iPECS eMG80/eMG800

Administration & Programming Manual

Please read this manual carefully before operating System.
Retain it for future reference.

iPECS is an Ericsson-LG Brand

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Revision History

SW version	ISSUE	DATE	DESCRIPTION OF CHANGES
	1.0	Sep., 2013	Initial Release
	1.1	Dec., 2013	Changed Ericsson-LG to Ericsson-LG Enterprise
1.1.x	1.2	Feb., 2015	Update contents according to S/W integration for both eMG80 & eMG800
1.2.x	1.3	May, 2015	We updated the following features: - On-line user guide - Terminal attributes (Small popup use, large popup timer, SLT open loop time) - Web Access Authorization - NTP attributes - Digit Conversion Table - System attributes - U-LOOP, PBX code insertion for emergency call - Disconnect with Inband information - Temp License expiration notify - Trace Log via Web - Add System Date and Time to Installation wizard
2.0.x	1.4	Jan., 2016	- Added Speed code number plan in PGM100. - IPCR announce only for incoming call. - Updated Strong password in PGM 160/161. - Updated 'Do not overwrite station name in PGM 211. - Added Attendant ring mode in PGM 257. - Added the more item for Alarm in PGM 163. - Added Flexible button default table (PGM 239) - Added Preset flexible button default (PGM 240) - Added System DST mode in PGM 439. - Added LDAP server setting in PGM 160/161. - Added Arabic language. - Updated Message wait indication LED in PGM 112. - Updated Company directory in Station Name Display. - Added Station User Greeting in Station Data. - Added the search box in Maintenance. - Added MOH Management in Maintenance. - Updated DB management by adding Comment field. - Updated Install wizard - DTMF repeat tone does not have nothing to do with PSTN in PGM160-15 - Added Call wait signal and duration in PGM 113. - Added some admin (Alternate/Secondary signal port, Local route ID, Remote route ID, Sending Name option) in PGM 324. - Added SLT Pulse and SLT pulse-MW type in PGM 110. - Added Lift Handset for Page & Privacy in PGM 111. - Added Short Modem in PGM 112. - Added NFC Authorization Code use in PGM 112. - Added rel 180 after 183 and "Add 'user=phone' param" in PGM 133. - Added Short Modem Timer in PGM 182~182, 186 - Added Alarm mode to send email to the address in PGM 163.

			- Added the special character to DB management. - Added Ring detection register setting in Analog parameter. - Added LCD Dimming for LIP-9000 Series & LDP-9240D in PGM 112. - 'Go to assignment' function added to Personal group overview and can check the master & member list at a glance. - Added Station ICR scenario (1201) to Station Data. - Changed the name from UCS Standard to UCS data. - Added MOH management in Maintenance. - Added Keyset admin password to Install Wizard.

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1. INTRODUCTION

1.1 Manual Application

This document provides detailed information covering the configuration of the eMG database and maintenance of the eMG. The manual also details the power-up and initialization routines and the Station Web Portal.

The manual is written for the experienced installer with knowledge of telephony terms, and functions of small and mid-sized business telecommunications systems.

1.2 Manual Organization

This manual is organized in ten (10) major sections including:

- **Section 1 Introduction**: This section introduces the content and organization of the manual.
- **Section 2 System & Admin Information**: In this section general information on System capacities, power-up routines and the system initialization process are detailed. Also, this section discusses the process for registration of IP and softphones with the eMG system.
- **Section 3 Station Administration**: This section provides details on configuring the system employing a station allowed administrative access. Step by step procedures are given along with brief but concise descriptions of the various configuration parameters and available settings. We recommend that you use Section 4 Web administration.
- **Section 4 Web Administration**: Similar to the Station Administration section, the Web Administration section gives step by step procedures and descriptions for the configuration parameters and settings available using a Web browser.
  - **Section 4.5 Maintenance**: The Maintenance section provides details on managing the eMG including database upload and download, software upgrade, and user access management using the Web browser interface.
  - **Section 4.6 Station Program**: This section discusses the configuration of the features and functions available in the portal.
  - **Section 4.7 On-line web user guide**: This section explains the frequent use of features to a user. We didn't describe this section because you can easily get the information on the web by clicking [User's guide] of login page.
- **Appendix A**: The Station and Attendant Station User Program codes are listed with the associated function. These fixed codes are available at the iPECS IP or LDP phones to configure basic functions such as ring tones, activate features and assign features and functions to Flex buttons.
- **Appendix B**: A complete listing of the nine basic Flexible Numbering Plans. One is selected as the system's Flexible Numbering Plan. Each of the basic Numbering Plans

includes all feature and resource access codes, and any individual code can be changed.

- **Appendix C**: This Appendix includes a detailed listing of all the configurable parameters by Program group and includes the default values for each parameter. It is only for Station Administration.

1.3 S/W & H/W Terminology

The core system software is employed with the hardware of several iPECS systems, each with their own hardware designations. The software employs terms that may differ from the Hardware and Feature manuals as indicated in the below list.

- VSF or VSF Gateway , referring to the integrated AA/VM built into the KSU Main board and the VVMU
- CO/IP or CO/IP Line, referring to external network connections, outside Lines

2. SYSTEM & ADMIN INFORMATION

2.1 System capacities

The iPECS eMG is available in several hardware configurations based on the Main board of the KSU. Upon initialization, the software will structure a database for the maximum possible station and CO/IP Line configurations. Thus, the software port count capacities will differ from the hardware count however, the hardware limitations always apply. The total System ports supported by the software include the Station ports, CO/IP Line ports and ports for various options including the integrated AA/VM, Miscellaneous ports, etc. Other than the Station and CO/IP Line ports, the hardware and software capacities are the same. The capacities relative to the software are provided in the table below.

Table 2.1-1 eMG80 Software Capacities

Item	Capacity
CO/Trunk lines	Max. 74
Stations	Max. 140
Attendants	4
LAN port	2 (1 each, KSU and VVMU)
Modem Channel	1 (MODU)
Serial Port(RS-232C)	1
USB(2.0) Host port	1
Alarm/Doorbell input	2 (1 per KSU)
External Control Relays	2 (1 per KSU)
Music Source Inputs	1 Internal: select one of 13 melodies 1 External source input 5 SLT ports 3 VSF announcements
Power Fail Circuit	Max. 6 (1 per KSU, EKSU, CH204, CH408, CS416)
VSF Device 1: Built-in AA/VM w/MEMU w/MEMU2 VSF Device 2 (VVMU)	8 channels(2 Chan. by default, 1 Channel by license), 1 hour 15 hours(no license needed) 60 hours(no license needed) 8 channels (by license) & 15 hours(by license), 1 hour(by default)
Conference channels	148 channels/13 party per group
WTIB	1
DECT Phones	48
Built-in VoIP channels	8 (2 channels by default, 6 channels by license)
VVMU VoIP channels	8 (by license)
IP Stations and SIP Trunks	48 port (32 Stations+16 SIP Trunks)
External Page	1 port
Internal Page	35 zones
System Speed Dial	3000 numbers, 25 digits each

Item	Capacity
System Speed Dial Zones (Groups)	10 zones
Station Speed Dial	100 per station, 25 digits each (Max. 4000 numbers)
Last Number Redial	10 numbers
Save Number Redial	1 number
DSS Consoles per Station	3
Serial DSS - System	100
Serial DSS – Station (LIP-8000)	4
Serial DSS – Station (LIP-9000)	1
SMDR buffer	5000
CO Line Groups	20
Station & Station Groups	40
Station & Station Group Members	70
Pickup Group	50
Pickup Group Member	140
Conference Groups - System	40
Conference Groups - Station	20 per station
Executive/Secretary pairs	36
Authorization Codes	500 (Station: 140, System: 360)
Transparent Networking Table	15
ICLID Routing table	250
Tenancy (ICM) Group	15
Attendant Station	4
DID Digits Analysis	4
MSN Table	500

Table 2.1-2 eMG800 Software Capacities

Item	Capacity
CO/Trunk lines	Max. 600
Stations	Max. 1200
Attendants	5
LAN port	MPB(1), VOIB(1), VMIB(1)
Modem Channel	1(MODU)
Serial Port(RS-232C)	1
USB(3.0) Host port	1
Alarm/Doorbell input	1
External Control Relays	2 (1 per KSU)
Music Source Inputs	1 Internal: select one of 13 melodies 1 External source input 5 SLT ports 3 VSF announcements
Power Fail Circuit	1 port / 1 LCOB
VSF Device VMIU VMIB	 4ch, 1 hours 8ch, 100 hours

Item	Capacity
Conference channels	148 channels/13 party per group
WTIB	3
DECT Phones	192
Built-in VoIP channels	8
VOIB128 channels	Default: 32 channel (8 channel base by license)
IP Stations and SIP Trunks	600
External Page	1 port
Internal Page	100 zones
System Speed Dial	8000 numbers, 25 digits each
System Speed Dial Zones (Groups)	10 zones
Station Speed Dial	100 per station, 25 digits each (Max. 12,000 numbers)
Last Number Redial	10 numbers
Save Number Redial	1 number
DSS Consoles per Station	3
Serial DSS - System	500
Serial DSS – Station (LIP-8000)	4
Serial DSS – Station (LIP-9000)	1
SMDR buffer	30,000
CO Line Groups	200
Station & Station Groups	200
Station & Station Group Members	200
Pickup Group	200
Pickup Group Member	12,000
Conference Groups - System	160
Conference Groups - Station	100 per station
Executive/Secretary pairs	100
Authorization Codes	2,400 (Station: 1,200/System: 1,200)
Transparent Networking Table	32
ICLID Routing table	250
Tenancy (ICM) Group	32
Attendant Station	5
DID Digits Analysis	4
MSN Table	1,500

2.2 Slot configuration for eMG80

The built-in interface ports, ports of the optional Interface boards and the optional Function boards are organized into Slots. For the built-in and optional board interfaces two Slots are defined, a Slot for the Stations and a Slot for the CO/IP Lines. The Function boards use a single Slot to identify the board location. The Slots are used during the initialization routines, refer to section 2.3, to identify the installed equipment and establish the numbering for the Stations, CO/IP lines, and Function board channels. An additional Slot (Slot 18) is used by the software to identify the Conferencing channels as a virtual board.

The figure below depicts the Slot locations and Table 2.2-1 & 2.2-2 lists the Slots, the hardware designation for boards applicable for the Slot and the software reference for the type of interfaces.

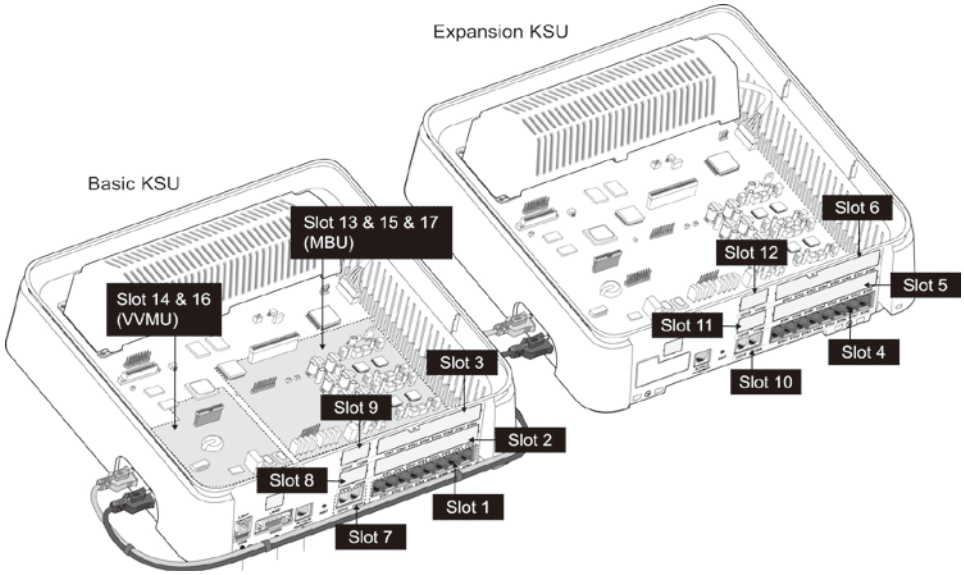


Table 2.2-1 eMG80 Slot Configuration (Standard)

Slot	KSU	H/W Reference	S/W Reference
1	KSU	Built-in KSU Station interface group KSUA and KSUI: 1-DKT & 7-Hybrid KSUAD & KSUID: 8-DKT &-4 SLT	 HYIB8 DSIB12
2	KSU	CH204 or BH104 CH408, BH208 or HYB8 CS416 or SLIB16 WTIB4	HYIB4 HYIB8 SLIB16 WTIB4
3	KSU	CH204 or BH104 CH408, BH208 or HYB8 CS416 or SLIB16 WTIB4	HYIB4 HYIB8 SLIB16 WTIB4
4	EKSU	Built-in EKSU Station interface group 8-Hybrid	 HYIB8
5	EKSU	CH204 CH408 or HYB8 CS416 or SLIB16	HYIB4 HYIB8 SLIB16

Slot	KSU	H/W Reference	S/W Reference
6	EKSU	CH204 CH408 or HYB8 CS416 or SLIB16	HYIB4 HYIB8 SLIB16
7	KSU	Built-in KSU Station interface group KSUA and KSUAD: 4-CO Line KSUI & KSUID w/PRIU: KSUI & KSUID w/BRIU2	 LCOB4 PRIB BRIB2
8	KSU	CH204 CH408 or CS416 BH104 BH208	LCOB2 LCOB4 BRIB1 BRIB2
9	KSU	CH204 CH408 or CS416 BH104 BH208	LCOB2 LCOB4 BRIB1 BRIB2
10	EKSU	Built-in EKSU Station interface group 4-CO Line	 LCOB4
11	EKSU	CH204 CH409 or CS416	LCOB2 LCOB4
12	EKSU	CH204 CH408 or CS416	LCOB2 LCOB4
13	KSU	Built-in KSU VoIP channels	VOIU
14	KSU	VVMU VoIP channels	VOIB
15	KSU	Built-in 4-port 1-Hour AA/VM	VMIU
16	KSU	VVMU 4-port, 15-hour AA/VM	VMIB
17		Miscellaneous connections	MISU
18	KSU	Virtual Slot for Conferencing channels	

2.3 Initialization

The system should be initialized before starting the configuration to assure a known starting point and automatically register installed boards. Also, if the Nation Code requires modification, the system will be initialized in the process so as to establish tones and gains appropriate for the region. You can initialize the system using the Initialization switch (Dip-switch SW1, pole-2) in the KSU or using the software Initialization PGM 450. Note the former must be used to change the Nation Code as detailed section 3.3.1.

2.3.1 Basic Power-Up Routine

When the KSU power switch is turned On or the KSU Reset button is pressed with power ON, the system will initiate the “Power-up” routine. During the Power-Up routine the system checks the Initialization switch and, if the switch is in the Off position, the system will perform the basic Power-up routine; clear all scratch-pad memory, load run-time programs, establish communications with each registered Interface board, Function board, iPECS IP Phone and LDP Phone, send Restart commands and load appropriate settings to the boards and terminals. The KSU also will attempt to communicate and register the EKSU. If a registered board or terminal does not respond after several attempts, the system places the device in an out-of-service mode but maintains the configuration of the device. Once the Power-up routine is complete, the system will conduct normal operations.

2.3.2 Registration of Boards

If the Initialization switch is in the ON position, in addition to the Power-Up routine, the system will perform the full Initialization procedure. During initialization, the system attempts to communicate with the board in each Slot, starting with Slot 1 and progressing sequentially through the slots, to determine the installed equipment. If the board is installed, the Slot number (“Sequence Number”) is registered, an “Order number” is determined and the MPB MAC and IP address are assigned. Using “Order number”, which is the order that devices of the same type (CO/IP Line, Station, VSF device, etc.) register, the system assigns the Station numbers and CO/IP Line numbers.

An exception to the above is the MAC and IP address of the VOIB which covers the VoIP channels on the VVMU. The VOIB has a separate MAC address and the IP address is assigned from the system. Note this IP address can be modified at a later time.

Once the system is operational and the database configured, the system can be expanded manually by registering the optional boards as detailed in PGM 235, Registration Table.

2.3.3 Initial Station and CO Numbering

The default Station Numbering Plan assigns a Three-digit number to each station port. Starting at the first (left) port of Slot 1, the system assigns the Station Numbers beginning at “100 (eMG80) or 1000 (eMG800)”. The Station number increments for each port in the slot, moving to the right until reaching the last port. The process is repeated for each Station slot (1 to 6) in sequence assigning consecutive Station Numbers.

Note the Station Number Plan can be two to four digits and the Station Number for each port can be modified individually.

Slots 7 to 14 are then registered and, since they are CO/IP Lines, the Order numbers 1 to 8 are used to number the CO/IP Lines. The process is repeated for each device type.

2.3.4 IP Phone Registration

Unregistered iPECS IP Phones attempt to discover and register with a local (on the same LAN) iPECS system, in this case the eMG. The phone will send a registration request to the MPB IP address. If no response is received, the phone will send a multi-cast request. With the request, the phone will send the MAC address. This address must be assigned in the PGM 235.

When the system receives the request, the MAC address received is compared to the Registration table and, if matched, the phone is registered, it is given the next available sequence number starting at “19”, and assigned the next available Station Number.

If the iPECS IP Phone is configured as a remote device, it will send a registration request to the iPECS system at the configured IP address. When the system receives the request, it is processed normally except the MAC address must be assigned in PGM 442 Remote Device Register.

2.3.5 Default Database

Based on the installed equipment, the system populates the database with the default values, refer to Appendix C based on Keyset administration as numbering plan 1. Once the database is set to default, the system will conduct normal operations.

2.4 General Admin and Menu Structure

The iPECS eMG can be configured to meet each customer's individual needs. System configuration may be accomplished by entering the “Program mode” at an assigned Admin Station or by pointing a Web Browser at the IP address of the, MPB. Section 3 provides a description for data entry using the Admin Station. Section 4 discusses configuration employing the Web browser. Note that some parameters are available through Web Admin and not the Keyset Admin.

Configurable items are organized as “Data” groups with a common affect, i.e. station, system, numbering plan, etc. Items are further grouped into “Programs” forming a multi-layered menu structure as the following list. Each of the Program groups is assigned a three digit “Program” (PGM) code used to access the group from an Admin Keyset. The top level Data groups include:

- System ID & Numbering Plans
- Station Data
- Board Based Data
- CO Line Data
- System Data
- Station Group Data
- ISDN Line Data
- SIP Data
- Tables Data
- Networking Data
- H.323 Routing Table
- T-NET Data
- Zone Data
- Device Login
- UCS Standard
- DECT Data
- Hotel Data
- Green Mode
- Initialization

The default and range of values for each configurable parameter are provided in Section Web admin programming. The index and charts are helpful references when entering data into the system‘s database.

3. STATION ADMIN PROGRAMMING

3.1 General

3.1.1 LCD & Button Functions

While in the Program mode, the Liquid Crystal Display (LCD) and Flex button LEDs of an Admin Station are used to guide and indicate status of the feature. The dial-pad is most often used to enter data after selecting a data item using the Flex buttons. In some cases, pressing a Flex button will toggle the entry with the Flex button LED indicating the status (On/Off).

For Programs with multiple Flex button selections, the volume controls (**[VOL UP]** and **[VOL DOWN]** buttons) may be used to select the next or previous item. The **[SPEED]** button is generally employed as a delete button to erase existing entries. However, where noted, it may be used to confirm a range input. Pressing the **[CONF]** button, returns to the 1st step of the data entry procedure for the Program without storing unsaved entries.

The **[Save]** button is used to store data after entry. If there are no conflicts in the entered data, confirmation tone will be received and the data stored. If a conflict exists, error tone is provided and newly entered data are not saved. Generally, corrected data may be entered and stored without restarting the entry procedure from the 1st step.

3.1.2 Alphanumeric Data Entries

In some cases, an alphanumeric entry is required. Two (2) dial-pad digits represent each character of an alphanumeric entry, as shown in Table 3.1.2–1 below. Use the Table to determine the two digits that must be entered from the dial-pad for each character.

Table 3.1.2-1 ALPHANUMERIC DIAL-PAD ENTRIES

1 Q – 11 Z – 12 . – 13 1 – 10	**2** A - 21 B - 22 C - 23 2 - 20	**3** D - 31 E - 32 F - 33 3 - 30
4 G – 41 H - 42 I - 43 4 - 40	**5** J - 51 K - 52 L - 53 5 - 50	**6** M - 61 N - 62 O - 63 6 - 60
7 P - 71 R - 72 S - 73 Q - 7* 7 - 70	**8** T - 81 U - 82 V - 83 8 - 80	**9** W - 91 X - 92 Y - 93 Z - 9# 9 - 90
***** Blank - *1 : - *2 , - *3	**0** 0-00	**#** #

3.2 Data Entry Mode

Limited data entry can be accomplished from an Admin Station or station assigned for data entry (Station Attributes III PGM 113, Flex button 1). After initialization and registration, any enabled iPECS IP or LDP Phone may access the system database. In addition, as default, there is no Station Admin password defined. To enter the Program mode from the Admin Station follow the procedure below. In the left column of the chart are the LCD displays and in the right column are step-by-step instructions to modify database items.

PROCEDURE:	
STATION 100 (T) 04 SEP 01 02:49 PM	1. Press the [PGM] button. Dial '*' and '#'.
ENTER ADMIN PASSWORD	Enter the Admin password. Confirmation tone is received. As a default there is no password and this step is skipped.
ADMIN PROGRAM START	
ENTER PGM NUMBER	To select a program, use the instructions in the following sections, starting with "Press the **[PGM]** button" and dial the specified Admin Program code.

3.3 Procedure for Data Entry

The following sections provide specific instructions for entering data from the Admin Station once in the Program mode. Each section provides descriptive information, step-by-step instructions and Tables for determining appropriate entries.

3.3.1 System ID — PGM 100

Under System ID, the country is identified using the international dial codes (NATION CODE). If the NATION code requires changing, the system must be initialized to restructure memory and create the country specific defaults, gain, frequencies and other system characteristics specific to the country and regional regulatory requirements.

To change the NATION Code on eMG:

- Set the MPB Dip-switch 1 pole 2 to the ON position,
- Follow the procedure below to modify the NATION code
- Press the reset button on the KSU, power the system Off and On, or use PGM 450 to initialize the system.
- After initialization, reset switches as needed, Dip-switch 1 pole 2 should be OFF.

A twenty-four (24) character SITE NAME and the local Area Code are also defined in this program. The SITE NAME is primarily useful for the installer/programmer as a reference to the customer.

In addition, under this program the system can be programmed to select one of eight (8) Flexible Number Plans, refer to Appendix B. Individual items from the selected Numbering Plan can be changed under Flexible Numbering Plan part A to D – PGM 106 to 109- in section 3.3.2.5.

PROCEDURE:	
SYSTEM ID PRESS FLEX KEY (1-6)	1. Press the **[PGM]** button and dial 100.
	Select the desired Flex button (1~5), refer to Table 3.3.1-1. For COUNTRY CODE, refer to Table 3.3.1-2 for appropriate entries.
	Use the dial-pad to enter desired System Id data. For System Reset, button 5, press **[Save]** to reset the System Id to default.
	To store the System Id data press the **[Save]** button.

Table 3.3.1-1 SYSTEM ID (PGM 100)

BTN	– DISPLAY	REMARK	RANGE	DEFAULT
1	COUNTRY CODE 1	Refer to Table 3.3.1-2 below. Note system must be re-initialized if changed.	4 digits	1

Table 3.3.1-1 SYSTEM ID (PGM 100)

BTN	– DISPLAY	REMARK	RANGE	DEFAULT
2	CUSTOMER SITE NAME ……	Refer to Table 3.1.2-1 for alphanumeric dial-pad entries.	24 character	
3	MY MULTI AREA CODE ENTER TABLE NO(00-40)	Enter the area code of the installed site.	6 digits	
4	NUMBERING PLAN (1-9) 1	Refer to Appendix B for details of Numbering Plan selection.	1-9	1
5	PREFIX USAGE (1:ON/0:OFF) : OFF	Enable/Disable 8-digit Station Numbering Plan. Assign the Prefix codes in the 8-Digit Numbering Table (PGM238).	0: OFF 1: ON	OFF
6	SYSTEM ID SYSTEM RESET	Returns the System Id to default.		

Table 3.3.1-2 COUNTRY CODES

COUNTRY	CODE	COUNTRY	CODE	COUNTRY	CODE
America	1	Argentina	54	Australia	61
Bahrain	973	Bangladesh	880	Belgium	32
Bolivia	591	Brazil	55	Brunei	673
Burma	95	Cameroon	237	Chile	56
China (Taiwan)	886	CIS	7	Colombia	57
Costa Rica	506	Cyprus	357	Czech	42
Denmark	45	Ecuador	593	Egypt	20
El Salvador	503	Ethiopia	251	Fiji	679
Finland	358	France	33	Gabon	241
Germany	49	Ghana	233	Greece	30
Guam	671	Guatemala	502	Guyana	592
Haiti	509	Honduras	504	Hong Kong	852
India	91	Indonesia	62	Iran	98
Iraq	964	Ireland	353	Israel	972
Italy	39	Japan	81	Jordan	962
Kenya	254	Korea	82	Kuwait	965
Liberia	231	Libya	218	Malta	356
Luxembourg	352	Malaysia	60	Morocco	212
Mexico	52	Monaco	377	Nigeria	234
Netherlands	31	New Zealand	64	Pakistan	92
Norway	47	Oman	968	Paraguay	595
Panama	507	P.N.G	675	Portugal	351
Peru	51	Philippines	63	Senegal	221
Qatar	974	Saudi Arabia	966	Spain	34
Singapore	65	South Africa	27	Sweden	46
Sri Lanka	94	Swaziland	268	Tunisia	216
Switzerland	41	Thailand	66	United Kingdom	44
Turkey	90	U.A.E.	971	Y.A.R.	967
Uruguay	598	Venezuela	58		

3.3.2 NUMBERING PLANS DATA — PGM 102 to 109

3.3.2.1 System IP Address Plan — PGM 102

The System IP Address Plan sets several IP addresses including the KSU LAN port IP address (MPB IP Address) required for external VoIP calls, the IP address for the router, and the system's internal private IP address Plan. Note that the MPB and Router addresses and sub-net mask must be a routable IP address for access to an external VoIP network, remote access by a gateway/board or terminal and remote Web access. The VOIB must also have a routable IP address for access to/from an external VoIP network or remote user.

When Automatic IP Assignment, button 7, is enabled, the system will assign IP addresses to each local terminal and the VOIB using the assigned System IP address range. These addresses are used for communications between the system and the VOIB and terminals.

The system may be connected to a LAN that is segmented by two separate private IP address schemes. This segmenting technique is often used to separate voice and data devices. However, with this segmenting technique, the system would normally treat the segmented Terminals such as iPECS Soft Phones, as remote devices, using valuable WAN bandwidth. Assigning the "Second Sys IP address" with valid IP address from the second segment permits the system to communicate with the devices directly over the LAN.

iPECS can be installed behind a NAPT server, if the NAPT server provides fixed address translation and port forwarding to the system. In this case, the system will employ the "Firewall IP address", button 10, as the fixed public IP address for communication with remote devices. This address must be assigned as the "MFIM" address in the remote device.

PROCEDURE:	
SYSTEM IP ADDRESS PLAN PRESS FLEX KEY (01-17)	1. Press the **[PGM]** button and dial 102.
	Select the desired button 1~19, refer to Table 3.3.2.1-1.
	Use the dial-pad to enter desired IP addresses. Use an "*" to enter a dot (".")
	Press the **[Save]** button to store IP address entries.

Table 3.3.2.1-1 SYSTEM IP ADDRESS PLAN (PGM 102)

BTN	DISPLAY	DEFAULT	REMARK
1	MPB IP ADDRESS 10 .10 .10 . 2	10.10.10.2	This is the IP address of the KSU LAN port A. A Public IP Address is required for remote user and external VoIP network access. IPv4 format.
2	MPB SUB NET MASK 255.255.255.0	255.255.0.0	
3	ROUTER IP ADDRESS 10 .10 .10 . 1	10.10.10.1	IP Address of router for external network (WAN) access. Required for shared voice and data LAN, external VoIP and remote Web access.
4	SYSTEM START IP ADDRESS 10.10.10.10	10.10.10.10	Start of range for private IP addresses assigned by the system to Modules/Terminals.

Table 3.3.2.1-1 SYSTEM IP ADDRESS PLAN (PGM 102)

BTN	DISPLAY	DEFAULT	REMARK
5	SYSTEM END IP ADDRESS 10.10.10.254	10.10.10.254	End of range for private IP addresses assigned by the system to Modules/Terminals.
6	SYSTEM SUB NET MASK 255.255.255.0	255.255.0.0	
7	AUTOMATIC IP ASSIGN (1:ON/0:OFF): ON	ON	The system will automatically assign IP addresses to modules and terminals (ON) or, when OFF, IP addresses are assigned manually in PGM 103 Device IP Address Plan.
8	SECOND SYS IP ADDRESS 0 . 0 .0 . 0	0.0.0.0	When devices are located on a different private address on the same net, enter the MPB IP address for the second LAN.
9	SECOND SYS SUB NET MASK 255.255.255 .0	255.255.255.0	
10	FIREWALL IP ADDRESS 0 . 0 .0 . 0	0.0.0.0	When the system is installed behind a NAPT server, the fixed IP Address provided by the NAPT server must be assigned in this field. Also, use this IP address for the MPB address in remote devices.
11	FIRST START MAC ADDR 000000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the start address of the first range.
12	FIRST END MAC ADDR 000000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the end address of the first range.
13	SECOND START MAC ADDR 000000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the start address of the second range.
14	SECOND END MAC ADDR 000000000000	00.00.00.0 0.00.00	A range of MAC addresses can be entered to register devices. This entry is the end address of the second range.
15	SYSTEM IP ADDRESS PLAN SYSTEM RESET		Returns System IP Address Plan to default values.
16	MPB DNS IP ADDR 0 .0 . 0 . 0	0.0.0.0	IP Address of Domain Name Server, which iPECS will use to resolve URL to an IP address. The DNS provides the resolution after receiving the name from iPECS.
17	MPB DHCP (1:ON/0:OFF) : OFF	OFF	Enable/Disable DHCP client function for the MPB.

3.3.2.2 Device IP Address Plan -PGM 103

TDM board is registered with own slot number. It is registered automatically without any configuration.

To register an IP device:

As IP gateway/board and terminals register to the iPECS, a logical slot number is assigned, which indicates the order of registration. Also, based on the type of device (CO/IP gateway/board, Terminal) the system assigns a logical Sequence Number. Thus, Sequence Numbers for CO gateway/board, Terminals are independently assigned based on the type of gateway/board. These Sequence Numbers are employed to provide a relationship between the physical MAC address and the logical port numbers of the device.

The system may assign a default private IP address to each Sequence Number. If desired, this program may be used to modify the assigned IP address for each gateway/board and iPECS Phone.

Each local gateway/board and terminal can be assigned for “Direct Send”. With Direct Send enabled, the system will employ the Ethernet MAC address, layer 2 switching to eliminate the need for IP traffic overhead, reducing overall LAN traffic.

The system normally employs IP multi-cast protocol to respond to a registration request from a gateway/board or terminal. When the device is separated from the system by a router, the system must use the IP uni-cast protocol. This is established by the “Local Device” assignment.

When disabled (Off), the system will send an IP uni-cast message to the device in response to a registration request.

PROCEDURE:	
DEVICE IP ADDRESS PLAN PRESS FLEX KEY (1-7)	1. Press the **[PGM]** button and dial 103.
	Select the desired Flex button. Button 1: CO & VOIP Gateway/Board Button 2: Stations Button 3: MISU Button 4: VMIU, VMIB Button 5: MCIB Button 6: SYSTEM RESET Button 7: WTIB
	Use the **[VOL UP]** and **[VOL DOWN]** buttons to see next/ previous IP Address. Refer to Table 3.3.2.2-1 for display information.

PROCEDURE:	
	Press Flex 1~6 to select the Sub-menu item desired. See Table 3.3.2.2-1. Button 1: IP address Button 2: MAC address Button 3: ARP Button 4: REGISTRATION Button 5: CPU Type Button 6: Device (Board) ID
	Use the dial-pad to enter desired data. For IP and MAC addresses, an "*" is used to enter a dot (".")
	Press the **[Save]** button to store the data entry.

Table 3.3.2.2-1 DEVICE & STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
1	001-001 :B40EDCBF5606 VOIP 1 :10 .10 .10 .2	LCD shows: Line 1 Sequence Number, 2 or 3 digits MAC Address, 12 digits Line 2 Module Type, 4 characters First Logical port number IP Address, 7~12 digits	CO & VoIP board IP address set sequentially, from the range in PGM 102.
1–1	SET IP ADDRESS VOIP 1 : 10.10.10.2	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254
1–2	SET MAC ADDRESS 001-001 : B40EDCBF5606	Use Flex button 2 to enter the device's MAC address in the system memory.	None
1–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switching to local devices.	OFF
1–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the MPB.	MCAST
1–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
1–6	DEVICE(BOARD) ID PRIB	Flex button 6 displays the Board type designation.	
2	001-001 : B40EDCBF5606 KTU 100 :10.10.10.10	LCD shows: Line 1 Sequence Number, 3 digits MAC Address, 12 digits Line 2 Station Type, 3 characters Station Number, 2~4 digits IP Address, 7~12 digits	Station IP address set sequentially, from the range in PGM 102.
2–1	SET IP ADDRESS KTU 100 :10.10.10.10	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254

Table 3.3.2.2-1 DEVICE & STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
2–2	SET MAC ADDRESS 001-001 : B40EDCBF5606	Use Flex 2 button to enter the device's MAC address into system memory.	None
2–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switching to local devices.	OFF
2–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the MPB.	MCAST
2–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
2–6	DEVICE(BOARD) ID HYIB	Flex button 6 displays the terminal type designation.	
3	001-017 : B40EDCBF5606 MISU :10.10.10.2	LCD shows: Line 1 Sequence Number, 2 digits MAC Address, 12 digits Line 2 "MISU" IP Address, 7~12 digits.	IP address of MISU. Functions in the system's MPB set automatically,
3–1	SET IP ADDRESS MISU :10.10.10.2	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254
3–2	SET MAC ADDRESS 001-003 : B40EDCBF5606	Use Flex button 2 to enter the device's MAC address into system memory.	None
3–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switching to local devices.	OFF
3–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the MPB.	MCAST
3–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
3–6	DEVICE(BOARD) ID MISU	Flex button 6 displays the MISU type designation.	
4	001-015 : B40EDCBF5606 VMIU :10.10.10.2	LCD shows: Line 1 Sequence Number, 2 digits MAC Address, 12 digits Line 2 device type and IP address.	.
4–1	SET IP ADDRESS VMIU :10.10.10.2	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254

Table 3.3.2.2-1 DEVICE & STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
4–2	SET MAC ADDRESS 001-015 : B40EDCBF5606	Use Flex button 2 to enter the device's MAC address into system memory.	None
4–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switching to local devices.	OFF
4–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the MPB.	MCAST
4–5	CPU TYPE MSC1K	Flex button 5 displays the type of CPU employed in the device.	
4–6	DEVICE(BOARD) ID VMIU	Flex button 6 displays the type designation.	
5	001-018 : FFFF0000FFFF MCIB : 10 .10 .10 .2	LCD shows: Line 1 Sequence Number, 2 digits MAC Address, 12 digits Line 2 device type and IP address.	
5–1	SET IP ADDRESS MCIB :10.10.10.2	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254
5–2	SET MAC ADDRESS 001-018 : FFFF0000FFFF	Use Flex button 2 to enter the device's MAC address into system memory.	None
5–3	ARP (1:ON/0:OFF): OFF	Use Flex button 3 to enable/disable Direct Send mode, which employs layer 2 switching to local devices.	OFF
5–4	REGISTRATION (0:UCAST/1:MCAST): MCAST	Use Flex button 4 to enable/disable Local Device Mode, which defines the device as on a common LAN with the MPB.	MCAST
5–5	CPU TYPE MS828	Flex button 5 displays the type of CPU employed in the device.	
5–6	DEVICE(BOARD) ID MCIB_V	Flex button 6 displays the type designation, MCIB_V.	
6	DEVICE IP ADDRESS PLAN SYSTEM RESET	If the **[Save]** button is pressed, the system will reset and restart.	
7	001-003 : 00405A142C67 WTIB : 10:10:10:14	LCD shows: Line 1 Sequence Number, 2 digits MAC Address, 12 digits Line 2 "WTI4" and IP Address, 7~12 digits.	
7–1	SET IP ADDRESS WTIB :10.10.10.14	Use Flex button 1 to set the device's IP address in IP v4 format.	10.10.10.10~254

Table 3.3.2.2-1 DEVICE & STATION ADDRESS PLAN (PGM 103)

BTN	DISPLAY	FEATURE	DEFAULT
7–2	SET MAC ADDRESS 001-003 : 00405A142C67	Use Flex button 2 to enter the device's MAC address into system memory.	None
7–3	ARP (0:ON/1:OFF): OFF	Use Flex button 3 to enable/disable ARP, ARP OFF enables Direct Send, which employs layer 2 switching to local devices.	OFF
7–4	REGISTRATION (0:UCAST/1:MCAST):MCAST	Use Flex button 4 to disable/enable Local Device Mode, which defines the device as on a common LAN with the system. MCAST enables Local Device Mode.	MCAST
7–5	CPU TYPE MS828	Flex button 5 displays the type of CPU employed in the device.	
7–6	DEVICE(BOARD) ID WTIB	Flex button 6 displays the type designation, WTIB.	

3.3.2.3 CO Device Sequence Number -PGM 104

The system uses the Sequence Number to assign logical (software) port numbers. This Sequence Number relates the hardware and software port numbers for each device.

PROCEDURE:	
001 002 003 004 005 006 009 007 008 013 014 . . .	1. Press the **[PGM]** button and dial 104.
001 002 003 004 005 006 009 007 008 013 014 . . .	Press the Flex button (1~6) for the desired Sequence Number, use the **[VOL UP]** and **[VOL DOWN]** buttons for the next/previous set of six Sequence Numbers.
001 002 003 004 005 006 009 007 008 013 014 . . .	Using the dial pad, enter new slot numbers. Note slot numbers cannot be duplicated and duplicates will cause an error. The **[SPEED]** button may be used to erase the slot number associated with the selected Sequence Number.
	Press the **[Save]** button to store the new Slot data.

3.3.2.4 Flexible Station Numbering Plan -PGM 105

Each LDP Phone, iPECS IP Phone and SLT is assigned a Sequence Number during the registration process. The station Sequence Number is a 3-digit number starting at 001, which is incremented as each terminal device is registered. At registration, station numbers increment sequentially with the Sequence Number and are assigned starting at station 100 for Sequence Number 001. The Station Numbering Plan allows the station numbers to be Three (3) to eight (8) digits in length.

PROCEDURE:	
001 002 003 004 100 101 102 103	1. Press the **[PGM]** button and dial 105.
001 002 003 004 … … … …	Use either of the two methods below to change the station number associated with a Sequence Number. Note pressing the **[SPEED]** button twice clears all station number assignments. The **[VOL UP] / [VOL DOWN]** buttons are used to view the next/previous 2 station Sequence Numbers.
	Range entry: Using the dial-pad, enter a station number range (first & last station number). The two station numbers must be of the same length, 2~8 digits. The range assignment begins with the first station number shown by the LCD and continues to the end of the entered range.
	Single entry: 4.1 Press Flex button 1~4 to select the desired Sequence Number from the two shown by the LCD. 4.2 Dial new station number.
	Press the **[Save]** button to store the new station numbers.

3.3.2.5 Flexible Numbering Plan part A to D - PGM 106 to 109

Feature dial codes for the system can be assigned using the system's Flexible Numbering Plan. Feature codes should be one (1) to four (4) digits in length and must not conflict. For example, Feature dial codes 53 and 536 represent a conflict. The system will generate error tone and will not update the database. Table 3.3.2.5-1 to Table 3.3.2.5-4 below show the defaults for the 1st base Numbering Plan. Appendix B provides the default values for each of the eight base Numbering Plans, select the base Numbering Plan in PGM 100.

PROCEDURE:	
FLEX NUMBERING PLAN A PRESS FLEX KEY (01-24)	1. Press the **[PGM]** button and dial: 106 for part A 107 for part B 108 for part C 109 for part D.
	Select the desired button (01~24); refer to Table 3.3.2.5-1 to Table 3.3.2.5-4 for **PGM** 106 to 109 respectively.
	Use the dial-pad to enter desired data. Where a range is required, input the first and last numbers in the range.
	Press the **[Save]** button to store the new Numbering Plan data.

Table 3.3.2.5-1 FLEXIBLE NUMBERING PLAN PART A (PGM 106)

BTN	DISPLAY	FEATURE	DEFAULT
1	INT PAGE ZONES START& END:301-335	Internal Page Zone access codes.	eMG80:301~335 eMG800:301~400
2	INT ALL CALL ENTER NEW #:543	Internal All Call Page access code.	543
3	MEET ME PAGE ENTER NEW #:544	Meet-Me-Page answer code.	544
4	EXT PAGE ZONE 1 ENTER NEW #:545	External Page Zone 1 access code.	545
5	UNUSED		
6	EXT ALL CALL ENTER NEW #:548	External All Call Page access code.	548
7	ALL CALL PAGE ENTER NEW #:549	All Call Page access code.	549

Table 3.3.2.5-1 FLEXIBLE NUMBERING PLAN PART A (PGM 106)

BTN	DISPLAY	FEATURE	DEFAULT
8	SMDR ACT CODE ENTER ENTER NEW #:550	Dial code to signify the start of an SMDR Account Code.	550
9	FLASH CMD TO CO ENTER NEW #:551	Dial code to generate a Flash on the active CO Line.	551
10	SLT LAST SPD DIAL ENTER NEW #:552	SLT Last Number Redial feature access code.	552
11	DND ENTER NEW #:553	Dial code to activate Do-Not-Disturb.	553
12	CALL FWD ENTER NEW #:554	Dial code to activate Call Forward.	554
13	SPD DIAL PGM ENTER NEW #:555	Speed Dial programming access dial code for SLTs.	555
14	MSG WAIT ENABLE ENTER NEW #:556	Dial code to activate a Message Wait/Call Back.	556
15	MSG WAIT RETURN ENTER NEW #:557	Dial code to return a Message Wait/Call Back.	557
16	SPD DIAL ACCESS ENTER NEW #:558	SLT Speed Dial access code.	558
17	DND/FWD CANCEL ENTER NEW #:559	Dial code to cancel DND/FWD/MSG Wait.	559
18	CO SYS HOLD ENTER NEW #:560	Dial code to place a CO call on System Hold.	560
19	SLT PGM MODE ENTER ENTER NEW #:561	User program mode entry dial code for SLTs.	561
20	ATTD UNAVAILABLE ENTER NEW #:562	Dial code to place attendant in the “unavailable” mode, attendant only.	562
21	ALARM RESET ENTER NEW #:565	Dial code to terminate Alarm contact signal.	565
22	GROUP CALL PICK-UP ENTER NEW #:566	Group Call Pick-up dial code.	566
23	UNIVERSAL ANSWER ENTER NEW #:567	Universal Night Answer dial code.	567

Table 3.3.2.5-1 FLEXIBLE NUMBERING PLAN PART A (PGM 106)

BTN	DISPLAY	FEATURE	DEFAULT
24	ACCNT CODE WITH BIN ENTER NEW #:568	Dial code for entering an Account code.	568

Table 3.3.2.5-2 FLEXIBLE NUMBERING PLAN PART B (PGM 107)

BTN	DISPLAY	FEATURE	DEFAULT
1	WALKING COS ENTER NEW #:569	Dial code to activate Walking Class-of-Service.	569
2	ACD AGENT ON/OFF DUTY ENTER NEW #:571	Dial code to toggle ACD Agent or Supervisor ON and OFF duty.	571
3	ACD SUPERVISOR LOGIN ENTER NEW #:572	Supervisor login dial code.	572
4	ACD SUPERVISOR LOGOUT ENTER NEW #:573	Supervisor logout dial code.	573
5	ACD HELP CODE ENTER NEW #:574	Agent code requesting Supervisor help and Supervisor Help request Response code.	574
6	ACD CALLS IN QUEUE ENTER NEW #:575	Dial code to display calls in queue.	575
7	ACD SUPERVISOR STATUS ENTER NEW #:576	Dial code to display group status.	576
8	ACD SUPERVISOR MONITOR ENTER NEW #:577	Dial code to activate Supervisor monitor.	577
9	ACD REROUTE QCALL ANS ENTER NEW #:578	Dial code to reroute call after answer.	578
10	ACD REROUTE QCALL NO AN ENTER NEW #:579	Dial code to reroute call prior to answer.	579
11	CAMP-ON ANSWER ENTER NEW #:621	Dial code to answer a Camped On call.	621
12	CALL PARK LOCATIONS START#:#601-#619	Dial code to place/retrieve a call in a Park location.	eMG80:#601~#619 eMG800:#601~#800
13	STA GRP PILOT NUMBER START #:401-440	Station group pilot numbers.	eMG80:401~440 eMG800:401~500

Table 3.3.2.5-2 FLEXIBLE NUMBERING PLAN PART B (PGM 107)

BTN	DISPLAY	FEATURE	DEFAULT
14	STA USER VSF FEATURES ENTER NEW #:*66	VSF feature access code.	*66
15	CALL COVERAGE RING ENTER NEW #:76	Code for Call Coverage button.	76
16	DIRECT CALL PICK-UP ENTER NEW #:*77	Dial code to activate Directed Call Pick-up.	*77
17	ACCESS CO GROUP FEAT ENTER NEW #:89	Dial code to access a CO Line or IP channel from a CO/IP group.	89
18	ACCESS IND CO/IP FEAT ENTER NEW #:88	Dial code to access a specific CO Line.	88
19	ACCESS HELD CO/IP FEAT ENTER NEW #:8*	Dial code to access last held CO Line or IP channel from Hold.	8*
20	ACCESS HELD IND CO/IP ENTER NEW #:8#	Dial code to access a specific CO Line/IP channel from Hold.	8#
21	ACCESS CO IN 1ST CO GRP ENTER NEW #:9	Dial code to access the 1st available CO Line in any accessible group.	9
22	ATTENDANT CALL ENTER NEW #:0	Dial code to call an Attendant.	0
23	VM MSG WAIT ENABLE ENTER NEW #:*8	Dial code for external Voice mail to activate Message Wait indication.	*8
24	VM MSG WAIT CANCEL ENTER NEW #:*9	Dial code for external Voice Mail to deactivate Message Wait indications.	*9

Table 3.3.2.5-3 FLEXIBLE NUMBERING PLAN PART C (PGM 108)

BTN	DISPLAY	FEATURE	DEFAULT
1	DOOR OPEN 1 ENTER NEW #:#*1	Dial code to activate Door 1 contact (open door 1)	#*1
2	DOOR OPEN 2 ENTER NEW #:#*2	Dial code to activate Door 2 contact (open door 2).	#*2

Table 3.3.2.5-4 FLEXIBLE NUMBERING PLAN PART D (PGM 109)

BTN	DISPLAY	FEATURE	DEFAULT
1	MCID REQUEST ENTER NEW #:*0	Dial code to activate Malicious Call ID Request in ISDN Supplementary service. Not available in USA version.	*0
2	AME FEATURE ENTER NEW #: 564	Dial code to assign an Answering Machine Emulation Flex button.	564
3	US-CONF TMR EXTENSION ENTER NEW #:##	Dial code to extend Unsupervised conference time.	##
4	PTT GROUP LOGIN/OUT ENTER NEW #:#0	Push-To-Talk group login and logout dial code. The station must have a PTT button for proper operation.	#0
5	ACD AGENT P LOGIN ENTER NEW #:581	ACD Agent Primary Login code.	581
6	ACD AGENT P LOGOUT ENTER NEW #:582	ACD Agent Primary Logout code.	582
7	ACD AGENT S LOGIN ENTER NEW #:583	ACD Agent Secondary Login code.	583
8	ACD AGENT S LOGOUT ENTER NEW #:584	ACD Agent Secondary Logout code.	584
9	ACD AGENT WRAPUP END ENTER NEW #:585	ACD Agent wrap-up end code.	585
10	TNET CM LOGIN/OUT ENTER NEW #:586	When Central Control networking (TNET) is employed, a station can be manually logged in or out of the Central system using this code.	586
11	ENTER INTO CONF-ROOM ENTER NEW #:59	Code for a station to enter a conference room.	59
12	ENTER INTO CONF-GROUP ENTER NEW #:68	Code to open a conference group.	68
13	STATION ICR ENTER NEW #:587	Code to activate Station ICR.	587
14	PICK UP GROUP PICK-UP ENTER NEW #:588	Pick Up Group Call Pick-up dials code.	588
15	EMERGENCY PAGE ENTER NEW #:589	Code for emergency page.	589
16	REMOTE MEX CONTROL ENTER NEW #:580	Code to control the mobile extension settings remotely.	580

Table 3.3.2.5-4 FLEXIBLE NUMBERING PLAN PART D (PGM 109)

BTN	DISPLAY	FEATURE	DEFAULT
17	ALL GR AGENT ON/OFF DUT ENTER NEW #:58*	Code to change the state of the Agent ON/Off duty in all hunt groups.	58*
18	SLT ACNR CODE ENTER NEW #:58#	In SLT, user can ACNR feature by using this numbering plan.	58#
19	ACD SUPERVISOR RING MODE ENTER NEW #:570	Code to check and change ACD group Ring mode by ACD group supervisor.	570
20	COMPANY DIRECTORY NAME ENTER NEW #:563	Code to check and change recording station subscribe name of Company Directory feature. (USA Only)	563
21	ISDN SUPP HOLD ENTER NEW #:57*	ISDN Supplementary Service for HOLD.	57*
22	ISDN SUPP CONF ENTER NEW #:57#	ISND Supplementary Service for Conference (Not supported).	57#
23	FORCED SEIZE BUSY STN/CO ENTER NEW #:56*	Busy Station / CO can be connected with entering this Code.	56*
24	ADDED FLEX NUMBER PLAN PRESS FLEX KEY (1-5)		
24-1	OVERRIDE DND/CFW ENTER NEW #:56#	[56#] + Station number, then the station's DND or CFW setting will be overridden.	56#
24-2	CANCEL CALL BACK ENTER NEW #:….	It is used to cancel call back.	
24-3	XFER TO VSF ANNC NO ENTER NEW #:55*	When a station is talking over a CO line User, [Transfer] + [55*] + Valid system announcement (01-70), then Outside user can hear system announcement, and system starts DISA service.	55*
24-4	CCR ENTER NEW #:#2	It is used in digit conversion.	#2
24-5	UCS SYS CONF GRP JOIN ENTER NEW #:5*0	It is used to join UCS conference group by entering the code.	5*0

3.3.2.6 8-Digit Table

We can support it more 4 digits for station number. Station numbering should not conflict with numbering plan. It is consist of prefix digits and add digits. Prefix digits can have up to 4 digits and Add digits can have up to 4 digits.

PROCEDURE:	
DIGIT 8 TBL ENTER TBL NO(01-10)	1. Press the **[PGM]** button and dial 238.
Digit 8 TBL 1 : Empty	Use the dial-pad to enter the desired table number.
	Press the desired Flex button; refer to Table 3.3.2.6-1.
	Use the dial-pad to enter the required data.
	Press the **[Save]** button to store the data entry.

Table 3.3.2.6-1 8-Digit Table (PGM 238)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	TBL 1 : SET 8 digit 8 Digit 1 : …….	The user may be allowed to enter the prefix digits using character assign method. (ex : 4+0 → 4)	Up to 4 digits	N/A
2	TBL 1: SET ADD DIGIT ADD DIGIT : 0	The user can be allowed to add digits. (ex: if it's set 3, prefix digits + xxx)	Up to 4 digits	0

3.3.3 Station Data –PGM 110-125

3.3.3.1 Station Type -PGM 110

Each station is assigned a type, which is used by the system to recognize the station's capabilities and default Flex button configuration. In addition, for the iPECS DSS/BLF Consoles, the associated station number is identified here. Note that the maximum of three (3) DSS Consoles(LIP DSS & LDP DSS) can be associated and connected to a station.

PROCEDURE:	
STATION TYPE ASSIGN ENTER STA RANGE	1. Press the **[PGM]** button and dial 110.
100-110 F1:TY F2:ASC IPKTU	Use the dial-pad to enter a station range (Ex 100~110). For a single station, enter the same number twice; use this procedure for an iPECS DSS Console.
	Select Flex button 1, to set the station type and, for iPECS DSS Consoles (types 2~4), Flex button 2 assigns the associated station.
100-110 F1:TY F2:ASC IPKTU	Use the dial-pad to enter desired data: 4-1. For Flex button 1 (TYPE), enter the station TYPE; refer to Table 3.3.3.1–1.
111-111 F1:TYPE F2 :ASC DSS MAP2 : STA	4-2. For Flex button 2 (Associated station), enter the number of the station used with the console. Flex button 2 is only available for iPECS DSS Consoles (Types 2~4), see Table 3.3.3.1-2 for default configurations.
	Press the **[Save]** button to store the data entries.

Table 3.3.3.1-1 STATION TYPE ASSIGNMENT — (PGM 110)

TYPE	DESCRIPTION
1	IP KEYSET
2	DSS MAP 1
3	DSS MAP 2
4	DSS MAP 3
5	SLT (DTMF)
6	SLT (DTMF) – Voltage Message lamp
7	SLT (DTMF) – FSK Message lamp
8	SLT (DTMF) – Polarity Reversal Message lamp

Table 3.3.3.1-2 CONSOLE BUTTON CONFIGURATION (PGM 110)

MAP	DEFAULT CONSOLE BUTTON CONFIGURATION	
MAP 1	Button 1: Intrusion	Button 2: All Call Page
	Button 3: Call Park 1	Button 4: Station Group 1
	Button 5: Camp-On	Button 6: Internal All Call Page
	Button 7: Call Park 2	Button 8: Station Group 2
	Button 9: [Release]	Button 10: Ext. All Call Page
	Button 11: Call Park 3	Button 12: Station Group 3
	Buttons 13 ~ 48: Station Ports 100 ~ 135	
MAP 2	Station Ports 136 ~ 183	
MAP 3	Station Ports 184 ~ 231	

3.3.3.2 Station Attributes I to III - PGM 111-113

Station Attributes define features and functions available to the station. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to Table 3.3.3.2-1 to Table 3.3.3.2-3 for a description of the features and the input required.

PROCEDURE:	
STATION ATT 1 ENTER STA RANGE	1. Press the **[PGM]** button and dial: 111 for Station Attributes I 112 for Station Attributes II 113 for Station Attributes III
100-110 STATION ATT 1 PRESS FLEX_KEY (01-24)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.3.2-1 to Table 3.3.3.2-3.
	Use the dial-pad to enter desired data for the attribute setting, refer to Table 3.3.3.2-1 to Table 3.3.3.2-3.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.2-1 STATION ATTRIBUTES I (PGM 111)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100-110 AUTO SPKR (1:ON/0:OFF) : ON	Enables **[SPEAKER]** activation when a CO/IP, DSS or other feature button is pressed, no need to lift handset.	0: OFF 1: ON	ON
2	100-110 CALL FWD (1:ON/0:OFF) : OFF	Enables Call Forward activation by the station.	0: OFF 1: ON	OFF

Table 3.3.3.2-1 STATION ATTRIBUTES I (PGM 111)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
3	100-110 DND (0-3) : 0(OFF)	Enables DND activation by the station.	0: OFF 1: ALL 2:ICM call only 3:CO call only	OFF
4	100-110 DATA SECURITY (1:ON/0:OFF) : OFF	Disables override and camp-on tones to the station when busy.	0: OFF 1: ON	OFF
5	100-110 HOWLING TONE (1:ON/0:OFF) : ON	Permits Howler tone to be sent to a SLT when left off-hook.	0: OFF 1: ON	ON
6	100-110 NO TCH ANS (1:ON/0:OFF) : OFF	Enables No-touch answer; this will automatically connect transferred calls to the station's speakerphone.	0: OFF 1: ON	OFF
7	100-110 PAGE ACCESS (1:ON/0:OFF) : OFF	Allows station to access paging.	0: OFF 1: ON	OFF
8	100-110 HEADSET RING (1:S/2:H/3:BOTH) : SPKR	This item selects device to receive incoming ring signals, Speaker, Headset or Both.	1: Speaker 2: Headset 3: Both	SPKR
9	100-110 SPKR/HEAD (1:SPKR/0:HEAD): SPKR	Selects Speakerphone mode or Headset mode	0: Headset 1: Speaker	SPKR
10	100-110 LCD DISP LED (1:RING/0:MWI): MWI	The LCD LED, upper left of LCD, may be used for Intercom Call ring Indication or Message Wait Indication.	0: MWI 1: Ring	MWI
11	100-110 LOOP LCR ACCT (1:ON/0:OFF) : OFF	Station based LOOP LCR authorization; this is used for LOOP LCR operation.	0: OFF 1: ON	OFF
12	100-110 CALL COVERAGE (1:ON/0:OFF) : OFF	The Call Coverage feature permits an iPECS Phone user to receive ring and answer calls to other stations.	0: OFF 1: ON	OFF
13	100-110 CALL COVERAGE DELAY RING: 0	When a covered station rings, the **{CALL COVERAGE}** button LED will flash at the covering station and will receive ring (immediate or delayed, 0 to 9 ring cycles).	0~9	0
14	100-110 OFFNET FWD (1:DIS/0:EN):ENABLE	A station must be allowed Off Net Fwd to forward external incoming calls outside the system or otherwise establish a CO-to-CO connection (Unsupervised Conference). (Except USA version)	0: Enable 1: Disable	Enable
15	100-110 FORCED ICM (1:ON/0:OFF) : OFF	When placing an intercom call, a user can change the ICM signaling mode, Tone Ring to Hands free answer mode or HF Answer to Tone Ring.	0: OFF 1: ON	OFF

Table 3.3.3.2-1 STATION ATTRIBUTES I (PGM 111)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
16	100-110 ACT PTT GRP ACTIVE PTT GROUP: .	A station can be assigned to a PTT group and the group enabled so the station can place and receive PTT announcements for the group.	0~9	.
17	100-110 ICM GROUP (01-15): 01	Assigns station to an ICM Tenancy Group, refer to PGM 125.	eMG80:1~15 eMG800:0~32	1
18	100-100 VMIU/VMIB BOARD USE 1ST VMIU/VMIB	Assigns the VMIU or VMIB where messages for the station are stored.	Sequence no	
19	100-110 SIP UID TBL (000-140) : 000	Index to SIP User ID table, PGM 126, for the station. Note PGM 126 is accessible by Web only.	000-140	000
20	100-110 CAMP ON TONE (1:ON/0:OFF) : ON	Permits camp on tone to be sent to a station when the station receives camp-on request.	0: OFF 1: ON	ON
21	100-110 SERIAL DSS (1:EN/0:DIS):ENABLE	Assigns Serial DSS usage authority.	0: Disable 1: Enable	Enable
22	100-110 DLTN (00-10) DIAL TONE (00)	Each station can choose one of eleven dial tone sources	00: dial tone 01: INT music 02: EXT music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10:VSF MOH3	dial tone
23	100-110 RBTN (00-10) RING BACK TONE (00)	Each station can choose one of eleven ring back tone sources	00: ring back tone 01: INT music 02: EXT music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10:VSF MOH3	ring back tone
24	100-110 ATTACH MSG (1:ON/0:OFF) : ON	When e-mail notification of a new VSF message is enabled, (PGM 236-button 7) the e-mail may include the voice mail as a wav file attachment. VSF mail server IP (PGM 113-button18) & VSF Mail Address (PGM 113-button19) are required for proper operation.	0: OFF 1: ON	ON

Table 3.3.3.2-2 STATION ATTRIBUTES II (PGM 112)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100-110 CALL TIME TN (1:ON/0:OFF) : OFF	A tone can be sent periodically indicating the elapsed time of an outgoing CO/IP call. The Elapsed Call Timer (PGM 180-button 19) determines the period between tones.	0: OFF 1: ON	OFF
2	100-110 AUTO HOLD (1:ON/0:OFF) : OFF	Enables Auto Hold for the station. With Auto Hold enabled, the system will place an active external call on hold if the user presses a CO/IP or DSS button.	0: OFF(Others) 1: ON(ATD)	OFF
3	100-110 TIME RESTRICT (1:ON/0:OFF) : OFF	The system can automatically disconnect outgoing calls at expiration of the Call Restrict timer (PGM 180-button 14).	0: OFF 1: ON	OFF
4	100-110 IND CO ACCESS (1:EN/0:DIS) : ENABLE	Permits stations to use dial codes to access individual CO Lines.	0: Disable 1: Enable	Enable
5	100-110 CO/IP QUEUING (1:EN/0:DIS): ENABLE	Permits the station to queue for the next available Line when an All Lines Busy signal is received.	0: Disable 1: Enable	Enable
6	100-110 CO PGM (1:EN/0:DIS): DISABLE	A station can be permitted to change the CO Line numbers (ports) associated with a CO Line button.	0: Disable 1: Enable	Disable
7	100-110 RING LINE PRE (1:EN/0:DIS) : ENABLE	Enables Ringing Line Preference for the station. Calls that ring the telephone are answered by going off-hook.	0: Disable 1: Enable	Enable
8	100-110 SPD ACCESS (1:EN/0:DIS) : ENABLE	Allows the station access to System Speed Dial bins.	0: Disable 1: Enable	Enable
9	100-110 UCD GRP SVC (1:ON/0:OFF) : OFF	When unavailable, DID/DISA calls to the station can be routed to the ACD Group to which the station is a member.	0: OFF 1: ON	OFF
10	100-110 RING GRP SVC (1:ON/0:OFF) : OFF	When unavailable, DID/DISA calls to the station can be routed to the Ring Group to which the station is a member.	0: OFF 1: ON	OFF
11	100-110 TWO WAY RECD (1:ON/0:OFF) : OFF	When allowed, the station can activate the Two-way record feature to record a conversation.	0: OFF 1: ON	OFF
12	100-110 MSG SCRL SPD (0 - 7) : 3	Select message scroll speed for IP phone (Not presently used).	0 ~ 7	3
13	100-110 HOT DESK STA (1:ON/0:OFF) : OFF	A station can be assigned as a Hot Desk phone. Users and agents can login and use resources of the system through the Hot Desk phone.	0: OFF 1: ON	OFF

Table 3.3.3.2-2 STATION ATTRIBUTES II (PGM 112)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
14	100-110 PREFER CO/GRP …..	The system will seize this CO Line or CO group number when the station dials '9' (First available CO access code).	CO # or CO Group #	..
15	100-110 SEND SLT CLI (1:ON/0:OFF) : ON	When allowed, system will send CLI information to the SLT.	0: OFF 1: ON	ON
16	100-110 UCD PRIORITY (0-9) : 0	ACD Group members may be assigned a priority, 0-9. Members with the highest priority are sent calls ahead of lower priority members. This field is the same as PGM 191-button 19 for ACD Groups.	0 ~ 9	0
17	100-110 EZ PWD LOGIN (1:ON/0:OFF	For ez ATD. Enables/disables required Auth code use.	0: OFF 1: ON	OFF
18	100-110 EMERGENCY CO …..	This field defines the CO Line or Group employed by the system to place Emergency Assistance calls.	CO #, CO Group #, Transit-out	Any CO
19	100-110 STA ACCOUNT (1:ON/O:OFF) : OFF	When ON, the station user must enter an authorization code to access CO Lines.	0: OFF 1: ON	OFF
20	100-110 AUTO CALL REC (0:OFF/1:ALL/2:CO): OFF	This field enables unconditional recording of all calls placed/received by the station. Recordings, in .wav format, are stored at the UCS Client or Recording Server (IPCR or 3rd party) defined under button 21. Station and CO calls are recorded with ALL. Only CO calls are recorded with CO.	0: OFF 1: ALL 2: CO	OFF
21	100-110 CALL REC DEST ……..	When Unconditional Call recording is enabled as above, the recording UCS Client station number is defined here.	station	
22	100-110 VSF BK DEL (1:ON/0:OFF) : OFF	UCS Client may monitor voice messages for another station as a backup. The UCS Client will include the message count for the station in the Voice message count. When enabled here, the UCS Client may delete messages for the station.	0: OFF 1: ON	OFF

Table 3.3.3.2-2 STATION ATTRIBUTES II (PGM 112)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
23	100-110 VSF BK STA ……..	UCS Client may monitor voice messages for another station as a backup. UCS Client will include the message count for the station in the Voice message count. This field defines the UCS Client station number that will be used as the VMIU/VMIB back up.	station	
24	100-110 VSF BK PROM (1:ON/0:OFF) : OFF	Enables UCS Client to backup VSF Prompts.	0: OFF 1: ON	OFF

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100-110 ADMIN (1:EN/0:DIS) : ENABLE	Enables station access to the System Database.	0: Disable 1: Enable	Enable
2	100-110 VSF ACCESS (1:EN/0:DIS) : ENABLE	Permits station access to the built-in AA/VM.	0: Disable 1: Enable	Enable
3	100-110 GROUP LISTEN (1:EN/0:DIS) : DISABLE	Enables Group Listen feature, audio is sent to both the handset and speaker with the handset microphone active and speakerphone microphone OFF.	0: Disable 1: Enable	Disable
4	100-110 OVERRIDE (1:EN/0:DIS) : DISABLE	Enables intrusion to gain access to an active CO/IP call.	0: Disable 1: Enable	Disable
5	100-110 SMDR HIDE (1:EN/0:DIS) : DISABLE	Enables hiding dialed digits in SMDR output.	0: Disable 1: Enable	Disable
6	100-110 VOICE OVER (1:EN/0:DIS) : ENABLE	Enables use of Voice Over by station.	0: Disable 1: Enable	Enable
7	100-110 PRIME LINE (1:HOT/0:WARM) : WARM	Enables Delayed Prime Line (Idle Line) activation, see PGM 121, Idle Line Selection and PGM 182-button 6 for Prime Line timer.	0: WARM 1: HOT	WARM
8	100-110 ALARM/DOORBEL (1:EN/0:DIS) : DISABLE	Assigns station to receive Alarm/Doorbell signal.	0: Disable 1: Enable	Disable

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	100-110 CALL WAIT (0-3) : For Ext/Int	When a busy station receives a call, the call may queue to the station instead of receiving busy tone. With Call Wait, the caller will hear Ring-back and the user sees the CO line LED flash. If this option is set to a station, and a co-line is ring assigned to the station, second ring assigned call CLI will show in the station's LCD.	0: OFF, 1: For External/Internal 2:For External, 3: For Internal	For External/Internal
10	100-110 LEFT MSG EXEC (1:ON/0:OFF) : ON	When a call is forward to the Secretary of an Executive/Secretary pair, messages can be left for the Executive (ON) or Secretary (OFF).	0: OFF 1: ON	ON
11	100-110 E&MIC HEADSET (1:ON/0:OFF) : OFF	Select E&MIC Headset mode.	0: OFF 1: ON	OFF
12	100-110 ENBLOCK MODE (1:ON/0:OFF) : OFF	When On, the user-dialed digits are stored at iPECS IP or LDP Phones until explicitly sent by the user. When sent, all dialed digits are sent to the system in a block. En-block mode is only available to iPECS IP and LDP Phones with 3-Soft keys.	0: OFF 1: ON	OFF
13	100-110 MSG RETRIEVE (1:FIFO/0:LIFO) : LIFO	Messages stored in the VSF may be retrieved in either a FIFO (first-in-first-out) or LIFO (last-in-first-out) order based on this entry.	1: FIFO 0: LIFO	LIFO
14	100-110 VMID NUMBER 100	When using an adjunct VM, the system can translate the Mailbox number from the user's station number to the assigned VMID. The system sends the station number or VMID to the VM (in-band or SMDI) in order to identify the appropriate Voice Mailbox.	0000-9999	Station #
15	100-110 AUTO ACD-DND ([SPD],0-9,*,#): ..	If an Agent does not answer an ACD call in the ACD No Answer timer, the Agent enters an Unavailable state with the Reason code entered here. The reason code is sent in the ACD Event message.	0: None #, * 1 ~ 9	None
16	100-110 FWD IF OOS (1:ON/0:OFF) : OFF	If a station is Out-of-Service and has previously forwarded calls, the system will forward the calls, if enabled here.	0: OFF 1: ON	OFF
17	100-110 BACK LIGHT (O:OFF/1:BUSY/2:ON): 1	The backlight of the LIP phones is assigned to stay off, light only when the station is busy, or light constantly.	0: OFF 1: Busy 2: ON	Busy

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
18	100-110 VSF MailSvrIP ……..	The VMIB includes notification of new messages to the user's e-mail. This field displays the user's e-mail mail server for the notification. Use Web Admin PGM 132 to modify this value.	IP v4 address Or Mail server name	
19	100-110 VSF Mail Addr …….	The VMIB includes notification of new messages to the user's e-mail. This field displays the e-mail address to notify when a new message is received at the VMIB. Use Web Admin to modify this value.	e-mail address	
20	100-110 BLOCK B-CALL (1:ON/0:OFF) : OFF	When an SLT extension tries to transfer a CO call to a CO line it is blocked and the call is released.	0 : OFF 1 : ON	OFF
21	100-110 BY PASS DTMF (1:ON/0:OFF) : OFF	When detected, DTMF from an SLT may be regenerated by the analog CO line ports, the SLT port can by-pass detection so DTMF is not detected.	0 : OFF 1 : ON	OFF
22	100-110 PROCTOR MONIT (1:ON/0:OFF) : OFF	Enables use of PABX ANI Link device for E-911 support, Only an SLT can be used for this feature.	0 : OFF 1 : ON	OFF
23	100-110 VSF MailSvrID ……	The VMIU and VMIB include notification of new messages to the user's voice mail. This field defines the user's ID to notify when a new message is received at the VMIU or VMIB.		
24	ADDED STATION ATT3 PRESS FLEX KEY (01-24)		01-24	
24-1	100-110 VSF MailSvrPW ……	Unified Mail server password		
24-2	100-110 DOOR OPEN (1:EN/0:DIS) : ENABLE	Enables use of Door open feature by station - Default value : Australia : Disable except for port 1or2 Otherwise : Enable	0: Disable 1: Enable	Enable
24-3	100-110 VSF MSG DD/TM (1:ON/0:OFF) : ON	When ON, play the date/time stamp of VSF message.	0 : OFF 1 : ON	ON
24-4	100-110 OGM DEST NOT ASSIGNED	Assign Mail box destination. When a user dial attendant code ('0' or '9'), if it is assigned then the call will be delivered to assigned mail box destination instead of attendant. If it is not assigned then the call will be delivered to attendant.		NOT ASSIGNED

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-5	100-110 VSF DEL MSG (1:ON/0:OFF) : OFF	When ON, delete VSF messages when send UMS e-mail notification.	0 : OFF 1 : ON	OFF
24-6	100-110 VM PWD CHECK (0-2) : STN&PWD	When ON, check password when a user access to the VSF messages.	0 : No Password 1 : PWD only 2: station number and Password	2: station number and Password
24-7	100-110 BARGE IN MODE (0-2) : DISABLE	Barge in permits an authorized extension to intrude into other existing outside/internal calls or to disconnect existing call forcedly. If 0, Barge In is disabled. If 1, Barge In monitors other conversation. If 2, Barge In monitor join and Forced Disconnect.	0: Disable 1: Monitor 2:Monitor&Join & Disconnect	Disable
24-8	100 – 110 SLT FLASH MODE (0-3) : FLASH TRANSFER	SLT Flash works as following option. 0: Flash Transfer – Flash detected, then the line is held and the line goes to waiting state. 1: Flash Drop - Flash detected and Line is disconnected. 2: Flash Ignore – Flash detected, but Ignored. 3: Hold Release – Flash detected, then the line is held and the line goes to waiting state. And the SLT user goes on-hook, then the held line is disconnected, not recalling.	0: Transfer 1: Drop 2: Ignore 3: Hold Release	Transfer
24-9	100 – 110 RLS COST DISP (1:ON/0:OFF) : OFF	When CO line is released, according to admin option, call-cost or disconnection-cause can be displayed to user LCD.	0 : OFF 1 : ON	OFF
24-10	100 – 110 LDT TBL INDEX (00-10) : 01	LCR will be operated with this LDT table index	No. of LDT Table	1
24-11	100 – 110 WEB CALL BACK (1:EN/0:DIS) : DISABLE	Enable Web call back service. When enabled, call back service on station web admin could be used.	0: Disable 1: Enable	Disable
24-12	100 – 110 VSF SMTP SECU (0-2) : NO SECUTIRY	Security for VSF mail sending can be chosen.	0: No Security 1: SSL 2: TSL	No Security
24-13	100 – 110 VSF SMTP PORT (00001-65535) : 00025	When VSF mail sending, SMTP port can be program.	00001 – 65535	25

Table 3.3.3.2-3 STATION ATTRIBUTES III (PGM 113)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-14	100 – 110 VSF S-MAILADDR ……	When VSF mail sending, Sender Mail Address can be program.		
24-15	100 – 110 PREPAID CALL (1:ON/0:OFF) : OFF	Enable prepaid call service.	0: OFF 1: ON	OFF
24-16	100 – 110 PREPAID MONEY 000000	Prepaid Money can be entered. By Call Metering signal, pre-paid money can be calculated.	000000 - 999999	0
24-17	100 – 110 DEFAULT VM NO ….	Default VM group number used when users press the **[Msg/Call Back]** button and there is no message.		
24-18	100 – 110 SLT MODE (0-3) : DEFAULT	SLT configuration mode. It is used only for South Africa. SLT gain is changed cording to this configuration.	0: Default 1: Short 2: Long 3: Far	Default (0)
24-19	100 – 110 OFF HOOK RING (0-3) : REFER TO SYS	Off hook ring type could be selected by station base.	0: BURST 1: MUTE 2: SYSTEM 3:SILENCE	Refer to System (2)
24-20	100 – 110 SIP COLOR RING …..	Color ring is provided from assigned SIP VM (UMS). SIP extension number that is connected to SIP VM (UMS) server should be assigned.		
24-21	100 – 110 FORCED ACNT (1:ON/0:OFF) : OFF	User should enter an Account Code prior to placing an outgoing call when this value has “ON”.	0: OFF 1: ON	OFF
24-22	100 – 110 FLEX BTN PGM (1:ON/0:OFF) : ON	A user can program Flex buttons at station.	0: OFF 1: ON	ON
24-23	100 – 110 STNWEB_LEVEL (1-3) : LEVEL 1	There are 3 access levels that can be assigned to station. The station with level 1 can view/access all programs in station web. The station with level 2/3 follows Station Web Authorization menu (System Data -> Station Web Authorization).	LEVEL 1 ~ LEVEL 3	LEVEL 1
24-24	100 – 110 HEADSET PAGE (1:S/2:H/3:BOTH): SPKR	Paging is provided on selected device (SPEAKER/HEADSET/Both) while in the headset mode.	1~3 (SPKR/ HEADSET/ Both)	1: SPKR

3.3.3.3 Station Attributes IV -PGM 114

When a station uses an ISDN Line, various parameters relating to ISDN Calling Line Identification and Connected Line Identification can be assigned for each station. In addition, when the station is an SLT, several parameters must be set to indicate the capabilities related to the station, such as 3.1 KHz audio for ISDN use. Refer to Table 3.3.3.3-1 for a description of the attributes and the inputs available.

PROCEDURE:	
STATION ATT 4 ENTER STA RANGE	1. Press the **[PGM]** button and dial 114.
100-110 STATION ATT4 PRESS FLEX_KEY (01-24)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.3.3-1.
	Use the dial-pad to enter desired data for the attribute, refer to Table 3.3.3.3-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100-110 CLIP DISPLAY (1:ON/0:OFF) : OFF	CLIP (Calling Line Identification Presentation), an ISDN service, sends the number of the calling party to the system in the call SETUP message. If enabled here, the number will be shown in the iPECS Phone LCD.	0: OFF 1: ON	OFF
2	100-110 COLP DISPLAY (1:ON/0:OFF) : OFF	COLP (Connected Line Id Presentation), an ISDN service, sends the number of the answering party to the system in the call CONNECT message. If enabled here, the number will be shown in the iPECS Phone LCD.	0: OFF 1: ON	OFF
3	100-110 PROGRESS IND (1:ON/0:OFF) : OFF	When employing a non-ISDN terminal, specifically a modem or analog FAX, the ISDN call SETUP message must include this message and the Progress Indication parameter should be set to “ON”.	0: OFF 1: ON	OFF
4	100-11- CLIR SERVICE (1:ON/0:OFF) : OFF	CLIR (Calling Line Identification Restriction), an ISDN service, removes calling party Id sent from the PSTN to the called party with a RESTRICT instruction in the SETUP message. If enabled here, the system will send the RESTRICT instruction to the PSTN when an outgoing ISDN call is placed.	0: OFF 1: ON	OFF

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
5	100-110 COLR SERVICE (1:ON/0:OFF) : OFF	COLR (Connected Line Id Restriction), an ISDN service, removes connected party Id sent from the PSTN to the calling party with a RESTRICT instruction in the CONNECT message. If enabled here, the system will send the restrict instruction to the PSTN when the station answers an ISDN call.	0: OFF 1: ON	OFF
6	100-110 STN CLI 1 100	When not restricted (button 4 & 5 above) and entry 00 of the CLIP/CLOP Table is selected in PGM 143-button 1& 2, this entry is added to the number sent in the ISDN call SETUP or CONNECT message in place of the station number.	12 digits	Station number
7	100-110 3.1 kHz AUDIO (1:ON/0:OFF) : OFF	When an analog device (SLT or FAX) uses an ISDN Line in the system, the Information Element of the ISDN SETUP message must indicate it only has 3.1 KHz audio capabilities. If a SLT or analog FAX will be allowed access to the ISDN Lines, this parameter must be “ON”.	0: OFF 1: ON	OFF
8	100-110 CLI NAME DISP (1:ON/0:OFF) : OFF	When the CLI data from the PSTN in the call SETUP message matches a number in Speed Dial, the system can display the name associated with the Speed Dial bin, if set to ON.	0: OFF 1: ON	OFF
9	100-110 CLI/REDIRECT (1:RED/0:CLI) : CLI	When an incoming ISDN call is Redirected by the ISDN, the call SETUP message will contain an original and redirected CLI. This selection determines if the iPECS Phone will display the original or redirected number.	0: CLI 1: Redirect	CLI
10	100-110 CLI MSG-WAIT (1:ON/0:OFF) : OFF	A log of caller identification can be maintained for the user, permitting the user to call back the identified party. System-wide, up to 1000 entries can be maintained in the log.	0: OFF 1: ON	OFF
11	100-110 EXT OR ATD (1:ATD/0:EXT) : EXT	When the system sends a station number with CLIP or COLP, the number can be either the Attendant number or the number of the station.	0: EXT 1: ATD	EXT

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
12	100-110 MSN WAIT (1:ON/0:OFF) : OFF	When a call that is corresponding to a MSN Telephone Number comes in to system, the call is basically routed to idle stations that have free MSN button that is assigned for the corresponding Telephone Number. And also the call can be routed to busy stations in the following condition. OFF : if a keyset is in a busy status, cannot receive incoming MSN Telephone Number corresponding call even though it has a free(idle) corresponding MSN LOOP Button ON : if a keyset is in a busy status, can receive incoming MSN Telephone Number corresponding call if it has a free(idle) corresponding MSN LOOP Button	0: OFF 1: ON	OFF
13				
14	100-110 DID RESTRICT (1:ON/0:OFF) : OFF	Enable station receive DID call.	0: OFF 1: ON	OFF
15	100-110 DISA RESTRICT (1:ON/0:OFF) : OFF	Enable station receive DISA call.	0: OFF 1: ON	OFF
16				
17	100-110 MODEM ENABLE (1:ON/0:OFF) : OFF	It is used to set modem attributes.	0: OFF 1: ON	OFF
18	100-110 FAST XFER CLI (1:ORI/0:TRN) : TRN	If a user transfers a CO call with CLI to SLT or DECT, CO CLI can be seen instead of station number when this option is set to ORI.	0: TRN 1: ORI	TRN
19				
20	100-110 PICKUP BY BTN (1:ON/0:OFF) : ON	It is used to set pick up by flex button.	0: OFF 1: ON	ON
21	100-110 MULTI LANG (1-6):PROMPT1 A.AMERICA	Selected language prompt is played to the user when accessing the VMIU or VMIB.	1~6 (1: N.AMERICA 2:KOREA 3:TURKIYE 4:RUSSIA 5:AUTRALIA 6:GERMANY)	1

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
22	100-110 P-MSG DND (1:ON/0:OFF) : OFF	If it is ON, the pre-selected station doesn't receive the ring and the caller hears DND tone.	0: OFF 1: ON	OFF
23	100-110 P-MSG LANG (1-6):PROMPT1 U.S	Select voice enabled preselected message for a station playing toward an incoming CO call	1~6 (1: US 2:KOREA 3:TURKIYE 4:RUSSIA 5:AUTRALIA 6:GERMANY)	1
24	ADDED STATION ATT4 PRESS FLEX KEY (01-23)			
24-1	100-110 STN CLI 2 ……....	Station CLI 2 can be programmed. If a CO line is set to Station CLI 2, then this CLI is used for outgoing CLI.	16 Chars	None
24-2	100-110 STN CLI 3 ……....	Station CLI 3 can be programmed. If a CO line is set to Station CLI 3, then this CLI is used for outgoing CLI.	16 Chars	None
24-3	100-110 STN CLI 4 ……....	Station CLI 4 can be programmed. If a CO line is set to Station CLI 4, then this CLI is used for outgoing CLI.	16 Chars	None
24-4	100-110 STN CLI 5 ……....	Station CLI 5 can be programmed. If a CO line is set to Station CLI 5, then this CLI is used for outgoing CLI.	16 Chars	None
24-5	100-110 SLT CID TYPE (0:FSK./1:DTMF) : FSK	SLT can send CID by programming options.	(0:FSK./1:DTMF)	FSK
24-6	100-110 WAKEUP ANNC 00	Wakeup Announce can be programmed.	0-200	0
24-7	100-110 CAMP ON ENABLE (1:ON/0:OFF) : ON	If it is ON (enabled) then this station will receive camp on. But if it is OFF (Disabled) then this station will not receive camp on by other person.	0: OFF 1: ON	ON
24-8	100-110 GAIN TBL (1-3) : 1	TDM gain table can be programmed.	1-3	1
24-9	100-110 TONE TBL (1-5) : 1	Tone table can be programmed.	1-5	1
24-10	100-110 DGT CONV TBL (01-15) : 00	Set the digit conversion table.	eMG80:1-15 eMG800:1-32	0
24-11	100-110 VIDEO ON CALLING (1:ON/0:OFF) : OFF	Video show to called party when calling (ex. IP Video Door Phone)	0: OFF 1: ON	OFF

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-12	100-110 E.164 CLI TO (1:ON/0:OFF) : OFF	Send CLI with E.164 format if it is ON.	0: OFF 1: ON	OFF
24-13	100-110 FLEX PAGE (1-3) : 3 PAGE	The iPECS LIP-9030 and 9040 have 8 and 12 Flexible buttons, respectively. Additional Flex buttons are available using Flex button pages. The phone can have up to 3 pages each with the 8 or 12 Flex buttons. Thus, an LIP-9030 can have 24 Flex buttons and the LIP-9040 can have 36 Flex buttons. The Navigation Up/Down button is used to scroll through the Flex buttons pages assigned.	1-3	3 PAGE
24-14	100-110 ALIGN LCD (0-2) : NOT ALIGN	For the iPECS LIP-9010/20/30/40, character alignment for messages to the phone can be right or left aligned by the system, or alignment controlled by the phone (“Not Align”).	0: Not align 1: Left 2: Right	Not Align
24-15	100-110 TWOWA REC AN 00	The two way record announcement can be recorded to play to the station as Announcement.	0-200	00
24-16	100-110 LDT ZONE (001-100) : 001	If the LDT Zone Number of a LDT table (LCR LDT(221)) is equal to this value, the LDT table is available to this CO Line.	001-100	001
24-17	100-110 ECM FAX(T.38) (1:ON/0:OFF) : ON	ECM stands for Error Correction Mode. If you failed to send something via Faxes, you can send it again until it is successful.	0: OFF 1: ON	ON
24-18	100-110 DISP RESTRICT (1:ON/0:OFF) : OFF	When {Display Restricted Caller Number} in CLI Attributes(113) of a station is ON, Although the caller number is restricted in ISDN message, the ringing station displays the caller number.	0: OFF 1: ON	OFF
24-19	100-110 SMALL WIN USE (1:ON/0:OFF) : OFF	If this option is set to ON, small popup is displayed on the LCD of LIP-9030/9040. If it is set to OFF, top bar is displayed instead of small popup.	0: OFF 1: ON	OFF
24-20	100-110 LARGE WIN TMR (0-5) : 0	When Large popup timer is set to any value from 1 to 5 except 0, the display of large popup is disappeared after the timer expired and then the large popup information is displayed at top bar.	0-5	0
24-21	100-110 MWI LED (0-4) : ALL MWI	User can program Message wait lamp for each type, refer to the range.	0: All MWI 1: VM MWI 2: CLI MWI 3: SMS MW 4: ICM MWI	ALL MWI

Table 3.3.3.3-1 STATION ISDN ATTRIBUTES (PGM 114)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-22	100-110 NFC AUTH USE (1:ON/0:OFF) : ON	If this option is ON, User enters Authorization code to use NFC function only for LIP-9071.	0: OFF 1: ON	ON
24-23	100-110 SHORT MODEM (1:ON/0:OFF) : OFF	If this value of SLT is ON, SLT is the modem mode in seizing a co line. When the CO line is CO Board, the {short modem timer} is starting when the SLT seizes the CO line. And if the {short modem timer} is expired, the SLT goes to the original mode. When the CO line is ISDN, the {short modem timer} is starting after receiving the ISDN connect message. And if the {short modem timer} is expired, the SLT goes to the original mode.	0: OFF 1: ON	OFF

3.3.3.4 Flexible button Assignment -PGM 115

Each Flex button for each iPECS IP and LDP Phone, and DSS Console is assigned a function (Type) and an associated Value as shown in Table 3.3.3.4-1.

For assignments to an DSS Console, the **[VOL UP]**/**[VOL DOWN]** buttons shift the Flex button appearance on the Admin station to the next or previous group of 24 buttons as they appear on the iPECS DSS Console. When multiple DSS Consoles are associated with a station, **[VOL UP]**/**[VOL DOWN]** are used to access and assign a function to the console buttons. Each console contains entries for 48 buttons even though the console may only have 12 buttons. In this case, assignments for buttons 13 to 48 are ignored.

Table 3.3.3.4-2 shows the default button assignments for the iPECS IP and LDP Phones and Table 3.3.3.4-3 and Table 3.3.3.4-6 provides default assignment for the various DSS Console button maps.

PROCEDURE:	
FLEX BUTTON ASSIGN ENTER STA RANGE	1. Press the **[PGM]** button and dial 115.
100-110 BTN ASSIGN PRESS FLEX_KEY (1-24)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press the desired Flex button (1~24).

	Use the dial-pad to enter the desired button TYPE (1~6) and value, if required. Refer to Table 3.3.3.4-1 for types and value range. Defaults for the iPECS IP and LDP Phones are shown in Table 3.3.3.4-2, for DSS Console defaults refer to Table 3.3.3.4-3. In addition, for the DSS Console, use **[VOL UP]/[VOL DOWN]** buttons to access the next/previous 24 flex buttons.
	Press the **[Save]** button to store the Flex button data entry.

Table 3.3.3.4-1 FLEX BUTTON TYPE & VALUE CODES (PGM 115)

TYPE	DESCRIPTION	Remarks
1	Empty Button	Empty (unassigned) button, may be defined by the user.
2	User Program Fixed Numbering Plan	Assigns button to perform a User Program function from the Fixed Numbering Plan, Appendix A.
3	**{[SPEED] XXX}**	Station or System Speed Dial bin.
4	Flexible Numbering Plan Code	Assigns button to dial a code from the Flexible Numbering Plan, see Appendix B.
5	Station or Network Station	Assign network station number from network table.
6	MSN	Enter desired MSN Table index.
7	U-LOOP	U-Loop button for call wait of internal & external call

Table 3.3.3.4-2 iPECS IP & LDP PHONE BUTTON DEFAULT CONFIGURATION (PGM 115)

BTN	iPECS LDP Phone					
	9030	9008	7004	7008	7016	7024
1	{CO 1}	{CO 1}	Trans/ PGM*	DND	{CO 1}	{CO 1}
2	{CO 2}	{CO 2}	Speed*	Call Back	{CO 2}	{CO 2}
3	{CO 3}	{CO 3}	{LOOP}	{LOOP}	{CO 3}	{CO 3}
4	{CO 4}	{CO 4}	{LOOP}	{LOOP}	{CO 4}	{CO 4}
5	{CO 5}	{CO 5}		empty	{CO 5}	{CO 5}
6	{CO 6}	{CO 6}		empty	{CO 6}	{CO 6}
7	{CO 7}	{CO 7}		empty	{CO 7}	{CO 7}
8	{CO 8}	{LOOP}		empty	{CO 8}	{CO 8}
9	{CO 9}	empty			{CO 9}	{CO 9}
10	{CO 10}	empty			{CO 10}	{CO 10}
11	{LOOP}				{LOOP}	{LOOP}
12	{LOOP}				{LOOP}	{LOOP}
13	empty				empty	empty
14	empty				empty	empty
15	empty				empty	empty
16	empty				empty	empty
17	empty					empty
18	empty					empty
19	empty					empty
20	empty					empty

BTN	iPECS LDP Phone					
	9030	9008	7004	7008	7016	7024
21	empty					empty
22	empty					empty
23	empty					empty
24	empty					empty

BTN	iPECS IP Phone (7000/8000/8000E series)								
	8004	8008	8012	8024	8040	7004	7008	7016	7024
1	{CO 1}	{CO 1}	{CO 1}	{CO 1}	{CO 1}	Trans/ PGM*	DND	{LOOP}	{CO 1}
2	{CO 2}	{CO 2}	{CO 2}	{CO 2}	{CO 2}	{LOOP}	{LOOP}	empty	{CO 2}
3	{CO 3}	{CO 3}	{CO 3}	{CO 3}	{CO 3}	{LOOP}	{LOOP}	empty	{CO 3}
4	{CO 4}	{CO 4}	{CO 4}	{CO 4}	{CO 4}		empty	empty	{CO 4}
5		{CO 5}	{CO 5}	{CO 5}	{CO 5}		empty	empty	{CO 5}
6		{CO 6}	{CO 6}	{CO 6}	{CO 6}		empty	empty	{CO 6}
7		{CO 7}	{CO 7}	{CO 7}	{CO 7}		empty	empty	{CO 7}
8		{LOOP}	{CO 8}	{CO 8}	{CO 8}			empty	{CO 8}
9			{CO 9}	{CO 9}	{LOOP}			empty	{CO 9}
10			{CO 10}	{CO 10}	{LOOP}			empty	{CO 10}
11			{LOOP}	{LOOP}				empty	{LOOP}
12			{LOOP}	{LOOP}				empty	{LOOP}
13				empty				empty	empty
14				empty				empty	empty
15				empty				empty	empty
16				empty				empty	empty
17				empty					empty
18				empty					empty
19				empty					empty
20				empty					empty
21				empty					empty
22				empty					empty
23				empty					empty
24				empty					empty

BTN	iPECS IP Phone (9000 series)					
	9002	9010	9020	9030 (8/24)	9040 (12/36)	9070 (48)
1	{LOOP}	{CO 1}	{CO 1}	{CO 1}	{CO 1}	{CO 1}
2	{LOOP}	{CO 2}	{CO 2}	{CO 2}	{CO 2}	{CO 2}
3		{CO 3}	{CO 3}	{CO 3}	{CO 3}	{CO 3}
4		{CO 4}	{CO 4}	{CO 4}	{CO 4}	{CO 4}
5		{LOOP}	{CO 5}	{CO 5}	{CO 5}	{CO 5}
6			{CO 6}	{CO 6}	{CO 6}	{CO 6}
7			{CO 7}	{CO 7}	{CO 7}	{CO 7}
8			{CO 8}	{CO 8}	{CO 8}	{CO 8}
9			{LOOP}	{CO 9}	{CO 9}	{CO 9}
10			{LOOP}	{CO 10}	{CO 10}	{CO 10}
11				{LOOP}	{LOOP}	{LOOP}
12				{LOOP}	{LOOP}	{LOOP}

NOTE:
These button definitions cannot be changed.

Table 3.3.3.4-3 IP CONSOLE BUTTON CONFIGURATION

MAP	DEFAULT CONSOLE BUTTON CONFIGURATION	
MAP 1	Button 1: Intrusion	Button 2: All Call Page
	Button 3: Call Park 1	Button 4: Station Group 1
	Button 5: Camp-On	Button 6: Internal All Call Page
	Button 7: Call Park 2	Button 8: Station Group 2
	Button 9: [Release]	Button 10: Ext. All Call Page
	Button 11: Call Park 3	Button 12: Station Group 3
	Buttons 13 ~ 48: Station Ports 100 ~ 135	
MAP 2	Station Ports 136 ~ 183	
MAP 3	Station Ports 184 ~ 231	

3.3.3.5 Station Class-of-Service – PGM 116

All stations are assigned a Class-of-Service (COS), which determines the ability of the user to dial certain types of calls, refer to Table 3.3.3.5-1. Separate COS assignments are made for Day, Timed and Night Mode system operation. As a default, all stations are assigned with a Station COS of 1, no restrictions for all three modes.

The station COS interacts with the CO Line COS to establish overall dialing or Toll restrictions. This interaction and the resulting restrictions are given in Table 3.3.3.5-2.

Long distance calls are determined by the 1st dialed digit ("0") and/or the number of digits dialed. If the 1st digit dialed is an LD code, default "0", or, if the number of digits dialed exceeds the assigned LD digit counter (SMDR Attributes PGM 177 button 4), the call is consider a Long Distance call and appropriate restrictions are applied.

PROCEDURE:	
STATION COS ENTER STA RANGE	1. Press the **[PGM]** button and dial 116.
100-110 STATION COS DAY=01 NIGHT=01 TIMED=01	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press desired Flex button, 1: Day mode COS 2: Night mode COS 3: Timed mode COS
	Use the dial-pad to enter desired data for the Station COS, refer to Table 3.3.3.5-1 & Table 3.3.3.5-2.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.5-1 STATION CLASS-OF-SERVICE (PGM 116)

STATION COS	RESTRICTIONS
1	No restrictions are placed on dialing from the station.
2	The assignments in Exception Table A are monitored for allow and deny numbers.
3	The assignments in Exception Table B are monitored for allow and deny numbers.
4	The assignments in both Exception Tables A & B are monitored for allow and deny numbers.
5	The leading digit dialed cannot be a Long Distance code, default "0", and further denied/allowed based on Exception Table C.
6	The leading digits dialed cannot be a Long Distance code & digit count cannot exceed the LD digit counter, default 8 digits, and further denied/allowed based on Exception Table C.
7	Intercom and paging calls are allowed. No outgoing dialing except for emergency calls is allowed on CO Lines.
8	The assignments in the Exception Table D are monitored for allow and deny numbers.
9	The assignments in the Exception Table E are monitored for allow and deny numbers.
10	The assignments in the Exception Table D & E are monitored for allow and deny numbers.
11	The assignments in the Exception Table A & B and D & E are monitored for allow and deny numbers.

Table 3.3.3.5-2 STATION/CO LINE COS TOLL RESTRICTIONS (PGM 116)

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 5	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 9	Exception Table E governs the dialing	Exception Table E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction

3.3.3.6 CO/IP Group Access – PGM 117

Stations can be allowed or denied access to CO Lines and IP Channels by group (eMG80: 20 /eMG800:200), refer to CO Line Attributes, PGM 141, button 1. As a default, all stations are allowed access to all groups except Private Lines (group 00) and unused CO Lines. The CO Line of an RSGM is assigned as a Private Line by default.

PROCEDURE:	
CO/IP GROUP ACCESS ENTER STA RANGE	1. Press the **[PGM]** button and dial 117.
100 – 110 CO/IP GRP PRESS FLEX KEY (01-20)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	The first 20 Flex button LEDs indicate group access for eMG. Press the desired Flex button to toggle CO/IP Group access, LED on: group access allowed LED off: group access not allowed
	Press the **[Save]** button to store the data entry.

3.3.3.7 Internal Page Zone Access – PGM 118

Each iPECS IP and LDP Phone is assigned to receive announcements from each Internal Page Zone. A station can be assigned to any, all or no zones. Note a remote station or a station not assigned to any Internal Zone will not receive any page announcements including Internal All Call. As a default, all stations except remote stations are assigned to zone 1.

PROCEDURE:	
INTERNAL PAGE ZONE ENTER STA NUMBER	1. Press the **[PGM]** button and dial 118.
100-110 I-PAGE ZONE PRESS FLEX KEY (001-024)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	The LEDs indicate the status for Page Zones 1 to 24, Use the **[VOL UP]**/**[VOL DOWN]** button to display Page Zones 25 to 35. Press the desired Flex button to toggle Internal Page Zone assignments, LED On: station receives announcement LED Off: station does not receive announcement.
	Press the **[Save]** button to store the Page Zone data.

3.3.3.8 PTT (Push-To-Talk) Group Access – PGM 119

Each iPECS Phone is assigned to receive PTT announcements from any combination of the nine PTT groups. Note remote stations and stations not assigned to a group will not receive PTT page announcements including All PTT group page. As a default, all stations except remote stations are assigned to group 1.

PROCEDURE:	
PTT GROUP ACCESS ENTER STA NUMBER	1. Press the **[PGM]** button and dial 119.
100-110 PTT GRP ACC PRESS FLEX_KEY (01-10)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	The first 10 Flex button LEDs indicate assigned zones. Press the desired Flex button to toggle Push-To-Talk group assignments, LED On: station receives announcement LED Off: station does not receive PTT announcement Flex button 10 assigns group 0, all groups.
	Press the **[Save]** button to store the PTT group data.

3.3.3.9 Preset Call Forward – PGM 120

This assignment allows an external or internal call to initially ring at a station and forward to a pre-determined destination. Preset Call Forward can be assigned separately for internal and external calls forwarding for all calls (Unconditional), Internal Busy, No-Answer or DND, or External Busy, No-Answer or DND. Calls can set as Preset Forward to a Station, Hunt group, System Speed dial for Off-net, or Station ICR.

For the “Transfer to Mail-Box” enter the Station Group number of the Voice Mail group (external VM, VSF or Feature Server Voice Mail group). This will permit other iPECS IP Phone and LDP users to transfer a call directly to the desired user‘s Voice Mail-Box.

PROCEDURE:	
CALL FWD PRESET ENTER STA RANGE	1. Press the **[PGM]** button and dial 120.
100 – 110 STA PRES FWD CONDITION CHOICE (F1 –F8)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.

PROCEDURE:	
F1:S F2:H F3:SPD F4:ICR UNCONDITION : ….	Press Flex Button for the desired type of forward: 1. Unconditional 2. Internal Busy 3. Internal No Answer 4. External Busy 5. External No Answer 6. Transfer to Mailbox (destination must the VM Group). 7. Internal DND 8. External DND
ENTER FWD STA NO. UNCONDITION : STA ….	Select Flex button for the Destination type: 1. Station 2. Hunt Group 3. System Speed Bin for Off-net 4. Station ICR
	Use the dial pad to enter the value associated with the selected type: For Station & Net Station, enter station number, For Hunt Group, enter Station Group Number, For System Speed Bin for Off-Net enter Speed bin number.
	Press the **[Save]** button to store the data entry.

3.3.3.10 Idle Line Selection – PGM 121

When a station goes to an off-hook condition (lifts handset or presses **[SPEAKER]** button), the system normally provides intercom dial tone. In place of the dial tone, the station can be programmed to access a CO Line, CO/IP Group or call a Station or Station Group as described in Table 3.3.3.10-1. The Idle Line Selection (Prime Line) can be either immediate or delayed after going off-hook. The immediate/delay selection is based on the Hot/Warm assignment in Station Attributes III Prime Line PGM 113, button 7 and System timers PGM 182, button 6.

PROCEDURE:	
IDLE LINE SELECTION ENTER STA RANGE	1. Press the **[PGM]** button and dial 121.
100-110 IDLE LINE NOT ASSIGNED (1-7)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.

	Use the dial-pad to enter the type and value for the desired Idle Line selection, refer to Table 3.3.3.10-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.10-1 IDLE LINE SELECTION TYPE & VALUE (PGM 121)

TYPE	VALUE	DESCRIPTION
1	Flex button	Flex button, activates Flex Number as if dialed.
2	CO line	CO/IP path seizes CO line.
3	CO group	CO/IP Group seizes CO line from the CO/IP Group.
4	Station	Station, calls the assigned station
5	Hunt Group	Call to Hunt Group
6	Station Speed	Call to Station Speed
7	System Speed	Call to System Speed

3.3.3.11 Station IP Attributes – PGM 122

Stations are allowed access to the systems H.323 VoIP resources based on the Station IP Attributes. Refer to Table 3.3.3.11-1 for a description of the attributes and the inputs available.

PROCEDURE:	
STATION IP ATTRIBUTE ENTER STA RANGE	1. Press the **[PGM]** button and dial 122.
100-110 STA IP ATT PRESS FLEX KEY (1)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.3.11-1.
	Use the dial-pad to enter desired data for the Station IP Attribute, refer to Table 3.3.3.11-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.11-1 STATION IP ATTRIBUTES (PGM 122)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100-110 DTR IP CALL (1:EN/0:DIS) : ENABLE	Enables station to access an IP channel directly by dialing the IP Group access code to place H.323 or SIP VoIP calls.	0: Disable 1: Enable	Enable

3.3.3.12 Station Timers – PGM 123

Certain timers can be assigned on a station basis. Available timers, description and valid inputs are given in Table 3.3.3.12-1.

PROCEDURE:	
STATION TIMERS ENTER STA RANGE	1. Press the **[PGM]** button and dial 123.
100-110 STATION RANGE PRESS FLEX KEY (1-2)	Use the dial-pad to enter a station range (Ex. 100~110). For a single station, enter the same number twice.
	Press the desired Flex button.
	Use the dial-pad to enter desired data for the Station IP Attribute, refer to Table 3.3.3.12-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.12-1 STATION TIMERS (PGM 123)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	STA FWD NO ANS TMR (sec) (000-600) : 000	This timer determines the duration the station will ring prior to Ring-No-Answer Forward. This setting affects both manual and Preset Call Forward and overrides the System Ring No Answer timer PGM 181-button 1.	000-600 seconds	000
2	CUT OFF (Min) (00-99) : 00	Allowed length of CO/IP calls when station is assigned Call Time restriction in Station Attributes II, PGM 112, button 3	00-99 minutes	00

3.3.3.13 Linked Station Table – PGM 124

A station can be linked to another station so that the two stations effectively act as a single station with the attributes of the primary station number. An unregistered or registered station may be linked to a primary station. When unregistered station linking is used, the linked station does not reduce the system's capacity.

PROCEDURE:	
LINKED STA TABLE ENTER STA NUMBER	1. Press the **[PGM]** button and dial 124.
STA 110 IS LINKED PAIR PRESS FLEX KEY (1-3)	Use the dial-pad to enter primary station number for the Linked pair (Ex. 110).
	Press the desired Flex button.
	Use the dial-pad to enter desired data, refer to Table 3.3.3.13-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.13-1 LINKED STATION ATTRIBUTES (PGM 124)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	SET IP ADDRESS IP: IP NOT ASSIGNED	IP Address of the linked station not required.		
2	ROUTER IP ADDRESS IP: ROUTER IP NOT ASSIGN	Set Router IP address associated with linked station.		
3	STA 110 : SET MAC ADDR MAC: NOT ASSIGNED	Set MAC address of linked un-registered station, required data. Note the secondary station must not be registered in the system prior to linking. If needed, delete the device from the system.		

3.3.3.14 ICM Tenancy Group – PGM 125

Stations can be assigned to an ICM Tenancy group under Station Attributes II PGM 111, button 17. Up to 15 Tenant groups for eMG80 and up to 32 for eMG800 can be defined. Each group is configured to allow or deny placing intercom calls to stations in other groups and an Attendant station can be defined for each group. The Attendant will receive “dial 0” calls and controls Day/Night mode for the Group.

PROCEDURE:	
ICM TENANCY GROUP ENTER GRP NUMBER (01-15)	1. Press the **[PGM]** button and dial 125.
ICM TENANCY GRP 01 F1:ATD F2:ACCESS	Use the dial-pad to enter the group number (Ex. 01)
	Press the desired Flex button; refer to Table 3.3.3.14-1.
	For Attendant assignment, use the dial-pad to enter the station number of the Group Attendant.
	To assign accessible ICM Tenancy groups for the group, the Flex button indicates the current Tenant group access. Press the Flex. Buttons to toggle Group access settings. LED ON: group access allowed LED OFF: group access denied
	Press the **[Save]** button to store the data entry.

Table 3.3.3.14-1 ICM TENANCY GROUP ATTRIBUTES (PGM 125)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ICM TENANCY GRP 01 ATD:	Attendant station for the ICM tenancy group. ATD. Receives dial ‘0’ calls and controls Day/Night mode.	STA No	-
2	ICM TENANCY GRP 01 PRESS ACCESS GRP(1-15)	ICM Tenancy groups allowed access to the selected group.	eMG80:01-15 eMG800:01-32	GROUP 1

3.3.3.15 Station VM Attributes – PGM 127

Voice Mail attributes can be assigned on a station basis. The description and valid inputs are given in Table 3.3.3.15-1.

PROCEDURE:	
ENTER PGM NUMBER	1. Press the **[PGM]** button and dial 127.
STATION VM ATT ENTER STA RANGE	Enter Station Range.
100-110 STA VM ATT PRESS FLEX KEY (01-20)	Press the desired Flex button.
	Use the dial-pad to enter desired data, refer to Table 3.3.3.15-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.3.15-1 STATION VM Attributes (PGM 127)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VM COS (1-5) : 1	Voice Mail COS (Grade) can be set on each station. Each COS attributes can be set at PGM 253.	1-5	1
2	ADMINISTRATOR MAILBOX (1:EN/0:DIS):DISABLE	If this option is set to ON, Administrator Voice Mail feature can be accessed.	0: Disable 1: Enable	Disable
3	ANNC. ONLY MAILBOX (1 :EN/0 :DIS) :DISABLE	If this option is set to ON, no message can be left and only the greeting is played.	0: Disable 1: Enable	Disable
4	ANNC. ONLY OPTION (0-1):PREVIOUS MENU	This option is available only ANNC. ONLY MAIL BOX is set to ON. If Previous Menu, after greeting message is played, go to previous menu. If Hang Up, after greeting message is played, call is hanged up.	0: Previous 1: Hang Up	Previous menu
5	COMPANY DIR FIRST NAME ……	This field is first name of a station for Company Directory feature.	Max 12 Char	N/A
6	COMPANY DIR LAST NAME ……	This field is last name of a station for Company Directory feature.	Max 12 Char	N/A
7	USER-MSG RW/FF TIME (03-99):04 Sec	User Message Rewind / Fast Forward are supported by this time.	03-99	04
8	NOTIFY REPEAT COUNT (00-99) : 03	It is used to transfer call to attendant if retry count is over this for VM notification.	00-99	03

Table 3.3.3.15-1 STATION VM Attributes (PGM 127)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	NOTIFY DIAL TIME (00-99) : 15 Sec	It is dial waiting time after provide VMIU/VMIB announcement for VM notification.	00-99 (seconds)	15
10	FORWARD OPTION (0-1) : MOVE	When a left message is forwarded, this option is applied.	0:Move 1: Copy	Move
11	CASCADE MAILBOX1 ….	Message cascading i s a feature that copies messages left for the originating mailbox to another mailbox. This field is destination mail box station.	Station No.	N/A
12	CASCADE MAILBOX2 ….			
13	CASCADE MAILBOX3 ….			
14	CASCADE MAILBOX4 ….			
15	CASCADE MAILBOX5 ….			
16	CASCADE METHOD (0-2) : DISABLE	Cascade method is determined.	0:Disable 1: Copy 2: Move	Disable
17	CASCADE MESG TYPE (0-2) : NORMAL ONLY	Cascade Message Type is determined.	0:Normal Only 1: Urgent Only 2:All	Normal only
18	CASCADE APPLY TYPE (0-2) : IMMEDIATE	Cascade Apply Type is determined. Immediate: Cascade is done as soon as a message is left. After Notify Retry Count: After Notify Retry Count is over, cascade is done. After Cascade Timer: Cascade is done after cascade timer.	0:Immediate 1: After Notify Retry Count 2: After Cascade Timer	Immediate
19	CASCADE TMR(min) (000-250) : 000	Cascade Apply Timer is set.	000 ~250 (min)	0
20	MSG WAIT NOTICE (0-2) : TONE	When a user has voice mail, system can provides this as voice prompt instead of dial tone according to option based on station. Disable: System provides normal dial tone when a user goes to off hook status. Tone: System provides warning tone instead of dial tone to give indication when a user goes to off hook status. Prompt: System provides message indication as voice prompt when a user goes to off hook status.	0: OFF 1:Tone 2:Prompt	Tone

3.3.3.16 Station CCR Table – PGM 128

CCR Table can be assigned on a station basis. The description and valid inputs are given in Table 3.3.3.16-1.

PROCEDURE:	
ENTER PGM NUMBER	1. Press the **[PGM]** button and dial 128.
STATION CCR ENTER STA RANGE	Enter Station Range (Ex. 100~110).
100-110 S TA CCR PRESS FLEX KEY (01-14)	Press the desired Flex button.
	Press the desired Flex button; refer to Table 3.3.3.16-1.

Table 3.3.3.16-1 STATION CCR Table (PGM 128)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1-10	101 – 110 STA CCR INPUT 0 : NOT ASSIGNED	Button 1 to 10 means outside user press 1 to 0. This dialing is matched with this table destination. The destination is 14 kinds.		NA
11	101 – 110 CCR TBLUSAGE (1:ON/0:OFF) : OFF	If this option is set to ON, this CCR table is worked. If this option is set to OFF, this CCR table is not worked, instead of that, outside caller's dialed digit can be regarded as DISA dialing.	OFF ON	OFF
12	101 – 101 CCR 1 DGT ONLY (1:ON/0:OFF) : OFF	If this option is set to ON, Only the first digit that is user entered is affected to the CCR routing. If this option is set to OFF, the following next digits are also affected to the DISA routing.	ON/OFF	OFF
13	101 – 101 * USED AS (0-3): NUMBERING PLAN	While listening User Greeting, * button working is followed by this attribute.	0 : Numbering Plan 1 : Replay Greeting 2 : Access Mail Box 3 : Leave Message	Numbering Plan
14	101 – 101 # USED AS (0-3): ACCESS MAILBOX	While listening User Greeting, # button working is followed by this attribute.	0 : Numbering Plan 1 : Replay Greeting 2 : Access Mail Box 3 : Leave Message	Access Mailbox

Table 3.3.3.16-1 CCR DESTINATIONS (PGM 128)

TYPE	DESCRIPTION
1	Route to a Station
2	Route to a Hunt Group
3	Route with System Speed Dial
4	Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
5	Route to VSF Announcement
6	Route to VSF Announcement and disconnect
7	Route to Networked Station
8	Conference Room
9	Internal Page
10	External page
11	All Call Page
12	Route to voice mail (Hunt group/station number)
13	Company Directory (USA Only)
14	Record VM Greeting (USA Only)

3.3.3.17 LSS Label Edit – PGM 129

The LIP-8012 LSS 12 button DSS Console incorporates an LCD used to label the function of each button. The label, which can be up to 12 characters, is assigned in this program.

PROCEDURE:	
LSS LABEL EDIT ENTER STA NUMBER	1. Press the **[PGM]** button and dial 129.
STA 100 LSS LABEL ENTER LSS IDX(1-4)	Use the dial-pad to enter the station number associated with the console (Ex. 100).
STA 100 LSS 1 ENTER BTN NO (01 – 12)	Consoles are indexed, allowing multiple consoles to be associated with a station. Use the dial-pad to enter the index of the LSS console (1 ~ 4).
STA 100 LSS 1 BTN 1 LABEL IS EMPTY	Use the dial-pad to enter the desired LSS console button number (1 ~ 12).
	Edit the label referring to Table 2.1.2-1 Alpha-numeric Entry Chart.
	Press the **[Save]** button to store the data entry.

3.3.4 BOARD DATA – PGM 130 to 132

3.3.4.1 H.323 VoIP Attributes – PGM 130

The VOIP channels are used for Distributed Networking, access to SIP or H.323 networks and for remote iPECS devices. When the standard H.323 VoIP protocol is employed for an external VoIP call, several attributes of these channels can be assigned. The H.323 call set-up mode and tunneling (H.245 Encapsulation) can be established.

Also for H.323 support, a RAS (Registration, Admissions and Status) channel can be defined. The RAS channel IP addresses (uni-cast and multi-cast) as well as the IP port Numbering Plan and other H.323 set-up characteristics are defined.

This PGM also allows setting the IP TOS bit for Diffserv, a commonly recognized packet prioritization protocol. Higher priority packets are given priority in the Router or Layer 3 Switch queue. However, they are the first to be discarded in the event of long queue delays, which may cause excess packet loss and poor voice quality.

Refer to Table 3.3.4.1-1 for a description of the features and the input required.

PROCEDURE:	
H323 VOIP ATTRIBUTE ENTER SEQ NO(001-300)	1. Press the **[PGM]** button and dial 130. eMG800 range is 0001-2890.
001 H323 VOIP ATTR PRESS FLEX KEY (01-24)	Use the dial pad to enter the VoIP board sequence number.
	Press the desired Flex button; refer to Table 3.3.4.1-1.
	Use the dial pad to enter the desired data, refer to Table 3.3.4.1-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.4.1-1 H.323 VOIP ATTRIBUTES (PGM 130)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	H.323 SETUP MODE (1:FAST/0:NORM): FAST	H.323 IP calls can be set-up using the H.323 normal or Fast Start mode.	0: Fast 1: Norm	Fast
2	H.323 TUNNEL MODE (1:ON/0:OFF) : ON	H.323 IP calls can be set-up using the H.245 encapsulation (Tunneling).	0: OFF 1: ON	ON
3	H.323 DTMF PATH (0:IN/1:OUT/2:2833): 0	During a connection, DTMF Digits can be sent in-band or out of band (H.245).	0: In band 1: Out band 2: 2833	0
4	DIFFSERV PRETAG TAG (00-63) : 04	Diffserv pre-tagging for Voice packet. Note high values may cause high packet discard levels.	0~63	4

Table 3.3.4.1-1 H.323 VOIP ATTRIBUTES (PGM 130)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
5	RAS USAGE (1:ON/0:OFF) : OFF	Determine whether VOIU/VOIB Board will be used as a Gatekeeper.	0: OFF 1: ON	OFF
6	RAS MULTICAST IP 224.0.1.41	Multi-cast IP address for RAS Information of Gatekeeper.	IP Address	224.0.1.41
7	RAS MULTICAST PORT (00001-65535): 01718	Multi-cast IP Port for RAS Information of Gatekeeper.	IP Port #	1718
8	RAS UNICAST IP 82.134.80.2	Uni-cast IP address for RAS Information of Gatekeeper.	IP Address	82.134.80.2
9	RAS UNICAST PORT (00001-65535): 01719	Uni-cast IP Port for RAS Information of Gatekeeper.	IP Port #	1719
10	RAS KEEP_ALIVE TM (001-999) : 120 (sec)	The time between exchange of RAS Information between GK and VOIB/VOIU.	001-999 (SEC)	120
11	RAS NUM PLAN PREFIX 9	The numbering plan for Calling Number in RAS Setup.	Number (24 digits)	9
12	RAS GATEWAY ID ONLY POSSIBLE BY WEB ADM	The Gatekeeper ID (This can be programmed only via WEB Admin).	128 Character	
13	RAS LIGHT RRQ (1:ON/0:OFF) : OFF	The system can be assigned to use the simple RRQ (Registration Request) message (ON) or the full RRQ message (OFF).	0: OFF 1: ON	OFF
14	TCP KEEP ALIVE (1:ON/0:OFF) : ON	The system will send a polling message every 75 seconds to assure the status of the TCP connection.	0: OFF 1: ON	ON
15	FAIL OVER USAGE (1:ON/0:OFF) : OFF	The H.323 call will be failover to another line (FAIL OVER USAG: ON).	0: OFF 1: ON	OFF
16	FAIL OVER TIME(sec) (03-10) : 05	The H.323 call will be failover. The time will be set.	03-10 (Sec.)	5
17	FAIL OVER CO GRP (01-21) : . .	If the H.323 call will be failover, assign another CO group.	01-21	
18	Q931 START PORT (00001-65535) : 02048	IP-Binding H.323 signaling option: Q.931 TCP Start Port in case of outgoing call.	00001-65535	2048
19	Q931 END PORT (00001-65535) : 02559	IP-Binding H.323 signaling option: Q.931 TCP End port in case of outgoing call.	00001-65535	2559

Table 3.3.4.1-1 H.323 VOIP ATTRIBUTES (PGM 130)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
20	H245 START PORT (00001-65535) : 02560	P-Binding H.323 signaling option: H.245 TCP Start Port.	00001-65535	2560
21	H245 END PORT (00001-65535) : 03071	IP-Binding H.323 signaling option: H.245 TCP End Port.	00001-65535	3071
22	RAS START PORT (00001-65535) : 02048	IP-Binding H.323 signaling option: RAS UDP Start Port.	00001-65535	2048
23	RAS END PORT (00001-65535) : 03071	IP-Binding H.323 signaling option: RAS UDP End Port.	00001-65535	3071
24	001 H323 VOIP ATTR (2ND) PRESS FLEX KEY (1-4)			
24-1	MEDIA START PORT (00001-65535) : 06000	IP-Binding media option: Media UDP Start Port.	00001-65535	6000
24-2	MEDIA END PORT (00001-65535) : 07036	IP-Binding media option: Media UDP End Port.	00001-65535	7036
24-3	DATA START PORT (00001-65535) : 08500	IP-Binding option: Data Sharing TCP Start Port.	00001-65535	8500
24-4	DATA END PORT (00001-65535) : 08548	IP-Binding option: Data Sharing TCP End Port.	00001-65535	8548
24-5	H.245 SETUP (1:ON/0:OFF) : OFF	This feature is the ability of two user endpoints to communicate before call is actually established in normal call mode. This feature is not used when 'H323 Setup Mode' is 'Fast'. * Setup: Caller party tries to open early media on receiving the Setup message. * Proceeding: Calling party tries to open early media on receiving the Proceeding message. * Alerting: Calling party tries to open early media on receiving the Alerting message.	0: OFF 1: ON	OFF
24-6	H.245 PROCEEDING (1:ON/0:OFF) : OFF		0: OFF 1: ON	OFF
24-7	H.245 ALERTING (1:ON/0:OFF) : OFF		0: OFF 1: ON	OFF

3.3.4.2 T1/E1/PRI Attributes – PGM 131

Each T1/PRI module can be assigned for various attributes of the interface. The T1 interface framing and line coding can be selected and, for the PRI, TE or NT operation and CRC check can be selected. Refer to Table 3.3.4.2-1 for a description of the features and the input required. Note that the Sequence Number can be determined in PGM 103, Button 1.

PROCEDURE:	
T1 /E1/PRI ATTRIBUTE ENTER SEQ NO (001 –300)	1. Press the **[PGM]** button and dial 131 and enter sequence number (Ex. 001). eMG800 range is 0001-2890.
001 T1 /PRI ATTR PRESS FLEX KEY (1 – 7)	Use the dial pad to enter the Sequence Number of the desired T1/PRI module. Use PGM 103 to determine Sequence Numbers. (e.g. enter the sequence number
	Press the desired Flex button; refer to Table 3.3.4.2-1.
	Use the dial pad to enter the desired data, refer to Table 3.3.4.2-1.
	Press the **[Save]** button to store the Table data entry.

Table 3.3.4.2-1 T1/PRI MODE (PGM 131)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	T1 SETUP MODE (1:ESF/0:D4) : D4	Select T1 Setup mode. D4 frame: Use In-Band Control Protocol. ESF: Use Data link Message.	0: D4 1: ESF	D4
2	T1 LINE MODE (1:AMI/0:B8ZS) : B8ZS	Select T1 line mode (AMI/B8ZS).	0: B8ZS 1: AMI	B8ZS
3	PRI LINE MODE (1:TE/0:NT): TE	Select TE/NT mode.	0: NT 1: TE	TE
4	PRI/E1 CRC CHECK (1:ON/0:OFF): OFF	For PRI lines the CRC (Cyclical Redundancy Check) can be disabled (OFF).	0: OFF 1: ON	OFF
5	E1 R2DSP CHECK (1:ON/0:OFF): OFF	Used for R2-EI board or E1 board.	0: OFF 1: ON	OFF
6	DCO PX TYPE (0-3): STANDARD (2)	Reserved for future use with R2 E1 board.	0: S1240 1: TDX1B 2: STANDARD 3:CONGES_DIS	STANDARD
7	CALLER NAME TYPE (1:DISP/0:FAC) : FACILIT	If the caller has a name, the Caller Name is sent to the network according to the option (FACILITY, DISPLAY). (USA only)	0:FACILITY 1:DISPLAY	FACILITY

3.3.4.3 Board Base Attributes – PGM 132

Appliances (Boards and IP Phones) can be connected to the iPECS over a managed WAN without the need to employ a VoIP channel. In this case, the system does not implement security (IPSec) or QoS treatment over the link. To implement the managed WAN connectivity, the iPECS must be assigned with the IP address of the router for all appliances that may attempt a point-to-point connection over the managed WAN, including devices on the iPECS LAN. Note that if the device's Router IP address is not defined, the system will use the Router IP address defined in PGM 102.

The default codec employed by each device can be specifically defined as G.711, G.723, G.729, G.722 or the system default codec PGM 161 can be defined.

Note that the Sequence Number can be determined in PGM 103, Button 1.

PROCEDURE:	
BOARD BASE ATTRIBUTE ENTER RANGE (001–300)	1. Press the **[PGM]** button and dial 132 and enter Range (Ex. 001~002). eMG800 range is 0001-2890.
001-002 BOARD ATTRIBUTE PRESS FLEX KEY (01–13)	Use the dial pad to enter the Sequence Number range of the desired module. Use PGM 103 to determine Sequence Numbers.
	Press the desired Flex button; refer to Table 3.3.4.3-1.
	Use the dial pad to enter the desired data, refer to Table 3.3.4.3-1.
	Press the **[Save]** button to store the Table data entry.

Table 3.3.4.3-1 BOARD ATTRIBUTES (PGM 132)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	001-002 ROUTER IP ADDR 0 .0 .0 .0	Enter the default Router IP address associated with the selected devices.		0.0.0.0
2	001-002 DEV CODEC TYPE (0-4): SYSTEM CODEC	Select the CODEC type for the selected devices: 0: G.711, 1: G.723.1, 2: G.729, 3: G.722 4: System Codec refer to PGM 161-button 9.	0-4	4
3	001-002 FIRWALL IP ADDR 0 .0 .0 .0	Enter the Firewall IP address associated with the selected devices.		0.0.0.0
4	001-002 RTP SECURITY (1:ON/0:OFF) : ON	Remote iPECS IP & LDP phones use IPSec to assure a secure connection. To reduce bandwidth use, IPSec may be disabled.	0: OFF 1: ON	ON

Table 3.3.4.3-1 BOARD ATTRIBUTES (PGM 132)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
5	001-002 TNET ENABLE (0:ON/0:OFF) : OFF	When a module or station is to be connected in a Centralized Control network (TNET), the device must be enabled for TNET operation.	0: OFF 1: ON	OFF
6	001-002 VSF SENDER MAIL	VMIU/VMIB e-mail address for Mailbox Mail Sending.		NULL
7	001-002 T38 ENABLE (1:ON/0:OFF) : OFF	T38 mode ON/OFF for FAX data transfer.	0: OFF 1: ON	OFF
8	001-002 USE BRD IP FWIP (1:ON/0:OFF) : OFF	VOIB IP will be used for SIP signaling in Multi NAT circumstance.	0: OFF 1: ON	OFF
9	001-002 RTP FIRWALL IP 0 .0 .0 .0	Enter the Firewall IP address associated with the Remote Phone or Gateway/board if there needs Dual Broadband connection for SIP trunks and Remote phones (using a VOIB).		0.0.0.0
10	001-002 T38 PORT USAGE (0:D/1:S/2:T) : 0	T38 Port can be different with Voice Port. Or, be same or be triggered.	0: D 1: S 2: T	0
11	001-002 2833 PAYLOAD (000-127) : 000	RFC 2833 Payload is programmable.	000-127	000
12	001-002 2833 VOLUME (00-36) : 00	RFC 2833 packet volume.	00-36	00
13	001-002 2833 REDUNDANCY (1-8) : 0	RFC2833 Packet Redundancy.	1-8	0

3.3.5 CO LINE DATA – PGM 140 to 151

3.3.5.1 CO Service Type – PGM 140

Each CO Line is assigned a type, Normal or DID. Normal CO Lines can be employed for DISA Service PGM 146. DID lines are for incoming only operation and provide call routing based on signaling from the carrier, refer to section 3.3.5.4 DID Service Attributes - PGM 145.

PROCEDURE:	
COL SERVICE ATT ENTER COL RANGE	1. Press the **[PGM]** button and dial 140 and enter the range (Ex. 0102).
01-02 SVC TYPE PRESS FLEX KEY (1-1)	2. Press the desired Flex button.
01-02 SVC TYPE (1-4) NORMAL CO (1)	Use the dial pad to enter a CO Line range. For a single CO Line, enter the same number twice.
	Use the dial pad to enter the desired service type: 1. Normal CO line 2. DID line 3. TIE line 4. Unused
	Press the **[Save]** button to store the data entry.

3.3.5.2 CO/IP Attributes I ~ III - PGM 141~143

CO/IP Attributes define various characteristics of the CO lines and IP facilities under control of the system. Most require a dial pad input of 1 or 0 to set the characteristic, refer to Table 3.3.5.2-1 to Table 3.3.5.2-3. Specific descriptions for Class-of-Service and CO line Call Metering tones are provided in Table 3.3.5.2-4 and Table 3.3.5.2-5 respectively.

PROCEDURE:	
CO/IP ATTRIBUTE 1 ENTER COL RANGE	1. Press the **[PGM]** button and dial: 141 for CO/IP Attributes I 142 for CO/IP Attributes II 143 for CO/IP Attributes III.
01-02 CO/IP ATT 1 PRESS FLEX KEY (01-24)	Use the dial-pad to enter a CO/IP line range. For a single CO/IP Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.2-1 to Table 3.3.5.2-3.

PROCEDURE:	
	Use the dial-pad to enter desired data for the Attribute, refer to Table 3.3.5.2-1 through Table 3.3.5.2-5.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.2-1 CO/IP ATTRIBUTES I (PGM 141)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
1	01-02 CO/IP GROUP GRP NO (01-20) : 01	Each CO Line is assigned to a group; grouping should be based on the Line type and COS.	01
2	01-02 CO LINE COS COS (1–5) : 1	Each CO Line is assigned a Class-of-Service which will interact with the Station COS, refer to section 3.3.5.2. CO COS 1: Station COS applies CO COS 2: Exception Table A governs CO COS 3: Exception Table B governs CO COS 4: Restricts LD calls and Exception Table C CO COS 5: Overrides Station COS 2~6 with no restrictions.	1
3	01-02 CO START SIGNAL (1:GND/0:LOOP) : LOOP	The system can recognize a loop closure or a ground as the “connect” (start) signal on an analogue CO Line.	LOOP
4	01-02 CO LINE TYPE (1:PBX/0:CO) : CO	Each CO Line can be assigned as connected to a CO Line or a PBX/CTX Line.	CO
5	01-02 CO LINE SIGNAL (1:DTMF/0:PULSE):DTMF	Each analogue CO Line can be assigned to send either DTMF or Pulses for dialed digits to the PSTN.	DTMF
6	01-02 UNSED		
7	01-02 UNIVERSAL ANS (1:ON/0:OFF) : OFF	Universal Night Answer (UNA) allows any station to answer a call on the CO Line by dialing the UNA code.	OFF
8	01-02 CO/IP GRP AUTH (1:ON/0:OFF) : OFF	Each CO/IP Group can be assigned to require the user enter an Authorization Code for access.	OFF
9	01-02 DATA STATION NO FAX : ….	Each CO/IP line can be assigned to recognize a FAX call when a specified station answers.	….
10	01-02 TENANCY GROUP (00-15) : 00	Only stations in the assigned Tenancy group are permitted access to the defined CO Line.	00

Table 3.3.5.2-1 CO/IP ATTRIBUTES I (PGM 141)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
11	01-02 CO VOIP MODE VOIP MODE(1-6) : COMMON	The VOIB channels can support iPECS, H.323 or SIP protocols. This field defines the protocol for the VoIP channel(s). 1: COMMON 2:H.323 ONLY 3: SIP ONLY 4:RTP RLY 5:H.323/RTP RLY 6:SIP/RTP RLY	COMMON
12	01-02 PROCTOR ON/OFF (1:ON/0:OFF) : OFF	Each analogue CO line can be assigned to send the station number as DTMF digits for Proctor service.	OFF
13	01-02 WAIT IF VSF BUSY (1:ON/0:OFF) : ON	When a DID/DISA call assigned to receive a VMIU/VMIB announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or route to the DID/DISA Destination - PGM 167.	ON
14	01-02 UNUSED		
15	01-02 UNUSED		
16	01-02 RING TONE (00-12, 0:N/A) : 00	Ring Tone can be programmable by CO-line base admin.	00
17	01-02 UNUSED		
18	01-02 GAIN TABLE (1-3) : 1	TDM gain table can be programmed.	1
19	01-02 TONE TBL (1-5) : 1	Tone table can be programmed.	1
20	01-02 DGT CONV. TBL (01-15) : 01	Select digit conversion table.	01
21	01-02 PREPAID CALL (1:ON/0:OFF) : OFF	Enables Pre-paid Call feature.	OFF

Table 3.3.5.2-1 CO/IP ATTRIBUTES I (PGM 141)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
22	01-02 PREPAID MONEY 0 (USED:0)	An amount can be associated with the station as prepayment for outgoing calls. The assigned “Pre-paid Money” is reduced by the calculated call cost (Call Metering or cost/minute). This parameter displays the remaining funds for outgoing calls. Prepaid Money is often used in small hospitality businesses. The “Used Pre-paid Money” displays the money that has been used.	
23	01-02 LDT ZONE (001-100) : 001	If the LDT Zone Number of a station/co line is equal to this value, this LDT table is available to the station/co line.	001
24	ADDED CO/IP ATTRIBUTE 1 PRESS FLEX KEY (1-2)		
24-1	01-02 ICLID USAGE (0-2) : CLI	An incoming call can be routed to the destination based on Calling Name. Disable - ICLID feature is disabled CLI - ICLID feature is operated with CLI Name - ICLID feature is operated with Name	CLI
24-2	01-02 EMERGENCY PBX C (0-4) : DISABLE	System can insert PBX code automatically if pre-configured when a user make an emergency call.	Disable

Table 3.3.5.2-2 CO/IP ATTRIBUTES II (PGM 142)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
1	01-02 CO NAME DISPLAY (1:ON/0:OFF) : OFF	The IP Phone display can indicate the CO Line/IP channel number or a twelve (12)-character name, if assigned.	OFF
2	01-02 CO NAME ASSIGN ……	Each CO Line and the IP group can be assigned a twelve (12) character name for display purposes, see Table 3.1.2-1 for character entry sequence.	
3	01-02 METERING UNIT 00:NONE (0-6)	Selects the call-metering signal from the PSTN to indicate call cost, refer to Table 3.3.5.2-5.	00
4	01-02 LINE DROP(CPT) (1:ON/0:OFF) : OFF	Each CO Line can be programmed to disconnect if an error tone is detected.	OFF
5	01-02 DISA ACCT CODE (1:ON/0:OFF) : ON	With DISA ACCT CODE “ON”, users will be required to enter an Authorization code. Enter codes in Authorization Codes Table - PGM 227.	ON

Table 3.3.5.2-2 CO/IP ATTRIBUTES II (PGM 142)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
6	01-02 MOH: (00-10) MUSIC 1 (01)	A held call can be connected to one (1) of three (3) possible audio sources while on Hold as Music-on-Hold (MOH). 00:REFER TO SYS HOLD 01: INT music 02: EXT music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10:VSF MOH3	01
7	01-02 CO DIAL TONE (1:ON/0:OFF) : ON	ISDN Lines may provide a digital signal rather than actual tones. If the ISDN tone is set to “OFF”, iPECS can provide the tones.	ON
8	01-02 CO RBACK TONE (1:ON/0:OFF) : OFF		OFF
9	01-02 CO ERROR TONE (1:ON/0:OFF) : OFF		OFF
10	01-02 CO BUSY TONE (1:ON/0:OFF) : OFF		OFF
11	01-02 DISA CO ACCESS (1:ON/0:OFF) : OFF	Permits DISA users access to the VoIP facilities of the system.	OFF
12	01-02 FLASH TMR (000-300 10 ms) : 050	This entry sets the duration of a Flash on the CO Line.	050 500 msec
13	01-02 OPEN LOOP (00-20 100ms) : 04	This entry sets the duration of open loop that will be recognized as a “Disconnect Signal”.	04
14	01-02 ICLI DT TMR (00-20 SEC) : 00	When a call is received, the system may use the ICLID (Incoming Caller ID) to route the call. The system will delay routing a call for this timer while awaiting ICLID. Enter a 00 to disable ICLID routing.	00
15	01-02 SMS OUTGOING (1:EN/0:DIS) : DISABLE	Each CO line can be assigned to support PSTN SMS.	Disable
16	01-02 SMS RCV STATION STA : ….	When a PSTN SMS is received, the system delivers the message to the assigned station.	….

Table 3.3.5.2-2 CO/IP ATTRIBUTES II (PGM 142)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
17	01-02 DL TN:(00-10) DIAL TONE (00)	One of eleven dial tones can be used by the CO line. 00:DIAL TONE 01:INT MUSIC 02:EXT MUSIC 03:VSF MOH 04:SLT MOH1 05:SLT MOH2 06:SLT MOH3 07:SLT MOH4 08:SLT MOH5 09:VSF MOH2 10:VSF MOH3	dial tone
18	01-02 RB TN: (00-10) RING BACK TONE (00)	One of eleven ring back tones can be used by the CO line.	Ring back tone
19	01-02 REJECT ANONYMOUS (1:ON/0:OFF) : OFF	When REJECT ANONYMOUS “ON”, incoming call without Caller ID will be rejected.	OFF
20	01-02 PREFIX TABLE ID (0-6) : 0	If prefix table ID is set to 0, then prefix dialing call cannot be applied. If prefix table ID is set to (1-6), then prefix dialing call can be applied with PREFIX DIALING TABLE (PGM 206)	0
21	01-02 CO CUT OFF TMR (00-99 MIN) : 00	Co base call cut off timer can be set at this field.	00
22	01-02 DISA DELAY TMR (0-9 SEC): 0	It is only used for Russia. System is connected to DISA call immediately, and DISA announcement is played after this timer.	0
23	01-02 LDT TBT INDEX (00-10) : 01	LCR will be operated with LDT table index.	1
24	01-02 DISA ANS TMR (0-9 SEC) : 0	It is only used for Russia. When DISA incoming call, System is connected after DISA Answer Timer.	0

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
1	01-02 COLP TABLE IDX INDEX : NOT ASSIGNED	When an incoming call on an ISDN Line is answered, the system will send caller id using the number from the CLIP/COLP Table –PGM 201- entry defined by this parameter.	None

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
2	01-02 CLIP TABLE IDX INDEX : NOT ASSIGNED	When a call is placed on an ISDN Line, the system will send caller id using the number from the CLIP/COLP Table –PGM 201- entry defined by this parameter. For entry 00, the CLI STA NO entered in PGM 114-button 6 will be used in place of the station number. For other entries, the station number is added as a suffix to the entry in PGM 201.	None
3	01-02 ENBLOCK SENDING (1:ON/0:OFF) : OFF	This entry determines if the system sends dialed digits to the ISDN line as they are received (Overlap) or collects all digits and forwards them in a block, ENBLOCK.	eMG80 : OFF, eMG800: ON
4	01-02 TYPE OF NO(0-4) NATIONAL (2)	For outgoing calls on the ISDN Line, this parameter defines the “Type of Number Plan” provided in Calling Party Information Element of the ISDN call SETUP message. 0: UNKNOWN 1: INTERNATIONAL 2: NATIONAL 3: Unused 4: SUBSCRIBER	2
5	01-02 DID REMOVE NO (00-99) : 00	When a DID call is received on an ISDN Line, this entry determines the number of digits that will be removed starting with the first received digit.	00
6	02 TEI TYPE (1:AUTO/0:FIX) : AUTO	The TEI (Terminal Endpoint Identifier) is a unique identifier for each device attached to the ISDN line. When the system shares an ISDN connection with other devices, the TEI should be automatic to assure no conflict with other attached devices. When the ISDN connection is not shared, the Fixed identifier option should be employed.	AUTO
7	02 ISDN-SS CD/CR (1:EN/0:DIS) : DISABLE	Permits a user access to ISDN Supplementary Call Deflection or Call Re-route Service. (Except USA version)	Disable
8	02 ISDN 1 DGT RM (1:ON/0:OFF) : OFF	Select one digit remove mode in ISDN Called Digits (for Italy).	OFF
9	001-002 AOC TYPE (0-5) NO SERVICE (0)	When assigned, the system will analyze the Advice of Charge information in the Facility Message according to the ETSI specifications with appropriate regional protocol support.	No Service
10	001-002 ISDN LINE TYPE (1:U/0:A): U_LAW	The system will encode voice using the A-law or u-law PCM format and should be set to match the ISDN Back bone type.	u-Law
11	01-02 CALLING SUBADDR (1:ON/0:OFF) : OFF	For outgoing calls, the user’s station number may be included in the ISDN call SETUP message Sub-address field.	OFF

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
12	01-02 IN PREFIX INS (1:ON/0:OFF) : OFF	Regional ISDN providers may use the Local Area Prefix code for special services. In cases where the code is not provided in the incoming call SETUP message, the system can insert the Local Prefix and Area code in SMDR, LNR, displays, etc.	OFF
13	01-02 OUT PREFIX INS (1:ON/0:OFF) : ON	Regional ISDN providers may use the Local Area Prefix code for special services. The system can insert the Local Prefix in the outgoing call SETUP message.	ON
14	01-02 INT ACCESS CODE ….	When an incoming call includes the international Country code in the ISDN call SETUP message, the Country code will be included in the station display. To include the Country code, Incoming Prefix insertion (button 12 above) and CLI Display for the station (PGM 114-button 1) must be On.	
15	01-02 AREA CODE ……	Regional ISDN providers may use the Local Prefix and Area codes for special services. The system will insert this Local Area Code in the call SETUP messages defined under button 13 above.	-
16	01-02 PREFIX CODE ….	Regional ISDN providers may use the Local Prefix and Area codes for special services. The system will insert this Local Prefix Code in the call SETUP messages defined under button 13 above.	-
17	01-02 CLI TRANSIT (1:ORI/0:CFW):CFW	When the system must send CLI to the ISDN for an off-net call, the CLI can be either the original caller's CLI or the CLI of the Off-net forwarding/transferring station.	CFW
18	01-02 PRESERVE NAME (1:ON/0:OFF) : OFF	For DID lines, the CLI is normally displayed only during ringing. If enabled here, the CLI will be displayed for the entire call duration.	OFF
19	01-02 REDIRECT INFO NO SERVICE (0)	When the system needs to send Redirecting number to the ISDN for an off-net call, the Redirecting number can be either the original caller's CLI or the CLI of the Off-net forwarding/transferring station. If it is no service then system will not send this information. If it is OGR CLI (original CLI) then system will send original CLI that is received from incoming CO line. If it is CFW CLI then system will send redirecting CLI that is CLI for call off-net call forwarded station.	NO SERVICE

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
20	01-02 INC CLI CHOICE (1:ORI/0:TRANSIT):TRS	Incoming CLI Choice – When ISDN setup message have two CLI (Transit Point CLI / Original CLI), by using this option, CLI can be chosen.	Transit
21	01-02 CALLING NUM PLAN (0-6):ISDN/TELEPHONY (1)	ISDN Calling Party Numbering Plan can be programmable. 0: Unknown. 1: ISDN / Telephony. 2: Data / Numbering. 3: Telex. 4: National Standard. 5: Private. 6: Reserved.	ISDN/ Telephony
22	01-02 CALLED NUM PLAN (0-6) : UNKNOWN (0)	ISDN Called Party Numbering Plan can be programmable. 0: Unknown. 1: ISDN / Telephony. 2: Data / Numbering. 3: Telex. 4: National Standard. 5: Private. 6: Reserved.	Unknown
23	01-02 SCREENING (0-3) USER PROVIDED, NO S (0)	ISDN Screening Indicator can be programmable. 0: User Provided, No Service. 1: User Provided, Pass. 2: User Provided, Fail. 3: Network Provided.	0
24	ADDED CO LINE ATT3 PRESS FLEX KEY (1-6)		
24-1	01-02 CLI TYPE (1-5) STN CLI 1 (1)	Outgoing CLI can be chosen from CLI 1 to CLI 5. This program is combined with PGM 114 – Station CLI 1 to Station CLI 5.	1 (Station CLI 1)
24-2	01-02 ISDN PLUSE CODE ….	When incoming CLI start with “+” code, this Plus code can be translated as this program.	-
24-3	01-02 CP/ALERT INBAND (1:ON/0:OFF):OFF	Send progress indication with in-band information in call proceeding and alerting message.	OFF
24-4	01-02 DISCONNECT INBAND (1:ON/0:OFF):OFF	Send progress indication with in-band information in disconnect message.	OFF
24-5	01-02 BURSTTN TO CALLER (1:ON/0:OFF):OFF	Send to burst tone to caller if it’s set ON.	OFF

Table 3.3.5.2-3 CO/IP ATTRIBUTES III (PGM 143)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	DEFAULT
24-6	01-02 DISCONN. (INBAND) IGMORE (0)	When system receives DISCONNECT message with Inband information from PSTN, the following option can be applied: -. Ignore Inband information: Line is disconnected -. Bypass Inband information: Progress Information is transferred -. Wait Release: System wait to send Release message till the other party is disconnected	Ignore

Table 3.3.5.2-4 STATION/CO LINE COS TOLL RESTRICTIONS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 5	Local Call only (LD Code, 1st digit “0” or “1”) and Table C	Local Call only (LD Code, 1st digit “0” or “1”) and Table C	Local Call only (LD Code, 1st digit “0” or “1”) and Table C	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction

Table 3.3.5.2-4 STATION/CO LINE COS TOLL RESTRICTIONS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 9	Exception Table E governs the dialing	Exception Table E governs the dialing	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call (LD Code / Counter) and Table C	No Restriction

Table 3.3.5.2-5 CALL METERING FUNCTION

ENTRY	CALL METERING TYPE
00	- None
01	- 50 Hz
02	- 12 KHz
03	- 16 KHz
04	- Singular Polarity Reverse (SPR)
05	- Plural Polarity Reverse (PPR)
06	- No Polarity Reverse (NPR)

3.3.5.3 CO/IP Ring Assignment – PGM 144

Each CO/IP line is assigned to signal a station or group for an incoming call (Ring). Separate ring assignments are made for Day, Night, and Timed Ring modes. When assigned to ring to a VSF announcement, the call can be dropped automatically after the assigned announcement by entering '#' after the VSF announcement number.

When CO Lines are programmed to Ring an external AA/VM or Feature Server Group as an Automated Attendant, the Ring signal can be on an immediate or delayed basis allowing other stations/groups to be assigned Ring and answer prior to signaling the AA. The delay is defined in seconds from 00 to 30.

PROCEDURE:	
CO RING ASSIGNMENT ENTER COL RANGE	1. Press the **[PGM]** button and dial 144.
01-02 PRESS KEY DAY NIGHT TIMED-R	Use the dial-pad to enter a CO Line range. For a single CO Line, enter the same number twice.
	Press the desired Flex button: Button 1: Day Ring Button 2: Night Ring Button 3: Timed Ring
	Use the dial pad to select the destination type: Dial 1: Station Dial 2: Hunt Group Dial 3: VSF Dial 4: AA Ring Time Dial 5: Net number
	Use the dial pad to enter a value for the selected destination type. For: Dial 1: Enter a station range (enter the same station number twice to assign a single station) and the ring delay if any, in ring cycles (0~9). Dial 2: Enter a hunt group number. Dial 3: Enter the VSF announcement number and, if desired '#' to drop the call after the announcement. Dial 4: For AA Ring Time, enter the desired delay from 00 to 30 seconds.
	Press the **[Save]** button to store the data entry.

3.3.5.4 DID Service Attributes – PGM 145

PSTN DID lines can be assigned the type of “Start” signaling and treatment of any received digits. Digits can be used “as is” to route the call within the system, digits can be converted and used to route the call, or digits can be converted to a Table index to determine the call routing based on the assigned conversion method, see Table 3.3.9.7-1 (PGM 231).

PROCEDURE:	
DID ATTRIBUTES ENTER COL RANGE	1. Press the **[PGM]** button and dial 145.
01-02 DID ATTRIBUTES PRESS FLEX KEY(1–4)	Use the dial-pad to enter the DID Line range. For a single DID Line, enter the same number twice.
	Select the desired Flex button; refer to Table 3.3.5.4-1.
	Use the dial-pad to enter the desired value for the selected Attribute, refer to Table 3.3.5.4-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.4-1 DID LINE ATTRIBUTES (PGM 145)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 SIG. TYPE: 1-3 WINK (2)	Assigns the type of DID start signaling, Immediate, Wink or Delayed.	1: Immediate 2: Wink 3: Delayed	Wink
2	01-02 DID CONV TYPE (0 – 2) : 1	The received DID digits can be treated to determine call routing, simple conversion (PGM 230), “use as is” (no treatment), or modify using look-up Table (PGM 231).	0: Convert 1: Use as is 2: Look-up	Use as is
3	01-02 DID DGT RCV NO 3 (2 – 4)	Number of digits expected from the PSTN DID circuit.	2~4	eMG80:3 eMG800:4
4	01-02 DID DGT MASK #***	DID digit modification sequence: “#” deletes the digit, “*” accepts the digit as is, a digit (0~9) replaces the digit. The modification is based on the position of the digit (1~4) in the received number.	(0~9, *, #)	#***

3.3.5.5 DISA Service – PGM 146

DISA Service can be enabled on CO lines based on the system operation mode (Day, Night, and Timed). DISA calls may be routed to dial tone and await user dialing (simple routing) or through a multi-layered Audio Text menu assigning a VSF Announcement/Customer Call Route (CCR) Table Index. The system can be instructed to disconnect after the announcement or follow the CCR Table routing with a user-recorded announcement requesting specific inputs from the user.

PROCEDURE:	
DISA ATTRIBUTES ENTER COL RANGE	1. Press the **[PGM]** button and dial 146.
01-02 DISA ATTRIBUTE F1:DAY F2:NIGHT F3:TIME	Use the dial-pad to enter the CO Line range. For a single CO Line, enter the same number twice.
001-002 DISA ATTRIBUTE DAY SERVICE 00 (00 – 71)	Select the desired Flex button: Button 1: Day Button 2: Night Button 3: Timed
	Use the dial-pad to enter the desired VSF AA Announcement, (00: disabled, 01~70 CCR Table index PGM 228, or 71: await user digits). Enter '#' after the entry to include a "drop after announcement instruction".
	Press the **[Save]** button to store the data entry.

3.3.5.6 CO Line Preset Forward Attributes – PGM 147

The CO Line Preset Forward feature enables a CO line to initially ring at multiple stations and forward to a pre-determined destination (PGM 204). The destination can be a station, Voice Mailbox, ACD group, or Hunt group. Each CO line has a Preset Forward Timer. Each CO line also can be assigned a VMID (Voice Mail Id) to allow sending specific VM digits when a CO line forwards to an external VM group.

PROCEDURE:	
CO PRESET FWD ATT ENTER COL RANGE	1. Press the **[PGM]** button and dial 147.
01-02 CO PRE-FWD PRESS FLEX KEY(1–3)	Use the dial-pad to enter the CO Line range. For a single CO Line, enter the same number twice.
	Select the desired Flex button; refer to Table 3.3.5.6-1.
	Use the dial-pad to enter the desired value for the selected Attribute, refer to Table 3.3.5.6-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.6-1 CO LINE PRESET FORWARD ATTRIBUTES (PGM 147)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 PRESET FWD TMR (00-99 SEC) : 00	An incoming call, which remains unanswered for this timer, is routed to the pre-determined Ring Table Index, PGM 147-button 2.	00-99 Sec	00
2	01-02 RING TBL INDEX INDEX : NOT ASSIGNED	If an incoming call remains unanswered after the Preset Fwd time the call is routed as defined in the ICLID Ring Assignment table bin entered here, refer to PGM 204.	001-250	…
3	01-02 VMID NUMBER ….	Each CO/IP line can be assigned a VMID (Voice Mail Id) that is sent to the VM group to identify the desired Mailbox for the CO/IP line.	0000~9999	…

3.3.5.7 CO Additional Attributes – PGM 148

CID Attributes are assigned for Analog CO Line Caller Id services.

PROCEDURE:	
CO ADDITIONAL ATTR ENTER COL RANGE	1. Press the **[PGM]** button and dial 163.
01–02 CID SETTING PRESS FLEX_KEY (01–13)	Use the dial–pad to enter a CO line range. For a single CO Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.7-1.
	Use the dial–pad to enter desired data for the Attribute.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.7-1 CO Additional Attributes (PGM 148)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01–02 CID MODE SELECT (0–4) : FSK	CID signal type can be assigned according to the CID type PSTN provides.	0: Disabled 1: FSK 2 : DTAS FSK 3: DTMF 4: Russia CID	FSK
2	01-02 RCID DETECT (1: ALL/0: LOCAL) : ALL	Russia CID Detect Mode.	0: LOCAL 1: ALL	ALL
3	01-02 RCID REQUEST (1: AUTO/0: USER) : AUTO	Russia CID Request Mode.	0: USER 1: AUTO	AUTO
4	01-02 RCID REQ TMR(10ms) (010–150) : 030	Russia CID First Delay Timer.	010–150 (10msec)	030
5	01-02 RCID NOANS TMR(s) (001–300) : 020	Russia CID NO–Answer Timer.	001–300 (sec)	020
6	01-02 RCID DGT NUMBER (04–10) : 07	Russia CID Digit Number.	04–10	07
7	01-02 RCID REQ COUNT (1–3) : 1	Russia CID Request Count.	1–3	1
8	01-02 RCID REQ DELAY (10–30) : 10 (10ms)	Russia CID Retry Delay Timer.	10–30 (10msec)	10
9	01-02 CC BLOCKING (0-2): DISABLED	It's for only Brazil R2, it blocks for collect call if double answer or with indication is selected.	0: Disabled 1: Double Answer 2: With Indicator	Disabled

Table 3.3.5.7-1 CO Additional Attributes (PGM 148)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
10	01-02 CC ANS TMR (001-250): 010 (100ms)	If it is set to Double Answer for collect call blocking, this timer is sending dummy answer signal.	1-250 (100ms)	10
11	01-02 CC IDLE TMR (001-250): 020 (100ms)	If it is set to Double Answer for collect call blocking, this timer is sending dummy idle signal.	1-250 (100ms)	20
12	01-02 LINE MONITORING (1: ON / 0: OFF): ON	This determines that detect line fault or not.	0: OFF 1: ON	ON
13	01-02 RING DETECT REG (000-255) : 015	In the web admin, it is located in the Maintenance page [Appliances Control] > [Analog CO Param Set].	000-255	015

3.3.5.8 NA ISDN Line Attributes – PGM 150

To comply with the North American ISDN standards, certain attributes must be defined for the system. These include Directory (telephone) Number and Service Profile (SPID) for the device. Note that this programming is required only for “Country Code” 1, USA installations.

PROCEDURE:	
COL NA ISDN ATT ENTER CO RANGE	1. Press the **[PGM]** button and dial 150.
01-02 COL NA ISDN ATT PRESS FLEX KEY (1-8)	Use the dial-pad to enter a CO Line range. For a single CO Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.8-1.
	Use the dial-pad to enter desired data for the Attribute, refer to Table 3.3.5.8-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.8-1 NA ISDN ATTRIBUTES (PGM 150)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 TYPE OF PX(1-4) NI1 (1)	The type of PSTN determines several specifics of the protocol and is required for proper operation.	1: NI 1 2: NI 2 3: 5 ESS 4: NORTEL	NI 1

Table 3.3.5.8-1 NA ISDN ATTRIBUTES (PGM 150)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
2	01-02 SPID NUMBER ……	The Service Profile Identifier (SPID) is a number assigned to a fully initializing ISDN terminal and enables the Stored Program Control switching System (SPCS) to identify the ISDN terminal at layer 3 of the D-channel signaling protocol. The SPID is a free-formatted numeric string composed of 9 to 23 numeric {0-9} and International Alphabet (IA5) characters. The SPID uniquely identifies a particular set of subscription parameters assigned to a TSP.	9~23 digits	
3	01-02 DN NUMBER ……	Initializing terminals are required to store a 7-digit DN in order to perform the compatibility checking procedures that are part of call termination.	23 digits	-
4	01-02 EKTS MODE (1:EKTS/0:NONE) : NONE	The EKTS (Electronic Key Telephone Service) terminal permits a user to operate those features that are specific to EKTS, as well as voice features that may function distinctly in the EKTS environment. EKTS allows a DN to be shared by more than one terminal, on the same or on different interfaces.	0: None 1: EKTS	NONE
5	01-02 TYPE FOR 1/2/3 UNKNOWN (0)	ISDN CALLED NO is made with the International format, National format, Network format, Subscriber format, or Abbreviated format when user dials 1~3 digits.	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated	Unknown
6	01-02 TYPE FOR 4/5/6 UNKNOWN (0)	ISDN CALLED NO is made with the International format, National format, Network format, Subscriber format, or Abbreviated format when user dials 4~6 digits.	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated	Unknown
7	01-02 TYPE FOR 7/8/9 UNKNOWN (0)	ISDN CALLED NO is constructed with the International format, National format, Network format, Subscriber format, or Abbreviated format when user the dials 7~9 digits.	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated	Unknown
8	01-02 TYPE FOR 10/11 UNKNOWN (0)	ISDN CALLED NO is constructed with the International format, National format, Network format, Subscriber format, or Abbreviated format when user the dials more than 10 digits.	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated	Unknown

3.3.5.9 ISDN CO Line Attributes – PGM 151

ISDN standards require that the ISDN terminating device, in this case the iPECS eMG, include various “adjustable” timers and counters as described below.

PROCEDURE:	
COL ISDN ATT ENTER CO RANGE	1. Press the **[PGM]** button and dial 151.
01-02 COL ISDN ATT PRESS FLEX KEY (01-16)	Use the dial-pad to enter a CO Line range (Ex. 01-02). For a single CO Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.9-1.
	Use the dial-pad to enter desired data for the Attribute, refer to Table 3.3.5.9-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.9-1 ISDN CO LINE ATTRIBUTES (PGM 151)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 T200 (1- 5) (1-5) : 1 (sec)	The terminal must support one T200 timer for each data link supported.	1~5 (seconds)	1
2	01-02 T201 (1- 5) (1-5) : 1 (sec)	The minimum time between TEI ID check messages.	1~5 (seconds)	1
3	01-02 T202(1-5) (1-5) : 2 (sec)	When the terminal transmits a TEI Identify Request message, it must provide one T202 timer for each logical link supported.	1~5 (seconds)	2
4	01-02 T203 (05 – 15) (05-15) : 10 (sec)	If the terminal initiates the link monitoring function, it must provide one T203 timer for each logical link supported. T203 defines the maximum time between message exchanges.	5~15 (seconds)	10
5	01-02 T204 (05 – 15) (05-15) : 10 (sec)	The T204 timer defines the minimum time between transmissions of XID messages.	5~15 (seconds)	10
6	01-02 T302 (10 – 30) (10-30) : 15 (sec)	In the Overlap dial mode, when the system receives incomplete dialing information from the ISDN, the system will wait the T302 timer duration for the additional digits. At time-out of this timer, the call will be disconnected.	10~30 (seconds)	15
7	01-02 T303 (01 – 10) (01-10) : 04 (sec)	T303 establishes the time Interval for a response after sending a call setup message.	1~10 (seconds)	4

Table 3.3.5.9-1 ISDN CO LINE ATTRIBUTES (PGM 151)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
8	01-02 T305 (10 – 60) (10-60) : 30 (sec)	T305 establishes the Interval for a Released signal after receiving a Disconnect message.	10~60 (seconds)	30
9	01-02 T308 (01 – 10) (01-10) : 04 (sec)	T308 establishes the Interval for a Released ACK signal after sending a release message.	1~10 (seconds)	4
10	01-02 T309 (001 – 100) (001-100) : 090 (sec)	Optional state timer.	1~100 (seconds)	90
11	01-02 T310 (10 – 60) (10-60) : 40 (sec)	Timer used in accepting Received signal.	10~60 (seconds)	40
12	01-02 N200 (1 – 5) (1-5) : 3	The terminal shall provide one N200 counter for each logical link supported. The default value of this counter shall be 3.	1~5	3
13	01-02 N201 (250 – 300) (250~300) : 260 (byte)	The N201 counter sets the maximum number of Octets in the ISDN information field.	250~300 (bytes)	260
14	01-02 N202 (1 – 5) (1-5) :3	If the terminal transmits a TEI Identify Request message (to request assignment of a TEI), the terminal shall provide one N202 counter for each logical link that it supports.	1~5	3
15	01-02 N204 (1 – 5) (1-5) : 1	The N204 counter establishes the maximum number of XID re-transmissions from the terminal.	1~5	1
16	01-02 K_VALUE (1-5) : 1	The terminal shall provide one K counter for each logical link supported.	1~5	1

3.3.5.10 T1 Line Timers – PGM 152

North American T1 standards require that the T1 terminating device, in this case the iPECS eMG, include various “adjustable” timers and counters as described below.

PROCEDURE:	
COL T1 ATT ENTER CO RANGE	1. Press the **[PGM]** button and dial 152.
01-02 COL T1 ATT PRESS FLEX KEY (01-13)	Use the dial-pad to enter a CO Line range (Ex. 01-02). For a single CO Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.10-1.
	Use the dial-pad to enter desired data for the Attribute, refer to Table 3.3.5.10-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.10-1 T1 LINE TIMERS (PGM 152)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 PAUSE (1-9) : 2 (sec)	A timed pause may be included in a Speed Dial number, in which case, the pause time is defined by this entry. Not currently implemented.	1~9 (seconds)	2
2	01-02 RLS GRD (01-60) : 20 (100ms)	The release guard timer defines the length of time the system will maintain a Line as busy after the call has been terminated to assure the PSTN has sufficient time to ‘clear down’ the circuit. Not currently implemented.	01~60 (100 ms)	20
3	01-02 DT DELAY (02-50) : 10 (100ms)	The DT (Dial tone) Delay timer defines the duration that dial tone must be received for DT recognition. Not currently implemented.	02~50 (100 ms)	10
4	01-02 INTER DGT (15-30) : 15 (20ms)	The Inter Digit timer defines the duration between digit transmissions. Not currently implemented.	15~30 (20 ms)	15
5	01-02 WINK (07-15) : 10 (20ms)	For TIE or DID Lines the Wink timer defines the length of time the ‘wink’ (T1 TIE line circuit reversal) will last.	7~15 (20 ms)	10

Table 3.3.5.10-1 T1 LINE TIMERS (PGM 152)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
6	01-02 OP RATE (0- 3) 60-40 (10pps) (0)	For Pulse signaling, defines the duration and make/break ratio of each pulse.	0: 60-40 (10pps) 1: 66-33 (10pps) 2: 60-40 (20pps) 3: 66-33 (20pps)	60-40 (10pps)
7	01-02 SEZ DTC (000-127) : 003 (20ms)	This timer defines the length of a valid 'line seizure' signal.	0~127 (20 ms)	3
8	01-02 RELEASE (000-127) : 007 (20ms)	For Ground Start Lines, defines the minimum length of time ground will not be applied to the TIP side from the PSTN.	0~127 (20 ms)	7
9	01-02 IASG TY (1:DTMF/0:PULSE) : DTMF	Incoming Address Signaling Type defines the type of signaling (DTMF or Pulse) expected.	0~1	DTMF
10	01-02 RING DTC (2-9) : 2 (100ms)	The Ring DTC (detect) timer defines the minimum acceptable length of the Ring-on time during a ring cycle.	2~9 (100 ms)	2
11	01-02 RING STOP (10-60) : 60 (100ms)	The Ring Stop timer defines the maximum Ring-off time during a ring cycle.	10~60 (100 ms)	60
12	01-02 COLLECT DGT (1-6) : 3	Collect DGT (digits) defines the number of digits expected on a DID line.	1~6	3
13	01-02 STORE TIME (01~15) : 15 (1sec)	For DID lines, this timer defines the maximum delay between incoming DID digits.	1~15 (second)	15

3.3.5.11 DCOB CO Attribute – PGM 153

The DCOB Attributes defines various characteristics of the E1/PRI module when employing R2 signaling.

PROCEDURE:	
DCOB COLINE ATT ENTER CO RANGE	1. Press the **[PGM]** button and dial 153.
01-02 DCOB CO ATT PRESS FLEX KEY (1-6)	Use the dial-pad to enter a CO Line range (Ex. 01-02). For a single CO Line, enter the same number twice.
	Press the desired Flex button; refer to Table 3.3.5.11-1.
	Use the dial-pad to enter desired data for the Attribute, refer to Table 3.3.5.11-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.5.11-1 DCOB CO ATTRIBUTE (PGM 153)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-02 LINE STATUS (1-9) : 6	Send Line status information to PX when a call routed to subscriber before the called party is ringing.	1~9	6
2	01-02 DNIS SERVICE (1:ON/0:OFF) : OFF	In R2, determine whether system will send caller information to PX or not.	0: OFF 1: ON	OFF
3	01-02 NO OF CLI DGTS (01-15) : 10	In R2, board request CLI Digit to PX.	01~15	10
4	01-02 DCOB TYPE(0-2) DID (2)	According to this type, the line can be restricted to seize CO line for outgoing call.	0~2 (0: DID/DOD 1:DOD 2:DID)	2
5	01-02 CALL CATEGORY (1-9) : 1	In R2 signaling, the category signal used by the iPECS is defined here.	1~9	1
6	01-02 DID DGT NUM (00-32) : 00	Maximum number of DID digits if line is E1/R2 (if it is N/A then it will follow PGM 145 3rd.)	00~32	0

3.3.6 SYSTEM DATA –PGM 160 to 182

3.3.6.1 System Attributes I & II – PGM 160 to 161

There are two (2) System Attributes programs to define settings that affect system-wide features and functions. Generally, the entry will turn the feature ON (enable) or OFF (disable).

Refer to Table 3.3.6.1-1 and Table 3.3.6.1-2 for a description of the Attributes, LCD displays and the data entries required.

PROCEDURE:	
SYSTEM ATTRIBUTES 1 PRESS FLEX KEY (01-24)	1. Press the **[PGM]** button and dial: 160 for System Attributes I 161 for System Attributes II.
	Press the Flex button for the desired Attribute, refer to Table 3.3.6.1-1 & Table 3.3.6.1-2.
	Use the dial-pad to enter desired data for the Attribute, refer to Table 3.3.6.1-1 to Table 3.3.6.1-2.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ATD CALL QUE RB TONE (1:RBT/0:MOH): MOH	When calling a busy attendant, the system will provide either ring-back tone or MOH. If MOH is selected, the source must be defined in PGM 171.	0: MOH 1: RB tone	MOH
2	CAMP-ON RBT/MOH (1:RBT/0:MOH) : MOH	When Camp-On is used, the calling station will receive either ring-back tone or MOH. If MOH is selected, the source must be defined in PGM 171.	0: MOH 1: RB tone	MOH
3	CO DIAL TONE DETECT (1 : ON/ 0 : OFF) : OFF	The system can use dial-tone detection or a timed pause for Speed Dial numbers that contain a Pause.	0: OFF 1: ON	OFF
4	CO LINE CHOICE (0:RR/1:LAST/2:FIRST): 1	CO Lines are selected by the system from groups using either the LAST used, ROUND robin method or FIRST line in the group.	0: ROUND 1: LAST 2: FIRST	LAST
5	DISA RETRY COUNT (1 –9): 3	A DISA user is allowed to retry erroneous authentication code entries. This entry sets the number of retries before the system disconnects.	1~9	3

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
6	EXTERNAL NIGHT RING (1 : ON/ 0 : OFF) : OFF	CO/IP calls, which are assigned UNA, can activate the Loud Bell Contact. An incoming call, received while in Night, will activate the contact.	0: OFF 1: ON	OFF
7	HOLD PREFERENCE (1: SYS/ 0: EXC) : SYS	A single depression of the **[HOLD]** button places the call on the preferred hold, System or Exclusive.	0: Excl 1: System	System
8	PRINT LCR CONV DIGIT (1 : LCR/ 0 : USER) : LCR	SMDR will output the number dialed by either the system's LCR or the user.	0: User 1: LCR	LCR
9	ATD CALL QUE AVAILABLE (1:ON/0:OFF) : OFF	The system can be configured to queue incoming calls to a busy Attendant.	0: OFF 1: ON	OFF
10	USE PGM_0 IN ALL ATTD (1 : ON/ 0 : OFF) : OFF	This field allows Main attendants access to all Attendant functions including System Attendant features and programming. (Except PGM 06 – Record system announcement)	0: OFF 1: ON	OFF
11	OFFNET PROMPT USAGE (1 : ON/ 0 : OFF) : OFF	When a call is routed to a destination external to the iPECS, the Off Net routing prompt can be played. Not available in US version.	0: OFF 1: ON	OFF
12	CO-TO-CO UC TMR EXTEND (1:ON/0:OFF) : OFF	When an Unsupervised Conference is established with DISA, Off-Net Fwd, etc., the Unsupervised Conference timer (PGM 182-button 5 determines the allowed duration of the call. If enabled here, the user may dial '#' to extend the allowed duration.	0: OFF 1: ON	OFF
13	ACD MANAGER PRINT (1:ON/0:OFF) : OFF	When the optional ACD Message events are desired, the system must be enabled to send ACD event messages.	0: OFF 1: ON	OFF
14	CALL LOG LIST NUM (15-50) : 15	The Call Log that saves the Outgoing call, Received call, or Lost call information can be displayed by pressing Call Log Display Button. The maximum size of the Call Log per station is defined here.	15~50	15
15	REPEAT DTMF TONE (1:ON/0:OFF) : OFF	When enabled, the system will provide DTMF repeat tone to the caller's station. It's nothing to do with PSTN.	0: OFF 1: ON	OFF

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
16	AUTH RETRY COUNT (1-9) : 3	If a CO's have "CO/IP group Authorization" set to ON in PGM141, 8th or the Stations have "Station Account" set to ON in PGM112, 19th then a valid authorization code must be entered to make an external CO call. When user fails to enter a valid Authorization code in the number of attempts assigned in this field, the station is disconnected or the Station COS is changed to COS 7. If the COS 7 WHEN AUTH FAIL, PGM 161, 17th is on then the station COS is changed to COS 7 otherwise the station is disconnected. When the station COS is changed COS 7, the user must employ COS Restore in Station User PGM 2 to return the station to the normal COS.	1 ~ 9	3
17	CONFROOM CO TEL NUMBER CO TEL:..	ISDN DID number an external party must dial to enter a Conference room. UCS Client must pre-establish the Conf Room.	8 digits	
18	MPB DIFFSERV TAG(00-63): 04	MPB Diff-Serv pre-tag value.	00-63	04
19	UPGRADE MODE (1:FTP/0:TFTP): FTP	Upgrade transfer mode from MPB to IP devices.	1: FTP 0: TFTP	FTP
20	TRANSFER TONE (1:RBT/0:MOH): RBT	When a CO call is transferred to a busy extension, Ring Back Tone or Music On Hold will be played to the CO Line.	0: MOH 1: RBT	RBT
21	CONF WARN TONE (1:ON/0:OFF) : ON	As new members join a conference room, the system provides warning tone to conference members.	0: OFF 1: ON	ON
22	TLS for WEB (1:ON/0:OFF) : OFF	Enables Transport Layer Security TLS for Web access.	0: OFF 1: ON	OFF
23	DUMMY DIAL TONE (1:ON/0:OFF) : OFF	When a CO/IP line does not provide dial tone, the system can provide dummy dial tone to the user.	0: OFF 1: ON	OFF
24	SYSTEM 2 ADDED ATTR PRESS FLEX KEY (01-23)	Select button 24 to access added attributes 1~23.	FLEX 1 ~ FLEX 23	

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-1	SIP STA MODE (1:PTP/0:RTD): RTD	SIP phones may set-up a point-to-point RTP connection (PTP) or to assure a controlled connection, RTP can be routed via a VoIP channel (RTD).	0: RTD 1: PTP	ROUTED
24-2	SYS AUTH END CODE(#) (1:ON/0:OFF) : OFF	If this value is set to ON, the end dialing digit (#) must be entered when system Auth code is entered.	0: OFF 1: ON	OFF
24-3	STN VM FEATURE USAGE (1:ON/0:OFF) : ON	If this value is set to ON, Station VM feature (PGM 127) can be used.	0: OFF 1: ON	ON
24-4	REMOTE VM ACCESS (1:ON/0:OFF) : ON	If this value is OFF, the user cannot access their VSF mailbox via DID, DISA CO call and so on (i.e. through CO line channel).	0: OFF 1: ON	ON
24-5	TRANSFER TONE USAGE (1:ON/0:OFF) : OFF	If this value is ON, Warning tone is served to the [transfer to] station. This is only applied to screened transfer case.	0: OFF 1: ON	OFF
24-6	LCR DIAL TONE DETECT (1:ON/0:OFF) : OFF	If this value is set to ON, system first checks if the CO provides dial tone in case if analog CO is seized for LCR dialing. If there's no dial tone, the call is rerouted to Alternate DMT Index. If LCR type is set to M13, LCR dial tone detect option is not applied.	0: OFF 1: ON	OFF
24-7	ICM CALL LOG (1:ON/0:OFF) : OFF	If this value is set to ON, system save and provide ICM call log for IP and LDP phone.	0: OFF 1: ON	OFF
24-8	ATD PWORD USAGE (1:ON/0:OFF) : OFF	If this value is set to ON, system requests password below cases. When a user enters attendant program([PGM] + 0) in attendant keyset, When a user enters speed program in attendant keyset, When a user assigns attendant program code([PGM] + 0) to flexible button in attendant keyset,	0: OFF 1: ON	OFF
24-9	PICKUP STA NAME USAGE (1:ON/0:OFF) : OFF	Name of picked up station is display when pickup internal call.	0: OFF 1: ON	OFF
24-10	DISPLAY LCR MODE (1:ON/0:OFF) : ON	Display "LCR MODE" when LCR is activated.	0: OFF 1: ON	ON

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-11	EASY 5 WAKE UP USAGE (1:ON/0:OFF) : OFF	If this value is set to ON, and PGM 161 – 5-Wake Up Usage is also set to ON, each station user can enter his wake up time, without entering wake up type, wake up index.	0: OFF 1: ON	OFF
24-12	WEB LOGIN ID USAGE (1:ON/0:OFF) : OFF	If this value is set to ON, Login ID should be entered to login the web admin.	0: OFF 1: ON	OFF
24-13	VM MEX NOTIFY OVER LCO (1:EN/0:DIS) : DISABLE	If this value is set to ON, LCO can be used for the VM notification call to MEX.	0: DISABLE 1: ENABLE	DISABLE
24-14	MODEM ASC CO LINE (00-74) : 00	Call is delivered to built-in modem if calls come in from assigned CO line.	00-74	0
24-15	MEET ME SOFT DISPLAY (1:ON/0:OFF) : ON	If this value is set to OFF, {MEET ME} soft button is not displayed in being paged.	0: OFF 1: ON	ON
24-16	DEV INFO REQ INTERVAL (015-255) : 015	System checks each device by polling message periodically using this timer.	015-255	015
24-17	NUM OF CLI WAIT LIST (000-255) : 000	The number of CLI wait list can be the available number.	000-255	000
24-18	EMER MAIL STA . . .	When an Emergency Mailbox Station is assigned, an emergency call placed by a station is recorded automatically to the assigned mailbox.		
24-19	MSVC XML PORT (00001-65535) : 07878	The XML port used to support Web callback, call-through and iPECS ClickCall application for MSVC (Mobile Service) must be defined.	00001~65535	7878
24-20	MEXT CO PASSWD (1:ON/0:OFF) : OFF	When a mobile extension places an external call using an iPECS CO/IP Line, the user may be required to enter a valid Authorization code to place the call.	OFF ON	OFF
24-21	DIAL BY NAME LIST (0:ALL/1:GRP) : OFF	The Dial by Name feature can allow stations in any ICM tenancy groups to call a station any in ICM Tenancy group. When desired, Dial by Name can be limited to function within allowed Tenancy calling groups, PGM 125.	All Accessible ICM Group only	ALL

Table 3.3.6.1-1 SYSTEM ATTRIBUTES I (PGM 160)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-22	DIAL BY SYSNAME LIST (0:ALL/1:ZONE) : OFF	If this value is set to "Accessible System Speed Zone Only", the system speed dial number of Accessible system speed zone (System Speed Zone(232)) is displayed in {Dial by Name}.	All, Accessible System Speed Zone Only	ALL
24-23	NO CLI CALL LOG (1:ON/0:OFF) : OFF	Leave system Call log even though there is no CLI information if it is ON. Otherwise Call log is not leaved.	OFF ON	OFF

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	OFF-HOOK RING TYPE (1:MUTE/0:BURST) : MUTE	Off-hook ring can be a single tone burst or muted normal ring.	0:BURST 1:MUTE	MUTE
2	PAGE WARN TONE (1 : ON/ 0: OFF) : ON	A warning tone can be sent prior to a page announcement.	0: OFF 1: ON	ON
3	AUTOMATIC PRIVACY (1 : ON/ 0: OFF) : ON	Automatic Privacy can be disabled, allowing stations to join an active CO/IP call. A warning tone can be provided, see button 4 below.	0: OFF 1: ON	ON
4	PRIVACY WARN TONE (1 : ON/ 0: OFF) : ON	If desired, warning tone can be provided when privacy is overridden.	0: OFF 1: ON	ON
5	ACD PRINT ENABLE (1 : ON/ 0: OFF) : OFF	ACD statistics can be periodically sent to the assigned serial port. To provide periodic reports, this entry must be ON.	0: OFF 1: ON	OFF
6	ACD PRINT TIMER(1sec) (001 –255) : 001	This entry defines the time, in 10-second increments, between the periodic ACD reports.	001~255 (10 sec)	010
7	CLEAR ACD DATABASE (1 : ON/ 0: OFF) : OFF	When a periodic report is sent, the ACD database can be cleared automatically, if “ON”.	0: OFF 1: ON	OFF
8	OVERRIDE 1ST CO GRP (1: ON/0: OFF) : ON	When a user dials ‘9’, the system can search all CO/IP Groups for the first available CO/IP line.	0: OFF 1: ON	ON
9	BASE CODEC TYPE (0-3): G.711(0)	The default codec can be defined as G.711 or G.723.1 for decreased bandwidth needs. The selected codec will be used on all internal communications as well as for remote iPECS devices.	0: G.711 1: G.723.1 2:G.729 3:G.722	G.711

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
10	G711 PACKETIZATION(1ms) (10/20/30) : 20	The G.711 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.711 codec is used.	10/20/30	20
11	G723 PACKETIZATION(1ms) (30/60) : 030	The G.723.1 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.723.1 codec is used.	30/60	030
12	NETWORK TIME/DATE (0-2) : DISABLE	The system can use ISDN Network time or NTP to synchronize time with the ISDN or data network. To disable time sync, use OFF. ISDN sync is not available in USA version.	0~2	DISABLE
13	INCOMING TOLL CHK (1:ON/0:OFF) : ON	The system can invoke COS dialing restrictions when a user dials while connected to incoming call.	0: OFF 1: ON	ON
14	WEB SERVER PORT (00001-65535) : 00080	This field determines the TCP port employed to access the system WEB server.	00001~ 65535	00080
15	UNUSED			
16	OLD AUTH CODE USAGE (1:ON/0:OFF) : ON	System Authorization codes are entered by the user as “*” and the code (ON) or “*”+ the Auth code index and the code (OFF).	0: OFF 1: ON	ON
17	COS 7 WHEN AUTH FAIL (1:ON/0:OFF) : OFF	If user fails to enter a valid Authorization code in the number of attempts assigned in FAC RETRY COUNT, PGM 160-button 16, the station is disconnected or the Station COS is changed to COS 7. In the latter case, the user must employ COS Restore in Station User PGM 2 to return the station to the normal COS.	0: OFF 1: ON	OFF
18	UNIFIED MESSAGE FORMAT (1:ON/0:OFF) : OFF	System Integration Messages are sent out the defined serial or TCP channel.	0: OFF 1: ON	OFF
19	RECORD WARNING TONE (1:ON/0:OFF) : ON	When call recording is active, a tone can be sent to all connected parties to indicate the conversation is being recorded.	0: OFF 1: ON	ON
20	UNUSED	Unused.	0: OFF 1: ON	OFF

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
21	UNUSED	Unused.	0: OFF 1: ON	OFF
22	SMS CENTER NUMBER	When the PSTN will be used to send SMS, the phone number of the Short Message Service Center must be entered.	23 digits	
23	SMS PROTOCOL (0-8) : NONE (0)	The Short Message Service Protocol must be selected to support SMS: 0: No PSTN SMS support, 1: ETSI-P1 2: ETSI-P2 3: KT-LivingNet 4: SIP-Text 5: SIP-XML 6: KT-IP-PBX 7: SKN-IP-PBX 8: KT XML	0 ~ 8	NONE
24	SYSTEM 2 ADDED ATTR PRESS FLEX KEY (1-23)	Select button 24 to access added attributes 1~23.	FLEX 1 ~ FLEX 23	
24-1	G722 PACKETIZATION(1ms) (10/20/ 30) : 20	The G.722 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.722 codec is used.	10/20/30msec	20
24-2	UNUSED	This filed is used only for KOREA.		
24-3	SMS CENTER CLI	When the CO/IP will be used to receive SMS, the Caller Id expected from the Short MSG Service Center must be defined.	23 digits	
24-4	TRANSIT-OUT SECURITY (1:ON/0:OFF) : ON	Check IP address for transit-out in the master system, if it is not valid IP address then it will be denied.	0: OFF 1: ON	ON
24-5	EMR CALL ATD NOTIFY (1:ON/0:OFF) : ON	Provide notification to attendant when user dials emergency number.	0: OFF 1: ON	ON
24-6	UNUSED	Unused.	0: LOCAL 1: MCIB_V	MCIB_V
24-7	FIRST DIGIT * IN SPD DISPLAY SECURITY (0)	If it is ‘0’ then the first ‘*’ in speed will be used for display security otherwise DTMF ‘*’ will be send.	0: DISPLAY SECURITY 1: DIGIT *	DISPLAY SECURITY
24-8	STRONG PASSWORD (1:ON/0:OFF) :OFF	ON: Password in PGM162 must be longer than 8 and made by Numbers, Characters.	0: OFF 1: ON	ON

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-9	VSF SMTP PORT (00001~65535) : 00025	SMTP port of VMIU/VMIB	00001~65535	00025
24-10	ICM BUSY SVC (1:INTR/0:OHVO): OHVO	If ICM busy, choice OHVO or Intrusion.	0: OHVO 1: INTR	OHVO
24-11	AUTO SAVE NEW MEG (1:ON/0:OFF) : OFF	If it's ON, Move current (new) message to saved message category. If it is OFF, leave it in new message category.	0: OFF 1: ON	OFF
24-12	IGMP QUERY USAGE (1:ON/0:OFF) : OFF	Regarding PGM161 (Flex 24-12 to 15) are used when there are some problems in multicast packet forwarding like as registering devices or multicast MOH. With some multicast snoop enabled switch devices, they do not forward multicast packets if there is no IGMP query device in the network. This entity enables the IGMP query option and MPB sends IGMP query message with periodic to avoid multicast related problem.	0: OFF 1: ON	OFF
24-13	IGMP INTV_TMR(1sec) (0000~3600) : 0180	This timer defines the interval time of each IGMP query messages. With some special switches, this timer value should be modified.	(0~3600) sec	180
24-14	IGMP QUERY ALL HOSTS (1:ON/0:OFF) : ON	This entity defines which destination address is used when IGMP query is sent to. If ON is selected, query message is sent to ALL HOST group by using address 224.0.0.1. And OFF is selected, query is sent to iPECS specific address by using address 239.20.19.50. This should be ON when there is a MOH problem.	0: OFF 1: ON	ON
24-15	IGMP QUERY GENERIC (1:ON/0:OFF) : OFF	This entity specifies a group address being queried. If ON is selected, all multicast group are queried. If OFF is selected, iPECS registering device group (239.20.19.50) is only queried. This should be ON when there is a MOH problem.	0: OFF 1: ON	OFF
24-16	UNUSED			

Table 3.3.6.1-2 SYSTEM ATTRIBUTES II (PGM 161)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-17	RESTRICT * AND # (1:ON/0:OFF) : OFF	If it's ON, if the first digit is * or # then the call will be prohibited.	0: OFF 1: ON	OFF
24-18	RESTRICT ANS DGT DISP (1:ON/0:OFF) : ON	If it's OFF, SMDR print digits after answer.	0: OFF 1: ON	ON
24-19	IP BIND USAGE (1:ON/0:OFF) : OFF	If It's ON, VOIU/VOIB will apply IP-Binding with information in PGM130 (Flex 18 – Flex 24-3) / PGM133 (Media port)	0: OFF 1: ON	OFF
24-20	ACD MAILSEND WEEKLY SET N/A (0-7)	Sets day of week to send ACD statistic data weekly. (0 for no weekly data, 1-7 for Monday through Sunday)	0-7	0
24-21	ACD MAILSEND DAILY SET ..(00-23)	Sets time-of-day for ACD statistic data to be sent on a daily basis. (00 for no daily records, 01-23 for hour of the day)	00-23	..
24-22	ACD DEL AFTER MAILSEND (1 : ON/ 0: OFF) : OFF	Delete ACD statistic data after sending e-mail.	0: OFF 1: ON	OFF
24-23	NEW 5 WAKE UP USAGE (1:ON/0:OFF) : OFF	New Wake-Up function usage option.	0: OFF 1: ON	OFF

3.3.6.2 System Password – PGM 162

Access to the system database and maintenance functions can be protected by passwords up to twelve (12) digits. Three passwords can be defined, Keyset Admin, Remote access, and CID. The Maintenance password has full and unlimited access to the database and maintenance functions of the system. The User and Admin password have access to database items defined in Web Admin. Note there are no default passwords.

PROCEDURE:	
SYSTEM PASSWORD PRESS FLEX KEY (1-3)	2. Press the **[PGM]** button and dial 162.
KEYSET ADMIN PASSWORD @@@@@@@@@@@@	Press the Flex button for the desired password: For the Keyset Admin password press Flex button 1. For the Remote access password press Flex button 2. For the CID password press Flex button 3.
REMOTE ACCESS PASSWORD @@@@@@@@@@@@	Enter the desired password, up to 12 digits. To erase a password press the **[SPEED]** button.
CID PASSWORD @@@@@@@@@@@@	Enter the desired password, up to 12 digits. To erase a password press the **[SPEED]** button.
	Press the **[Save]** button to store the password entry.

Table 3.3.6.2-1 System Passwords

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	KEYSET ADMIN PASSWORD @@@@@@@@@@@@	Admin password, configurable database access in Keyset Admin.	12 digits	none
2	REMOTE ACCESS PASSWORD @@@@@@@@@@@@	Remote access password, full and unlimited access to database and maintenance functions.	12 digits	none
3	CID PASSWORD @@@@@@@@@@@@	CID password.	12 digits	none

3.3.6.3 Alarm Attributes – PGM 163

The system can monitor an external contact. This contact is most often employed as an Alarm indicator or Doorbell. The Alarm attributes define the operation of the external contact. The Alarm Signal sent to assigned stations can be repeating or a single burst, the former is often desired. For the Doorbell, a single tone is sent each time the contact activates. Refer to Table 3.3.6.3-1 for a description of the features, the data entries required and LCD displays for each attribute.

PROCEDURE:	
SYSTEM ALARM ATT PRESS FLEX KEY (1-8)	1. Press the **[PGM]** button and dial 163.
	Press the desired Flex button; refer to Table 3.3.6.3-1.
	Use the dial-pad to enter desired data for the attribute, refer to Table 3.3.6.3-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.3-1 ALARM ATTRIBUTES (PGM 163)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ALARM ENABLE (1:ON/0:OFF) : OFF	This parameter enables the external contact monitoring circuitry.	0: OFF 1: ON	OFF
2	ALARM CONTACT TYPE (1:CLOSE/0:OPEN) : CLOSE	This parameter establishes the contact state that will activate the Alarm, close or open.	0: Open 1: Close	CLOSE
3	ALARM/DOORBELL MODE (1:ALARM/0:BELL): ALARM	The contact can be treated to function as a doorbell instead of an alarm.	0: Bell 1: Alarm	ALARM
4	ALARM SIGNAL MODE (1:RPT/0:ONCE) : RPT	The assigned stations will receive a Repeating signal or single burst (ONCE) of alarm tone.	0: Once 1: Repeat	RPT
5	EMER CALL NOTIFY (1:ON/0:FF) : ON	This parameter enables/disables the emergency call notification.	0: OFF 1: ON	ON
6	DCOB FAULT NOTIFY (1:ON/0:FF) : ON	This parameter enables/disables the DCOB Fault notification.	0: OFF 1: ON	ON
7	SIP REG FAULT NOTIFY (1:ON/0:FF) : ON	This parameter enables/disables the SIP Registration Fault notification.	0: OFF 1: ON	ON
8	TEMP LICENSE NOTIFY (1:ON/0:OFF) : ON	This entry enables user to get the notification before expiring Temp license.	0: OFF 1: ON	ON

3.3.6.4 Attendant Assignment – PGM 164

eMG80 is consist of 1 System attendant and 3 Main attendant. eMG800 is consist of 1 System attendant and 4 Main attendant. The System Attendant has higher priority in call handling and system management functions with access to PGM 0. As a default, the System Attendant is assigned Station 100 for eMG80 and Station 1000 for eMG800. Main Attendants are not assigned by default.

PROCEDURE:	
ATTENDANT ASSIGNMENT 100	1. Press the **[PGM]** button and dial 164.
ATTENDANT ASSIGNMENT 100	Select the desired button: Button 1: System Attendant Button 2: Main Attendants
	Use the dial-pad to enter desired station numbers for the System and Main Attendants. Use the **[SPEED]** button to erase an entry and the **[VOL UP]**/**[VOL DOWN]** button to scroll through the Main Attendants.
	Press the **[Save]** button to store the Attendant assignment entry.

3.3.6.5 Multi-cast RTP/RTCP Ports – PGM 165

Multi-cast is employed by the system to send BGM, MOH, paging and Push-To-Talk packets. Employing a single multi-cast packet reduces the overall LAN traffic. In some cases, specifically when multiple systems are connected to the same default router it may be advantageous to define different ports for each system.

PROCEDURE:	
MULTICAST RTP/RTCP PRESS FLEX KEY (1-2)	1. Press the **[PGM]** button and dial 165.
MULTICAST RTP PRESS FLEX_KEY (01-24)	Press Flex button 1 for RTP ports or Flex button 2 for RTCP ports.
	Press the desired Flex button; refer to Table 3.3.6.5-1. The 24 Flex buttons are used to assign ports for the first 24 RTP/RTCP functions. To assign port numbers for additional RTP/RTCP functions, use the **[VOL UP]**/**[VOL DOWN]** buttons.
	Use the dial-pad to enter desired data for the port, refer to Table 3.3.6.5-1.

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	M-CAST RTP BGM INT 8100 (8101)	RTP and RTCP ports for internal BGM.	0000-9999	8100 (8101)
2	M-CAST RTP BGM EXT 1 8102 (8103)	RTP and RTCP ports for external BGM 1.	0000-9999	8102 (8103)
3	M-CAST RTP BGM EXT 2 8104 (8105)	RTP and RTCP ports for external BGM 2.	0000-9999	8104 (8105)
4	M-CAST RTP I-PAGE 1 8106 (8107)	RTP and RTCP ports for Internal Page 1.	0000-9999	8106 (8107)
5	M-CAST RTP I-PAGE 2 8108 (8109)	RTP and RTCP ports for Internal Page 2.	0000-9999	8108 (8109)
6	M-CAST RTP I-PAGE 3 8110 (8111)	RTP and RTCP ports for Internal Page 3.	0000-9999	8110 (8111)
7	M-CAST RTP I-PAGE 4 8112 (8113)	RTP and RTCP ports for Internal Page 4.	0000-9999	8112 (8113)
8	M-CAST RTP I-PAGE 5 8114 (8115)	RTP and RTCP ports for Internal Page 5.	0000-9999	8114 (8115)
9	M-CAST RTP I-PAGE 6 8116 (8117)	RTP and RTCP ports for Internal Page 6.	0000-9999	8116 (8117)
10	M-CAST RTP(RTCP) I-PAGE 7 8118 (8119)	RTP and RTCP ports for Internal Page 7.	0000-9999	8118 (8119)
11	M-CAST RTP I-PAGE 8 8120 (8121)	RTP and RTCP ports for Internal Page 8.	0000-9999	8120 (8121)
12	M-CAST RTP I-PAGE 9 8122 (8123)	RTP and RTCP ports for Internal Page 9.	0000-9999	8122 (8123)
13	M-CAST RTP I-PAGE 10 8124 (8125)	RTP and RTCP ports for Internal Page 10.	0000-9999	8124 (8125)
14	M-CAST RTP I-PAGE 11 8126 (8127)	RTP and RTCP ports for Internal Page 11.	0000-9999	8126 (8127)
15	M-CAST RTP I-PAGE 12 8128 (8129)	RTP and RTCP ports for Internal Page 12.	0000-9999	8128 (8129)

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
16	M-CAST RTP I-PAGE 13 8130 (8131)	RTP and RTCP ports for Internal Page 13.	0000-9999	8130 (8131)
17	M-CAST RTP I-PAGE 14 8132 (8133)	RTP and RTCP ports for Internal Page 14.	0000-9999	8132 (8133)
18	M-CAST RTP I-PAGE 15 8134 (8135)	RTP and RTCP ports for Internal Page 15.	0000-9999	8134 (8135)
19	M-CAST RTP I-PAGE 16 8136 (8137)	RTP and RTCP ports for Internal Page 16.	0000-9999	8136 (8137)
20	M-CAST RTP I-PAGE 17 8138 (8139)	RTP and RTCP ports for Internal Page 17.	0000-9999	8138 (8139)
21	M-CAST RTP I-PAGE 18 8140 (8141)	RTP and RTCP ports for Internal Page 18.	0000-9999	8140 (8141)
22	M-CAST RTP I-PAGE 19 8142 (8143)	RTP and RTCP ports for Internal Page 19.	0000-9999	8142 (8143)
23	M-CAST RTP I-PAGE 20 8144 (8145)	RTP and RTCP ports for Internal Page 20.	0000-9999	8144 (8145)
24	M-CAST RTP I-PAGE 21 8146 (8147)	RTP and RTCP ports for Internal Page 21.	0000-9999	8146 (8147)
25	M-CAST RTP I-PAGE 22 8148 (8149)	RTP and RTCP ports for Internal Page 22.	0000-9999	8148 (8149)
26	M-CAST RTP I-PAGE 23 8150 (8151)	RTP and RTCP ports for Internal Page 23.	0000-9999	8150 (8151)
27	M-CAST RTP I-PAGE 24 8152 (8153)	RTP and RTCP ports for Internal Page 24.	0000-9999	8152 (8153)
28	M-CAST RTP I-PAGE 25 8154 (8155)	RTP and RTCP ports for Internal Page 25.	0000-9999	8154 (8155)
29	M-CAST RTP I-PAGE 26 8156 (8157)	RTP and RTCP ports for Internal Page 26.	0000-9999	8156 (8157)
30	M-CAST RTP I-PAGE 27 8158 (8159)	RTP and RTCP ports for Internal Page 27.	0000-9999	8158 (8159)
31	M-CAST RTP I-PAGE 28 8160 (8161)	RTP and RTCP ports for Internal Page 28.	0000-9999	8160 (8161)

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
32	M-CAST RTP I-PAGE 29 8162 (8163)	RTP and RTCP ports for Internal Page 29.	0000-9999	8162 (8163)
33	M-CAST RTP I-PAGE 30 8164 (8165)	RTP and RTCP ports for Internal Page 30.	0000-9999	8164 (8165)
34	M-CAST RTP I-PAGE 31 8166 (8167)	RTP and RTCP ports for Internal Page 31.	0000-9999	8166 (8167)
35	M-CAST RTP I-PAGE 32 8168 (8169)	RTP and RTCP ports for Internal Page 32.	0000-9999	8168 (8169)
36	M-CAST RTP I-PAGE 33 8170 (8171)	RTP and RTCP ports for Internal Page 33.	0000-9999	8170 (8171)
37	M-CAST RTP I-PAGE 34 8172 (8173)	RTP and RTCP ports for Internal Page 34.	0000-9999	8172 (8173)
38	M-CAST RTP I-PAGE 35 8174 (8175)	RTP and RTCP ports for Internal Page 35.	0000-9999	8174 (8175)
39	M-CAST RTP I-PAGE ALL 8176 (8177)	RTP and RTCP ports for Internal All Call Page.	0000-9999	8176 (8177)
40	M-CAST RTP E-PAGE 1 8178 (8179)	RTP and RTCP ports for External Page 1.	0000-9999	8178 (8179)
41	MULTICAST RTP E-PAGE 2 8180 (8181)	RTP and RTCP ports for External Page 2.	0000-9999	8180 (8181)
42	M-CAST RTP E-PAGE ALL 8182 (8183)	RTP and RTCP ports for External All Call Page.	0000-9999	8182 (8183)
43	M-CAST RTP PAGE ALL 8184 (8185)	RTP and RTCP ports for All Call Page.	0000-9999	8184 (8185)
44	M-CAST RTP PTT 1 8186 (8187)	RTP and RTCP ports for PTT group 1.	0000-9999	8186 (8187)
45	M-CAST RTP PTT 2 8188 (8189)	RTP and RTCP ports for PTT group 2.	0000-9999	8188 (8189)
46	M-CAST RTP PTT 3 8190 (8191)	RTP and RTCP ports for PTT group 3.	0000-9999	8190 (8191)
47	M-CAST RTP PTT 4 8192 (8193)	RTP and RTCP ports for PTT group 4.	0000-9999	8192 (8193)

Table 3.3.6.5-1 MULTI-CAST RTP/RTCP PORTS — (PGM 165)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
48	M-CAST RTP PTT 5 8194 (8195)	RTP and RTCP ports for PTT group 5.	0000-9999	8194 (8195)
49	M-CAST RTP PTT 6 8196 (8197)	RTP and RTCP ports for PTT group 6.	0000-9999	8196 (8197)
50	M-CAST RTP PTT 7 8198 (8199)	RTP and RTCP ports for PTT group 7.	0000-9999	8198 (8199)
51	M-CAST RTP PTT 8 8200 (8201)	RTP and RTCP ports for PTT group 8.	0000-9999	8200 (8201)
52	M-CAST RTP PTT 9 8202 (8203)	RTP and RTCP ports for PTT group 9.	0000-9999	8202 (8203)
53	M-CAST RTP PTT ALL 8204 (8205)	RTP and RTCP ports for PTT group ALL.	0000-9999	8204 (8205)
54	M-CAST RTP BGM VSF 1 8206 (8207)	RTP and RTCP ports for VSF/VMIB BGM use.	0000-9999	8206 (8207)
55	M-CAST RTP SLT MOH 1 8208 (8209)	RTP and RTCP ports for SLT MOH 1 use.	0000-9999	8208 (8209)
56	M-CAST RTP SLT MOH 2 8210 (8211)	RTP and RTCP ports for SLT MOH 2 use.	0000-9999	8210 (8211)
57	M-CAST RTP SLT MOH 3 8212 (8213)	RTP and RTCP ports for SLT MOH 3 use.	0000-9999	8212 (8213)
58	M-CAST RTP SLT MOH 4 8214 (8215)	RTP and RTCP ports for SLT MOH 4 use.	0000-9999	8214 (8215)
59	M-CAST RTP SLT MOH 5 8216 (8217)	RTP and RTCP ports for SLT MOH 5 use.	0000-9999	8216 (8217)
60	M-CAST RTP VSF MOH 2 8218 (8219)	RTP and RTCP ports for VSF/VMIB MOH 2 use.	0000-9999	8218 (8219)
61	M-CAST RTP VSF MOH 3 8220 (8221)	RTP and RTCP ports for VSF/VMIB MOH 3 use.	0000-9999	8220 (8221)

3.3.6.6 DISA COS – PGM 166

A DISA user is subject to the dialing restrictions assigned in the DISA Class-of-Service (COS). The restrictions applied are the same as with the corresponding Station COS levels 1~11 and interact with the CO COS in the same manner. Assignments for DISA COS are made for the Day, Timed and Night mode of system operation. The default for all three DISA COS modes is 1, no restrictions.

PROCEDURE:	
DISA COS (1 – 11) DAY: 07 NIGHT: 07 TIMED:07	1. Press the **[PGM]** button and dial 166.
	Select the desired button; Button 1: Day mode COS Button 2: Night mode COS Button 3: Timed mode COS
	Use the dial-pad to enter desired DISA COS (1~11).
	Press the **[Save]** button to store the DISA COS data entry.

3.3.6.7 DID/DISA Destination – PGM 167

When a DID line or DISA user dials an invalid/vacant or busy station number the caller will be sent to the assigned destination that is selected according to the CO tenancy group of the DID/DISA line.

The destination is separately defined for invalid, busy, no answer and DND conditions and can be defined as the Attendant, busy tone, Station Group or VSF System Announcement.

Note that for calls on a DID line to a busy station, Call Wait can be assigned, refer to PGM 113, Station Attributes III, button 9.

Also, for DID calls only, announcements (prompts) can be sent from the VSF to the caller for various conditions, busy, error, DND, No Answer, reroute busy, reroute error, reroute no answer, or Attendant Transfer.

PROCEDURE:	
DID/DISA DESTINATION ENTER ICM GROUP (00-15)	1. Press the **[PGM]** button and dial 167. Select ICM tenancy group (eMG80:0~15 / eMG800:0~32)
DID/DISA DESTINATION :0 PRESS FLEX KEY (1-9)	Press the **[PGM]** button and dial 167 and press Flexible button (Ex.1).
BUSY DESTINATION TONE (F1-F4)	Select the desired Flex button, Button 1: Busy Destination (F1-F4) Button 2: Error Destination (F1-F4) Button 3: No Answer Destination (F1-F4) Button 4: VSF Prompt Usage (F1-F5) Button 5: Reroute Busy Destination (F1-F3) Button 6: Reroute Error Destination (F1-F3) Button 7: Reroute No answer Destination (F1-F3) Button 8: DND destination (F1-F3) Button 9: Reroute NET CO BUSY Destination (F1-F3)
	For Flex button 1~3 or 1~4, use the dial-pad to enter 1: ON or 0: OFF for the following VSF prompts. 1: Tone 2: Attendant 3: Station Group number 4: VSF Announcement For Flex button 4, select Flex button 1~5 for the desired VSF prompt and use the dial-pad to enter 1: ON or 0: OFF: Button 1: Busy Prompt Button 2: Error Prompt Button 3: DND Prompt Button 4: No Answer Prompt Button 5: Attendant Transfer Prompt
	Press the **[Save]** button to store the destination data entry.

3.3.6.8 External Control Contacts – PGM 168

The MPBs include programmable contacts, which can be used to control external devices. Refer to Table 1.1-1 System Capacity Chart for number of available contacts. Each contact is assigned to activate under one of several conditions. As a Loud Bell Contact (LBC), the contact will activate when the assigned station or group receives an external call. Note for LBC, when the system is in the Night or Timed Ring mode, the contact will activate for incoming UNA calls and will ignore any station assignment. The contact may alternatively activate as a Door open contact, when External Page Zone 1 is accessed.

PROCEDURE:	
EXT CONTROL CONTACT PRESS FLEX KEY (1-2)	1. Press the **[PGM]** button and dial 168.
EXT CONTROL CONTACT NO 1 : . . . (1-3)	Select Flex button 1~2 for the desired External Control contact.
	Use the dial-pad to enter desired data. 1: LBC + station number 2: Door open 3: External Page 1 access
	Press the **[Save]** button to store the External Contact data entry.

3.3.6.9 LCD Display Mode -PGM 169

The LCD display mode sets the time (12/24 hr.), date (day/month order), language and day-of-week display. Refer to Table 3.3.6.9-1 and Table 3.3.6.9-2 for a description of the modes, the data entries required and LCD displays for each attribute.

PROCEDURE:	
LCD DISPLAY MODE PRESS FLEX KEY (1-4)	1. Press the **[PGM]** button and dial 169.
	Select the desired Flex button; refer to Table 3.3.6.9-1.
	Use the dial-pad to enter the desired mode and language, refer to Table 3.3.6.9-1 and Table 3.3.6.9-2.
	Press the **[Save]** button to store the LCD Display mode data entry.

Table 3.3.6.9-1 LCD DISPLAY MODE (PGM 169)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	LCD DATE MODE (1:MMDD/0:DDMM): MMDDYY	Sets the Date display as month/day or day/month.	0: DD-MM-YY 1: MM-DD-YY	MMDDYY
2	LCD TIME MODE (1:12H/0:24H):12H	Sets the Time display mode as 12 hour or 24-hour (military) time.	0: 24 Hour Mode 1: 12 Hour Mode	12 Hour
3	LCD LANGUAGE (00-18) ENGLISH (00)	Sets the Language used in the LCD; Refer to Table 3.3.6.9-2 below.	00~18	00 (English)
4	LCD WEEKDAY MODE (0-2) PGM 169 BTN 1 (0)	Sets the Day-of-Week (DoW) display mode: 0: no DoW, see PGM 169-BTN1... 1: display MM/DD WDY, (alpha month display, overrides button 1. 2: display MM DD WDY, numeric month display, overrides button 1.	0: use button 1 1: MM/DD WDY 2: MM DD WDY	Use button 1

Table 3.3.6.9-2 LCD LANGUAGE SELECTION

ENTRY	LANGUAGE
00	English
01	Italian
02	Finnish
03	Dutch
04	Swedish
05	Danish
06	Norwegian
07	Hebrew
08	German
09	French
10	Portuguese
11	Spanish
12	Korean
13	Estonian
14	Russian
15	Turkish
16	Polish
17	Greek
18	Arabic

3.3.6.10 Button LED Flash Rate – PGM 170

The LED flash rate for various functions and states can be assigned any one of the system's 15 signals. The various functions and states are shown in Table 3.3.6.10-1. The 15 flash signals available in the system are shown in Table 3.3.6.10-2.

PROCEDURE:	
LED FLASHING RATE PRESS FLEX_KEY (1-24)	1. Press the **[PGM]** button and dial 170.
LED FLASHING RATE PRESS FLEX KEY (25-35)	There are 35 Flash rate entries represented by Flex buttons. To access entries 25 to 35, use the **[VOL UP]/[VOL DOWN]** buttons. Press the desired Flex button; refer to Table 3.3.6.10-1.
	Use the dial-pad to enter desired data for the flash rate, refer to Table 3.3.6.10-1 and Table 3.3.6.10-2.
	Press the **[Save]** button to store the Flash Rate data entry.

Table 3.3.6.10-1 BUTTON LED FLASH RATE (PGM 170)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	COL IN RING FLASH 30 IPM	CO button Incoming ring flashing rate.	00-14	FLASH 30 IPM (2)
2	COL XFER RING FLASH 120 IPM	CO button transfer ring flashing rate.	00-14	FLASH 120 IPM(10)
3	COL QUE RING FLASH 240 IPM FLUTTER	CO button queue call back ring flashing rate.	00-14	FLASH 240 IPM FLUTTER(6)
4	COL RCL RING FLASH 480 IPM FLUTTER	CO button recall ring flashing rate.	00-14	FLASH 480 IPM FLUTTER(8)
5	COL I HOLD RING FLASH 30 IPM WINK	CO button I hold flashing rate.	00-14	FLASH 30 IPM WINK(12)
6	COL SYS HOLD RING FLASH 60 IPM	CO button system hold flashing rate.	00-14	FLASH 60 IPM (3)
7	COL EXC HOLD RING FLASH 120 IPM	CO button exclusive hold flashing rate.	00-14	FLASH 120 IPM(10)
8	COL OUT DISABLED FLASH 240 IPM FLUTTER	CO button out going disabled flashing rate.	00-14	FLASH 240 IPM FLUTTER(6)
9	COL IN OFFNET CFW FLASH 240 IPM FLUTTER	CO button incoming off-net call forward flashing rate.	00-14	FLASH 240 IPM FLUTTER(6)

Table 3.3.6.10-1 BUTTON LED FLASH RATE (PGM 170)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
10	COL DISA IND FLASH 240 IPM	CO button DISA indication flashing rate.	00-14	FLASH 240 IPM(5)
11	COL SUPP CW FLASH 240 IPM FLUTTER	CO button supplementary call waiting flashing rate.	00-14	FLASH 240 IPM FLUTTER(6)
12	COL SUPP HOLD FLASH 480 IPM	CO button supplementary hold flashing rate.	00-14	FLASH 480 IPM(7)
13	DSS CO RING FLASH 30 IPM	DSS button CO ring flashing rate.	00-14	FLASH 30 IPM (2)
14	DSS ALL RING FLASH 60 IPM	DSS button ICM ALL ring flashing rate.	00-14	FLASH 60 IPM (3)
15	DSS ASC RING FLASH 120 IPM	DSS button ICM ring associate device flashing rate.	00-14	FLASH 120 IPM(10)
16	DSS IN DND FLASH 60 IPM	DSS button station in DND.	00-14	FLASH 60 IPM (3)
17	DSS LOCK OUT FLASH 480 IPM FLUTTER	DSS button station in lockout.	00-14	FLASH 480 IPM FLUTTER(8)
18	DSS PRESEL MSG FLASH 30 IPM	DSS button station in pre-selected message.	00-14	FLASH 30 IPM (2)
19	DSS ICM HOLD FLASH 60 IPM	DSS button station on ICM hold.	00-14	FLASH 60 IPM (3)
20	DSS OTHER FLASH 120 IPM	DSS button station in other state.	00-14	FLASH 120 IPM(10)
21	UCD QUE RING 2 FLASH 60 IPM	CIQ Threshold # 1.	00-14	FLASH 60 IPM (3)
22	UCD QUE RING 6 FLASH 120 IPM	CIQ Threshold # 2.	00-14	FLASH 120 IPM(10)
23	UCD QUE RING 7-X FLASH 240 IPM	CIQ Threshold # 3.	00-14	FLASH 240 IPM(5)
24	UCD DND(OFF DUTY) FLASH 120 IPM	UCD agent is off duty (UCD DND).	00-14	FLASH 120 IPM(10)
25	UCD WARNING FLASH 120 IPM	UCD warning tone.	00-14	FLASH 120 IPM(10)

Table 3.3.6.10-1 BUTTON LED FLASH RATE (PGM 170)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
26	UCD HELP FLASH 120 IPM	UCD help request/response.	00-14	FLASH 120 IPM(10)
27	FEATURE RECORD FLASH 240 IPM	FEATURE voice record button.	00-14	FLASH 240 IPM(5)
28	FEATURE MSG WAIT FLASH 30 IPM	FEATURE message wait.	00-14	FLASH 30 IPM (2)
29	DSS OUT OF SERVICE FLASH OFF	Station in out-of-service state.	00-14	FLASH OFF (00)
30	ON DEMAND RING MODE FLASH 60 IPM	DND LED of attendant for ring mode indication (On-demand).	00-14	FLASH 60 IPM (3)
31	NIGHT RING MODE FLASH STEADY	DND LED of attendant for ring mode indication (Night).	00-14	FLASH STEADY(01)
32	TIMED RING MODE FLASH 240 IPM	DND LED of attendant for ring mode indication (TIMED).	00-14	FLASH 240 IPM(5)
33	AUTO RING MODE FLASH 480 IPM	DND LED of attendant for ring mode indication (AUTO).	00-14	FLASH 480 IPM(7)
34	PAGE HOLD BUTTON FLASH 60 IPM	HOLD LED for paging.	00-14	FLASH 60 IPM (3)
35	DSS OFF DUTY FLASH 120 IPM	DSS button station in Hunt DND.	00-14	FLASH 120 IPM (10)

Table 3.3.6.10-2 FLASH RATE TABLE (PGM 170)

Flash Rate	DESCRIPTION
00	Flash OFF
01	Steady On
02	30 ipm flash (30% On)
03	60 ipm flash (30% On)
04	60 ipm double wink (30% On-Off-On-Off 7 &0% On)
05	240 ipm flash (30% On)
06	240 ipm flutter (30% On-Off-On-Off-On & 70% Off)
07	480 ipm flash (30% On)
08	480 ipm flutter (30% On-Off-On-Off-On & 70% Off)
09	15 ipm flash (30% On)
10	120 ipm flash (30% On)
11	120 ipm flutter (30% On-Off-On-Off-On & 70% Off)
12	30 ipm double flash (30% On-Off-On & 70% Off)
13	480 ipm double wink (30% On-Off-On-Off 7 &0% On)
14	480 ipm double flash (30% On-Off-On & 70% Off)

3.3.6.11 Music Sources – PGM 171

Music inputs are provided for use as the Background Music and/or Music-On-Hold source inputs. MPBs provide for two (2) music inputs. The first input is the internal source and the second is external. In addition, a VMIU or VMIB announcement may be recorded and played as MOH to a holding caller. And SLIB port is used as MOH to a holding caller.

PROCEDURE:	
MUSIC ASSIGN PRESS FLEX KEY (1-6)	1. Press the **[PGM]** button and dial 171.
	Select the desired Flex button; refer to Table 3.3.6.11-1.
	Use the dial-pad to select the desired Music Source, refer to Table 3.3.6.11-1.
	To save the Music Source, press the **[Save]** button.

Table 3.3.6.11-1 MUSIC SOURCES FOR MOH & BGM (PGM 171)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	BGM TYPE (00-10) MUSIC 1 (01)	Assigns the source for BGM.	00: No BGM 01: INT Music 02: EXT Music 03: VSF MOH 04-08: SLT MOH1-5 09: VSF MOH2 10: VSF MOH3	Music 1
2	MOH TYPE (00-10) MUSIC 1 (01)	Assigns the source for MOH	00: Hold tone 01: INT Music 02: EXT Music 03: VSF MOH 04-08: SLT MOH1-5 09: VSF MOH2 10: VSF MOH3	Music 1
3	INT MOH TYPE (00-12) ROMANCE (00)	Assigns the input for source 1	00: ROMANCE 01: TURKISH MARCH 02: GREEN SLEEVE 03: FUR ELISE 04: CARMEN / 05: WALTZ 06: PAVANE 07: SICHILIANO 08: SONATA 09: SPRING 10: CAMPANELLA 11: BADINERIE 12: BLUE DANUBE	ROMANCE
4	ASGN SLT MOH (F1-F5) …. …. …. …. ….	Assign the SLIB port as a SLT MOH.	F1-F5:SLTMOH1-5	
5	VSF MOH2 (01-70) VSF NO (..)	A system announcement could be used for VSF MOH 2	01-70	N/A
6	VSF MOH3 (01-70) VSF NO (..)	A system announcement could be used for VSF MOH 3	01-70	N/A

3.3.6.12 PABX Access Codes – PGM 172

When the system is used “behind” a PBX/CTX, the system needs to recognize the PBX/CTX Trunk access codes to implement dialing restriction, tone detection sequences and Flash timing. A maximum of four (4) Trunk Access Codes of one (1) or two (2) digits can be entered.

PROCEDURE:	
PABX ACCESS CODE PRESS FLEX KEY (1-4)	1. Press the **[PGM]** button and dial 172.
PABX ACCESS CODE 1 ..	Select the Flex button for the desired Access Code (button 1~4).
	Use the dial-pad to enter the PABX Trunk Access Code, two (2) digits 0~9, Use “*” as a wild card (any digit) entry.
	Press the **[Save]** button to store the access code data entry.

3.3.6.13 Ringing Line Preference Priority – PGM 173

When multiple calls are ringing at a station assigned Ringing Line Preference, the order of preference can be assigned based on the type of call; CO/IP Transfer (XFR), CO/IP Recall (REC), Incoming call (INC), or CO/IP Queue (QUE). ICM calls are always assigned the lowest priority.

PROCEDURE:	
XFR REC INC QUE 1 2 3 4	1. Press the **[PGM]** button and dial 173.
	Select the Flex button for the desired Call Type; refer to Table 3.3.6.13-1.
	Use the dial-pad to enter the priority 1~4.
	Press the **[Save]** button to store the RLP Priority data entry.

Table 3.3.6.13-1 RLP PRIORITY (PGM 173)

BTN	DESCRIPTION	RANGE	DEFAULT
1	CO/IP Transferred call	1~4	1
2	CO/IP Recall	1~4	2
3	COIP Incoming call	1~4	3
4	Queued CO/IP recall	1~4	4

3.3.6.14 RS-232 Port Settings – PGM 174

The system has an RS–232 serial port located on the MPB; refer to the ***iPECS eMG Hardware Description and Installation Manual***. Certain characteristics of each port are programmable: baud rate, RS–232 control, and page settings. Refer to Table 3.3.6.14-1 for a description of the settings, the data entries required and LCD displays.

PROCEDURE:	
RS232 PORT SETTING PRESS FLEX KEY (1-3)	1. Press the **[PGM]** button and dial 174.
	Press Flex button 1 for Serial port 1 or Flex button 2 for USB COM1 port or Flex button 3 for USB COM2 port, then select a Flex button for the desired attribute (e.g. Flex button 1), refer to Table 3.3.6.14-1.
	Use the dial-pad to enter the desired Port data, refer to Table 3.3.6.14-1.
	Press the **[Save]** button to store the Port Data entry.

Table 3.3.6.14-1 RS–232 PORT SETTINGS (PGM 174)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	SERIAL1 PORT SETTING PRESS (F1-F5)	Select a Flex button for the desired attribute.	F1-F5	
1-1	SERIAL1 BAUD RATE BAUDRATE: 115200	This entry establishes the BAUD rate for the RS-232 serial port.	1: Unused 2: 9600 3: 19200 4: 38400 5: 57600 6: 115200	115200
1-2	SERIAL1 CTS/RTS (1:ON/0:OFF):OFF	The system's RS-232 port can support Clear-to-Send (CTS) and Ready-to-Send (RTS), control leads.	0: OFF 1: ON	OFF
1-3	SERIAL1 PAGE BREAK (1:ON/0:OFF):OFF	The system can send a page break command over the serial port at the end of each page. See button 4 for page length set-up.	0: OFF 1: ON	OFF
1-4	SERIAL1 LINE PAGE (001-199) : 066	This entry is used to set the page length, the number of lines the system will send before sending the page break, see button 3 above.	001~199	66
1-5	SERIAL 1 XON/XOFF (1:ON /0:OFF):XOFF	This entry enables XON/XOFF protocol. (It is not supported)	0: OFF 1: ON	XOFF

3.3.6.15 Serial Port Function Selections – PGM 175

The system has an RS-232 serial port located on the MPB; Also, the system can employ IP over three (3) TCP channels for the output of various system information.

Each output function is assigned a Serial port or TCP channel that is used to output the information. In addition, a TCP port must be assigned when a function is defined to use a TCP channel. The Serial port is located on the MPB; refer to the ***iPECS eMG Hardware Description and Installation Manual***. Note each function can be defined to use only one output. Refer to Table 3.3.6.15-1 and Table 3.3.6.15-2 for a description of the selections, the data entries required and LCD displays.

PROCEDURE:	
PRINT PORT SELECTION PRESS FLEX_KEY (1-2)	1. Press the **[PGM]** button and dial 175.
SELECT TCP NO PRESS FLEX_KEY (1-9)	Press Flex button 1 to assign the output type for each function or Flex button 2 to assign the TCP port for the function when a TCP channel is selected for the function.
	Select the Flex button for the desired function, refer to Table 3.3.6.15-1 or Table 3.3.6.15-2.
	Use the dial pad to enter the output type (Flex button 1) or TCP port (Flex button 2). For Flex button 1 the entries available are: 1: Serial port 1 2: Serial port 2 3: TCP channel 1 4: TCP channel 2 5: TCP channel 3 6: USB COM1 (6) 7: USB COM2 (7)
	Press the **[Save]** button to store the data entry.

Table 3.3.6.15-1 FUNCTION OUTPUT TYPE (PGM 175)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	OFF LINE SMDR (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for Off-line SMDR/Statistics output.	1 ~ 7	SERIAL1
2	ADMIN DATA (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the ADMIN Report output.	1 ~ 7	SERIAL1
3	TRAFFIC (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the TRAFFIC report output.	1 ~ 7	SERIAL1
4	SMDI (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the SMDI output.	1 ~ 7	SERIAL1

Table 3.3.6.15-1 FUNCTION OUTPUT TYPE (PGM 175)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
5	CALL INFO (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used to receive Call Information output.	1 ~ 7	SERIAL1
6	ON-LINE SMDR (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the On-line SMDR.	1 ~ 7	SERIAL1
7	TRACE (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the Trace output.	1 ~ 7	SERIAL1
8	DEBUG (1-7) SERIAL1 (1)	Defines the serial port or TCP channel used for the Debug output.	1 ~ 7	SERIAL1
9	ACD PACK (1-7) SERIAL 1 (1)	Defines the serial port or TCP channel used for the Unified Messages.	1 ~ 7	SERIAL1

Table 3.3.6.15-2 OUTPUT FUNCTION TCP PORT (PGM 175)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	OFF-LINE SMDR (1-9999) TCP PORT(NULL)	Defines the TCP port used for Off-line SMDR/ Statistics output.	1 ~ 9999	NULL
2	ADMIN DATA (1-9999) TCP PORT(NULL)	Defines the TCP port used for the ADMIN Report output.	1 ~ 9999	NULL
3	TRAFFIC (1-9999) TCP PORT(NULL)	Defines the TCP port used for the TRAFFIC report output.	1 ~ 9999	NULL
4	SMDI (1-9999) TCP PORT(NULL)	Defines the TCP port used for the SMDI output.	1 ~ 9999	NULL
5	CALL INFO (1-9999) TCP PORT(NULL)	Defines the TCP port used to receive Call Information output.	1 ~ 9999	NULL
6	ON-LINE SMDR (1-9999) TCP PORT(NULL)	Defines the TCP port used for the On-line SMDR.	1 ~ 9999	NULL
7	TRACE (1-9999) TCP PORT(NULL)	Defines the TCP port used for the Trace output.	1 ~ 9999	NULL
8	DEBUG (1-9999) TCP PORT(NULL)	Defines the TCP port used for the Debug output.	1 ~ 9999	NULL
9	ACD PACK (1-9999) TCP PORT(NULL)	Defines the TCP port used for Unified Messages.	1 ~ 9999	NULL
10	I-SMDR (1-9999) TCP PORT(NULL)	Defines the TCP port used for I-SMDR(Interactive-SMDR)	1 ~ 9999	NULL

3.3.6.16 Break/Make Ratio – PGM 176

For Pulse dial CO Lines, the system supports 10pps and the percent break/make ratios of 66/33 or 60/40.

PROCEDURE:	
BREAK/MAKE RATIO (1:66/33 / 0: 60/40): 60/40	1. Press the **[PGM]** button and dial 176.
	Dial the digit (1 or 0) for the desired Break/Make ratio: 1: 66/33 0: 60/40
	To save Break/Make ratio data, press the **[Save]** button.

3.3.6.17 SMDR Attributes – PGM 177

Station Message Detail Recording (SMDR) is an ASCII output of details on both incoming and outgoing calls. Various SMDR attributes can be assigned including; output records for all calls or LD only, call cost per pulse when using call metering, etc. Refer to Table 3.3.6.17-1 for a description of each Attribute, LCD displays and the data entries required.

PROCEDURE:	
SMDR ATTRIBUTES PRESS FLEX KEY (01-24)	1. Press the **[PGM]** button and dial 177.
	Press the desired Flex button; refer to Table 3.3.6.17-1.
	Use the dial-pad to enter the desired data, refer to Table 3.3.6.17-1.
	To save SMDR Attribute data, press the **[Save]** button.

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	SMDR SAVE (1:ON/0:OFF) : OFF	The system can store all outgoing calls (ON) or only calls that exceed the SMDR Timer (OFF). The later allows PSTN call set-up times to be removed from the recorded call time. For SMDR Timer settings refer to button 12 below.	0: OFF 1: ON	OFF
2	SMDR PRINT (1 : ON/ 0: OFF) : ON	The system can output SMDR records automatically as they occur (real-time) or only when requested. When this attribute is ON, SMDR output is automatic at call completion.	0: OFF 1: ON	ON

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
3	RECORD TYPE (1 : LD/ 0: ALL) : LD	The system can record all outgoing calls or only long distance calls. Long distance calls are identified by the LD digit count and LD codes assigned in Flex button 4 and 19, respectively.	0: ALL calls 1: LD	LD
4	LD CALL DIGIT COUNT (07-15) : 07	Dialed numbers, which exceed the assigned LD digit count, are considered long distance calls for SMDR and COS purposes.	07-15	07
5	PRINT INCOMING CALL (1 : ON/ 0: OFF) : OFF	The system can output records for incoming calls as well as outgoing calls. If enabled, incoming calls are recorded as well as outgoing calls.	0: OFF 1: ON	OFF
6	PRINT LOST CALL (1 : ON/ 0: OFF) : ON	The system can provide lost call records, records for unanswered incoming (abandoned) calls.	0: OFF 1: ON	ON
7	RECORD IN DETAIL (1 : ON/ 0: OFF) : ON	The system can output detailed call records (ON) or summary information (total number of calls, cost and cost for each station).	0: OFF 1: ON	ON
8	HIDDEN DIALED DIGIT (0 – 9) : 0	For security purposes, digits dialed for an outgoing call can be hidden and replaced with “*”. This field defines the number of digits to hide. Button 24 below defines whether leading or trailing digits are hidden. In addition, the station must be assigned for SMDR HIDE, PGM 113 button 5.	0~9	0
9	SMDR CURRENCY UNIT …	The unit of currency used for call cost can be identified with 3 alpha characters for easy reference, refer to Table 2.1.2-1.		-
10	COST PER PULSE 000000	When metering is provided by the PSTN, the cost per metering pulse can be assigned.	6 digits	000000
11	SMDR DECIMAL LOCATION (0-5) : 0	This value determines the position of the decimal in the Cost per Pulse, button 10, starting from the right most digits.	0~5	0
12	SMDR START TIMER (1sec) (000 – 250) : 000	To allow for call set-up times through the PSTN, a “Valid call timer” can be set. A call must be longer than the SMDR Start Timer for a call record to be generated if enabled under button 1 above.	000~250 seconds	000
13	SMTP IP ADDR (WEB) 0 . 0 . 0 . 0	SMTP Mail server IPv4 address to receive the SMDR e-mail reports.	12-digits	
14	USER MAIL ADDR (WEB) ……	User e-mail address to receive the SMDR e-mail reports, display only. To change data, use Web Admin.		

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
15	MAIL SEND WEEKLY SET N/A (0-7)	Sets day of week to send SMDR data weekly (0 for no weekly data, 1-7 for Monday through Sunday)	0-7	0
16	MAIL SEND DAILY SET 00(00-23)	Sets time-of-day for SMDR data to be sent on a daily basis (00 for no daily records, 01-23 for hour of the day).	00-23	00
17	AUTO SEND MODE (1 : ON/ 0: OFF) : OFF	If the SMDR buffer is full, the system can automatically send a notification by e-mail.	0: OFF 1: ON	OFF
18	AUTO DELETE MODE (1 : ON/ 0: OFF) : OFF	Delete SMDR records after sending e-mail.	0: OFF 1: ON	OFF
19	LONG DISTANCE CODE 0	For SMDR and COS purposes, five (5) Long Distance codes of up to two (2) digits each can be assigned. If dialed as the 1st digits, the call is considered an LD call.	Flex button 1~5 + digits 0~9 & '*' as a wild card	BTN 1: 0
20	SMDR RIN/CLI/CPN SVC_I (0:RIN/1:CLI/2:CPN):0	For incoming calls, the system will send the defined data item for "Field I". The data item may be CLI, CPN or Ring Service Time. Note the User dialed number is always provided for an outgoing call.	0: RING 1: CLI 2: CPN	RING time
21	MSN PRINT ON SMDR (1:ON/0:OFF) : OFF	Print MSN number Information in SMDR Record.	0: OFF 1: ON	OFF
22	SMDR RIN/CLI/CPN SVC_II (0:RN/1:CL/2:CP/3:NO):2	For incoming calls, the system will send the defined data item for "Field II". The data item may be CLI, CPN or Ring Service Time.	0: RING 1: CLI 2: CPN 3: None	CPN
23	PRINT SERIAL NO (1 : ON/0:OFF) : OFF	Print record number as part of SMDR output, will reset to 1 when SMDR capacity is reached or SMDR records are deleted, see button 18.	0: OFF 1: ON	OFF
24	SMDR ATTRIBUTRS(2ND) PRESS FELX KEY (01-19)		01-19	
24-1	SMDR HIDE DGT 1:RIGHT/0:LEFT) : RIGHT	When "HIDDEN DIALED DIGIT" is enabled, button 8 above, this field determines if leading or trailing digits are hidden.	0: Left 1: Right	Right
24-2	SMDR INTERFACE SVC (0 : OFF/1:CO/2:CO&ICM) : 0	When enabled, the system stores SMDR data to send to applications including NMS upon request.	0: OFF 1: CO 2:CO&ICM	OFF
24-3	SMDR ICM SAVE (1:ON/0:OFF) : OFF	When enabled, intercom call data is stored as part of the SMDR data.	0: OFF 1: ON	OFF

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-4	SMDR ICM PRINT (1:ON/0:OFF) : OFF	When enabled, intercom call data is printed as part of the On-line SMDR.	0: OFF 1: ON	OFF
24-5	SMDR DISC CAUSE (1:ON/0:OFF) : OFF	When enabled, the disconnect cause is stored in Off-line SMDR data and printed as parted of the On-line SMDR.	0: OFF 1: ON	OFF
24-6	LONG TIME CALL (10min) (000-144) : 000	To monitor long time CO call, a “Long Time Call” can be set. 0 means no monitoring. If CO call duration exceeds this value, a notification will be sent to NMS server and alarm will be displayed.	000 ~ 144	000
24-7	PRT LIMIT TO NET CALL (1:ON/0:OFF) : OFF	When CO call is transferred to Net transit out CO, it’s automatically deleted from SMDR.	0: OFF 1: ON	OFF
24-8	INTERNATIONAL CODE ….	It is used to distinguish international call for SMDR.	4 digit	….
24-9	MOBILE PHONE CODE ….	It is used to distinguish mobile call for SMDR.	4 digit	….
24-10	SMTP MAIL SERVER ID ……	This field defines the user’s ID for SMTP Mail server. If user’s ID and password is assigned, SMTP Mail server will check the validation of user ID and password.	Max 40 Chars	
24-11	SMTP MAIL SERVER PWD ……	This field defines the user‘s password for SMTP Mail server. If user‘s ID and password is assigned, SMTP Mail server will check the validation of user ID and password.	Max 20 Chars	
24-12	TRANSFER CHARGE RATE (0-2): INDIVIDUAL	1. INDIVIDUAL: When a call is transferred to another station, the transferred call is charged to two stations respectively. 2. INTEGRATE XFERING: When a call is transferred to another station, the call is charged to the transferring station. 3. INTEGRATE XFERED: When a call is transferred to another station, the call is charged to the transferred station.	0: INDIVIDUAL 1: INTEGRATE XFERING 2: INTEGRATE XFERED	INDIVIDUAL

Table 3.3.6.17-1 SMDR ATTRIBUTES (PGM 177)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-13	ATD XSFER CHARGE RATE (0-2):INDIVIDUAL	1. INDIVIDUAL: When Attendant make outgoing call and transfer this call to another station, the transferred will follow the Transfer Charge Mode. 2. ATD CHARGING: When Attendant makes outgoing call and transfers this call to another station, the call is charged to the Attendant. 3. XFERED CHARGING: When Attendant makes outgoing call and transfers this call to another station, the call is charged to the transferred station.	0: INDIVIDUAL 1: ATD CHARGING 2: XFERED CHARGING	INDIVIDUAL
24-14	SMTP DNS ADDR (WEB)	SMTP Mail server Domain address to receive the SMDR e-mail reports.	Max 100 Chars	-
24-15	SMTP SENDER MAIL (WEB)	Program VSF mail Sender mail Address (It is moved to web admin PGM 160-161)	Max 40 Characters	-
24-16	SMTP SECURITY (0-2) : NO SECURITY	Choose SMTP Security (It is moved to web admin PGM 160-161)	0-2 (0:No security 1:SSL 2:TLS)	0
24-17	SMTP PORT (00001-65535) : 00025	Choose SMTP Port (It is moved to web admin PGM 160-161)	1-65535	25
24-18	VSF VM DISPLAY (0:'I', 1:'V')	If the value is 'I', the call to "VSF voice mail" is displayed as 'I' in SMDR. But if the value is 'V', the call to "VSF voice mail" is displayed as 'V' in SMDR. 'I' means "incoming call". 'V' is new indication for "VSF voice mail".	0:'I' 1:'V'	0:'I'
24-19	DISPLAY N TYPE (1:ON/0:OFF) : OFF	Display 'N' in SMDR to distinguish and it is network call.	1:ON 2:OFF	OFF

3.3.6.18 System Date, Time and Daylight Saving Time (DST) – PGM 178

The system Date, Time and DST feature are established by this entry. The date and time are employed for several features and functions including; LCR, LCD displays, SMDR outputs, Auto Ring Mode Selection, Wake-Up Alarm, etc. If DST is enabled the system time will be adjust one-hour forward and back at the DST start and end times, respectively.

PROCEDURE:	
SET TIME/DATE & DST PRESS FLEX_KEY (1 - 5)	1. Press the **[PGM]** button and dial 178.
	Press the Flex button for the desired Attribute; refer to Table 3.3.6.18-1. Button 1: Time Button 2: Date Button 3: DST enable mode Button 4: DST start time Button5 : DST end time
	Use the dial-pad to enter desired data for the Attribute, refer to Table 3.3.6.18-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.18-1 SYSTEM TIME, DATE & DST (PGM 178)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	SET TIME TIME 00:22(HH:MM)	Sets the system time.	HH:MM	
2	SET DATE DATE : 07/24/13(MMDDYY)	Sets the system date.	MMDDYY	
3	DST ENABLE MODE (1:ON/0:OFF) : OFF	Enables DST feature for System Time.	0: OFF 1: ON	OFF
4	DST START TIME ONLY POSSIBLE BY WEBADM	The DST start time. This can be set only via WEB Admin.	See DST Table	2nd Sunday of March at 2:00 AM
5	DST END TIME ONLY POSSIBLE BY WEBADM	The DST end time. This can be set only via WEB Admin.	See DST Table	1st Sunday in Nov., at 2:00 AM

3.3.6.19 Multi Language – PGM 179

The VMIU and VMIB support multiple languages; up to six languages may be supported simultaneously. Once the prompts are downloaded to the VMIU/VMIB, the caller receives the Language selection announcement for DISA and CCR calls as well as proceeding a Hunt Group guaranteed announcement or DID error announcement. The language selection announcement will only affect the language prompts enabled for use.

PROCEDURE:	
SET SYSTEM MULTI LANG ENTER SEQ NO (001 -300)	1. Press the **[PGM]** button and dial 179 (e.g. enter 015). eMG800 sequence number range is 0001-2890.
SET 015 SYS MULTI LANG PRESS FLEX KEY (1-6)	Select Flex button, Button 1: N. AMERICA Prompt Usage Button 2: UNKNOWN Prompt Usage Button 3: UNKNOWN Prompt Usage Button 4: UNKNOWN Prompt Usage Button 5: UNKNOWN Prompt Usage Button 6: UNKNOWN Prompt Usage
N.AMERICA Prompt Usage (1:ON/0:OFF) : OFF	Us the dial pad to enable or disable the desired language prompts.
	Press the **[Save]** button to store the data entry.

3.3.6.20 System Timers I to III - PGMs 180-182

A number of timers can be assigned to control and affect many features and functions of the system. Refer to Table 3.3.6.20-1 to Table 3.3.6.20-3 for a description of the timers and the input required.

PROCEDURE:	
SYSTEM TIMER 1 PRESS FLEX KEY (01-22)	1. Press the **[PGM]** button and dial: 180 for System Timers I 181 for System Timers II 182 for System Timers III
	Press the Flex button for the desired Timer; refer to Table 3.3.6.20-1 to Table 3.3.6.20-3.
	Us the dial pad to enable or disable the desired language prompts.
	Press the **[Save]** button to store the data entry.
	Use the dial-pad to enter the desired Timer data, refer to Table 3.3.6.20-1 to Table 3.3.6.20-3.
	Press the **[Save]** button to store the Timer data entry.

Table 3.3.6.20-1 SYSTEM TIMERS I (PGM 180)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ATD RECALL TMR(min) (00-60) : 01	Determines the amount of time the attendant receives recall after which the system will disconnect the call.	00~60 (minutes)	01
2	CALL PARK TMR(sec) (000-600) : 120	Determines the amount of time before a parked call will recall the station that parked the call.	000~600 (seconds)	120
3	CAMP-ON RECALL TMR(sec) (000-600) : 030	When a call transfer is camped-on, this timer determines the amount of time before the station receives recall.	000~600 (seconds)	030
4	EX-HOLD RECALL TMR(sec) (000-600) : 060	Determines the amount of time before a call placed on exclusive hold will recall the station.	000~600 (seconds)	060
5	I-HOLD RECALL TMR(sec) (000-600) : 030	Determines the amount of time before a call that is recalling the station will recall before also recalling the attendant.	000~600 (seconds)	030
6	S-HOLD RECALL TMR(sec) (000-600) : 030	Determines the amount of time before a call placed on system hold will recall the station.	000~600 (seconds)	030
7	TRANS RECALL TMR(sec) (000-600) : 030	Determines the amount of time a transferred call will ring at the receiving station before recalling the station that transferred the call.	000~600 (seconds)	030
8	ACNR DELAY TMR(sec) (000-300) : 030	If the ACNR Pause Timer expires and no CO Line is available for ACNR recall, the delay timer sets the delay before ACNR attempts to access a CO line. The retry counter is not decremented by this action.	000~300 (seconds)	030
9	ACNR PAUSE TMR(sec) (000-300) : 030	This timer establishes the time between ACNR recall attempts.	000~300 (seconds)	030
10	ACNR RETRY COUNT (01-13) : 03	This counter sets the number of recall attempts for ACNR before ACNR is abandoned. (For CIS : 1-9).	1~13	03
11	ACNR TONE DTC TMR(sec) (001-300) : 030	If call progress tones are not available for ACNR, the system will wait this duration after dialing before considering the called party as busy/no answer.	001~300 (seconds)	030
12	AUTO RELEASE TMR(sec) (000-300) : 030	If a user accesses a CO/IP path and does not take any action, the system will automatically release the CO/IP path when this timer expires.	000~300 (seconds)	030
13	CCR INT DGT TMR(100ms) (000-300) : 030	Inter-digit timer used with Customer Call Routing function.	000~300 (100msec)	030

Table 3.3.6.20-1 SYSTEM TIMERS I (PGM 180)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
14	CALL RESTRICT TMR(min) CHECK PGM 123-F2	Not used. Check PGM123-BTN2	00~99 (minutes)	00
15	CO DIAL DLY TMR(100ms) (00-99) : 05	Delay for through connection to prevent illegal dialing when CO/PBX has slow response.	00~99 (100msec)	05
16	RLS GUARD TMR(100ms) (010-150) : 020	When a CO Line is returned to idle, the system will deny access for this time to assure the PSTN returns the CO circuitry to idle.	010~150 (100msec)	020
17	CO RING OFF TMR(100ms) (010-150) : 060	This timer sets the maximum 'OFF' duration of the incoming ring cycle to determine when a call has been abandoned.	010~150 (100msec)	060
18	CO RING ON TMR(100ms) (1-9) : 2	This timer sets the 'ON' time of the incoming ring cycle for the Ring Detect circuitry of the system to recognize an incoming call.	1~9 (100msec.)	2
19	ELAPSED CALL TMR(sec) (005-900) : 180	Users can receive a periodic tone indicating the length of an outgoing call. This timer sets the time before and between the tones. Note Call Time Tone must be enabled in PGM 112-button 1.	005~900 (seconds)	180
20	WEB PWD GUARD TMR (min) (001-999) : 005	If no data packets are received during a Web Admin connection for the Guard time, a password check will be initiated by the system.	001~999 (minutes)	5
21	ON HOOK IDLE TMR (sec) (00-99) : 00	Phone (IP/DKTU) goes to idle after this timer when the phone receives disconnect message or signal from CO line.	00~99 (seconds)	0
22	CALL REC REPEAT TMR(sec) (000-999) : 000	If record warning tone is set and this timer is set greater than 1, it works periodically when it's recorded.	000~999 (seconds)	0

Table 3.3.6.20-2 SYSTEM TIMERS II (PGM 181)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	FWD NO ANS TMR(sec) (000-600) : 015	When a user activates No-Answer Forward, calls will ring for this duration before the calls are forward. The Station No-Answer Forward timer PGM 123 will take precedence.	000~600 (seconds)	015
2	DID/DISA NO ANS(sec) (000-255) : 000	A DID/DISA call to a station will forward to the DID/DISA Destination assigned in PGM 167 should this timer expire before the call is answered.	000~255 (seconds)	000

Table 3.3.6.20-2 SYSTEM TIMERS II (PGM 181)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
3	VSF USR RECORD(sec) (000-999) : 060	This timer sets the maximum duration allowed for the User Greeting in the system's basic Voice Mail.	000~999 (seconds)	60
4	VSF VALID USER MSG(sec) (0-9) : 4	This timer sets the minimum duration allowed for a voice mail message in the system's basic VSF Voice Mail. Messages shorter than this period are not stored.	0~9 (seconds)	4
5	DOOR OPEN TMR(100ms) (00-99) : 20	This timer sets the minimum contact closure time required to activate the contact assigned as a door open contact.	00~99 (100msec.)	20
6	ICM DIAL TONE TMR(sec) (001-255) : 010	If a user goes off-hook on the Intercom and takes no action for this timer, the user will receive error tone.	001~255 (seconds)	10
7	INTER DIGIT TMR(sec) (01-20) : 05	This timer sets the maximum allowed time between user dialed digits. At expiration, the user will receive error-tone.	01~20 (seconds)	05
8	MSG REMINDER TONE(min) (00-60) : 00	An iPECS Phone user will receive periodic reminder tones of a message waiting at intervals based on this timer.	00~60 (minutes)	00
9	PAGE TIME OUT TMR(sec) (000-255) : 015	Determines the maximum duration of a page after which the caller and Page Zone are released.	000~255 (seconds)	15
10	PAUSE TMR(sec) (1-9) : 3	A Timed pause of this duration is used in Speed Dial and during other automatically dialed digits sent to the PSTN.	1~9 (seconds)	3
11	SOFT AUTO RLS TMR(sec) (01-30) : 10	When a Soft Key is used on the iPECS Phone, after expiration of this timer, the display will return to the previous display.	1~30 (seconds)	10
12	VM PAUSE TMR(100 msec) (01-90) : 30	When the system sends a "Pause" to Voice Mail using In-band signals, the Pause interval is defined by this timer. Not available in the USA.	1~90 (100msec.)	30
13	VSF CUT ERR TMR(1 SEC) (01-90) : 00	To cut error tone in VSF message that is leaved in a station.	1~90 (1 sec.)	00
14	UNUSED	Unused.		
15	EMERGENCY RETRY TMR (00-99) : 00 SEC	System try to make emergency call according to the CO access rule/Prefer CO/CO group if system could not seize predefined emergency Co line within this timer.	00~99 (1 sec.)	00

Table 3.3.6.20-2 SYSTEM TIMERS II (PGM 181)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
16	ERROR TONE TMR(1sec) (005-180) : 030	Error Tone Timer	005~180 (1 sec.)	30
17	HOWLING TONE TMR(1sec) (000-180) : 030	Howling Tone Timer	000~180 (1 sec.)	30
18	NOTIFY PLAY DELAY(1sec) (01-99) : 10	When VM notification call uses LCO, system will treat the call as the answered after this timer and play the new message prompt.	1~99 (1 sec.)	10
19	SHORT MODEM TMR(1sec) (01-60) : 10	If {Short modem} of a SLT is ON, the SLT maintains the modem mode for this time.	01~60 (1 sec.)	10

Table 3.3.6.20-3 SYSTEM TIMERS III (PGM 182)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	SLT HOOK BOUNCE(100ms) (01-25) : 01	This timer determines the duration the system considers an actual state change in the hook-switch and not a spurious contact bounce.	01~25 (100msec.)	01
2	SLT MAX H_FLASH(100ms) (01-25) : 07	This timer sets the maximum time an SLT user can depress the hook-switch for a Flash signal.	01~25 (100msec.)	07
3	SLT MIN H_FLASH(10ms) (000-250) : 010	This time sets the minimum time an SLT user must depress the hook-switch for a Flash signal.	000~250 (10 msec.)	010
4	STA AUTO RLS TMR(sec) (000-300) : 060	For an internal call, the system will return a station to idle if the call remains unanswered for this duration.	000~300 (seconds)	060
5	UNSUPER CONF TMR(min) (00-99) : 10	This timer determines the duration of an “Unsupervised conference” before the station is recalled or the conference is dropped.	00~99 (minutes)	10
6	PRIME LINE TMR(sec) (01-20) : 05	This timer sets the delay (no action duration) for delayed Prime Line operation.	01~20 (seconds)	05
7	WINK SIGNAL TMR(10ms) (010-200) : 010	This timer sets the duration of the “Seize Acknowledge Signal” (Wink) sent to the PSTN on a DID line.	010~200 (10 msec.)	010
8	EN-BLOC I_DGT TMR(sec) (01-20) : 05	When an ISDN Line is assigned to send digits En-block, PGM 143-button 3, the system will send a dialed digit if the user dials “#” or this timer is expired.	01~20 (seconds)	05
9	DTMF DURATION TMR(10ms) (04-99) : 10	This timer establishes the duration of the DTMF tone sent on an analog CO Line.	04~99 (10 msec.)	10

Table 3.3.6.20-3 SYSTEM TIMERS III (PGM 182)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
10	FLEX DID TMR(100ms) (01-99): 30	The system will receive DID digits for this timer. After the timer expires, the system will use the last 2 to 4 digits received as DID digits.	01~99 (100msec.)	30
11	WAKE UP FAIL TMR (sec) (00-99): 20	Provide wake up fail indication to attendant according to this timer.	00~99 (1 sec.)	20
12	PREPAID WARN TMR (sec) (00-99): 00	Prove warning tone when run out of prepaid money if this timer is not zero.	00~99 (1 sec.)	00
13	FAX DETECT TMR (sec) (01-20): 10	It is maximum fax tone detection time to deliver FAX call to fax destination.	1~20 (1 sec.)	10
14	AUTO PAUSE TMR (sec) (000-255): 000	IPCR Mute function will be released by this auto pause released timer.	0~255 (1 sec.)	0

3.3.6.21 In-Room Indication – PGM 183

The Supervisor Station can set the In-Room Indication to all members in the same Group up to 10 bins can be programmed, and each bin has (at most) 20 members excluding the Supervisor.

PROCEDURE:	
IN ROOM INDICATION ENTER BIN NO (01-10)	1. Press the **[PGM]** button and dial 183.
IN ROOM INDICATION F1:SUPERVISOR F2:MEM	Use the dial-pad to enter the desired bin number.
	Press the desired Flex button; refer to Table 3.3.9.6-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.21-1 In-Room Indication (PGM 183)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	IN ROOM INDICATION SURERVISOR : STA 100	Assigns Supervisor station.		
2	STA 100 MEM 101 …. …. ….	This entry assigns stations as members.		

3.3.6.22 DCOB SYS Timers – PGM 186

A number of timers can be assigned to control and affect operation of E1 lines using R2 signaling. Refer to Table 3.3.6.22-1 for the timer descriptions and inputs required.

PROCEDURE:	
DCOB SYS ATTRIBUTES PRESS FLEX KEY (1-6)	1. Press the **[PGM]** button and dial 186.
	Press the Flex button for the desired Timer; refer to Table 3.3.6.22-1.
	Use the dial-pad to enter the desired Timer data, refer to Table 3.3.6.22-1.
	Press the **[Save]** button to store the Timer data entry.

Table 3.3.6.22-1 DCOB SYSTEM TIMERS (PGM 186)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	R2 OUT MANAG TMR(sec) (01-50) : 14	In R2 signaling, maximum time for waiting for forward signal from PBX.	01~50 (seconds)	14
2	R2 IN MANAG TMR(sec) (01-50) : 14	In R2 signaling, maximum time for waiting for forward signal from PBX.	01~50 (seconds)	14
3	R2 DISAPPEAR TMR(sec) (01-50) : 14	In R2 signaling, maximum time for waiting for the acknowledge of R2 signal.	01~50 (seconds)	14
4	R2 PULSE TMR(20msec) (01-30) : 07	In R2 signaling, time duration to send pulse typed R2 signal.	01~30 (20 msec)	07
5	R2 READY TMR (20msec) (000-500) : 007	Reserved for future usage for R2 timers.	000~500 (20 msec)	07
6	DIAL TONE DELAY (20msec) (01-30) : 20	Reserved for future usage for R2 timers.	01~30 (20 msec)	20

3.3.6.23 NTP Attributes – PGM 195

The system can employ the Network Time Protocol (NTP) or ISDN clock to synchronize the system time with the NTP time server or ISDN clock. The system requests the time from the NTP server at 10-minute intervals and then determines the time differential. If the system time is more 2 seconds off the NTP time, the system time is adjusted to synchronize with the NTP server time.

PROCEDURE:	
NTP ATTRIBUTES PRESS FLEX KEY (1-1)	1. Press the **[PGM]** button and dial 195.
	Press the Flex button for the desired NTP Attribute; refer to Table 3.3.6.23-1.
	Use the dial-pad to enter the desired data, refer to Table 3.3.6.23-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.23-1 NTP ATTRIBUTES

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	NETWORK TIME/DATE (0-2): DISABLE(0)	Sets time synchronization for the system as : Disable ISDN clock NTP, NTP Attributes are set only via the Web.	0: DISABLE 1: ISDN 2: NTP	DISABLE

3.3.6.24 CRR Attributes – PGM 252

System can reroute incoming call to CO. If called number matched with compare digits of Table 252, the call are routed to Rerouting number.

PROCEDURE:	
CRR ATTRIBUTES PRESS FLEX KEY (1–3)	1. Press the **[PGM]** button and dial 252.
	Press the Flex button 1~3 for the desired setting, refer to Table 3.3.6.24-1.
	For Flex button 1 enable or disable CRR. For Flex button 2, press the **[Save]** button to reset the CRR table. For Flex button 3, dial the table bin number to input data.
	For Flex button 3, Enter the bin number, refer to Table 3.3.6.24-1.

Table 3.3.6.24-1 CRR ATTRIBUTES (PGM 252)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ENABLE CRR (1:ON/0:OFF) : OFF	This field is used to enable or disable CO Call Rerouting.	0: OFF 1: ON	OFF
2	INIT CRR PRESS **[Save]** KEY	This field is used to initialize the CRR table.		
3	CRR ATTRIBUTES ENTER BIN NO(000-169)		000-169	
3-1	CRR 001 COMPARE CO GRP GRP NO (01-20) : 01	Compared Co group should be matched with incoming CO group.	01-20 Max 2 digits	01
3-2	CRR 001 RECEIVE DGTS	Incoming digit numbers should be matched with these digits. An "*" may be entered as a wild-card to indicate insertion of the compared number.	Max 12 digits	
3-3	CRR 001 CO+TEL NUMBER	This field defines the CO line, CO group or CO access code plus telephone number.	Max 20 digits	
3-4	CRR 001 TYPE	If you chose '1' for NET type, you can use transit out code for CO to CO rerouting. If you chose '2' for DISA type, you can access the station number as DISA mode. Other case, you should not use this type.	N/A	

3.3.6.25 VM COS Attributes – PGM 253

Each Station is assigned one of the five Voice Mail Classes of Service. The VM COS attributes include user greeting length, E-Mail notifications, message retention and optional message marking.

PROCEDURE:	
ENTER PGM NUMBER	1. Press the **[PGM]** button and dial 253.
VM COS ATTRIBUTE ENTER COS RANGE (1-5)	Enter COS range from 1 to 5.
1-2 VM COS ATT PRESS FLEX KEY (1-8)	Press flex button 1-8 for the desired setting, refer to Table 3.3.6.25-1.
	Use the dial-pad to enter the desired data, refer to Table 3.3.6.25-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.25-1 VM COS ATTRIBUTES (PGM 253)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	GREETING LENGTH (00-99) : 60	This defines maximum user greeting length.	00-99	60
2	MESSAGE LENGTH (000-600) : 000	This defines maximum user message recording time.	000-600	000
3	NUMBER OF MESSAGE (000-250) : 000	This defines maximum number of voice mail message.	000-250	000
4	RETENTION TIME (00-99) : 00 (DAYS)	Voice mail messages will be automatically deleted after this amount of days.	00-99	00
5	E-MAIL NOTIFICATION (0-2) : NOTI. DELETE	E-mail notification can be enabled or disabled.	0: OFF 1: Notification 2: Notification & Delete	Notification & Delete
6	FUTURE DELEVERY MSG (1 :ON /0 :OFF) : OFF	Future Delivery message can be enabled or disabled.	0: OFF 1: ON	OFF
7	CONFIRM MSG RECEIPT (1 :ON/0 :OFF) : OFF	Confirm message receipt can be enabled or disabled.	0: OFF 1: ON	OFF
8	PRIVATE MSG MARK (1 :ON/0 :OFF) : OFF	Private message mark can be enabled or disabled.	0: OFF 1: ON	OFF

3.3.6.26 Personal Group – PGM 260

Several stations can share same station number. That means Personal Group is extended feature of Linked Pair.

A Personal Group is composed with a master station and several member stations.

A master station and all member stations share master station's number.

By using this shared number, almost features (Call To xxx / Call From xxx / SMDR / Message Wait…) can be activated.

But, some features can be chosen by PGM 261 attribute about all station activating or individual station working.

In PGM 260, Personal group master and member can be assigned.

In PGM 261, Personal group attribute can be set.

PROCEDURE:	
PERSONAL GRP ASSIGN ENTER GRP NUM (01–70)	1. Press the **[PGM]** button and dial 260. And Enter Group number (eMG80:1~7 /eMG800:1~600)
PERSONAL GRP 01 F1 : MASTER STA F2 : MEM	Press Flex button 1, register Master station. Press Flex button 2, register member stations.
	Use the dial-pad to enter the desired data.
	Press the **[Save]** button to store the data entry.

3.3.6.27 Personal Group Attribute – PGM 261

In PGM 261, Personal group attribute can be set.

PROCEDURE:	
PERSONAL ATTRIBUTE ENTER GRP NUM (01–70)	1. Press the **[PGM]** button and dial 261. And Enter Group number.(eMG80:1~70 /eMG800:1~600)
PERSONAL GRP 01 PRESS FLEX KEY (1-3)	2. Press the Flex button 1~4 for the desired setting, refer to Table 3.3.6.27-1.
	Use the dial-pad to enter the desired data, refer to Table 3.3.6.27-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.6.27-1 PERSONAL GROUP ATTRIBUTES (PGM 261)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01 USE MASTER WAKEUP (1:ON/0:OFF) : OFF	If this value is set to ON, all member wake-up follow by master wake up. If this value is set to OFF, individual wake-up is worked by each station.	0: OFF 1: ON	OFF
2	01 USE MASTER DND (1:ON/0:OFF) : OFF	If this value is set to ON, DND setting affect to Master and all member. If this value is set to OFF, individual DND is worked by each station.	0: OFF 1: ON	OFF
3	01 SET LINKED PAIR (1:ON/0:OFF) : OFF	If this value is set to ON, Master and Member Stations are linked and only one station can be activated.	0: OFF 1: ON	OFF

3.3.7 STATION GROUP DATA – PGM 190 & 192

Stations can be grouped so that incoming calls will search (hunt) for an idle station in the group. The system allows assignment of three hunt processes, Circular, Terminal and UCD. In addition, there are eight (8) functional groups available: ACD (Automatic Call Distribution) based on UCD hunt, Ring, Call Pick-Up, External Voice Mail (SLT connected), VSF-Voice Mail, iPECS Feature Server Voice Mail, Network Voice Mail and UCS Groups.

Certain types of groups can incorporate announcements, which are given to the calling party. The system's VMIU or VMIB can store up to seventy (70) announcements for use with Station Groups.

Note that a station can belong to multiple groups if the groups are all of the same type. Also note that when a station group is assigned to a group type (Station, ACD, VM, FS VM, VSF-VM, Net VM, UCS and Ring), the group attributes are initialized to the default values.

3.3.7.1 Station Group Assignment -PGM 190

Under Station Group Assignments the type, members and Pick-Up attribute are assigned to the Station Group. Note for the Net VM group, the network number must be assigned as the Net VM group member station. Refer to Table 3.3.7.1-1 for a description of the functions, the LCD displays and data entries required.

PROCEDURE:	
STATION GRP ASSIGN ENTER GRP NO(401-440)	1. Press the **[PGM]** button and dial 190.
STATION GRP 401 F1:TYPE F2:PKUP F3:MEM	Use the dial pad to enter the desired Station Group number.
	Press the Flex button for the desired setting; refer to Table 3.3.7.1-1.
	Use the dial pad to enter the desired Station Group data. Note for group members, enter a station or station range. For an individual station press the desired Flex button for the position of the station in the group and dial the station number. For a range, enter the first and last station number in the range.
	Press the **[Save]** button to store the data entry.

Table 3.3.7.1-1 STATION GROUP ASSIGNMENT (PGM 190)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	STATION GRP 401 CIRCULAR GROUP (00-10)	This entry defines the type of station group.	00: Not Assign 01: Circular 02: Terminal 03: UCD/ACD 04: RING 05: Ext VM 06: PICK-UP 07: VSF-VM 08: UMS 09: NET-VM 10:UCS Server	Not Assign
2	GROUP 401 PICK-UP (1:ON/0:OFF) : OFF	Stations can pick-up group calls ringing at other stations in the group. This does not apply to VSF groups.	0: OFF 1: ON	OFF
3	CIRCULAR GROUP 401	This entry assigns stations as members of a station group, or for Net VM, the Network number.		

3.3.7.2 Station Group Attributes – PGM 191

Each type of group has a different set of available attributes relating to announcements, timers, overflow, etc. Table 3.3.7.2-1 through Table 3.3.7.2-8 provides descriptions for the attributes, LCD displays and data entries required. The attributes for the Circular and Terminal Hunt groups are given in Table 3.3.7.2-1 and the UCD attributes include the ACD functions Table 3.3.7.2-2. In addition, there are no attributes for a group assigned as a Net VM group in PGM 190.

PROCEDURE:	
STATION GRP ATT ENTER GRP NO(401-440)	1. Press the **[PGM]** button and dial 191.
CIRC GRP 401 PRESS FLEX KEY (01-21)	Use the dial pad to enter the desired Station Group. The system will display the type of group from the Station Group Assignment PGM 190 data (Ex. 01 Circular).
	Press the Flex button for the desired attribute; refer to Table 3.3.7.2-1 to Table 3.3.7.2-8.
	Use the dial pad to enter the desired Group Attributes data, refer to Table 3.3.7.2-1 to Table 3.3.7.2-8.
	Press the **[Save]** button to store the data entry.

Table 3.3.7.2-1 STATION GROUP ATTRIBUTES — CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	CIRC 401 ANNC 1 TMR(1s) (000 - 999) : 015	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds 1st Announcement Timer, the call may be sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 (seconds)	015
2	CIRC 401 ANNC 2 TMR(1s) (000 - 999) : 000	After the 1st announcement, the 2nd ANNC TMR is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 (seconds)	000

Table 3.3.7.2-1 STATION GROUP ATTRIBUTES — CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
3	CIRC 401 ANNC1 LOC VSF ANNC .. (01 – 70)	The Station Group can be assigned an announcement, which is played if the call remains queued beyond the ANNC 1 TMR duration. The announcement location is the VSF ANNC1 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
4	CIRC 401 ANNC2 LOC VSF ANNC .. (01 – 70)	The Station Hunt Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the ANNC 2 TMR duration. The announcement location is the VSF ANNC2 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
5	CIRC 401 ANNC2 RPT TMR (000 - 999) : 000.	The 2nd announcement can be repeated to calls that remain in queue at intervals of the Announcement 2 Repeat Timer. **NOTE** Repeating must be "ON" under button 6 below.	000~999 (seconds)	000
6	CIRC 401 ANNC 2 RPT (1: ON / 0: OFF): OFF	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the Announcement Repeat Timer interval.	0: OFF 1: ON	OFF
7	CIRC 401 OVERFLOW DEST S/H/V/SPD (Dial 1-4)	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or will pass to the assigned Overflow Destination.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	
8	CIRC 401 OVERFLOW TMR (000 - 600) : 180	A call to a group will remain at the last station in the group or can be sent to the assigned Overflow Destination after expiration of the OVERFLOW Timer.	000~600 (seconds)	180

Table 3.3.7.2-1 STATION GROUP ATTRIBUTES — CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	CIRC 401 WRAP-UP TMR (000 - 999) : 002	After terminating any call, a Group member will be maintained in a busy state for the duration of the WRAP-UP Timer.	000~999 (seconds)	002
10	CIRC 401 NO ANS TMR(1s) (00 – 99) : 15	Calls to a station in the group are directed to the station, if unavailable or unanswered in the NO Answer Timer, the call can be routed based on the assigned hunt process.	00~99 (seconds)	15
11	CIRC 401 PILOT HUNT (1 : ON/ 0: OFF) : ON	A circular/terminal hunt group can be set so that only calls to the pilot number (Station Group number) will hunt.	0: OFF 1: ON	ON
12	CIRC 401 RPT NO MEMBER (1 : ON/ 0: OFF) : OFF	If a call is received and no members are on-duty, an ICM call will return re-order tone, while a CO/IP call will be routed to the overflow destination.	0: OFF 1: ON	OFF
13	CIRC 401 MUSIC SRC (00–10) : 01	A Music source is assigned so that calls to the group receive audio from the source in place of ring-back tone.	00: Ring-back 01: INT Music 02: EXT Music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3	01
14	CIRC 401 MBR FORWARD (1 : ON/ 0: OFF) : ON	A member activating Call forward may be placed in an unavailable state for hunt group calls (ON). When OFF, group calls are sent to the member as normal.	0: OFF 1: ON	ON
15	MAILBOX MSG WAIT STA	When a group calls overflows or routes to the VM group, a station number is used to identify the Mailbox for the Circular group messages.	Station	….
16	MAILBOX PASSWORD ……	The password associated with a group Mailbox is defined here. The password is used in conjunction with the Circular group as with a normal station.	12 digits	….

Table 3.3.7.2-1 STATION GROUP ATTRIBUTES — CIRCULAR & TERMINAL GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
17	CIRC 401 FORCED DEST S/H/V/SPD (DIAL 1-4)	When a call is delivered to the group the system can redirect the call to the Forced destination if enabled under button 18 below.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-
18	FORCED FWD DEST USAGE (1:ON/0:OFF): OFF	Enables the system to redirect group calls to the Forced destination defined under button 17 above.	0: OFF 1: ON	OFF
19	WAIT IF 1ST ANNC BUSY (1:ON/0:OFF): ON	When a call assigned to receive an announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or bypass the announcement.	0: OFF 1: ON	ON
20	GROUP NAME ……..	A hunt group name can be designated.	20 character	….
21	CIRC 401 MAX QUE C-CNT (00-99) : 99	When the number of calls queued to the group match this parameter, new calls will receive error tone and be disconnected after the VSF AA announcement, if assigned, is played.	00-99	99

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ACD 403 ANNC 1 TMR(1s) (000 – 999) : 015	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds this 1st Announcement Timer, the call may be sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 (seconds)	015
2	ACD 403 ANNC 2 TMR(1s) (000 – 999) : 000	After the 1st announcement, a 2nd ANNC TMR is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 (seconds)	000

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
3	ACD 403 ANNC1 LOC VSF ANNC .. (01–70)	Each Station Hunt Group can be assigned an announcement, which is played if the call remains queued beyond the ANNC 1 TMR duration. The announcement location is a VSF ANNC1 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
4	ACD 403 ANNC2 LOC VSF ANNC .. (01–70)	The Station Hunt Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the ANNC 2 TMR duration. The announcement location is a VSF ANNC2 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
5	ACD 403 ANNC2 RPT TMR (000 – 999) : 000	The 2nd announcement can be repeated to calls that remain in queue at intervals of the Announcement 2 Repeat Timer. Note repeating must be "ON" under button 6 below.	000~999 (seconds)	000
6	ACD 403 ANNC2 RPT (1: ON / 0: OFF): OFF	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF Announcement can be repeated at the Announcement Repeat Timer interval.	0: OFF 1: ON	OFF
7	ACD 403 OVERFLOW DEST S/H/V/SPD (Dial 1-4)	A call to the group will continue to route through the group until answered or all group members have been tried. The call will then queue to the group or route to the assigned Overflow Destination.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	
8	ACD 403 OVERFLOW TMR (000 - 600) : 180	A call to a group will remain queued to the group or be sent to the assigned Overflow Destination after expiration of the OVERFLOW Timer.	000~600 (seconds)	180
9	ACD 403 WRAP-UP TMR (000 - 999) : 002	After terminating any call, a Hunt Group member will be maintained in a busy state for the duration of the WRAP-UP Timer.	000~999 (seconds)	002

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
10	ACD 403 RPT NO MEMBER (1 : ON/ 0: OFF) : OFF	If a call is received and no members are on-duty, an ICM call will return re-order tone, while a CO/IP call will be routed to overflow destination.	0: OFF 1: ON	OFF
11	ACD 403 MUSIC SRC (00– 10) : 01	A Music source can be assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone while in Queue.	00: Ring-back 01: INT Music 02: EXT Music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3	01
12	ACD 403 ACD WARN TONE (1 : ON/ 0: OFF) : OFF	An ACD supervisor can monitor agent conversations. A warning tone can be provided to the agent and connected party when the supervisor activates the monitor feature.	0: OFF 1: ON	OFF
13	ACD 403 ALTER DEST S/H/SPD (Dial 1-3)	When a call comes into the group and there are no group members available, the call will be routed to the assigned alternate destination.	1-3 (1:Station 2:Station group 3:System speed)	....
14	ACD 403 SP-VISOR TMR (000-999) : 030	When calls have been in queue longer than the Supervisor Timer, the ACD supervisor is notified by a display of the longest queue time.	000~999 (seconds)	030
15	ACD 403 SP-VISOR C-CNT (00-99) : 00	When the number of calls in queue exceeds the Supervisor Call Counts, the ACD Supervisor is notified by a display of queued calls count.	00~99	00
16	WAIT IF 1ST ANNC BUSY (1:ON/0:OFF): ON	When a call assigned to receive an announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or bypass the announcement.	0: OFF 1: ON	ON
17	ACD 403 MAX QUE C-CNT (00-99) : 99	When the number of calls queued to the group match this parameter, new calls will receive error tone and be disconnected after the VSF AA announcement, if assigned, is played.	00-99	99
18	ACD 403 SUPERVISOR …. …. …. ….	Any valid IP Phone can be assigned as a Supervisor, max. 5 ACD Supervisors.	Station	....

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
19	100 110 123 124 0 0 0 0	ACD Group members may be assigned a priority, 0-9. Members with the highest priority are sent calls ahead of lower priority members. This field is the same as PGM 112-button 16.	0~9	0
20	ACD 403 ACD_DND W_TMR (002-200) : 010	ACD agents are placed in the Wrap-up mode for the Wrap-up timer duration after call completion.	002~200 sec	010
21	ACD 403 ICLID USAGE (1:ON/0:OFF) : OFF	Within 5 seconds of a guaranteed announcement, the caller may dial digits as an ICLID. The User dialed digits are compared to the ICLID Table entries, PGM 203 for routing or, for a single dialed digit, to the ACD CCR table PGM 191 BTN 23.	0: OFF 1: ON	OFF
22	GROUP NAME ……..	An ACD group name can be designated.	20 character	..
23	ACD 403 CIQ ROUTE PRESS FLEX KEY (01-10)	CCR for ACD Calls-in-queue permits caller to re-route the call by dialing a single digit. The destination is assigned to Flex button 1 ~ 10 for digits 1 ~ 9 & 0.	FLEX 1 ~ FLEX 10	
23-1~23-10	ACD 403 CIQ ROUTE INPUT 1 : NOT ASSIGNED	When an ACD call is queued and the caller may exit this queue by entering one digit. The queued call can be routed to station, hunt, system-speed bin, or network station. Dial 1: Enter a station number. Dial 2: Enter a hunt group number. Dial 3: Enter a system speed bin. Dial 4: Enter a network station number.	-	-
24	ACD 403 ADDED ATTR PRESS FLEX KEY (01-24)	To select an ACD group “Added Attribute”, press flex button 24, then select button 1~24 for the attribute desired.	FLEX 1 ~ FLEX 24	
24-1	ZAP TONE (1:ON/0:OFF) : OFF	Agents, using a headset can have ACD calls connected to them automatically preceded by a tone (Zap tone).	0: OFF 1: ON	OFF
24-2	MAILBOX MSG WAIT STN ….	When an ACD call overflows or routes to the VM group, a station number is used to identify the Mailbox for the ACD group messages.	Station	….
24-3	MAILBOX PASSWORD ……	The password associated with an ACD group Mailbox is defined here. The password is used in conjunction with the ACD group as with a normal station.	12 digits	….

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-4	CIQ AGENT DISPLAY (1:ON/0:OFF) : OFF	When an ACD call is in queue, the Call in queue information can be displayed on LCD of agent and supervisor telephones.	0: OFF 1: ON	OFF
24-5	FORCED FWD DEST USAGE (1:ON/0:OFF): OFF	Enables the system to redirect group calls to the Forced destination defined under button 24-24 below.	0: OFF 1: ON	OFF
24-6	CIQ #1 THRESHOLD (00-99) : 10	If the queued call count exceeds the threshold, the system plays the CIQ #1 Announcement (button 7 below) to the CIQ #1 Page Zone (button 8 below) after the CIQ #1 Announcement Delay Timer (button 9 below). Announcements are repeated at intervals of the CIQ #1 Announcement Repeat Timer (button 10 below).	00-99	10
24-7	CIQ #1 ANNC LOC VSF ANNC .. (00-200)	VSF announcement number for the CIQ #1 Announcement.	00-200	…
24-8	CIQ #1 PAGE ZONE (00-40) : 00	Page Zone to receive CIQ #1 Announcement.	eMG80:00~15 or 00~40, eMG800:0~105	00
24-9	CIQ #1 ANNC DELAY TMR (000-180) : 015	Delay timer for CIQ #1 Announcement.	000-180	015
24-10	CIQ #1 ANNC REPEAT TMR (000-180) : 045	Interval for repeating the CIQ #1 Announcement.	000-180	045
24-11	CIQ #2 THRESHOLD (00-99) : 20	If the queued call count exceeds the threshold, the system plays the CIQ #2 Announcement (button 12 below) to the CIQ #2 Page Zone (button 13 below) after the CIQ #2 Announcement Delay Timer (button 14 below). Announcements are repeated at intervals of the CIQ #2 Announcement Repeat Timer (button 15 below).	00-99	20
24-12	CIQ #2 ANNC LOC VSF ANNC .. (00-200)	VSF announcement number for the CIQ #2 Announcement.	00-200	…
24-13	CIQ #2 PAGE ZONE (00-40) : 00	Page Zone to receive CIQ #2 Announcement.	eMG80:00~15 or 00~40, eMG800:0~105	00
24-14	CIQ #2 ANNC DELAY TMR (000-180) : 015	Delay timer for CIQ #2 Announcement.	000-180	015
24-15	CIQ #2 ANNC REPEAT TMR (000-180) : 025	Interval for repeating the CIQ #2 Announcement.	000-180	025

Table 3.3.7.2-2 STATION GROUP ATTRIBUTES — UCD/ACD GROUPS (PGM 191)

BTN	– ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
24-16	CIQ #3 THRESHOLD (00-99) : 30	If the queued call count exceeds the threshold, the system plays the CIQ #3 Announcement (button 17 below) to the CIQ #3 Page Zone (button 18 below) after the CIQ #3 Announcement Delay Timer (button 19 below). Announcements are repeated at intervals of the CIQ #3 Announcement Repeat Timer (button 20 below).	00-99	30
24-17	CIQ #3 ANNC LOC VSF ANNC .. (00-200)	VSF announcement number for the CIQ #3 Announcement.	00-200	…
24-18	CIQ #3 PAGE ZONE (00-40) : 00	Page Zone to receive CIQ #3 Announcement.	eMG80:00~15 or 00~40, eMG800:0~105	00
24-19	CIQ #3 ANNC DELAY TMR (000-180) : 015	Delay timer for CIQ #3 Announcement.	000-180	015
24-20	CIQ #3 ANNC REPEAT TMR (000-180) : 005	Interval for repeating the CIQ #3 Announcement.	000-180	005
24-21	CIQ MENT ON/OFF (1:ON/0:OFF) : OFF	If enabled, queued callers receive the CIQ message (You are # in queue) after the 1st and 2nd announcement.	0: OFF 1: ON	OFF
24-22	ACD NO ANS TMR (000-180) : 000	Calls to an agent in the group are directed to the station, if unanswered in the NO ANSWER TIMER, the call is routed to another agent.	000-180	000
24-23	ACD 403 MBR FORWARD (1 : ON/ 0: OFF) : ON	A member activating Call Forward may be placed in an unavailable state for hunt group calls (ON). When OFF, group calls are sent to the member as normal.	0: OFF 1: ON	ON
24-24-1	ACD 403 FORCED DEST S/H/V/SPD (DIAL 1-4)	When a call is delivered to the group the system can redirect the call to the Forced destination, if enabled under button 24-5 above.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-
24-24-2	ACD Q CALL INDI 0(OFF)1(R/LED)2(LED):0	If there are queued group calls, the queuing indication can be served to group members by Mute Ring and LED button flashing.	0:OFF 1:RING& LED 2: LED only	OFF

Table 3.3.7.2-3 STATION GROUP ATTRIBUTES — RING GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	RING 405 ANNC1 TMR(1s) (000 – 999) : 015	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds this 1st Announcement Timer, the call may be sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 (seconds)	015
2	RING 405 ANNC 2 TMR(1s) (000 – 999) : 000	After the 1st announcement, a 2nd ANNC TMR is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 (seconds)	000
3	RING 405 ANNC1 LOC VSF ANNC .. (01–70)	Each Ring Group can be assigned an announcement, which is played if the call remains queued beyond the ANNC 1 TMR duration. The announcement location is a VSF ANNC1 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
4	RING 405 ANNC2 LOC VSF ANNC .. (01–70)	The Ring Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the ANNC 2 TMR duration. The announcement location is a VSF ANNC2 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
5	RING 405 ANNC2 RPT TMR (000 – 999) : 000	The 2nd announcement can be repeated to calls that remain in queue at intervals of the Announcement 2 Repeat Timer. Note repeating must be "ON" under button 6 below.	000~999 (seconds)	000
6	RING 405 ANNC2 RPT (1: ON / 0: OFF): OFF	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the Announcement Repeat Timer interval.	0: OFF 1: ON	OFF

Table 3.3.7.2-3 STATION GROUP ATTRIBUTES — RING GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
7	RING 405 OVERFLOW DEST S/H/V/SPD (Dial 1-4)	A call to the group rings at member stations until the Overflow timer expires then the call passes to the assigned Overflow Destination.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	
8	RING 405 OVERFLOW TMR (000 - 600) : 180	A call to a ring group will continue to ring stations in the group or be sent to the assigned Overflow Destination after expiration of the OVERFLOW Timer.	000~600 (seconds)	180
9	RING 405 WRAP-UP TMR (000 - 999) : 002	After terminating any call, a Ring Group member will be maintained in a busy state for the duration of the WRAP-UP Timer.	000~999 (seconds)	002
10	RING 405 MUSIC SRC (00–10) : 01	A Music source is assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone.	00: Ring-back 01: Int music 02: Ext music 03: VSF MOH 04: SLTMOH1 05: SLTMOH2 06: SLTMOH3 07: SLTMOH4 08: SLTMOH5 09: VSFMOH2 10: VSFMOH3	01
11	RING 405 MAX QUE C-CNT (00-99) : 99	When the number of calls queued is reached, new calls will receive error tone and be disconnected after the VSF AA announcement, if assigned, is played.	00-99	99
12	RING 405 MBR FORWARD (1 : ON/ 0: OFF) : ON	A member activating Call Forward may be placed in an unavailable state for hunt group calls (ON). When OFF, group calls are sent to the member as normal.	0: OFF 1: ON	ON
13	MAILBOX MSG WAIT STA	When a group calls overflows or routes to the VM group, a station number is used to identify the Mailbox for the Ring group messages.	Station	….
14	MAILBOX PASSWORD ……	The password associated with a group Mailbox is defined here. The password is used in conjunction with the Ring group as with a normal station.	12 digits	….
15	RING 405 FORCED DEST S/H/V/SPD (DIAL 1-4)	When a call is delivered to the group the system can redirect the call to the Forced destination if enabled under button 16 below.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-

Table 3.3.7.2-3 STATION GROUP ATTRIBUTES — RING GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
16	FORCED FWD DEST USAGE (1:ON/0:OFF): OFF	Enables the system to redirect group calls to the Forced destination defined under button 15 above.	0: OFF 1: ON	OFF
17	WAIT IF 1ST ANNC BUSY (1:ON/0:OFF): ON	When a call assigned to receive an announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or bypass the announcement.	0: OFF 1: ON	ON
18	GROUP NAME ……	A Ring group name can be designated.	20 character	….
19	RING Q CALL INDI 0(OFF)1(MUTE)2(BURST):1	When a station calls a Ring Group, DSS/BLF buttons assigned for the calling station will flash and muted ring is received.	0:OFF 1: Mute 2: Burst	Mute

Table 3.3.7.2-4 STATION GROUP ATTRIBUTES — EXTERNAL VM GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VM 407 WRAP-UP TMR (000 – 999) : 002	After terminating any call, the VM port will be maintained in a busy state for the duration of the WRAP-UP Timer.	000~999 (seconds)	002
2	VM 407 PUT MAIL INDEX (1 – 4) : 1	For external analog Voice Mail groups, an index to the Voice Mail Dial Table, this contains the “Put Mail” dial code.	1~4	1
3	VM 407 GET MAIL INDEX (1 – 4) : 2	For external analog Voice Mail groups, an index to the Voice Mail Dial Table, which contains the “Get Mail” dial code?	1~4	2
4	VM 407 HUNT TYPE (1 : CIR/ 0 : TERM): TERM	The type of Hunt process applied to the SLT ports connected to the VM can be assigned as Circular or Terminal.	0: TERM 1: CIRC	TERM
5	VM 407 OVERFLOW TMR (000 - 600) : 180	A call to a group will remain queued to the group or be sent to the assigned OVERFLOW DEST after expiration of the OVERFLOW TMR.	000~600 (seconds)	180
6	VM 407 OVERFLOW DEST S/H/V/SPD (Dial 1-4)	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or routes to the assigned OVERFLOW DEST.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-

Table 3.3.7.2-4 STATION GROUP ATTRIBUTES — EXTERNAL VM GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
7	FORCED FWD DEST USAGE (1:ON/0:OFF): OFF	When a call is delivered to the group the system can redirect the call to the Forced destination if enabled under button 8 below.	0: OFF 1: ON	OFF
8	VM 407 FORCED DEST S/H/V/SPD (DIAL 1-4)	Enables the system to redirect group calls to the Forced destination defined under button 7 above.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-
9	GROUP NAME ……	A hunt group name can be designated.	20 character	….
10	VM 407 SERVER TYPE (0:IPCR/1:3RD) : 3RD	Server Type can set 3rd or IPCR.	0: IPCR 1: 3RD	3RD
11	VM 407 SERVER NUMBER (01-10) : . .	Sever Number can set 01 ~ 10 for 237 table.	01-10	..
12	VM 407 MEMBER TYPE (0:SIP/1:SLT) : SLT	Server Member can set SIP or SLT.	0: SIP 1: SLT	SLT
13	VM 407 SERVER CAPACITY (001-140) : 000	Maximum number of channels of SIP VM (UMS).	eMG80:00~140, eMG800:0~1200	0

Table 3.3.7.2-5 STATION GROUP ATTRIBUTES — PICK-UP GROUPS (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	PICK UP 408 AUTO PICKUP (1 : ON/ 0: OFF) : OFF	If a Pick-Up Group member is ringing, another member of the Pick-Up Group can Pick-Up a call ringing at another member by simply going “off-hook”.	0: OFF 1: ON	OFF
2	PICK UP 408 ALL RING (1 : ON/ 0: OFF) : OFF	When a call is offered to a member of the Pick-Up Group in the Tone Ring mode, all members will ring. **NOTE** Auto Pickup, Button 1 must be “ON”.	0: OFF 1: ON	OFF

Table 3.3.7.2-6 STATION GROUP ATTRIBUTES — VSF-VM GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VSF-VM 409 RETENSION (1d) (00 – 99) : 00	When voice messages are stored in the VSF, the system will maintain (store) the message for the maximum number of days set in this program (1 to 99 days). (Not used currently)	00-99 (day)	00
2	VSF-VM 409 DIAL TIME (1s) (00 – 99) : 15	This timer determines the inter-digit time employed during a VSF-VM session. If this timer expires while the VSF-VM is awaiting user input, the system will assume the remote party has disconnected and will return the channel to idle.	00-99 (seconds)	15
3	VSF-VM GROUP NAME ……	A VSF-VM group name can be designated.	20 character	….

Table 3.3.7.2-7 STATION GROUP ATTRIBUTES — UMS GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	UMS 410 ANNC 1 TMR(1s) (000 - 999) : 015	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds this 1st Announcement Timer, the call may be sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 (seconds)	015
2	UMS 410 ANNC 2 TMR(1s) (000 - 999) : 000	After the 1st announcement, the 2nd ANNC TMR is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000-999 (seconds)	000
3	UMS 410 ANNC1 LOC VSF ANNC .. (01 – 70)	The Station Group can be assigned an announcement, which is played if the call remains queued beyond the ANNC 1 TMR duration. The announcement location is the VSF ANNC1 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none

Table 3.3.7.2-7 STATION GROUP ATTRIBUTES — UMS GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
4	UMS 410 ANNC2 LOC VSF ANNC .. (01 – 70)	The Station Hunt Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the ANNC 2 TMR duration. The announcement location is the VSF ANNC2 number. An entry of 00 indicates no announcement. Including '#' at the end of an entry instructs the system to disconnect after the announcement.	01~70	00: none
5	UMS 410 ANNC2 RPT TMR (000 - 999) : 000.	The 2nd announcement can be repeated to calls that remain in queue at intervals of the Announcement 2 Repeat Timer. Note; repeating must be "ON" under button 6 below.	000~999 (seconds)	000
6	UMS 410 ANNC 2 RPT (1: ON / 0: OFF): OFF	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the Announcement Repeat Timer interval.	0: OFF 1: ON	OFF
7	UMS 410 OVERFLOW DEST S/H/V/SPD (Dial 1-4)	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or routes to the assigned Overflow Destination.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	
8	UMS 410 OVERFLOW TMR (000 - 600) : 180	A call to a group will remain at the last station in the group or can be sent to the assigned Overflow Destination after expiration of the OVERFLOW Timer.	000~600 (seconds)	180
9	UMS 410 NANS TMR(1s) (00 – 99) : 15	Calls to a station in the group are directed to the station, if unavailable or unanswered in the NO Answer Timer, the call can be routed based on the assigned hunt process.	00~99 (seconds)	15
10	UMS 410 PILOT HUNT (1 : ON/ 0: OFF) : ON	A FS VM group can be set so that only calls to the pilot number (station group number) will hunt.	0: OFF 1: ON	ON
11	UMS 410 ALTER DEST STA/HUNT	When a call comes into the group and there are no group members available, the call will be routed to the assigned Alternate Destination.	Station or Group Number	....

Table 3.3.7.2-7 STATION GROUP ATTRIBUTES — UMS GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
12	UMS 410 HUNT TYPE (1 : CIRC/ 0 : TERM): CIR	When a call is offered to the group, the Hunt process can be defined for Circular or Terminal hunt group.	0: TERM 1: CIR	CIR
13	UMS 410 WRAP-UP TMR (002 – 999) : 002	After terminating any call, the VM port will be maintained in a busy state for the duration of the WRAP-UP Timer.	002~999 (seconds)	002
14	FORCED FWD DEST USAGE (1:ON/0:OFF): OFF	Enables the system to redirect group calls to the Forced destination defined under button 15 below.	0: OFF 1: ON	OFF
15	UMS 410 FORCED DEST S/H/V/SPD (DIAL 1-4)	When a call is delivered to the group the system can redirect the call to the Forced destination if enabled under button 14 above.	1-4 (1:Station 2:Station group 3:VSF Announce 4:System speed)	-
16	GROUP NAME ……	A hunt group name can be designated.	20 character	….

Table 3.3.7.2-8 STATION GROUP ATTRIBUTES — UCS SERVER GROUP (PGM 191)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	UCS SVR [411] ASSIGNED UC Server 1 (01–16)	UCS Server number, this value must be set to 1.	01-16	1

3.3.7.3 Pick Up Group Assignment – PGM 192

Under Pick-Up Group Assignments members are assigned to the Station Pick Up Group.

PROCEDURE:	
PICKUP GRP ASSIGN ENTER GRP NUM(00-49)	1. Press the **[PGM]** button and dial 192 and enter group number (Ex. 00). (eMG80:00~49/ eMG800:0~199)
PICKUP GRP 00 …. …. ….	Use the dial pad to enter the desired Pickup Group. The system will display the member of pickup group.
PICKUP GRP 00 …. …. ….	Note for group members, enter a station or station range. For an individual station press the desired Flex button for the position of the station in the group and dial the station number. For a range, enter the first and last station number in the range.
	Press the **[Save]** button to store the data entry.

3.3.8 ISDN LINE & ICLID ROUTING DATA – PGM 200-206

Each ISDN (Integrated Services Digital Network) Line provides digital services to the end-user. Basic Rate Lines have three (3) channels, 2 B channels and a D channel. The 2 B channels provide 64 Kbps each, a total of 128 Kbps for "Bearer" or voice channels. The D channel provides a 16 Kbps signaling channel. Primary Rate Lines have 23/30 64 Kbps 'B' channels and 1/2 64 Kbps signaling channels. For proper operation, entries are required for various attributes in PGM 200 ~ 202 to match the ISDN circuit and services from the PSTN.

3.3.8.1 ISDN Attributes – PGM 200

ISDN attributes define several characteristics of the ISDN interface. ISDN call cost services (Advice of Charge), CLI modification, voice encoding, and other characteristics of the interface are defined.

PROCEDURE:	
SYSTEM ISDN ATT PRESS FLEX KEY (1-3)	1. Press the **[PGM]** button and dial 200.
	Press the Flex button for the desired Attribute; refer to Table 3.3.8.1-1.
	Use the dial pad to enter the desired Attribute data.
	Press the **[Save]** button to store the Attribute data entry.

Table 3.3.8.1-1 ISDN LINE ATTRIBUTES (PGM 200)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	CO ATD CODE (2DGT) ..	When the system is set to send the station number with ISDN CLIP or COLP, either the station number or this ATD code will be sent based on PGM 114 button 11.	1~2 digits	
2	CLI PRINT TO SERIAL (1:ON/0:OFF) : OFF	The ISDN Calling Line Id may be included in call records output over the serial port assigned for "Call Information", PGM 175 button 5.	0: OFF 1: ON	OFF
3	DISPLAY DID INFO (1:ON/0:OFF) : OFF	Display DID digit information on LCD and print it to serial port.	0: OFF 1: ON	OFF

3.3.8.2 CLIP/COLP Table – PGM 201

Normally, the system will send the primary Directory Number of the ISDN Line in the ISDN call SETUP and CONNECT messages to identify the caller (CLIP) or the answering (COLP) party respectively. Under certain circumstances, it may be desirable to provide a secondary or DID number for the ISDN Line. In these cases, the CLIP/COLP Table may be used to define the digits sent. The number sent is selected based on the index assigned for the ISDN Line under CO/IP Attributes III (PGM 143).

For the CLIP/COLP Table entry, the CLI Station Number (PGM 114) is sent in place of the station number. For all other CLIP/COLP Table entries, the station number is sent as a suffix to the number in the Table. Note that this number is sent only if CLIR and COLR are disabled under the CLIR Service and COLR Service assignments in the Station ISDN Attributes (PGM 114).

PROCEDURE:	
CLIP/COLP TABLE ENTRY ENTER BIN NO (00 –4 9)	1. Press the **[PGM]** button and dial 201 and enter the bin number (Ex.00).
CLIP/COLP TABLE 00 …….	Use the dial pad to enter the desired Bin number (00-49)
	Use the dial pad to enter the desired CLIP/COLP data, maximum 10 digits.
	Press the **[Save]** button to store the CLIP/COLP data entry.

3.3.8.3 MSN Table – PGM 202

When an ISDN Line assigned for DID operation, receives an incoming call, the call will be routed to a station based on the Flexible DID Table Index in the MSN Table.

PROCEDURE:	
MSN TABLE ATT ENTER BIN NO (001 – 500)	1. Press the **[PGM]** button and dial 202 and enter the bin number (Ex.121). (eMG80:001~500/ eMG800:1~1500)
MSN TABLE 121 PRESS FLEX KEY (1 – 3)	Use the dial pad to enter a MSN Table index number.
	Press the Flex button for the desired MSN Table entry; refer to Table 3.3.8.3-1.
	Use the dial pad to enter the desired Table data.
	Press the **[Save]** button to store the Table data entry.

Table 3.3.8.3-1 MSN ATTRIBUTES (PGM 202)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	MSN TABLE 121 CO RANGE … - …	CO Line number associated with the MSN.		None
2	MSN TABLE 121 INDEX : NOT ASSIGNED	Index to the Flexible DID Table, PGM 231.	000~999	None
3	TABLE 121 TEL NUMBER ……..	Telephone Number (called number)	23 Digits	None

3.3.8.4 ICLID Route Table – PGM 203

The system can employ ICLID (Incoming Calling Line Id) to determine the routing of incoming external calls. Each CO/IP Line and ACD group may be assigned to employ ICLID routing. The system will compare the received ICLID to entries in the ICLID Route Table and, if a match is found, will route the call to the destination indicated by the index (bin) number of PGM 204.

PROCEDURE:	
ICLID ROUTE TABLE ATT ENTER BIN NO (001-250)	1. Press the **[PGM]** button and dial 203 and enter the bin number (Ex.001).
ICLID ROUTE TABLE 001 PRESS FLEX KEY (1-4)	To program ICLID Route table, dial Bin No (001 – 250).
	Press the Flex button for the desired ICLID Table entry; refer to Table 3.3.8.4-1.
	Use the dial pad to enter the desired Table data
	Press the **[Save]** button to store the Table data entry.

Table 3.3.8.4-1 ICLID ROUTE INDEX (PGM 203)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ROUTE TABLE 001 INDEX : NOT ASSIGNED	Index to the ICLID Ring Assignment Table PGM 204 that determines the call routing.	001~250	Not assigned
2	TABLE 001 ICLID NUMBER ……	ICLID (Incoming Caller Id) to match for the index. If the Caller Id matches the Table entry, the index is used to select the route from PGM 204.	24-digits 0 ~ 9 & '*' and '#' as a wild-card.	None
3	TABLE 001 ICLID NAME ……	ICLID name that is sent by the system to the destination for the ICLID routed call.	12.Character	None
4	TABLE 001 ICLID TONE ..	If the ICLID Number is matched with CID of caller, the Ring tone is followed this ICLID Tone.	2 digits.01~12	None

3.3.8.5 ICLID Ring Assignment – PGM 204

If the Incoming Caller ID matches an entry in the ICLID Route Table, the index from the Table is used to determine the call routing from the ICLID Ring Assignment Table. Separate ring assignments are made for Day, Night, and Timed Ring mode for each index, 001 to 250, in this table. When assigned to ring to a VSF announcement, the call can be automatically dropped after the announcement by entering '#' after the announcement number.

When CO Lines are programmed to Ring an external AA/VM, VSF or Feature Server Group as an Automated Attendant, the Ring signal can be on an immediate or delayed basis allowing other stations/groups to be assigned Ring and answer prior to signaling the AA. The delay is defined in seconds from 00 to 30.

PROCEDURE:	
ICLID RING ASN TBL ATT ENTER BIN NO (001-250)	1. Press the **[PGM]** button and dial 204 and enter the bin number (Ex.001).
PRESS KEY DAY NIGHT TIMED-R	Use the dial pad to enter the Index or Bin number (001 – 250).
	Press the desired Flex button: Button 1: Day Ring Button 2: Night Ring Button 3: Timed Ring
	Use the dial pad to select the destination type: Dial 1: Station Dial 2: Hunt Group Dial 3: VSF Announcement Dial 4: AA Ring Time Dial 5 : Net number
	Use the dial pad to enter a value for the selected destination type.
	Press the **[Save]** button to store the data entry.

3.3.8.6 PPP Attributes – PGM 205

In addition to remote access via an IP network connection, the system database may be accessed remotely via MODU. The system will request a user id and password, which must match one of the User Ids and passwords assigned. After matching id and password are entered, the iPECS Home page is provided and Web Admin is available as explained in section 4.

PROCEDURE:	
PPP ATTRIBUTES PRESS FLEX KEY (1-7)	1. Press the **[PGM]** button and dial 205.
	Press the desired Flex button; refer to Table 3.3.8.6-1.
	Used the dial pad to enter desired data, refer to Table 3.3.8.6-1 for appropriate entries.
	Press the **[Save]** button to store the data entry.

Table 3.3.8.6-1 PPP ATTRIBUTES (PGM 205)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	PPP DEST STA ….	If the incoming capability is 64 Kbps unrestricted digital and the called party number matches the PPP destination, the system will automatically answer the call and request PPP ID and password.	Station number	None
2	PPP USER ID 1 likppp01	System accepts this PPP ID 1.	12 Character	likppp01
3	PPP PASSWORD 1 Ipkts01	The password entered is used to authorize PPP ID 1.	12 Character	Ipkts01
4	PPP USER ID 2 likppp02	System accepts this PPP ID 2.	12 Character	likppp02
5	PPP PASSWORD 2 Ipkts02	The password entered is used to authorize PPP ID 2.	12 Character	Ipkts02
6	PPP SERVER IP ADDR 10 . 0 .0 .3	Operator can configure PPP Server IP Address with this option. To apply this option, system must be restarted.		10.0.0.3
7	PPP CLIENT IP ADDR 10 . 0 .0 .2	Operator can configure PPP Client IP Address with this option. To apply this option, system must be restarted.		10.0.0.2

3.3.8.7 Prefix Dialing Table – PGM 206

With this table, three features can be supported.

1. Analog CO Call Charge with NPR metering.
2. SIP direct dialing with no wait inter-digit timer.
3. ISDN Prefix Call – ISDN en-block Dialing with Prefix Call Setup.

If first some digits (up to 8 digits) of outgoing dial number are matched with Prefix Code of each table, this table can start work. By each CO-line (PGM 142 – F20), Table ID (0-6) can be set. This table ID (PGM 142 – F20) is associated with PGM 206 – each table ID.

PROCEDURE:	
PREFIX DIALING TABLES ENTER BIN NO (001-500)	1. Press the **[PGM]** button and dial 206 and enter the bin number (Ex.001).
PREFIX TABLE 001 PRESS FLEX KEY(01-10)	Use the dial-pad to enter the Table index number (bin).
Refer to Table 3.3.8.7-1 DISPLAY	2. Press the desired Flex button, refer to Table 3.3.8.7-1
	Use the dial pad to enter desired data, refer to Table 3.3.8.7-1...
	Press the **[Save]** button to store the data entry.

Table 3.3.8.7-1 Prefix Dialing Table (PGM 206)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	001 PREFIX CODE	Enter the Prefix code. (Max 8 digits)		
2	001 TABLE ID (0 – 6) : 0	Enter Table ID (0-6). 0 means NOT used.	0-6	0
3	001 MIN DIGIT (00 – 30) : 00	Select the minimum dial digits (00-30)	00-30	00
4	001 MAX DIGIT (00 – 30) : 00	Select the minimum dial digits (00-30)	00-30	00
5	001 NUM OF TYPE(0-6) UNKNOWN(0)	Select Number of Type (0~6). Unknown/International/National/ Network Spec/Subscriber/ Abbreviated /Reserved	0-6 (0:Unknown 1:International 2:National 3:Network Spec. 4:Subscriber 5:Abbreviated 6:Reserved)	UNKNOWN(0)

Table 3.3.8.7-1 Prefix Dialing Table (PGM 206)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
6	001 NUM PLAN(0-6) UNKNOWN(0)	Select Numbering Plan (0~6). Unknown/ISDN/Data Numbering/Telex/National Standard/Private /Reserved	0-6 (0:Unknonw 1:ISDN/Telephony 2:Data numbering 3:Telex 4:National standard 5:Private 6:Reserved)	UNKNOWN(0)
7	001 SENDING COMPLETE (1:ON/0:OFF) : OFF	Select Sending Complete option. (On/Off)	0-1	OFF
8	001 CALL TYPE (0-5) UNKNOWN(0)	Call Charge Type (0~5). Unknown/Local/Long Distance/ International/Mobile/reserved	0-5 (0:Unknown 1:Local 2:Long Distance 3:International 4:Mobile 5:reserved)	UNKNOWN(0)
9	001 CALL TIMER(sec) (000 – 999) : 000	Call Charge Timer can be assigned. By this timer value Call Metering can be established.	000-999	000
10	001 CALL COST 000000	Call Cost is calculated by CALL TIMER. (ex : timer is 1 min, cost is 000020, then after 3 minute call, total call cost is calculated to 000060)	000000-999999	000000
11	001 FLAT RATE (1:ON/0:OFF) : OFF	If Flat Rate is ON, Flat Rate is applied by CALL COST per a call	0-1	OFF
12	PREFIX TABLE INIT PRESS [HOLD] TO INIT	Initialize Prefix table.		

3.3.9 TABLES DATA – PGM 220 to 235

3.3.9.1 LCR Assignment Tables - PGM 220 to 223

The LCR Tables provide a mechanism to define the database, which will route outgoing calls, particularly long distance, using the most cost effective route. User dialed digits are compared to table entries and modified appropriately based on time of day, day of week, and assigned routes. There are four LCR Tables, LCR Control Attributes, LCR Leading Digit Table, LCR Digit Modification Table, and LCR Initialization Table.

3.3.9.1.1 LCR Control Attributes - PGM 220

The LCR Control Attributes, among others items, allows access to the LCR Access Mode assignments. The LCR Access Modes define the user operations that will access the LCR feature.

The LCR Access Modes are:

Mode 00:	LCR Disabled
Mode 01:	Loop (user dials '9' or CO/IP Group code (8xx) or presses a Loop button)
Mode 02:	Loop and Internal (user dials digits without a CO/IP Access Code prefix)
Mode 11:	Loop and Direct CO Line (user dialed CO Line Access Code, or presses **{CO}** button).
Mode 12:	Loop, Direct CO Line, and Internal
Mode 13:	Loop, Direct CO Line, Internal and Direct

In addition, days of the week are grouped into zones (Day Zones) and the time of day can be set into three groups (Time Zones). Table 3.3.9.1.1-1 provides general descriptive information and input ranges.

– **PROCEDURE:**	
LCR CONTROL ATTRIBUTES PRESS FLEX KEY (1-5)	1. Press the **[PGM]** button and dial 220.
	Press Flex button 1~5, refer to Table 3.3.9.1.1-1.
	For LCR Access Mode and Time Zones, use the dial-pad to enter desired data and proceed to step 5). Refer to Table 3.3.9.1.1-1 for input ranges. For Day Zones press the Flex button 1~7 to select the day of week, Monday: Flex button 1 to Sunday: Flex button 7.
	For Day Zones, after selecting the desired day of week Flex button, use the dial pad to enter the desired zone, 1~3.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.1.1-1 LCR CONTROL ATTRIBUTES (PGM 220)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	LCR ACCESS MODE (1-6) (M00) DISABLE LCR	This entry defines the effective LCR modes, the modes by which the user can access LCR.	M00: 1 M01: 2 M02: 3 M11: 4 M12: 5 M13: 6	1
2	DAY ZN 1:1234567 2: 3: M1 T2 W3 T4 F5 SA6 SU7	For each day of the week, a Day Zone (1 to 3) is assigned. The active Day Zone is the Zone assigned to the current day of the week (Flex button 1~7).	Flex 1~7 + 1~3	Zone 1: all days of the week
3	TIME ZONE 1 1:00-24 2: . .-. . 3:. .- . .	This entry defines the hours of the day during which Time Zone 1 is active. Note hours not defined in Time Zone 2 and 3 are automatically part of Time Zone 1.	00~24	00~24
4	TIME ZONE 2 1:00-24 2: . .-. . 3:. .- . .	This entry defines the hours of the day during which Time Zone 2 is active.	00~24	00~24
5	TIME ZONE 3 1:00-24 2: . .-. . 3:. .- . .	This entry defines the hours of the day during which Time Zone 3 is active.	00~24	00~24

3.3.9.1.2 LCR Leading Digit Table — PGM 221

The Leading Digit Table is used to analyze the user-dialed digits to determine an appropriate Digit Modification Table Index. LDT Tables are provided for 32 LDT Table for iPECS-1200, 10 for the other systems. The Table is divided into bins. The applicable LCR Access Modes (LCR Type) and the digits (up to the first 12) to be compared with the number dialed by the user are entered in the Leading Digit Table bin. In addition, indices to the Digit Modification Table are defined for each Time Zone of each Day Zone; refer to LCR Control Attributes PGM 220.

Note the mode used to access LCR must match the LCR Type and must be within the effective LCR Access Mode assigned in PGM 220 to access the Digit Modification Table index. The allowed LCR Types are:

1. **CO Line or Loop access**: User dials CO Line Access Code, CO/IP Group Access Code (8xx), Any CO Line Access Code '9', or presses a CO Line, CO/IP Group or Loop button.
2. **Internal**: User dials outgoing call while receiving Intercom dial tone with no CO/IP access code.
3. **Both**: Both COL and Internal.

In addition, each Leading Digit Table bin has the option to require an authorization code entry. When the user-dialed digits match an entry in the LCR Leading Digit Table, the system will check the Authorization option for the LDT Table bin. If the Authorization option is enabled, the user must enter a valid Authorization code to place the call.

PROCEDURE:	
LDT TABLE ENTER LDT TBL NO (01-10)	1. Press the **[PGM]** button and dial 221 and enter LDT Table number (Ex.01).(eMG80:01~10/eMG800:1~32)
LDT 01 TABLE ENTER LDT BIN (000)	Enter the LDT Table number (Ex.000).
000 BOTH CD: . . . . . . DMT:	The system displays the first available bin (000~249) of the Leading Digits Table. To select a different bin, use the dial pad to enter the desired bin number.
	Press the desired Flex button (1~6), refer to Table 3.3.9.1.2-1.
	Use the dial pad to enter the desired Leading Digit Table data, refer to Table 3.3.9.1.2-1.
	Press the **[Save]** button to store the data entry. Note, as the data is stored, the system sorts the LDT bins in ascending order to allow rapid "look-up" of data. Thus, the bin number will be changed appropriately.

Table 3.3.9.1.2-1 LCR LEADING DIGITS (PGM 221)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	LDT 01/000 : LCR TYPE LCR MODE : BOTH (3)	This entry defines the LCR modes that will apply to this Leading Digit Table bin. To apply the DMT index, the LCR Type must be part of the LCR Mode defined in PGM 220.	1: Internal 2: CO Line 3: Both	Both
2	LDT 01/000 : LCR CODE	Up to 12 digits that, if matched by the user dialed digits, will access the DMT entry for the index assigned for the Day and Time zone below.	12 digits 0 ~ 9 and '*' as a wildcard	
3	LDT 01/000 : DAY 1 DMT INDEX(6DGT):	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 1. The appropriate index will be selected for the current Day and Time Zone. An entry of 6 digits (2 per Time Zone) must be entered.	00~99 3 DMT indices	
4	LDT 01/000: DAY 2 DMT INDEX(6DGT):	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 2. The appropriate index will be selected for the current Day and Time Zone. An entry of 6 digits (2 per Time Zone) must be entered.	00~99 3 DMT indices	
5	LDT 01/000: DAY 3 DMT INDEX(6DGT):	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 3. The appropriate index will be selected for the current Day and Time Zone. An entry of 6 digits (2 per Time Zone) must be entered.	00~99 3 DMT indices	
6	LDT 01/000: CHK PASSWORD (1:ON / 0:OFF) : OFF	If enabled (ON), when the dialed digits match the LDT table digits, the system will send second dial tone to request the user input a valid Authorization code.	0: OFF 1: ON	OFF
7	LDT 01/000: ZONE NO (001-100) : 001	If the LDT Zone Number of a station/co line is equal to this value, this LDT table is available to the station/co line.	001-100	001

3.3.9.1.3 LCR Digit Modification Table — PGM 222

Using the index determined from the analysis of the LCR Leading Digits Table PGM 221, the dialed number is modified in accordance with the Digit Modification Table and sent over the CO/IP group assigned for the index.

Digits of the dialed number can be deleted based on the “Removal Position (RP)” and “Number of Remove digits (NR)” and a digit stream can be inserted in the resulting number. Counting from the first dialed digit, the Removal Position defines the location of the digit where removal begins and, NR defines the number of digits to remove. The “Add Digit Stream” is then inserted in the resulting number at the digit position assigned by the Add Position entry. The resulting number is then dialed over the CO/IP path assigned. If the assigned path is not available, the “Alternate DMT index” is used to determine the number and CO/IP path to be used.

Table 3.3.9.1.3-1 provides the displays, descriptions and entry ranges for the Digit Modification Table.

PROCEDURE:	
DMT TABLE ENTER DMT BIN (00-99)	1. Press the **[PGM]** button and dial 222 and enter DMT bin number (Ex.55).
55 A: . . . . . . RP01 NR00 AP01 CG01 AD ..	Using the dial pad enter the desired Digit Modification Table index.
	Press the Flex button (1~6) for the desired Table entry, refer to Table 3.3.9.1.3-1.
	Use the dial pad to enter the desired Digit Modification Table data, refer to Table 3.3.9.1.3-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.1.3-1 LCR DIGIT MODIFICATION (PGM 222)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	DMT 55 ADDED DGT	This entry defines the digit stream to insert in the number after digits are removed. Digits 0~9, '*', '#', and special characters: **[HOLD]**: timed Pause **[DND]**: Dial tone detect **[FLASH]**: Billing station number	25 digits	
2	DMT 55 REMOVAL POSITION (01-12) : 01	This entry defines the position of the digit where removal is to begin, starting with the 1st dialed digit (01).	01~12	01
3	DMT 55 NUM OF REMOVE DIGITS (00-12) : 00	This entry defines the number of digits to remove starting at the “Removal Position”.	00~12	00
4	DMT 55 ADD POSITION (01-13) : 01	This entry defines the position in the number (after digits are removed) where the Add Digits are inserted.	01~13	01
5	DMT 55 CO/IP GROUP (01-21) : 01	This entry defines the CO/IP Group that the system will attempt to use for the call.	01~21	01
6	DMT 55 ALT INDEX (00-99) : . .	This entry defines an Alternate Digit Modification Table Index to use if no path is available in the assigned CO/IP Group.	00~99	

Table 3.3.9.1.3-1 LCR DIGIT MODIFICATION (PGM 222)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
7	DMT 55 NET NUM PLAN BIN (000-251) : . . .	This entry defines the Net Number Plan Table bin that the system will attempt to use for the transit out call.	000~251	
8	DMT 55 SMDR CODE	This only used for TNET with CM. This code will be send to CM when the TNET status is changed from Local survival mode to bypass mode.	4 digit	

3.3.9.1.4 LCR Table Initialize — PGM 223

The LCR Table Initialize allows global values to be assigned to the various Digit Modification Table entries. In addition, the LCR Leading Digits and LCR Digit Modification Tables can be initialized, no entries state.

PROCEDURE:	
INITIALIZE LCR DB PRESS FLEX KEY (1-6)	1. Press the **[PGM]** button and dial 223.
	Press the Flex button (1~6) for the desired Table entry, refer to Table 3.3.9.1.4-1.
	Use the dial pad to enter the desired LCR data, refer to Table 3.3.9.1.4-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.1.4-1 LCR TABLE INITIALIZE (PGM 223)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ENTER DMT INIT VAL(DAY1)	This entry permits the global setting of the Digit Modification Table Time Zone 1 to 3 indices for Day Zone 1.	00~99 3 DMT indices	
2	ENTER DMT INIT VAL(DAY2)	This entry permits the global setting of the Digit Modification Table Time Zone 1 to 3 indices for Day Zone 2.	00~99 3 DMT indices	
3	ENTER DMT INIT VAL(DAY3)	This entry permits the global setting of the Digit Modification Table Time Zone 1 to 3 indices for Day Zone 3.	00~99 3 DMT indices	
4	ENTER CO GRP INIT VAL . .	This entry permits the global setting of the CO/IP Group to be used for LCR calls.	01~21	
5	ENTER ALT INDEX INIT VA . .	This entry permits the global setting of the Digit Modification Alternate Index.	00~99	
6	INITIALIZE ALL LCR ?	Pressing **[Save]** will return the LCR LDT and DMT tables to the default (no entries) setting.		

3.3.9.2 Toll Tables – PGM 224

There are five Toll restriction Tables and each has a pair of Table entries. Each pair consists of an Allow and a Deny entry. Allow and Deny entries for Table 'A' apply to Station and DISA Class of Service 2, 4 and 11. Allow and Deny entries for Table 'B' apply to Station and DISA Class of Service 3, 4 and 11. Allow and Deny entries for Table 'C' apply to Station and DISA Class of Service 5 and 6. Allow and Deny entries for Table 'D' apply to Station and DISA Class of Service 8, 10 and 11. Allow and Deny entries for Table 'E' apply to Station and DISA Class of Service 9, 10 and 11.

For each Table, there can be up to 50 separate Allow and Deny entries (total of 100) of up to 20 digits. Entries in the Tables can be any digit (0-9), "#" as a wild card (don't care) digit, or "*" as an end of entry digit.

Based on Table entries, stations or DISA users are allowed or denied dialing specified numbers. The following rules apply to establishing restrictions based on the Table entries:

- If the appropriate Allow/Deny Table pair has no entries and COS is 2 to 4, or 8 to 9, no restrictions are applied. If the COS is 5 or 6, no Long Distance dialing is allowed.
- If entries are only made in the Allow Table, only those numbers entered can be dialed, all other dialed numbers will be restricted.
- If entries are only made in the Deny Table, only those numbers entered will be restricted and all other numbers can be dialed.
- When there are entries in both the Allow and Deny Table pair, if the number is in the Deny Table, the number will be restricted otherwise the number can be dialed without restriction.

PROCEDURE:	
TOLL EXCEPTION TABLES PRESS FLEX KEY (01-10)	1. Press the **[PGM]** button and dial 224.
ALLOW TABLE A ENTER BIN NO (01-50)	Press Flex button 1~10: Button 1: Allow Table A Button 2: Deny Table A Button 3: Allow Table B Button 4: Deny Table B Button 5: Allow Table C Button 6: Deny Table C Button 7: Allow Table D Button 8: Deny Table D Button 9: Allow Table E Button 10: Deny Table E
	Use the dial-pad to select a bin number (01~50).
	Use the dial-pad to enter the dialed number desired (up to 20 digits). Use "#" as a wild card to represent any digit and, at the end of an entry, dial "*" to end the entry. To delete a Toll Table entry, press the **[SPEED]** button.
	Press the **[Save]** button to store the data entry.

3.3.9.3 Emergency Code Table – PGM 226

The Emergency Code Table is used to identify emergency numbers which, when dialed, will override all COS dialing restrictions. An Emergency Code number may be up to fifteen (15) digits in length.

PROCEDURE:	
EMERGENCY SVC CALL ENTER BIN NO (01 - 10)	1. Press the **[PGM]** button and dial 226 and enter the bin number (Ex.01).
EMERGENCY SVC CALL BIN 01: 911	Use the dial-pad for the desired Emergency code entry, 01 ~ 10.
	Use the dial-pad to enter the Emergency code number. After entering the number dial "*", the number is displayed with an "E" indicating END of entry.
	Press the **[Save]** button to store the data entry.

3.3.9.4 Authorization Codes Table – PGM 227

Authorization codes are employed to control access to the system resources and facilities. Walking COS, CO/IP Group access, DISA callers, and certain Call Forward types may require input of a valid Authorization code. Codes up to 12 digits may be entered into the system database. The station has an associated Station Authorization bin, which can be assigned by the user from the user's telephone. The System Authorization codes are stored in System bins and are entered or deleted only through Admin.

PROCEDURE:	
AUTHORIZATION CODE F1:STA_AUTH F2:SYS_AUTH	1. Press the **[PGM]** button and dial 227.
	Press Flex button 1 or 2 to select the desired entry: Flex button 1 - Station authorization code Flex button 2 - System Authorization code
	For Flex button 1 enter a station range, enter the same station number twice for a single station entry. Then press Flex button 1 to set the password and Flex button 2 to set the COS (Day, Night and Timed).
	Use the dial-pad to enter the Authorization code or COS.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.4-1 AUTHORIZATION CODES (PGM 227)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	AUTHORIZATION CODE ENTER STA RANGE	Authorization code for each station can be assigned up to 12 digits in length (enter STA range (Ex. 100110)).		
1-1	STATION AUTHORIZATION 100-110 :	Authorization codes for system-wide use can be assigned up to 12 digits in length.	100-239	
2	AUTHORIZATION CODE ENTER BIN NO(001-360)	Selects attribute, code or Class of Service.	eMG80:001~360, eMG800:1~1200	
	SYSTEM AUTHORIZATION F1:SET_PWD F 2:SET_COS	Press Flex button 1 or 2 to select the desired entry: Flex button 1 – Set Password Flex button 2 – Set class of service	Flex button1-2	
2-1	SYSTEM AUTHORIZATION 001:	A password of up to 12 digits is defined.		
2-2	SET COS : F1:DAY F 2:NIGHT F 3:TIME	Establishes the COS associated with the System Authorization code during Day, Night and Timed Service modes.	Flex button1-3	

3.3.9.5 Customer Call Routing/VSF AA Table – PGM 228

The system incorporates IVR (Integrated Voice Response) capabilities called CCR (Customer Call Routing). After or during a VSF AA Announcement, a caller may dial a digit to select a destination or route for the call. The CCR/VSF-AA Routing Audio Text Table defines the destination associated with digits dialed by the caller in response to the VSF AA Announcement (01-70). Up to 70 single-level Audio Text menus may be assigned or, multi-level menu structures (maximum 70 levels) can be established using one menu as a destination for the previous level.

PROCEDURE:	
CUSTOM CALL ROUTING SELECT CCR TABLE (01-70)	1. Press the **[PGM]** button and dial 228 and select CCR table (Ex.01).
CCR TABLE 01 PRESS FLEX KEY (01-14)	Use the dial-pad to select a CCR Table index, 01~70. The index number 01-70 is the VSF Announcement number.

PROCEDURE:	
CCR TABLE 01 INPUT 1 : NOT ASSIGNED	2. Press a Flex button (1~13, 10=0) to assign a route for the associated CCR dialed digit. (11~13 is assigned to busy, no answer, error destinations) − Flex button 01-10 is matched with input dial digit from outside user. The flex key number 10 is matched with dial digit 0. − Flex button 11-13 is related with CCR re-route Busy / Error / No Answer destination – The destination type is Tone / Attendant / Hunt Group / VSF Announcement. Flex button 14 is CCR One Digit Only option. If this option is set to ON, user can dial only one digit. If this option is set to OFF, user can dial more than one digit. That means CCR or DISA service can be possible.
CCR TABLE 01 INPUT 1 : ...	Use the dial-pad to enter the Type and Value for Destination, refer to Table 3.3.9.5-1 for Type and value codes.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.5-1 CCR DESTINATIONS (PGM 228)

TYPE	DESCRIPTION
01	Route to a Station
02	Route to a Hunt Group
03	Route with System Speed Dial
04	Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
05	Route to VSF Announcement
06	Route to VSF Announcement and disconnect
07	Route to Networked Station
08	Conference Room
09	Internal Page (eMG80:1~35 / eMG800:1~100)
10	External page
11	All Call Page
12	Route to voice mail (station group/station number)
13	Company Directory (USA Only)
14	Record VM Greeting (USA Only)
15	UCS system conference group (eMG80:100~139 / eMG800:100~259)

3.3.9.6 Executive/Secretary Table – PGM 229

Stations can be paired as Executive/Secretary pairs so that when the Executive enters DND, intercom and transferred calls are automatically routed to the Secretary. An Executive may have only one Secretary however, a Secretary can be assigned to multiple Executives. A Secretary of one pair may be the Executive of another however, assignments that form a loop-back are not allowed. In addition, when active, the Secretary can be assigned to receive the Executive's voice messages, refer to Station Attributes III PGM 113 button 10.

PROCEDURE:	
EXEC/SEC PAIRS ENTER BIN NO (01-36)	1. Press the **[PGM]** button and dial 229 and enter the bin number (Ex.01).
EXEC/SEC PAIR 01 PRESS FLEX KEY(1-7)	Use the dial-pad to enter the desired Executive/Secretary pair bin.
	Press the desired Flex button; refer to Table 3.3.9.6-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.6-1 EXECUTIVE/SECRETARY PAIRS (PGM 229)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	EXEC/SEC PAIR 01 PAIR 1 : . . . /. . .	Assigns Executive/Secretary pair stations.		
2	CO CALL TO SEC (1:ON/0:OFF) : OFF	If desired, all incoming CO calls to the Exec. The call is routed to the Secretary's station regardless of the Executive's status.	0: OFF 1: ON	OFF
3	CALL EXEC IF SEC DND (1:ON/0:OFF) : OFF	If the Secretary is in DND, Executive calls can be routed back to the Executive.	0: OFF 1: ON	OFF
4	EXEC GRADE (01-12): 12	Higher (or equal) grade Executives can override the Executive/Secretary Forward feature (5th: ICM call to SEC) to call a lower grade Executive. Highest grade: 01, Lowest grade: 12.	01~12	12
5	ICM CALL TO SEC (1:ON/0:OFF) : OFF	If this option is ON, all internal calls to the executive station (except for calls from higher or same grade executive) are routed to the Secretary's station regardless of the Executive's status. 8801 Default value Korea, India, Israel, Turkey, Thailand : ON / Otherwise : OFF	0: OFF 1: ON	OFF
6	SEC. AUTO ANS (1:ON/0:OFF) : OFF	When executive call to the secretary who is in 'T' mode. The call will be answered by hands free mode if it is ON.	0: OFF 1: ON	OFF
7	EXEC GROUP (00-50) : 00	If Group is greater than 1, it works that lower grade executive can call to higher grade executive directly when they are same group.	00-50	00

3.3.9.7 Flexible DID Conversion Table – PGM 231

When the received DID digits are converted as in PGM 230, the resulting 4 digit number may be used as an index to the Flexible DID Conversion Table. The Flexible DID Table index is used when DID Line is assigned a Conversion type 2; refer to PGM 145 Flex button 2. Based on the index from PGM 230 and the system mode (Day, Night or Timed) a destination for the DID call is determined. The destination can be a VSF AA Announcement with CCR assigned allowing further routing of the call or can route using the ICLID routing tables.

PROCEDURE:	
FLEX DID CONV TABLE F1:INPUT F2:INIT F3:DEL	1. Press the **[PGM]** button and dial 231.
FLEX DID CONV TBL INPUT ENTER BIN NO (0000-9999)	Select Flex button 1~3: Flex button 1: Input new data Flex button 2: Initialize Table Flex button 3: Delete entry Enter the bin number (Ex.0001)
TABLE BIN 001 PRESS FLEX KEY (1-9)	Use the dial pad to enter a Table index (0000~9999).
	Press Flex button 1~9 to select the desired destination, refer to Table 3.3.9.7-1.
	Use the dial pad to enter the desired type and value for the destination, refer to Table 3.3.9.7-2.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.7-1 FLEXIBLE DID CONVERSION (PGM 231)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	TABLE 001 NAME ……....	Name associated with the destination.	11 characters	
2	TABLE 001 DAY DEST NONE (01-15)	Destination setting for Day Ring mode.	01-15	
3	TABLE 001 NIGHT DEST NONE (01-15)	Destination setting for Night Ring mode. Table 3.3.9.7-2.	01-15	
4	TABLE 001 TIMED_R DEST NONE (01-15)	Destination setting for Timed Ring mode. Table 3.3.9.7-2.	01-15	
5	TABLE 001 REROUTE DEST NONE (01-15)	Destination setting for Reroute Dest mode. Table 3.3.9.7-2.	01-15	

Table 3.3.9.7-1 FLEXIBLE DID CONVERSION (PGM 231)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
6	TABLE 001 USE ICLID (1:ON/O:OFF) : OFF	A DID Conversion Table index can be assigned to employ ICLID routing, section 3.3.8.4.	0: OFF 1: ON	OFF
7	TABLE 001 AUTO RING TBL (00-16),16:N/A) : 00	A DID Conversion Table Index can be assigned to employ an Auto ring mode table, section 3.3.9.9.	00-16	00
8	TABLE 001 MOH : (00-10) REFER TO CO HOLD(00)	A Music source is assigned so that calls to the destination receive audio from the source in place of ring-back tone.	00-10 (00: Refer to CO Hold 01: INT Music 02: EXT Music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3	Refer to CO Hold
9	TABLE 001 RING TONE (00-16, 0:N/A) : 00	Ring tone of destination is followed this ring tone value.	2 digits. 00~16	00

Table 3.3.9.7-2 FLEXIBLE DID DESTINATION (PGM 231)

TYPE	DESCRIPTION
01	Route to a Station
02	Route to a Hunt Group
03	Route with System Speed Dial
04	Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
05	Route to VSF AA Announcement
06	Route to VSF AA Announcement and disconnect
07	Route to a Networking Station
08	Conference Room
09	Internal Page
10	External page
11	All Call Page
12	Voice Mail Box Group
	Voice Mail Box Station
13	ICLID Ring Assignment Table
14	Company Directory (USA Only)
15	Record VM Greeting (USA Only)

3.3.9.8 System Speed Zone Table – PGM 232

The System Speed Dial numbers can be grouped into zones. Only stations allowed can access numbers within a zone, allowing System Speed Dials to be partitioned. Each zone can be assigned to apply the appropriate Station and CO Line COS for the Speed Dial number prior to dialing.

PROCEDURE:	
SYSTEM SPEED ZONE PGM ENTER BIN NO (01-10)	1. Press the **[PGM]** button and dial 232 and enter the bin number (Ex.01).
SYSTEM SPEED ZONE 1 F1:ZN F2 :ST F3:TK F4:AK	Using the dial-pad, enter the zone number, 01~10.
	Press Flex button 1~3 for the desired zone characteristic, refer to Table 3.3.9.8-1.
	Using the dial pad, enter the desired data as indicated in Table 3.3.9.8-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.8-1 SPEED ZONE (PGM 232)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ENTER NEW ZONE RANGE ZONE 1 : 2200- 4999	Speed Dial Bin range for zone.	2200-4999	eMG80:2200~4999, eMG800:2200~9999
2	ENTER STA RANGE ZONE 1 : 100 – 239	Station range for zone.	100-239	eMG80:100~239, eMG800:1000~2199
3	SPEED ZONE 1 TOLL CHK (1:ON/0:OFF) : ON	Assignment to apply toll restriction.	0: OFF 1: ON	ON
4	SPEED ZONE 1 AUTH CHK (1:ON/0:OFF) : ON	Speed Dial Authorization Check for zone.	0: OFF 1: ON	ON

3.3.9.9 Auto Ring Mode – PGM 233

The system can automatically select the Ring and COS Mode based on time of day and day of week. Three Ring and COS modes are supported, Day, Night, and Timed modes. The ring assignments are as defined in CO/IP Ring Assignment - PGMs 144. The COS assignments are defined in the DISA COS - PGM 166.

The start times for Day, Night and start and end times for timed modes are entered for each day of week. When the Timed mode ends, the system reverts to the appropriate mode based on the Day/Night settings and the time-of-day. The Attendant can override the automatic selection and select the desired system Mode (Day, Night, and Timed). A separate Auto Ring Table can be established for each ICM Tenancy Group - PGM 125 (indices 1 ~ 15) and for the system (index 00).

PROCEDURE:	
WEEKLY TIME TABLE DIAL DIGIT (00-15)	1. Press the **[PGM]** button and dial 233 and enter Dial digit (Ex.00).(eMG80:00~15/eMG800:00~32)
WEEKLY TIME TBL 0 PRESS FLEX KEY (1-7)	Use the dial-pad to enter a tenant Table index or 00 for the system (00~15).
	Press the Flex button 1~7 for the desired day of week (Monday ~Sunday) followed by Flex button 1~3 for the desired ring mode (Day, Night, Timed), refer to Table 3.3.9.9-1.
	Use the dial-pad to enter a time (military time), 0000 to 2359.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.9-1 AUTO RING MODE ASSIGNMENT (PGM 233)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	MON DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Monday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
2	TUE DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Tuesday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
3	WED DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Wednesday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
4	THU DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Thursday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
5	FRI DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Friday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..

Table 3.3.9.9-1 AUTO RING MODE ASSIGNMENT (PGM 233)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
6	SAT DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Saturday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..
7	SUN DAY-09:00 NITE-18:00 TDS-..:.. TDE-..:..	Sunday DAY/NIGHT/TIMED ring mode start times and TIMED mode end times.	0000~2359	DAY: 9:00 NITE: 18:00 TDS: ..:.. TDE: ..:..

3.3.9.10 Voice Mail Dialing Table – PGM 234

When an external Voice Mail system is used that employs in-band signaling, a digit sequence must be defined for the system to signal various call characteristics to the Voice Mail system. The voice mail uses the sequences to determine appropriate announcements or further call routing. The Table permits the definition of digits as either a prefix or suffix to other digits (station number for mailbox identification). Sequences are defined for such call characteristics as Put Mail, Get Mail, No Answer call, etc.

PROCEDURE:	
VOICE MAIL DIALING TBL DIAL DIGIT (1-9)	1. Press the **[PGM]** button and dial 234.
	Use **the dial-pad** to enter a table entry (1~9), refer to Table 3.3.9.10-1.
	Use the dial-pad to select Prefix or Suffix and the digit sequence, use the **[MSG/CALLBK]** button to enter a Pause, refer to Table 3.3.9.10-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.10-1 VOICE MAIL DIAL (PGM 234)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VOICE MAIL 1 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to receive call to record a message. Put Mail	1: Prefix 2: Suffix Any digits	P#
2	VOICE MAIL 2 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to playback recorded messages. Get Mail	1: Prefix 2: Suffix Any digits	P##
3	VOICE MAIL 3 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to receive a call while the user is busy. Busy Mail	1: Prefix 2: Suffix Any digits	P#*3P
4	VOICE MAIL 4 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to receive a call while the user is in DND. DND Mail	1: Prefix 2: Suffix Any digits	P#*4P

Table 3.3.9.10-1 VOICE MAIL DIAL (PGM 234)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
5	VOICE MAIL 5 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to receive a call when the user did not answer. No Answer Mail	1: Prefix 2: Suffix Any digits	P#*5P
6	VOICE MAIL 6 PREFIX OR SUFFIX (1-2)	Code sent when the voice mail is to receive a call when a dialing error exists. Error Mail	1: Prefix 2: Suffix Any digits	P#*6P
7	VOICE MAIL 7 PREFIX OR SUFFIX (1-2)	It is reserved.	1: Prefix 2: Suffix Any digits	
8	VOICE MAIL 8 PREFIX OR SUFFIX (1-2)	It is reserved.	1: Prefix 2: Suffix Any digits	
9	VOICE MAIL 9 DISCONNECT [DIAL DGT_1]	Code sent when the voice mail is to disconnect a call. Disconnect Mail	1: Prefix 2: Suffix Any digits	*****

3.3.9.11 Registration & Fractional Module Table – PGM 235

When multiple iPECS eMG are located on the same LAN, it may be desirable to register add-on devices employing the Registration Table.

PROCEDURE:	
REGISTRATION TBL ENTER TBL NO(1-5)	1. Press the **[PGM]** button and dial 235 and enter Table number (Ex.1).
REG TBL 1: NO MAC INFO MAX PORT : 00, DEV ID:	Use the dial-pad to select a Table entry (1~5).
	Press the desired Flex button; refer to Table 3.3.9.11-1.
	Use the dial-pad to enter the desired data, refer to Table 3.3.9.11-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.11-1 MAC REGISTRATION (PGM 235)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	TBL 1: SET MAC ADDR MAC 1:	Enter the MAC address of the device to register.		
2	TBL 1: SET MAX PORT NO OF PORT : 00	Enter maximum number of ports (channels) for the device. For a 00 entry the system will accept physical port number.	00-99	00

Table 3.3.9.11-1 MAC REGISTRATION (PGM 235)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
3	TBL 1: DEVICE ID DEVICE ID :	Enter device ID when it has multiple device ID in Board/Gateway.	0-255	0 (N/A)

3.3.9.12 Mobile Extension Table – PGM 236

A mobile phone can be used in conjunction with an iPECS Phone. The Mobile phone can access system resources available to the user's wired phone and will receive ring for incoming iPECS calls. The user may be allowed to enable the Mobile extension and define the mobile number. The system can be defined to employ a specific CO/IP Line Group to place calls to the Mobile phone.

The Mobile Extension Table also defines Notification of new VSF messages. When a new message is received for a user in the VSF, the system will call the assigned 'Tel Number' notifying the user of the new message.

PROCEDURE:	
MOBILE EXTENSION TABLE ENTER STA NUMBER	1. Press the **[PGM]** button and dial 236 and enter STA number (Ex.100).
100 : MOBIL EXT ATTR PRESS FLEX KEY (01-14)	Use the dial-pad to enter the desired station number.
	Press the Flex button for the desired item; refer to Table 3.3.9.12-1.
	Use the dial-pad to enter the required data.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.12-1 MOBILE EXTENSION (PGM 236)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	100 : PGM AUTHORITY (1:ON/0:OFF) : OFF	The user may be allowed to activate the mobile extension feature.	0: OFF 1: ON	OFF
2	100 : USAGE DISABLE (0-2)	Mobile extension feature can be enabled and Fail Over to Mobile extension can be included	0: DISABLE 1: MOBILE EXT 2: FAIL OVER	DISABLE
3	100 : ACCESS CO GRP CO GRP : 01	CO group used to call (ring) the mobile extension.	eMG80:1-21 eMG800:1~201	01

Table 3.3.9.12-1 MOBILE EXTENSION (PGM 236)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
4	100 : TEL NUMBER ……..	Telephone number of the Mobile extension.		Not assigned
5	TABLE 001 CLI ……	When the mobile Telephone number and CLI do not match, the CLI entered here is used to authorize incoming calls from the mobile.		Not assigned
6	100 : HUNT CALL ENABLE (1:ON/0:OFF) : OFF	When the paired station is a member of a hunt group (ACD, Circular or Terminal), group calls can be sent to the active mobile extension.	0: OFF 1: ON	OFF
7	100 : VSF NOTIFY (1:ON/0:OFF) : OFF	Enables outbound notification by the system when the VSF has unheard messages.	0: OFF 1: ON	OFF
8	100 : NOTIFY RETRY CNT (1~9) : 3	Defines the number of attempts the system will make to complete a notification when receiving busy/no-answer.	1~9	3
9	100 : NOTIFY RETRY INT (1~3) : 3	Defines the time between notification attempts. If a notification fails, the system will retry after the timer expires.	1~3 (Minutes)	3
10	100 : NOTIFY BY MY CLI (1:ON/0:OFF) : OFF	When the system sends CLI to the mobile extension, the CLI can be either the original caller's CLI or the CLI of station.	0: OFF 1: ON	OFF
11	100 : CALL BACK (1:ON/0:OFF) : OFF	If it is set to "ON", incoming mobile extension call will be released before answered and system places a call to mobile extension. After mobile extension answers, the dial tone is provided and mobile extension can make internal or external call.	0: OFF 1: ON	OFF
12	100 : DELAY TIMER (000-255) : 000	Mobile extension call will be placed after delay time.	000~255	0
13	100 : ANNOUNCE (00-200) : 00	It can be announced for remote control.	0~200	0
14	100 : SUFFIX DID TBL T (1:ON/0:OFF) : OFF	It provide flexible DID table index when DID type 2 is used.	0: OFF 1: ON	OFF

3.3.9.13 Hot Desk Attributes – PGM 250

A Hot Desk station allows a user to login for access to the system features and resources. Once logged in, the user is provided access to system features and resources employing the database for the user's assigned station.

PROCEDURE:	
HOTDESK ATTRIBUTE PRESS FLEX KEY (1-3)	1. Press the **[PGM]** button and dial 250.
	Press the desired Flex button; refer to Table 3.3.9.13-1.
	Use the dial-pad to enter the appropriate data.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.13-1 HOT DESK ATTRIBUTES (PGM 250)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	NO OF AGENT (000-140) 000	Assign number of hot desk agents.	0-140	000
2	VIEW AGENT RANGE N/A	View the assigned station number for agents.		
3	AUTO LOGOUT TMR (hour) (00-24) : 00	A Hot desk station will return to inactive if the logged in user takes no action for the Auto Logout timer.	0~24 Hrs.	00

3.3.9.14 CO Call Rerouting – PGM 252

System can reroute incoming call to CO. If called number matched with compare digits of Table 252, the call are routed to Rerouting number.

PROCEDURE:	
CRR ATTRIBUTE PRESS FLEX KEY (1-3)	1. Press the **[PGM]** button and dial 252.
	Press the desired Flex button; refer to Table 3.3.9.14-1.
	Use the dial-pad to enter the appropriate data.
	Press the **[Save]** button to store the data entry.

Table 3.3.9.14-1 CALL REROUTING ATTRIBUTES (PGM 252)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ENABLE CRR (1:ON/0:OFF) : OFF	Enable CRR	0: OFF 1: ON	OFF
2	INIT CRR PRESS **[Save]** KEY	Initialize all data		
3	CRR ATTRIBUTES ENTER BIN NO (000-169)	If PGM 252-BTN1 is set 'ON', BTN3 is available. (Ex. enter the bin number 000)	000-169	
	CRR TABLE 000 PRESS FLEX KEY (1-4)	Press the desired Flex button, refer to Table 3.3.9.14-2	Flex button 1-4	

Table 3.3.9.14-2 CRR TABLE ATTRIBUTES (PGM 252)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	CRR 000 COMPARE CO GRP GRP NO (01-20) : 01	Enter group number for compare digits in incoming.	01-20	01
2	CRR 000 RECEIVE DGTS	Enter receive digits.		..
3	CRR 000 CO+TEL NUMBER	Enter co group (or individual co, access co) plus telephone number.		..
4	CRR 000 TYPE ...	N/A : press digit '0' NET TYPE : '1' for transit out DISA TYPE : '2' for using DISA	0-2	N/A

3.3.9.15 Digit Conversion Tables – PGM 270

The Digit Conversion Table index is assigned to the Station and CO line. And the digit conversion can be applied according to the Apply Time Type (Unconditional, Day/Night/Timed or LCR Day/Time) differently.

Each Table includes 200 entries of up to 16 digits; entries in the Tables can be any digit (01–15), or "*", "#". Each Index can be applied by Apply Option. (All/Station/CO line/Disable)

PROCEDURE:	
DIGIT CONVERSION TABLE ENTER TABLE NO (01–15)	1. Press the **[PGM]** button and dial 270 and enter the table number (Ex. 01).(eMG80 : 1-15 / eMG800:1-32)
01 DIGIT CONVERSION ENTER BIN NO (001–200)	2. Dial Digit Conversion Table Number (01–15) and enter the bin umber (Ex.001).
01/001 DIGIT CONV. PRESS FLEX KEY (01–18)	3. Dial conversion Bin No (001–200). − Flex 1: Apply Time Type − Flex 2: Dialed Digit − Flex 3: Unconditional Changed Digit − Flex 4−6: Day/Night Timed Changed Digit − Flex 7−15: LCR Time (Day/Time Zone Changed Digit) − Flex 16 : Ring mode table − Flex 17 : Apply Option − Flex 18: ARS CO Access CO
	4. Use the dial–pad to enter the dialed number.
	5. Press the **[Save]** button to store the data entry.

Table 3.3.9.15-1 DIGIT CONVERSION TABLE ATTRIBUTES (PGM 270)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01/001 APPLY T–TYPE (0–2): UNCONDITIONAL	The Apply time type to be applied when the dialed digit is dialed.	0: Unconditional 1: Follow DNT 2: Follow LCR	Unconditional
2	01/001 DIALED DIGIT ……..	The dialed digits	Max. 24 digits	
3	01/001 UNCOND CHANGED ……..	The dialed digits are converted to this digit stream unconditionally.	Max. 24 digits	
4	01/001 DAY CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW DNT' and current ring mode is DAY.	Max. 24 digits	
5	01/001 NIGHT CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW DNT' and current ring mode is NIGHT.	Max. 24 digits	
6	01/001 TIMED CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW DNT' and current ring mode is TIMED.	Max. 24 digits	

Table 3.3.9.15-1 DIGIT CONVERSION TABLE ATTRIBUTES (PGM 270)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
7	01/001 D1/T1 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR' and day zone is 1 and time zone is 1.	Max. 24 digits	
8	01/001 D1/T2 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR' and day zone is 1 and time zone is 2.	Max. 24 digits	
9	01/001 D1/T3 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR' and day zone is 1 and time zone is 3.	Max. 24 digits	
10	01/001 D2/T1 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR' and day zone is 2 and time zone is 1.	Max. 24 digits	
11	01/001 D2/T2 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR' and day zone is 2 and time zone is 2.	Max. 24 digits	
12	01/001 D2/T3 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR' and day zone is 2 and time zone is 3.	Max. 24 digits	
13	01/001 D3/T1 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR' and day zone is 3 and time zone is 1.	Max. 24 digits	
14	01/001 D3/T2 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR' and day zone is 3 and time zone is 2.	Max. 24 digits	
15	01/001 D3/T3 CHANGED ……..	The dialed digits are converted to this digit stream when Apply Time type is 'FOLLOW LCR' and day zone is 3 and time zone is 3.	Max. 24 digits	
16	01/001 RING MODE TBL (00–15) : 0	The dialed digits are converted according to the auto ring mode time.	00-15	0
17	01/001 APPLY OPTION (0–3): ALL	The Apply Option can be applied according to the caller.	0. All 1. Reserved 2. CO Line 3. Disable	All
18	01/001 ARS CO ACCESS CO	If a selected path is not available for some reason (All Busy, Line Fault etc.) after digit conversion, Alternative Route Selection (ARS) will connect calls using predefined designated ARS digit in digit conversion table.	Max. 8 Digits	

3.3.10 NETWORKING DATA – PGM 320 to 324

3.3.10.1 Network Basic Attribute – PGM 320

PROCEDURE:	
NET BASIC ATTRIBUTE PRESS FLEX KEY (1-8)	1. Press the **[PGM]** button and dial 320.
	Press the Flex button 1~8 for the desired setting, refer to Table 3.3.10.1-1.
	Use the dial-pad to enter the required data.
	Press the **[Save]** button to store the new data.

Table 3.3.10.1-1 NETWORK BASIC ATTRIBUTE (PGM 320)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	NET ENABLE (1:ON/:OFF) :OFF	Enable Networking function	0: OFF 1: ON	OFF
2	NET RETRY COUNT (00-99) :00	Not used.	00-99	00
3	NET CNIP ENABLE (1:ON/:OFF) :ON	The name of calling station is sent to the called system between iPECS eMG. CNIP is displayed at called party stations display based on the programming.	0: OFF 1: ON	ON
4	NET CONP ENABLE (1:ON/:OFF) :OFF	Reserved for future usage.	0: OFF 1: ON	OFF
5	NET SIGNAL METHOD (1:FAC/:UUS) :FAC	Select the information element type for QSIG supplementary service message.	0: UUS 1: FAC	FAC
6	NET CAS ENABLE (1:ON/:OFF) :OFF	Not used.	0: OFF 1: ON	OFF
7	NET VPN ENABLE (1:ON/:OFF) :OFF	Not used.	0: OFF 1: ON	OFF
8	NET CC RETAIN MODE (1:ON/:OFF) :OFF	Not used.	0: OFF 1: ON	OFF

3.3.10.2 Network Supplementary Attribute – PGM 321

PROCEDURE:	
NET SUPPLEMENTARY ATTR PRESS FLEX KEY (1-9)	1. Press the **[PGM]** button and dial 321.
	Press Flex button 1~9 for the desired setting, refer to Table 3.3.10.2-1.
	Use the dial-pad to enter the required data, refer to Table 3.3.10.2-1.
	Press the **[Save]** button to store the new data.

Table 3.3.10.2-1 NETWORK SUPPLEMENTARY ATTRIBUTE (PGM 321)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	NET TRANSFER MODE (1:RERT/0:JOIN) :REROUT	Select type for Transfer and Call forward – Rerouting or Join	1: RERT 0: JOIN	REROUT
2	TCP PORT FOR BLF (9500-9999) :9500	TCP port for sending BLF message to BLF Manager	0000-9999	9500
3	UDP PORT FOR BLF (9500-9999) :9501	UDP port for sending BLF message to BLF Manager	0000-9999	9501
4	BLF MANAGER IP 0 . 0 . 0 .0	IP Address of BLF Server used only when iPECS is configured with LDK systems for Voice Networking		0.0.0.0
5	DURATION OF BLF STS (01-99) 100 mm sec : 10	Duration of BLF status message sending to BLF Server.	01-99 (msec)	10
6	MULTI CAST IP 0 . 0 . 0 .0	IP address of Multicast for BLF service.		0.0.0.0
7	NET TRANS FAULT RCL TMR (001-300)sec : 010	Network transfer fault recall timer to be used when no responses from other systems.	001-300 (seconds)	10
8	VOIP CALL REROUTE CO GR (00-20) : 00	SIP outgoing call is rerouted via alternative backup CO line when call is failed or there is no answer during 3 seconds.	eMG80:1-20 eMG800:1~200	00
9	BLF SERVICE USAGE (1:ON/:OFF) :ON	Enable/disable for BLF manager function.	0: OFF 1: ON	ON

3.3.10.3 Network CO LINE Attribute – PGM 322

PROCEDURE:	
NET COL ATTRIBUTE ENTER CO RANGE	1. Press the **[PGM]** button and dial 322 and enter CO range (Ex. 0101).(eMG80 : 1-74 / eMG800: 1-600)
01-01 NET COL PGM PRESS FLEX KEY (1-2)	Use the dial-pad to enter the CO Range.
	Press the Flex button 1~2 for the desired setting, refer to Table 3.3.10.3-1.
	Use the dial-pad to enter the required data, refer to Table 3.3.10.3-1.
	Press the **[Save]** button to store the new data.

Table 3.3.10.3-1 NETWORK BASIC ATTRIBUTE (PGM 322)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01-01 NET CO GRP (00 – 24) : 00	Networking CO group programming for Networking call.	00-24	00
2	01-01 NET CO TYPE (0:PSTN/1:NET) : PSTN	Select network CO Line Type	0: PSTN 1: NET	PSTN

3.3.10.4 NET Numbering Plan Table – PGM 324

PROCEDURE:	
NET NUM PLAN TABLE ENTER BIN NO (000-251)	1. Press the **[PGM]** button and dial 324 and enter bin number (Ex.001).
001 NET NUM PLAN TBL PRESS FLEX KEY (01 – 16)	Use the dial-pad to enter the 3-digit Table index (bin) number, 000 ~ 251.
	Press the Flex button, 1~16 for the desired setting, refer to Table 3.3.10.4-1.
	Use the dial-pad to enter the required data, refer to Table 3.3.10.4-1.
	Press the **[Save]** button to store the new data.

Table 3.3.10.4-1 NETWORK NUMBERING PLAN (PGM 324)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	001 SYSTEM USAGE (0:NET/1:PSTN) : NET	Select system usage	0: NET 1: PSTN	NET
2	001 NUM PLAN CODE	'*' means any digits can be inserted between 0 ~ 9. The digits followed by '#' are an internal station number.	16 digits	
3	001 NUM PLAN CO GRP (00 - 24) : . .	'00' means an internal net station number	00-24	..
4	001 CPN INFORMATION PRESS FLEX KY (1-4)	Flex 1: ISDN CPN INFORMATION Flex 2: (Flex button 1- 4) 1: 00 CPN INFORMATION 01 2: 00 CPN INFORMATION 02 3: 00 CPN INFORMATION 03 4: 00 CPN INFORMATION 04	16 digits	
5	001 ALT SPD BIN (2000-4999) :	Alternative Dial Number (System SPD Bin) when the networking path has a fatal problem.	eMG80:2000~4999 eMG800:2000~9999	
6	DEST SYSTEM IP ADDR 0 . 0 . 0 . 0	IP Address of destination MPB system only when iPECS eMG is configured for Voice Networking.		0.0.0.0
7	DEST SYSTEM PORT NO (0000-9999) : 5588	Port Number of destination system for Networking.	0000-9999	5588
8	001 DIGIT REPEAT (0:NO/1:YES): NO	When the number plan code (Flex 2) is for PSTN call or transit-call, this number code can be enveloped in SETUP message or not whether if this field is set or not.	0: NO 1: YES	NO

Table 3.3.10.4-1 NETWORK NUMBERING PLAN (PGM 324)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
9	001 NET PSTN ENBLOCK (0:NO/1:YES) : NO	Choose “Transit-out Public Line” to En-block or Over-lap.	0: NO 1: YES	NO
10	001 CO ATD CODE CLI (1:ON/0:OFF) : OFF	Determine whether if Centralized ATD CLI is sent or not when slave system makes transit call.	0: OFF 1: ON	OFF
11	001 FIREWALL ROUTING (1:ON/0:OFF) : ON	Select IP address (Firewall IP address or Non-firewall IP address). If the destination system (VOIB) is in same VPN then Non-firewall IP address should be sent. Otherwise the firewall IP address should be sent. ON : Send firewall IP address OFF : Send Non-firewall (Internal) IP address	0: OFF 1: ON	ON
12	001 AUTHO CODE COS USE (0:NO/1:YES): NO	When there‘s a transit out call request from user of slave system by seizing CO line, apply COS according to the authorization code.	0: NO 1: YES	NO
13	001 SMDR DIAL HIDDEN (0:NO/1:YES): NO	Determine to display dialed digit of transit out call or not at the slave system; it can contain authorization code.	0: NO 1: YES	NO
14	001 NET PSTN CLI (0:NET/1:PSTN): NET	NET: Send network station number for CLI PSTN: Send full CLI (e.g., 02-450-1000)	0: NET 1: PSTN	NET
15	001 SITE NAME	It is comment field to set name of network site.	Max. 12 characters	
16	001 EMERGENCY RERTE TMR (00-10) : 00	When timer is ‘0’: The reroute emergency call is not work. When timer is set ‘1’~’10’: The reroute emergency call is activated after this timer. This is only work when PGM 112-18th is transit-out CO group.	00-10	00

3.3.10.5 Network Feature Code Table – PGM 325

PROCEDURE:	
NET FEATURE CODE TBL ENTER BIN NO (01-20)	1. Press the **[PGM]** button and dial 325 and enter the bin number (Ex.01).
01 NET FEATURE CODE TBL PRESS FLEX KEY (1-2)	Use the dial-pad to enter the bin no.
	Press the Flex button 1~2 for the desired setting, refer to Table 3.3.10.5-1.
	Use the dial-pad to enter the required data, refer to Table 3.3.10.5-1.
	Press the **[Save]** button to store the new data.

Table 3.3.10.5-1 NETWORK FEATURE CODE TABLE (PGM 325)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	01 NET FEATURE CODE	Networking Feature Code programming for Networking paging call.	16 digits	
2	01 NET DEST NONE (1-6)	Select network feature type (1-6) and dial associated number. • INT PAGE ZONE (eMG80:01-35/eMG800:1-100) • EXT PAGE ZONE : (1-1) • ALL CALL PAGE ZONE : (1-3 : 1(INT), 2(EXT), 3(ALL)) • DOOR OPEN : 1~2 • Conference Room (1-9) • Call park (eMG80:01-19/eMG800:1-200)	1 : INT PAGE 2 : EXT PAGE 3 : ALL CALL PAGE 4: DOOR OPEN 5:Conference Room (1-9) 6:Call park (01-19)	N/A

3.3.11 TNET (Centralized Networking) – PGM 330 ~ 336

In a Centralized Control TNET (Transparent Networking), remote devices may be registered to a Central MPB/MPB (CM) and to a Local MPB/MPB (LM). In this way, the CM maintains control of the remote device. Should the WAN connection between an LM and CM fail (2 second polling error), the LM will initiate operational control of the locally registered devices. Calls between the systems (CM & LM) can automatically shift to PSTN Modules registered with the LM for Fail-over operation. The configuration and characteristics of LMs and CM are configurable as is Fail-over operation.

3.3.11.1 TNET Basic Attributes – PGM 330

Each MPB in a Central Control network environment must be enabled for TNET operation in order to function as part of the network.

PROCEDURE:	
TNET BASIC ATTRIBUTES PRESS FLEX KEY (1 – 1)	1. Press the **[PGM]** button and dial 330.
TNET ENABLE (1:ON/0:OFF) : OFF	Press Flex button 1.
	Use the dial-pad to enable or disable TNET, Central Control networking.
	Press the **[Save]** button to store the new data.

3.3.11.2 TNET CM Attributes – PGM 331

Each LM (Local MPB), which is part of a Central Control Network, must be defined with the IP Address of the CM (Central MPB) as well as the LM configuration data that will be sent to the CM at the time the LM registers with the CM. The port counts define the ports, which are allocated in the CM database for use by devices registered to the LM. The number of ports defined in the database of each LM must be equal or less than the ports defined in the CM for the LM, see PGM 332, in order to register properly.

PROCEDURE:	
TNET CM ATTRIBUTES PRESS FLEX KEY (1 – 10)	1. Press the **[PGM]** button and dial 331.
	Press the Flex button, 1~6 for the desired setting, refer to Table 3.3.11.2-1.
	Use the dial-pad to enter the required data, refer to Table 3.3.11.2-1.
	Press the **[Save]** button to store the new data.

Table 3.3.11.2-1 TNET CM ATTRIBUTES (PGM 331)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	CM REGISTER REQ (1:ON/0:OFF) : ON	This field informs the LM to attempt registration with the CM. This field must be set to ON for proper registration.	0: OFF 1: ON	OFF
2	CM SERVER TYPE 0:LIK / 1:CM : LIK(0)	This field defines Central Call Manager type. The LIK is eMG/UCP even though the display is LIK.	0:LIK 1: CM	LIK
3	CM1 IP ADDRESS 0 .0 .0 .0	This field defines the IP address of the CM1 that will be used by the LM.	IPv4 address	
4	CM2 IP ADDRESS 0 .0 .0 .0	This field defines the IP address of the CM2 that will be used by the LM.	IPv4 address	
5	CM1 MAC ADDRESS 000000000000	This field defines the MAC address of the CM1 that will be used by the LM.		
6	CM2 MAC ADDRESS 000000000000	This field defines the MAC address of the CM2 that will be used by the LM.		
7	CM IPKTS PORT (0001 - 9999) :5588	In the TNET environment, the IP KTS protocol signaling UDP port is defined. At present this field is not used, do not change this port number.	0000-9999	5588

Table 3.3.11.2-1 TNET CM ATTRIBUTES (PGM 331)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
8	CM TOTAL PORT (000 – 999) : 011	This field defines the total number of ports the LM will request be allocated by the CM for devices attached to the LM. This value must be equal to or less than the port count in the CM for the LM devices.	000-999	000
9	POLLING COUNT (00 – 99) : 05	This field defines the maximum polling failures an LM considers a WAN fault.	00-99	05
10	POLLING INTERVAL (00 – 99) : 02	This field defines the interval time between LM to CM polling attempts.	00-99	02

3.3.11.3 TNET LM ATTRIBUTES – PGM 332

The CM (Central MPB/MPB) must be programmed with the MAC and IP address of each LM (Local MPB) in the Centralized Control network as well as the maximum configuration of each LM. The port counts define the ports, which are allocated in the CM database for use by devices registered to the LM. The number of ports defined in the database of each LM, sees PGM 331, must be equal to or less than the ports defined in the CM for the LM, in order to register properly. VoIP channels are needed to support RTP Packet relay or codec translation between other devices. The CO port count must include any VoIP channels required.

PROCEDURE:	
TNET LM ATTRIBUTES ENTER BIN NO(01-15)	1. Press the **[PGM]** button and dial 332.
TNET LM(01) ATTRIBUTES PRESS FLEX KEY (1- 4)	Use the dial pad to enter the bin number associated with the LM.
	Press the Flex button, 1~4 for the desired setting, refer to Table 3.3.11.3-1.
	Use the dial-pad to enter the required data, refer to Table 3.3.11.3-1.
	Press the **[Save]** button to store the new data.

Table 3.3.11.3-1 TNET LM ATTRIBUTES (PGM 332)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	LM(01) MAC ADDRESS 000000000000	This field defines the MAC address of the LM that will be part of the TNET environment and is used by the CM for authorization.	MAC address	

Table 3.3.11.3-1 TNET LM ATTRIBUTES (PGM 332)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
2	LM(01) IP ADDRESS 0 .0 .0 .0	This field displays the IP address of the LM.	IPv4 address	
3	LM(01) IPKTS PORT (0001 - 9999) :5588	In the TNET environment, the IP KTS protocol signaling UDP port is defined. At present this field is not used, do not change this port number.	0000-9999	5588
4	LM (01) TOTAL PORT (000 – 999) : 000	This field defines the total number of ports the LM will request be allocated by the CM for devices attached to the LM. This value must be equal to or more than the available port count in the LM.	000-999	000
5	LM (01) MULTICAST IP 239.20.19.1	This field defines the multicast IP address that could be used in TNET branch site.	IPv4 address	

3.3.11.4 FoPSTN Attributes – PGM 333

The Fail-over function allows the systems in a Centralized Control network (TNET) environment to complete calls from system to system over a PSTN (analog or digital) line should the WAN connection to the CM fail. A CO Gateway/Board must be registered to the LM for local control and access CO services. Users may call others in the normal manner and the call is routed over CO facilities to the remote CM. When calls are directed to a DID line at the receiving system, the system will select a line from the assigned CO Group and dial the Tel Number with the station number dialed as the trailing digits.

PROCEDURE:	
FoPSTN ATTRIBUTES PRESS FLEX KEY (1–3)	1. Press the **[PGM]** button and dial 333.
	Press the Flex button 1~3 for the desired setting, refer to Table 3.3.11.4-1.
	For Flex button 1 enable or disable FO. For Flex button 2, press the **[Save]** button to reset the FO table. For Flex button 3, dial the table bin number to input data.
	For Flex button 3, use the dial-pad to enter the required data, refer to Table 3.3.11.4-1.
	Press the **[Save]** button to store the new data.

Table 3.3.11.4-1 FAIL-OVER ATTRIBUTES (PGM 333)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ENABLE FoPSTN (1:ON/0:OFF) : ON	This field is used to enable or disable Fail-over operation from the CM or LM.	0: OFF 1: ON	OFF

Table 3.3.11.4-1 FAIL-OVER ATTRIBUTES (PGM 333)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
2	INIT FoPSTN TABLE PRESS **[Save]** KEY	This field is used to initialize the FO table.		
3	FoPSTN ATTRIBUTES ENTER BIN NO(000-199)			
3-1	FoPSTN 001 NUM PLAN xxxxxxxx	Station numbers associated with the remote system. A range can be indicated by using "*" to indicate the range.	Max 8 digits	
3-2	FoPSTN 001 CO GROUP GRP NO (00-21) : 01	This field defines the CO Group of the local system that will be used to place calls to the stations entered in the FO Numbering Plan, should WAN failure occur.	eMG80:1~20 eMG800:1~200	
3-3	FoPSTN 001 TEL NUMBER xxxxxxxxxxxxxxxxxx	This field defines the telephone number the system should dial to place a call to the stations entered in the FO Numbering Plan, should Wan failure occur. An "*" may be entered as a wild-card to indicate insertion of the dialed station number.		

3.3.11.5 TNET LM External Contact Attributes – PGM 334

Each LM incorporates relay contacts, which can be employed as a Door Lock Release. The contact activates a 3rd party Door Lock Release mechanism activated by dialing the Door Unlock code at a local station. Note assigning other functions to the contact may cause unexpected operation.

PROCEDURE:	
TNET LM EXT CONTACT ENTER BIN NO (01-15)	1. Press the **[PGM]** button and dial 334. The range is : eMG80 : 1-15 / eMG800: 1-32
LM(01) EXT CONTACT PRESS FLEX_KEY (1-4)	Select LM number
	Select Flex button 1~4 for the desired External Control contact.
	Use the dial-pad to enter desired data. 1. LBC + station number, (ex. 150) 2. Door Lock Release 3. External Page 1 access 4. External Page 2 access
	Press the **[Save]** button to store the External Contact data entry.

3.3.11.6 TNET LM Music Attributes – PGM 335

The CM does not provide BGM/MOH to an LM. The LM employs local BGM and MOH facilities, which reduces traffic load on the WAN and IP channel processors. The LM uses IP Multicast for local BGM and MOH transport.

PROCEDURE:	
TNET LM MUSIC ATTR ENTER BIN NO (01-15)	1. Press the **[PGM]** button and dial 335
MUSIC ASSIGN PRESS FLEX_KEY (1-3)	Select LM number
Refer to Table 3.3.11.6-1 DISPLAY	Select the desired Flex button; refer to Table 3.3.11.6-1.
	Use the dial-pad to select the desired Music Source, refer to Table 3.3.11.6-1.
	To save the Music Source, press the **[Save]** button.

Table 3.3.11.6-1 MUSIC SOURCES FOR MOH & BGM (PGM 335)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	BGM TYPE (0-3) MUSIC 1 (1)	Assigns the source for BGM.	00: Ring-back 01: Int music 02: Ext music 03: VSF MOH 04: SLTMOH1 05: SLTMOH2 06: SLTMOH3 07: SLTMOH4 08: SLTMOH5 09: VSFMOH2 10: VSFMOH3	Music 1
2	MOH TYPE (0-3) MUSIC 1 (1)	Assign the source for MOH.	00: Ring-back 01: Int music 02: Ext music 03: VSF MOH 04: SLTMOH1 05: SLTMOH2 06: SLTMOH3 07: SLTMOH4 08: SLTMOH5 09: VSFMOH2 10: VSFMOH3	Music 1
3	INT/EXT1 MUSIC (0:INT/1:EXT1): INT	Assigns the input for source 1 (Internal or External)	0: Internal 1: Ext. Music 1	Internal

3.3.11.7 TNET LM Alarm Attributes – PGM 336

The LM incorporates circuitry to monitor an external contact. This contact is most often employed as an Alarm indicator or Doorbell. The Alarm attributes define the operation of the monitoring circuitry. For the Alarm, the signal to the LM stations can be repeating or a single burst, the former is often desired. For the Doorbell, a single tone is sent each time the contact activates.

PROCEDURE:	
TNET LM ALARM ATTR ENTER BIN NO (01-15)	1. Press the **[PGM]** button and dial 336.
LM(01) ALARM ATTR PRESS FLEX KEY (1-4)	Select LM number
	Press the desired Flex button; refer to Table 3.3.11.7-1.
	Use the dial-pad to enter desired data for the attribute, refer to Table 3.3.11.7-1.
	Press the **[Save]** button to store the data entry.

Table 3.3.11.7-1 ALARM ATTRIBUTES (PGM 336)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ALARM ENABLE (1:ON/0:OFF) : OFF	This parameter enables the external contact monitoring circuitry.	0: OFF 1: ON	OFF
2	ALARM CONTACT TYPE (1:CLOSE/0:OPEN) : CLOSE	This parameter establishes the contact state that will activate the Alarm, close or open.	0: Open 1: Close	CLOSE
3	ALARM/DOORBELL MODE (1:ALARM/0:BELL): ALARM	The contact can be treated to function as a doorbell instead of an alarm.	0: Bell 1: Alarm	ALARM
4	ALARM SIGNAL MODE (1:RPT/0:ONCE) : RPT	The assigned stations will receive a Repeating signal or single burst (ONCE) of alarm tone.	0: Once 1: Repeat	RPT

3.3.12 Zone Data – PGM 436 - 441, 444

Zone data is a tool employed to easily manage the characteristics of groups of devices under the control of an MPB. Often, devices are installed in groups with common characteristics. Such devices can be grouped to a Zone to define common characteristics including Country Code, DSCP, RTP packet handling, etc. Common attributes are defined at the device, Zone and Inter-zone level. Device settings have priority over Zone settings, while Zone settings have priority over system settings.

Generally, transport of RTP packets should be a peer-to-peer communication over either a LAN or VPN. If iPECS devices are separated by a NAPT server or direct peer-to-peer communications is not available, packet relay must be employed to assure communication. In packet relay, RTP packets are received by a local VoIP channel (MPB or VOIB), which is under control of the MPB, and the IP address is translated from a public to the device's private address. The VoIP channels implement a secure channel using IPSec protocol. Devices can be assigned as part of an "RTP Relay group" to use the same VoIP channels to implement relay of RTP packets. Packet relay groups also provide for conversion of multi-cast packets from the MPB to uni-cast and back again at the group level to multi-cast. Note packet relay requires an MPB or VoIP channel be available locally for each simultaneous call that requires packet relay. Programs 436 to 441 define device zone assignments and zone configurations. These programs are available only in Web admin. Holiday and Vacation assignments for each zone are defined in Program 444.

3.3.12.1 Zone Holiday Assignment – PGM 444

Holidays and vacation day intervals for each zone can be established to define a specified Service mode (Day, Night, and Timed) Up to 40 holidays and 5 vacation intervals can be defined.

PROCEDURE:	
ZONE HOLIDAY ASSIGNMENT ENTER BIN (01-32)	1. Press the **[PGM]** button and dial 444 and enter the bin number (Ex.01).
ZONE(01) HOLIDAY ATTR PRESS FLEX KEY (1-3)	Use the dial-pad to enter the bin (Zone) number (01~32).
	Press the Flex button, 1 ~ 3, for the desired setting, refer to Table 3.3.12.1-1.
	Use the dial pad to enter the required data, refer to Table 3.3.12.1-1.
	Press the **[Save]** button to save any changes.

Table 3.3.12.1-1 ZONE HOLIDAY ASSIGNMENT (PGM 444)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	ZONE(01) RING MODE(0-3) TIMED-R	Enter the desired Service mode for the Holiday or Vacation.	0 -3 0: DAY 1: NIGHT 2: TIMED 3: N/A	TIMED
2	ZONE(01) VACATION ENTER BIN NO(1-5)	Assign a date range for the vacation entering the start and end dates as yymmdd - yymmdd.	12 digits	None
3	ZONE(01) HOLIDAY ENTER BIN NO(01-40)	Assign a date for the holiday for the Zone as MMDD.		None

3.3.13 GREEN MODE

The system can disable the power of a Digital Phone or SLT (Single Line Telephone) installed in the system at night or during holiday mode. The power On/Off can be controlled by Web Admin manually or automatically according to the assigned power On/Off time.

3.3.13.1 Green mode activation – PGM 500

It is applied for SLIB, DSIB and HYIB. Regarding the exact board related to terminal, refer to iPECS eMG Hardware Description and Installation Manual.

PROCEDURE:	
GREEN MODE ACTIVATION PRESS FLEX KEY (1-4)	1. Press the **[PGM]** button and dial 500.
	Press the Flex button, 1 ~ 4, for the desired setting, refer to Table 3.3.13.1-1.
	Use the dial pad to enter the required data, refer to Table 3.3.13.1-1.
	Press the **[Save]** button to save any changes.

Table 3.3.13.1-1 GREEN MODE ACTIVATION (PGM 500)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	POWER SAVE USAGE (1:EN/0:DIS) : DISABLE	Enable or Disable power usage.	0: Disable 1: Enable	DISABLE
2	POWER ON/OFF (1:ON/0:OFF) : ON	Power ON/OFF manually all of stations in Power Save used board.	0: OFF 1: ON	ON
3	POWER SAVE MODE PRESS SLOT BTN (F1-F6)	Enables or Disables Power Save Usage Mode of each board.	Flex button1-6	
4	POWER CURRENT STATE CHECK SLOT BTN (F1-F6)	Displays the current status of board power ON/OFF.	Flex button1-6	

3.3.13.2 Green mode time setting – PGM 501

It is applied for SLIB, DSIB and HYIB. Regarding the exact board related to terminal, refer to iPECS eMG Hardware Description and Installation Manual.

PROCEDURE:	
GREEN MODE TIME ENTER WEEK DAY NO (1-7)	1. Press the **[PGM]** button and dial 501 and enter the day from 1 to 7 by dial pad (Ex.1).
(MON) GREEN MODE TIME F1:ON TIME F2:OFF TIME	Press the desired Flex button 1 or 2.
	Press the Flex button, 1 ~ 2, for the desired setting, refer to Table 3.3.13.2-1.
	Use the dial pad to enter the required data, refer to Table 3.3.13.2-1.
	Press the **[Save]** button to save any changes.

Table 3.3.13.2-1 GREEN MODE TIME (PGM 501)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	POWER ON TIME (HH:MM) NOT ASSIGNED	Enable power on time		Not assigned
2	POWER OFFIME (HH:MM) NOT ASSIGNED	Enable power off time		Not assigned

3.3.14 INITIALIZATION — PGM 450

The system has been pre-programmed with certain features, which are based on the default database. The defaults are loaded into memory when the system is initialized. The system should always be initialized when installed or the database is suspected of being corrupt. The system can be initialized manually during installation, refer to the ***iPECS eMG Hardware Description & Installation Manual***.

This program allows all or any of several distinct portions or the database to be initialized, returned to default.

PROCEDURE:	
INITIALIZATION PRESS FLEX KEY (01-17)	1. Press the **[PGM]** button and dial 450.
	Select a Flex button to initialize the desired data, refer to Table 3.3.14-1.
	Press the **[Save]** button, the selected data is initialized and confirmation tone is received.

Table 3.3.14-1 INITIALIZATION DATA (PGM 450)

BTN	DISPLAY	REMARK
1	INITIALIZATION FLEX NUM PLAN	It will initialize numbering plan.
2	INIT STATION DATA STATION DATA(ENT STA RNG)	It will initialize station attributes for selected stations.
3	INIT COL DATA COL DATA(ENT COL RNG)	It will initialize CO line attributes for selected CO lines.
4	INIT COL DATA SYSTEM DATA	It will initialize system attributes.
5	INITIALIZATION STATION GROUP	It will initialize hunt attributes.
6	INITIALIZATION ISDN TABLES	It will initialize ISDN related attributes. (MSN/Flexible DID, COLP, DID conversion)
7	INITIALIZATION SYSTEM TIMER	It will initialize system timer attributes.
8	INITIALIZATION TOLL TABLES	It will initialize toll tables.

Table 3.3.14-1 INITIALIZATION DATA (PGM 450)

BTN	DISPLAY	REMARK
9	INITIALIZATION LCR DATA	It will initialize LCR attributes.
10	INITIALIZATION OTHER TABLES	It will initialize miscellaneous tables. (Exec/Sec, CCR, Prefix, Authorization code, Auto ring mode, VM prefix, System SPD Zone, Multicast table, Mobile Extension)
11	INITIALIZATION FLEX BUTTON	It will initialize flexible button and DSS/LSS.
12	INITIALIZATION NET DATA	It will initialize networking attributes.
13	INITIALIZATION ALL DATA	It will initialize all programs.
14	SYSTEM RESTART RESTART NOW	It will restart the MPB.
15	UNUSED	
16	INITIALIZATION PERSONAL GROUP	It will initialize Personal Group.
17	INITIALIZATION Default password *	It will initialize(remove) password if it is *
18	INITIALIZATION HOTEL DATA	

3.3.15 PRINT-OUT DATABASE — PGM 451

The system can output all or portions of the system database in order to provide a 'hard-copy'. The data is output over the appropriate Serial port (Serial 1 or Serial 2).

PROCEDURE:	
DATABASE PRINT OUT PRESS FLEX KEY (01-22)	1. Press the **[PGM]** button and dial 451.
	Select Flex button 1~22 to output the desired data, refer to Table 3.3.15-1.
	For Station, Station Flex buttons, and CO/IP line data, use the dial pad to enter the desired range for stations or CO/IP lines, or for all skip this step.
	Press the **[Save]** button, after output, confirmation tone is heard.

Table 3.3.15-1 DATABASE PRINT OUT (PGM 451)

BTN	DISPLAY	REMARK
1	DATABASE PRINT OUT FLEX NUM PLAN	
2	DATABASE PRINT OUT IP SETTING PLAN	
3	DATABASE PRINT OUT STA DATA(ENT STA RNG)	A station range must be entered to output the Station data.
4	DATABASE PRINT OUT COL DATA(ENT COL RNG)	A CO/IP line range (01~21) must be entered to output CO/IP data.
5	DATABASE PRINT OUT SYSTEM DATA	
6	DATABASE PRINT OUT STATION GROUP	
7	DATABASE PRINT OUT ISDN TABLES	
8	DATABASE PRINT OUT SYSTEM TIMER	
9	DATABASE PRINT OUT TOLL TABLES	

Table 3.3.15-1 DATABASE PRINT OUT (PGM 451)

BTN	DISPLAY	REMARK
10	DATABASE PRINT OUT LCR DATA	
11	DATABASE PRINT OUT OTHER TABLES	
12	DATABASE PRINT OUT NATION SPECIFIC	
13	DATABASE PRINT OUT FLX BTN(ENT STA RNG)	A station range must be entered to output the Station Flex button data. Data may be output in 20 or 10 character format, see Flex button 17 below.
14	DATABASE PRINT OUT ALL DATA	
15	DATABASE PRINT OUT LCD PRINT(0-2):NORMAL 24	
16	DATABASE PRINT OUT TO QUIT PRESS **[Save]**	
17	STRING LENGTH (1:20/0:10): 20(CHAR)	The Station Flex button print out can be provide in a 20 or 10 character format, default is 20 characters.
18	DATABASE PRINT OUT BOARD ATTRIBUTES	
19	DATABASE PRINT OUT NETWORKING TABLE	
20	DATABASE PRINT OUT HOTEL DATA	
21	FLEX BTN LCD PRINT STR LEN(0-1): 20	Print out strings those are used in flexible button to display the content.
22	WORKING LCD PRINT	Print out strings those are used to activate some features.

3.3.16 VIRTUAL TRACE DIP-SWITCH — PGM 452

The Virtual Trace Dip-switch is used to enable and disable traces for various functions as defined in Table 3.3.16-1.

PROCEDURE:	
VIRTUAL TRACE DIP SW PRESS FLEX KEY (01-22)	1. Press the **[PGM]** button and dial 452.
	To enable trace, press the desired trace button 1-9. The Flex button LEDs indicate trace setting, On/Off, press the desired Flex button to toggle Trace Enable, LED on: trace enable LED off: trace disabled.
	To enable selected trace settings, press the **[Save]** button.

Table 3.3.16-1 VIRTUAL TRACE DIP-SWITCH (PGM 452)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VIRTUAL TRACE DIP SW CALL TRACE : (OFF)	'Call Trace' is enabled for output.	0: OFF 1: ON	OFF
2	VIRTUAL TRACE DIP SW VOIP TRACE : (OFF)	VoIP Trace is enabled for output.	0: OFF 1: ON	OFF
3	VIRTUAL TRACE DIP SW HTTP TRACE : (OFF)	HTTP Trace is enabled for output.	0: OFF 1: ON	OFF
4	VIRTUAL TRACE DIP SW MULTICAST TRACE : (OFF)	Multicast Data (normally registration data between MPB and local mode device) Trace is enabled for output.	0: OFF 1: ON	OFF
5	VIRTUAL TRACE DIP SW CTI TRACE : (OFF)	CTI Device Trace is enabled for output.	0: OFF 1: ON	OFF
6	VIRTUAL TRACE DIP SW RAW DATA TRACE : (OFF)	Detailed Data Trace is enabled.	0: OFF 1: ON	OFF
7	VIRTUAL TRACE DIP SW MPMP TRACE: (OFF)	MPB to MPB Data Trace is enabled for output.	0: OFF 1: ON	OFF
8	VIRTUAL TRACE DIP SW CPU RE TRACE: (OFF)	CPU Redundancy Data Trace is enabled for output. It is not used.	0: OFF 1: ON	OFF
9	VIRTUAL TRACE DIP SW MISU/VMIU TRACE:(OFF)	MISU/VMIU Trace is enabled for output.	0: OFF 1: ON	OFF
10	VIRTUAL TRACE DIP SW DSP TRACE (OFF)	DSP Trace is enabled for output.	0: OFF 1: ON	OFF

Table 3.3.16-1 VIRTUAL TRACE DIP-SWITCH (PGM 452)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
11	VIRTUAL TRACE DIP SW SIP TRACE (OFF)	SIP Trace is enabled for output.	0: OFF 1: ON	OFF
12	VIRTUAL TRACE DIP SW ISDMR TRACE (OFF)	ISMDR Trace is enabled for output.	0: OFF 1: ON	OFF
13	VIRTUAL TRACE DIP SW SIP MSG TRACE (OFF)	SIP MSG Trace is enabled for output.	0: OFF 1: ON	OFF
14	VIRTUAL TRACE DIP SW FULL SIP TRACE (OFF)	FULL SIP Trace is enabled for output.	0: OFF 1: ON	OFF
15	VIRTUAL TRACE DIP SW HOTEL TRACE (OFF)	Hotel trace is enabled for output.	0: OFF 1: ON	OFF
16	VIRTUAL TRACE DIP SW SIP EXT TRACE (OFF)	SIP EXT Trace is enabled for output.	0: OFF 1: ON	OFF
17	VIRTUAL TRACE DIP SW DEBUG TRACE (OFF)	DEBUG Trace is enabled for output.	0: OFF 1: ON	OFF
18	VIRTUAL TRACE DIP SW IPATD TRACE (OFF)	IPATD Trace is enabled for output.	0: OFF 1: ON	OFF
19	VIRTUAL TRACE DIP SW ISDN TRACE (OFF)	ISDN Trace is enabled for output.	0: OFF 1: ON	OFF
20	VIRTUAL TRACE DIP SW SPI TRACE (OFF)	SPI Trace is enabled for output.	0: OFF 1: ON	OFF
21	VIRTUAL TRACE DIP SW DECT T RACE (OFF)	DECT Trace is enabled for output.	0: OFF 1: ON	OFF
22	VIRTUAL TRACE DIP SW HTTPXML T RACE (OFF)	HTTPXML Trace is enabled for output.	0: OFF 1: ON	OFF

3.3.17 VIRTUAL DIP-SWITCH — PGM 453

The Virtual Dip Switch is employed to change from in-band to SMDI for External Voice Mail communications and manually poll each IP KTS device.

PROCEDURE:	
VIRTUAL DIP SWITCH PRESS FLEX KEY (1-6)	1. Press the **[PGM]** button and dial 453.
	To enable trace, press desired Flex button 1~6. The Flex button LEDs indicates Dip switch setting, On/Off. Press the desired Flex button to toggle setting, LED On: enabled LED Off: disabled
	To enable call trace, press the **[Save]** button.

Table 3.3.17-1 VIRTUAL DIP-SWITCH (PGM 453)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	VIRTUAL DIP SWITCH DEVICE POLLING: (ON)	'Device polling'. If enabled (On), the system will check each registered device, Gateway/Board and iPECS Phone to determine if the device is alive or not.	0: OFF 1: ON	ON
2	VIRTUAL DIP SWITCH SMDI SETTING: (OFF)	SMDI setting is enabled for output.	0: OFF 1: ON	OFF
3	VIRTUAL DIP SWITCH MULTICAST LED: (OFF)	If this value is set, the LED commands from MPB will be sent to Gateway/boards and terminals in the multi-cast mode.	0: OFF 1: ON	OFF
4	VIRTUAL DIP SWITCH AUTO NEGO: (MANUAL)	This field enables negotiation of speed between the LAN switch port and the system.	0: AUTO 1: MANUAL	MANUAL
5	VIRTUAL DIP SWITCH FULL-HALF: (FULL)	The duplex mode of LAN connections can be set according to this field.	0: FULL 1: HALF	FULL
6	VIRTUAL DIP SWITCH 10-100 TX: (100)	The speed of the Ethernet interface is established based on this field, 10 Base T or 10/ 100 Base T.	0: 100 1: 10	100

3.3.18 DECT ATTRIBUTES — PGM 491

DECT Attributes define functions associated with the DECT equipment and operation. Generally, the entry will turn the feature ON (enable) or OFF (disable).

PROCEDURE:	
DECT ATTRIBUTES PRESS FLEX KEY (1-4)	1. Press the **[PGM]** button and dial 491.
	Press the Flex button for the desired Attribute; refer to Table 3.3.18-1.
	Use the dial pad to enter the required data.
	Press the **[Save]** button to store the data entry.

Table 3.3.18-1 DECT ATTRIBUTES (PGM 491)

BTN	ATTRIBUTE/DISPLAY	DESCRIPTION	RANGE	DEFAULT
1	AUTO CALL RLS (1:ON/0:OFF) : OFF	If enabled, when the other party of an active internal call disconnects, GDC-400H/450H/500H returns to idle.	0: OFF 1: ON	OFF
2	BASE FAULT ALARM (1:EN/0:DIS) : DISABLE	If enabled, DECT Base station (GDC-600BE) alarms are sent to the Attendant.	0: Disable 1: Enable	Disable
3	CHAIN FAULT ALARM (1:EN/0:DIS) : DISABLE	Not used.	0: Disable 1: Enable	Disable

4. WEB SERVICE

4.1 General

The iPECS eMG incorporates a Web Server, which is employed by the system's Web Service. Using a Web browser the system's Web Server can be accessed and the database managed in a user-friendly environment. In addition to modifying the system database, Web Admin provides for Maintenance such as system file upload, remote upgrade, database download and maintenance functions.

We provide On-line web user guide to a user. You can get the information about the frequent use of features by clicking [User's guide] in the login page.

The default database includes assignment of a private IP address to the system. This address (10.10.10.2) may be used to access the system from the LAN. However, a routable IP address must be assigned for access from a remote location.

To access the iPECS Web Server requires:

1) Operating iPECS series system
2) IP address assigned in the system and is known
3) TCP port assigned for the KSU LAN port and is known
4) iPECS eMG connected to an accessible LAN
5) iPECS eMG password (Keyset Admin, Remote access, and CID) if any, is known

4.1.1 PC/Browser

- MS Explore 10.0, Chrome 24.0, Firefox 18.0 or higher version is recommended (HTML5 support required)
- Windows PC, at least 32MB RAM (64MB or more RAM is recommended)
- NIC (Network Interface Card)

4.1.2 Environment for LAN connection

- IEEE 802.3, 10/100 Base T
- Static/DHCP addressing
- Firewall, requires Network Administrator to allow access.
- Remote access requires a routable IP address for the iPECS eMG Web Server. This must be assigned to the system prior to access.

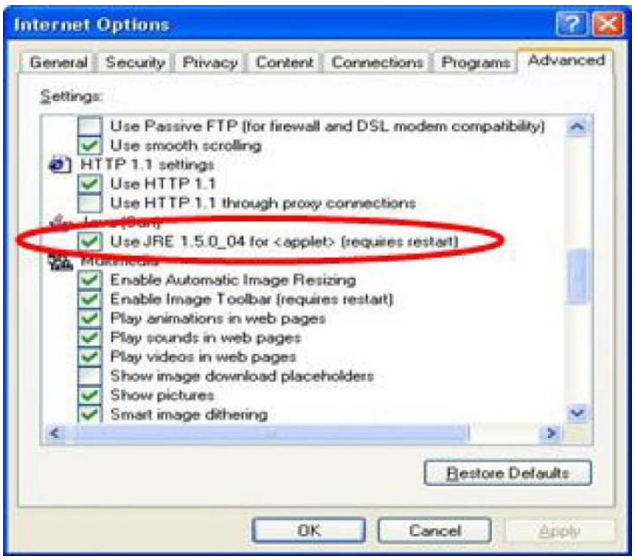
4.1.3 Web Browser setting

Web browsers may store (cache) a copy of the iPECS Web pages in a cache memory. The Web browser may use these copies to provide a “quick view”. If the Web page has been altered by data entered in Station Admin or a file upgrade, the cached copy will be out-of-date and could cause unexpected system operation. To assure proper page views and data entry, the browser should be set to eliminate the use of the cached pages. For Explorer, in “Internet Options”, enable refresh on “Every visit to the page”, for other browser, the procedure may be different.

4.1.4 Password Encryption

When enabled in PGM 162, iPECS eMG implements decryption of the password employing RC-6 block encryption. iPECS eMG employs a Sun Java Virtual Machine applet to implement AES encryption. The PC entering the Password must have a JAVA Virtual Machine and the JRE (Java Runtime Environment) Explorer option enabled to properly handle encrypted passwords. The Sun JVM is downloaded from the Java home page (www.java.com). Once downloaded, execute the downloaded file. To enable the Explorer JRE option,

1. From the Explorer menu select Internet Options-Advanced.
2. From the Advanced Internet Options check the **[Use JRE….]** Option.



3. After restarting the computer, access iPECS eMG Web Manager, section 4.2. “Applet iPECSPwd started” will display in the bottom left corner to indicate password encryption is active.

4.2 iPECS eMG80 & eMG800 Web Access & Login

In the browser 'ADDRESS' field, enter the MPB IP address (default is 10.10.10.2) and TCP port. Select GO; the Web server returns iPECS eMG Web Services Login page, Figure 4.2.1-1. The eMG Web services include the Admin and Maintenance functions and the Station Program User Portal. To access the Admin and Maintenance function, User ID and Password should be matched with the assignments in the User Management. The default Maintenance User ID is 'admin' and the password is '1234'. The system will return the Admin & Maintenance Main page, section 4.3.

To access the Station program, the user must enter their Station number and full Authorization code (station number and Auth code) in Tables Data – Station Authorization Code (PGM 227). The system will return the Station Program Main page as shown in section 4.6.

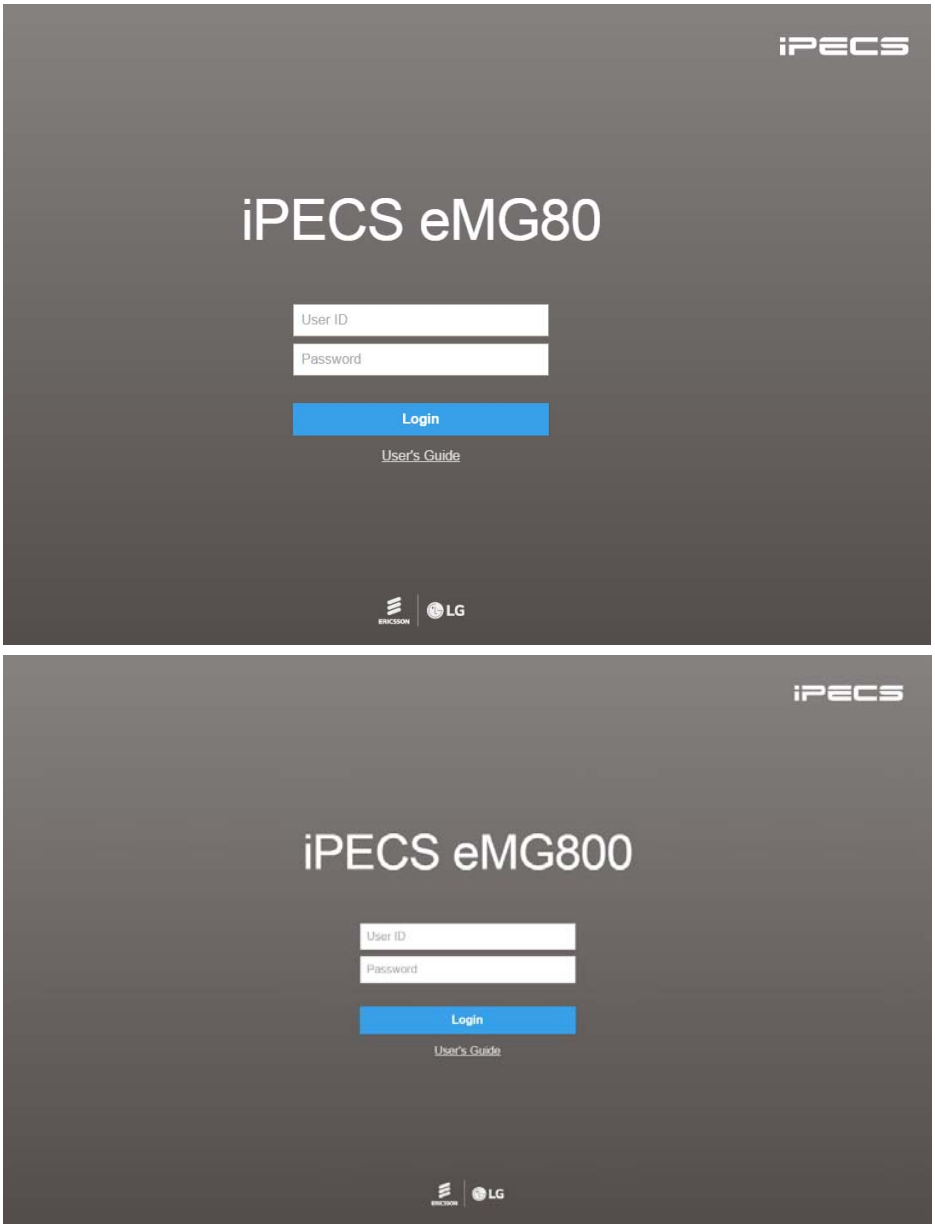


Figure 4.2-1 iPECS eMG80 & eMG800 Home page

4.3 Web Admin & Maintenance Main Page Overview

In the Web Admin Login screen (see section 4.2) enter the User Id and Password then click the **[Login]** button to access the iPECS Admin & Maintenance Main Page, refer to Figure 4.3-1.

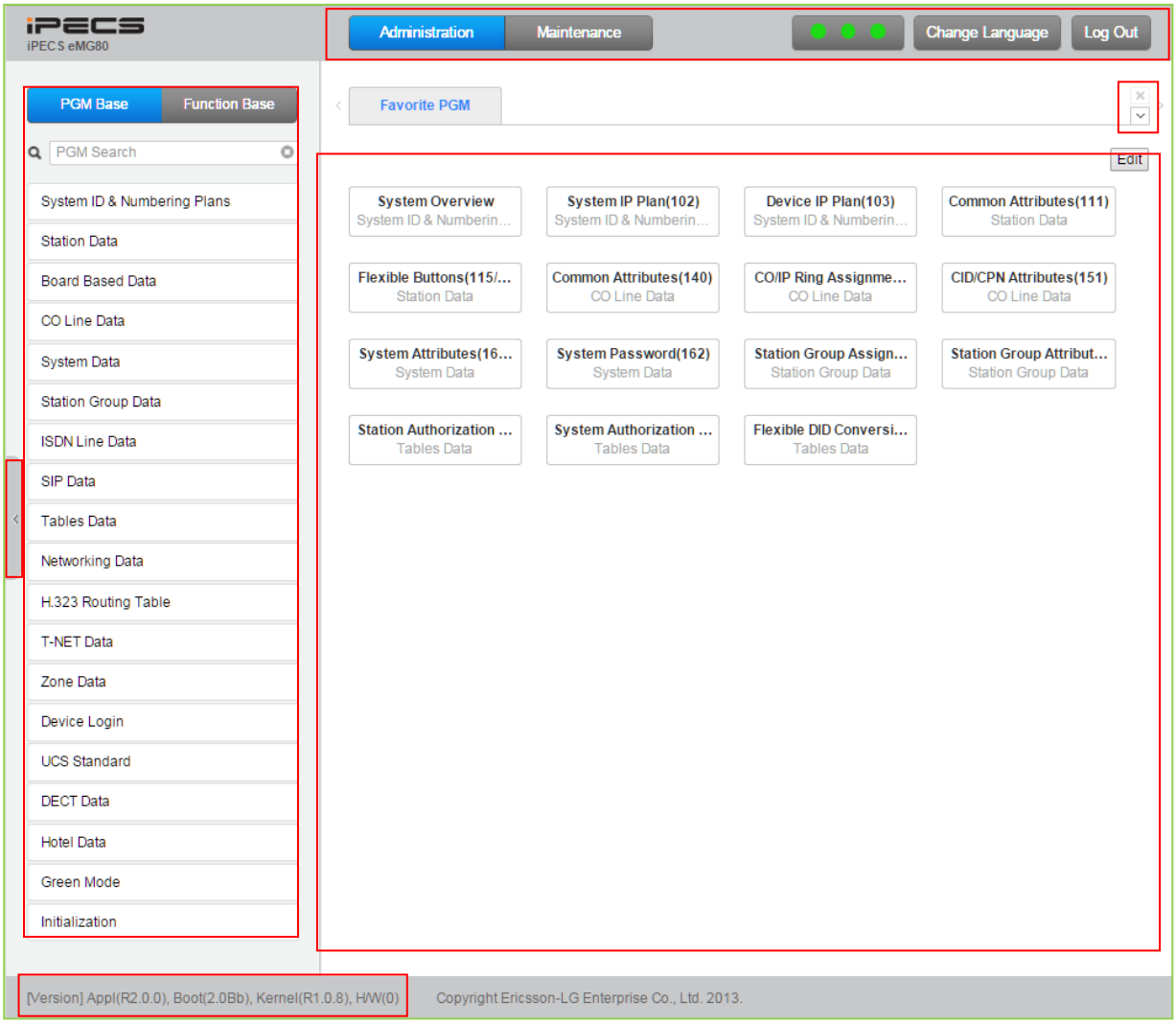


Figure 4.3-1 iPECS eMG80 & eMG800 Admin & Maintenance Main Page

The Admin & Maintenance Main Page has three sections,

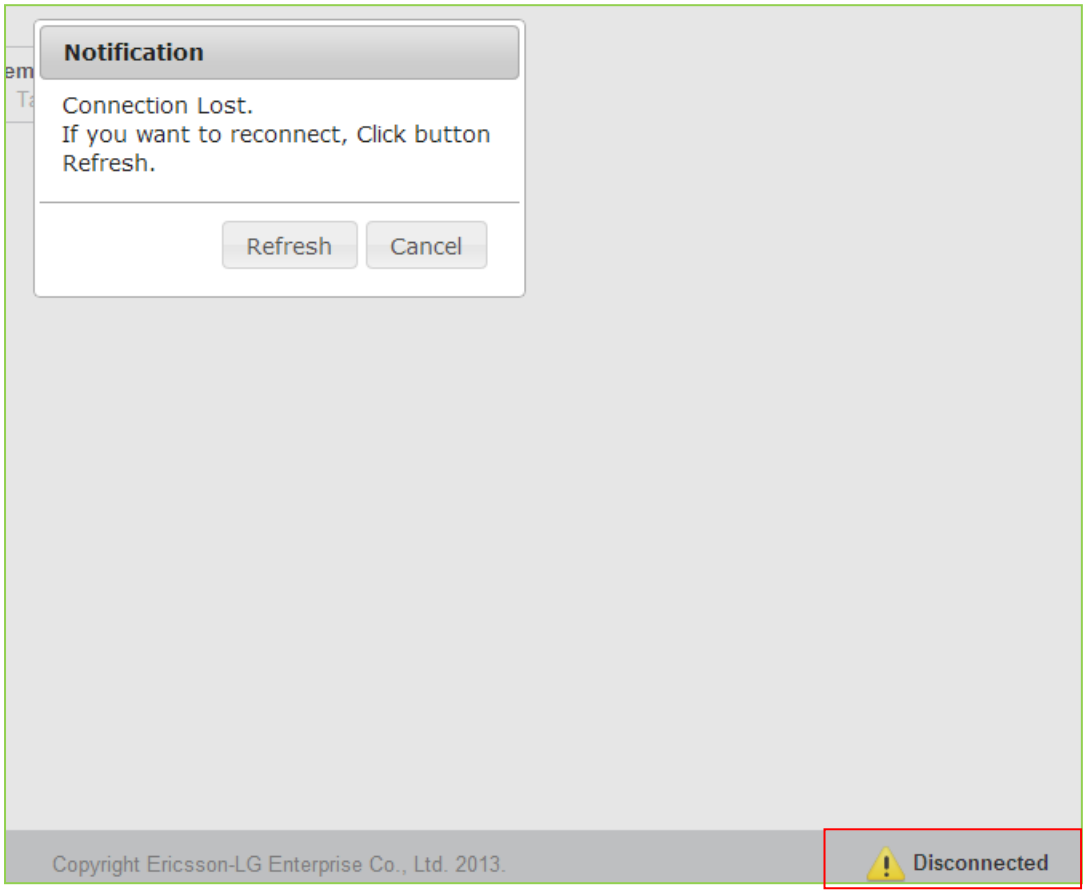
Menu bar – Upper frame
Web site directory & navigation section – Left frame
Favorite Programs and Entry section – Central frame

Items in the Menu bar are mouse-clickable for selections of:

Administration – accesses the system database.
Maintenance – permits databases to be downloaded, including all data, system speed dial, LCR, SMDR, UCP and Gateway file.
Change Language – change the desired language.
Log out – log out the web server

What is the meaning about Buttons and Text on page?

1) Hide menu by clicking the left arrow in the middle of window on left side.
2) X button at the top of the page on the right side functions whether the current tab or all tabs are closed or not.
3) button will display all PGM by click and check which PGM is using.
4) The Application, Boot, and Kernel version can find at the left side of bottom.
5) User can check the status indicator at the bottom on the right side of page by displaying the text such Disconnected or Read Only User.
   - Disconnected: discconected to Web Admin Server without working for a long time. User can connect to Web Admin Server by clicking Refresh button.
   - Read Only User: User who access to Web Admin Sever has no authority to set the function as the maintenance user and just is only for read.



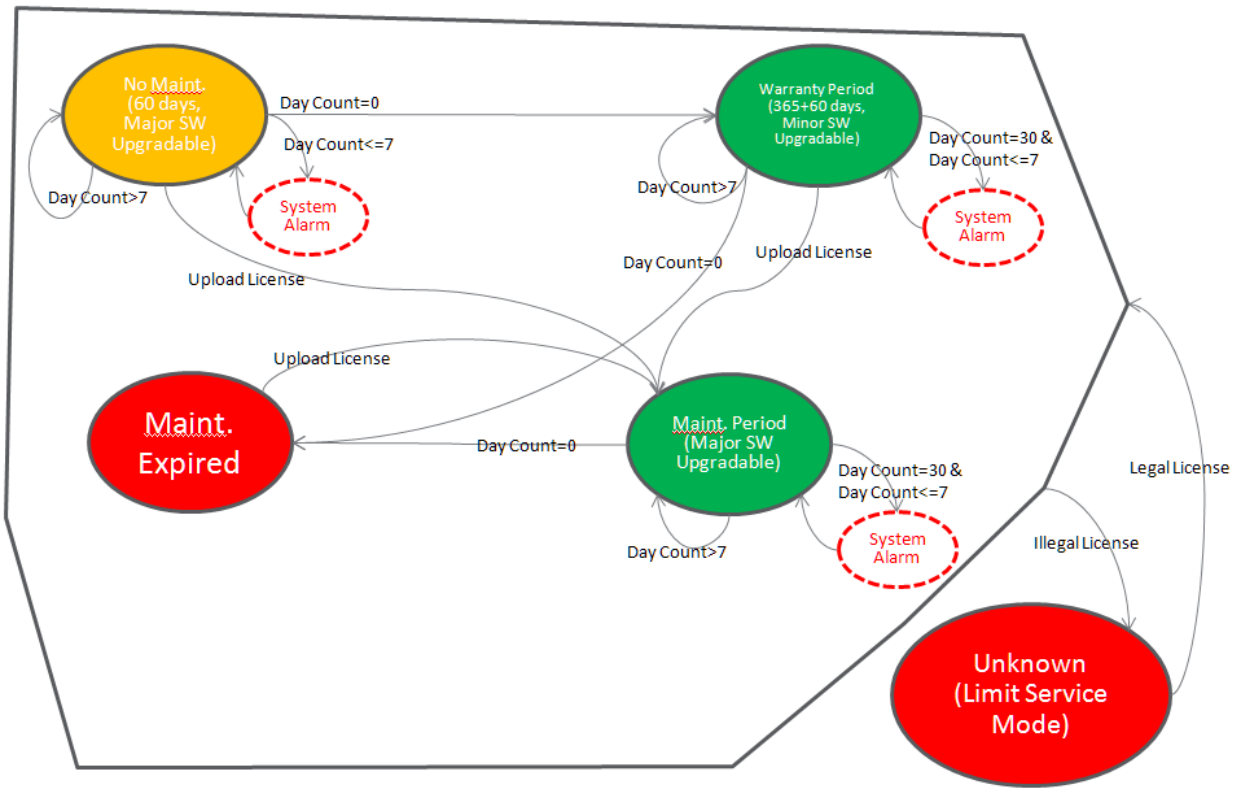
License State Display

In eMG system, a Software Maintenance license is needed in order to upgrade system software. If “No Maint. Period” or the color of SW Maint. is GREEN, system software can be upgraded. Major version upgrade is possible in “No Maint.” or “Maintenance” Period but Minor version upgrade is possible in “Warranty” Period. In other states, both upgrade and downgrade are not allowed.

- First LED : SW maintenance
- Second LED: Temp License
- Third LED: T-Net /Redundancy

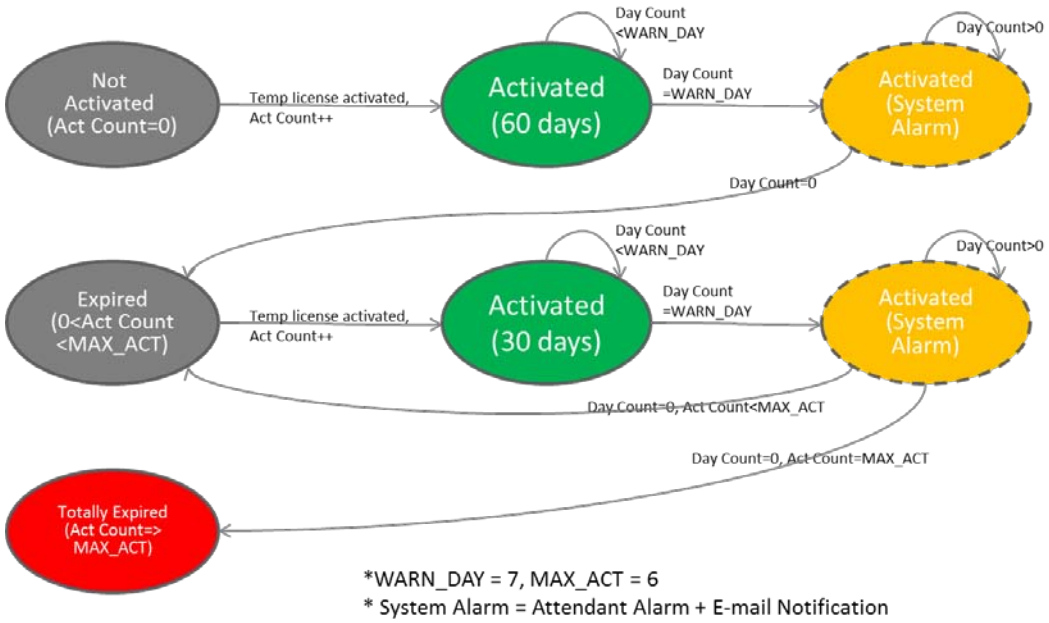
SW Maintenance State

The following figure is SW Maintenance stat for SMB. System Alarm is occurred 30 days once before expiration and for 7 days before expiration.



Temp License State

Temp License can be activated totally 6 times. It is valid for 60 days at first activation and is valid 30 days from second activation to the last. System Alarm is occurred from 7 days before expiration.

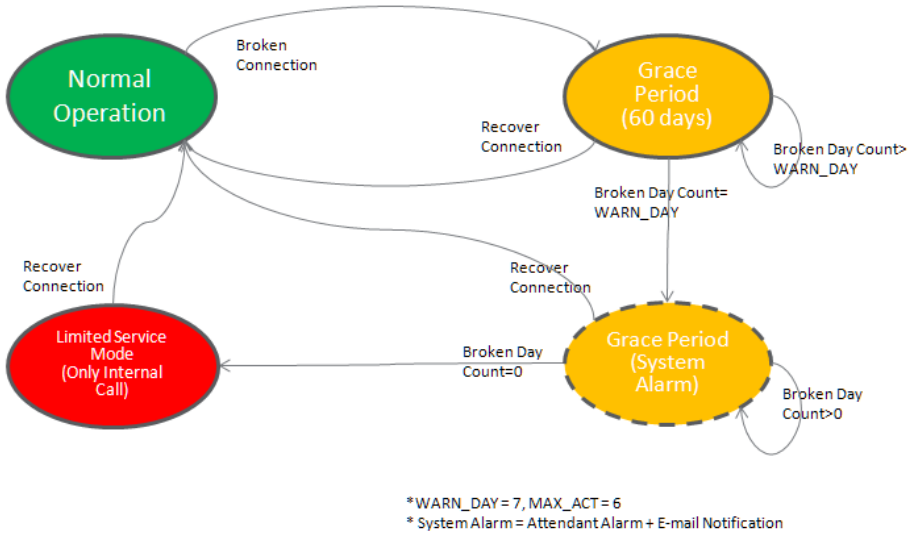


T-Net or Redundancy State

T-Net LCM license is valid for 60 days if the connection is broken. And Redundancy is valid for 60 days if eMG system is slave, active state, and the connection is broken. But the limitation is not applied in Master eMG. System Alarm is occurred from 7 days before entering “Limited Service Mode”.

- Below cases are always “Normal”.

1. TNLS license
2. Master system when redundancy



4.3.1 Favorite Program Groups

To ease access to frequently used program, the iPECS Admin Main Page displays a Favorite PGM list. The Favorite PGM list buttons, when selected, return the associated Web page. Up to 20 favorites are configured using the Edit button in the upper right of the page.

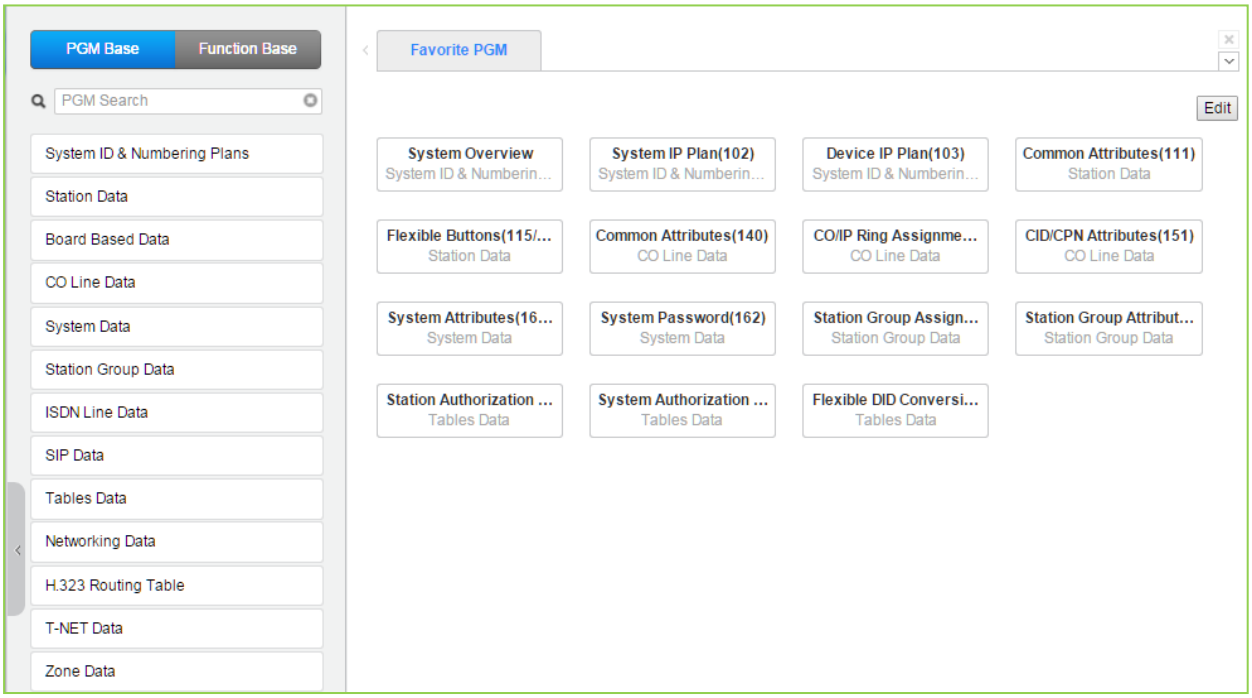


Figure 4.3.1-1 Favorite Program

To register a Favorite program, click Edit button. The following page will be displayed.

- Clear button: Clears the check box for all programs.
- Save button: Saves the Web page, PGMs with checked boxes are stored as Favorites, up to 20.
- Back button: Returns to the previous page.

Figure 4.3.1-2 Favorite Program Groups for edit

4.3.2 Using Function Base

Function Base is designed to customize the feature or PGM by configuring the Function base so that customer can be easy to use the desired and frequent feature.

There are two buttons: Common Function List and User Function List. The feature or PGM can register up to 20 as Favorite function.

1) Common Function List

Generally, iPECS eMG supports the basic function list as default. The available function is 5 (DID Setting Scenario, Network Scenario, SIP Extension Registration, SIP Trunk Configuration, Station Group Scenario). The 5 functions can't be deleted or editable.

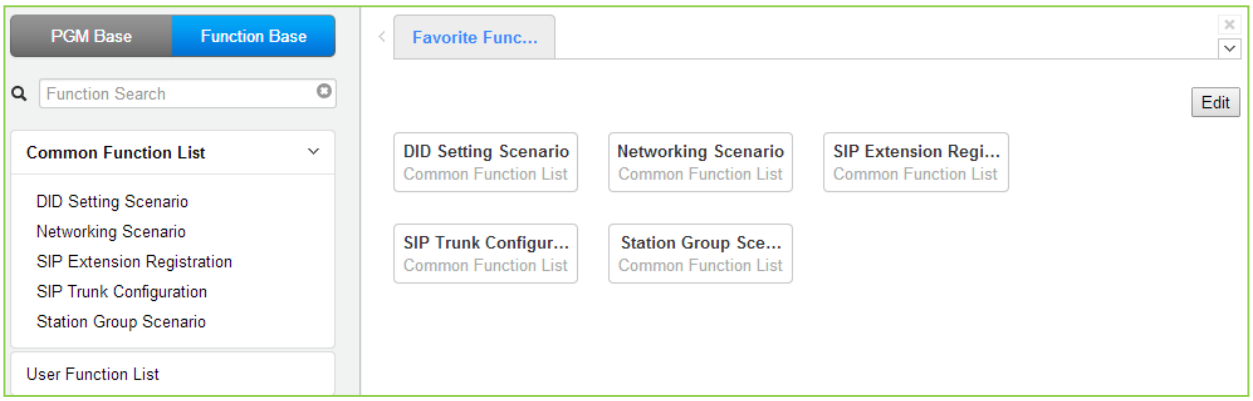


Figure 4.3.2-1 Common Function List

2) User Function List

To configure the user function list, click Maintenance button and then you can see the Function Program in the left frame and click the sub menu 'User Function Management' as the following figure. On this web page, you can add or delete the function.

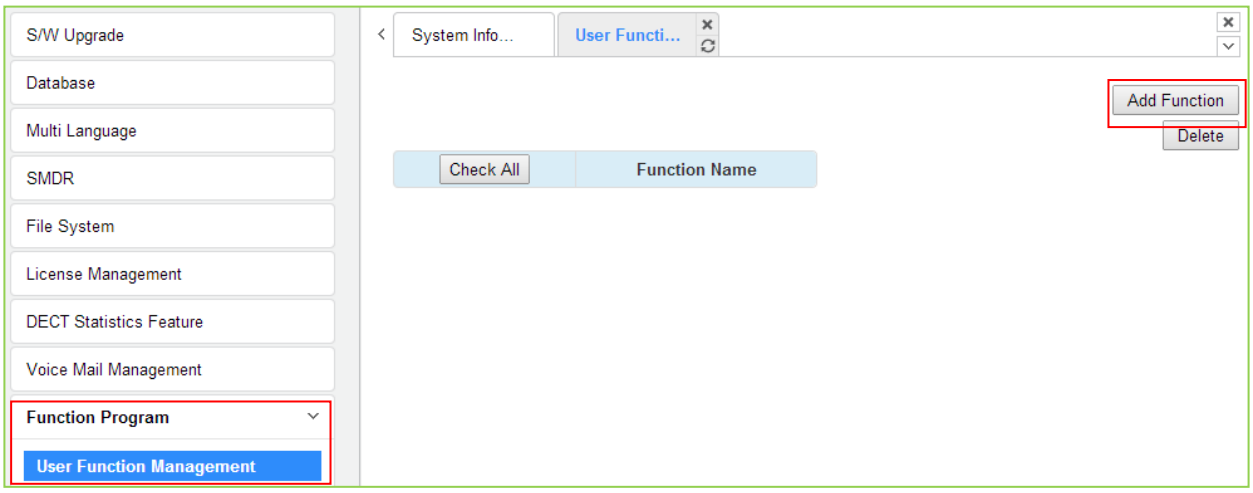
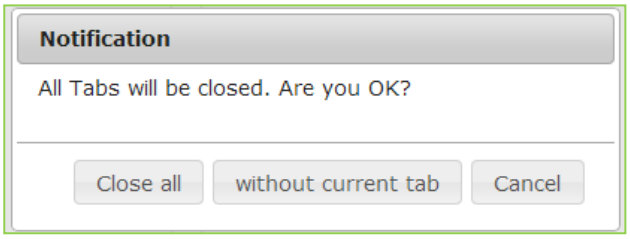


Figure 4.3.2-2 User Function Management

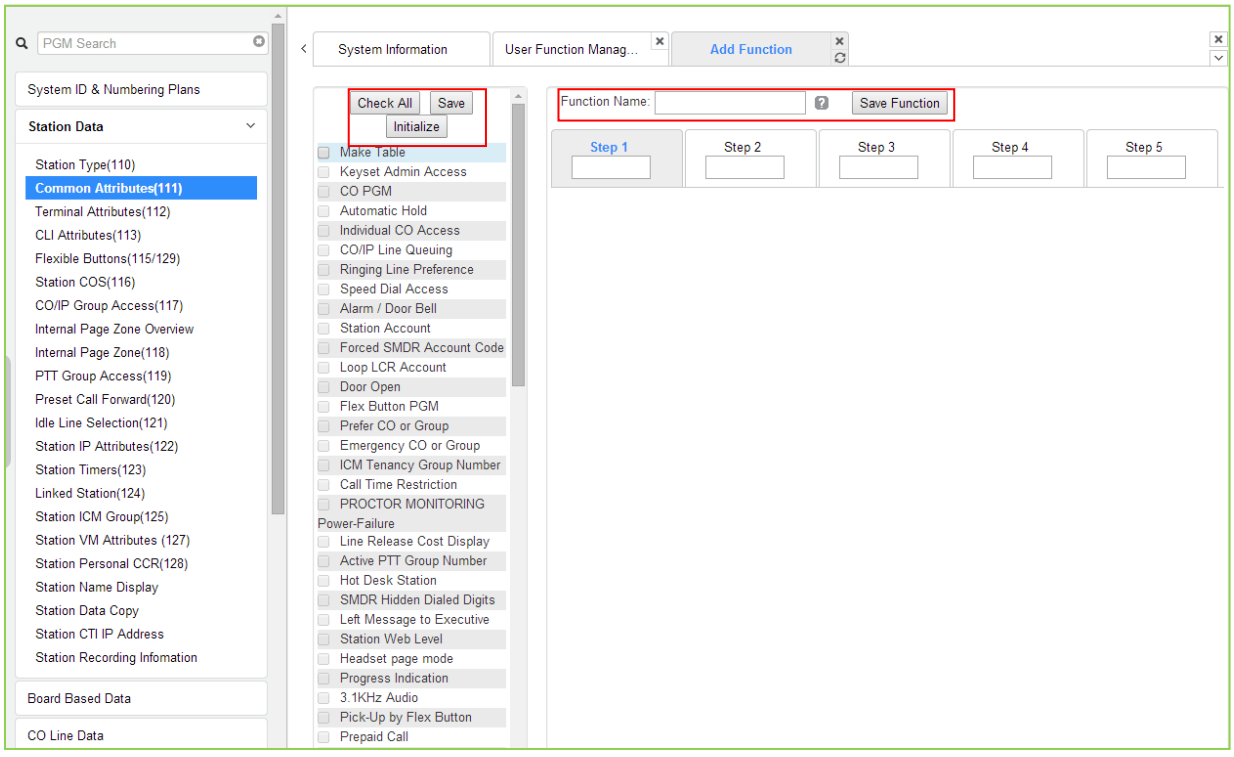
Adding Function

This step is divided into 5 steps and you can make the desired function each step. The following is the guide to make Name and add the function on each step:

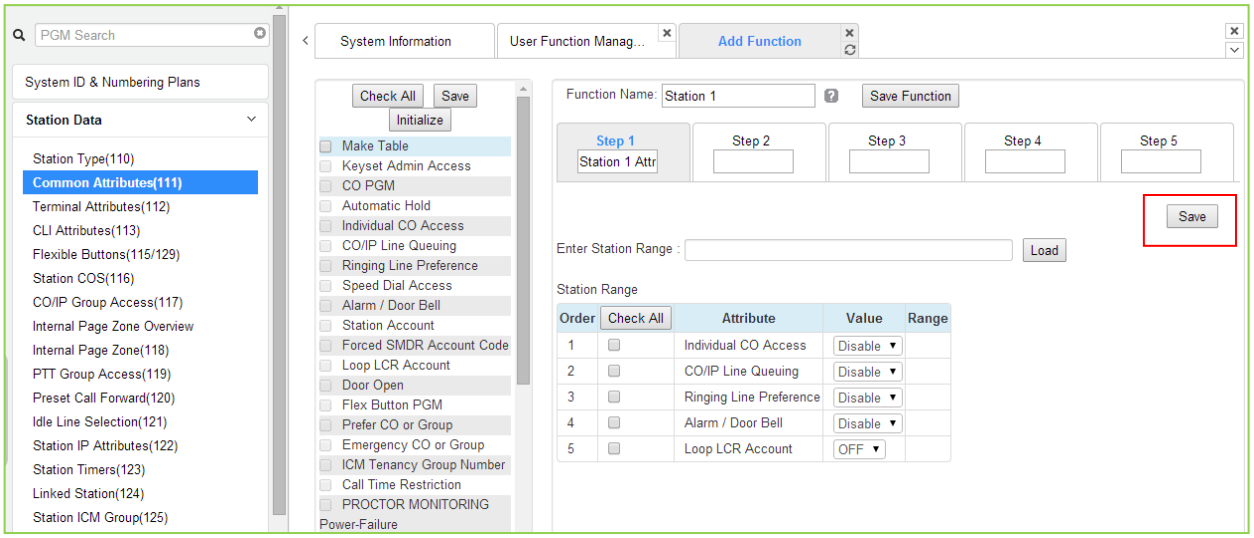
1) To enter the function name, English, Numbering, Underscore (_) and Parentheses are available. Function name has to be filled out.
2) To enter the step name, English, Numbering, and Special letters except Double quotation marks are available.
3) The step name doesn't need to be filled out, but the function has to be configured each step.
4) To cancel or close this tab, click the close button (X) and pop up the blow;



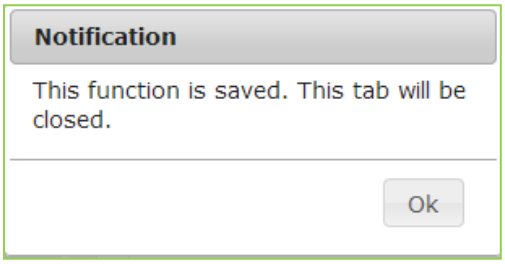
1. Click the Add Function button.
2. On the below window, click the desired PGM in the left frame. First fill out the function name and step name. To configure the step 1, click the Make table to check the desired function and then click the Save button.
   - ✓ Check All: check all functions
   - ✓ Save: Save the checked functions
   - ✓ Initialize: Initialize the checked functions

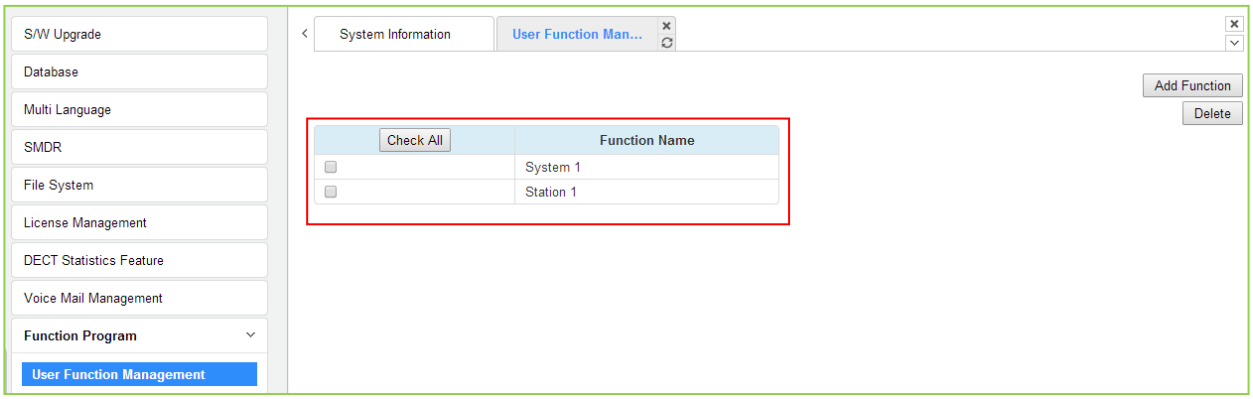


3. The selected functions are displayed and click the Save button after checking each functions. The rest steps are the same as the step 1.



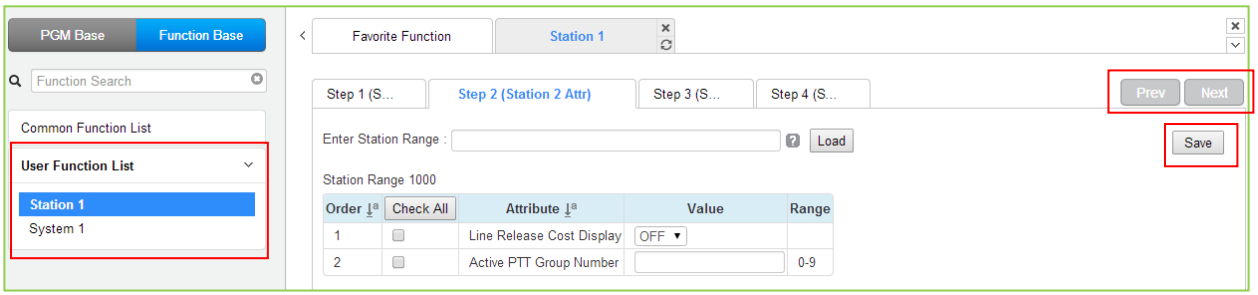
4. Finally, click the Save Function to save and then click the OK button.





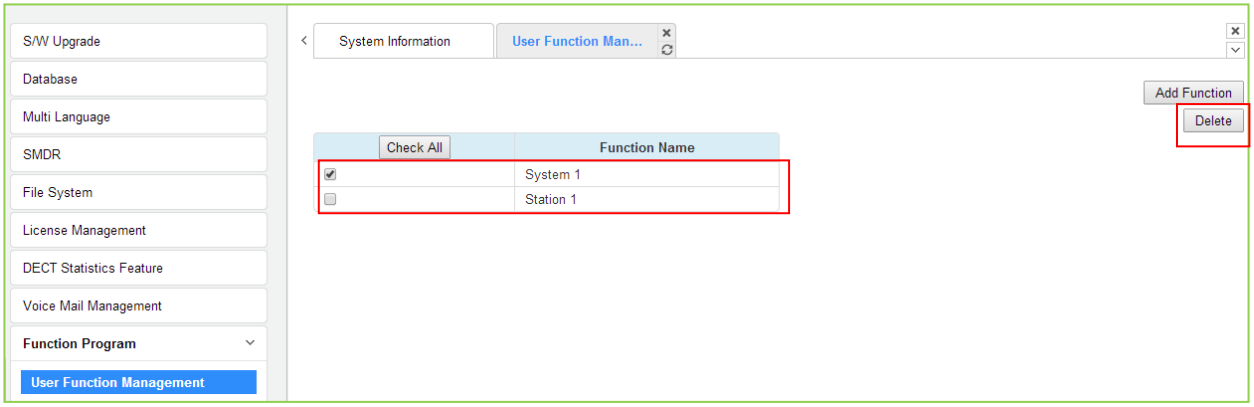
5. To check the function, click Function Base button in the left frame and User Function List and you will see the following figure.

   You can enable or disable the function by checking each function and then click the save after setting Value. Also move to each step by clicking the next button or Previous button.



Deleting Function

To delete the user function, click Maintenance at the top of window and then click the Function Program -> User Function Management. Check the desired function to delete and click the delete button.



4.3.3 iPECS Web Page Navigation

The Navigation frame appears in the left after login; refer to Figure 4.3-1. Selecting a Program group from either the Navigation pane or the Favorites list will display the selected Web entry page.

Each of the system‘s data entry Web pages includes a frame for data display and modification. To modify data, click in the data field, either a drop-down menu will appear for entry selection or a cursor will appear in the field and the user may type in the data required. Once all new data for a Web page has been entered, the **[Save]** button must be clicked to send the new page to the system and save the modified data.

In some cases, where mentioned, it may be necessary to reset the system. The system can be reset manually as described in the ***iPECS eMG Hardware Description and Installation Manual*** by selecting the Reset System button on the Initialization Web page or using the reset button.

4.3.4 General Web Page Features

4.3.4.1 Web Page Range Entries

On many of the Web pages for Station, CO Line and Tables Data a range of station, lines or table indices must be entered to display the appropriate data entry page. In this case, a range of devices or indices can be selected by entering the lowest and highest device number separated by a dash. In addition, a comma can be used to enter non-sequential numbers. Note no space characters should be entered before or after the dash or comma. Note the data entry page displays the data for the lowest device or table index entered.

4.3.4.2 Table Check Boxes

Data entry pages that require a range entry, only display the data for the lowest device number or Table index entered in the range. To assure that only the appropriate data is changed for all entries in the range, a check box is located in front of each attribute. When the page is saved, only data for attributes with the box checked are saved for the range while data for unchecked attributes are not modified.

4.3.4.3 Sorting Displayed Data

Charts in the data pages typically allow the data to be sorted based on a given column in either ascending or descending order. In the column header, the sorting symbol displays to indicate the sorting function is available for the column.

4.3.5 Install wizard

After the system is initialized, the first time Web Admin is accessed, the Install Wizard is displayed. The Wizard presents 9 pages in sequence with parameters that should be verified or commonly need modification prior to operation of the system including:

1) System Upgrade
2) Nation Code
3) System Time & Date
4) Station Number
5) Flexible Numbering Plan
6) CO Ring Assignment
7) License Upload
8) Maintenance ID & Password
9) IP Information

4.3.5.1 System Upgrade

Click the Select files button and then open the pop-up folder. Select the desired file to upload to the system's memory and click the **[Start]** button. The file is sent to the system's memory, saved and automatically loaded upon a system reset or restart.

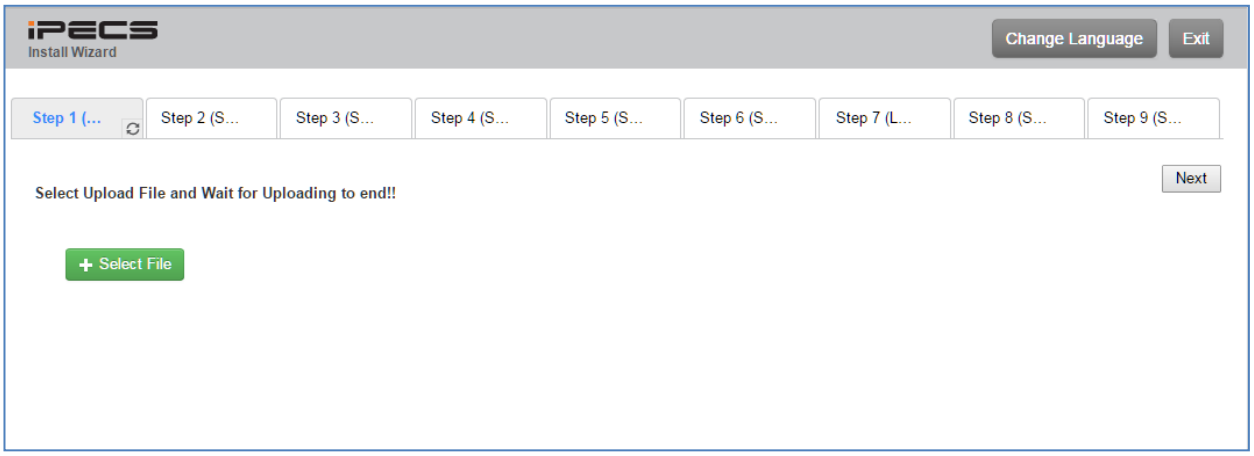


Figure 4.3.5.1-1 System upgrade

4.3.5.2 Nation Code

During initialization, the system employs the Nation Code to establish the default gains and tones for the various interfaces (analog CO Lines, ISDN lines, etc.), as well as the numbering plans for the specific country. The gains, in particular must be set to comply with the local regulatory requirements.

Normally, the Nation Code will be set at the factory, however assure the Nation code matches the system location. If not, **turn SW 1 Pole 2 of KSU to ON**, change the Nation Code and save the page. If the code is changed, after saving the page the system will initialize automatically to properly set the gains, tones and numbering plan for the selected country. In addition, all other data will be initialized so, the Nation Code should be properly set prior to other programming.

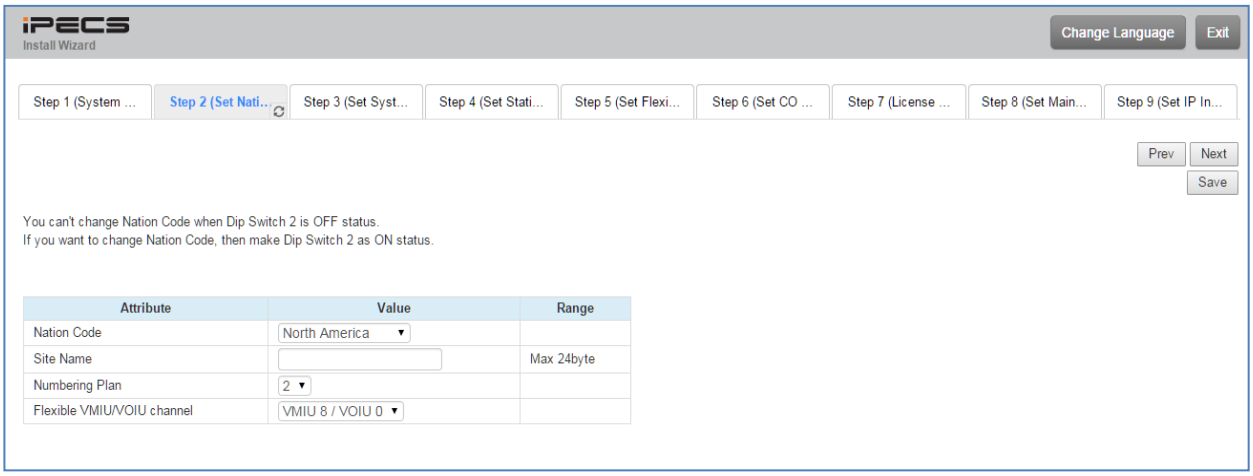


Figure 4.3.5.2-1 Set Nation Code Wizard

4.3.5.3 Set System Time and Date

You can set System time and date in this page.

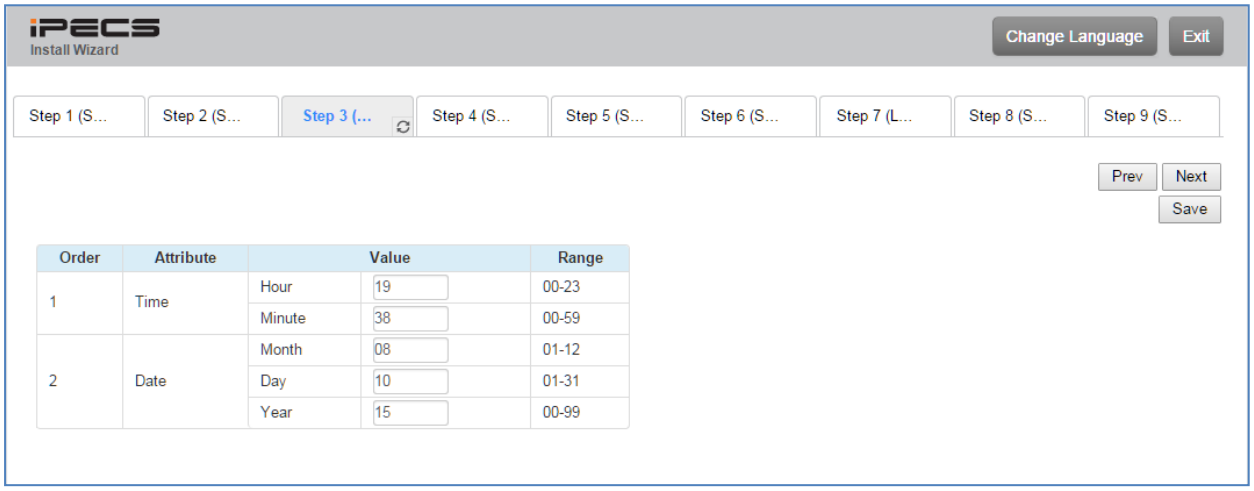


Figure 4.3.5.3-1 Set system time and date

4.3.5.4 Set Station Number

You want to change the current station number to New station number. In this page, you can change the station number.

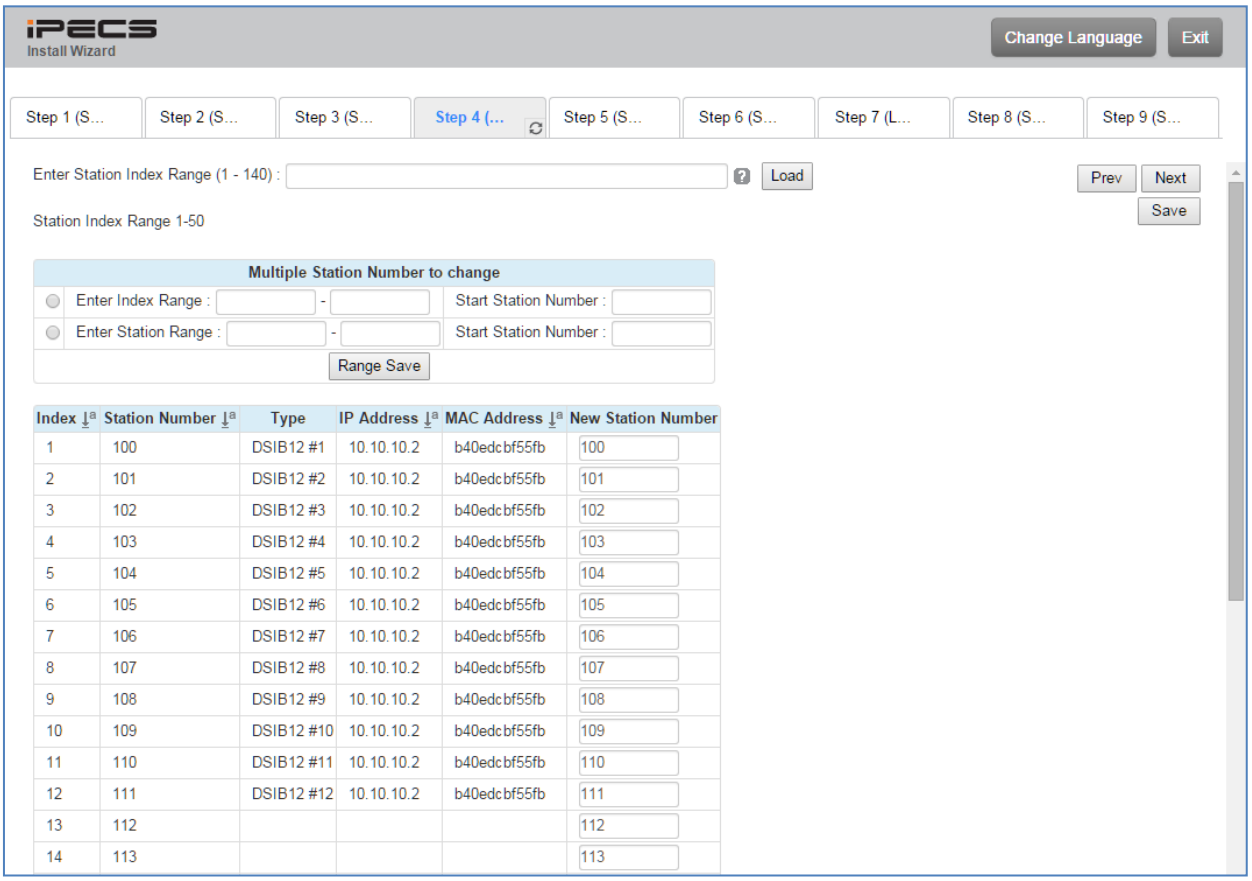


Figure 4.3.5.4-1 Set Station Number

4.3.5.5 Set Flexible Numbering Plan

The Flexible Numbering Plan defines the various digit strings (codes) users may dial to access system resources (outside lines, page zones, etc.) and features. In the wizard, codes for features that commonly may require modification are displayed.

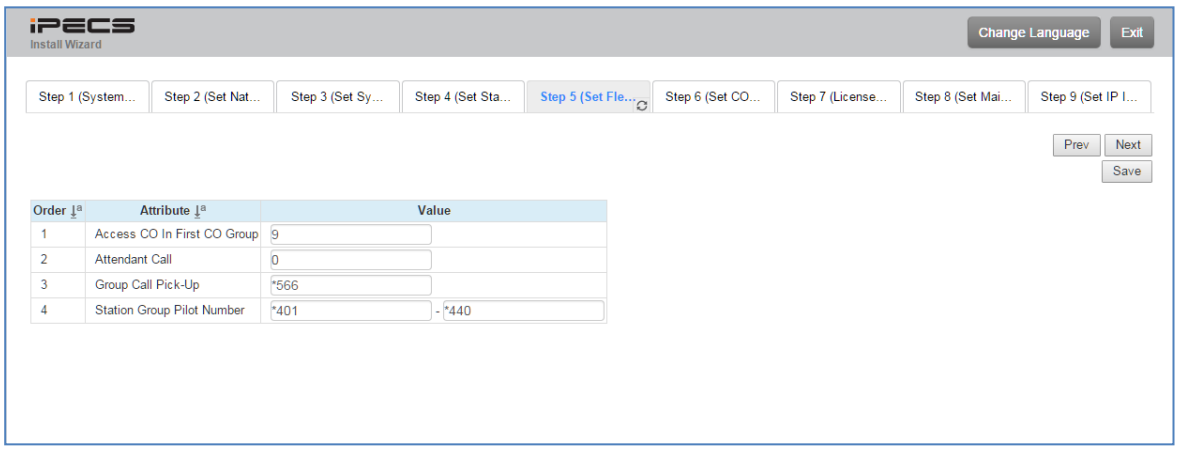


Figure 4.3.5.5-1 Set Flexible Numbering plan

4.3.5.6 Set CO Ring Assignment

CO Ring Assignment establishes how the system will route incoming calls. The wizard assignments cover all CO/IP Lines in the system and the Ring assignments for Day, Night and Timed Ring modes can be established.

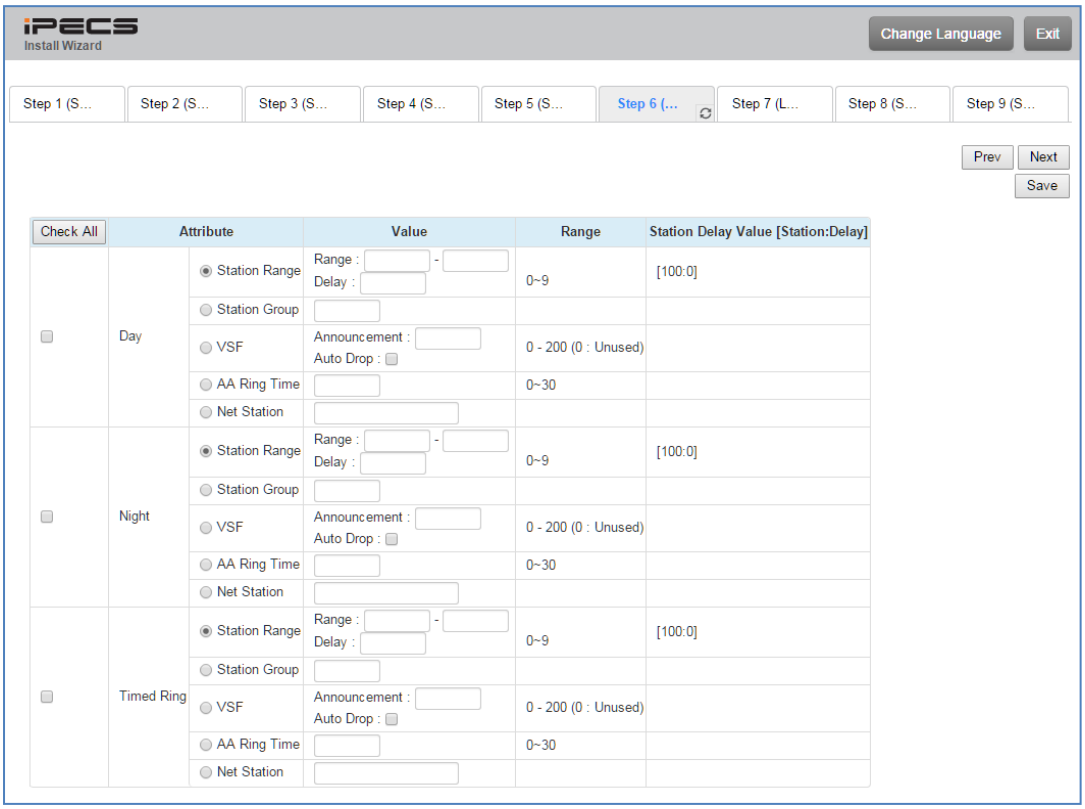


Figure 4.3.5.6-1 Set CO Ring Assignment

4.3.5.7 Set License Upload

Before License upload, make sure that the date of system is set correctly. Click the Select files button and then open the pop-up folder. Select a valid license file to upload to the eMG system and click the **[Start]** button. If the file which is sent to the system is “System License File”, it will be saved and automatically applied without restart. The enabled features by uploading license file can be shown in “System Overview” page.

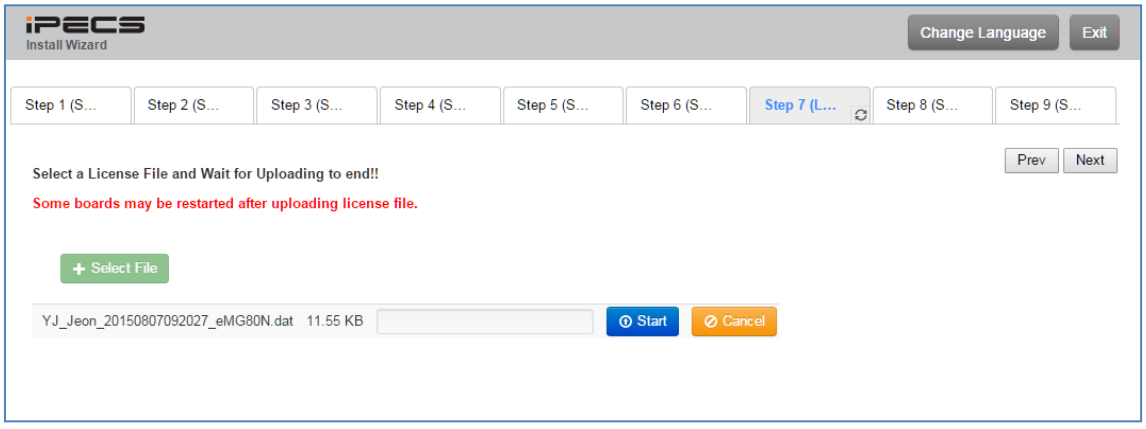


Figure 4.3.5.7-1 Set License Upload

4.3.5.8 Set Maintenance ID & Password

The Wizard includes a password entry page. **It is strongly recommended that a unique User ID and strong password be entered to minimize the risk of admin and maintenance access by unauthorized personnel.**

In order to finish the final step, you should register at least a maintenance ID. If not so, the Wizard can't go on to the next.

Also, Keyset admin password can be registered in this page.

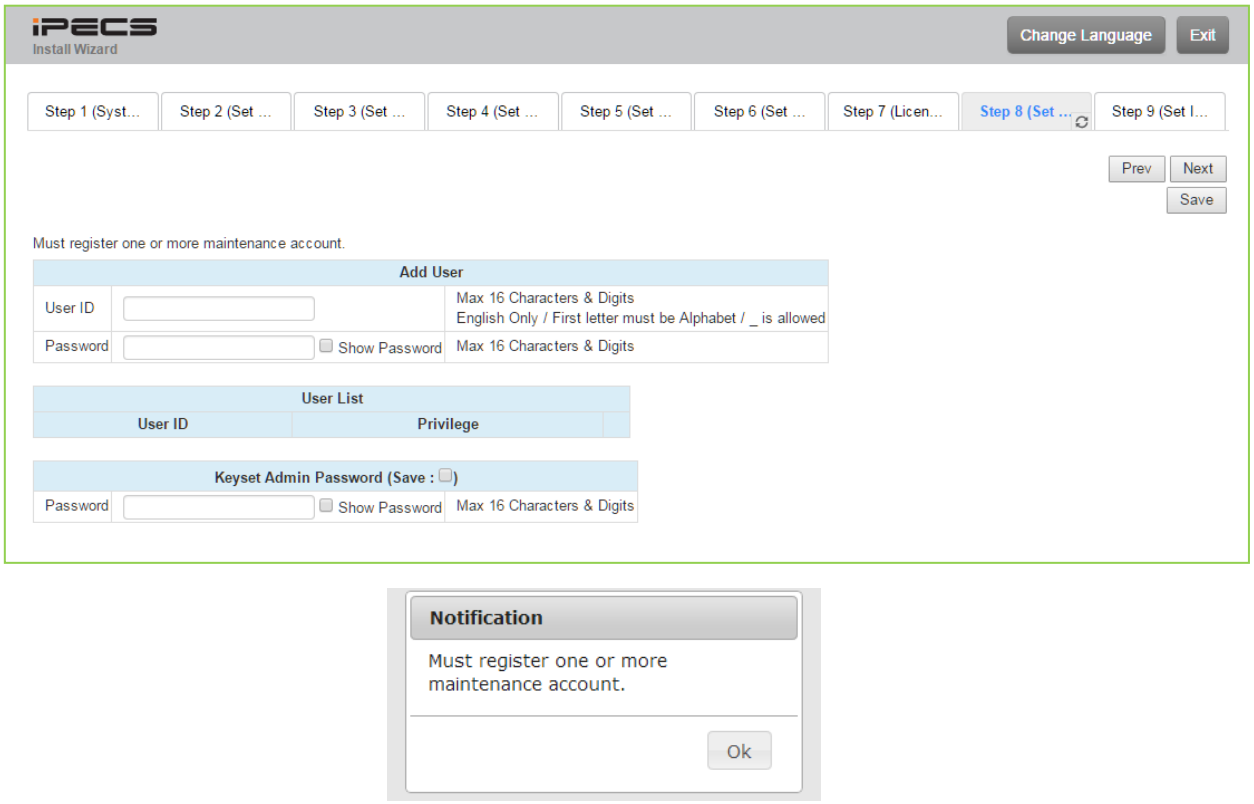


Figure 4.3.5.6-1 Set Maintenance Password

NOTE

The new information will be in effect immediately upon saving the information. When a new Admin User ID and Password are saved, the Web login screen appears. A new Admin session will be required using the new login credentials.

4.3.5.9 Set IP Information

The IP Information page establishes the IP address scheme. DHCP can be enabled or static addressing can be configured. When the system is behind a firewall, the Firewall address must be entered allowing proper operation with remote users, devise and SIP trunks. A DNS (Directory Name Server) for Domain Name resolution should also be entered on this page. Note that changing any IP address in the system requires a system reset; the reset does not initialize data.

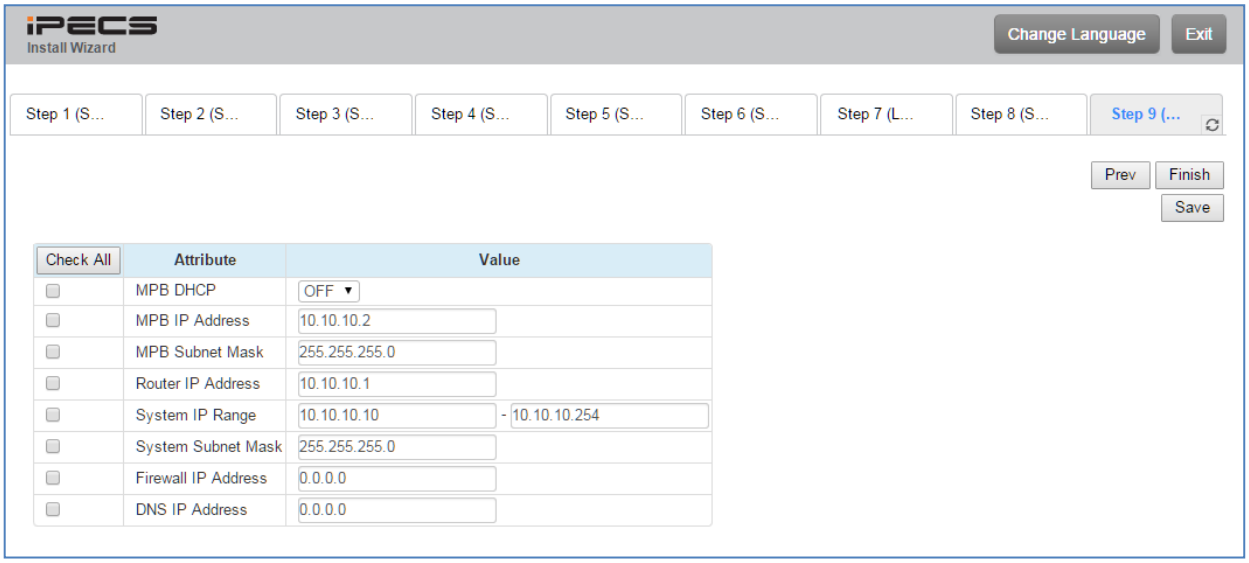


Figure 4.3.5.2-1 Set IP Information

4.4 Web Admin Programming

4.4.1 System ID & Numbering Plans

Selecting the System ID & Numbering Plans expands the Navigation page to display the available Program groups displayed in the left frame as shown in Figure 4.4.1-1.

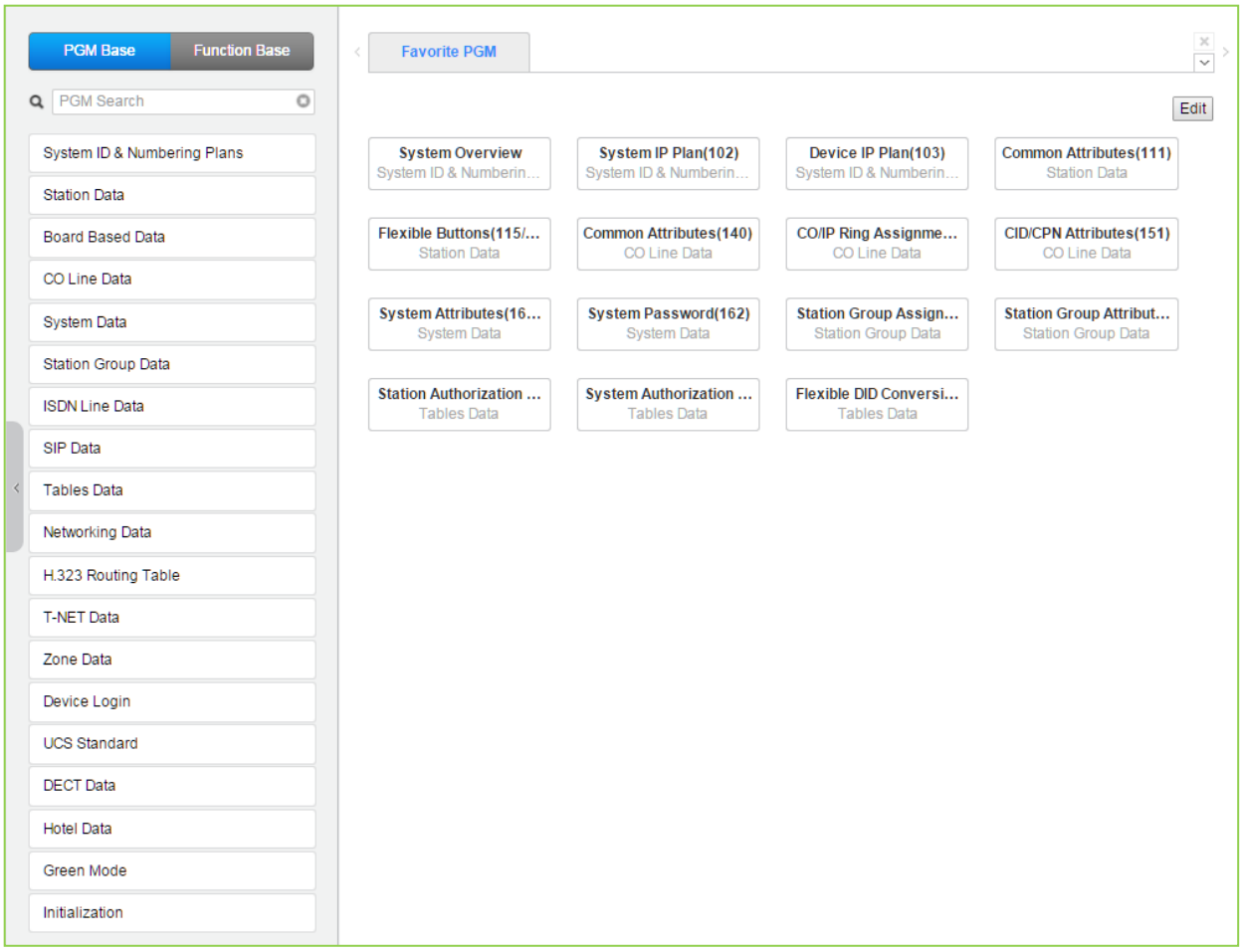


Figure 4.4.1-1 System ID & Numbering Plans sub-menu

4.4.1.1 System ID – PGM 100

Selecting System ID will display the Input Entry page, Figure 4.4.1.1-1.

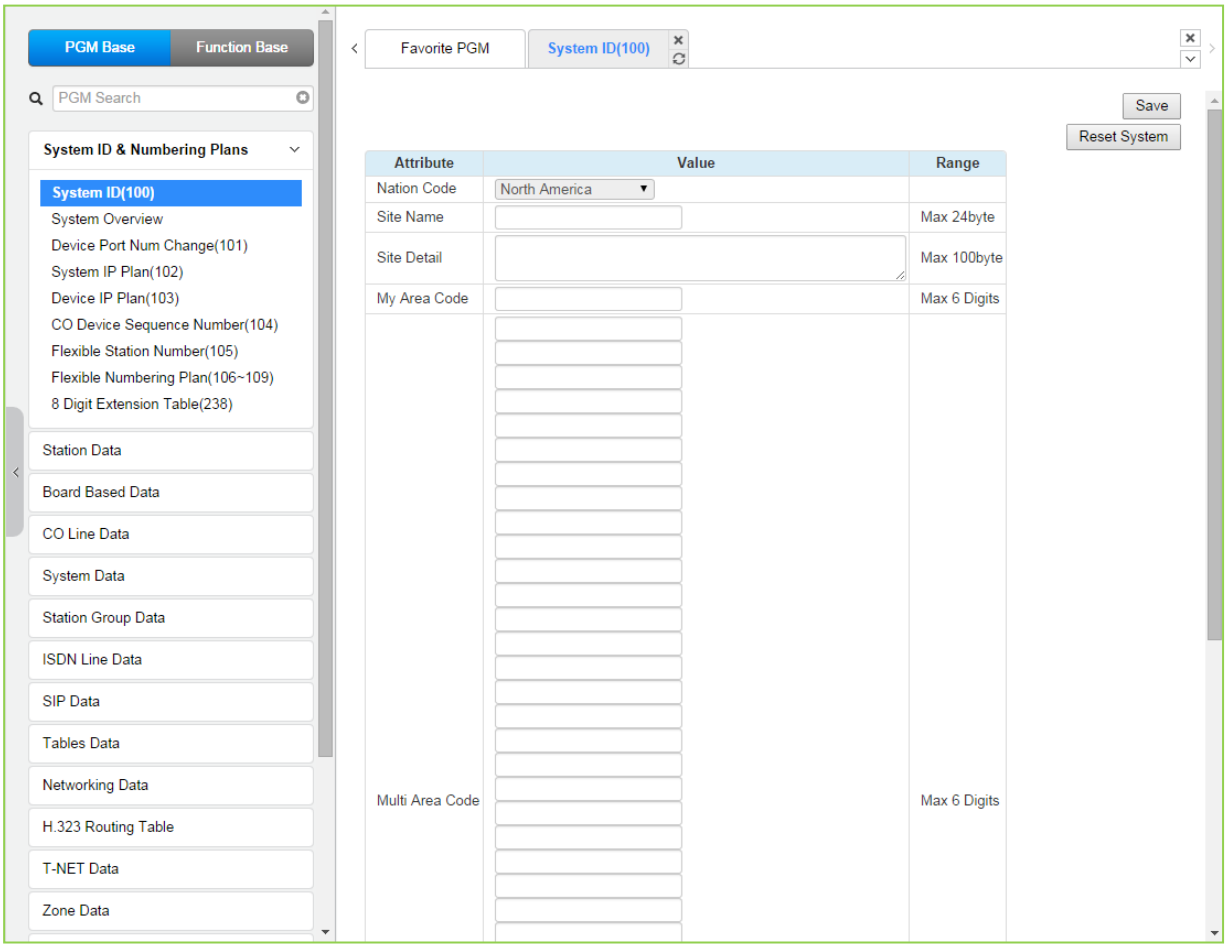


Figure 4.4.1.1-1 System ID

Under System ID, the country is identified using the international dial codes (Nation Code). A twenty-three (23) character Site Name, Site detail and the local “My Area Code” maybe defined. This information is used to set gain, frequencies and other system characteristics specific to the country and regional regulatory requirements. The Site Name is primarily useful for the installer/programmer as a reference to customer.

Note

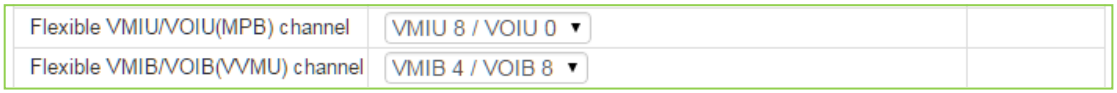
To change Nation code, Dip-switch 1 pole # 2 is ON; you cannot change the Nation code while the switch is OFF.

The rest attributes are additional options for Customer’s convenience.

Numbering Plan

The system employs one of the nine (9) basic Flexible Number Plans as detailed in Appendix B. Individual items from the selected Numbering Plan can be changed under Flexible Numbering Plan in section 4.4.1.7.

In case of eMG80



1. Administrator can select the channel capacity of VoIP and Voice Mail in this filed.
   - In case of VMIU8/VOIU0, the default 2 channel of VoIP can't be used.
2. VVMU channel field can't be available if VVMU is not installed.
3. Select VoIP and Voice mail channel for Built-in (MPB) and VVMU by referring the below chart.

Item		Specification
VOIU(MPB)	Built-in VoIP	Max. 8 Channels
		- 2 Channels (by default)
		- 6 Channels (1 Channel increment by license)
VMIU(MPB)	Built-in Voice Mail	Max. 8 Channels
		- 2 Channels (by default)
		- 6 Channels (1 Channel increment by license)
VOIB(VVMU)	VoIP	Max. 8 Channels
		- 8 Channels (1 Channel increment by license)
VMIB(VVMU)	Voice Mail	Max. 8 Channels
		- 8 Channels (1 Channel increment by license)

In case of eMG800

Flexible VMIU/VOIU channel

You can select one of the following types according to the current configuration using Voice mail and VoIP channel:

1) VMIU8 / VOIU0
2) VMIU8 / VOIU2
3) VMIU8 / VOIU4
4) VMIU4 / VOIU8

Speed Numbering

You can easily memory the system speed dial code and station dial code by selecting the desired type depending on the situation among the following types:

eMG80

1) Type (0): System speed (2000~4999), Station speed (000~099)
2) Type (1): System speed (200~999), Station speed (00~99)
3) Type (2): System speed (20~99), Station speed (00~19)

4) Type (3): System speed (10~99), Station speed (00~09)
5) Type (4): System speed (1~9), Station speed (0~9)

eMG800

1) Type (0): System speed (2000~9999), Station speed (000~099)
2) Type (1): System speed (2000~7999), Station speed (000~099)
3) Type (2): System speed (2000~4999), Station speed (000~099)
4) Type (3): System speed (200~999), Station speed (00~19)
5) Type (4): System speed (20~99), Station speed (00~19)
6) Type (5): System speed (10~99), Station speed (00~09)
7) Type (6): System speed (1~9), Station speed (0~0)

The notifications is displayed ‘Speed Numbering type is successfully changed. Please refresh this page to reload Speed numbering data.” According to selecting Speed numbering type, the range of System speed dial and Station speed dial is changed.

4.4.1.2 System Overview

Selecting System Overview will display the System Overview page, Figure 4.4.1.2-1 & 4.4.1.2-2. This page displays the system capacity, the system license overview related to Application, Device ID list, and Gateway list. Note that data cannot be entered on this page. Especially, you can check the status of software license and Temp license.

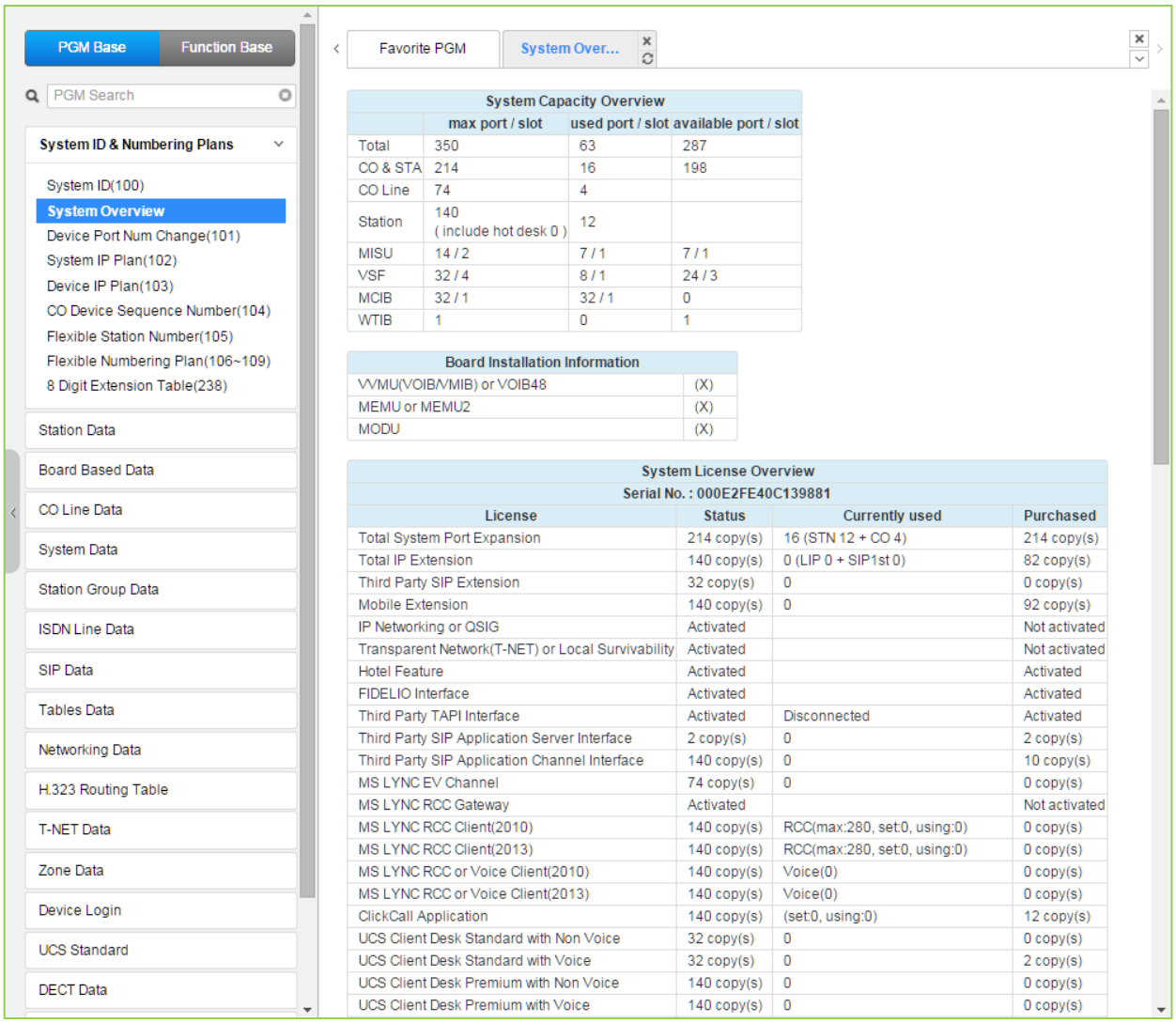


Figure 4.4.1.2-1 eMG80 System Overview

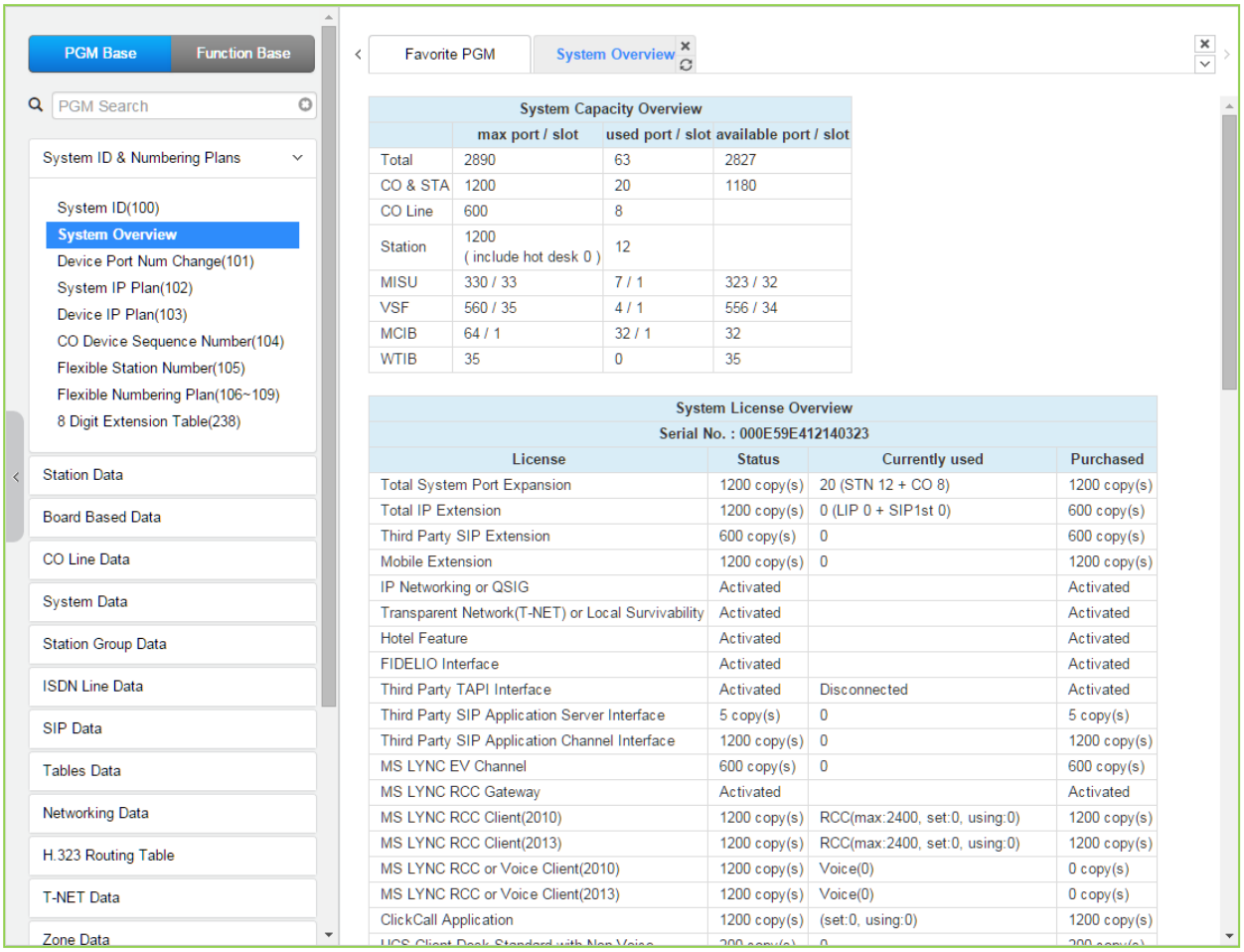


Figure 4.4.1.2-1 eMG800 System Overview

4.4.1.3 Device Port Number Change – PGM 101

Selecting Device Port Num Change (101) will display the input entry page.

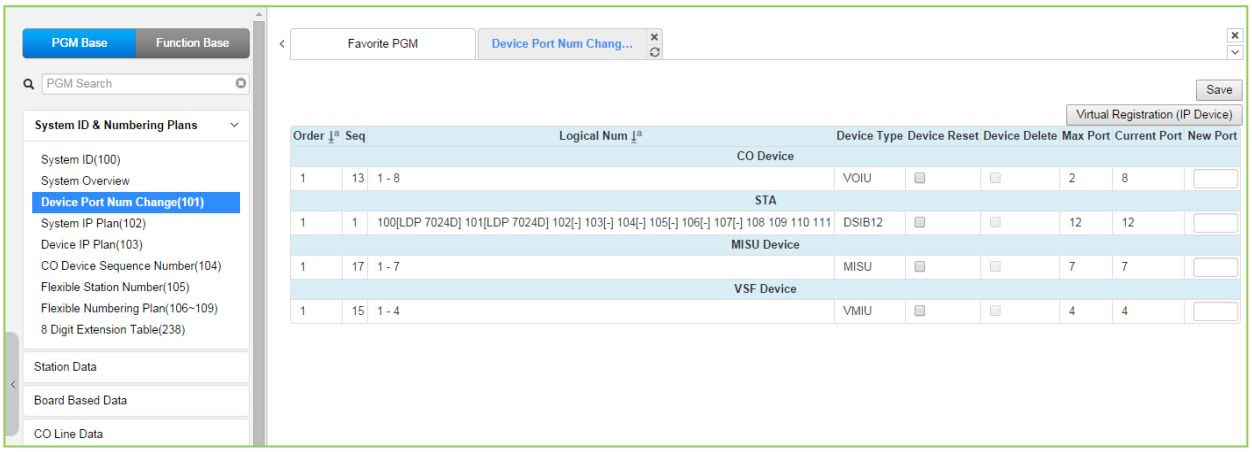


Figure 4.4.1.3-1 eMG80 Device Port Num Change

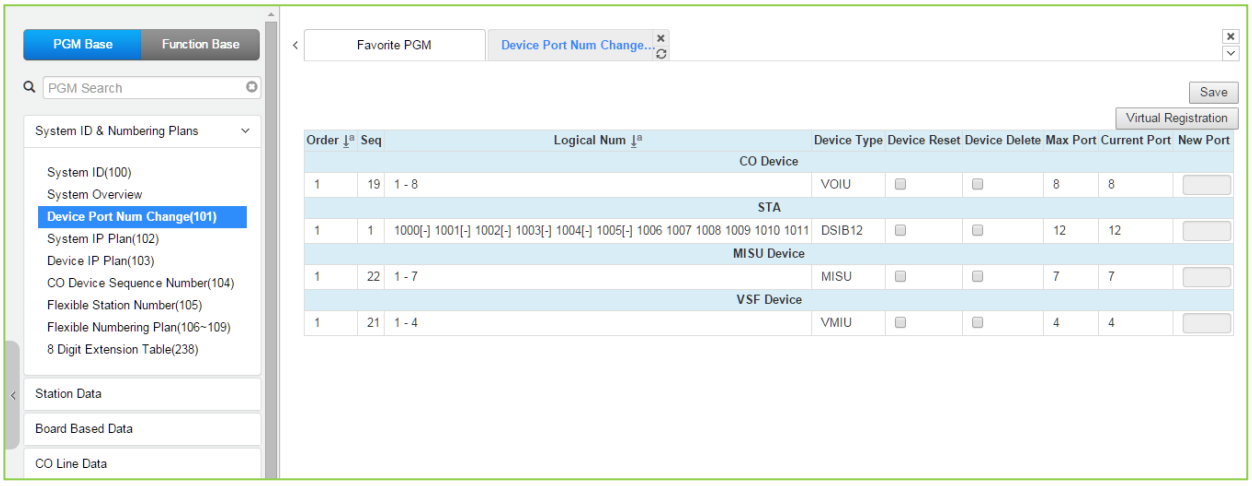


Figure 4.4.1.3-2 eMG800 Device Port Num Change

The system supports changing port count of a device or deleting devices. In this window, the Device ID, Mac address, IP address and port count of the device can be modified. Also checking the **[Device Delete]** check box will delete the device.

Devices may be registered through the Virtual Registration page by accessing to “Device Port Number Change” page. Devices can be registered with or without a MAC address and the number of ports associated with the device may be limited. This may be useful for example to implement a “partial T1” gateway where only some of the T1 channels are available. Note to virtually register a SIP trunk, use the Device Type of CO and device as VOIM, enter the desired number of channels. If you want to use virtual MAC address when you register Device, please check the check box in front of MAC address input field. Click **[Register]** button after finishing the desired value.

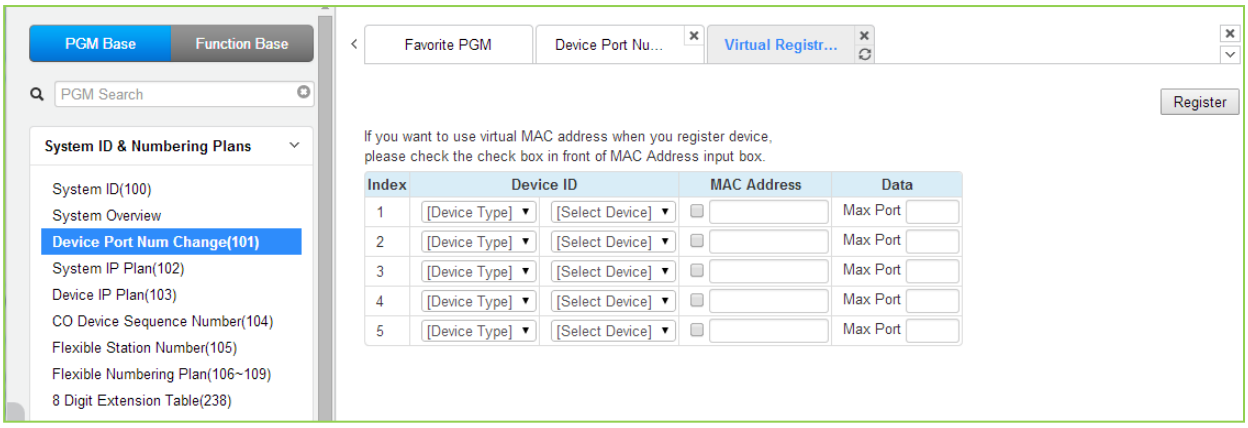


Figure 4.4.1.3-2 Virtual Registration

4.4.1.4 System IP Plan - PGM 102

Selecting System IP Plan will display the input entry page.

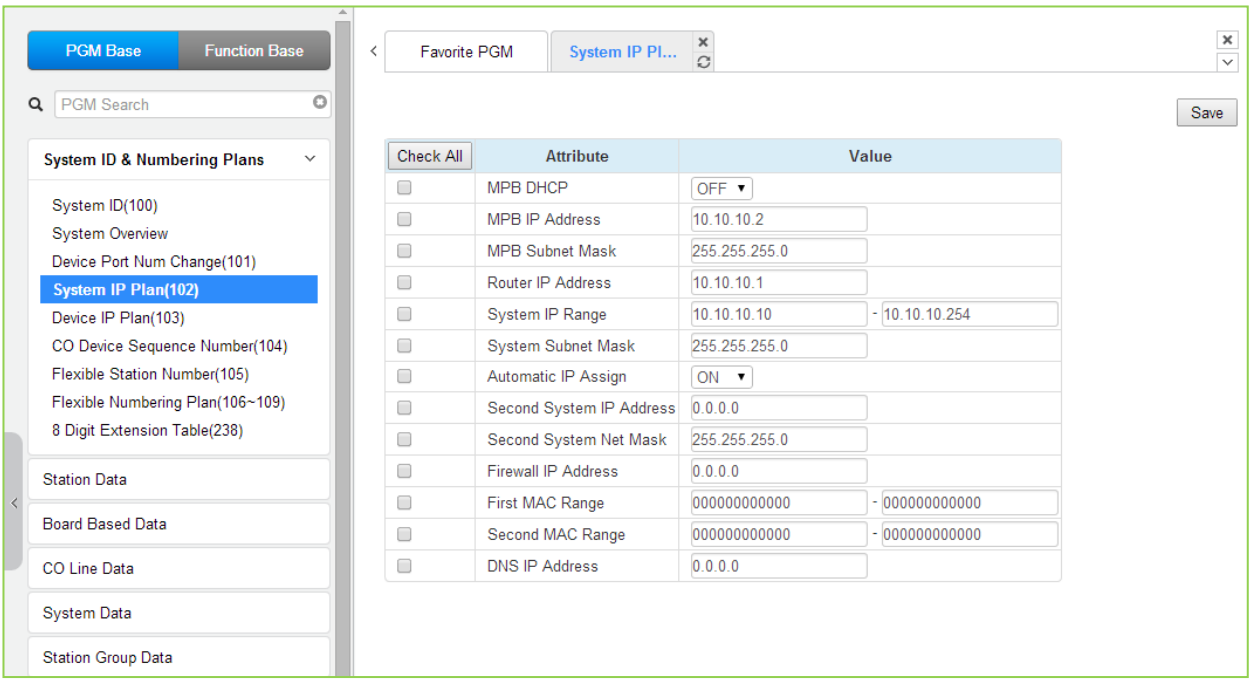


Figure 4.4.1.4-1 System IP Plan

The System IP Plan sets several IP addresses including the MPB IP address that is required for external VoIP calls, the IP address for the router, and the system‘s internal private IP address Plan. Note that the LAN and Router addresses must be routable IP addresses for access to an external VoIP network, remote access by an iPECS Phone or remote Web access. When used, the LAN port of the VVMU (Voice over IP device unit) must also have a routable IP address for access to/from an external VoIP network and a remote iPECS device.

When “Automatic IP Assign” is enabled, the system will assign IP addresses to each iPECS IP terminal and the VVMU using the System IP address range defined. These addresses are used for communications between the system and other VVMU and terminals.

The system may be connected to a LAN that is segmented by two separate private IP address schemes. This segmenting technique is often used to separate voice and data devices. However, with this segmenting technique, the system will normally treat the segmented devices such as IP softphones, as remote devices, using valuable WAN bandwidth. Assigning the “Second Sys IP address” with a valid IP address from the second segment permits the system to communicate directly with the devices over the LAN.

iPECS can be installed behind a NAPT server, if the NAPT server provides fixed address translation and port forwarding to the system. In this case, the system will employ the “Firewall IP address” as the fixed IP address for communication with remote devices. This address must be assigned as the “MPB” address in the remote device.

Table 4.4.1.4-1 SYSTEM IP ADDRESS PLAN

ATTRIBUTE	DESCRIPTION	DEFAULT
MPB DHCP	Controls the DHCP client function for the MPB in the KSU.	OFF
MPB IP Address	Public IP Address of the KSU LAN port that required for remote user and external VoIP network access. IPv4 format.	10.10.10.2
MPB Subnet Mask	Defines the system subnet for MPB IP addresses.	255.255.255.0
Router IP Address	IP Address of router for external network (WAN) access. Required for shared voice and data LAN, external VoIP and remote Web access.	10.10.10.1
System IP Range	Range for private IP addresses of Modules/Terminals.	
System Subnet Mask	Define the system subnet for private IP addresses.	255.255.255.0
Automatic IP Assign	The system automatically assigns IP addresses to modules and terminals (ON) or, when OFF, IP addresses are assigned manually in Device IP Address Table or from the DHCP address assigned to the device.	ON
Second System IP Address	When devices have different address schemes on the same LAN, enter an IP address from the second LAN for use by the eMG system.	0.0.0.0
Second System Net Mask	Net mask of the second private IP addresses	255.255.255.0
Firewall IP Address	When the system is installed behind a NAPT server, the fixed IP Address provided by the NAPT server must be assigned here. Also, use this IP address to identify the MPB in remote devices.	0.0.0.0
First MAC Range	MAC Address Range to register a device if device MAC address is included in range.	000000000000~ 000000000000
Second MAC Range	MAC Address Range to register a device if device MAC address is included in range.	000000000000~ 000000000000
DNS IP Address	IP Address of Domain Name Server, which iPECS eMG will use to resolve a URL to an IP address. The DNS provides the resolution after receiving the name from iPECS.	0.0.0.0

4.4.1.5 Device IP Plan - PGM 103

Selecting Device IP Plan will display the input entry page.

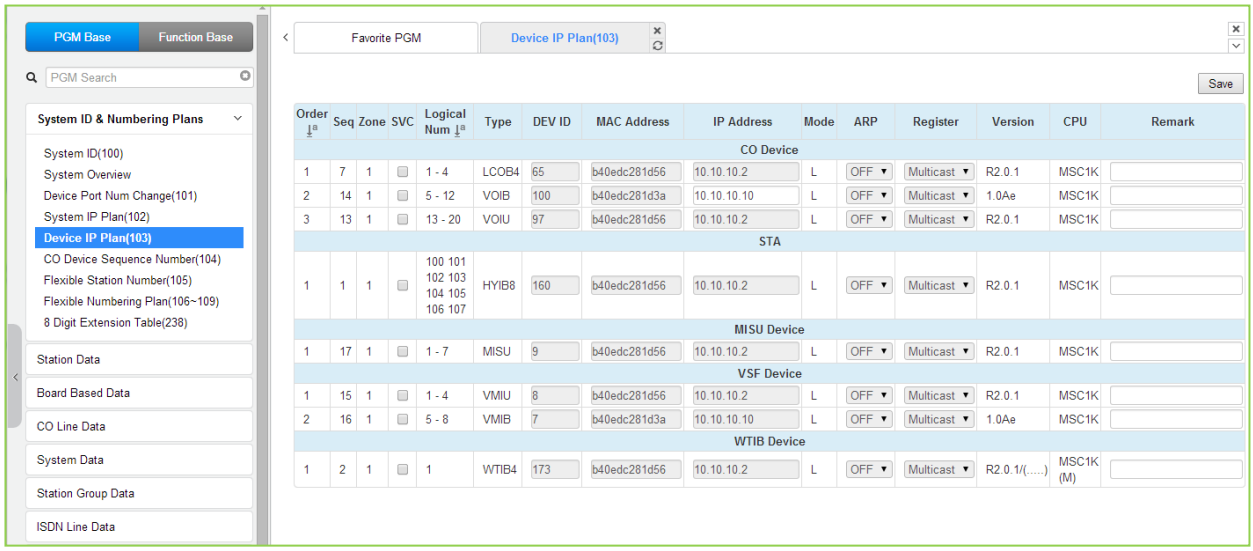


Figure 4.4.1.5-1 Device IP Plan

TDM board is registered with own slot number. It is registered automatically without any configuration.

If the station is assigned to Master or Slave by linked station, the bracket '[M] or [S]' will be displayed by the station number in PGM 101, 103, 105, 124 of Web page.

To register IP device:

As Gateway/board and terminals are registered to the iPECS, a slot number is assigned, which indicates the order of registration. Also, based on the type of device (CO Gateway/board, Terminal or Station board) the system assigns a logical Sequence Number. Thus, Sequence Numbers for CO Gateway/board, Terminals are independently assigned based on the type of Gateway/board. These Sequence Numbers are employed to provide a relationship between the physical MAC address and the logical port numbers of the device.

The system may assign a default private IP address to each Sequence Number. If desired, this program may be used to modify the assigned IP address for each Gateway/board and iPECS Phone.

Each Gateway/board and terminal can be assigned for "Direct Send". With Direct Send enabled, the system will employ the Ethernet MAC address of the device to send iPECS protocol messages to the device. This reduces the overall LAN traffic by eliminating the need for IP address headers in the messages.

The system normally employs IP multi-cast protocol to respond to a registration request from a Gateway/board or terminal. When the device is separated from the system by a router, the system must use the IP uni-cast protocol. This is established by the "Local Device" assignment. When disabled (Off), the system will send an IP uni-cast message to the device in response to a registration request.

4.4.1.6 CO Device Sequence Number - PGM 104

Selecting CO Gateway/board Sequence Number will display the input entry page. Selecting the blue colored text in the Table header will sort the table based on the selected column. Click **[Save]** button after changing Value to apply.

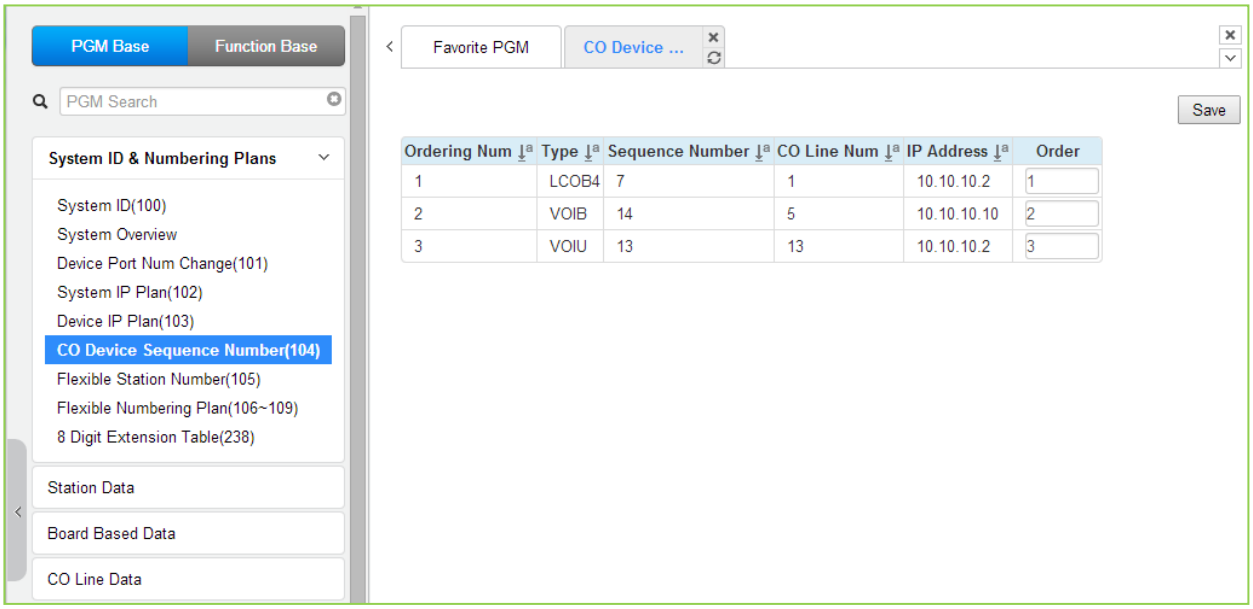


Figure 4.4.1.6-1 CO Device Sequence Number

The system configures the CO/IP Line numbers as discussed in section 2.2. Each slot is assigned the starting CO/IP Line number based on the Order Numbering. In place of the default Order Numbering, the “Order” number assigned in this PGM can be used to reorder the CO/IP numbering.

4.4.1.7 Flexible Station Numbering Plan - PGM 105

Selecting Flexible Station Number will return the data entry page. This page permits changes in the Station Numbering Plan using one of three methods:

Enter Station Index Range: eMG80: 1-140 / eMG800: 1-1200

Station Index Range: use to change the station numbers associated with a range of “Order Numbers” (the indexes). The “Start Station Number” is assigned to the station with the first index then the station number is incremented by one and assigned to the next station in the range. The process is repeated until the station number with the last index is changed.

Station Number: enter the station number to search. The station number is displayed and then you can change the new station number as you wish.

Multiple Station Number to change: there are two ways to search the station number for change; Enter Index Range or Enter Station Range.

You can change station numbers over a range of stations using the “Start Station Number” as the first station number for the range. The station number is incremented by one for each successive station in the range.

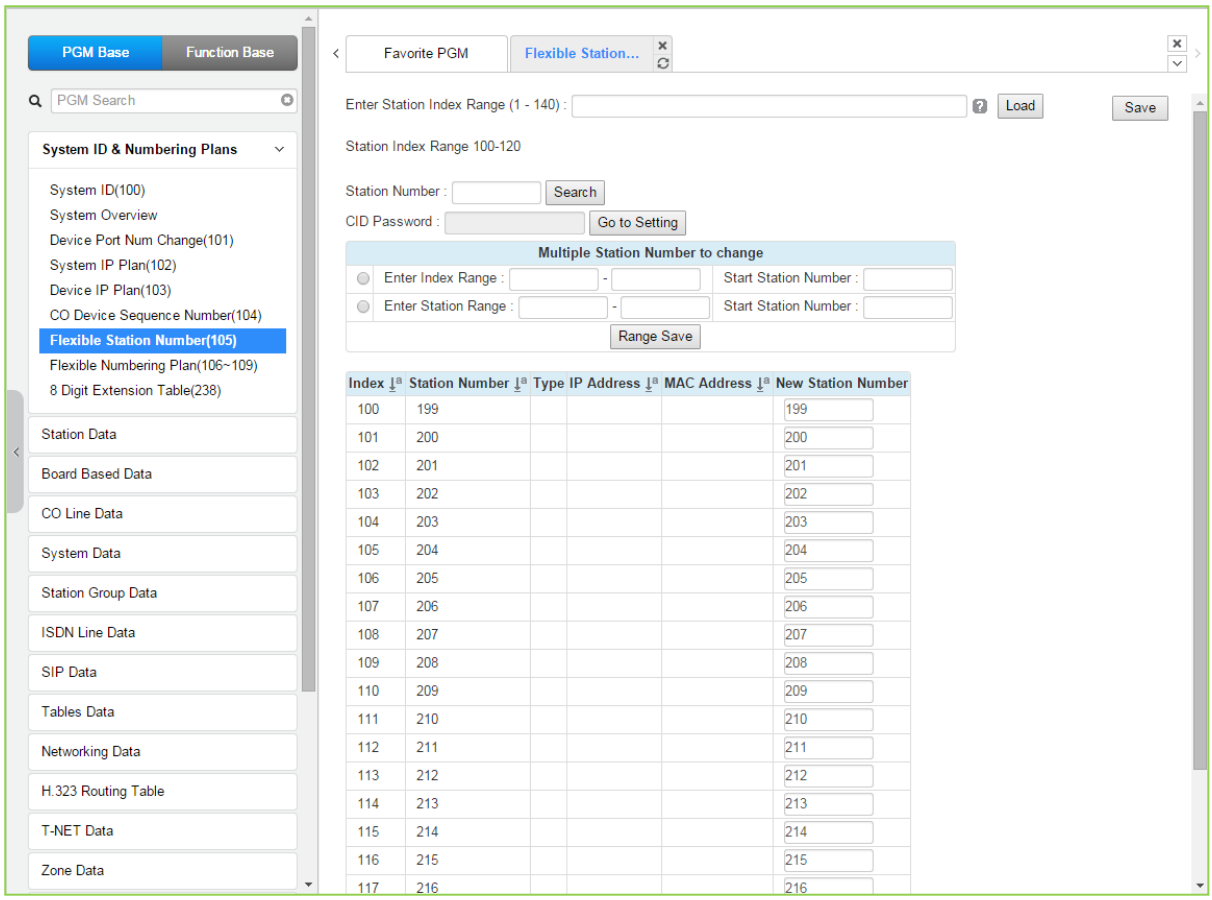


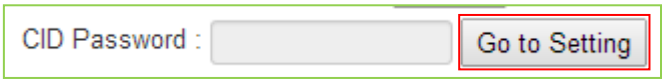
Figure 4.4.1.7-1 Flexible Station Number

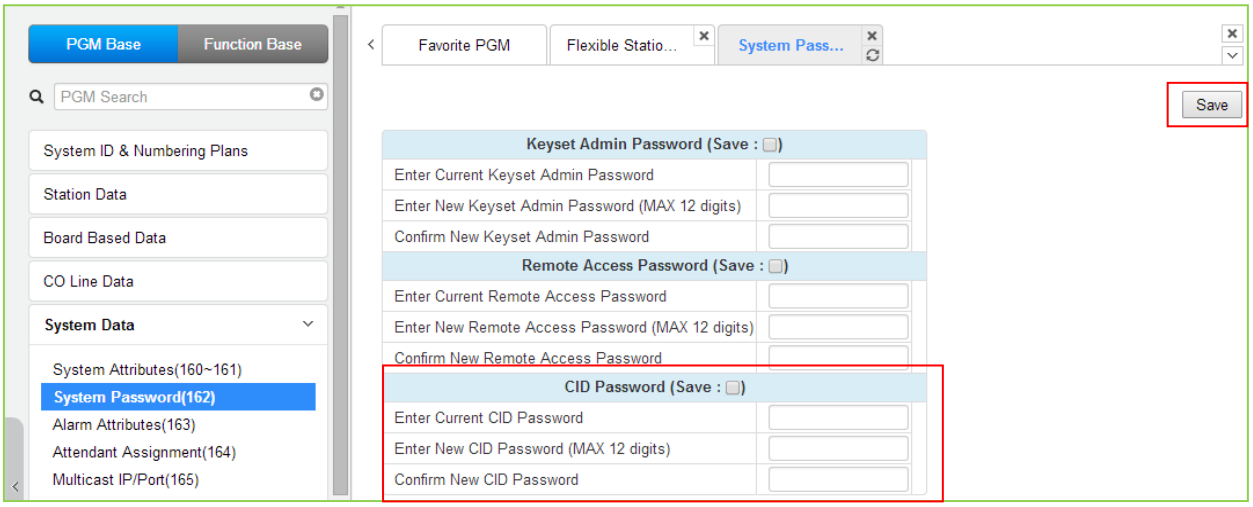
Each iPECS IP and LDP Phone and SLT is assigned a logical order number, shown as the “Index” number on the Web page, during the registration process. The station Index number is incremented from 1 as each terminal device is registered. At registration, station numbers increment sequentially with the index and are assigned starting at Station 100 for eMG80 and at

Station 1000 for eMG800. The Station Numbering Plan allows the station numbers to be two (2) to eight (8) digits in length as long as the number of digits in the Station numbers is the same.

Setting CID Password directly

You can set the CID password to click “Go to Setting” button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark tick on the save box and click the Save button.





4.4.1.8 Flexible Numbering Plan - PGM 106 ~ 109

Selecting Flexible Numbering Plan will display the input entry page. Selecting the blue colored text in the Table header will sort the table based on the selected column. Click **[Save]** button after changing Value to apply.

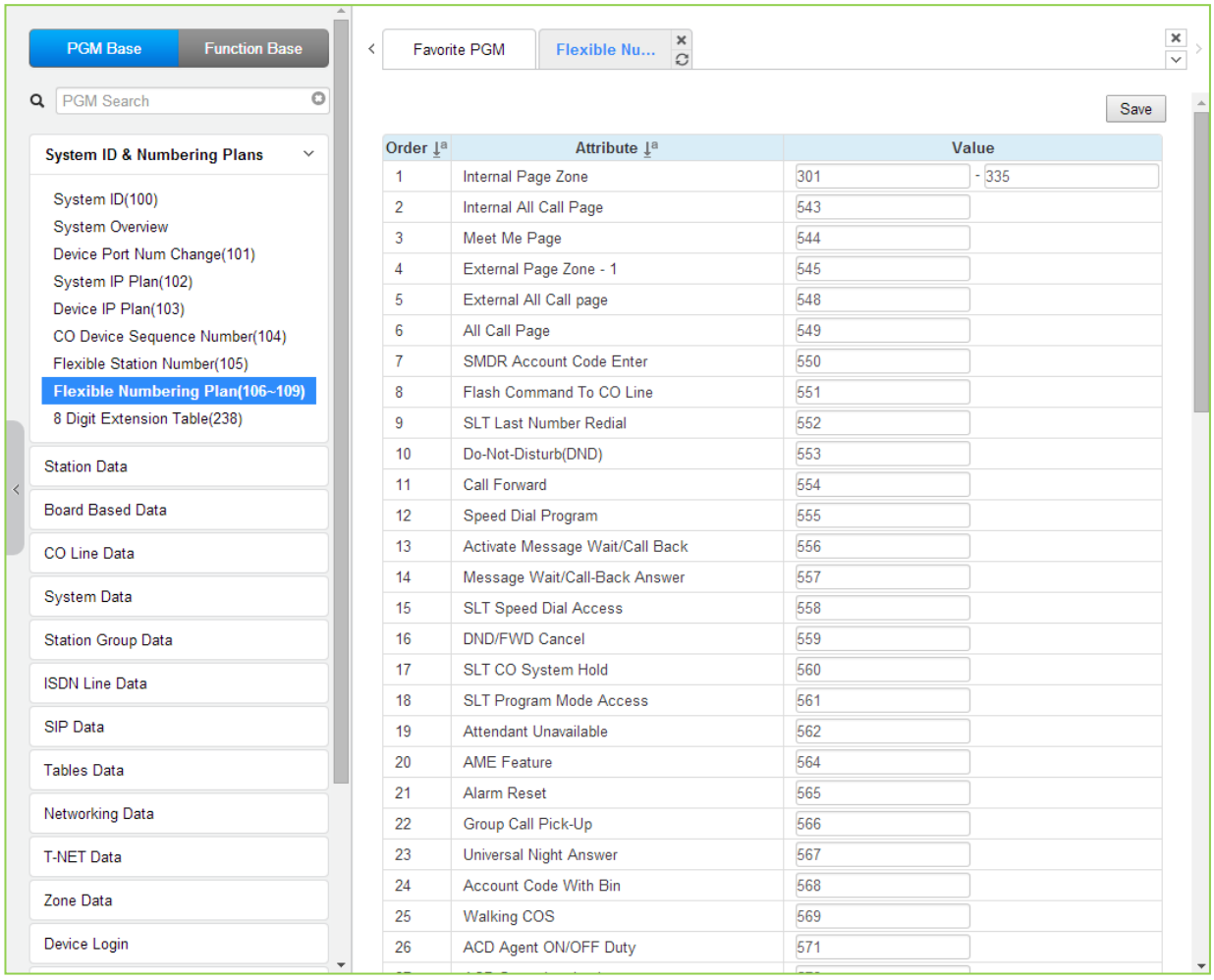


Figure 4.4.1.8-1 Flexible Number Plan

Feature dial codes for the system can be assigned using the system‘s Flexible Number Plan. Feature codes should be one (1) to four (4) digit in length and must not conflict. For example, Feature codes 53 and 536 represent a conflict. The system will not update the database until correct data is entered. Table 4.4.1.8-1 provides a brief description for each feature and the default codes as they appear in **Numbering Plan 2**. The default values for other numbering plans, which may be selected under System ID section, are provided in Appendix B.

Table 4.4.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
1	Internal Page Zone	Internal Page Zone access codes.	eMG80:301~335 eMG800:*301~*400
2	Internal All Call Page	Internal All Call Page access code.	*543
3	Meet Me Page	Meet-Me-Page answer code.	*544

Table 4.4.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
4	External Page Zone – 1	External Page Zone 1 access code.	*545
5	External All Call Page	External All Call Page access code.	*548
6	All Call Page	All Call Page access code.	*549
7	SMDR Account Code Enter	Dial code to signify the start of an SMDR Account Code.	*550
8	Flash Command To CO Line	Dial code to generate a Flash on the active CO Line.	*551
9	SLT Last Number Redial	SLT Last number redial feature access code.	*552
10	Do-Not-Disturb (DND)	Dial code to activate Do-Not-Disturb.	*553
11	Call Forward	Code to activate Call Forward.	*554
12	Speed Dial Program	SLT Speed Dial programming access code.	*555
13	Activate Message Wait/Call Back	Code to activate Message Wait/Call Back.	*556
14	Message Wait/Call-Back Answer	Code to return Message Wait/Call Back.	*557
15	SLT Speed Dial Access	SLT Speed Dial access code.	*558
16	DND/FWD Cancel	Code to cancel DND/FWD/MSG Wait.	*559
17	SLT CO System Hold	Code to place a CO Line call on System Hold.	*560
18	SLT Program Mode Access	SLT user program access code.	*561
19	Attendant Unavailable	Code to make attendant “unavailable”.	*562
20	AME Feature	Dial code to assign an Answering Machine Emulation Flex button.	*564
21	Alarm Reset	Code to terminate an Alarm signal.	*565
22	Group Call Pick-Up	Group Call Pick-up code.	*566
23	Universal Night Answer	Universal Night Answer code.	*567
24	Account Code With Bin	Dial code for entering an Account Code.	*568
25	Walking COS	Dial code to activate Walking Class-of-Service.	*569
26	ACD Agent ON/OFF Duty	Code to toggle ACD Supervisor ON and OFF duty.	*571
27	ACD Supervisor Login	Supervisor log-in code.	*572
28	ACD Supervisor Logout	Supervisor log-out code.	*573
29	ACD Help Code	Agent & Supervisor code for Supervisor help.	*574
30	ACD Call In Queue Display	Dial code to display calls in queue.	*575
31	ACD Supervisor Status	Dial code to display group status.	*576
32	ACD Supervisor Monitor	Dial code to activate Supervisor monitor.	*577
33	ACD Reroute Queued Call Answer	Code to reroute call after answer.	*578
34	ACD Reroute Queued Call No Answer	Code to reroute call prior to answer.	*579
35	Camp-On Answer	Dial code to answer a Camped On call.	*621
36	Call Park Locations	Dial code to place/retrieve a call in a system Park Orbit.	eMG80:#601~#619 eMG800:#601~#800
37	Station Group Pilot Number	Station group pilot number.	eMG80: *401~*440 eMG800: *401~*500
38	Station User VSF Features Access	VSF feature access code.	66
39	Call Coverage Ring	Code for Call Coverage button.	*76
40	Direct Call Pick-Up	Dial code to activate Directed Call Pick-up.	*77
41	Access CO Group	Dial code to access a CO Line from a group.	89

Table 4.4.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
42	Access Individual CO/IP	Dial code to access a specific CO/IP Line.	88
43	Access Held CO/IP	Dial code to access the last CO/IP Line from Hold.	8*
44	Access Held Individual CO/IP	Dial code to access a specific CO/IP Line from Hold.	8#
45	Access CO In First CO Group	Dial code to access the 1st available CO/IP Line in any accessible group.	9
46	Attendant Call	Dial code to call Main Attendant.	0
47	VM MSG Wait Enable	Dial code for external Voice mail to activate Message Wait indication.	*8
48	VM MSG Wait Cancel	Dial code for external Voice Mail to deactivate Message Wait indication.	*9
49	Door Open	Dial code to activate Door 1 contact.	#*1
50	Door Open	Dial code to activate Door 2 contact.	#*2
51	MCID Request	Dial code to activate Malicious Caller Id (Except USA version).	*0
52	Unsupervised Conf Timer Extend Code	Dial code to extend unsupervised conference time.	##
53	PTT Group Logon/Logoff	Push-To-Talk group login and logout dial code. The station must have a PTT button for proper operation.	#0
54	ACD Agent Primary Login	ACD Agent Primary Login code.	*581
55	ACD Agent Primary Logout	ACD Agent Primary Logout code.	*582
56	ACD Agent Secondary Login	ACD Agent Secondary Login Code.	*583
57	ACD Agent Secondary Logout	ACD Agent Secondary Logout Code.	*584
58	Wrap-up End	ACD Agent Wrap-up end code.	*585
59	T-NET CM LOGIN/OUT	T-NET CM Login/out code	*586
60	ENTER INTO CONF ROOM	Code for a station to enter a conference room.	*59
61	ENTER INTO CONF-GROUP	Code for a station to initiate a conference group.	*68
62	STATION ICR	Code for a station to activate ICR forward.	*587
63	PICK UP GROUP PICK-UP	Pick Up Group Call Pick-up dialing code.	*588
64	EMERGENCY PAGE	Code for emergency page.	*589
65	REMOTE MEX CONTROL	Code to control the mobile extension settings remotely.	*580
66	Agent ON/OFF Duty In ALL GRP	Code to change the state of the Agent ON/Off duty in all Station groups.	*58*
67	SLT ACNR	Dial code for an SLT to activate ACNR	*58#
68	ACD Supervisor Ring Mode	Code to check and change ACD group Ring mode by ACD group supervisor.	*570
69	Company Directory Name	Code to check and record a user's Name greeting for the Company Directory feature.	*563
70	ISDN Supplementary HOLD	ISDN Supplementary HOLD Numbering Plan Code.	*57*
71	ISDN Supplementary Conference	ISDN Supplementary Conference Numbering Plan Code (Not supported).	*57#
72	Forced Channel Seize	Code to disconnect an existing call and seize the CO/IP Line or connect to the station.	*56*
73	Override DND/Forward	Dial code to override DND or Call Forward activated by a station.	*56#

Table 4.4.1.8-1 FLEXIBLE NUMBERING PLAN CODES

Order	ATTRIBUTE	DESCRIPTION	DEFAULT
74	Cancel call back	Code to cancel a Callback request.	
75	Transfer to VSF Number	While on a CO/IP Line call, this code may be used to transfer a call to a valid system announcement, [Transfer] + [*55*] + valid system announcement (01-200). The outside party receives the system announcement and DISA service activates.	*55*
76	CCR	It is used in digit conversion.	#2
77	Room Type Conf Group Join	After a UCS client activates a UCS Conference Group, other users may dial this code and the group number to enter the Conference.	5*0

4.4.1.9 8 Digit Extension Table - PGM 238

Selecting 8 Digit Extension Table will display the input entry page. Click **[Save]** button after changing Value to apply.

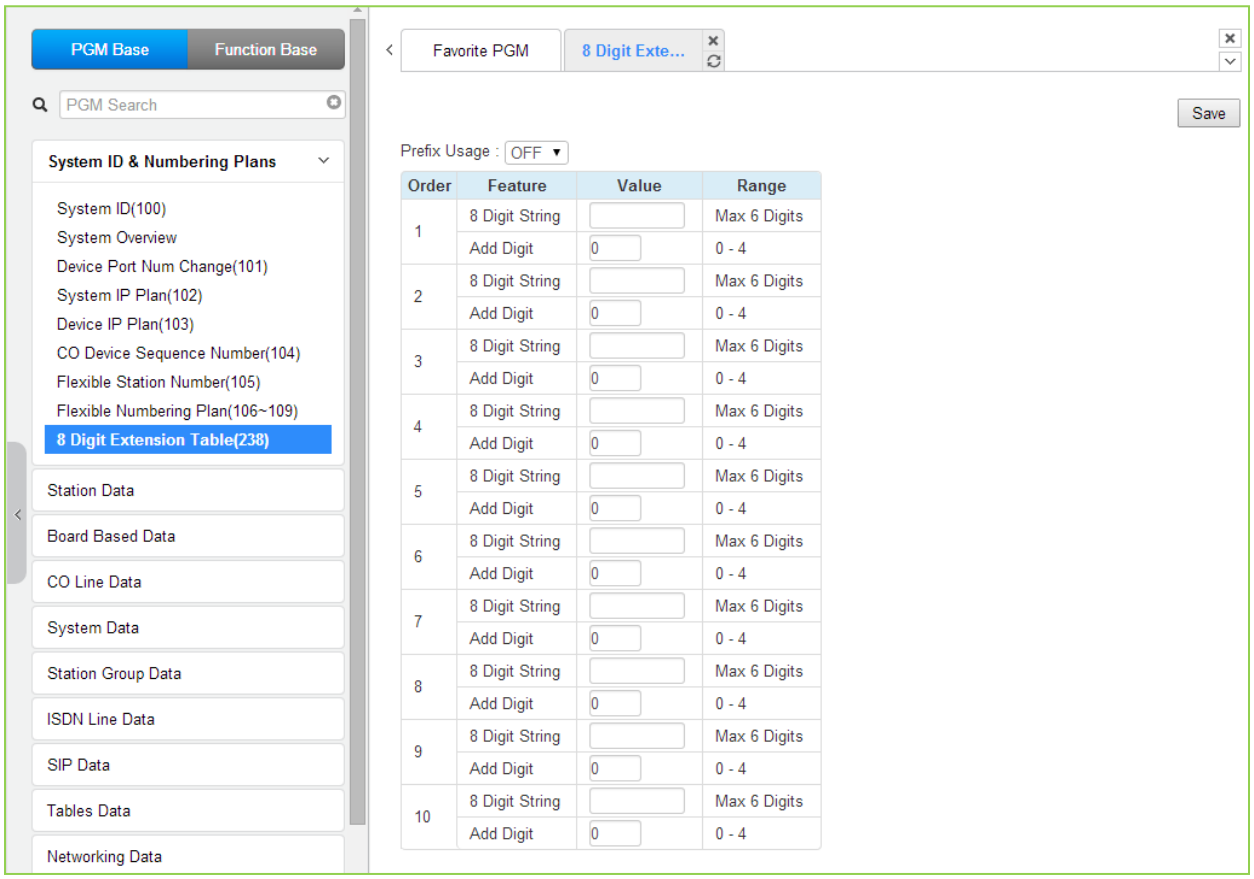


Figure 4.4.1.9-1 8 Digit Table

The iPECS eMG supports a Station Numbering Plan of up to 8 digits. By combining a prefix digit string (8 Digit String) of up to six (6) digits with the Add Digit count (digit count from the Station Numbering assigned in PGM 105), Station Numbering can support up to 8 digits. Note that multiple prefixes (8 Digit Strings) can be assigned.

4.4.2 Station Data

Selecting the Station Data group returns the Station Data menu displayed in the left frame as shown in the following figure.

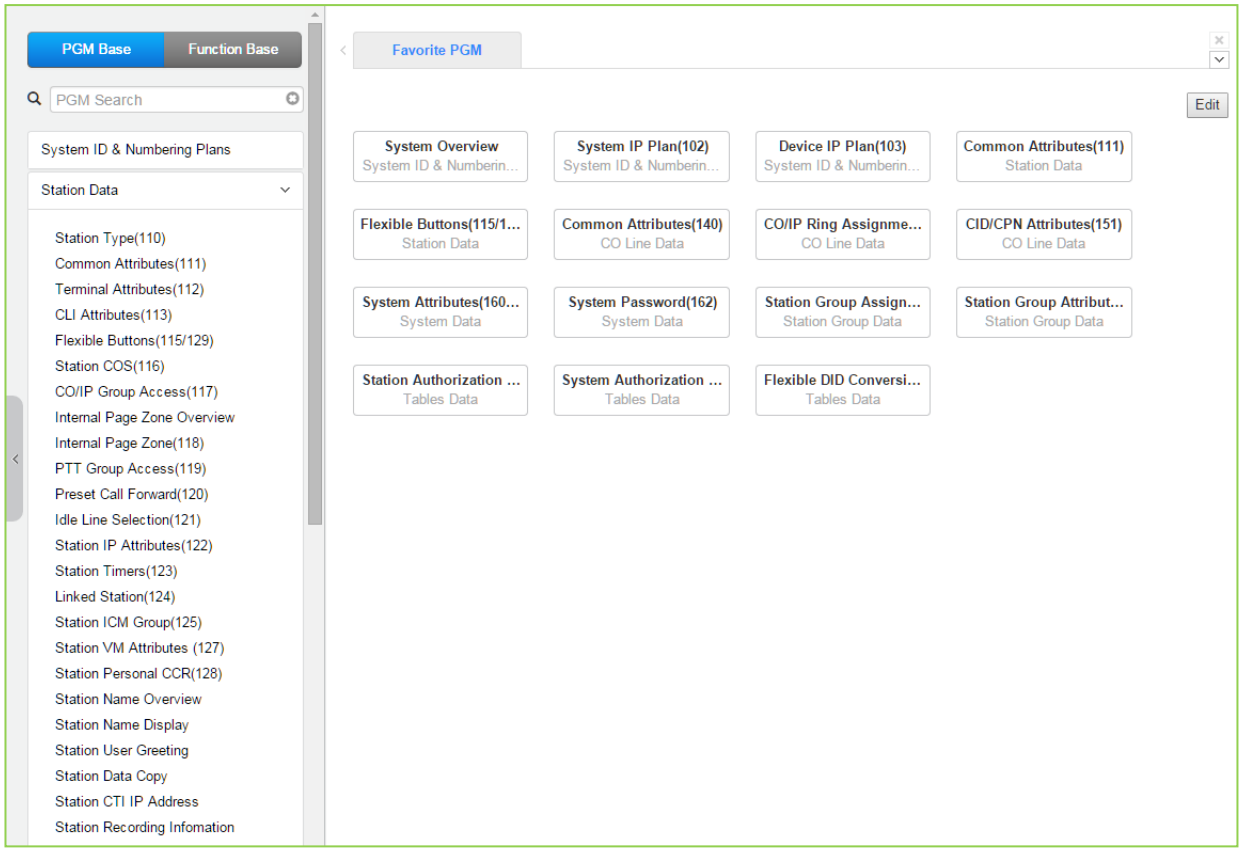


Figure 4.4.2-1 Station Data Main Page

4.4.2.1 Station Type - PGM 110

Selecting Station Type will display the Station Type data input entry page. Enter a valid station range and click **[Load]** to modify the Station Type data. Click **[Save]** button after changing Value to apply.

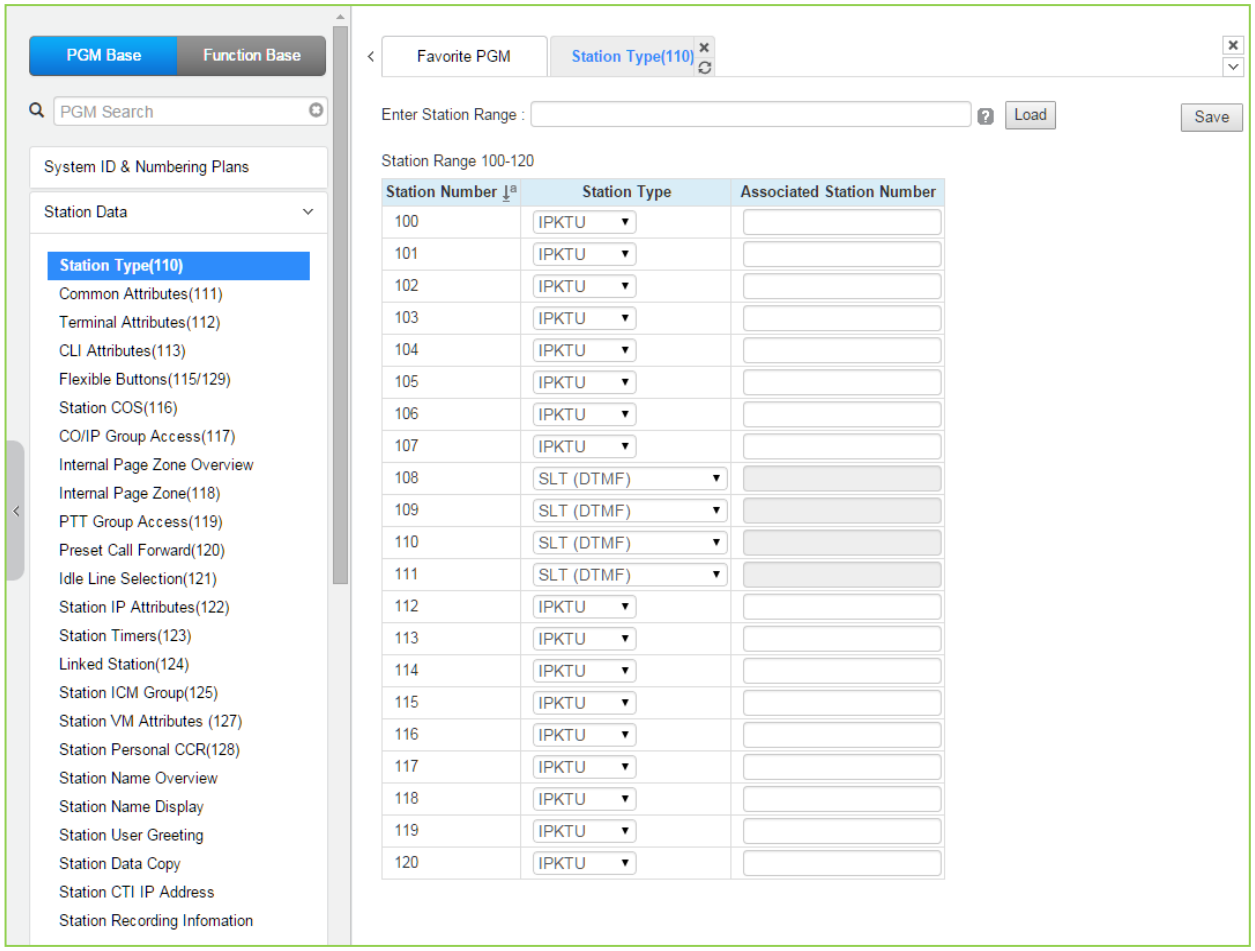


Figure 4.4.2.1-1 Station Type

Each station is assigned a type selected from the “Station Type” drop-down menu. The type is used by the system to recognize the station‘s capability and set default Flex button configurations. In addition, for standard iPECS DSS/BLF consoles, the ‘Associated Station Number’ is required so the system will recognize the station that is used with the console. Note this is not used with the Serial DSS/BLF Consoles.

In case of seleting SLT type, there are 6 types as below:

- SLT (DTMF)
- SLT (Pulse)
- SLT (DTMF VOL-MW)
- SLT (Pulse-MW)
- SLT (DTMF FSK-MW)
- SLT (DTMF POL-MW)

4.4.2.2 Common Attributes - PGM 111

Selecting Common Attributes will display the common attributes data input page. Enter a valid station range and click the **[Load]** button to enter Common Attributes data.

Use the check boxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations by clicking **[Save]** Button after changing Value.

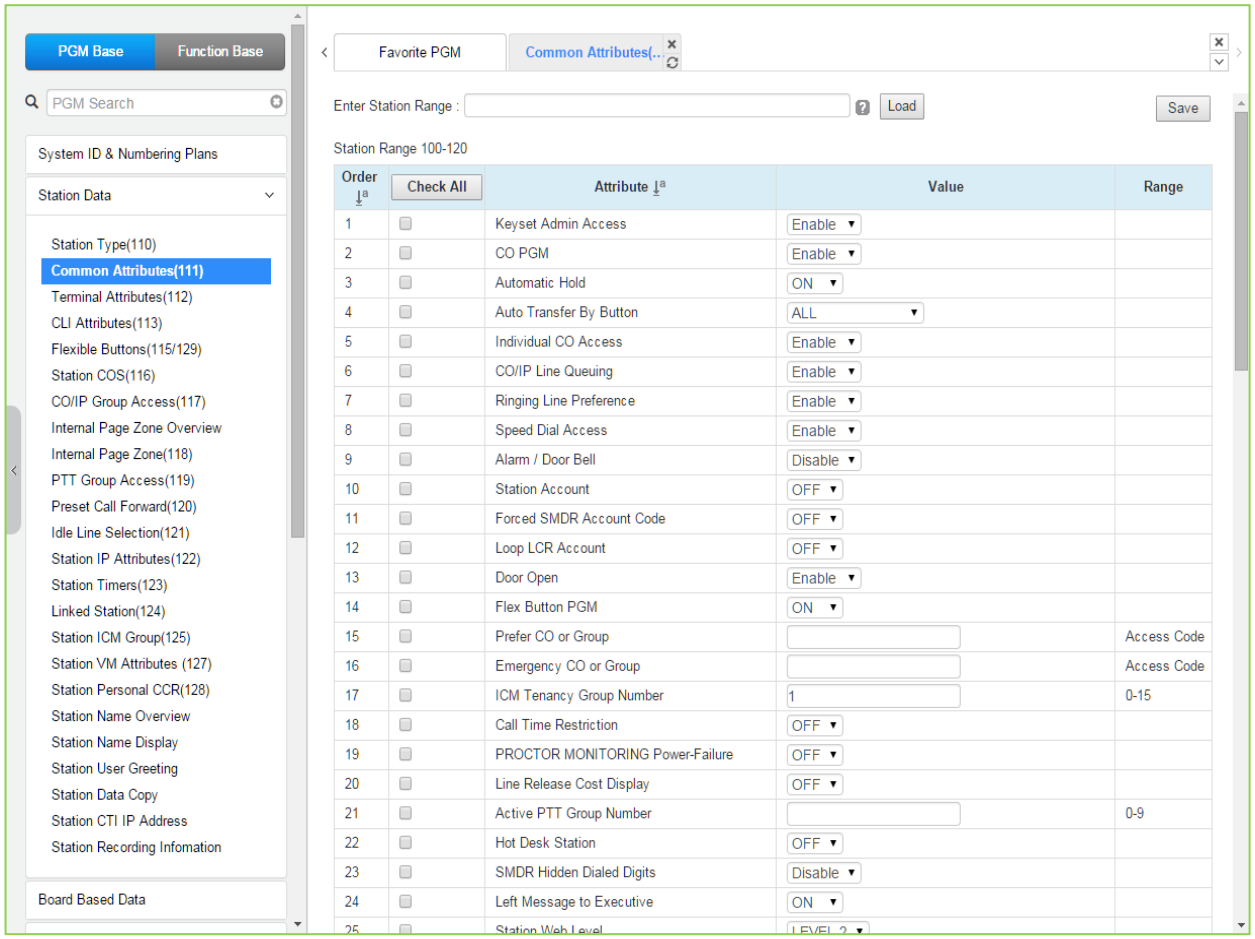


Figure 4.4.2.2-1 Common Attributes

Common Attributes define features and functions available to the station. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to Table 4.4.2.2-1 for a description of the features and the input required.

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Keyset Admin Access	When enabled, the station can access the system Database.	Disable Enable	Enable
CO PGM	A station can be permitted to change the CO/IP Line numbers (ports) associated with a Flexible button.	Disable Enable	Disable
Automatic Hold	Enables Auto Hold for the station. With Auto Hold enabled, the system will place an active external call on hold if the user presses a CO/IP Line or DSS button.	OFF ON	ATD: ON Others: OFF
Auto Transfer By Button	Transfer a talking call to a new making call by press Station (DSS)/CO (Loop)/U-Loop flexible button.	OFF ALL	ALL

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Except CO to CO	
Individual CO Access	Permits stations to use dial codes to access individual CO/IP Lines.	Disable Enable	Enable
CO/IP Line Queuing	Permits the station to queue for the next available Line when an All Lines Busy signal is received.	Disable Enable	Enable
Ringing Line Preference	Enables Ringing Line Preference for the station. Calls that ring the telephone can be answered by going off-hook without selecting the CO/IP Line button.	Disable Enable	Enable
Speed Dial Access	Allows the station to access System Speed Dial bins.	Disable Enable	Enable
Alarm/Door Bell	Assigns a station to receive Alarm/Door Bell signal.	Disable Enable	Disable
Station Account	When ON, the station user must enter an authorization code to access CO/IP Lines.	OFF ON	OFF
Forced SMDR Account Code	When On, the user must enter an Account code to place an outgoing call.	OFF ON	OFF
Loop LCR Account	The Station may be required to enter a Station Authorization code to access LOOP LCR operation.	OFF ON	OFF
Door Open	Enables use of Door open feature by station.	Disable Enable	Enable
Flex Button PGM	The ability to assign Flexible buttons of the iPECS IP and LDP Phones can be controlled. When allowed here, the user may assign features to Flexible buttons but requires special assignments to configure CO/IP Line buttons.	OFF ON	ON
Prefer CO or Group	The System will seize this CO/IP Line or a Line from the CO/IP group number when the station dials “9” (First available Co access code)	CO/IP Line/ CO Group number	…
Emergency CO or Group	This field defines the CO/IP Line or Group employed by the system to place Emergency Assistance calls.	CO # or CO Group #	Any CO
ICM Tenancy Group	Assigns stations to an ICM Tenancy Group.	eMG80:1~15 eMG800:0~32	1
Call Time Restriction	All outgoing calls will disconnect at expiration of the Call Restrict Timer, see System Timers section 4.4.5.20.	OFF ON	OFF
Proctor Monitoring Power-Fail	Enables use of PABX ANI Link device for E-911 support, Only an SLT port can be used for this feature.	OFF ON	OFF
Line Release Cost Display	When a CO/IP line is released, the disconnect cause or call-cost is displayed in the LCD of the iPECS IP or LDP Phone.	OFF ON	OFF
Active PTT Group Number	A station can be assigned to a PTT (Push-to-Talk) group and the group enabled so the station can place and receive PTT announcements for the group.	0~9	
Hot Desk Station	A station can be assigned as a Hot Desk phone. Users and agents can login and use resources of the system through the Hot Desk phone.	OFF ON	OFF
SMDR Hidden Dialed Digits	Enables hiding dialed digits in SMDR output.	Disable Enable	Disable
Left Message to Executive	When a call forwards to the Secretary of an Executive/Secretary pair, messages can be left for the Executive (ON) or Secretary (OFF).	OFF ON	ON

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Web Level	Based on this level, the user will be able to view the specified programs within the Station User Web portal. Level 1 can view all programs, Levels 2 and 3 are configured in “Station Web Authorization” under System Data. This is a Web only PGM.	LEVEL 1 ~ LEVEL 3	LEVEL 2
Headset page mode	When a page announcement is received, it is normally played over the Speaker of the iPECS IP or LDP Phone. For headset users, the page can played to the headset or both the headset and speaker.	SPKR/ HEADSET/ BOTH	Speaker
Progress Indication	When employing a non-ISDN terminal, specifically a modem or analog FAX, the ISDN call SETUP message must include this message and “Progress Indication” should be set to “ON”.	OFF ON	OFF
3.1 KHz Audio	When an analog device (SLT or FAX) uses an ISDN Line in the system, the Information Element of the ISDN SETUP message must indicate the device only has 3.1 KHz audio capabilities. If an SLT or analog FAX will be allowed access to the ISDN Lines, this parameter must be “ON”	OFF ON	OFF
Pickup by flexible button	It is used to set pick up by flex button. ON: user can pick up by DSS button. OFF: Users cannot pickup by DSS button.	OFF ON	ON
Prepaid Call	Enables Pre-paid Call feature.	OFF ON	OFF
Prepaid Money (0 - 999999) & Used Prepaid Money	An amount can be associated with the station as prepayment for outgoing calls. The assigned “Pre-paid Money” is reduced by the calculated call cost (Call Metering or cost/minute). This parameter displays the remaining funds for outgoing calls. Prepaid Money is often used in small hospitality businesses. The “Used Pre-paid Money” displays the money that has been used.	000000 – 999999 000000 - 999999	0 0
SIP USER TABLE INDEX	Index to SIP User ID table, PGM 126, for the station. Note PGM 126 is accessible by Web only. It is selected in “SIP user ID selection” in PGM 133. User can use different use ID for service provider.	eMG80:0~140 eMG800:0~1200	0
SIP USER TABLE INDEX2	Index to SIP User ID table, PGM 126, for the station. Note PGM 126 is accessible by Web only. It is selected in “SIP user ID selection” in PGM 133. User can use different use ID for service provider.	eMG80:0~140 eMG800:0~1200	0
SIP USER TABLE INDEX3	Index to SIP User ID table, PGM 126, for the station. Note PGM 126 is accessible by Web only. It is selected in “SIP user ID selection” in PGM 133. User can use different use ID for service provider.	eMG80:0~140 eMG800:0~1200	0
Station Web Language	Change the language of the station.	English/ Local language	English
Lift Handset for page	If an iPECS IP or LDP Phone user attempts to page using the speakerphone, pre-selection will be activated and the display shows ‘Lift Handset for Page when Lift Handset for Page is ON". If Lift Handset for Page is OFF, then User can make page on speakerphone without lift handset.	OFF ON	ON
Privacy	If Privacy option is ON, then any person could not barge-in to	OFF	OFF

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	the station and Attendant can't intrude to Station. Also, if Privacy option is ON, any person can't forcefully disconnect the station.	ON	
Call Coverage Attributes			
Call Coverage Mode	The Call Coverage feature permits an iPECS IP or LDP Phone user to receive ring and answer calls for other stations.	OFF ON	OFF
Call Coverage Delay Ring	When a covered station rings, the **{CALL COVERAGE}** button LED will flash at the covering station and the station will receive ring (immediate or delayed by 0 to 15 ring cycles).	0~15	0
Call Coverage On Busy	OFF: Call Coverage is implemented when a covered station is in the idle state. ON: Call Coverage is implemented when a covered station is on idle or busy state.	OFF ON	ON
Call Coverage Through Mobile Ext	OFF: Call Coverage Ring is not delivered to Mobile Extension ON: Call Coverage Ring is not delivered to Mobile Extension	OFF ON	ON
Call Coverage On Busy Range	External Call Only: Call Coverage only for external calls when the covered station is busy External and Internal Call: Call Coverage both for external & internal calls when the covered station is busy	External Call Only/ External and Internal Call	External Call Only
Call Coverage Delay Ring Method	by Originator: Call Coverage Delay is implemented by the covered station's "Call Cover Delay Ring" delay count' by Member: Call Coverage Delay is implemented by covering station's "Call Cover Delay Ring" delay count'	by Originator/ by Member	by Originator
Call Coverage For Wakeup Ring	OFF: Wakeup Ring to covered station is not covered ON: Wakeup Ring to covered station is covered	OFF ON	OFF
Call Coverage Ring Type on Member	Silence: No audible ring is presented and the user must press the flashing Call Coverage button to answer the call. Normal Ring: Audible ring is presented and the call can be answered by simply lifting the handset or pressing the Speaker button. Mute ring is only supported in LIP-8000E series.	Silence/ Normal Ring/ Muted(Continuous)-80XXE only/ Muted(One Burst)-80XXE only	Normal Ring
Tone/Ring Attributes			
Call Time Tone	A tone can be sent periodically indicating the elapsed time of an outgoing CO/IP call. The Elapsed Call Timer, see System Timers section 4.4.5.20, determines the period between tones.	OFF ON	OFF
Camp-on Tone	Permits camp-on tone to be sent to a station when the station receives a camp-on request.	OFF ON	ON
ICM Dial Tone Source	One of four dial tone sources can be selected for each station: Dial-tone MOH 1 MOH 2 VSF MOH	Dial Tone/ Internal music/ External music/ VSF MOH/ SLT MOH1~5/ VSF MOH2/ VSF MOH3	Dial Tone
ICM Ring Back Tone Source	One of four ring back tones can be selected for each station: Ring Back tone	Ring Back Tone/ Internal music/	Ring Back Tone

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	MOH 1 MOH 2 VSF MOH	External music/ VSF MOH/ SLT MOH1~5/ VSF MOH2~3	
Off hook ring type	While the station is Off hook ring, the type of ring can be adjusted as a single burst, muted normal ring, system ring or no audible ring signal.	BURST/ MUTE/ Refer to System Attributes SILENCE	Refer to System attributes
SIP color ring	Color ring is provided from assigned SIP VM (UMS). SIP extension number that is connected to SIP VM (UMS) server should be assigned.		Station number
Gain table index	Selects one of three Tables employ to set the gain from a device to other device types. PGM 410 to 417 under the Maintenance tab set the individual gains.	1-3	1
Tone table index	Tone table can be programmed.	1-5	1
Digit conversion table	One of the 15 Digit Conversion Tables can be configured for use for this CO/IP Line.	eMG80:1-15 eMG800:1-32	
Routing Attributes			
Call Forward	Enables Call Forward to be activated by the station.	OFF ON	OFF
DND	Enables DND to be activated by the station. The station can be limited to activate DND for outside calls (CO/IP Only) or for internal calls (ICM only), if desired.	OFF/ ALL/ ICM call only/ CO call only	OFF
Off-net Forward	A station must be allowed Off Net Fwd to forward external incoming calls outside the system or otherwise establish a CO-to-CO connection (Unsupervised Conference). (Except USA version)	Disable Enable	Enable
ACD Group Service	When unavailable, DID/DISA calls to the station can route to the ACD Group to which the station is a member.	OFF ON	OFF
Ring Group Service	When unavailable, DID/DISA calls to the station can route to the Ring Group to which the station is a member.	OFF ON	OFF
ACD Login Priority	ACD Group members may be assigned a priority, 0-9. Members with the highest priority are sent calls ahead of lower priority members. This field is the same as PGM 191-button 19.	0 ~ 9	0
Prime Line	Enables Delayed Prime Line (Idle Line) activation, see Idle Line Selection section 4.4.2.11, and Prime Line Delay timer section 4.4.5.20.	HOT WARM	WARM
Auto ACD DND	If an Agent does not answer an ACD call in the ACD No Answer timer, the Agent enters an Unavailable state with the Reason code entered here. The reason code is sent in ACD Event messages.	None #, *, 1~9	NONE
Forward if OOS	If a station is Out-of-Service and has previously forwarded calls, the system will forward the calls to the previous destination if enabled here.	OFF ON	OFF
LDT Table Index	LCR operation for the station will employ the LDT Table index defined by this entry.	eMG80: 1-10 eMG800:1-32	1

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LDT Zone number	If the LDT Zone Number of a LDT table (LCR LDT(221)) is equal to this value, the LDT table is available to this station.	1-100	1
Mobile (Web) Client Service	When enabled, the station can activate call back from the Station Web portal.	Disable, Enable	Disable
Click to call service	To use click call application, it should be enabled.	Disable, Enable	Disable
MS Lync RCC service	To use MS Lync RCC, it should be enabled.	Disable, Enable	Disable
MSN Wait	When a call that is corresponding to a MSN Telephone Number comes in to system, the call is basically routed to idle stations that have free MSN button that is assigned for the corresponding Telephone Number. And also the call can be routed to busy stations in the following condition. OFF : if a keyset is in a busy status, cannot receive incoming MSN Telephone Number corresponding call even though it has a free(idle) corresponding MSN LOOP Button ON : if a keyset is in a busy status, can receive incoming MSN Telephone Number corresponding call if it has a free(idle) corresponding MSN LOOP Button.	OFF ON	OFF
DID Restriction	A call routed using DID normally routes to the appropriate station. If desired, a Station can be restricted from receiving DID calls.	OFF ON	OFF
DISA Restriction	A call routed using DISA normally routes to the appropriate station. If desired, a Station can be restricted from receiving DISA calls.	OFF ON	OFF
Pre-Selected Msg DND	When the user activates Pre-Selected or Custom Messages, the system can automatically activate DND for the station so that the station will not receive ring and the call is routed based on the DND treatment.	OFF ON	OFF
Voice Attributes			
Page Access	Allows station to access paging facilities.	OFF ON	OFF
Forced hands Free Mode	When placing an intercom call, a user can change the ICM signaling mode, Tone Ring to Hands free answer mode or HF Answer to Tone Ring.	OFF ON	OFF
Group Listening	Enables Group Listen feature, audio is sent to both the handset and speaker with the handset microphone active and speakerphone microphone OFF.	Disable Enable	Enable
Override Privilege	Enables intrusion to gain access to an active CO/IP call.	Disable Enable	Disable
Voice Over	Enables use of Voice Over by the station.	Disable Enable	Enable
Barge In Mode	Barge-in permits an authorized Station to intrude into other existing outside/internal calls or to force disconnection existing of an existing call.	Disable/ Only Monitor/ Monitor & Join & Disconnect	Disable
Camp on enable	When On, a Station that is busy on a call, can receive Camp-on tones from another calling Station or CO/IP Line.	OFF ON	ON
Video Show on	When VoIP video door phone rings to a video-enabled IPKTS	OFF	OFF

Table 4.4.2.2-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Calling (ex. IP Video Door Phone)	handset, the video streaming commences immediately while the IPKTS handset is in the ringing and the video stream continues when answered. - OFF : normal implementation (video starts after answer) - ON: video stream from this Video Door Phone to the ringing video-enabled LIP Phone even though this is alerting stage. - Condition: A VOIU/VOIB channel for RTP-Packet-Relay purpose is required to serve ring-back-tone generation via a DSP channel. That is because system does pre-answer to the Video Door Phone even though the receiving station is on alerting state.	ON	

4.4.2.3 Terminal Attributes - PGM 112

Selecting Terminal Attributes will display the Terminal Attributes data input page. Enter a valid station range and click **[Load]** to enter Terminal Attributes data. Use the check boxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations by clicking **[Save]** Button after changing Value.

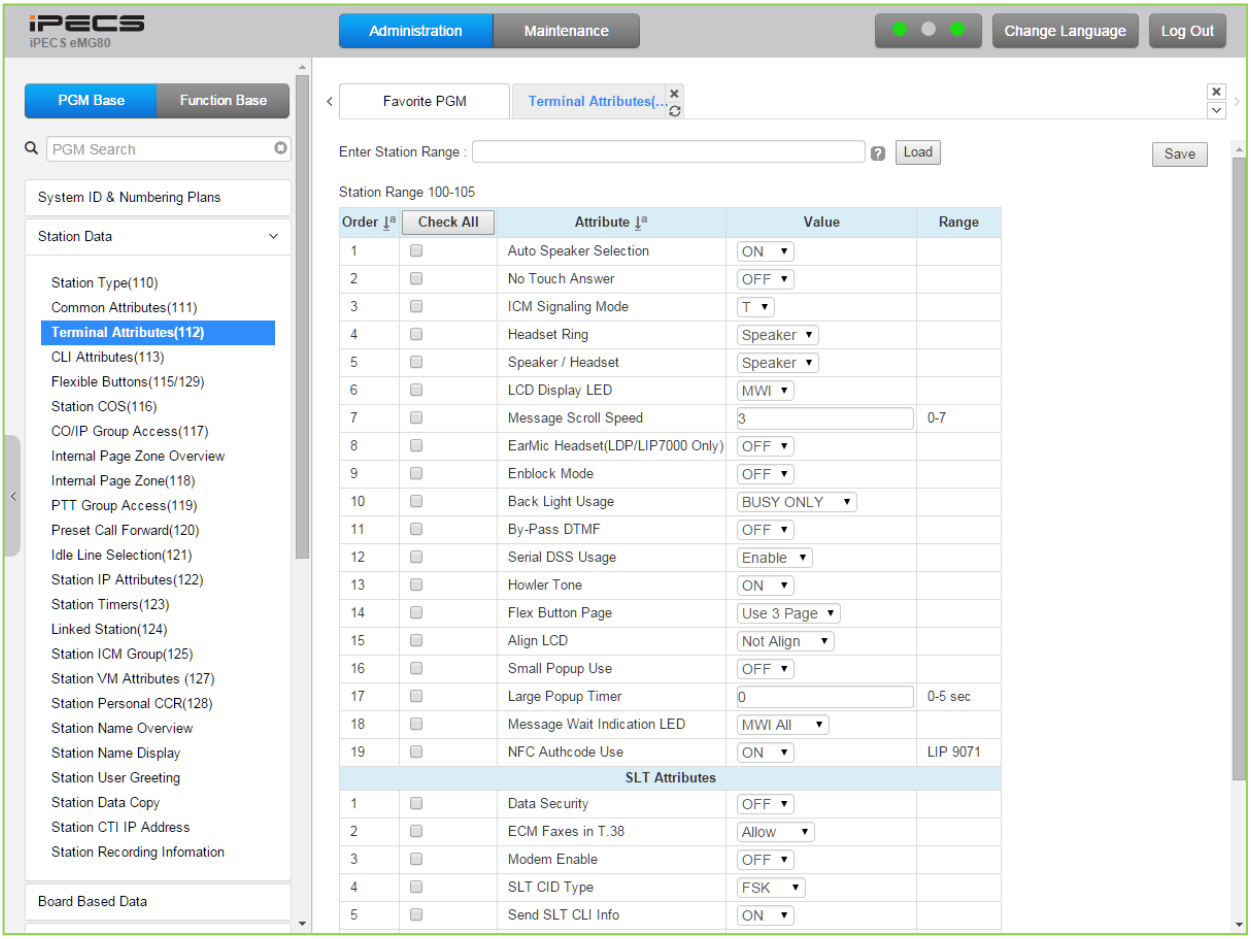


Figure 4.4.2.3-1 Terminal Attributes (PGM 112)

Terminal Attributes define features and functions available to the terminal itself. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to Table 4.4.2.3-1 for a description of the features and the input required.

Table 4.4.2.3-1 Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Attributes			
Auto Speak Selection	Enables **[SPEAKER]** activation when a CO/IP Line, DSS or other feature button is pressed; there is no need to lift handset.	OFF ON	ON
No-Touch Answer	Enables No-touch answer, which automatically connects transferred calls to the station's speakerphone after a short tone.	OFF ON	OFF
ICM signaling Mode	The user may select Hands-free (H), Privacy (P) or Tone Ring (T) for the ICM Signaling mode.	H, T, P	T
Headset Ring	Selects device to receive incoming ring signals, Speaker, Headset or Both.	Speaker/ Headset/	Speaker

Table 4.4.2.3-1 Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Both	
Speaker/Headset	Selects Speakerphone or Headset mode.	Speaker/ Headset/	Speaker
LCD Display LED	The LCD LED, upper left of LCD, may be used for Intercom Call ring Indication or Message Wait Indication.	RING MWI	MWI
Message Scroll Speed	Select message scroll speed (Not used at present).	0 ~7	3
Ear & Mic Headset	Select Ear & Mic Headset mode for the iPECS IP or LDP Phone.(LDP/LIP-7000 only)	OFF ON	OFF
Enblock mode	When On, the user-dialed digits are stored at the iPECS IP or LDP Phone until explicitly sent by the user. When sent, all dialed digits are sent to the system in a block. En-block mode is only available to iPECS IP or LDP Phones with 3-Soft keys.	OFF ON	OFF
Back Light Usage	The backlight of iPECS IP and LDP Phones is assigned to stay off, light only when the station is busy, or light constantly.	Always Off/ Busy Only/ Always On	Busy Only
By Pass DTMF	When detected, DTMF from an SLT may be regenerated by CO/IP Line interface circuitry, the SLT port can by-pass detection so DTMF is not detected.	OFF ON	OFF
Serial DSS Usage	Enables an LIP-8000/LIP-9000 station to have a Serial DSS/BLF Console attached.	Disable Enable	Enable
Howler Tone	Howler tone can be sent to a phone when left off-hook.	OFF ON	ON
Flex Button Page	The iPECS LIP-9030 and 9040 have 8 and 12 Flexible buttons, respectively. Additional Flex buttons are available using Flex button pages. The phone can have up to 3 pages each with the 8 or 12 Flex buttons. Thus, an LIP-9030 can have 24 Flex buttons and the LIP-9040 can have 36 Flex buttons. The Navigation Up/Down button is used to scroll through the Flex buttons pages assigned.	Use 1 Page Use 2 Page Use 3 Page	Use 3 Page
Align LCD	For the iPECS LIP-9010/20/30/40, character alignment for messages to the phone can be right or left aligned by the system, or alignment controlled by the phone (“Not Align”).	Not Align Align Left Align Right	Not Align
Small Popup Use	If this option is set to ON, small popup is displayed on the LCD of LIP-9030/9040. If it is set to OFF, top bar is displayed instead of small popup.	OFF ON	OFF
Large Popup Timer	When Large popup timer is set to any value from 1 to 5 except 0, the display of large popup is disappeared after the timer expired and then the large popup information is displayed at top bar.	0~5 (Sec.)	0
Message Wait Indication LED	User can program MWI (Message Wait Indication) LED according to the following type: 1. MWI All: LED is blinking about all calls and Message 2. VM MWI: blinking in case of getting Voice mail 3. CLI MWI: blinking in case of Calling Line Identification 4. SMS MWI: blinking in case of getting Short message 5. ICM MWI: blinking in case of Incomming call	MWI All, VM MWI, CLI MWI,: SMS MWI, ICM MW	MWI ALL
NFC Authorization	If this option is ON, User enters Authorization code to use NFC	OFF	ON

Table 4.4.2.3-1 Terminal Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
code Use	function for LIP-9071.	ON	
LCD Dimming Apply	If this option is ON, LCD dimming is available only for LIP-9000 Series and LDP-9240D. LCD is dark when the phone is paused so some light is needed. So we provide the dimmable lights.	OFF ON	OFF
SLT Attributes			
Data Security	Disables override and camp-on tones to the station. This feature is commonly used for an analog modem or FAX to assure tones do not affect received information.	OFF ON	OFF
ECM Faxes in T.38	ECM stands for Error Correction Mode. If you failed to send something via Faxes, you can send it again until it is successful.	Allow, Prevent	Allow
MODEM Enable	It is used to set modem attributes.	OFF ON	OFF
SLT CID TYPE	SLT can send CID by programming options.	FSK DTMF	FSK
Send SLT CLI Info	When allowed, the system sends CLI information to the SLT.	OFF ON	ON
SLT Flash Mode	When an SLT activates a Hook-flash the system will perform one of the following operations: Flash Transfer – active call placed on hold and dial tone is returned. Flash-Drop – the active call is dropped. Flash-Ignore – the Hook-flash is ignored, no action is taken. Hold Release – the active call is placed on hold and if the SLT returns to idle the call is dropped.	Flash xfer/ Flash Drop/ Flash Ignore/ Hold Release	FlashTransfer
SLT configuration mode	For the South African region, the SLT gain is adjusted based on the SLT Configuration Mode.	Default, Short, Long, Far	Default
Block Back Call	When an SLT attempts to transfer a CO/IP call to another CO/IP Line, the transfer can be blocked and the call released.	OFF ON	OFF
SLT Open Loop Time	Send open loop signal to SLT port when counter party user hangs up SLT.	0~9 (100ms)	0
Short Modem	If this value of a SLT is ON, the SLT is the modem mode in seizing a CO line. When the CO line is CO board, the {short modem timer} is starting when the SLT seizes the co line. And if the {short modem timer} is expired, the SLT goes to the original mode. When the CO line is ISDN, the {short modem timer} is starting after receiving the ISDN connect message. And if the {short modem timer} is expired, the SLT goes to the original mode.	OFF ON	OFF

4.4.2.4 CLI Attributes - PGM 113

Selecting CLI Attributes will display the CLI Attributes data input page. Enter a valid station range and click **[Load]** to enter CLI Attributes data. Use the check boxes to indicate which attributes to define; data for checked attributes is stored for the entire range of stations by clicking **[Save]** Button after changing Value.

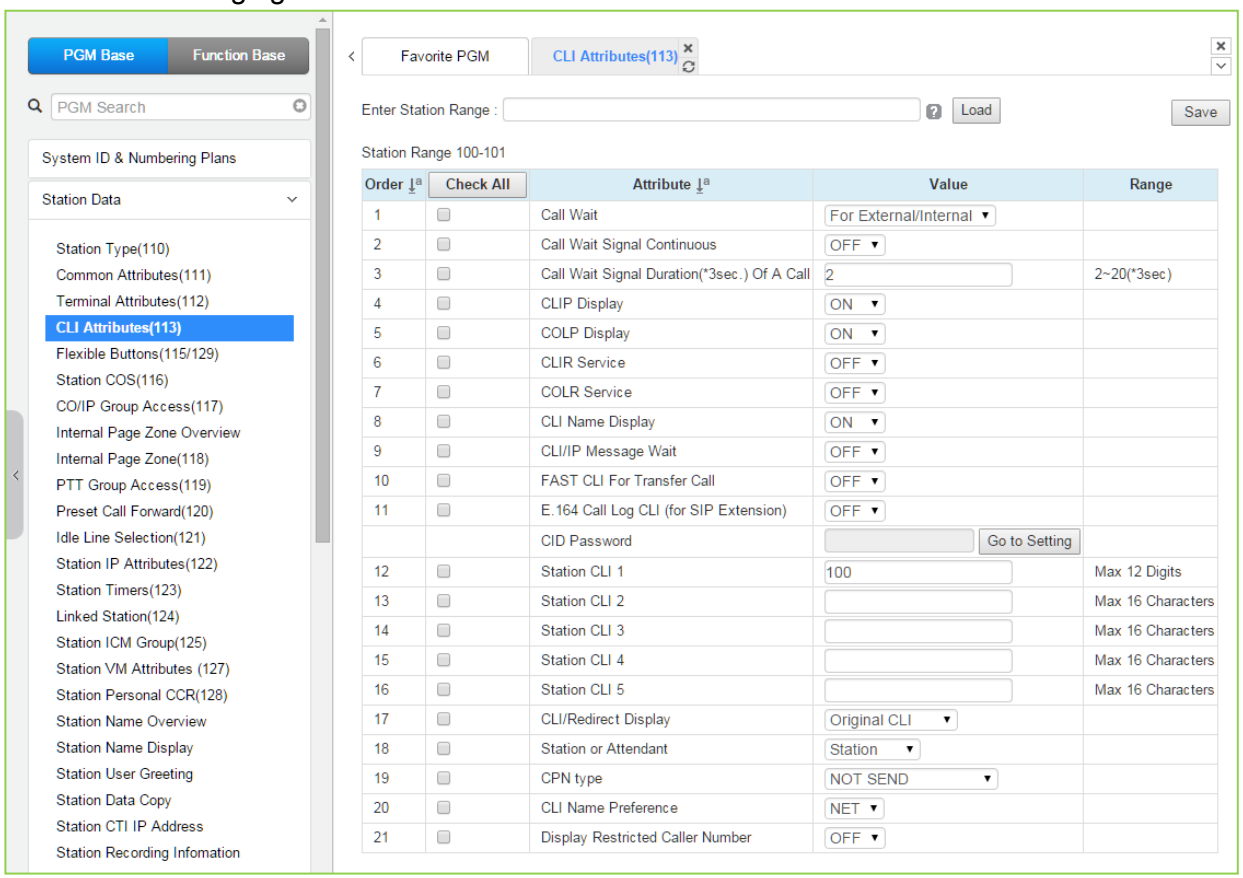


Figure 4.4.2.4-1 CLI Attributes (PGM 113)

CLI Attributes define features and functions available to the station. Generally, the entry will turn the feature ON (enable) or OFF (disable) or enter is made in the text box. Refer to Table 4.4.2.4-1 for a description of the features and the input required.

Setting CID Password directly

You can set the CID password to click “Go to Setting” button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark tick on the save box and click the Save button.

Table 4.4.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Call Wait	When a busy station receives a call, the call may queue to the station instead of receiving busy treatment. With Call Wait, the caller will hear Ring-back tone and the CO/IP Line LED flashes. Also, the CLI for the new incoming call displays.	OFF, For External/Internal, For External, For Internal	For External/Internal

Table 4.4.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Call wait signal continuous	When this filed set On, you will get the indication of Call wait signal continuously without returning to the current conversation. In case of Off, you will return to the current conversation after 1 cycle of Call wait signal indication.	ON, OFF	OFF
Call wait signal duration (*3sec.) of a call	You can set the call wait signal duration of a waiting call: the default is 2 (2*3sec.) and the range is from 2 to 20.	2-20 (*3sec)	2
CLIP Display	CLIP (Calling Line Identification Presentation), a carrier service, sends the number of the calling party to the system in the call SETUP message. If enabled here, the number will be shown in the iPECS Phone LCD.	OFF ON	ON
COLP Display	COLP (Connected Line Id Presentation), a carrier service, sends the number of the answering party to the system in the call CONNECT message. If enabled here, the number will be shown in the iPECS Phone LCD.	OFF ON	ON
CLIR Service	CLIR (Calling Line Identification Restriction), a carrier service, removes calling party Id sent from the ISDN to the called party with a RESTRICT instruction in the SETUP message. If enabled here, the system will send the RESTRICT instruction to the PSTN when an outgoing ISDN call is placed.	OFF ON	OFF
COLR Service	COLR (Connected Line Id Restriction), a carrier service, removes connected party Id sent from the ISDN to the calling party with a RESTRICT instruction in the CONNECT message. If enabled here, the system will send the restrict instruction to the PSTN when the station answers an ISDN call.	OFF ON	OFF
CLI Name Display	When the CLI data in the call SETUP message from the carrier matches a number in Speed Dial, the system can display the name associated with the Speed Dial bin, if set to ON.	OFF ON	ON
CLI/IP Message Wait	A log of missed calls with caller identification can be maintained for the user, permitting the user to call back the identified party. Up to 1000 entries are maintained in the log, system-wide.	OFF ON	OFF
FASTCLI For Transfer Call	If this option is set to ON, when a transferred call is routed to an SLT or DECT phone, the CLI for the CO/IP call is sent to the SLT or DECT phone instead of transferring station number.	OFF ON	OFF
E.164 Call Log CLI (for SIP Extension)	When enabled, the E.164 format CLI is sent to SIP Extensions for an incoming CO/IP call.	OFF ON	OFF
Station CLI 1	When not restricted by CLIR or COLR, this entry is added to the number in the selected COIP/CLIP Table and sent in the ISDN call SETUP or CONNECT message in place of the station number.	12 digits	eMG80:100 eMG800:1000
Station CLI 2	When not restricted by CLIR or COLR, this entry is added to the number in the selected COIP/CLIP Table and sent in the ISDN call SETUP or CONNECT message in place of the station number.	16 characters	Related with PGM 143 – Station CLI Type

Table 4.4.2.4-1 CLI Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station CLI 3	When not restricted by CLIR or COLR, this entry is added to the number in the selected COIP/CLIP Table and sent in the ISDN call SETUP or CONNECT message in place of the station number.	16 characters	Related with PGM 143 – Station CLI Type
Station CLI 4	When not restricted by CLIR or COLR, this entry is added to the number in the selected COIP/CLIP Table and sent in the ISDN call SETUP or CONNECT message in place of the station number.	16 characters	Related with PGM 143 – Station CLI Type
Station CLI 5	When not restricted by CLIR or COLR, this entry is added to the number in the selected COIP/CLIP Table and sent in the ISDN call SETUP or CONNECT message in place of the station number.	16 characters	Related with PGM 143 – Station CLI Type
CLI / Redirect Display	When an incoming call is Redirected in the carrier's network, the call SETUP message will contain an original and redirected CLI. This selection determines if the iPECS IP and LDP Phone will display the original or redirected number.	Original CLI/ Redirect CLI	Original CLI
Station or Attendant	When the system sends a station number with CLIP or COLP, the number can be either the Attendant number or the number of the station.	Station Attendant	Station
CPN Type	NOT SEND: CPN is not sent to S0 interface. STATION NUMBER: Station number is sent as CPN to S0 interface. BYPASS FROM NET: Incoming CPN is sent as CPN to S0 interface.	Not send, Station number, By pass from NET	Not send
CLI Name Preference	NET: If CLI name is provided from network, then it is displayed. If CLI name is not provided from network, matched Speed name is displayed. SPD: If CLI is matched with Speed bin and it has name, then matched Speed name is displayed. If CLI is not matched or matched Speed name is not configured, CLI name from network is displayed.	NET, SPD	NET
Display Restricted Caller Number	When {Display Restricted Caller Number} in CLI Attributes(113) of a station is ON, Although the caller number is restricted in ISDN message, the ringing station displays the caller number.	OFF ON	OFF

4.4.2.5 Flexible Buttons - PGM 115/129

Selecting Flex Buttons will display the Flex buttons data input page. Enter a valid Station range and click **[Load]** to enter Flex button data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

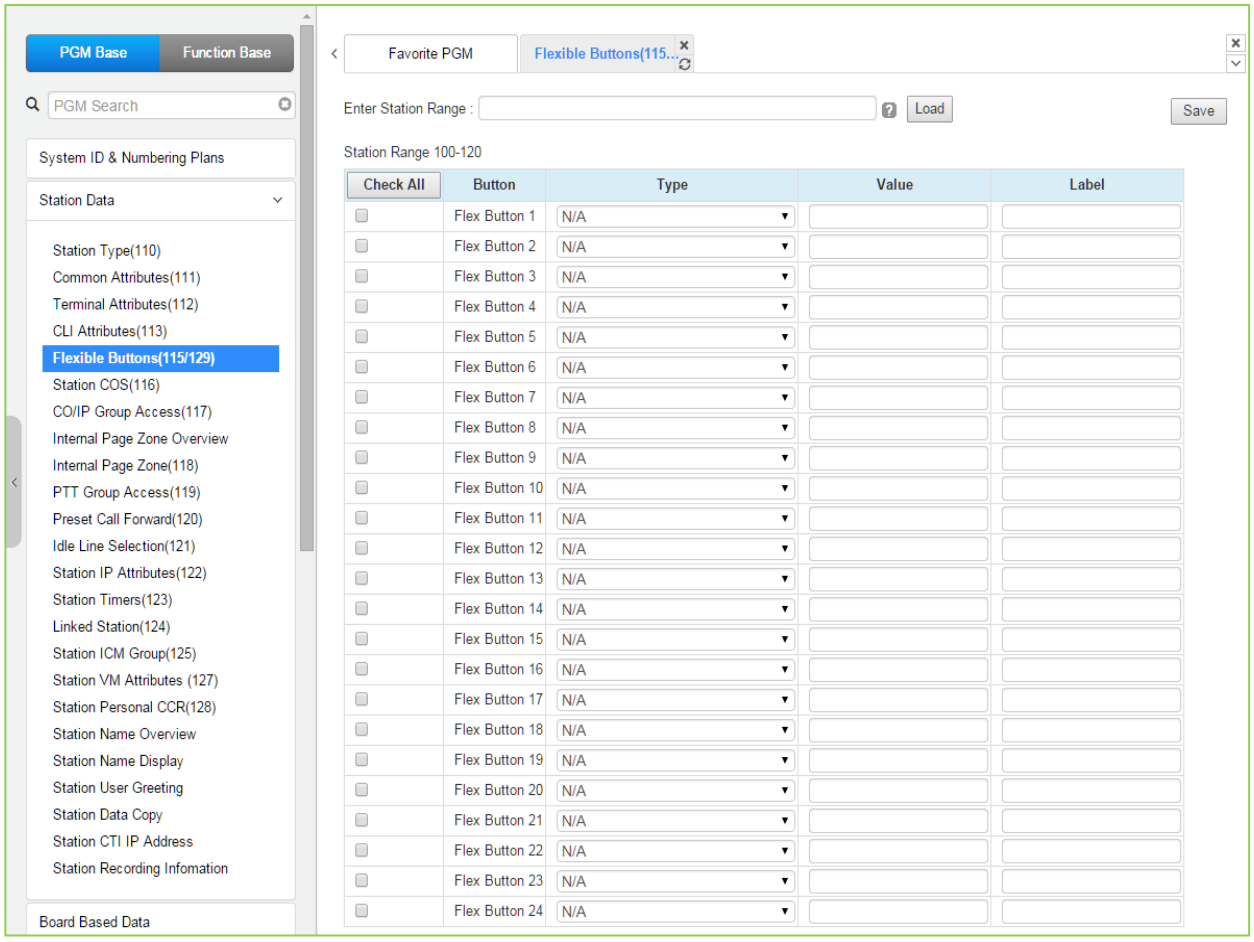


Figure 4.4.2.5-1 Flex Buttons Assignment

Each Flex button for each iPECS IP and LDP Phone and DSS Console can be assigned a function (TYPE) as below. After selecting the Type for a button, enter the value, if required. The types available from the drop-down menu are shown in Table 4.4.2.5-1 below. In addition, for the LIP Phone models 8040, 8050, and 9070 and the LSS Console models, a label can be assigned that is used as the designation for the button in the LCD of the phone.

Table 4.4.2.5-1 FLEX BUTTON TYPE & VALUE

TYPE	REMARK
N/A	Empty (unassigned), may be defined by the user.
CO Line	Assigns button to access a defined CO/IP line.
CO Group	Assigns button to access a free line in the CO/IP Group.
Loop	Assigns button to access a loop line.
Station Number	Assigns button as DSS/BLF for the assigned station number.

Table 4.4.2.5-1 FLEX BUTTON TYPE & VALUE

TYPE	REMARK
Programming (Numbering Plan)	Assigns button to dial a code from the Flexible Numbering Plan, see Appendix B section.
Programming (PGM)	Assigns button to perform a User Program function from the Fixed Numbering Plan, Appendix B section.
Station Speed Bin	Station Speed Dial bin.
System Speed Bin	System Speed Dial bin.
Net Station Number	Refer to section 4.4.10.6 Network Numbering Plan Table - PGM 324.
U-Loop	U-Loop button for call wait of internal & external call

4.4.2.6 Station COS - PGM 116

Selecting Station COS will display the Station COS data input page. Enter a valid station range and click **[Load]** to enter the Station COS data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

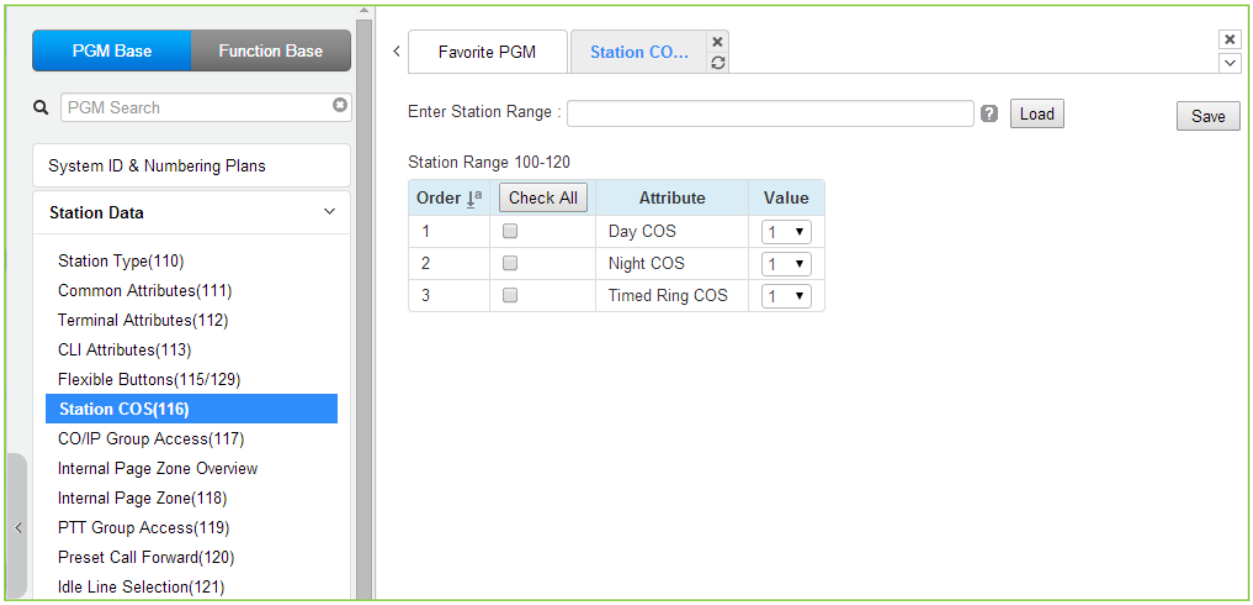


Figure 4.4.2.6-1 Station COS

In case of PGM 116 is in condition of limited service mode due to License issue, the default value is 7 for all COS type.

All stations are assigned a Class-of-Service (COS), which determines the ability of the user to dial certain types of calls, refer to Table 4.4.2.6-1. Separate COS assignments are made for Day, Timed and Night Mode operation. As a default all stations are assigned with a Station COS of 1 for all modes, no restrictions. The station COS interacts with the CO Line COS to establish overall dialing or Toll restrictions. This interaction and the resulting restrictions are given in Table 4.4.2.6-2.

Long distance calls are determined by the 1st dialed digit (“0” or “1”) and the number of digits dialed. If the 1st digit dialed is a LD code, default “0” or “1”, or, if the number of digits dialed exceeds the assigned LD digit counter in System Data SMDR Attributes section 4.4.5.17, the call is consider a Long Distance call and appropriate restrictions applied.

Table 4.4.2.6-1 STATION COS

STATION COS	RESTRICTIONS
1	No restrictions are placed on dialing from the station.
2	The assignments in Exception Table A are monitored for allow and deny numbers.
3	The assignments in Exception Table B are monitored for allow and deny numbers.
4	The assignments in both Exception Tables A & B are monitored for allow and deny numbers.
5	The leading digit dialed cannot be a Long Distance code, default “0” or “1”, and further denied/allowed based on Exception Table C.
6	The leading digits dialed cannot be a Long Distance code & digit count cannot exceed the LD digit counter, default 7 digits, and further denied/allowed based on

Table 4.4.2.6-1 STATION COS

STATION COS	RESTRICTIONS
	Exception Table C.
7	Intercom and paging calls are allowed. No outgoing dialing except for emergency calls is allowed on CO Lines.
8	The assignments in the Exception Table D are monitored for allow and deny numbers.
9	The assignments in the Exception Table E are monitored for allow and deny Numbers
10	The assignments in the Exception Table D & E are monitored for allow and deny numbers.
11	The assignments in the Exception Table A & B and D & E are monitored for allow and deny numbers.

Table 4.4.2.6-2 STATION/CO COS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 5	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 9	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) and Table C	No Restriction

4.4.2.7 CO/IP Group Access - PGM 117

Selecting CO/IP Group Access will display the CO/IP Group Access data input page. Enter a valid station range and click **[Load]** to enter CO/IP Group Access data. Check the appropriate boxes to allow or delete access to each CO/IP Group. Click **[Save]** button after changing Value to apply.

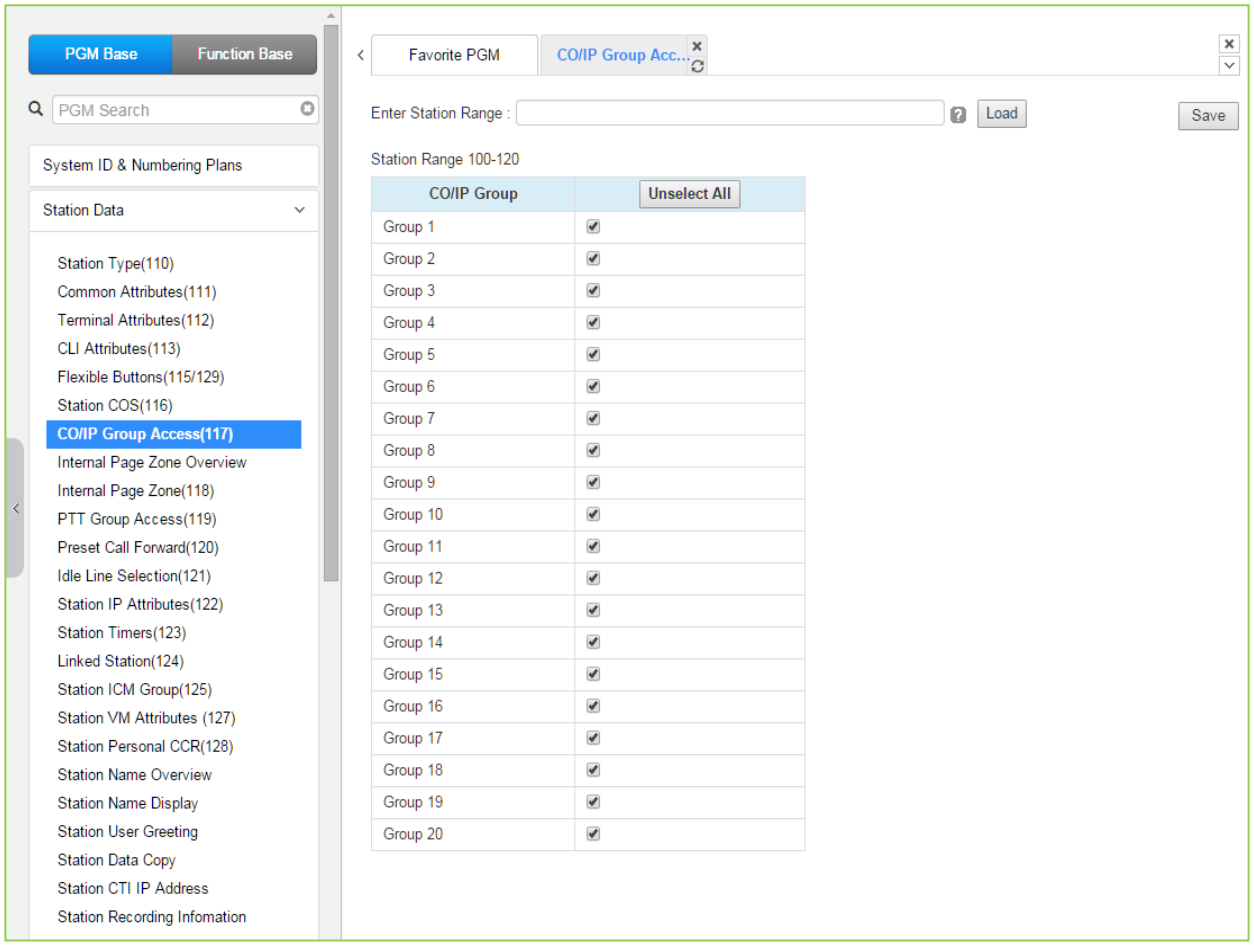


Figure 4.4.2.7-1 CO/IP Group Access

Stations can be allowed or denied access to CO Lines and IP Channels by group (eMG80: 20 & eMG800: 200). As a default, all stations are allowed access to all groups except Private Lines (group 00) and unused CO Lines. The CO Line is assigned as a Private Line by default.

4.4.2.8 Internal Page Zone Access - PGM 118

Selecting Internal Page Zone will display the Internal Page Zone data input page. Enter a valid station range and click **[Load]** to enter the Internal Page Zone Access data. Check the appropriate boxes to allow or delete access to each Internal Page Zone. Click **[Save]** button after changing Value to apply.

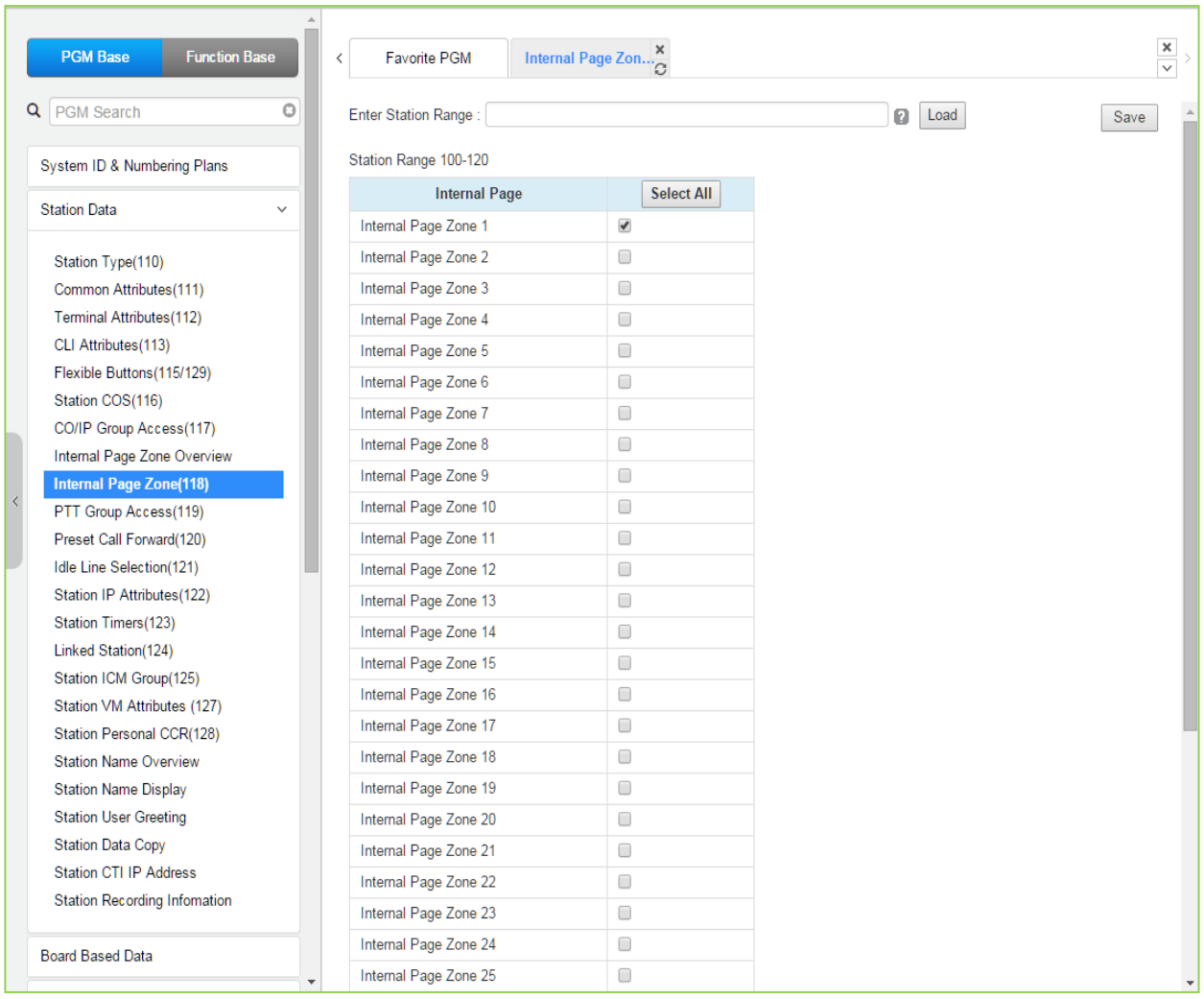


Figure 4.4.2.8-1 Internal Page Zone

Each iPECS IP and LDP Phone is assigned to receive announcements from each Internal Page Zone. A station can be assigned to any, all or no zones. Note a remote station or a station not assigned to any Internal Zone will not receive any page announcements including Internal All Call. As a default, all stations except remote stations are assigned to zone 1.

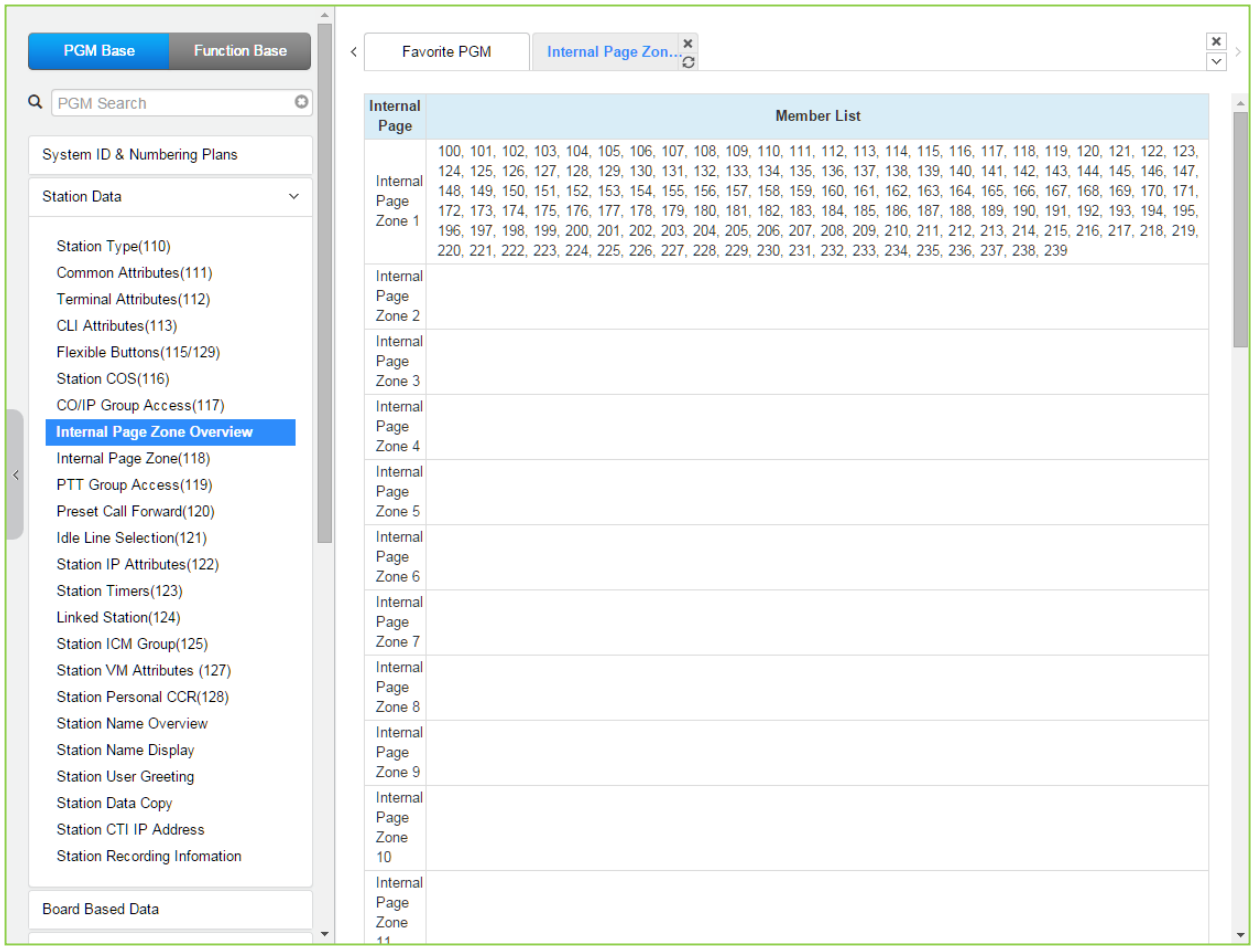


Figure 4.4.2.8-2 Internal Page Zone overview

4.4.2.9 PTT Group Access - PGM 119

Selecting PTT Group Access will display the PTT Group Access data input page. Enter a valid Station range and click **[Load]** to enter the PTT Group Access data. Check the appropriate boxes to allow or delete access to each PTT Group. Click **[Save]** button after changing Value to apply.

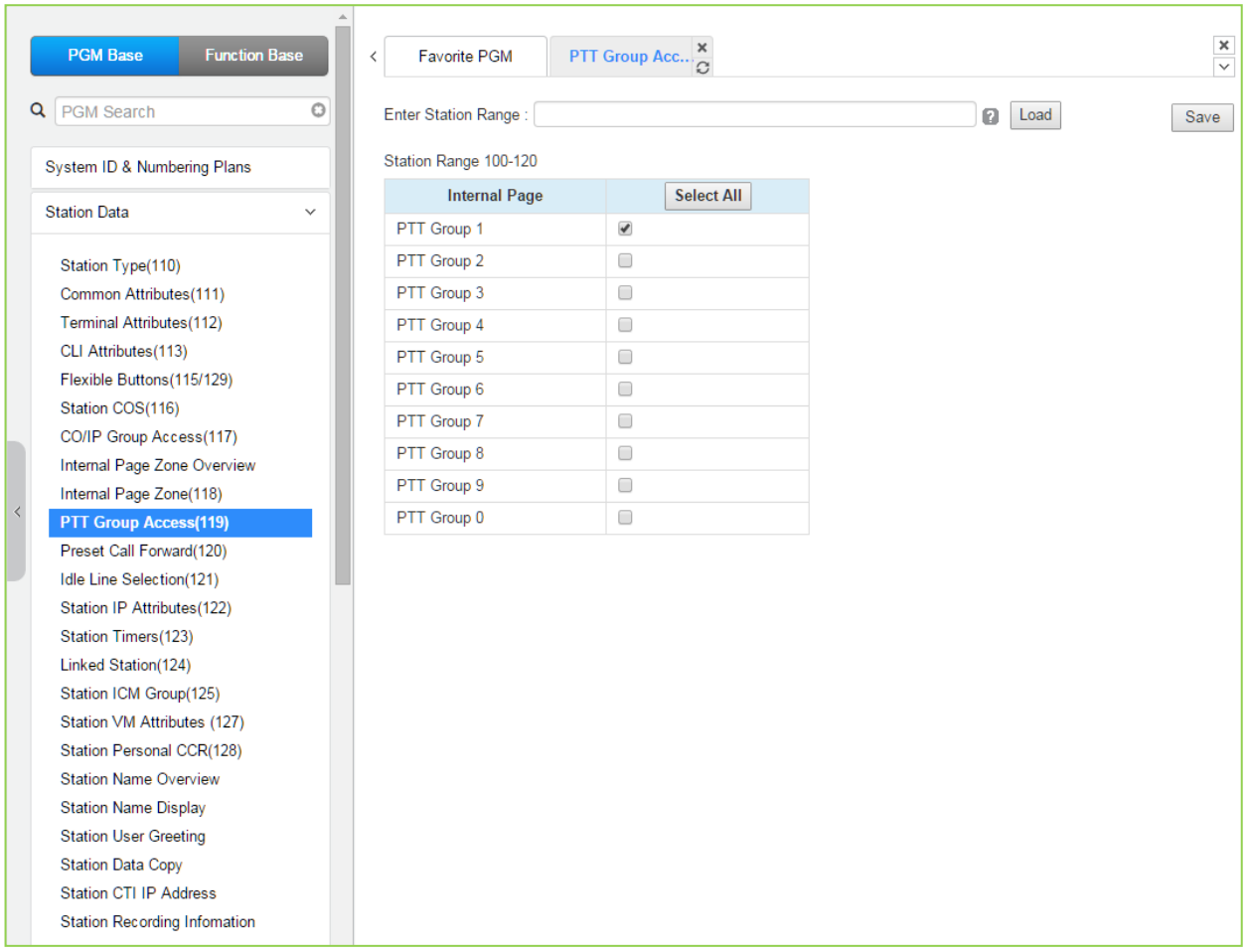


Figure 4.4.2.9-1 PTT Group Access

Each iPECS IP or LDP Phone is assigned to receive PTT announcements from any combination of the ten (10) PTT groups. Note a station not assigned to any group will not receive PTT page announcements including Internal All PTT group page. As a default, all stations except remote stations are assigned to group 1.

4.4.2.10 Preset Call Forward - PGM 120

Selecting Preset Call Forward will display the Preset Call Forward data input page. Enter a valid station range and click **[Load]** to enter the Station Preset Call Forward data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

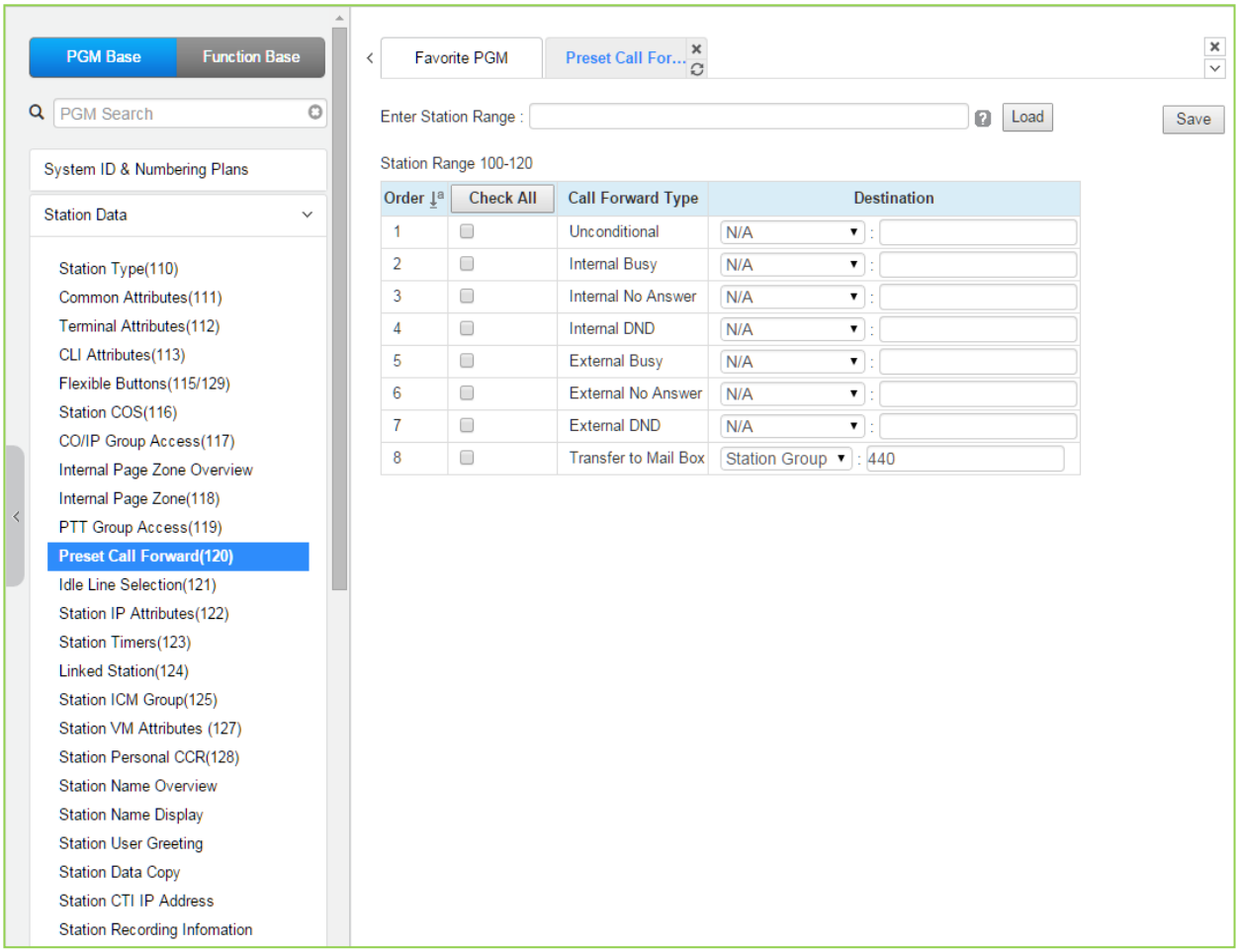


Figure 4.4.2.10-1 Preset Call Forward

Stations can be programmed so that incoming CO/IP and Intercom calls forward to a preset station or station group. This allows an external or internal call to initially ring at a station and forward to a pre-determined destination. Preset Forward can be separately assigned Unconditional, Internal Busy, Internal No Answer, Internal DND, External Busy, External No Answer, External DND preset forwarding to any station, Station group, system speed dial bin (off-net) or Station ICR. As a default, no Preset Call Forward is assigned.

For “Transfer Mail-Box” enter the Station Group number of the Voice Mail group (external VM, VSF or Feature Server Voice Mail group). This will permit other users to transfer calls directly to the desired user‘s Voice Mailbox.

4.4.2.11 Station ICR Scenario - PGM 1201

Selecting Station ICR Scenario displays the input entry page.

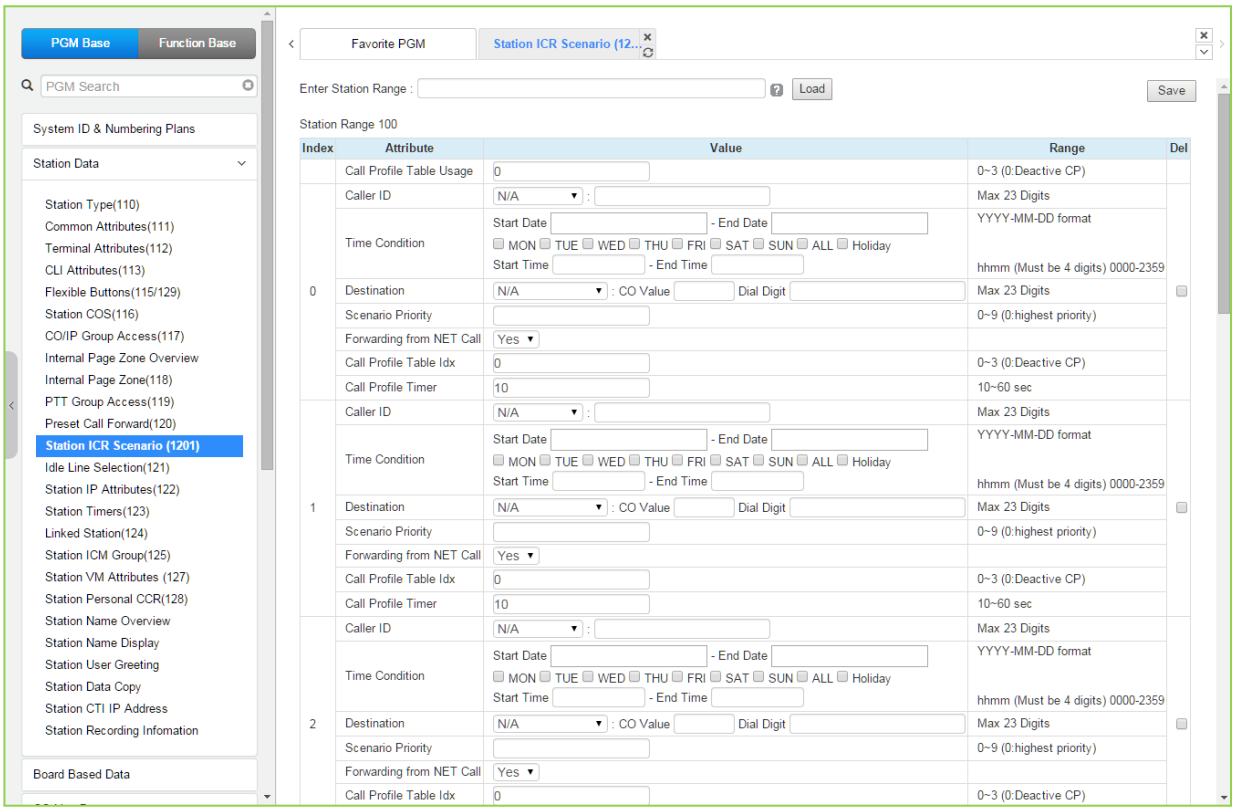


Figure 4.4.2.11-1 Station ICR Scenario

Station ICR is an extension of call forward where the user enters scenarios to define the call forward feature. Each station has ten (10) routing scenarios that define conditions for routing a user's incoming calls. Each scenario may define time of day, day of week, date, caller ID and destination for incoming calls. In addition, the scenarios may be prioritized; calls are routed to the destination with the highest priority-matching scenario.

4.4.2.12 Idle Line Selection - PGM 121

Selecting Idle Line Selection will display the Idle Line Selection data input page. Enter a valid Station range and click **[Load]** to enter the Idle Line Selection data. Click **[Save]** button after changing Value to apply.

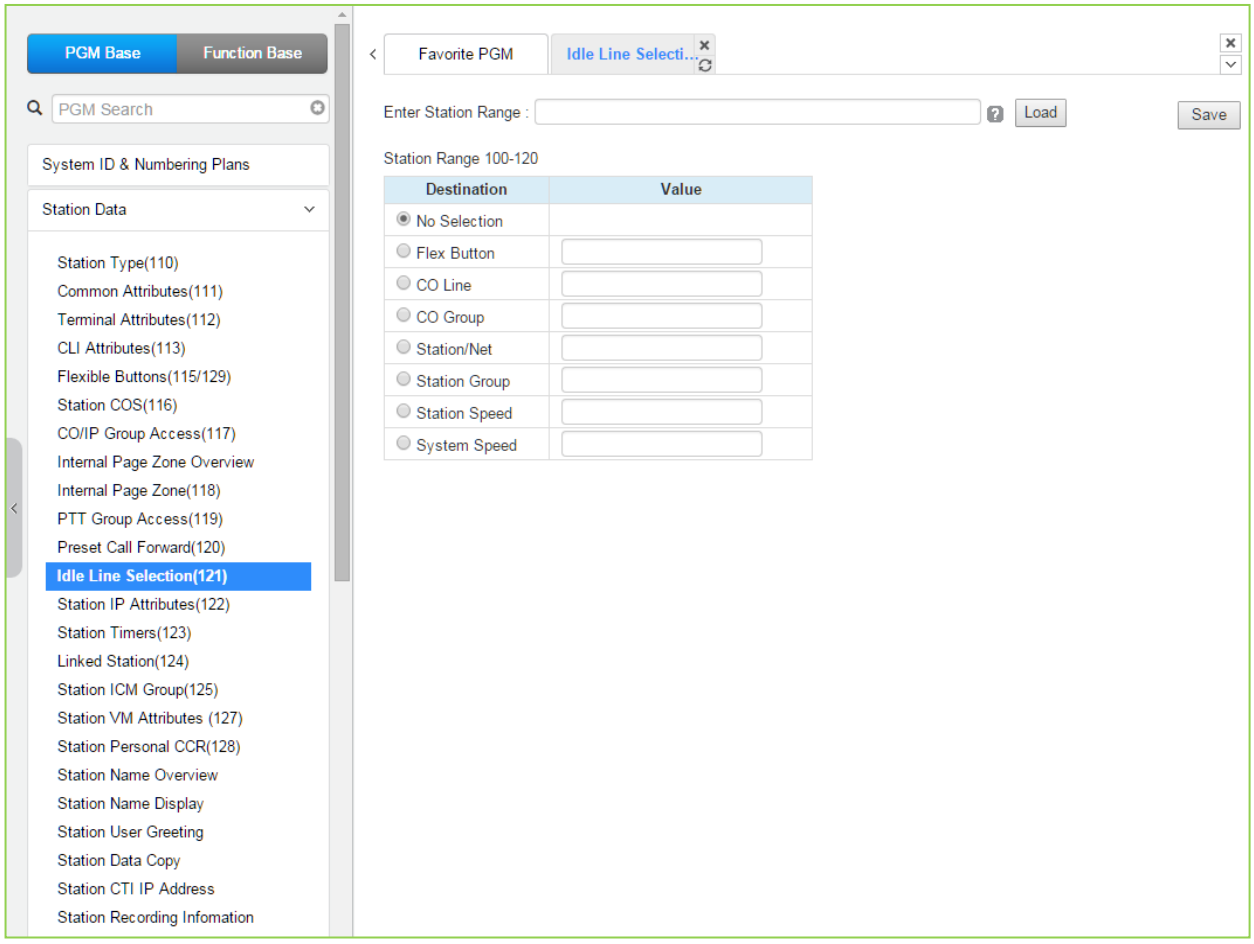


Figure 4.4.2.12-1 Idle Line Selection

When a station goes to an off-hook condition (lifts handset or presses **[SPEAKER]** button), the system normally provides intercom dial tone. In place of dial tone, the station can be programmed to access a CO Line, CO/IP Group or call a Station or Station Group as described in Table 4.4.2.12-1 when the station goes off-hook. The Idle Line Selection (Prime Line) can be either immediate or delayed after going off-hook. The immediate/delay selection is based on the Hot/Warm assignment in Common Attributes - Prime Line, section 4.4.2.2.

Table 4.4.2.12-1 IDLE LINE SELECTION TYPE & VALUE

TYPE	DESCRIPTION
No Selection	Returns Intercom dial tone.
Flex Button	Flex button, activates Flex button as if pressed.
CO Line	CO/IP path seizes CO line.
CO/IP Group	CO/IP Group, seizes CO line from the CO/IP Group.
Station/Net	Station, calls the assigned station.
Station group	Station group, calls the assigned station group.
Station speed	Station speed, calls the assigned station speed.
System speed	System speed, calls the assigned system speed.

4.4.2.13 Station IP Attributes - PGM 122

Selecting Station IP Attributes will display the Station IP Attributes data input page. Enter a valid Station range and click **[Load]** to enter the Station IP Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

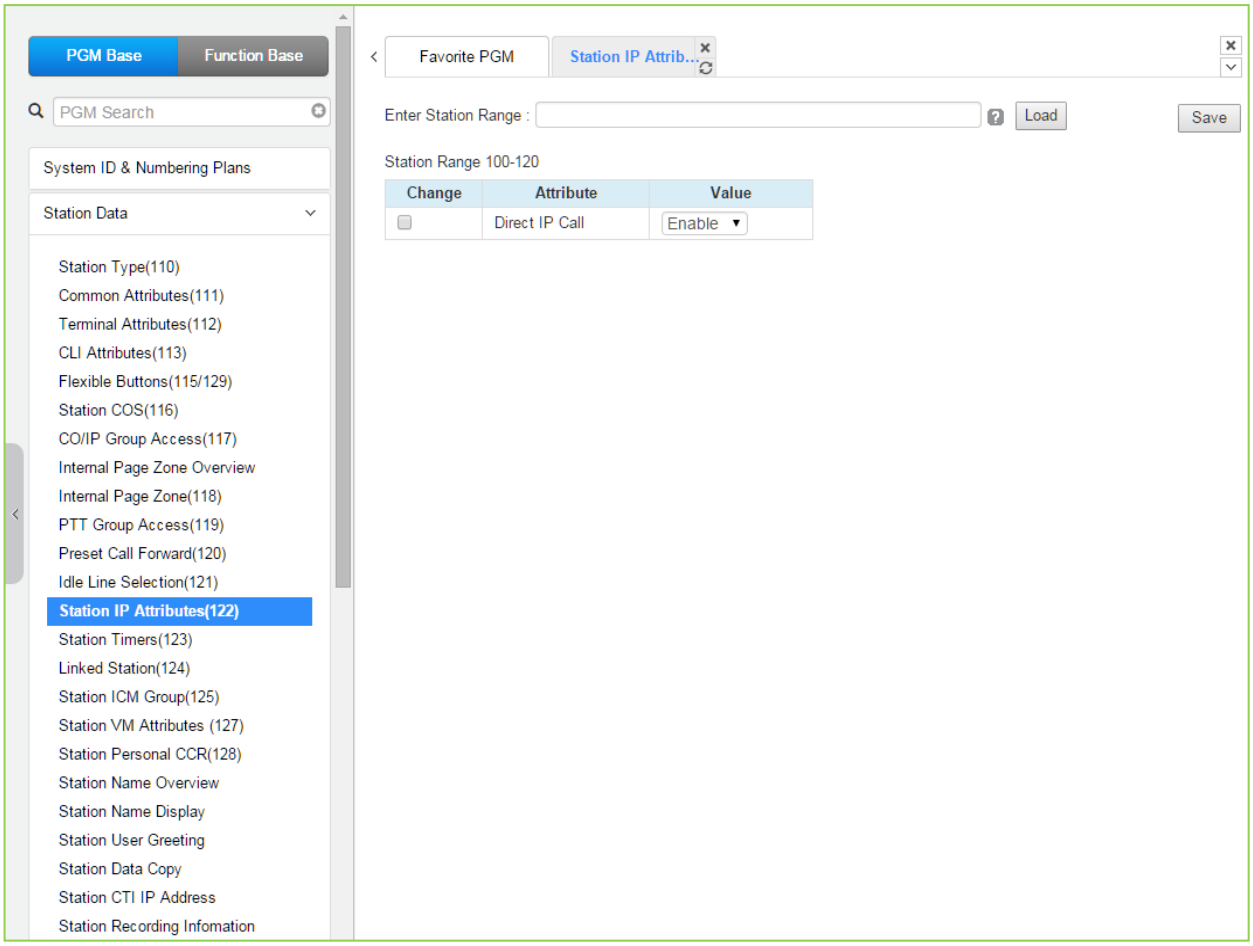


Figure 4.4.2.13-1 Station IP Attributes

Stations are allowed access to the systems VoIP resources based on the Station IP Attributes.

4.4.2.14 Station Timers - PGM 123

Selecting Station Timers will display the Station Timers input page. Enter a valid Station range and click **[Load]** to enter the Station Timers data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

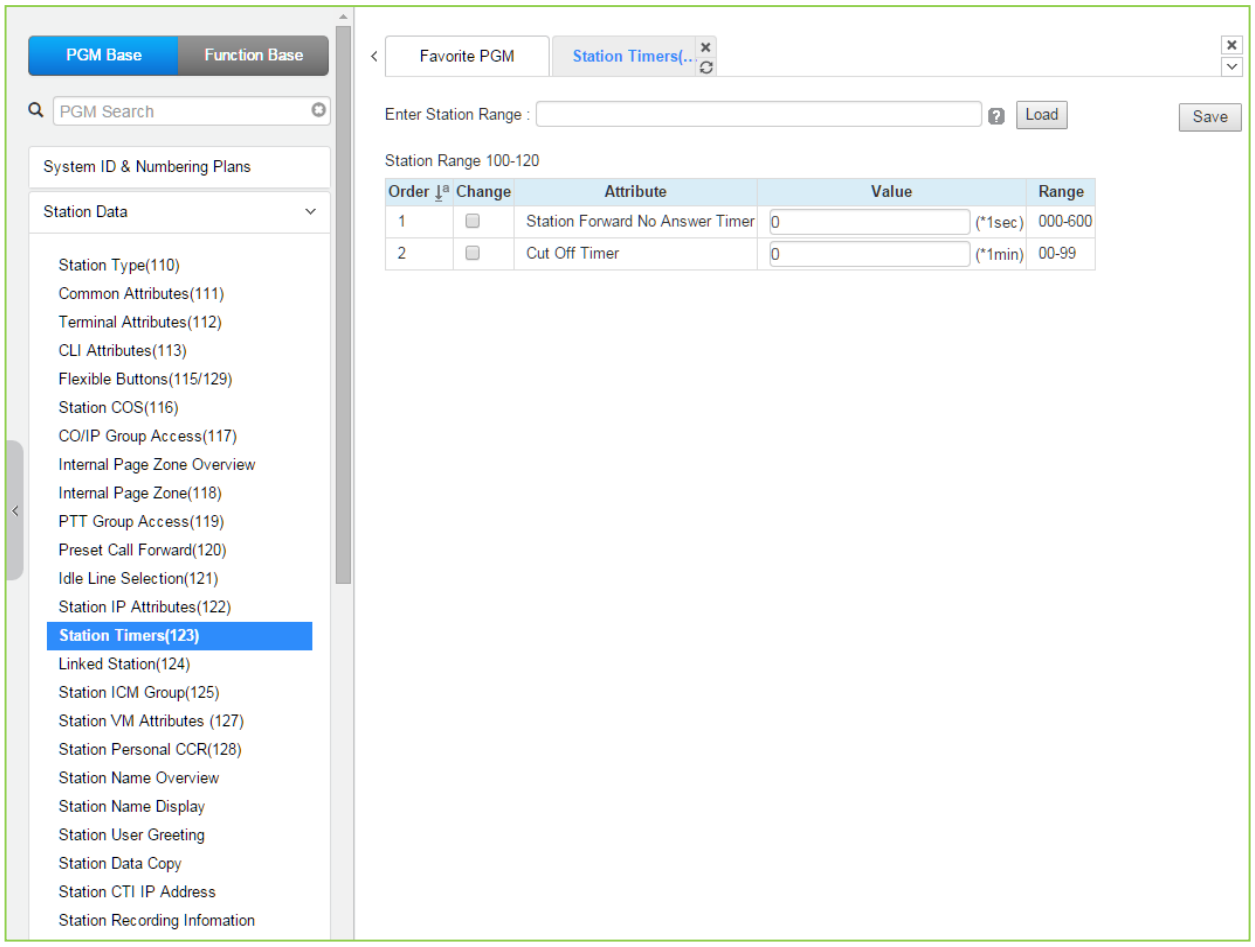


Figure 4.4.2.14-1 Station Timers

Certain timers can be assigned on a station basis. Available timers, description and valid inputs are given in Table 4.4.2.14-1.

Table 4.4.2.14-1 STATION TIMERS (PGM 123)

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Forward No Answer Timer	This timer determines the duration the station will ring prior to Ring-No-Answer Forward. This setting affects both manual and Preset Call Forward and overrides the System No answer forward timer section 4.6.1.	000-600 (seconds)	000
Cut Off Timer	Allowed length of CO/IP calls when station is assigned Call Time restriction in Common Attributes, PGM 111, button 17.	00-99 (minutes)	00

4.4.2.15 Linked Station - PGM 124

Selecting Linked Station will display the Linked Station input page. Enter a valid Station range and click **[Load]** to enter the Linked Station data. Click **[Save]** button after changing Value to apply.

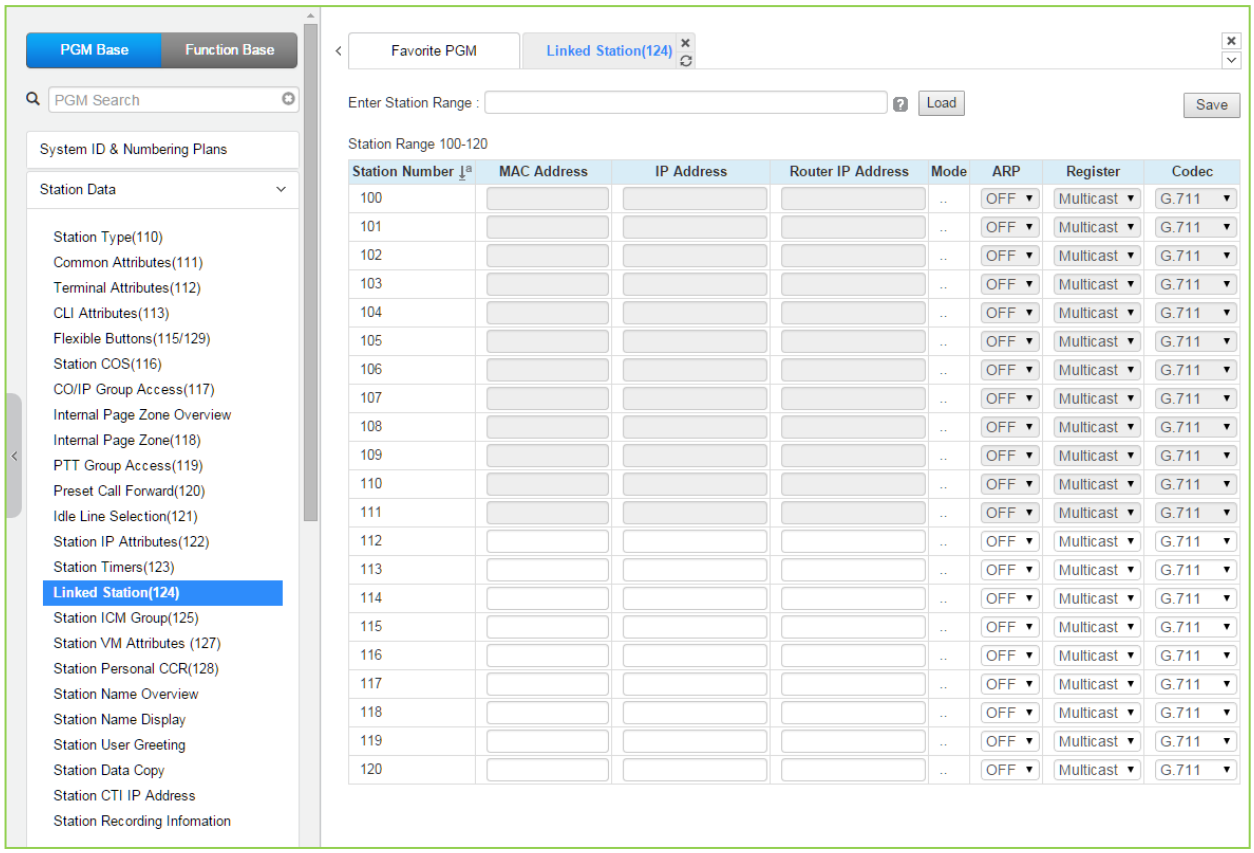


Figure 4.4.2.15-1 Linked Station Pair

For UCS Client, it is recommended that PGM 443 be employed for an unregistered (MAC Linked pair) station. When unregistered station linking is used, the linked station does not reduce the system‘s capacity. However, in this case, the linked station must be an iPECS IP Phone. Unregistered linking is allowed only to an iPECS IP Phone. Once UCS Client is linked, it will display in this Web page as well as in PGM 103 and 443.

If the station is assigned to Master or Slave by linked station, the bracket ‘[M] or [S]’ will be displayed by the station number in PGM 101, 103, 105, 124 of Web page.

To link registered stations, the Personal Group feature is used and configured in PGM 260 and 261.

Table 4.4.2.15-1 LINKED STATION TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MAC Address	Assigns the MAC address of a linked station.		
IP Address	The IP Address of the linked station.	IPv4 address	
Router IP Address	Set the Router IP address for a linked station.	IPv4 address	
Mode	Display operating mode of the station, remote or local	Remote:	L (Local)

Table 4.4.2.15-1 LINKED STATION TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	and NAT or NAPT.	-. R/NAPT -. R/NAT -. R/NAP -. R Local remote -. LO/NAPT -. LO/NAT -. LO/NAP -. LO Local -. L/NAPT -. L/NAT -. L/NAP -. L	
ARP	If enabled, the system will directly send packets using the MAC address.	OFF ON	OFF
Register	Normally, iPECS IP devices register using multi-cast packets. When separated from the system, that is when the device is remote, unicast is used.	Multicast Unicast	Multicast
Codec Type	CODEC type.	G.711/ G.723.1/ G.729/ System, use the codec defined for the system	G.711

4.4.2.16 Station ICM Group - PGM 125

Selecting Station ICM Group displays the Station ICM Tenancy Group input page. Select ICM Group, the system will display the ICM Group Characteristics. Check the appropriate box to allow access to the group and enter the Station number of the group Attendant. Click **[Save]** button after changing Value to apply.

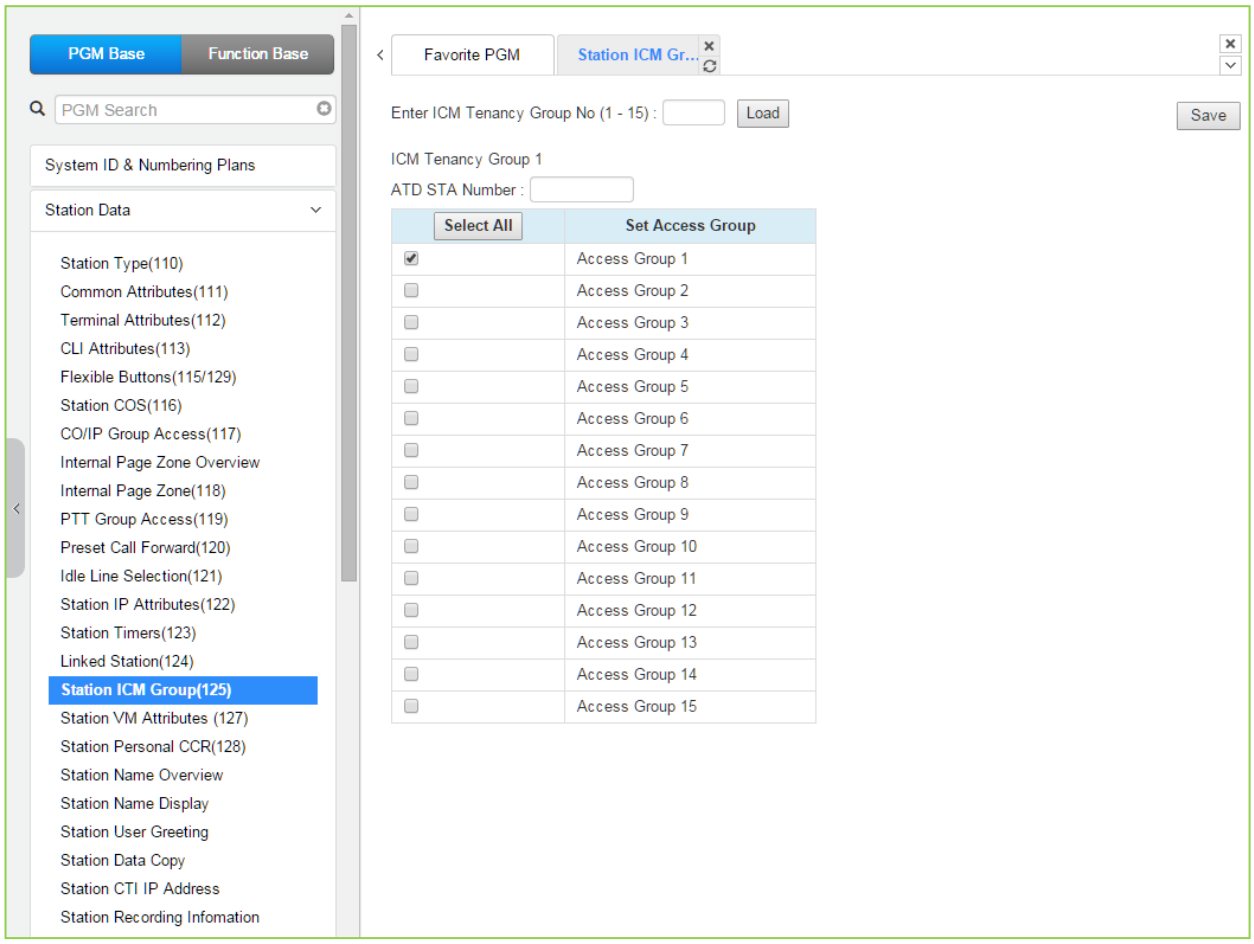


Figure 4.4.2.16-1 Station ICM Group

Stations can be assigned to an ICM group under Common Attributes section 4.4.2.2. Up to 15 Tenant groups for eMG80 and up to 32 for eMG800 can be defined. Each group is configured to allow or deny placing intercom calls, including transfers, to stations in other groups and an Attendant station can be defined for each group.

Table 4.4.2.16-1 STATION ICM GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Tenancy ATD	Attendant station for the ICM Tenant group. ATD receives dial '0' calls and controls Day/Night Service.	Station No.	
Group Access	ICM tenancy groups allowed access by stations of the selected group.	eMG80:1~15 eMG800:1~32	1

4.4.2.17 Station Voice Mail Attributes – PGM 127

Selecting VM Attributes displays the Station Voice Mail Attributes input page. Enter a valid Station range and click **[Load]** to enter the Station Voice Mail Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

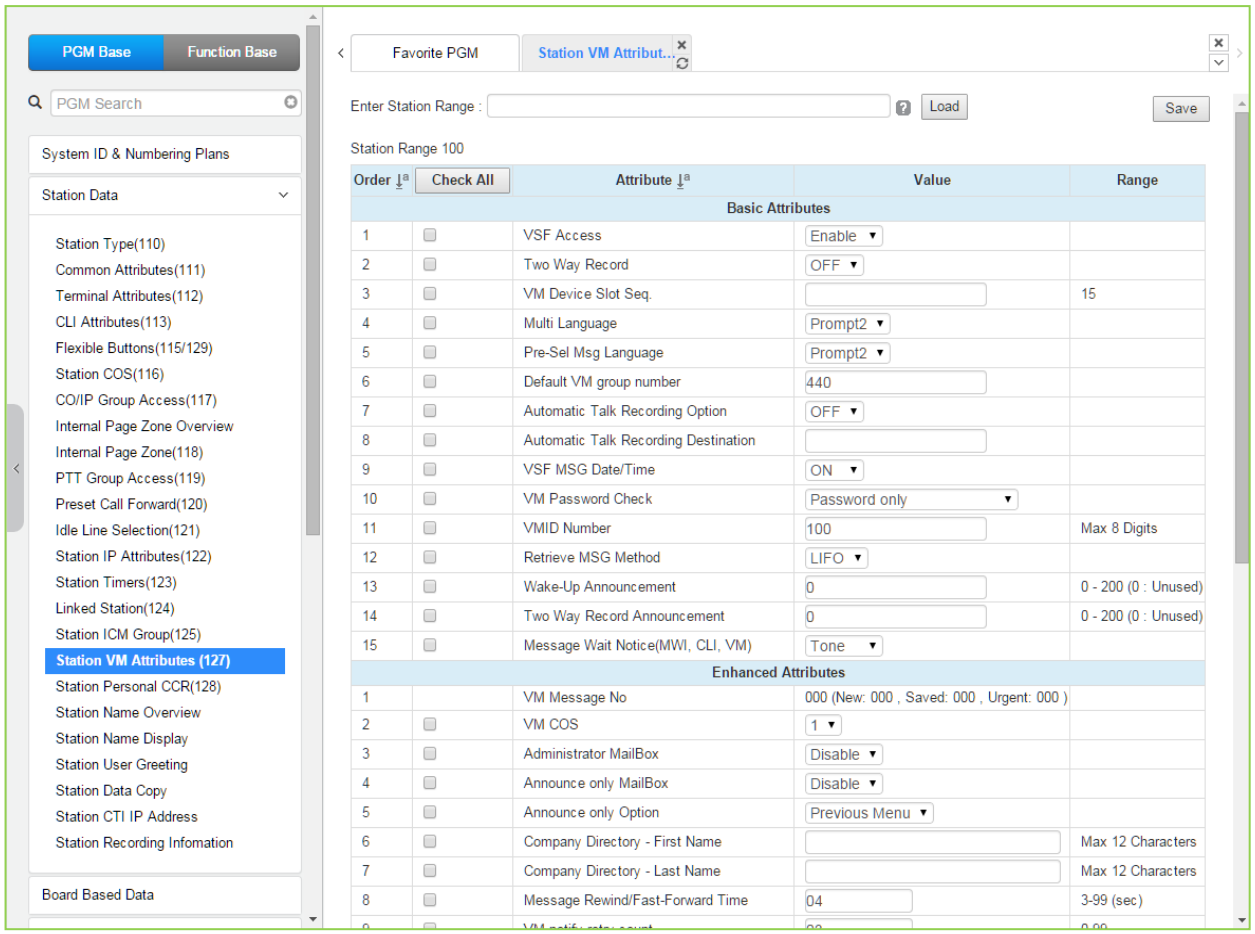


Figure 4.4.2.17-1 Station VM Attributes

The Station VM Attributes are divided into three sub-sections. The Basic Attributes assign general characteristics of the Station's Voice Mail and announcements. Enhanced Attributes assign characteristics including VM COS, notification, cascading and Company Directory Names. The E-Mail Notification section defines various SMTP server data such as the Station and System E-mail account data.

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Basic Attributes			
VSF Access	The station must be permitted VSF access to access the built-in Voice Mailbox.	Disable Enable	Enable
Two way Record	When allowed, the station can activate the Two-way record feature to record a conversation.	OFF ON	OFF
VMIU/VMIB Slot Seq.	The sequence number defines the VMIU or VMIB where messages for the station are stored	Seq. No.	
Multi Language	The selected language is employed for prompts played to the user when accessing the VSF.	Prompt 1~6	Prompt 2
Pre-selected	The selected language is employed for prompts played	Prompt 1~6	Prompt 2

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Message Language	to an external CO caller if the called station has activated Pre-selected Message.		
Default VM group number	When the user has no Voice messages and selects the **[Call Back/Msg]** button, the "Default VM group number" is called.		
Auto Talk Recording Option	This field enables unconditional recording of all calls placed/received by the station. Recordings, in .wav format, are stored at the UCS Client defined as the Call Recording Station below.	OFF ON	OFF
Auto Talk Recording Destination	When Auto Call recording is defined for a station, the recording UCS Client station number is defined here.	Station	
VSF MSG Date/Time	When ON, the data/time the message was received is played to the user prior to the message.	OFF ON	ON
VM Password check	When ON, the user must enter their valid Authorization code to access their VSF Voice Mailbox. The password can be defined as none, the Authorization code only or the normal Station Number and Authorization code.	No password/ Password only/ Station number and password	Password only
VMID Number	When using an adjunct VM, the system can translate the Mailbox number from the user's station number to the assigned VMID. The system sends the station number or VMID, if assigned, to the VM (in-band or SMDI) in order to identify the appropriate Voice Mailbox.	Max. 8 digit	eMG80:100 eMG800:1000
Retrieve MSG Method	Messages stored in the VSF may be retrieved in either a FIFO (first-in-first-out) or LIFO (last-in-first-out) order based on this entry.	FIFO/ LIFO	LIFO
WAKEUP ANNC.	A VSF system announcement can be recorded to play to the station as a Wakeup Announcement.	0-200	0
Two way record announcement	The two way record announcement can be recorded to play to the station as Announcement.	0-200	0
Message Wait Notice(MWI, CLI, VM)	When a user has voice mail, system can provides this as voice prompt instead of dial tone according to option based on station. Disable: System provides normal dial tone when a user goes to off hook status. Tone: System provides warning tone instead of dial tone to give indication when a user goes to off hook status. Prompt: System provides message indication as voice prompt when a user goes to off hook status. DECT phone do not support this feature.	Disable, Tone, Prompt	Tone
Enhanced Attributes			
VM Message No	Number of Voice Messages in the user's Mailbox.		000
VM COS	Each Voice Mailbox is assigned one of five VM Classes of Service (COS) that determines basic characteristics of the Mailbox such as message retention. The Voice Mail COS attributes are set in PGM 253.	1-5	1
Administrator Mailbox	A Mailbox can be assigned as an Administrator Mailbox permitting broadcast messaging and control of other user mailboxes.	Disable Enable	Disable
Announce Only	A mailbox can be configured so that the connected party	Disable	Disable

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Mailbox	will hear the greeting but cannot leave a message, Announce Only. After the greeting, the call is routed based on the "Announce Only Option.	Enable	
Announce Only Option	This option determines if the caller will be disconnected or returned to the previous menu after hearing the Announce Only Mailbox greeting.	Previous Menu/ Hang Up	Previous menu
Company Directory – First Name	This field is first name of a station for Company Directory feature.	Max. 12 characters	N/A
Company Directory – Last Name	This field is last name of a station for Company Directory feature.	Max. 12 characters	N/A
Message Rewind/Fast-Forward Time	While listening to a message the user may rewind or Fast forward. The Rewind and Fast Forward time are determined by this field.	03 - 99	04
VM Notify retry count	If the notification to the user's mobile repeatedly fails, after the retry count, the system will send the call to the Attendant to complete the notification.	00 - 99	03
VM Notify dial time	When the mobile notification call is placed, the system will terminate the call, considering the call a failed attempt, if no digits are received from the mobile phone user before the timer expires.	00 - 99	15 sec
VM Forward Option	When a left message is forwarded, this option is applied.	Move / Copy	Move
Cascade Mailbox 1	A left message is copied or moved to 1'st mailbox destination station.	Station No	N/A
Cascade Mailbox 2	A left message is copied or moved to 2'nd mailbox destination station.	Station No	N/A
Cascade Mailbox 3	A left message is copied or moved to 3'rd mailbox destination station.	Station No	N/A
Cascade Mailbox 4	A left message is copied or moved to 4'th mailbox destination station.	Station No	N/A
Cascade Mailbox 5	A left message is copied or moved to 5'th mailbox destination station.	Station No	N/A
Cascade Method	Cascade method is determined.	Disable / Copy / Move	Disable
Cascade Message Type	Cascade Message Type is determined.	Normal Only / Urgent Only / All	Normal only
Cascade Apply Timer	Cascade Apply Timer is set.	001 ~250 (min)	0
E-Mail notification			
[Send Mail] button : click Send mail button to send mail for notification			
SMTP Mail Server Address	This field defines the address or url of the SMTP mail server for the notification.	IP v4 addressor Mail server name	
SMTP Port	This field defines the TCP/IP port the system will employ when communicating with the SMTP E-mail server.	1 - 65535	25
SMTP Security Connection	The system can support basic security policies when communicating with the SMTP E-mail server. Note the server must also be configured for the selected security protocol.	No Security/ SSL/ TLS	No Security

Table 4.4.2.17-1 STATION VM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
E-Mail Account ID	This field defines the account Identification for the system configured in the SMTP server.		
E-Mail Account Password	This field defines the password for the system's E-mail account in the SMTP server.		
Sender E-Mail Address (From)	This field defines the E-mail address used to send the new Voice Message notification via E-mail.	E-mail address	
Receiver E-Mail Address (To)	This field defines the E-mail address to notify when a new VSF message is received for the station.	E-mail address	
Attach Message Option	When E-mail notification is enabled in the VM COS (PGM 253), the E-mail may include the voice mail as a wav file attachment. The proper information must be assigned for the receiver mail and system mail account information.	OFF ON	ON
Delete Message Option	After sending an E-mail notification the system will automatically delete the Voice message from the user's Voice Mailbox if this parameter is ON.	OFF ON	OFF

4.4.2.18 Station Personal CCR Table – PGM 128

Selecting Station Personal CCR displays the Station Personal CCR Table input page. Enter a valid Station range and click **[Load]** to enter the Station Personal CCR Table data. Click **[Save]** button after changing the type or value.

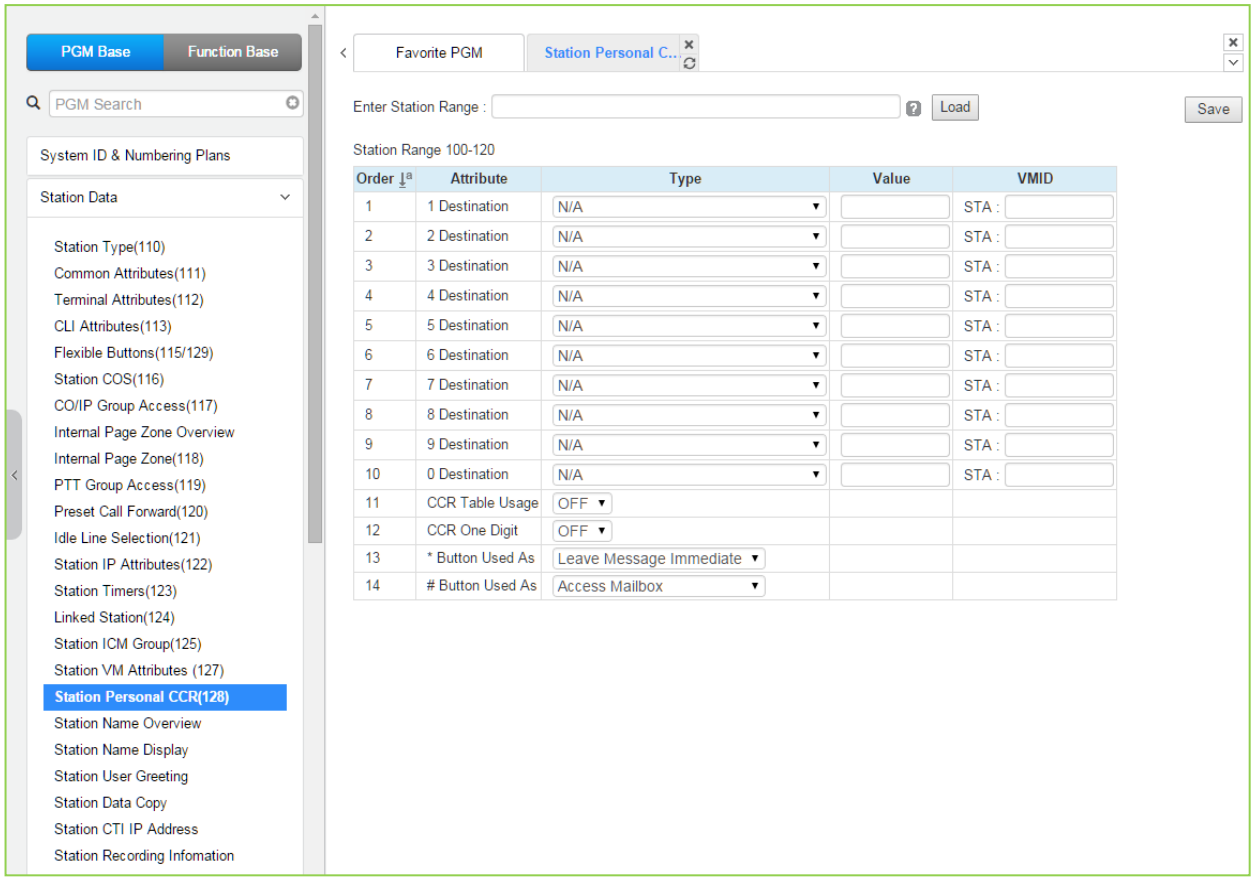


Figure 4.4.2.18-1 Station Personal CCR Table

Table 4.4.2.18-1 STATION CCR Table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
1-0 Destination	Digit dialed by outside caller. A destination type and value can be programmed by dialed digit. 14 kinds destination is available.	…	NA
CCR One Digit	When ON, the system will analyze the first digit received only, additional digits dialed by the caller are ignored.	OFF ON	OFF
CCR Table Usage	If this option is ON, CCR table can be activated. If this option is OFF, CCR table is not available, instead of that, dialing digits by outside caller can be recognized as DISA dialing.	ON OFF	OFF
*Button Used As	* can be used as the following: • System Numbering Plan • Replay Greeting • Access Mailbox • Leave Message Immediate	Refer to Description	Leave Message Immediate

Table 4.4.2.18-1 STATION CCR Table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
# Button Used As	# can be used as the following: • System Numbering Plan • Replay Greeting • Access Mailbox • Leave Message Immediate	System Refer to Description	Access Mailbox

Table 4.4.2.18-2 STATION CCR DESTINATIONS

DESTINATION TYPES
Route to a Station
Route to a Station Group
Route with System Speed Dial
Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
Route to VSF Announcement
Route to VSF Announcement and disconnect
Route to Networked Station.
Conference Room
Internal Page
External page
All Call Page
Route to voice mail(station group/station number)
Company Directory
Record VM Greeting
Room type conference group join

4.4.2.19 Station Name Overview & Display

Selecting Station Name Overview & Display will display the Station Name input page, Figure 4.4.2.19-1 & 4.4.2.19-2. Enter a valid Station range and click **[Load]** to enter the Station Name data.

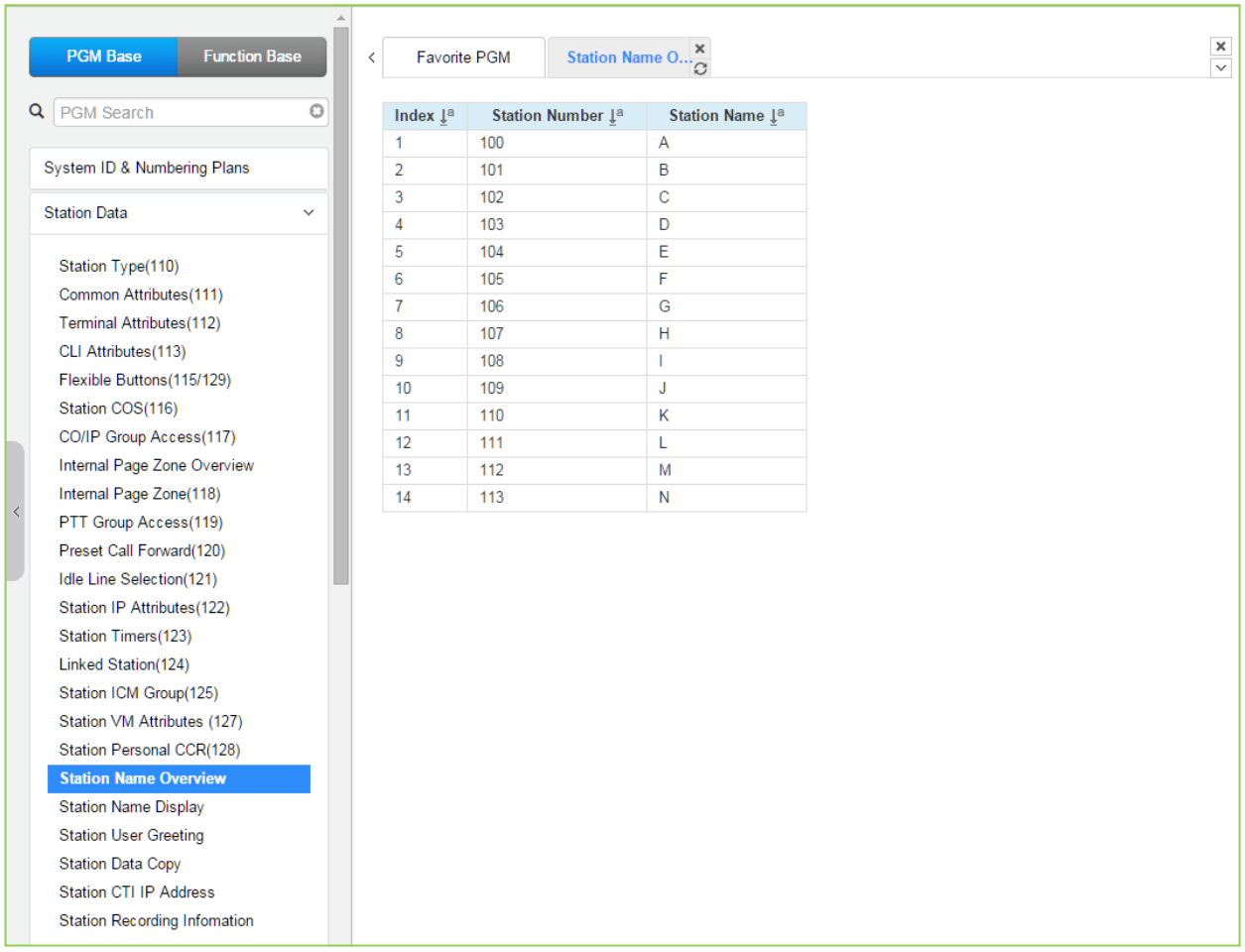


Figure 4.4.2.19-1 Station Name Overview

Each station name will be displayed if the each station has the name.

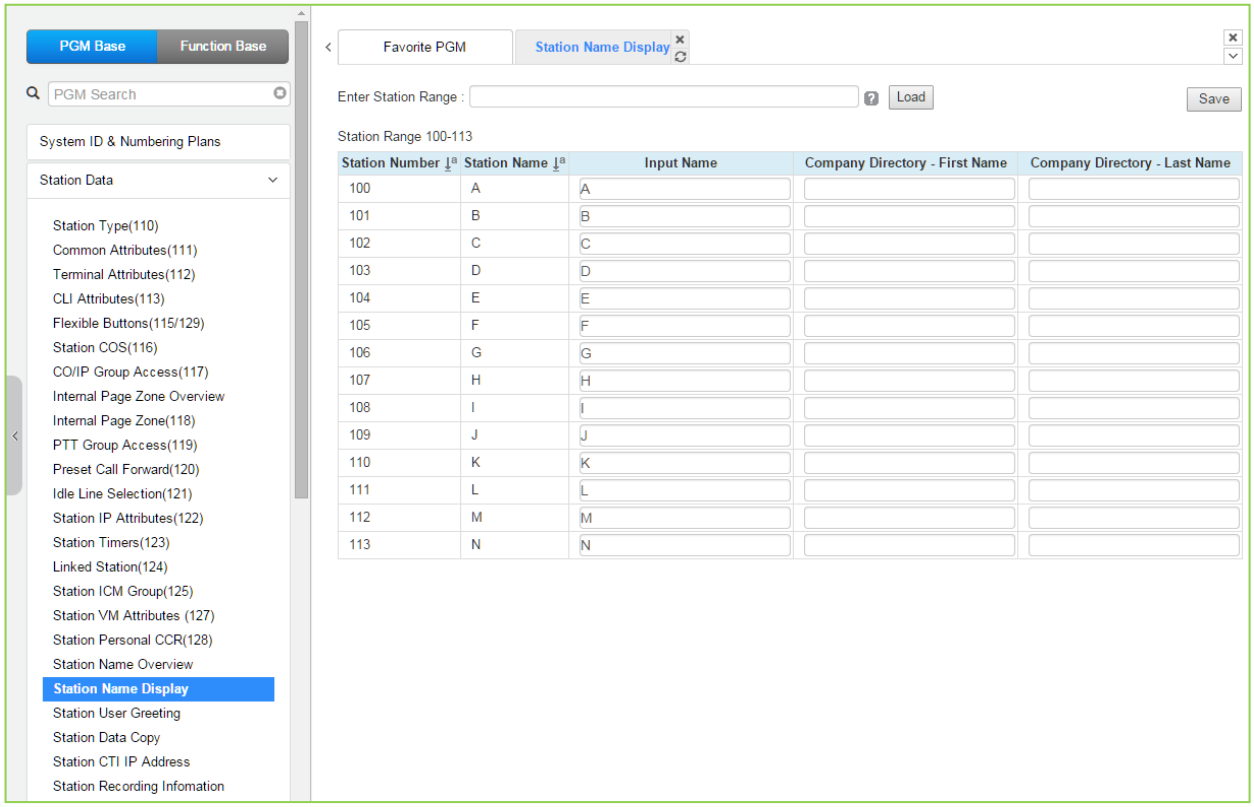


Figure 4.4.2.19-2 Station Name Display

You can fill out the Station name, Input name (up to 20 digits), company directory-First name & Last name for customer's convenience.

4.4.2.20 Station User Greeting

Selecting Station User Greeting will display the Station User Greeting data input page. Enter a valid Station range and click **[Load]** to enter the Station Voice Mail Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

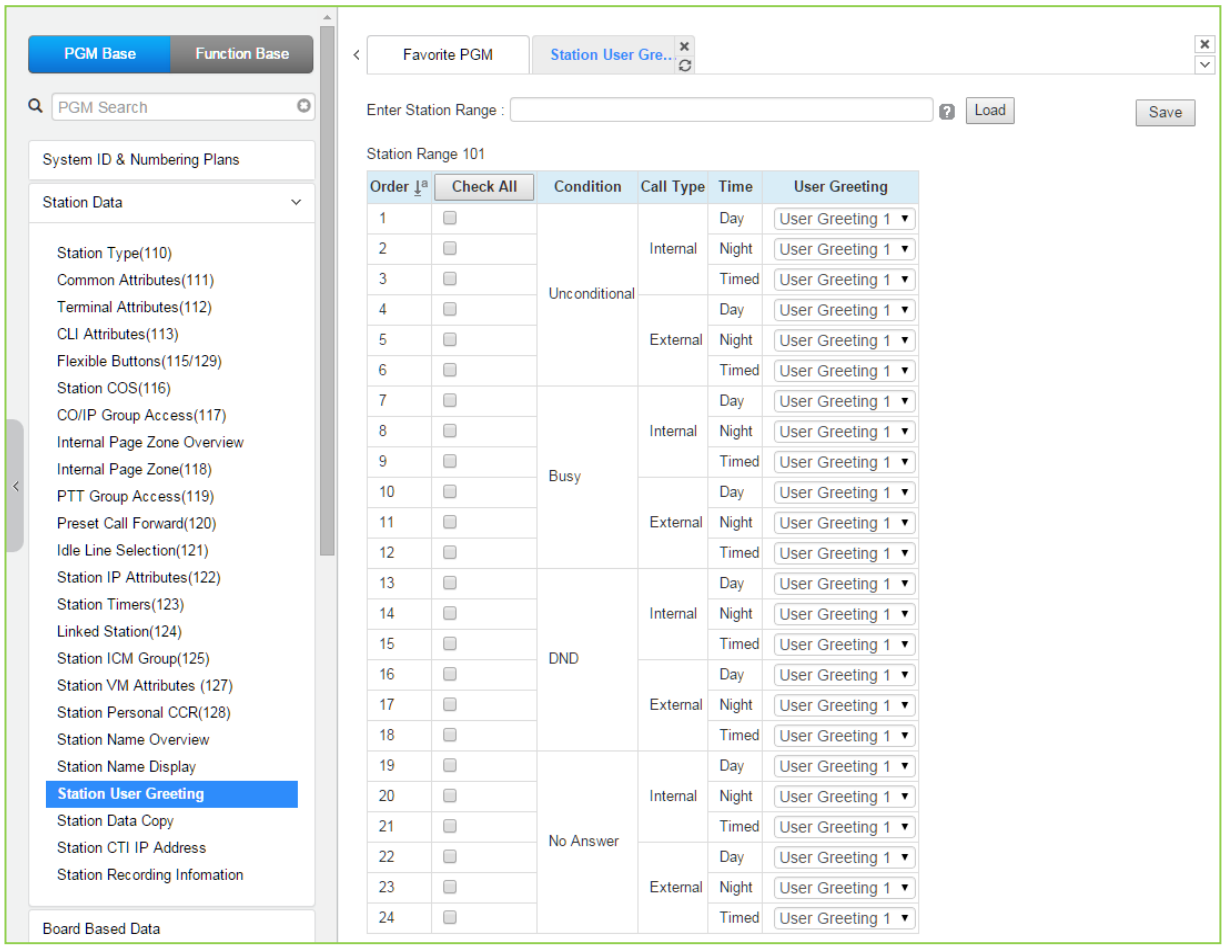


Figure 4.4.2.20-1 Station User Greeting

There are 4 User greeting for each station.

User can select multi user greeting depending on the condition, call type, and time.

-. Condition: unconditional, busy, DND, No answer

-. Call Type: Internal, External

-. Call Time: Day, Night, Timed

4.4.2.21 Station Data Copy

Selecting Station Data Copy will display the Station Data Copy data input page. Enter a valid Source Station, Destination Station Range and click **[Copy]** to copy the station data. Note that this function is not available for an Attendant station.

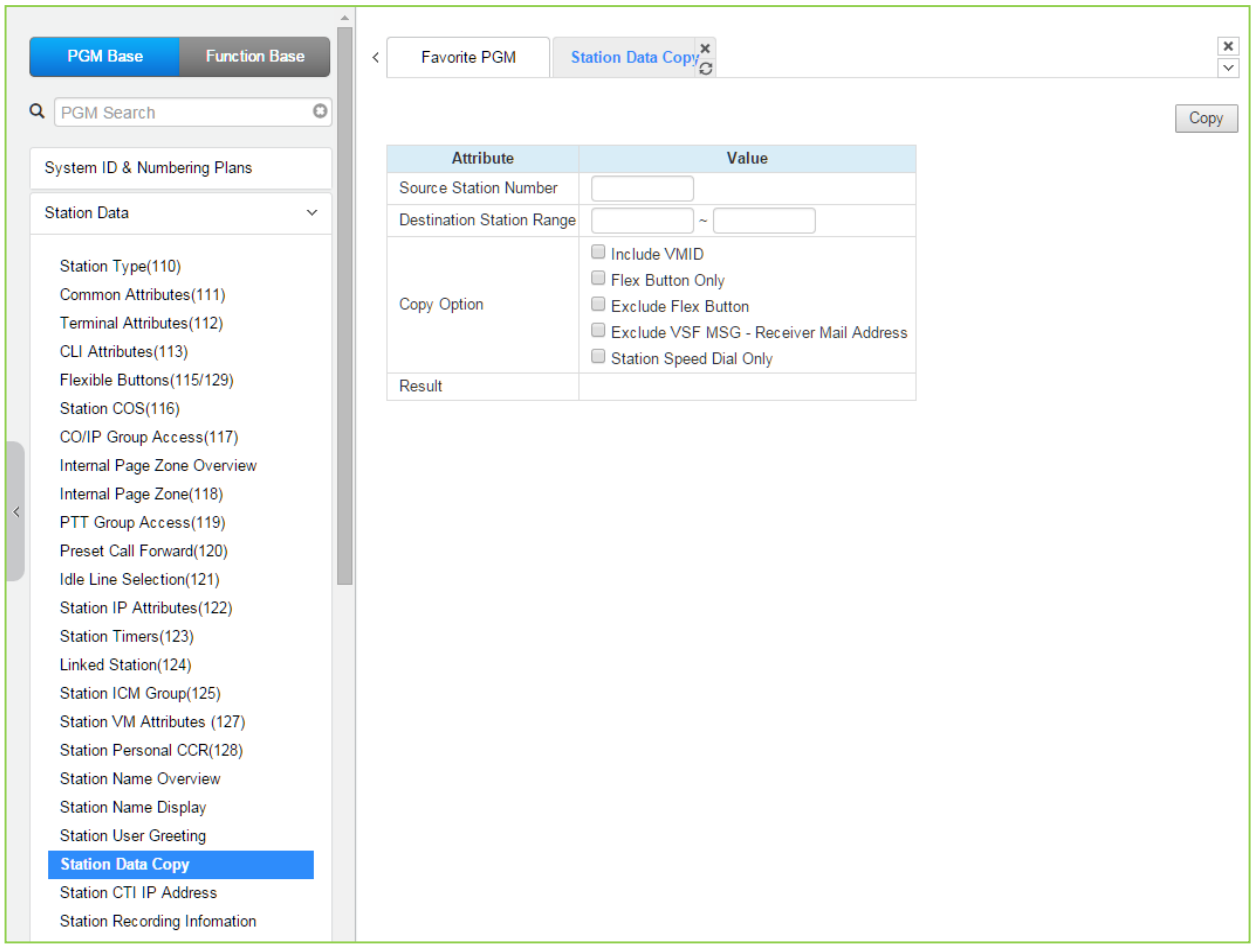


Figure 4.4.2.21-1 Station Data Copy

4.4.2.22 Station CTI IP Address (1st Party TAPI)

Selecting Station CTI IP Address displays the page shown in the following figure. Enter a Station Range and click **[Load]** to display and modify the CTI IP address. Click **[Save]** button after changing the type or value.

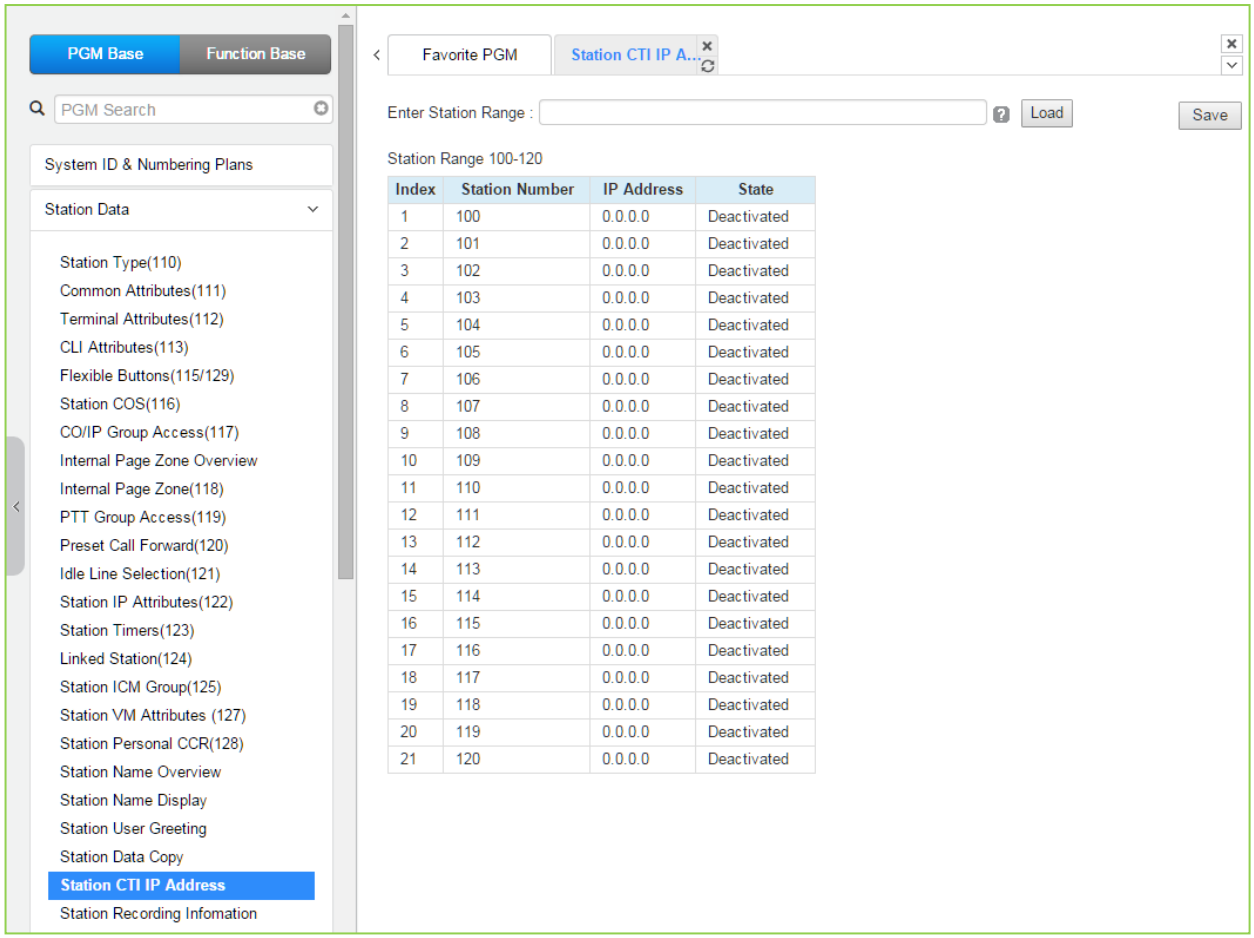


Figure 4.4.2.22-1 Station CTI IP Address

The system supports 1st party TAPI (Telephony Application Programming Interface) for CTI (Computer Telephony Integration). The system will send specific TAPI information to the IP address for activity by the associated Station.

4.4.2.23 Station Recording Information

Selecting Station recording information displays the page shown in the following figure. Enter a Station Range and click **[Load]** to display and check the current recording information on each station.

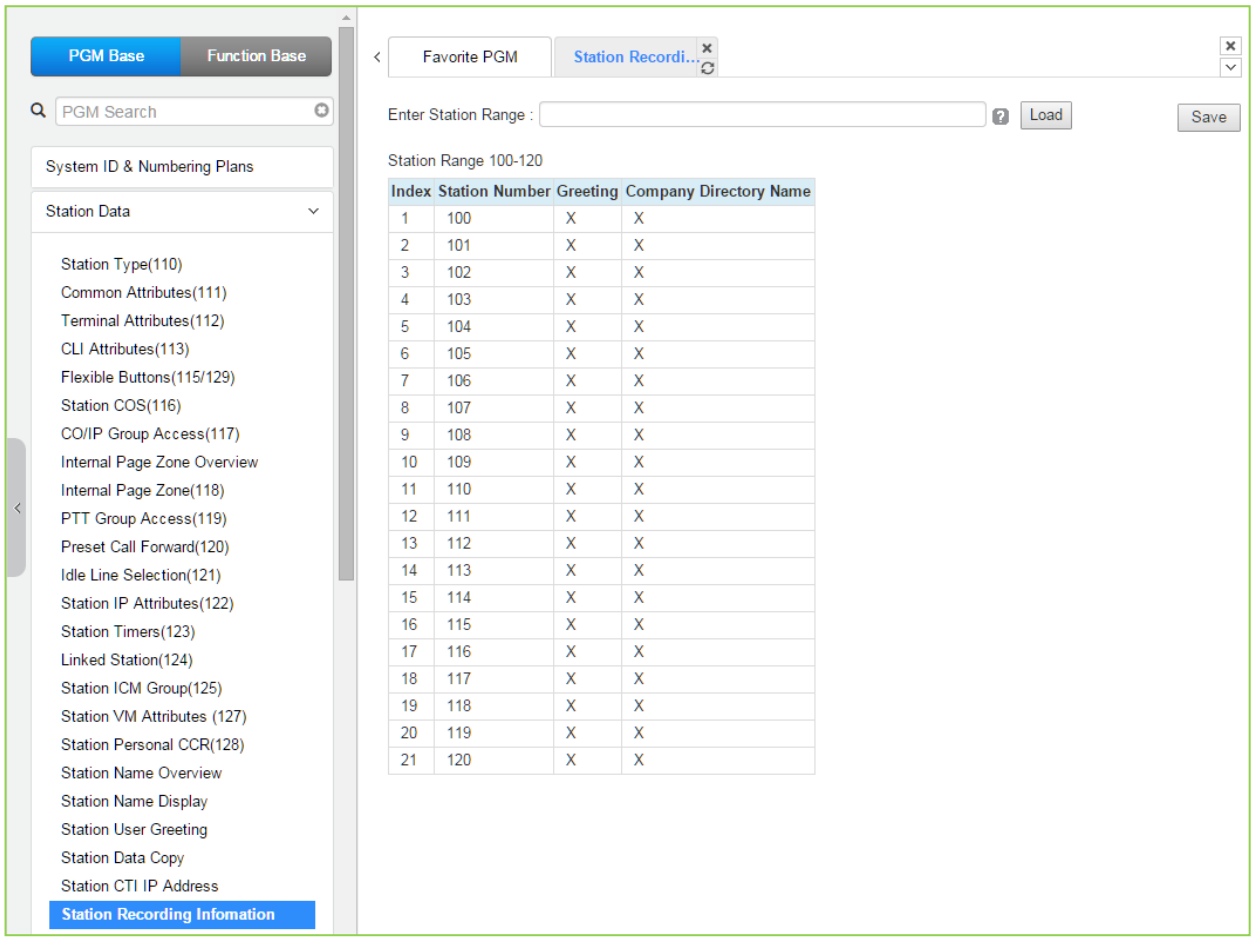


Figure 4.4.2.23-1 Station Recording Information

The {Station Recording information} displays the recording state of voice mail greeting and company directory name with O and X. (O: recorded, X: not recorded)

4.4.3 Board Based Data

Selecting the Board Based Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

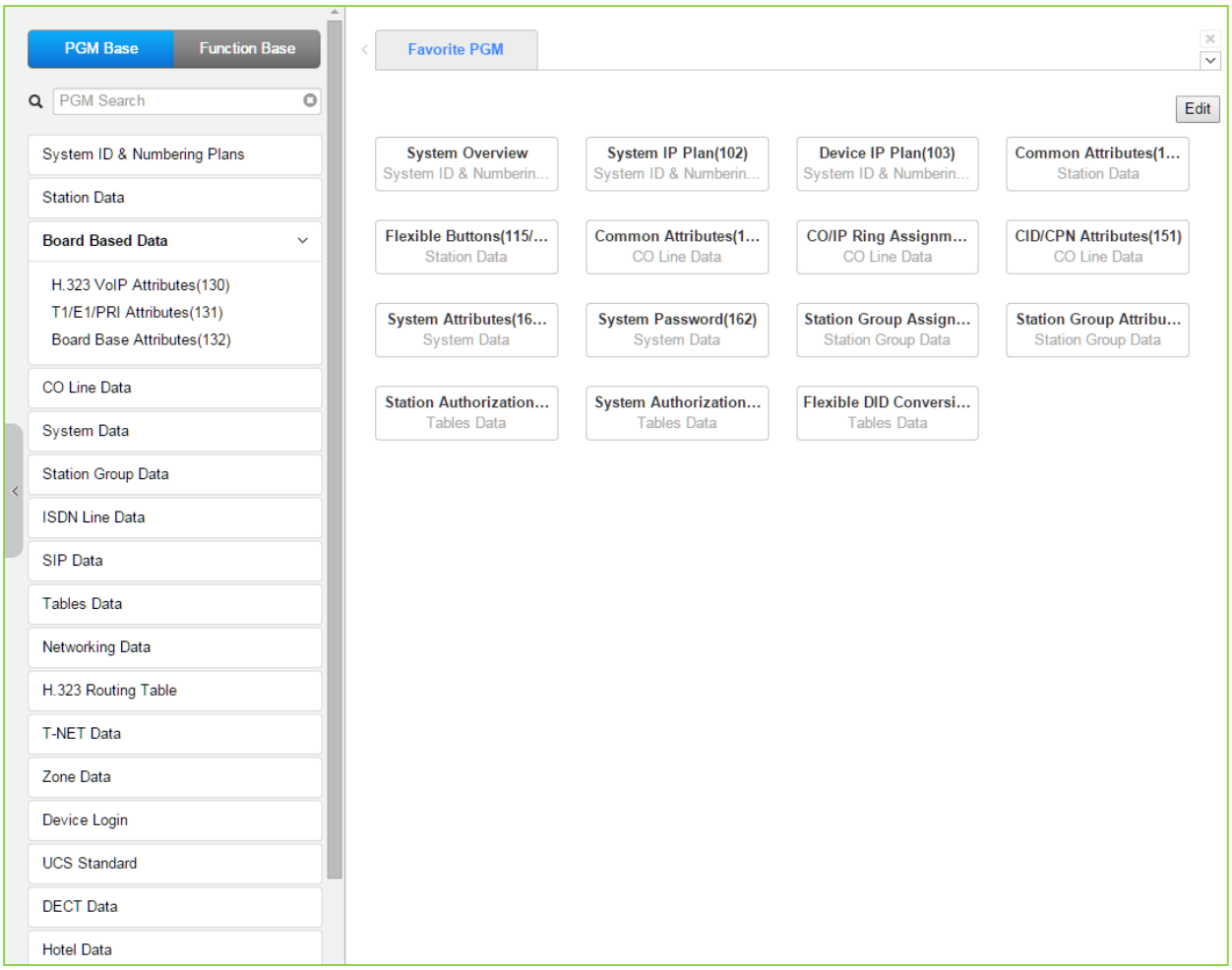


Figure 4.4.3-1 Board Based Data Main Page

4.4.3.1 H.323 VoIP Attributes - PGM 130

Selecting H.323 VoIP Attributes returns the H.323 VoIP Attributes data input page. Enter the VoIP gateway Sequence number (refer to '*Device IP Plan*' if you want to find the sequence number) and click **[Load]** to enter VoIP data. Click **[Save]** button after changing Value.

Enter Device/GW slot sequence number: eMG80 : 1-300 / eMG800: 1-2890

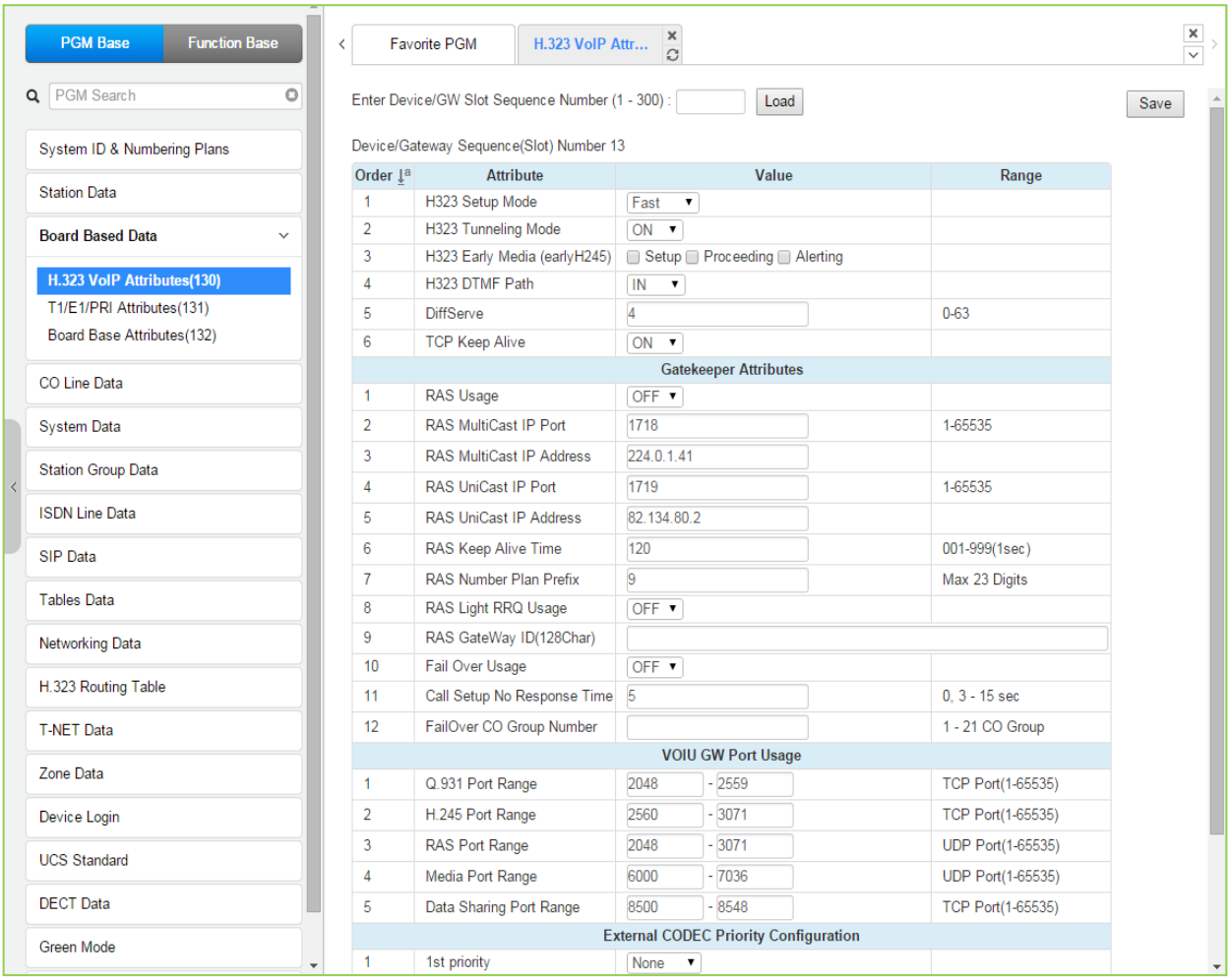


Figure 4.4.3.1-1 H.323 VoIP Attributes

The VOIP channels may be used for Distributed Networking, access to SIP or H.323 networks and for remote iPECS devices. When the standard H.323 VoIP protocol is employed for an external VoIP call, several attributes of these channels can be assigned. The H.323 call set-up mode and tunneling (H.245 Encapsulation) can be established.

Also for H.323 support, a RAS (Registration, Admissions and Status) channel can be defined. The RAS channel IP addresses (uni-cast and multi-cast) as well as the IP port Numbering Plan and other H.323 set-up characteristics are defined.

This page also allows setting the IP TOS bit for Diffserv, a commonly recognized packet prioritization protocol. Higher priority packets are given priority in the Default gateway or Layer 3 Switch queue. However, they are the first to be discarded in the event of long queue delays, which may cause excess packet loss and poor voice quality.

Refer to Table 4.4.3.1-1 for a description of the features and the input required.

Table 4.4.3.1-1 H.323 VOIP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
H323 Setup Mode	IP calls can be set-up using the H.323 normal or Fast Start mode.	Normal/ Fast	Fast
H323 Tunneling Mode	IP calls can be set-up using the H.245 encapsulation (Tunneling).	OFF ON	ON
H323 Early Media (early H245)	This feature is the ability of two user endpoints to communicate before call is actually established in normal call mode. This feature is not used when 'H323 Setup Mode' is 'Fast'. * Setup: Caller party tries to open early media on receiving the Setup message. * Proceeding: Calling party tries to open early media on receiving the Proceeding message. * Alerting: Calling party tries to open early media on receiving the Alerting message.	Setup, Proceeding, Alerting	
H323 DTMF Path	During a call, DTMF can be sent in-band or out-of-band (H.245)	Out-band/ In-band/ 2833	IN
DIFFSERV	This parameter sets DiffServ pre-tagging for Voice packet. Note high values may cause high packet discard levels.	0~63	4
TCP Keep-Alive	The system will send a polling message every 75 seconds to assure the status of the TCP connection.	OFF ON	ON
Gatekeeper Attributes			
RAS Usage	Determine whether VOIB (VOIU) board will be used as a Gatekeeper.	OFF ON	OFF
RAS Multicast IP Port	Multi-cast IP Port for RAS Information of Gatekeeper.	IP Port #	1718
RAS Multi-cast IP Address	Multi-cast IP address for RAS Information of Gatekeeper.	IP Address	224.0.1.41
RAS Uni-cast IP Port	Uni-cast IP Port for RAS Information of Gatekeeper.	IP Port #	1719
RAS Uni-cast IP Address	Uni-cast IP address for RAS Information of Gatekeeper.	IP Address	82.134.80.2
RAS Keep Alive Time	The time between exchange of RAS Information between GK and VoIP channel.	001-999 (seconds)	120
RAS Number Plan Prefix	The numbering plan for Calling Number in RAS Setup.	Max. 23 digit	9
RAS Light RRQ Usage	The system can be assigned to use the simple RRQ (Registration Request) message (ON) or the full RRQ message (OFF).	OFF ON	OFF
RAS Gateway ID	The Gatekeeper ID.	128 characters	
Fail Over Usage	If an H.323 call fails to set-up in the “Call Setup No Response time below, the system will attempt to place the call on the Failover CO/IP group also defined below.	OFF ON	OFF

Table 4.4.3.1-1 H.323 VOIP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Call Setup No Response Time	When Failover is enabled, the system places the fail-over call if this timer expires before the system receives a response to setup messages.	0, 3-10 Sec.	5
Failover CO Group Number	The system will place the Fail-over call employing a CO/IP line from the assigned CO/IP Line Group.	eMG80:1-21 CO group eMG800:1~201 CO group	
VOIU GW Port Usage			
Q.931 Port Range	IP-Binding H.323 signaling option: Q.931 TCP Port Range.	TCP port	2048-2559
H.245 Port	Range IP-Binding H.323 signaling option: H.245 TCP Port Range.	TCP port	2560-3071
RAS Port Range	IP-Binding H.323 signaling option: RAS UDP Port Range.	UDP port	2048-3071
Media Port Range	IP-Binding media option: Media UDP Port Range.	UDP port	eMG80:6000-7036 eMG800:6000-14400
Data Sharing Port Range	IP-Binding option: Data Sharing TCP Port Range.	TCP port	8500-8548
External CODEC Priority Configuration			
External CODEC Priority Configuration	The system supports five Codecs and, for negotiating purposes, the priority of each can be defined. Codecs not assigned a consecutive priority are not available during negotiations with the host.	None/ g.711-u/ g.711-a/ g.723.1/ g.729/ g.729-a	none

4.4.3.2 T1/PRI Attributes - PGM 131

Selecting T1/PRI Attributes returns the T1/PRI Attributes data input page. Enter the Device Sequence number (refer to '*Device IP Plan*' if you want to find the sequence number) and click **[Load]** to enter T1/PRI data. Click **[Save]** button after changing Value.

Enter Device/GW slot sequence number : eMG80 : 1-300 / eMG800: 1-2890

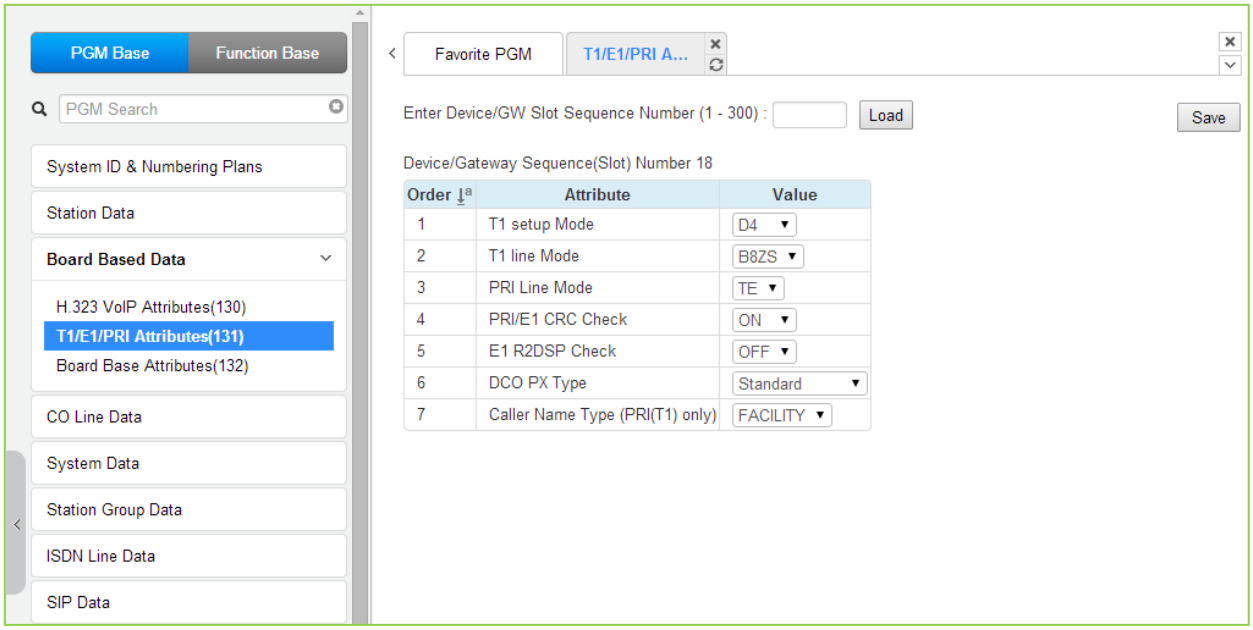


Figure 4.4.3.2-1 T1/PRI Attributes

Each T1/PRI module can be assigned for various attributes of the interface. The T1 interface framing and line coding can be selected and, for the PRI, TE or NT operation can be selected. Refer to Table 4.4.3.2-1 for a description of the features and the input required.

Table 4.4.3.2-1 T1/PRI ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
T1 Setup Mode	Select T1 Setup mode D4 frame: Using In-Band Control Protocol. ESF: Using Data link Message.	ESF/ D4	D4
T1 Line Mode	Select T1 line coding (AMI/B8ZS).	AMI/ B8ZS	B8ZS
PRI Line Mode	Select TE/NT Mode.	TE/NT	TE
PRI /E1 CRC Check	Enable CRC (Cyclical Redundancy Check).	OFF ON	OFF
E1 R2DSP check	Used for R2-E1 Device or E1 Device.	OFF/ ON	OFF
DCO PX Type	Reserved for future usage for R2 E1 Device.	S1240/ TDX1B/ STANDARD/ CONGES_DIS	STANDARD
Caller Name Type(PRI(T1) only)	If the caller has a name, the Caller Name is sent to the network according to the option (FACILITY, DISPLAY). (USA only)	FACILITY, DISPLAY	FACILITY

4.4.3.3 Board Base Attributes - PGM 132

Selecting Board Base Attributes returns the Board Base Attributes data input page, Figure 4.4.3.3-1. Enter the Sequence number (refer to '*Device IP Plan*' if you want to find the sequence number) and click **[Load]** to enter attribute values. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter Device/GW slot sequence number: eMG80 : 1-300 / eMG800: 1-2890

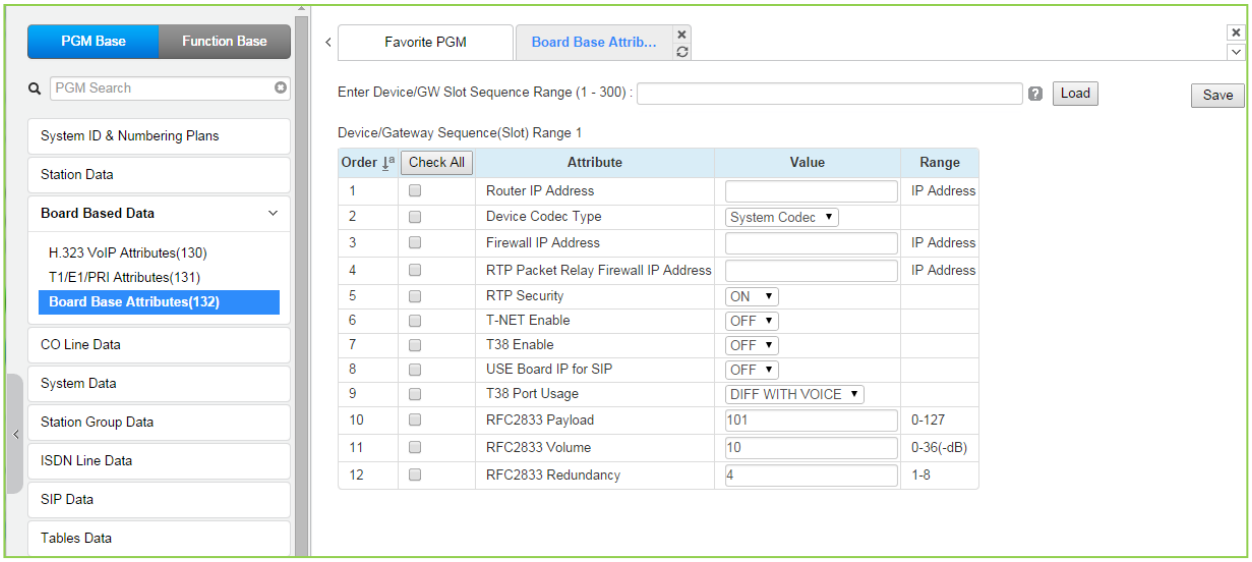


Figure 4.4.3.3-1 Board Base Attributes

Appliances (Devices and IP Phones) can be connected to the iPECS over a managed WAN without the need to employ a VoIP channel. In this case, the system does not implement security (IPSec) or QoS treatment over the link. To implement the managed WAN connectivity, the iPECS must be assigned with the IP address of the router for all appliances that may attempt a point-to-point connection over the managed WAN, including devices on the iPECS LAN. Note that if the device's Router IP address is not defined, the system will use the Router IP address defined in System & Device IP Address Plan.

The default codec employed by each device can be specifically defined as G.711, G.729, G.723, G.722, or the system default codec assigned.

Appliances include support for SRTP (Secure Real-Time Protocol), which employs Advanced Encryption Standard (AES) to secure RTP packets. If RTP security is enabled then IPSEC or SRTP is implemented for RTP packet.

Table 4.4.3.3-1 BOARD BASE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Router IP Address	Enter the Default gateway (Router) IP address associated with the selected devices.	IP Address	
Device Codec Type	Select the CODEC type for each device.	G.711, G.723.1, G.729, G.722, or SYSTEM CODEC	SYSTEM CODEC

Table 4.4.3.3-1 BOARD BASE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Firewall IP Address	Enter the Firewall IP address of the selected devices.		0.0.0.0
RTP Packet Relay Firewall IP Address	Enter the Firewall IP address associated with the Remote Phone or Gateway if there a dual broadband connection for SIP trunks and Remote phones (using a VOIB).		0.0.0.0
RTP Security	SRTP implements AES (Advanced Encryption Standard) for packets between other devices with RTP Security enabled.	OFF ON	ON
TNET Enable	When a module or station is to be connected in a Centralized Control network (TNET), the device must be enabled for TNET operation.	OFF ON	eMG80:ON eMG800:OFF
T38 Enable	T38 mode ON/OFF for FAX data transfer between other iPECS boards.	OFF ON	OFF
USE Board IP for SIP	VOIB IP will be used for SIP Signaling in Multi NAT circumstance.	OFF ON	OFF
T38 Port Usage	The TCP/IP port employed for T38 packets is negotiated and the system can allow the port to be the same as or different from the preceding Voice packets.	DIFF WITH VOICE SAME AS VOICE NET TRIGERING	DIFF WITH VOICE
RFC2833 Payload	Payload value for RFC2833	0~127	101
RFC2833 Volume	Volume(Gain) of RFC2833 payload	0~36(-dB)	10
RFC2833 Redundancy	Sending time of end packet of RFC2833	1~8	4

4.4.4 CO Line Data

Selecting the CO Line Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

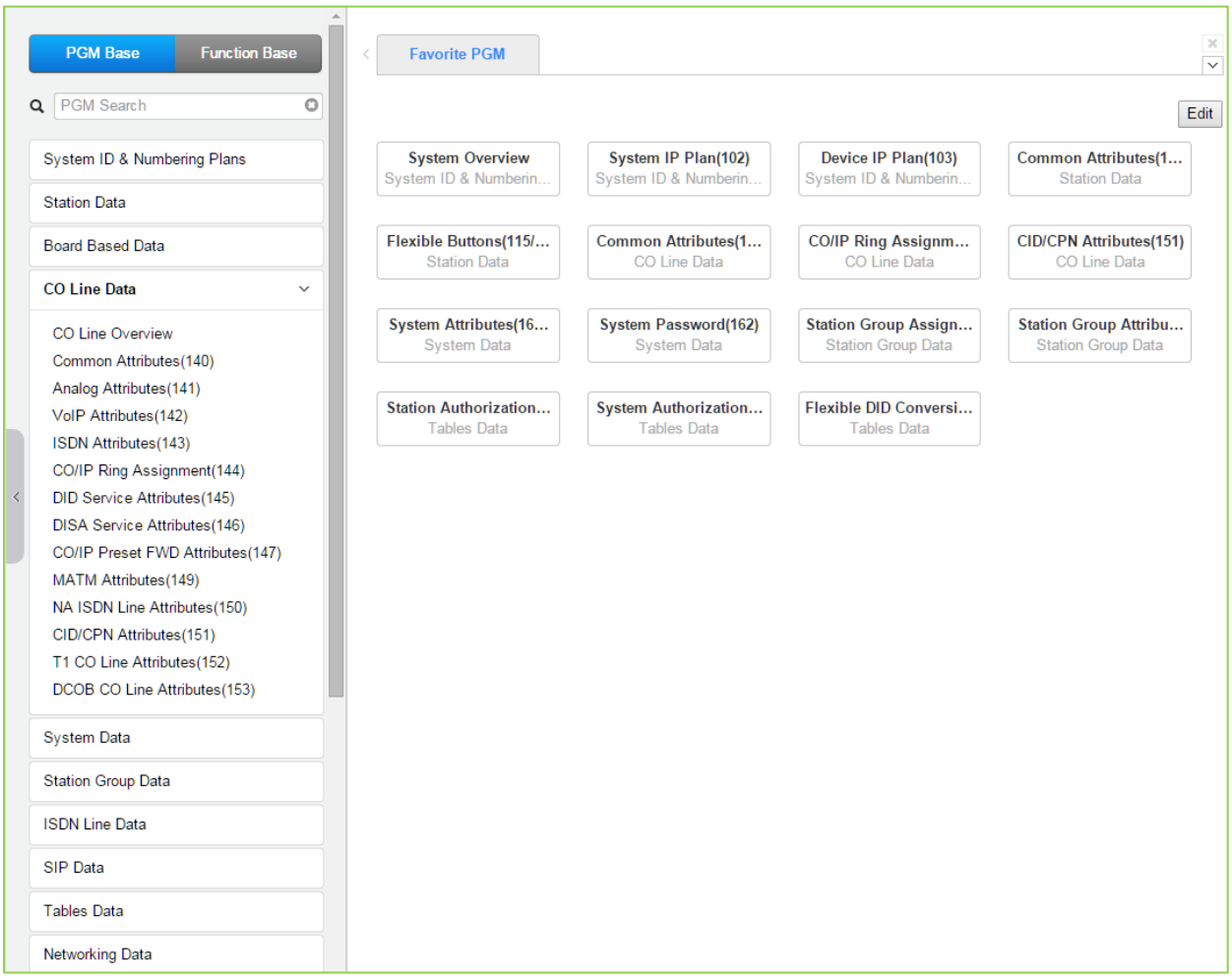


Figure 4.4.4-1 CO Line Data Main Page

4.4.4.1 Common Attributes - PGMS 140

Selecting Common Attributes will display the Common Attributes data input page. Enter a valid CO range and click **[Load]** to enter the Common Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

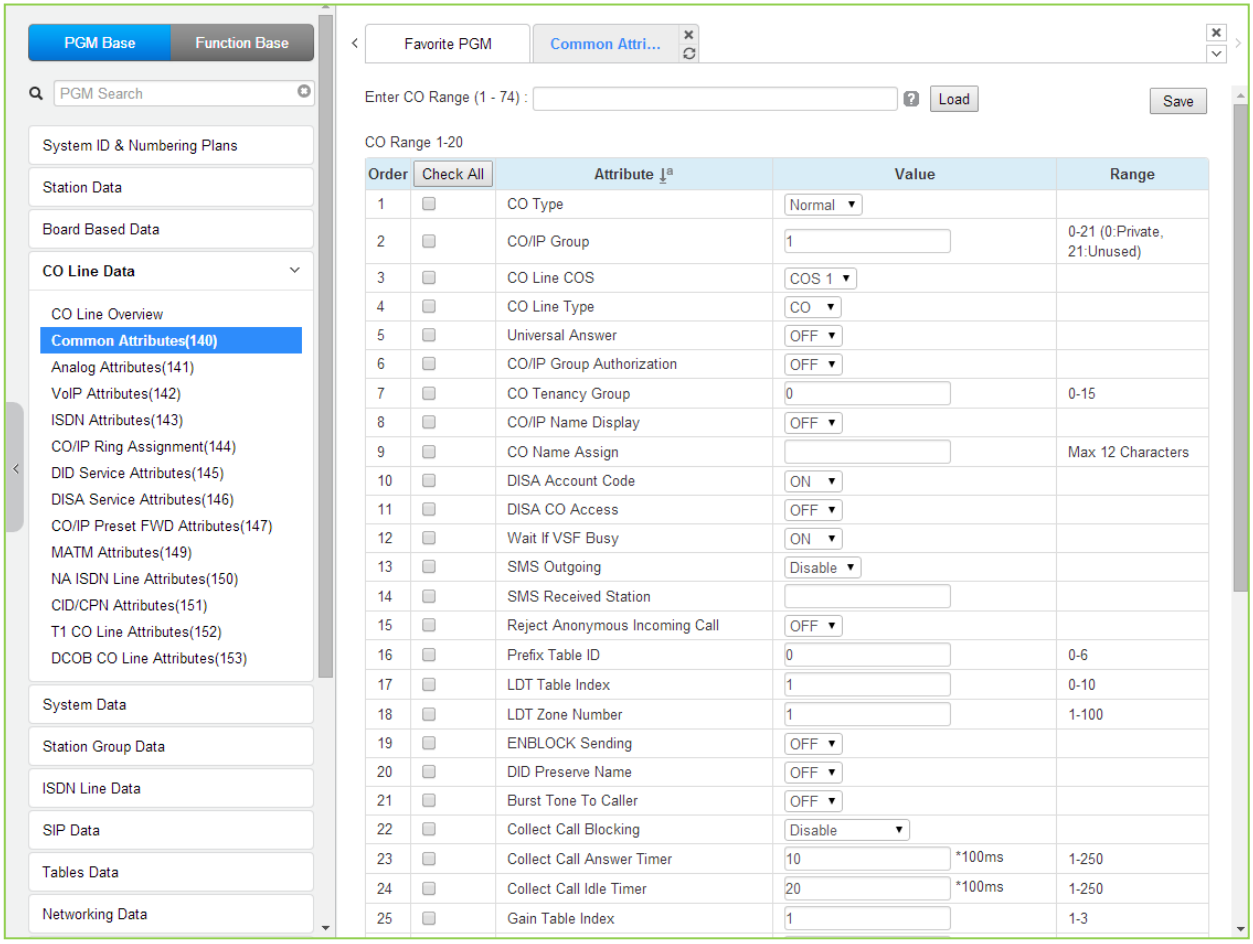


Figure 4.4.4.1-1 Common Attributes

Common Attributes define various characteristics of CO lines facilities under control of the system. Most characteristics require an On/Off setting; refer to Table 4.4.4.1-1. Specific descriptions for Class-of-Service and CO line Call Metering tones are provided in Table 4.4.4.1-3.

Table 4.4.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Type	Each CO Line is assigned a type, Normal, DID or TIE Line.	Normal/ DID/ TIE/ Unused	Normal
CO/IP Group	Each CO/IP Line is assigned to a group; grouping should be based on the Line type, technology and COS.	eMG80:0-21 eMG800:0-201	1

Table 4.4.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Line COS	Each CO/IP Line is assigned a Class-of-Service that interacts with the Station COS, refer to Table 4.4.4.1-2 CO COS 1: Station COS applies CO COS 2: Exception Table A governs CO COS 3: Exception Table B governs CO COS 4: Restricts LD calls & Exception Table C CO COS 5: Overrides Station COS 2~6 with no restrictions.	COS 1~5	COS 1
CO Line Type	Each CO/IP Line can be assigned as connected to a CO Line or a PBX/CTX Line.	PBX CO	CO
Universal Night Answer	Universal Night Answer (UNA) allows any station user to answer a call on the CO/IP line by dialing the UNA code.	OFF ON	OFF
CO/IP Group Authorization	Each CO/IP Group can be assigned to require the user enter an Authorization Code.	OFF ON	OFF
CO Tenancy Group	Only stations in the assigned Tenancy group are permitted access to the defined CO Line.	eMG80:00-15 eMG800:0-32	0
CO/IP Name Display	The IP Phone display can indicate the CO line/IP channel number or the twelve (12) character name, if assigned below.	OFF ON	OFF
CO Name Assign	Each CO Line and IP group can be assigned a twelve (12)-character name for display purposes.	Max. 12 characters	
DISA Account Code	With DISA Account Code “ON”, users are required to enter a DISA Authorization code. Codes are entered in the Authorization Code Table, section 4.4.9.9.	OFF ON	ON
DISA CO Access	When enabled, DISA users may access the VoIP facilities of the system.	OFF ON	OFF
Wait If VSF Busy	When a DID/DISA call assigned to receive a VSF announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or route to the DID/DISA Destination -PGM 167-.	OFF ON	ON
SMS Outgoing	Each CO line can be assigned to support PSTN SMS.	Disable Enable	Disable
SMS Received Station	When a PSTN SMS is received, the system delivers the message to the assigned station.	Station	….
Reject Anonymous Incoming Call	When REJECT ANONYMOUS is enabled, incoming calls without Caller ID are rejected.	OFF ON	OFF
Prefix Table ID	When the Prefix Dialing Table (PGM 206) feature is used, this Prefix Table ID is employed. If this value is set to 0, the Prefix Table feature is disabled.	0 – 6. 0 means disable	0
LDT Table Index	When LCR is configured, this LDT Table index is referenced for outgoing calls on this CO/IP Line.	0-10(eMG80), 0-32(eMG800)	1
LDT Zone Number	If the LDT Zone Number of a LDT table (LCR LDT(221)) is equal to this value, the LDT table is available to this CO Line.	1-100	1
ENBLOCK Sending	This entry determines if the system sends dialed digits to the ISDN line as they are received (OFF), or collects all digits and forwards them in a block. (ON).	OFF ON	ON

Table 4.4.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DID preserve Name	For DID lines, the CLI is normally displayed only during ringing. If enabled here, the CLI will be displayed for the entire call duration.	OFF ON	OFF
Burst Tone to Caller	Send to burst tone to caller if it's set ON.	OFF ON	OFF
Collect Call Blocking	This parameter defines the type of Collect Call Blocking supported for E1 CO lines with R2 signaling. (Intended for Brazil only)	Disable/ Double Answer/ Double Answer w/Indication	Disable
Collect Call Answer Timer	These parameters determine treatment of an incoming call when Collect Call Blocking Double Answer is assigned. In this case, the system answers the call and maintains the connection for the Call Answer time then, the system will disconnect for the Call Idle time before finally reconnecting the call.	1-250 (100ms)	10
Collect Call Idle Timer		1-250 (100ms)	20
Gain table index	One of three Gain tables can be configured for TDM connections.	1-3	1
Tone table index	One of the five Tone table can be configured for use with the CO/IP Line.	1-5	1
Digit conversion table index	One of the Digit Conversion Tables can be configured for use for this CO/IP Line.	eMG80:1-15 eMG800:1-32	1
Prepaid Call	The Pre-paid Call feature must be enabled for use by a station.	OFF ON	OFF
Prepaid Money (0-999999) & Used Prepaid Money	An amount can be associated with the station as prepayment for outgoing calls. The assigned "Pre-paid Money" is reduced by the calculated call cost (Call Metering or cost/minute). This parameter displays the remaining funds for outgoing calls. Prepaid Money is often used in small hospitality businesses. The "Used Pre-paid Money" displays the money that has been used.	0-999999 0-999999	0
Automatic call recording destination	When desired, the IP CR server can be used to record calls on the CO/IP Line. This value defines the Station Group of the IP CR server. The IP CR Agent object, see PGM 237, must be assigned as CO Line for proper operation.		
ICLID Usage	An incoming call can be routed to the destination based on Calling Name. Disable - ICLID feature is disabled CLI - ICLID feature is operated with CLI Name - ICLID feature is operated with Name	Disable, CLI, Name	CLI
PBX Code Insertion for Emergency call	System can insert PBX code automatically if pre-configured when a user make an emergency call.	Disable, PBX code1~4	Disable
Timer Attributes			
CO CUT OFF TIMER	When the Station is assigned Call Time restriction is assigned, this timer defines the allowed call duration.	00-99 00 = disable	0

Table 4.4.4.1-1 Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DISA Delay Timer	Once answered, the system attaches a DTMF receiver to the DISA call to receive caller-dialed digits. This timer introduces a delay before attaching the DTMF receiver to the CO line. (Intended for Russia only)	0-9	0
DISA Answer Timer	When a call is received on a CO line with DISA service, the system will answer the call when the DISA Answer Timer expires. (Intended for Russia only)	0-9	0
Tone Attributes			
CO Line MOH	A held call can be connected to one (1) of ten (10) possible audio sources while on Hold as Music-on-Hold (MOH).	Refer to Sys Hold/ Internal Music/ External Music/ VSF MOH/ SLT MOH1~5/ VSF MOH2~3	Refer to Sys Hold
CO Dial Tone	ISDN Lines may provide a digital signal rather than actual tones. In this case, the iPECS can provide the tones. If the ISDN provides the tone, the Tone is “ON”, for an iPECS eMG-generated tone, the tone is set to “OFF”.	OFF ON	ON
CO Ring Back Tone		OFF ON	OFF
CO Error Tone		OFF ON	OFF
CO Busy Tone		OFF ON	OFF
CO Line Dial Tone Source	One of eleven sources can be defined as dial tone for use by the CO line.	Dial Tone/ Internal Music/ External Music/ VSF MOH/ SLT MOH1~5/ VSF MOH2~3	Dial Tone
CO Ring Back Tone Source	One of eleven sources can be defined as ring back tone for use by the CO line.	Ring Back Tone/ Internal Music/ External Music/ VSF MOH/ SLT MOH1~5/ VSF MOH2~3	Ring Back Tone
COL Ring Tone	One of twelve Ring Tones can be configure for use by this CO Line.	00-16	0

Table 4.4.4.1-2 STATION/CO LINE TOLL RESTRICTIONS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call (LD code/counter) & Table C	No Restriction

Table 4.4.4.1-2 STATION/CO LINE TOLL RESTRICTIONS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 5	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) & Table C	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) & Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) & Table C	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 9	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call (LD code/counter) & Table C	No Restriction

Table 4.4.4.1-3 CALL METERING FUNCTION

ENTRY	CALL METERING TYPE
00	- None
01	- 50 Hz
02	- 12 KHz
03	- 16 KHz
04	- Singular Polarity Reverse (SPR)
05	- Plural Polarity Reverse (PPR)
06	- No Polarity Reverse (NPR)

4.4.4.2 Analog Attributes - PGMS 141

Selecting Analog Attributes will display the Analog Attributes data input page. Enter a valid CO range and click **[Load]** to enter the Analog (PSTN) Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

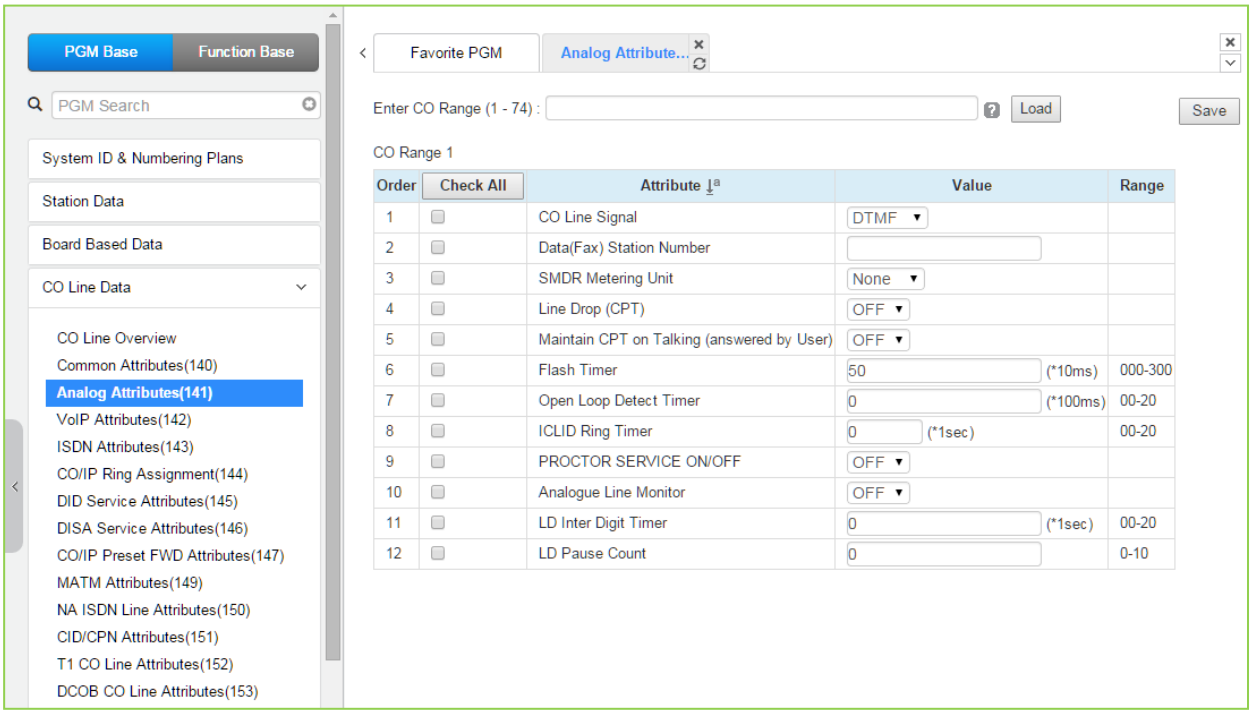


Figure 4.4.4.2-1 Analog Attributes

Analog Attributes define various characteristics of Analog CO Lines under control of the system. Most characteristics require an On/Off setting; refer to Table 4.4.4.2-1.

Table 4.4.4.2-1 Analog ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Line Signal	Each analog CO Line can be assigned to send either DTMF or Pulses for dialed digits to the PSTN.	DTMF Pulse	DTMF
Data(Fax) Station Number	Each CO line can be assigned to recognize a FAX call when a specified station answers.	Station Number	
SMDR Metering Unit	This field selects the call-metering signal from the PSTN to indicate call cost, refer to Table 4.4.4.1-2.	See Table 4.4.4.1-2	None
Line Drop (CPT)	Each CO Line can be programmed to disconnect if error tone is detected.	OFF ON	OFF
Maintain CPT on talking (Answer by User)	The system can continuously monitor the CO Line during a call and, if error tone is detected, drop the call.	OFF ON	OFF
Flash Timer	This time sets the flash time.	000-300 (*10 msec)	50
Open Loop Detect timer	This entry sets the duration of open loop that will be recognized as a “Disconnect Signal”.	00-20 (*100 msec)	04

Table 4.4.4.2-1 Analog ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ICLID Ring Timer	When a call is received, the system may use ICLID (Incoming Caller ID) to route the call. The system will delay routing a call for this duration while awaiting ICLID. Enter a 00 to disable ICLID routing.	00-20 (*Sec)	4
Proctor Service	Each analog CO line can be assigned to send the station number as DTMF digits for Proctor service.	OFF ON	OFF
Analog Line monitor	The system can monitor and report faults on an analog CO Line.	OFF ON	ON
LD Inter Digit Timer	This time is for setting the duration between digits for LD (Long Distance) call.	00-20 (*1sec)	0
LD Pause count	This count sets the number of Pause for Long distance call.	0-10	0

Table 4.4.4.2-2 CALL METERING FUNCTION

ENTRY	SMDR METERING UNIT TYPE
00	- None
01	- 50 Hz
02	- 12 KHz
03	- 16 KHz
04	- Singular Polarity Reverse (SPR)
05	- Plural Polarity Reverse (PPR)
06	- No Polarity Reverse (NPR)

4.4.4.3 VoIP Attributes - PGMS 142

Selecting VoIP Attributes will display the Analog Attributes data input page. Enter a valid CO range and click **[Load]** to enter the VoIP Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

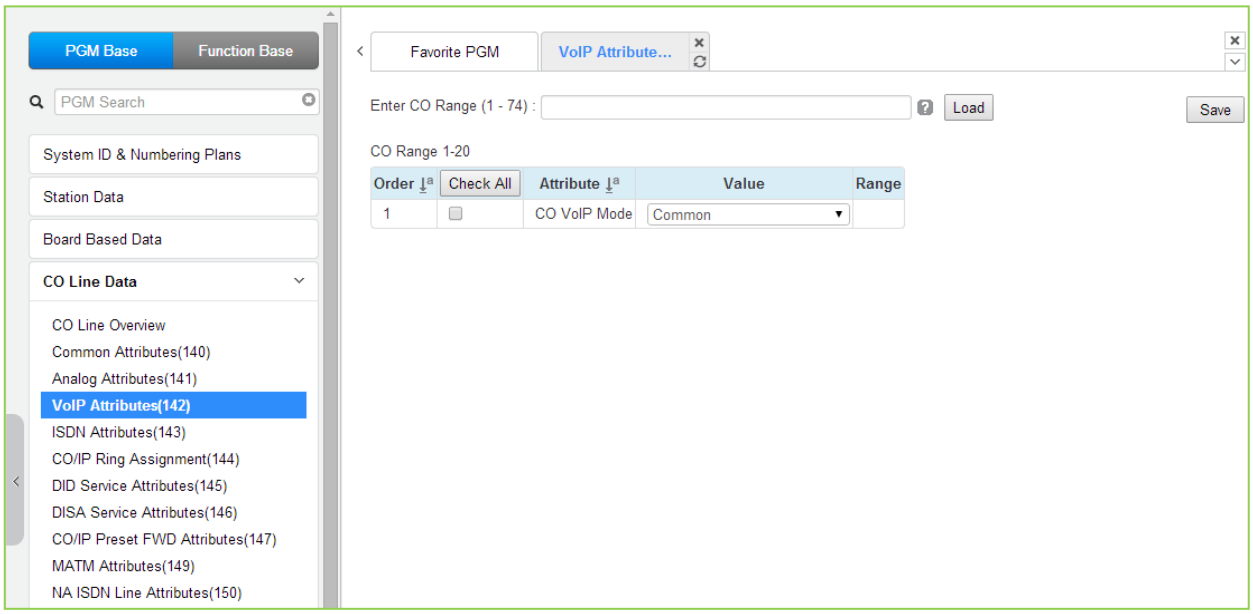


Figure 4.4.4.3-1 VoIP Attributes

Table 4.4.4.3-1 VoIP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO VoIP Mode	The VoIP channels can support iPECS, H.323 or SIP protocols. This field defines the protocol for the VoIP channel(s).	COMMON/ H323 only/ SIP only/ RTP-Packet-Relay only/ H323 & RTP-Packet-Relay/ SIP & RTP-Packet-Relay	COMMON

4.4.4.4 ISDN Attributes - PGMS 143

Selecting ISDN Attributes will display the ISDN Attributes data input page. Enter a valid CO range and click **[Load]** button to enter the ISDN Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

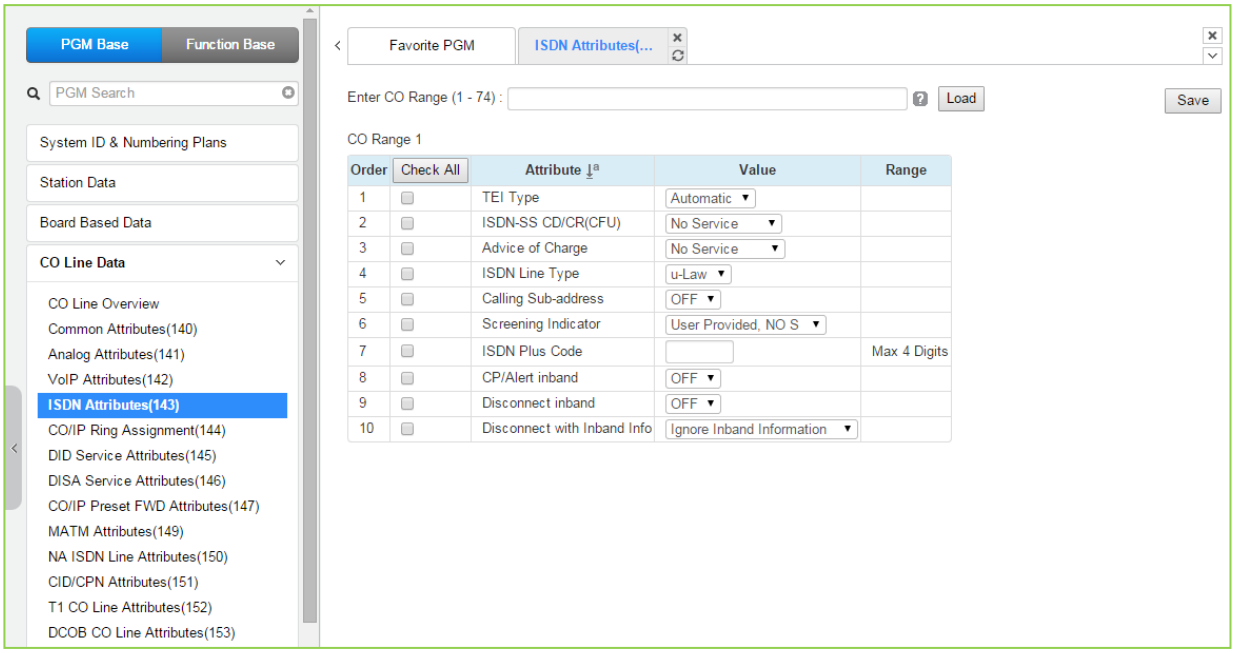


Figure 4.4.4.4-1 ISDN Attributes

PGM 143 assigns attributes associated with ISDN lines in the entered range.

Table 4.4.4.4-1 ISDN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
TEI Type	The TEI (Terminal Endpoint Identifier) is a unique identifier for each device attached to the ISDN line. When the system shares an ISDN connection with other devices, the TEI should be automatic to assure no conflict with the other attached devices. Otherwise, the Fixed identifier option should be employed.	Fixed/ Automatic	Automatic
ISDN – SS CD/CR(CFU)	Permits a user to access to ISDN Supplementary Call Deflection Service. (Except USA version).	No Service/ Call Deflection/ Call Rerouting	No Service
Advice of Charge	When assigned, the system will analyze the Advice of Charge information in the Facility Message according to the ETSI specifications with appropriate regional protocol support.	No AOC/ Italy & Spain/ Finland/ Australia/ Belgium/ ETSI STD	No Service
ISDN Line Type	The system will encode voice using the A-law or u-law PCM format to match the installed ISDN back	μ-Law/ A-Law	μ-Law

Table 4.4.4.4-1 ISDN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	bone.		
Calling Sub-address	For outgoing calls, the user's station number may be included in the ISDN call SETUP message Sub-address field.	OFF ON	OFF
Screening indicator	The ISDN Screening Indicator can be configured.	User Provided, No Service/ User Provided, Pass/ User Provided, Fail/ Network Provided.	User Provided, No Service
ISDN PLUS Code	When the incoming CLI starts with "+", this value will be inserted in place of the "+" sign.	0000-9999	-
CP/Alert inband	Send progress indication with in-band information in Call proceeding and Alerting messages.	OFF ON	OFF
Disconnect inband	Send progress indication with in-band information in Disconnect message.	OFF ON	OFF
Disconnect with Inband Info	When system receives DISCONNECT message with Inband information from PSTN, the following option can be applied: -. Ignore Inband information: Line is disconnected -. Bypass Inband information: Progress Information is transferred -. Wait Release: System wait to send Release message till the other party is disconnected	Ignore Inband information, Bypass Inband information, Wait Release	Ignore Inband information

4.4.4.5 CO/IP Ring Assignment - PGM 144

Selecting CO/IP Ring Assignment will display the CO/IP Ring Assignment data input page. Enter a valid CO range and click **[Load]** to enter the CO/IP Ring Assignment data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

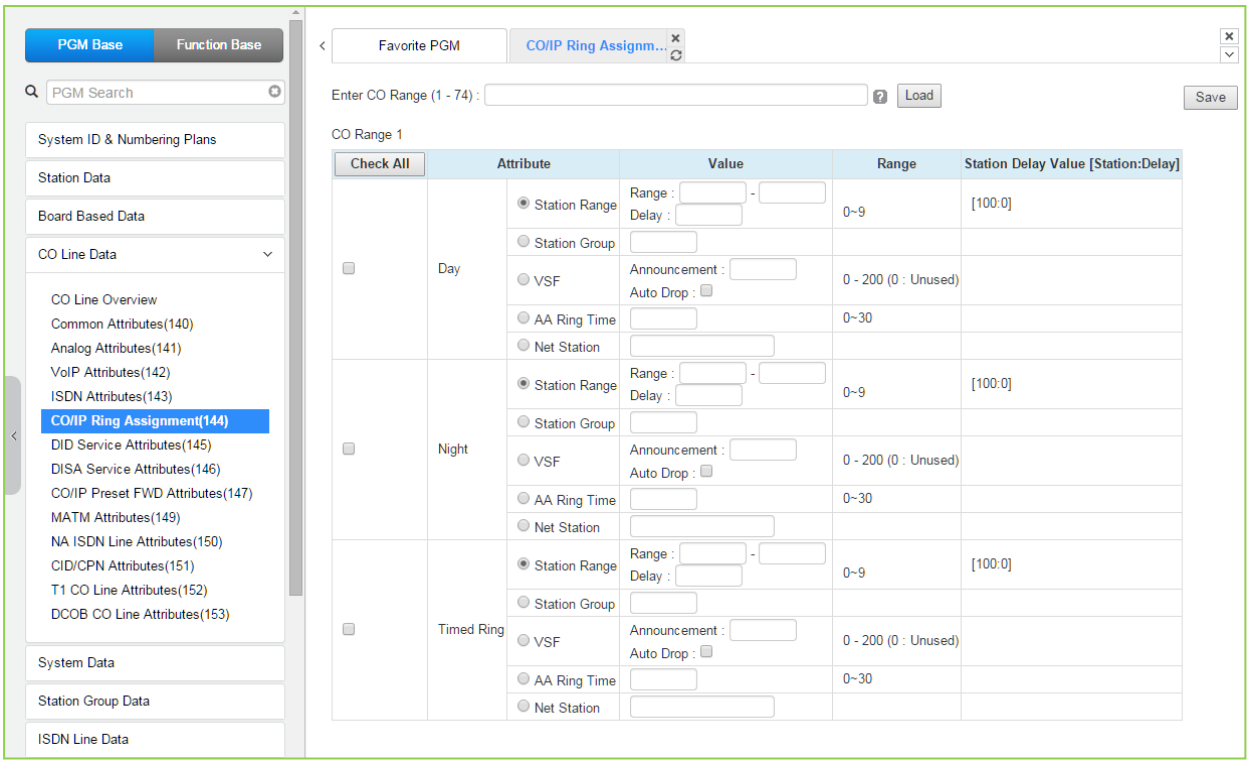


Figure 4.4.4.2-1 CO/IP Ring Assignment

Each “Normal” CO/IP line is assigned to signal a station, station group or VSF Announcement for an incoming call (Ring). Separate ring assignments are made for Day, Night, and Timed Ring mode. A delay from 1 to 9 Ring cycles can also be assigned, based on this assignment, the station/Station group will receive audible ring after a delay of the number of Ring cycles entered. In addition, when assigned to ring a VSF Announcement, the system can be programmed to disconnect after the announcement, ‘Auto Drop’.

When CO/IP Lines are programmed to Ring an external AA/VM, VSF or Feature Server Group as an Automated Attendant, the signal can be on an immediate or delayed basis allowing stations/groups to be assigned Ring and answer prior to signaling the AA. The delay is defined in seconds from 00 to 30.

4.4.4.6 DID Service Attributes - PGM 145

Selecting DID Service Attributes will display the DID Service Attributes data input page. Enter a valid CO range and click **[Load]** button to enter the DID Service Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

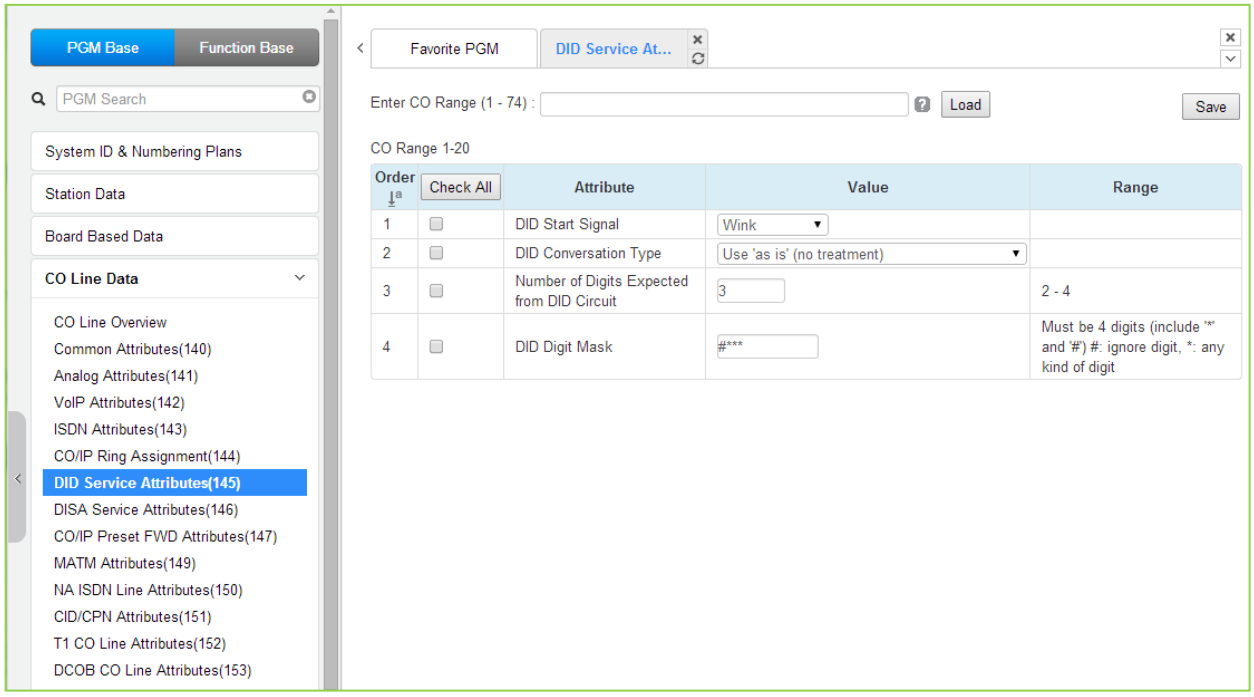


Figure 4.4.4.6-1 DID Service Attributes

DID lines can be assigned the type of “Start” signaling and treatment of received digits. Digits can be used “as is” to route the call within the system, digits can be converted and used to route the call, or digits can be converted to a Table index to determine the call routing from a Table look-up. Refer to Table 4.4.4.6-1 for additional description of attributes and values.

Table 4.4.4.6-1 DID SERVICE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DID Start Signal	Assigns the type of DID start signaling, Immediate, Wink or Delayed for the CO/IP Line.	Immediate/ Wink/ Delayed	Wink
DID Conversion Type	The received DID digits can be treated to determine call routing, simple conversion (Convert), use “as is” (no treatment), or modify using Flexible DID Conversion Table (Look-up).	DID Digit Conversion/ Use ‘as is’/ Modify using Flexible DID conversion table	Use ‘as is’
Number of Digits Expected from DID Circuit	The number of digits expected from the PSTN DID circuit.	2~4	eMG80:3 eMG800:4
DID Digit Mask	DID digit modification sequence: “#” deletes the digit, “*” accepts the digit “as is”, a digit (0~9) replaces the digit. The modification is based on the position of the digit (1~4) in the received number.	(0~9, *, #)	#***

4.4.4.7 DISA Service Attributes - PGM 146

Selecting DISA Service Attributes will display the DISA Service Attributes data input page. Enter a valid CO range and click **[Load]** to enter the DISA Service Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

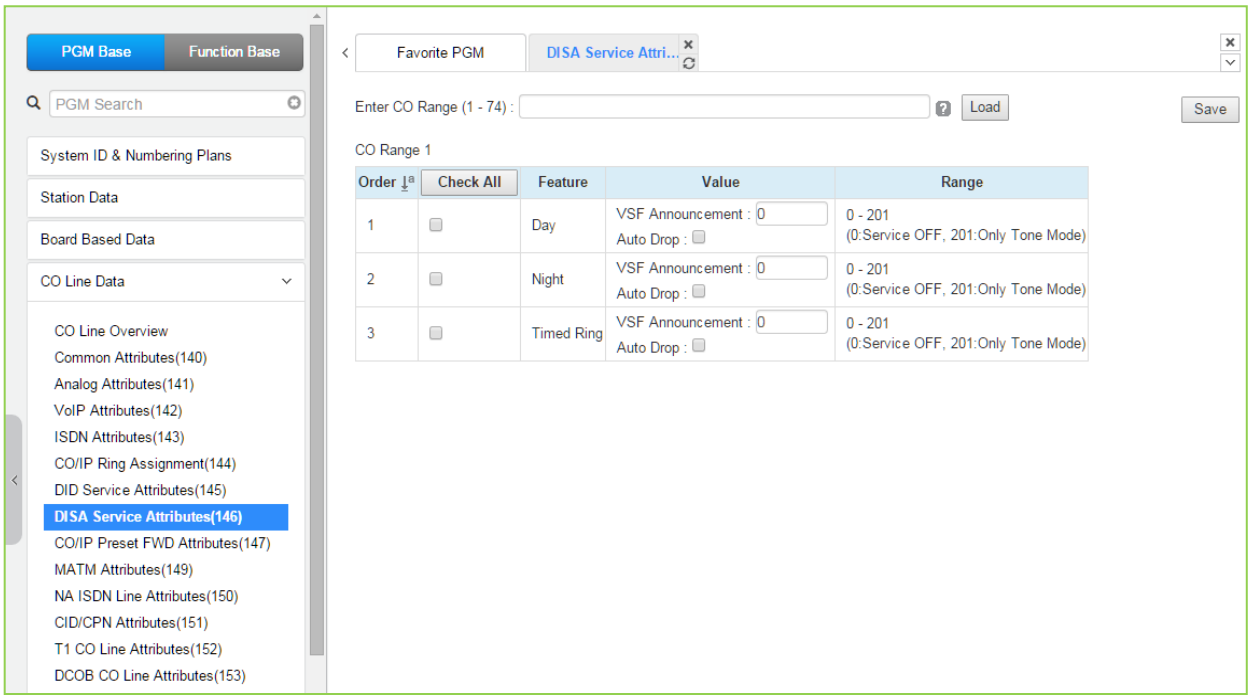


Figure 4.4.4.7-1 DISA Service Attributes

DISA Service can be enabled on CO lines based on the system operation mode (Day, Night, and Timed). DISA calls may be routed to dial tone and await user dialing (simple routing) or through a multi-layered Audio Text menu assigning a VSF Announcement and a Customer Call Route (CCR) Table Index. The system can be programmed to disconnect after the announcement, 'Auto Drop', or follow the CCR Table routing with a user-recorded announcement requesting specific inputs from the user.

4.4.4.8 CO/IP Preset Forward Attributes - PGM 147

Selecting CO/IP Preset Forward Attributes will display the CO/IP Preset Forward Attributes data input page. Enter a valid CO range and click **[Load]** to enter the CO/IP Preset Forward Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

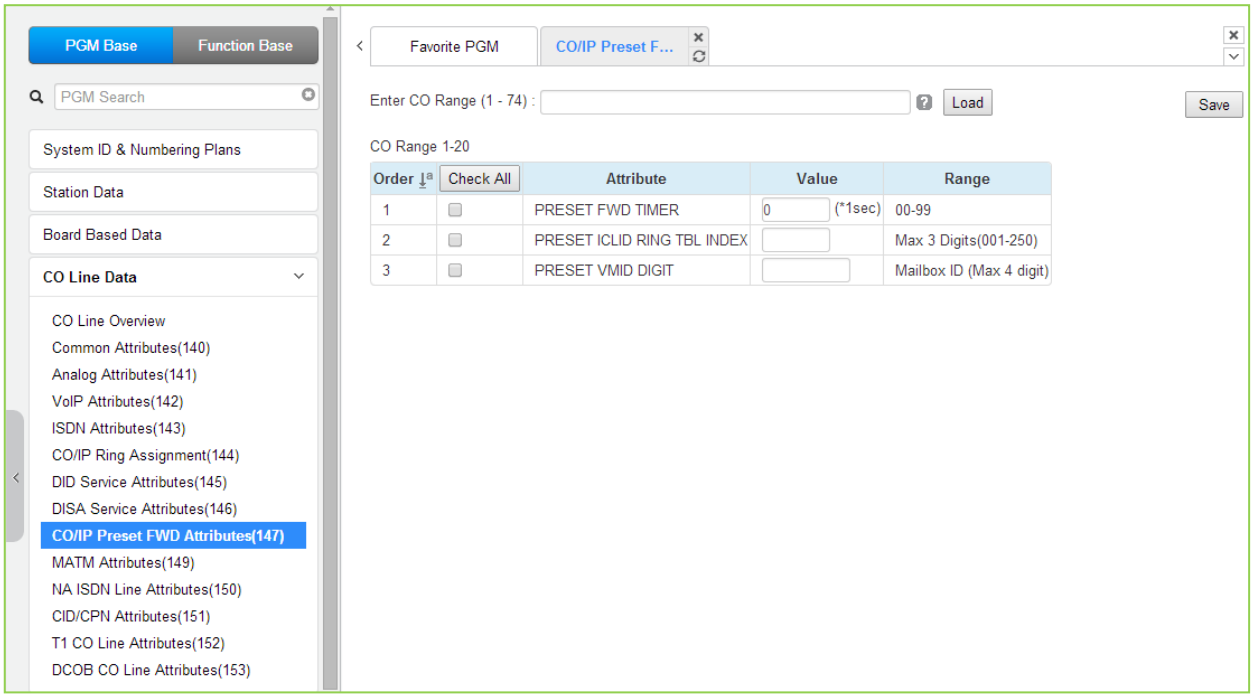


Figure 4.4.4.8-1 CO/IP Preset Forward Attributes

The CO/IP Preset Call Forward feature enables a CO line to initially ring at multiple stations and forward to a pre-determined destination. A separate timer can be defined for each CO/IP line for no-answer. The destination can be any index to the ICLID Ring Table in section 4.4.7.5 or a Voice Mailbox. The VMID field allows selecting a specific mailbox when the CO line call forwards to an external VM group.

Table 4.4.4.8-1 CO/IP PRESET FORWARD ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Preset FWD Timer	An incoming call, which remains unanswered for this timer, is routed as defined in the ICLID Ring Table Index of section 4.4.7.5.	00-99 (Sec.)	00
Preset ICLID Ring Table Index	If an incoming call remains unanswered after the Preset Fwd time above, the call is routed as defined in the ICLID Ring Table index defined here, see section 4.4.7.5.	001-250	
Preset VMID Digit	Each CO/IP line can be assigned a VMID (Voice Mail Id) that is sent to the external VM group to identify the desired Mailbox for the call.	Mailbox ID (Max. 4 digits)	

4.4.4.9 MATM Attributes - PGM 149

Selecting MATM Attributes will display the MATM Attributes data input page. Enter a valid CO range and click **[Load]** to enter the MATM Attributes data. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the entire range of CO/IP Lines when saved. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button. These attributes are available for Country code 82.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

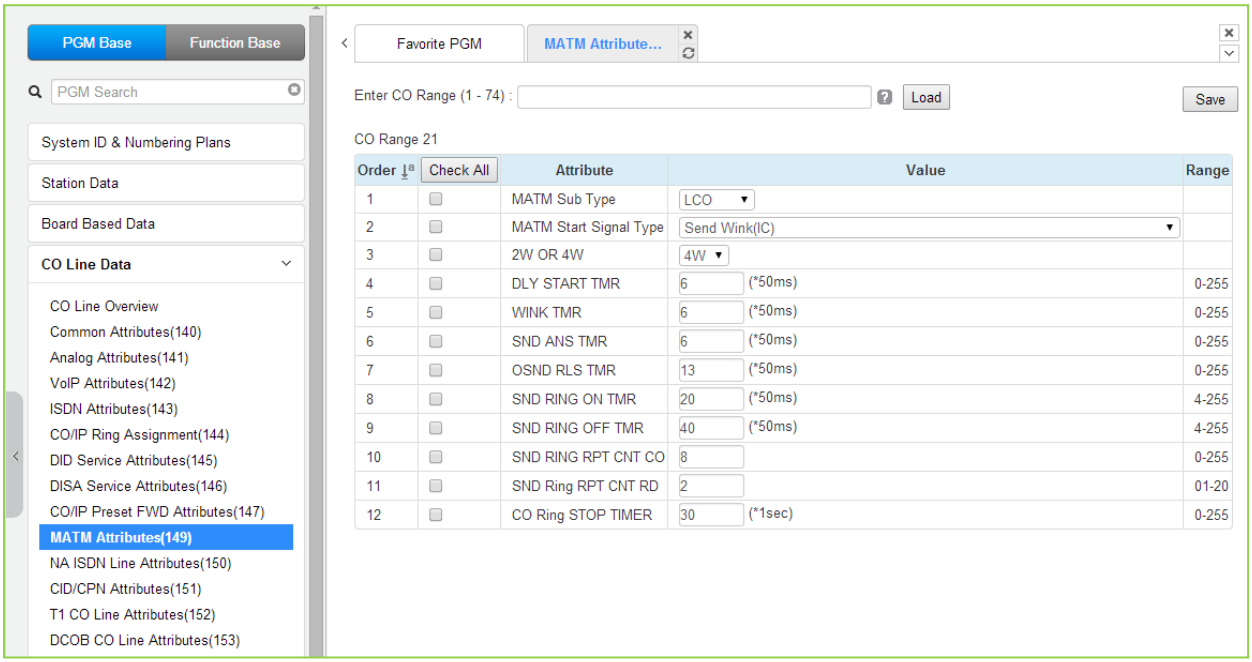


Figure 4.4.4.9-1 MATM Attributes

Table 4.4.9-1 MATM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MATM Sub Type	This is the analog trunk type for the MATM option board. COIU : LCO RDIU : RD (ring down, only for national army) LDIU : LD (loop dial, only for national army) EMC = E&M continuous, EMD = E&M discontinuous)	LCO, RD, LD, EMC, EMD, Unused	LCO
MATM Start Signal Type	This is the signal type for the analog trunk. This should be set with alternate trunk type. These can be set by testing with available values.	Send Wink (IC), Wait Seize Ack(OG), Send Wink (IC) and Wait Seize Ack(OG), Send Sub Answer (IC) and Wait Sub Answer(OG), Send Wink and Send Sub Answer(IC), Wait Ack and Wait Sub Answer(OG),	Send Wink (IC)

Table 4.4.9-1 MATM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Send Wink and Send Sub Answer(IC) & Wait Wink and wait sub answer(OG), Unused Type	
2W or 4W	For E&M Lines, this value should be set as 2 wire or 4wire to match the line.	2W/ 4W	4W
DLY Start Timer	This is timer value for analog signaling.	0~255	6
Wink Timer	This is timer value for analog signaling.	0~255	6
SND ANS Timer	This is timer value for analog signaling.	0~255	6
OSND RLS Timer	This is timer value for analog signaling.	0~255	13
SND RING ON Timer	This is timer value for analog signaling.	4~255	20
SND RING OFF Timer	This is timer value for analog signaling.	4~255	40
SND RING RPT CNT CO	This is timer value for analog signaling.	0~255	8
SND RING RPT CNT RD	This is timer value for analog signaling.	01~20	2
CO Ring STOP Timer	This is timer value for analog signaling.	0~255	30

4.4.4.10 NA ISDN Line Attributes - PGM 150

Selecting NA (North America) ISDN Line Attributes will display the NA ISDN Line Attributes data input page. Enter a valid CO range and click **[Load]** to enter the NA ISDN Line Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

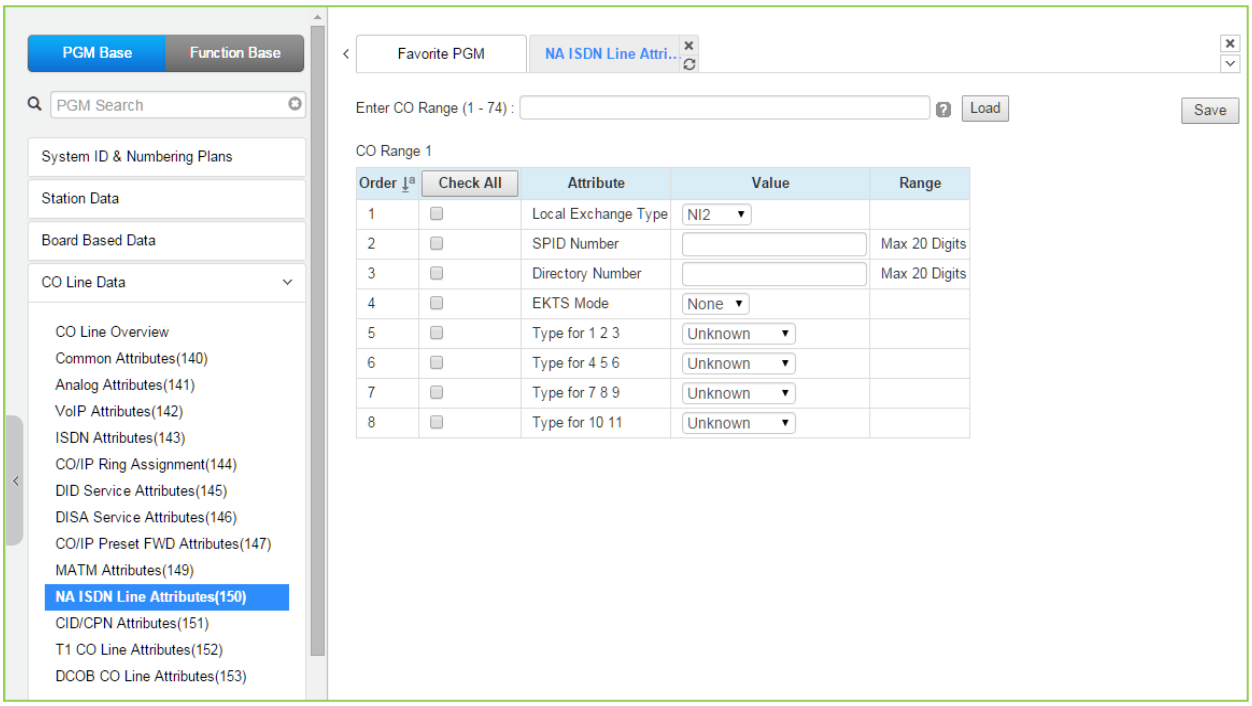


Figure 4.4.4.10-1 NA ISDN Line Attributes

To comply with the North American ISDN standards, certain attributes must be defined for the system. These include Directory (telephone) Number and Service Profile Id (SPID) for the device. Note that this programming is required only for “Country Code” 1, USA installations. Refer to Table 4.4.4.10-1 for information on individual attributes.

Table 4.4.4.10-1 NA ISDN LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Local Exchange Type	The type of ISDN determines several specifics of the protocol and is required for proper operation.	NI 1/ NI 2/ 5 ESS/ Nortel	NI 2
SPID Number	The Service Profile Identifier (SPID) is a number assigned to a fully initializing ISDN terminal and enables the Stored Program Control switching System (SPCS) to identify the ISDN terminal at layer 3 of the D-channel signaling protocol. The SPID is a free-formatted numeric string composed of 9 to 20 numeric {0-9} and International Alphabet (IA5) characters. The SPID uniquely identifies a particular set of	20 digits	

Table 4.4.4.10-1 NA ISDN LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	subscription parameters assigned to a TSP.		
Directory Number	Initializing terminals are required to store a 7-digit DN in order to perform the compatibility checking procedures that are part of call termination.	20 digits	
EKTS Mode	The EKTS (Electronic Key Telephone Service) terminal permits a user to operate those features that are specific to EKTS, as well as voice features that may function distinctly in the EKTS environment. EKTS allows a DN to be shared by more than one terminal, on the same or on different interfaces.	NONE/ EKTS	NONE
Type for 1/2/3	ISDN CALLED NO uses the International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 1~3digits.	Unknown/ International/ National/ Network/ Subscriber/ Abbreviated	Unknown
Type for 4/5/6	ISDN CALLED NO is constructed with International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 4~6 digits.	Unknown/ International/ National/ Network/ Subscriber/ Abbreviated	Unknown
Type for 7/8/9	ISDN CALLED NO is constructed with International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials 7~9 digits.	Unknown/ International/ National/ Network/ Subscriber/ Abbreviated	Unknown
Type for 10/11	ISDN CALLED NO is constructed with International format, National format, Network format, Subscriber format, or Abbreviated format when the user dials more than 10 digits.	Unknown/ International/ National/ Network/ Subscriber/ Abbreviated	Unknown

4.4.4.11 CID/CPN Attributes - PGM 151

Selecting CID/CPN Attributes will display the CID/CPN Attributes data input page. Enter a valid CO range and click **[Load]** to enter the CID/CPN Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

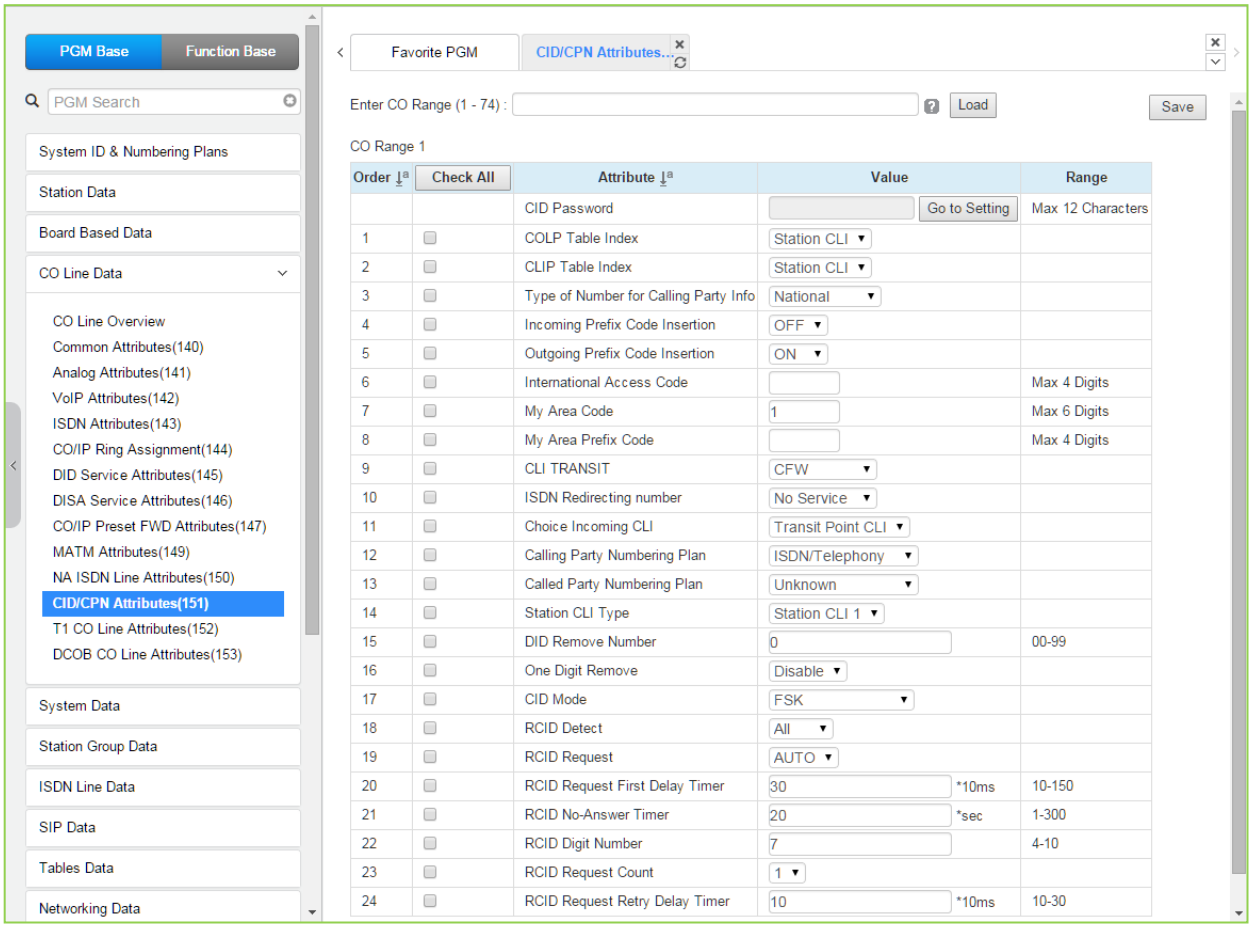


Figure 4.4.4.11-1 CID/CPN Attributes

COLP: Connected Line Presentation / CLIP: Calling Line Identification Presentation

Setting CID Password directly

You can set the CID password to click “Go to Setting” button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark tick on the save box and click the Save button.

Refer to Table 4.4.4.11-1 for information on individual attributes.

Table 4.4.4.11-1 CID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
COLP Table Index	When an incoming call on an ISDN Line is answered, the system will send caller id using the number from the CLIP/COLP Table (section 4.4.7.2) entry defined by this parameter. The station number is included as a suffix of	N/A 0-49 Station CLI	Station CLI

Table 4.4.4.11-1 CID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	the caller id. For “Using Station’s COLP Attribute”, the Station CLI type entered below will be used in place of the station number.		
CLIP Table Index	When a call is placed on an ISDN Line, the system will send caller id using the number from the CLIP/COLP Table (section 4.4.7.2) entry defined by this parameter. The station number is included as a suffix of the caller id. For “Using Station’s CLIP Attribute”, the Station CLI Type entered below will be used in place of the station number.	N/A 0-49 Station CLI	Station CLI
Type of Number for Calling Party Info	For outgoing calls on an ISDN Line, this parameter defines the “Type of Number Plan” provided in Calling Party Information Element of the ISDN call SETUP message.	Unknown/ International/ National/ Unused/ Subscriber	National
Incoming Prefix Code Insertion	Regional ISDN providers may use the Local Area Prefix code for special services. In cases where the code is not provided in the incoming call SETUP message, the system can insert the My Local Prefix and My Area Code below in SMDR, LNR, displays, etc.	OFF ON	OFF
Outgoing Prefix Code Insertion	Regional ISDN providers may use the Local Area Prefix code for special services. The system can insert the “My Area Code” and “My Local Prefix Code” in the Connect message as defined in those items below.	OFF ON	ON
International Access Code	When an incoming call includes the international Country code in the ISDN call SETUP message, the Country code can be included in the station display. To include the Country code, Incoming Prefix insertion, and CLI display in Station Data, section 4.4.2.4 must be ON.	Max. 4 digits	-
My Area Code	Regional ISDN providers may use the Local Prefix and Area codes for special services. The system will insert this Local Area Code in the call SETUP messages defined under the Incoming/Outgoing Prefix Code Insertion entries above.	Max. 6 digits	-
My Area Prefix Code	Regional ISDN providers may use the Local Prefix and Area codes for special services. The system will use this code for insertion of the Local Prefix Code in the call SETUP messages if Local Prefix Insertion is enabled above.	Max. 4 digits	-
CLI Transit	When the system must send CLI to the ISDN for an off-net call, the CLI can be either the original caller’s CLI or the CLI of the Off-net forwarding/transferring station.	ORI/ CFW	CFW
ISDN Redirecting Number	When the system needs to send a Redirecting number to the ISDN for an off-net call, the Redirecting number can be either the original caller’s CLI or the CLI of the Off-net forwarding/transferring station. If it is no service then system will not send this information. If it is configured for OGR CLI (original CLI) then system will send original CLI that is received from incoming CO line. If it is CFW CLI then system will send the redirecting CLI that is the CLI of the off-net call forwarding station.	NO SERVICE/ ORG CLI/ CFW CLI	NO SERVICE

Table 4.4.4.11-1 CID/CPN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Choice incoming CLI	Incoming CLI Choice – When ISDN setup message has two CLIs (Transit Point CLI / Original CLI), this option determines the CLI the system will recognize.	Original CLI/ Transit Point CLI	Transit point CLI
Calling party numbering Plan	ISDN Calling Party Numbering Plan can be configured.	Unknown, ISDN/Telephony, Data/Numbering, Telex, National Std, Private, Reserved	ISDN/ Telephony
Called party numbering Plan	ISDN Calling Party Numbering Plan can be programmable.	Unknown, ISDN/Telephony, Data/Numbering, Telex, National Std, Private, Reserved	Unknown
Station CLI Type	When the Station CLI is used with the CLIP or CLOP, one of five Station CLIs as defined in PGM 114 section 4.4.7.2 is used for this CO/IP Line as selected here.	Station CLI 1 – Station CLI 5	Station CLI 1
DID Remove Number	When a DID call is received on an ISDN Line, this entry determines the number of digits that will be removed starting at the first received digit.	00~99	00
One Digit Remove	Selects one digit remove mode in ISDN Called Digits for Italy DID.	Enable Disable	Disable
CID mode	The type of CID signal can be assigned according to the type of CID from the carrier.	Disabled/ FSK/ DT-AS(TAS) FSK/ DTMF/ RCID	FSK
RCID detect	Russia CID Detect Mode.	LOCAL/ ALL	ALL
RCID request	Russia CID Request Mode.	USER/ AUTO	AUTO
RCID Request First Delay Timer	Russia CID First Delay Timer.	010–150 (10msec)	30
RCID No-Answer Timer	Russia CID NO–Answer Timer.	001–300 (Sec.)	20
RCID Digit Number	Russia CID Digit Number.	04–10	07
RCID Request Count	Russia CID Request Count.	1–3	1
RCID Request Retry Delay Timer	Russia CID Retry Delay Timer.	10–30 (10msec)	10

4.4.4.12 T1 CO Line Attributes - PGM 152

Selecting T1 CO Line Attributes will display the T1 Line Attributes data input page. Enter a valid CO range and click **[Load]** to enter the T1 Line Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

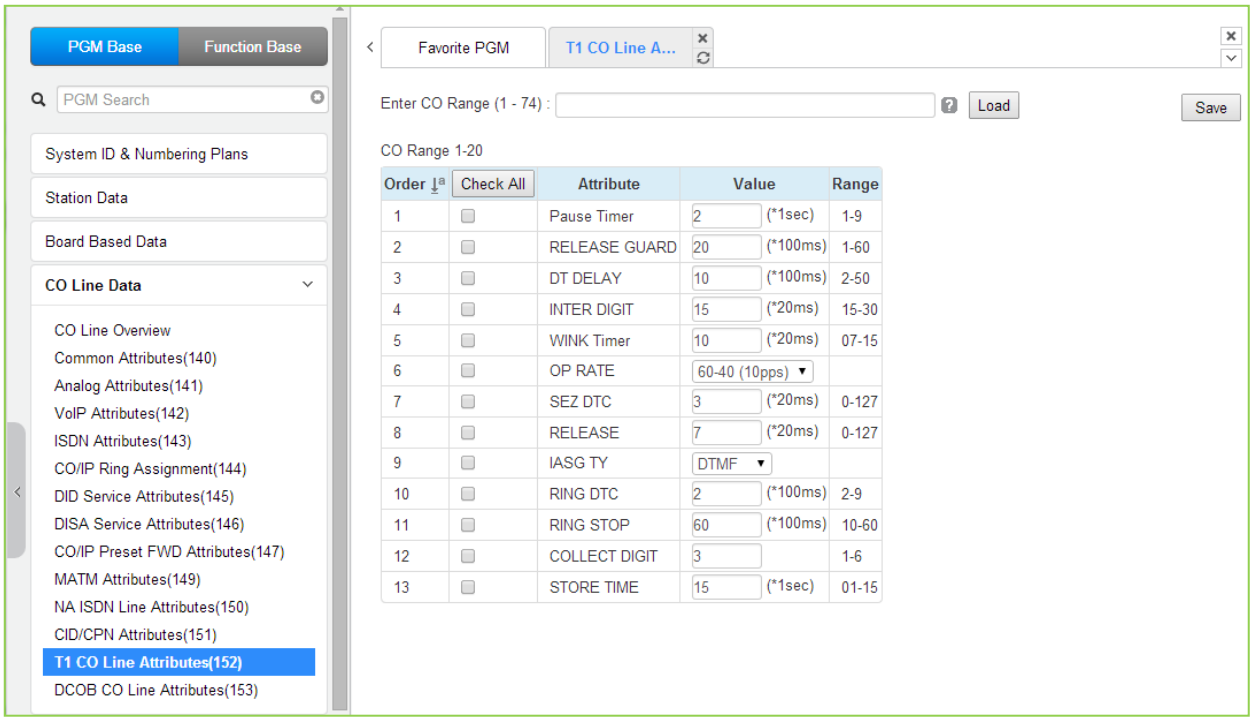


Figure 4.4.4.12-1 T1 CO Line Attributes

North American T1 standards require that the T1 terminating device, in this case iPECS eMG, include various “adjustable” timers and counters as described below.

Table 4.4.4.12-1 T1 CO LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Pause Timer	A timed pause may be included in a Speed Dial number, in which case, the pause time is defined by this entry. Not currently implemented.	1~9 (seconds)	2
RELEASE GUARD	The release guard timer defines the length of time the system will maintain a Line as busy after the call has been terminated to assure the PSTN has sufficient time to ‘clear down’ the circuit. Not currently implemented.	01~60 (100 ms)	20
DT DELAY	The DT (Dial tone) Delay timer defines the duration dial tone must be received for DT recognition. Not currently implemented.	02~50 (100 ms)	10
INTER DIGIT	The Inter Digit timer defines the duration between digit transmissions. Not currently implemented.	15~30 (20 ms)	15
WINK Timer	For TIE or DID Lines the Wink timer defines the length of time the ‘wink’ (T1 TIE line circuit reversal) will last.	7~15 (20 ms)	10
OP RATE	For Pulse signaling, defines the duration and make/break ratio of each pulse.	60-40(10pps) 66-33(10pps) 60-40(20pps)	60-40 (10pps)

Table 4.4.4.12-1 T1 CO LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		66-33(20pps)	
SEZ DTC	This timer defines the length of a valid 'line seizure' signal.	0~127 (20 ms)	3
RELEASE	For Ground Start, this timer defines the minimum length of time ground will not be applied to the TIP side from the PSTN.	0~127 (20 ms)	7
IASG TY	Incoming Address Signaling Type defines the type of signaling (DTMF or Pulse) expected.	PULSE/ DTMF	DTMF
RING DTC	The Ring DTC (detect) timer defines the minimum acceptable length of the Ring-on time during a ring cycle.	2~9 (100 ms)	2
RING STOP	The Ring Stop timer defines the maximum Ring-off time during a ring cycle.	10~60 (100 ms)	60
COLLECT DGT	Collect DGT (digits) defines the number of digits expected on a DID line.	1~6	3
STORE TIME	For DID lines, this timer defines the maximum delay between incoming DID digits.	1~15 (second)	15

4.4.4.13 DCOB CO Line Attributes - PGM 153

Selecting DCOB CO Line Attributes will display the DCOB Line Attributes data input page. Enter a valid CO range and click **[Load]** button to enter the DCOB Line Attributes data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

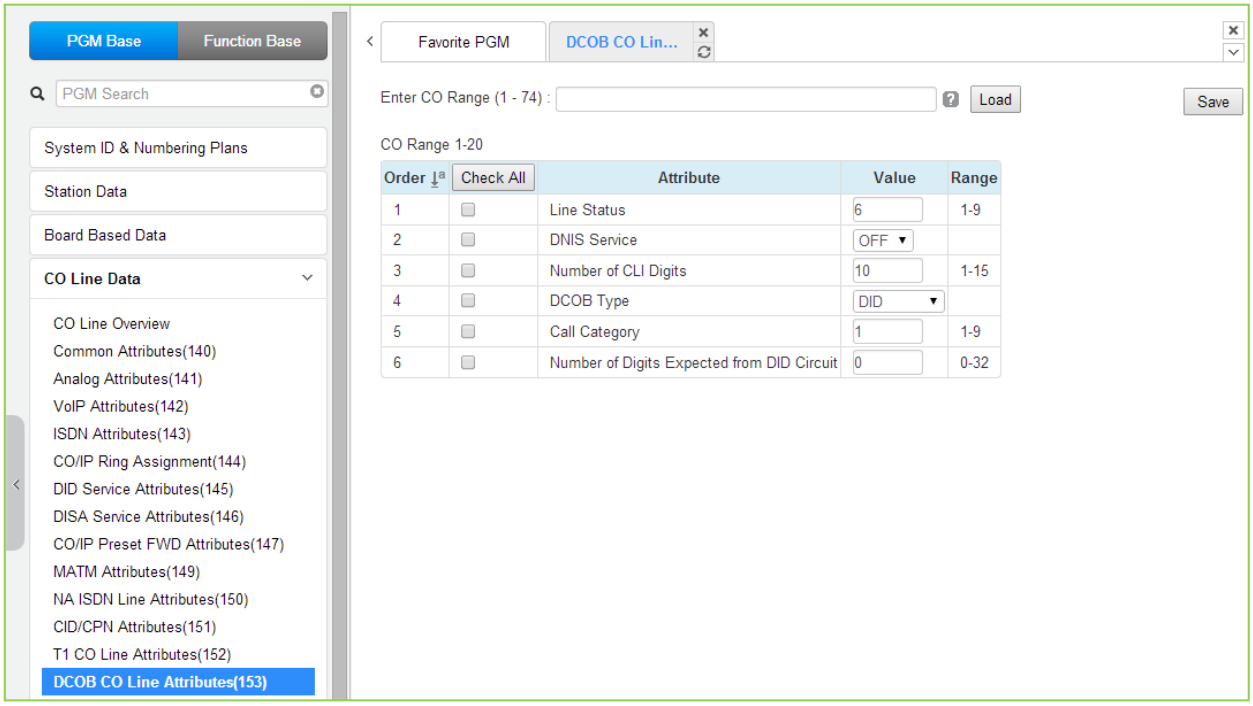


Figure 4.4.4.13-1 DCOB CO Line Attributes

Table 4.4.4.13-1 DCOB LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Line Status	This parameter defines the code that the system will send to indicate idle line status in accordance with E1R2 specifications.	1~9	6
DNIS Service	In R2, this field determines whether system will send caller information to PX or not.	OFF ON	OFF
Number of CLI Digits	This parameter defines the number of digits expected as the Calling Line Identification from digital CO lines.	01~15	10
DCOB Type	According to this type, the line can be restricted to the type of service, incoming DID and outgoing calls (DOD).	DID/DOD, DOD, DID	DID
Call Category	This parameter defines the code sent in response to a call category request from the network in accordance with E1R2 specifications.	1~9	1
Number of Digits Expected from DID circuit	This parameter defines the number of digits expected as DID digits from digital CO lines. If set to “0”, the number of digits defined in PGM 145 is used.	0~32	0

4.4.5 System Data

Selecting the System Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

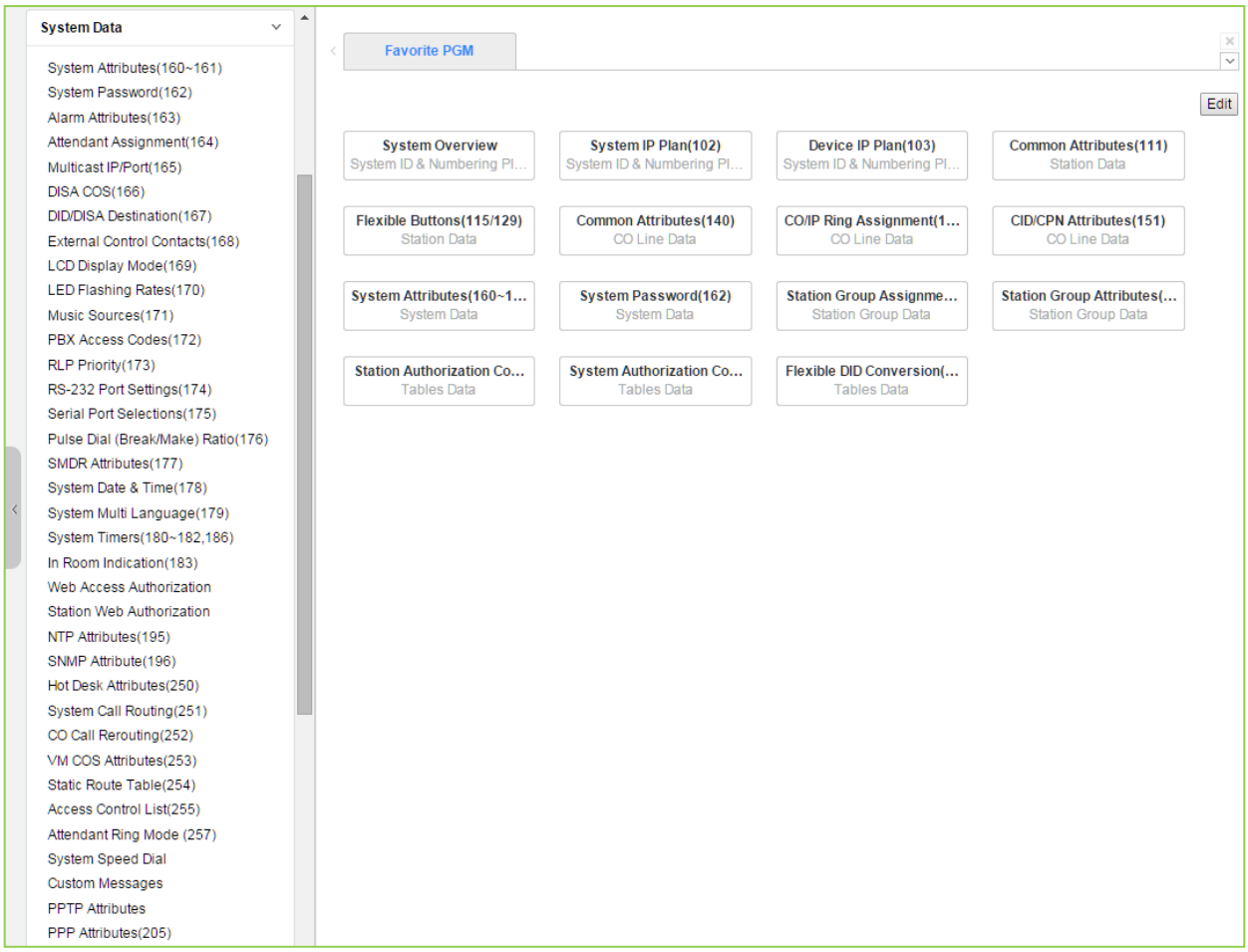
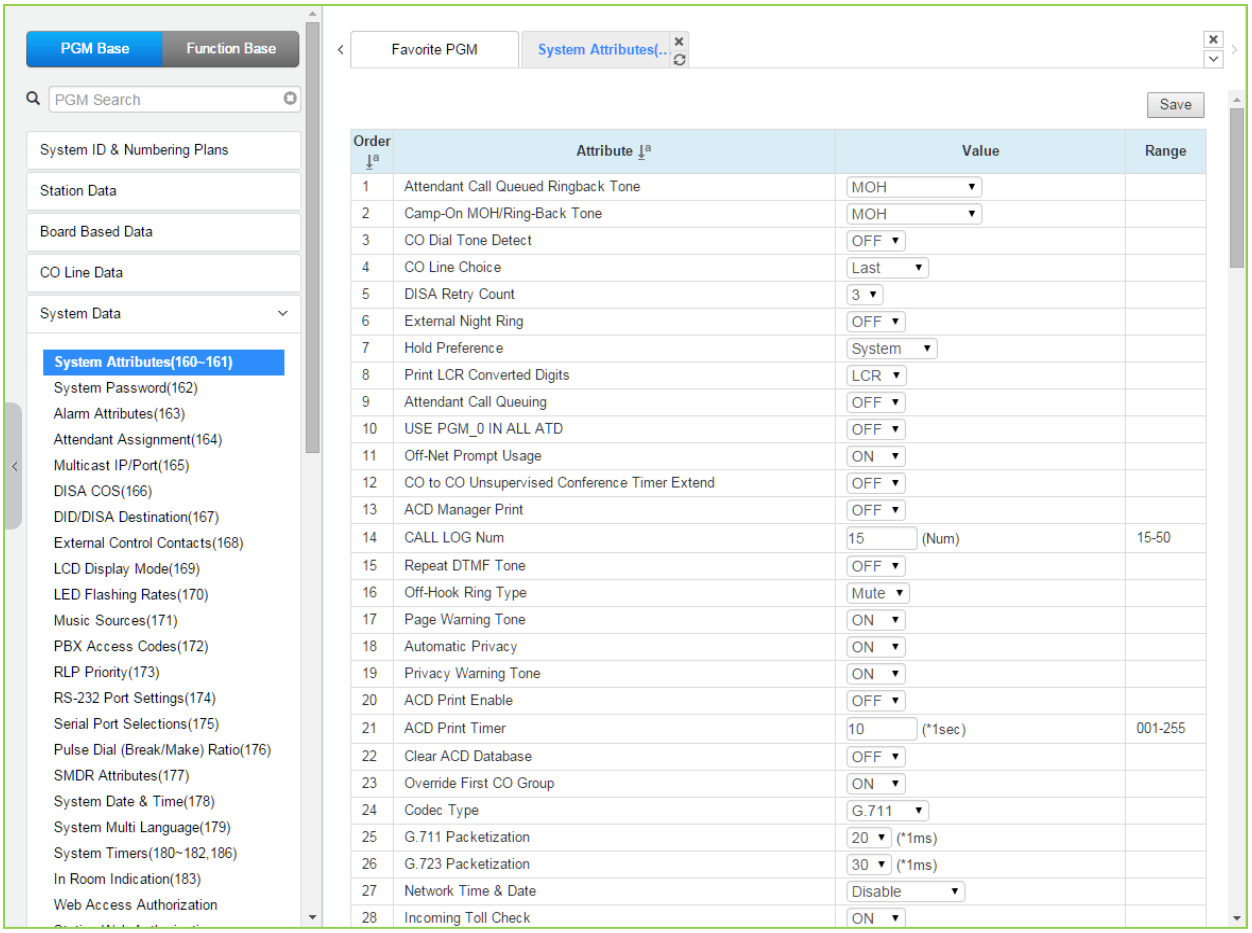


Figure 4.4.5-1 System Data Main Page

4.4.5.1 System Attributes - PGM 160 & 161

Selecting System Attributes will display the System Attributes data entry page. Selecting the blue colored text in the Table header will sort the table based on the selected column. Click **[Save]** button after changing Value.



Order	Attribute	Value	Range
1	Attendant Call Queued Ringback Tone	MOH	
2	Camp-On MOH/Ring-Back Tone	MOH	
3	CO Dial Tone Detect	OFF	
4	CO Line Choice	Last	
5	DISA Retry Count	3	
6	External Night Ring	OFF	
7	Hold Preference	System	
8	Print LCR Converted Digits	LCR	
9	Attendant Call Queuing	OFF	
10	USE PGM_0 IN ALL ATD	OFF	
11	Off-Net Prompt Usage	ON	
12	CO to CO Unsupervised Conference Timer Extend	OFF	
13	ACD Manager Print	OFF	
14	CALL LOG Num	15 (Num)	15-50
15	Repeat DTMF Tone	OFF	
16	Off-Hook Ring Type	Mute	
17	Page Warning Tone	ON	
18	Automatic Privacy	ON	
19	Privacy Warning Tone	ON	
20	ACD Print Enable	OFF	
21	ACD Print Timer	10 (*1sec)	001-255
22	Clear ACD Database	OFF	
23	Override First CO Group	ON	
24	Codec Type	G.711	
25	G.711 Packetization	20 (*1ms)	
26	G.723 Packetization	30 (*1ms)	
27	Network Time & Date	Disable	
28	Incoming Toll Check	ON	

Figure 4.4.5.1-1 System Attributes

System Attributes define settings that affect system wide features and functions. Generally, the entry will turn the feature ON (enable) or OFF (disable). Refer to Table 4.4.5.1-1 for a description of the Attributes and the data entries required.

Setting CID Password directly

You can set the CID password to click “Go to Setting” button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark tick on the save box and click the Save button.

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Attendant Call Queued Ring Back Tone	When calling a busy attendant, the system will provide either ring-back tone or MOH. If MOH is selected, the source must be defined in section 4.4.5.5.	MOH/ Ring-Back Tone	MOH
Camp-On MOH/Ring-Back Tone	When Camp-On is used, the calling station will receive either ring-back tone or MOH. If MOH is selected, a source must be defined in section 4.4.5.5.	MOH/ Ring-Back Tone	MOH
CO Dial Tone Detect	The system can use dial-tone detection or a timed pause for speed dial numbers that contain a Pause.	OFF ON	OFF
CO Line Choice	CO Lines are selected by the system from groups using either the LAST used, FIRST or ROUND robin method.	LAST FIRST ROUND	LAST
DISA Retry Count	A DISA user is allowed to retry erroneous authentication code entries. This entry sets the number of retries before the system disconnects.	0~9	3
External Night Ring	CO/IP calls, which are assigned UNA, can activate the Loud Bell Contact. While in the Night mode, an incoming call will activate the contact.	OFF ON	OFF
Hold Preference	A single depression of the **[Hold]** button places the call on the preferred hold, System or Exclusive.	System/ Exclusive	System
Print LCR Converted digits	SMDR will output the number dialed by either the system's LCR or the user.	LCR/ USER	LCR
Attendant Call Queuing	The system can be configured to queue incoming calls to a busy Attendant	OFF ON	OFF
USE PGM_0 IN ALL ATD	This field allows Main Attendants to activate Day/Night mode and other System Attendant menus except PGM 06 – Record system announcement. (Not available in USA version.)	OFF ON	OFF
Off-net Prompt Usage	When a call is routed to a destination external to the iPECS, the Off Net routing prompt can be played. (Not available in US version.)	OFF ON	ON
CO to CO Unsupervised Conference Timer Extend	When an Unsupervised Conference is established with DISA, Off-Net Fwd, etc., the Unsupervised Conference timer, section 4.4.5.20, determines the allowed duration of the call. If enabled here, the user may extend the allowed duration.	OFF ON	OFF
ACD Manager Print	When the optional ACD Event messages are required, the system must be enabled here to send the events.	OFF ON	OFF
CALL LOG Number	The Call Log saves the Outgoing call, Received call, or Lost call information and can be displayed by pressing Call Log Display Button. The maximum size of the Call Log per station is defined here.	15~50	15
Repeat DTMF tone	If enabled, the system will repeat DTMF tones to the caller's station when the call is routed to an off-net location.	OFF ON	OFF
Off-Hook Ring Type	Off-hook ring can be a single tone burst or muted normal ring.	MUTE/ BURST	MUTE

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Page Warning Tone	A warning tone can be sent prior to a page announcement.	OFF ON	ON
Automatic Privacy	Automatic Privacy can be disabled, allowing stations to join an active CO/IP call. A warning tone can be provided, see Privacy Warning Tone below.	OFF ON	ON
Privacy Warning Tone	If desired, a warning tone can be provided when privacy is overridden.	OFF ON	ON
ACD Print Enable	ACD statistics can be periodically sent to the assigned serial port. To provide periodic reports, this feature must be ON.	OFF ON	OFF
ACD Print Timer	This entry defines the time, in 10-second increments, between the periodic ACD reports assigned above.	001~255 (1 sec)	010
Clear ACD Database	When a periodic report is sent, the ACD database can be cleared automatically, if “ON”.	OFF ON	OFF
Override 1st CO Group	When a user dials ‘9’, the system can search all CO/IP Groups for the first available CO/IP line.	OFF ON	ON
Codec Type	The default codec can be defined as G.711, G.729, G.722 or G.723.1 for decreased bandwidth needs. The selected codec will be used on all internal communications as well as for remote iPECS devices.	G.729/ G723.1/ G711/ G722	G711
G711 Packetization	The G.711 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.711 codec is used.	10/20/30 (1 msec)	020
G723 Packetization	The G.723.1 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.723.1 codec is used.	30/60 (1 msec)	030
Network Time/Date	The system can use ISDN Network time or NTP to synchronize time with the ISDN or data network. ISDN sync is not available in USA version.	Disable/ ISDN/ NTP	Disable
Incoming Toll Check	The system can invoke COS dialing restrictions when a user dials while connected to incoming call.	OFF ON	ON
Web Server Port/TLS for Web	This field determines the TCP port employed to access the system WEB server. This field also enables Transport Layer Security (TLS) for access to Web Admin.	00001-65535/ Enable or Disable	80/ Disable
Auth Retry Count	When an Authorization code is required, the user may attempt to enter a Valid code up to the maximum value defined in this field.	1-9	3
Simple Auth Code Usage	System Authorization codes are entered by the user as “*” and the code (ON) or “*”+ the Auth code index and the code (OFF).	OFF ON	ON
COS 7 when Auth Fail	If a user fails to enter a valid Authorization code in the number of attempts assigned in Auth Retry Count above, the station is disconnected or the Station COS is changed to COS 7. In the latter case, the user must employ COS Restore in Station User PGM 2 to return the station to the normal COS.	OFF ON	OFF
Unified Message Format	System Integration Messages are sent out the defined serial or TCP channel.	OFF ON	OFF

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Conference Room CO Tel Number	ISDN DID number an external party must dial to enter a Conference room.	Max. 15 digits	
Record warning tone	When call recording is active, a tone can be sent to all connected parties to indicate the conversation is being recorded.	OFF ON	ON
MPB DIFF SERVE	Diff-Serv Code Point applied to packets from the iPECS eMG LAN port of the MPB.	00-63	46
Device Upgrade Mode	Transfer mode for upgrades from MPB to an iPECS device.	FTP TFTP	FTP
CO Transfer Tone	When a CO call is transferred to a busy extension, Ring Back Tone or Music On Hold will be played to the CO Line.	MOH/ Ring-Back Tone	Ring-Back Tone
Conference Warning Tone	When a new member joins a conference room, the system provides warning tone to conference members.	OFF ON	ON
Dummy Dial Tone	When a CO line does not provide dial tone, the system can provide dummy dial tone.	Unused/ Use	Unused
SIP Station Mode	SIP phones may set-up a point-to-point RTP connection (PTP) or to assure a controlled connection, RTP can be routed via a VoIP channel (RTD).	RTD/ PTP	Routed
SMS Center Number	When the PSTN will be used to send SMS, the phone number of the Short Message Service Center must be entered.	Max. 23 digits	
SMS Center CLI	When the CO/IP Line will be used to receive SMS, the Caller Id expected from the Short MSG Service Center must be defined.	Max. 23 digits	
SMS Protocol	The Short Message Service Protocol must be selected to support SMS.	None/ ETSI-P1/ ETSI-P2/ KT-LivingNet/ SIP-Text/ SIP-XML/ KT IP-PBX/ SKN IP-PBX/ KT XML	NONE
G.722 Packetization	The G.722 voice frame packetization time determines the interval at which voice samples are packetized and sent when the G.722 codec is used.	10/20/30 (1 msec)	020
Transit-out security	The system will check the IP address for transit-out calls in the master system. If not valid the transit-out call is denied.	Unused/ Use	Use
Emergency call attendant Notify	The Attendant can be notified when another user in the system dials emergency number.	Unused/ Use	Use
First digit * in SPD	Normally, when “*” is the first digit in a Speed Dial number, the Display Security feature is activated so that the number is not shown in the LCD of iPECS IP or LDP Phones. Otherwise, the “*” is sent as the first digit to the carrier.	Display Security/ Digit *	Display Security

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Use Strong Password	When enabled, passwords in PGM 162 must be longer than 10 digits and include both numbers and characters.	OFF ON	ON
VSF SMTP port	SMTP port used for the VSF gateways (VMIU/VMIB)	00001~65535	00025
CTI IP	When assigned, the system will accept 3rd party TAPI messages only from assigned IP address.		0.0.0.0
Intercom busy service	When busy, an intercom call may use Off-hook Voice-Over or Intrusion to connect to the called intercom party.	Voice-over/ Intrusion	Voice over
Auto save new message	After listening to a voice message, if the user takes no action, the system can automatically save the message or leave the message in the new message category.	Unused/ Use	Unused
IGMP query usage	The system employs multi-cast packets for registration and certain general functions such as MOH. With some multicast snoop enabled Layer 2 switches, multicast packets are not forward unless an IGMP query device exists in the network. This entry enables the IGMP query option and system sends periodic IGMP query message to avoid multicast blocking.	OFF ON	OFF
IGMP query interval timer	This timer defines the interval for each IGMP query message.	0~3600 (Sec.)	180
IGMP query all host	IGMP queries are sent to all IP hosts (ON) on the network or to iPECS devices only. For All Hosts, IP address 224.0.0.1 is used otherwise the iPECS specific 239.20.19.50 IP address is used. If problems occur with MOH, the “All Hosts” may correct the issue.	OFF ON	ON
IGMP query generic	This entity specifies a group addresses being queried. If ON is selected, all multicast group are queried. If OFF is selected, iPECS registering device group (239.20.19.50) is queried only. This should be ON when there is a MOH problem.	OFF ON	OFF
Restrict star and pound	If enabled, calls using * or # as the first digit are prohibited by the system.	OFF ON	OFF
Restricted Dialing Display After Answer	If a restricted number is called, the system will output an SMDR record for the call after the call is answered.	OFF ON	ON
IP BIND USAGE	If It’s ON, VOIU/VOIB will apply IP-Binding with information in PGM130 (Flex 18 – Flex 24-3) / PGM133 (Media port)	OFF ON	OFF
New 5 Wake Up Usage	New Wake-Up function usage option.	OFF ON	OFF
Easy 5 Wake Up Usage	If this value is set to ON, and New 5 Wake Up Usage is also set to ON, each station user can enter his wake up time, without entering wake up type, wake up index.	OFF ON	OFF
Station VM Feature Usage	If this option is set to ON, Station VM feature (PGM 127) can be used.	OFF ON	ON

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
End code(#) usage in System Auth Code	If this option is set to ON, End code (#) must be entered when system Auth code is entered.	OFF ON	OFF
Remote VM Access	If this value is OFF, the user cannot access to VSF mailbox via DID, DISA CO call and so on (i.e. through CO line channel).	OFF ON	ON
Transfer Tone Usage	If this value is ON, Warning tone is served to the [transfer to] station. This is only applied to screened transfer case.	OFF ON	OFF
CID Password Usage	If this value is ON, a user must enter the CID password to modify an admin value about CID setting.	OFF ON	OFF
LCR Dial Tone Detect	If this value is set to ON, the system first checks dial tone in case on analog CO Lines then LCR dialing is completed. If no dial tone is detected, the call is rerouted to Alternate DMT Index. If LCR type is set to M13, LCR dial tone detect option is not applied.	OFF ON	OFF
ICM call log	If this value is set to ON, the system provides an ICM Call log for iPECS IP and LDP Phones.	OFF ON	OFF
Mobile Phone Presence Service port	This is for an interface between eMG and external server that sends http/xml data. Currently the first usage of this port is 'mobile phone presence' service. If set to a valid port the presence service will be implemented and the system will await messages for presence from the external server.	00001~65535	00000
Mobile Phone Presence State Sync	When the system receives presence information for a mobile extension from external server, the system synchronizes the station's call state with this presence information. A busy presence will set the station to busy.	OFF/ DSS LED only/ Station Status	Station Status
Mobile Phone Presence Force Idle Timer	The system will return a station's state to idle if there is no updated presence information from external server for the duration of this timer.	0~3600 (Sec.)	0
Attendant Password Usage	If this value is set to ON, system requests a password: When a user enters Attendant program ([PGM] + 0, When an Attendant enters Speed program, When a user assigns attendant program code ([PGM] + 0) to Flexible button,	OFF ON	OFF
Picked-up station name usage	Name of picked up station is display when pickup internal call.	OFF ON	ON
Display LCR mode	Display "LCR MODE" when LCR is activated.	OFF ON	ON
VM Notify to Mobile Extension over CO	If this value is set to ON, an analog Loop Start CO Line can be used for the VM notification call to the Mobile Extension.	Disable Enable	Disable
MODEM Associated Station/CO line	When a call is received by the assigned CO Line, the call is routed to the system's built-in modem.	CO/STA	eMG80:STA/239 eMG800:STA/2199

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Display {MEET ME} Soft button	If this value is set to OFF, **{MEET ME}** soft button is not displayed during a paged.	OFF ON	ON
Number of CLI Wait List	The system check the status of each device with a polling message periodically using this timer.	0-255	0
Emergency Mailbox Station	When an Emergency Mailbox Station is assigned, an emergency call placed by a station is recorded automatically to the assigned mailbox.		
MSVC XML Port	The XML port used to support Web callback, call-through and iPECS ClickCall application for MSVC (Mobile Service) must be defined.	00001~65535	7878
IPCR Announce for recording warning	When ON, the IPCR server Call Recording notification announcement is played to the caller in place of the warning tone.	OFF ON	OFF
IPCR Announce for only incoming	User can choice IPCR Announce when it's incoming by setting ON.	OFF ON	OFF
Mobile EXT CO Access Password Check	When a mobile extension places an external call using an iPECS CO/IP Line, the user may be required to enter a valid Authorization code to place the call.	OFF ON	OFF
Hold key usage on paging	When ON, the Hold key is used for paging.	OFF ON	ON
Device Info Request Interval	The system checks the status of each device with a polling message at intervals of this timer.	15 ~ 255 seconds	15
Dial By Name List	The Dial by Name feature can allow stations in any ICM tenancy groups to call a station any in ICM Tenancy group. When desired, Dial by Name can be limited to function within allowed Tenancy calling groups, PGM 125.	All Accessible ICM Group only	ALL
Dial By System Speed Name List	If this value is set to "Accessible System Speed Zone Only", the system speed dial number of Accessible system speed zone (System Speed Zone(232)) is displayed in {Dial by Name}.	All, Accessible System Speed Zone Only	ALL
Default Web Language	Set the language of WEB.	English/ Local language	English
No Range Load Limit on Web Admin	OFF: Limited index range will be accepted (eg, 1-100) ON: No limitation of table index (eg, 221, 222, 270, etc)	OFF/ON	ON
Forward limitation by caller COS	Caller(internal station) call to a station offnet forwarded. It can be forwarded by caller COS if it's ON.	OFF/ON	OFF
No CLI Call Log	Leave system Call log even though there is no CLI information if it is ON. Otherwise Call log is not leaved.	OFF ON	OFF
Remote VM Forward Access	If the value is ON, Call Forwarding setting from remote access is enabled. If the value is OFF, Call Forwarding setting from remote access is disabled.	OFF ON	ON
DB Backup to USB monthly	System downloads the database to USB periodically. The user can access, copy and delete files in USB	N/A, 1,	

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	drive via web admin. So you can back up DB by choosing the specific date for Monthly or Weekly.	15	
DB Backup to USB weekly		N/A, Mon ~ Sun.	
SMDR/ACD/Alarm Mail Attribute			
Common SMTP Attributes			
SMTP Server IP Address	SMTP server IPv4 address to receive the SMDR E-mail reports.	12-digits	0.0.0.0
SMTP Server Domain Address	SMTP Mail server Domain address to receive the SMDR e-mail reports. Check DNS IP address setting.	Max. 100 characters	
SMTP Port	This field defines the TCP/IP port that the system will employ when communicating with the SMTP E-mail server. (It is moved to web admin PGM 160-161)	1-65535	25
SMTP Security Connection	The system can support basic security policies when communicating with the SMTP E-mail server. Note the server must also be configured for the selected security protocol.	No security/ SSL/ TLS	No security
E-Mail Account ID	This field defines the user's ID for SMTP server. If the user's ID and password is assigned, SMTP server will check the validity of the user ID and password.	Max. 40 characters	
E-Mail Account Password	This field defines the user's password for SMTP server. If the user's ID and password is assigned, SMTP Mail server will check the validity of user ID and password.	Max. 20 characters	
Sender E-Mail Address (From)	Program SMDR/ACD/Alarm mail Sender mail Address	Max. 40 characters	
Sender System Domain Name	Domain name of SMTP Mail server to receive SMDR reports. This field is used in place of SMTP Mail Server IP Address above.	Max. 18 characters	
Database Attributes [Send Mail]			
[Send Mail] button is used for sending the mail after filling out the below menu			
Database Mail Send Monthly Set	Sets day of month for Database to be sent on a monthly basis (NA for no monthly reports, select the day for 1 or 15).	NA/ 1/ 15	NA
Database Mail Send Weekly Set	Sets day of week to send Database weekly.	Day-of week	N/A
Database Type	Select the desired database type: All database, System speed, Station speed, LCR, etc.		All Database
Database Receiver Mail Address	E-mail address to receive the Database E-mail reports.	Max. 40 characters	
SMDR Attributes			
[Send Mail] button is used for sending the mail after filling out the below menu			
SMDR Mail Send Weekly Set	Sets day of week to send SMDR data weekly.	NA, Monday to Sunday	N/A
SMDR Mail Send Daily Set	Sets time-of-day for SMDR data to be sent on a daily basis (00 for no daily records, 01-23 for hour of the day).	00-23	

Table 4.4.5.1-1 SYSTEM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SMDR Mail Auto Send Set	If the SMDR buffer is full, the system can automatically send a notification by E-mail.	OFF ON	OFF
SMDR Mail Auto Delete Set	Delete SMDR records after sending E-mail.	OFF ON	OFF
SMDR Receiver Mail Address	User E-mail address to receive the SMDR e-mail reports.	Max. 40 characters	
ACD Attributes			
[Send Mail] button is used for sending the mail after filling out the below menu			
ACD Mail Send Weekly Set	Sets day of week to send ACD statistic data weekly.	NA, Monday to Sunday	N/A
ACD Mail Send Daily Set	Sets time-of-day for ACD statistic data to be sent on a daily basis (00 for no daily records, 01-23 for hour of the day).	00-23	N/A
ACD Database Delete After Mail Send	Delete ACD statistic data after sending E-mail	OFF ON	OFF
ACD Receiver Mail Address	User e-mail address to receive the ACD E-mail reports.	Max. 40 characters	
Alarm Attributes			
[Send Mail] button is used for sending the mail after filling out the below menu			
Alarm Receiver E-Mail Address(To) & Notification Receiver E-Mail Address(To)	The system will send email to saved E-Mail Address when system alarm is occurred or system restarts.	Max. 40 characters	
LDAP Server Settings			
Server Display Name	When the UCS Client requires access to an LDAP server, the system will provide the LDAP server information to the client. The server name is defined in this field.	15 characters	LDAP Server
Server IP	When an LDAP server is employed, the IP address of the server must be defined.		0.0.0.0
Server Port	When an LDAP server is employed, the TCP/IP port of the server must be defined.	0001-65535	
Require Login	The UCS Client ID and Password may be required for log in to the LDAP server.	OFF ON	ON
Use SSL	When supported by the server, the client can employ SSL (Secure Sockets Layer) for added security.	OFF ON	OFF
Search Base	Server base means Search option. You can get the search option from LDAP Server manager. For example, if OU (Organization Unit) is OC and DC (Directory Company) are ucapp and com, you can give the option "OU=OC, DC=ucapp, DC=com" in this field. You will get the desired directory.		
LDAP User ID	The ID and Password must require to connect to LDAP Server.		
LDAP User Password			

4.4.5.2 System Password - PGM 162

Selecting System Password will display the System Password data entry page, Figure 4.4.5.2-1. Use the check boxes to indicate which attributes to modify; data for checked attributes is stored for the Keyset Admin, Remote Access Password, or CID password when saved. Click **[Save]** button after changing Value.

It is important to use strong password for lowering overall risks of a security breach. The best way to choose good password are designed to make passwords less easily discovered by intelligent guessing.

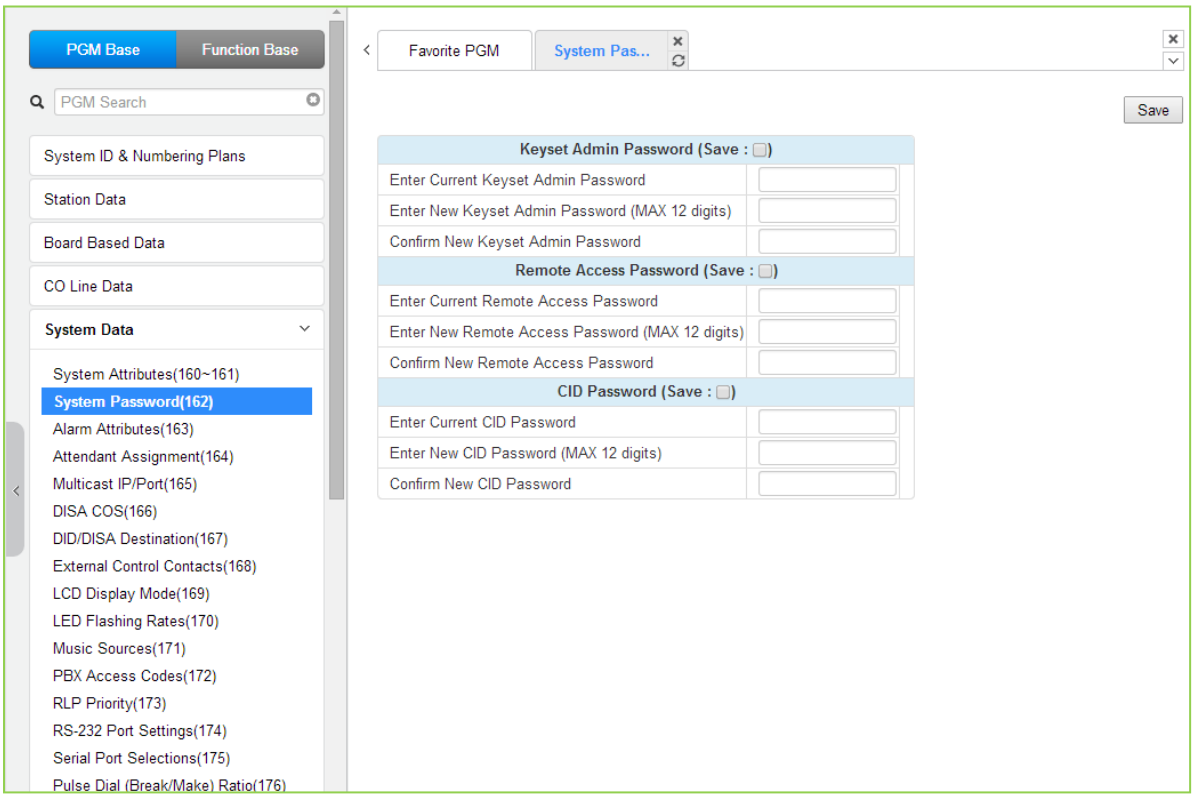
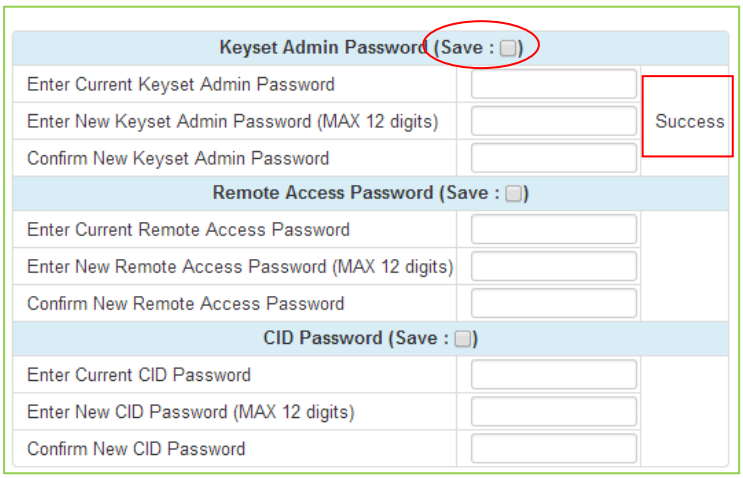


Figure 4.4.5.2-1 System Password

Access to the system database and maintenance functions can be protected by passwords up to twelve (12) digits. Three passwords can be defined, Keyset Admin, Remote Access and CID.

Check the save box and enter the password and click the save button.

The following success message is displayed if the password is correct and saved successfully.



4.4.5.3 Alarm Attributes - PGM 163

Selecting Alarm Attributes will display the Alarm Attributes data entry page. Click **[Save]** button after changing Value.

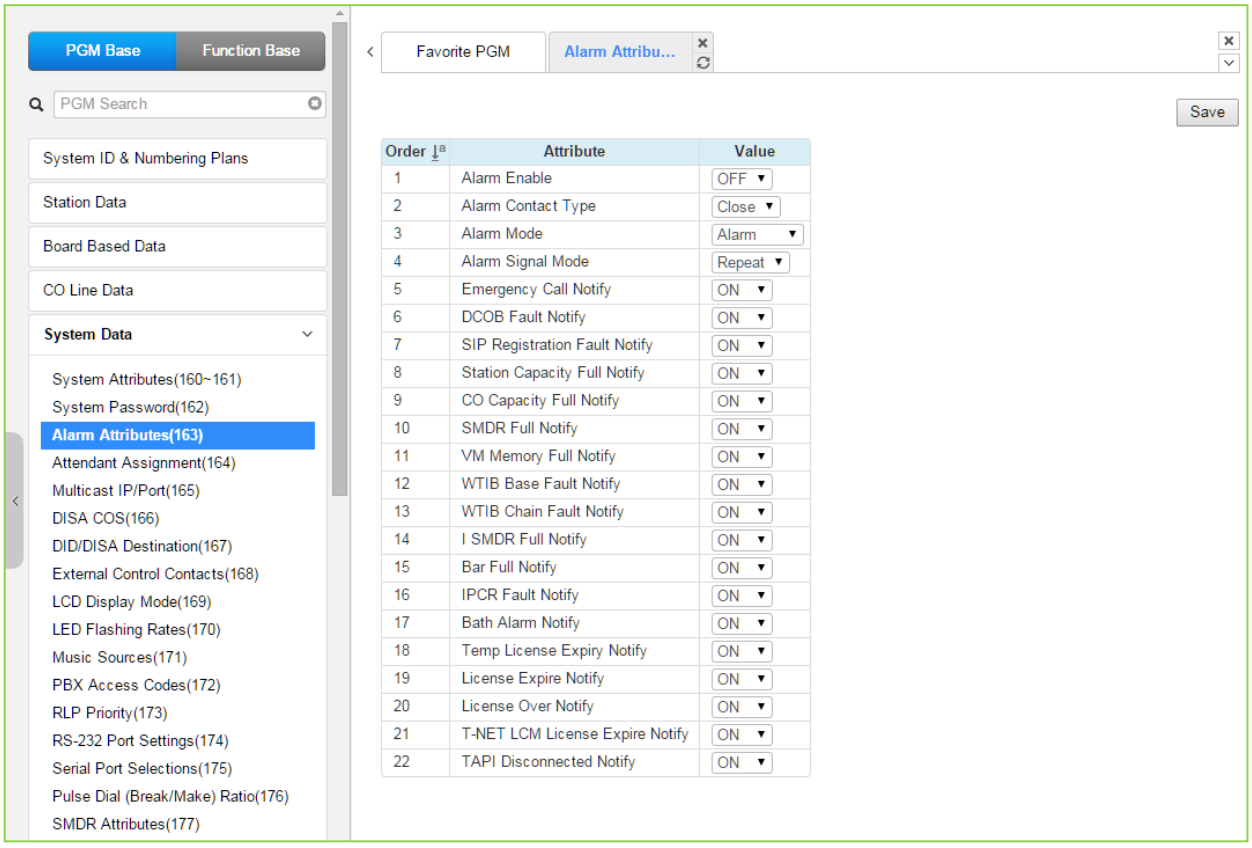


Figure 4.4.5.3-1 Alarm Attributes

The system can monitor an external contact. This contact is most often employed as an Alarm indicator or Doorbell. The Alarm attributes define the operation of the external contact. For the Alarm, the signal to assigned stations can be repeating or a single burst, the former is often desired. For the Doorbell, a single tone is sent each time the contact activates. Refer to Table 4.4.5.3-1 for a description of the features and the data entries required for each attribute.

When 'Alarm Mode' attributes set 'Alarm', the system sends an email to the address that set in PGM 160 Alarm Attributes 'Alarm Receiver E-Mail Address (To) & Notification Receiver E-Mail Address (To)'.

Table 4.4.5.3-1 ALARM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Alarm Enable	This entry enables/disables the contact monitoring circuitry.	OFF ON	OFF
Alarm Contact Type	This parameter establishes the contact state that will activate the Alarm, close or open.	Close/ Open	Close
Alarm Mode	The contact can be treated to function as a doorbell or an alarm.	Alarm/ Door-Bell	Alarm
Alarm Signal Mode	The assigned stations will receive a Repeating signal or single burst (Once) of alarm tone.	Repeat/ Once	Repeat

Table 4.4.5.3-1 ALARM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Emergency Call Notify	This entry enables/disables the Emergency call notification.	OFF ON	ON
DCOB Fault Notify	This entry enables/disables DCOB Fault notification.	OFF ON	ON
SIP Registration Fault Notify	This entry enables/disables SIP Registration Fault notification.	OFF ON	ON
Station Capacity Full Notify	This entry enables user to get the notification as alarm when Station Capacity is over the capacity.	OFF ON	ON
CO Capacity Full Notify	This entry enables user to get the notification as alarm when CO Capacity is over the capacity.	OFF ON	ON
SMDR Full Notify	This entry enables user to get the notification as alarm when SMDR is over the capacity.	OFF ON	ON
VM Memory Full Notify	This entry enables user to get the notification as alarm when the memory of Voice Mail is full.	OFF ON	ON
WTIB Base Fault Notify	This entry enables user to get the notification as alarm when WTIB base gets the fault.	OFF ON	ON
WTIB Chain Fault Notify	This entry enables user to get the notification as alarm when WTIB chain gets the fault.	OFF ON	ON
I SMDR Full Notify	This entry enables user to get the notification as alarm when I SMDR is over the capacity.	OFF ON	ON
Bar Full Notify	This entry enables user to get the notification as alarm when Bar is full.	OFF ON	ON
IPCR Fault Notify	This entry enables user to get the notification as alarm when IPCR gets the fault.	OFF ON	ON
Bath Alarm Notify	This entry enables user to get the notification as alarm about Bath Alarm.	OFF ON	ON
Temp License Expiry Notify	This entry enables user to get the notification as alarm before Temp license expires.	OFF ON	ON
License Expire Notify	This entry enables user to get the notification as alarm before License expires.	OFF ON	ON
License Over Notify	This entry enables user to get the notification as alarm before License is over.	OFF ON	ON
T-NET LCM License Expire Notify	This entry enables user to get the notification as alarm before T-NET LCM license expires.	OFF ON	ON
TAPI Disconnected Notify	This entry enables user to get the notification as alarm when TAPI is disconnected.	OFF ON	ON

4.4.5.4 Attendant Assignment - PGM 164

Selecting Attendant Assignment will display the Attendant Assignment data entry page. Click **[Save]** button after changing Value.

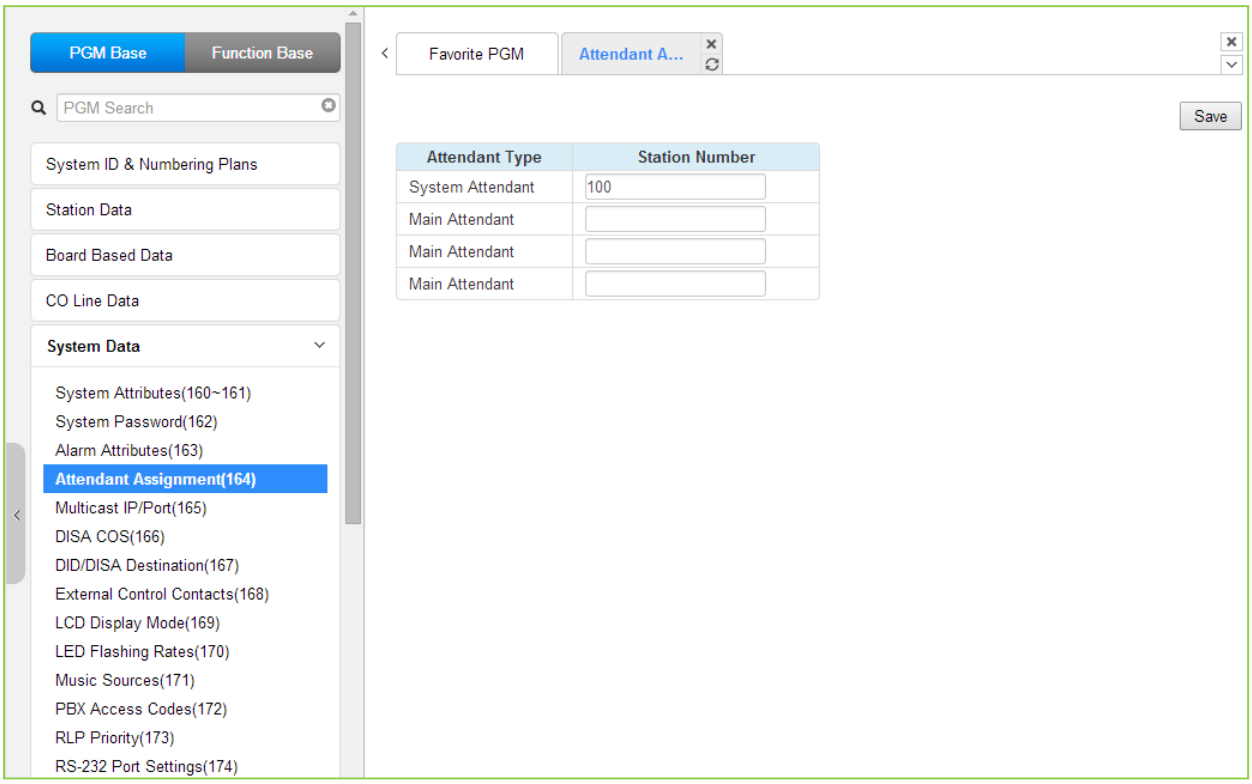


Figure 4.4.5.4-1 Attendant Assignment

eMG80 is consist of 1 System attendant and 3 Main attendant. eMG800 is consist of 1 System attendant and 4 Main attendant. The System Attendant has higher priority in call handling and system management functions. As a default, the System Attendant is assigned Station 100 for eMG80 & Station 1000 for eMG800. Main Attendants are not assigned by default.

4.4.5.5 Multi-cast IP/Port - PGM 165

Selecting Multi-cast IP/Port will display the Multi-cast IP/Port data entry page. Click **[Save]** button after changing Value.

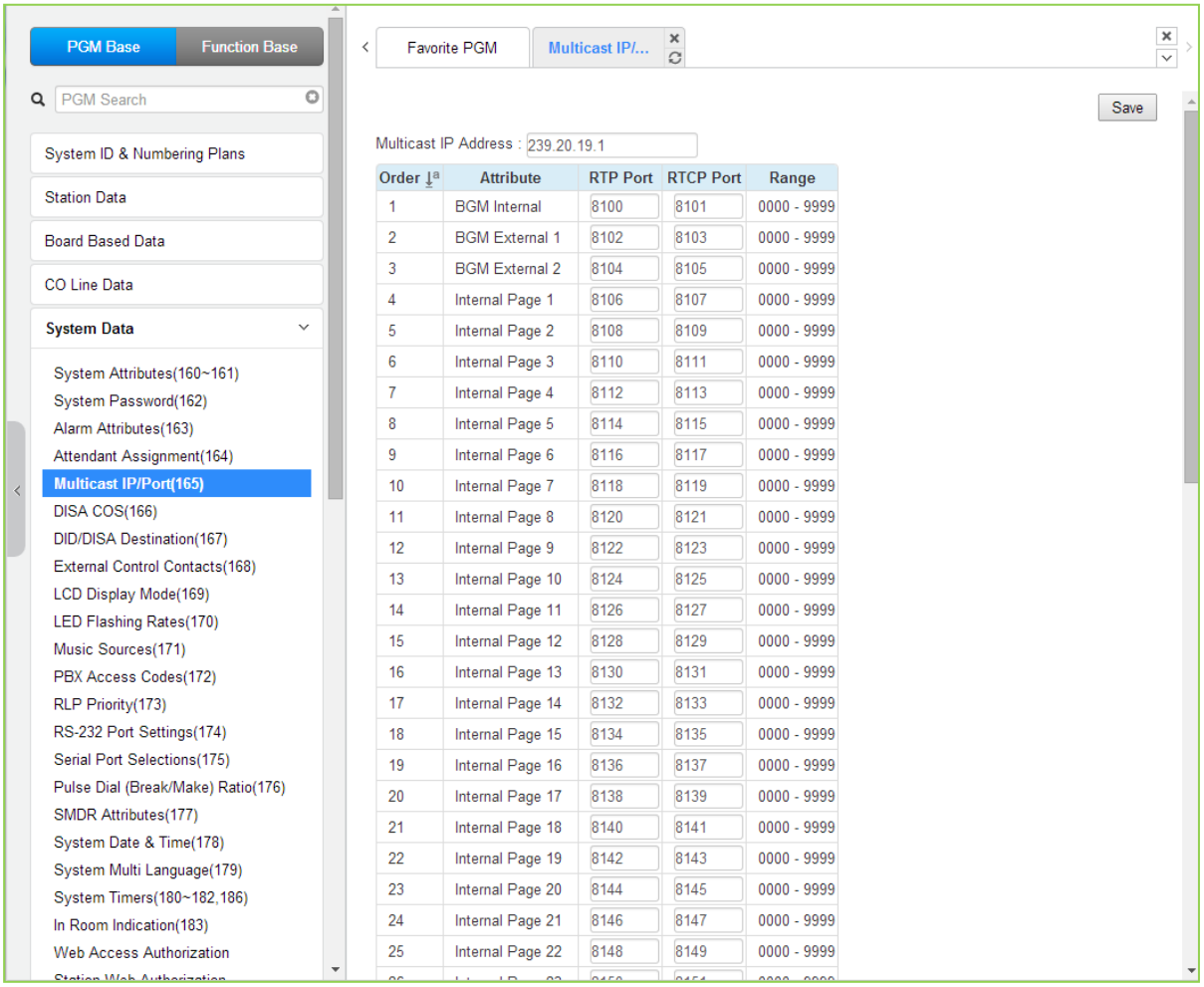


Figure 4.4.5.5-1 Multi-cast IP/Port

Multi-cast is employed by the system to send BGM, MOH, paging and Push-To-Talk packets. Employing a single multi-cast packet reduces the overall LAN traffic. In some cases, specifically when multiple systems are connected to the same default gateway (router) it may be advantageous to define different IP ports for each system.

Table 4.4.5.5-1 eMG80 MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
BGM Internal	RTP and RTCP ports for internal BGM.	0000-9999	8100 (8101)
BGM External 1	RTP and RTCP ports for external BGM 1.	0000-9999	8102 (8103)
BGM External 2	RTP and RTCP ports for external BGM 1.	0000-9999	8104 (8105)
Internal Page 1	RTP and RTCP ports for Internal Page 1.	0000-9999	8106 (8107)
Internal Page 2	RTP and RTCP ports for Internal Page 2.	0000-9999	8108 (8109)

Table 4.4.5.5-1 eMG80 MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Internal Page 3	RTP and RTCP ports for Internal Page 3.	0000-9999	8110 (8111)
Internal Page 4	RTP and RTCP ports for Internal Page 4.	0000-9999	8112 (8113)
Internal Page 5	RTP and RTCP ports for Internal Page 5.	0000-9999	8114 (8115)
Internal Page 6	RTP and RTCP ports for Internal Page 6.	0000-9999	8116 (8117)
Internal Page 7	RTP and RTCP ports for Internal Page 7.	0000-9999	8118 (8119)
Internal Page 8	RTP and RTCP ports for Internal Page 8.	0000-9999	8120 (8121)
Internal Page 9	RTP and RTCP ports for Internal Page 9.	0000-9999	8122 (8123)
Internal Page 10	RTP and RTCP ports for Internal Page 10.	0000-9999	8124 (8125)
Internal Page 11	RTP and RTCP ports for Internal Page 11.	0000-9999	8126 (8127)
Internal Page 12	RTP and RTCP ports for Internal Page 12.	0000-9999	8128 (8129)
Internal Page 13	RTP and RTCP ports for Internal Page 13.	0000-9999	8130 (8131)
Internal Page 14	RTP and RTCP ports for Internal Page 14.	0000-9999	8132 (8133)
Internal Page 15	RTP and RTCP ports for Internal Page 15.	0000-9999	8134 (8135)
Internal Page 16	RTP and RTCP ports for Internal Page 16.	0000-9999	8136 (8137)
Internal Page 17	RTP and RTCP ports for Internal Page 17.	0000-9999	8138 (8139)
Internal Page 18	RTP and RTCP ports for Internal Page 18.	0000-9999	8140 (8141)
Internal Page 19	RTP and RTCP ports for Internal Page 19.	0000-9999	8142 (8143)
Internal Page 20	RTP and RTCP ports for Internal Page 20.	0000-9999	8144 (8145)
Internal Page 21	RTP and RTCP ports for Internal Page 21.	0000-9999	8146 (8147)
Internal Page 22	RTP and RTCP ports for Internal Page 22.	0000-999	8148 (8149)
Internal Page 23	RTP and RTCP ports for Internal Page 23.	0000-9999	8150 (8151)
Internal Page 24	RTP and RTCP ports for Internal Page 24.	0000-9999	8152 (8153)
Internal Page 25	RTP and RTCP ports for Internal Page 25.	0000-9999	8154 (8155)
Internal Page 26	RTP and RTCP ports for Internal Page 26.	0000-9999	8156 (8157)

Table 4.4.5.5-1 eMG80 MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Internal Page 27	RTP and RTCP ports for Internal Page 27	0000-9999	8158 (8159)
Internal Page 28	RTP and RTCP ports for Internal Page 28	0000-9999	8160 (8161)
Internal Page 29	RTP and RTCP ports for Internal Page 29	0000-9999	8162 (8163)
Internal Page 30	RTP and RTCP ports for Internal Page 30	0000-9999	8164 (8165)
Internal Page 31	RTP and RTCP ports for Internal Page 31	0000-9999	8166 (8167)
Internal Page 32	RTP and RTCP ports for Internal Page 32	0000-9999	8168 (8169)
Internal Page 33	RTP and RTCP ports for Internal Page 33	0000-9999	8170 (8171)
Internal Page 34	RTP and RTCP ports for Internal Page 34	0000-9999	8172 (8173)
Internal Page 35	RTP and RTCP ports for Internal Page 35	0000-9999	8174 (8175)
Internal Page All	RTP and RTCP ports for Internal All Call Page	0000-9999	8176 (8177)
External Page 1	RTP and RTCP ports for External Page 1.	0000-9999	8178 (8179)
External Page 2	RTP and RTCP ports for External Page 2.	0000-9999	8180 (8181)
External Page All	RTP and RTCP ports for External All Call Page.	0000-9999	8182 (8183)
Page All	RTP and RTCP ports for All Call Page.	0000-9999	8184 (8185)
PTT 1	RTP and RTCP ports for PTT group 1.	0000-9999	8186 (8187)
PTT 2	RTP and RTCP ports for PTT group 2.	0000-9999	8188 (8189)
PTT 3	RTP and RTCP ports for PTT group 3.	0000-9999	8190 (8191)
PTT 4	RTP and RTCP ports for PTT group 4.	0000-9999	8192 (8193)
PTT 5	RTP and RTCP ports for PTT group 5.	0000-9999	8194 (8195)
PTT 6	RTP and RTCP ports for PTT group 6.	0000-9999	8196 (8197)
PTT 7	RTP and RTCP ports for PTT group 7.	0000-9999	8198 (8199)
PTT 8	RTP and RTCP ports for PTT group 8.	0000-9999	8200 (8201)
PTT 9	RTP and RTCP ports for PTT group 9.	0000-9999	8202 (8203)
PTT All	RTP and RTCP ports for PTT group ALL	0000-9999	8204 (8205)

Table 4.4.5.5-1 eMG80 MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
BGM Internal VSF	RTP and RTCP ports for VSF BGM	0000-9999	8206 (8207)
SLT MOH 1	RTP and RTCP ports for SLT MOH1	0000-9999	8208 (8209)
SLT MOH 2	RTP and RTCP ports for SLT MOH2	0000-9999	8210 (8211)
SLT MOH 3	RTP and RTCP ports for SLT MOH3	0000-9999	8212 (8213)
SLT MOH 4	RTP and RTCP ports for SLT MOH4	0000-9999	8214 (8215)
SLT MOH 5	RTP and RTCP ports for SLT MOH5	0000-9999	8216 (8217)
VSF MOH2	RTP and RTCP ports for VSF MOH2	0000-9999	8218 (8219)
VSF MOH3	RTP and RTCP ports for VSF MOH3	0000-9999	8220 (8221)

Table 4.4.5.5-2 eMG800 MULTI-CAST IP/Port

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
BGM Internal	RTP and RTCP ports for internal BGM.	0000-9999	8100 (8101)
BGM External 1	RTP and RTCP ports for external BGM 1.	0000-9999	8102 (8103)
BGM External 2	RTP and RTCP ports for external BGM 1.	0000-9999	8104 (8105)
Internal Page 1-100	RTP and RTCP ports for Internal Page 1.	0000-9999	8106-8304 (8107-8305)
Internal Page All	RTP and RTCP ports for Internal All Call Page	0000-9999	8306 (8307)
External Page 1	RTP and RTCP ports for External Page 1.	0000-9999	8308 (8309)
External Page 2	RTP and RTCP ports for External Page 2.	0000-9999	8310 (8311)
External Page All	RTP and RTCP ports for External All Call Page.	0000-9999	8312 (8313)
Page All	RTP and RTCP ports for All Call Page.	0000-9999	8314 (8315)
PTT 1-9	RTP and RTCP ports for PTT group 1.	0000-9999	8316-8332 (8317-8333)
PTT All	RTP and RTCP ports for PTT group ALL	0000-9999	8334 (8335)
BGM Internal VSF	RTP and RTCP ports for VSF BGM	0000-9999	8336 (8337)
SLT MOH 1-5	RTP and RTCP ports for SLT MOH1	0000-9999	8338-8346 (8339-8347)
VSF MOH2-3	RTP and RTCP ports for VSF MOH2	0000-9999	8348-8350 (8349-8351)

4.4.5.6 DISA COS - PGM 166

Selecting DISA COS will display the DISA COS data entry page. Click **[Save]** button after changing Value.

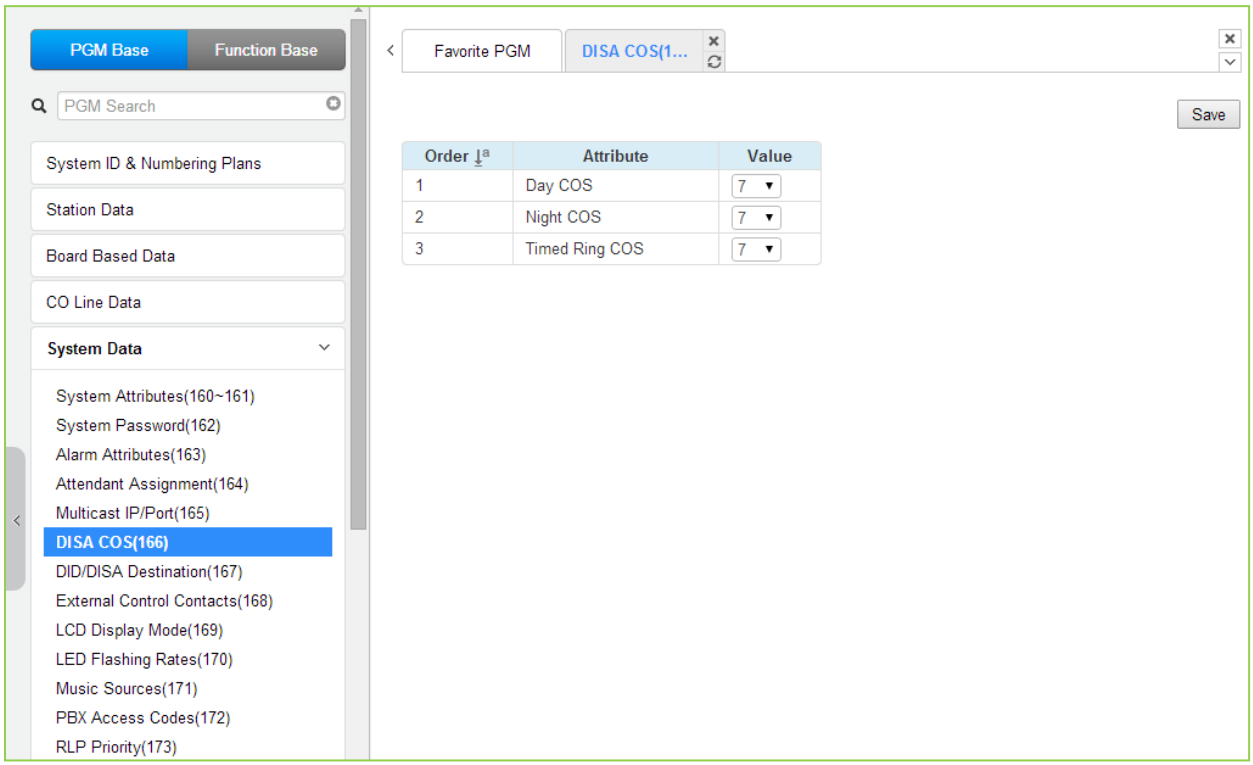


Figure 4.4.5.6-1 DISA COS

A DISA user is subject to the dialing restrictions assigned in the DISA Class-of-Service (COS). The restrictions applied are the same as with the corresponding Station COS levels 1~11 and interact with the CO/IP COS in the same manner. An assignment is made for Day, Timed and Night Ring mode of system operation. The default for all three modes (Day, Timed and Night) of DISA COS is 1, no restrictions.

4.4.5.7 DID/DISA Destination - PGM 167

Selecting DID/DISA Destination displays the Tenant Group input page. Select Tenant Group, the system will display the DID/DISA Destination Attributes. Click **[Save]** button after changing Value.

Enter ICM Tenancy group: eMG80 : 0-15 / eMG800: 0-32

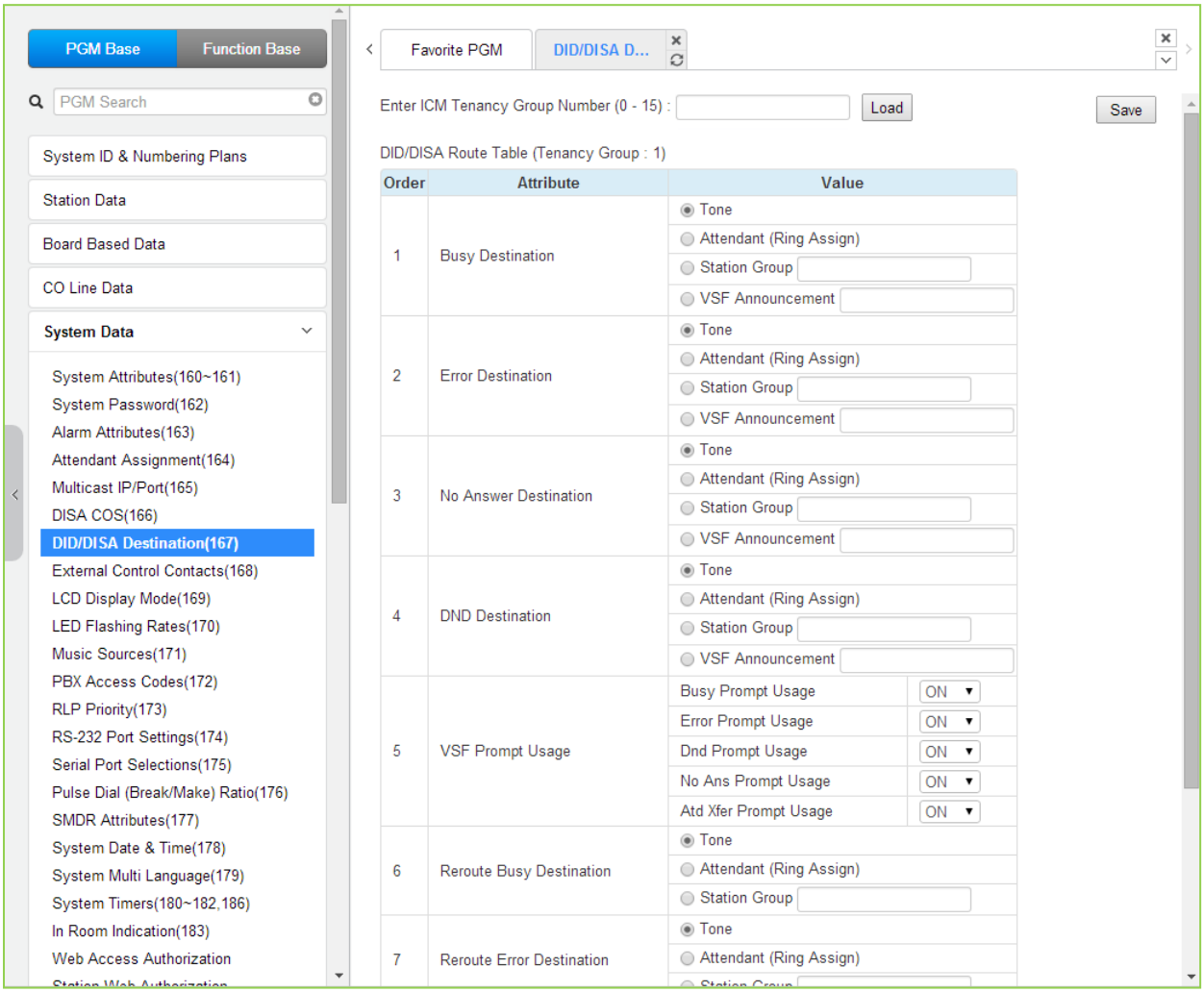


Figure 4.4.5.7-1 DID/DISA Destination

When a DID line or DISA user dials an invalid/vacant or busy station number the caller will be sent to the assigned destination that is selected according to the CO Tenancy group of the DID/DISA line. The destination is separately defined for invalid, busy, and No Answer conditions and can be defined as the Attendant, busy tone, a Station Group or a VSF Announcement.

For calls on a DID line to a busy station, DID Call Wait can be assigned, refer to Common Attributes section 4.4.2.2. Also, for DID calls only, announcements (prompts) can be sent from the VSF gateway to the caller for various conditions, busy, error, DND, No Answer, or Attendant Transfer.

4.4.5.8 External Control Contacts - PGM 168

Selecting External Control Contacts will display the External Control Contact data entry page. Click **[Save]** button after changing Value.

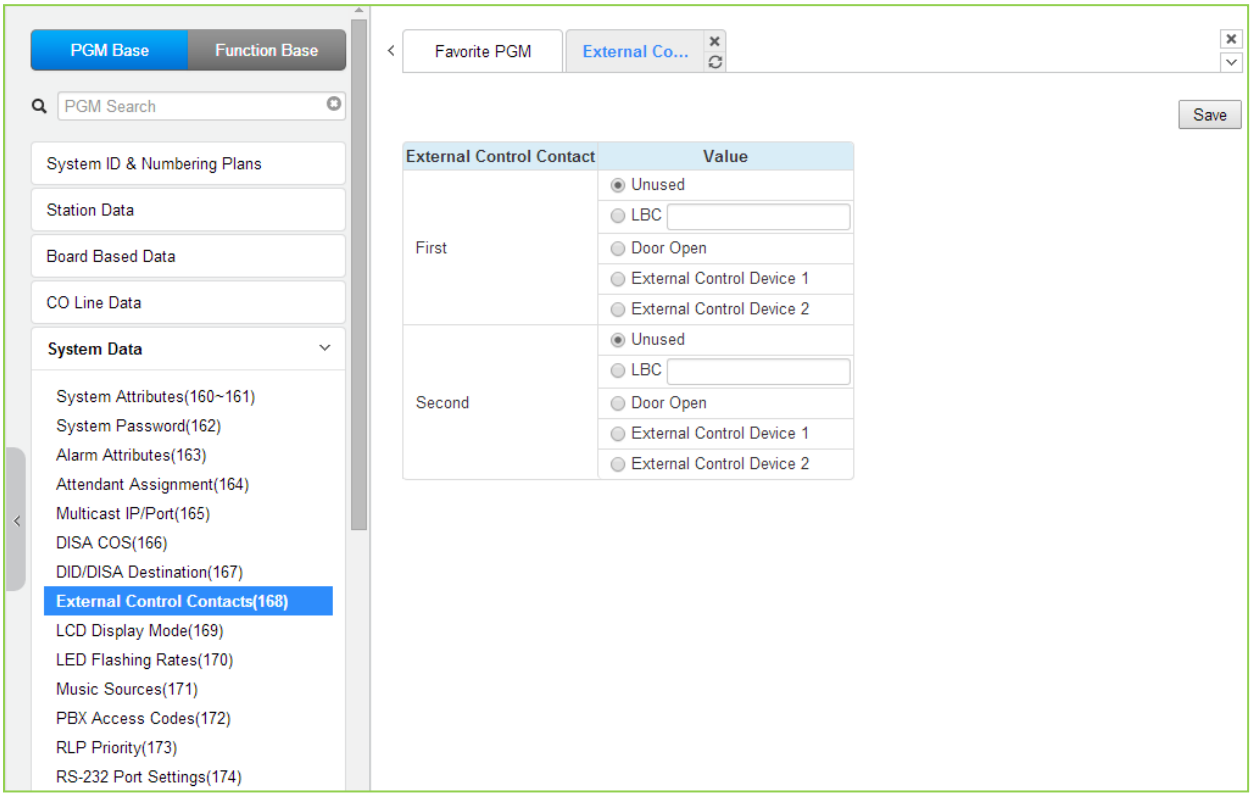


Figure 4.4.5.8-1 External Control Contact

The external contact device can be used to control external devices, refer to Figure 4.4.5.8-1 for number of available contacts. Each contact is assigned to activate under one of several conditions. As a Loud Bell Contact (LBC), the contact will activate when the assigned station or group receives an external call. For LBC, when the system is in the Night or Timed Ring mode, the contact will activate for incoming UNA calls and will ignore any station assignment. The contact may alternatively activate as a Door Lock Release contact, when External Page Zone is accessed.

4.4.5.9 LCD Display Mode - PGM 169

Selecting LCD Display Mode will display the data entry page. Click **[Save]** button after changing Value.

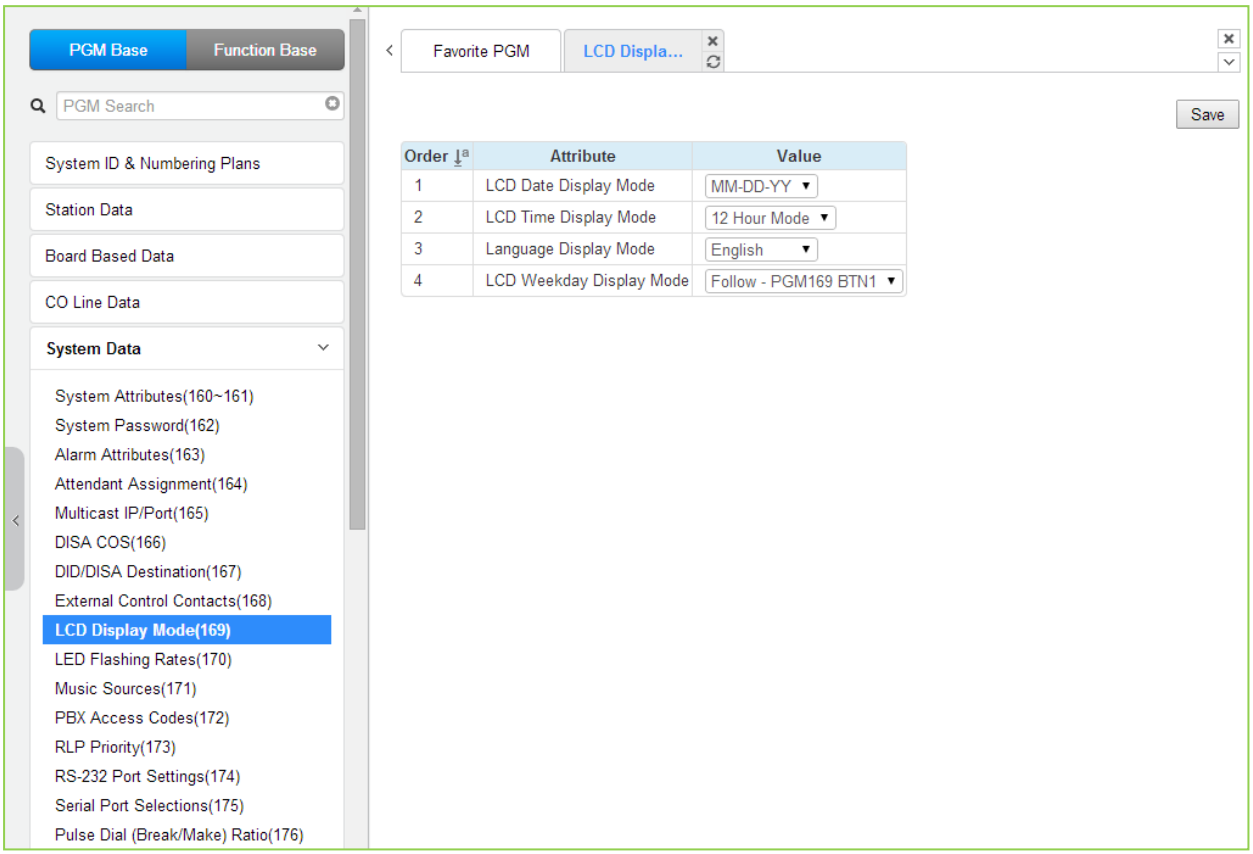


Figure 4.4.5.9-1 LCD Display Mode

The LCD display mode sets the time (12/24 hr.), date (day/month order) and language. Refer to Table 4.4.5.9-1 and Table 4.4.5.9-2 for a description of the modes and the data entries required.

Table 4.4.5.9-1 LCD DISPLAY MODES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCD Date Display Mode	Sets the Date display as month/day or day/month.	DD-MM-YY MM-DD-YY	MM-DD-YY
LCD Time Display Mode	Sets the Time display mode as 12 hour or 24-hour (military) time.	12 Hour Mode 24 Hour Mode	12 Hour
Language Display Mode	Sets the Language used in the display; refer to Table 4.4.5.9-2 below.		English
LCD Weekday Display Mode	Sets the Day-of-Week (DoW) display mode: no DoW display mm/dd/DoW, (alpha month display, overrides setting of button 1 above. display mm/dd/DoW, numeric month display, overrides setting of button 1 above.	Follow - PGM169 BTN1/ Type1 (MM/DD WDY)/ Type2 (MM DD WDY)	Follow - PGM169 BTN1

Table 4.4.5.9-2 LCD LANGUAGE SELECTION

LANGUAGE
English
Italian
Finnish
Dutch
Swedish
Danish
Norwegian
Hebrew
German
French
Portuguese
Spanish
Korean
Estonian
Russian
Turkish
Polish
Greek
Arabic

4.4.5.10 LED Flashing Rate - PGM 170

Selecting LED Flashing Rate will display the data entry page. Click **[Save]** button after changing Value.

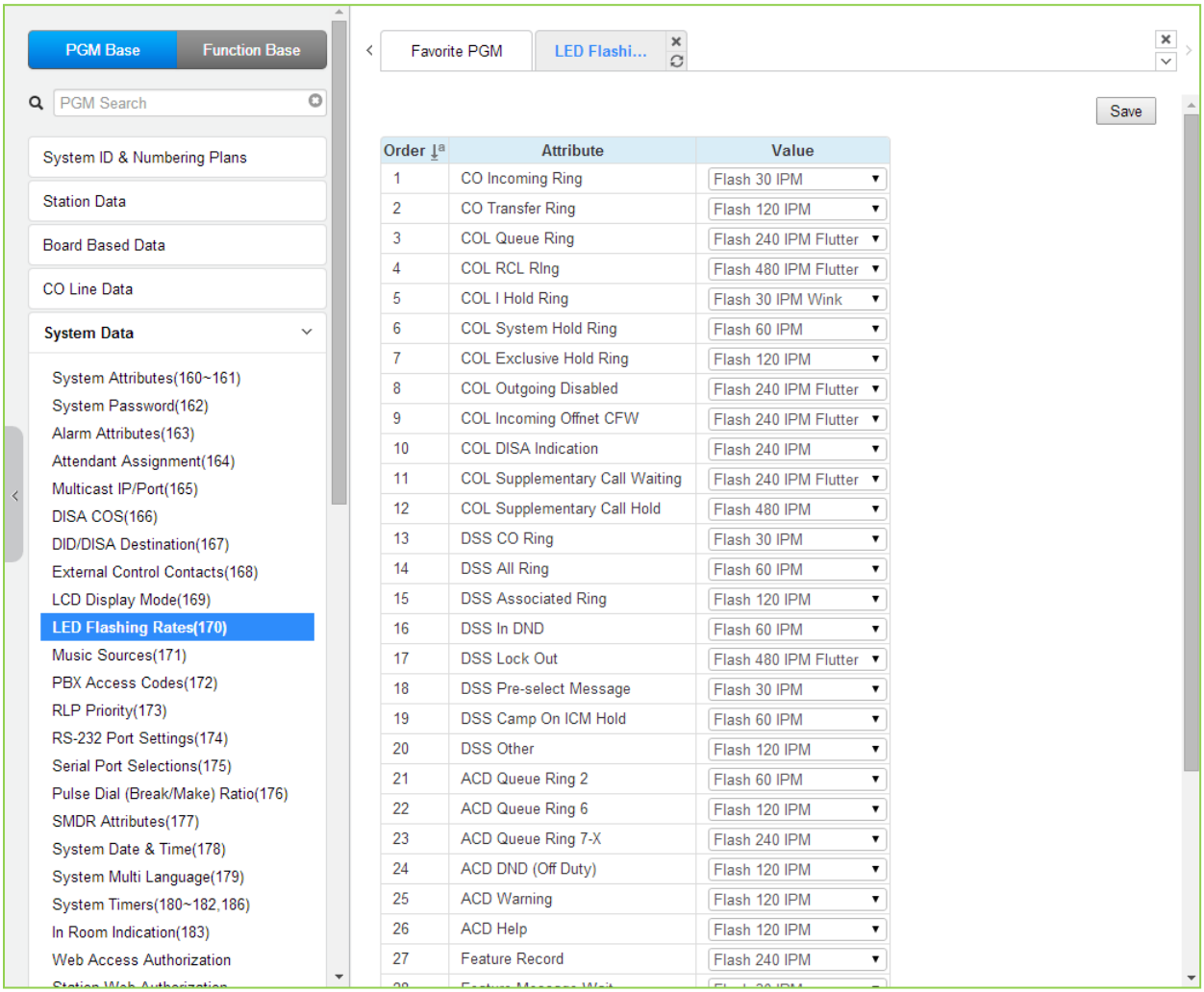


Figure 4.4.5.10-1 LED Flashing Rate

The LED flash rate for various functions and states can be assigned any one of the system's 15 signals. The various functions and states are shown in Table 4.4.5.10-1. The 15 flash signals available in the system are shown in Table 4.4.5.10-2.

Table 4.4.5.10-1 LED INDICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Incoming Ring	CO button Incoming ring flashing rate.	00-14	FLASH 30 IPM (2)
CO Transfer Ring	CO button transfer ring flashing rate.	00-14	FLASH 120 IPM (10)
COL Queue Ring	CO button queue call back ring flashing rate.	00-14	FLASH 240 IPM FLUTTER (6)

Table 4.4.5.10-1 LED INDICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
COL RCL Ring	CO button recall ring flashing rate.	00-14	FLASH 480 IPM FLUTTER (8)
COL I Hold Ring	CO button I hold flashing rate.	00-14	FLASH 30 IPM WINK (12)
COL System Hold Ring	CO button system hold flashing rate.	00-14	FLASH 60 IPM (3)
COL Exclusive Hold Ring	CO button exclusives hold flashing rate.	00-14	FLASH 120 IPM (10)
COL Outgoing Disabled	CO button outgoing disabled flashing rate.	00-14	FLASH 240 IPM FLUTTER (6)
COL Incoming Off-net CFW	CO button incoming off-net call forward flashing rate.	00-14	FLASH 240 IPM FLUTTER (6)
COL DISA Indication	CO button DISA indication flashing rate.	00-14	FLASH 240 IPM (5)
COL Supplementary Call Waiting	CO button supplementary call waiting flashing rate.	00-14	FLASH 240 IPM FLUTTER (6)
COL Supplementary Call Hold	CO button supplementary hold flashing rate.	00-14	FLASH 480 IPM (8)
DSS CO Ring	DSS button CO ring flashing rate.	00-14	FLASH 30 IPM (2)
DSS All Ring	DSS button ICM ALL ring flashing rate.	00-14	FLASH 60 IPM (3)
DSS Associated Ring	DSS button ICM ring associate device flashing rate.	00-14	FLASH 120 IPM (10)
DSS Incoming Ring	DSS button station is in DND.	00-14	FLASH 60 IPM (3)
DSS Lock Out	DSS button station is in lock out.	00-14	FLASH 480 IPM FLUTTER (8)
DSS Pre-select Message	DSS button station is in pre-selected message.	00-14	FLASH 30 IPM (2)
DSS camp on ICM Hold	DSS button station is in ICM hold.	00-14	FLASH 60 IPM (3)
DSS Other	DSS button station is in other state.	00-14	FLASH 120 IPM (10)
ACD Queue Ring 2	CIQ #1 Threshold.	00-14	FLASH 60 IPM (3)
ACD Queue Ring 6	CIQ #2 Threshold.	00-14	FLASH 120 IPM (10)
ACD Queue Ring 7-X	CIQ #3 Threshold.	00-14	FLASH 240 IPM (5)
ACD DND (Off Duty)	ACD an agent is off duty (ACD DND).	00-14	FLASH 120 IPM (10)
ACD Warning	ACD warning tone.	00-14	FLASH 120 IPM (10)
ACD Help	ACD help request/response.	00-14	FLASH 120 IPM (10)
Feature Record	FEATURE voice record button.	00-14	FLASH 240 IPM (5)

Table 4.4.5.10-1 LED INDICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Feature Message Wait	FEATURE message wait.	00-14	FLASH 30 IPM (2)
DSS Out-of-service state	DSS button a station is in out-of-service state.	00-14	FLASH OFF (00)
On-demand Ring mode	DND led of attendant station for ring mode.	00-14	FLASH 60 IPM (3)
Night Ring mode	DND led of attendant station for ring mode.	00-14	FLASH Steady
Timed Ring mode	DND led of attendant station for ring mode.	00-14	FLASH 240 IPM (5)
Auto Ring mode	DND led of attendant station for ring mode.	00-14	FLASH Off
Page Hold Button	HOLD LED for paging.	00-14	FLASH 60 IPM (3)
DSS Station DND(off duty)	DSS button station in Station DND.	00-14	FLASH 120 IPM (10)

Table 4.4.5.10-2 LED FLASH RATE TABLE

Flash Rate	DESCRIPTION
1	Steady On
2	30 ipm flash (30% On)
3	60 ipm flash (30% On)
4	60 ipm double wink (30% On-Off-On-Off & 70% On)
5	240 ipm flash (30% On)
6	240 ipm flutter (30% On-Off-On-Off-On & 70% Off)
7	480 ipm flash (30% On)
8	480 ipm flutter (30% On-Off-On-Off-On & 70% Off)
9	15 ipm flash (30% On)
10	120 ipm flash (30% On)
11	120 ipm flutter (30% On-Off-On-Off-On & 70% Off)
12	30 ipm double flash (30% On-Off-On & 70% Off)
13	480 ipm double wink (30% On-Off-On-Off & 70% On)
14	480 ipm double flash (30% On-Off-On & 70% Off)

4.4.5.11 Music Sources - PGM 171

Selecting Music Sources will display the Music Sources data entry page. Click **[Save]** button after changing Value.

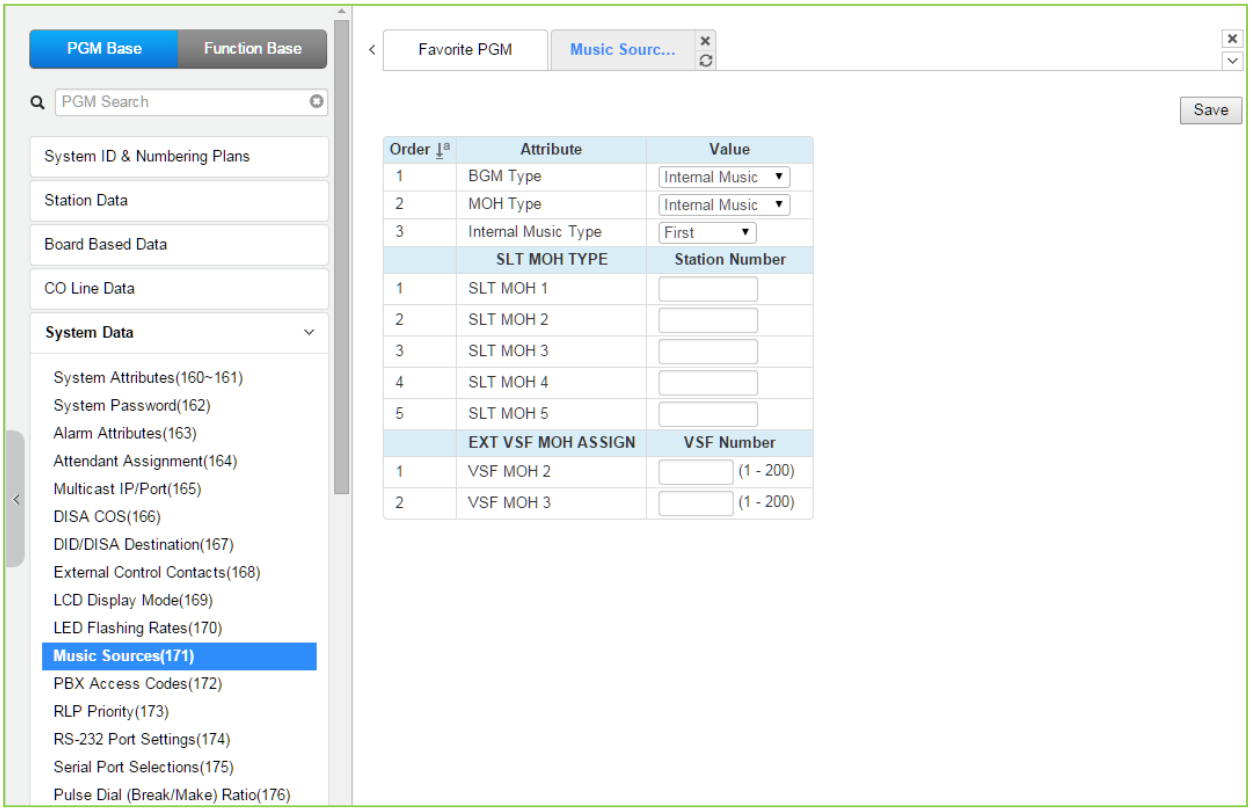


Figure 4.4.5.11-1 Music Sources

Music inputs are provided for use as the Background Music and/or Music-On-Hold source inputs. Up to three VSF announcements may be recorded and played as MOH to the connected caller. Also, up to five SLT ports may be used as MOH to the held caller.

4.4.5.12 PBX Access Codes - PGM 172

Selecting PBX Access Codes will display the PBX Access Codes data entry page. Click **[Save]** button after changing Value.

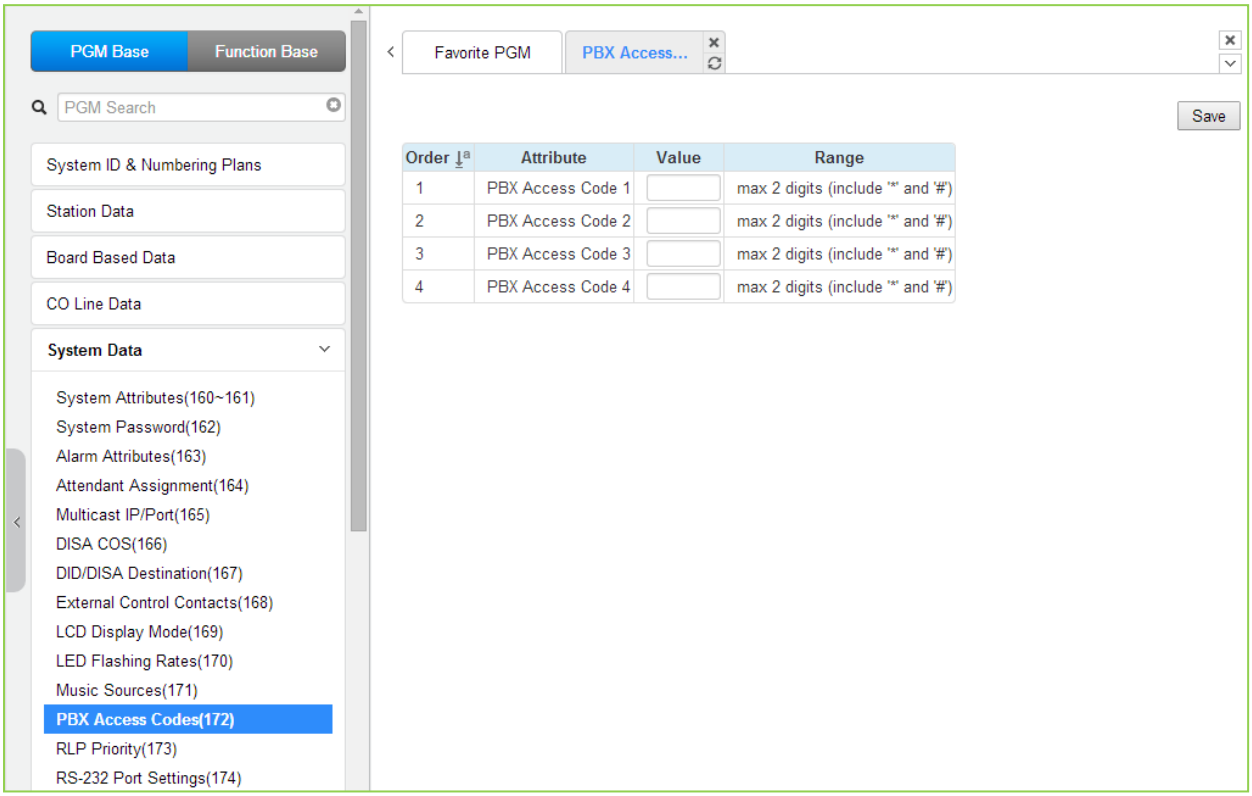


Figure 4.4.5.12-1 PBX Access Codes

When the system is used “behind” a PBX/CTX, the system needs to recognize the PBX/CTX Trunk access codes to implement proper dialing restriction, tone detection sequences and Flash timing. A maximum of four (4) Trunk Access Codes of one (1) or two (2) digits can be entered.

4.4.5.13 Ringing Line Preference Priority - PGM 173

Selecting Ring Line Preference Priority will display the Ringing Line Preference Priority data entry page. Click **[Save]** button after changing Value.

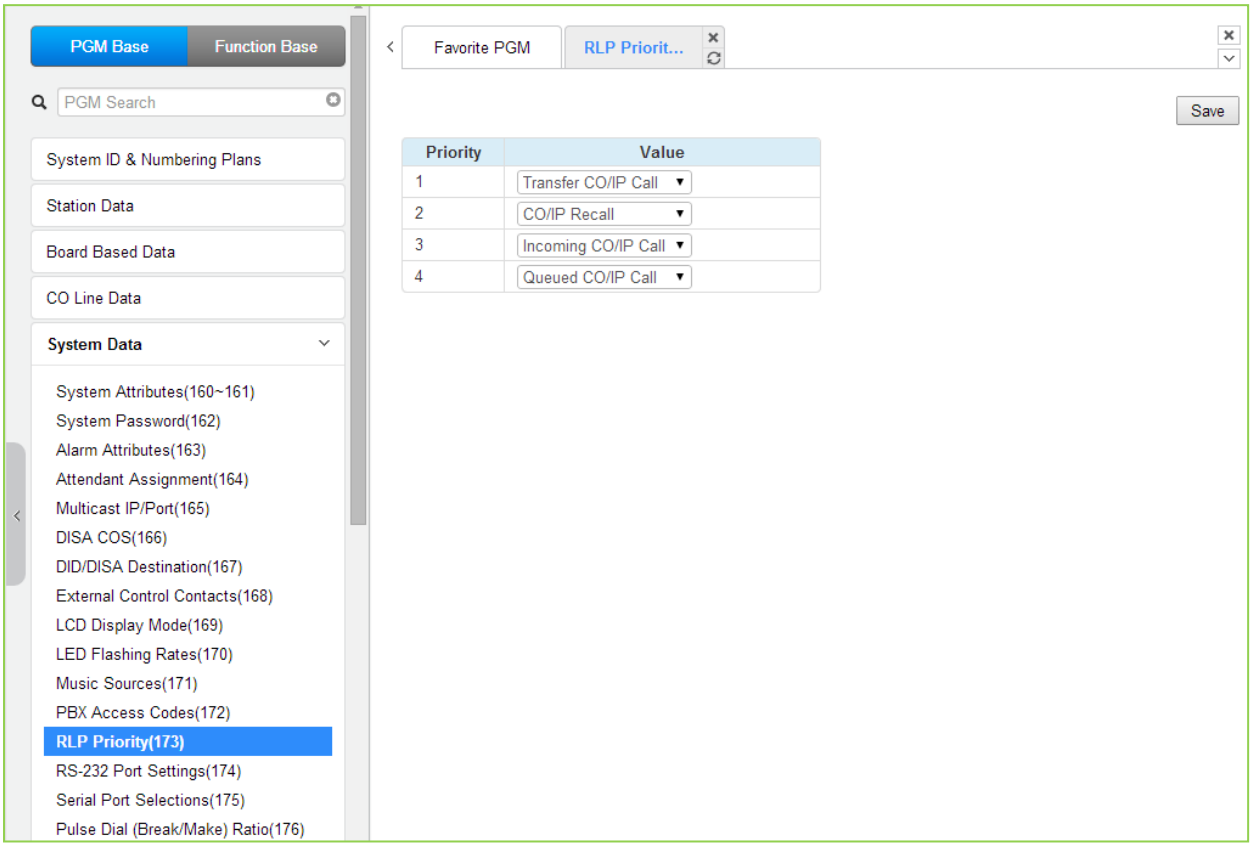


Figure 4.4.5.13-1 Ringing Line Preference Priority

When multiple calls are ringing at the same time to a station assigned Ringing Line Preference, the order of preference is based on the type of call: CO/IP Transfer, CO/IP Recall, Incoming call, CO/IP Queue. ICM calls are always assigned the lowest priority.

4.4.5.14 RS-232 Port Settings - PGM 174

Selecting RS-232 Port and USB 1&2 port Settings will display the RS-232 Port and USB 1&2 port Settings data entry page. Click **[Save]** button after changing Value.

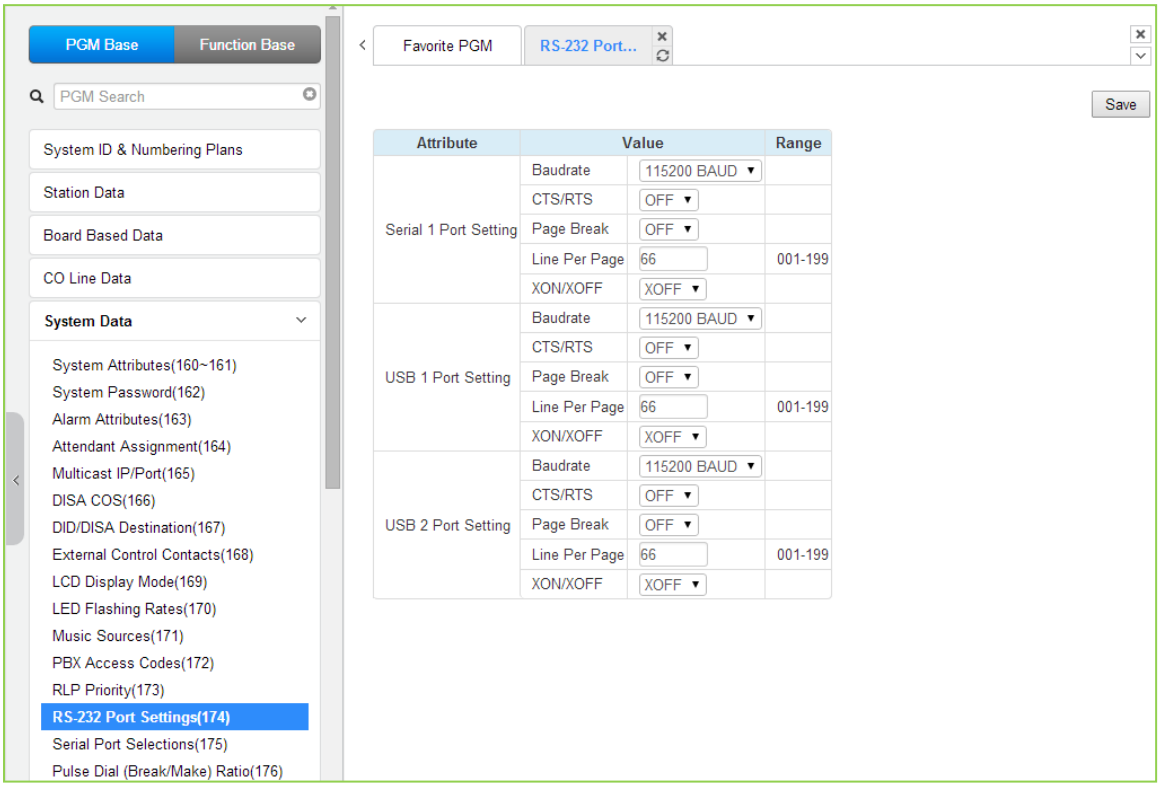


Figure 4.4.5.14-1 RS232 Port and USB 1&2 port Settings

Certain characteristics of each port are programmable including baud rate, RS 232 control, and page settings. Refer to Table 4.4.5.14-1 for a description of the settings and the data entries available.

Table 4.4.5.14-1 RS232 PORT and USB 1&2 port Settings

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Baud Rate	This entry establishes the BAUD rate for the RS-232 serial port.	Unknown/ 9600/ 19200/ 38400/ 57600/ 115200	115200
CTS/RTS	The system's RS232 port can support Clear-to-Send (CTS) and Ready-to-Send (RTS), control leads. **It is not used.**	OFF ON	OFF
Page Break	The system can send a page break command over the serial port at the end of each page. See Lines per Page below for page length set-up.	OFF ON	OFF
Line Per Page	This entry sets the page length, the number of lines the system will send before sending the page break.	001~199	66
XON/XOFF	This entry enables/disables XON/XOFF protocol. **It is not used.**	XON/ XOFF	XOFF

4.4.5.15 Serial Port Selections - PGM 175

Selecting Serial Port Selections will display the Serial Port Selections data entry page. For each function select the desired output using the drop-down menu and, if a TCP channel is assigned, enter the TCP port. Click **[Save]** button after changing Value.

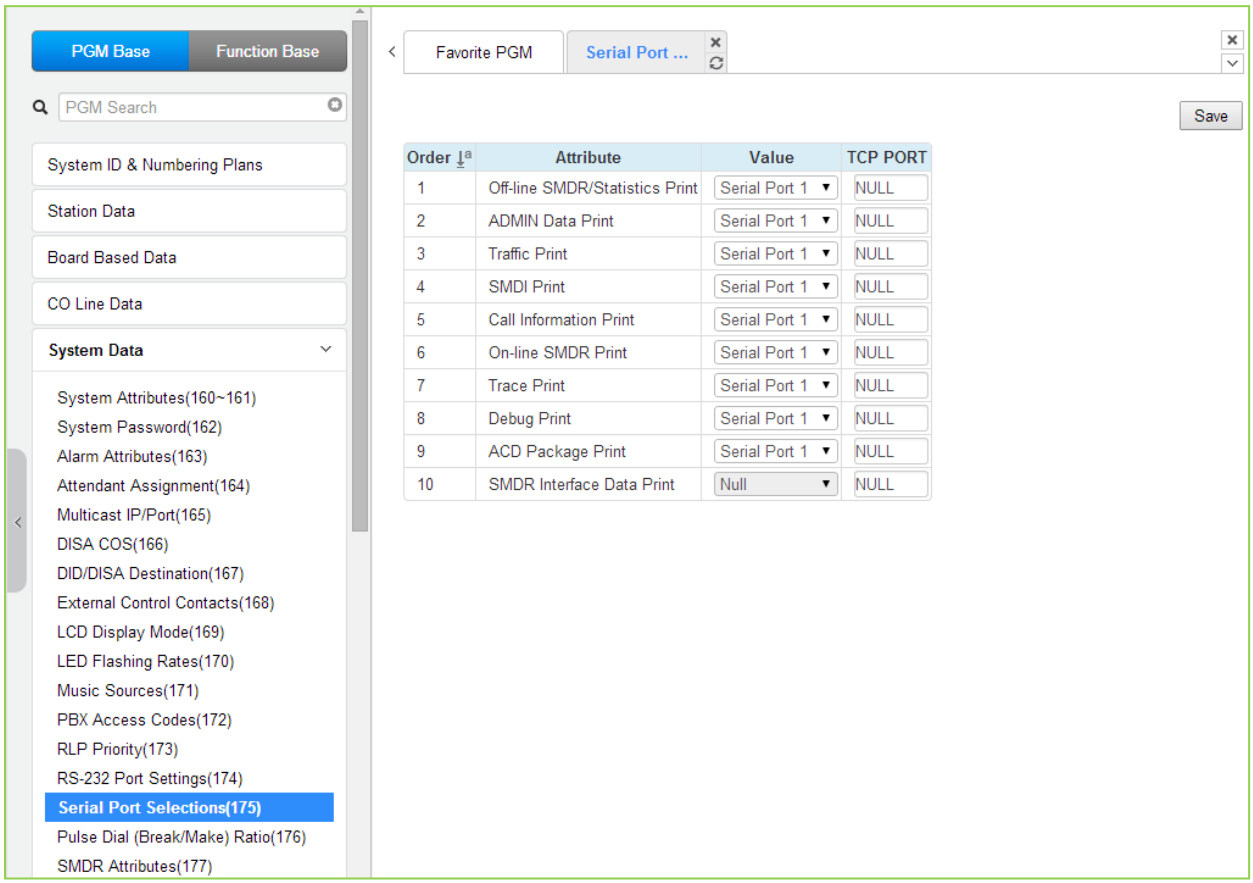


Figure 4.4.5.15-1 Serial Port Selections

The system has six (6) serial ports (1 RS232, 3 TCP Channels and 2 USB serial). A serial port is assigned to each function that requires a serial output.

4.4.5.16 Pulse Dial (Break/Make) Ratio - PGM 176

Selecting Pulse Dial (Break/Make) Ratio will display the Break/Make Ratio data entry page. Click **[Save]** button after changing Value.

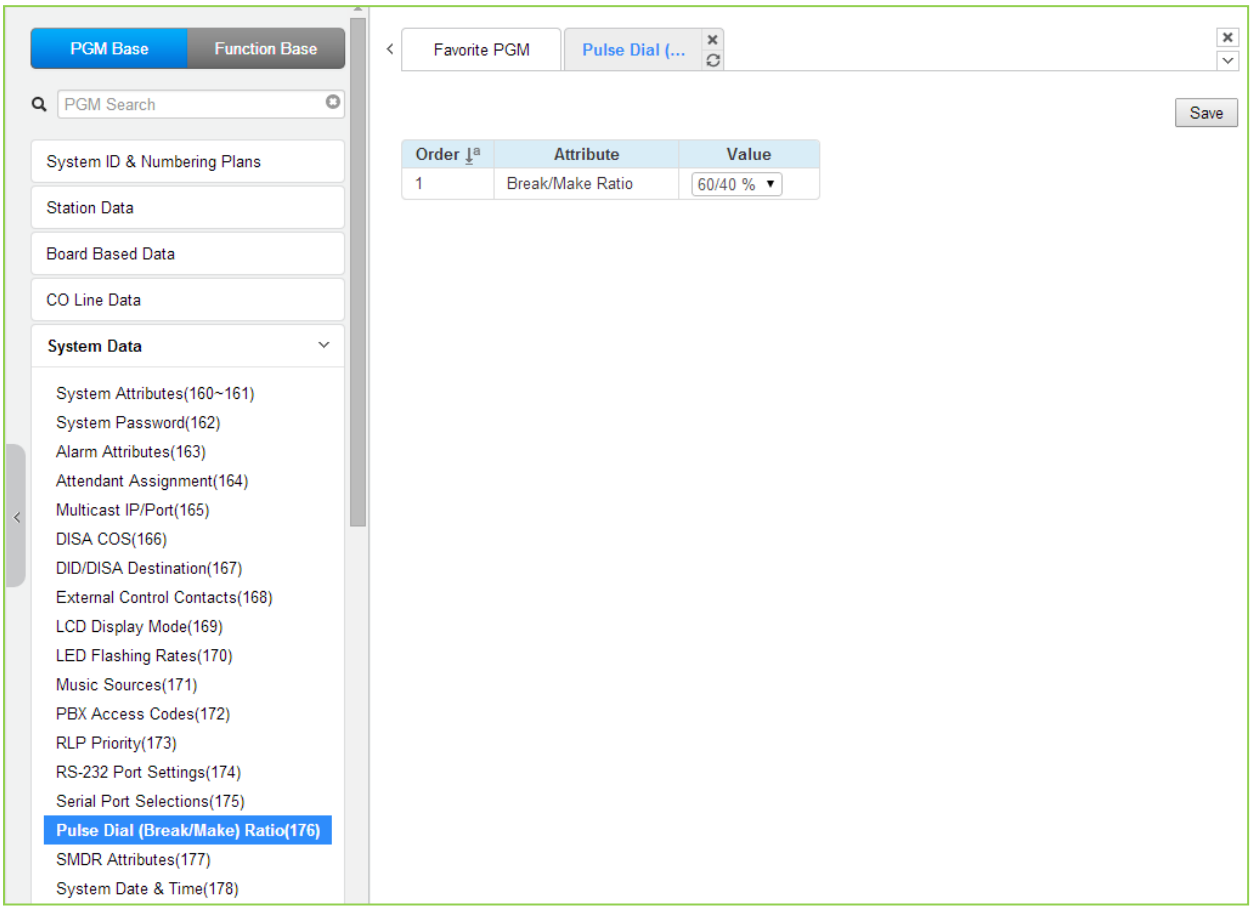


Figure 4.4.5.16-1 Break/Make Ratio

For Pulse dial CO Lines, the system supports 10pps and break/make ratios of 60/40% or 66/33%.

4.4.5.17 SMDR Attributes - PGM 177

Selecting SMDR Attributes will display the SMDR Attributes data entry page. Click **[Save]** button after changing Value.

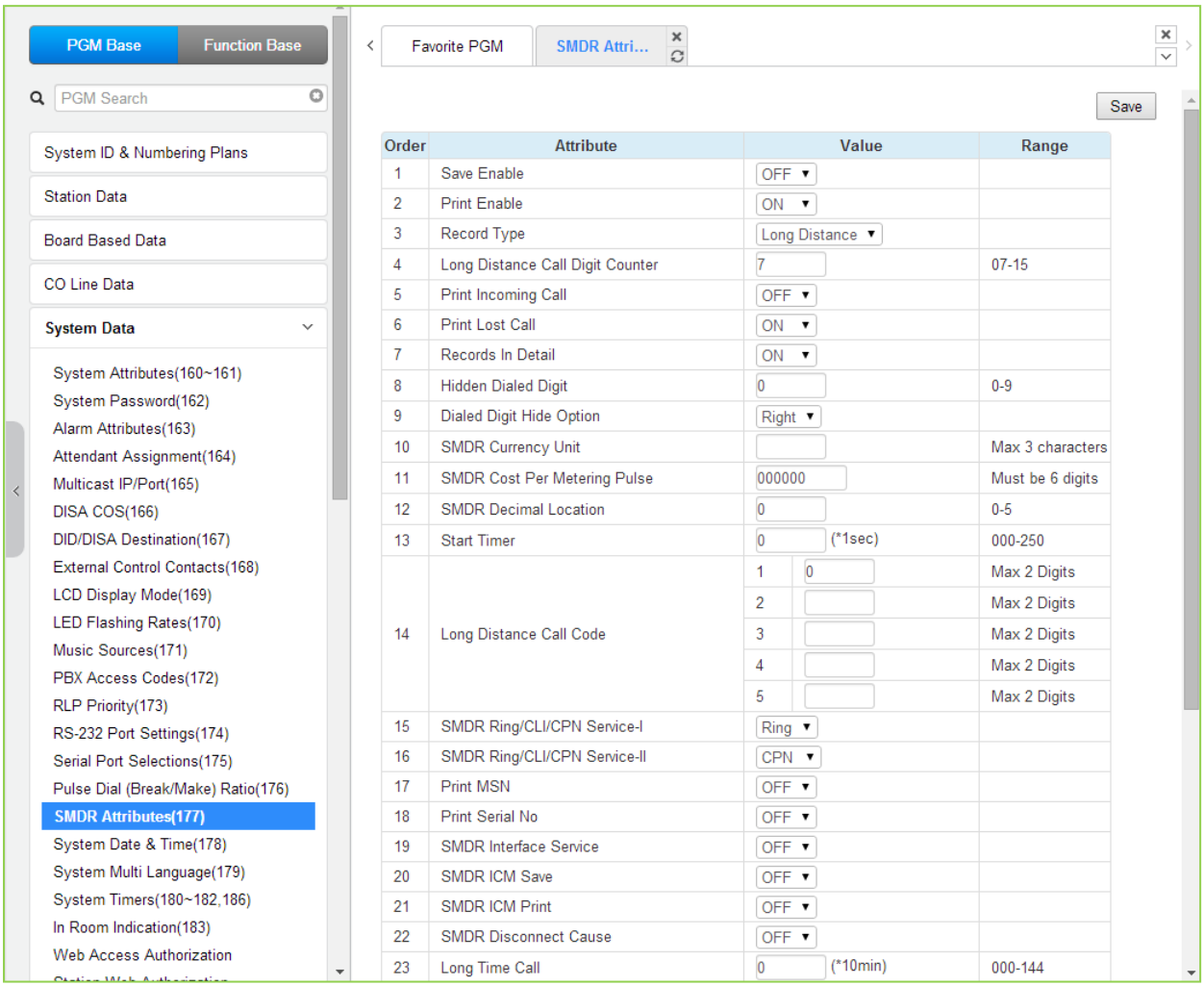


Figure 4.4.5.17-1 SMDR Attributes

Station Message Detail Recording (SMDR), which is output over an RS 232 port or TCP channel, contains details on both incoming and outgoing calls. Various SMDR attributes can be assigned including; output records for all calls or LD only, call cost per pulse when using call metering, etc. Refer to Table 4.4.5.17-1 for a description of each Attribute and the data entries required.

Table 4.4.5.17-1 SMDR ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Save Enable	The system can output all outgoing call records (ON) or, to allow for PSTN call set-up times, only records for calls that exceed the SMDR Timer (OFF). For SMDR Timer settings refer to “Start Timer”, below.	OFF ON	OFF
Print Enable	The system can output SMDR records automatically as they occur (real-time) or only when requested. When this attribute is ON, SMDR is sent at call completion.	OFF ON	ON

Table 4.4.5.17-1 SMDR ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Record Type	The system can record all outgoing calls or only long distance calls. Long distance calls are identified by the LD digit count and LD codes assigned in “Long Distance code”	Long Distance/ ALL calls	Long Distance
Long Distance Call Digit Counter	Dialed numbers, which exceed the assigned LD digit count are considered long distance calls for SMDR and COS purposes.	07-15	07
Print Incoming Call	The system can output records for Incoming calls as well as outgoing calls. If enabled, incoming as well as outgoing calls are recorded.	OFF ON	OFF
Print Lost Call	When incoming call records are enabled, the system can also provide records for unanswered incoming (abandoned) calls.	OFF ON	ON
Records In Detail	The system can output detailed call records (ON) or summary call information (total number of calls, cost and cost for each station).	OFF ON	ON
Hidden Dialed Digit	For security purposes, digits dialed for an outgoing call can be hidden and replaced with “*”. This field defines the number of digits to hide. The Dialed Digit Hide Option below defines whether leading or trailing digits are hidden The station must be assigned for SMDR Hidden digits in Common Attributes section 4.4.2.2.	0~9	0
Dialed Digit Hide Option	When “HIDDEN DIALED DIGIT” is enabled, above, this field determines if leading or trailing digits are hidden.	Right/ Left	Right
SMDR Currency Unit	The unit of currency used for call cost can be identified with 3-characters for easy reference.	Max. 3 characters	
SMDR Cost Per Metering Pulse	When call metering is provided by the PSTN, the cost per metering pulse can be assigned.	6-digits	000000
SMDR Decimal Location	This value determines the position of the decimal in the Cost per Pulse entry above, starting from the right most digits.	0~5	0
Start Timer	To allow for call set-up times through the PSTN, a “Valid call timer” can be set.	000~250 (msec)	0
Long Distance Code	For SMDR and COS purposes, five (5) Long Distance codes of up to two (2) digits each can be assigned. If dialed as the 1st digits, the call is considered an LD call.	5 two digit LD codes, use * as wild card(any digit)	
SMDR CLI or Ring Service I	For incoming calls, the system will send the defined data item for “Field I”. The data item may be CLI, CPN or Ring Service Time. Note the User dialed number is always provided for an outgoing call.	RING/ CLI/ CPN	RING
SMDR Ring/CLI/CPN Service II	For incoming calls, the system will send the defined data item for “Field II”. The data item may be CLI, CPN or Ring Service Time.	RING/ CLI/ CPN	CPN
MSN PRINT ON SMDR	Print MSN number Information in SMDR Record.	OFF ON	OFF
Print Serial No	Print record number as part of SMDR output, will reset to 1 when SMDR capacity is reached or SMDR Mail Auto Delete Set above is enabled.	OFF ON	OFF
SMDR Interface Service	When enabled, the system stores SMDR data to send to applications including NMS upon request.	OFF CO CALL, CO & ICM CALL	OFF

Table 4.4.5.17-1 SMDR ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SMDR ICM Save	When enabled, intercom call data is stored as part of the SMDR data.	OFF ON	OFF
SMDR ICM Print	When enabled, intercom call data is printed as part of the On-line SMDR.	OFF ON	OFF
SMDR Disconnect Cause	When enabled, the disconnect cause is stored in Off-line SMDR data and printed as parted of the On-line SMDR.	OFF ON	OFF
Long time call	To monitor long duration external calls, a “Long Time Call” can be set. If CO call duration exceeds this value, a notification will be sent to NMS server and alarm. If set to “000” the feature is disabled.	000 ~ 144	0
Print SMDR from any CO to NET call	When a CO call is transferred to a Net transit-out CO, the local SMDR record is deleted.	OFF ON	OFF
Transfer Call Charge Rate	When a call is transferred by a station, the SMDR record can be charged based on the following options. 1. INDIVIDUAL: When a call is transferred to another station, the transferred call is charged both stations based on the time on the call. 2. INTEGRATE TRANSFERING STATION: When a call is transferred to another station, the call is charged to the transferring station. 3. INTEGRATE TRANSFERRED STATION: When a call is transferred to another station, the call is charged to the station receiving the transfer.	Individual/ Integrate transferring station/ Integrate transferred station	Individual Station
Attendant Transfer Charge Rate	When a call is transferred by a station, the SMDR record can be charged based on the following options. 1. INDIVIDUAL: When the Attendant places an outgoing call and transfer the call to a station, the Transfer Call Charge Rate above. 2. ATTENDANT STATION CHARGING: When Attendant places an outgoing call and transfers this call to a station, the call is charged to the Attendant. 3. TRANSFERRED STATION CHARGING: When the Attendant places an outgoing call and transfers this call to a station, the call is charged to the receiving station.	Individual charging/ Attendant station charging/ Transferred station charging	Individual charging
International Access Code	It is used to distinguish international call for SMDR.	Max. 4 digits	
Mobile Access Code	It is used to distinguish mobile call for SMDR.	Max. 4 digits	
VSF Voicemail indication	Calls to the Voice Mail may be shown as I (Incoming call) or V(New indication) for Voice Mail in the SMDR record.	I(Incoming call)/ V(New indication)	I(Incoming call)
Display Nxxxx for Net number	Display ‘N’ in SMDR to distinguish and it is network call.	OFF/ ON	OFF

4.4.5.18 System Date & Time - PGM 178

Selecting System Date & Time will display the System Date & Time and DST data entry page. Click **[Save]** button after changing Value.

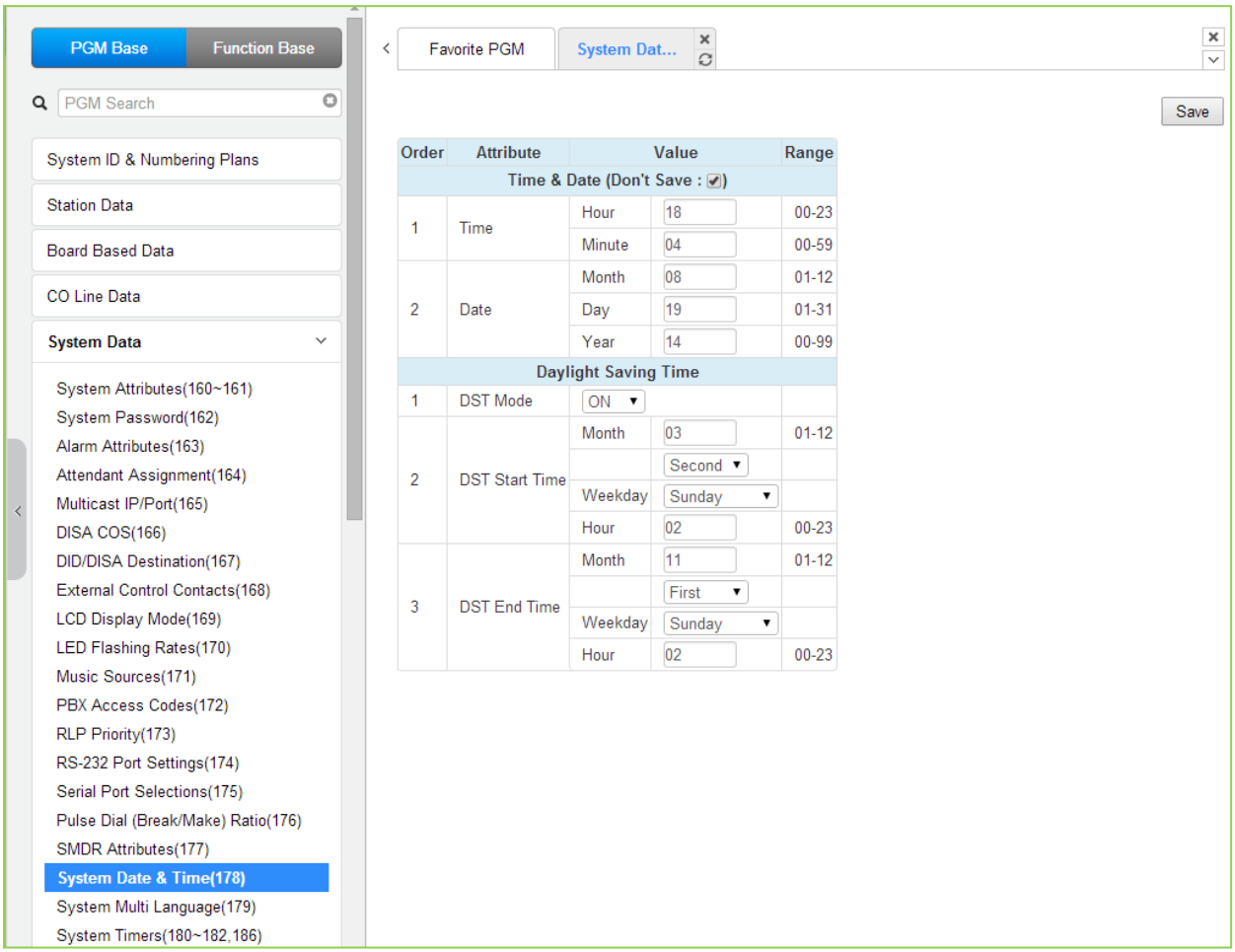


Figure 4.4.5.18-1 System Date & Time

The System Date and Time are established by the [Time & Date] menu. The date and time are employed for several features and functions including; LCR, LCD displays, SMDR outputs, Auto Ring mode Selection, Wake-up Alarm, etc.

If Daylight Savings Time is enabled the system time will be adjust one-hour forward and back at the DST start and end times, respectively.

4.4.5.19 System Multi Language - PGM 179

Selecting System Multi Language will display the System Multi Language data entry page. Click **[Save]** button after changing Value.

Enter Device/GW slot sequence number: eMG80 : 1-300 / eMG800: 1-2890

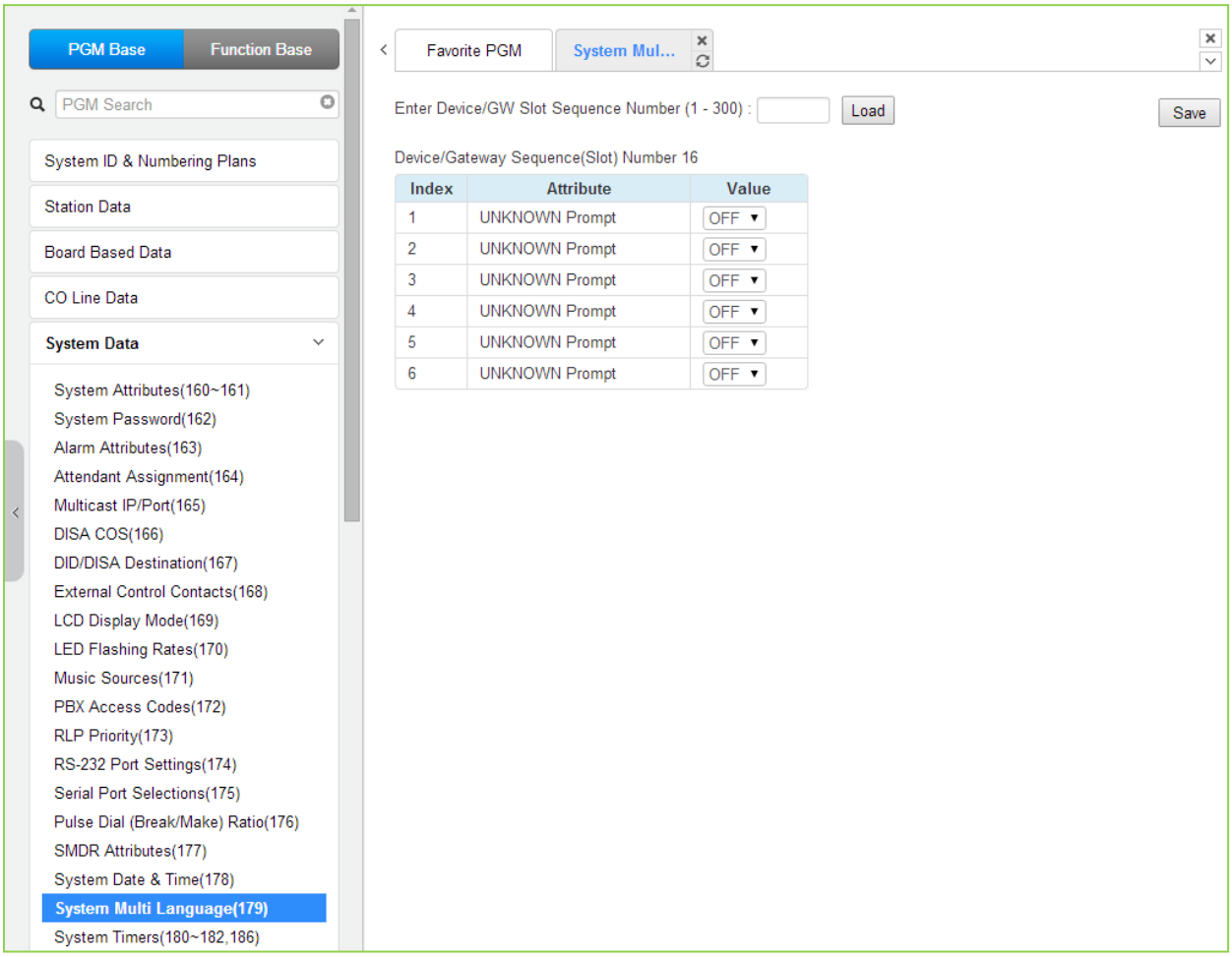


Figure 4.4.5.19-1 System Multi-Language

The VMIU and VMIB support multiple languages; up to six languages may be supported simultaneously. Once the prompts are downloaded to the VMIU and VMIB, the caller receives the Language selection announcement for DISA and CCR calls as well as preceding a Station Group announcement or DID error announcement. The language selection announcement will only affect the language prompts enabled for use.

The available language is 6 for eMG80 and 18 for eMG800. eMG800 can be selected among 18 language. The selection/upload/delete is available in Maintenance ‘VSF Prompt Message’

4.4.5.20 System Timers - PGMS 180 ~ 182 & 186

Selecting System Timers will display the System Timers data entry page. Click **[Save]** button after changing Value.

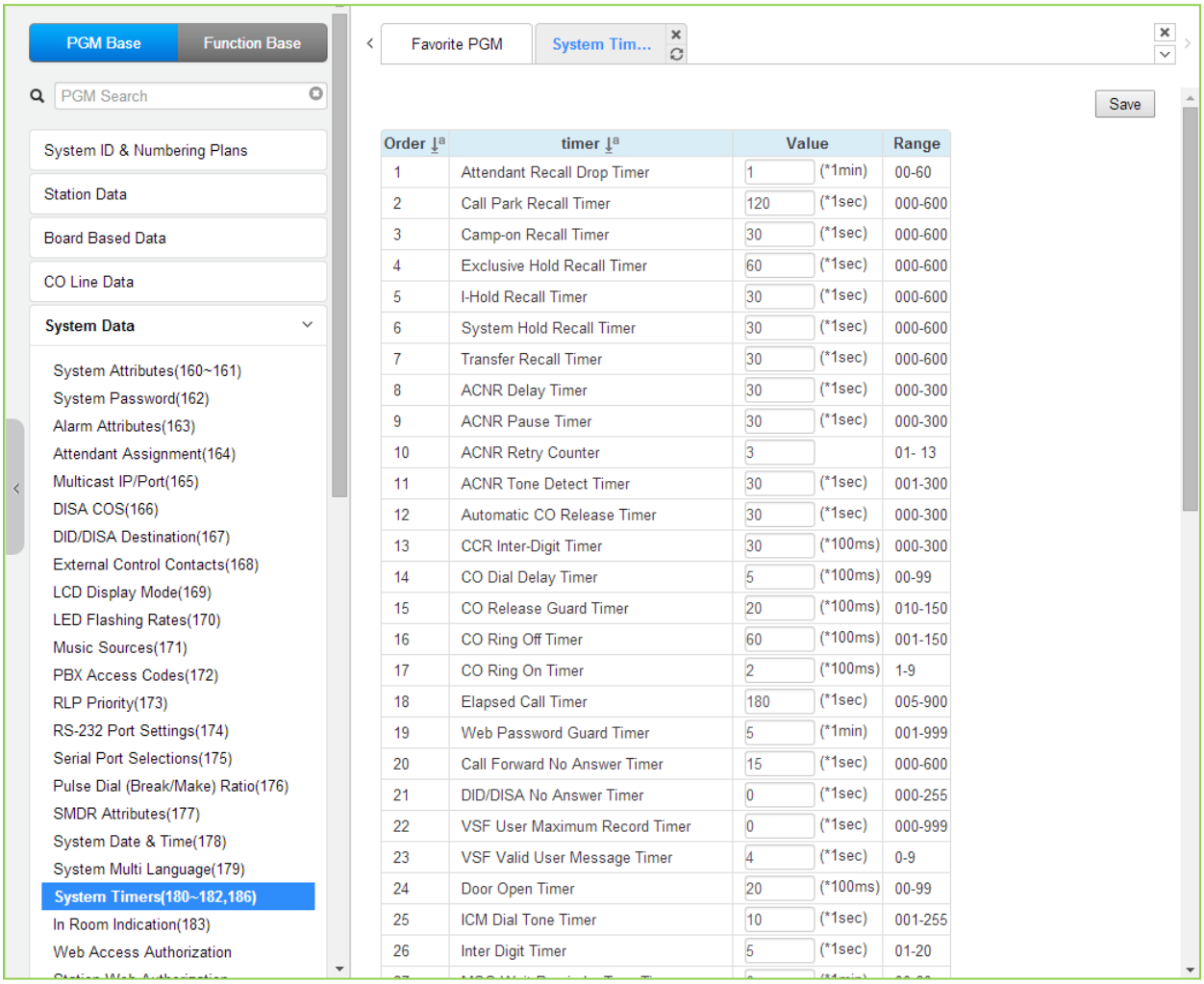


Figure 4.4.5.20-1 System Timers

A number of timers can be assigned to control and affect many features and functions. Refer to Table 4.4.5.20-1 for a description of the timers and the input required.

Table 4.4.5.20-1 SYSTEM TIMERS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Attendant Recall Timer	Enter the desired time that Attendant receives recall after the system will disconnect the call.	00~60 (minutes)	01
Call Park Recall Timer	Enter the desired recall time for call park. Parked call will recall the station at a specified time.	000~600 (seconds)	120
Camp-on Recall Timer	When a call is transferred using Camp-On, this field determines the desired recall time for Camp-on. The station receives the call again with a specified time.	000~600 (seconds)	030
Exclusive Hold Recall Timer	Enter the desired time for Exclusive hold. The station receives the call again after a specified time.	000~600 (seconds)	060

Table 4.4.5.20-1 SYSTEM TIMERS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
I-Hold Recall Timer	Enter the desired time for Hold recall. The station receives the call again after a specified time.	000~600 (seconds)	030
System Hold Recall Timer	Enter the desired time for System hold recall time. The station receives the call again after a specified time.	000~600 (seconds)	030
Transfer Recall Timer	Enter the desired time for transferring the call again to the receiving station.	000~600 (seconds)	030
ACNR Delay Timer	If the ACNR Pause Timer expires and no CO/IP Line is available for ACNR recall, in this filed, you can set the delay time before ACNR attempts to access a CO/IP line again. This feature doesn't affect the ACNR retry counter.	000~300 (seconds)	030
ACNR Pause Timer	Enter the desired time for pause between ACNR recall attempts.	000~300 (seconds)	030
ACNR Retry Counter	Enter the number of ACNR retry attempts. ACNR will finish after a specified times. Regarding CIS country, the range is from 1 to 9.	1~13	03
ACNR Tone Detect Timer	If call progress tones are not available for ACNR, the system will wait the specified time after dialing before considering the called party as "busy/no answer".	001~300 (seconds)	30
Automatic CO Release Timer	If a user accesses a CO/IP Line and takes no action, the system will automatically release the CO/IP Line when the specified time is over or expired.	000~300 (seconds)	030
CCR Inter-digit Timer	Inter-digit timer used with Customer Call Routing function.	000~300 (seconds)	030
CO Dial Delay Timer	To prevent dialing when CO/PBX has slow response, dialing by the system can be delayed using this timer.	00~99 (minutes)	05
CO Release Guard Timer	When a CO/IP Line is returned to idle, the system will deny access for the specified time to assure the PSTN returns the CO/IP Line circuitry to be idle.	010~150 (seconds)	020
CO Ring Off Timer	This timer sets the maximum 'OFF' duration of the incoming ring cycle for the Ring Detect circuitry of the system to detect an abandoned call.	001~150 (seconds)	060
CO Ring ON Timer	This timer sets the 'ON' time of the incoming ring cycle for the Ring Detect circuitry of the system to recognize an incoming call.	1~9 (100 msec)	2
Elapsed Call Timer	Users can receive a periodic tone indicating the length of an outgoing call. This timer sets the time before and between the tones. Note CO Warning Tone must be enabled for the station in Station Data, section 4.4.2.	005~900 (seconds)	180
Web Password Guard Timer	If no data packet is received during a Web connection, after the guard time a password check will be initiated by the system.	001~999 (minutes)	5
Call Forward No Answer Timer	When a user activates No-Answer Forward, calls will ring for this duration before being forward. The Station No-Answer Forward timer section 4.4.2.12 will take precedence.	000~600 (seconds)	15
DID/DISA No Answer Timer	A DID/DISA call to a busy station will forward to the DID/DISA Destination assigned under section 4.4.5.7 should this timer expires.	000~255 (seconds)	00

Table 4.4.5.20-1 SYSTEM TIMERS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF User Maximum Record Timer	This timer sets the maximum duration allowed for the User Greeting in the system's VSF.	000~999 (seconds)	0
VSF Valid User Message Timer	This timer sets the minimum duration allowed for a User Greeting.	0~9 (seconds)	4
Door Open Timer	This timer sets the minimum time required to activate the contact assigned as a door open contact.	00~99 (100 msec)	20
ICM Dial Tone Timer	If a user goes off-hook to receive Intercom dial tone and takes no action for this timer, the user will receive error tone.	001~255 (seconds)	10
Inter Digit Timer	This timer sets the maximum time allowed between each user-dialed digit. At expiration, the user will receive error-tone.	01~20 (seconds)	5
MSG Wait Reminder Tone Timer	An iPECS IP or LDP Phone user will receive periodic reminder tones of a message waiting at intervals of this timer.	00~60 (minutes)	00
Paging Timeout Timer	Determines the maximum duration of a page after which the caller and Page Zone are released.	000~255 (seconds)	15
Pause Timer	A Timed pause of this duration is used in speed dial and during other automatically dialed digits sent to the PSTN.	1~9 (seconds)	3
Soft auto RLS Timer	When a Soft Key is used on the 6000 or 7000 series iPECS IP or LDP Phone, after expiration of this timer, the display will return to the previous display.	1-30 (seconds)	10
VM Pause Timer	When the system sends a "Pause" to Voice Mail using in-band signals, this timer defines the Pause duration. (Not available in the USA.)	1-90 (ms)	30
SLT Hook Switch Bounce Timer	This timer determines the duration the system considers an actual state change in the hook-switch and not a spurious contact bounce.	01~25 (100 msec.)	1
SLT Maximum Hook Switch Flash Timer	This timer sets the maximum time an SLT user can depress the hook-switch for a Flash signal.	01~25 (100 msec.)	7
SLT Minimum Hook Flash Timer	This time sets the minimum time an SLT user must depress the hook-switch for a Flash signal.	000~250 (10 msec.)	10
Station Auto Release Timer	For an internal call, the system will return a station to idle if the call remains unanswered for this duration.	000~300 (seconds)	60
Unsupervised Conference Timer	This timer determines the duration of an "Unsupervised Conference" before the station is recalled or the conference is dropped. 00 means 10 minutes.	00~99 (minutes)	10
Prime Line Delay Timer	This timer sets the delay (no action duration) for delayed (Warm) Prime Line operation.	01~20 (seconds)	5
Wink Signal Timer	This timer sets the duration of the "Seize Acknowledge Signal" (Wink) sent to the PSTN on a DID line.	010~200 (10 msec.)	10
En-block Inter Digit Timer	When an ISDN Line is assigned to send digits En-block, CO Attribute section 4.4.4.1, the system will send digits if the user dials "#" or this En-block inter-digit timer expires.	01~20 (seconds)	5
DTMF Duration Timer	This timer establishes the duration of DTMF tones sent on an analog CO line.	04~99 (10 msec.)	10

Table 4.4.5.20-1 SYSTEM TIMERS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Flex DID Timer	The system will receive DID digits for this timer. After the timer expires, the system will use the last 2 to 4 digits received as DID digits.	01~99 (100 msec)	30
R2 Out Manage Timer	Reserved for future usage for R2 timers.	01~50 (seconds)	14
R2 In Manage Timer	Reserved for future usage for R2 timers.	01~50 (seconds)	14
R2 Disappear Timer	Reserved for future usage for R2 timers.	01~50 (seconds)	14
R2 Pulse Timer	Reserved for future usage for R2 timers.	01~30 (*20ms)	7
R2 Ready Timer	Reserved for future usage for R2 timers.	000~500 (*200ms)	7
Dial Tone Delay Timer	Reserved for future usage for R2 timers.	01~30 (*20ms)	20
Wake Up Fail Timer	Provide wake up fail indication to Attendant according to this timer.	00~99	20
VSF Cut Error Tone Timer	This timer determines the minimum voice message length to reduce the number of messages with dial-tone.	00~90 (seconds)	0
On Hook Auto Idle Timer	When an iPECS IP or LDP Phone receives a disconnect message or signal from CO line the phones goes to idle after this timer.	00~99 (seconds)	0
IP Watch Timer	To protect dual active in case of CPU redundancy and alarm IP conflict.	0~250 (1 sec.)	0
Prepaid Call Drop Warning Timer	Prove warning tone when run out of prepaid money if this timer is not zero.	00-99	10
Emergency retry timer	System try to make emergency call according to the CO access rule/Prefer CO/CO group if system could not seize predefined emergency Co line within this timer.	00~99 (seconds)	0
Record Warning Repeat Timer	If record warning tone is set and this timer is set greater than 1, it works periodically when it's recorded.	000~999 (seconds)	0
Error Tone Timer	Error Tone Timer.	5~180 (seconds)	30
Howling Tone Timer	Howling Tone Timer.	0~180 (seconds)	30
VM Notify Play Delay Over CO Timer	When VM notification to the mobile uses an analog loop start Line, system will treat the call as the answered after this timer and play the new message prompt.	1~99 (1 sec.)	10
Fax Detect timer	It is maximum fax tone detection time to deliver FAX call to fax destination.	1~20 (1 sec.)	10
Auto Pause Release timer	IPCR Mute function will be released by this auto pause released timer.	0~255 (1 sec.)	0
Short Modem Timer	If {Short modem} of a SLT is ON, the SLT maintains the modem mode for this time.	01~60 (1 sec.)	10

4.4.5.21 In-Room Indication - PGM 183

Selecting In-Room indication will display the In Room data entry page. Click **[Save]** button after changing Value.

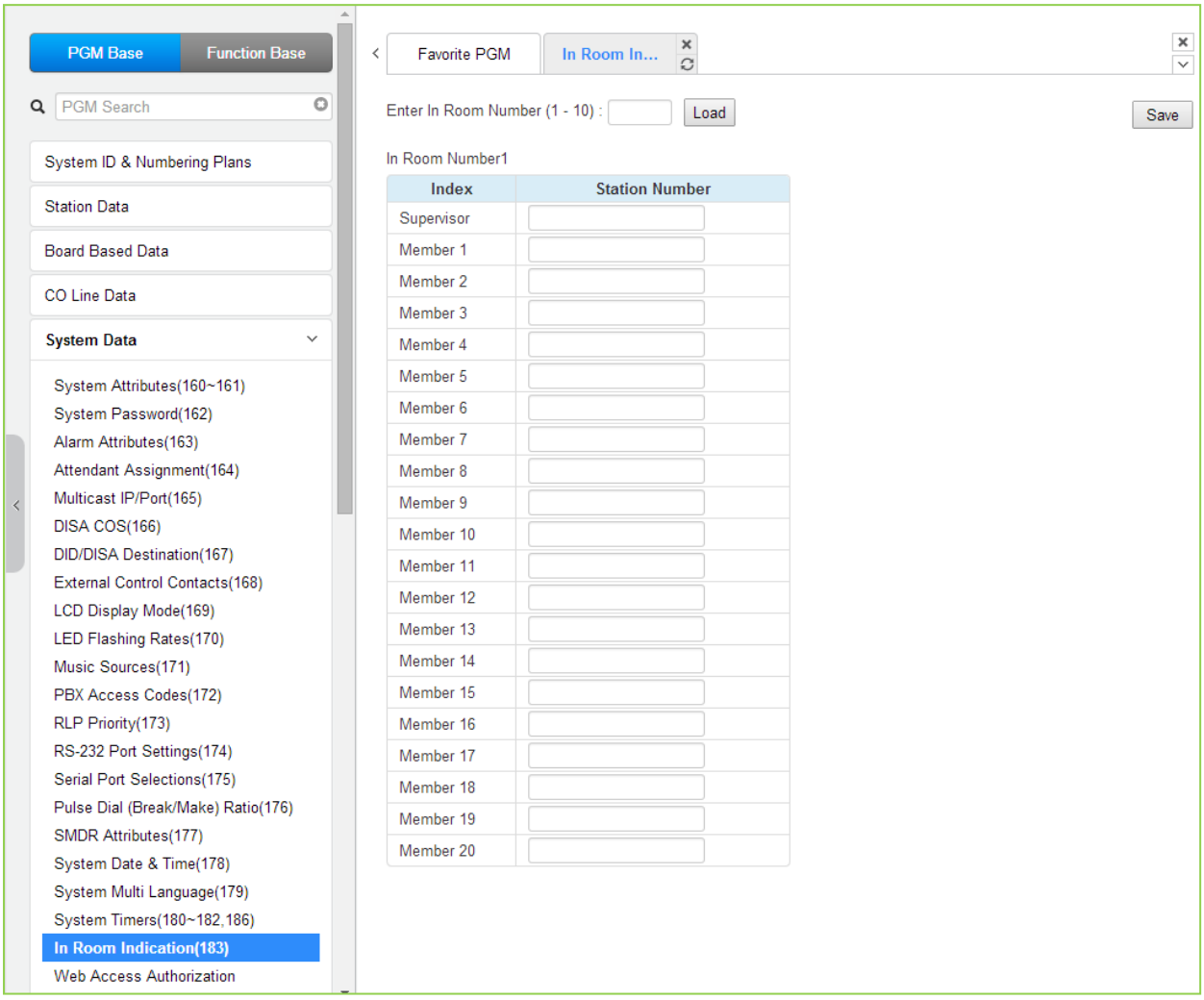


Figure 4.4.5.21-1 In-Room Indication

The Supervisor Station can set the In-Room Indication for all members in the In-Room indication group. Up to 10 Supervisors (groups) can be configured can be programmed, and each can have up to 20 members in the group, excluding the Supervisor.

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Supervisor	Assign number of hot desk agent.		
Member 01~20	This entry assigns stations as members		

4.4.5.22 Web Access Authorization

Selecting Web Access Authorization will display the Web Access Authorization data entry page. This page is only displayed when a password is defined. Click **[Save]** button after changing Value.

A user can select three authorization option (N/A, Read, Read/Write) only in Web Access & Station Web Authorization PGM of Web Admin.

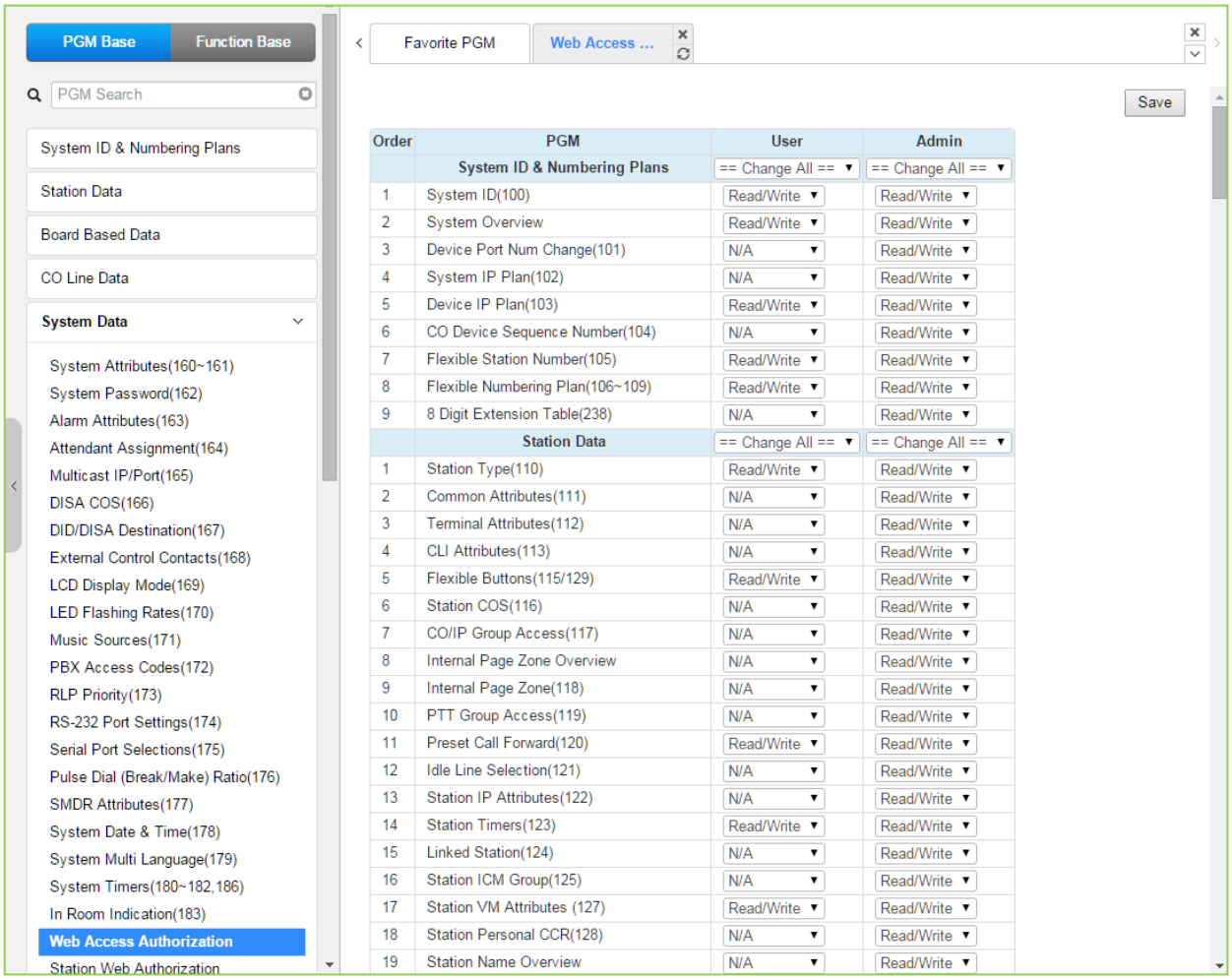


Figure 4.4.5.22-1 Web Access Authorization

Three different passwords can be assigned for the access to the iPECS Web administration so that the different levels of access to the program fields can be allowed. Two levels, the User and Admin level, have access to the assigned fields. The Maintenance password has access all the programming fields and the maintenance fields including trace settings, device log view, gain & cadence control, lock key install and device delete feature. In addition, the Maintenance level user can assign the authorities of the other user levels.

In the Maintenance menu, the Database, SMDR, and Voice Mail Delete fields can be chosen by User level or Admin Level.

4.4.5.23 Station Web Access Authorization

Selecting Station Web Authorization will display the Web authorization data entry page. Click **[Save]** button after changing Value.

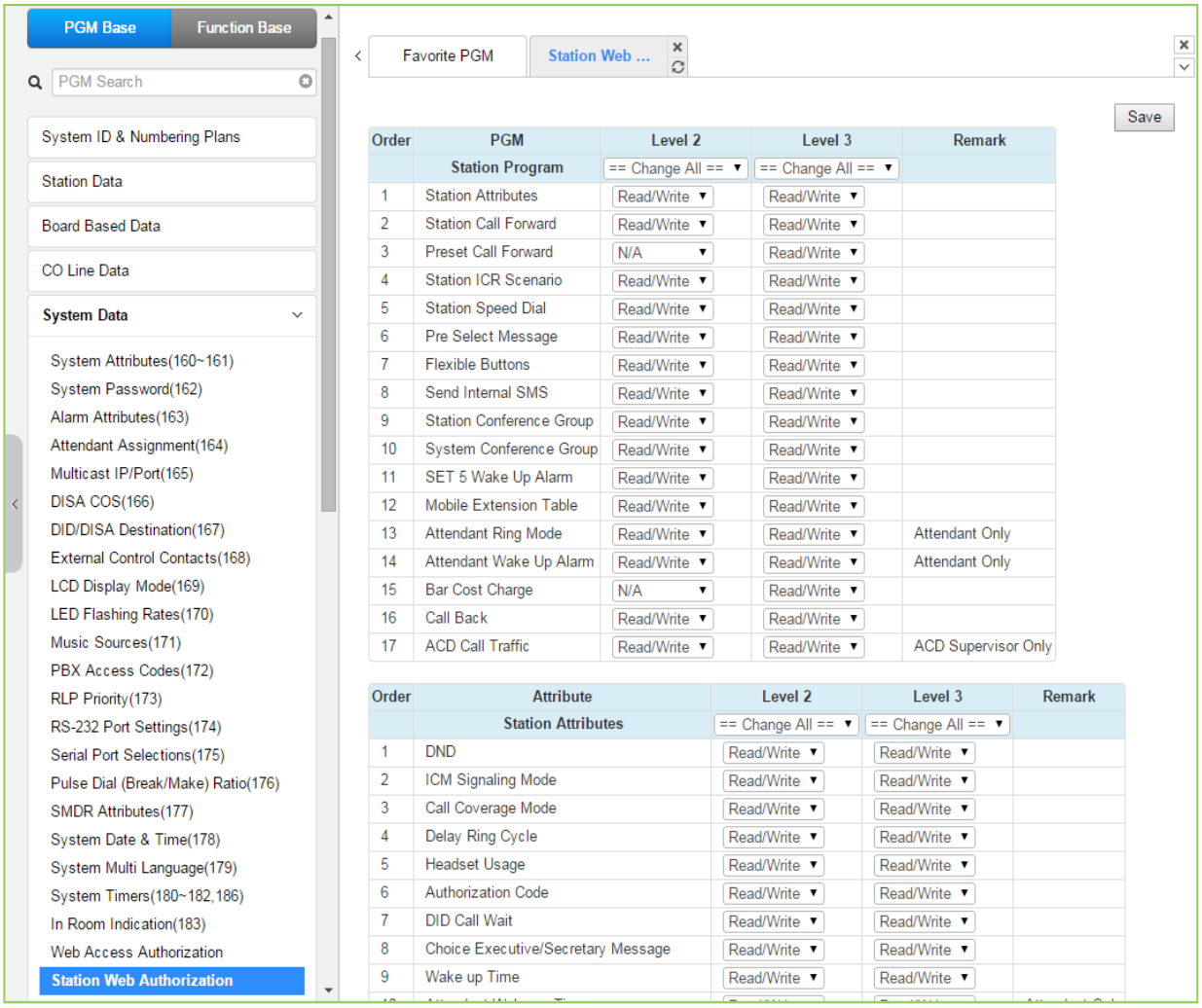


Figure 4.4.5.23-1 Station Web Access Authorization

Three access levels can be assigned to each station for access to the Station Web pages in Station Data (Common Attributes (111) : 'Station Web Level'). Level 1 has access to all Station pages and attributes. The pages and attributes for Levels 2 and 3 are programmable.

4.4.5.24 NTP Attributes - PGM 195

Selecting NTP Attributes will display the System NTP Attributes entry page.

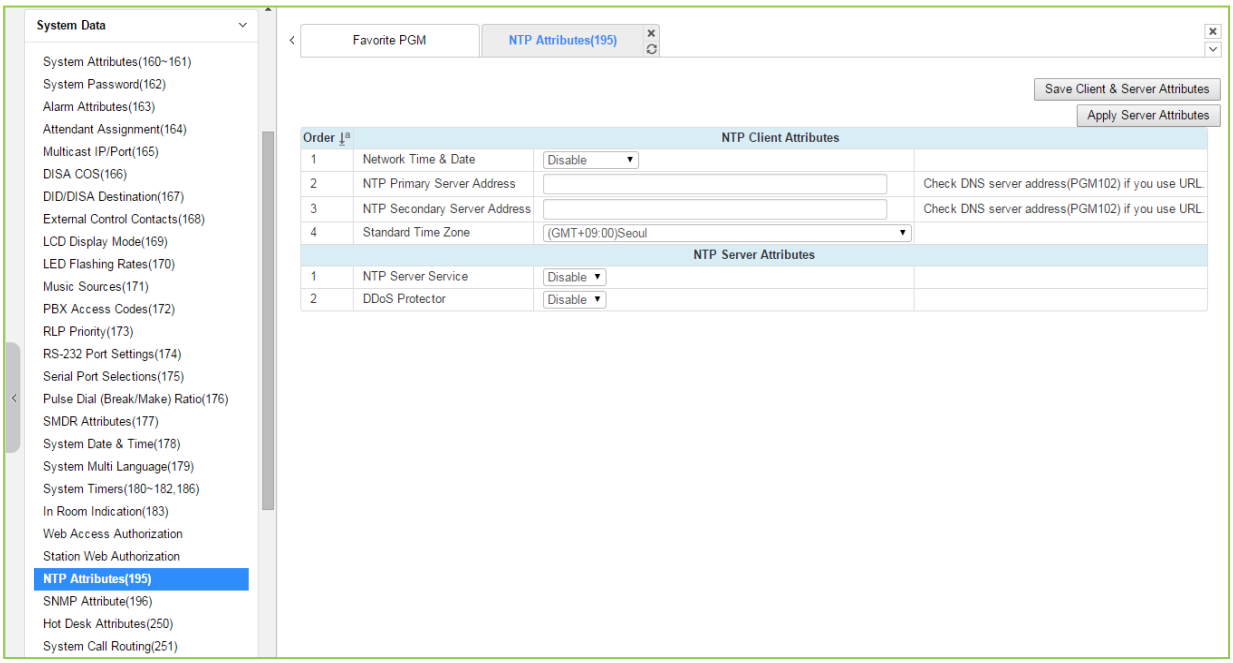


Figure 4.4.5.24-1 NTP Attributes

The system can employ the Network Time Protocol (NTP) to synchronize the system time with an NTP time server. The system requests the time from the NTP server at 10-minute intervals and then determines the time differential. If the system time is more 2 seconds off the NTP time, the system time is adjusted to synchronize with the NTP server time.

4.4.5.25 SNMP Attribute - PGM 196

Selecting SNMP Attribute will display the SNMP Attributes entry page. Click **[Save]** button after changing Value.

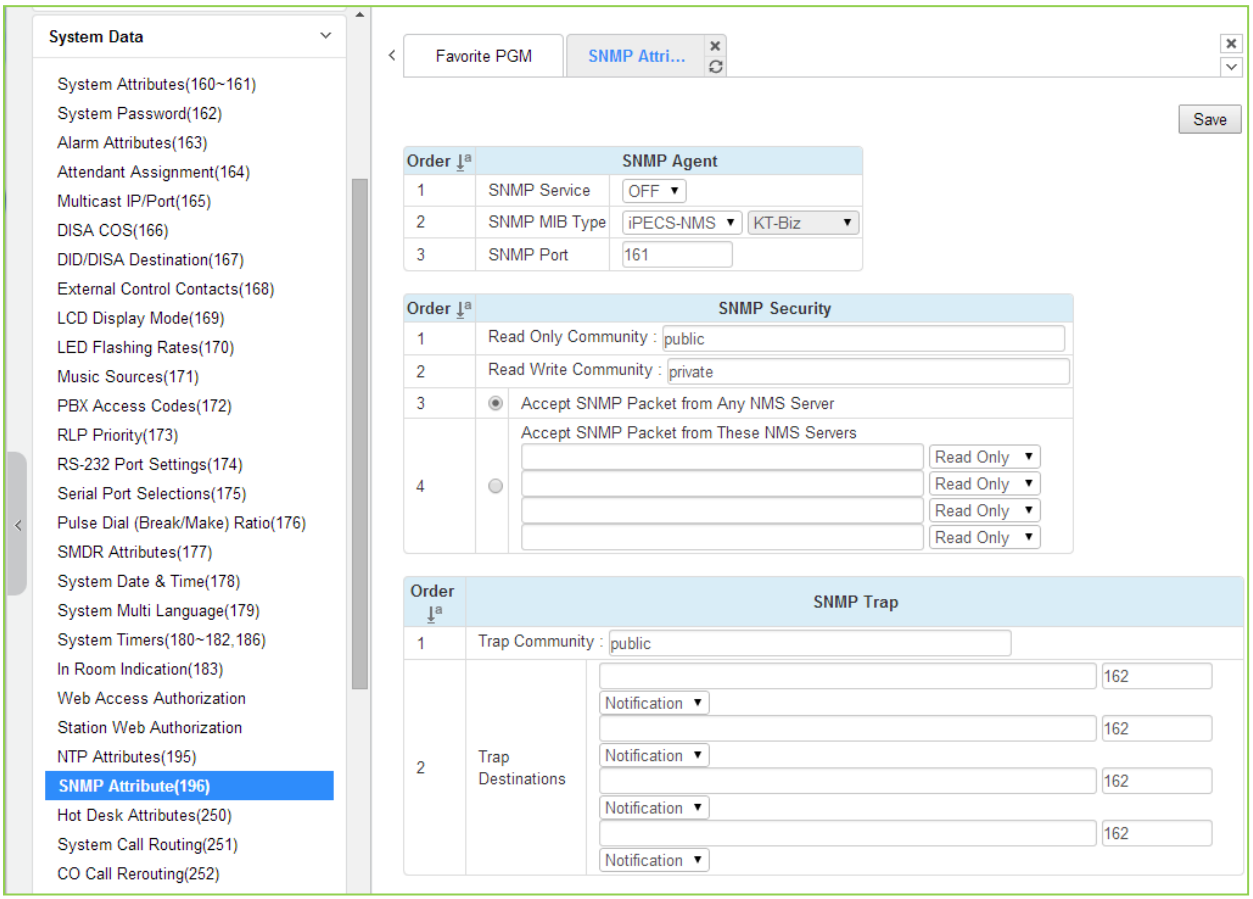


Figure 4.4.5.25-1 SNMP Attribute

SNMP Attributes, as shown on the screen, are divided into three categories: SNMP Agent, SNMP Security, and SNMP Trap. The SNMP Service field enables the SNMP agent running in the iPECS call server. The SNMP port field defines the UDP port used for communications from iPECS eMG for SNMP messages. This port should not be changed.

In SNMP Security are the Read Only and Read Write SNMP Community fields, 4 to 16 characters. The SNMP community designates an SNMP communication group to which an SNMP message belongs, and is a logical relationship between the SNMP agent (iPECS eMG) and SNMP manager (iPECS NMS). The SNMP community settings must be the same for the iPECS eMG and the iPECS NMS server.

- Read Only Community (default=Public)—Defines a community string used when the iPECS NMS reads data from iPECS eMG.
- Read Write Community (default=Private)—Defines the community string used when iPECS NMS reads or writes data to iPECS eMG.

Although iPECS eMG can accept packets from any SNMP manger such as iPECS NMS, for improved security, the IP address of specific servers can be defined and allowed Read only or Read Write access. It is recommended that the system be assigned with the IP address of a

specific NMS server with Read Write access.

The SNMP Trap configuration defines the Trap Community, and the Trap Destination, which includes the IP Address of the SNMP manager, iPECS NMS, and the .message type. The Trap Community designates a communication group to which a Trap message belongs, and is a logical relationship between the SNMP agent (iPECS eMG) and SNMP manager (iPECS NMS). This 4 to 16 character string should be the same as the Trap community string defined in the iPECS NMS. The Trap community should be the same for all iPECS eMG systems registered to an iPECS NMS server whereas the SNMP community may be defined with different strings for each iPECS eMG.

The Trap Destination defines the IP address of the iPECS NMS server and the port, 162. Enter the IP address of the NMS server but, the port should not be changed. The pull down menu next to the address is used to define the message type. Three values are available:

- Trap – message type is defined in SNMPv1, but because iPECS-NMS and iPECS eMG use SNMPV2, the Trap type message is not recommended.
- Notification – message type sent from the SNMP agent once without checking the reception of the message.
- Inform – message type requires an acknowledgement from the SNMP manager. If the agent does not receive a response, the message is resent. Inform messages are intended for use in environments with high packet loss however, use of the Inform message type may detrimentally affect iPECS eMG performance.

The iPECS SNMP attributes are defined here. Refer to Table 4.4.5.25-1 for description and values that can be entered.

Table 4.4.5.25-1 SNMP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
SNMP service	SNMP Service field is used to set the SNMP agent in the iPECS ON or OFF.	OFF ON	OFF
SNMP MIB Type	Select SNMP MIB specification. U-CEMS is KOREA telecom speciation.	iPECS-NMS/ U-CEMS	iPECS-NMS
SNMP Port	SNMP Protocol port number.		161
Read Only Community	Read only community should be used when SNMP manager (NMS) is trying to read data from SNMP agent (eMG)	4 ~ 16 characters	public
Read Write Community	When the SNMP manager (NMS) needs to read and write data to the agent (iPECS eMG). This attribute should be enabled.	4 ~ 16 characters	private
Trap Community	For the SNMP agent (eMG), this field defines the destination IP address to receive trapped messages (Alarm/fault events).	4 ~ 16 characters	public
Trap Destination	IP address of iPECS NMS server, port 162 should not be changed.	IP address	Public
Message Type	Defines how the agent sends the Message.	Notification/ Inform/ Trap	Notification

4.4.5.26 Hot Desk Attributes - PGM 250

Selecting Hot Desk Attributes will display the Hot Desk Attributes data entry page. Click **[Save]** button after changing Value.

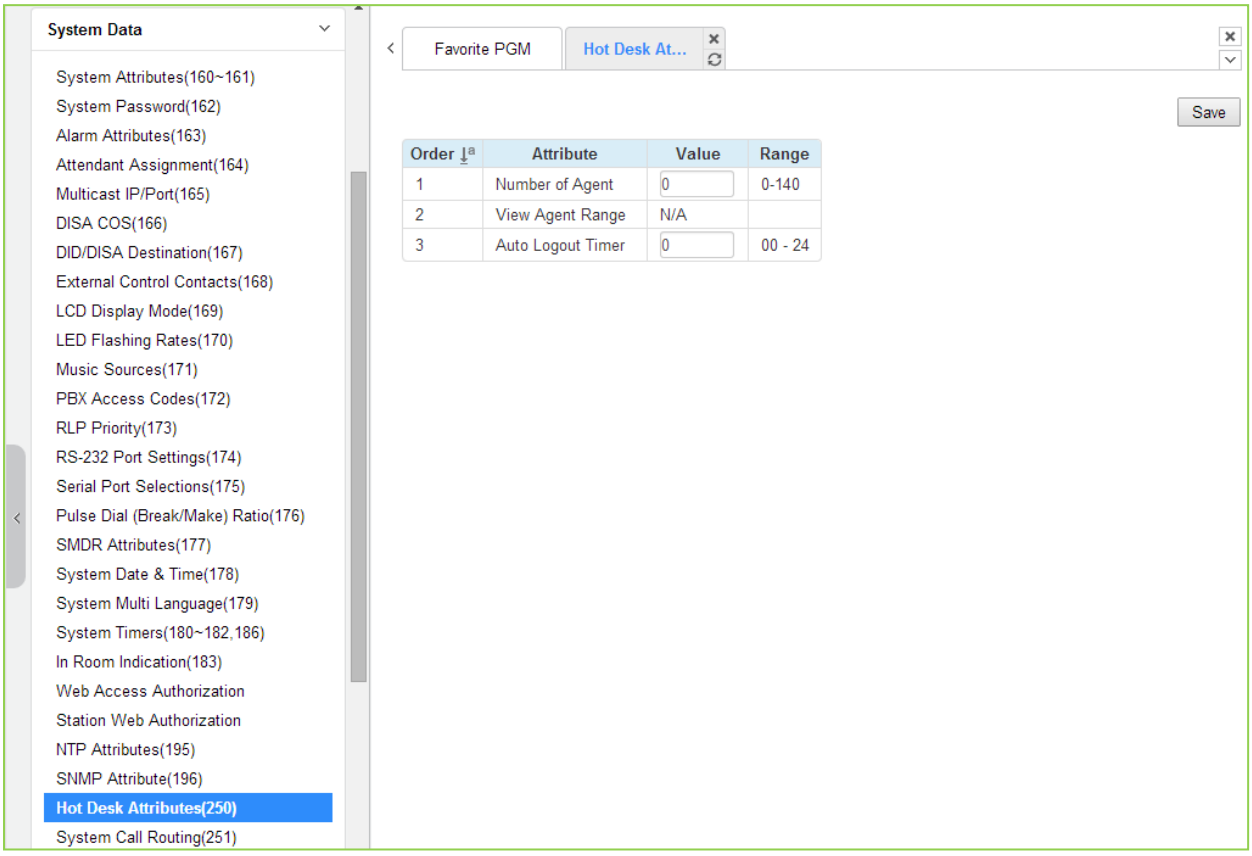


Figure 4.4.5.26-1 Hot Desk Attributes

A Hot Desk station allows a user to login for access to the system features and resources. Once logged in, the user is provided access to system features and resources employing the database for the user's assigned station.

User station numbers are assigned automatically by the system. The system assigns station numbers to each agent starting at the highest station number.

Table 4.4.5.26-1 HOT DESK ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Number of Agent	Assign number of hot desk agent.	0-140	0
View Agent Range	View the assigned station numbers for agents.		N/A
Auto Logout Timer	A Hot desk station will return to inactive if the logged in user takes no action for the Auto Logout timer.	00~24 Hrs.	00

4.4.5.27 System Call Routing - PGM 251

Selecting System Call Routing will display the System Call Routing data entry page. Enter a valid Index range and click **[Load]** to enter Call Routing data. Click **[Save]** button after changing Value.

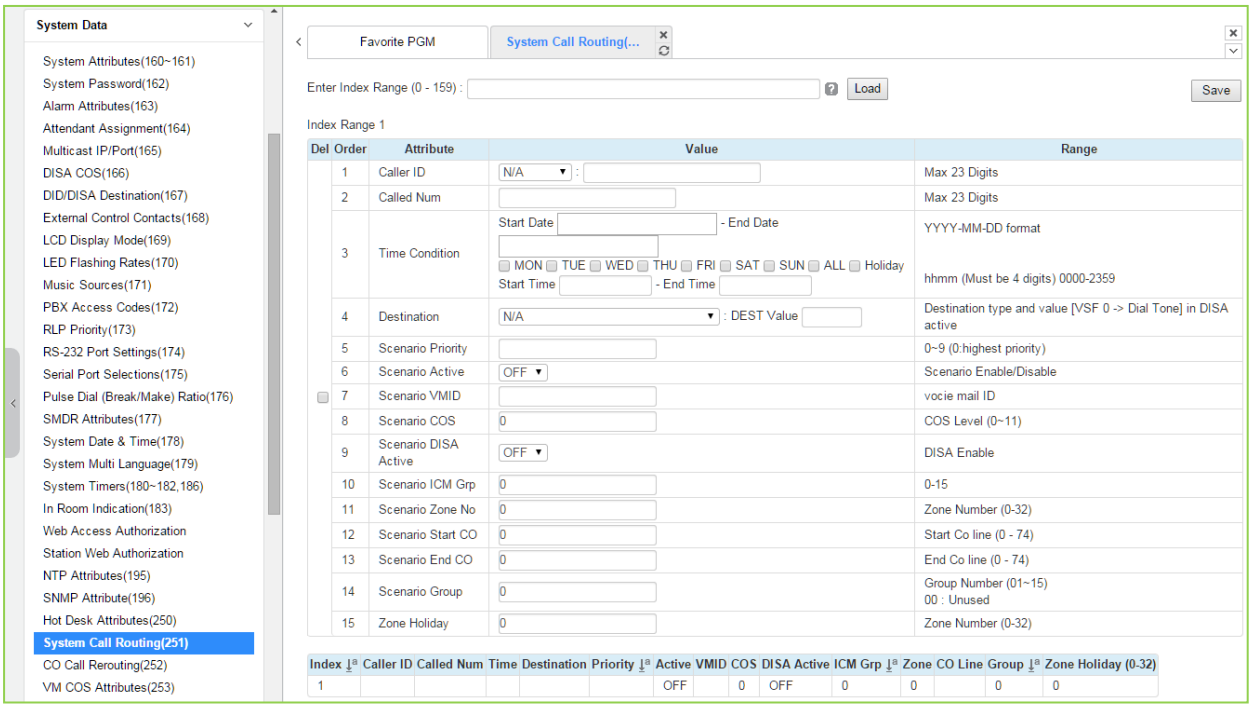


Figure 4.4.5.27-1 System Call Routing

System Call Routing establishes scenarios with criteria to route calls. Criteria include time 0f day, day of week, Caller and Called numbers, etc. System Call Routing takes precedent over other system based call routing. However, Station and CO Call Routing scenarios take precedence over System Call Routing scenarios.

Table 4.4.5.27-1 System Call Routing Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Caller ID	This field defines the Caller Id for the scenario.	Max. 23 Digits	N/A
Called Num	This field defines the Called number for this scenario.	Max. 23 Digits	
Time condition (Start Day and End Day, weeks, start time and end time)	The time and day for activation of the scenario can be defined.	YYYY-MM-DD hhmm (Must be 4 digits)	
Destination (Type and Value)	This field defines the destination type and value for call routing when the scenario criteria are met.	STA Station Group SPD PABX/ VSF/ VSF(#)/ Net Station/ Company room/ INT Page/	N/A

Table 4.4.5.27-1 System Call Routing Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		EXT Page/ All Page/ VM/ ICLID Table	
Scenario Priority	Each scenario can be assigned a priority. The highest priority scenario meeting the criteria is used to route the call.	0-9 (Highest priority)	
Scenario Active	A scenario must be active to be employed. If not active the scenario is ignored.	ON OFF	OFF
Scenario VMID	A Voice Mail Id can be associated with the scenario for routing to a Voice Mailbox.	Voice mail ID	
Scenario COS	If DISA is active for the scenario, the COS can be assigned for the call.	0-11 (COS level)	0
Scenario DISA Active	The scenario can employ DISA for the incoming call routing.	OFF/ ON	OFF
Scenario ICM Group	The scenario can route calls to a specific Tenancy group.	eMG80:0-15, eMG800:0-32	0
Scenario Zone No.	A zone can be assigned so that only CO calls to a CO/IP Line in the Zone will route based on the scenario.	eMG80:0-32, eMG800:0-32	0
Scenario Start CO and End CO	This field defines a range of CO/IP Lines that will employ to the scenario.	eMG80:0-74, eMG800:0-600	0
Scenario Group: this is used for scenario group by attendant.	Scenarios can be group allowing the Attendant to select a group of scenarios to route calls.	eMG80: Group number(01~15/ 00: unused) eMG800: Group number(01~32/ 00: unused)	0
Zone Holiday	A Zone can be assigned for routing calls using the scenario during Holiday periods defined for the Zone.	eMG80:0-32, eMG800:0-32	0

4.4.5.28 CO Call Rerouting - PGM 252

Selecting CO Call Rerouting will display the CO Call Rerouting data entry page. Enter a valid Index range and click **[Load]** to enter Call Routing data. Click **[Save]** button after changing Value.

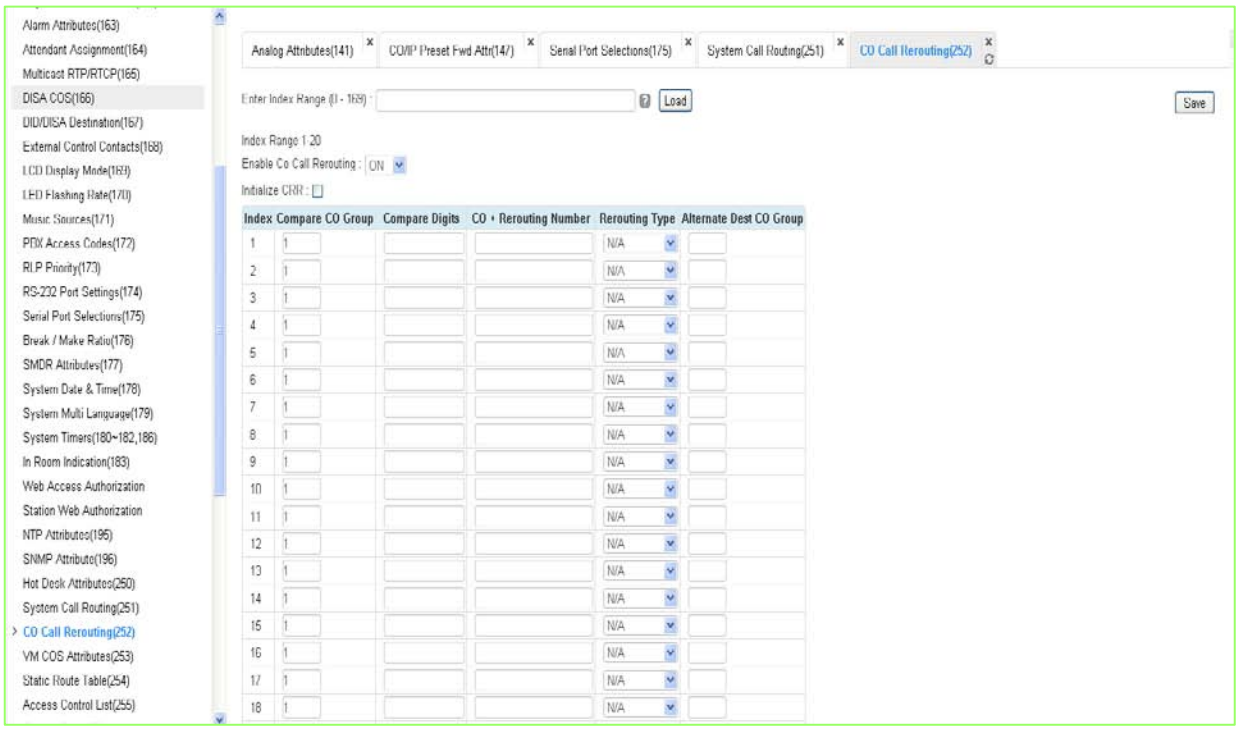


Figure 4.4.5.28-1 CO Call Rerouting

CO Call Rerouting establishes routing for CO/IP calls with a specified caller id on CO/IP Lines from a specified group. The rerouting sends calls out over another CO/IP Line or group, a network destination, a DISA call or to another station. The incoming CO group and compare digits determine if the call should be rerouted and the destination is determined by the CO code and Telephone number, which is dialed when the incoming group and compare digits are matched. The routing type determines if the call is routed normal (N/A) or if the call is routed over a network or employs DISA.

Example CRR chart

Index	Incoming CO group	Compare Code	CO Code + Tel number	Routing Type
0	1	454	88005123456	N/A
1	2	456**	8901123456	N/A
2	1	42*555	9123456	N/A
3	5	353	8901123456	NET Type
4	5	401		DISA Type

- Index 0: If an incoming call on a CO/IP Line from group has digits “454” then seize CO 5 and send digit 123456.
- Index 1: If an incoming call on a CO/IP Line from group 2 has digits “456**” then seize

CO group 1 and send digit 123456.

- Index 2: If an incoming call on a CO/IP Line from group1 has digits “42*555” then seize the first CO/IP Line and send digit 123456.
- Index 3; if an incoming call on a CO/IP Line from group 5 has digits “353” then seize CO group 1 and send digit 123456 as a transit-out call over the Network.
- Index 4: If an incoming call on a CO/IP Line from group 5 has digits “401” then activate DISA and await digits from the caller.

4.4.5.29 VM COS Attributes – PGM 253

Selecting VM COS Attributes will display the VM COS Attributes data entry page. Select a valid VM COS and click **[Load]** to enter VM COS data. Click **[Save]** button after changing Value.

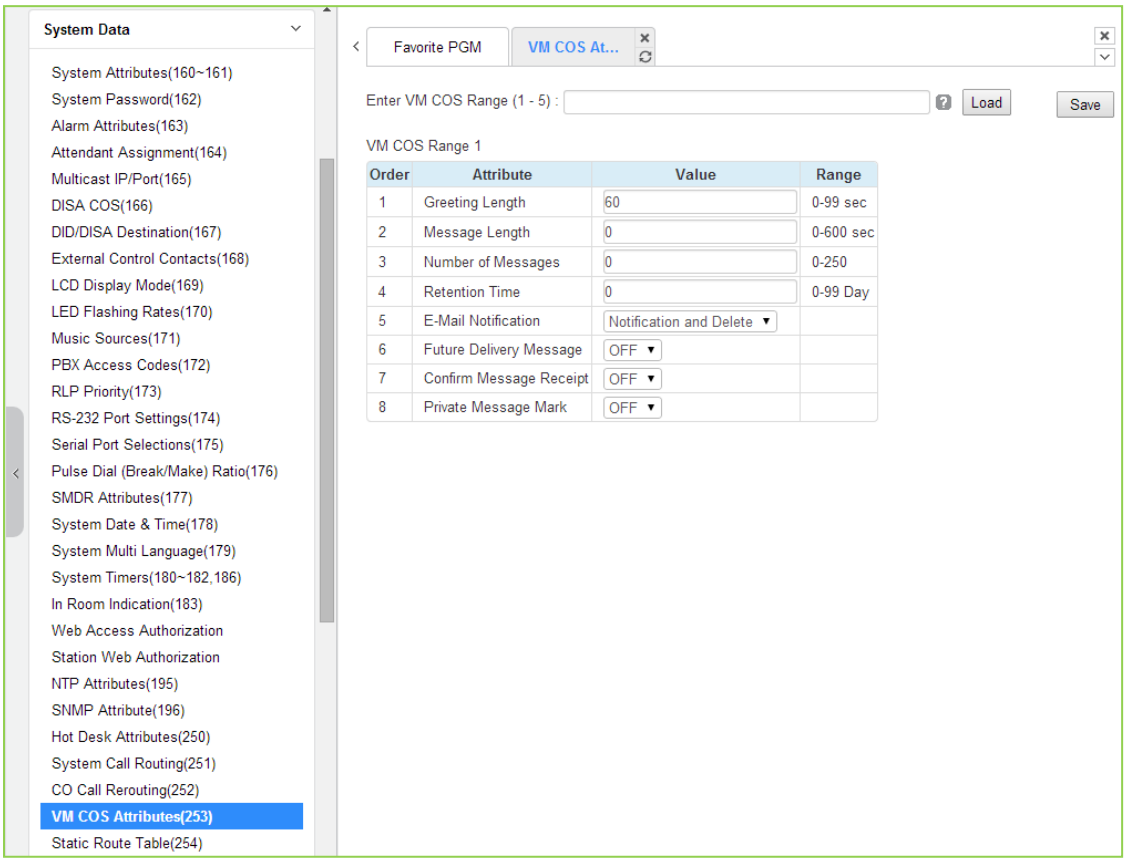


Figure 4.4.5.29-1 VM COS Attributes

VM COS establishes various common characteristics of the user's Voice Mailbox including greeting and message length, E-mail notification, message retention, etc.

Table 4.4.5.29-1 VM COS ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Greeting Length	This defines maximum user greeting length.	0-99 (Seconds)	60
Message Length	This defines maximum user message recording time.	0-600 (Seconds)	0
Number Of Messages	This defines maximum number of voice mail message.	0-250	0
Retention Time	Voice mail messages will be automatically deleted after this number of days.	0-99 Days	0
E-Mail Notification	E-mail notification can be enabled or disabled and, if enabled, the message can be deleted after notification.	Disable/ Notification Only/ Notification & Delete	Notification & Delete
Future Delivery Message	Future Delivery of messages can be enabled or disabled.	OFF ON	OFF
Confirm Message Receipt	Confirm message receipt can be enabled or disabled.	OFF ON	OFF
Private Message Mark	Private message mark can be enabled or disabled.	OFF ON	OFF

4.4.5.30 Static Route Attributes – PGM 254

Selecting Static route Attributes will display the static route attributes data entry page. Click **[Save]** button after changing Value.

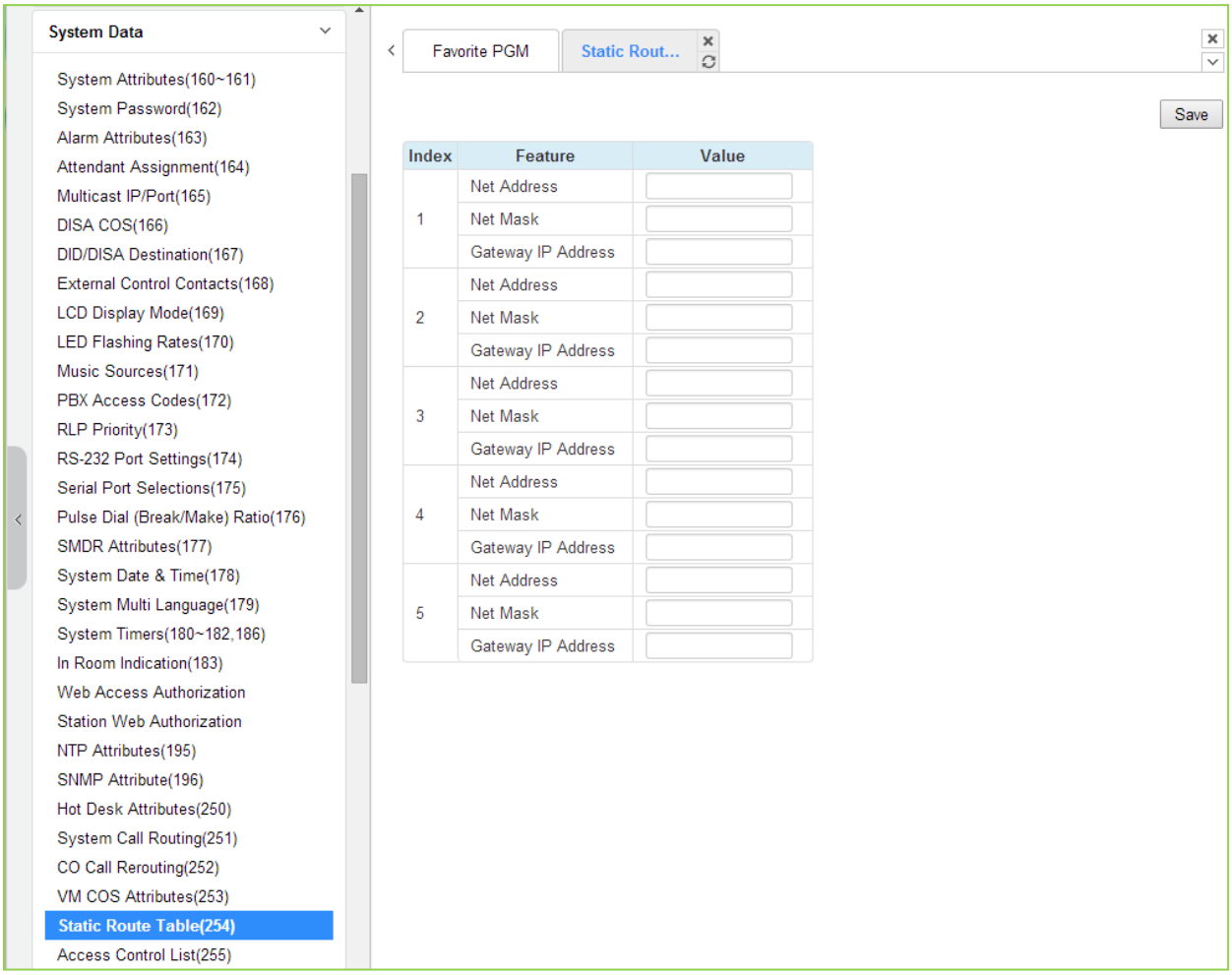


Figure 4.4.5.30-1 Static Route Table Attributes

Table 4.4.5.30-1 STATIC ROUTE TABLE ATTIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net address	Network IP address	IP address	
Net mask	Net mask		
Gateway IP address	Gateway(route) IP address	IP address	

4.4.5.31 Access Control List – PGM 255

Access Control List will display the access control attributes data entry page. Enter a valid index range and click **[Load]** to enter ACL data. Click **[Save]** button after changing Value.

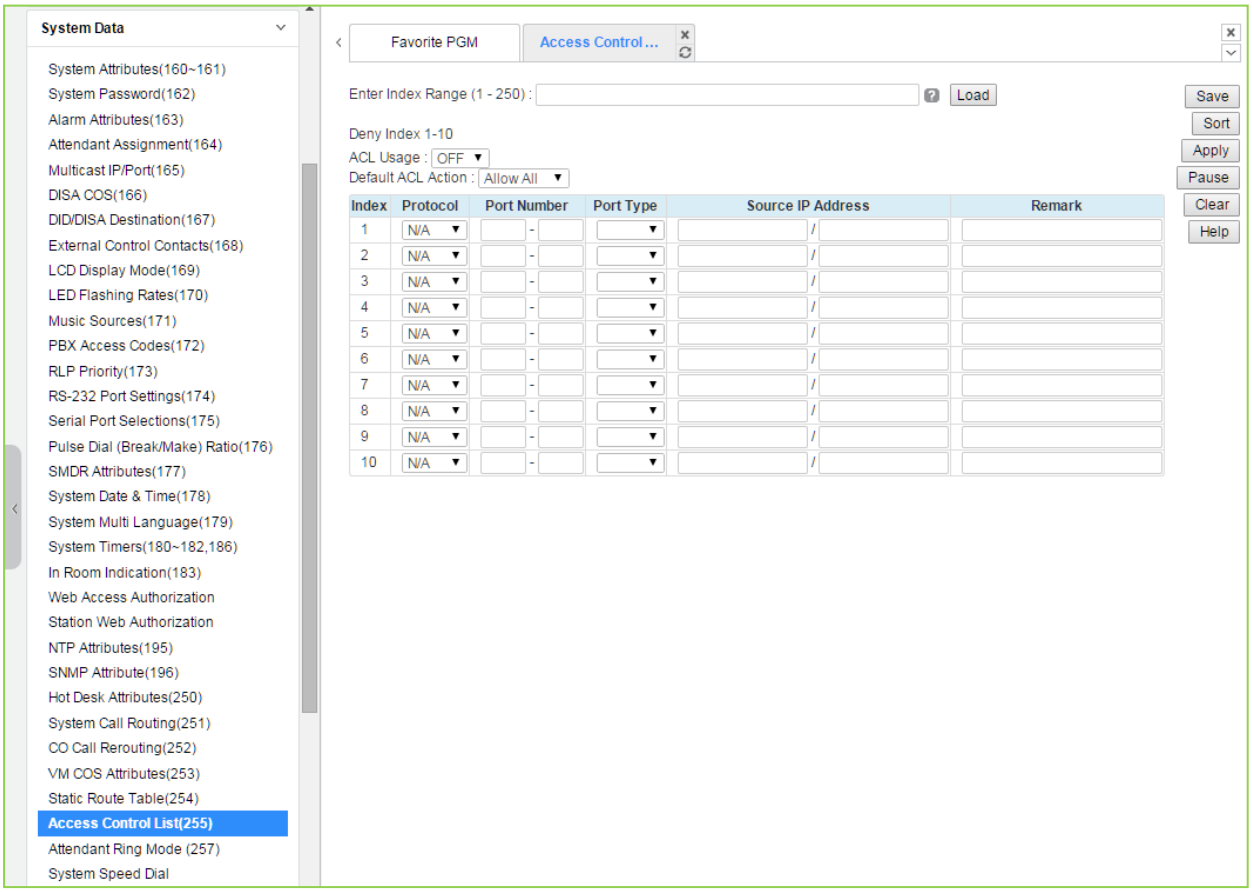


Figure 4.4.5.31-1 Access Control List

Access Control determines the Source IP addresses that can access the system for specific protocols.

Table 4.4.5.31-1 ACCESS CONTROL LIST

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Protocol	This field defines the accessing protocol type.	N/A, ALL, TCP, UDP, ICMP	N/A
Port number	This field further defines the protocol TCP/IP port number.		
Port type	The port number can be configured as either the source or destination port number.	DEST/ SRC	
Source IP address	The allowed source IP address and net mask allowed access is defined by this field.		
Remark	This is a general remark field.		

4.4.5.32 Attendant Ring Mode – PGM 257

Selecting Attendant ring mode will display Attendant ring mode entry page. Click **[Save]** button after changing Value.

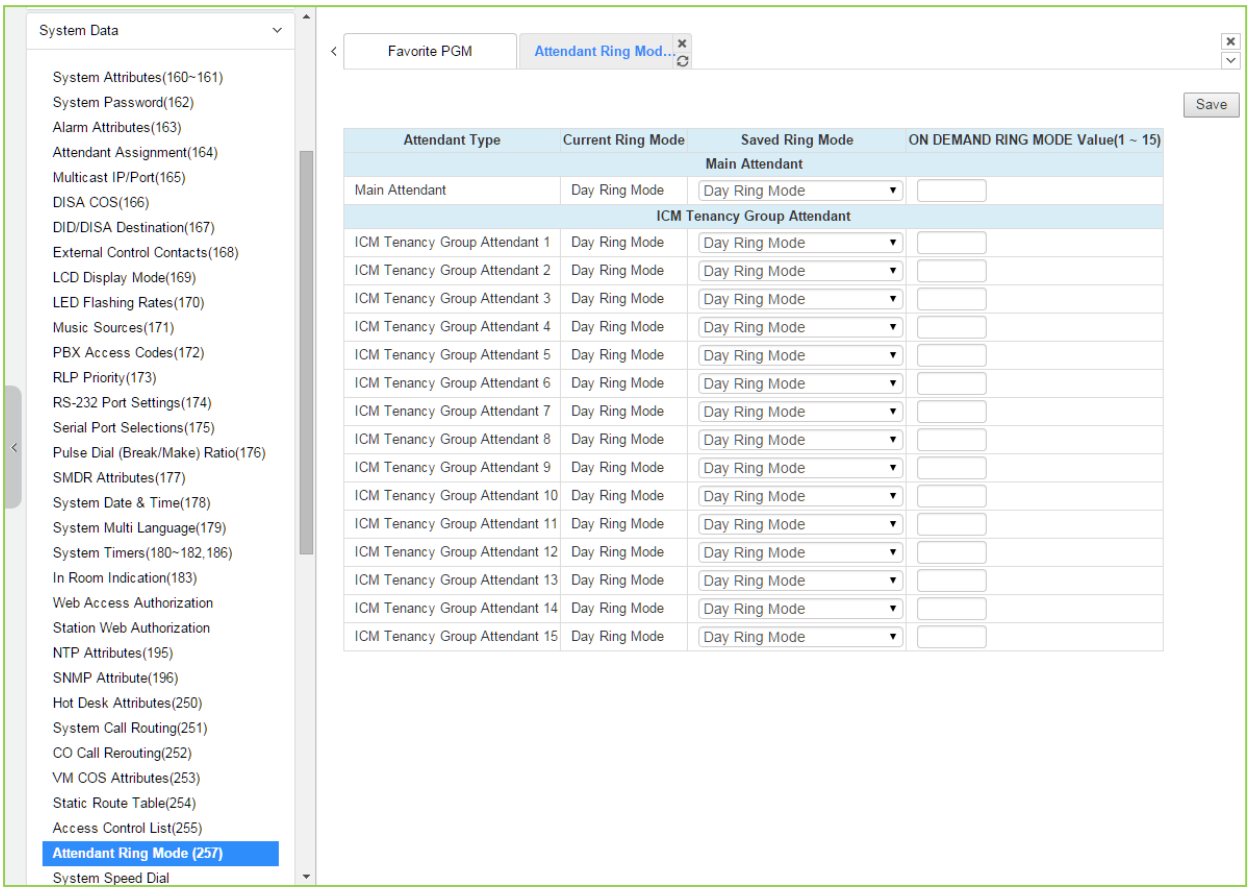


Figure 4.4.5.32-1 Attendant Ring Mode

Administrator assigns the ring mode to 1 Main attendant and 15 ICM Tenancy Group Attendant.

Five ring modes are supported as Day, Night, Timed, Auto, On demand ring mode (1~15).

The Attendant controls the system Ring mode changing from Auto ring Mode to Day, Night, Timed or On demand ring mode. Based on the ring mode selected in the field of Saved Ring Mode, different ring assignments, COS (Class of Service) and answering privileges are invoked for the system users.

In case Main attendant select the other ring mode of Day ring mode in the field of Saved Ring Mode, ICM Tenancy group attendant controls the system ring mode instead of Main attendant. So Current Ring Mode and Saved Ring Mode of ICM Tenancy group attendant may be different.

4.4.5.33 System Speed Dial

Selecting System Speed Dial will display the System Speed Dial entry page. Enter a valid range of System Speed Dial numbers and click **[Load]** to enter Speed Dial data. Click **[Save]** button after changing Value.

Enter Index range: eMG80 : 2000-4999 / eMG800: 2000-9999

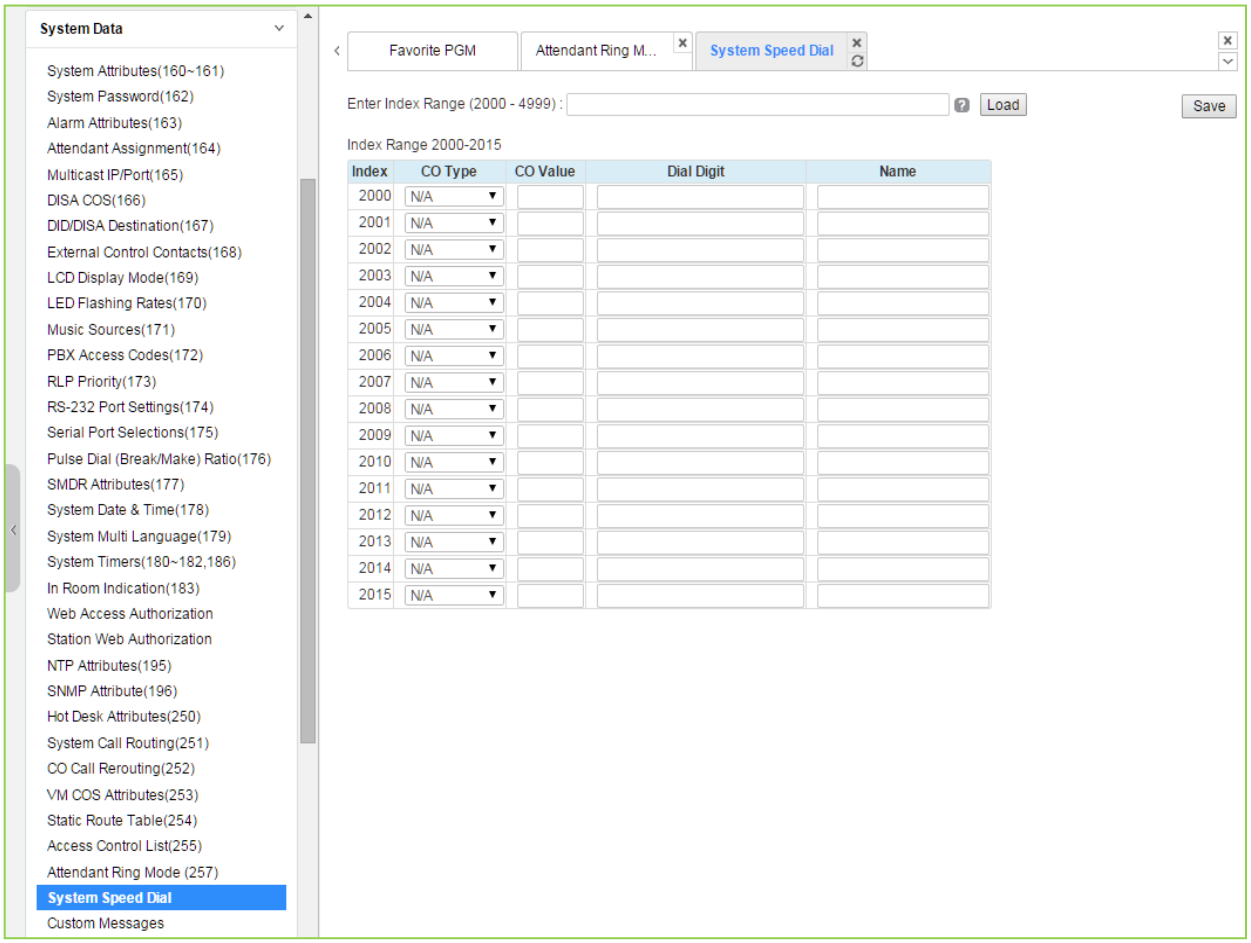


Figure 4.4.5.33-1 System Speed Dial List

The eMG80 (eMG800) has memory for 3000(8000) Speed Dial numbers of up to 25 digits each. Each System Speed bin (index) is assigned the CO/IP Line for the Speed Dial, the number to be dialed and a name for Dial-by-Name.

4.4.5.34 Custom Messages

Selecting Custom Messages will display the Custom Message Table data entry page. Click **[Save]** button after changing Value.

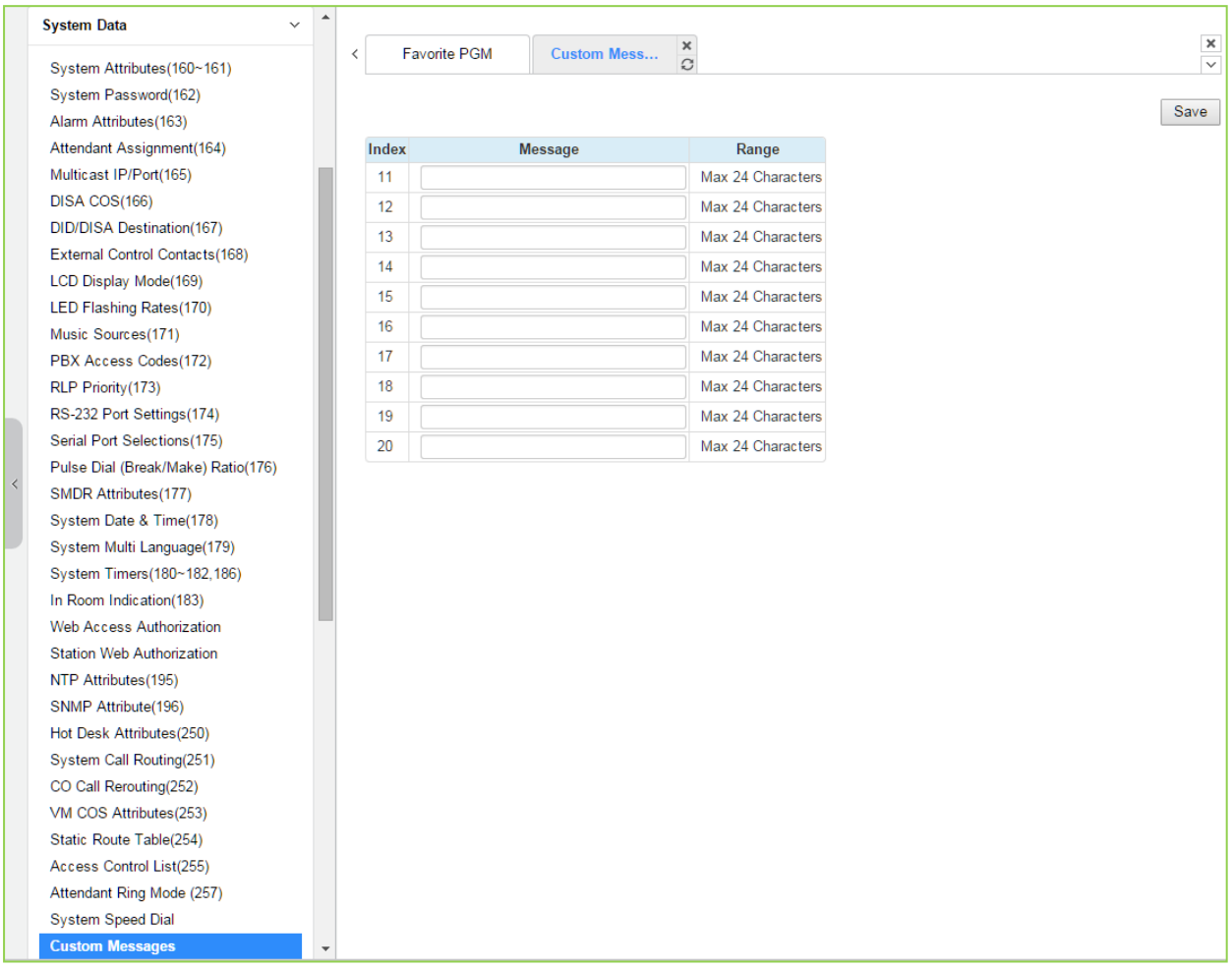


Figure 4.4.5.34-1 Custom Message

The system's 10 Custom messages can be defined with up to 24 characters each.

4.4.5.35 PPTP Attributes

Selecting PPTP Attributes will display the PPTP Attributes Table data entry page. Click **[Save]** button after changing Value.

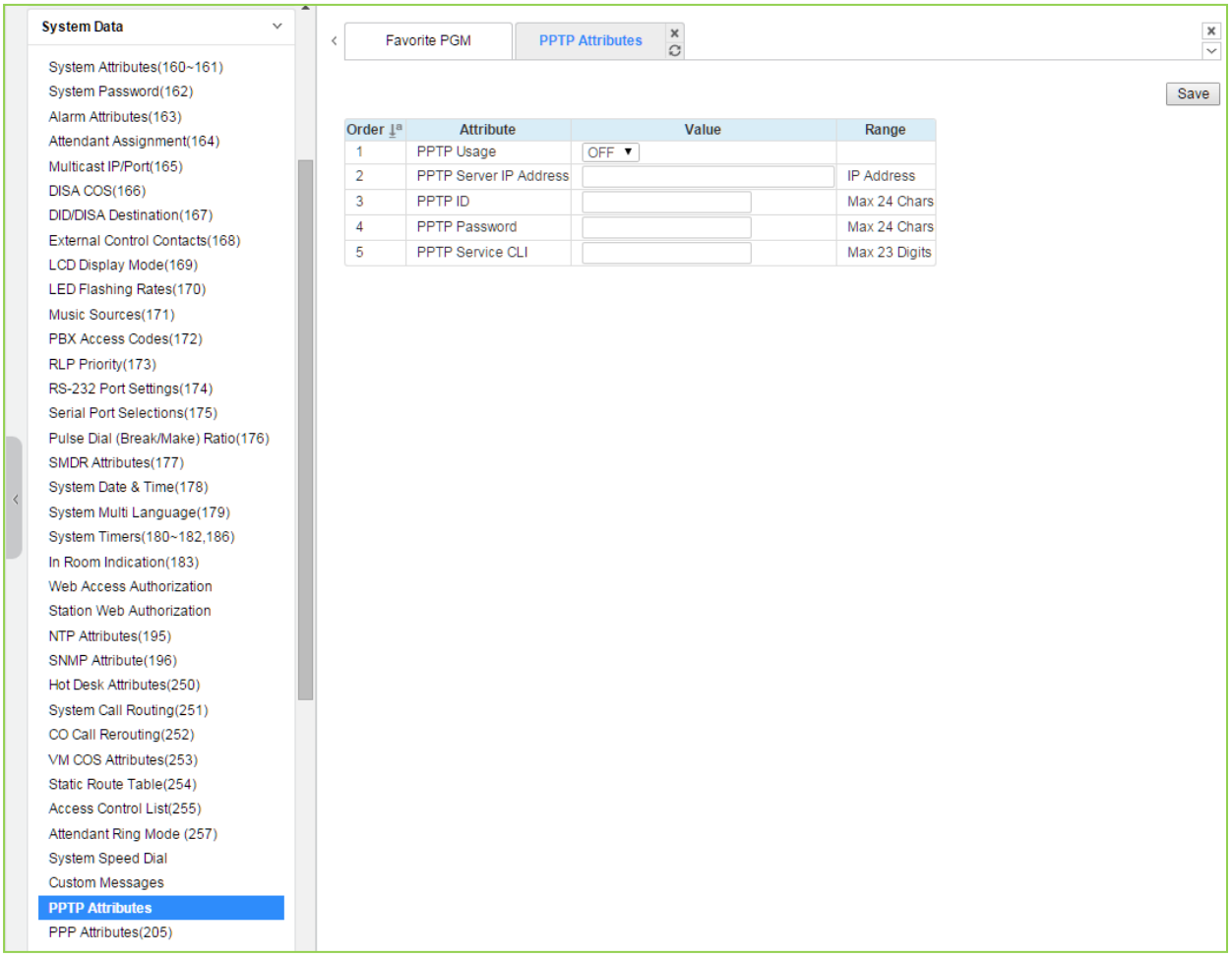


Figure 4.4.5.35-1 PPTP Attributes

When required, the system supports Point to Point Tunneling Protocol (PPTP). PPTP must be enabled and values for the PPTP server IP address, Id and password must be entered and a server name may be entered.

4.4.5.36 PPP Attributes – PGM 205

Selecting PPP Attributes will display the PPP Attributes data entry page, Figure 4.4.5.35-1. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

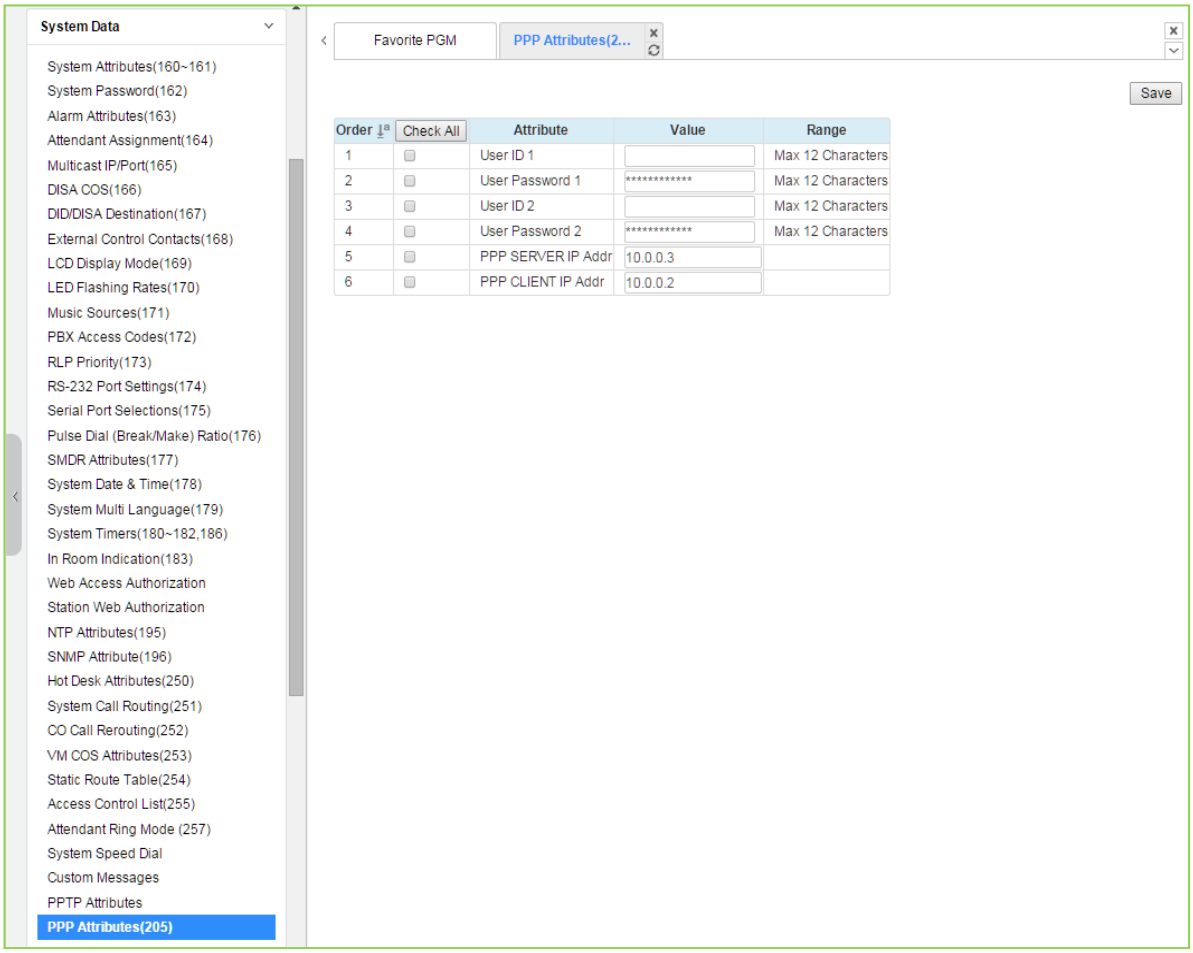


Figure 4.4.5.36-1 PPP Attributes

In addition to remote access via an IP network connection, the system database may be accessed remotely via an ISDN connection. Placing a call over an ISDN Line to the designated PPP Station will provide a connection to the system database. The system will request a user id and password, which must match one of the User Ids and passwords assigned. After a matching id and password are received, the iPECS Login Home page is provided.

Table 4.4.5.36-1 PPP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
User ID 1	The System accepts this PPP ID 1 as valid.	Max. 12 characters	likppp01
User Password 1	The password entered is used to authorize PPP ID 1.	Max. 12 characters	lpkts01
User ID 2	The System accepts this PPP ID 2 as valid.	Max. 12 characters	likppp02
User Password 2	The password entered is used to authorize PPP ID 2.	Max. 12 characters	lpkts02
PPP Server IP Addr	When configured, the PPP Server IP Address must match this entry. To apply this option the system must be restarted.	IP Address	
PPP Client IP Addr	When configured, the PPP Client IP Address must match this entry. To apply this option the system must be restarted.	IP Address	

4.4.6 Station Group Data

Selecting the Station Group Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

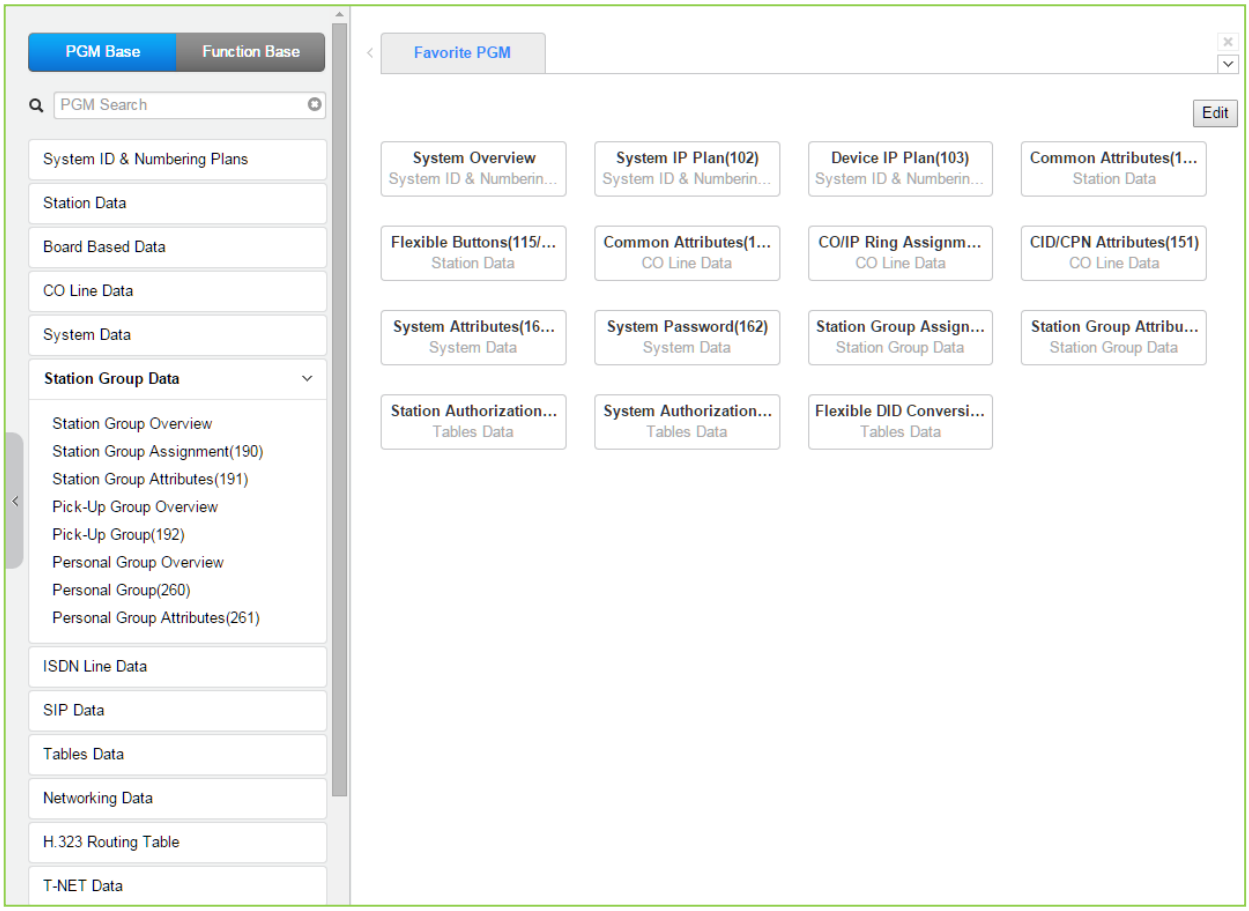


Figure 4.4.6-1 Station Group Data

Stations can be grouped so that incoming calls will search (Station) for an idle station in the group. The system allows assignment of three Station processes, Circular, Terminal and ACD. In addition, there are eight (8) functional groups available: ACD (Automatic Call Distribution) based on ACD station, Ring, Call Pick-Up, External Voice Mail (SLT connected), VSF-Voice Mail, iPECS Feature Server Voice Mail and Network Voice Mail, and UCS Groups.

Certain types of groups can incorporate announcements, which are given to the calling party. The system‘s VSF can store up to two hundreds (200) announcements for use with Station Groups.

Note that a station can belong to multiple groups if the groups are all of the same type. Also note that when a station group is assigned to a group type (Circular, Terminal, ACD, VM, FS VM, VSF-VM, Net VM, UCS and Ring), the group attributes are initialized to the default values.

4.4.6.1 Station Group Overview

Selecting the Station Group Overview item will return the Station Group Overview page. This page displays the Station Group attributes (type, pick-up attribute and member stations) for all the Station Groups.

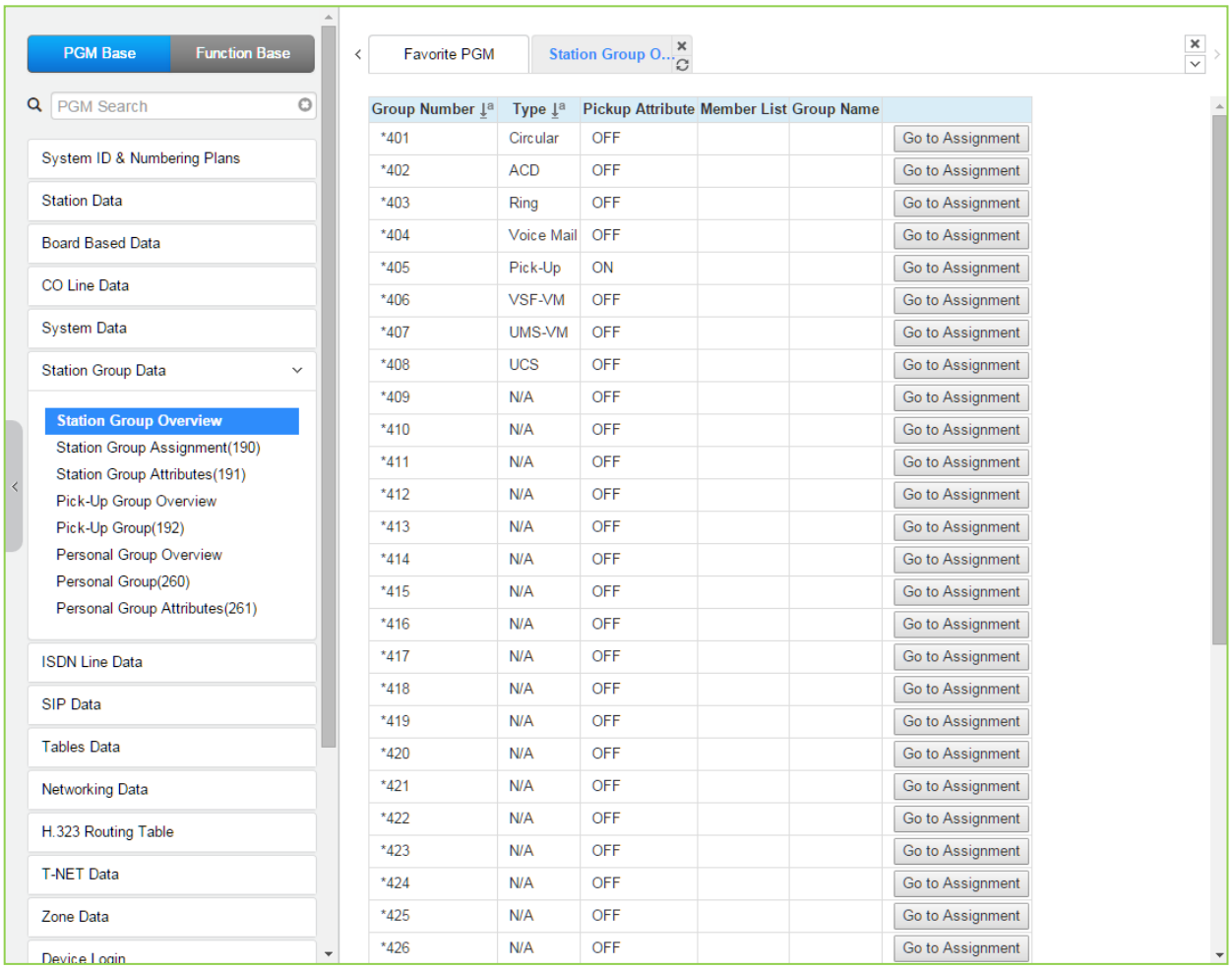


Figure 4.4.6.1-1 Station Group Overview

All information of each group will be displayed and changed the assignment on this page.

Each Group can be assigned Type, Pickup attributes, Member list, and Group name by clicking “Go to Assignment” on this page. Station Group Assignment (190) will be displayed and directly go to Station Group Attributes (191) of the group by clicking “Go to Attributes”.

4.4.6.2 Station Group Assignment - PGM 190

Selecting Station Group Assignment will display the Station Group data entry page. Enter the desired Station Group number and click **[Load]** to display the Group Assignment.

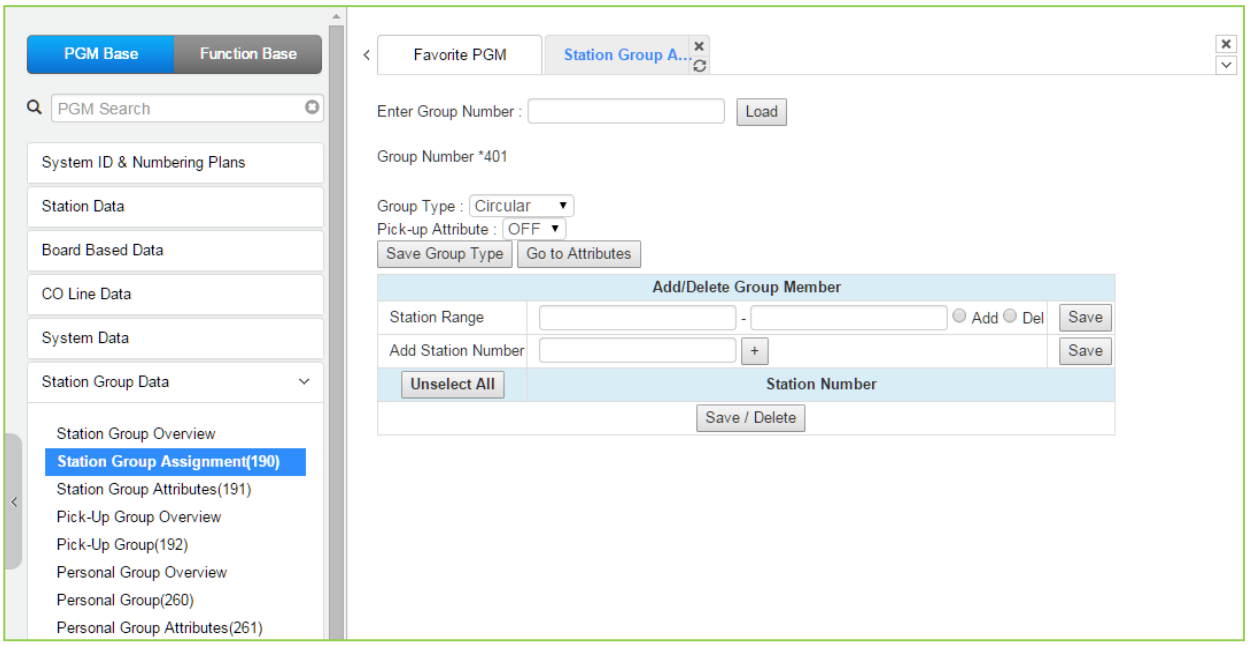


Figure 4.4.6.2-1 Station Group Assignments

Under Station Group Assignments the type, members and Pick-Up attributes are assigned to the Station Group. Note for the Net VM group, the network number must be assigned as the Net VM group member station.

Table 4.4.6.2-1 STATION GROUP ASSIGNMENT

ATTRIBUTE	– DESCRIPTION	RANGE	DEFAULT
Group Type	Defines the type of station group.	N/A, Circular, Terminal, ACD, Ring, Voice Mail, Pick-Up, VSF-VM, UMS VM, NET VM, UCS	N/A
Pick-up Attribute	Stations can pick-up group calls ringing at other stations in the group. This does not apply to the VM groups.	OFF ON	OFF
Member	Assigns stations as members of a station group or, for the Net VM group type, defines the Net Number of the group.		-

4.4.6.3 Station Group Attributes - PGM 191

Selecting Station Group Attributes will display the Station Group Attributes data entry page. Enter the Station Group number and click **[Load]**, the Web page for the selected group will be displayed as in Figure 4.4.6.3-1 to Figure 4.4.6.3-8 based on the Group type.

Each type of group has a different set of available attributes relating to announcements, timers, overflow, etc. Table 4.4.6.3-1 through Table 4.4.6.3-8 provides descriptions for the attributes and data entries required. Note that the attributes for the Circular and Terminal Station groups are given in Table 4.4.6.3-1 and the UCD attributes include the ACD functions Table 4.4.6.3-2.

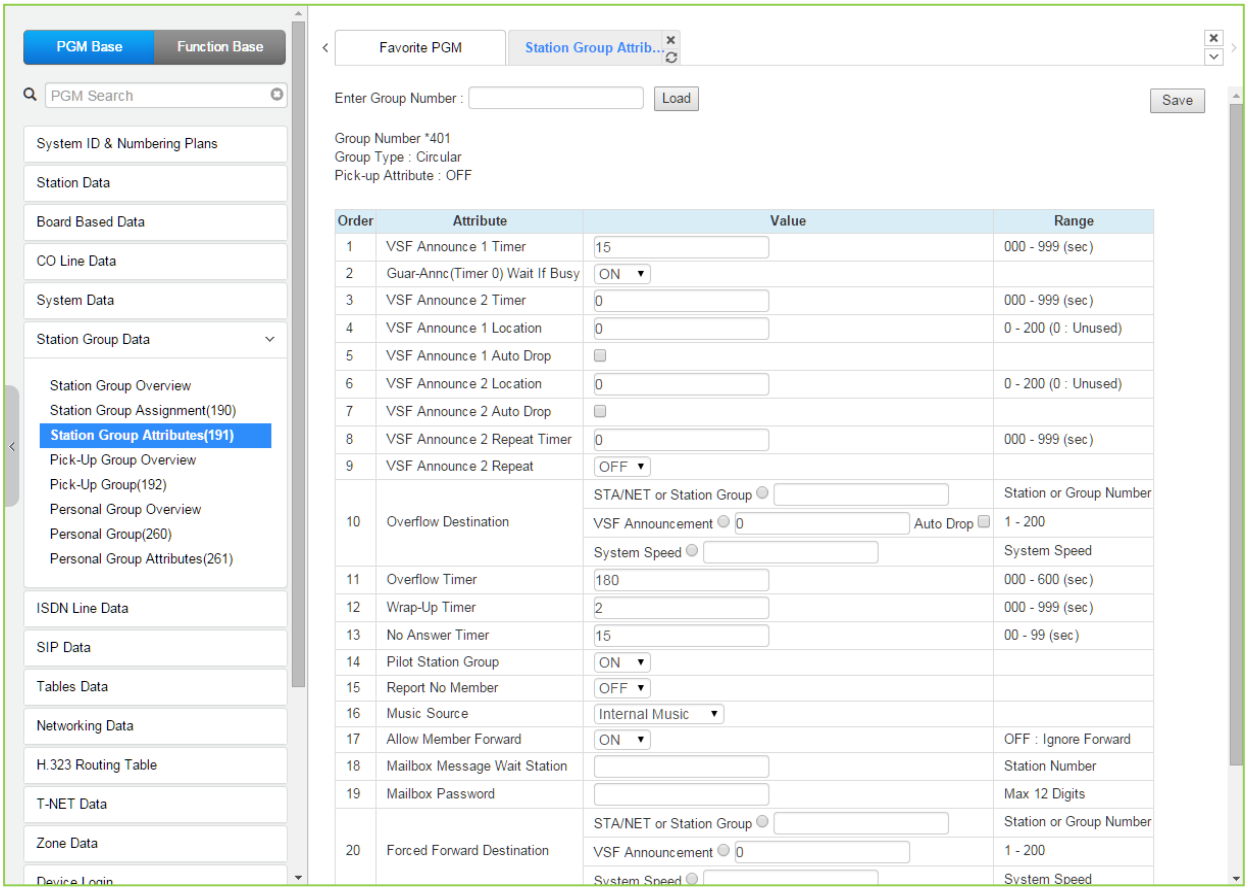


Figure 4.4.6.3-1 Terminal & Circular Group Attributes

Table 4.4.6.3-1 TERMINAL & CIRCULAR GROUP ATTRIBUTES

ATTRIBUTE	– DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds the VSF Announce 1 timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the station process (guaranteed announcement).	000~999 (seconds)	015
Guar-Annc(Timer 0) Wait If Busy	When a call assigned to receive a guaranteed announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or bypass the announcement (OFF).	OFF ON	ON

Table 4.4.6.3-1 TERMINAL & CIRCULAR GROUP ATTRIBUTES

ATTRIBUTE	– DESCRIPTION	RANGE	DEFAULT
VSF Announce 2 Timer	After the 1st announcement, the 2nd ANNC TMR is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 (seconds)	000
VSF Announce 1 Location	The Station Group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is the VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement.	Check box	
VSF Announce 2 Location	The Station Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is the VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF Announce 2 Auto Drop	If this attribute is selected, the call will drop after the 2nd VSF announcement.	Check box	
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to callers that remain in queue at intervals of the Announcement 2 Repeat Timer. Note VSF Announce 2 Repeat below must be “ON”.	000~999 (seconds)	000
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the Announce 2 Repeat Timer interval, defined above.	OFF ON	OFF
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or route to the assigned overflow destination. If VSF Announcement is selected, Auto Drop can be checked.	STA/NET or Station Group/ VSF Announcement/ Auto Drop/ System SPD	
Overflow Timer	A call to the group will remain at the last station in the group or can be sent to the assigned Overflow Destination after expiration of the Overflow Timer.	000~600 (seconds)	180
Wrap-Up Timer	After terminating a group call, a Group member will be maintained in a busy state for the duration of the Wrap-Up timer.	000~999 (seconds)	002
No Answer Timer	Calls to a station in the group are directed to the station, if unavailable or unanswered in the No Answer Timer, the call can be routed based on the assigned hunt process.	00~99 (seconds)	15
Pilot Station Group	A circular/terminal Station group can be set so that only calls to the pilot number (station group number) will hunt.	OFF ON	ON
REPT No Member	If a call is received and no members are on-duty, an ICM call will return re-order tone, while a CO/IP call will be routed to the overflow destination.	OFF ON	OFF
Music Source	A Music source can be assigned so that calls to the group will receive audio from the assigned source in	Ring back tone/ Internal Music/	Internal Music

Table 4.4.6.3-1 TERMINAL & CIRCULAR GROUP ATTRIBUTES

ATTRIBUTE	– DESCRIPTION	RANGE	DEFAULT
	place of ring-back tone.	External Music/ VSF MOH/ SLT MOH1~5/ VSF MOH2~3	
Allow Forward Member	A member activating Call forward may be placed in an unavailable state for Station group calls (ON). When OFF, group calls are sent to the member as normal (OFF).	OFF ON	ON
Mailbox Message Wait Station	When a call overflows or routes to the VM group, a station number is used to identify the Mailbox for the group messages.	Station Number	
Mailbox Password	The password associated with a group Mailbox is defined here. The password is used in conjunction with the group Mailbox as with a normal station.	Max. 12 digits	
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, bypassing the hunt process. “Forced Forward”, below, must be enabled.	STA./NET or Station group/ VSF Announcement/ Sys. Speed	
Forced Forward Destination Usage	Calls to a Station group may forward directly to a defined destination, see above “Forced Forward Destination” when Forced Forward is enabled for the group.	OFF ON	OFF
Group Name	A name can be designated for the group.	Max. 12 characters	
Maximum Queued Call Counter	When the number of calls queued to the group match this parameter, new calls will receive error tone and be disconnected after the VSF Announcement 1, if assigned, is played.	00-99	99

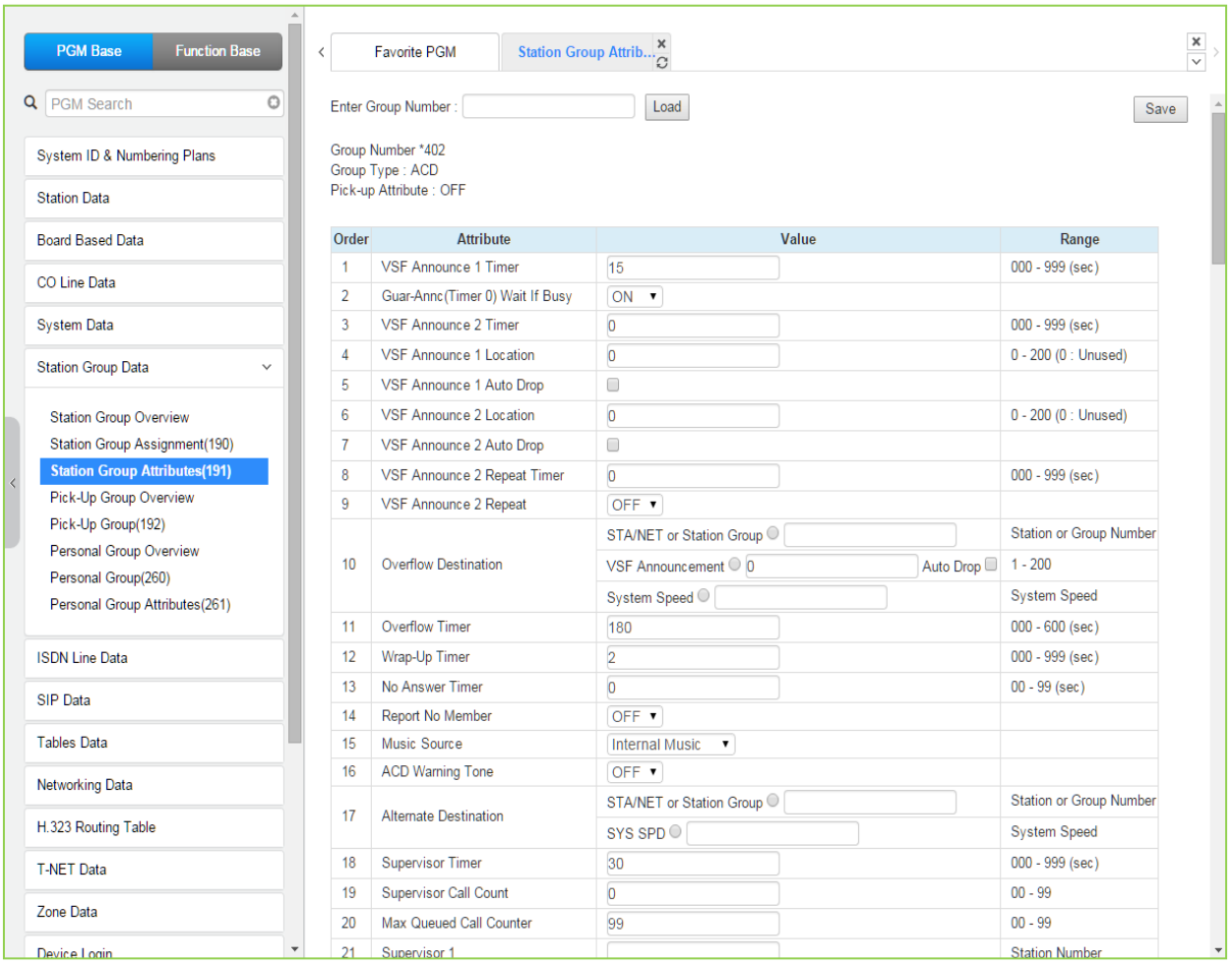


Figure 4.4.6.3-2 ACD Group Attributes

Table 4.4.6.3-2 ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds the VSF Announce 1 Timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 (seconds)	015
Guar-Annc (Timer 0) Wait If Busy	When a call assigned to receive a guaranteed announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or bypass the announcement. (OFF)	OFF ON	ON
VSF Announce 2 Timer	After the 1st announcement, a 2nd timer is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 (seconds)	000
VSF Announce 1 Location	Each Station Group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is a VSF announcement number. An entry of 00 indicates no announcement.	00~200	00: none

Table 4.4.6.3-2 ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement		
VSF Announce 2 Location	The Station Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is a VSF announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF Announce 2 Auto Drop	If this attribute is selected, the call will drop after the 2nd VSF announcement		
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to calls that remain in queue at intervals of the VSF Announce 2 Repeat Timer. Note repeating must be “ON” under VSF Announce 2 Repeat below.	000~999 (seconds)	000
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the VSF Announce 2 Repeat Timer interval.	OFF ON	OFF
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will queue to the group or route to the assigned Overflow Destination. If VSF Announce is assigned, Auto Drop is available.	STA/NET or Station Group/ VSF Announcement/ Auto Drop/ System SPD	
Overflow Timer	A call to a group will remain queued to the group or be sent to the assigned Overflow Destination after expiration of the Overflow Timer	000~600 (seconds)	180
Wrap-Up Timer	After terminating a group call, a Station Group member will be maintained in a busy state for the duration of the Wrap-Up timer.	000~999 (seconds)	002
ACD No Answer Timer	Calls to an agent in the group are directed to the station, if unanswered in the NO ANSWER TIMER, the call can be routed another agent	00-99 (seconds)	00
REPT No Member	If a call is received and no members are on-duty, an ICM call will return re-order tone, while a CO/IP call will be routed to the overflow destination.	OFF ON	OFF
Music Source	A Music source can be assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone while in queue.	Ring back tone/ Internal Music/ External Music/ VSF MOH/ SLT MOH1~5/ VSF MOH2~3	Internal Music
ACD Warning Tone	An ACD supervisor can monitor agent conversations. A warning tone can be provided to the agent and connected party when the supervisor activates the monitor feature.	OFF ON	OFF
Alternate Destination	When a call comes into the group and there are no group members available, the call will be routed to the assigned Alternate Destination.	STA/NET or Station Group, System SPD	....

Table 4.4.6.3-2 ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Supervisor Timer	When calls have been in queue longer than the Supervisor Timer, the ACD supervisor is notified by a display of the longest queue time.	000~999 (seconds)	030
Supervisor Call Count	When the number of calls in queue exceeds the Supervisor Call Count, the ACD Supervisor is notified by a display of queued calls.	00~99	00
Maximum Queued Call Counter	When the number of calls queued to the group match this parameter, new calls will receive error tone and be disconnected after the VSF Announcement 1, if assigned, is played.	00-99	99
Supervisor 1 to 5	Any valid iPECS IP or LDP Phone with display can be assigned as a Supervisor, max. 5 ACD Supervisors.	Station	
ACD DND Wrap Timer	This parameter sets the duration a station will receive ring before the system places the station in ACD DND and unavailable for group calls. A setting of '00' disables automatic ACD DND.	002~200 (Sec.)	010
Entered Caller ID ICLID Usage	Within 5 seconds of a guaranteed announcement, the caller may dial digits as an ICLID. The user-dialed digits are compared to the ICLID Table entries, for routing or, for a single dialed digit, to the ACD CCR table below.	OFF ON	OFF
Forward Member Calls	A member activating Call Forward may be placed in an unavailable state for Station group calls (ON). When OFF, group calls are sent to the member as normal.	OFF : no FWD ON : FWD	ON
Group Name	An ACD group name can be designated.	Max. 12 characters	
CIQ Route 1	When an ACD call is queued, the caller may be allowed to dial a digit to exit the queue and route to another destination. The alternate destination is based on the user-dialed digit and can be a station, Station group, system-speed bin, or network station. Dial the digit below for the type of destination and enter the value associated with the destination. 1: Enter a station number. 2: Enter a Station group number. 3: Enter a system speed bin. 4: Enter a network station number		Not selected
CIQ Route 2			Not selected
CIQ Route 3			Not selected
CIQ Route 4			Not selected
CIQ Route 5			Not selected
CIQ Route 6			Not selected
CIQ Route 7			Not selected
CIQ Route 8			Not selected
CIQ Route 9			Not selected
CIQ Route 0			Not selected
ZAP Tone	Agents using a headset can have ACD calls connected to them automatically preceded by a tone (Zap tone).	OFF ON	OFF
CIQ Announcement	If enabled, queued callers receive the CIQ message (You are # in queue) after the 1st and 2nd announcement.	OFF ON	OFF
Mailbox Message Wait Station	When an ACD call overflows or routes to the VM group, a station number is used to identify the Mailbox for the ACD group messages	Station number	
Mailbox Password	The password associated with an ACD group Mailbox is defined here. The password is used in conjunction with the ACD group Mailbox as with a normal station.	Max. 12 digits	

Table 4.4.6.3-2 ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CIQ Display To Agent - Mode	When an ACD call is in queue, the Call in queue information is displayed in the LCD of agent and supervisor phones.	OFF ON	OFF
CIQ #1 Page Alert - Threshold	If the queued call count exceeds the threshold, the system plays the CIQ #1 Announcement to the CIQ #1 Page Zone after the CIQ #1 Announcement Delay Timer. The announcement is repeated at intervals of the CIQ #1 Announcement Repeat Timer.	00-99	10
CIQ #1 Page Alert – Announcement Location	VSF announcement number for the CIQ #1 Announcement.	00-200	0
CIQ #1 Page Alert – Page Zone	Page Zone to receive CIQ #1 Announcement.	eMG80:00~15 or 00-40/ eMG800:0~105	00
CIQ #1 Page Alert - Delay Time	Delay timer for CIQ #1 Announcement	000-180	015
CIQ #1 Page Alert - Repeat Time	Interval for repeating the CIQ #1 Announcement.	000-180	045
CIQ #2 Page Alert - Threshold	If the queued call count exceeds the threshold, the system plays the CIQ #2 Announcement to the CIQ #2 Page Zone after the CIQ #2 Announcement Delay Timer. The announcement is repeated at intervals of the CIQ #2 Announcement Repeat Timer.	00-99	20
CIQ #2 Page Alert - Announcement Location	VSF announcement number for the CIQ #2 Announcement.	00-200	0
CIQ #2 Page Alert – Page Zone	Page Zone to receive CIQ #2 Announcement.	eMG80:00~15 or 00-40/ eMG800:0~105	00
CIQ #2 Page Alert - Delay Time	Delay timer for CIQ #2 Announcement	000-180	015
CIQ #2 Page Alert - Repeat Time	Interval for repeating the CIQ #2 Announcement.	000-180	025
CIQ #3 Page Alert - Threshold	If the queued call count exceeds the threshold, the system plays the CIQ #3 Announcement to the CIQ #3 Page Zone after the CIQ #3 Announcement Delay Timer. The announcement is repeated at intervals of the CIQ #3 Announcement Repeat Timer.	00-99	30
CIQ #3 Page Alert - Announcement Location	VSF announcement number for the CIQ #3 Announcement.	00-200	0
CIQ #3 Page Alert - Page Zone	Page Zone to receive the CIQ #3 Announcement.	eMG80:00~15 or 00-40/ eMG800:0~105	00
CIQ #3 Page Alert - Delay Time	Delay timer for the CIQ #3 Announcement	000-180	015
CIQ #3 Page Alert - Repeat Time	Interval for repeating the CIQ #3 Announcement.	000-180	005

Table 4.4.6.3-2 ACD GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, by passing the hunt process. "Forced Forward", below, must be enabled.	STA./NET or Station group, VSF Announcement, Sys. Speed	
Forced Forward Dest Usage	Calls to a Station group may forward directly to a defined destination, see above "Forced Forward Destination" when Forced Forward is enabled for the group.	OFF ON	OFF
Auto Ring Mode	Reference table of Auto Ring Mode Table Time for ACD Group Ring Mode. When Manual Change is selected, the Group supervisor can change the ACD group ring mode manually with ACD Group Ring Mode flexible number.	Manual Change/ Table 0 ~ 15	Manual Change
Day Destination	When the ACD Ring Mode Table schedule is in the Day mode, ACD group calls route to the destination defined here.	Normal Service, STA/NET or Station group, VSF Announcement, Sys. Speed	Normal Service
Night Destination	When the ACD Ring Mode Table schedule is in the Night mode, ACD group calls route to the destination defined here.	Normal Service, STA/NET or Station group, VSF Announcement, Sys. Speed	Normal Service
Timed Destination	When the ACD Ring Mode Table schedule is in the Timed mode, ACD group calls route to the destination defined here.	Normal Service, STA/NET or Station group, VSF Announcement, Sys. Speed	Normal Service
ACD Group Queuing Call Indication	If there are queued group calls, the queuing indication can be served to group members by Mute Ring and LED button flashing.	OFF ON (RING and LED) ON (LED only)	OFF

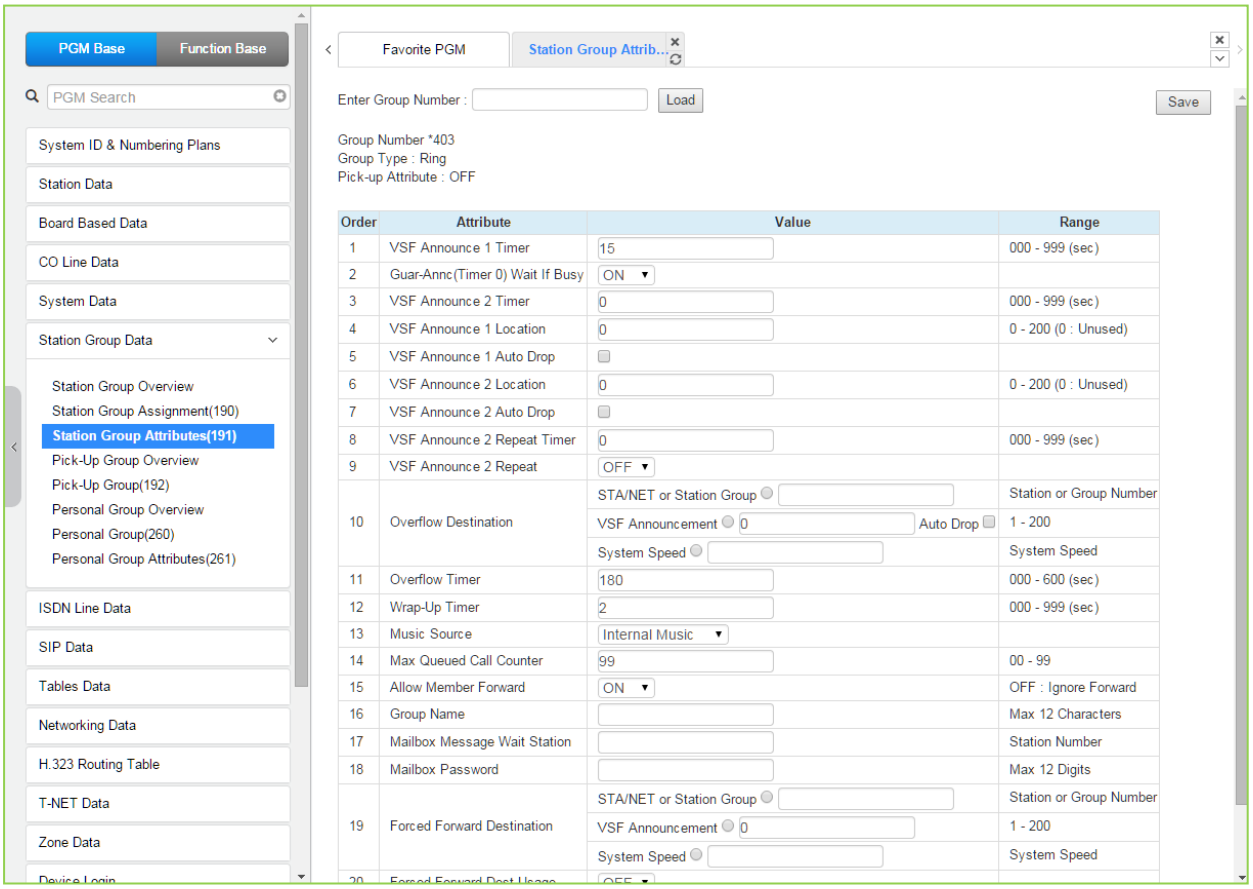


Figure 4.4.6.3-3 Ring Group Attributes

Table 4.4.6.3-3 RING GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available station. If the queue period exceeds the VSF Announce 1 Timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the hunt process (guaranteed announcement).	000~999 (seconds)	015
Guar-Ann(Timer 0) Wait If Busy	When a call assigned to receive a guaranteed announcement arrives and all channels are busy, the call may wait with Ring back until a channel is available (ON) or bypass the announcement. (OFF)	OFF ON	ON
VSF Announce 2 Timer	After the 1st announcement, a 2nd announcement Timer is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned 2nd VSF announcement.	000~999 (seconds)	000
VSF Announce 1 Location	Each Ring Group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none

Table 4.4.6.3-3 RING GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement.	Check box	
VSF Announce 2 Location	The Ring Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF announce Auto Drop	If this attribute is selected, the call will drop after the 2nd VSF announcement	Check box	
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to calls that remain in queue at intervals of the VSF Announce 2 Repeat Timer. Note VSF Announce 2 Repeat below must be “ON”.	000~999 (seconds)	000
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the VSF Announce 2 Repeat Timer interval, defined above.	OFF ON	OFF
Overflow Destination	A call to the group will continue to ring group member stations until answered. The call will remain at the last station or routes to the assigned Overflow Destination. If VSF Announce is assigned, Auto Drop is available.	STA/NET or Station Group, VSF Announcement, Auto Drop, System SPD	
Overflow Timer	A call to a group will remain in the group or route to the assigned Overflow Destination after expiration of the Overflow Timer.	000~600 (seconds)	180
Wrap-Up Timer	After terminating group call, a Station Group member will be maintained in a busy state for the duration of the Wrap-Up Timer.	000~999 (seconds)	002
Music Source	A Music source can be assigned so that calls to the group will receive audio from the assigned source in place of ring-back tone.	Ring back tone/ Internal Music/ External Music/ VSF MOH/ SLT MOH1~5/ VSF MOH2~3	Internal Music
Maximum Queued Call Counter	When the number of calls queued to the group match this parameter, new calls will receive error tone and be disconnected after the VSF AA announcement, if assigned, is played.	00-99	99
Allow Forward Member	A member activating Call Forward may be placed in an unavailable state for Station group calls (ON). When OFF, group calls are sent to the member as normal.	OFF : no FWD ON : FWD	ON
Group name	A group name can be designated.	Max.12 characters	
Mailbox Message Wait Station	When a call overflows or routes to the VM group, a station number is used to identify the Mailbox for the group messages.	Station number	
Mailbox Password	The password associated with the group Mailbox is defined here. The password is used in conjunction with the group Mailbox as with a normal station.	Max. 12 digits	
Forced Forward	Calls to a Station group may forward directly to a defined	STA/NET or Station	

Table 4.4.6.3-3 RING GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Destination	destination, bypassing the hunt process. “Forced Forward”, below, must be enabled.	group, VSF Announcement, Sys. Speed	
Forced Forward Dest Usage	Calls to a Station group may forward directly to a defined destination, see above “Forced Forward Destination” when Forced Forward is enabled for the group.	OFF ON	OFF
Ring group indication	When a station calls a Ring Group, DSS/BLF buttons assigned for the calling station will flash and muted ring is received.	OFF, Mute, Burst	Mute

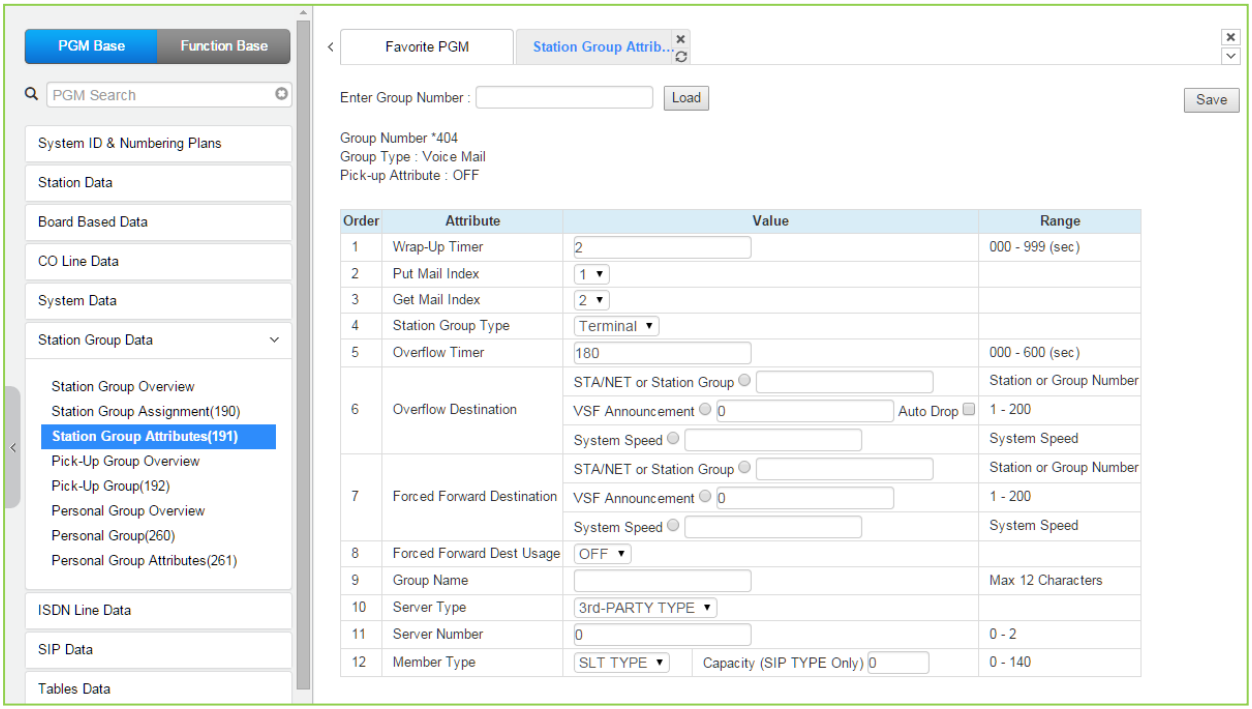


Figure 4.4.6.3-4 External Voice Mail Group Attributes

Table 4.4.6.3-4 EXTERNAL VOICE MAIL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Wrap-Up Timer	After terminating a group call, the VM port will be maintained in a busy state for the duration of the Wrap-Up timer.	000~900 (seconds)	002
Put Mail Index	For external analog Voice Mail groups, an index to the Voice Mail Dial Table that contains the “Put Mail” dial code.	1~4	1
Get Mail Index	For external analog Voice Mail groups, an index to the Voice Mail Dial Table that contains the “Get Mail” dial code.	1~4	2
Station Group Type	The type of Station Group process applied to the SLT ports connected to the VM can be assigned as Circular or Terminal.	Terminal/ Circular	Terminal

Table 4.4.6.3-4 EXTERNAL VOICE MAIL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Overflow Timer	A call to a group will remain at the last station in the group or be sent to the assigned Overflow Destination after expiration of the Overflow Time.	000~600 (seconds)	180
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or will route to the assigned Overflow Destination. If assigned VSF Announce, Auto Drop is available.	STA/NET or Station Group, VSF Announcement, Auto Drop, System Speed	-
Forced Forward Destination	Calls to a Station group may forward directly to a defined destination, by passing the hunt process. “Forced Forward”, below, must be enabled.	STA/NET or Station group, VSF Announcement, Sys. Speed	
Forced Forward Dest Usage	Calls to a Station group may forward directly to a defined destination, see above “Forced Forward Destination” when Forced Forward is enabled for the group.	OFF ON	OFF
Group Name	A group name can be designated.	Max. 12 character	
Server type	When a third party SIP server is used for AA/VM, or the IPCR or third party SIP recording server is used, the server type must be selected.	IPCR/ 3rd party	3rd party
Server number	Each IPCR and third party SIP server must be assigned a server number from 01 ~ 10 which correlates this group with an Agent table.	0-2	0
Member Type	Member type is assigned as SLT type or SIP Type. In case of SIP Type, enter the capacity from 1-140 for eMG80 & 1-1200 for eMG800.	eMG80:0-140 eMG800:0-1200 (SLT Type/ SIP Type)	SLT Type

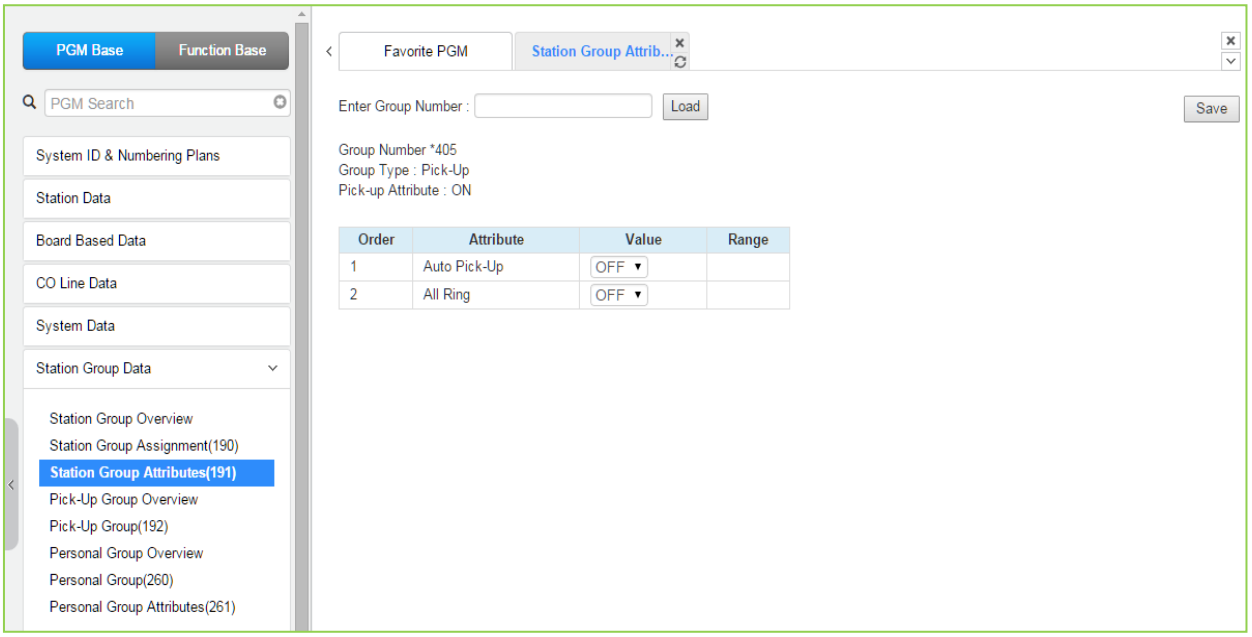


Figure 4.4.6.3-5 Pick-Up Group Attributes

Table 4.4.6.3-5 PICK-UP GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Pick Up	If a group member is ringing, other members of the Group can Pick-Up the ringing call by simply going “Off-hook”.	OFF ON	OFF
All Ring	When a call is offered to a member of the Pick-Up Group in the Tone Ring mode, all members will ring. Note Auto Pickup above must be “ON”.	OFF ON	OFF

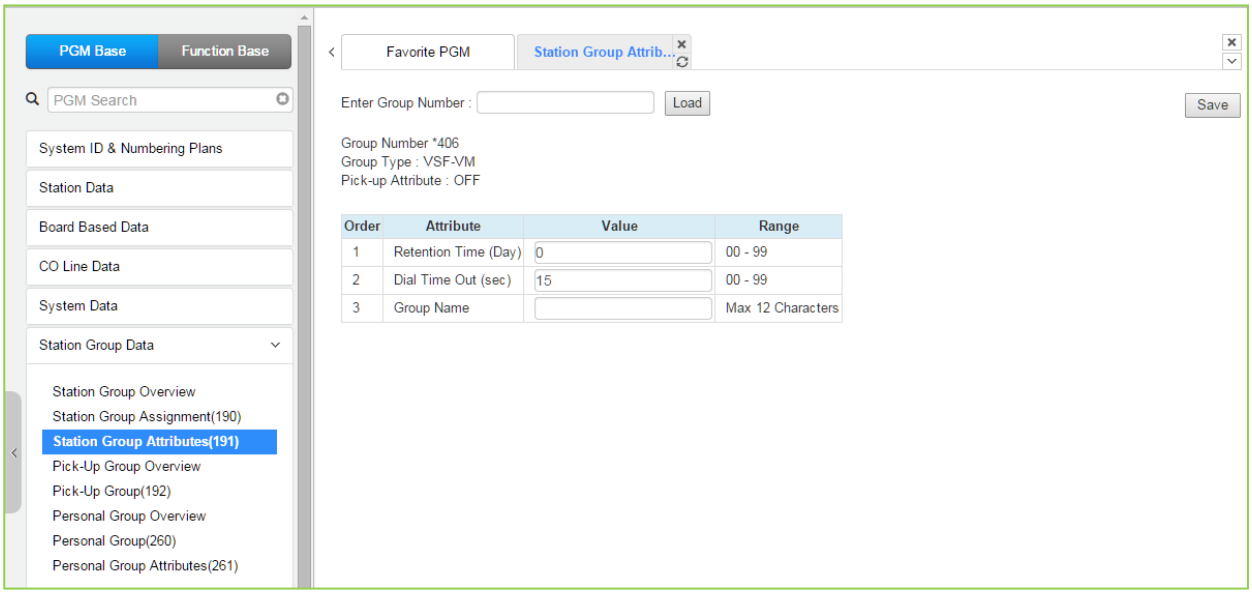


Figure 4.4.6.3-6 VSF Group Attributes

Table 4.4.6.3-6 VSF GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Retention Time (day)	When voice messages are stored in the VSF, the system will maintain (store) the message for the maximum number of days set in this program (0 to 99 days). (Not used)	00-99 (day)	0
Dial Time Out (sec)	This timer determines the inter-digit time for a VSF-AA or a VM session. If this timer expires while the VSF AA or VM is awaiting user input, the system will assume the remote party has disconnected and will return the channel to idle.	00-99 (seconds)	15
Group Name	A group name can be designated.	Max. 12 characters	

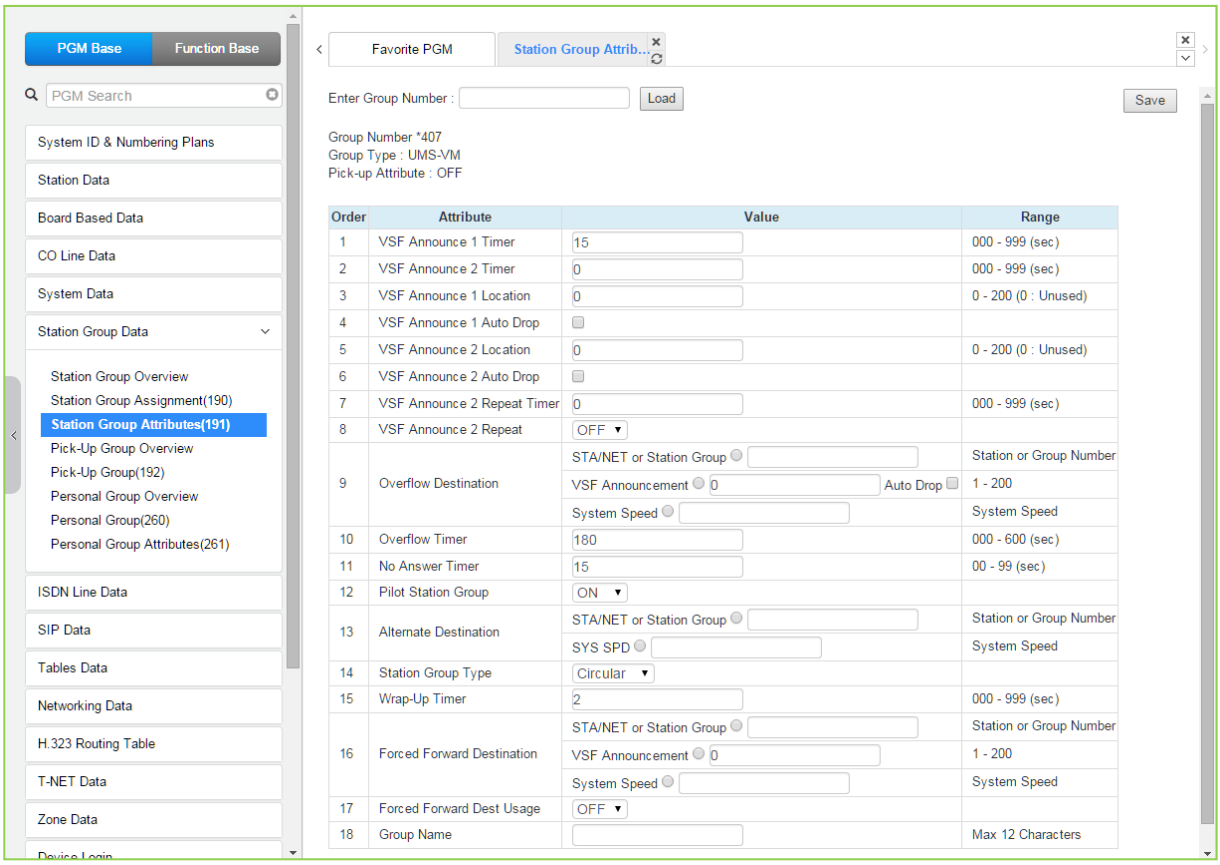


Figure 4.4.6.3-7 iPECS Feature Server Voice Mail Group (UMS-VM) Attributes

Table 4.4.6.3-7 FEATURE SERVER VOICE MAIL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
VSF Announce 1 Timer	If all stations in the group are busy when a call is offered, the call may continue to wait (queue) for an available FS-VM channel. If the queue period exceeds the VSF Announce 1 Timer, the call is sent to a VSF announcement. If the timer is set to 000, the call will receive the first announcement, in full, prior to the station process (guaranteed announcement).	000~999 (seconds)	015
VSF Announce 2 Timer	After the 1st announcement, a 2nd Announcement Timer is activated. At expiration, if the call remains queued to the group, the call is sent to the assigned VSF Announce 2 Location.	000~999 (seconds)	000
VSF Announce 1 Location	Each group can be assigned an announcement, which is played if the call remains queued beyond the VSF Announce 1 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates no announcement.	00~200	00: none
VSF Announce 1 Auto Drop	If this attribute is selected, the call will drop after the 1st VSF announcement.	Check box	
VSF Announce 2 Location	The Group can be assigned a 2nd announcement, which is played if the call remains queued beyond the VSF Announce 2 Timer duration. The announcement location is a VSF Announcement number. An entry of 00 indicates	00~200	00: none

Table 4.4.6.3-7 FEATURE SERVER VOICE MAIL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	no announcement.		
VSF Announce 2 Auto Drop	If this attribute is selected, the call will drop after the 2nd VSF announcement.	Check box	
VSF Announce 2 Repeat Timer	The 2nd announcement can be repeated to calls that remain in queue at intervals of the announcement 2 repeat timer. Note VSF Announce 2 Repeat below must be “ON”.	000~999 (seconds)	000
VSF Announce 2 Repeat	After the 2nd announcement, if the call remains queued to the group, the 2nd VSF announcement can be repeated at the VSF Announce Repeat timer interval, above.	OFF ON	OFF
Overflow Destination	A call to the group will continue to route through the group until answered or all group members have been tried. The call will remain at the last station or route to the assigned Overflow Destination. If assigned VSF Announce, Auto Drop is available.	STA/NET or Station group, VSF Announcement, Auto drop, System Speed	
Overflow Timer	A call to a group will remain at the last station in the group or route to the assigned Overflow Destination after expiration of the Overflow Timer.	000~600 (seconds)	180
No Answer Timer	Calls to a station in the group are directed to the station, if unavailable or unanswered in the No Answer Timer, the call can be routed based on the assigned hunt process.	00~99 (seconds)	15
Pilot Station Group	A FS-VM Station group can be set so that only calls to the pilot number (station group number) will hunt.	OFF ON	ON
Alternate Destination	When a call comes into the group and there are no group members available, the call will be routed to the assigned Alternate Destination.	STA/NET or Station group, System SPD	
Station Group type	The Station group process for the FS-VM group can be defined as Circular or Terminal.	Circular/ Terminal	Circular
Wrap-Up Timer	After terminating any call, the FS port will be maintained in a busy state for the duration of the Wrap-Up Timer.	000~999 (seconds)	2
Forced Forward Destination	Calls to a group may forward directly to a defined destination, by passing the hunt process. “Forced Forward”, below, must be enabled.	Sta./NET or Station group, VSF announcement, Sys. Speed	
Forced Forward Dest Usage	Calls to a Station group may forward directly to a defined destination, see above “Forced Forward Destination” when Forced Forward is enabled for the group.	OFF ON	OFF
Group Name	A group name can be designated.	Max. 12 characters	

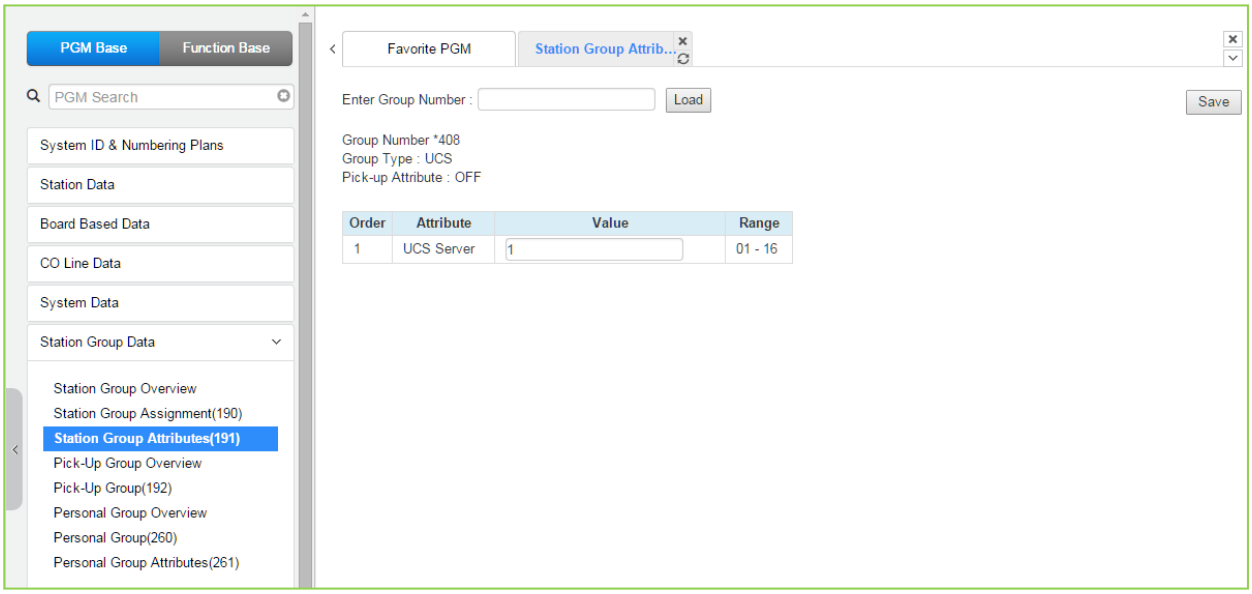


Figure 4.4.6.3-8 iPECS UCS Server Group Attributes

Table 4.4.6.3-8 UCS GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
UC Server	UCS Server number, this value must be set to 1.	00-16	1

4.4.6.4 Pick Up Group Overview

Selecting the Pick Up Group Overview item will return the Station Pick Up Group Overview page. This page displays the Station Group member stations for all the Station Pick Up Groups. Note that data cannot be entered on this page.

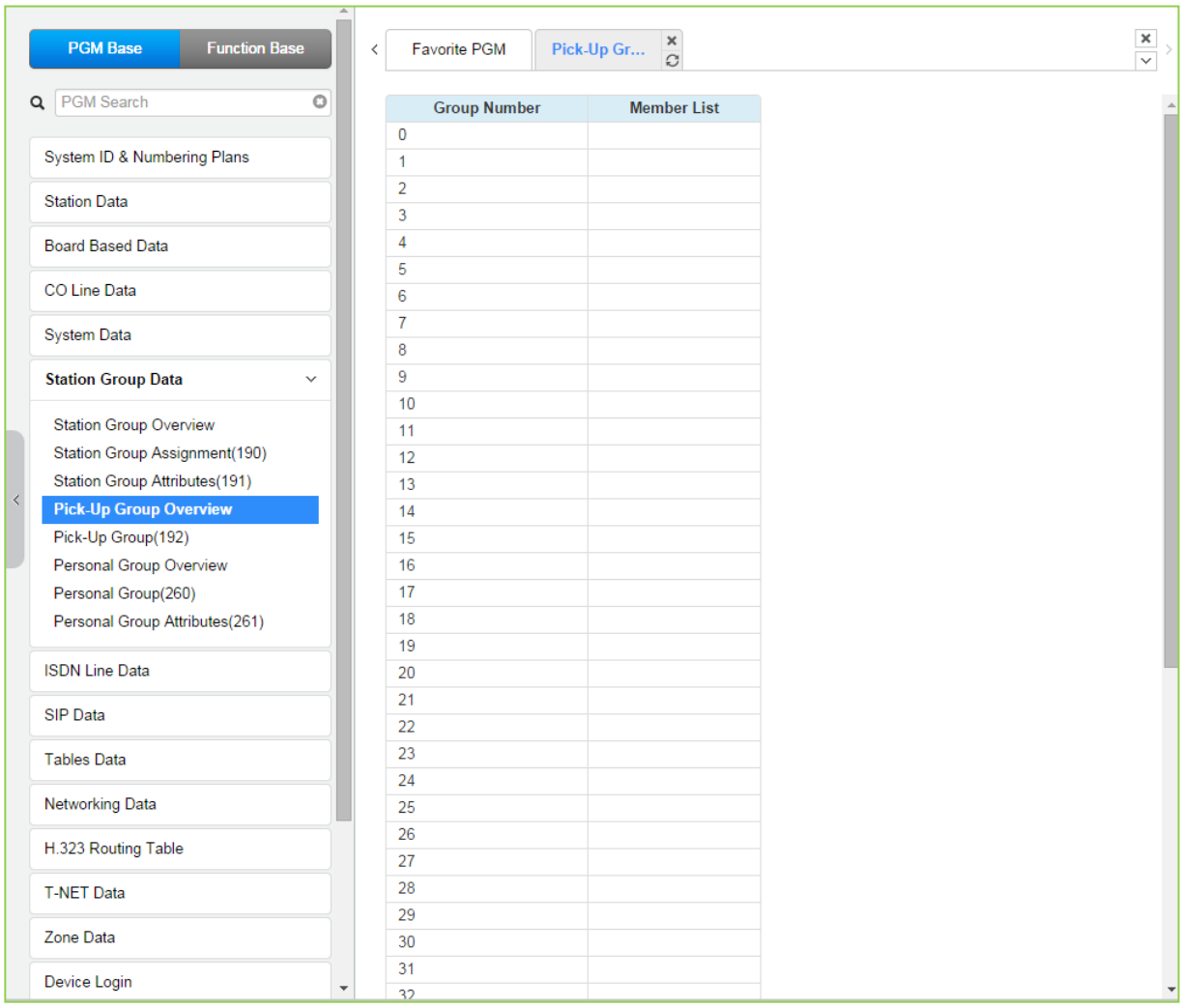


Figure 4.4.6.4-1 Pick Up Group Overview

4.4.6.5 Pick Up Group - PGM 192

Selecting Pick Up Group will display the Pick Up Group entry page. Enter the desired Pick Up Group number and click **[Load]** to display the group member Assignment.

Enter Group Number: eMG80 : 0-49 / eMG800: 0-199

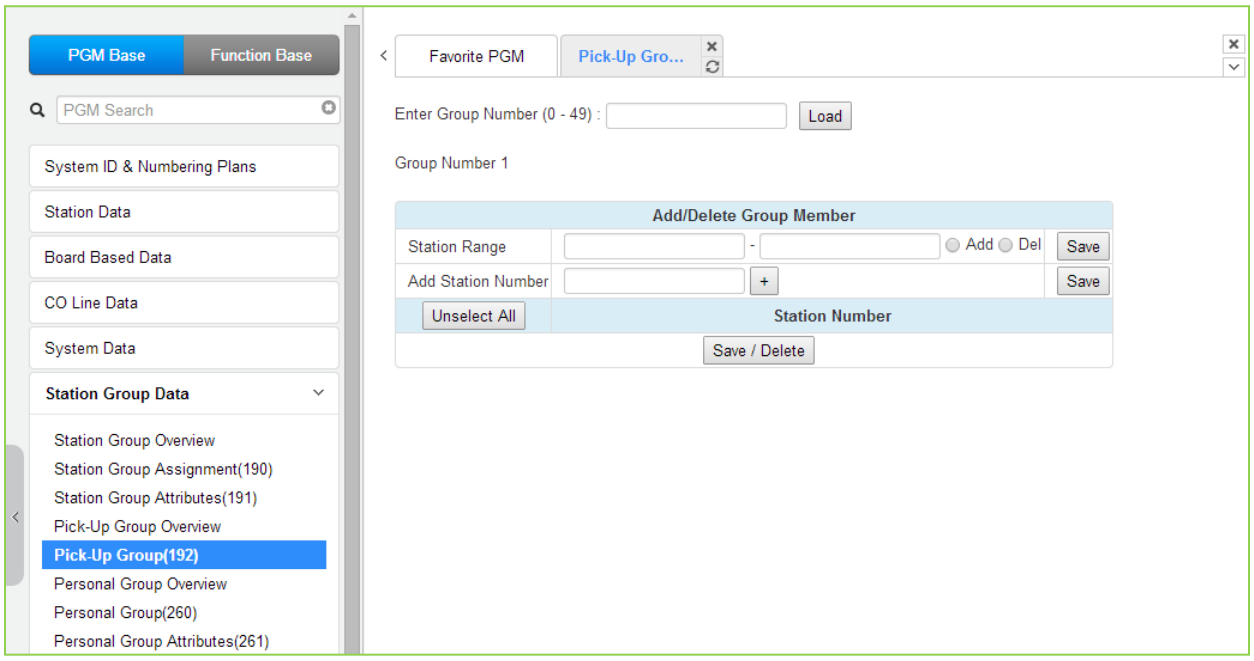


Figure 4.4.6.5-1 Pick Up Group

Table 4.4.6.5-1 PICK UP GROUP ASSIGNMENT

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Member	Assign stations as members of the Pick-Up group.		

4.4.6.6 Personal Group Overview

Selecting Personal Group Overview displays the master station and member list for all the personal groups.

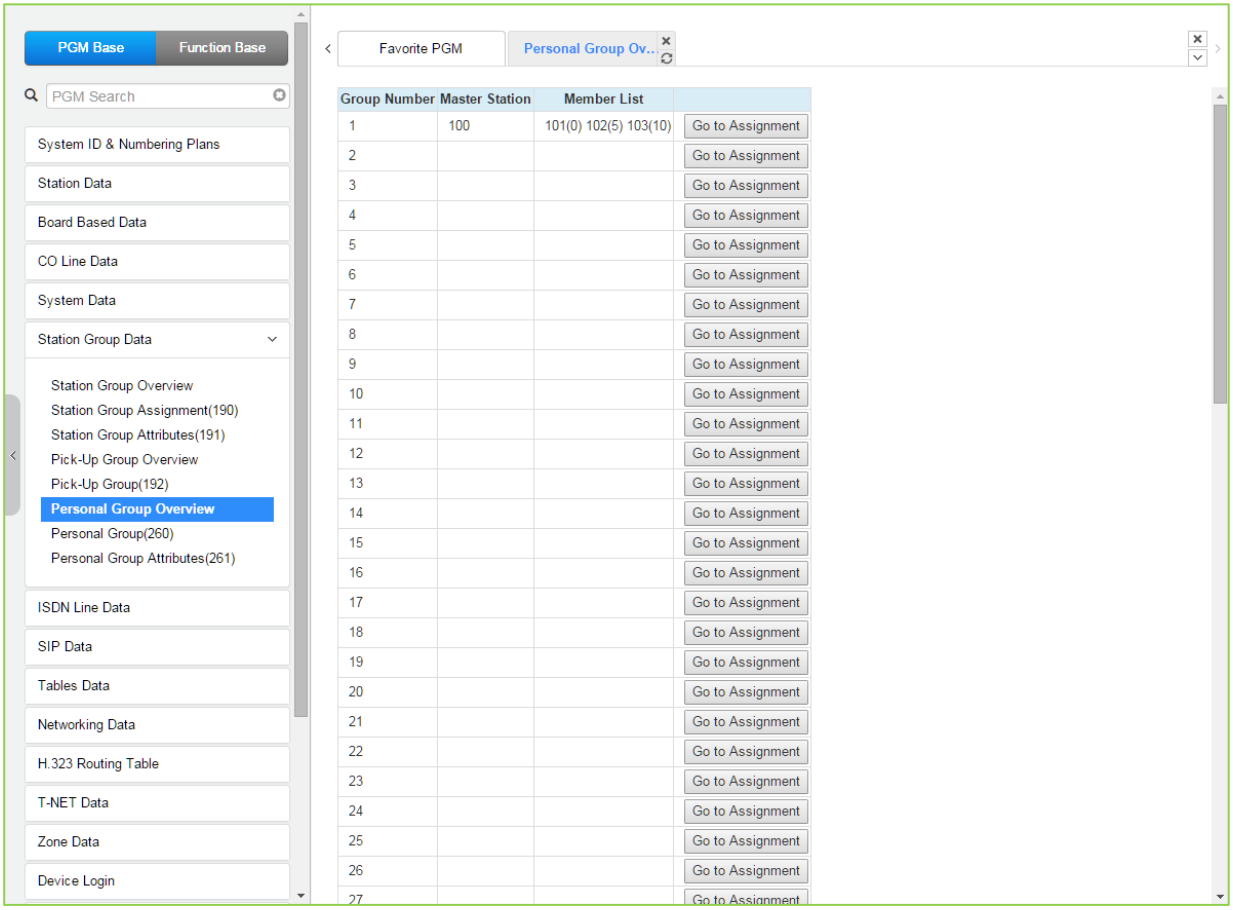


Figure 4.4.6.6-1 Personal Group Overview

Clicking [Go to Assignment] goes to move Personal group (260) for assigning Master station & Member Station and setting Personal group attributes directly.

4.4.6.7 Personal Group - PGM 260

Selecting Personal Group will display the Personal Group entry page. Enter a valid Personal Group number and click load to enter group data.

Enter Group Number: eMG80 : 1-70 / eMG800: 1-600

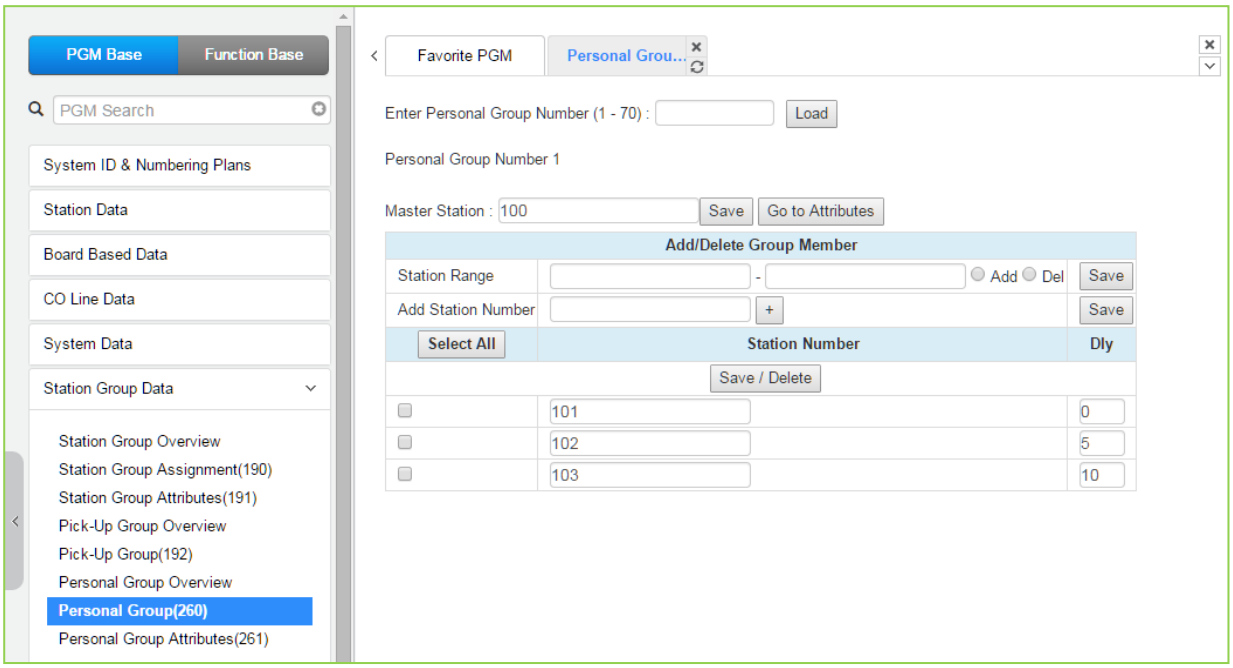


Figure 4.4.6.7-1 Personal Group

Several stations can share same station number. That means Personal Group is extended feature of Linked Pair.

A Personal Group is composed with a master station and several member stations.

A master station and all member stations share master station's number.

In case of Member station, each member station can be set the delay (Dly) time.

By using this shared number, almost features (Call To xxx / Call From xxx / SMDR / Message Wait…) can be activated.

But, some features can be chosen by PGM 261 attribute about all station activating or individual station working.

In PGM 260, Personal group master and member can be assigned.

In PGM 261, Personal group attribute can be set.

4.4.6.8 Personal Group Attribute - PGM 261

Selecting Personal Group Attribute will display the Personal Group Attribute entry page. Enter a valid Personal Group number to enter the group data. Click **[Save]** button after changing Value.

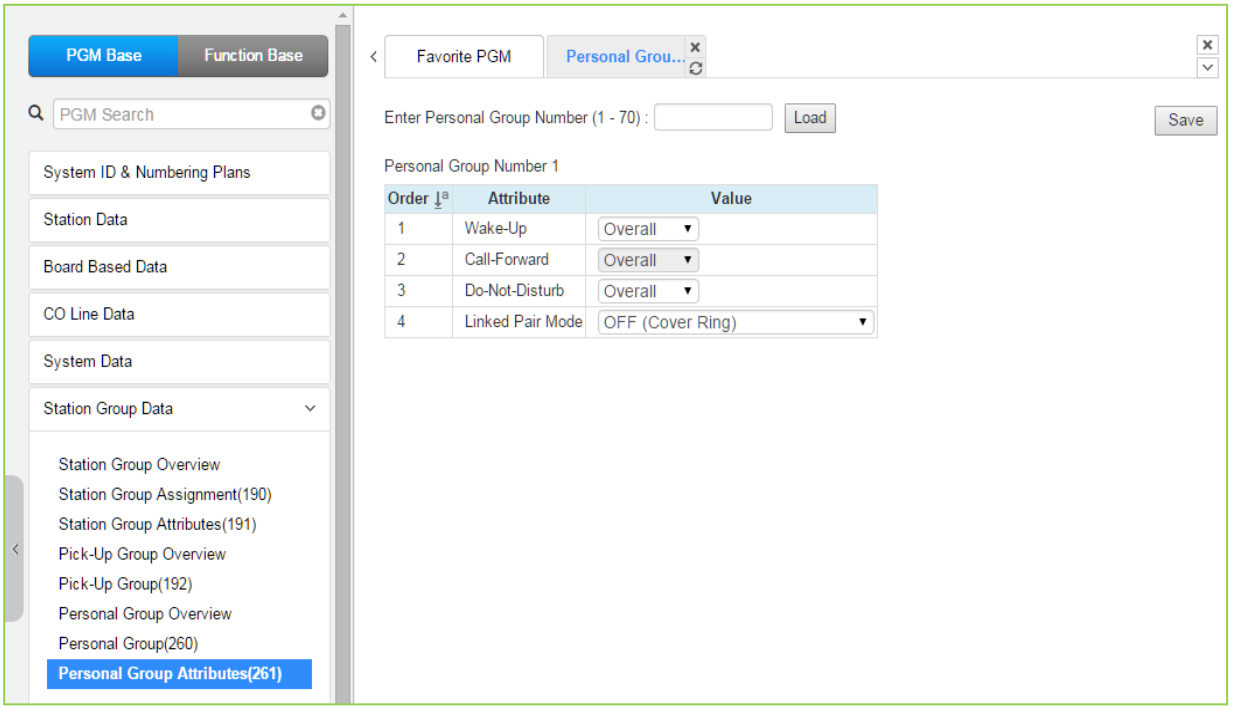


Figure 4.4.6.8-1 Personal Group Attributes

Table 4.4.6.8-1 PERSONAL GROUP ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Wake-Up	If this value is set to Overall, all member wake-up follow by master wake up. If this value is set to Individual, individual wake-up is worked by each station.	Individual/ Overall	Overall
Call-Forward	If this value is set to Overall, call forward setting affect to Master and all members. If this value is set to Individual, individual Call Forward is worked by each station.	Individual/ Overall	Overall
Do-Not Disturb	If this value is set to Overall, DND setting affect to Master and all members. If this value is set to Individual, individual DND is worked by each station.	Individual/ Overall	Overall
Linked Pair Mode	If this value is set to ON, Master and Member Stations are linked and only one station can be activated.	OFF(Cover Ring)/ ON(Cover Ring and State Sync.)	OFF(Cover Ring)

4.4.7 ISDN Line & ICLID Routing Data

Selecting the ISDN Line Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

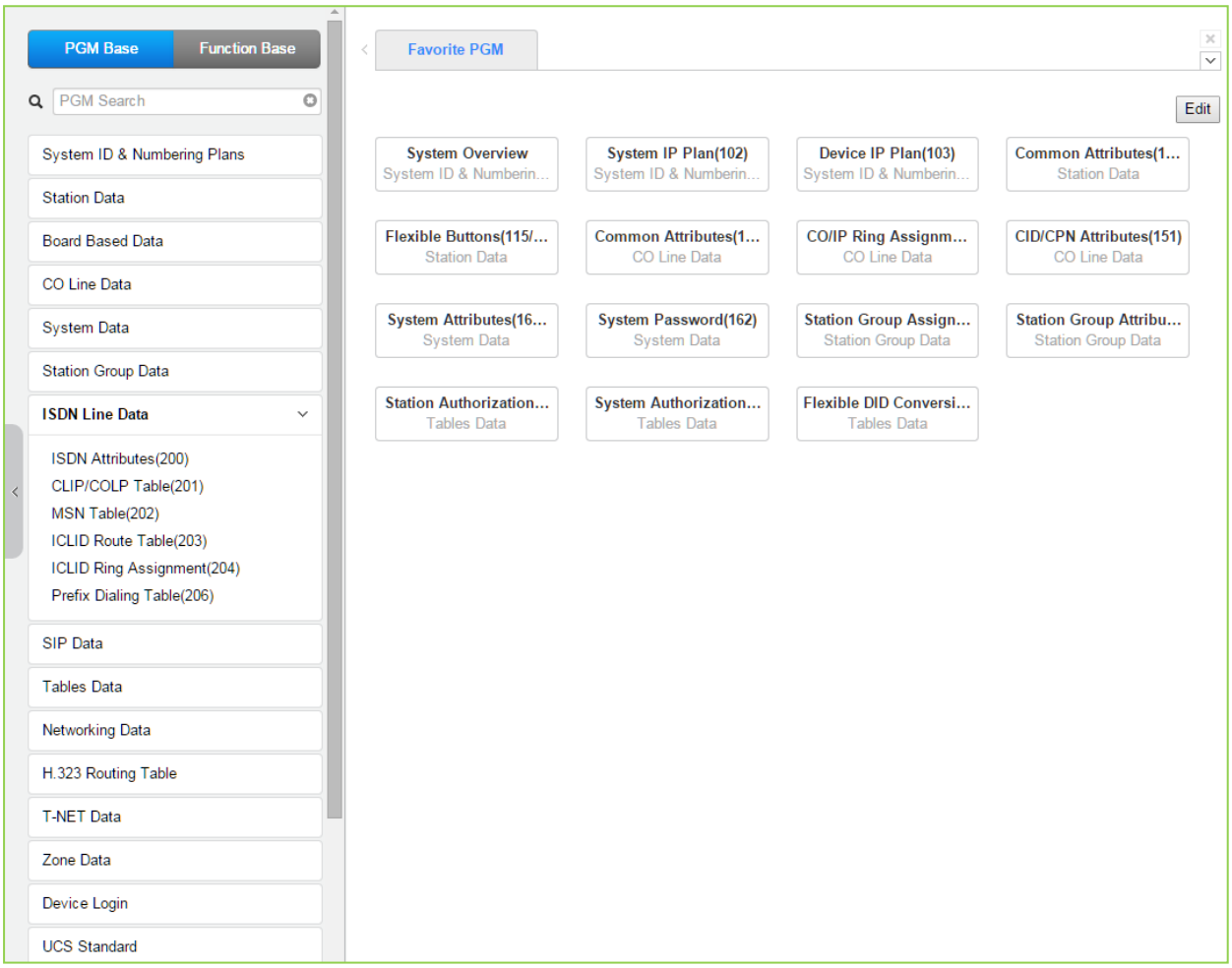


Figure 4.4.7-1 ISDN Line Data

Each ISDN (Integrated Services Digital Network) Line provides digital services to the end-user. Basic Rate Lines have three (3) channels, 2 B channels and a D channel. The 2 B channels provide 64 Kbps each, a total of 128 Kbps for “Bearer” or voice channels. The D channel provides a 16 Kbps signaling channel. Primary Rate Lines have 23/30 64 Kbps ‘B’ channels and 1/2 64 Kbps signaling channels. For proper operation, entries are required for various attributes and Tables to match the ISDN circuit and services.

4.4.7.1 ISDN Attributes - PGM 200

Selecting ISDN Attributes will display the ISDN Attributes data entry page. Click **[Save]** button after changing Value.

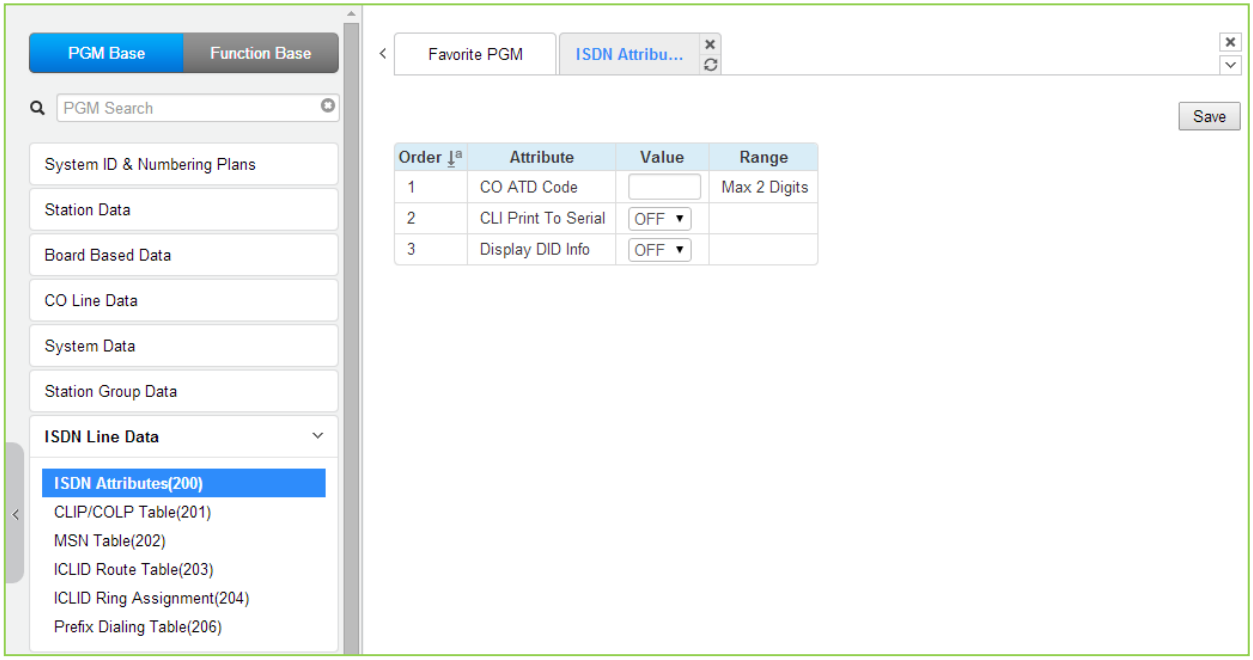


Figure 4.4.7.1-1 ISDN Attributes

ISDN attributes define several characteristics of the ISDN interface. ISDN call cost services (Advice of Charge), CLI modification, voice encoding, and other characteristics of the interface are defined, refer to Table 4.4.7.1-1.

Table 4.4.7.1-1 ISDN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO ATD Code	When the system is set to send the station number with ISDN CLIP or COLP, either the station number or this ATD code will be sent based on Common Attributes section 4.4.2.2, EXT or ATD assignment.	Max.2 Digits	
CLI Print To Serial	The ISDN Calling Line Id may be included in call records, refer to SMDR Attributes section 4.4.5.17.	OFF/ ON	OFF
Display DID Information	Display DID digit information on LCD and print it to serial port.	OFF/ ON	OFF

4.4.7.2 CLIP/COLP Table - PGM 201

Selecting CLIP/COLP Table will display the CLIP/COLP Table Attributes data entry page. Click **[Save]** button after changing Value.

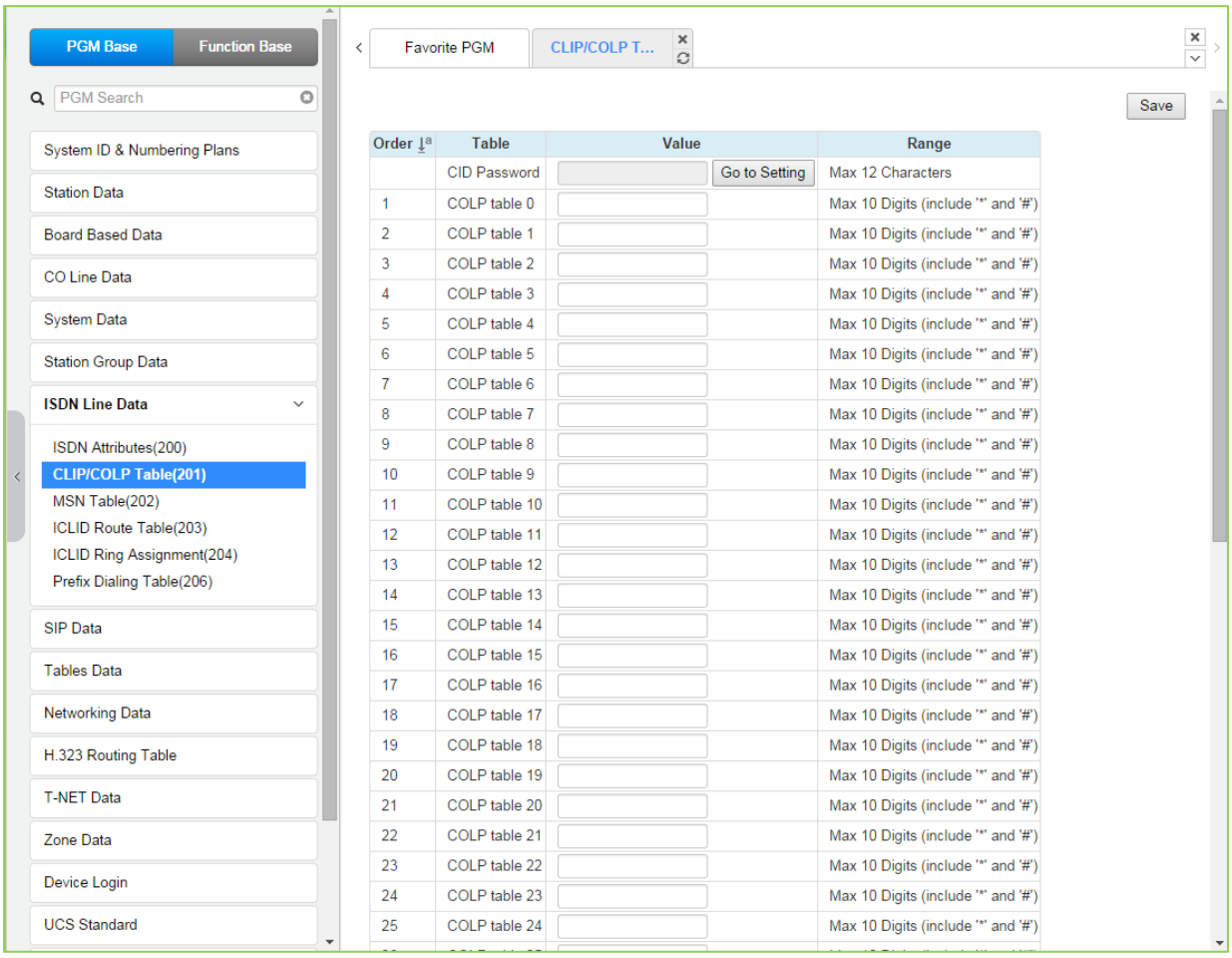


Figure 4.4.7.2-1 CLIP/COLP Table

Normally, the system will send the primary Directory Number of the ISDN Line in the ISDN call SETUP and CONNECT messages to identify the caller (CLIP) or the answering (COLP) party respectively. Under certain circumstances, it may be desirable to provide the secondary or DID number for the ISDN Line. In these cases, the CLIP/COLP Table may be used to define the digits sent. The number sent is selected based on the index assigned for the CO/IP Line under *'CID/CPN Attributes section'*.

The CLI Station Number is sent in place of the station number. For all other entries, the station number is sent as a suffix to the number in the Table. Note that this number is sent only if CLIR/COLR is disabled under the CLIR Service and COLR Service assignments in the Station ISDN Attributes.

Setting CID Password directly

You can set the CID password to click "Go to Setting" button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark tick on the save box and click the Save button.

4.4.7.3 MSN Table - PGM 202

Selecting MSN Table will display the MSN Table data entry page. Click **[Save]** button after changing Value.

Enter Index Range: eMG80 : 1-500 / eMG800: 1-1500

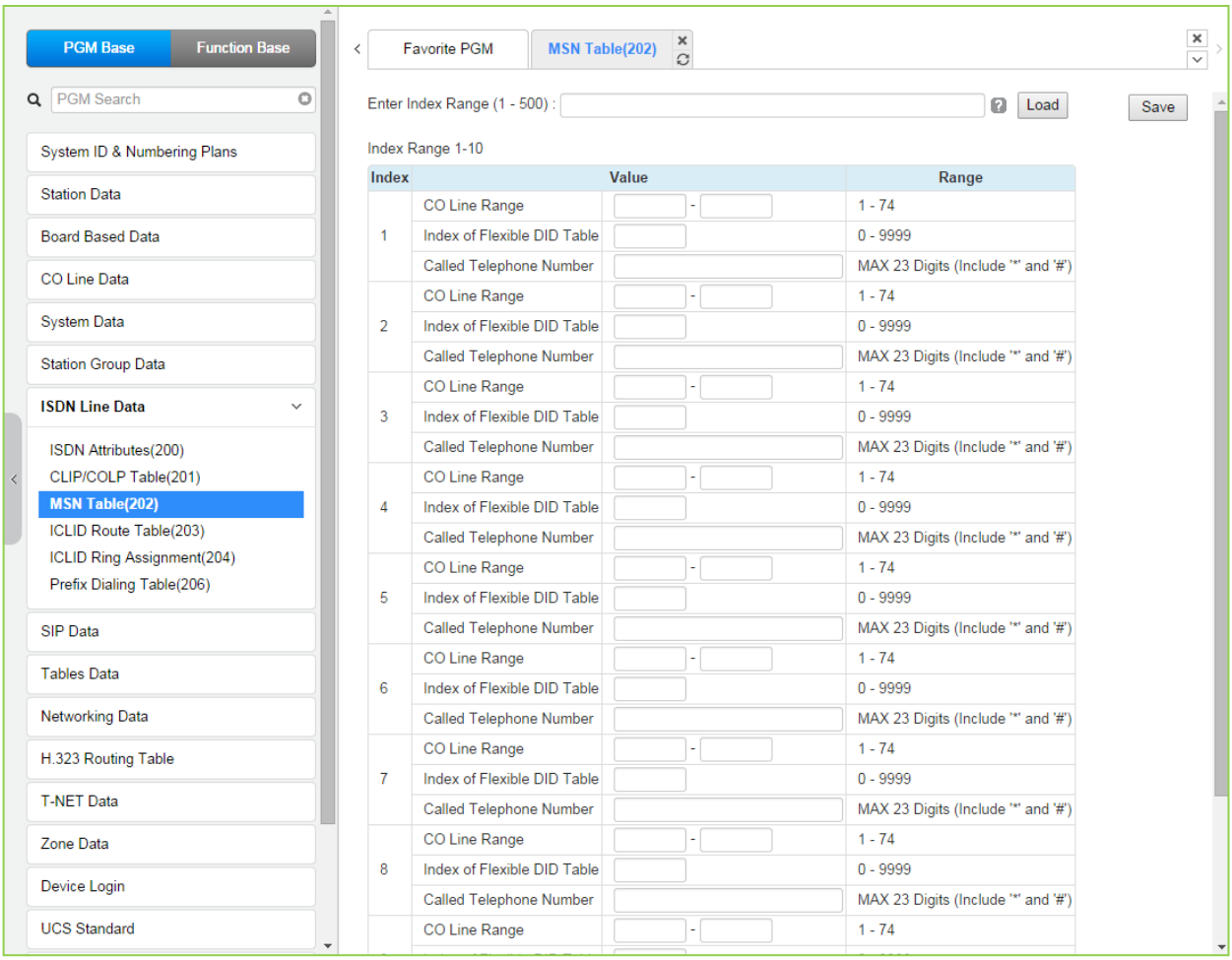


Figure 4.4.7.3-1 MSN Tables

When an ISDN Line assigned for DID operation receives an incoming call, the call will be routed to a station based on the Flexible DID Table Index assigned in the MSN Table. Each iPECS configuration has a different capacity as indicated by the entry range in Table 4.4.7.3-1.

Table 4.4.7.3-1 MSN TABLE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CO Line Range	Enter the CO Line Range.	eMG80:1-74 eMG800:1-600	None
Index of Flexible DID Table	Index to the Flexible DID Table, section 4.4.9.12.	0~9999	None
Called Telephone Number	Telephone Number (called number)	Max. 23 Digits (Include * and #)	None

4.4.7.4 ICLID Route Table - PGM 203

Selecting ICLID Route Table will display the ICLID Route Table data entry page. Click **[Save]** button after changing field.

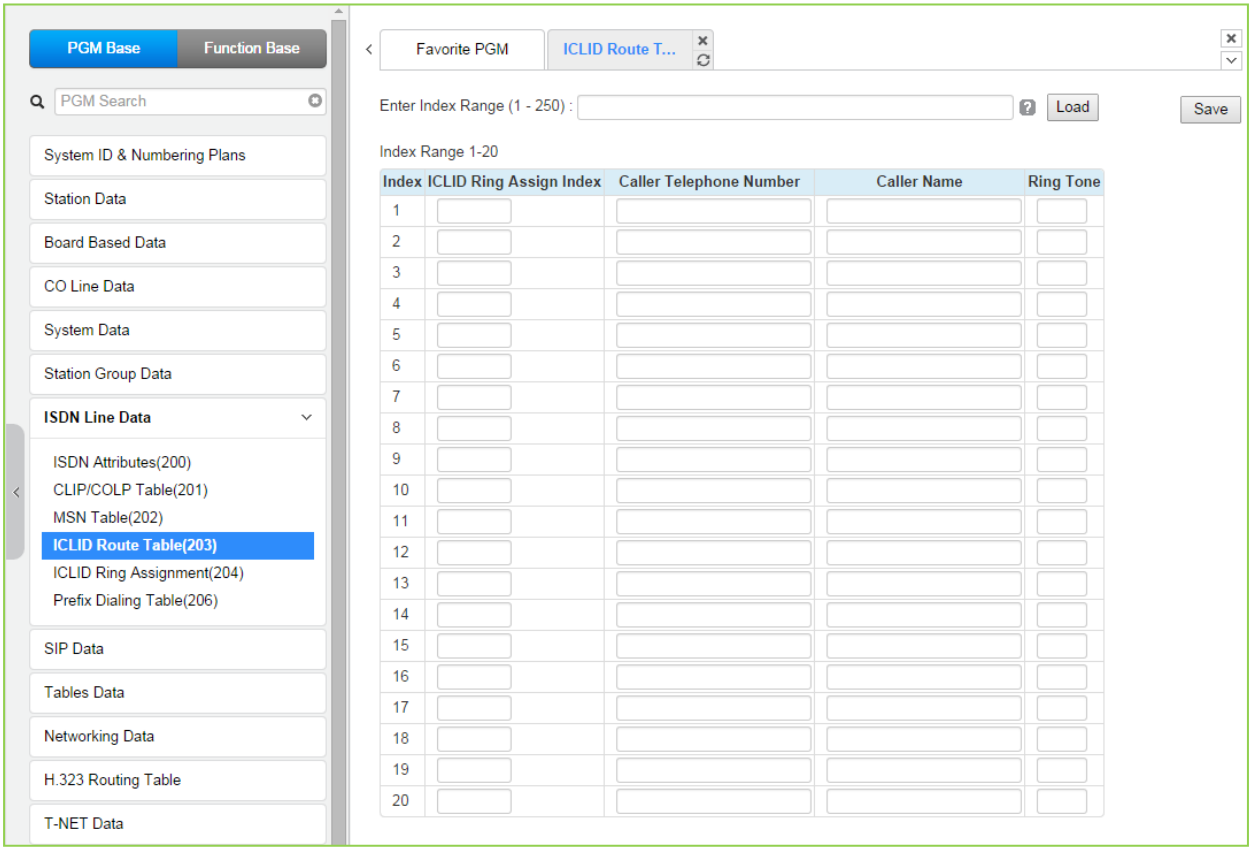


Figure 4.4.7.4-1 ICLID Route Table

The system can employ ICLID (Incoming Calling Line Id) to determine the routing of incoming external calls. Each CO/IP Line, including DID Lines and ACD group calls may be assigned to employ ICLID routing. The system will compare the received ICLID to entries in the ICLID Route Table and, if a match is found, will route the call to the destination defined in the ICLID Ring Assignment Table index assigned here.

Table 4.4.7.4-1 ICLID ROUTE TABLE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
ICLID Ring Assign Index	Index to the ICLID Ring Assignment Table that determines the call routing.	001~250	None
Caller Telephone Number	ICLID (Incoming Caller Id) to match for the index. If the Caller Id matches the Table entry, the index is used to select the route.	24 Digits	None
Caller Name	ICLID name that is sent by the system to the destination for the ICLID routed call.	12 characters	None
Ring Tone	If the received Caller Id matches the Caller Telephone Number, the Ring tone selected here is employed for the call alerting.	01 ~ 16	Ring Tone

4.4.7.5 ICLID Ring Assignment Table - PGM 204

Selecting ICLID Ring Assignment Table will display the ICLID Ring Assignment Table data entry page. The station number starts 100 for eMG80 and 1000 for eMG800. Click **[Save]** button after changing Value.

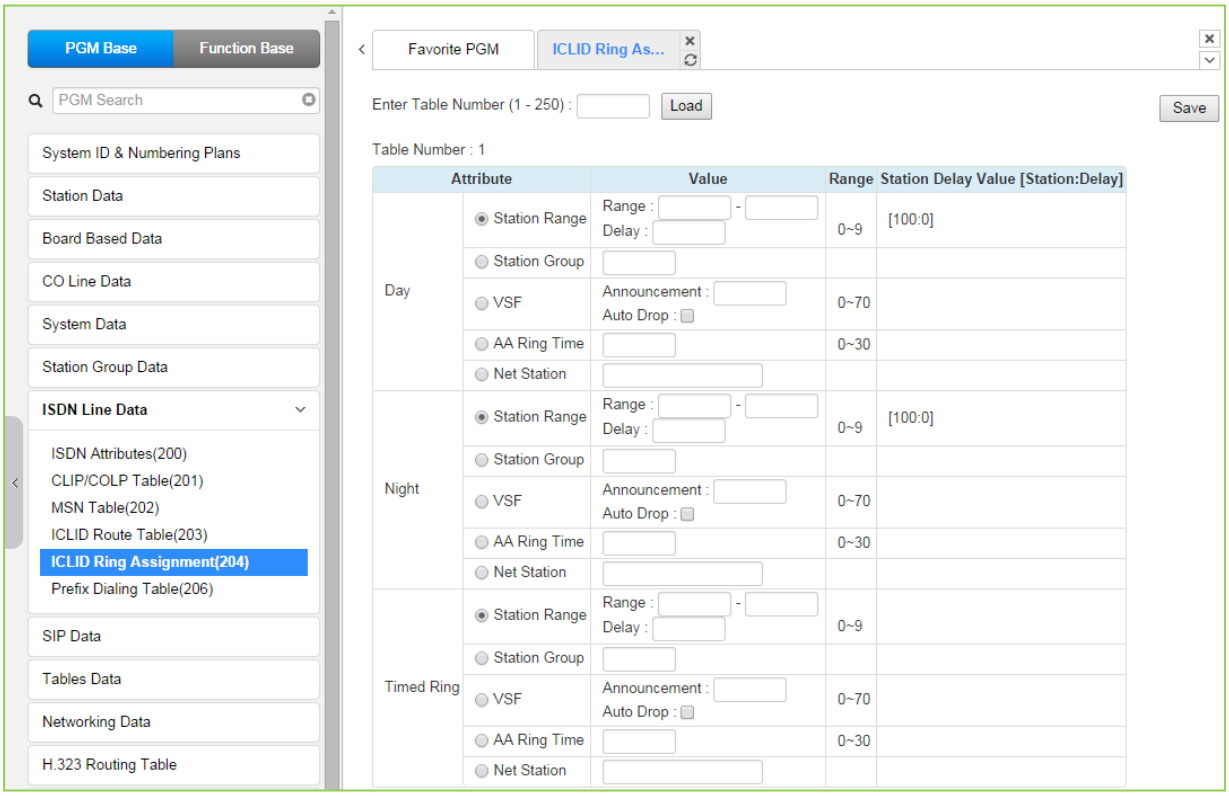


Figure 4.4.7.5-1 ICLID Ring Assignment Table

If the Incoming Caller ID matches an entry in the ICLID Route Table, the index from the Table is used to determine the call routing from the ICLID Ring Assignment Table. Separate ring assignments are made for Day, Night, and Timed Ring mode for each index, 001 to 250, in this table. When assigned to ring to a VSF announcement, the call can be automatically dropped after the announcement by entering '#' after the announcement number.

When CO Lines are programmed to Ring an external AA/VM, VSF or Feature Server Group as an Automated Attendant, the Ring signal can be on an immediate or delayed basis allowing other stations/groups to be assigned Ring and answer prior to signaling the AA. The delay is defined in seconds from 00 to 30.

4.4.7.6 Prefix Dialing Table - PGM 206

Selecting ISDN Prefix Dialing Attributes will display the Prefix Dialing Table Attributes data entry page. Click **[Save]** button after changing Value.

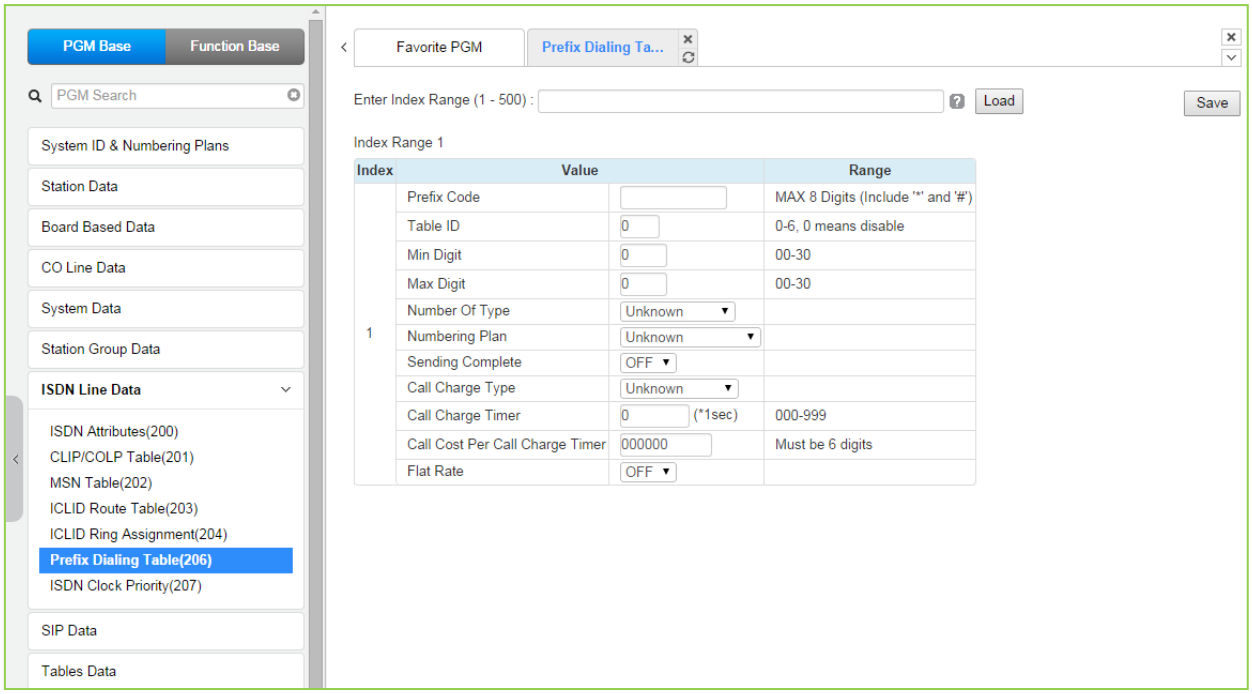


Figure 4.4.7.6-1 Prefix Dialing Table Attributes

Prefix Dialing Table. With this table, three features can be supported.

1. Analog CO Call Charge with NPR metering.
2. SIP direct dialing with no wait inter-digit timer.
3. ISDN Prefix Call – ISDN en-block Dialing with Prefix Call Setup.

If first some digits (up to 8 digits) of outgoing dial number are matched with Prefix Code of each table, this table can start work. By each Co-line (PGM 142 – F20), Table ID (0-6) can be set. This table ID (PGM 142 – F20) is associated with PGM 206 – each table ID.

Table 4.4.7.6-1 Prefix dialing Table Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Prefix Code	Enter the Prefix code. (Max 8 digits)	Max. 8 Digits (Include * and #)	
Table ID	Enter Table ID (0-6). 0 means NOT used.	0-6	0
Min Digit	Select the minimum dial digits (00-30).	00-30	0
Max Digit	Select the maximum dial digits (00-30).	00-30	0
Number Of Type	Select Number of Type (0~6). Unknown/International/National/Network Spec/Subscriber/Abbreviated /Reserved.	Unknown/ International/ National/ Network spec/ Subscriber/	Unknown

Table 4.4.7.6-1 Prefix dialing Table Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Abbreviated/ Reserved	
Numbering Plan	Select Numbering Plan (0~6). Unknown/ISDN/Data Numbering/Telex/National Standard/Private /Reserved.	Unknown/ ISDN Telephony/ Data numbering/ Telex/ National standard/ Private/ Reserved	Unknown
Sending Complete	Select Sending Complete option. (On/Off)	ON/OFF	OFF
Call Charge Type	Call Charge Type (0~5). Unknown/Local/Long Distance/International/Mobile/reserved	Unknown/ Local/ Long distance/ International/ Mobile/ Reserved	Unknown
Call Charge Timer	Call Charge Timer can be assigned. By this timer value Call Metering can be established.	000-999	0
Call Cost	Call Cost is calculated by CALL TIMER. (ex : timer is 1 min, cost is 000020, then after 3 minute call, total call cost is calculated to 000060)	000000-999999	000000
Flat Rate	If Flat Rate is ON, Flat Rate is applied by CALL COST per a call.	ON/OFF	OFF

4.4.7.7 ISDN Clock Priority - PGM 207 for eMG800

Selecting ISDN Clock Priority will display the ISDN Clock priority Attributes data entry page. Click **[Save]** button after changing Value.

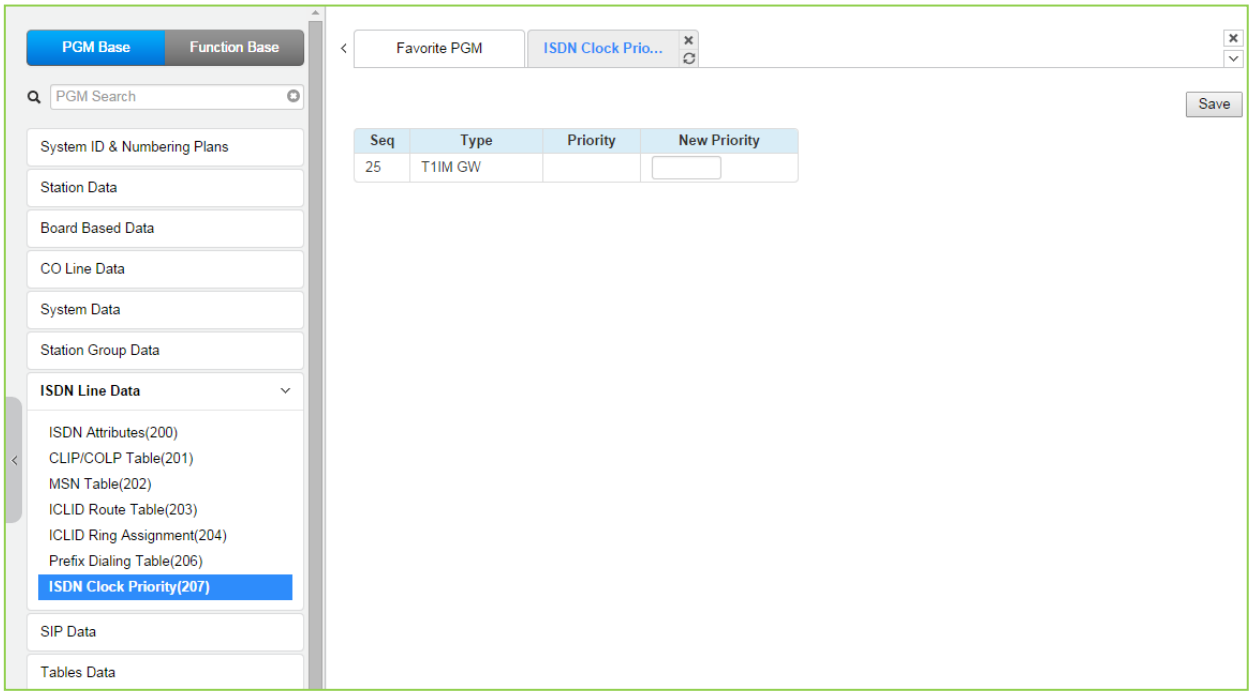


Figure 4.4.7.7-1 ISDN Clock Priority Attributes

Table 4.4.7.7-1 ISDN Clock Priority Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Priority	Clock priority if more than one ISDN boards are used	1-18	

4.4.8 SIP Data

Selecting the SIP Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

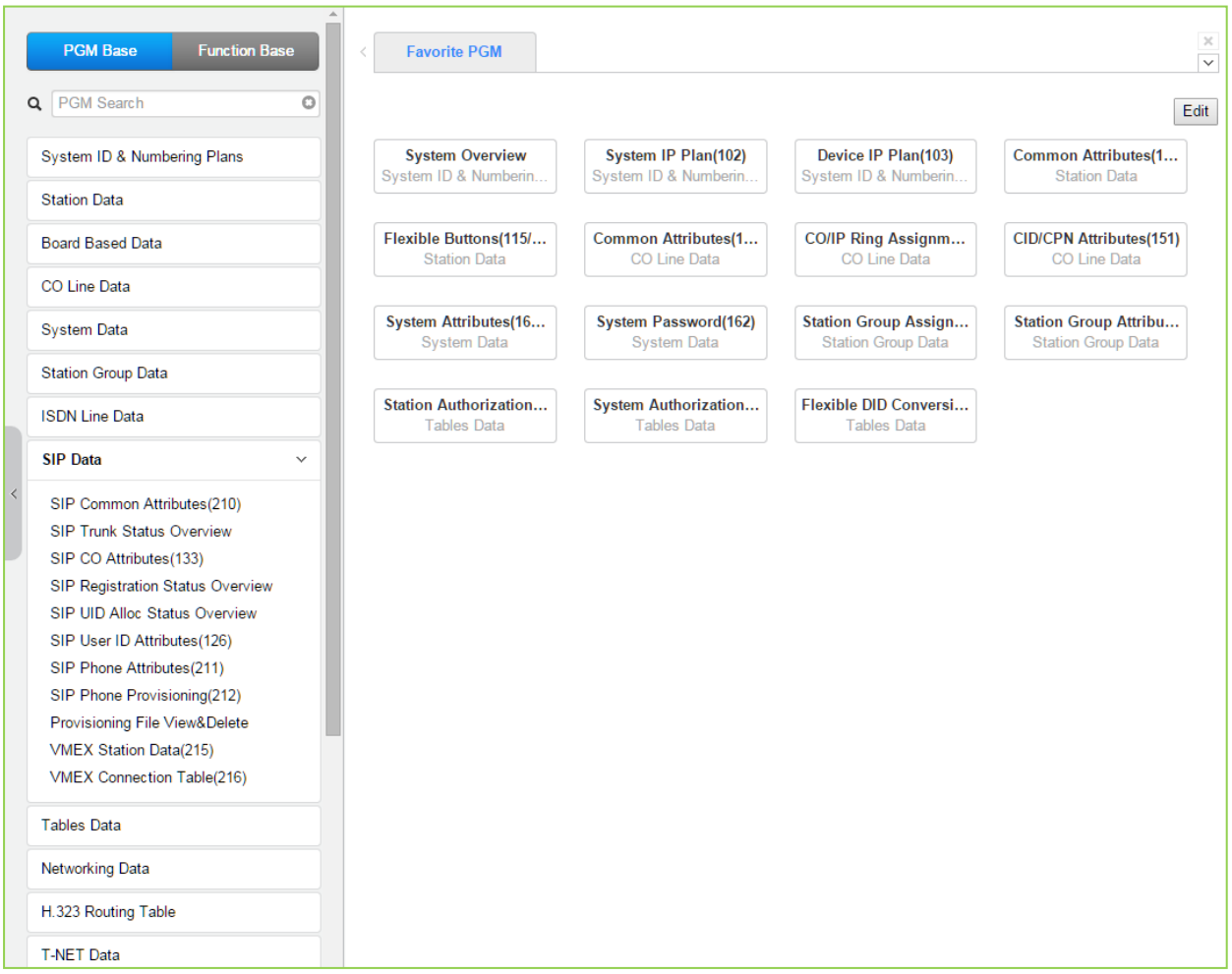


Figure 4.4.8-1 SIP Data

4.4.8.1 SIP Common (System based) Attributes - PGM 210

Selecting SIP Common Attributes will display the SIP System based Attributes data entry page. The attributes are system based SIP server data that running on MPB. Click **[Save]** button after changing Value.

DNS server address is where system can get IP address of external party that was written in Name in system. Local UDP/TCP/TLS Port is MPB's SIP signaling port number.

'Signal TLS Option' is for the SIP signaling by TLS configuration.

'SIP Status' the status of is running of SIP server in MPB.

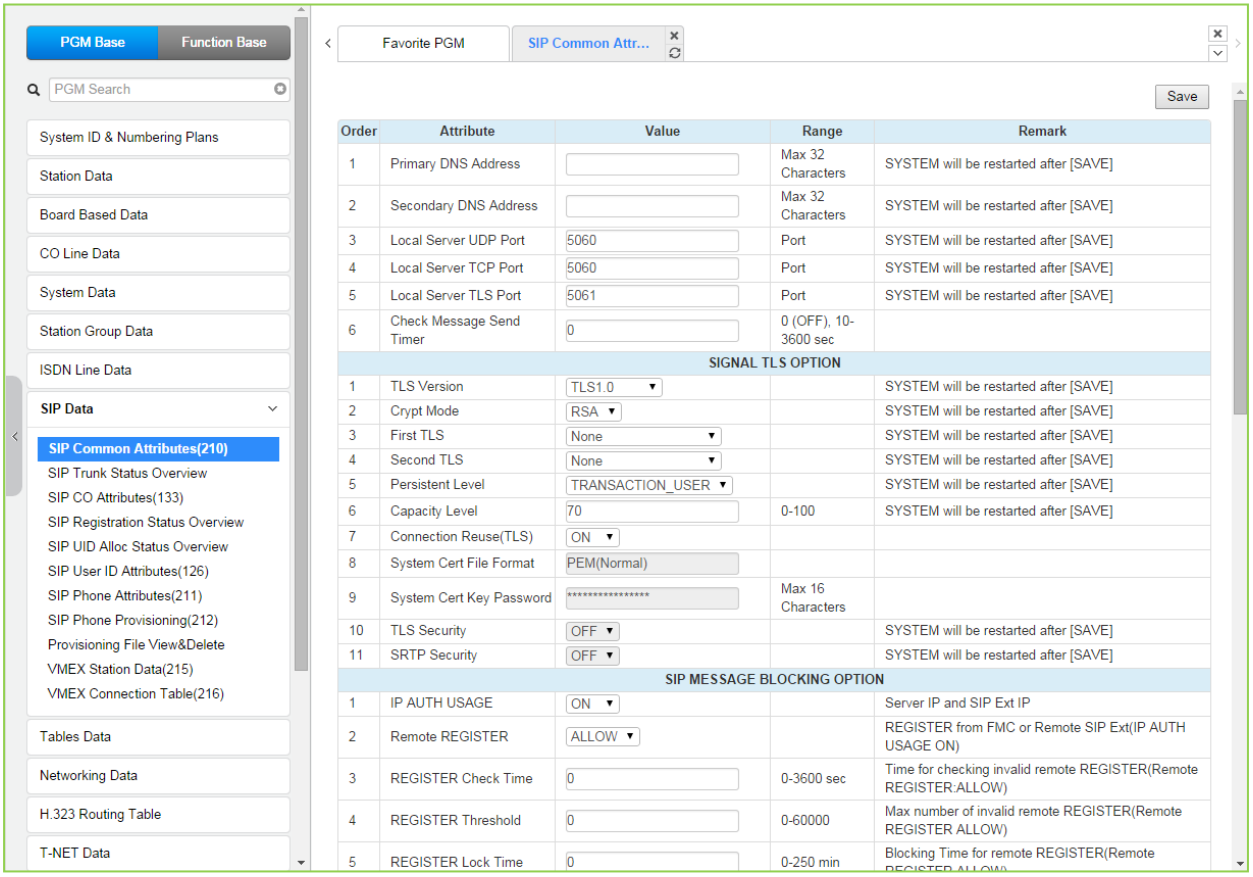


Figure 4.4.8.1-1 SIP Common Attributes

Check Message Send Timer – This is Keep Alive Message (OPTIONS) frequency from SIP server (MPB) to SIP Phone. If a SIP Phone does not respond to system's Keep Alive Message then system will make the status of SIP Phone to 'disconnected' in system.

Keep Alive Message (OPTIONS) programming for a SIP station is as below:

- Frequency : SIP Data / SIP Common Attributes (210) - Check Message Send Timer.
- Usage ON/OFF for a SIP Extension : SIP Data / SIP Phone Attributes (211) – Keep Alive Usage.
- Retry Count : IP Data / SIP Phone Attributes (211) – Retry Count.

Table 4.4.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Primary DNS Address	Name Resolution Server. System will be restarted after Save.	IP Address (Max. 32 characters)	
Secondary DNS Address	Name Resolution Server. System will be restarted after Save.	IP Address (Max. 32 characters)	
Local Server UDP Port	SIP UDP signaling port. System will be restarted after Save.		5060
Local Server TCP Port	SIP TCP signaling port. System will be restarted after Save.		5060
Local Server TLS Port	SIP TLS signaling port. System will be restarted after Save.		5061
Check Message Send Timer	Keep Alive (OPTIONS Message) sending frequency	0, 10 ~ 3600 (Sec.) 0: OFF	0
Signal TLS option			
TLS Version	TLS version. TLS1.0: TLS1.0 is used for TLS connection. TLS1.2: TLS1.2 is used for TLS connection. SSL3(Auto) : TLS1.0 or TLS1.2 is used – auto negotiation System will be restarted after Save.	TLS1.0/ TLS1.2/ SSL3(Auto)	TLS1.0
Crypt Mode	TLS Crypt Mode. System will be restarted after Save.	RSA/ECC	RSA
First TLS	SIP signaling TLS encryption primary key method. System will be restarted after Save.	None/ ARIA-128/ AES-128/ ARIA-128-SHA2/ AES-128-SHA2/ AES-256-SHA2(RSA)	None
Second TLS	SIP signaling TLS encryption secondary key method. System will be restarted after Save.	None/ ARIA-128/ AES-128/ ARIA-128-SHA2/ AES-128-SHA2/ AES-256-SHA2(RSA)	None
Persistent Level	TLS signaling path method TRANSACTION : different path with INVITE, INFO, MESSAGE TRANSACTION_USER : same path with INVITE, INFO, MESSAGE System will be restarted after Save.	TRANSACTION/ TRANSACTION_USER	TRANSACTION_USER
Capacity Level	TLS session maintenance rate, maximum 70%. System will be restarted after Save.	0 - 100	70
Connection Reuse (TLS)	TLS session maintain or not.	OFF ON	ON
System Cert File Format	The system supports two certification formats Privacy-Enhanced Electronic Mail (PEM) or Distinguished Encoding Rules (DER).	PEM(Normal) DER (Normal)	PEM (Normal)
System Cert Key password	Password to encrypt private key.	Max. 16 characters	

Table 4.4.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
TLS Security	Change password that is used to encrypt TLS certification periodically.	OFF ON	OFF
SRTP Security	Allow only SRTP call (blocking none SRTP call)	OFF ON	OFF
SIP Message blocking option			
IP AUTH USAGE	ON: Discard SIP Request (INVITE, REGISTER, NOTIFY, OPTIONS, MESSAGE …) if VIA IP and From IP are neither the server IP nor SIP Extension IP.	OFF ON	ON
Remote Register	ALLOW: proceed REGISTER from remote site. DENY: Discard all remote REGISTER. (It is applied with IP AUTH USAGE ON)	ALLOW/ DENY	ALLOW
REGISTER Check Time	Time interval to check invalid remote REGISTER flooding. (It is applied with IP AUTH USAGE ON and Remote REGISTER ALLOW)	0~3600 (Sec.)	0
REGISTER Threshold	Threshold value to decide if it is invalid remote REGISTER flooding. (It is applied with IP AUTH USAGE ON and Remote REGISTER ALLOW)	0~60000	0
REGISTER Lock Time	Time interval to discard remote REGISTER if it is REGISTER flooding state. (It is applied with IP AUTH USAGE ON and Remote REGISTER ALLOW)	0~250 (Min.)	0
SIP SMS Option			
SMS Domain	Domain Name used for sending SIP SMS	Max. 32 characters	
SMS request URI	Request URI for sending SIP SMS. This is only for Korea telecom.	Max. 32 characters	1549
SMS Mode	Assign SMS mode(normal or external) This is only for Korea telecom.		Normal
SIP FAX Option			
Start w/ G.711 Fax	G711 Fax path through Mode. G711 will be negotiated as voice path and Fax will send this voice path.	OFF ON	OFF
G.711 Fax method	G711 Fax Mode. VBD – VBD codec attribute will be added in SDP.	711A/711U/711A(VBD) .711U(VBD)	711A
T38 FAX Failover(711)	When T38 Negotiation is failed, G711 Codec will be used for Fax Transmission.	OFF ON	OFF
Miscellaneous Option			
OCS Prefix Code	OCS Prefix code will be attached in INVITE message When server type is OCS.	Max. 8 Digits	
SIP Pound Use	ON: Send digit '#' when user presses '#' OFF: The '#' is used for sending complete.	OFF ON	OFF
BLF SYNC NOTIFY Timer	After rebooting MPB will send NOTIFY to synchronize SIP BLF. After this timer MPB will send NOTIFY to SIP extension.	10-360	10
SRTP PATH(SIPEXT)	If SIP extensions are in Local network, SRTP voice channel will be established directly by setting.	VOIM RELAY or DIRECT	VOIM RELAY
DNS SRV Usage	DNS SRV query is used.	OFF ON	OFF
Out OF Rsc	Response code when all channels are used.	503/	503

Table 4.4.8.1-1 SIP Common Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Response		486	
Error Code For Trunk Rerouting	If eMG receives Error Code programmed in this field, Call will be rerouted.		
SIP QOS Option			
SIP QOS Method Selection	Select QOS field method.	DSCP/ TOS	TOS
SIP Signal DSCP value	When DSCP is selected, DSCP values for SIP signal.	0~63	0
SIP Signal TOS value	When TOS is selected, TOS value for SIP signal.	0~7	5
RTP DSCP value	When DSCP is selected, DSCP value for RTP.	0~63	0
RTP TOS value	When TOS is selected, TOS value for RTP.	0~7	5
SIP T-NET Option			
CM Prefix	Korea Telecom only, when employing an iPECS eMG as the CM, iPECS eMG will require a Prefix to set-up a SIP trunk call.	Max. 4 Digits	
CM Prefix Method	Korea Telecom only, enables the Prefix method for processing a call with a SIP trunk through iPECS eMG.	Normal, With prefix	Normal
SIP Trunk Register Option			
Register Retry Timer	When registration fails, iPECS eMG attempts to register periodically at intervals of this timer.	20~3600	60
Option Check number	Korea Telecom only, a SIP Options message is used for redundancy. If the system does not respond to the Option message after the number of attempts, the redundant server becomes active	1~20	1
Option Check Interval	Korea Telecom only, a SIP Options message is used for redundancy. The Option message is sent at intervals of this timer.	20~3600	20
SIP Alarm Server Option			
Alarm Server Usage	If this value is changed, all WTIB will restart.	OFF/ON	OFF
Alarm Server Address	Enter the alarm server address up to 32 characters.	Max. 32 characters	
Alarm Server UDP Port	Default UDP port for Alarm server.	Port	5060
Alarm Server Check Usage	If IPECS doesn't receive reply for this option 3 consecutive times, will not send Message and Information to Alarm server. PGM 210 check message send timer.	OFF/ ON	OFF
Terminal State Announcement	Information (Terminal state) is sent to Alarm server if this value is ON, not sent to Alarm server if this value is OFF.	OFF/ ON	OFF
600BE Channels for Alarm	The number of 600BE channels reserved for Alarm SMS.	0~1	0

4.4.8.2 SIP Trunk Status Overview

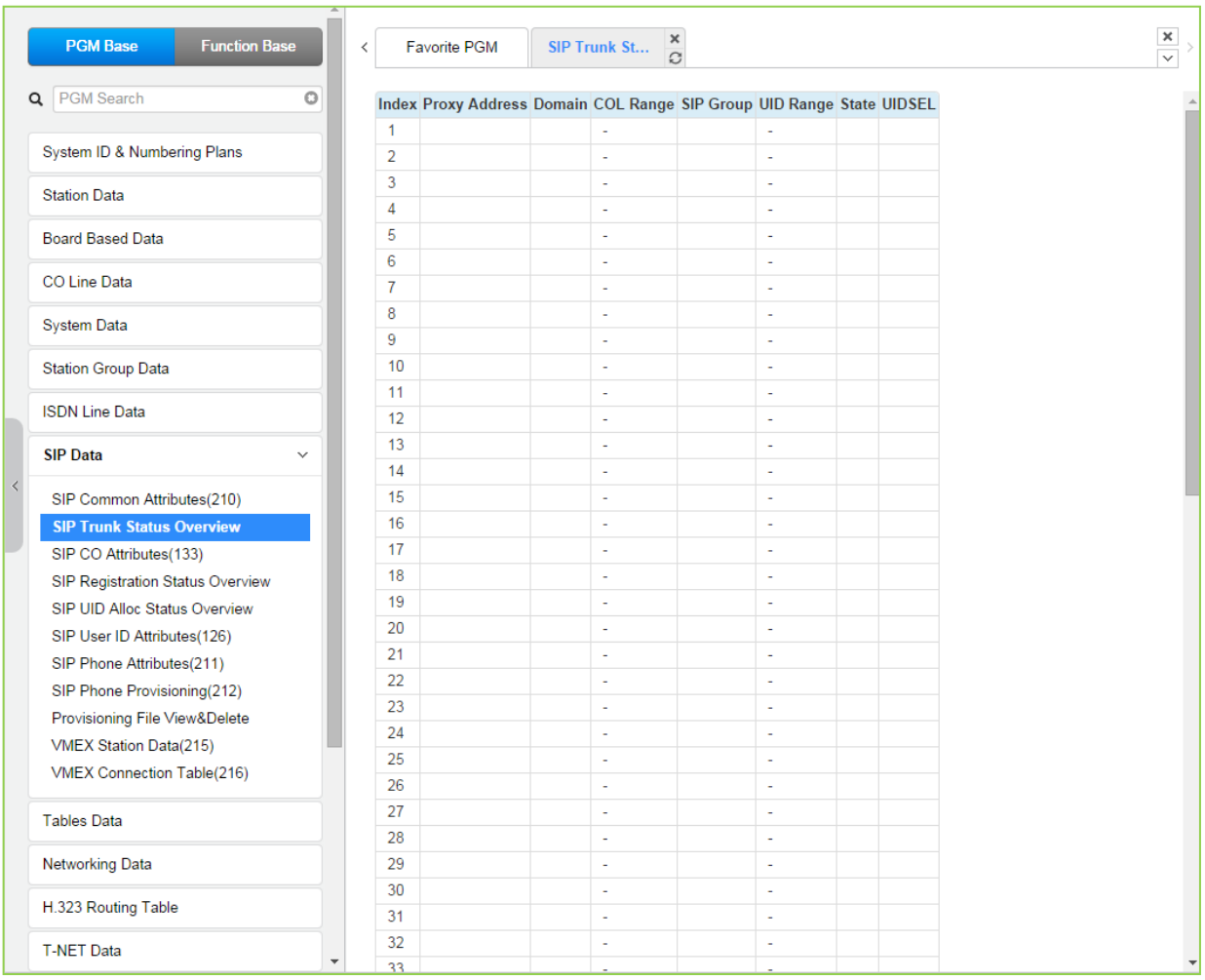


Figure 4.4.8.2-1 SIP trunk status overview

4.4.8.3 SIP CO Attributes - PGM 133

Selecting SIP CO Attributes returns the SIP CO Attributes data input page. Enter the CO Range and click **[Load]** to enter attribute values. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter CO Range: eMG80: 1-74 / eMG800: 1-600

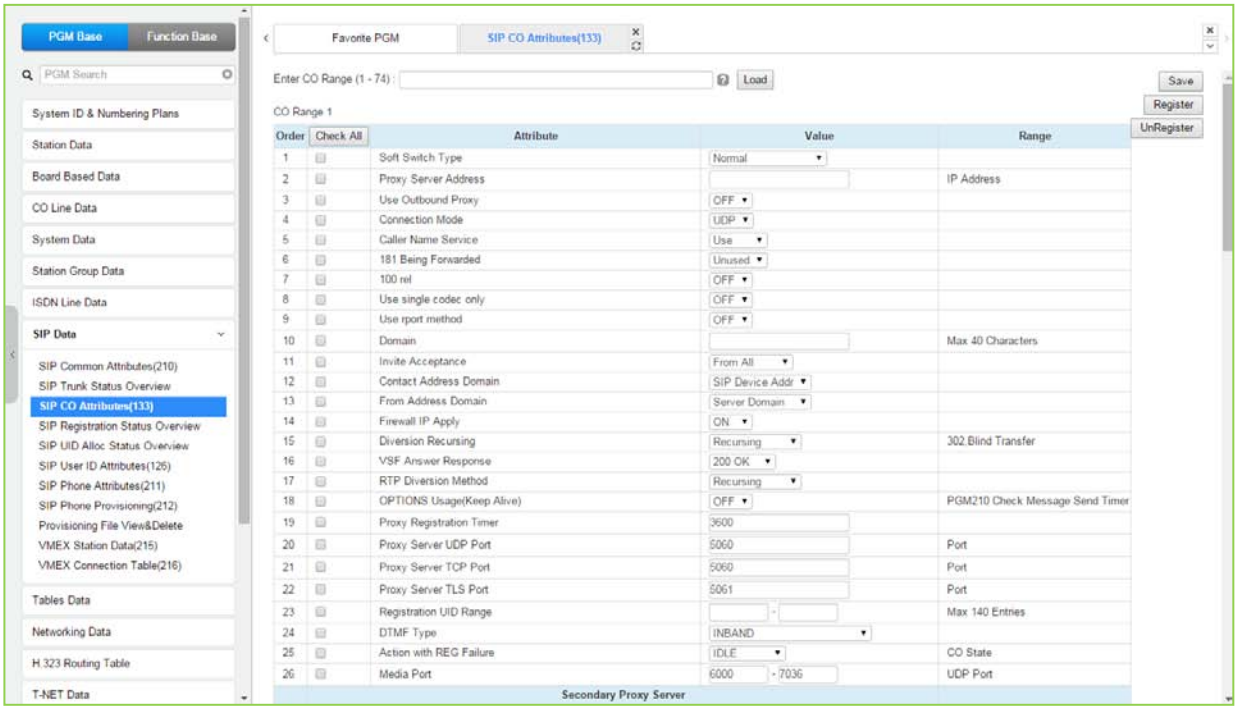


Figure 4.4.8.3-1 SIP CO Attributes

Various parameters must be entered for proper operation of SIP Trunk including the SIP proxy and Registrar as outlined in Table 4.4.8.3-1.

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Soft Switch Type	Allows identification of soft-switch to support extended soft-switch capabilities. KT, SK TELINK, etc. : Service Provider	Normal/ Broadsoft/ KT/ SK TELINK/ KT-C/ MS OCS/ SKYPE CONNECT/ SIP-CC/ TI PK0/ ERICSSON IMS/ DNS REDUNT(Tele2)/ MS LYNC KT-CENTREX	Normal

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Proxy Server Address	SIP Proxy server IP address.	IP address	
Use Outbound Proxy	The SIP module will communicate only to SIP Proxy Server. In this case, destination address of all communication will be the IP of SIP Proxy Server. Use Outbound Proxy flag should be 'OFF' when you use that SIP module for channels of 3rd-party SIP Extensions.	OFF/ ON	OFF
Connection Mode	This field establishes the SIP connection mode as UDP, TCP or TLS for SIP signaling messages.	UDP/TCP/ TLS	UDP
Caller Name Service	Provide and Display of Name Field Data.	Unused / Use	Use
181 Being Forwarded	SIP 181 Message is sent when call is being redirected or forwarded, if enabled.	Unused / Use	Unused
100rel support	Provisional messages, ACK for provisional messages.	OFF ON	OFF
Use single codec only	During capabilities negotiation, the system can send a single codec id or all codes supported.	OFF ON	OFF
Use rport method	When employed behind a NAPT server, device will add Rport header in SIP message to indicate port in use.	OFF ON	OFF
Domain	Domain name associated with iPECS VOIB channels. Is used in SIP “TO: header message” to SIP Server. Required when the Proxy uses a port other than 5060.	Max. 40 characters	
Invite Acceptance	Allow invite message from domain or anywhere.	Domain Only / From All	From All
Contact Address Domain	Contact Address Domain part option. Address of SIP gateway’ or (Server) Domain is used.	SIP Device Addr/ Server Domain	SIP Device Addr
From Address Domain	From Address Domain part option. Address of SIP gateway’ or (Server) Domain is used.	SIP Device Addr/ Server Domain	Server Domain
Firewall IP Apply	When Firewall IP is set in VOIB and VOIU, there can be option – use Firewall or Local IP for IP address of Via and Contact header and SDP connection IP.	OFF ON	ON
Diversion Recursing	Implement Recursing or Non-Recursing Diversion.	Recursing / Non-Recursing	Recursing
VSF Answer Response	SIP incoming CO call is answered with ‘200 OK’ or ‘183 Session Progress’ message by option. To make Non-Recursing Diversion with SIP ‘3xx’ when use CCR service, the new added option [PGM133 – VSF Answer Response] should be ‘183 Msg.’	183 Msg. 200 OK	200 OK
RTP Diversion Method	Reserved Currently.	Recursing / Non-Recursing	Recursing
OPTIONS Usage (Keep Alive)	With “OPTIONS Usage” ON, an Option message is sent at intervals of the Check Message Send Timer assigned in PGM 210 to assure a connection with the SIP CO. SIP COs generally provide an Option	OFF ON	OFF

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	message. In this case, the UCP should not be enabled here.		
Proxy Registration Timer	Time-out for registration.	1-65535	3600
Proxy Server UDP Port	Default port for SIP messages to proxy using UDP.	Port	5060
Proxy Server TCP Port	Default port for SIP messages to proxy using TCP.	Port	5060
Proxy Server TLS Port	Default port for SIP messages to proxy using TLS.	Port	5061
Registration UID Range	Defines the range of User IDs from Station SIP Attributes to register with the SIP Registrar Server.	Max. 140 Entries	
DTMF Type	DTMF sending mode.	INBAND/ 2833/ INFO (DTMF)/ INFO (DTMF RELAY)/ INFO(TELEPHONE EVENT)/ INFO(NORTEL NETWORKS)	INBAND
Action with REG Failure	SIP Module Service Down IDLE or WAIT IDLE when in Registration Fail or Link Down.	IDLE/ WATI IDLE	IDLE
Media Port	IP-Binding media option: Media UDP Port Range.	UDP Port	eMG80:6000-7036 eMG800:6000-14400
Secondary Proxy Server			
Secondary Proxy Server Address	It is used for SIP proxy server redundancy. KOREA telecom only.	IP Address	
Secondary Domain	It is used for SIP proxy server redundancy. KOREA telecom only.	Max. 32 Characters	
Secondary Proxy Server UDP Port	It is used for SIP proxy server redundancy. KOREA telecom only.	Port	
ID Presentation Option			
ID Usage			
P-Asserted-ID	The system normally provides a P-Asserted ID in SIP messages. The system can be configured not to provide the header.	Unused Use	Use
Remote-Party-ID	The system normally provides a Remote-Party-ID in SIP messages. The system can be configured not to provide the header.	Unused Use	Use
Privacy(CLIR) Presentation	SIP employs various headers that include a User Id and Name. In some cases, it may desirable to restrict the called party from receiving this information. Several options for Caller Id restriction can be applied.	Anonymous Name & Anonymous Number/ Anonymous Name/ Privacy: user/ Privacy: id/ Privacy:	Anonymous Name & Anonymous Number

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		user;id;critical/ Privacy: id & anonymous & P-Preferred-ID	
ID Individuality			
CID Password	Enter CID Password.		
From ID	The Id in the "From" header of SIP messages can be based on the calling station, the User Id or a fixed User Id. Extension SIP User Id: one of three SIP User Ids assigned to the station in PGM 111. Select which of the three indices to use in the SIP UID Selection below. Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151. Authorized Representative Id: the User Id of the "Authorized Representative Id" assigned to the SIP User Id that is indexed to the station in PGM 111. The specific index is selected below as the SIP UID Selection. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension SIP-User-ID Table/ Extension outgoing-CLI/ Authorized Representative ID/ Fixed Table	Extension SIP-User-ID Table
From Display	The "Display" field of the "From" header can be configured to use the below: System Rule: a. From ID = Extension SIP User-ID Table, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. b. From Id = Extension Outgoing CLI, display Station Name from PGM 111 or blank. c. From Id = Authorized Rep Id, display Contact Display Name of Authorized Rep Id from PGM 126 otherwise display Station Name from PGM 111 or blank. d. From Id = Fixed Table display Contact Display Name from PGM 126 or Station Name from PGM 111 or blank. Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151	SYS RULE/ Extension outgoing-CLI	SYS RULE
P-Asserted-ID	The Id in the "P-Asserted Id" header of SIP messages can be based on the calling station, the User Id or a fixed User Id. Ext SIP User Id: one of three SIP User Table indices assigned to the station in PGM 111. Select which of three in the SIP UID Selection below. Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151. Authorized Representative Id: the User Id of the	Extension SIP-User-ID Table/ Extension outgoing-CLI/ Authorized Representative ID/ Fixed Table	Extension SIP-User-ID Table

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	"Authorized Representative Id" assigned to the SIP User Id that is indexed to the station in PGM 111. The specific index is selected below as the SIP UID Selection. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.		
P-Asserted-ID Display	The "Display" field of the "P-Asserted Id" header can be configured to use the below: System Rule: a. P-Asserted ID = Extension SIP User-ID Table, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank b. P-Asserted Id = Extension Outgoing CLI, display Station Name from PGM 11 or blank c. P-Asserted Id = Authorized Rep Id, display Contact Display Name of Authorized Rep Id from PGM 126 otherwise display Station Name from PGM 111 or blank d. P-Asserted Id = Fixed Table display Contact Display Name from PGM 126 or Station Name from PGM 111 or blank Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151.	SYS RULE/ Extension outgoing-CLI	SYS RULE
Contact ID	The Id in the "Contact ID" header of SIP messages can be based on the calling station, the User Id or a fixed User Id. Ext SIP User Id: one of three SIP User Table indices assigned to the station in PGM 111. Select which of three in the SIP UID Selection below. Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below	Extension SIP-User-ID Table/ Extension outgoing-CLI/ Fixed Table	Extension SIP-User-ID Table
Remote-Party-ID	The Id in the "Remote-Party ID" header of SIP messages can be based on the calling station, the User Id or a fixed User Id. Ext SIP User Id: one of three SIP User Table indices assigned to the station in PGM 111. Select which of three in the SIP UID Assignment section below. Extension outgoing CLI: the CLI configured for the station through Web PGM 113 and 151. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension SIP-User-ID Table/ Extension outgoing-CLI/ Fixed Table	Extension SIP-User-ID Table
Offnet Call Route ID Transit			
CO to Offnet Direct Call Route			
From/Contact ID	The Id in the "From" and "Contact" headers of SIP messages employ System Attendant CLI, the	SYS ATD/ Original CLI/	SYST ATD

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	original CLI or a fixed User Id. Sys Atd: the CLI configured for the System Attendant through Web PGM 113 and 151. Original CLI: the CLI received by the system for the original incoming call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Fixed Table	
From Display	The “Display” field of the “From” header can be configured to use the below: System Rule: a. From ID = System Atd, display Contact Display Name from PGM 126, otherwise display Attendant Station Name from PGM 111 or blank. b. From Id = Original CLI, display the Name in received by the system for the original call. c. From Id = Fixed Table display Contact Display Name from PGM 126 or Station Name from PGM 111 or blank. Original CLI: the CLI received by the system for the original incoming call.	SYS RULE/ Original CLI	SYS RULE
P-Asserted-ID	The Id in the “P-Asserted Id” header of SIP messages can be based on the System Attendant, the Original CLI or a fixed User Id. Sys Atd: CLI: the CLI configured for the System Attendant through Web PGM 113 and 151. Original CLI: the CLI received by the system for the original incoming call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	SYS ATD/ Original CLI/ Fixed Table	SYST ATD
P-Asserted-ID Display	The “Display” field of the “P-Asserted Id” header can be configured to use the below: System Rule: a. P-Asserted ID = System Atd, display Contact Display Name from PGM 126, otherwise display Attendant Station Name from PGM 111 or blank. b. P-Asserted Id = Original CLI, display the Name in received by the system for the original call. c. P-Asserted Id = Fixed Table display Contact Display Name from PGM 126 or Station Name from PGM 111 or blank. Original CLI: the CLI received by the system for the original incoming call.	SYS RULE/ Original CLI	SYS RULE
Remote-Party-ID	The Id in the “Remote-Party ID” header of SIP messages can be based on the System Attendant, the Original CLI or a fixed User Id. Sys Atd: the CLI configured for the System Attendant through Web PGM 113 and 151. Original CLI: the CLI received by the system for	SYS ATD/ Original CLI/ Fixed Table	Original CLI

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	the original incoming call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.		
Diversion	The Id in the "Diversion" header of SIP messages can be based on the System Attendant, the Original CLI or a fixed User Id, or Unused. Unused: no Diversion header provided. Sys Atd: the CLI configured for the System. Attendant through Web PGM 113 and 151. Original CLI: the CLI received by the system for the original incoming call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Unused/ SYS ATD/ Original CLI/ Fixed Table	Unused
Offnet Call Forward by Station			
From/Contact ID	The Id in the "From" and "Contact" headers of SIP messages employ the forwarding Station, the original CLI or a fixed User Id. Extension: the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension/ Original CLI/ Fixed Table	Extension
From Display	The "Display" field of the "From" header can be configured to use the below: System Rule: a. From ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. b. From Id = Original CLI, display the Name in received by the system for the original call. c. From Id = Fixed Table display Contact Display Name from PGM 126 or blank. Original CLI: the CLI received by the system for the original incoming call.	SYS RULE/ Original CLI	SYS RULE
P-Asserted-ID	The Id in the "P-Asserted Id" header of SIP messages employ the forwarding Station, the original CLI or a fixed User Id Extension: the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension/ Original CLI/ Fixed Table	Extension
P-Asserted-ID Display	The "Display" field of the "P-Asserted Id" header can be configured to use the below: System Rule:	SYS RULE/ Original CLI	SYS RULE

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	a. P-Asserted ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. b. P-Asserted Id = Original CLI, display the Name in received by the system for the original call. c. P-Asserted Id = Fixed Table display Contact Display Name from PGM 126 or blank. Original CLI: the CLI received by the system for the original incoming call.		
Remote-Party-ID	The Id in the "Remote Party Id" header of SIP messages employ the forwarding station, the original CLI or a fixed User Id. Extension: the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension/ Original CLI/ Fixed Table	Extension
Diversion	The Id in the "Diversion" header of SIP messages can be based on the forwarding station, the Original CLI or a fixed User Id, or Unused. Unused: no Diversion header provided. Extension: the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Unused/ SYS ATD/ Original CLI/ Fixed Table	Unused
Mobile Extension External Call			
From/Contact ID	The Id in the "From" and "Contact" headers of SIP messages employ the calling station, the original CLI or a fixed User Id. Extension: the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call or Station number for ICM call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension/ Original CLI/ Fixed Table	Extension
From Display	The "Display" field of the "From" header can be configured to use the below: System Rule: a. From ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. b. From Id = Original CLI, display Station	SYS RULE/ Original CLI	SYS RULE

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	Name from PGM 111 for ICM call or the Name in received by the system for the original outside call. c. From Id = Fixed Table display Contact Display Name from PGM 126 or blank. Original CLI: the CLI received by the system for the original incoming call.		
P-Asserted-ID	The Id in the "P-Asserted Id" header of SIP messages employ the calling station, the original CLI or a fixed User Id. Extension: the Extension SIP User ID or Extension Outgoing CLI as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call or station number for ICM call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension/ Original CLI/ Fixed Table	Extension
P-Asserted-ID Display	The "Display" field of the "P-Asserted Id" header can be configured to use the below: System Rule: a. P-Asserted ID = Extension, display Contact Display Name from PGM 126, otherwise display Station Name from PGM 111 or blank. b. P-Asserted = Original CLI, display Station Name from PGM 111 for ICM call or the Name in received by the system for the original outside call. c. P-Asserted = Fixed Table display Contact Display Name from PGM 126 or blank. Original CLI: the CLI received by the system for the original incoming call.	SYS RULE/ Original CLI	SYS RULE
Remote-Party-ID	The Id in the "Remote Party Id" header of SIP messages employ the Station CLI, the original CLI or a fixed User Id. Extension: the Extension SIP User ID or Extension Outgoing CLII as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for the original incoming call or station number for ICM call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.	Extension/ Original CLI/ Fixed Table	Extension
Diversion	The Id in the "Diversion" header of SIP messages can be based on the calling station, the Original CLI or a fixed User Id, or Unused. Unused: no Diversion header provided. Extension: the Extension SIP User ID or Extension Outgoing CLII as assigned for the From ID under ID Individuality. Original CLI: the CLI received by the system for	Unused/ SYS ATD/ Original CLI/ Fixed Table	Unused

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	the original incoming call or the station number for ICM call. Fixed Table: the SIP User Id from the SIP UID Fixed Table Index attribute assigned below.		
SIP UID Assignment			
SIP User ID Fixed Table Index	When a header is assigned to use “Fixed Table”, the Id from this SIP User ID (PGM 126) Table index is used.	Index	
SIP User ID SELECTION	When a header is assigned to use the “Extension SIP-User-ID Table”, the SIP User ID is selected using this SIP UID index in the Station Attributes (PGM 111).	Index, Index 2, Index 3	SIP User Table Index
External CODEC Priority Configuration			
1st ~5th priority	1st. priority 2nd. priority 3rd. priority 4th. priority 5th. Priority 1. If specify priority to a specific CODEC then it will work for negotiation RTP data. 2. If only 1st. priority is specified and the others are none, then it will work as single CODEC only does.	None/ g.711-u/ g.711-a/ g.723.1/ g.729/ g.729-a/ g.722	none
SIP Call Setup Failover Option			
Call Setup No Response	When the system initiates a SIP Trunk call and receives no response from the SIP proxy server, after expiration of this timer the SIP call is canceled and a Fail-over call placed on the Fail-over CO/IP Line group specified below. Note the timer can be set at 3 to 15 seconds and ‘0’, which disables Fail-over.	0, 3 ~ 15 sec	5sec
Failover CO Group Number	When the system attempts to initiate a SIP Trunk call and the SIP Trunk is in an OOS state or the SIP proxy server does not respond in the No Response time above, the system will cancel the SIP call and place a call over a CO/IP Line from this group.	eMG80:1 ~ 21 eMG800:1~201 (Max. Numbers of CO Group)	none
SIP Session Timer			
Session Timer Usage	During a SIP call or “session”, there are no signaling packets sent or received from the SIP Call server. In order to assure a session is still active, the system can periodically send an Option message that the SIP Call server should acknowledge.	ON/OFF	OFF
Session Timer Value	When “Session Timer Usage” is enabled, the system will verify the session at this timer interval.	90~ 3600	360
Min SE	During negotiation with “Session Timer Usage” enabled, the system will use this value as the minimum Session expiration timer and will not respond to a SIP Option message prior to expiration	90~ 3600	90

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	of this timer.		
URI Formatting and Rules			
General Formatting			
To Field Method	The SIP "To:" header is formatted using the SIP or Telephony method as shown below. SIP method To: < sip:[Number]@[Domain];user=phone > Telephony method To: < tel:+[Number] >Domain	sip: method/ tel: method	SIP: method
Numbering Format	When assigned the Telephony method for the "To" header, the number format can be: Local - [tel:+Number]@[Domain] or Global (+E164) - [tel:+E.164 Address]@[Domain] E.164 Address: Nation + Area Code + Number	Local/ Global	Local
Local: include Area Code	The Area code (PGM 143) can be added as a prefix if the 'Numbering Format' is set as Local. Example: user dials '8701234' and the Area code is '042' The resulting "To" field URI is tel:+0428701234@[Domain]	Yes No	No
Global: include phone-context	If the 'Numbering Format' is Global and the 'To Field Method' is Telephony, the 'phone-context' can be added as below. user dials '0011428701234' from Country code 82 The resulting "To" field URI is, tel:+0011428701234@[Domain];phone-context=+82	Yes No	No
Specific Formatting by Conversion (example)			
From 4 digits	To 6 digits	User Dial	Result
0	+82	0314504639	+82314504639
00	+	0082314504639	+82314504639
1588	1588	15886724	15886724
031		0314504639	4504639
SRTP Setting			
SRTP Usage	When implemented by the carrier, the system can encrypt media (RTP) packets employing SRTP (Secure Real-Time Protocol). But VoIP Virtual switching channel does not support SRTP.	OFF ON	OFF
1st CRYPTO	The first priority Crypt method for SRTP. The range is as below: • None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80		None

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	• AES_CM_256_HMAC_SHA1_80		
2nd CRYPTO	The second priority Crypt method for SRTP. The range is as below: • None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80 • AES_CM_256_HMAC_SHA1_80		None
Caller/Called ID			
ID Option			
Caller ID Selection	For the purposes of display and ICLID call routing, the iPECS employ this header as the “Caller ID”.	P-Asserted-ID/ Remote-Party-D/ From ID	P-Asserted-ID
Display Caller Name(Though Id is Anonymous)	Even though the User Id is Anonymous, the system can display the SIP “From” header “Display Name” field for the call.	No Yes	No
Called ID Selection	For the purposes of call routing, the “SIP Request” or “To” header will be employed by the system as the “Called Party ID”.	Request URI/ To ID	Request URI
Miscellaneous set			
Drop Busy Station	While busy, the system can be configured to terminate a station call, and accept and connect any new call from the SIP Trunk. For special use in Italy only.	No Yes	No
Ignore INBAND DTMF	In some situations, DTMF tones from the connected party may be received along with the DTMF Type specified above. This can cause errors in detection such as double digits. In this case, the system can be configured to ignore Inband DTMF signals. Note do not disable Inband signals if selected as the “DTMF Type” above as this may disable DTMF detection.	No Yes	No
SIP Trunk Group	Multiple SIP User Id ranges may register with the SIP CO, for example, SIP COs from different providers. When different SIP User ID ranges are required on a SIP CO, a different SIP Trunk Group should be assigned to each range. Note this has no relationship with the CO/IP Line Group.	0~71	0
Send Refer for Transfer	The system can employ the SIP Refer method to forward or transfer incoming calls to an “Off-net” location if supported by the SIP Service Provider.	No Yes	No
CN Payload Insert	When Comfort Noise generation is desired, the system will provide a Comfort Noise Payload during periods of silence.	No Yes	No
Ignore 180 after 183	If the option is Yes, an appropriate ring back tone may be played to the calling party when the called	No Yes	No

Table 4.4.8.3-1 SIP CO ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	party's phone is alerting without changing the internal or system ring back tone. For example, when placing a call from USA to Korea, a Korean ring back tone is heard by the caller.		
Add “user=phone” param	For outgoing SIP call, "user=phone" will be added in Request URI of INVITE.	No Yes	No

4.4.8.4 SIP Registration Status Overview

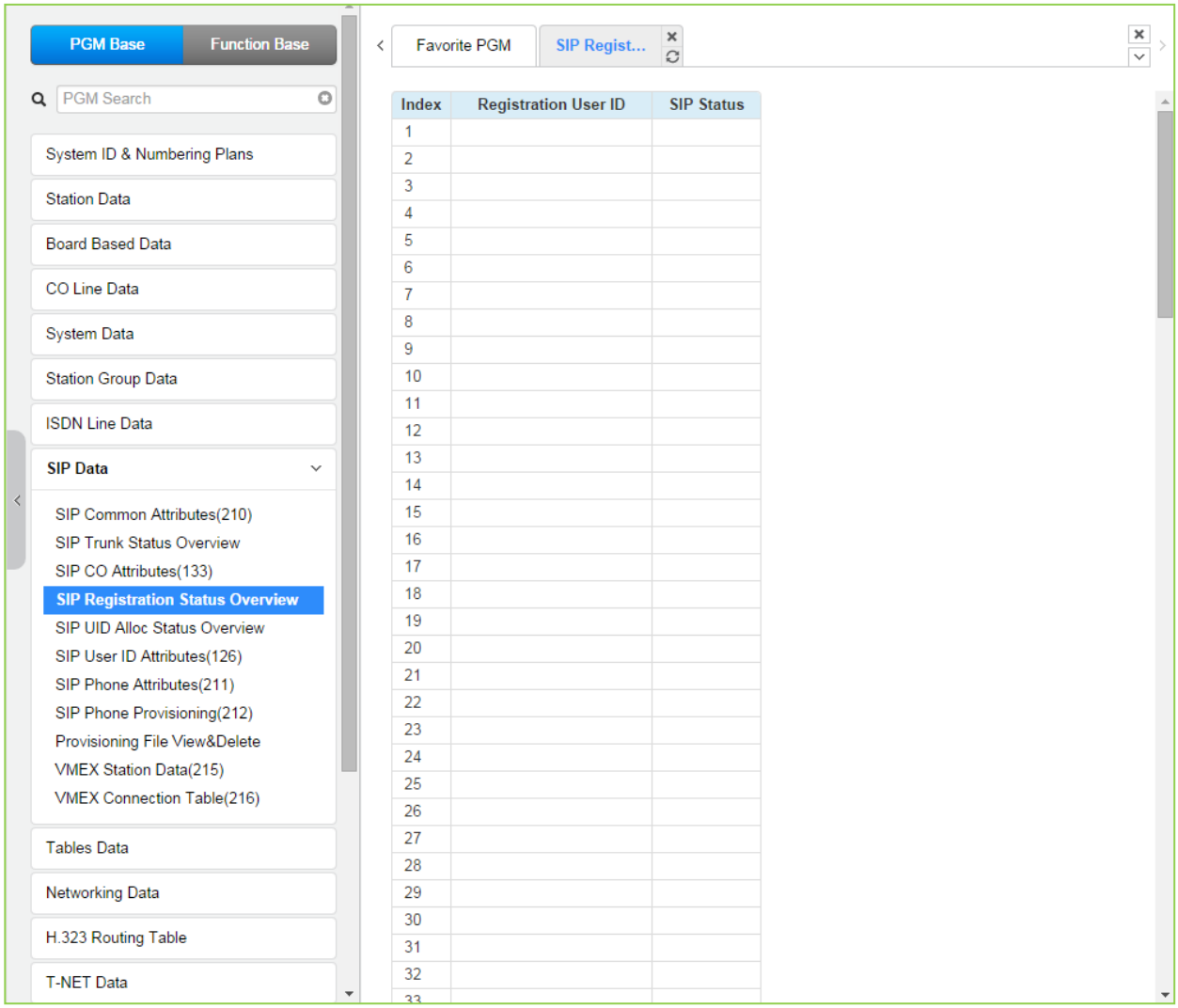


Figure 4.4.8.4-1 SIP Registration status overview

4.4.8.5 SIP UID Allocation Status Overview

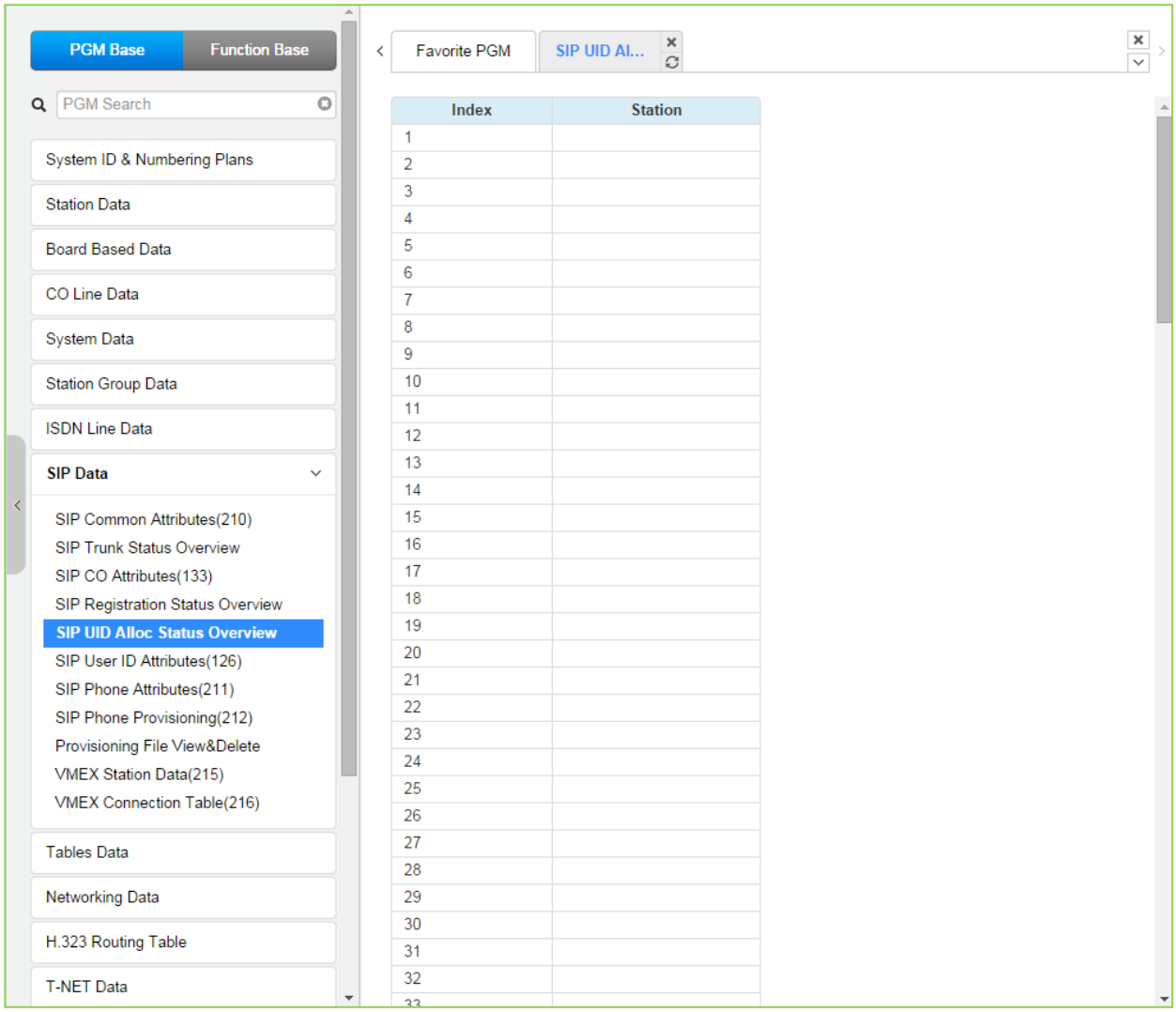


Figure 4.4.8.5-1 SIP UID Allocation Status Overview

4.4.8.6 SIP User ID Attributes – PGM 126

Selecting SIP User ID Attributes will display the SIP User ID input page. Enter a valid SIP User ID Index Number range, see Station Data, and click **[Load]** to view the SIP User ID Attributes for the first index in the range. Enter new data and click **[Save]** to modify the attributes for the index range.

Enter SIP User ID Index number: eMG80 : 1-140 / eMG800: 1-1200

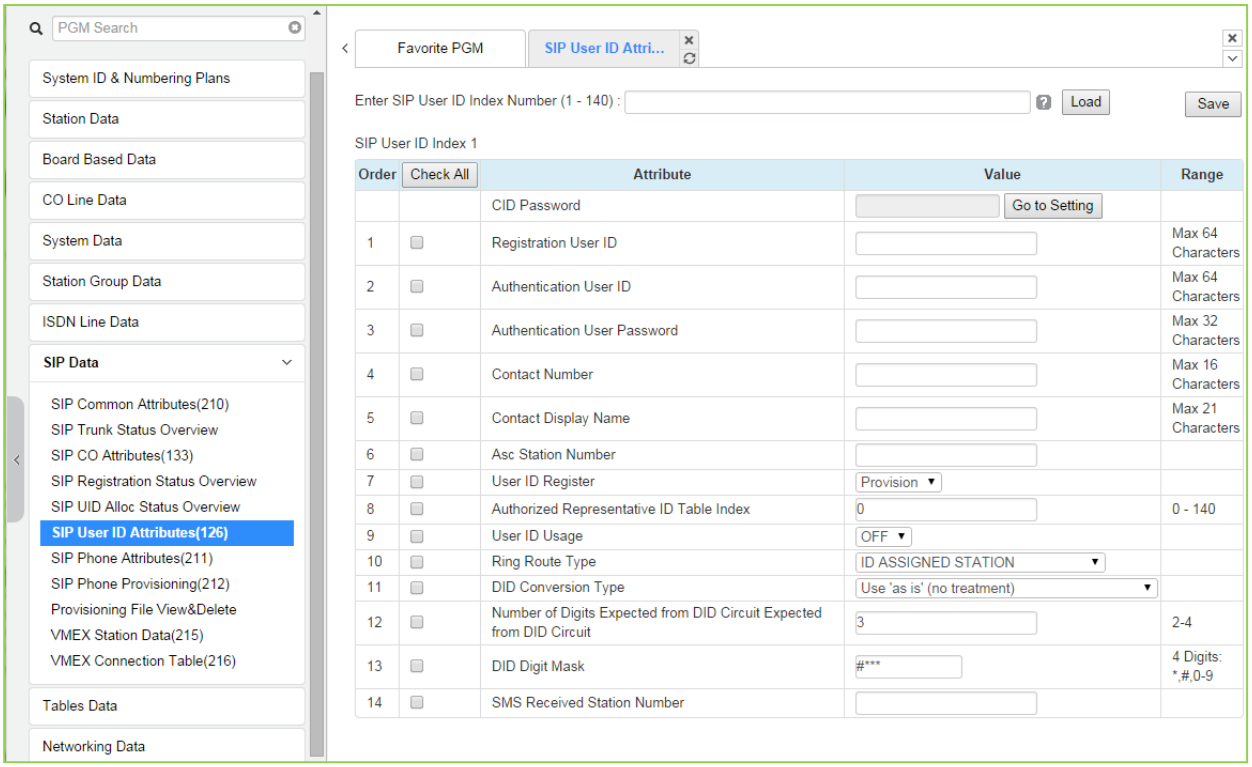


Figure 4.4.8.6-1 SIP User ID Attributes

For each station, an index to the SIP User Id Attributes Table is defined in PGM 111 Station Attributes. The SIP User Id Attributes Table defines SIP characteristics associated with the index including User ID, Authentication name, etc. These characteristics are required for proper operation of the system and registration of the iPECS IP and LDP phones when employed with SIP trunk. See also, PGM 133. Note PGM 126 and PGM 133 are accessible only via Web Admin.

Setting CID Password directly

You can set the CID password to click “Go to Setting” button. After clicking it, you will move to the following PGM 162 and set the CID password, and then save CID password to mark tick on the save box and click the Save button.

Table 4.4.8.6-1 SIP User ID ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Registration User ID	User ID@Domain.	Max. 64 characters	
Authentication User ID	Authentication name assigned in SIP Proxy when required for registration.	Max. 64 characters	

Table 4.4.8.6-1 SIP User ID ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Authentication User Password	User password as assigned in SIP Proxy when required for registration.	Max. 32 characters	
Contact Number	User ID.	Max. 16 characters	
Contact Display Name	Name field of Contact header.	Max. 21 characters	
Associative Station Number	This field assigns a station to receive incoming calls for the User ID index when “ID Assigned Station” is defined as the Ring Route Type below. In addition this station will receive messages resulting from the SIP Notify method to the iPECS VoIP channels, such as MSG wait, Line busy, etc.	Station number	
User ID Register	In some situations such as during provisioning of the SIP Server or Proxy, it may be desirable not to attempt registration. This field may be used to determine if registration should occur.	Register/ Provision	Provision
Authorized Representative ID Table Index	Representative ID table used for ID individuality.	eMG80:0~140 eMG800:0~1200	0
User ID Usage	If registration is enabled (User ID Register above) the iPECS SIP device (VoIP channels) can send the User ID to the SIP Proxy to register the ID. Otherwise, the Authentication Name and password are used.	OFF ON	OFF
Ring Route Type	Incoming calls from a SIP trunk can be routed based on CO/IP Ring assignments (PGM 144), routed to the defined Associated station above (ID Assigned Station) or DID treatment (defined below).	ID Assigned Station/ Ring Assignment/ DID Conversion/ MSN-DID Conversion(PGM 145)	ID assigned Station
DID Conversion Type	When the Ring Route above is defined as DID, the system will send the call to a destination based on the DID conversion selected here. The digits may be used as is to identify the desired station, modified based on the DID Digit mask below and routed to the resulting station or the modified DID number can be used as an index to the DID routing table, PGM 231 to route the call.	DID Digit Conversion/ Use ‘as is’/ Modify Using Flexible DID Conversion Table	Use ‘as is’
Number of Digits (2-4) Expected from DID Circuit	When DID Digit Conversion or Flexible DID Conversion Table routing is used, the number of digits received is defined in this field.	2-4	3
DID Digit Mask (4digits: *,#,0-9	When DID Digit Conversion or Flexible DID Conversion Table routing is used, the digit conversion is defined in this field.	4 Digits: *, #, 0-9	#***
SMS Received Station Number	When received SMS, SMS will go to this station.		

4.4.8.7 SIP Phone Attributes - PGM 211

Selecting SIP Phone Attributes will display the SIP Phone input page. Enter a valid SIP Station Number or range, and click **[Load]** to view the SIP Phone Attributes for the first Station Number in the range. Enter new data and click **[Save]** to modify the attributes for a Station or range.

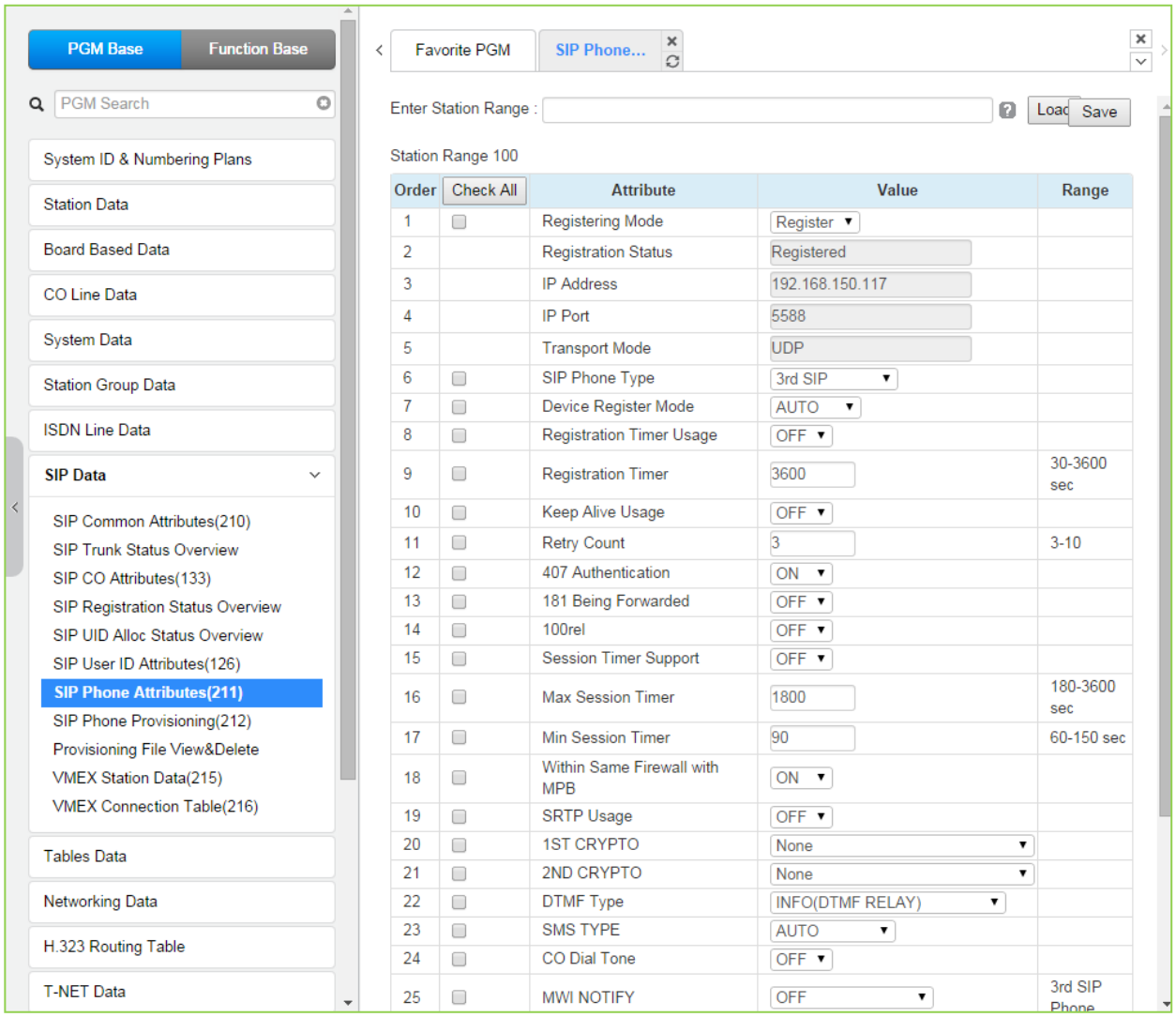


Figure 4.4.8.7-1 SIP Phone Attributes

< Registration >

For a new registration of SIP station, input ID/PWD & Desired Station Number in PGM 443 of Station User Login Table. This SIP Phone Attributes are for Stations that are already registered to system.

- Register Mode - Register/ Manual : Set Registration Time Out or Not
- Registration Status : View connection status (Disconnected or Not) for a station
- IP Address : SIP Phone‘s IP address
- IP Port : SIP Phone‘s IP Port Number
- Transport Mode : SIP signaling method
- SIP Phone Type : Automatically Assigned by System
- Device NAT Usage : Automatic Detection
- Registration Timer Usage: OFF – Assign (Re-) Registration Timer by Provisioning (212), ON – Assign (Re-) Registration Timer by SIP Phone Attributes (211).

- Registration Timer: more than 10 minute recommended.
- 407 Authentication: Authentication of Registration (and Call Setup). To implement authentication, user login Password should be available in PGM 443 for the Station.

< Keep Alive / NAT Resolution >

To keep stable information of SIP Phone's Connection, IP address and Port number that is under NAT environment, system uses 'OPTIONS' message to implement Keep Alive and assist NAT resolution - effort to maintain IP address of SIP Phone by sending message so often from system to SIP Phone. SIP Phone should be capable to answer for 'OPTIONS' message

- Check Message Sending Timer in [SIP Data / SIP Attributes (210)] : 120 seconds
- Keep Alive Usage for a SIP Station in [SIP Data / SIP Phone Attributes (211)] : ON
- Retry Count for a SIP Station in [SIP Data / SIP Phone Attributes (211)] : 3

< System Firewall Resolution >

In case of firewall routed with MPB, to distinguish remote SIP Phone that is outside of firewall from system local area a check bit is required per a SIP Station. With this check bit, system can determine whether to serve communication using firewall mapped WAN IP address of MPB or serve communication using LAN IP address of MPB.

- SIP Phones that are outside of system protect firewall : [SIP Data / SIP Phone Attributes (211)] – 'Same Zone with MPB' to 'OFF'

< Session Timer >

To confirm talk state frequently during in talk state, system sends 'UPDATE' message to SIP Phone. If there is no response for the UPDATE message with in Maximum session timer, system will disconnect the talking call.

- [SIP Data / SIP Phone Attributes (211)] – Session Timer Support : ON
- [SIP Data / SIP Phone Attributes (211)] – Max Session Timer : if exceed, disconnect talking call
- [SIP Data / SIP Phone Attributes (211)] – Min Session Timer: minimum guard timer for session timer negotiation.

< SRTP >

Voice & Video Data Encryption requires synchronization of CRYPTO method between system and SIP Phone side. If system specifies SRTP information then same information should be in SIP Phone side by Phone user programming.
SRTP usage requires a SRTP relay channel via eMG system VOIU and VOIB.

- [SIP Data / SIP Phone Attributes (211)] – SRTP Usage: ON
  →SIP Phone self-programming is required, too – SRTP ON
- [SIP Data / SIP Phone Attributes (211)] – 1st CRYPTO key generation type: one of ARIA_CM_192_HMAC_SHA1_80, AES_CM_128_HMAC_SHA1_80, ARIA_CM_128_HMAC_SHA1_80
  →SIP Phone self-programming is required, too – 1st/2nd CRYPTO method
- [SIP Data / SIP Phone Attributes (211)] – 2nd CRYPTO key generation type: one of ARIA_CM_192_HMAC_SHA1_80, AES_CM_128_HMAC_SHA1_80,

ARIA_CM_128_HMAC_SHA1_80
→SIP Phone self-programming is required, too – 1st/2nd CRYPTO method

< DTMF >

1) INFO (OUT BAND) type DTMF
   - Presented in SIP signaling message.
   - INFO (SIMPLE DTMF) / INFO (NORTEL NETWORKS) / INFO (DTMF RELAY) / INFO (TELEPHONE EVENT)
   - Default: INFO (DTMF RELAY)
2) TONE (INBAND) type DTMF
   - Presented in RTP packet
   - Additional VOIU/VOIB' DSP channel is required to detect DTMF in RTP
   - INBAND / 2833

<CO DIAL TONE>

This is to avoid double play of CO dial tone

'Set' if SIP phone plays CO dial tone by itself. If not, there will be another CO dial tone from external.

<Request URI Type>

Some SIP Phone will reject Request-URI if IP and port in domain field is different from its contact IP and port.

'Normal': IP and port number in Request URI domain field will be the real IP and port number of the SIP phone.

'KT-FMC': IP and port number in Request URI domain field will be system IP and port

<Busy Serve>

System Busy Tone: there will be a 'busy-tone' on busy state that is presented by system. Additional VOIB/VOIU DSP channel is required.

486 Busy Message: there will be '486 busy' SIP signaling response on busy state.

<Call Initiation Mode>

For a SIP station, system can establish multiple or single call sessions. With this option system can control 'call-wait' option in system side. Normally, the SIP Phone has its 'call-wait ON/OFF' option by itself.

Options are as below:

'Multiple': for a new additional call to SIP Phone, system initiates every call for the SIP Phone regarding it is on idle state. The 'call-wait allow/deny' is decided by SIP Phone itself.

'Single': system initiates only one call for a SIP Phone. The 'call-wait' is denied by system side. So, a call to a busy SIP station will be implemented on a busy state call-control.

Table 4.4.8.7-1 SIP PHONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Registration Mode	Register/Manual: Set Registration Time Out or Not.		Register
Registration Status	View: Connection Status (Disconnected or Not).		
IP address	View: IP Address.		
IP Port	View: SIP Connection Port Number.		
Transport Mode	UDP/TCP/TLS: SIP Signaling Method.		UDP
System SIP Port	The system will display the system SIP Port.		
SIP Phone Type	Automatically assigned by System.		3rd SIP
Device register mode	Automatically Resolved by system.	AUTO/ NO NAT/ NAT	AUTO
Registration Timer usage	ON (OFF: if want to set it by provisioning).	OFF ON	OFF
Registration Timer	Low time will make more traffic.	30-3600	3600
Keep Alive Usage	ON for NAT.	OFF / ON	OFF
Retry Count	OPTIONS message sending frequency.	3-10	3
407 Authentication	ON if want to authenticate register and call setup.	OFF / ON	ON
181 Being Forwarded	N/A	OFF / ON	OFF
100 rel Support	N/A	OFF / ON	OFF
Session Timer Support	Talk state monitoring and disconnect call if no response.	OFF ON	OFF
Max Session Timer	Disconnect call within this timer if there is no response.	180-3600	1800
Min Session Timer	Minimum Session timer negotiation guard time.	60-150	90
Within same firewall with MPB	Distinguish from system firewall.	OFF ON	ON
SRTP Usage	RTP encryption.	OFF / ON	OFF
1st CRYPTO	1st CRYPTO key generation type. The range is as below: • None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80 • AES_CM_256_HMAC_SHA1_80		None
2nd CRYPTO	2nd CRYPTO key generation type The range is as below: • None • ARIA_CM_192_HMAC_SHA1_80 • AES_CM_128_HMAC_SHA1_80 • ARIA_CM_128_HMAC_SHA1_80 • AES_CM_192_HMAC_SHA1_80 • ARIA_CM_256_HMAC_SHA1_80 • AES_CM_256_HMAC_SHA1_80		None
DTMF Type	DTMF type of SIP Phone.	INBAND/ 2833/	INFO(DTMF RELAY)

Table 4.4.8.7-1 SIP PHONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		INFO(SIMPLE DTMF)/ INFO(NORTEL NETWORKS)/ INFO(DTMF RELAY)/ INFO(TELEPHONE EVENT)	
SMS Type	SMS service type	AUTO, Text/plan, Text/plan(KR), Xnipm+xml	AUTO
CO DIAL TONE	When OFF, Provide virtual dial tone to SIP extension. When ON, Provide real CO dial tone to SIP extension.	OFF ON	OFF
MWI NOTIFY	NOTIFY request for Message Wait Indication.	OFF/ message-summary	OFF
Request URI Type	'Normal': IP and port number in Request URI domain field will be the real IP and port number of the SIP phone. 'KT-FMC': IP and port number in Request URI domain field will be system IP and port.	Normal/ KT FMC	Normal
Busy Service	System Busy Tone: Busy is served by busy tone served by system. 486 Busy Message: Busy is served by SIP busy message.	System Busy Tone / 486 Busy Message	System Busy Tone
Call Initiation Mode	'Multiple': for a new additional call to SIP Phone, system initiates every call for the SIP Phone regarding it is on idle state. The 'call-wait allow/deny' is decided by SIP Phone itself. 'Single': system initiates only one call for a SIP Phone. The 'call-wait' is denied by system side. So, a call to a busy SIP station will be implemented on a busy state call-control	Multiple / Single	Multiple
Pre Audio Connection For DTMF	Audio connection mode when call is not answered but in an alerting (ring-back tone) or dialing (CO dial tone) state. System normally connects audio by '183 Session Progress' message. But some kind of SIP Phone does not support DTMF implementation after this message and in that case system can connect audio by '200 OK' message by this option.	183 Session Progress / 200 OK	183 Session Progress
Do Not Overwrite Station Name	This feature can be set in case of the following Range: - OFF(REG): Extension name will be updated with displayed in REGISTER message. - ON: Extension name will not be updated. - OFF(INV): Extension name will be updated with displayed in INVITE message. - OFF(REG+INV): Extension name will be updated with displayed in REGISTER or INVITE message.	OFF(REG), ON, OFF(INV), OFF(REG+INV)	OFF(REG)
Follow CO Enblock Process	Skip "dial tone by system" phase and deliver transparent message of CO trunk to SIP phone.	OFF ON	OFF

Table 4.4.8.7-1 SIP PHONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Suffix DID Tbl to CLI	If this option is ON, CLI is published by suffixing DID Conversion table index.	OFF ON	OFF

4.4.8.8 SIP Phone Provisioning - PGM 212

Selecting SIP Phone Provisioning will display the SIP Phone Provisioning Data input page. Select one of CONFTYPE (Ericsson-LG Enterprise SIP Phone Type) and set the attributes you want to set for those types of SIP Phones on their registration to system and press **[Save]** button.

To store provisioning files that have been uploaded to the iPECS UCP, press **[Store uploaded Provision files]**. To view the stored configuration files, press **[View Provision files]**. To download Provision files, press **[Download Provision files]**. To view TLS Cert. files, press **[View TLS Cert files]** button.

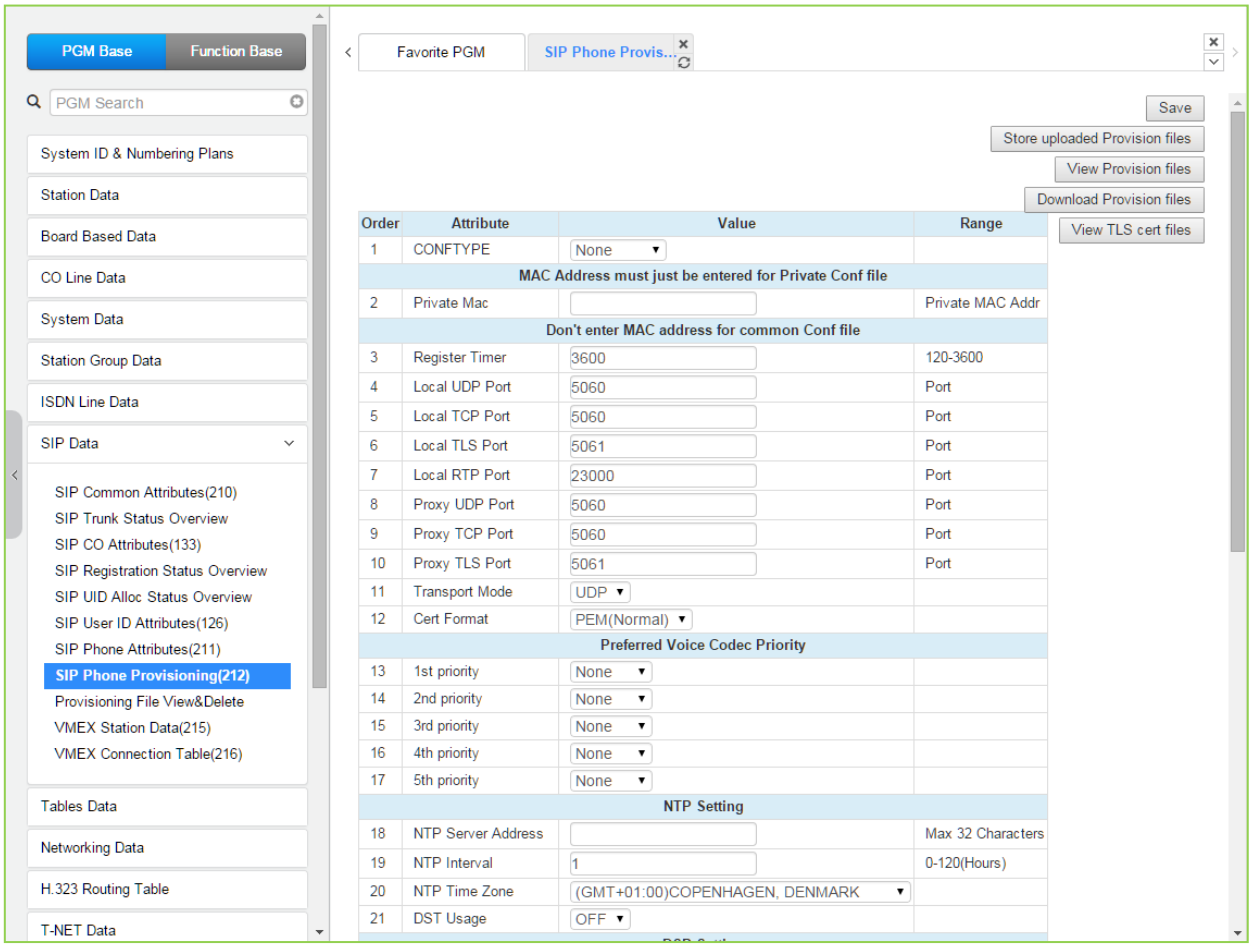


Figure 4.4.8.8-1 SIP Phone Provisioning

< Why ? >

To pre-assign default attributes and download configuration to SIP Extensions when they register to System (MPB)

< For Who? (for all of specified Phone type or for one MAC specified Phone) >

CONFTYPE: select Phone Type / Mandatory

< Ericsson-LG Enterprise WIT-400HE >

- Currently MPB (TFTP only) does not proceed provisioning for WIT400H(http only) because of different method
  →But, WIT-400HE follows eMG system's default provisioning by itself automatically.

< Ericsson-LG Enterprise LIP8002 / LIP88xx/LIP-8XXXE >

- MPB proceed provisioning for LIP8002 / LIP88xx/LIP-8XXXE

< Other 3rd party SIP Extensions >

- Does not proceed provisioning

Private Mac: specify MAC address if provisioning target is only for one specific SIP extension / Optional

< For What ? >

Re-Registration Timer: this will be useless if [SIP User ID Attributes (PGM 126) - Registration Timer Usage] is ON

SIP Extension's Local UDP/TCP/TLS Port number

Proxy Port: Server port number in sight of SIP Extension toward MPB

Transport: Signaling mode

SIP Extension's CODEC Priority

NTP Server and DST setting

The default volume of Speaker/Handset/Headset, maximum volume of Handset

Table 4.4.8.8-1 SIP PHONE PROVISIONING

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
CONFTYPE	Mandatory, select one of Ericsson-LG Enterprise SIP Phone type		None
MAC address must just be entered for Private Conf file			
Private MAC	Specify MAC address of a SIP Phone to serve private provisioning for an Extension. For common provisioning for all of CONFTYPE SIP Extensions, do not specify MAC address	Private MAC address	
Don't enter MAC address for common Conf file			
Registration Timer	Re-Registration Timer	120-3600	3600
Local UDP Port	SIP Phone default signaling UDP port	Port	5060
Local TCP Port	SIP Phone default signaling TCP port	Port	5060
Local TLS Port	SIP Phone default signaling TLS port	Port	5061
Local RTP Port	SIP Phone default RTP port start range	Port	23000
Proxy UDP Port	SIP Server port for SIP Phones (MPB SIP Port number)	Port	5060
Proxy TCP Port	The SIP phone will send messages to the UCP system over this SIP Server port.	Port	5060
Proxy TLS Port	The SIP phone will send messages to the UCP system over this SIP Server port.	Port	5061
Transport Mode	The IP packet transport mode used between the system and SIP phone for signaling messages is defined as UDP, TCP or TLS. In case of TLS, the options configured in the SIP Common Attributes (PGM 210) apply.	UPD TCP TLS	UDP
Cert Format	The system supports two certification formats Privacy-Enhanced Electronic Mail (PEM) or Distinguished Encoding Rules (DER).	PEM(Normal), DER (Normal)	PEM(Normal)
Preferred Voice CODEC PRIO			
1st priority ~ 5th priority	When the system negotiates with the SIP phone, the Codec priority specified is employed. If only the 1st. priority Codec is defined, only that Codec is available from the phone. If the Codec is not supported by the remote party, the call will	G.711-u G.711-a G.723.1 G-729	None

Table 4.4.8.8-1 SIP PHONE PROVISIONING

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	fail.	G.722	
NTP Setting (Need for TLS)			
NTP Server Address	The IP8800 series phones employ NTP to determine the time of day. The NTP server id must be configured for the phone.	Max. 32 Characters	
NTP Interval	The phone periodically checks the NTP server to determine the proper time of day.	0-120 (Hours)	1
NTP Time Zone	The phone must be configured with the local Time Zone for proper operation and time display.	GMT	
DST Usage	The phone must be configured to support Daylight Saving Time.	ON OFF	OFF
DSP Setting			
Speaker Volume	The default volume level of SIP phone speaker can be set through the Config file.	1-11, 1-7 (LIP-8850)	6
Handset Volume	The default volume level of SIP phone handset can be set through the Config file.	1-11, 1-7 (LIP-8850)	6
Headset Volume	The default volume level of SIP phone headset can be set through the Config file.	1-11, 1-7 (LIP-8850)	6
MAX Handset Volume	The default maximum volume level of SIP phone handset can be set through the Config file.	1-11	11
Digit Map			
Dial Tone Digit	A digit string can be defined in the Config file so that the SIP phone will provide a “Second Dial Tone” to the user.	Max. 256 Digits	
Pause Timer	Dial Pause timer in SIP Phone.	01-20 (Sec.)	3
Digit Map	Send setup to system numbering plan.	Max. 1000	
Emergency Code	The Emergency dial code for the SIP phone can be set through the Config file.	Max. 1000	
System Setting			
Feature Sync.	With Do Not Disturb and Call Forward feature synchronization ON, when SIP Phone changes the DND or Call Forward state, the system is informed of the change in status.	ON OFF	ON
Auto Idle Timer	Phone goes to idle after this timer when the phone receives disconnect message or signal from system.	00-99 (Sec.)	5
Check Domain	The IP-8800 SIP Phones can be configured to verify the domain in SIP messages match the registered proxy server.	OFF ON	ON
Telnet Usage	The IP-8800 series phones can support Tenet access to the CLI.	Enable Disable	Disable
WEB Usage	The IP-8800 series phones incorporate a Web server for access to the phone configuration files.	Enable Disable	Disable
Crypt Mode	The system provisioning cryptosystem is configured to employ either RSA or ECC (Elliptic Curve Cryptography)..	RSA ECC	RSA
Save button: save provisioning for the specified common CONFTYPE or specific SIP Extension with Private MAC. Store uploaded Provision files button: Store the uploaded provision files. Download Provision files button: download the provision files. View Provision files button: display all of saved provisioning information. View TLS Cert files button: display all of saved TLS Cert files information.			

4.4.8.9 Provisioning File View & Delete

Selecting Provisioning File View & Delete displays a list of all the Provisioning files stored in the provisioning files directory as shown in the following figure. Note this does not included files that have been uploaded to iPECS eMG file system but not “stored” under PGM 212. To delete a file from the provisioning file directory, check the box in front of the file to be deleted then click **[Delete]**.

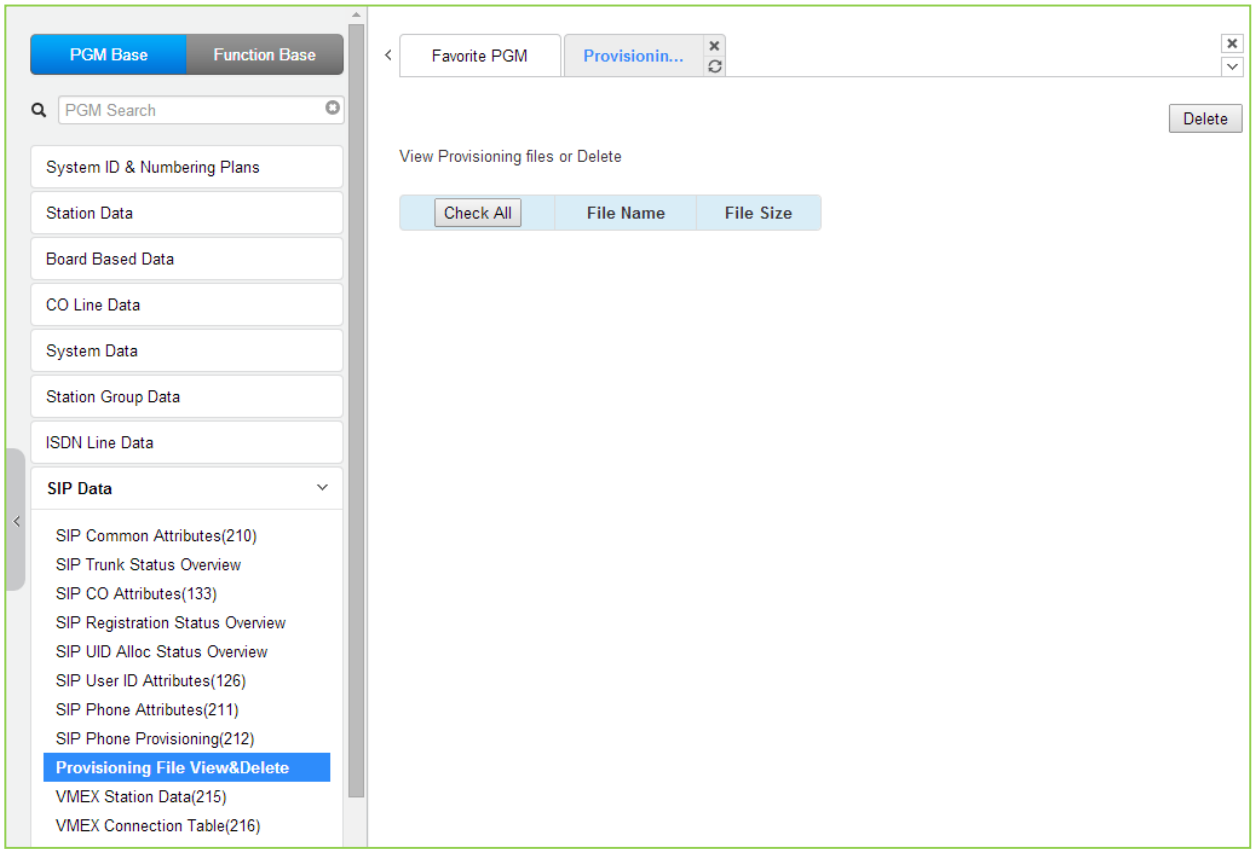


Figure 4.4.8.9-1 Provisioning File View & Delete

4.4.8.10 VMEX Station Data - PGM 215

Selecting VMEX Station data will display the VMEX Station Data input page as shown in the following figure. Enter a range, and click **[Load]** to view the VMEX Data for all stations in the range. Use the check boxes to indicate the VMEX Station Data to modify. After modifying the data, click **[Save]** to store the VMEX Station Data.

Enter VMEX Station Index Range: eMG80 : 1-140 / eMG800: 1-1200

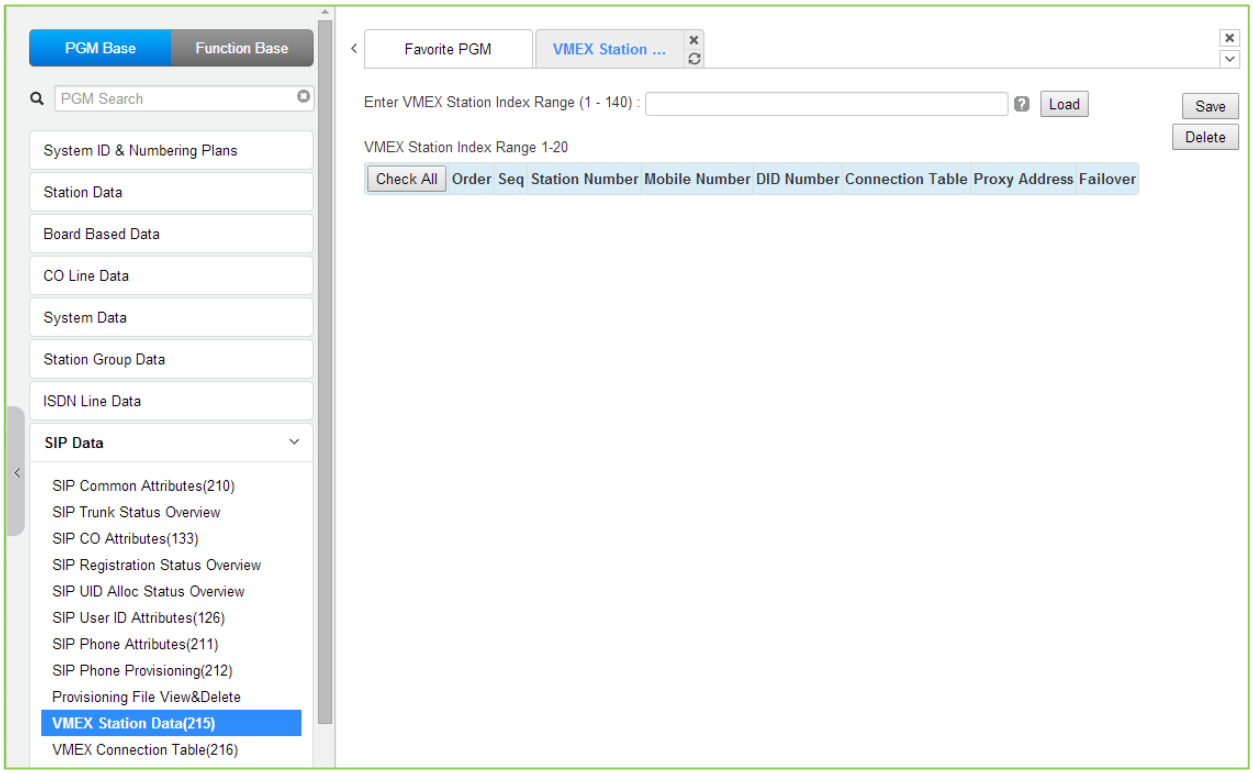


Figure 4.4.8.10-1 VMEX Station Data

The Virtual Mobile Extension feature permits a remote mobile phone to act as a station within the system employing SIP. For proper operation, various parameters as shown in Table 4.4.8.10-1 must be configured for the Station data.

Table 4.4.8.10-1 VMEX Station Data

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Number	The station number of the VMEX can be modified. The VMEX station number must not conflict with other numbering plans. The station number can be modified here or in PGM 105 and is affected by the 8 Digit Table	Station Number	
Mobile Number	The Caller Id of the Mobile phone must be entered to allow the system to recognize the VMEX phone. The mobile number here must match the number in the SIP From header.		
DID Number	The DID number associated with the VMEX must be configured to allow for recognition of calls to the VMEX.		
Connection Table	An index to the Connection Table PGM 216 must be entered. One of ten indices can be assigned permitting the use of multiple SIP Call servers.	0 ~ 10	
Proxy Address	The SIP Proxy for the VMEX must be configured for access to the VMEX.		
Fail-over	The index (Station Number) of the Mobile Extension Table (PGM 236) can be assigned for Fail-over operation. In this case, the Table entry must be configured for fail-over operation.	Station Number	

4.4.8.11 VMEX Connection table - PGM 216

Selecting VMEX Connection table will display the VMEX Connection Data input page. Use the check boxes to indicate the Table index data to modify and click **[Save]** button to store.

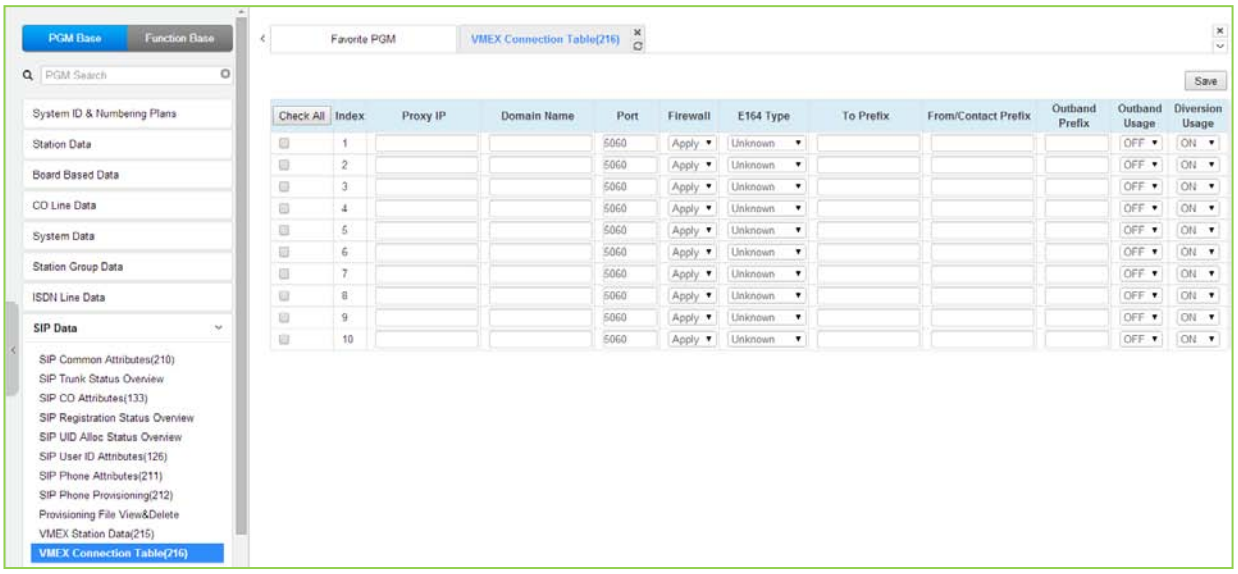


Figure 4.4.8.11-1 VMEX Connection Table

With VMEX, the carrier's Mobile network sends calls to and from the Mobile phone directly to the system employing a SIP Call server. For proper operation, the SIP Call server must be configured and special prefix codes must be defined for calls from and to the mobile phone.

Table 4.4.8.11-1 VMEX Connection Table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Proxy IP	This field assigns the IP address or URL of the Service Provider's SIP Proxy server.		
Domain Name	Domain name of the Service Provider's SIP Call server that is used in SIP "To:" headers.		
Port	Normally SIP signaling messages are sent on port 5060. If desired a different port can be defined.		5060
Firewall	The iPECS eMG can use the Firewall address or LAN address of the iPECS eMG board when communicating with the VMEX.	Not/ Apply	Apply
E164	The structure of the received SIP invite To header from the VMEX can be defined for proper conversion. This field is not presently used.	Unknown International National Local	Unknown
To Prefix	A special prefix code is included in the SIP invite "To" header sent from iPECS eMG to the carrier's SIP Call server to identify VMEX service	3 to 5 digits	
From Contact Prefix	A special prefix code is included in the SIP invite "From" and "Contact" header sent from iPECS eMG to the carrier's SIP Call server to identify VMEX service	3 to 5 digits	
Outbound Prefix	A special prefix code that must be in the SIP invite "To" header received by iPECS eMG for calls from the VMEX. If the prefix received does not match this entry, the call is rejected.	8 digits	
Outbound Usage	Not used.		
Diversion Usage	Not used		

4.4.9 Tables Data

Selecting the Tables Data group returns the sub-menu displayed in the left frame as shown in the following figure.

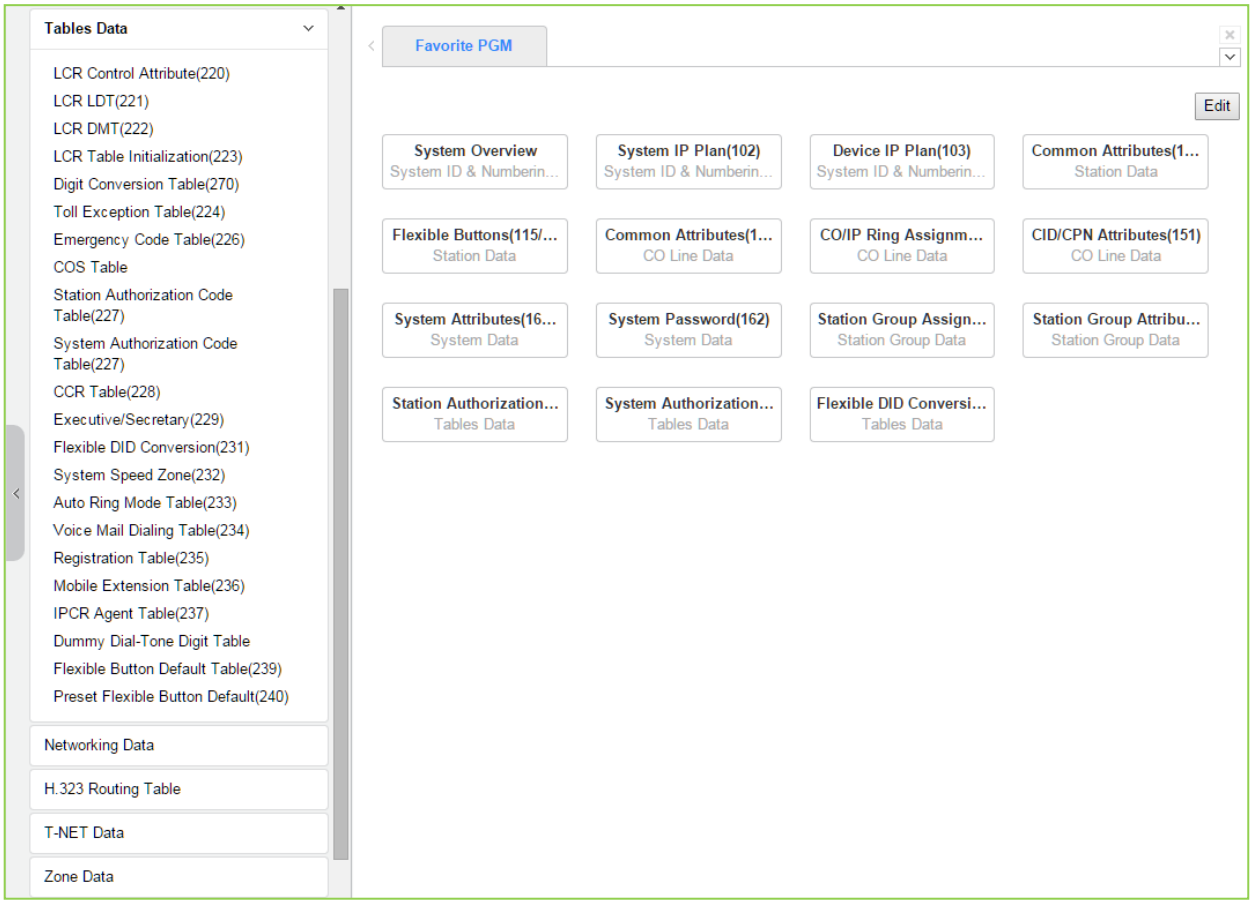


Figure 4.4.9-1 Tables Data

4.4.9.1 LCR Control Attributes - PGM 220

Selecting LCR Control Attributes will display the LCR Control Attributes data entry page. Click **[Save]** button after changing Value.

The LCR Tables provide a mechanism to define the database, which will route outgoing calls, particularly long distance, using the most cost effective route. User dialed digits are compared to table entries and modified appropriately based on time of day, day of week, and assigned routes. There are four LCR Tables, LCR Control Attributes, LCR Leading Digit Table, LCR Digit Modification Table, and LCR Initialization Table.

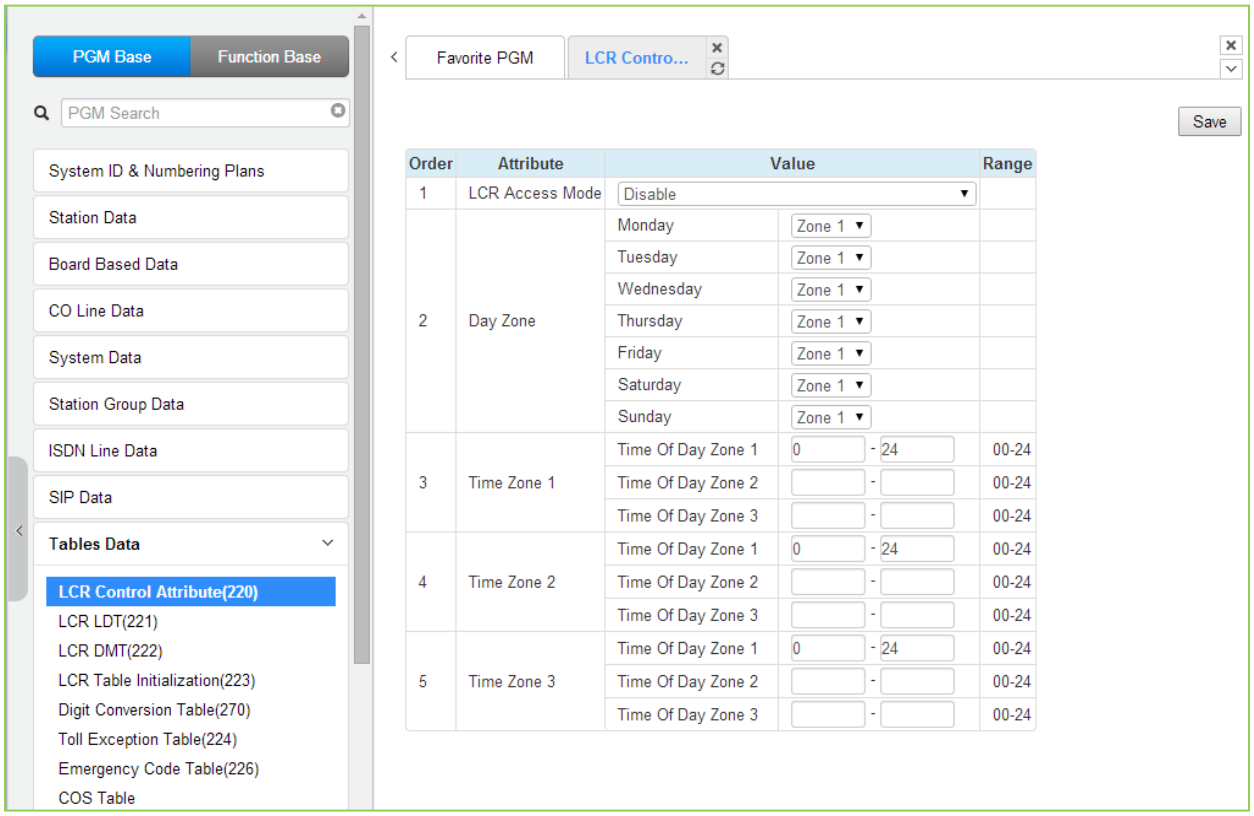


Figure 4.4.9.1-1 LCR Control Attributes

The LCR Control Attributes Table, among other items, allows assignment of the LCR Access Modes. The LCR Access Modes defines the user operations that will access the LCR feature.

The LCR Access Modes are:

- LCR Disabled.
- Loop (user dials '9' or CO/IP Group code (8xx), or presses a Loop button).
- Loop and Internal (user dials digits without a CO/IP Access Code prefix).
- Loop and Direct CO Line (user dials CO Line Access Code (88xx) or pressing a {CO line} button).
- Loop, Direct CO Line, and Internal.
- Loop, Direct CO Line, and Internal and Direct Loop.

In addition, days of the week are grouped into zones (Day Zones) and the time of day can be set into three groups (Time Zones). Table 4.4.9.1-1 provides general descriptive information and input ranges.

Table 4.4.9.1-1 LCR ASSIGNMENT

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCR Access Mode	This entry defines the effective LCR modes, the modes by which the user can access LCR.	Disable/ Only Loop LCR/ Internal and Loop LCR/ Loop and Direct CO LCR/ Internal, Loop and Direct CO LCR/ Internal, Loop, Direct CO and Direct Loop LCR	Disable
Day Zone	Each day of the week is assigned to a Day Zone (1~3). The active Day Zone is the Zone assigned to the current day of the week.	Zone1~3 (days of the week)	Zone 1
Time Zone1	This entry defines the hours of the day during which Time Zone 1 is active. Note hours not defined in Time Zone 2 and 3 are automatically part of Time Zone 1.	00~24	00~24
Time Zone2	This entry defines the hours of the day during which Time Zone 2 is active.	00~24	
Time Zone3	This entry defines the hours of the day during which Time Zone 3 is active.	00~24	

4.4.9.2 LCR LDT (Leading Digit Table) - PGM 221

Selecting LCR-LDT (Leading Digit Table) will display the LCR-LDT data entry page. Select the LDT Index range desired, blue text above the table header. Click **[Save]** button after changing Value.

Enter LDT Table Index Range: eMG80 : 1-10 / eMG800: 1-32

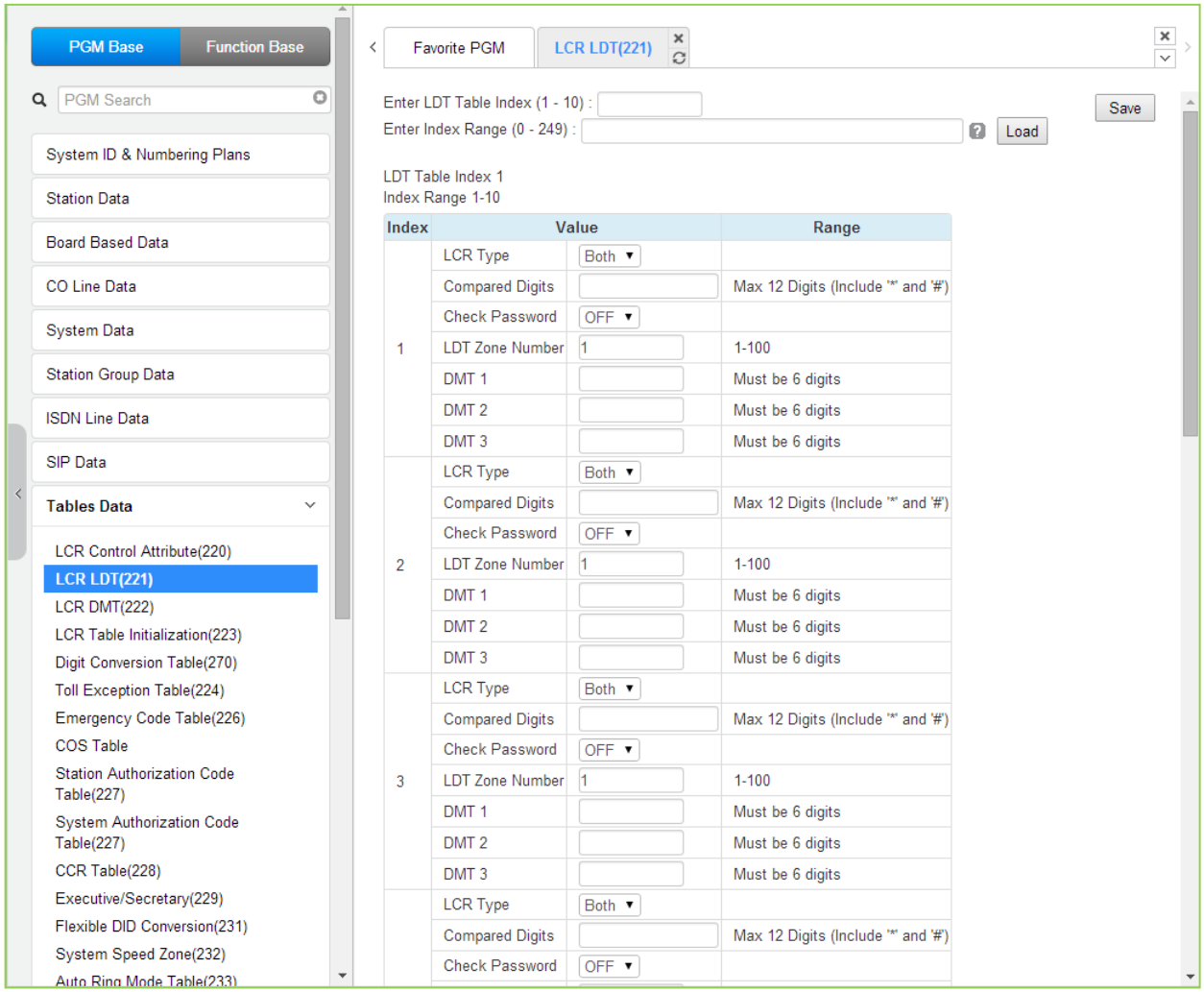


Figure 4.4.9.2-1 LCR Leading Digit Table

The Leading Digits Table is used to analyze the user-dialed digits to determine an appropriate Digit Modification Table Index. LDT Tables are provided for 10 for eMG80 system & 32 for eMG800 system. The Table is divided into bins. The applicable LCR Access Modes (LCR Type) and the digits (up to the first 12) dialed by the user are compared with the entries in the Leading Digit Table. In addition, indices to the Digit Modification Table are defined for each Time Zone of each Day Zone. Table 4.4.9.2-1 provides a brief description and entries for the Leading Digit Table.

Table 4.4.9.2-1 LCR LEADING DIGITS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
LCR Type	This entry defines the LCR modes that will apply to this LDT index.	Internal, CO Line, Both	Both
Compared Digits	Up to 6 digits that, if matched by the user dialed digits, will access the DMT Indices of the associated Leading Digit Table bin.	Max. 12 digits (Include * and #)	
Check Password	If enabled (ON), when the dialed digits match the LDT digits, the system will send second dial tone to request the user input a valid Authorization code.	0: OFF 1: ON	OFF
LDT Zone Number	If the LDT Zone Number of a station/co line is equal to this value, this LDT table is available to the station/co line. (Station Data->Common Attributes(111), CO Line Data->Common Attributes(140))	1-100	1
DMT1	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 1. The appropriate index will be selected for the current Day and Time Zone. One entry (DMT index) is made for each Time Zone, six (6) digits.	Must be 6 digits 3 DMT indices	
DMT2	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 2. The appropriate index will be selected for the current Day and Time Zone. One entry (DMT index) is made for each Time Zone, six (6) digits.	Must be 6 digits 3 DMT indices	
DMT3	This entry defines the Digit Modification Table index (00~99) for each Time Zone for Day Zone 3. The appropriate index will be selected for the current Day and Time Zone. One entry (DMT index) is made for each Time Zone, six (6) digits.	Must be 6 digits 3 DMT indices	

4.4.9.3 LCR DMT (Digit Modification Table) - PGM 222

Selecting LCR DMT (Digit Modification Table) will display the LCR DMT data entry page. Click **[Save]** button after changing Value.

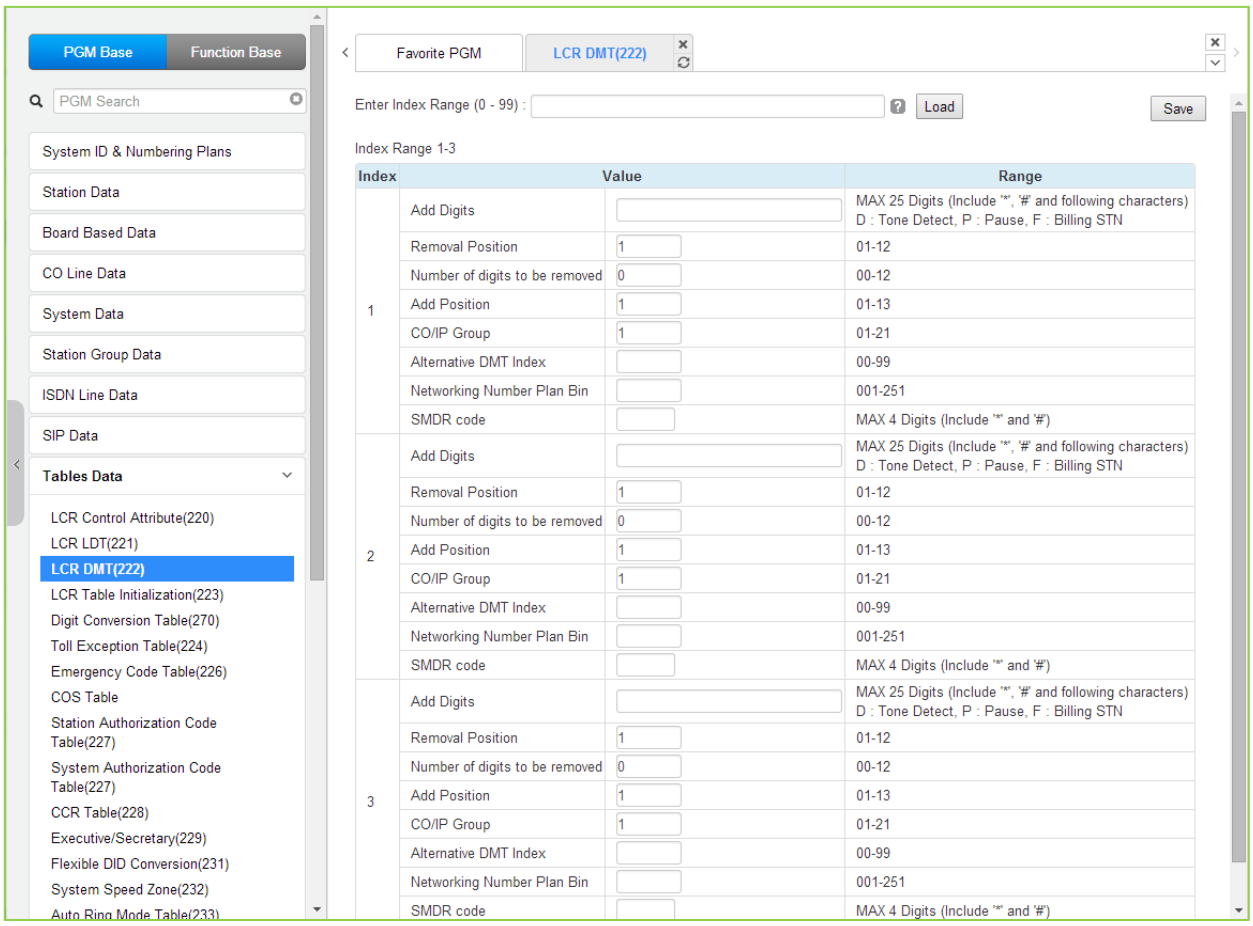


Figure 4.4.9.3-1 LCR Digit Modification Table

Using the index determined from the analysis of the LCR Leading Digits Table, the dialed number is modified in accordance with the Digit Modification Table and sent over the CO/IP group assigned for the index.

Digits of the dialed number can be deleted based on the “Removal Position” and “Number of digits to be removed” entries and a digit stream can be inserted in the resulting number. Counting from the first dialed digit, the Removal Position defines the location of the digit where removal begins and, the Number of digits to be removed defines the number of digits to remove. The “Add Digits” are then inserted in the resulting number at the digit position assigned by the Add Position entry. The resulting number is then dialed over the CO/IP path assigned. If the assigned path is not available, the “Alternate DMT index” is used to determine the number and CO/IP path to be used.

Table 4.4.9.3-1 LCR DIGIT MODIFICATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Add Digits	This entry defines the digit stream to insert in the number after digit removal. Digits 0~9, '*', '#', and special characters, P: timed Pause D: Dial tone detect F: Billing station number	Max. 25 digits	
Removal Position	This entry defines the position of the digit where removal is to begin, starting with the 1st dialed digit (01).	01~12	1
Number of digits to be removed	This entry defines the number of digits to remove starting at the "Removal Position	00~12	0
Add Position	This entry defines the position in the number, after digit removal, where the Add Digits are inserted.	01~13	1
CO/IP Group	This entry defines the CO/IP Group that the system will attempt to use for the call.	eMG80:01-21 eMG800:01-202	1
Alternative DMT Index	This entry defines an Alternate Digit Modification Table Index to use if no path is available in the assigned CO/IP Group.	00~99	
Networking Number Plan Bin	This entry defines the Net Number Plan Table bin that the system will attempt to use for the transit out call.	001-251	
SMDR Code	This only used for TNET with CM. This code will be send to CM when the TNET status is changed from Local survival mode to bypass mode.	Max. 4 digits (Include * and #)	

4.4.9.4 LCR Table Initialization - PGM 223

Selecting LCR Table Initialization will display the LCR Table Initialization data entry page. Click **[Initialize]** button to initialize input data.

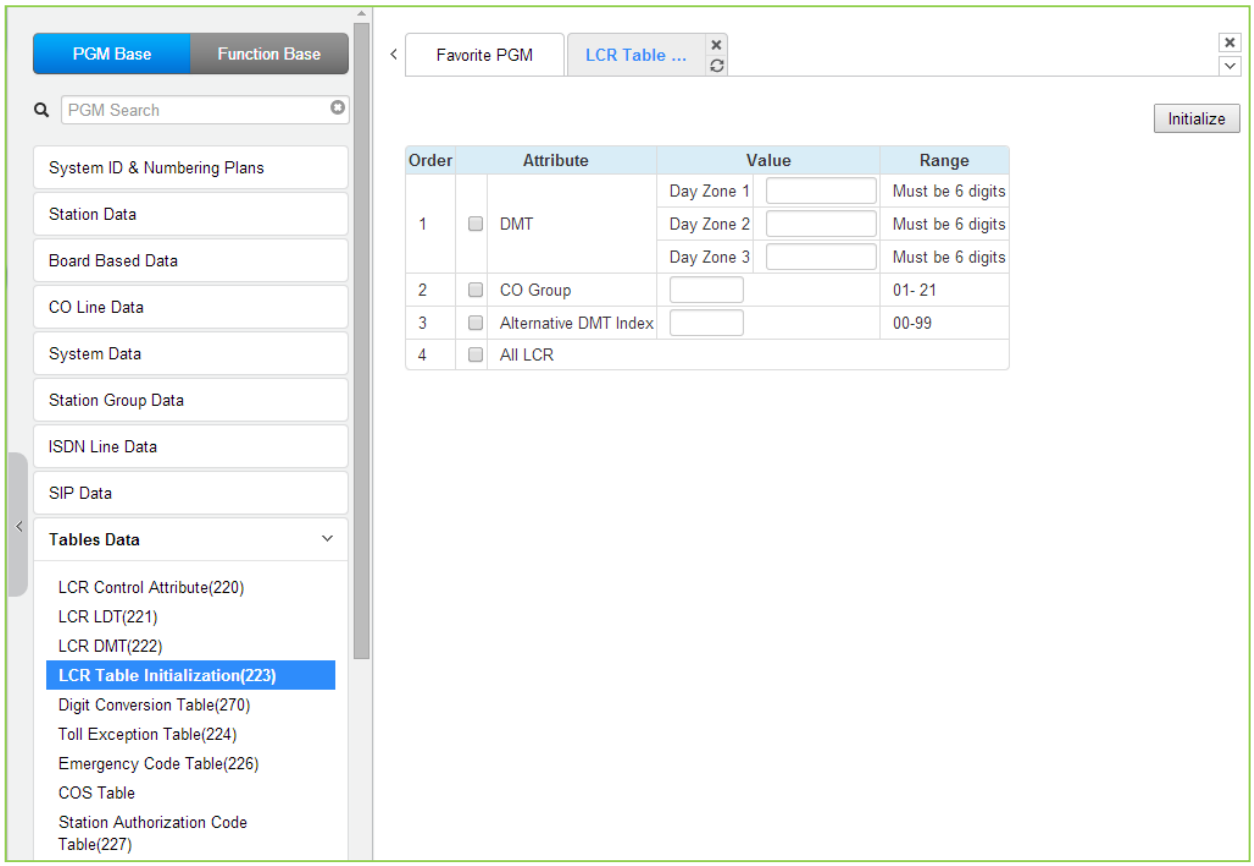


Figure 4.4.9.4-1 LCR Table Initialization

The LCR Table Initialization allows global values to be assigned to the various Digit Modification Table entries. In addition, the LCR Leading Digits and LCR Digit Modification Tables can be initialized to the default (no entries) state.

The CO group rage is from 1 to 21 for eMG80 and from 1 to 201 for eMG800.

4.4.9.5 Digit Conversion Table - PGM 270

Selecting Digit Conversion Table will display the page shown. Click **[Save]** button after changing Value.

Enter Table Number: eMG80: 1-15 / eMG800: 1-32

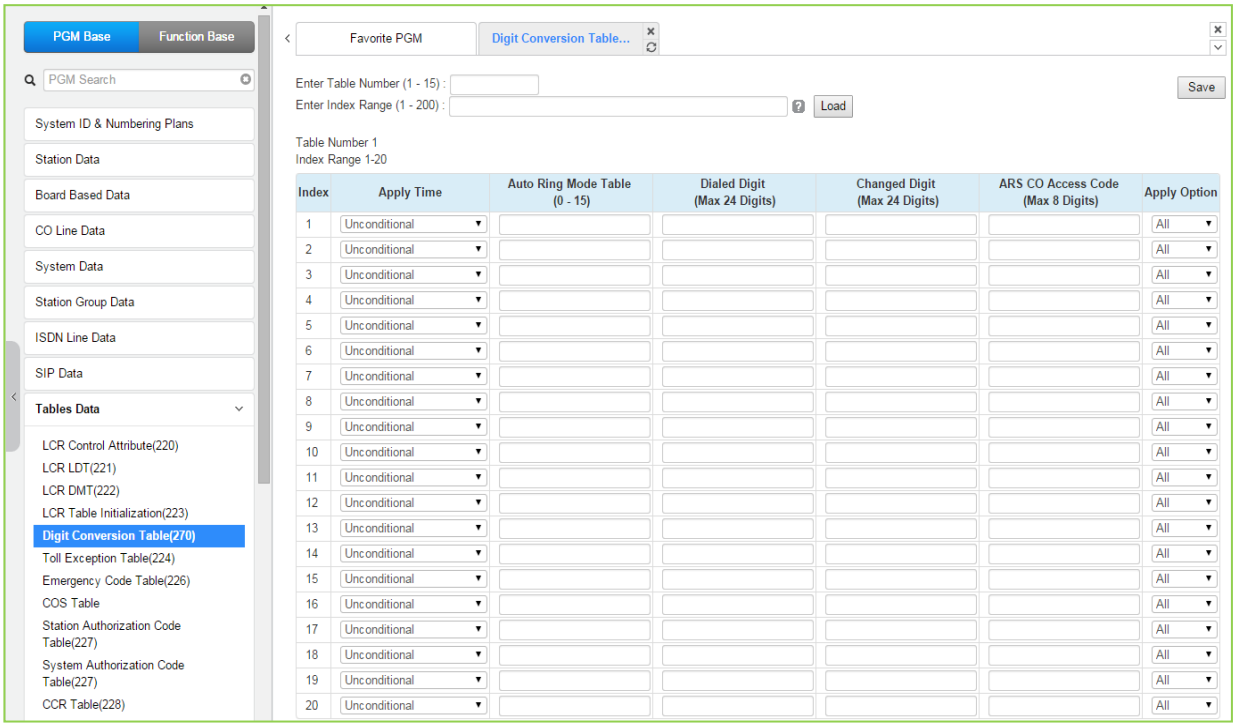


Figure 4.4.9.5-1 Digit Conversion Table

The Digit Conversion Table index is assigned to the Station and CO line. In addition, digit conversion can be applied according to the Apply Time Type (Unconditional, Day/Night/Timed or LCR/Time) as necessary. Each Table has 200 entries of up to 24 digits. Entries in the Tables can be any digit (0-9), “*”, “#”,”X” (Mask Digit), “F” (Ignore digit). Each Index can be applied by Apply Option (All/Station/CO line/Disable).

Table 4.4.9.5-1 Digit Conversion table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Apply time	The Apply time type to be applied when the dialed digit is dialed.	Unconditional, Follow Day/Night/Timed, Follow LCR	Unconditional
Auto Ring Mode table	Day/Night/Timed Time Table Index.	N/A, 00-15	N/A
Dialed digit	Dialed digit to be compared.	Max. 24 Digits	
Changed digit	Changed digit.	Max. 24 Digits	
ARS CO Access Code	If a selected path is not available for some reason (All Busy, Line Fault etc.) after digit conversion, Alternative Route Selection (ARS) will connect calls using predefined designated ARS digit in digit conversion table.	Max. 8 Digits	
Apply option	The Apply Option can be applied according to the caller.	All/ Station/ CO line/ Disable	All

4.4.9.6 Toll Exception Table - PGM 224

Selecting Toll Exception Table will display the Toll Table data entry page. Select the desired Allow or Deny Table, blue text above the table header, desired. Click **[Save]** button after changing Value.

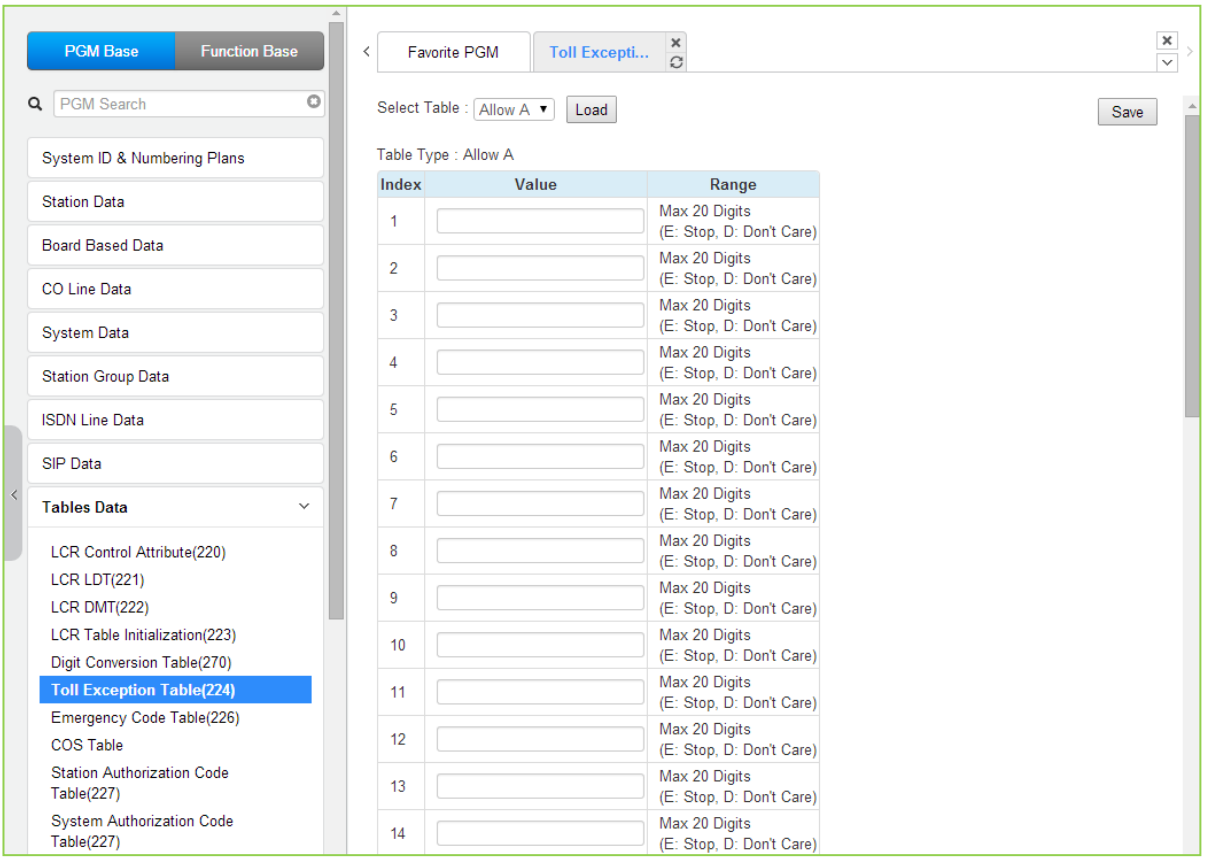


Figure 4.4.9.6-1 Toll Exception Table

There are ten Toll restriction Tables arranged in pairs. Each pair consists of an Allow Table and a Deny Table. Allow and Deny entries for Table `A‘ apply to Station and DISA Class of Service 2/4 and 11. Allow and Deny entries for Table `B‘ apply to Station and DISA Class of Service 3/4 and 11. Allow and Deny entries for Table `C‘ apply to Station and DISA Class of Service 5 and 6. Allow and Deny entries for Table `D‘ apply to Station and DISA Class of Service 8/10 and 11. Allow and Deny entries for Table `E‘ apply to Station and DISA Class of Service 9 to 11. The Allow and Deny Tables each permit up to 50 entries of up to 20 digits. Entries in the Tables can be any digit (0-9), “#” as a wild card (don‘t care) digit, or “*” as an end of entry digit.

Based on Table entries, stations or DISA users are allowed or denied dialing specified numbers. The following rules apply to establishing restrictions based on the Table entries:

- If the appropriate Allow/Deny Table pair has no entries and COS is 2 to 4, no restrictions are applied. If the COS is 5 or 6, no Long Distance dialing is allowed.
- If entries are only made in the Allow Table, only those numbers entered can be dialed, all other dialed numbers will be restricted.
- If entries are only made in the Deny Table, only those numbers entered will be restricted and all other numbers can be dialed.
- When there are entries in both the Allow and Deny Table pair, if the number is in the Deny Table, the number will be restricted otherwise the number can be dialed without restriction.

4.4.9.7 Emergency Code Table - PGM 226

Selecting Emergency Code Table will display the Emergency Code Table data entry page. Click **[Save]** button after changing Value.

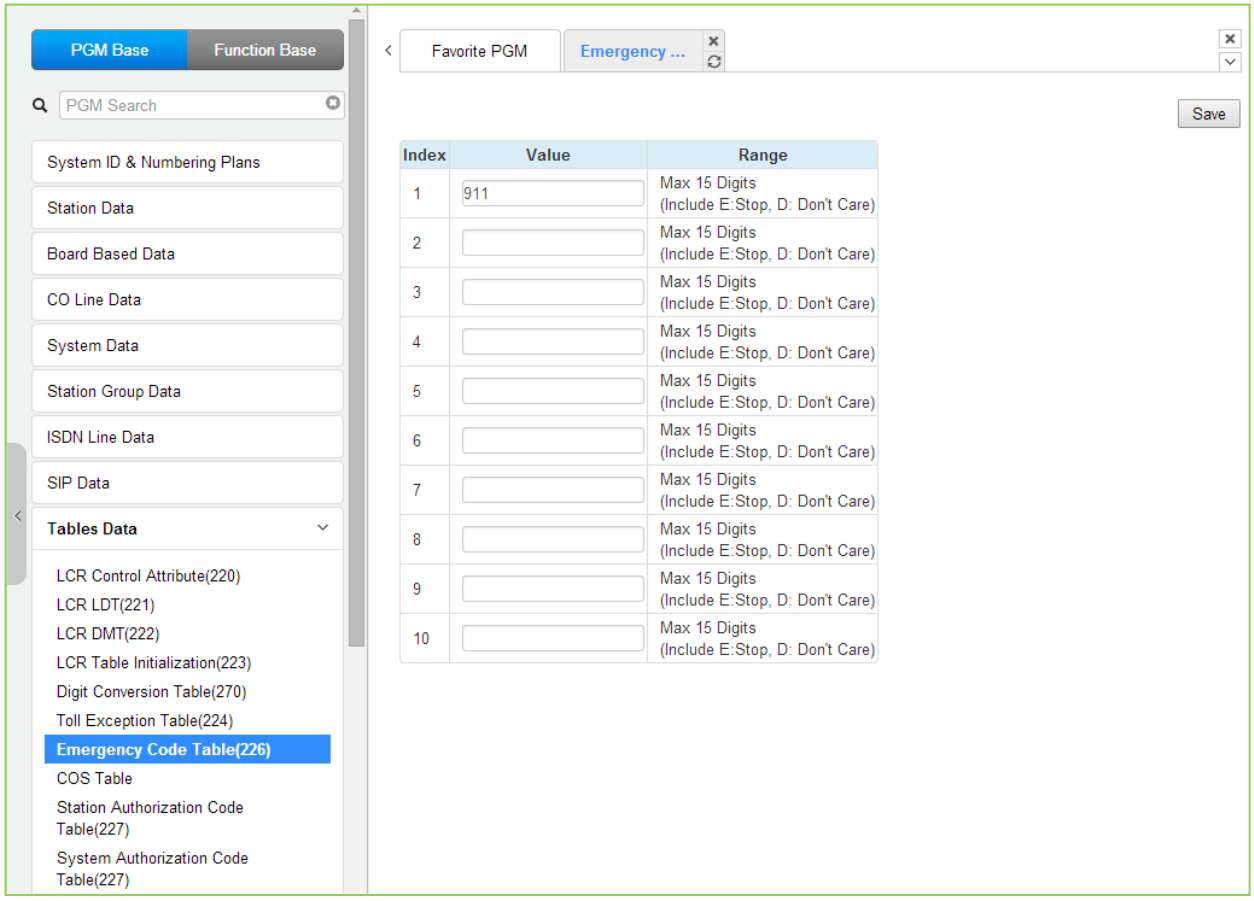


Figure 4.4.9.7-1 Emergency Code Table

The Emergency Code Table is used to identify emergency numbers which, when dialed, will override all COS dialing restrictions. An Emergency Code number may be up to fifteen (15) digits in length.

4.4.9.8 COS Table

Selecting COS Table will display the COS Table data entry page. Assignments for COS are made for the Day, Night, and Timed mode of each station. The level is from 1 to 11.

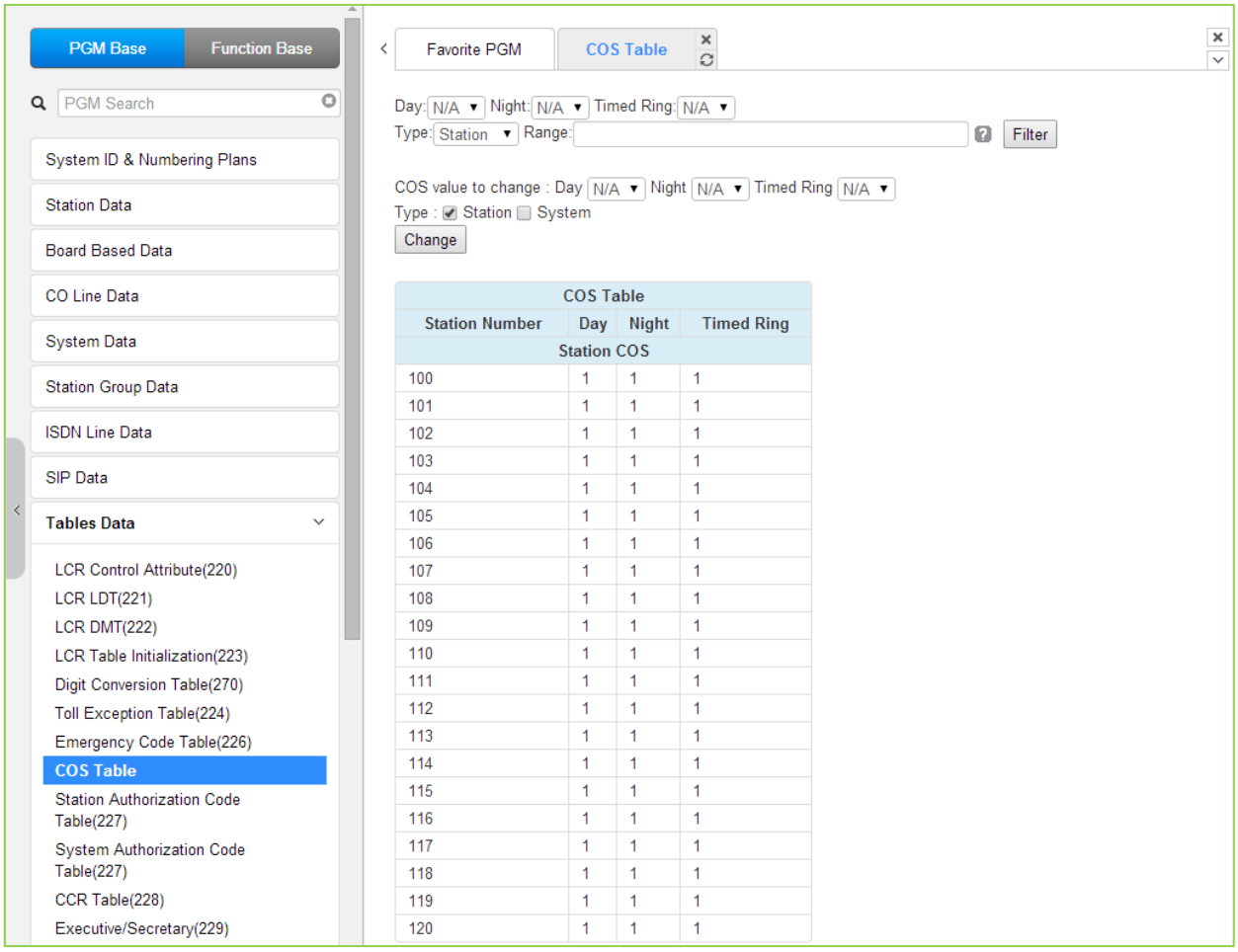


Figure 4.4.9.8-1 COS Table

4.4.9.9 Authorization Codes Table - PGM 227

There are two Authorization Code Tables, the System Authorization Code Table and Station Authorization Code Table. Selecting Station Authorization Code Table will display the data entry page in Figure 4.4.9.9-1 and selecting System Authorization Code Table will display the page in Figure 4.4.9.9-2. Enter a Station or System Index range and click **[Load]** to modify the data.

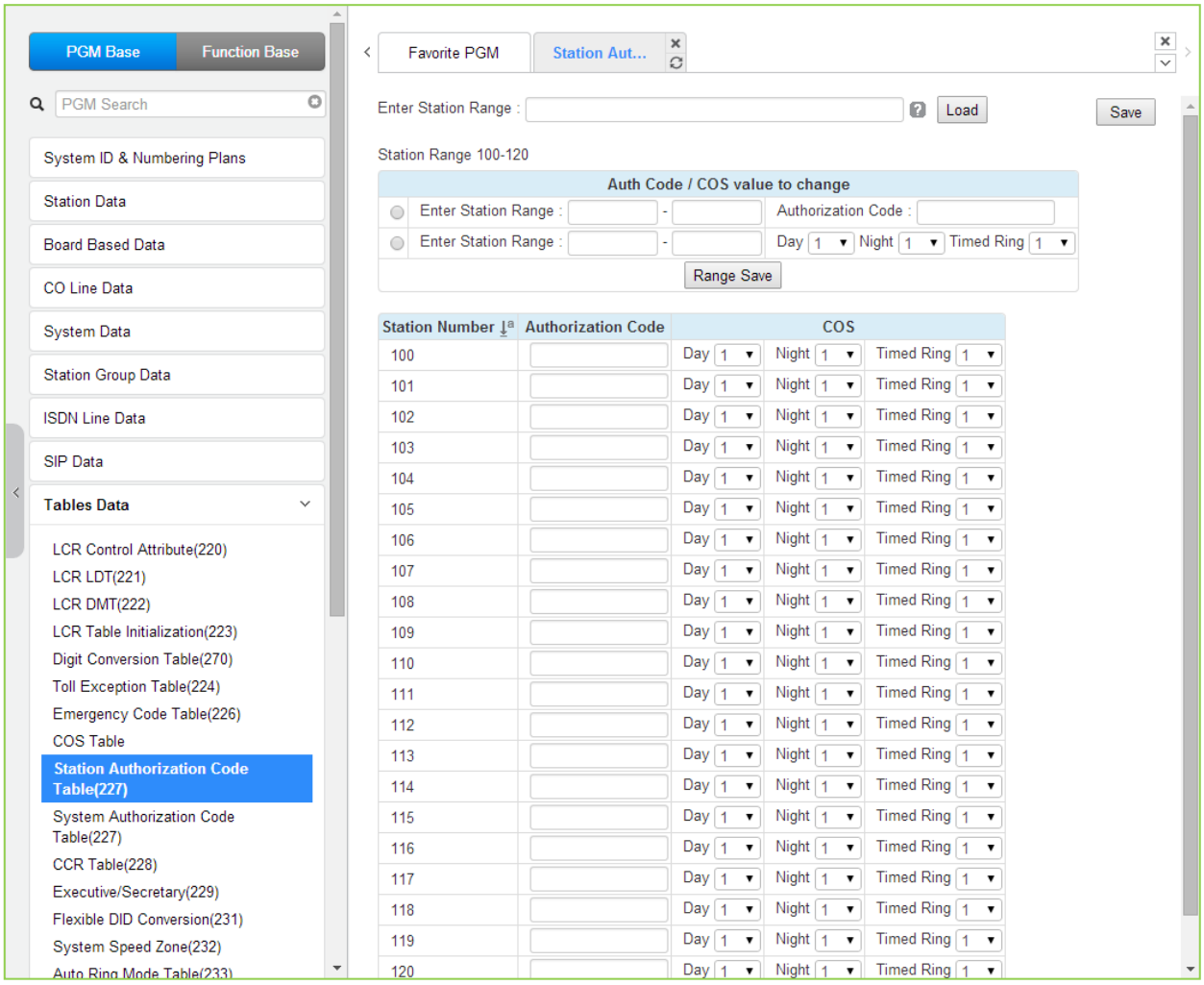


Figure 4.4.9.9-1 Station Authorization Code Table

User can change the authorization code and COS for the station range across the board and click the Range save button to save.

Enter System Index Range: eMG80: 1-360 / eMG800: 1-1200

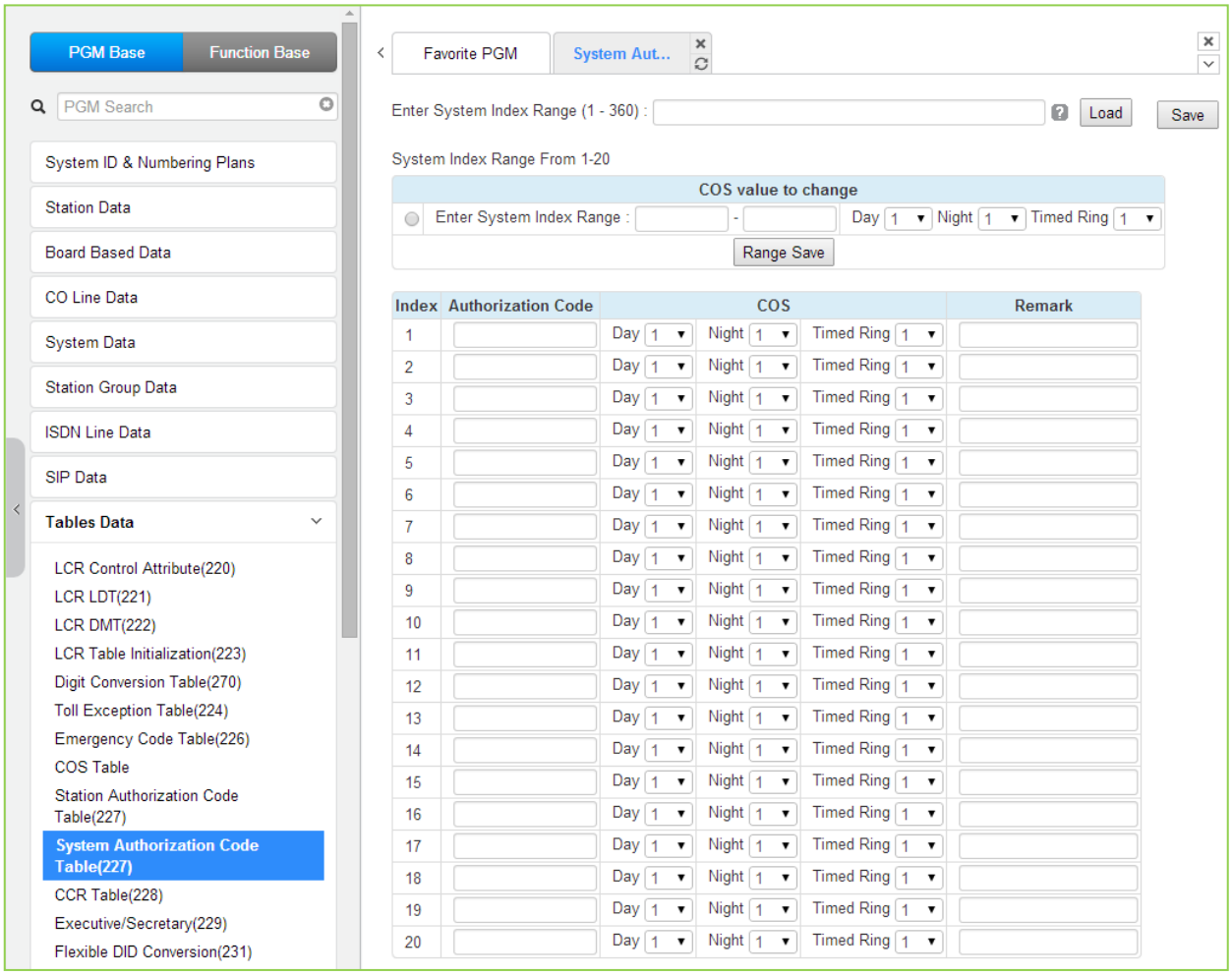
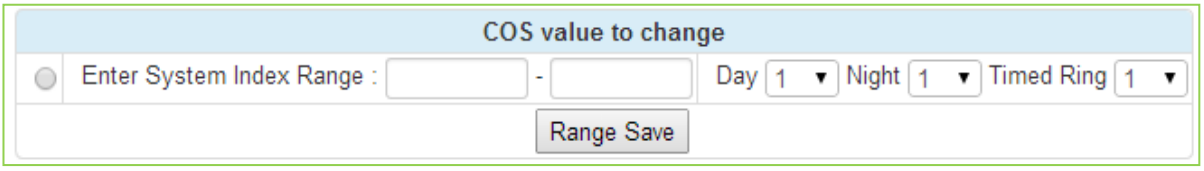


Figure 4.4.9.9-2 System Authorization Code Table



User can change COS for the system index range across the board and click the Range save button to save.

Authorization codes are employed to control access to system resources and facilities. Walking COS, CO/IP Group access, DISA calls and certain Call Forward types may require input of a valid Authorization code. Codes up to 12 digits may be entered into the system database.

There are two types of Authorization codes, station and system. The Station entries are associated with individual stations. The number of system Authorization codes varies based on the configuration; the number of available codes is provided in Table 2.1-1. Each Authorization code may be assigned a separate COS for Day, Night and Timed Ring mode operation.

The system will allow the station associated Authorization codes to be duplicated. However, the iPECS will not allow duplicate or conflicting system level codes unless the '*' and Authorization

table indexing is used to enter codes. Conflicting codes occur when a shorter code contains the first digits of a longer code, i.e. 12 conflicts with 1234.

Table 4.4.9.9-1 STATION CLASS-OF-SERVICE

STATION COS	RESTRICTIONS
1	No restrictions are placed on dialing from the station.
2	The assignments in Exception Table A are monitored for allow and deny numbers.
3	The assignments in Exception Table B are monitored for allow and deny numbers.
4	The assignments in both Exception Tables A & B are monitored for allow and deny numbers.
5	The leading digit dialed cannot be a Long Distance code, default “0”, and further denied/allowed based on Exception Table C.
6	The leading digits dialed cannot be a Long Distance code & digit count cannot exceed the LD digit counter, default 8 digits, and further denied/allowed based on Exception Table C.
7	Intercom and paging calls are allowed. No outgoing dialing except for emergency calls is allowed on CO Lines.
8	The assignments in the Exception Table D are monitored for allow and deny numbers.
9	The assignments in the Exception Table E are monitored for allow and deny numbers.
10	The assignments in the Exception Table D & E are monitored for allow and deny numbers.
11	The assignments in the Exception Table A & B and D & E are monitored for allow and deny numbers.

Table 4.4.9.9-2 STATION/CO LINE COS TOLL RESTRICTIONS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 1	No Restriction	No Restriction	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 2	Exception Table A governs the dialing	Exception Table A governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 3	Exception Table B governs the dialing	No Restriction	Exception Table B governs the dialing	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 4	Exception Table A & B governs the dialing	Exception Table A governs the dialing	Exception Table B governs the dialing	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 5	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Local Call only (LD Code, “1” or “0”) and Table C	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 6	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call (LD code/counter) and Table C	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 7	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only	In-house dialing only

Table 4.4.9.9-2 STATION/CO LINE COS TOLL RESTRICTIONS

	CO COS 1	CO COS 2	CO COS 3	CO COS 4	CO COS 5
STA COS 8	Exception Table D governs the dialing	Exception Table D governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 9	Exception Table E governs the dialing	Exception Table E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 10	Exception Table D & E governs the dialing	Exception Table D & E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction
STA COS 11	Exception Table A & B and D & E governs the dialing	Exception Table A & B and D & E governs the dialing	No Restriction	Only Local Call(LD code/counter) and Table C	No Restriction

4.4.9.10 Customer Call Routing Table - PGM 228

Selecting CCR Table will display the Customer Call Routing data entry page. Click **[Save]** button after changing Value.

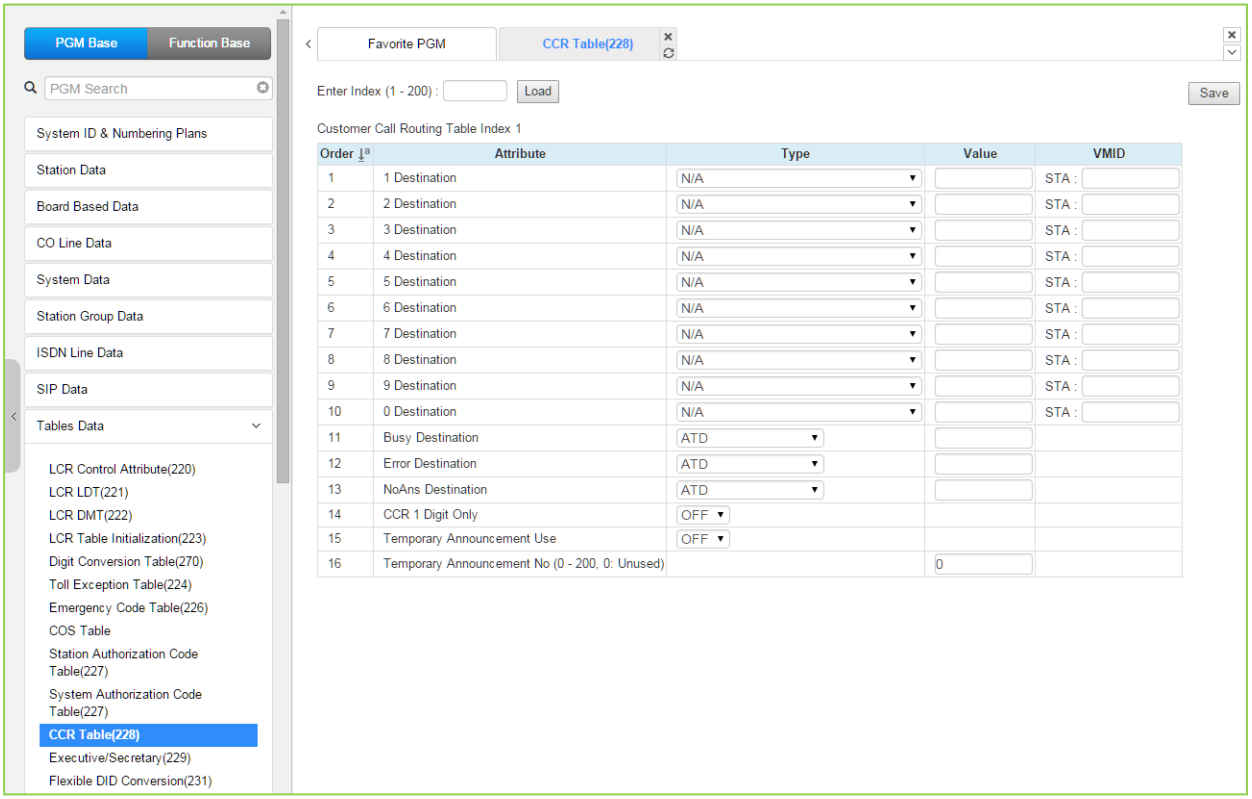


Figure 4.4.9.10-1 Customer Call Routing Table

The system incorporates IVR (Interactive Voice Response) capabilities called CCR (Customer Call Routing). After, or during a VSF Announcement, the caller may dial digits to select a destination or route for the call. The CCR Table defines the destination type and value associated with the digit dialed by the caller in response to the index, a VSF Announcement (01-70). The available destinations are shown in Table 4.4.9.10-1 below.

Up to 70 single-level Audio Text menus may be assigned or, multi-level menu structures (maximum 70 levels) can be established using one menu as a destination for the previous level.

Each CCR announcement can have re-route destination – Busy / Error / No Answer case.

Each re-routed destination types are Tone / Attendant / Station Group / VSF Announcement number.

The table includes a “CCR 1 Digit Only” option. When this option is enabled, the system will accept only a single digit as the entry. When the option is OFF, the caller can dial multiple digits that are accepted as DISA dialing.

Temporary announcement can be used in holiday, or emergency case.

When Temporary Announcement Usage is set to ON, programmed Temp Announcement is played instead of CCR table announcement.

This Temporary Announcement can be set also by Remote Access - by using [Remote Access to Mobile Extension] feature.

After access to Mobile Extension,

to turn On Temp Announcement, 8 + CCR Announcement Number.

to turn Off Temp Announcement, 9 + CCR Announcement Number.

Table 4.4.9.10-1 CCR DESTINATIONS (PGM 228)

TYPE	DESCRIPTION
	N/A
01	Route to a Station
02	Route to a Station Group
03	Route with System Speed Dial
04	Route as PBX Transfer with System Speed Dial (Flash then dial speed dial digits)
05	Route to VSF Announcement
06	Route to VSF Announcement and disconnect
07	Route to Networked Station
08	Conference Room
09	Internal Page
10	External page
11	All Call Page
12	Route to voice mail (station group/station number)
13	Company Directory (USA Only)
14	Record VM Greeting (USA Only)
15	Room type Conf Group Join

4.4.9.11 Executive/Secretary Table - PGM 229

Selecting Executive/Secretary will display the Executive/Secretary Table data entry page. Click **[Save]** button after changing Value.

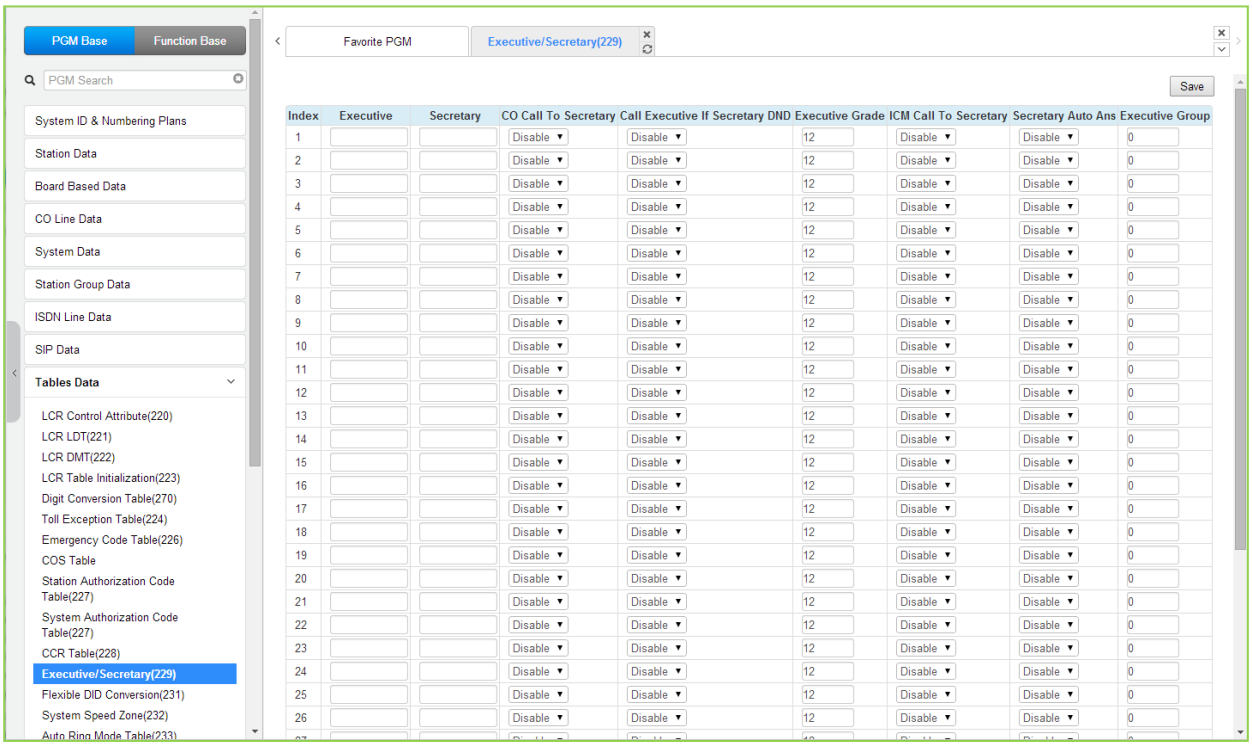


Figure 4.4.9.11-1 Executive/Secretary Table

Stations can be paired as Executive/Secretary pairs so that when the Executive enters DND, intercom and transferred calls are automatically routed to the Secretary. An Executive may have only one Secretary however, a Secretary can be assigned to multiple Executives. A Secretary of one pair may be the Executive of another however, assignments that form a loop-back are not allowed. In addition, when active, the Secretary can be assigned to receive the Executive‘s voice messages, refer to Common Attributes section 4.4.2.2.

The “CO Call to Sec” option will route all CO calls to the Executive to the defined Secretary‘s station regardless of the Executive‘s station status. The “Call Exec if Sec DND” option will route Executive calls back to the Executive if the Secretary is in DND. The Exec Grade permits higher grade Executives to override the Executive/Secretary Forward feature to call a lower grade Executive (Korea only). The highest grade is 1 and the lowest grade is 12. The “ICM Call to Sec” option will route all internal calls to the Executive(except for calls from higher or same grade executive) to the defined Secretary‘s station regardless of the Executive‘s station status.

Refer to Table 4.4.9.11-1 for a description of the Executive/Secretary parameters and the input required.

Table 4.4.9.11-1 Executive/Secretary Table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Executive	Assign Executive.		
Secretary	Assign Secretary.		
CO Call to Secretary	If desired, all incoming CO calls to the Exec. The call is routed to the Secretary's station regardless of the Executive's status.	Enable/ Disable	Disable
Call Executive if Secretary is in DND	If the Secretary is in DND, Executive calls can be routed back to the Executive.	Enable/ Disable	Disable
Executive grade	Higher (or equal) grade Executives can override the Executive/Secretary Forward feature (5th: ICM call to SEC) to call a lower grade Executive. Highest grade: 01, Lowest grade: 12.	01~12	12
ICM Call to Secretary	If this option is ON, all internal calls to the executive station (except for calls from higher or same grade executive) are routed to the Secretary's station regardless of the Executive's status. 8801 Default value Korea, India, Israel, Turkey, Thailand : ON Otherwise : OFF	Enable/ Disable	Disable
Secretary Auto Answer	When executive call to the secretary who is in 'T' mode. The call will be answered by hands free mode if it is ON.	Enable/ Disable	Disable
Executive Group	If Group is greater than 1, it works that lower grade executive can call to higher grade executive directly when they are same group.	00-50	00

4.4.9.12 Flexible DID Conversion Table - PGM 231

Selecting Flexible DID Conversion Table will display the Flexible DID Table data entry page. Click **[Save]** button after changing Value. Click **[Initialize All table Data]** to initialize all table and Click **[Delete All Table Data]** to delete.

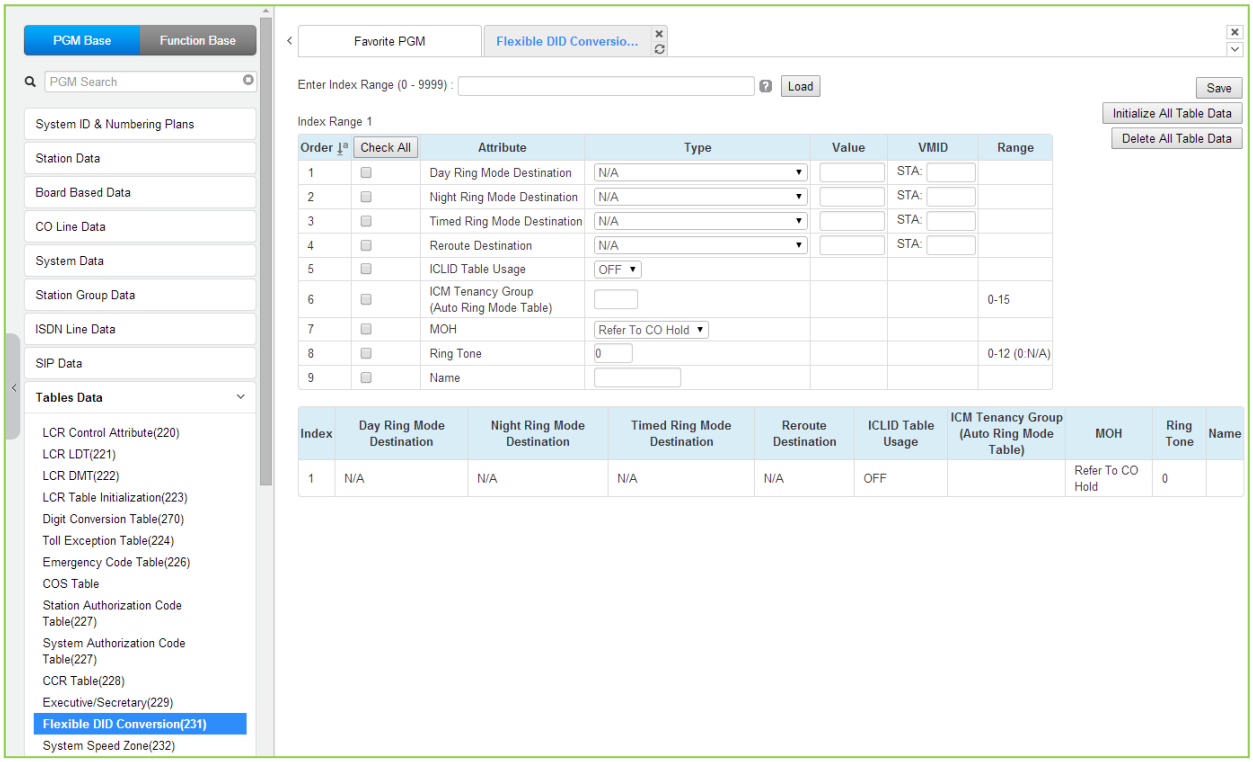


Figure 4.4.9.12-1 Flexible DID Conversion Table

When the received DID digits are converted, the resulting three-digit number may be used as an index to the Flexible DID Conversion Table. The Flexible DID Table index is used when DID Line is assigned a Conversion type 2, refer to the DID Service attributes section 4.4.4.6. Using the index from the digit conversion a destination for the DID call is determined by a Look-up in the Flexible DID Table. The destination for the call is generally defined as a type and a value. The type selects options such as station, station group, VSF, etc. The value specifies the particular station, station group, etc. In addition, ICLID routing can be enabled for DID lines or can be assigned as an index to the Auto Ring Mode table.

Table 4.4.9.12-1 FLEXIBLE DID CONVERSION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Day Ring Mode Destination	Destination setting for Day Ring mode.	N/A, Station, Station Group, System Speed, PABX transfer with system speed, VSF announcement, VSF announcement and Disconnect, Networking,	N/A
Night Ring Mode Destination	Destination setting for Night Ring mode.		N/A
Timed Ring Mode Destination	Destination setting for Timed Ring mode.		N/A
Reroute Destination	Destination setting for Reroute Ring mode.		N/A

Table 4.4.9.12-1 FLEXIBLE DID CONVERSION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Conference room, Internal page, External page, All call page, Voice mail (Station group), ICLID Table, Company Directory, Record VM Greeting, Room type Conf Group Join	
ICLID Table	Use ICLID Routing, section 4.4.7.4.	OFF/ON	OFF
ICM Tenancy Group (Auto Ring Table)	A DID Conversion Table Index can be assigned to employ an ICM Tenancy Group Auto Ring Table to determine Day/Night/Timed operation mode.	eMG80: 0~15 eMG800: 0~32	N/A
MOH	A Music source is assigned so that calls to the destination receive audio from the source in place of ring-back tone.	Refer to CO Hold, Internal/External Music 1, External Music 2, VSF MOH, SLT MOH 1, SLT MOH 2, SLT MOH 3, SLT MOH 4, SLT MOH 5, VSF MOH 2, VSF MOH 3	Refer to CO Hold
Ring Tone	Ring tone of destination is followed this ring tone value.	0-16	0
Name	Name associated with the destination	11 characters	

4.4.9.13 System Speed Zone Table - PGM 232

Selecting System Speed Zone will display the System Speed Zone data entry page. Click **[Save]** button after changing Value.

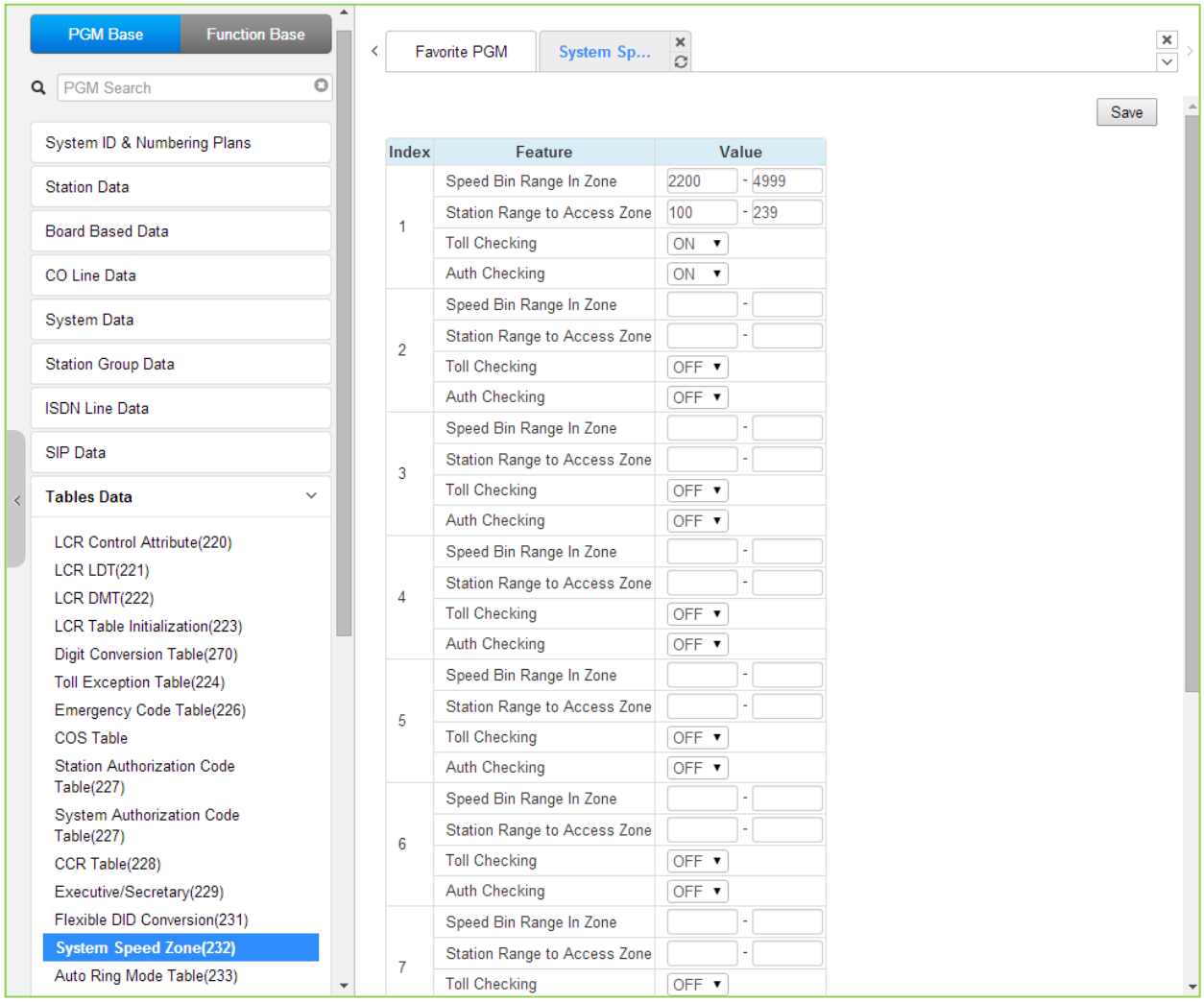
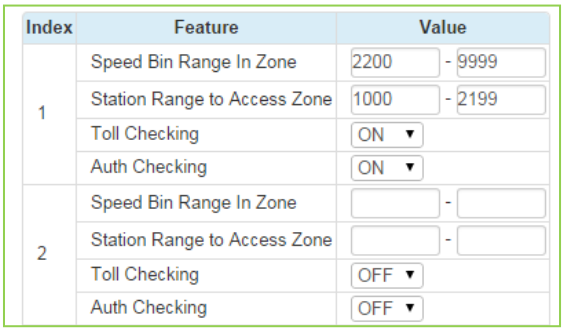


Figure 4.4.9.13-1 System Speed Zone

System Speed Dial Bins assigned to a zone are only available to stations allowed access to that zone. Each zone can be assigned to apply the appropriate Station and CO Line COS for the speed dial number prior to dialing.

In case of eMG800, the speed Bin in Zone and Station Range to access zone is as below:



4.4.9.14 Auto Ring Mode Table - PGM 233

Selecting Auto Ring Mode Table will display the Auto Ring Mode Table data entry page. Click **[Save]** button after changing Value.

Enter Index: eMG80: 0-15 / eMG800: 0-32

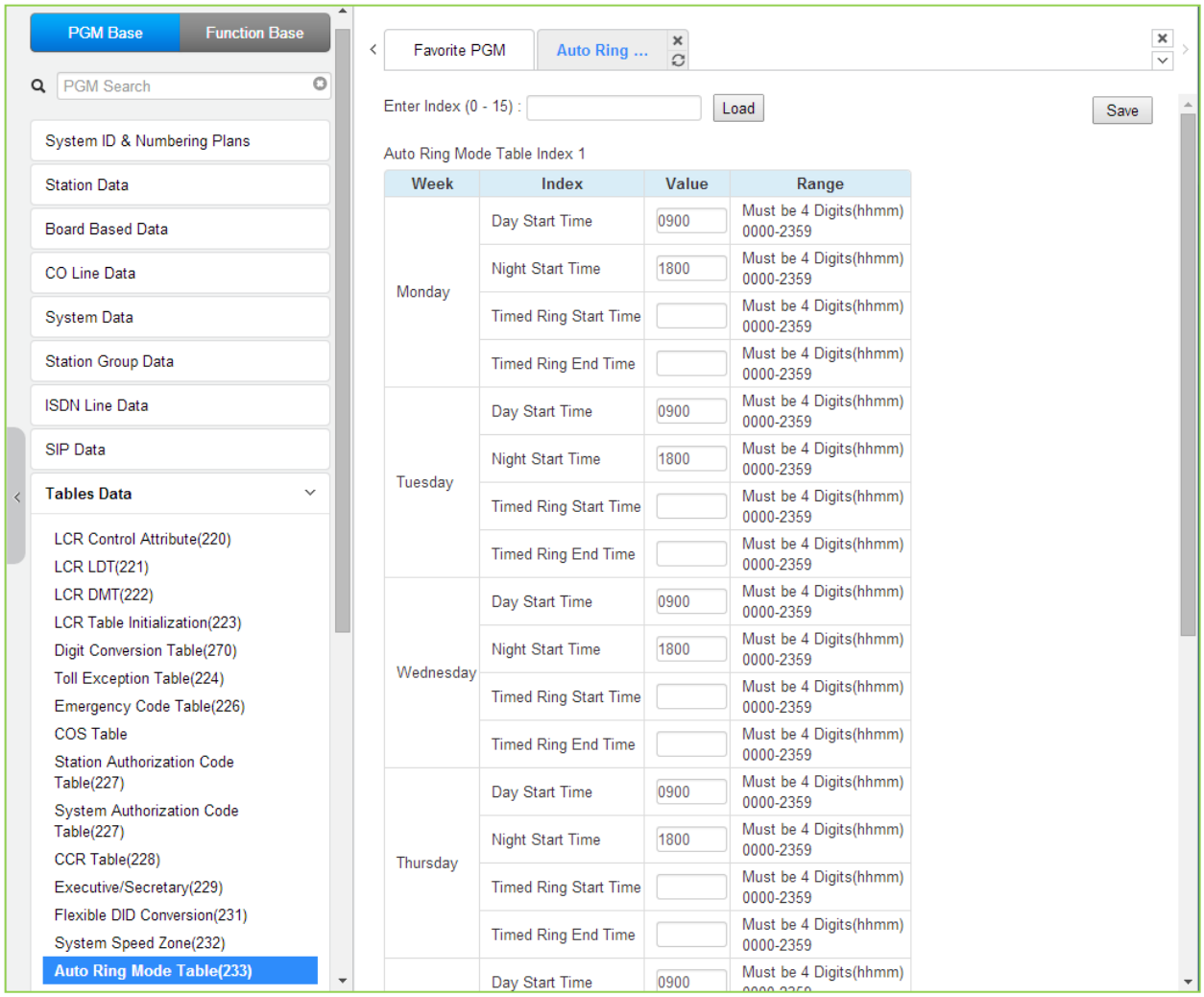


Figure 4.4.9.14-1 Auto Ring Mode Table

The system can be programmed to automatically select the Ring and COS based on time of day and day of the week. Three Ring & COS modes are available, Day, Night, and Timed. The Ring assignments are as defined in CO Ring Assignments, section 4.4.4.5. COS assignments are made in the Station COS and DISA COS programs discussed in sections 4.4.2.6 and 4.4.5.6, respectively.

The start times for Day, Night and start and end times for Timed modes are entered for each day of the week. After the Timed end time the mode returns to day if time is not in the Night mode. The Attendant can override the Automatic selection and select the desired mode (Day, Night, and Timed) manually. A separate Auto Ring Table can be established for each ICM Tenancy Group in section 4.4.2.15 (indices 1 ~ 15 for eMG80 & indices 1~32 for eMG800) and for the system (index 00).

4.4.9.15 Voice Mail Dialing Table - PGM 234

Selecting Voice Mail Dialing Table will display the Voice Mail Dialing data entry page. Click **[Save]** button after changing Value.

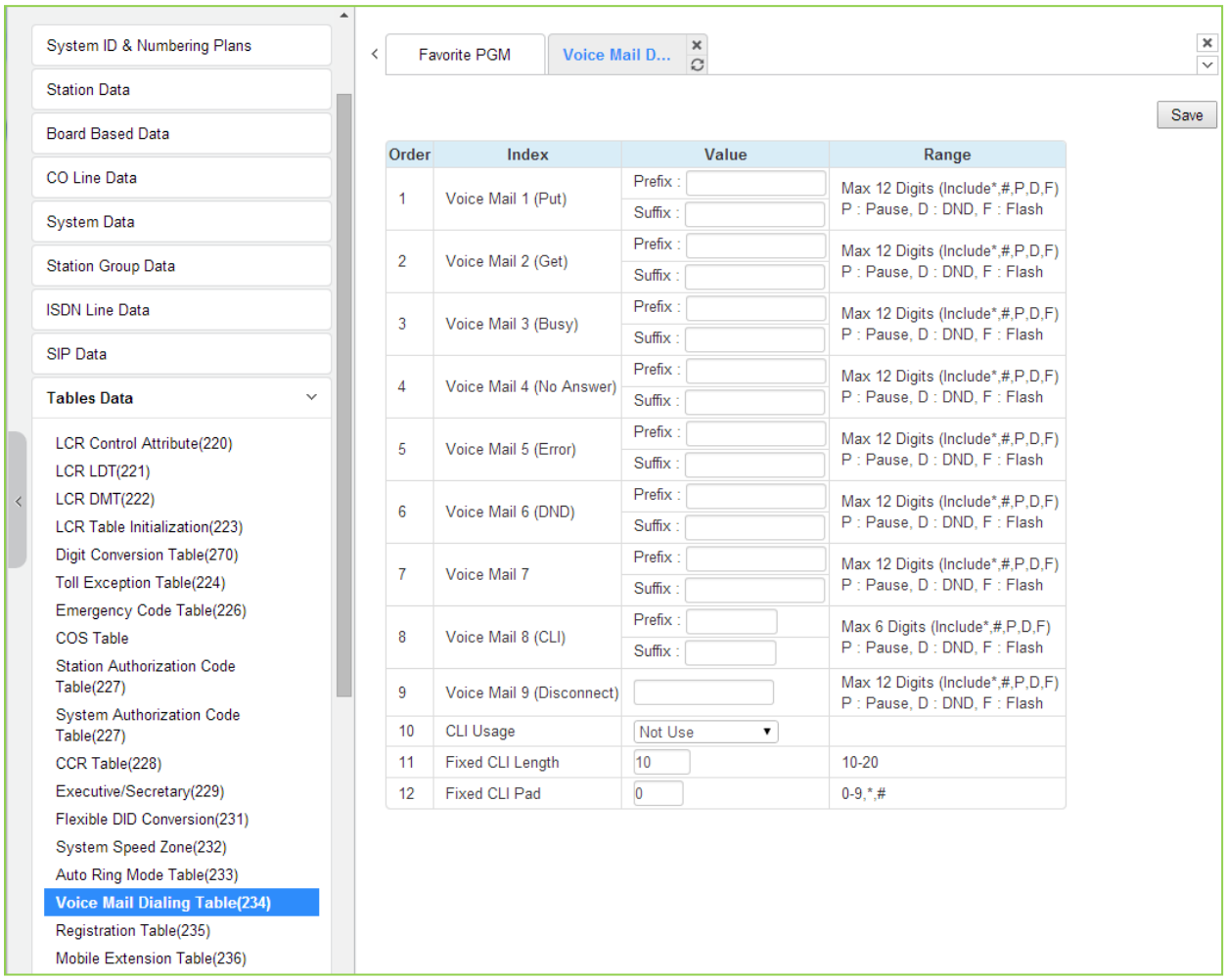


Figure 4.4.9.15-1 External Voice Mail Dialing Table

When an external Voice Mail system is used that connects to an SLT port, a digit sequence must be defined for the system to signal various call characteristics to the Voice Mail system. The external Voice Mail uses the sequences to determine appropriate announcements or further call routing. The Table permits the definition of digits as either a prefix or suffix to other digits (station number for mailbox identification). Sequences are defined for such call characteristics as Put Mail, Get Mail, No Answer call, etc. as described in Table 4.4.9.15-1.

Table 4.4.9.15-1 VOICE MAIL DIAL FUNCTIONS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Voice Mail 1 (Put)	Code to send when the voice mail is to receive call to record a message. Put Mail When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 2 (Get)	Code to send when the voice mail is to playback a recorded message.	Prefix Suffix	

Table 4.4.9.15-1 VOICE MAIL DIAL FUNCTIONS

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	Get Mail When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	(Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 3 (Busy)	Code to send when the voice mail is to receive a call when the user is busy. Busy Mail When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 4 (No Answer)	Code to send when the voice mail is to receive a call when the user did not answer. No Answer Mail When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 5 (Error)	Code to send when the voice mail is to receive a call when a user dialing error exists. Error Mail When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 6 (DND)	Code to send when the voice mail is to receive a call when the user is in DND. DND Mail When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 7	When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 8(CLI)	When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
Voice Mail 9 (Disconnect)	Code for disconnect call. Disconnect Mail When you enter the Digit, the following Digit means as below: P : Pause, D : DND, F : Flash	Prefix Suffix (Max. 12 Digits/ Include *, #, P, D, F)	
CLI Usage	Not use: Do not send CLI Real CLI length: Send CLI without padding before prefix code. Fixed CLI length: Send CLI with fixed length	Not use, Real CLI length, Fixed CLI length	Not use
Fixed CLI Length	Define length of CLI	10-20	10
Fixed CLI Pad	Define padding character for CLI	0-9,*,#	0

4.4.9.16 Registration Table - PGM 235

Selecting Registration Table will display the Registration data entry page. Click **[Save]** button after changing Value.

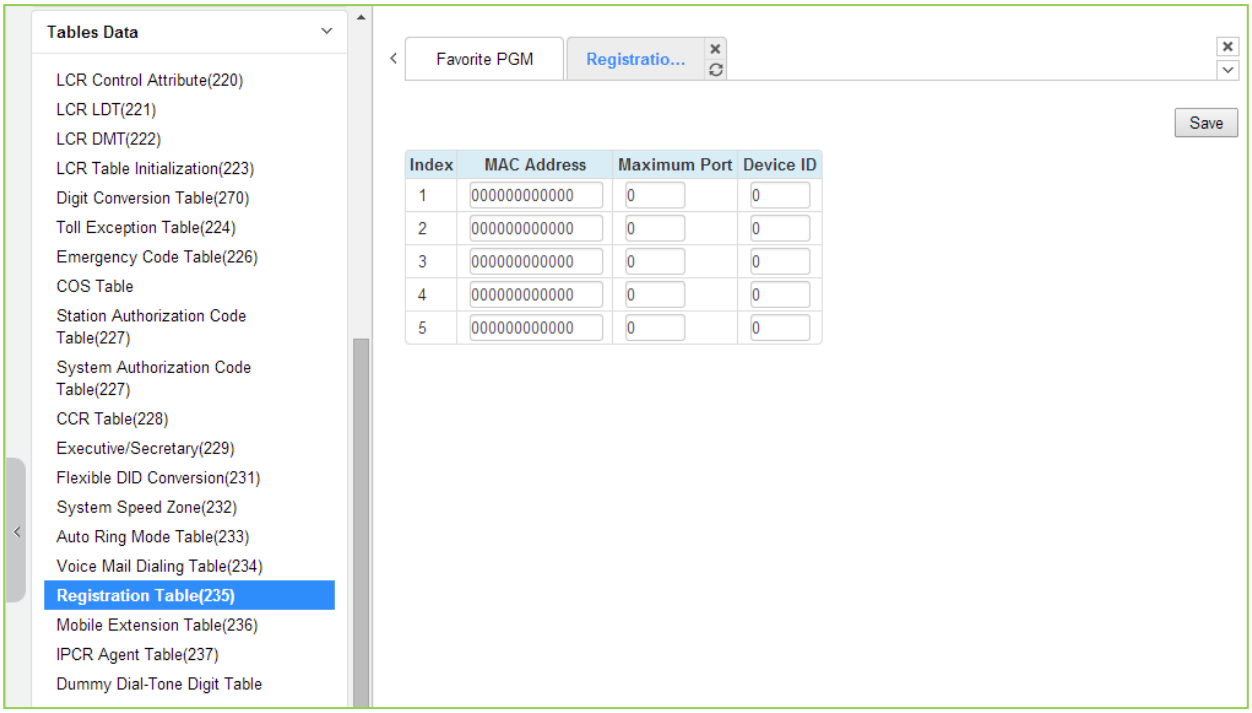


Figure 4.4.9.16-1 MAC Registration Table

When multiple iPECS eMG are located on the same LAN, it may be desirable to register add-on devices employing the Registration Table.

Table 4.4.9.16-1 MAC REGISTRATION & FRACTIONAL MODULE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
MAC Address	Enter MAC address of a device to register		000000000000
Maximum Port	Enter maximum number of ports (channels) for the device.	00-99	00
Device ID	Device type for internal device	0-255	0

4.4.9.17 Mobile Extension Table - PGM 236

Selecting Mobile Extension Table will display the Mobile Extension data entry page. Select the Station Order range desired, blue text above the table header. Selecting the blue colored text in the Table header will sort the table based on the selected column. Click **[Save]** button after changing Value.

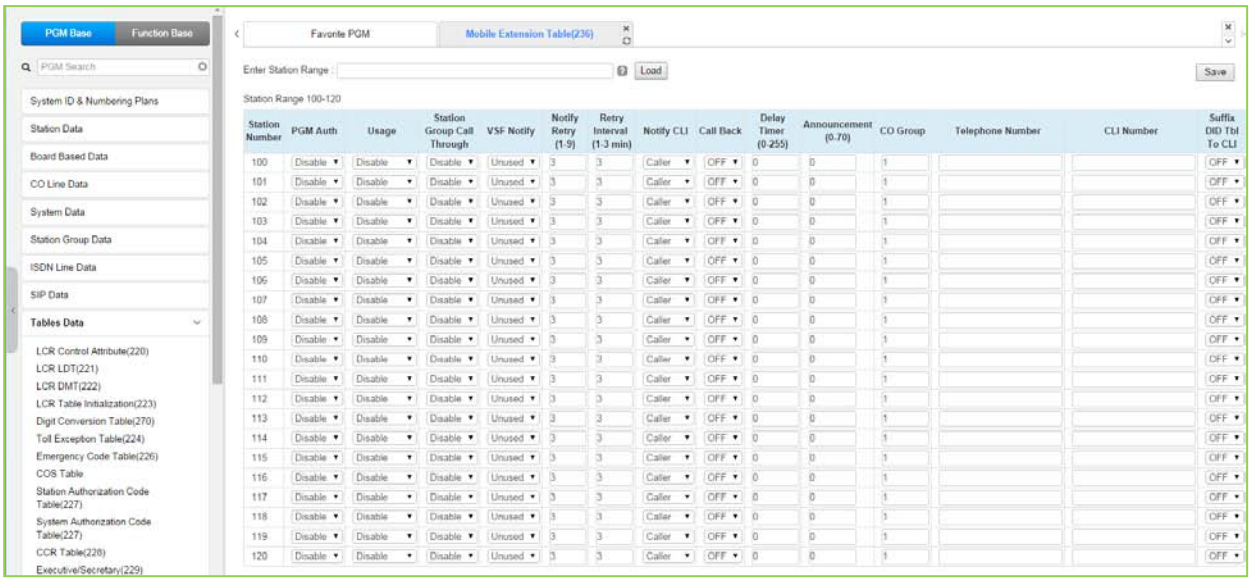


Figure 4.4.9.17-1 Mobile Extension Table

A mobile phone can be used in conjunction with an iPECS Phone. The Mobile phone can access system resources available to the user's wired phone and will receive ring for incoming iPECS calls. The user may be allowed to enable the Mobile extension and define the mobile number. The system can be defined to employ a specific CO/IP Line Group to place calls to the Mobile phone. In addition, the mobile phone can be assigned to receive Station group calls to the primary extension. Also, parameters for notification of new VSF voice mails can be defined.

Table 4.4.9.17-1 MOBILE EXTENSION TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
PGM Authority	The user may be allowed to activate the mobile extension feature.	Disable Enable	Disable
Usage	Mobile extension feature can be enabled and Fail Over to Mobile extension can be included.	Disable Mobile Ext Fail Over	Disable
Station Group Call Enable	When the paired station is a member of a Station group (ACD, Circular, Ring or Terminal), group calls can be sent to the active mobile extension.	Disable Enable	Disable
VSF Notify	Enables outbound notification by the system when the VMIB/VMIU has unheard messages.	Unused Use	Unused
Notify Retry	Defines the number of attempts the system will make to complete a notification when receiving busy/no-answer.	1 – 9 Times	3 Times
Retry Interval	Defines the time between notification attempts. If a notification fails, the system will retry after the	1 – 3 minutes	3 Minute

Table 4.4.9.17-1 MOBILE EXTENSION TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	timer expires.		
Notify CLI	When the system sends CLI to the mobile extension, the CLI can be either the original caller's CLI or the CLI of station.	Caller My Ext.	Caller
Call Back	If it is set to "ON", incoming mobile extension call will be released before answered and system places a call to mobile extension. After mobile extension answers, the dial tone is provided and mobile extension can make internal or external call.	OFF ON	OFF
Delay Timer	Mobile extension call will be placed after delay time.	0 ~ 255	0
Announcement	It can be announced for remote control.	0-200	0
CO Group	CO group used to call the mobile extension.	eMG80:1-21 CO group eMG800:1~201 CO group	1
Telephone Number	Telephone number or CLI of the Mobile extension.		Not assigned
CLI Number	When the mobile Telephone number and CLI do not match, the CLI entered here is used to authorize incoming calls from the mobile.		Not assigned
Suffix DID table index to the CLI	For the outgoing mobile extension call from incoming CO call via DID conversion type 2, DID conversion table index is suffixed to the original CLI. (format: 'original CLI' + '*' + 'Flexible DID Table Index')	OFF/ON	OFF
Tel Num As CLI Num	If this option is set to ON, Telephone Number is used the same as CLI Number. That means, when the mobile user calls to his station, if Telephone Number or CLI Number is matched with his mobile number, then the mobile user hears system dial tone, and calling to outside is available. If this option is set to OFF, only CLI Number is matched, system dial tone is served.	OFF/ON	ON

4.4.9.18 IPCR Agent Table - PGM 237

Selecting IPCR Agent Table will display the IPCR Agent data entry page. Select the Index and Agent ID Order range desired, blue text above the table header. Selecting the blue colored text in the Table header will sort the table based on the selected column. Click **[Save]** button after changing Value.

Enter the Agent order: eMG80 : 1-140 / eMG800: 1-1200

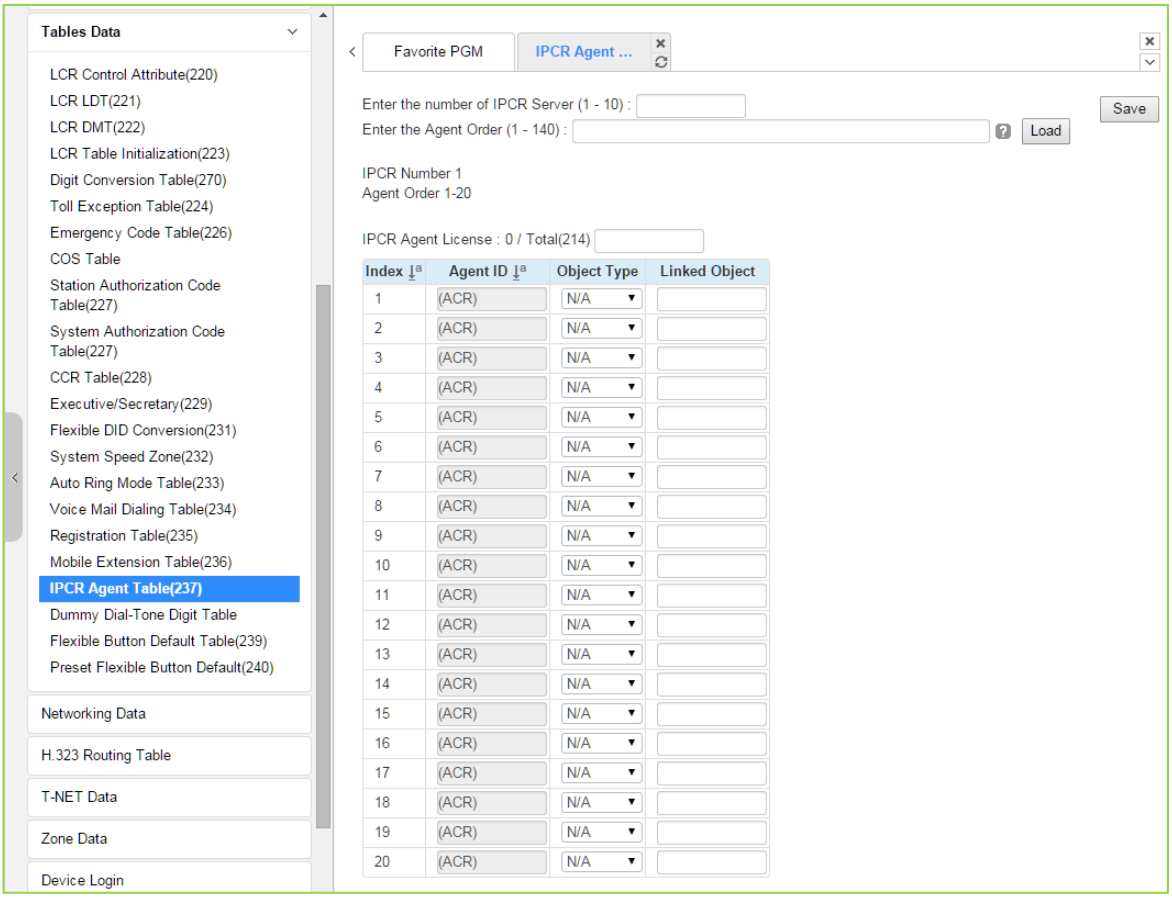


Figure 4.4.9.18-1 IPCR Agent Table

This table is used for matching agent ID to station number. If it‘s done, the station with agent ID is automatically recorded about internal, external and conference call.

4.4.9.19 Dummy Dial-Tone Digit Table

Selecting Dummy Dial-Tone Digit Table will display the Dummy Dial-Tone Digit data entry page. Click **[Save]** button after changing Value.

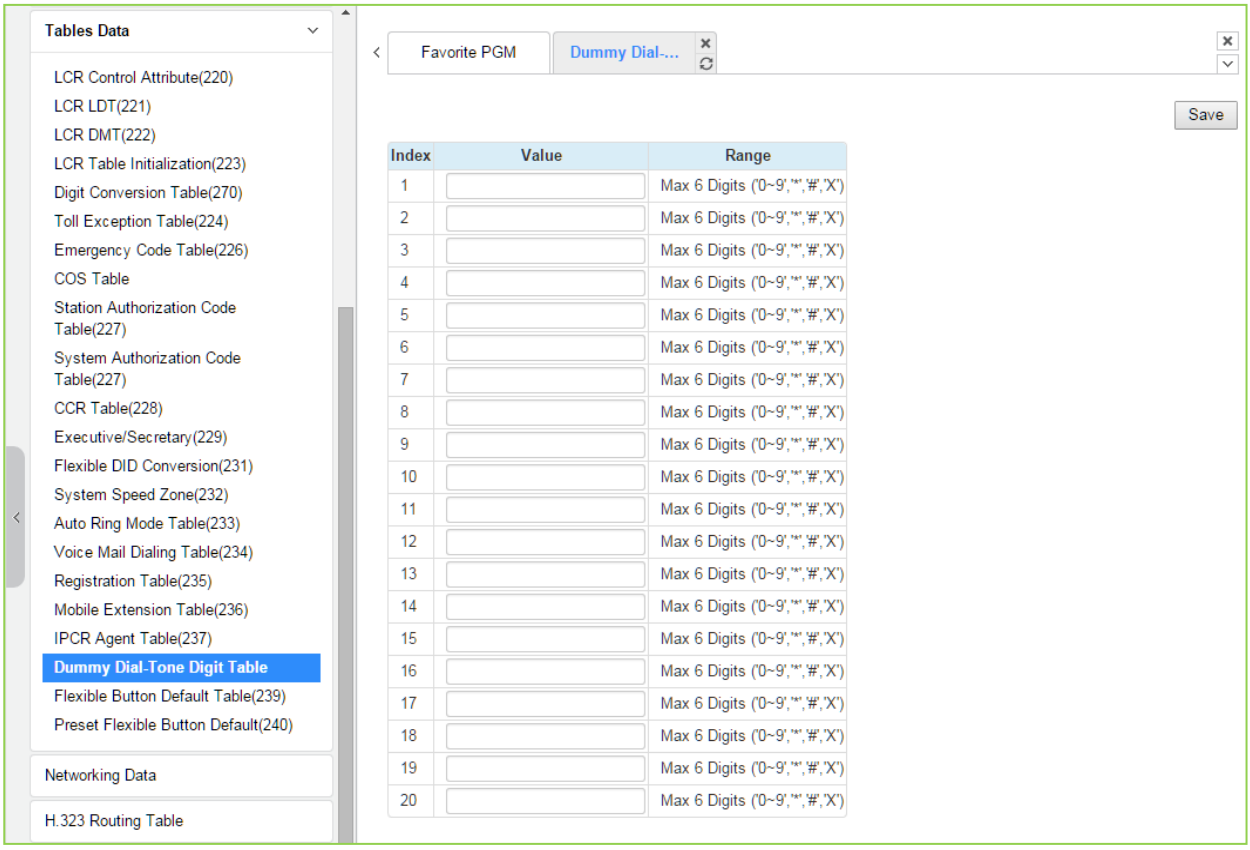


Figure 4.4.9.19-1 Dummy Dial-Tone Digit Table

When digit conversion is programmed, the CO line is seized after digit conversion is completed and therefore user cannot hear the CO dial tone from PX until completing digit conversion. For this case, a dummy dial tone can be programmed. Pressing one of pre-programmed digits (‘0–9’, ‘*’, ‘#’, X’) will provide CO dial tone to the user regardless of CO line seizure.

4.4.9.20 Flexible Button Default Table – PGM 239

Selecting Flexible button default table will display the below page. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

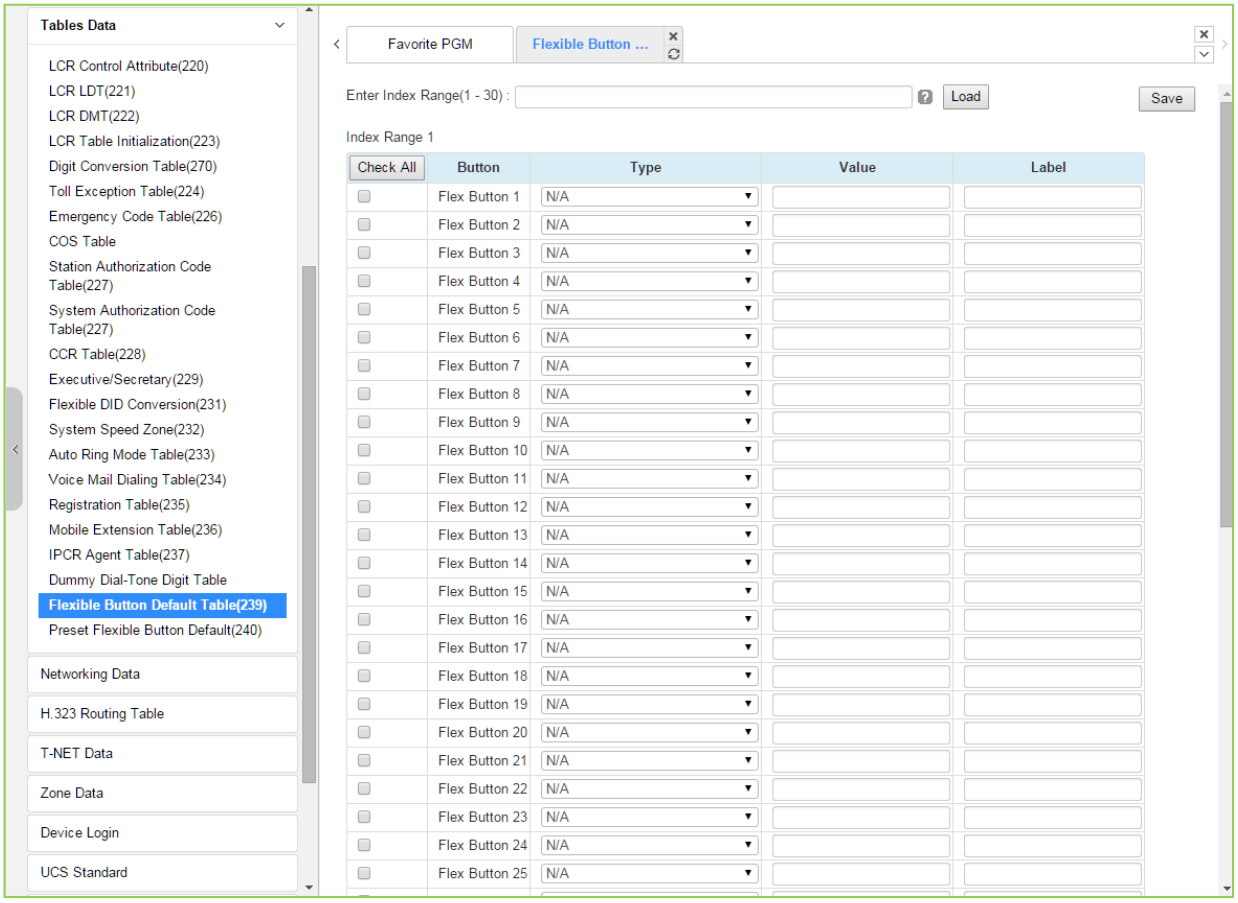


Figure 4.4.9.20-1 Flexible Button Default Table

The system provide 30 default flexible button table so administrator can be configured each table for using 'Preset Flexible Button Default (240).

Administrator can assign the type among the below types on Flexible button.

Table 4.4.9.20-1 FLEX BUTTON TYPE

TYPE	REMARK
N/A	Empty (unassigned), may be defined by the user.
CO Line	Assigns button to access a defined CO/IP line.
CO Group	Assigns button to access a free line in the CO/IP Group.
Loop	Assigns button to access a loop line.
Station Number	Assigns button as DSS/BLF for the assigned station number.
Programming (Numbering Plan)	Assigns button to dial a code from the Flexible Numbering Plan, see Appendix B section.
Programming (PGM)	Assigns button to perform a User Program function from the Fixed Numbering Plan, Appendix B section.
Station Speed Bin	Station Speed Dial bin.
System Speed Bin	System Speed Dial bin.
Net Station Number	Refer to section 4.4.10.6 Network Numbering Plan Table - PGM 324.
U-Loop	U-Loop button for call wait of internal & external call

4.4.9.21 Preset Flexible Button Default – PGM 240

Selecting Preset flexible button default will display the below page. Click **[Save]** button after changing Value.

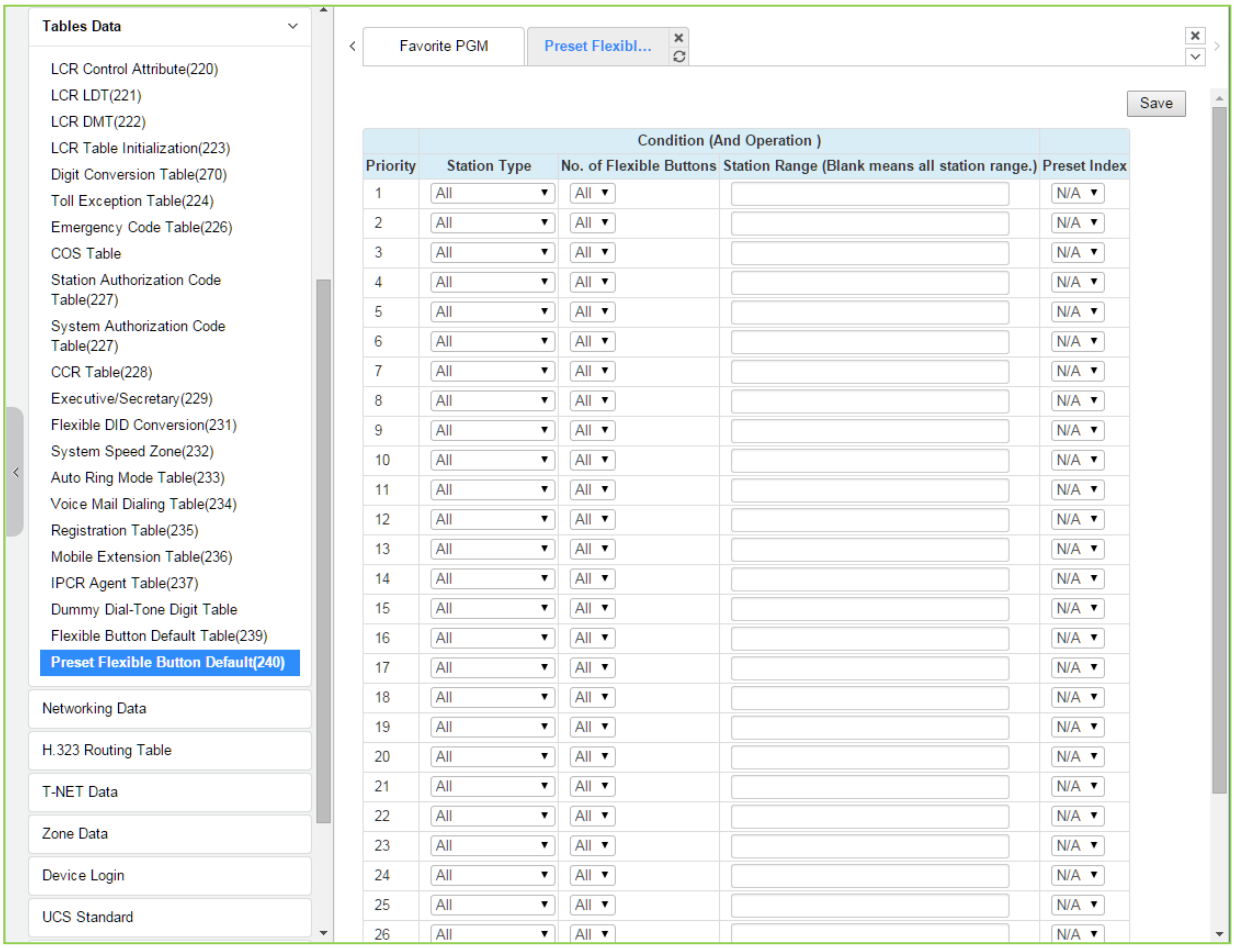


Figure 4.4.9.21-1 Preset Flexible Button Default

Administrator can assign Preset flexible button table to the station automatically by default. Before connecting the station, administrator has to set this table according to Priority, Station Type, the number of Button, Station Range, and check the preset Index (1~30). The preset index means the range of Flexible Button Default Table (PGM 239).

4.4.10 Networking Data

Selecting the Networking Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

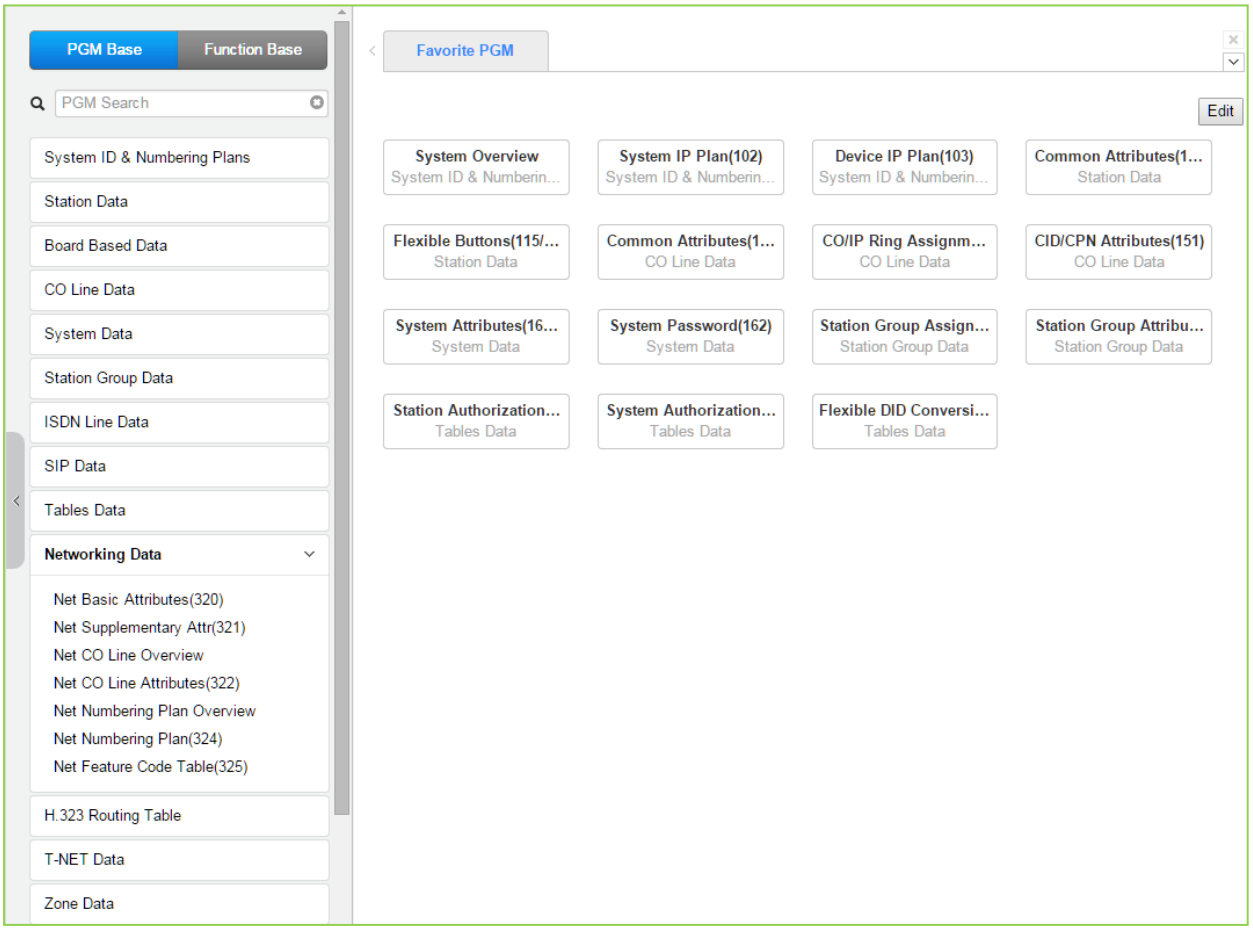


Figure 4.4.10-1 Networking Data

4.4.10.1 Network Basic Attributes - PGM 320

Selecting Network Basic Attributes will display the Network Basic Attributes entry page. Click **[Save]** button after changing Value.

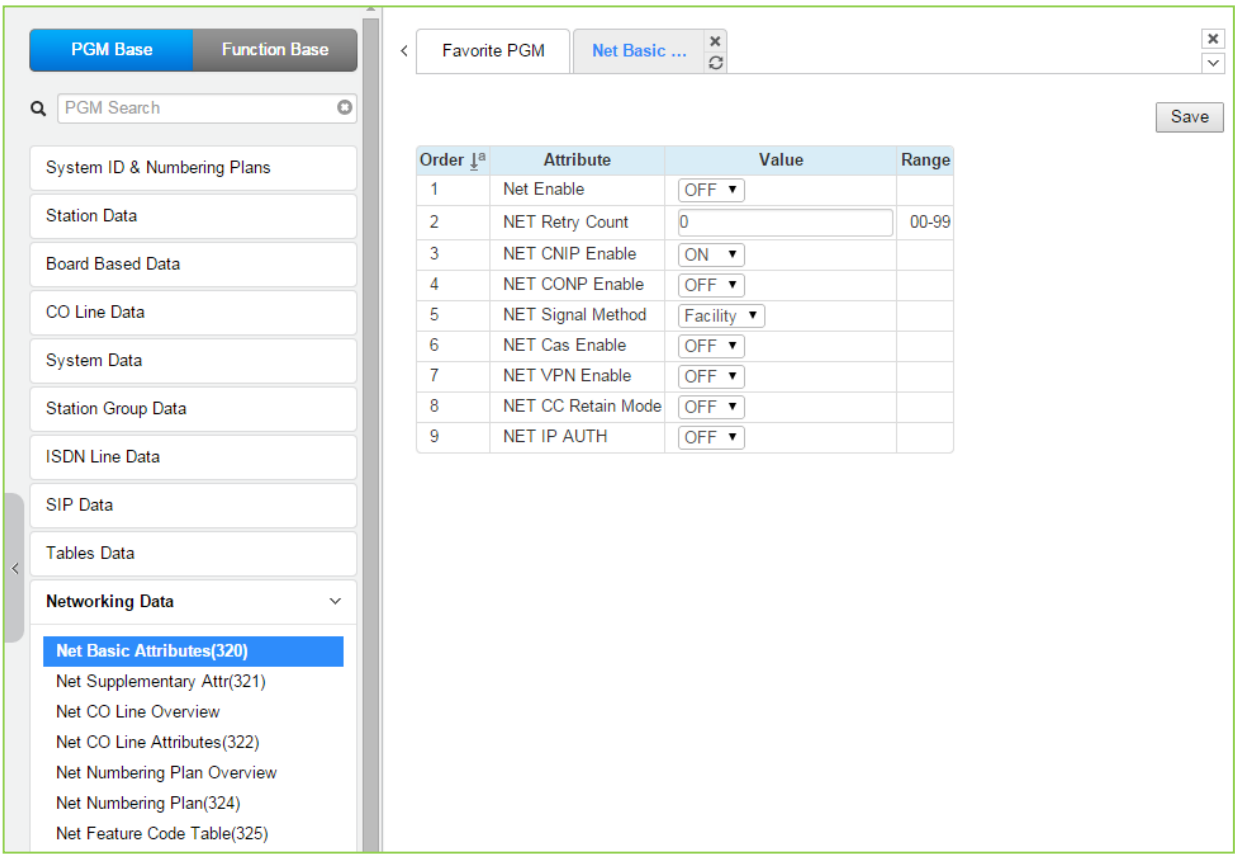


Figure 4.4.10.1-1 Network Basic Attributes

Table 4.4.10.1-1 NETWORK BASIC ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net Enable	Enable Networking function.	OFF ON	OFF
Net Retry Count	Reserved for future usage.	00-99	0
Net CNIP Enable	The name of calling station is sent to the called system between iPECS eMG. CNIP is displayed at called party stations display based on the programming.	OFF ON	ON
Net CONP Enable	Reserved for future usage.	OFF ON	OFF
Net Signal Method	Select the information element type for QSIG supplementary service message.	UUS/ Facility	Facility
Net Cas Enable	It is not used.	OFF ON	OFF
Net VPN Enable	Reserved for future usage.	OFF ON	OFF
Net CC Retain Mode	It is not used.	OFF ON	OFF
Net IP Auth.	If it is ON then system reject networking call when the IP address is not matched with PGM 324.	OFF ON	OFF

4.4.10.2 Network Supplementary Attributes - PGM 321

Selecting Network Supplementary Attributes will display the Network Supplementary Attributes entry page. Click **[Save]** button after changing Value.

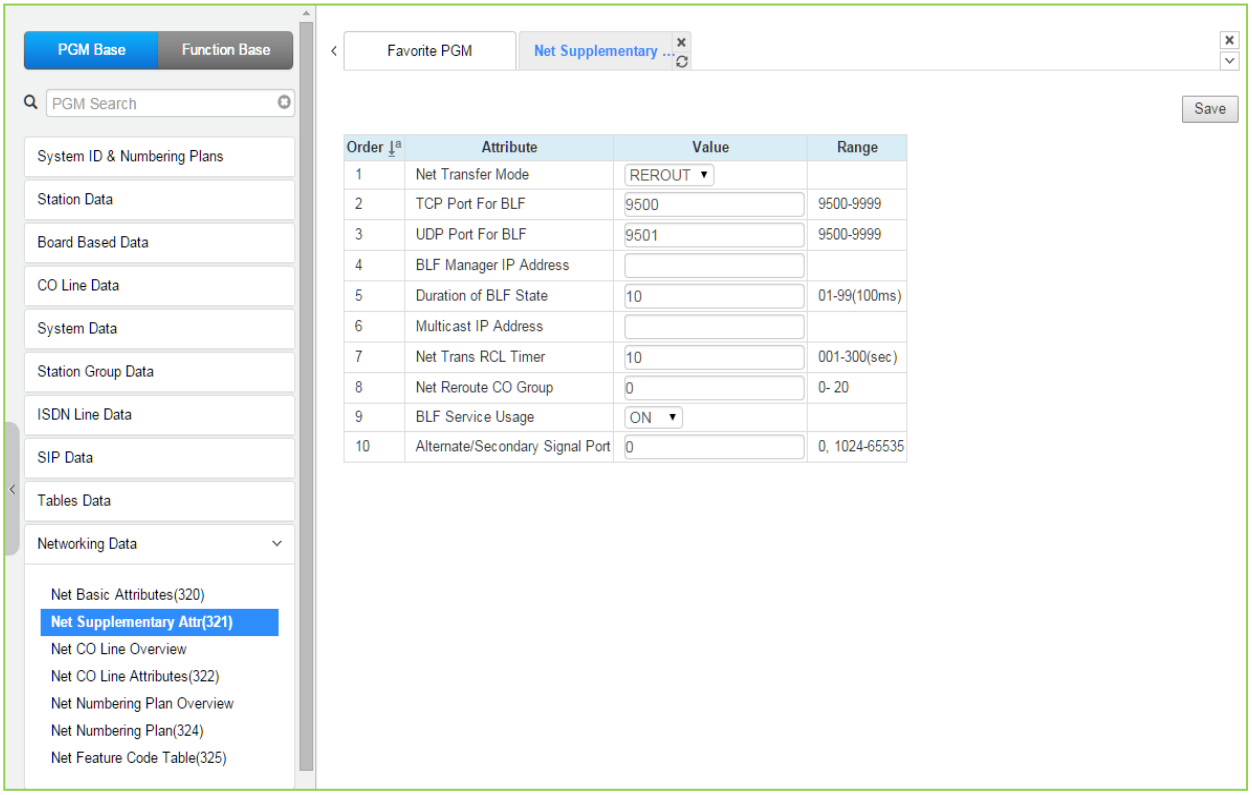


Figure 4.4.10.2-1 Network Supplementary Attributes

Table 4.4.10.2-1 NETWORK SUPPLEMENTARY ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net Transfer Mode	Select type for Transfer and Call forward. – REROUT or JOIN	REROUT/ JOIN	REROUT
TCP Port for BLF	TCP port for sending BLF message to BLF Manager.	9500-9999	9500
UDP Port for BLF	UDP port for sending BLF message to BLF Manager.	9500-9999	9501
BLF Manager IP	IP Address of BLF Server used only when iPECS is configured with LDK systems for Voice Networking.		0.0.0.0
Duration of BLF State	Duration of BLF state message sending to BLF Server.	01-99 (Sec.)	10
Multicast IP	IP address of Multicast for BLF service.		0.0.0.0
Net Trans Recall timer	Network transfer fault recall timer to be used when no responses from other systems.	001-300 (msec)	10
NET Reroute CO Group	The start times for Day, Night and start and end times for Timed modes are entered for each day of week. After Timed end time the mode goes to day if time is less than Night mode.	eMG80:0-20 CO group eMG800:0~200 CO group	
BLF Service Usage	BLF service usage.	OFF, ON	ON
Alternate/Secondary signal port	This signal port is used to add an alternate or secondary receiving signal port. A default receiving	0, 1024-65535	0

Table 4.4.10.2-1 NETWORK SUPPLEMENTARY ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	signal port is TCP 1720 and an additional signal port will be opened if this field is configured to valid value. When the system is installed behind xDSL modem, the problem of consecutive second call can happen by uncontrolled H.323 ALG function at xDSL modem. This field can be used to solve the problem of consecutive second call.		

4.4.10.3 Net CO Line Overview

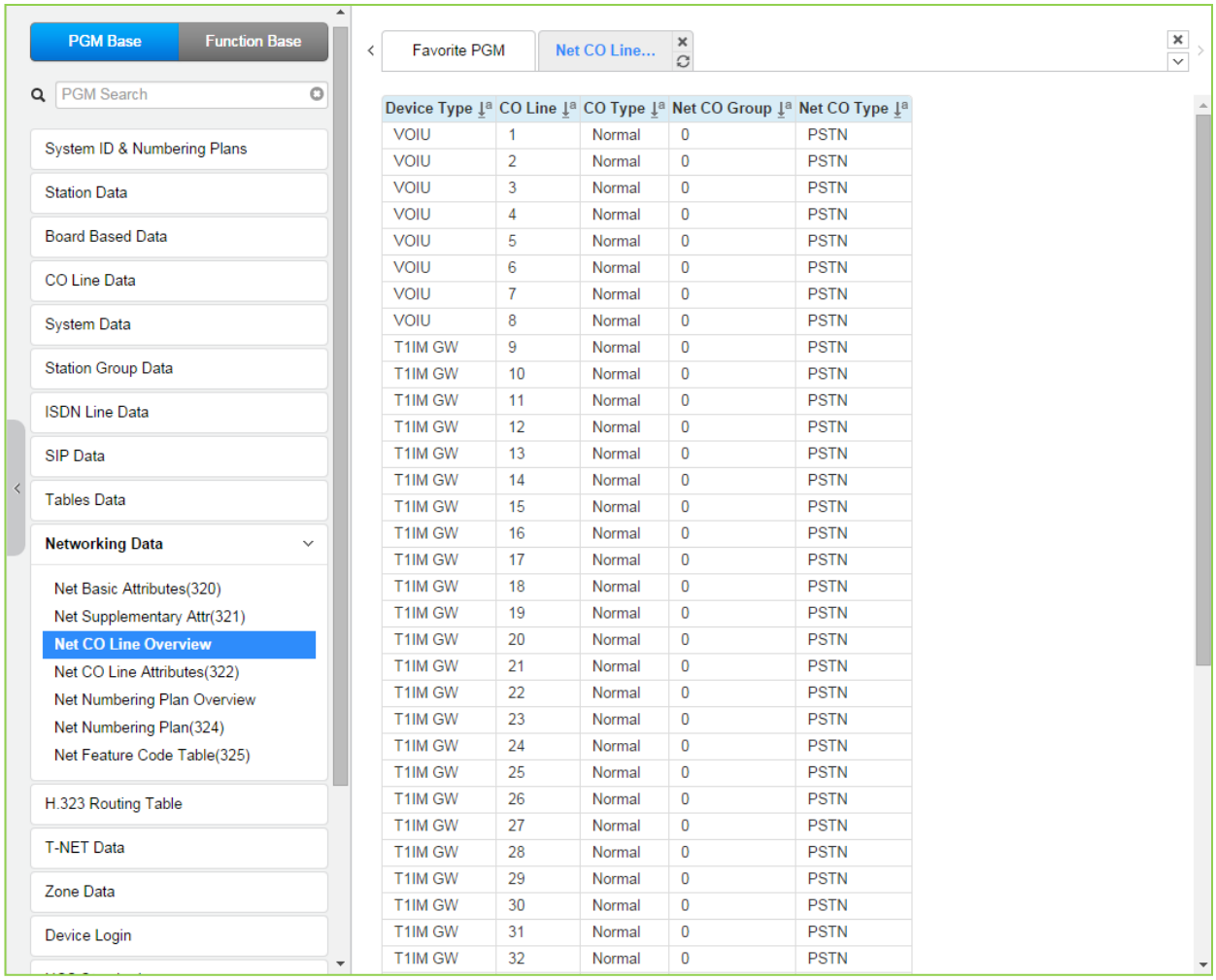


Figure 4.4.10.3-1 Network CO Line Overview

4.4.10.4 Network CO Line Attributes - PGM 322

Selecting Network CO Line Attributes will display the Network CO Line Group entry page. Enter a valid CO/IP Line range and click **[Load]** to enter the Network CO Line data. Click **[Save]** button after changing Value.

Enter CO Range: eMG80 : 1-74 / eMG800: 1-600

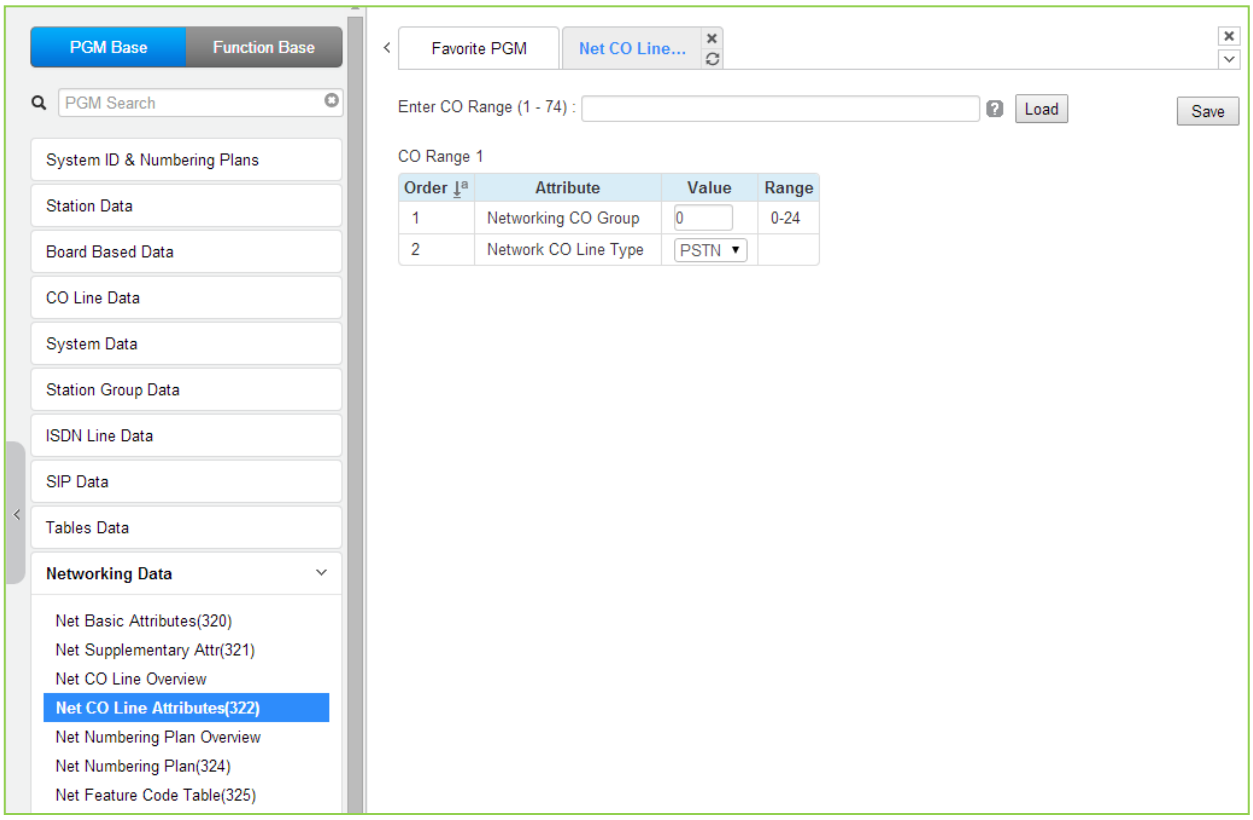


Figure 4.4.10.4-1 Network CO Line Attributes

Table 4.4.10.4-1 NETWORK CO LINE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Networking CO Group	The CO/IP Lines in the assigned group are employed as Network CO Lines, connecting to other systems in the network.	00-24	00
Network CO Line Type	The CO/IP Line is assigned for use by the network as a PSTN (carrier) or connection to the network.	NET/ PSTN	PSTN

4.4.10.5 Network Numbering Plan Table Overview

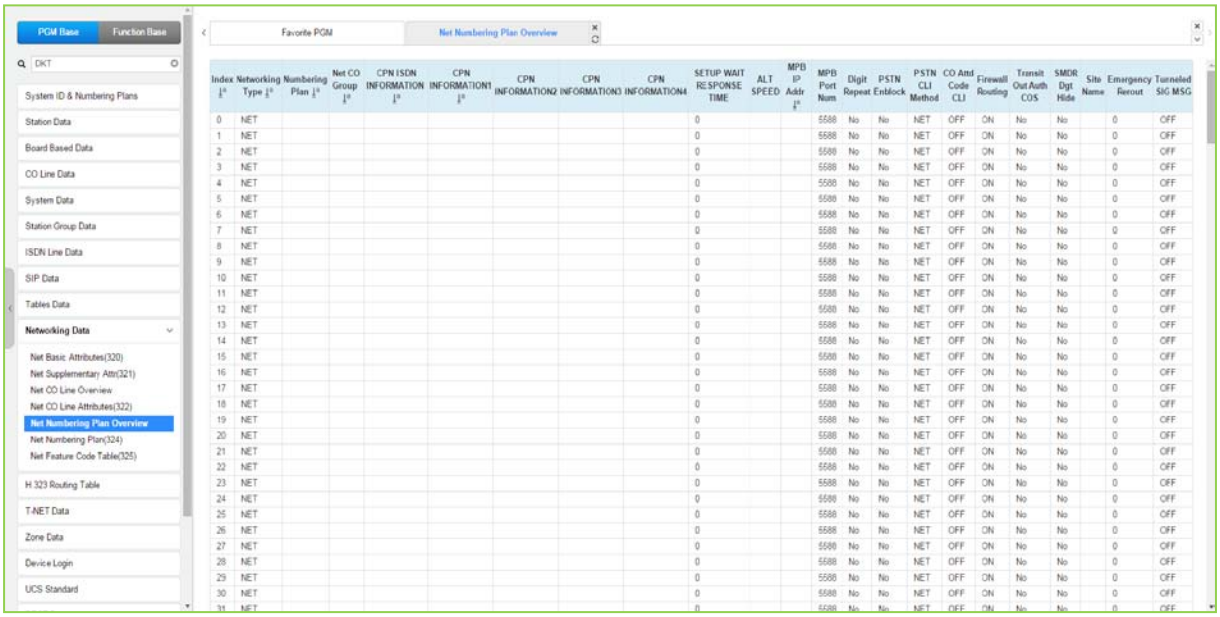


Figure 4.4.10.5-1 Network Numbering Plan Table overview

4.4.10.6 Network Numbering Plan - PGM 324

Selecting Network Numbering Plan Table will display the Network Numbering Plan Table data entry page. Click **[Save]** button after changing Value.

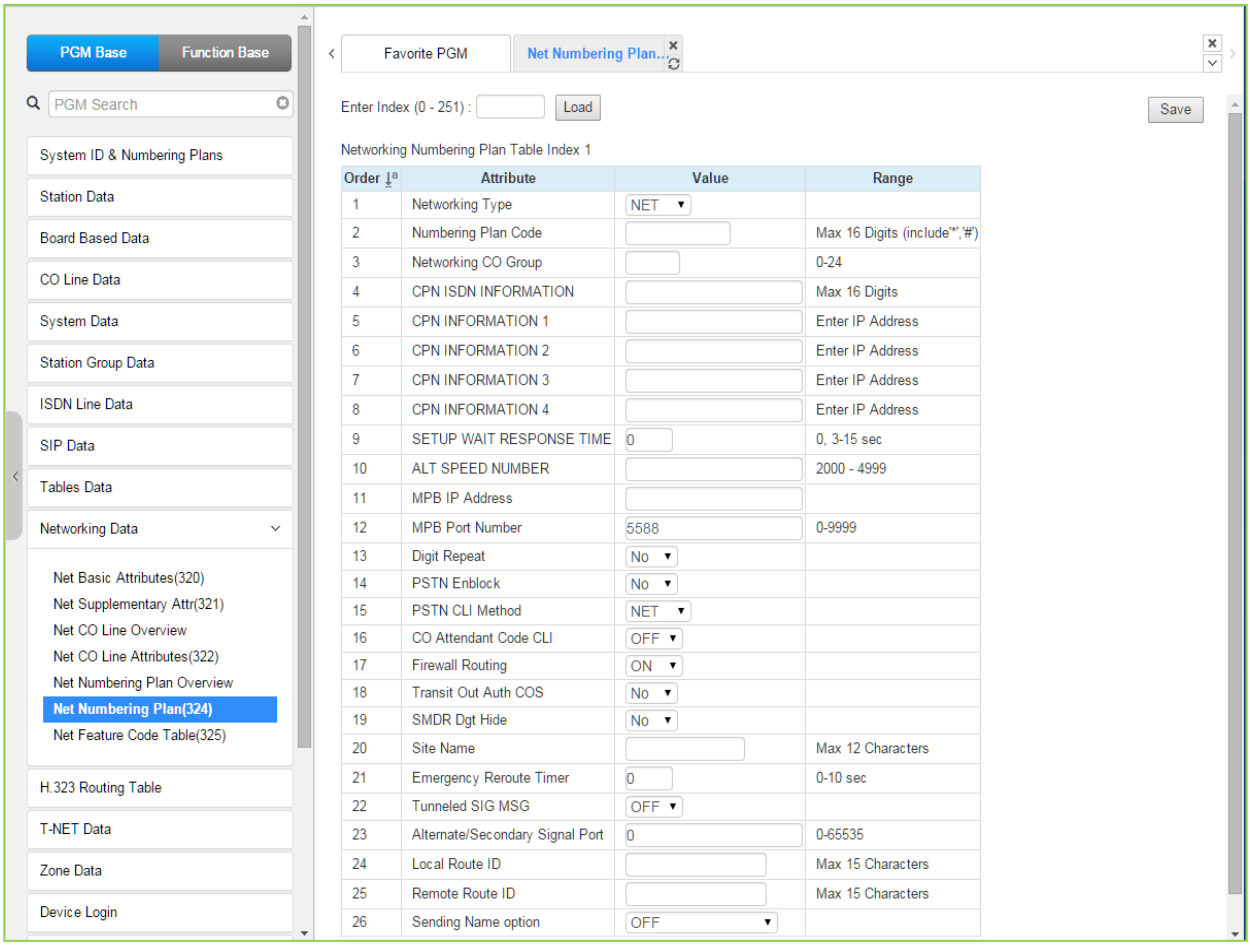


Figure 4.4.10.6-1 Network Numbering Plan Table

Table 4.4.10.6-1 NETWORK NUMBERING PLAN TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Network Type	Select the type.	NET / PSTN	NET
Numbering Plan Code	'*' means any digits can be inserted between 0 ~ 9. The digits followed by '#' are an internal station number.	Max. 16 digits (Include * and #)	
Networking CO Group	'00' means an internal net station number.	00-24	
CPN ISDN Information	CPN ISDN Information.	Max. 16 digits	
CPN Information	Flex 1: ISDN CPN INFORMATION Flex 2: (FLEX BTN 1- 4) 1: 00 CPN INFORMATION 01 2: 00 CPN INFORMATION 02 3: 00 CPN INFORMATION 03 4: 00 CPN INFORMATION 04	Enter IP address	
Setup Wait Response Time	Networking call-setup failure timer when there is no proceeding message from network (i.e. IP-Network is	0, 3~15 Sec.	0

Table 4.4.10.6-1 NETWORK NUMBERING PLAN TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	down)		
ALT Speed Bin	Alternative Dial Number (System SPD Bin) when the networking path has a fatal problem.	eMG80:2000~4999 eMG800:2000~9999	
MPB IP Address	IP Address of destination MPB system only when iPECS eMG is configured for Voice Networking		0.0.0.0
MPB Port number	Port Number of destination system for Networking.	0000-9999	5588
Digit Repeat	When the number plan code, see above, is for PSTN call or transit-call, this number code can be enveloped in SETUP message or not whether if this field is set or not.	Yes No	No
PSTN Enblock	Choose “Transit-out Public Line” as En-block or Over-lap.	Yes No	No
PSTN CLI Method	NET: Send network station number for CLI PSTN: Send full CLI (e.g., 02-450-1000)	NET PSTN	NET
CO Attendant Code CLI	Determine whether if Centralized ATD CLI is sent or not when slave system makes transit call.	OFF ON	OFF
Firewall Routing	Select IP address (Firewall IP address or Non-firewall IP address). If the destination system (VOIB) is in same VPN then Non-firewall IP address should be sent. Otherwise the firewall IP address should be sent. ON: Send firewall IP address OFF: Send Non-firewall (Internal) IP address	OFF ON	ON
Transit Out Auth COS	When there’s a transit out call request from slave system user by seizing CO line, apply COS according to the authorization code.	Yes No	No
SMDR Digit Hide	Determine to display dialed digit of transit out call or not at the slave system; it can contain authorization code.	Yes No	No
Site name	It is comment field to assign networking site name.	Max. 12 characters	
Emergency reroute timer	When timer is ‘0’: The reroute emergency call is not work. When timer is set ‘1’ ~ ‘10’: The reroute emergency call is activated after this timer. This is only work when PGM 112-18th is transit-out CO group. It will be fail over using “Fail Over CO Group Number (PGM133)” or “Net Reroute CO Group (PGM321)”.	0-10 (Sec.)	00
Tunneled SIG MSG	Send and Receive H323 message that include ISDN QSIG message. It is used to make networking with Panasonic system.	OFF ON	OFF
Alternate/Secondary signal port	This destination signal port is used on calling to remote network system. A default destination signal port is TCP 1720 but the port number is changed if this field is configured to valid value. When the system is installed behind xDSL modem, the problem of consecutive second call can happen by uncontrolled H.323 ALG function at xDSL modem. This field can be used to solve the problem of consecutive second call. Here, the value should be an alternate or secondary receiving signal port which is configured at remote system.	0-65535	

Table 4.4.10.6-1 NETWORK NUMBERING PLAN TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Local route ID	These two fields are used when a remote network system want to check the route ID value to authenticate the system. Here, 'Local Route ID' is the route ID string for local system. And 'Remote Route ID' is the route ID string for remote system.	Max. 15 characters	
Remote route ID		Max. 15 characters	
Sending Name option	Basically the calling party name is transferred in QSIG messages. This field is an additional way to send the calling party name. In some PBX systems, the Q.931 Display IE field is used to transferring the calling party name and this value can be used as an interoperating solution for displaying the calling party name.	OFF, Display IE(CISCO)	OFF

4.4.10.7 Network Feature Code Table - PGM 325

Selecting Network Feature Code Table returns the data entry page. Click **[Save]** button after changing Value.

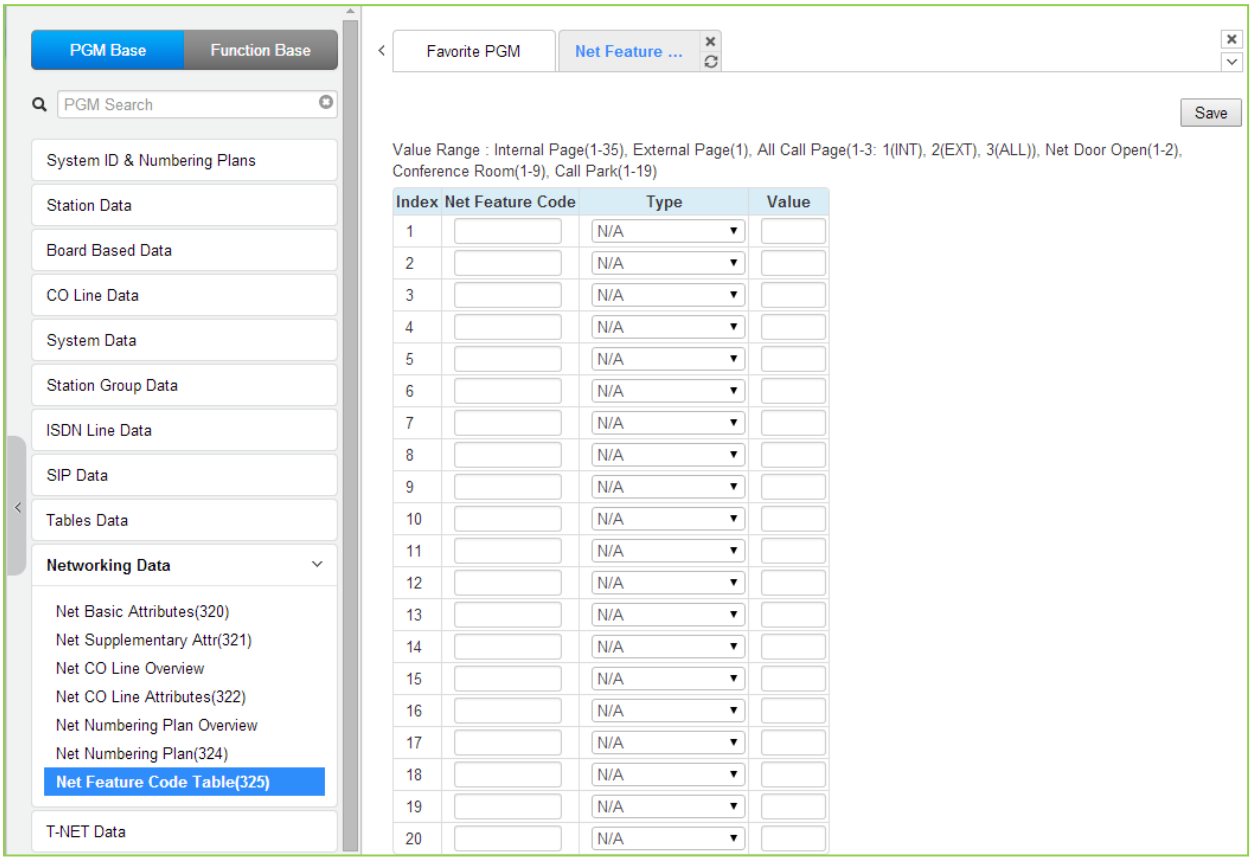


Figure 4.4.10.7-1 Network Feature Code Table

Table 4.4.10.7-1 NETWORK FEATURE CODE TABLE

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Net Feature Code	Networking Feature Code programming for Networking paging call.	16 digits	None
Net Feature type	Select network feature type.	N/A, Internal Page, External Page, All Call Page, Net Door Open, Conference Room, Call Park,	N/A

In case of eMG800, the value range is as below:

Internal page: 1-100, External page (1), All Call page (1-3: 1(INT), 2(EXT), 3(ALL)), Net door Open (1-2), Conference Room (1-9), Call Park (1-200)

4.4.11 H.323 Routing Table

Selecting the H.323 Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

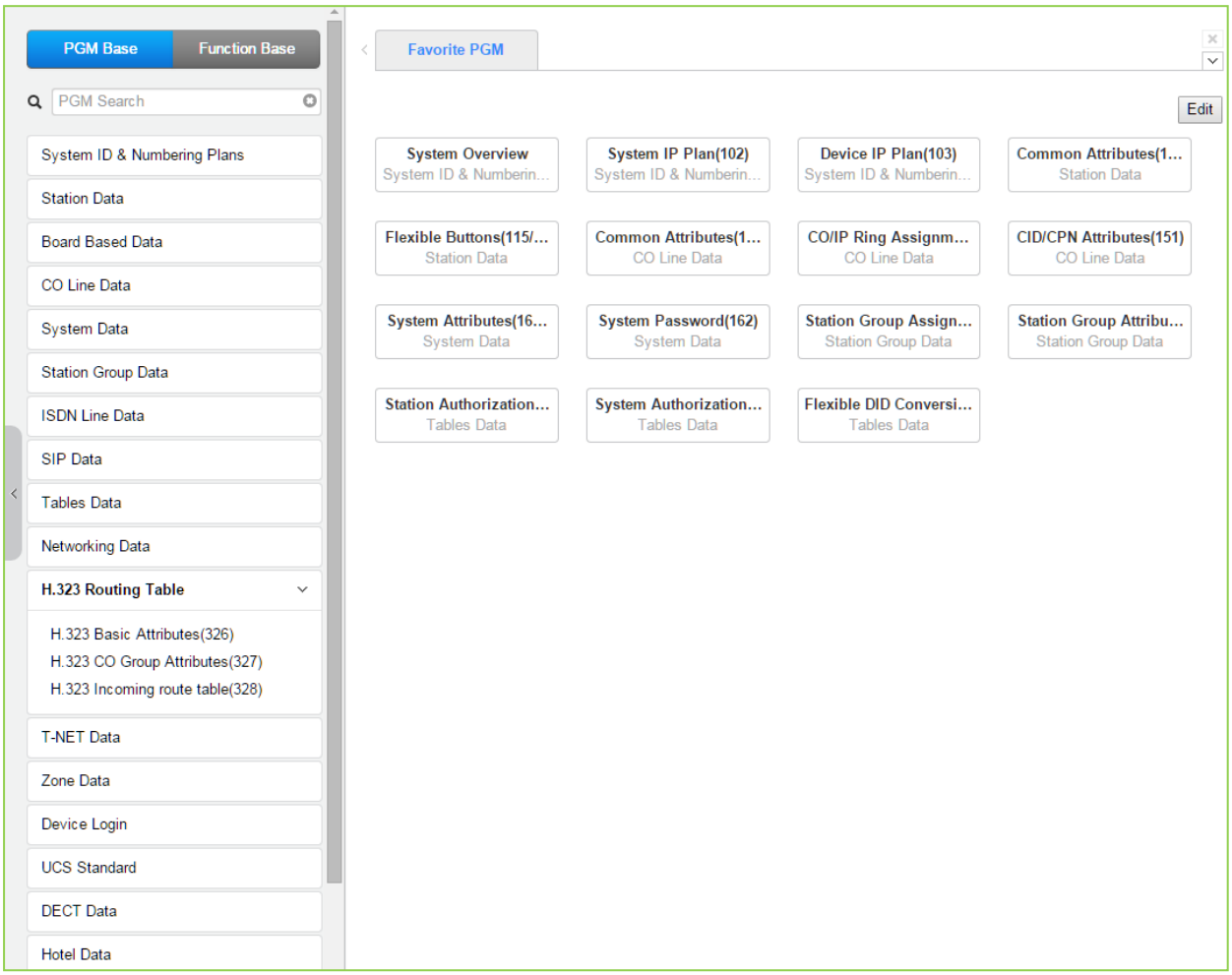


Figure 4.4.11-1 H.323 Routing Table Main Page

4.4.11.1 H.323 Basic Attributes -PGM 326

Selecting H.323 Basic Attributes will display the data entry page. Click **[Save]** button after changing Value.

Enter Device/GW slot sequence number: eMG80 : 1-300 / eMG800: 1-2890

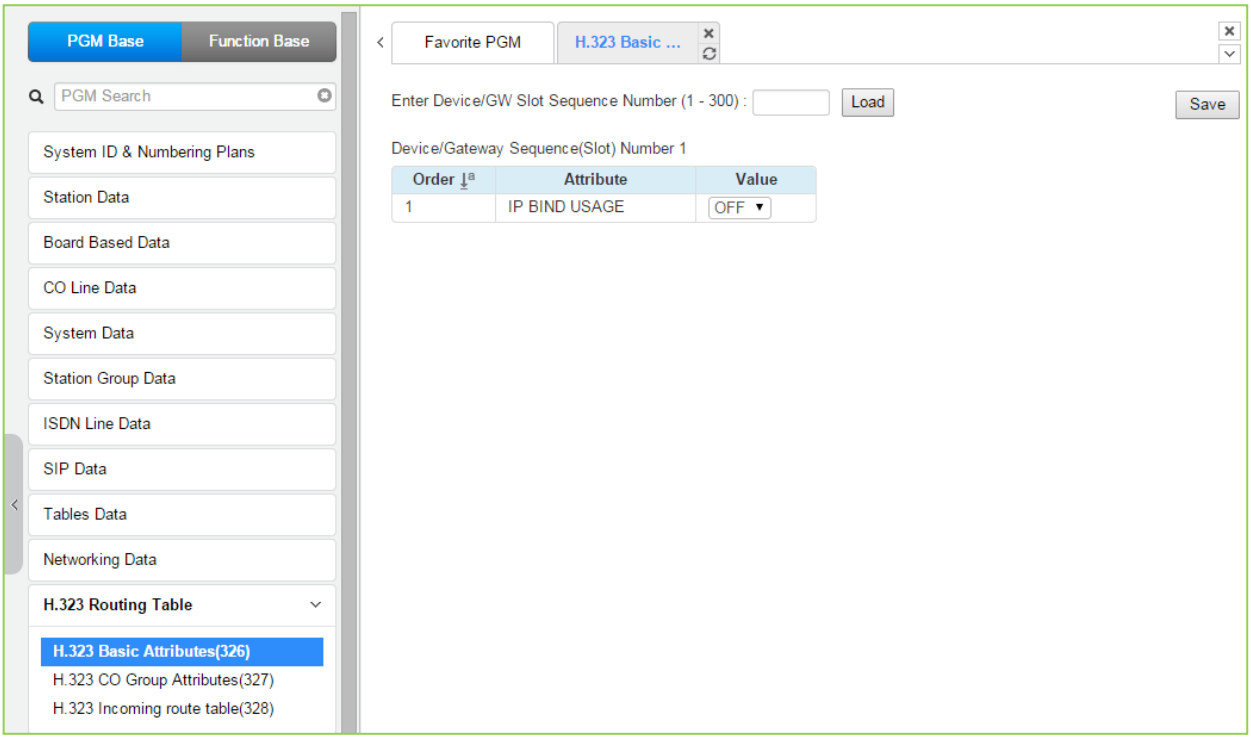


Figure 4.4.11.1-1 H.323 Basic Attributes

H.323 Signaling can be operated with each VOIB board or MPB.

Table 4.4.11.1-1 H.323 Basic Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
IP Band Usage	If it is set to ON, system allows H.323 signaling with system IP address. Or, each VOIB IP Address can be used.	OFF ON	OFF

4.4.11.2 H.323 CO Group Attributes -PGM 327

Selecting H.323 CO Group Attributes will display the data entry page. Click **[Save]** button after changing Value.

Enter Group number: eMG80 : 1-20 / eMG800: 1-200

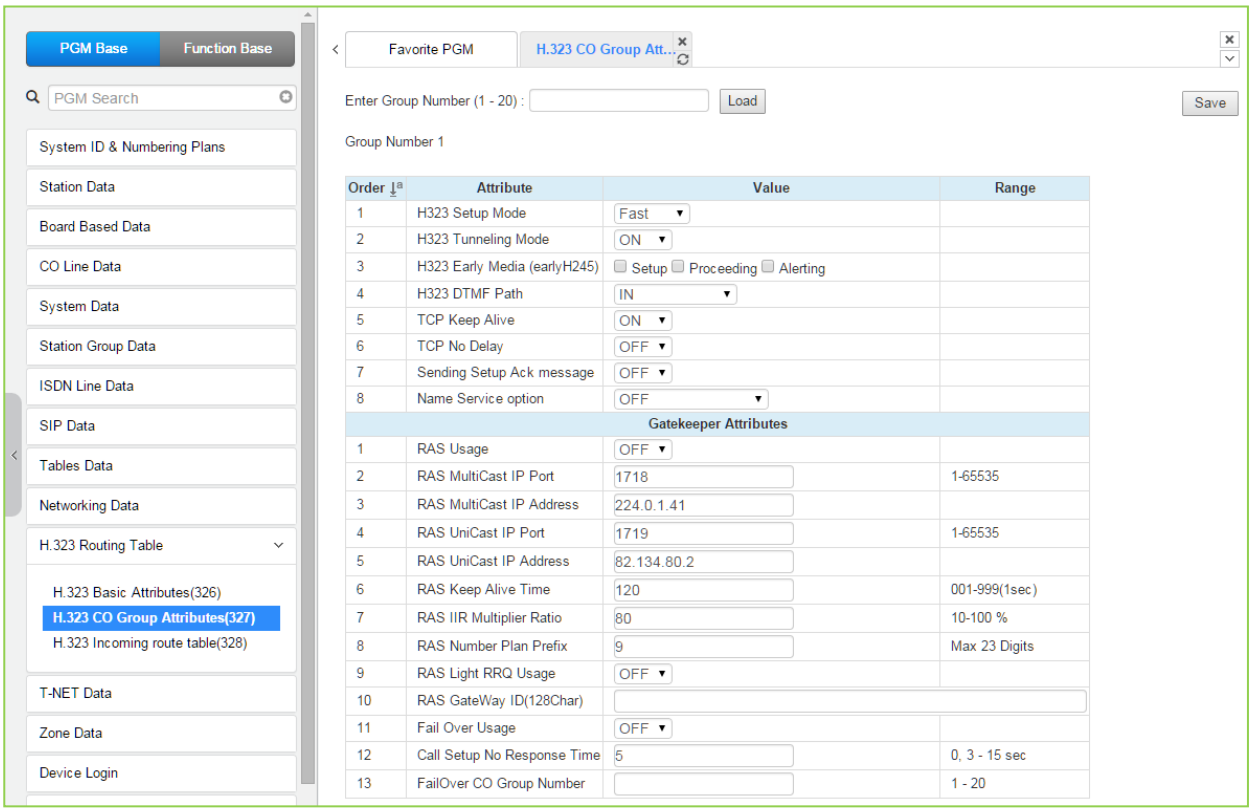


Figure 4.4.11.2-1 H.323 CO Group Attributes

The VOIP channels are used for Distributed Networking, access to SIP or H.323 networks and for remote iPECS devices. When the standard H.323 VoIP protocol is employed for an external VoIP call, several attributes of these channels can be assigned. The H.323 call set-up mode and tunneling (H.245 Encapsulation) can be established.

Also for H.323 support, a RAS (Registration, Admissions and Status) channel can be defined. The RAS channel IP addresses (uni-cast and multi-cast) as well as the IP port Numbering Plan and other H.323 set-up characteristics are defined.

Table 4.4.11.2-1 H.323 CO Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
H.323 Setup mode	H.323 IP calls can be set-up using the H.323 normal or Fast Start mode.	Fast Norm	Fast
H.323 Tunneling mode	H.323 IP calls can be set-up using the H.245 encapsulation (Tunneling).	OFF ON	ON
H323 Early Media (early H245)	This feature is the ability of two user endpoints to communicate before call is actually established in normal call mode. This feature is not used when 'H323 Setup Mode' is 'Fast'.	Setup, Proceeding, Alerting	

Table 4.4.11.2-1 H.323 CO Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	* Setup: Caller party tries to open early media on receiving the Setup message. * Proceeding: Calling party tries to open early media on receiving the Proceeding message. * Alerting: Calling party tries to open early media on receiving the Alerting message.		
H.323 DTMF Path	During a connection, DTMF Digits can be sent in-band or out of band (H.245).	IN, OUT, 2833	IN
TCP Keep Alive	The system will send a polling message every 75 seconds to assure the status of the TCP connection.	OFF ON	ON
TCP No Delay	Normally small chunks of TCP (H323) messages are combined into one packet and be sent to remote party to improve the efficiency of network. Sometimes this action yields the H323 signaling problem when system is behind NAT router and there is H323 ALG is running. 'OFF' value can be a solution to overcome the problem.	OFF ON	OFF
Sending Setup Ack message	System provides SETUP ACK message when there is no ‘sending complete IE’ in SETUP message.	OFF ON	OFF
Name Service option	Basically the calling party name is transferred in QSIG messages. This field is an additional way to send the calling party name. In some PBX systems, the Q.931 Display IE field is used to transferring the calling party name and this value can be used as an interoperating solution for displaying the calling party name.	OFF Display IE (CISCO)	OFF
Gatekeeper Attributes			
RAS Usage	Determine whether VOIU/VOIB Board will be used as a Gatekeeper.	OFF ON	OFF
RAS MultiCast IP Port	Multi-cast IP Port for RAS Information of Gatekeeper.	1~65535	1718
RAS MultiCast IP Address	Multi-cast IP address for RAS Information of Gatekeeper.	IP Address	224.0.1.41
RAS UniCast IP Port	Uni-cast IP Port for RAS Information of Gatekeeper.	1~65535	1719
RAS UniCast IP Address	Uni-cast IP address for RAS Information of Gatekeeper.	IP Address	82.134.80.2
RAS Keep Alive Time	The time between exchange of RAS Information between GK and VOIB/VOIU.	001-999 (SEC)	120
RAS IIR Multiplier Ratio	This feature is used when H323 call is routed by RAS gatekeeper. Keep alive interval time between the system and gatekeeper is provided by gatekeeper on registration time. This value of ratio is used to change the keep alive interval time from gatekeeper.	10~100%	80
RAS Number Plan Prefix	The numbering plan for Calling Number in RAS Setup.	Max. 23 digits	
RAS Light RRQ usage	The Gatekeeper ID (This can be programmed only via WEB Admin).	OFF ON	OFF
RAS Gateway ID	The system can be assigned to use the simple RRQ	Max. 128	

Table 4.4.11.2-1 H.323 CO Group Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	(Registration Request) message (ON) or the full RRQ message (OFF).	characters	
Fail over Usage	The H.323 call will be failover to another line (FAIL OVER USAG: ON).	OFF ON	OFF
Call Setup No Response time	The H.323 call will be failover. The time will be set.	0, 3-15 (Sec.)	0
Fail over CO Group number	If the H.323 call will be failover, assign another CO group.	eMG80:1-20 eMG800:1-200	

4.4.11.3 H.323 Incoming Route table -PGM 328

Selecting H.323 Incoming Route table will display the data entry page. Click **[Save]** button after changing Value.

Enter CO Group number: eMG80 : 1-20 / eMG800: 1-200

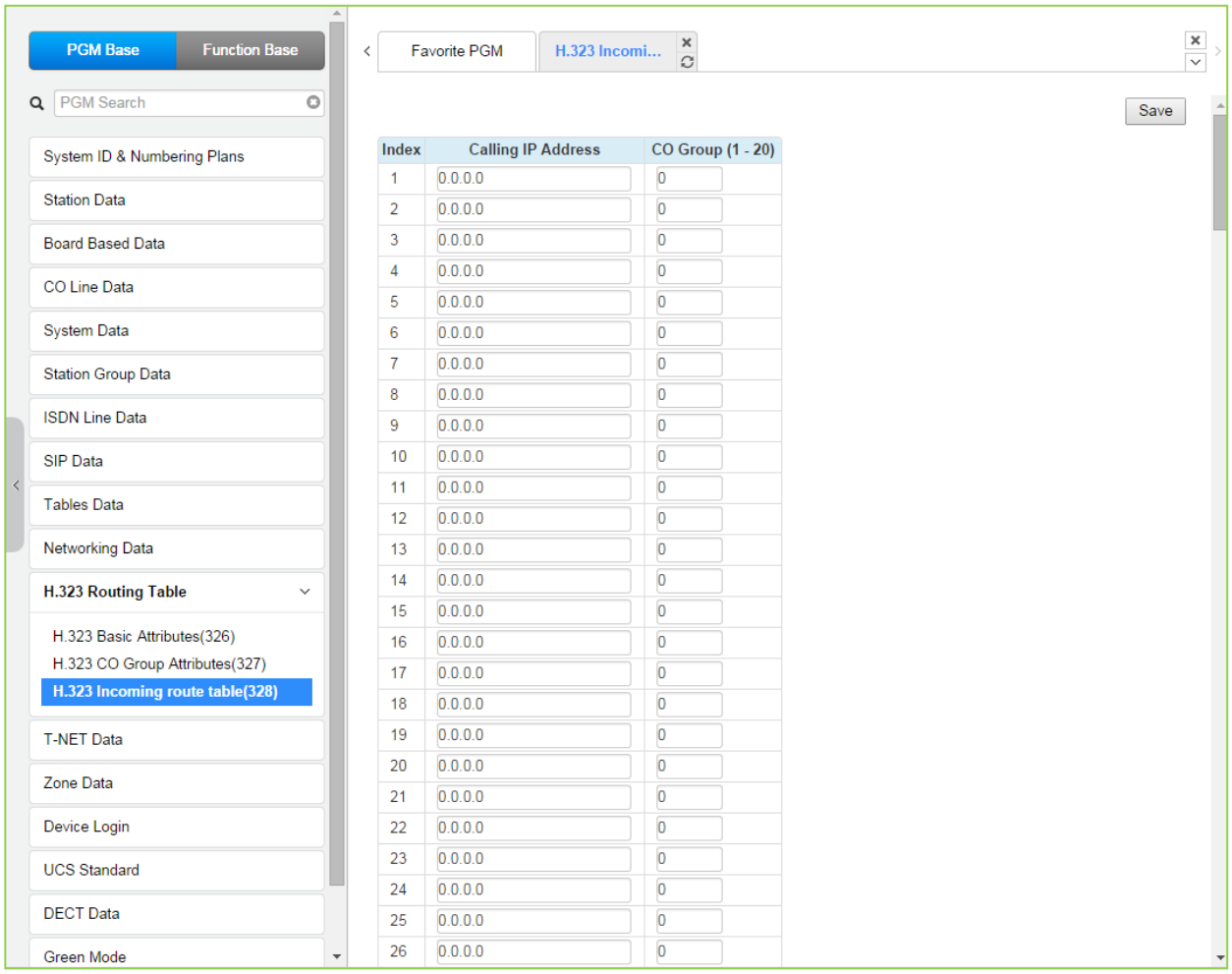


Figure 4.4.11.3-1 H.323 Incoming Route table

To get the direct H.323, the From IP-Address and 'incoming CO Group number' to be routed should be assigned.

Table 4.4.11.3-1 H.323 Incoming Route table

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Calling IP Address	IP address associated with H.323 incoming calls. 255.255.255.255 is used when external call cones from unknown IP Address which is not listed in this table entry.		0.0.0.0
CO Group	CO group number associated with H.323 incoming calls.	eMG80:1~20 eMG800:1~200	0

4.4.12 T-NET Data

Selecting the T-NET Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

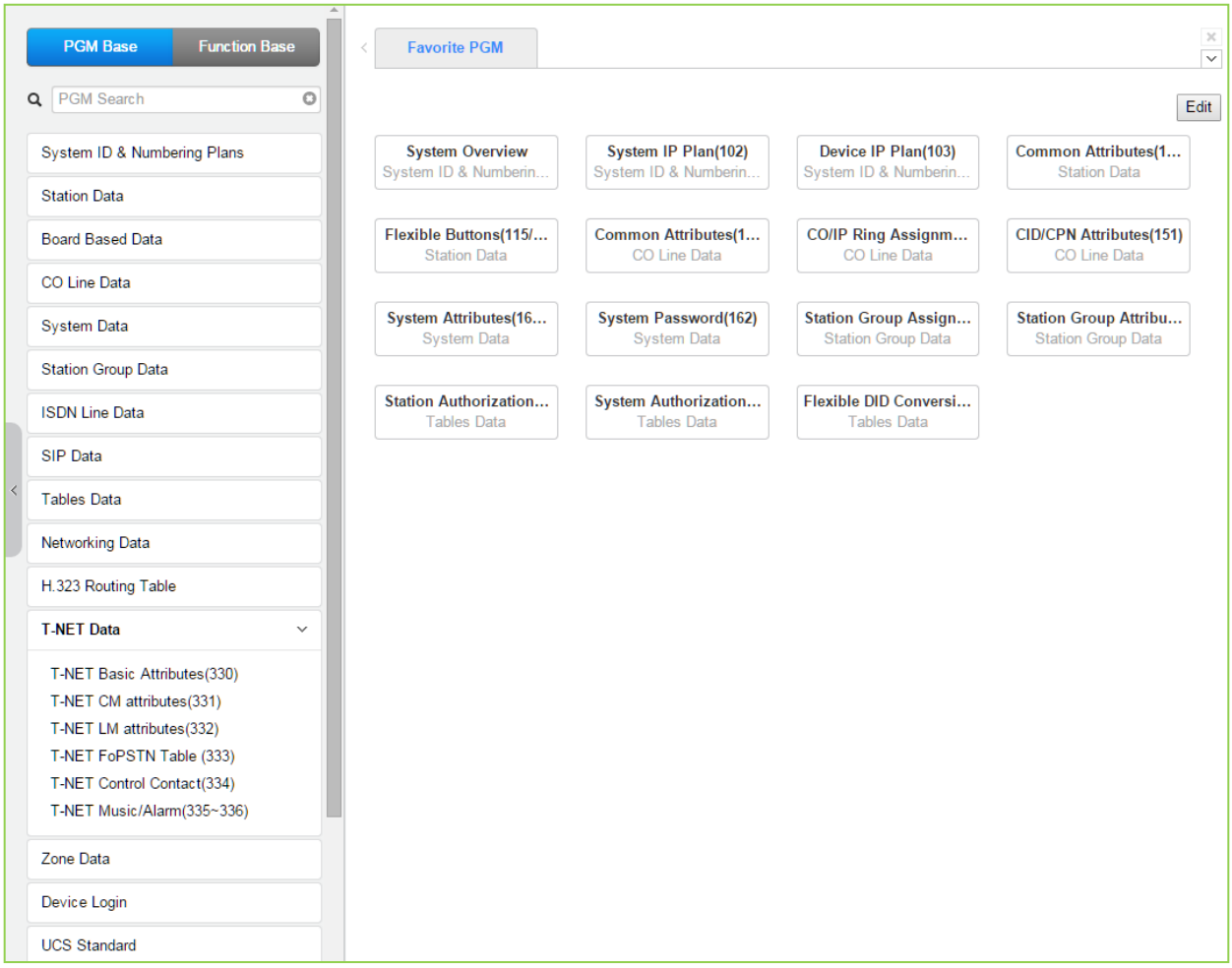


Figure 4.4.12-1 T-NET Data Main Page

In a Centralized Control T-NET (Transparent Network), remote devices may be registered to a Central iPECS eMG (CM) and to a Local iPECS eMG (LM). In this way, the CM maintains control of the remote device. Should the WAN connection between an LM and CM fail (polling error), the LM will initiate operational control of the locally registered devices. Calls between the systems (CM and LM) can automatically shift to PSTN Modules registered with the LM for Fail-over operation. The configuration and characteristics of LMs and CM are configurable as is Fail-over operation.

4.4.12.1 T-NET Basic Attributes -PGM 330

Selecting T-Net Basic Attributes will display the data entry page. Click **[Save]** button after changing Value.

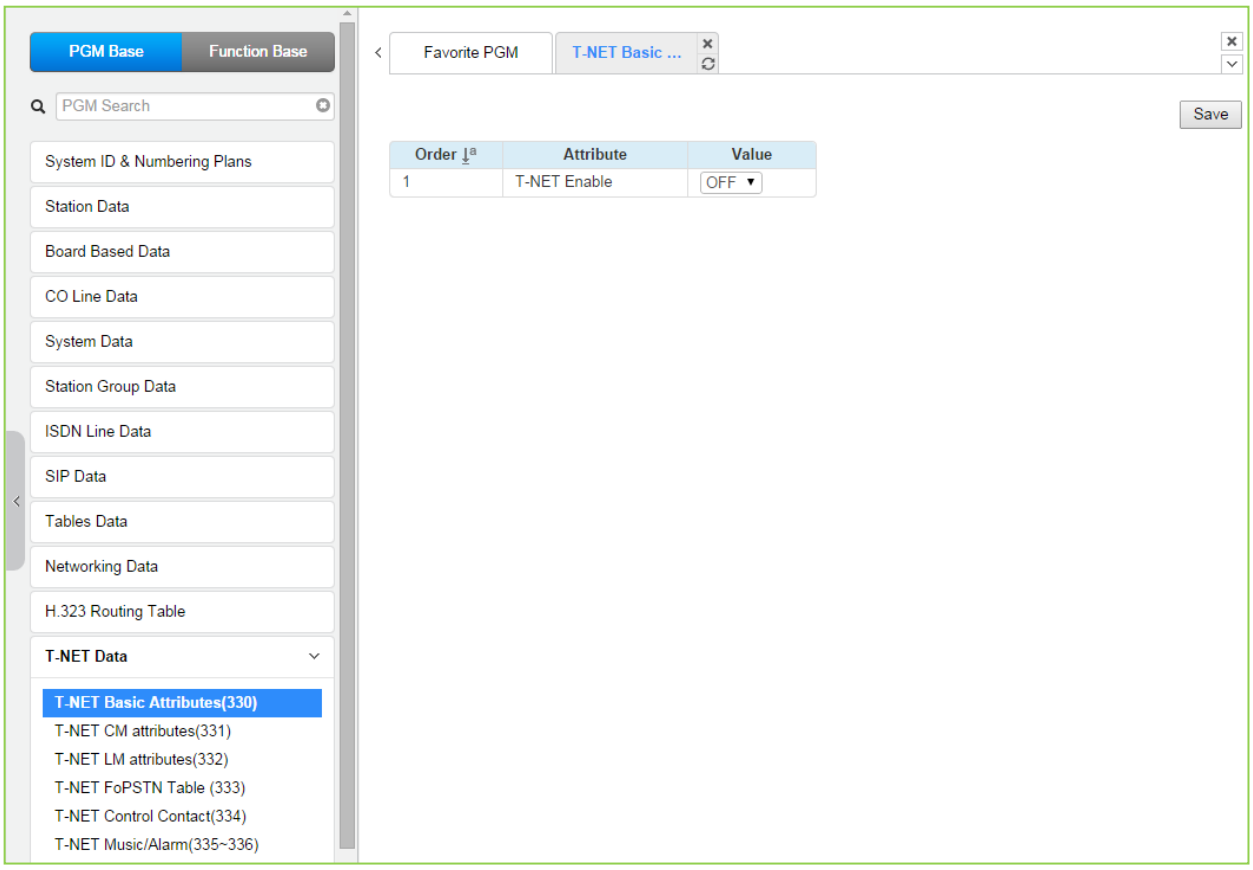


Figure 4.4.12.1-1 Zone number overview

Each iPECS eMG in a Central Control network environment must be enabled for T-NET operation in order to function as part of the network.

4.4.12.2 T-NET CM Attributes -PGM 331

Selecting T-Net CM Attributes will display the data entry page. Click **[Save]** button after changing Value.

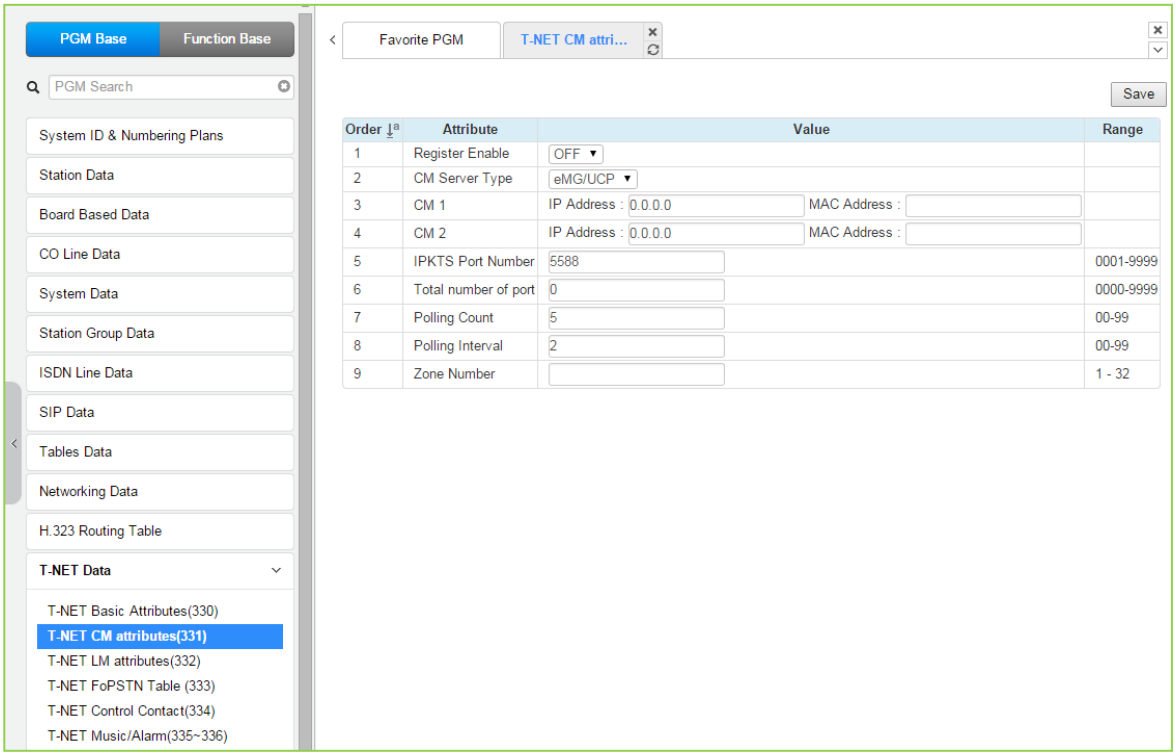


Figure 4.4.12.2-1 T-NET CM Attributes

Each LM (Local iPECS eMG), which is part of a Central Control Network, must be defined with the IP Address of the CM (Central iPECS eMG). The LM configuration data is sent to the CM at the time the LM registers with the CM. Total port counts define the ports, which are allocated in the CM database for use by devices registered to the LM. The number of ports defined in the database of each LM must be equal to or less than the ports defined in the CM for the LM, see PGM 332, in order to register properly.

Table 4.4.12.2-1 T-NET CM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Register Enable	This field informs the LM to attempt registration with the CM. This field must be set to ON for proper registration.	OFF ON	OFF
CM server type	Assign the type of CM server; iPECS eMG/UCP or iPECS CM.	eMG/UCP, CM	eMG/UCP
IP Address	This field defines the IP address of the CM that will be used by the LM.	IPv4 address	
IPKTS Port number	In the TNET environment, the IP KTS protocol signaling UDP port is defined. At present this field is not used, do not change this port number.	0001-9999	5588
Total number of port	This field defines the total number of ports the LM will request be allocated by the CM for devices attached to the LM. This value must be equal to or less than the port count in the CM for the LM devices.	0000-9999	0
Polling Count	This field defines the maximum polling failures an LM considers a WAN fault.	00-99	5
Polling interval	This field defines the interval time between LM to CM polling attempts.	00-99	2
Zone Number	Zone number can be assigned to Device or GW.	1-32	

4.4.12.3 T-NET LM Attributes -PGM 332

Selecting T-Net LM Attributes will display as below. Click **[Save]** button after changing Value.

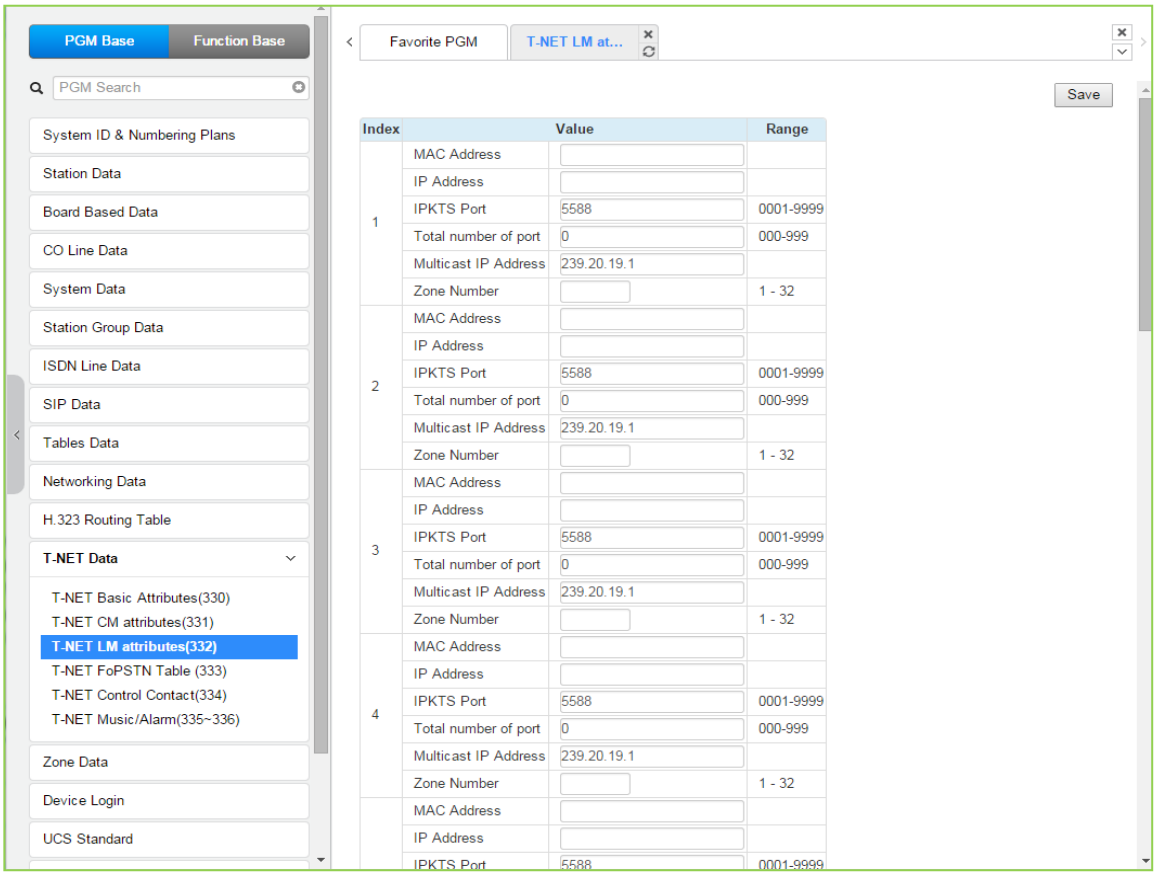


Figure 4.4.12.3-1 T-NET LM Attributes

The CM (Central iPECS eMG) must be programmed with the MAC and IP address of each LM (Local iPECS eMG) in the Centralized Control network as well as the maximum configuration of each LM. Up to 100 Local iPECS eMG (LMs) may be defined and configuration entered. The port counts define the ports that are allocated in the CM database for use by devices registered to the LM. The number of ports defined in the database for each LM in PGM 331, must be equal to or less than the ports defined in the CM for the LM, in order to register properly.

Table 4.4.12.3-1 T-NET LM ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Mac Address	This field defines the MAC address of the LM that will be part of the T-NET environment and is used by the CM for authorization.	MAC address	
IP Address	This field is the IP address of the LM.	IPv4 address	
IPKTS Port	In the T-NET environment, the IP KTS protocol signaling UDP port is defined. At present this field is not used, do not change this port number.	0001-9999	5588
Total no of port	This field defines the total number of ports the LM will request from the CM for devices attached to the LM. This value must be equal to or more than the port count defined in the LM.	000-999	0
Multicast IP address	This field defines the multicast IP address that could be used in T-NET branch site.	IPv4 address	
Zone number	Zone number can be assigned to Device or GW.	1-32	

4.4.12.4 T-NET FoPSTN table -PGM 333

Selecting T-NET FoPSTN Table will display the data entry page. Enter an index range then click **[Load]** to modify the data. Click **[Save]** button after changing Value.

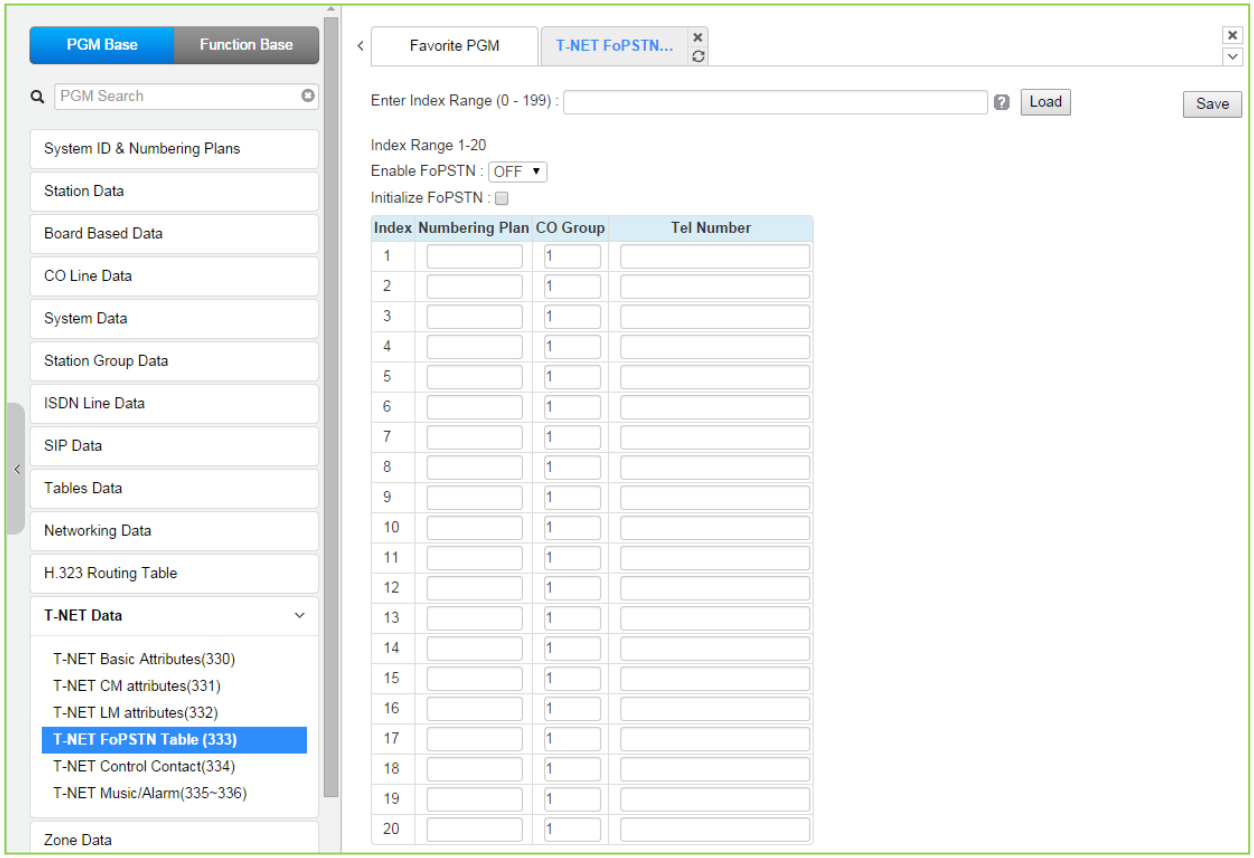


Figure 4.4.12.4-1 T-NET FoPSTN table

The Fail-over function allows the systems in T-NET environment to complete calls between systems over a PSTN (analog or digital) line should the WAN connection to the CM fail. A CO gateway Module must be registered to the LM for local CO services. Users may call others in the normal manner and the call is routed over CO facilities to the remote CM. When calls are directed to a DID line at the receiving system, the system will select a line from the assigned CO Group and dial the Tel Number with the station number dialed as the trailing digits.

Table 4.4.12.4-1 Fail Over to PSTN ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Numbering Plan	Station numbers associated with the remote system. A range can be indicated by using "*" to indicate the range. Example: 21* covers 210 to 219.	Station number	
CO Group	This field defines the CO Group of the local system that will be used to place calls to the stations entered in the Fail Over Numbering Plan above, should WAN failure occur.	eMG80:1~20 eMG800:1~200	
Tel Number	This field defines the telephone number the system should dial to place a call to the stations entered in the FO Numbering Plan, should WAN failure occur. An "*" may be entered as a wild card to indicate insertion of the dialed station number.	24 digits	

4.4.12.5 T-NET Control Contact -PGM 334

Selecting T-NET Control Contact will display the data entry page. Enter the T-NET range from the T-Net LM Attributes then click **[Load]** to modify the data. Click **[Save]** button after changing Value.

Enter T-NET Range: eMG80 : 1-15 / eMG800: 1-32

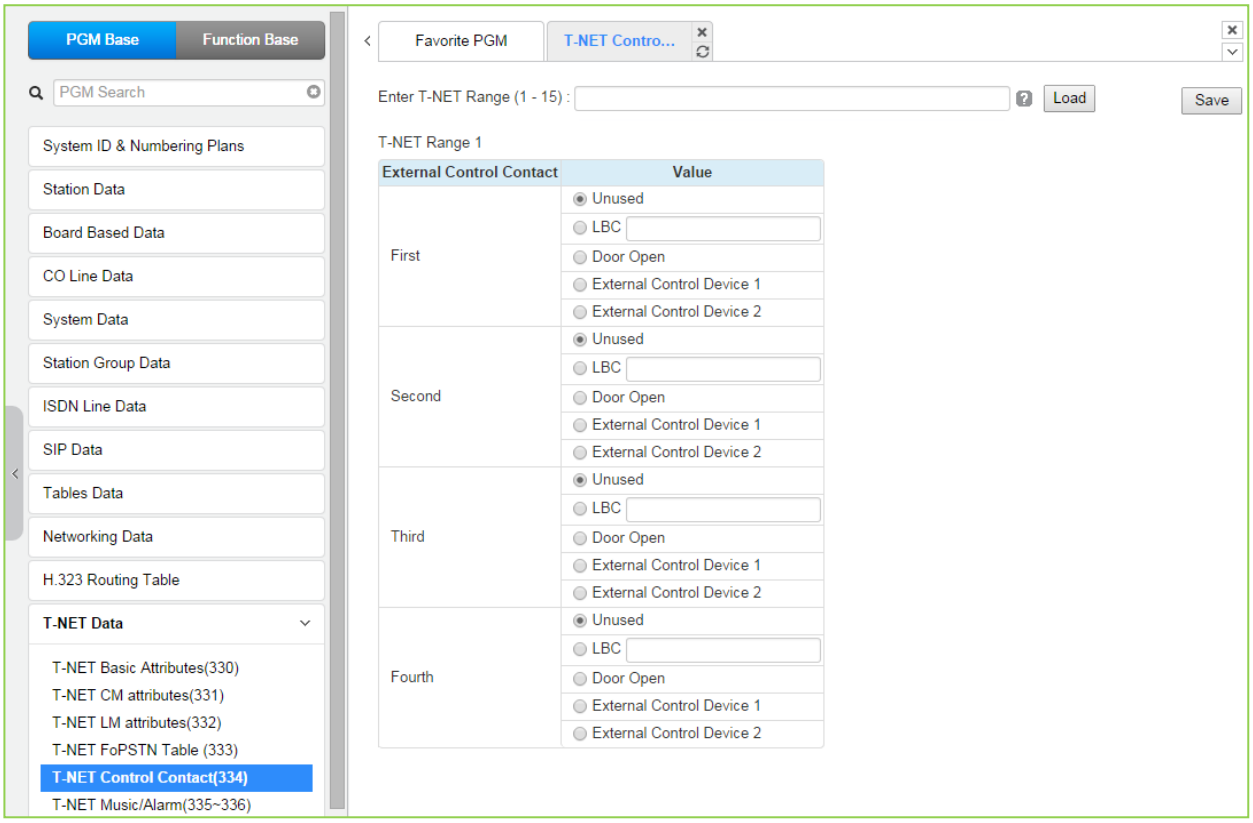


Figure 4.4.12.5-1 T-NET Control Contact

Each LM incorporates relay contacts that can be employed as a Door Lock Release. The contact activates a third party Door Lock Release mechanism activated by dialing the Door Unlock code at a local station.

4.4.12.6 T-NET Music/Alarm -PGM 335 ~ 336

Selecting T-NET Music/Alarm will display the data entry page. Enter the T-NET range from the T-Net LM Attributes then click **[Load]** to modify the data. Click **[Save]** button after changing Value.

Enter T-NET Range: eMG80 : 1-15 / eMG800: 1-32

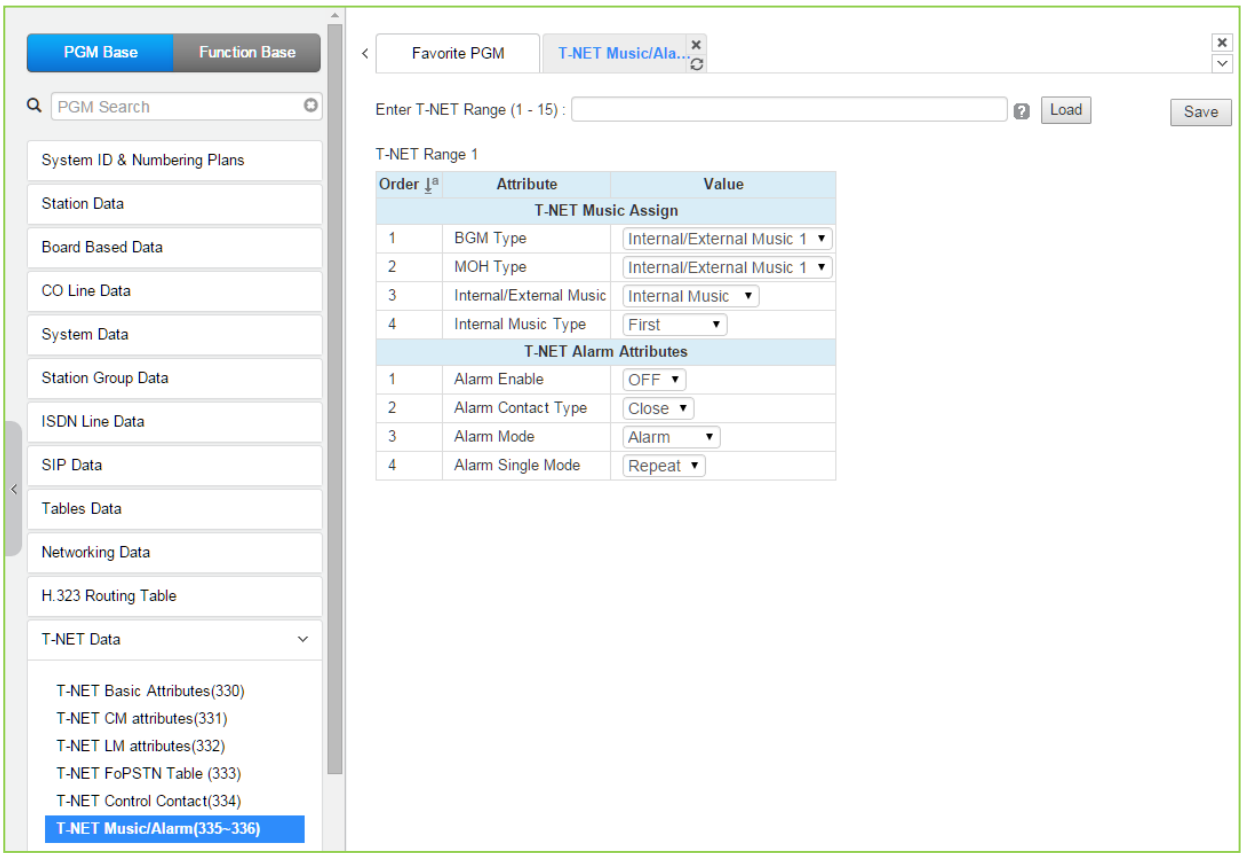


Figure 4.4.12.6-1 T-NET Music/Alarm

To minimize WAN traffic, the CM does not provide BGM/MOH to an LM. The LM employs local BGM and MOH facilities to reduce traffic load on the WAN and IP channel processors. The LM uses IP Multicast for local BGM and MOH transport. In addition, the Alarm contacts of the LM can be defined for use as a local alarm or doorbell.

4.4.12.7 T-NET ISDN Clock Priority -PGM 337 for eMG800

Selecting T-NET ISDN Clock priority will display the data entry page. Enter the T-NET range from the T-Net LM Attributes then click **[Load]** to modify the data. Click **[Save]** button after changing Value.

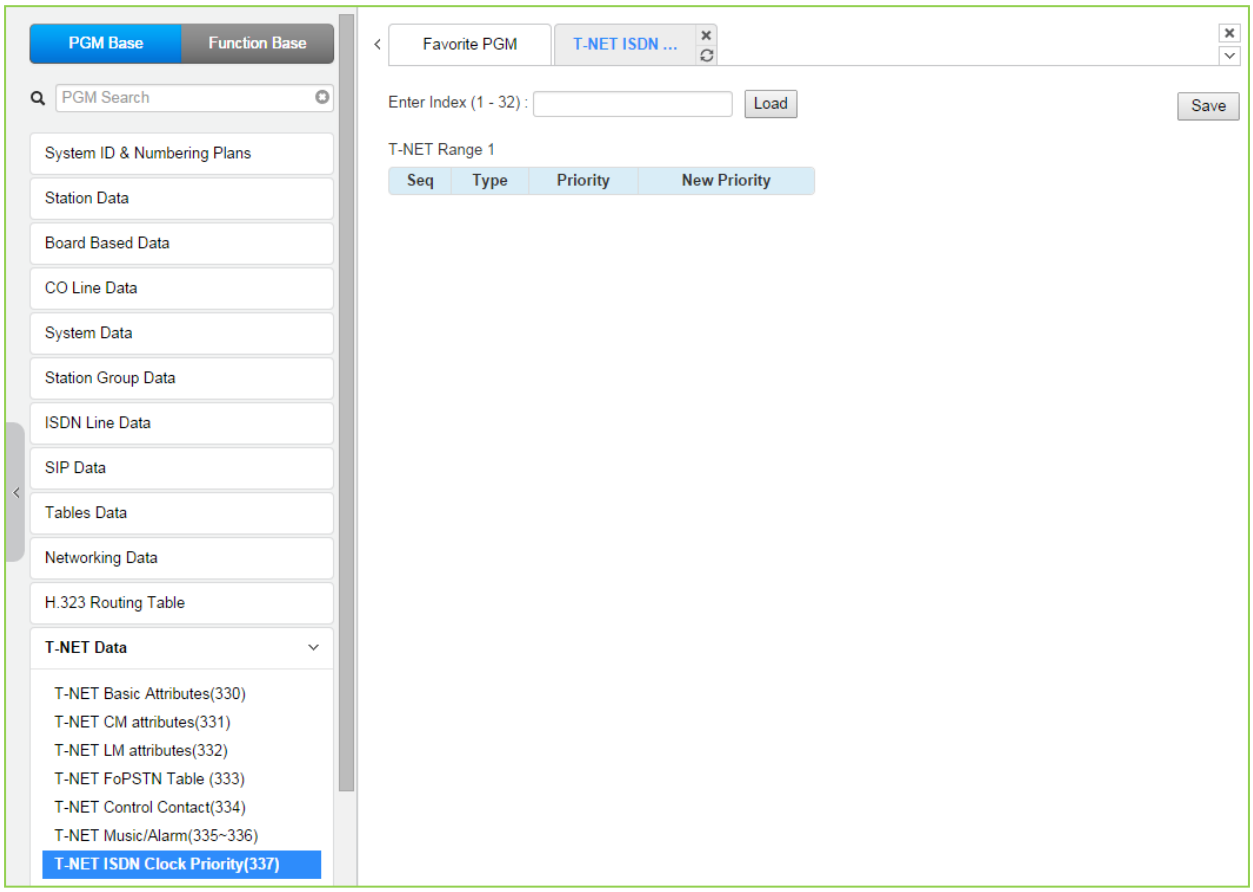


Figure 4.4.12.7-1 T-NET ISDN Clock Priority

Table 4.4.12.7-1 T-NET ISDN Clock priority

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Priority	ISDN clock priority in a TNET site	1-18	

4.4.13 Zone Data

Selecting the Zone Data program group returns the sub-menu displayed.

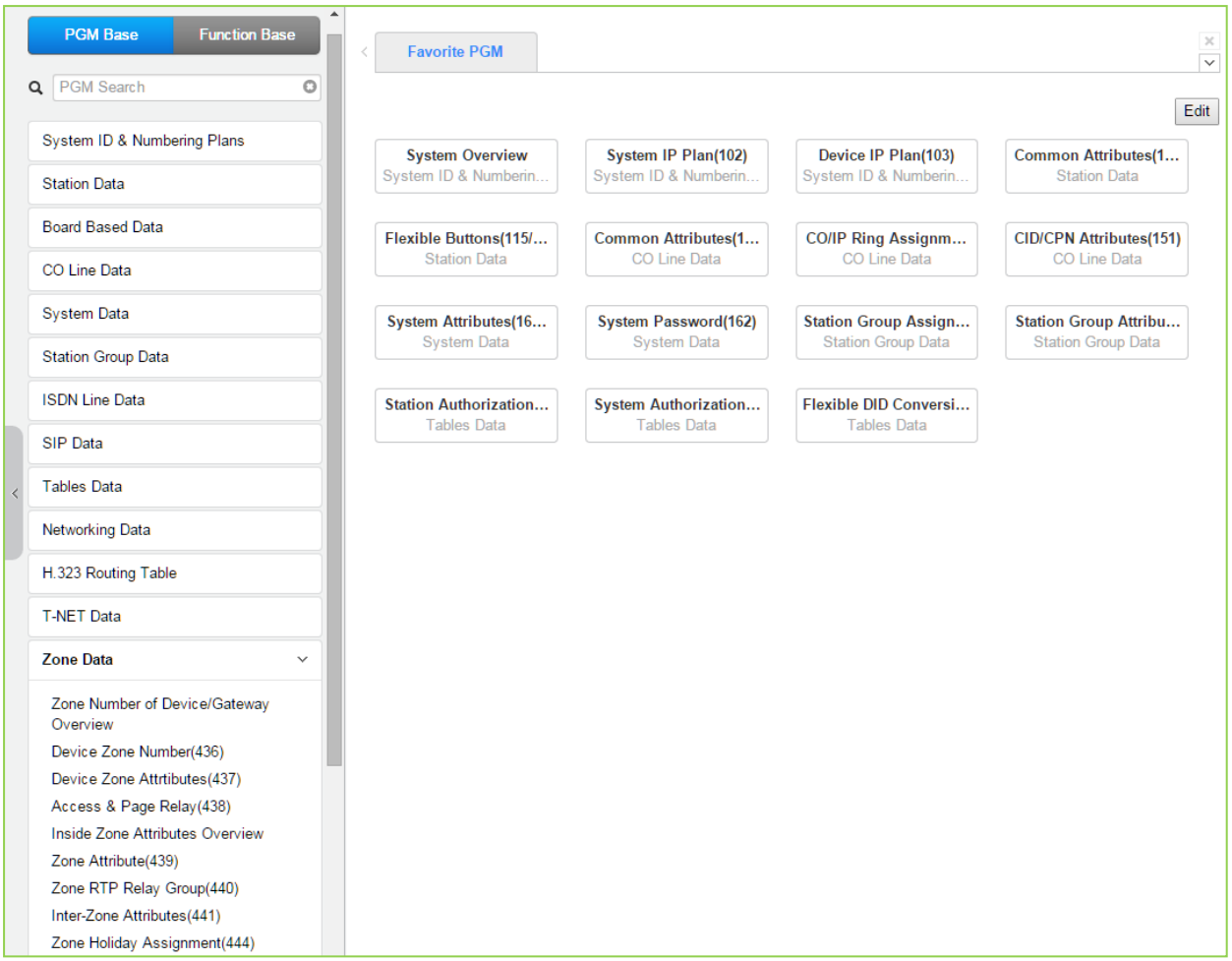


Figure 4.4.13-1 Zone Data Main Page

4.4.13.1 Zone Number Overview

Selecting Zone Number Overview returns the data entry page.

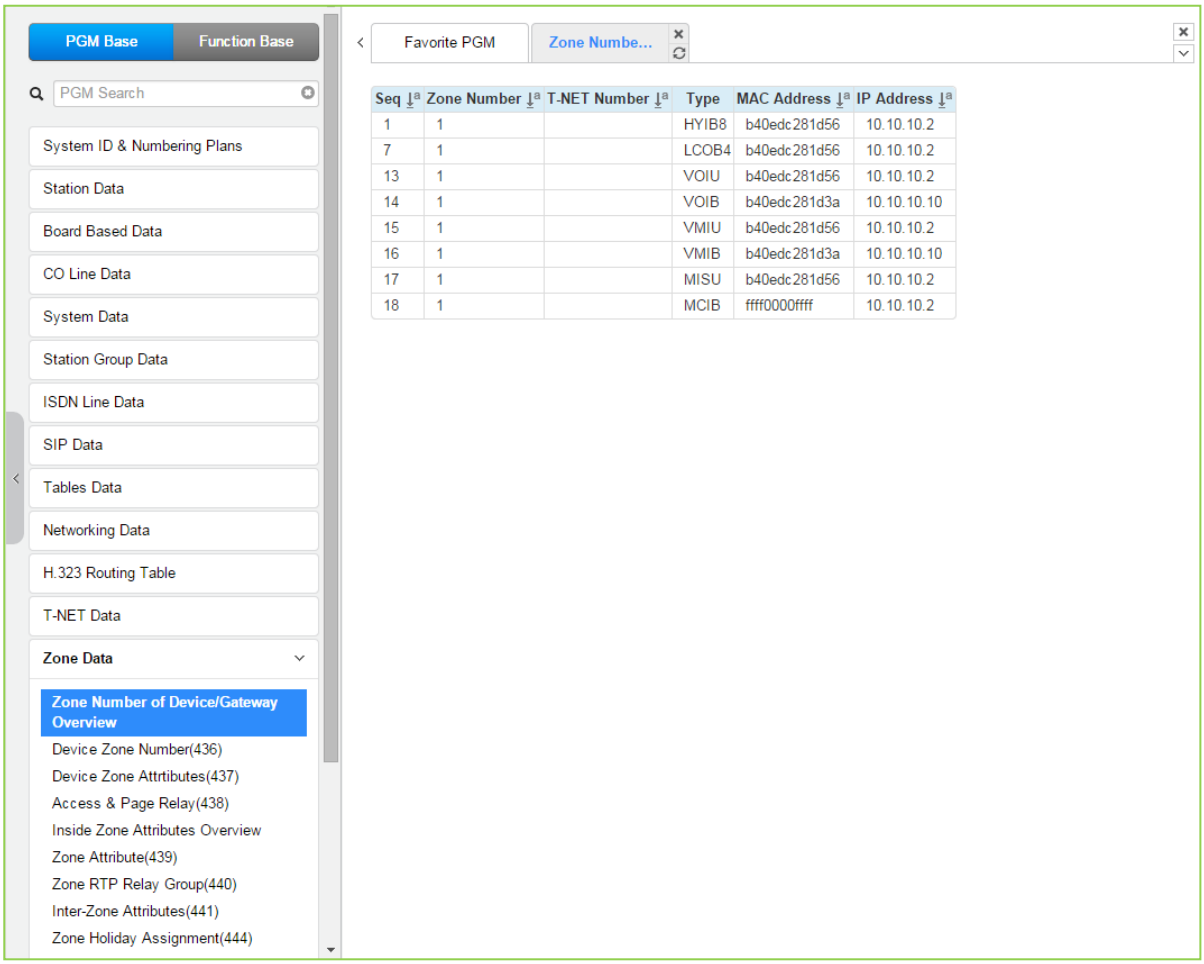


Figure 4.4.13.1-1 Zone number overview

Zone data is a tool employed to easily manage the characteristics of groups of devices under the control of an MPB. Such devices can be grouped to a Zone to define common characteristics including Country Code, DSCP, RTP packet handling, etc. Common attributes are defined at the device, Zone and Inter-zone level. Device settings have priority over system and Zone settings, while Zone settings have priority over system settings.

Generally, transport of RTP packets should be a peer-to-peer communication over either a LAN or VPN. If iPECS devices are separated by a NAPT server or direct peer-to-peer communications is not available, packet relay must be employed to assure communication. In packet relay, RTP packets are received by a local VoIP channel (VOIU or VOIB), which is under control of the MPB, and the IP address is translated from a public to the device's private address. The VoIP channel implements a secure channel using IPSec protocol. Devices can be assigned as part of an "RTP Relay group" to use the same VoIP channels to implement relay of RTP packets. Packet relay groups also provide for conversion of multi-cast packets from the MPB to uni-cast and back again at the group level to multi-cast. Note packet relay requires a VoIP channel (VOIU or VOIB) be available locally for each simultaneous call that requires packet relay.

4.4.13.2 Device Zone Number – PGM 436

Selecting the Device Zone Number returns the Zone Number data input page. Enter the Sequence number range (refer to section 4.4.1.4 System & Device IP Address Plan - PGM 102 & 103) and click **[Load]** to assign a Zone number for the device. Click **[Save]** button after changing Value.

Enter Device/GW sequence Range: eMG80 : 1-300 / eMG800: 1-2890

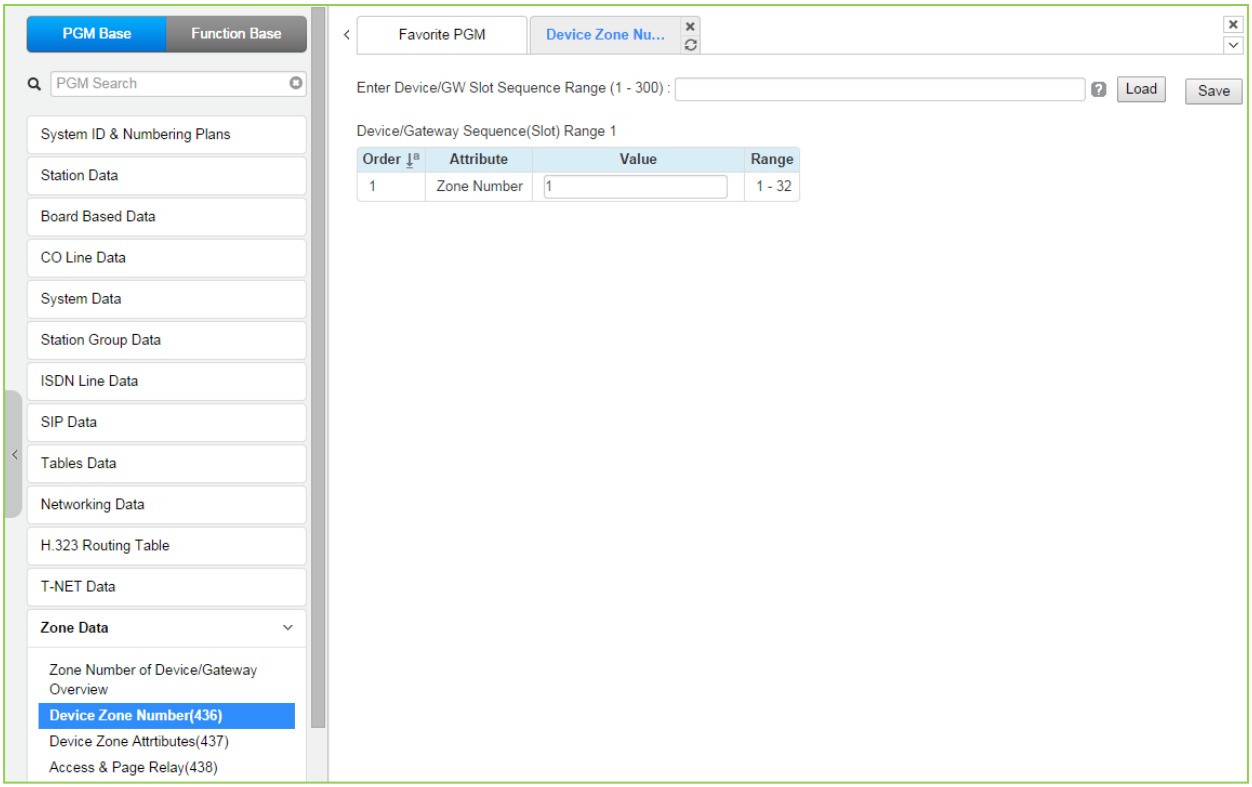


Figure 4.4.13.2-1 Device Zone Number

Device Zone Number assigns a device to one of up to 32 specific Zones.

Table 4.4.13.2-1 DEVICE ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Zone number	Zone number can be assigned to Device or GW.	1-32	1

4.4.13.3 Device Zone Attributes – PGM 437

Selecting the Device Zone Attributes returns the Device Zone Attributes data input page. Enter the Sequence number Range (refer to section 4.4.1.4 System & Device IP Address Plan - PGM 102 & 103) and click **[Load]** to assign a Zone number for the device. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter Device/GW sequence Range: eMG80 : 1-300 / eMG800: 1-2890

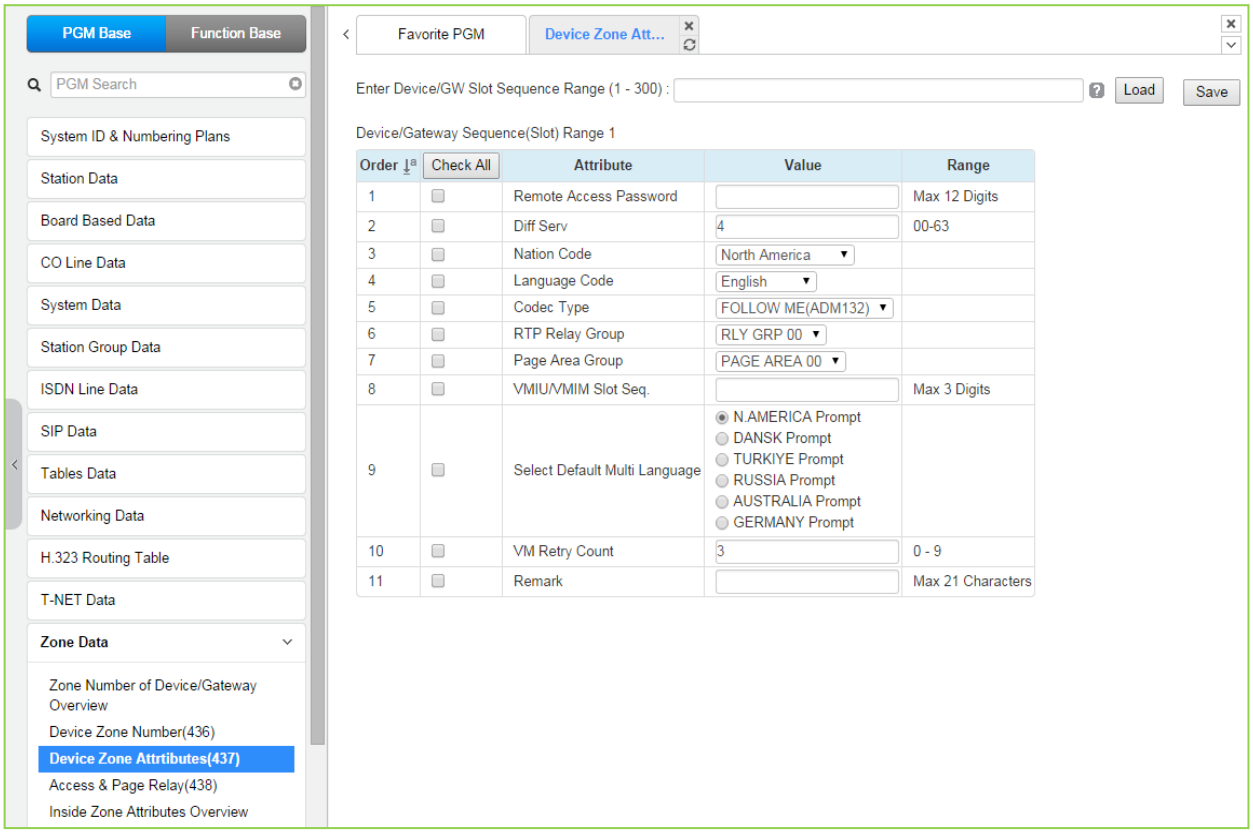


Figure 4.4.13.3-1 Device Zone Attributes

Device Zone Attributes define characteristics specific to the device including the registration password, Diff Serv Code Point, Nation, etc. In addition, Zone characteristics set at the Device level take precedence over characteristics for the Zone Attributes. While a Zone may incorporate up to 15 different RTP packet Relay Groups, for clarity a single RTP Relay Group should be used within a Zone.

Table 4.4.13.3-1 DEVICE ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Remote Access Password	Registration password assigned in device for Remote stand-alone device only	Max. 12 digits	None
Diff Serv	MPB assigned code point will take precedence. Applies to all devices	0-63	4
Country Code	Country location of the device. Available selections are given in Table 3.3.1-2.	Country Code	Nation dependent
Language Code	Devices' default language. The language selection type	Language Code	Nation

Table 4.4.13.3-1 DEVICE ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	is this default language or English.		dependent
Codec Type	The codec selection method can be defined as device based, see PGM 132, or based on the codec type assigned to the Zone.	Follow Zone, Follow Me (ADM132)	Follow Me (ADM132)
RTP Relay Group	Assigns the RTP Relay group employed by the device. Zone parameters define the VOIB to employ.	00-15	00 (no relay)
Page Area Group	Assigns the Paging Area group identity to relay paging data across the network using VOIB or Paging Agent	00-15	00 (same paging relay area)
VMIU/VMIB Slot Sequence	Assigns the VMIU/VMIB used to support Voice Mail for a device. The VMIU/VMIB must be under control of the same MPB as the device being assigned.	eMG80:Max. 3 Digits eMG800:Max. 4Digits	
Select Default Multi Language	User recorded language prompt is played to the user when accessing the VMIU or VMIB.	Type of prompt for assigned VMIU or VMIB	Default prompt
VM Retry Count	This is retrying count for multi-language selection. If retrying count is over then system provide system announcement with default language.	0-9	3
Remark	Descriptive information to help installer/programmer in identifying the device Zone, i.e. Branch1.	Max. 21 characters	

4.4.13.4 Access & Page Relay – PGM 438

Selecting Access & Page Relay returns the Access & Page RTP packet relay data input page. Enter the Sequence number Range (refer to section 4.4.1.4 System & Device IP Address Plan - PGM 102 & 103) and click **[Load]** to define packet relay characteristics for Paging between Zones. Click **[Save]** button after changing Value.

Enter Device/GW sequence Range: eMG80 : 1-300 / eMG800: 1-2890

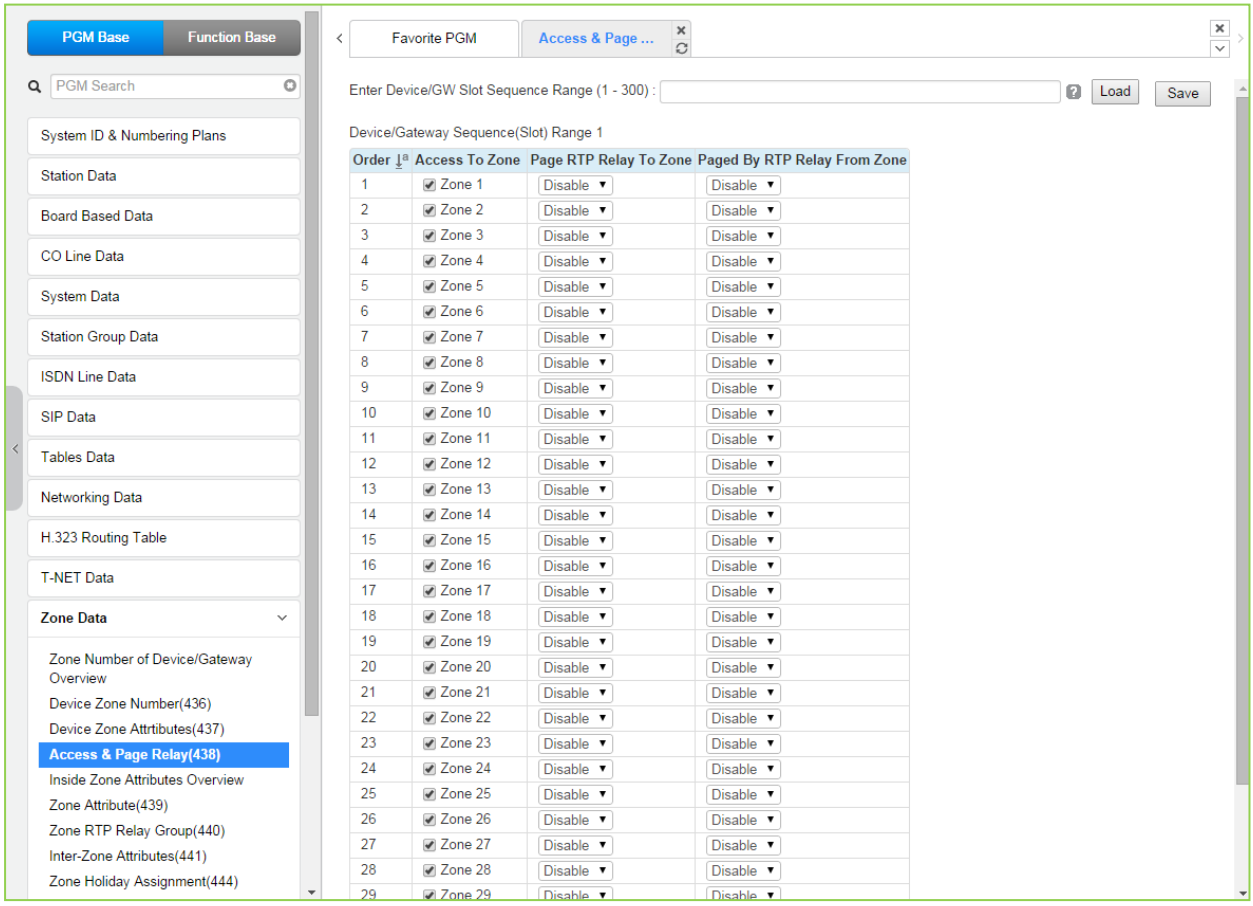


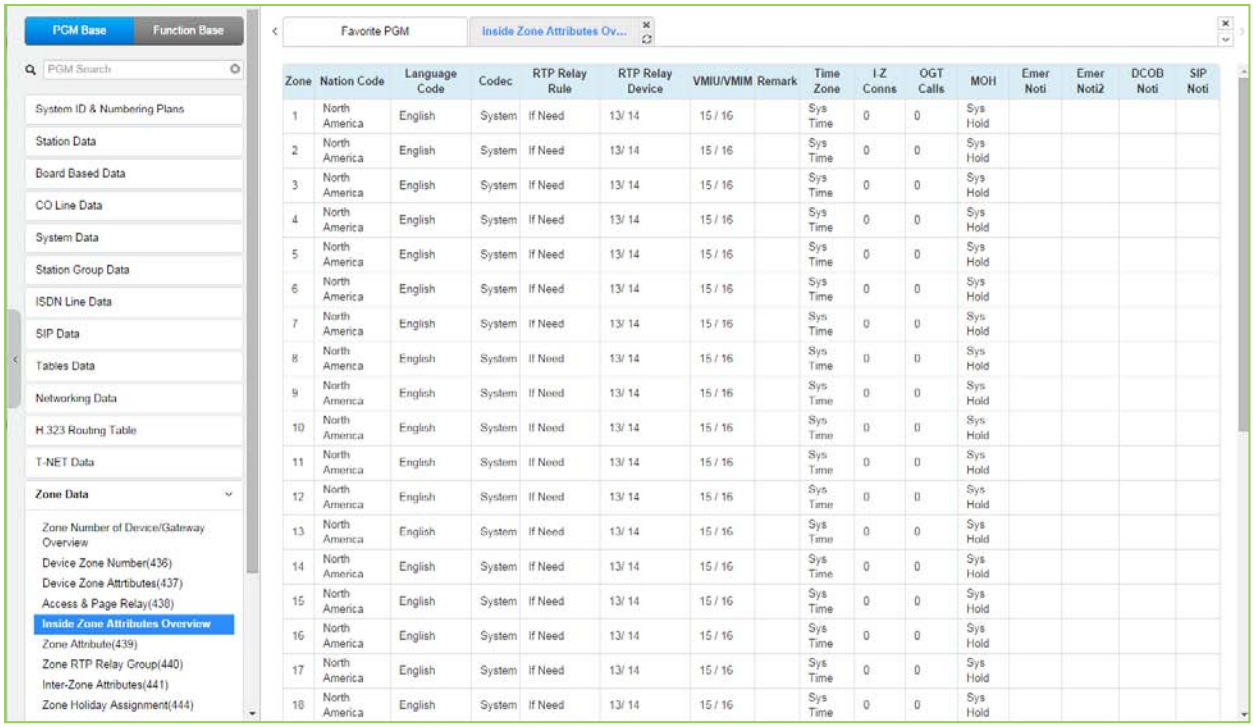
Figure 4.4.13.4-1 Zone Page RTP Packet Relay

iPECS protocol employs multi-cast to send of RTP packets to multiple devices at one time. This improves efficiency and lowers traffic by sending a single multi-cast packet to multi-cast group members. In particular, paging employs this multi-cast technique. However, since multi-cast is not commonly supported outside of the LAN, uni-cast must be used to transport such signals between routers. At the receiving Zone, a local VoIP channel receives the uni-cast signal from the controlling MPB. The VoIP channel then converts the packet address to a multi-cast signal for delivery to devices in the same Zone RTP Relay Group.

Table 4.4.13.4-1 Zone Page RTP Packet Relay

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Page RTP Relay to Zone	From this device to the Zone selected enable or disable.	Disable Enable	Disable
Page By RTP Relay From Zone	To this device from the Zone selected, enable or disable.	Disable Enable	Disable

4.4.13.5 Inside Zone Attributes Overview



Zone	Nation Code	Language Code	Codec	RTP Relay Rule	RTP Relay Device	VMIU/VMIM	Remark	Time Zone	I-Z Conns	OGT Calls	MOH	Emer Noti	Emer Noti2	DCOB Noti	SIP Noti
1	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
2	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
3	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
4	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
5	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
6	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
7	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
8	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
9	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
10	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
11	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
12	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
13	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
14	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
15	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
16	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
17	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				
18	North America	English	System	If Need	13/ 14	15 / 16		Sys Time	0	0	Sys Hold				

Figure 4.4.13.5-1 Zone Attributes Overview

4.4.13.6 Zone Attribute – PGM 439

Selecting the Zone Attributes returns the Zone Attributes data input page. Enter the desired Zone number range and click **[Load]** to assign Zone characteristics. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

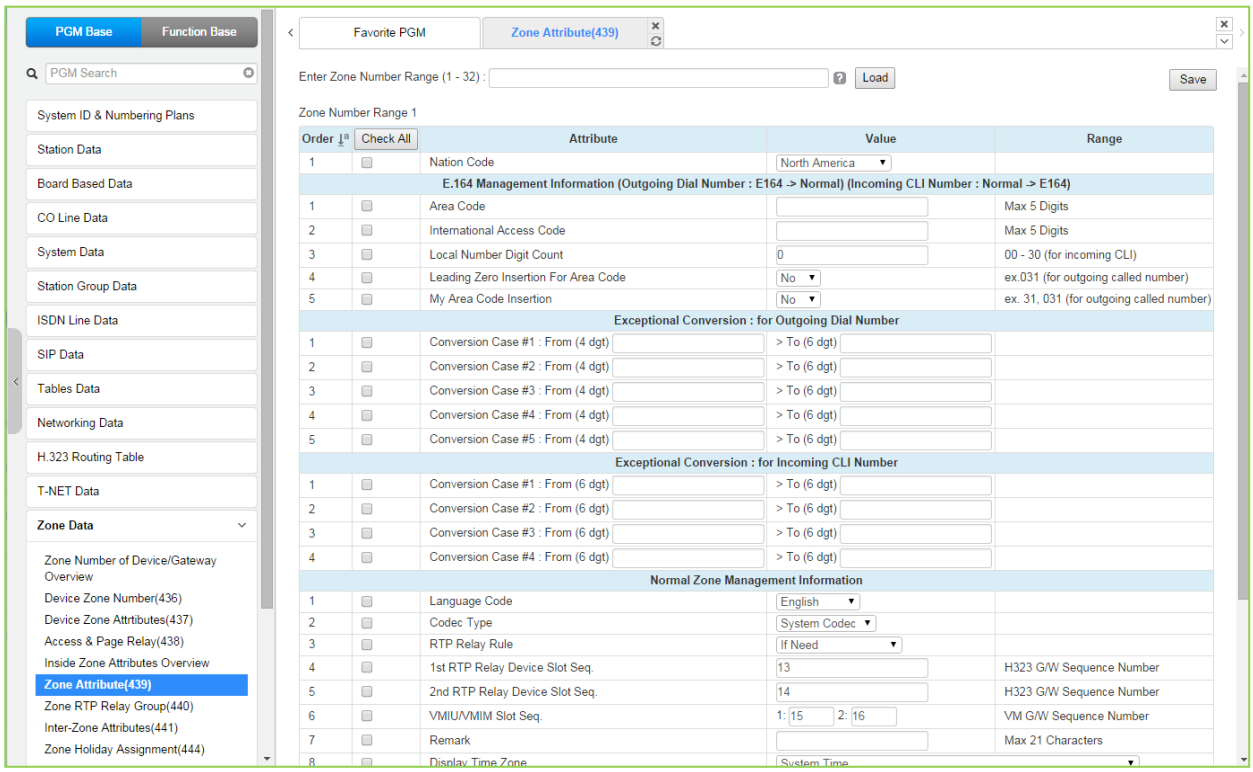


Figure 4.4.13.6-1 Zone Attributes

The nation code, codec and VMIU/VMIB assigned for a Zone will be employed by all devices in the Zone unless a different entry is made in Device Zone data. If the Device Zone data is default or assigned by the MPB, the Zone data will take precedence.

The Zone Attributes define when and which VoIP channels to use for RTP packet relay. Local VoIP channels are assigned to perform the packet relay function and the use can be defined as “if needed” or use the assigned RTP Relay Group. For “if Need”, the MPB will employ the IP KTS STUN protocol to determine when packet relay is required. If assigned “RTP Relay Group”, packet relay will always be employed for RTP packet receipt.

Table 4.4.13.6-1 ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Nation Code	Nation code of devices in the zone. Available selections are given in Table 3.3.1-2.	Country code	
E.164 Management Information (Outgoing Dial Number : E164-> Normal) (Incoming CLI Number: Normal ->164)			
Area Code	Assign area code that is use to convert CLI format (normal <-> E.164)	Max 5 Digits	
International Access Code	Assign international access code that is use to convert CLI format (normal <-> E.164)	Max 5 Digits	
Local Number Digit Count	CLI length is over this count then it is long distance call otherwise it is local call.	00-30	0

Table 4.4.13.6-1 ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	(it is for incoming CLI)		
Leading Zero Insertion for Area code	Insert zero ('0') in front of area code. (It is for outgoing called number)	No Yes	No
My Area Code Insertion	Insert my area code for CLI. (It is for outgoing called number)	No Yes	No
Exceptional Conversion : for Outgoing Dial Number			
Conversion Case #1	It is exception conversion rule for outgoing dialed number.		
Conversion Case #2			
Conversion Case #3			
Conversion Case #4			
Conversion Case #5			
Exceptional Conversion : for Incoming CLI Number			
Conversion Case #1	It is exception conversion rule for incoming CLI number.		
Conversion Case #2			
Conversion Case #3			
Conversion Case #4			
Normal Zone Management Information			
Language Code	Language code of devices in the zone.	Language Code	Nation dependent
Codec Type	Assigns the codec employed by devices in the Zone.	System codec G.711 G.723.1 G.729 G.722	System codec
RTP Relay Rule	Assigns when to use the packet relay function, with "If Need" the MPB will automatically determines when to use packet relay, while "RTP Relay Group" will always implement packet relay for RTP packets.	If need/ Relay Group/ Forced to Relay	If need
1st RTP Relay Device Slot Seq.	Assigns the local VOIU or VOIB IP channels that will be used to implement packet relay for devices in the Zone.	Sequence Number	eMG80:13 eMG800:19
2nd RTP Relay Device Slot Seq.	Back-up VoIP channels for RTP packet relay use in the Zone.	Sequence Number	eMG80:14 eMG800:NA
VMIU/VMIB Slot Sequence	Assigns the VMIU/VMIB used to support Voice Mail for devices in the Zone. The VMIU/VMIB must be under control of the same MPB as the device being assigned.	Sequence Number	eMG80: 2 (1:15/2:16) eMG800: 3
Remark	Descriptive information to help installer/programmer in identifying the device Zone, i.e. Branch1.	Max. 21 characters	

Table 4.4.13.6-1 ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Display time zone	The time & date displayed at the station are based on the time zone selected or the system time	Time zone, System time	System time
Max Total Inter Zone Connections	Maximum Total Inter Zone Connections. When this value is set to 0, it means that there is no limits of total inter zone connections.	eMG80:0-140 (0: No limit) eMG800: 0-1200 (0: No limit)	0
Max Outgoing CO Calls	Maximum Outgoing Co Calls. When this value is set to 0, it means that there is no limit of outgoing co calls.	eMG80:0-74 (0: No limit) eMG800: 0-600 (0: No limit)	0
Zone MOH Assign	A Music source can be assigned so that calls to this zone.	Refer to Sys Hold, Internal music External Music VSFMOH, SLT MOH1~5, VSF MOH2~3	Refer to Sys Hold
Emergency Call Notify Station	Assigns the destination station for Emergency Call Notification.	Station number	
Emergency Call Notify 2nd Station	This field assigns a secondary station to receive notification of an Emergency call from a device in the Zone.	Station number	
DCOB Fault Notify Station	Assigns the destination station for DCOB Fault Notification.	Station number	
SIP Registration Fault Notify Station	Assigns the destination station for SIP Registration Fault Notification.	Station number	
Daylight Saving Usage	If option is "System DST mode", the zone will follow the system DST mode (System Date &Time (178)). If option is "OFF", the zone will not apply the Daylight Saving Time.	System DST mode, OFF	System DST mode

4.4.13.7 Zone RTP Relay Group – PGM 440

Selecting the Zone RTP Relay Group returns the RTP Relay ON/OFF data input page. Enter the desired Zone and Group numbers and click **[Load]** button to assign Zone characteristics. Click **[Save]** button after changing Value.

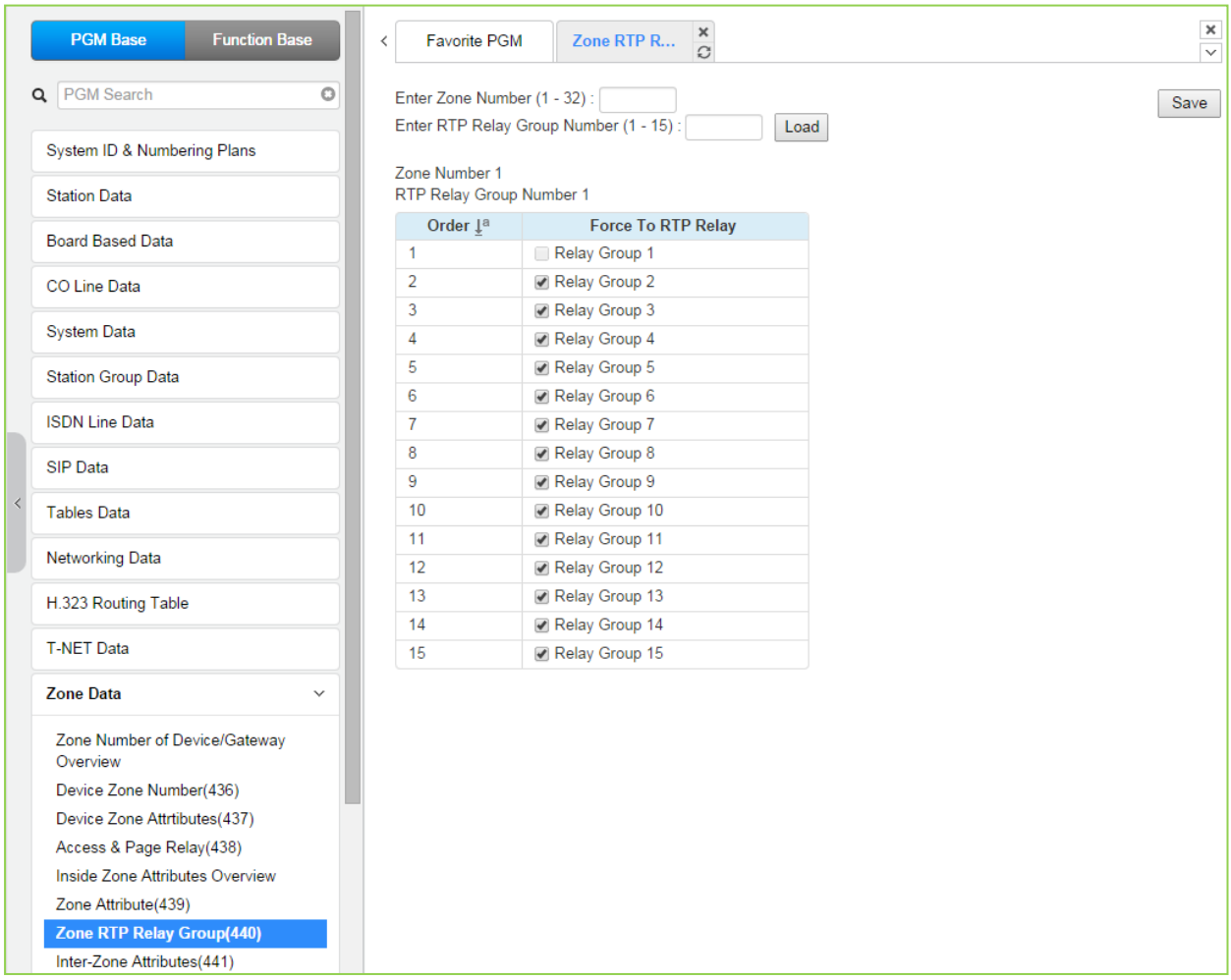


Figure 4.4.13.7-1 Zone RTP Packet Relay Groups

While it is strongly recommended that a Zone only have a single RTP Relay Group, up to 15 Groups can be assigned to a Zone. Devices in an RTP Relay Group should have common requirements for packet relay use. In some situations, it may be necessary to implement packet relay to groups in a Zone. Note that when “if Need” is assigned as the RTP Relay Rule in the Zone Attributes, assignments here are ignored.

4.4.13.8 Inter Zone Attribute – PGM 441

Selecting the Inter Zone Attribute returns the data input page. Enter the desired Source and Destination Zone number range and click **[Load]** to assign Zone characteristics. Click **[Save]** button after changing Value.

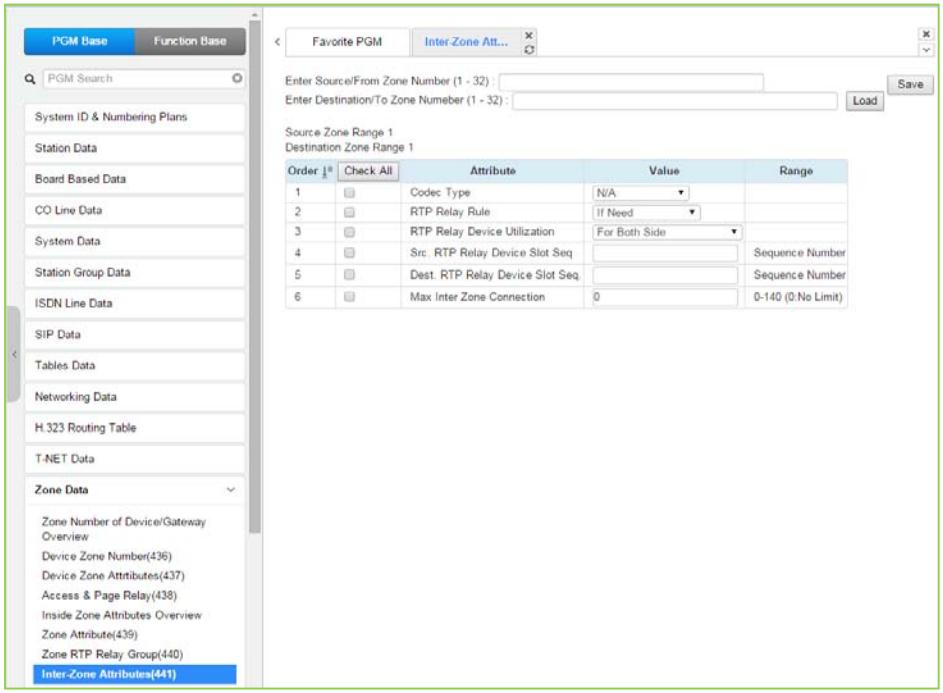


Figure 4.4.13.8-1 Inter-Zone Attributes

Inter Zone Attributes define RTP packet relay treatment for communications between devices in different Zones.

Table 4.4.13.8-1 INTER-ZONE ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Codec Type	Assigns the codec employed by devices in the Zone.	System Codec/ G.711 / G.723.1 G.729 / G.722	NA
RTP Relay Rule	Assigns when to use the packet relay function between Zones, with “If Need” the MPB will automatically determine when to use packet relay, while “RTP Relay Group” will always implement packet relay for RTP packets between the Zones.	If need/ Always not/ Forced to do	If need
RTP Relay Device Utilization	Assigns how to employ the Source and Destination VoIP channels. The assigned Source channels may be used for both sides of the communication or separately only for a device in the Source Zone. The Destination channels are then used as back-up channels or only for devices in the Destination Zone.	For Both Side/ Separated (SRC to DEST)	For Both side
Src RTP Relay Device Slot Seq.	Sequence number of MPB VOIU or VOIB(VOIM) to handle Packet relay for Source Zone.	Sequence Number	
Dest. RTP Relay Device Slot Seq.	Sequence number of MPB VOIU or VOIB to handle Dest packet relay. When Utilization is Separate the channels are used for devices in the destination Zone, otherwise they are used as back up for both sides.	Sequence Number	
Max Inter Zone connection	Maximum Inter Zone Connections between source zone and destination zone. When this value is set to 0, it means that there is no limit of inter zone connections between zones.	eMG80:0-140 (0: No limit) eMG800: 0-1200 (0: No limit)	0

4.4.13.9 Zone Holiday Assignment - PGM 444

Selecting the Zone Holiday Assignments returns the data input page. Enter the desired Source and Destination Zone numbers range and click **[Load]** to assign Zone holiday. Click **[Save]** button after changing Value.

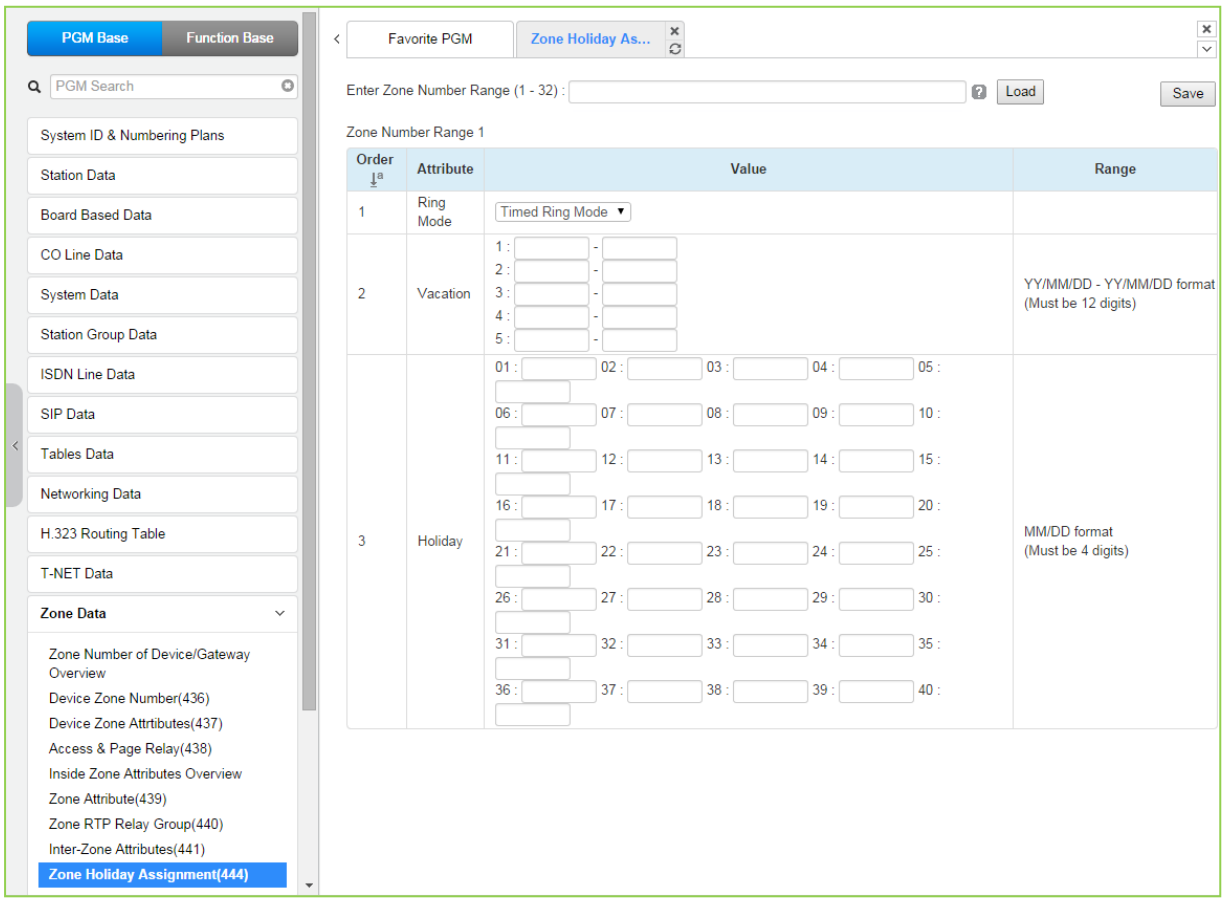


Figure 4.4.13.9-1 Zone Holiday Assignment

Holidays and vacation day intervals for each zone can be established to define the Service mode (Day, Night, and Timed) Up to 40 holidays and 5 vacation intervals can be defined.

Table 4.4.13.9-1 ZONE HOLIDAY ASSIGNMENT

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Ring Mode	Enter the desired Service mode for the Holiday or Vacation.	Day Ring Mode/ Night Ring Mode/ Timed Ring Mode/ N/A	Timed Ring Mode
Vacation	Assign a date range for the vacation entering the start and end dates as YY/MM/DD – YY/MM/DD.	Must be 12 digits	None
Holiday	Assign a date for the holiday for the Zone as MM/DD	Must be 4 digits	None

4.4.14 Device Login

Selecting the Device Login Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

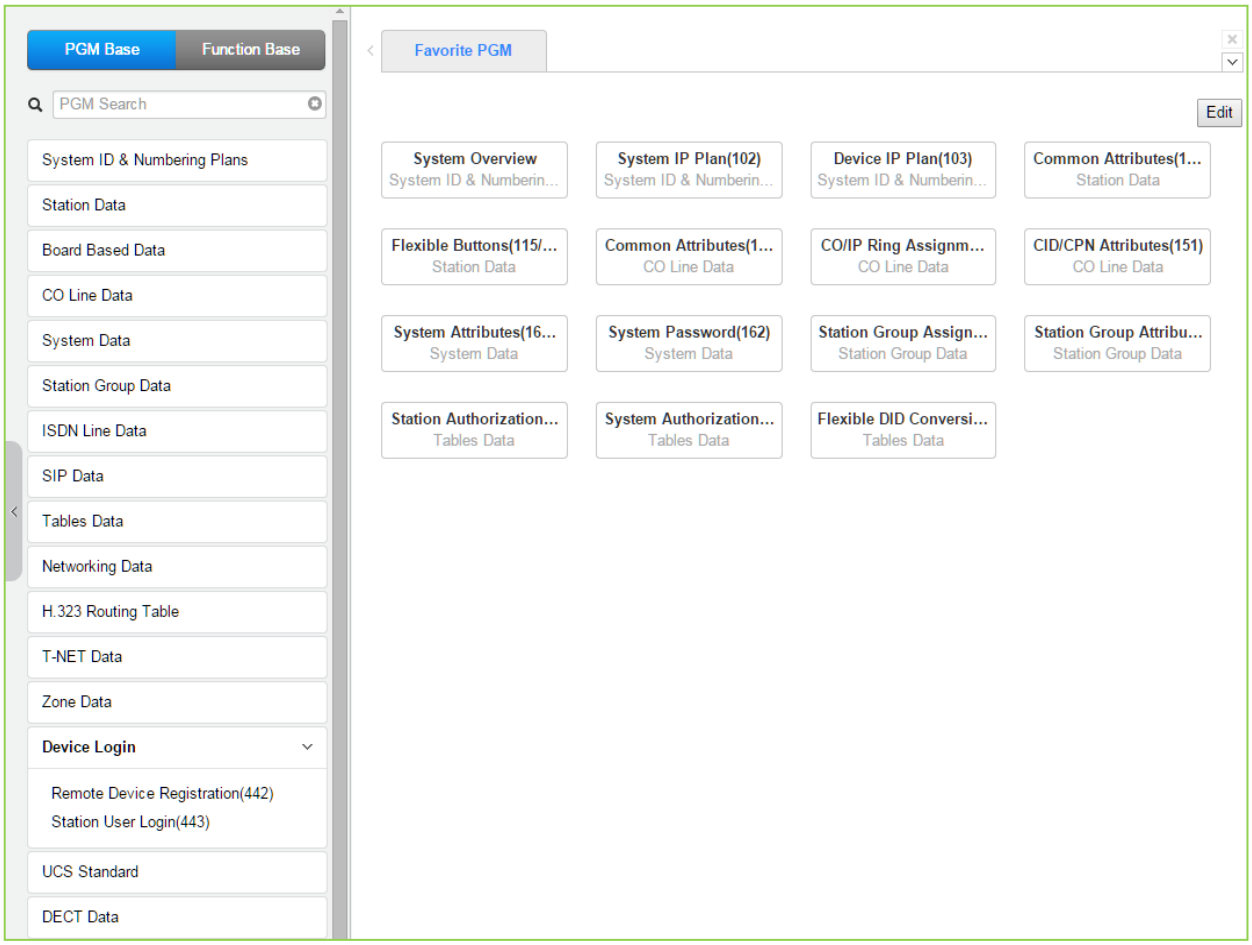


Figure 4.4.14-1 Device Login Data Main Page

4.4.14.1 Remote Device Registration – PGM 442

Selecting the Remote Device Registration returns the Remote Registration table data input page. Click **[Save]** button after changing Value.

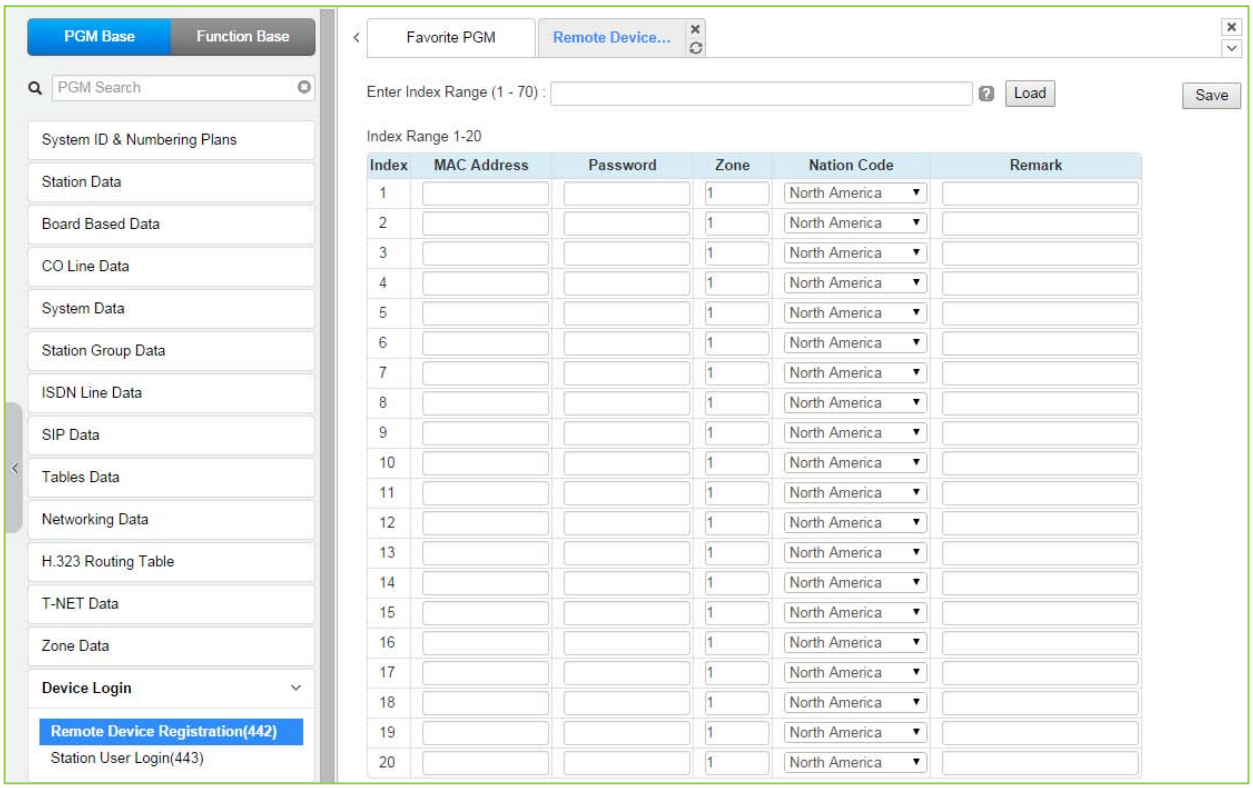


Figure 4.4.14.1-1 Remote Device Registration

When a device attempts to register with the controlling iPECS, the system will check the device MAC address and password against the Registration table. If a match is found, the device is registered regardless of Dip-switch 2 position. The system database is updated and the device receives device specific configuration data from the MPB.

Table 4.4.14.1-1 REMOTE DEVICE REGISTRATION

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Mac Address	Mac address of remote device	MAC Address	
Password	Password, if any, assigned in the devices database via Device Web admin.	Up to 12 digits	
Zone	The Zone to be assigned to the device.	01-32	01
Nation code	Nation or country location of the device.	See Table 4.4.1-1.	Assigned in System ID

4.4.14.2 Station User Login – PGM 443

Selecting the Station User Login returns the User Login Registration data input page. Click **[Save]** button after changing Value.

Enter Index Range: eMG80 : 1-140 / eMG800: 1-1200

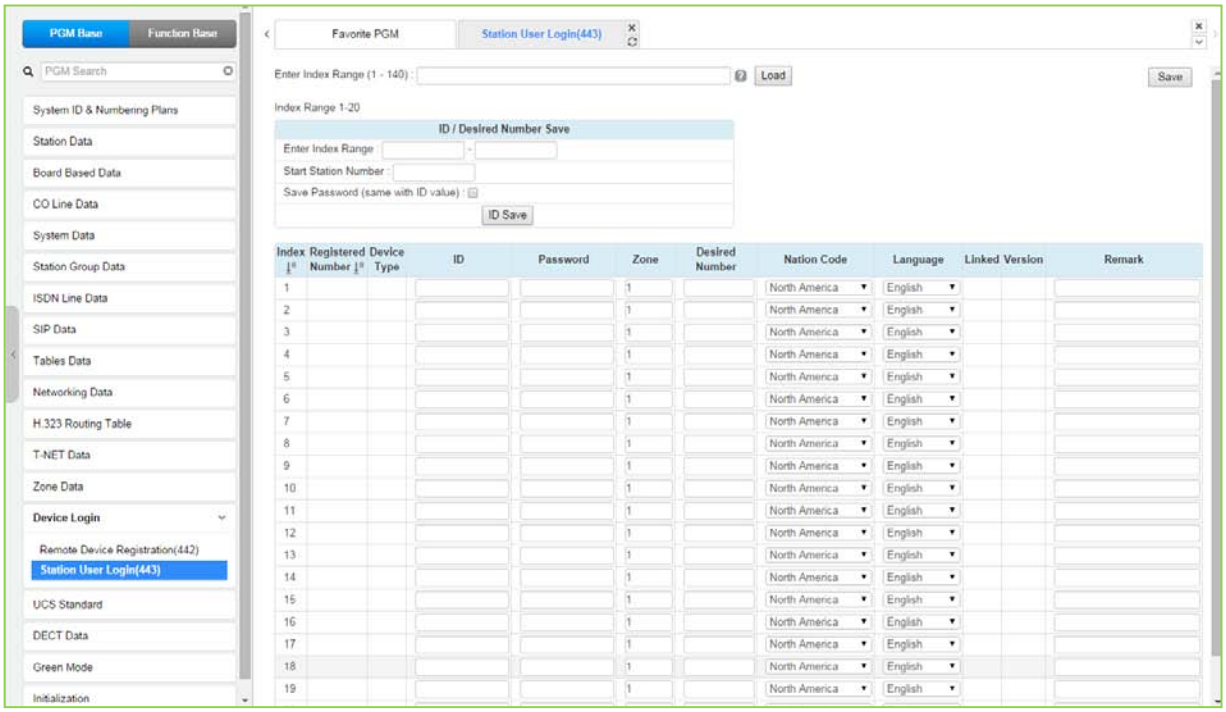


Figure 4.4.14.2-1 Station User Login

Station User Login configures User credentials for registration of iPECS UCS clients and initial registration of SIP phones. A station must register with the system each time it is connected to the system. The ID and password are assigned along with other characteristics of the remote station such as Zone, desired station number, country code, Language and a remark can be defined. The iPECS UCS Client can be configured as link-paired station by assigning the same Desired-Number as a registered desktop iPECS LIP Phone.

Note for the UCS Client, the UCS Standard Client Login, PGM 446, may be employed in place of PGM 443 as a single point to configure the client information.

Table 4.4.14.2-1 STATION USER LOGIN

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Registered Number	Station number registered to the station, displayed only after registration.	Station number	
Device Type	This filed is indicated what kind of device type is.		
ID	The User Login ID must be entered for registration	12 Characters	
Password	The User Login password must be entered for registration.	12 digits	
Zone	The device can be assigned to a Zone.	1-32	1
Desired Number	The desired number can be entered for the device. To link an iPECS UCS and iPECS LIP Phone, enter the station number of the registered iPECS LIP Phone prior to registration of the	Station number	

Table 4.4.14.2-1 STATION USER LOGIN

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	iPECS UCS or the UCS Client, PGM 446 may be used as the single administration point.		
Nation code	The Nation code for the device is assigned.		Assigned in System ID
Language	The default Language type for system voice prompts can be assigned to the device from the available languages.	Language Code	Nation dependent
Linked	This field indicates the Linked pair status of the station.		

4.4.15 UCS Data

Selecting the UCS Data group returns the sub-menu displayed in the left frame as shown in the following figure.

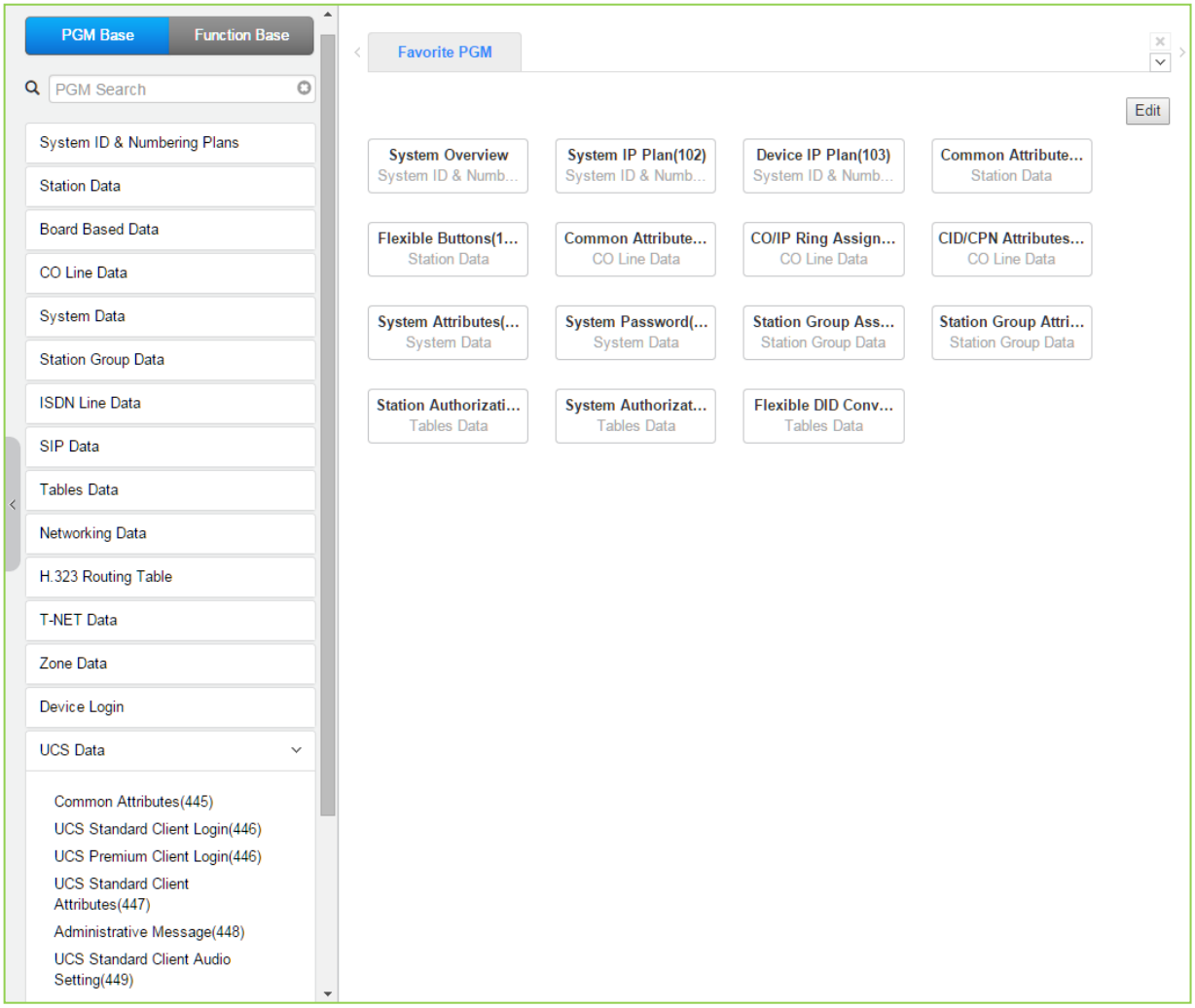


Figure 4.4.15-1 UCS Data Main Page

4.4.15.1 Common Attributes – PGM 445

Selecting Common attributes will display the common attributes input page. Click **[Save]** button after changing Value.

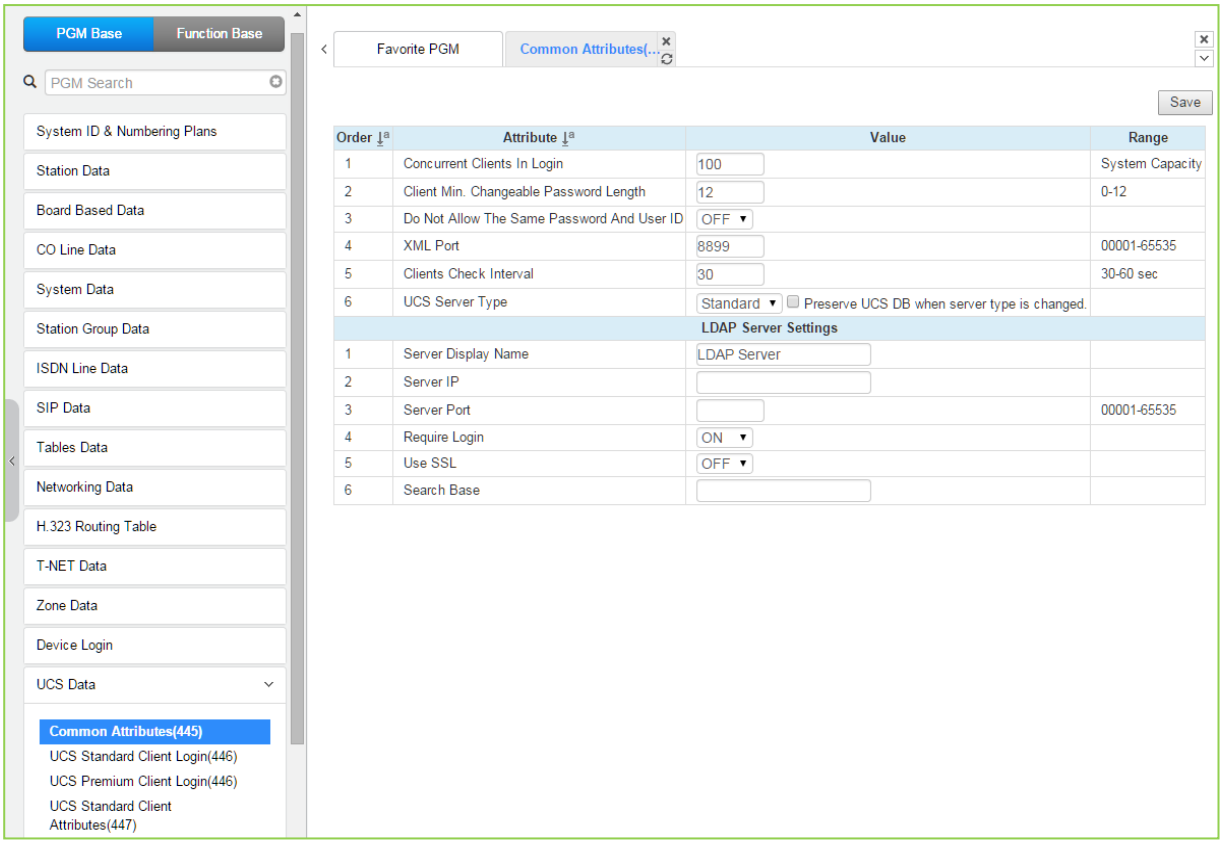


Figure 4.4.15.1-1 Common Attributes

Common Attributes for the UCS Clients include client login characteristics and LDAP server information shared with the clients as shown in Table 4.4.15.1-1.

Table 4.4.15.1-1 Common attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Concurrent Clients in login	iPECS eMG employs a per-seat license. The number of UCS Clients that are active at a time cannot exceed the licensed capacity.	System capacity	100
Minimum Password Length	The minimum length of a UCS Client password can be defined up to 12 characters.	0-12	12
Do Not Allow the Same Password and User ID	The User Id can be employed as the password if permitted (OFF).	OFF ON	OFF
XML Port	The system employs XML to send or request certain information such as the User picture. The TCP/IP port can be defined.		8899
Clients Check Interval	Periodically, the iPECS system will verify the status of logged in UCS clients.	30-60 seconds	30
UCS Server Type	The server that provides UCS service can be iPECS	Standard	Standard

Table 4.4.15.1-1 Common attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	eMG (Standard) or the external UCS Server (Premium). Additional video and collaboration features are provided by the UCS Server as Premium service. When the UCS Server is employed, the Standard Client Login information (PGM 446) is transferred from iPECS eMG to the UCS Server after the client is registered. If "Preserve UCS DB when server type is changed" is checked, UCS DB will not be initialized when UCS server mode is changed.	Premium	
LDAP Server Settings			
Server Display Name	When the UCS Client requires access to an LDAP server, the system will provide the LDAP server information to the client. The server name is defined in this field.	15 characters	
Server IP	When an LDAP server is employed, the IP address of the server must be defined.		0.0.0.0
Server Port	When an LDAP server is employed, the TCP/IP port of the server must be defined.	0000-9999	
Require Login	The UCS Client ID and Password may be required for log in to the LDAP server.	OFF ON	ON
Use SSL	When supported by the server, the client can employ SSL (Secure Sockets Layer) for added security.	OFF ON	OFF
Search Base	Search base means Search option. You can get the search option from LDAP Server manager. For example, if OU (Organization Unit) is OC and DC (Directory Company) are ucapp and com, you can give the option "OU=OC, DC=ucapp, DC=com" in this field. You will get the desired directory.		

4.4.15.2 UCS Standard Client Login – PGM 446

Selecting UCS Standard Client Login will display the UCS standard client login input page. Enter the Client index and click **[Load]** to modify the Client data. Use the check boxes to indicate the attributes to modify. Click **[Save]** button after changing Value.

Enter UCS Client Index: eMG80 : 1-32 / eMG800: 1-200

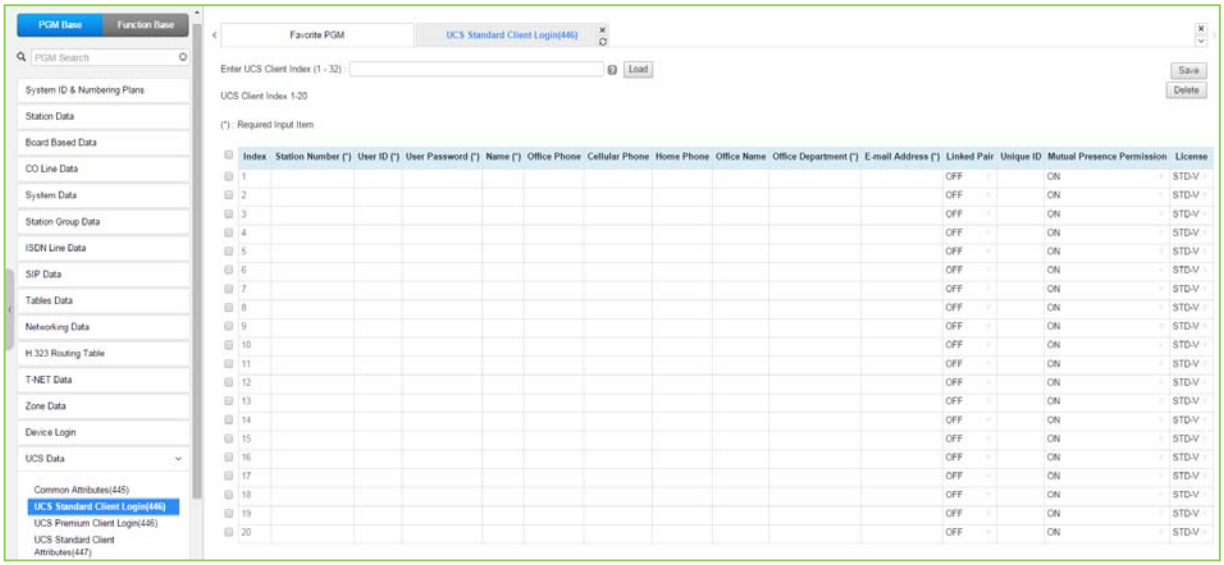


Figure 4.4.15.2-1 UCS Standard Client Login

The UCS Client information is configured for each client prior to registration. When the UCS Server is employed to provide Premium service, iPECS eMG will transfer the information to the server after the client registers and, after registration, any changes to the client configuration are accomplished in the UCS Server.

Table 4.4.15.2-1 UCS Standard Client Login

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Number	The station number for the UCS Client can be assigned here and will update PGM 103 and 443.		
User ID	The UCS Client Id for the UCS Client can be assigned here and will update PGM 103 and 443.	Min. 4 characters	
User PWD	The UCS Client password, up to 32 characters must be assigned.	Max. 32 characters	
Name	The user's name, up to 32 characters should be entered.	Max. 32 characters	
Office Phone	Set Office phone number.	Max. 32 characters	
Cellular Phone	Set Cellular phone number.	Max. 32 characters	
Home Phone	Set Home phone number.	Max. 32 characters	
Office Name	Set Office name.	Max. 32 characters	
Office Department	Set Office Department.	Max. 32 characters	
Email address	Set Email address.	Max. 40 characters	
Linked Pair	If the UCS Client is part of a Linked pair, it must be enabled here. By entering the Station number of the iPECS IP Phone as the UCS Client Station Number, the stations will employ MAC linking.	OFF ON	OFF

Table 4.4.15.2-1 UCS Standard Client Login

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Unique ID	When the UCS Server is employed, each client must have a unique Id of at least 40 characters, which identifies the clients to the UCS Server. Once the Client registers, iPECS eMG will send the information to the UCS Server. Note that the UCS Server Type in PGM 445 must be configured as “Premium”.	Min. 40 characters	
Mutual presence permission	The presence status of the Client can be shared with other clients.	OFF ON	ON
License	The status of license will be displayed and select the license for usage among range.	STD-V STD-NV MOBILE	License

4.4.15.3 UCS Premium Client Login – PGM 446

Selecting UCS Premium Client Login will display the UCS Premium client login input page. Enter the Client index and click **[Load]** to modify the Client data. Use the check boxes to indicate the attributes to modify. Click **[Save]** button after changing Value.

Enter UCS Server ID: eMG80 : 1-2 / eMG800: 1-5

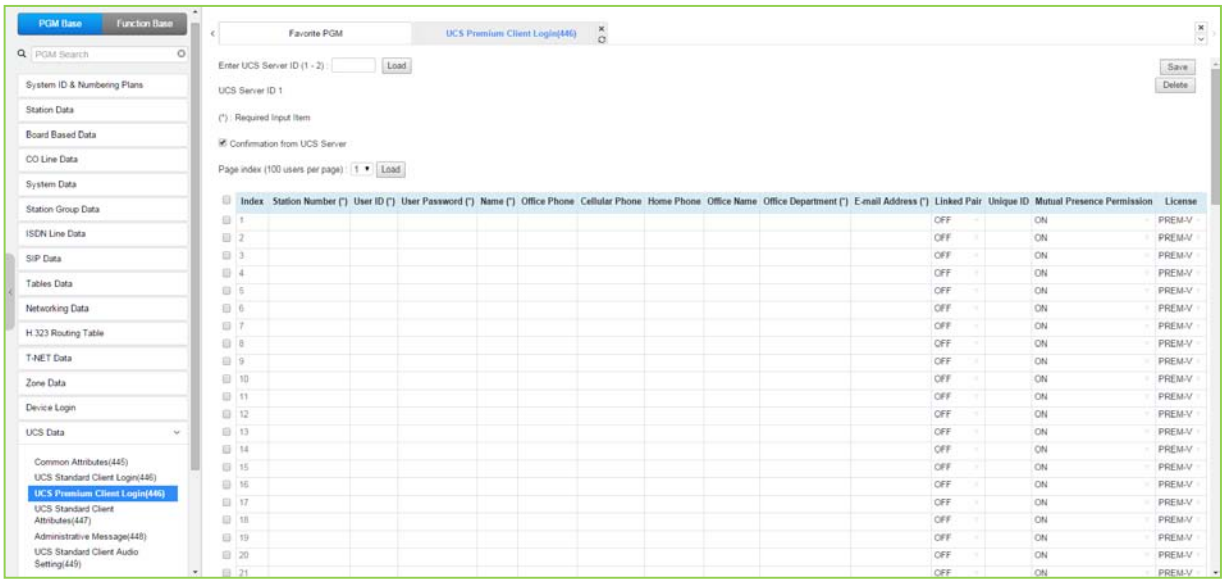


Figure 4.4.15-1 UCS Premium Client Login

The UCS Client information is configured for each client prior to registration. When the UCS Server is employed to provide Premium service, iPECS eMG will transfer the information to the server after the client registers and, after registration, any changes to the client configuration are accomplished in the UCS Server.

Table 4.4.15.3-1 UCS Premium Client Login

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Station Number	The station number for the UCS Client can be assigned here and will update PGM 103 and 443.		
User ID	The UCS Client Id for the UCS Client can be assigned here and will update PGM 103 and 443.	Min. 4 characters	
User PWD	The UCS Client password, up to 32 characters must be assigned.	Max. 32 characters	
Name	The user's name, up to 32 characters should be entered.	Max. 32 characters	
Office Phone	Set Office phone number.	Max. 32 characters	
Cellular Phone	Set Cellular phone number.	Max. 32 characters	
Home Phone	Set Home phone number.	Max. 32 characters	
Office Name	Set Office name.	Max. 32 characters	
Office Department	Set Office Department.	Max. 32 characters	
Email address	Set Email address.	Max. 40 characters	
Linked Pair	If the UCS Client is part of a Linked pair, it must be enabled here. By entering the Station number of the iPECS IP Phone as the UCS Client Station Number, the stations will employ MAC linking.	OFF ON	OFF

Table 4.4.15.3-1 UCS Premium Client Login

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Unique ID	When the UCS Server is employed, each client must have a unique Id of at least 40 characters, which identifies the clients to the UCS Server. Once the Client registers, iPECS eMG will send the information to the UCS Server. Note that the UCS Server Type in PGM 445 must be configured as “Premium”.	Min. 40 characters	
Mutual presence permission	The presence status of the Client can be shared with other clients.	OFF ON	ON
License	The status of license will be displayed and select the license for usage among range.	PREM-V PREM-NV MOBILE	

4.4.15.4 UCS Standard Client Attributes – PGM 447

Selecting UCS Standard client attributes will display the UCS standard client attributes input page. Enter the UCS Client index then click **[Load]** to modify the client data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter UCS Client Index: eMG80 : 1-32 / eMG800: 1-200

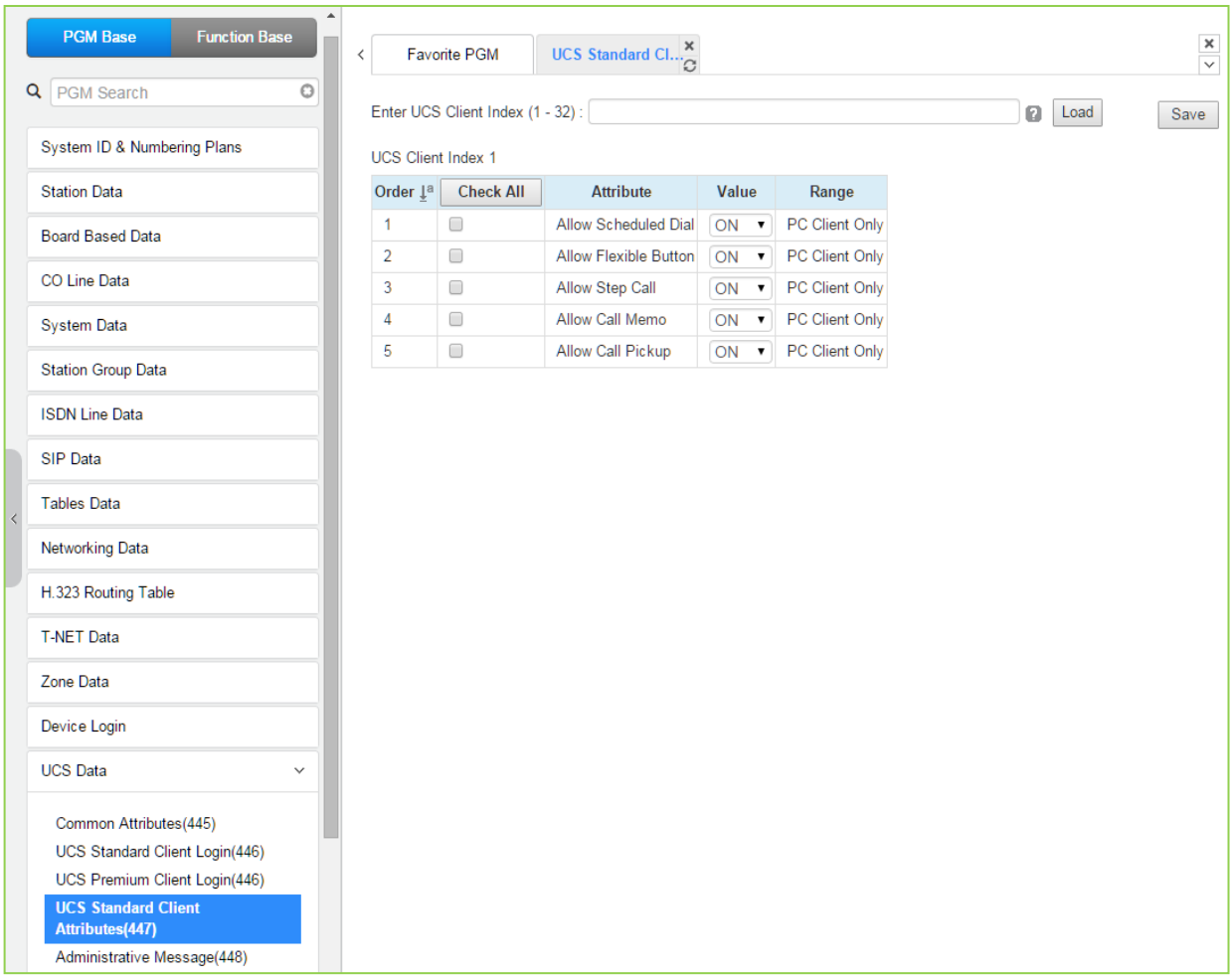


Figure 4.4.15.4-1 UCS Standard Client Attributes

The UCS Client can be allowed or denied access to several features as described in Table 4.4.15.4-1.

Table 4.4.15.4-1 UCS Standard Client Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Allow Scheduled Dial	Allows Scheduled Dialing from the client.	OFF/ON	ON
Allow Flexible Button	Allows the user to access Flex buttons on the UCS Client.	OFF/ON	ON
Allow Step Call	Allows access to the step-call feature by the UCS client.	OFF/ON	ON
Allow Call Memo	Allows the UCS Client access to the Call Memo feature.	OFF/ON	ON
Allow Call Pickup	Permits the UCS Client use of the Direct and Group Call Pick-up features.	OFF/ON	ON

4.4.15.5 Administrative Message – PGM 448

Selecting Administrative Message will display the administrative message input page. Click **[Send]** button after filling out the subject and Contents and checking the destination.

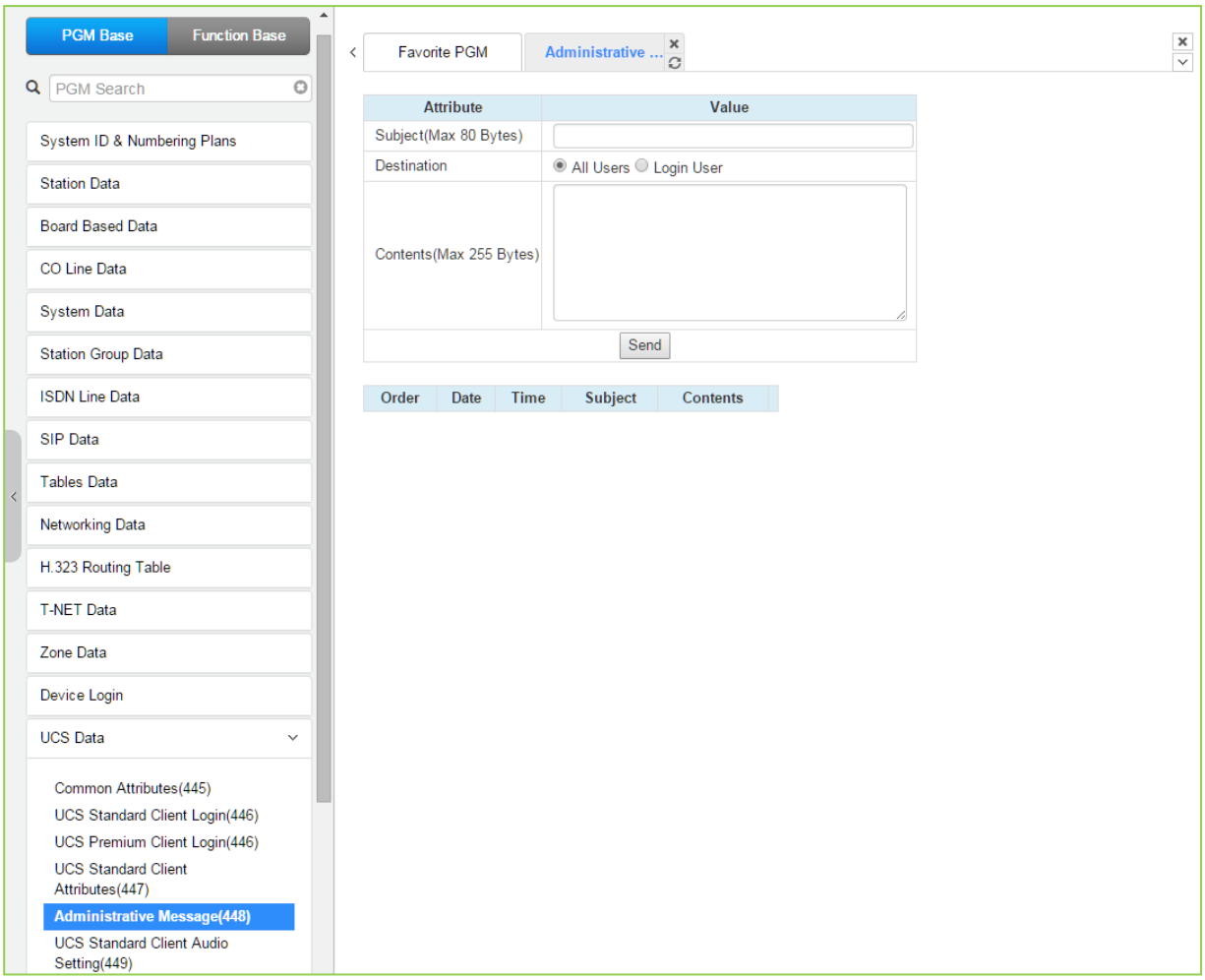


Figure 4.4.15.5-1 Administrative Message

An administrator can send a message to UCS Clients such as a Welcome message.

Table 4.4.15.5-1 Administrative Message

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Subject	Message subject.	Max. 80 bytes	
Destination	The message can be sent to currently active UCS Clients or to All Clients. For the All Clients selection, the message is sent to all active Clients and as each Client logs in.	Login user All users	All
Contents	Message body.	Max. 255 bytes	

4.4.15.6 UCS Standard Client Audio Setting – PGM 449

Selecting UCS Standard Client Audio setting will display the audio setting input page. Enter the Client index and click **[Load]** to modify the Client data. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

Enter UCS Client Index: eMG80 : 1-32 / eMG800: 1-200

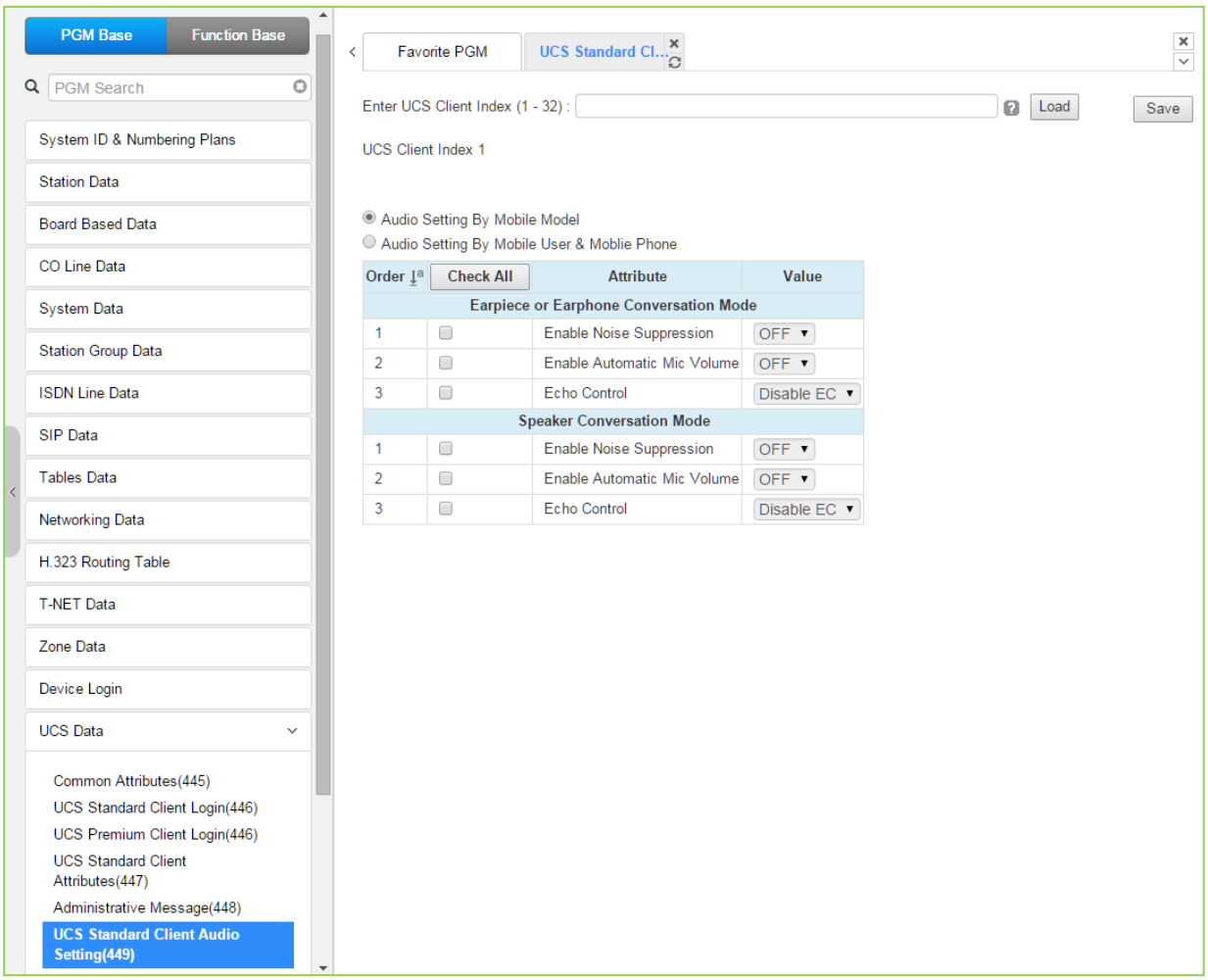


Figure 4.4.15.6-1 UCS Standard Client Audio Setting

Audio characteristic for the Speaker and earphone mode can be established for best overall audio performance.

Table 4.4.15.6-1 Audio Setting by Mobile User & Mobile phone

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Earpiece or Earphone conversion mode			
Enable Noise Suppression	The system can implement various levels of “Noise suppression from “OFF” to “Very High” in six levels.	OFF ON	OFF
Enable Automatic Mic. Volume	The system can implement Auto gain control for the Earphone.	OFF ON	OFF

Table 4.4.15.6-1 Audio Setting by Mobile User & Mobile phone

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Echo Control	Echo cancellation can be enabled for the Earphone.	Disable Minimum Low Moderate High Maximum	Disable EC
Speaker Conversation Mode			
Enable Noise Suppression	The system can implement various levels of “Noise suppression from “OFF” to “Very High” in six levels.	OFF ON	OFF
Enable Automatic Mic. Volume	The system can implement Auto gain control for the Speakerphone.	OFF ON	OFF
Echo Control	Echo cancellation can be enabled for the Speakerphone.	Disable Minimum Low Moderate High Maximum	OFF

4.4.16 DECT Data

Selecting the DECT Data program group returns the sub-menu displayed in the left frame as shown in the following figure.

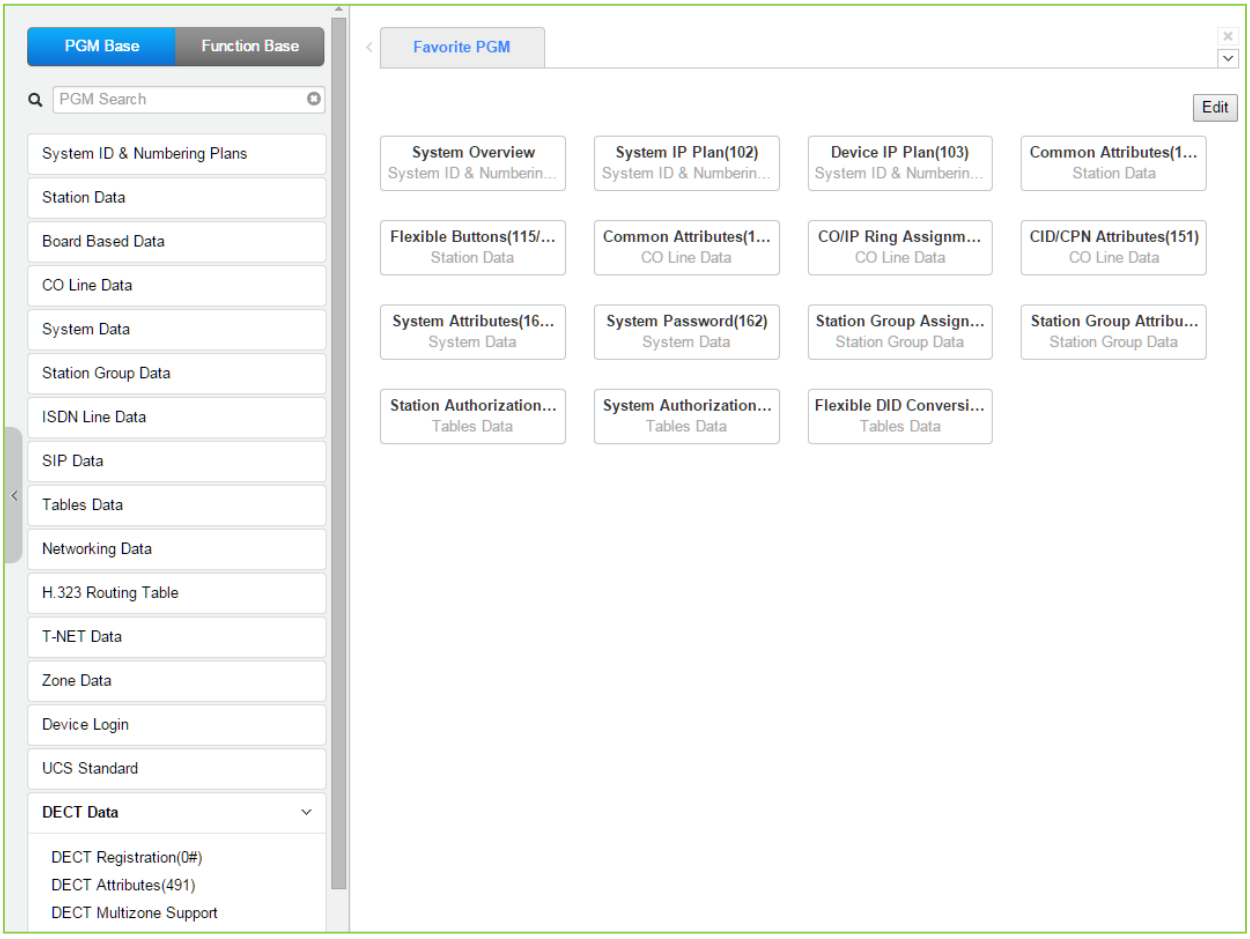


Figure 4.4.16-1 DECT Data Main Page

4.4.16.1 DECT Registration (0#)

Selecting DECT Registration returns the DECT Registration input page. Use the check mark to indicate which attributes to modify; data for checked attributes is stored by clicking **[Save]** button.

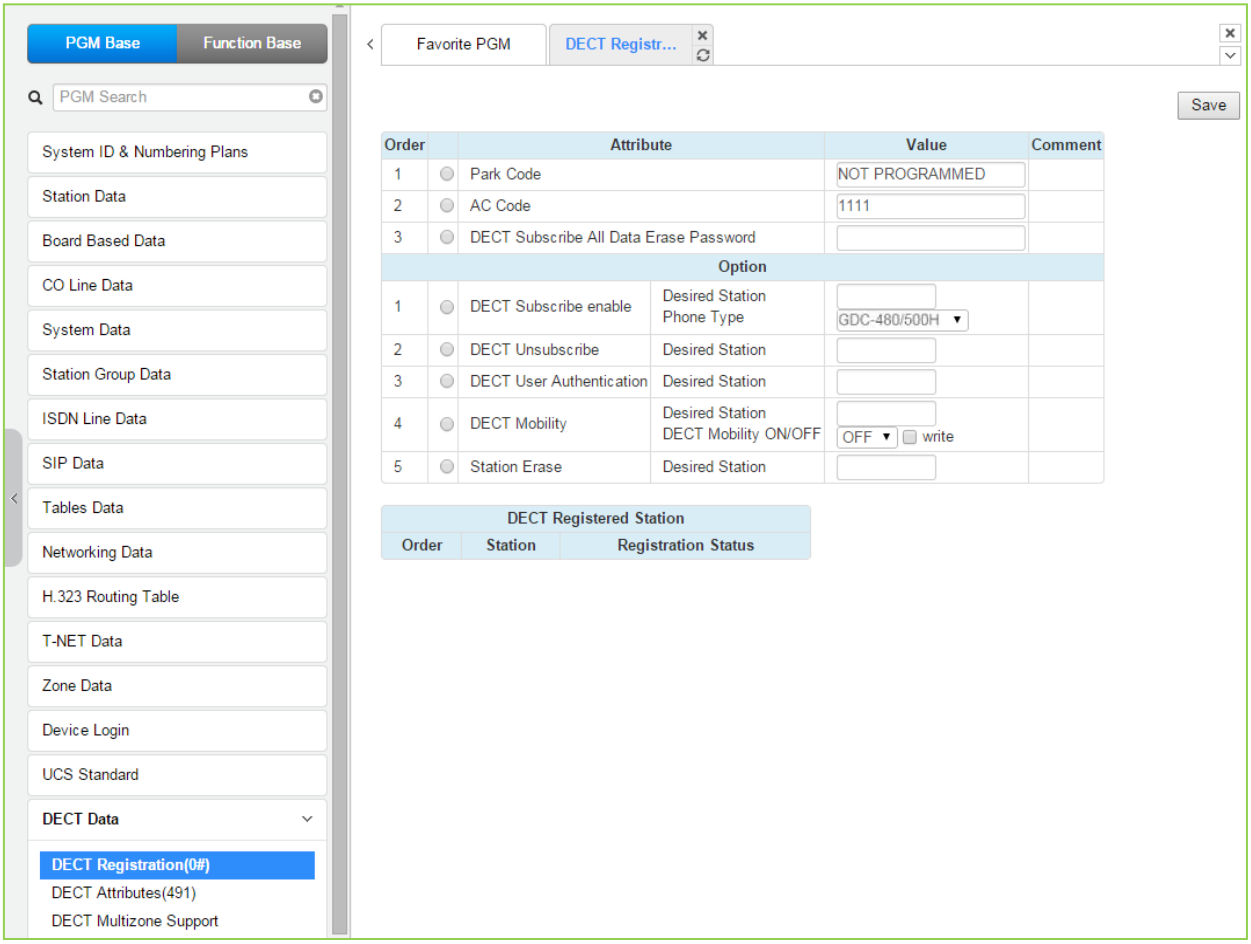


Figure 4.4.16.1-1 DECT Subscription Screen

On this page, the DECT PARK and authorization codes are defined. Several “Options” are available to enable subscription, unsubscribe a DECT station, enable mobility, etc. A chart is included displaying the registered and subscribed DECT terminals.

Table 4.4.16.1-1 DECT Registration

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Park Code	The PARK (Portable Access Rights Key) Code is a unique system Id entered at the DECT handset during the subscription process.	14 digits	Not programmed
AC Code	The Authentication Code is entered at a DECT handset to verify subscription.	Up to 8 digits	1111
DECT Subscribe All Data Erase Password	To erase all data of DECT, enter the password.		
Option			
DECT Subscribe Enable	Enables the system to accept subscription from a DECT handset.		

Table 4.4.16.1-1 DECT Registration

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Desired Station	Desired station number for the wireless DECT handset.	Station Number	
Phone Type	Several types of handsets may be selected.	GDC-480H/500H, GDC-400/450H, Standard GAP	GDC-480H/500H
	Press **[Send]** button after entering the number and type.		
DECT Unsubscribe	To terminate a subscription, enter the station number for the DECT handset. Note the Station must be connected, otherwise use Station Erase field below.	Station number	
DECT User Authentication	To subscribe successfully, the user will be required to enter the Station Authorization Code from PGM 227.		
DECT Mobility	When a DECT handset is registered to multiple systems that are networked, calls can be routed over the network to the DECT handset location.	Station number	
	Enter the registered station number, select Mobility ON or OFF and click **[write]** box then Save the page.	OFF ON	OFF
Station Erase	To terminate the registration for a DECT phone that is not connected, enter the registered station number and click **[Save]** button.	Station number	

4.4.16.2 DECT ATTRIBUTES - PGM 491

Selecting the DECT Attributes returns the DECT ATTRIBUTES input page. Click **[Save]** button after changing Value.

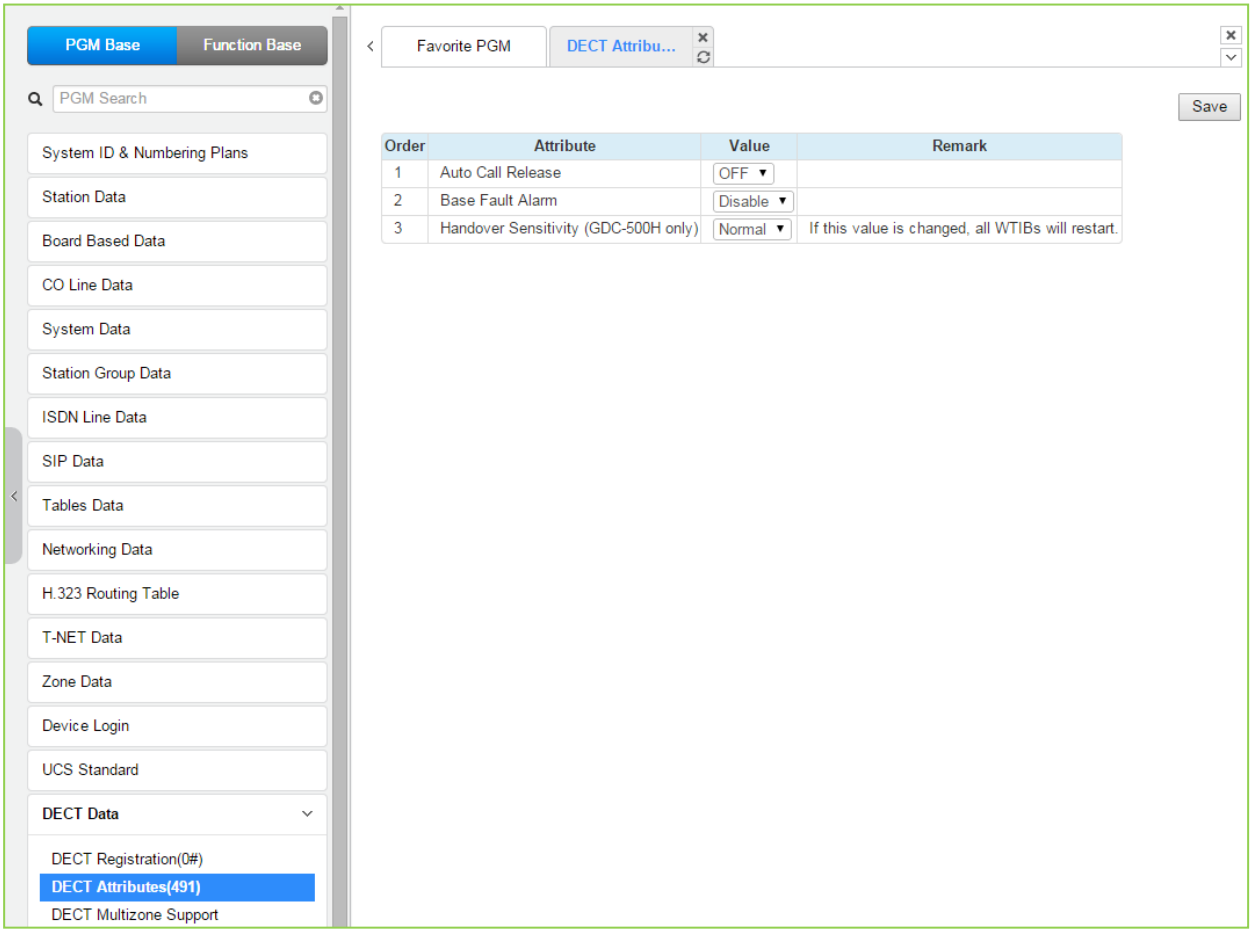


Figure 4.4.16.2-1 DECT ATTRIBUTES

DECT Attributes define functions associated with the DECT equipment and operation as shown in Table 4.4.16.2-1.

Table 4.4.16.2-1 DECT Attributes

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Auto Call Release	If enabled, when the other party of an active internal call disconnects, DECT terminal returns to idle.	OFF ON	OFF
Base Fault Alarm	If enabled, DECT Base station alarms are sent to the Attendant.	Disable Enable	Disable
Handover Sensitivity (GDC-500H only)	The user can control the handover sensitivity of GDC-500H. (Normal or Strong) If this value is changed, all WTIBs will restart.	Normal Strong	Normal

4.4.16.3 DECT Multi-zone support - PGM 491

Selecting the DECT Multizone support will display the DECT Multizone support input page. Click **[Save and All WTIBs reset]** button after changing Field to apply.

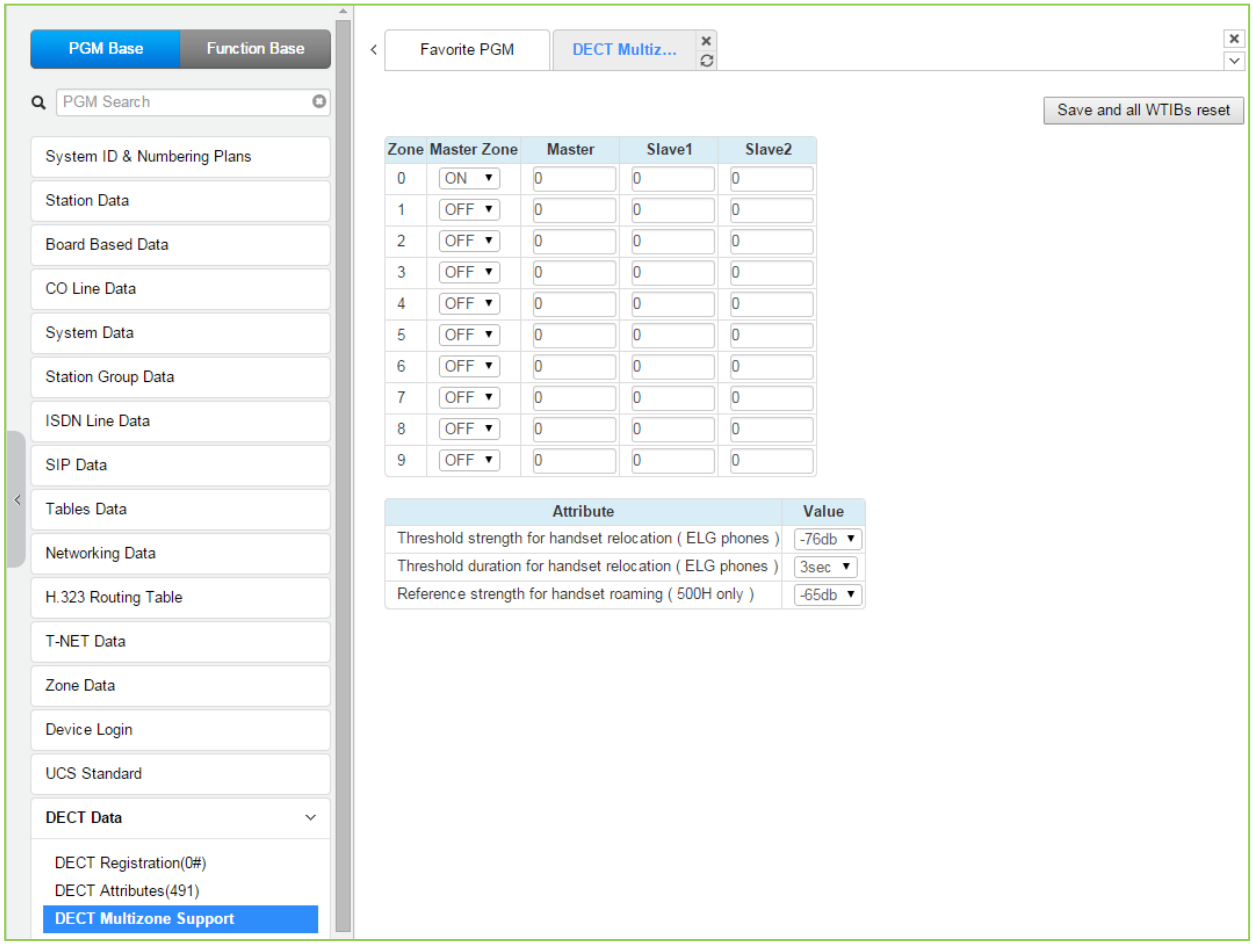


Figure 4.4.16.3-1 DECT Multi-zone support attributes

It is for roaming of DECT phones in large sites with more than 3 WTIB.

4.4.17 Hotel Data

Selecting the hotel data returns the sub-menu displayed in the left frame as shown in the following figure.

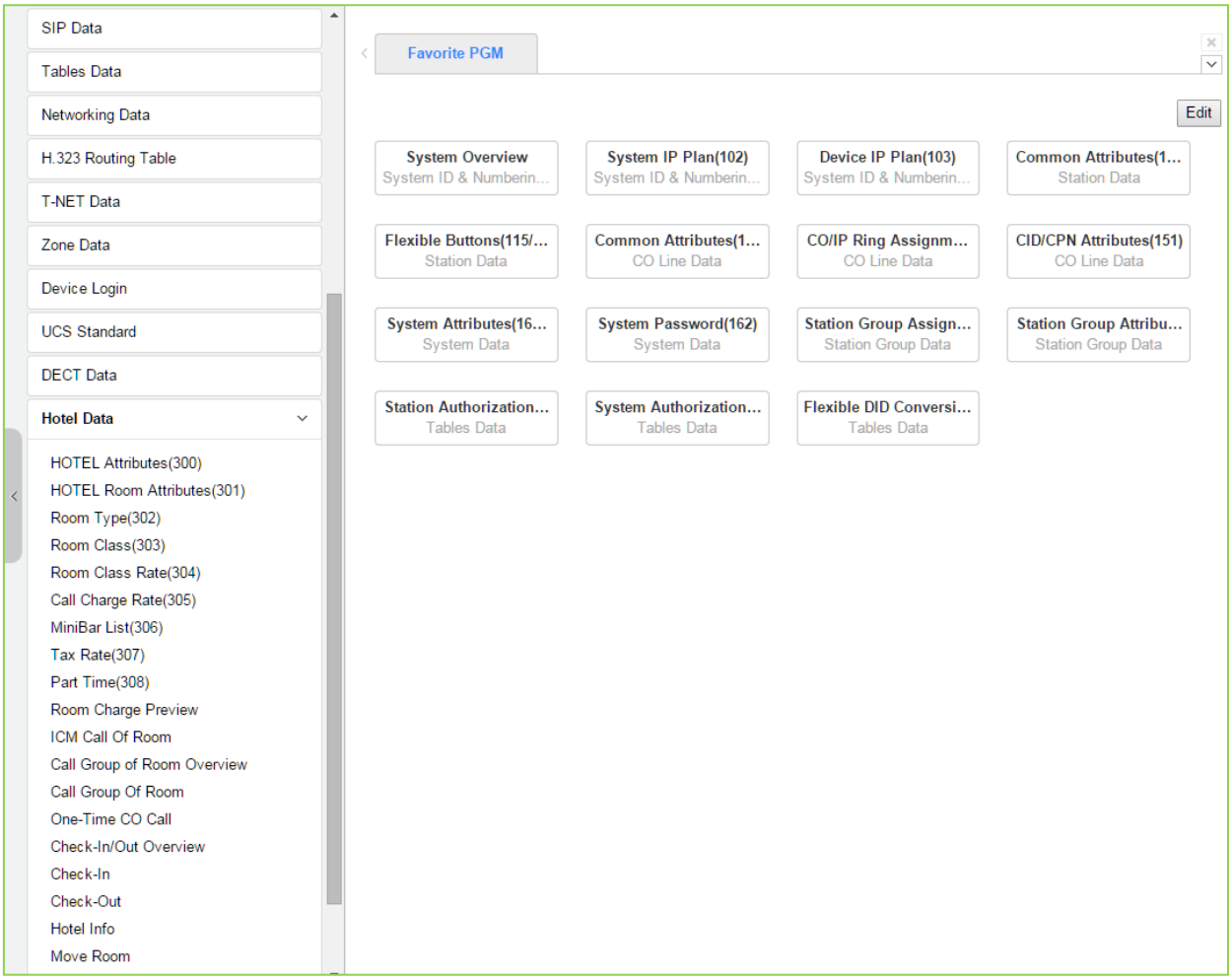


Figure 4.4.17-1 Hotel Data main page

With Hotel Data, we describe the function on another Hotel Feature and Programming manual. Refer to “Hotel Feature and Programming manual’.

4.4.18 Green Mode - PGM 500

Selecting the Green Mode program group returns the sub-menu displayed in the left frame as shown in the following figure.

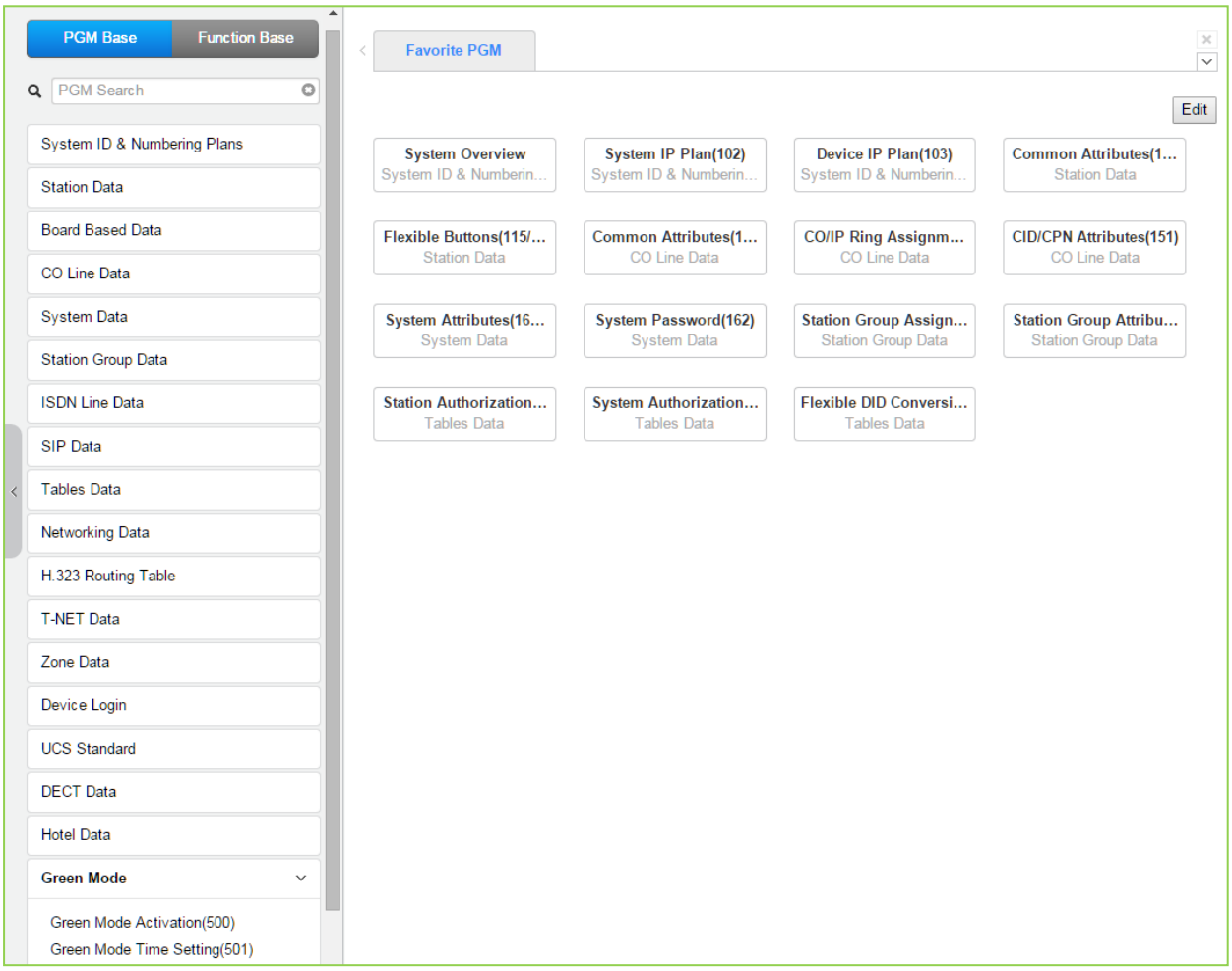


Figure 4.4.18-1 Green mode main page

4.4.18.1 Green mode activation

Selecting Green Mode Activation returns the page shown. Click **[Save]** button after changing Value.

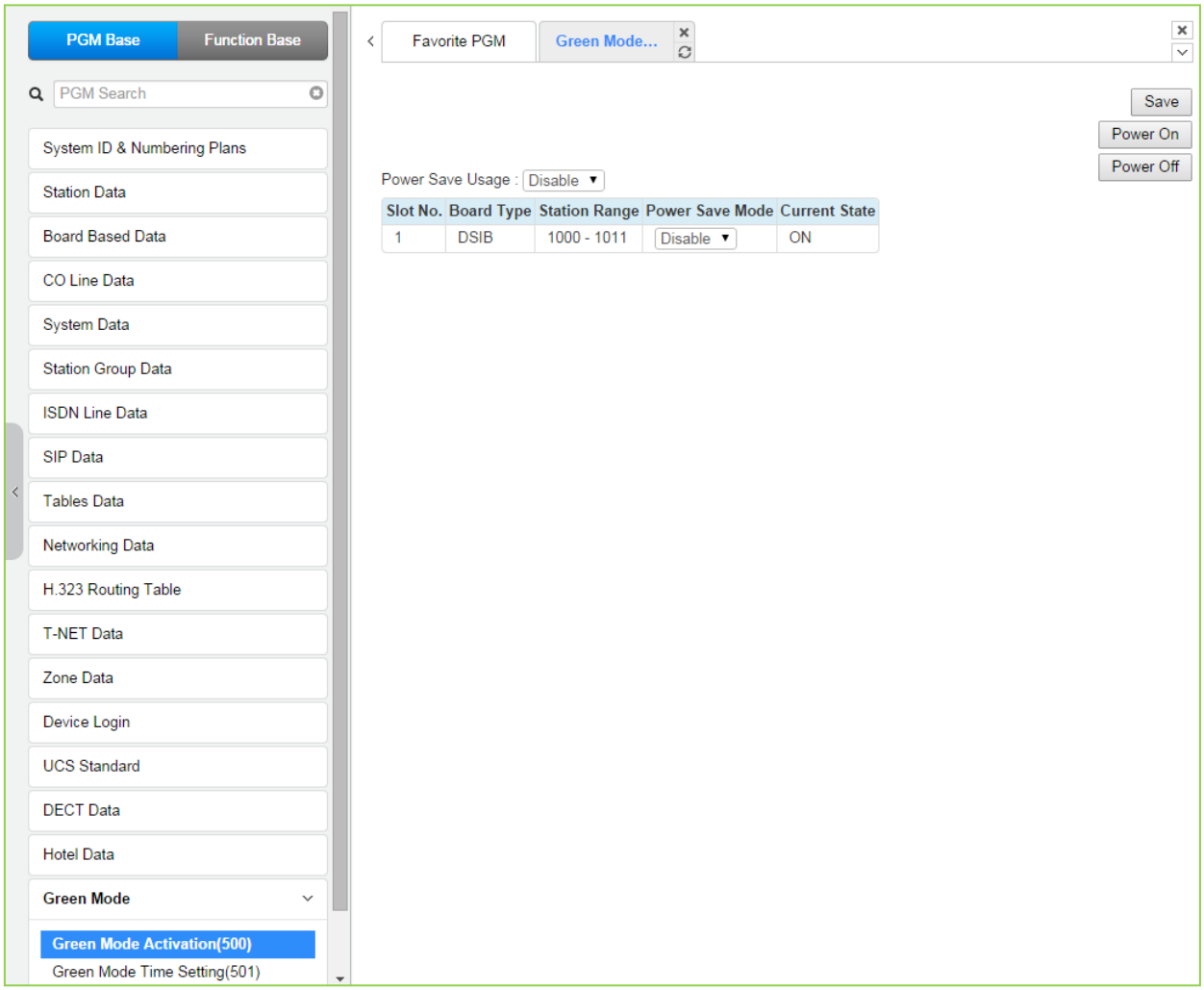


Figure 4.4.18.1-1 Green Mode Activation

The system can disable the power of a Digital Phone or Single Line Telephone (SLT) installed in the HYIB/SLIB/DSIB to save power during night or holiday mode. The power ON/OFF can be controlled by Web admin manually or automatically by assigning power ON/OFF time.

Table 4.4.18.1-1 Green Mode Activation Attributes

ATTRIBUTE	DESCRIPTION	DEFAULT
Power Save Usage	Enables or Disables Power Save usage.	Disable
Slot No.	The Slot Number of board supporting power control.	
Board Type	Board Type.	
Station Range	Station Number Range of board supporting power control.	
Power Save Mode	Enables or Disables Power Save Usage Mode of each board.	Disable
Current Status	Displays the current status of board power ON/OFF.	ON
Power ON button	Power ON manually all of stations in Power Save used board.	
Power OFF button	Power OFF manually all of stations in Power Save used board.	

4.4.18.2 Green Mode Time Setting

Selecting the Green Mode Time Setting returns the page shown. Click **[Save]** button after changing Value.

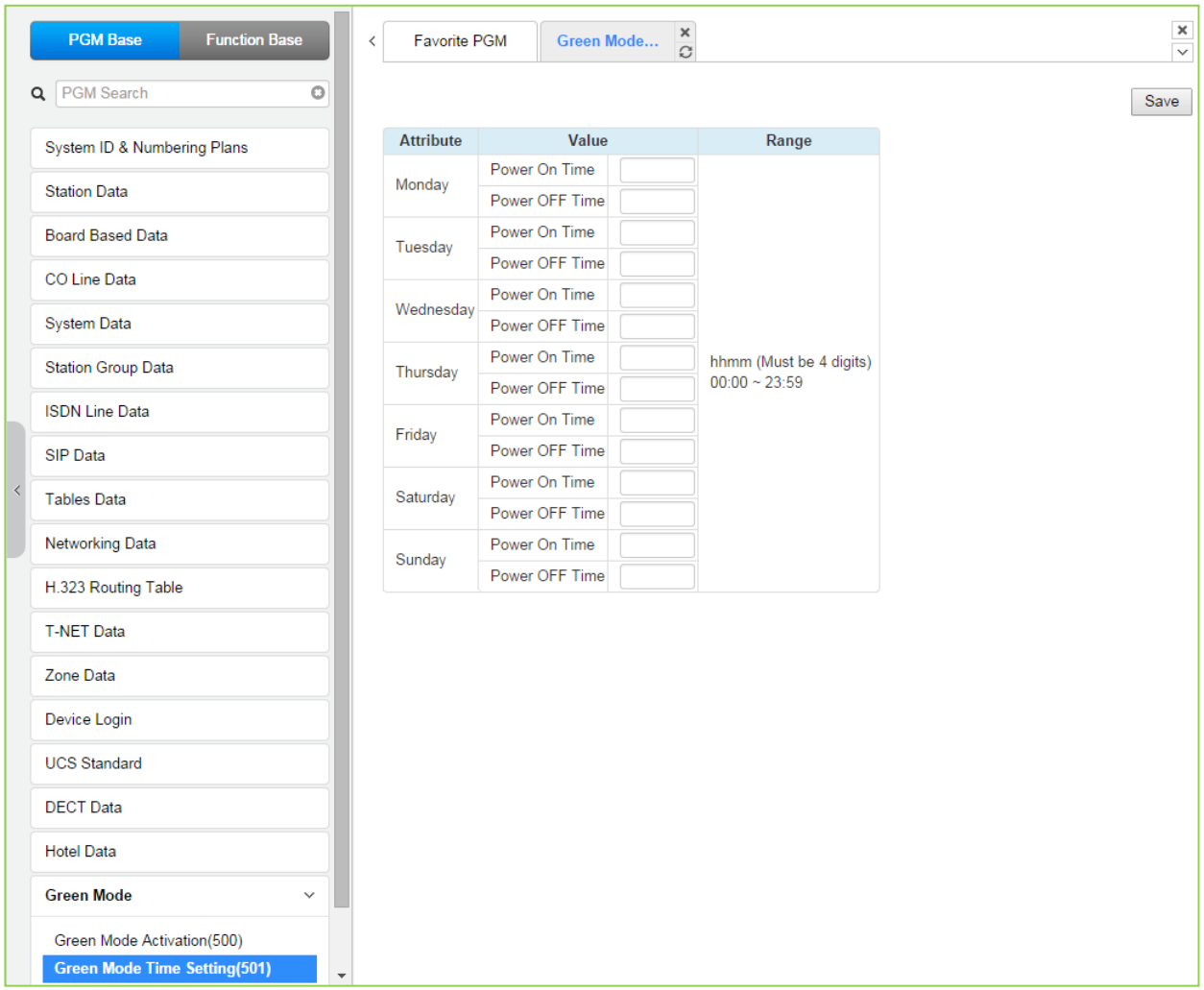


Figure 4.4.18.2-1 Green Mode Time Setting

The power ON/OFF time can be assigned to control Green Mode automatically. The power ON/OFF time can be defined at each day in a week. And when defined that time, power to assign board will be served or not.

Table 4.4.18.2-1 Green Mode Time Setting

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
Power ON Time	The time to start power supply to assigned board.	hhmm (Must be 4 Digits)	
Power OFF Time	The time to stop power supply to assigned board.	hhmm (Must be 4 Digits)	

4.4.19 Initialization - PGM 450

Selecting Initialization will return the sub-menu in the left frame in as shown in the following figure.

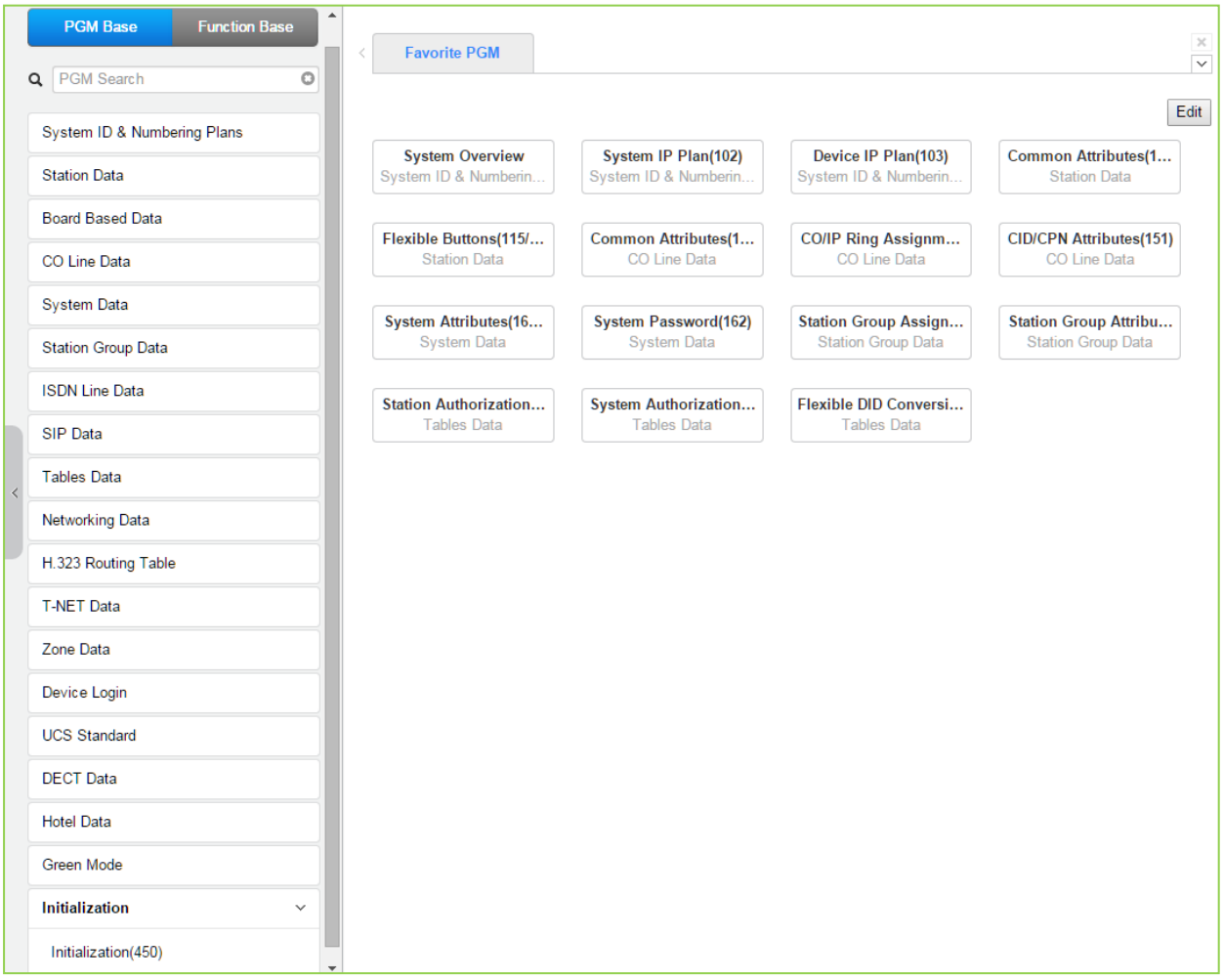


Figure 4.4.19-1 Initialization

4.4.19.1 Initialization Table - PGM 450

Selecting Initialization will display the Initialization Table data entry page. Use the check mark to indicate which attributes to modify; data for checked attributes is initialized by clicking **[Initialize]** button or reset system by clicking **[Reset system]** button.

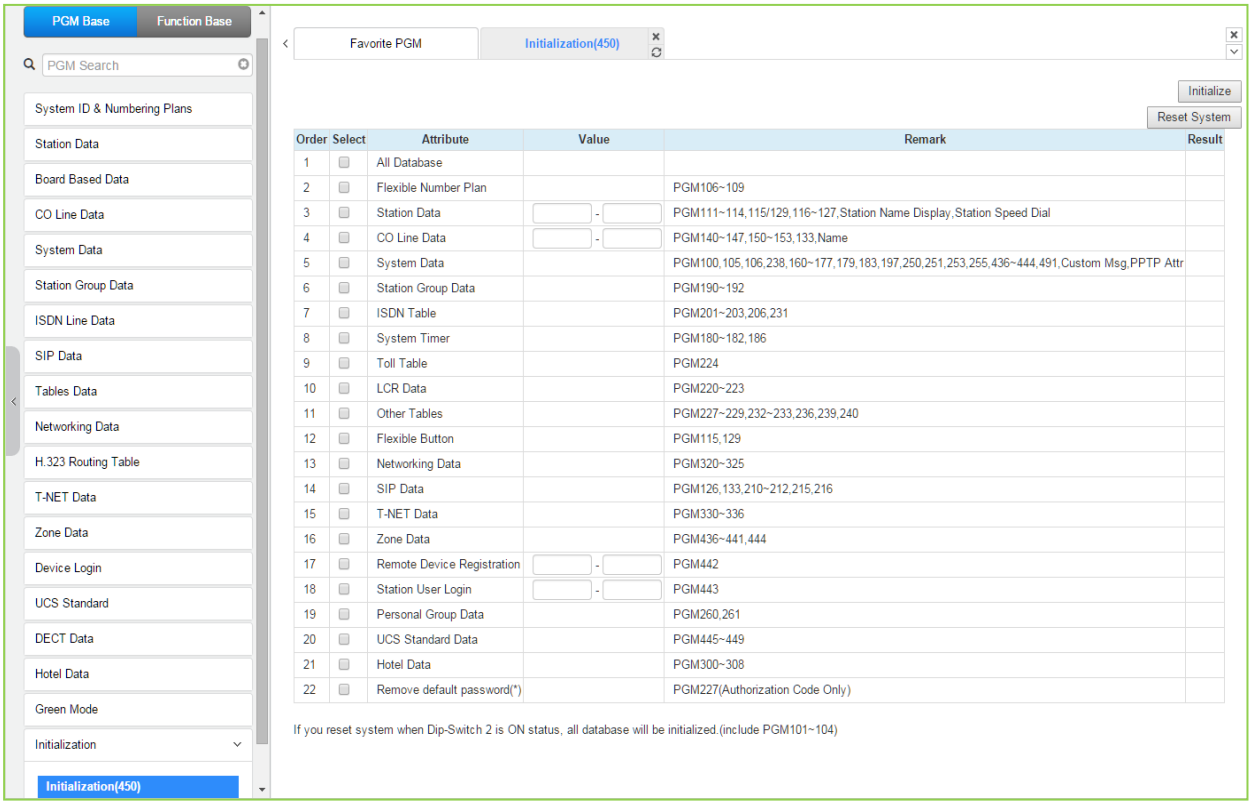


Figure 4.4.19.1-1 Initialization Menu

The system has been pre-programmed with certain features using the default data. The default data are loaded into memory when the system is initialized. The system should always be initialized when first installed or the database appears corrupted. The system can be initialized manually during installation, refer to the ***iPECS eMG Hardware Description & Installation Manual***, the system should be reset.

4.5 Maintenance

The Maintenance tab main screen displays information on the system software versions as well as information on modules and terminals connected to the system. From this page, the database upload/download, software upgrade, access control, license install and other management functions shown in Figure 4.5-1 & 4.5-2 are accessed. In addition, at the top of the central screen, detailed software version information is provided. Also, you can monitor the device in real time by clicking **[Real-time Device Monitoring]**.

Real time monitoring for Device

You can monitor the current status about Device in real time. The new information is highlighted in red.

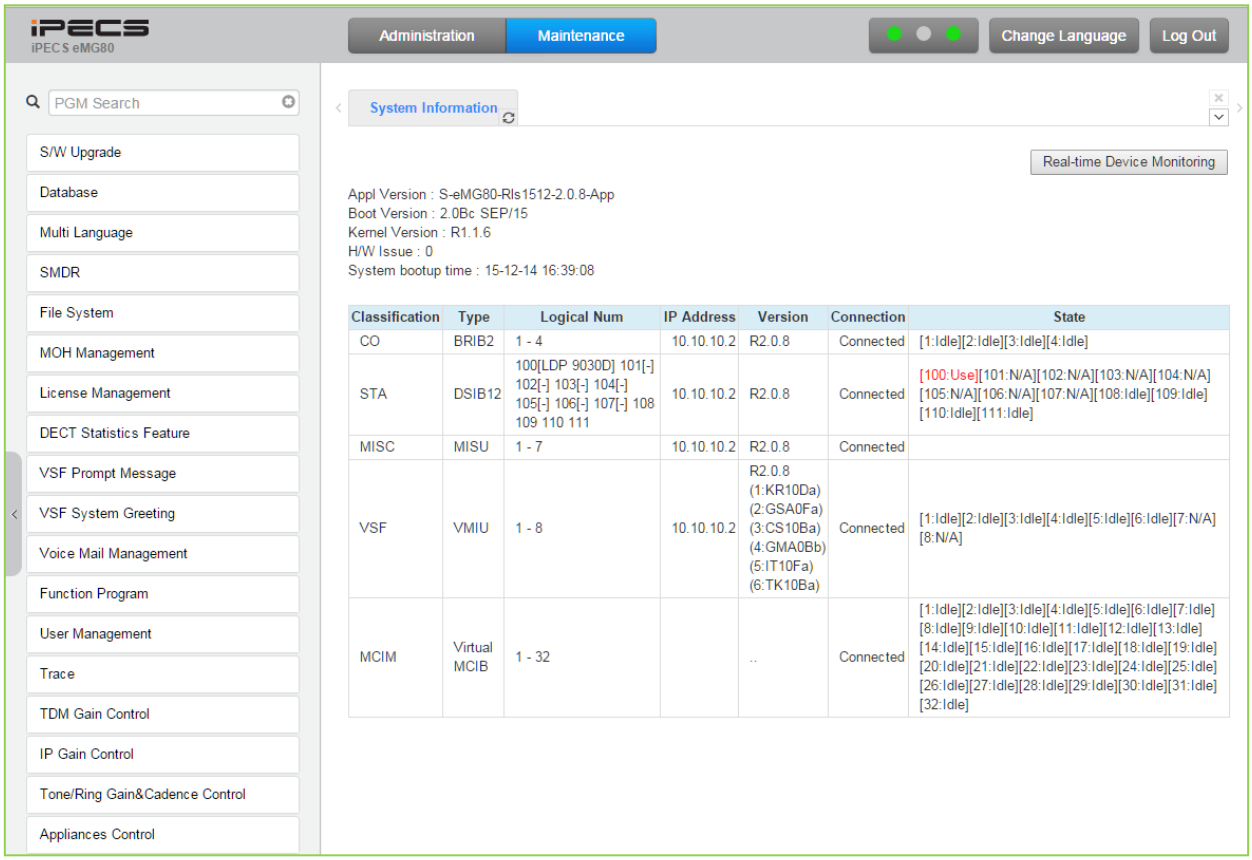


Figure 4.5-1 eMG80 Maintenance Main Page

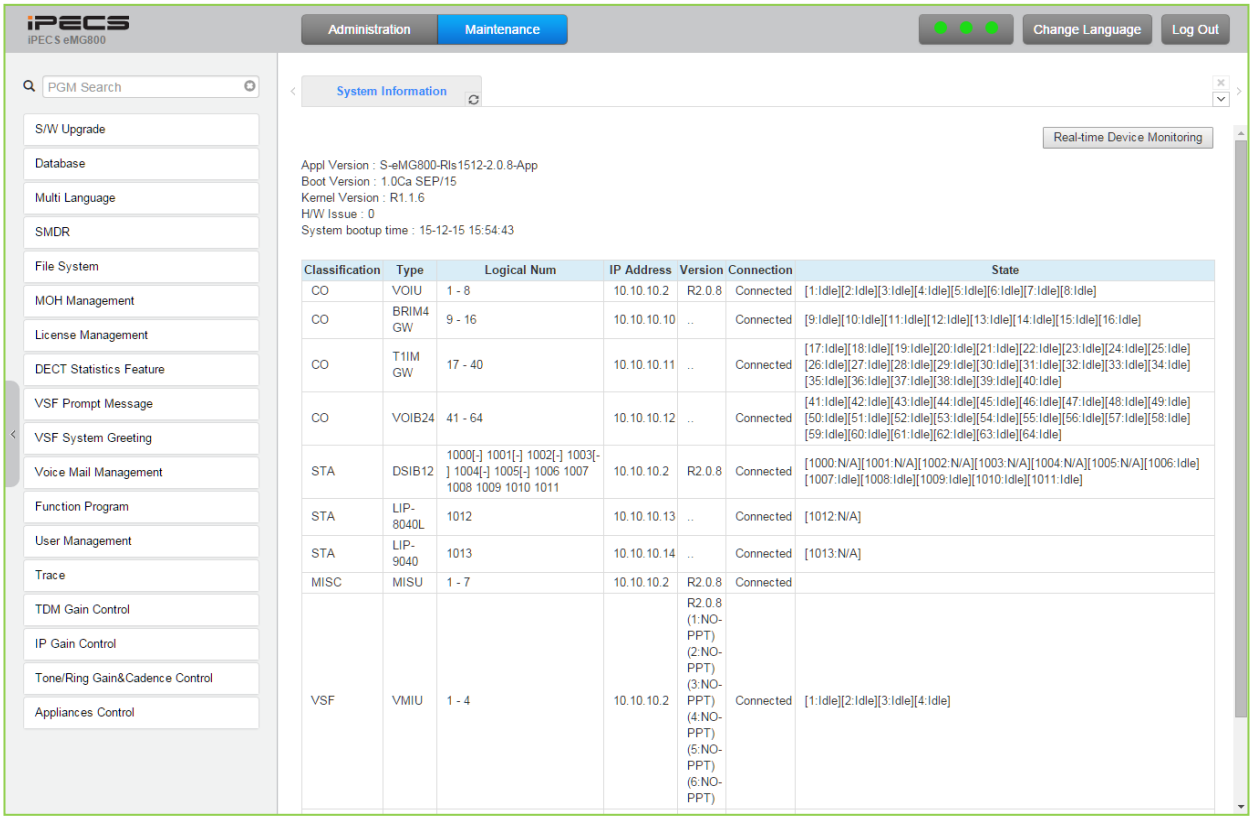


Figure 4.5-2 eMG800 Maintenance Main Page

As eMG software is being upgraded regularly, we cannot guarantee the above software version displayed and it may be different from the current version.

4.5.1 File Upload & Remote Upgrade

The iPECS eMG employ a NAND based memory file system thus, html, MPB upgrade and iPECS appliance image files can be uploaded. All of the iPECS series modules can be upgraded by remote access. Selecting S/W Upgrade from the main Web screen returns the Appliance Version page and sub-menus in the left frame as shown in Figure 4.5.1-1.

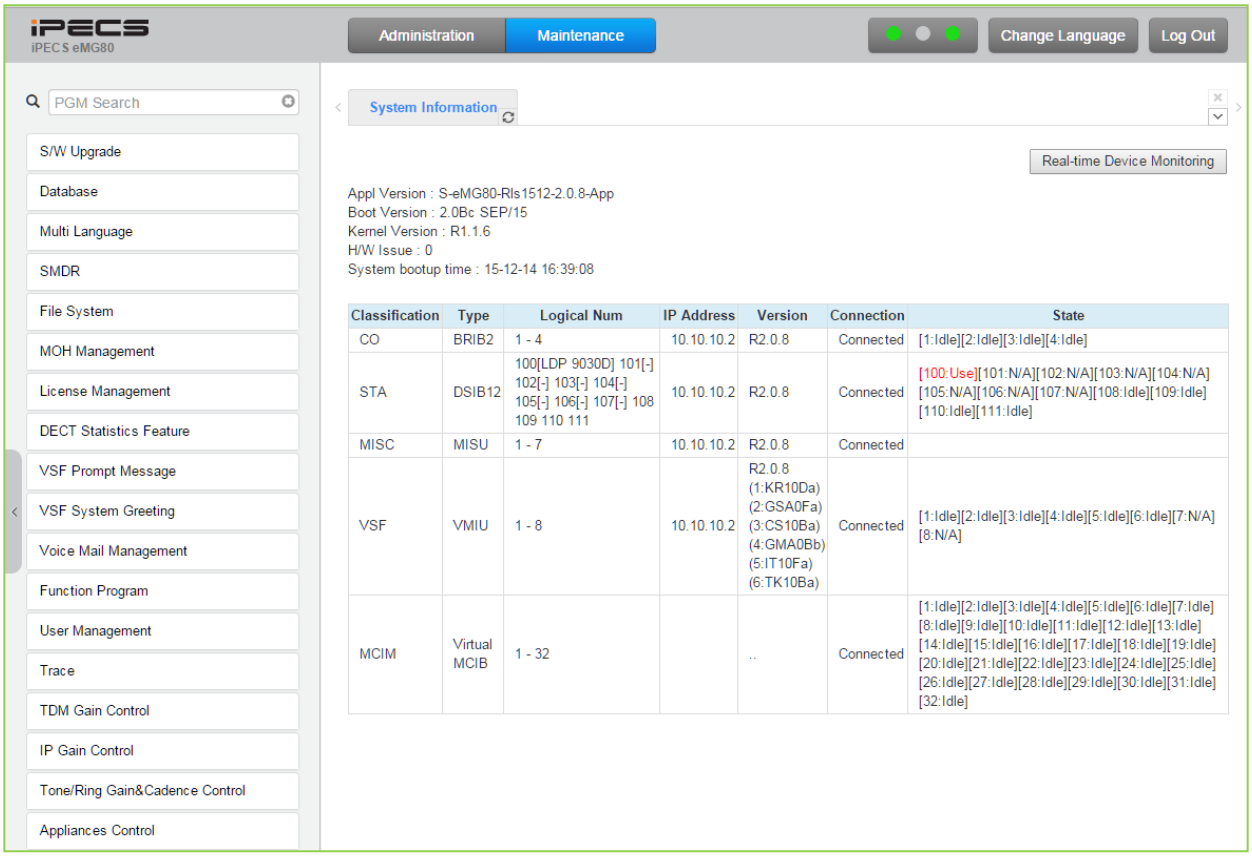


Figure 4.5.1-1 File Upload & Remote Upgrade

There are two types of upgrade images: application and kernel image. If both are required, upgrade the kernel first and then the application.

The VMIU is part of the MPB and VSF prompts are upgraded by uploading prompt files to the MPB. VMIB prompts are upgraded by direct upload of prompt files to the VMIB.

4.5.1.1 File Upload

From the File Upload page, Figure 4.5.1.1-1, click **[Select file]** button and then open the pop-up folder. Select the desired file to upload to the system's memory and click the **[Start]** button. The file is sent to the system's memory, saved and automatically loaded upon a system reset or restart. Html image files are extracted and previous HTML files are deleted at completion of the upload process. New VSF prompt files are also available immediately upon successful uploaded.

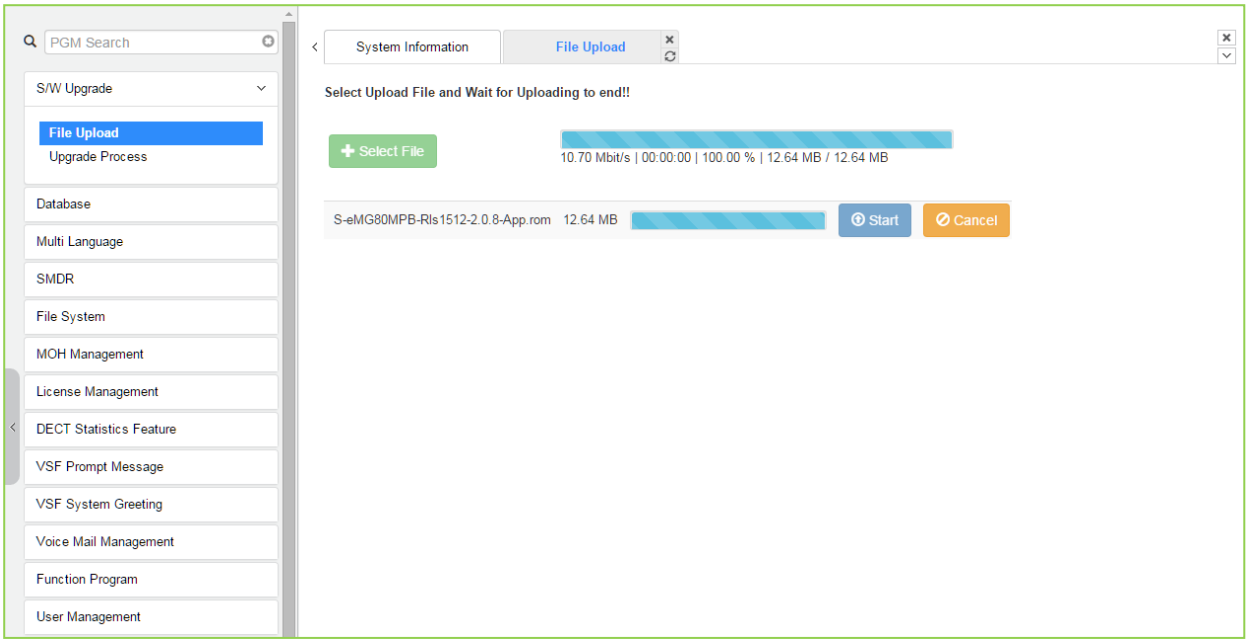


Figure 4.5.1.1-1 File Upload

* If file upload succeeds, a success page will be displayed.

4.5.1.2 Upgrade Process

If the iPECS Appliance image is uploaded, the appliances of the type for which an image was uploaded will be displayed and can be selected to upgrade, as shown in Figure 4.5.1.2-1 Upgrade Process. Select the desired appliance and click **[Upgrade]** button, the upgrade process will start and a progress screen will be displayed. Note if the Appliance is already in the process of an upgrade.

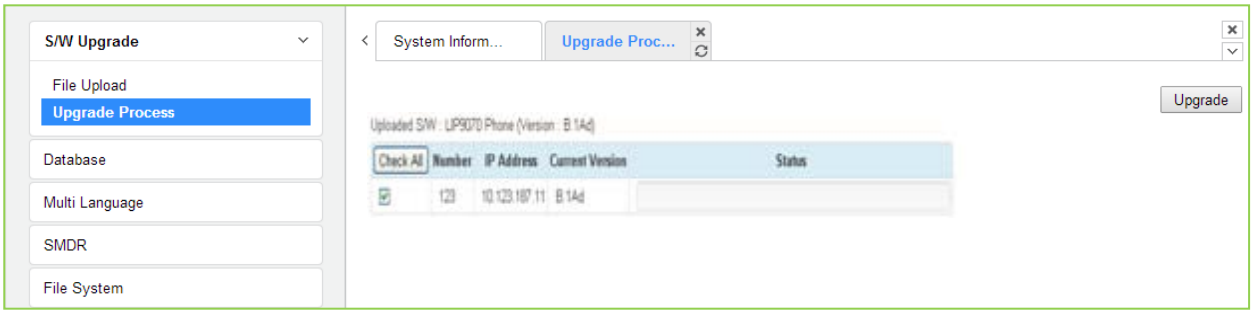


Figure 4.5.1.2-1 Upgrade Process

4.5.1.2.1 Upgrade Process View

The Upgrade Process View provides a status window; refer to Figure 4.5.1.2-1 Upgrade Process View, for Module and terminal upgrade activity in process.

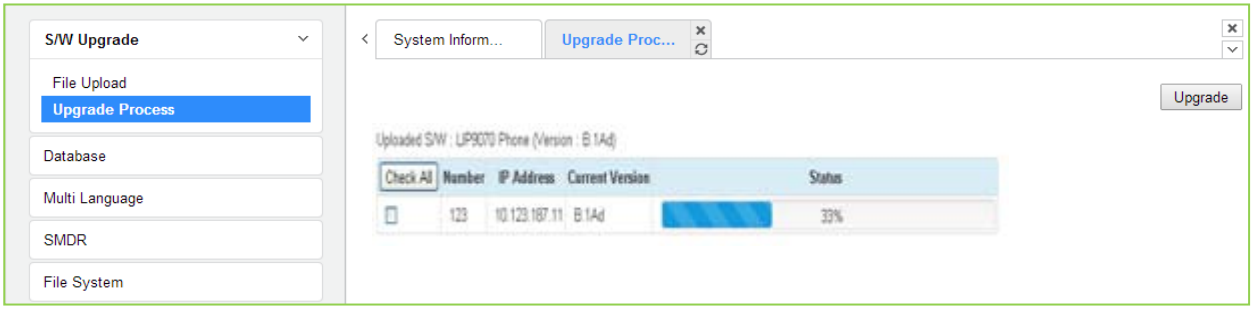


Figure 4.5.1.2-1 Upgrade Process View

4.5.1.2.2 iPECS eMG Upgrade Process

iPECS Software Full Upgrade Sequence

The following shows the order in which the upgrade process proceeds and firmware files for iPECS and modules. Note the xxxx in the ROM file names indicates the version number of the file.

MPB Upgrade Process

1. Upload MPB application image.

iPECS eMG	eMG 80/800 MPB application image (Example, eMG80: S-eMG80MPB-Rls1512-2.0.8-App eMG800: S-eMG800MPB-Rls1512-2.0.8-App)

2. Restart MPB.

Appliances Upgrade Process

1. Upload Appliance application image to MPB

LIP 8012/8024/8040E application image:	GS98Pxxxx.rom (xxxx indicates the version)
LIP 8002E application image:	GS99Pxxxx.rom (xxxx indicates the version)

2. Select target appliances & Upgrade application image.
3. Wait until upgrade process completes.
4. Automatically restart when upgrade completes successfully.

Upgrade of Voice Prompt

1. Access to VSF Prompt Upgrade page.
2. Select First/Second/Third for multiple language voice prompt.
3. Upload the proper prompt file.

VSF prompt file:	??96Wxxxx.rom (?? Is nation, i.e. GS, DM, KR, etc. ; xxxx indicates the version)

Upgrade of Voice Prompt to VMIU

1. Access to MPB.
2. Select First/Second/Third for multiple language of voice prompt.
3. Upload the proper prompt file to VMIU.

VMIB prompt file:	??96Wxxxx.rom (?? Is nation, i.e. GS, DM, KR, etc. ; xxxx indicates the version)

4.5.1.2.3 MPB Upgrade

First, confirm previous version of MPB, then upload the desired ROM files and reset system. If the new system database is not compatible with existing system database, it will be necessary to initialize the system database. This can be done manually using the Initialize Dip-switch located on the MPB.

Upgrade of the MPB includes HTML files; a separate upload of the HTML files is not required.

4.5.1.3 Upgrade HTML Files

The “File View” Menu is used to upload file and reload the system’s html files. Upload time of html will take 5 ~ 10 minutes.

4.5.1.3.1 Appliances Upgrade (Device and iPECS Phone)

Upload appliance image, and click **[Upgrade process]** button to select upgrade appliances. If appliances are selected, click **[Upgrade]** button. The page shown in Figure 4.5.1.2-1 will be displayed indicating the Upload command has been sent and upgrade process is working. This page will display the Upload status. When the appliance upgrade process is successful, the status is updated to “Success”. If the upgrade process fails, the process is attempted an additional three (3) times before abandoned.

4.5.1.3.2 Direct Appliances Upgrade

Should the above MPB managed upgrade process fail, appliances (Devices and iPECS Phones) can be upgraded directly using the appliance IP address as the upgrade destination address. Note the later may require local access.

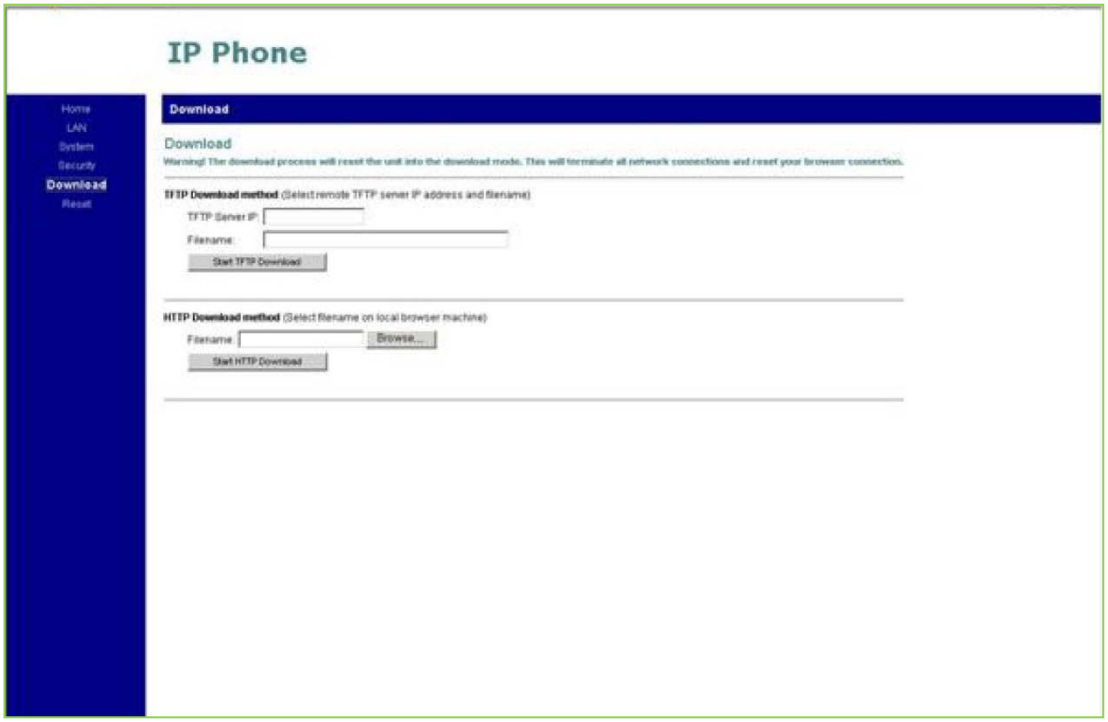


Figure 4.5.1.3.2-1 iPECS Phone Direct Connect Upgrade

4.5.1.4 WTIB Base upgrade Process for eMG800

Upgrade WTIB base image of eMG800.

1. Upload WTIB base image to MPB
2. Select target base & Upgrade.
3. Wait until upgrade process completes.
4. Automatically restart when upgrade completes successfully.

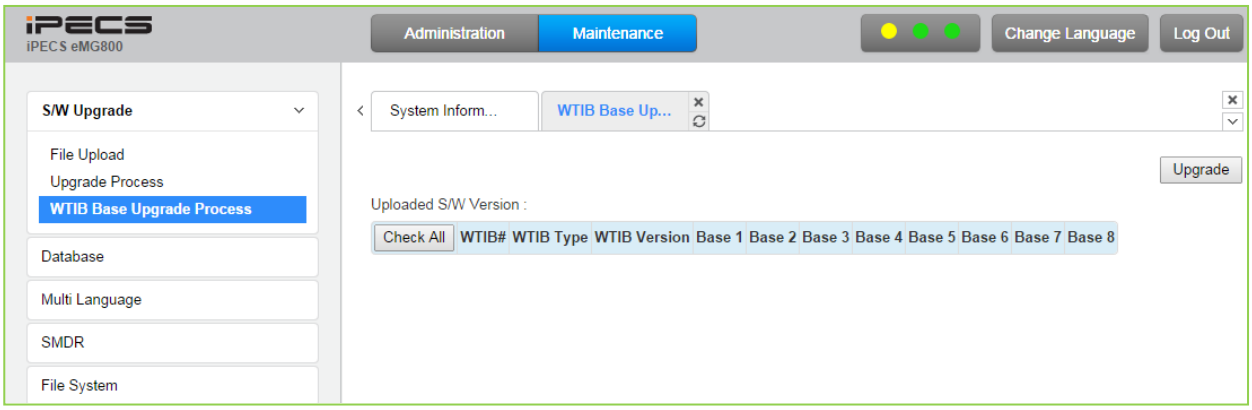


Figure 4.5.1.4 WTIB Base Upgrade Process

4.5.2 Database

4.5.2.1 Database Upload

The Database Upload selection will display the Database Upload page as shown in Figure 4.5.2.1-1. Select **[Select Files]** then select the database file desired from the local PC and click **[Start]** to upload the database to the system.

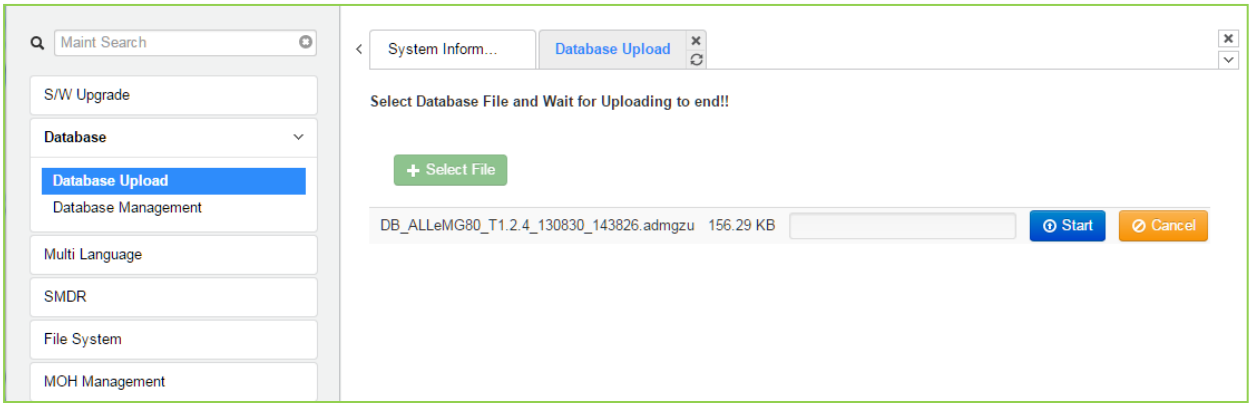


Figure 4.5.2.1-1 Database Upload

4.5.2.2 Database management

Selecting Database management will display the following figure 4.5.2.2-1. Selecting this option will download the entire iPECS eMG database to the local PC. This also allows the database in the PC to be uploaded to an iPECS eMG using the file upload procedures in section 4.5.1.1.

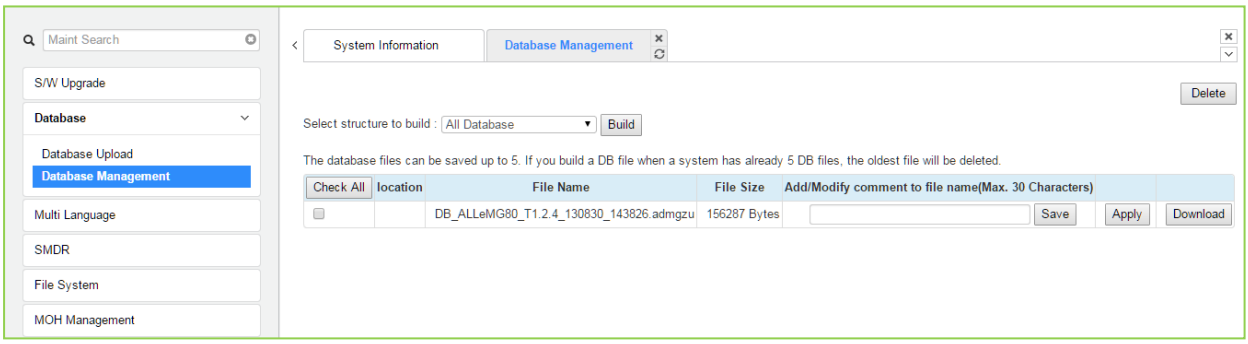


Figure 4.5.2.2-1 Database Download

You can add or modify the file name by entering the characters including special character (#, $, %, &, ', ( ), -, ., @, _). The comment will be created as [XXXXX] before '.admgzu'. It is useful to search DB after downloading.

Clicking on **[Download]** button will present the File Download window. Files should be saved to disk. Note that this screen will appear for all download processes.

A user can apply DB file from USB memory. The DB file name is composed of system type, DB type, date & time and version information.

4.5.3 Multi Language

The system can employ either English or a “Local Language” for the Web page displays. The multi-language file, which is a csv (comma separated variable) formatted file, is downloaded to a PC and the English terms are translated to the local language. The modified file can then be uploaded to iPECS eMG. Once uploaded, the user can select the “Change Language” button and select either English or the Local Language translation for Web page displays.

4.5.3.1 Multi Language File Upload

The Multi Language File Upload selection returns the Multi Language File Upload page as shown in Figure 4.5.3.1-1. By selecting the Multi Language File desired from the local PC, the desired Multi Language File can be uploaded to iPECS eMG’s.

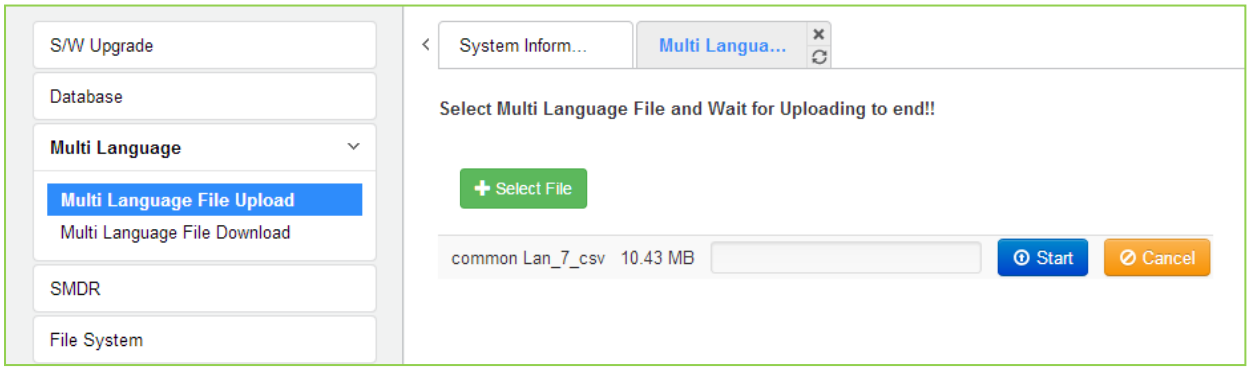


Figure 4.5.3.1-1 Multi Language File Upload

4.5.3.2 Multi Language File Download

Selecting Multi Language File Download will display the Multi Language File Download page Figure 4.5.3.2-1. Selecting this option will download the entire iPECS eMG Multi Language File to the local PC. This also allows the Multi Language File in the PC to be uploaded to iPECS eMG using the file upload procedures in section 4.5.1.1.

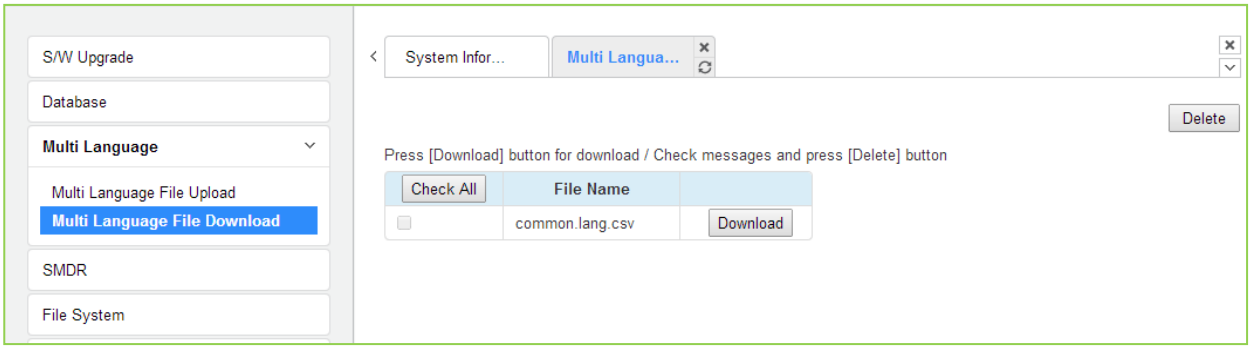


Figure 4.5.3.2-1 Multi Language File Download

4.5.4 SMDR

The iPECS eMG can download SMDR data in a SYLK format file (.slk). This file can be opened under any common spreadsheet application. The system will provide a view of SMDR data for the station range entered in the Web page Figure 4.5.4-1. This page may also be employed to delete SMDR records for the station range entered.

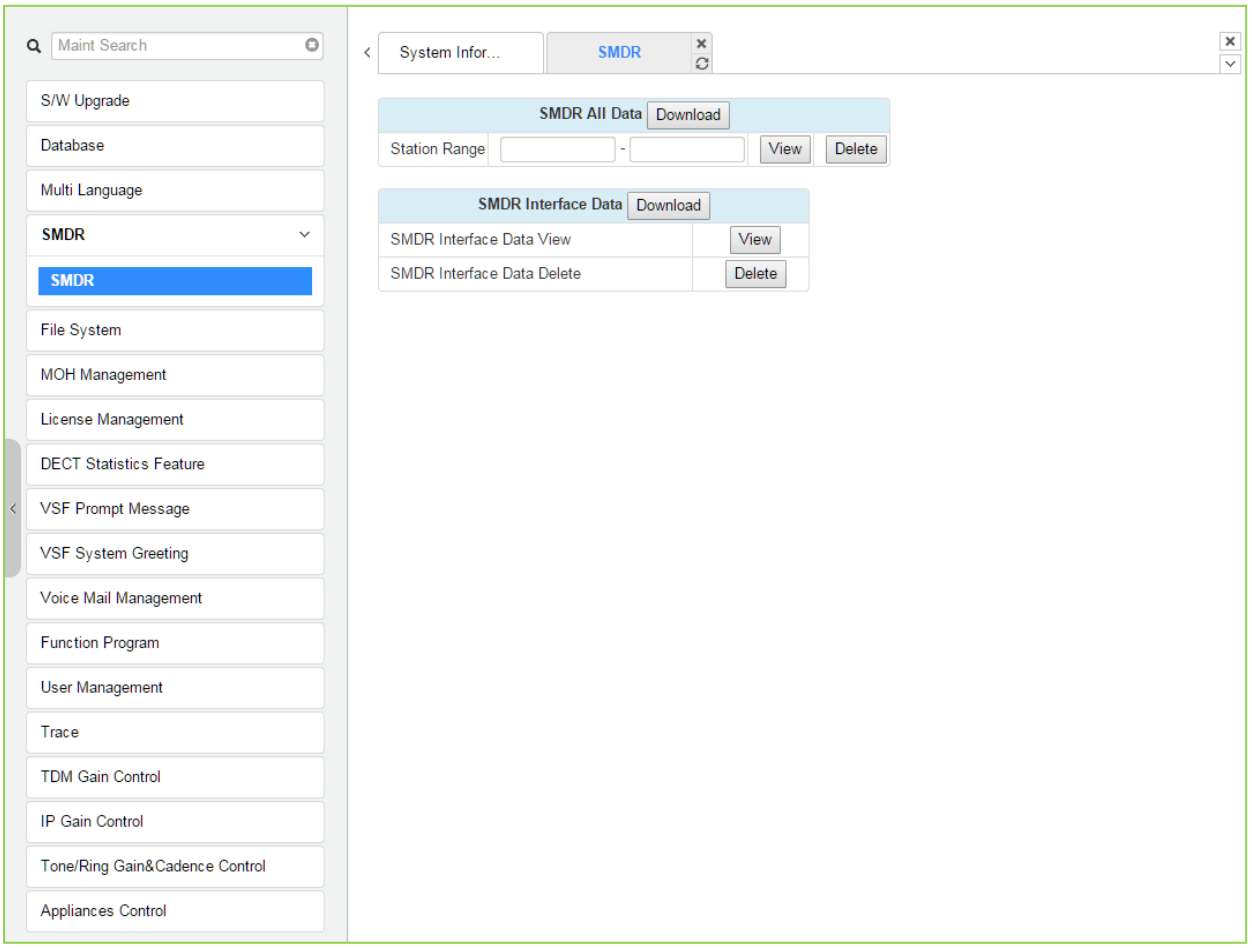


Figure 4.5.4-1 SMDR Access

4.5.5 File System

4.5.5.1 File View & Delete

The File View & Delete page displays a list of the various files stored in the file system memory. To delete a file, check the box for the file and click **[Delete]**. Files can also be downloaded to the PC using the **[Download]** button to the right of the file name.

Note the system requires the files displayed in grey and the system will not allow deletion of these files.

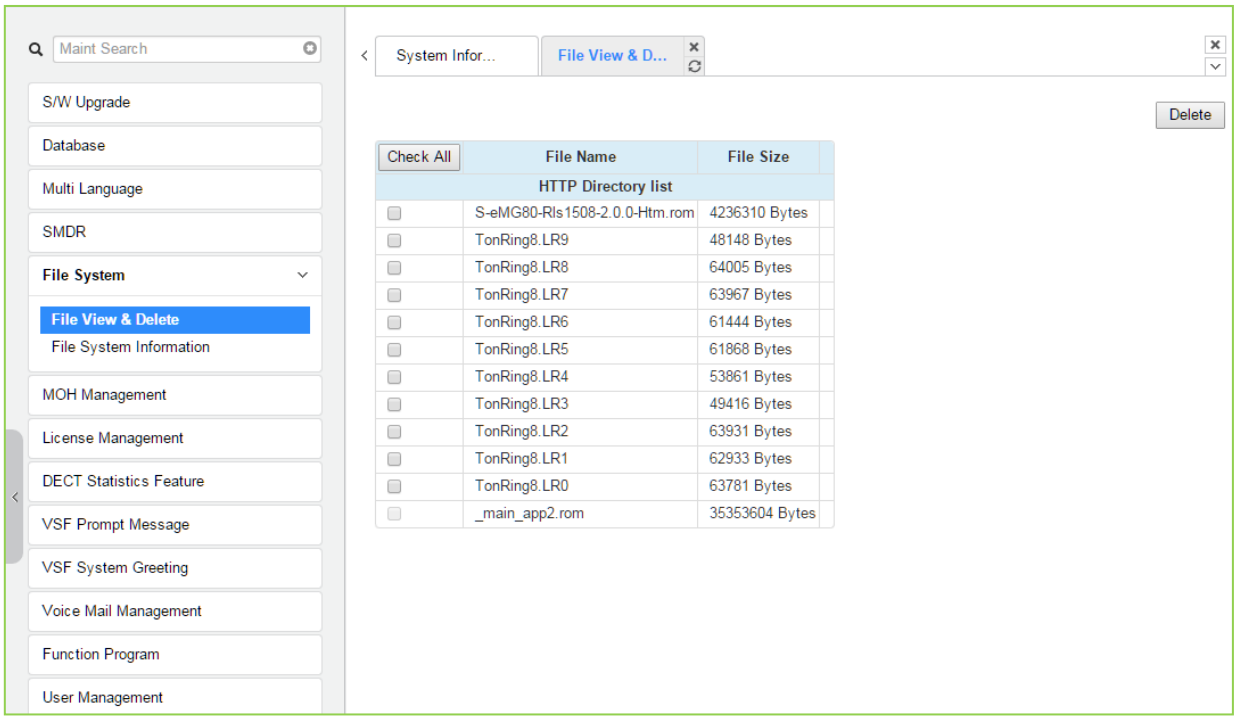


Figure 4.5.5.1-1 File View and Delete

4.5.5.2 File System Information

The File System Information page displays the disk status including the total and free disk space as shown in Figure 4.5.5.2-1. Use this page to determine if the free space on the disk is sufficient for uploading Upgrade files, section 4.5.1.

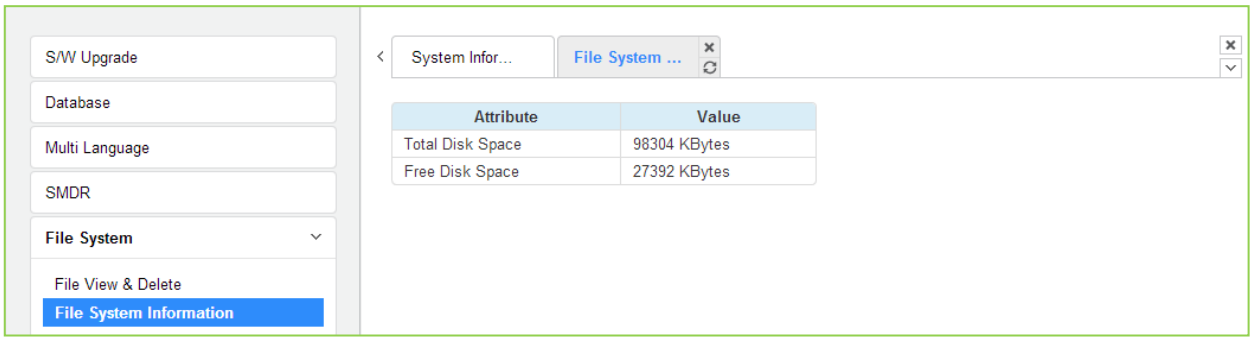


Figure 4.5.5.2-1 File System Information

4.5.6 MOH (Music On-Hold) Management

4.5.6.1 MOH Delete & Download

The MOH Delete & Download page displays a list of the thirteen files stored in the file system memory. To delete a file, check the box for the file and click **[Delete]**. Files can also be downloaded to the PC using the **[Download]** button to the right of the file name.

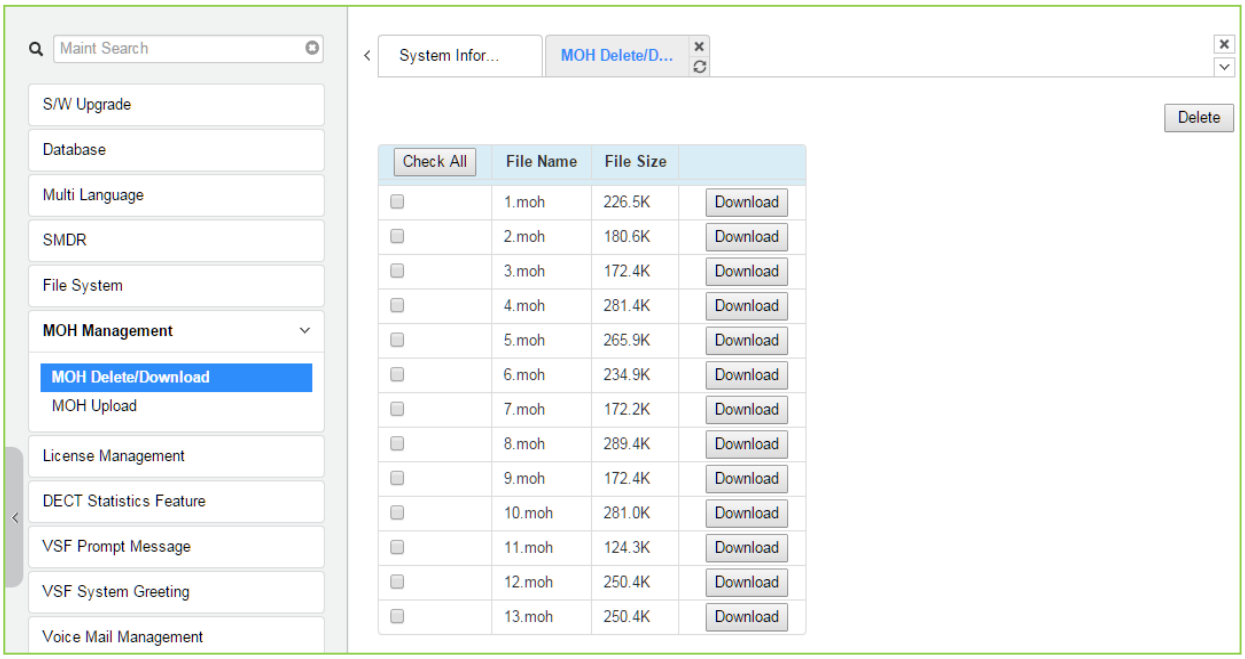


Figure 4.5.6.1-1 MOH Delete & Download

4.5.6.2 MOH Upload

Selecting “MOH Upload” will display the page shown in Figure 4.5.6.2-1. Here MOH can be uploaded to the system for each of up to thirteen (13) MOH. MOH files format must be followed as shown in the page ‘G.711 a/u-Law wav (8000Hz, 16bit, mono)’.

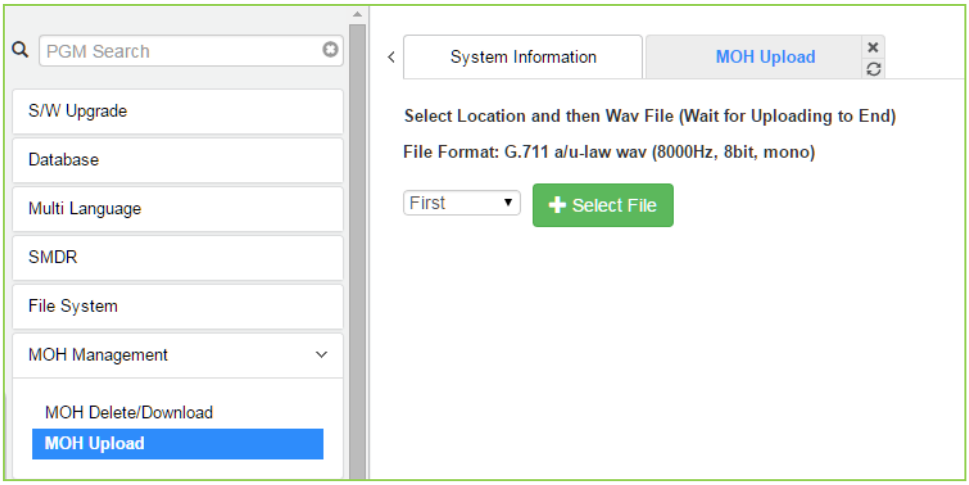
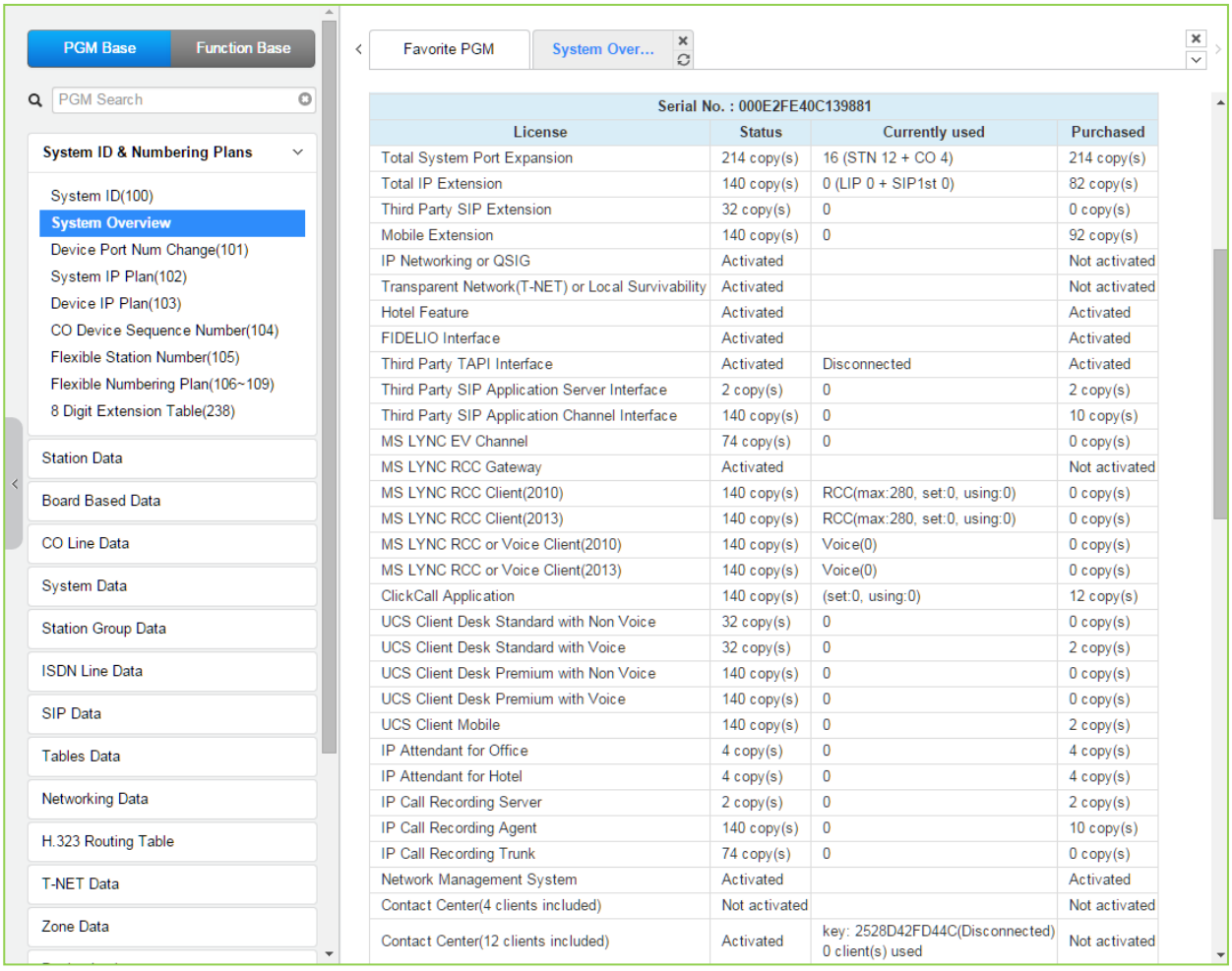


Figure 4.5.6.2-1 MOH Upload

4.5.7 License Install

Various licenses can be installed to expand capacity of the system and Auto Attendant/Voice Mail services available in the eMG system as well as soft clients and feature applications. After obtaining a license, the code is entered in the Value column as shown in Figure 4.5.7-1.



Serial No. : 000E2FE40C139881

License	Status	Currently used	Purchased
Total System Port Expansion	214 copy(s)	16 (STN 12 + CO 4)	214 copy(s)
Total IP Extension	140 copy(s)	0 (LIP 0 + SIP1st 0)	82 copy(s)
Third Party SIP Extension	32 copy(s)	0	0 copy(s)
Mobile Extension	140 copy(s)	0	92 copy(s)
IP Networking or QSIG	Activated		Not activated
Transparent Network(T-NET) or Local Survivability	Activated		Not activated
Hotel Feature	Activated		Activated
FIDELIO Interface	Activated		Activated
Third Party TAPI Interface	Activated	Disconnected	Activated
Third Party SIP Application Server Interface	2 copy(s)	0	2 copy(s)
Third Party SIP Application Channel Interface	140 copy(s)	0	10 copy(s)
MS LYNC EV Channel	74 copy(s)	0	0 copy(s)
MS LYNC RCC Gateway	Activated		Not activated
MS LYNC RCC Client(2010)	140 copy(s)	RCC(max:280, set:0, using:0)	0 copy(s)
MS LYNC RCC Client(2013)	140 copy(s)	RCC(max:280, set:0, using:0)	0 copy(s)
MS LYNC RCC or Voice Client(2010)	140 copy(s)	Voice(0)	0 copy(s)
MS LYNC RCC or Voice Client(2013)	140 copy(s)	Voice(0)	0 copy(s)
ClickCall Application	140 copy(s)	(set:0, using:0)	12 copy(s)
UCS Client Desk Standard with Non Voice	32 copy(s)	0	0 copy(s)
UCS Client Desk Standard with Voice	32 copy(s)	0	2 copy(s)
UCS Client Desk Premium with Non Voice	140 copy(s)	0	0 copy(s)
UCS Client Desk Premium with Voice	140 copy(s)	0	0 copy(s)
UCS Client Mobile	140 copy(s)	0	2 copy(s)
IP Attendant for Office	4 copy(s)	0	4 copy(s)
IP Attendant for Hotel	4 copy(s)	0	4 copy(s)
IP Call Recording Server	2 copy(s)	0	2 copy(s)
IP Call Recording Agent	140 copy(s)	0	10 copy(s)
IP Call Recording Trunk	74 copy(s)	0	0 copy(s)
Network Management System	Activated		Activated
Contact Center(4 clients included)	Not activated		Not activated
Contact Center(12 clients included)	Activated	key: 2528D42FD44C(Disconnected) 0 client(s) used	Not activated

Figure 4.5.7-1 License Install

4.5.7.1 License upload

Before License upload, make sure that the date of system is set correctly. Click the Select files button and then open the pop-up folder. Select a valid license file to upload to the eMG system and click the **[Start]** button. If the file which is sent to the system is “System License File”, it will be saved and automatically applied without restart. The enabled features by uploading license file can be shown in “System Overview” page.

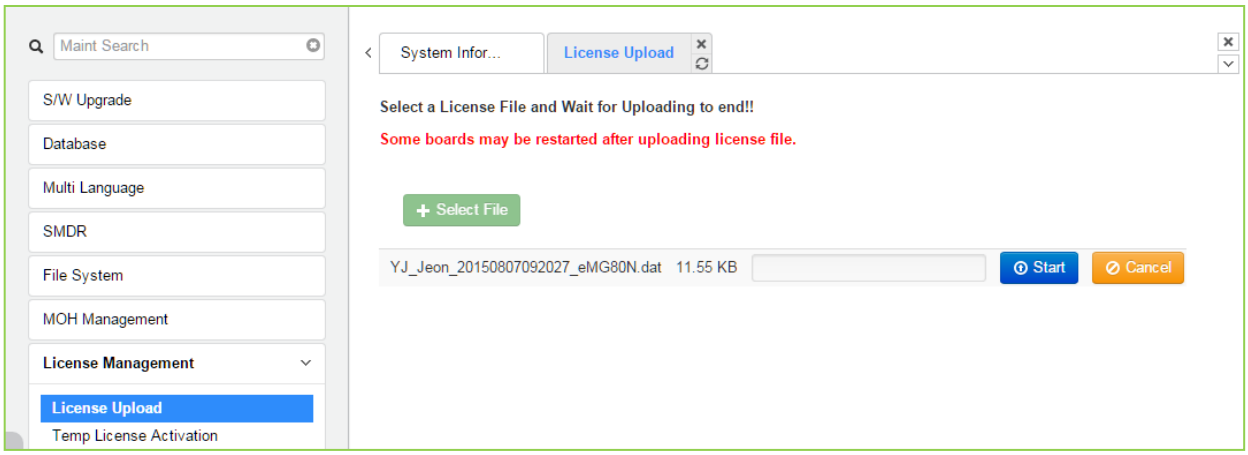


Figure 4.5.7.1-1 License Upload

You can check license upload detailed log by clicking "Log View" button.

4.5.7.2 Temp License Activation

Before Temp License Activation, make sure that the date of system is set correctly. In this page, Temp License can be activated by clicking [**Activation**] button. Remaining days and activation times are displayed in State column. The Temp License can be activated totally 6 times. It is valid for 60 days at first activation and is valid 30 days from second activation. Therefore the license file which has correct port number and features must be uploaded. Otherwise, system may enter “Limited Service Mode” due to the mismatched license.

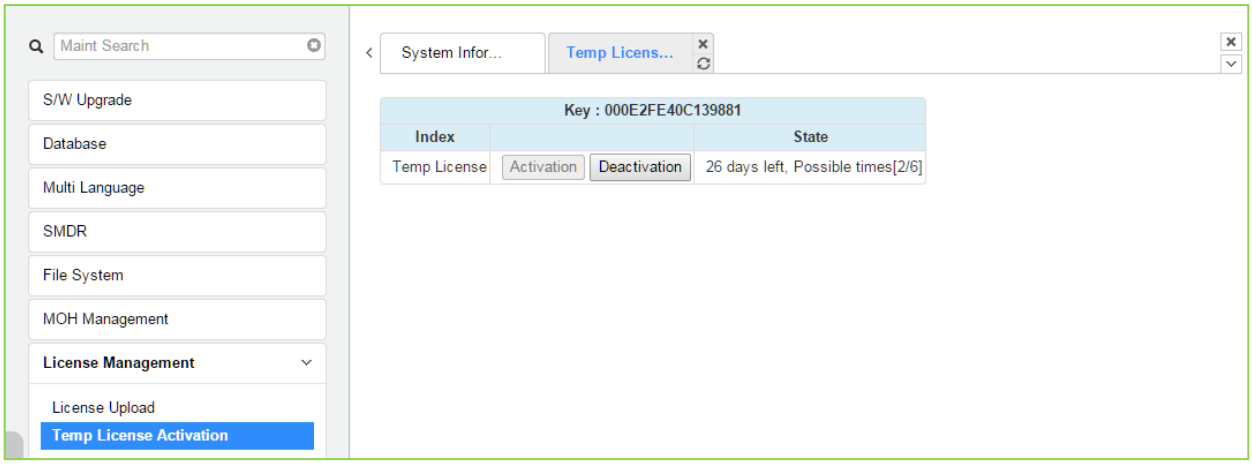


Figure 4.5.7.2-1 Temp License Activation

Notification

1) Please backup your DB before you activate a temporary license.
2) Must verify the present license before the temporary license expires.
3) If a temp license expires, upload a new license file or use within the scope of current license file. Otherwise, the system may go to [Limited Service Mode].

4.5.8 DECT Statistics Feature

Selecting DECT Statistics Feature displays the page shown in Figure 4.5.8-1. Select the desired radial button and, where needed, enter the WTIB sequence number then click **[Send]** to view the statistics.

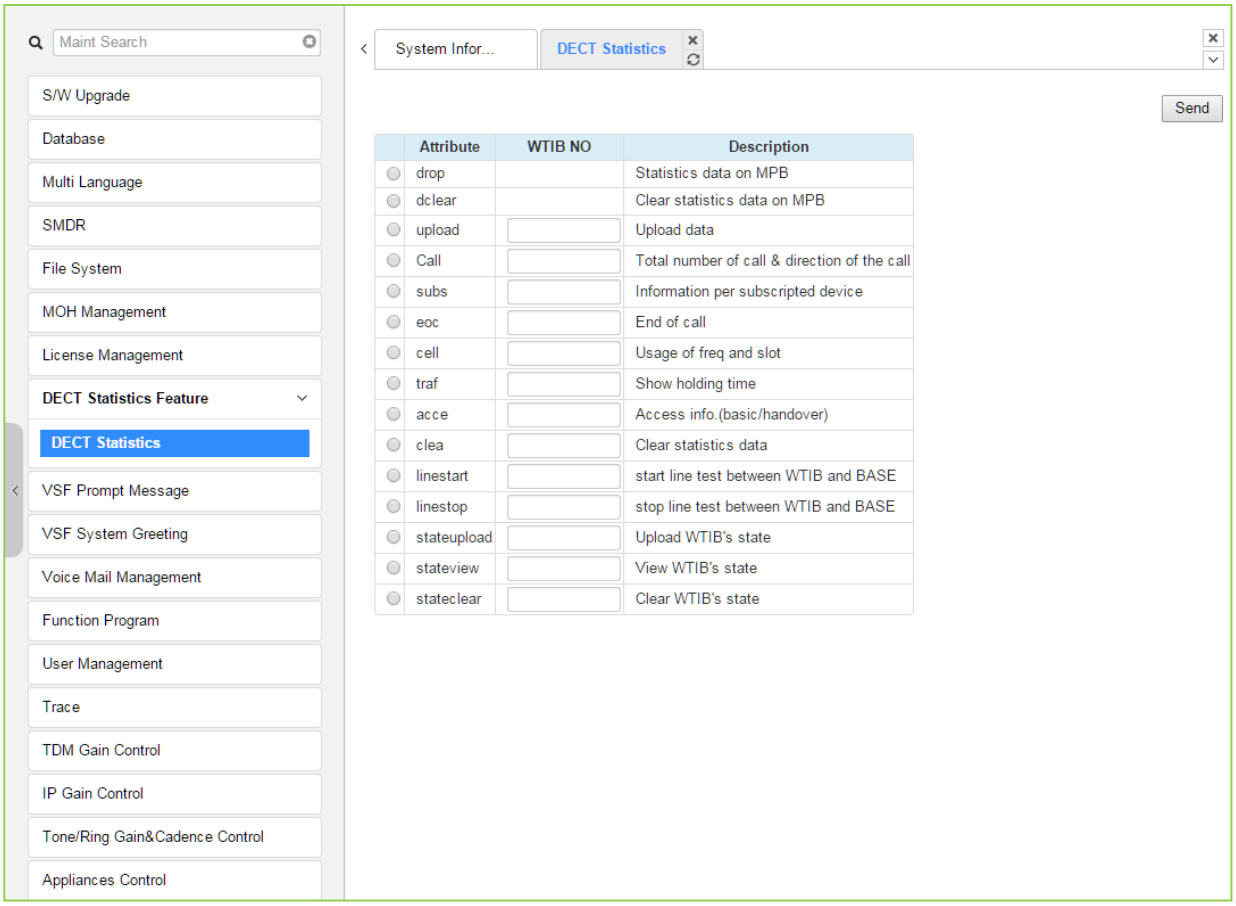


Figure 4.5.8-1 DECT Statistics Feature

Selected DECT statistics will be display.

4.5.9 VSF Prompt Upload

iPECS eMG delivers system prompts in up to six (6) languages. The prompts for each language are stored in a separate file. Files for each of the languages supported are available from the local Ericsson-LG Enterprise representative. The entire prompt file or individual prompts may be uploaded to the system. Once uploaded to the system the file is employed to play prompts to iPECS eMG user.

VSF prompt sub-menu is a little different between eMG80 and eMG800.

- Prompt selection: only eMG800 is available.
- Prompt Upload /Delete: eMG80 and eMG800 are available.
- Individual upload: eMG80 and eMG800 are available.

4.5.9.1 Prompt selection

Selecting Prompt Upload/Delete displays the page shown in Figure 4.5.9.1-1. From this page, the entire prompt file for selected languages can be selected the desired prompt files. The combo box button is used to upload files among 18 languages.

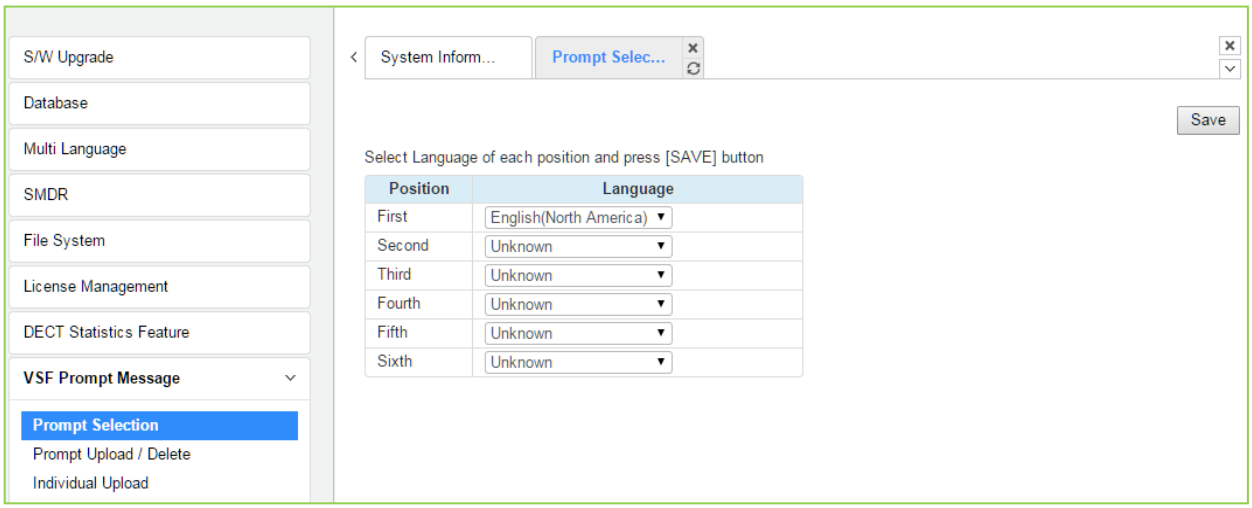


Figure 4.5.9.1-1 Prompt Selection for eMG800

4.5.9.2 Prompt Upload/Delete for eMG80

Selecting Prompt Upload/Delete displays the page shown in Figure 4.5.9.2-1 & Figure 4.5.9.2-2. From this page, the entire prompt file for selected languages can be deleted and updated prompt files uploaded to the system. The Select file button is used to upload files. The check box and Delete button are used to delete old or unused language files.

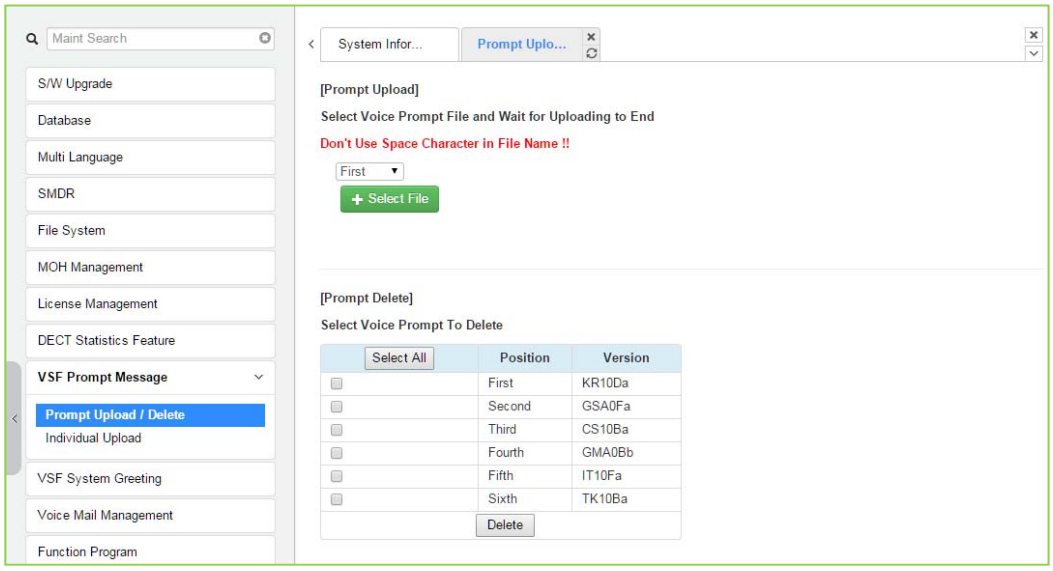


Figure 4.5.9.2-1 Prompt Upload & Delete for eMG80

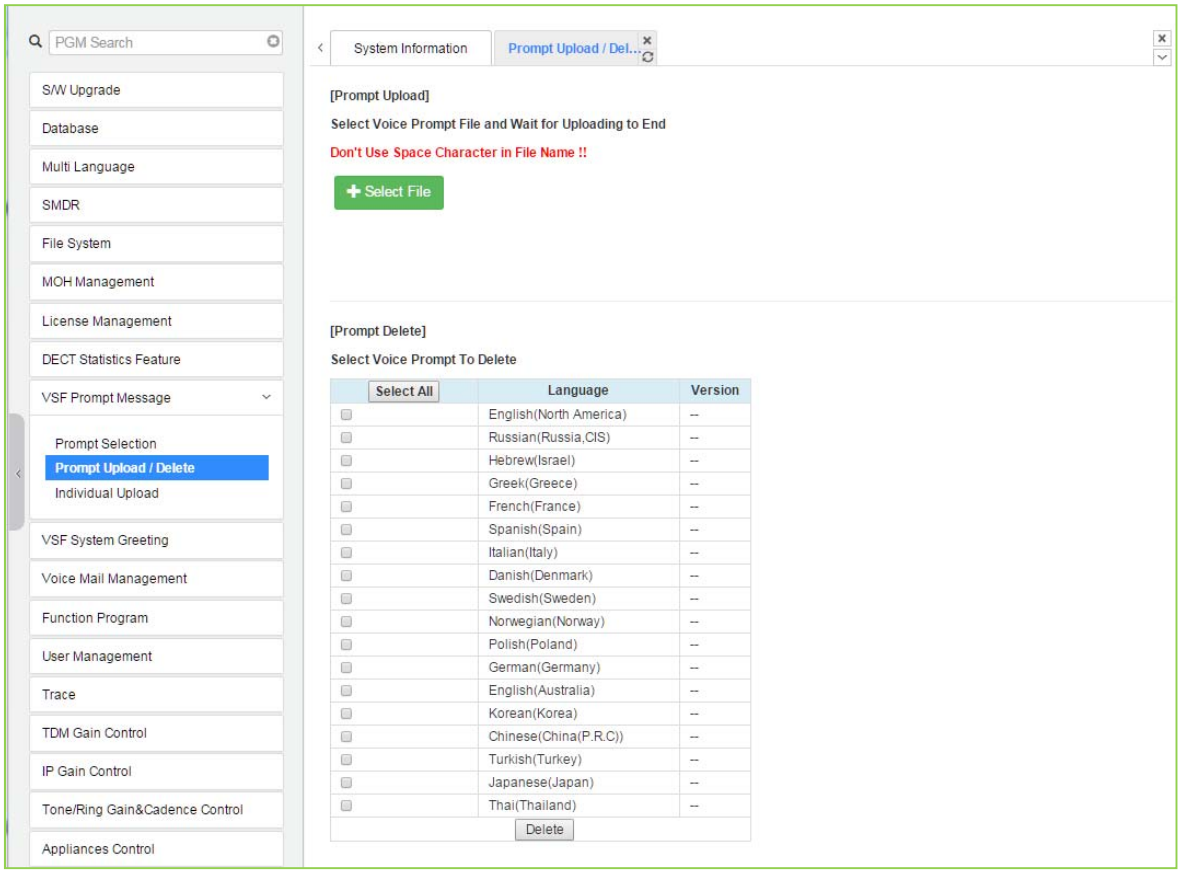


Figure 4.5.9.2-2 Prompt Upload & Delete for eMG800

4.5.9.3 Individual Upload

Selecting “Individual Upload” will display the page shown in Figure 4.5.9.3-1. Here individual system prompts can be uploaded to the system for each of up to six (6) languages. Prompt files must be appropriately named and must be in a G.711 a/u-Law format.

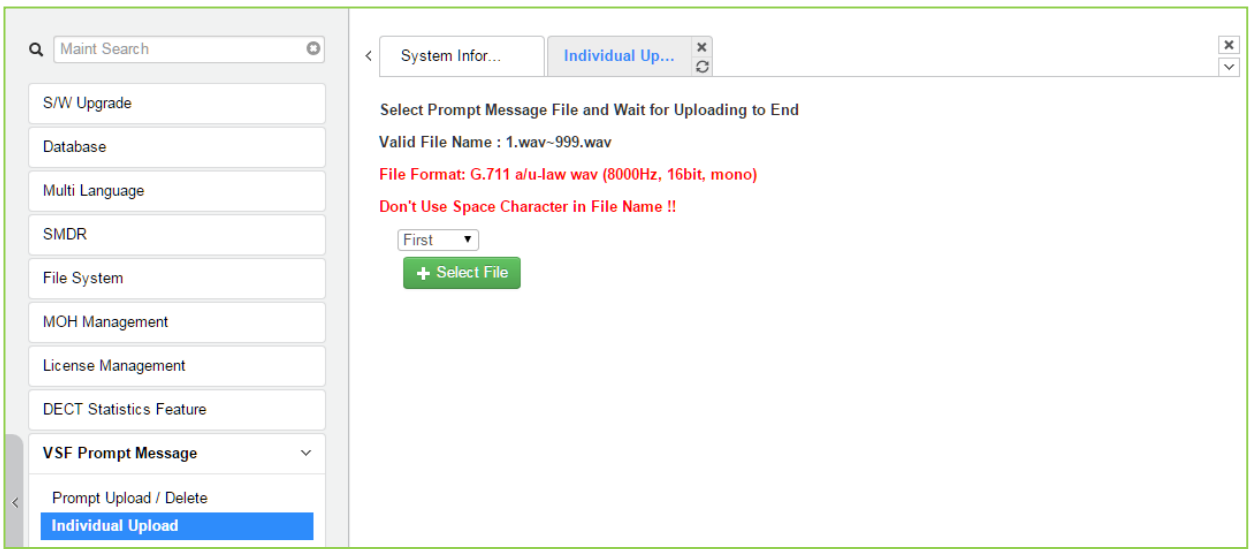


Figure 4.5.9.3-1 Individual Upload

4.5.10 VSF System Greeting

The System Greetings (Announcements) can be downloaded from the system or Uploaded to the system. Individual announcements can be recorded externally and then uploaded to the system. Like prompts, the individual announcement files must be in a .wav format using the g.711 codec. Individual greetings for each Language position can be uploaded as well as downloaded. Clicking on the message will download the message to the browser, which will play the message. To save the message, right click and select save as. Locate a directory and change the file name, if desired and click save.

All announcements can be downloaded from the system as a back-up file and uploaded to the VSF memory as required.

4.5.10.1 Individual Upload

Selecting Individual Upload displays the page shown in Figure 4.5.10.1-1. From this page, individual pre-recorded announcements for each language position can be uploaded from the PC to the VSF gateway. Select the language position and assure the file name matches the appropriate System Announcement number. The file format must be shown on the page.

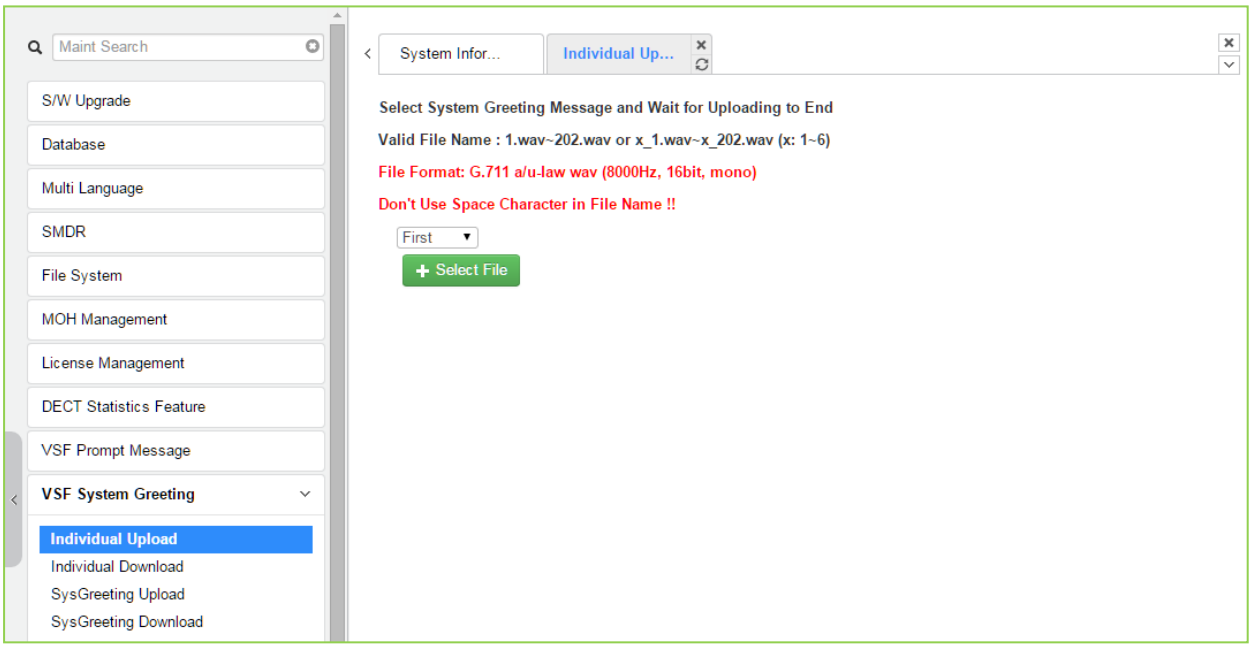


Figure 4.5.10.1-1 Individual Upload

4.5.10.2 Individual download

Selecting Individual Download displays the page shown in Figure 4.5.10.2-1. The page will display a list of System announcement in the VSF memory. Individual files may be downloaded with the Download button next to the announcement file name or using the checkbox and the delete button the announcement can be deleted from the VSF memory.

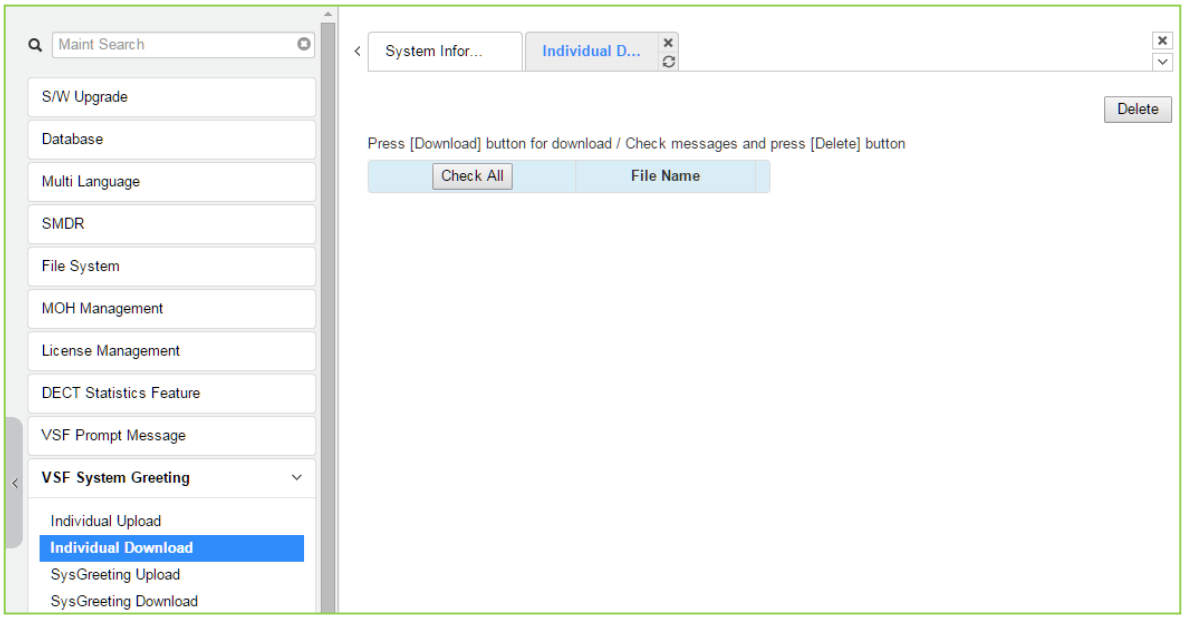


Figure 4.5.10.2-1 Individual Download

4.5.10.3 System greeting Upload

Selecting System Greeting Upload displays the page shown in Figure 4.5.10.3-1. From this page, announcements for each language “Position” can be uploaded to the VSF memory. First, select the language position then click the Select Files button to select the file to upload from the PC.

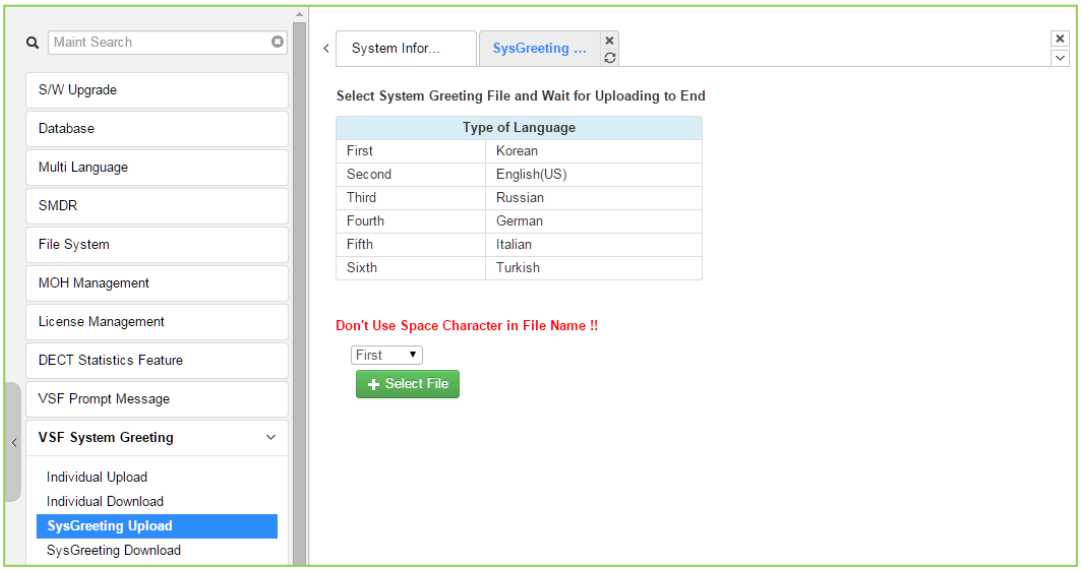


Figure 4.5.10.3-1 System Greeting Upload

4.5.10.4 System greeting Download

Selecting System Greeting Download displays the page shown in Figure 4.5.10.4-1. From this page, announcements for each language “Position” can be downloaded from the VSF memory as a back-up file. First, select the language position, click the Download button then follow the normal save file process to store the file to the PC.

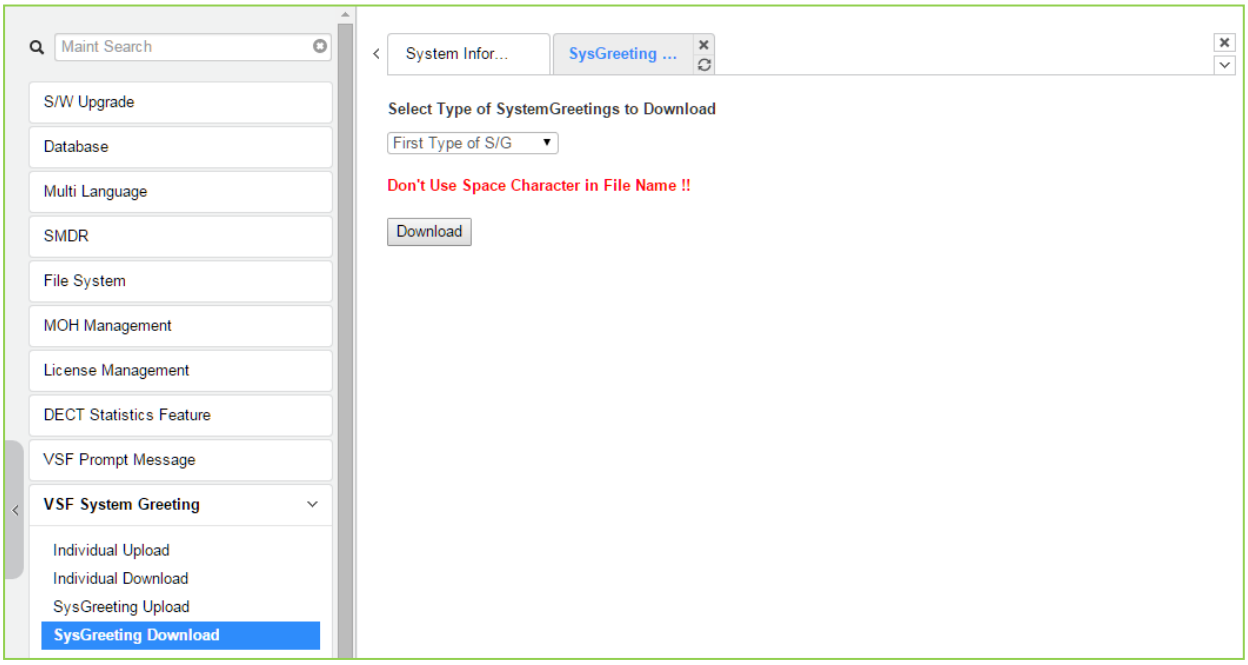


Figure 4.5.10.4-1 System Greeting Download

4.5.11 Voice Mail Management

The Voice Mail Management permits the administrator to view the status of the built-in Voice Mail boxes and delete the all messages, delete messages for specific stations, or back-up all the messages to the PC.

4.5.11.1 Voice Mail Delete

Selecting Voice Mail Delete displays the page as shown in Figure 4.5.11.1-1. From this page, messages stored in the VMIU (VMIB) can be deleted for all stations or a station range. In addition, using the “Display Station Voice Mail Status” button, the number of messages for each station is displayed.

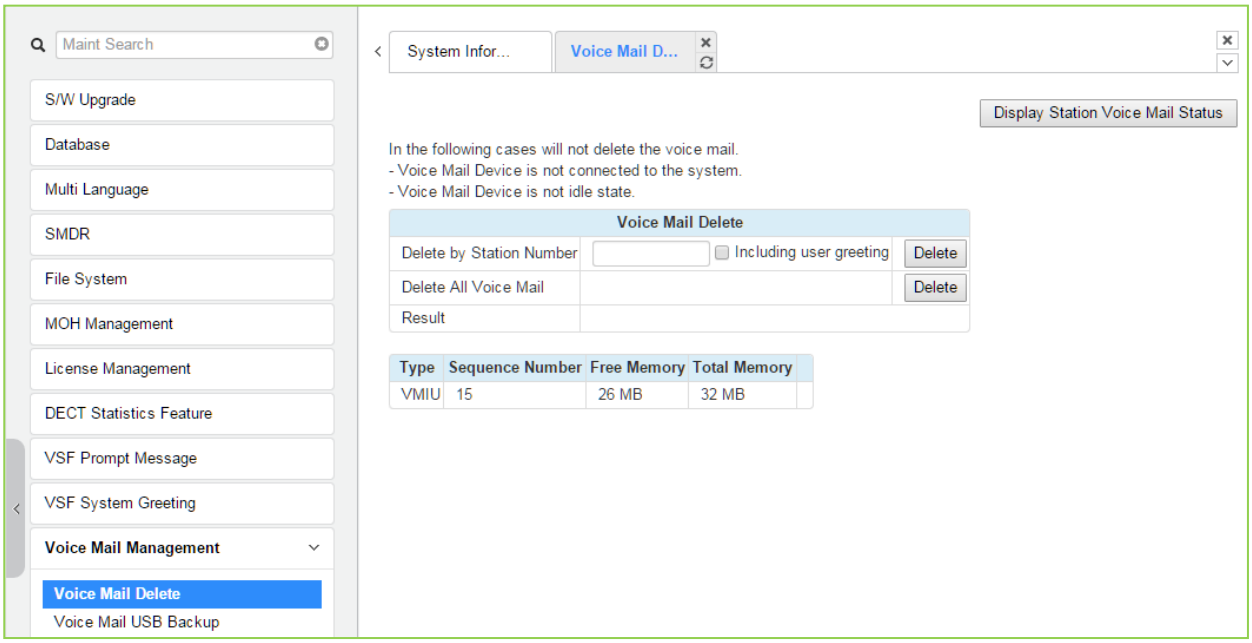


Figure 4.5.11.1-1 Voice Mail Delete

A user can delete user greeting if you set "Including user greeting" option when a user delete voice mail.

4.5.11.2 Voice Mail USB Backup

Selecting Voice Mail Backup displays the page shown in Figure 4.5.11.2-1. This page permits the Administrator to send all Voice messages in the VMIU/VMIB memory to the USB port of the KSU. Note the VSF must be idle and a USB memory device installed in the system.

The eMG800 has only [Backup Voice Mail to USB (VMIU)].

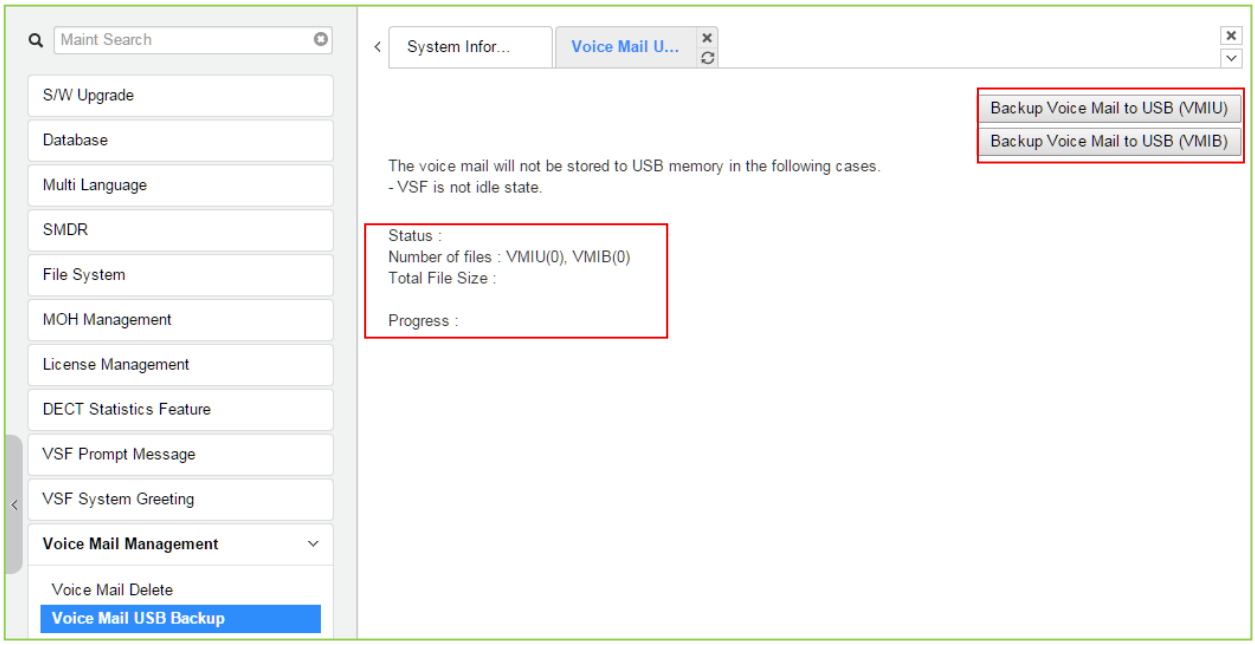


Figure 4.5.11.2-1 Voice Mail USB Backup

To back up Voice Mail, click the backup Voice Mail to USB button. User can find all information about the status, Number of files, Total file size, and the percentage of Progress by text.

4.5.12 Function program

The Function Program allows the administrator to build a set of programs with attributes in a structure customized to the administrator. The Function programs can then be accessed under the Administration pages using the “Function Base” button at the top of the left navigation page. Single level and multi-level programs can be structured. The User Function Management permits functions to be deleted or, with the “Add Function” button, new program functions can be added.

4.5.12.1 User Function Management Page

Selecting User Function Management displays the page shown in Figure 4.5.12.1-1. Using the check box and Delete button Function programs previously saved can be deleted.

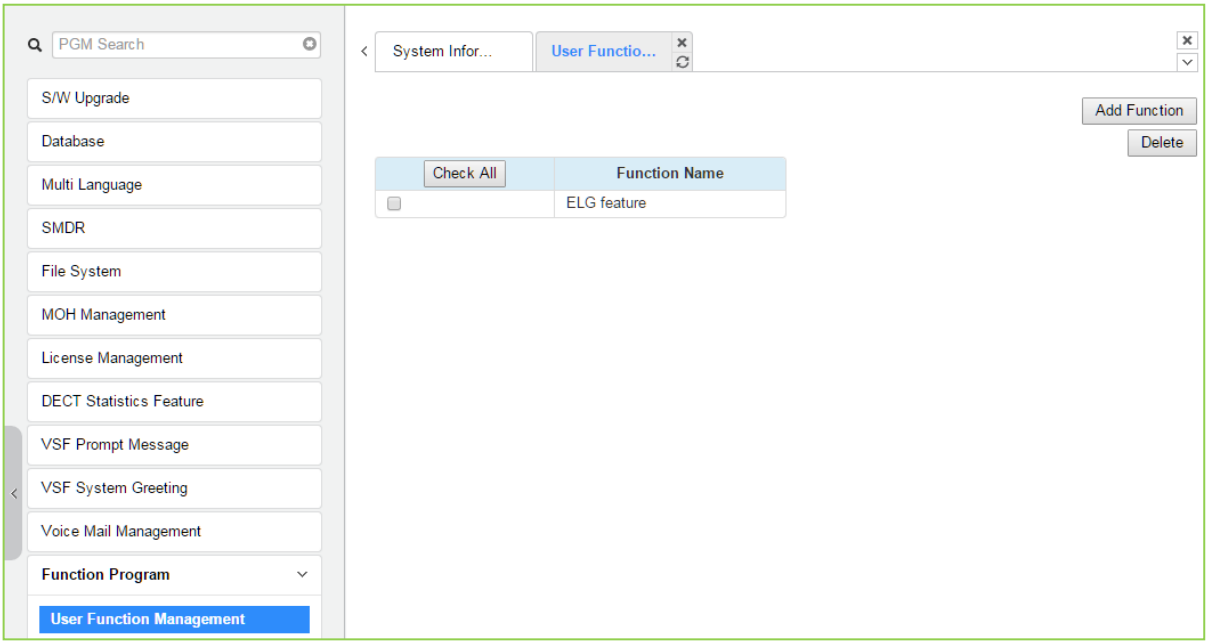
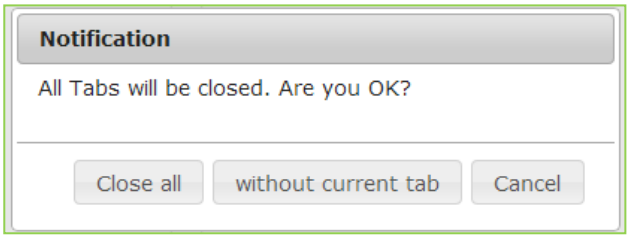


Figure 4.5.12.1-1 User Function Management Page

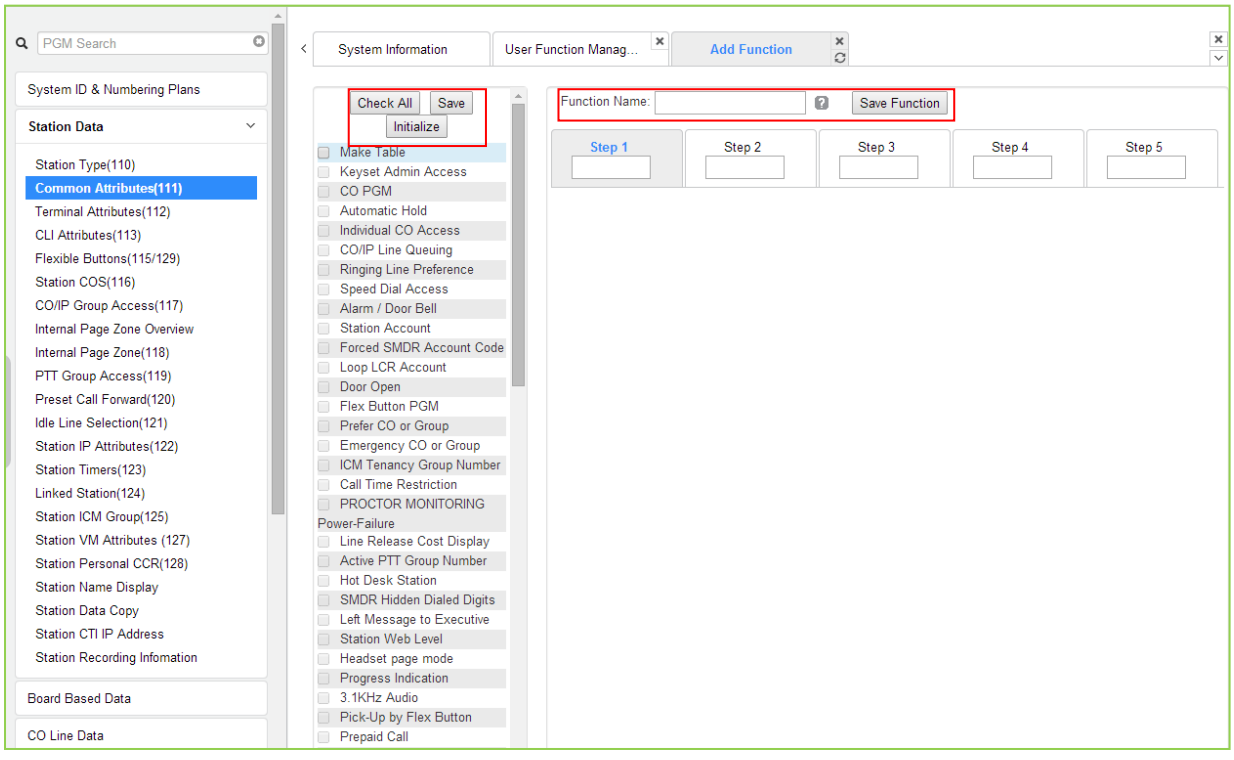
Adding Function

This step is divided into 5 steps and you can make the desired function each step. The following is the guide to make Name and add the function on each step:

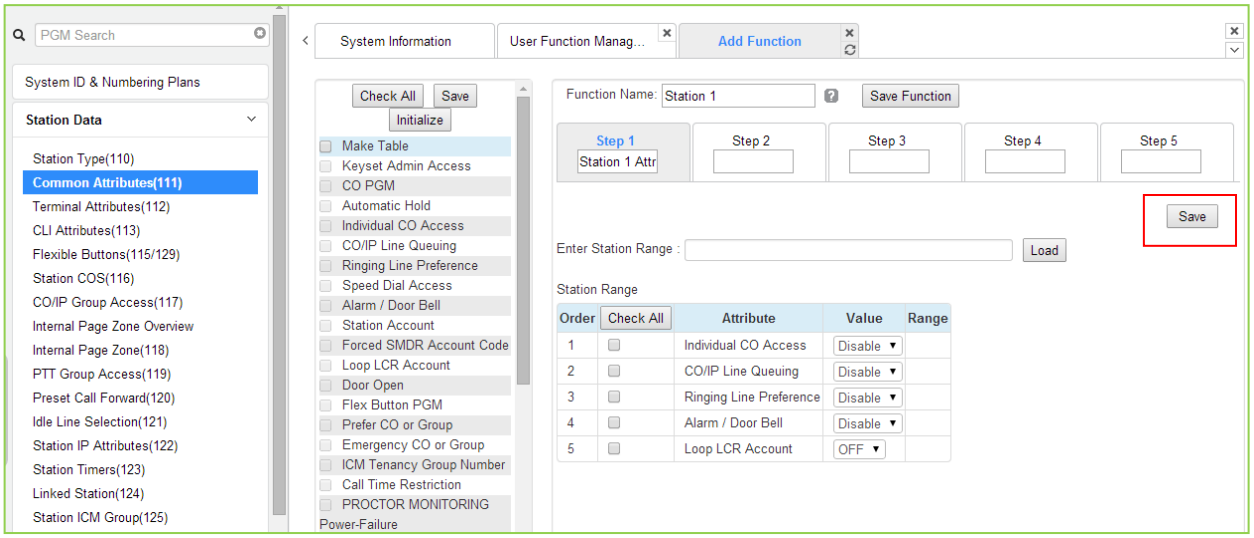
1) To enter the function name, English, Numbering, Underscore (_) and Parentheses are available. Function name has to be filled out.
2) To enter the step name, English, Numbering, and Special letters except Double quotation marks are available.
3) The step name doesn't need to be filled out, but the function has to be configured each step.
4) To cancel or close this tab, click the close button (X) and pop up the blow;



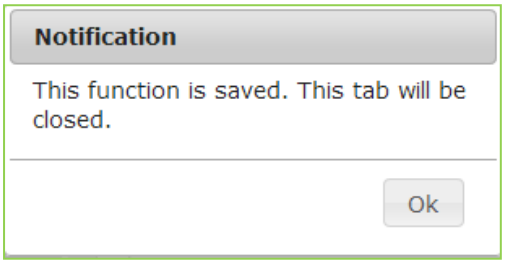
1. Click the Add Function button.
2. On the below window, click the desired PGM in the left frame. First fill out the function name and step name. To configure the step 1, click the Make table to check the desired function and then click the Save button.
   - ✓ Check All: check all functions
   - ✓ Save: Save the checked functions
   - ✓ Initialize: Initialize the checked functions

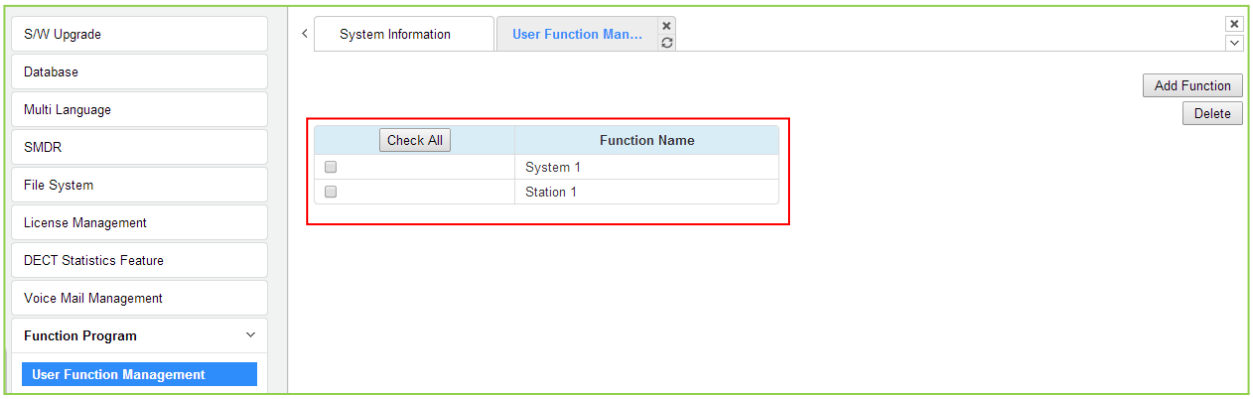


3. The selected functions are displayed and click the Save button after checking each functions. The rest steps are the same as the step 1.



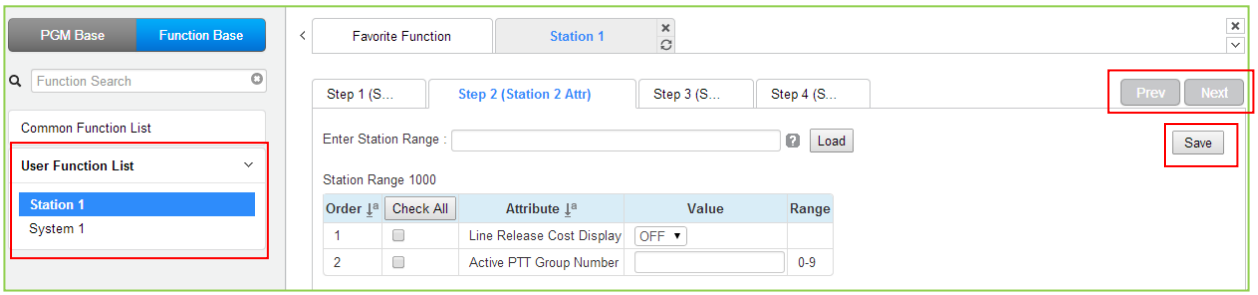
4. Finally, click the Save Function to save and then click the OK button.





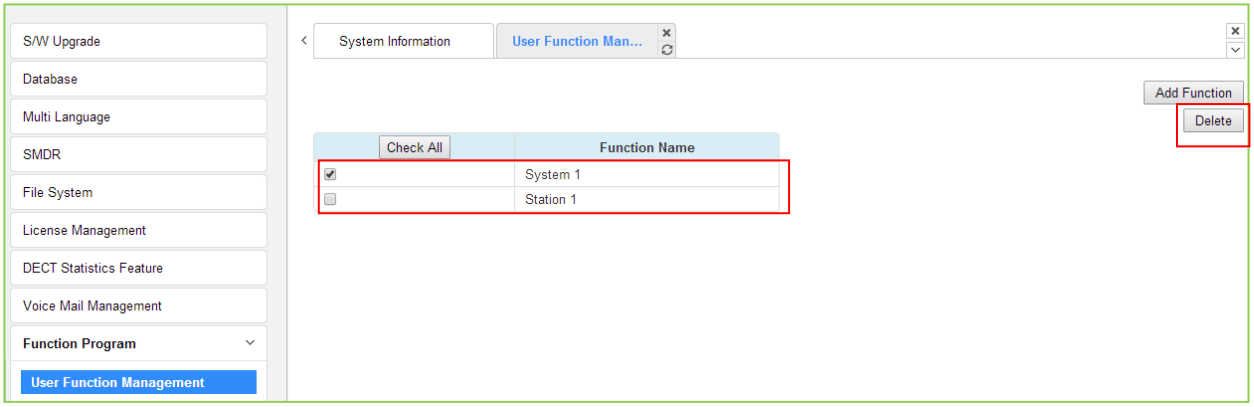
5. To check the function, click Function Base button in the left frame and User Function List and you will see the following figure.

   You can enable or disable the function by checking each function and then click the save after setting Value. Also move to each step by clicking the next button or Previous button.



Deleting Function

To delete the user function, click Maintenance at the top of window and then click the Function Program -> User Function Management. Check the desired function to delete and click the delete button.



4.5.13 User Management

iPECS eMG supports up to 10 system account (ID and password). The Access privilege is determined based on the entered system account (ID/Password). Station user ID and password is managed in PGM 227.

Please follow up the below instructions to make User ID:

1) Maximum 16 characters & digits
2) In English only
3) First letter must be Alphabet. The rest are available: Alphabet, number, underscore (_)
4) Don't use 'blank'.

It is strongly recommended that a unique User ID and strong password be entered to minimize the risk of admin and maintenance access by unauthorized personnel.

User should register more than a maintenance ID.

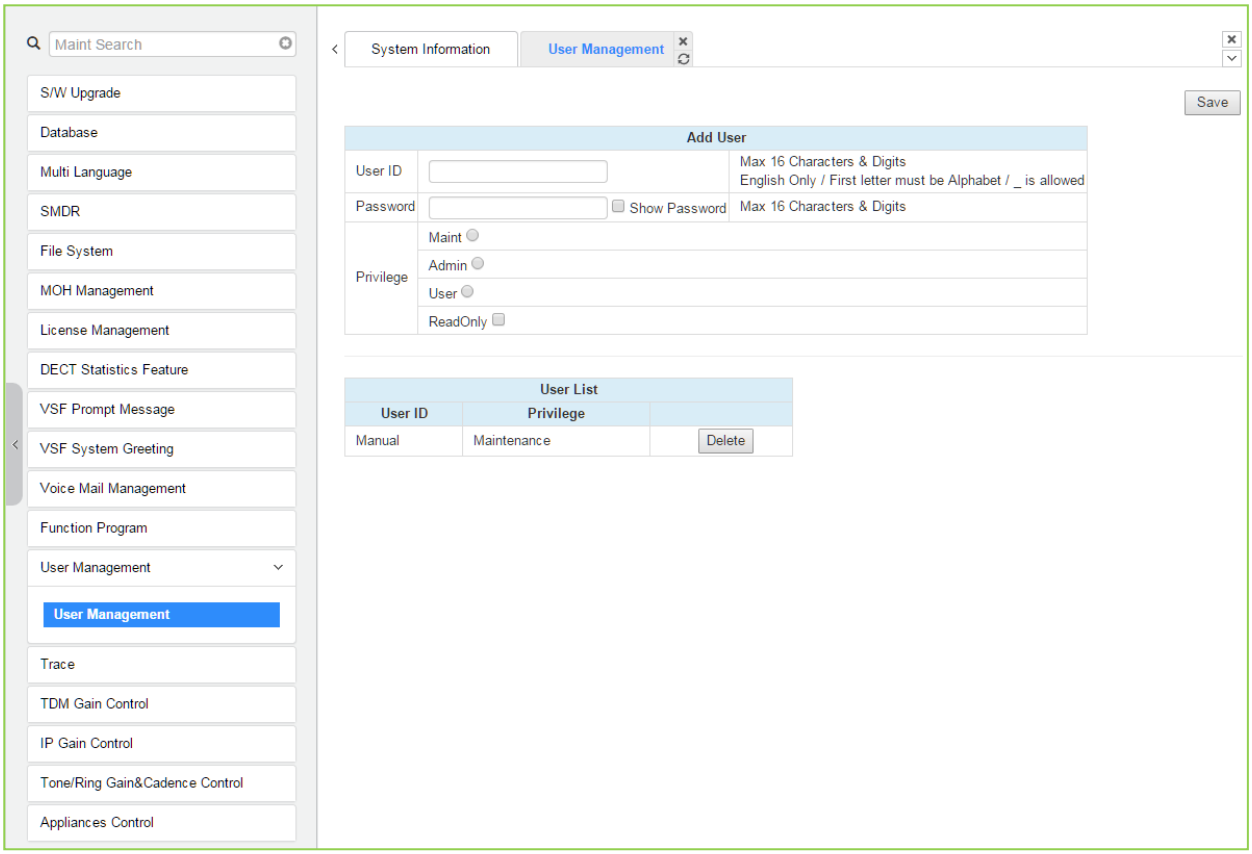


Figure 4.5.13-1 User Management

Up to 50 users ID and password can be registered.
Up to 10 users can login to a system simultaneously.

4.5.14 Trace

The eMG system software incorporates routines to monitor and output detailed call and feature processing information, and event logs. Information is provided on a system or device level as requested. User can find the information on this page.

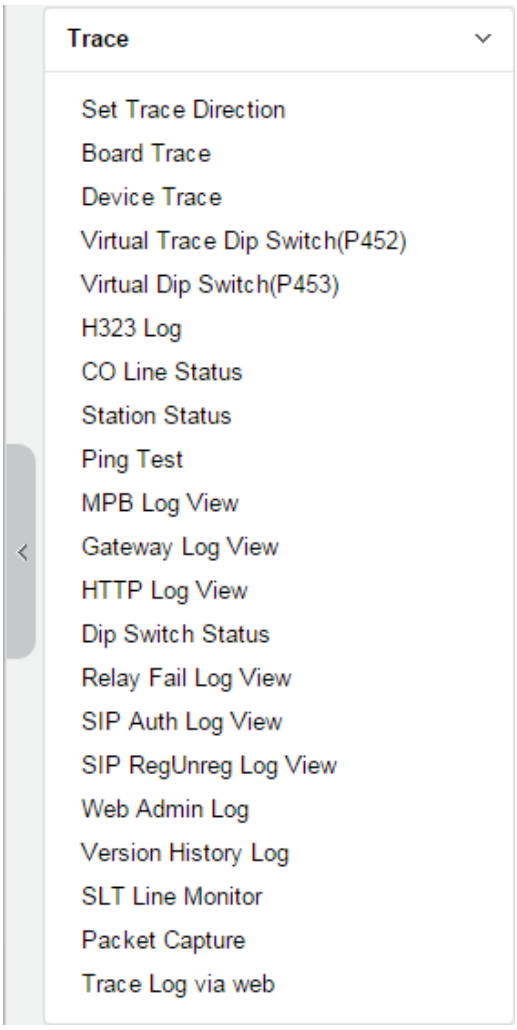


Figure 4.5.14-1 Trace Main Page

We explain [Packet Capture] and [Trace Log via web] among them because it is very useful to use Web admin.

Packet Capture

A user can start and stop capturing packets and download packet capture result. The dump file will be replaced when new capturing is started.

Default option is included. The file name is packetdump.cap. -i eth0 -w packetdump.cap -c 10000

- Option explanation

  protocol filter: tcp or udp or icmp

  port filter: both source and destination port -> port #number, source port -> src port #number,

destination port -> dst port #number

IP filter: both source and destination host IP -> host #IP_ADDR, source host IP -> src host #IP_ADDR, destination host IP -> dst host #IP_ADDR

Example

UDP and Port 5588 and Source IP address 10.1.1.100: udp and port 5588 and src host 10.1.1.100

Trace Log via web

A user can start and stop logging and download trace log result. The log file will be replaced when new logging is started.

1. Set 'Trace Attribute' to 'COM1(UART1)' from 'Set Trace Direction' menu.
2. Set 'Board Trace', 'Device Trace' and 'Virtual Trace Dip Switch(P452)' menu.
3. Click 'Start' button.

4.5.15 TDM Gain Control

Control voice gain of TDM device for each direction. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.

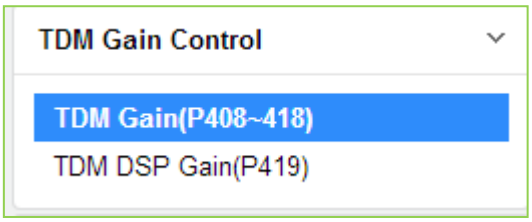


Figure 4.5.15-1 TDM Main Page

4.5.16 IP Gain Control

Audio gain for signals from and to each type of device is adjustable through the IP Gain Control page. The default gain values for the system are set to match the Nation Code. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.

Figure 4.5.16-1 IP Gain Control Main Page

4.5.17 Tone/ Ring Gain & Cadence Control

Selecting Tone Table will display the page shown, Figure 4.5.17-1. Here the tones, cadence and gain used with features can be managed. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.

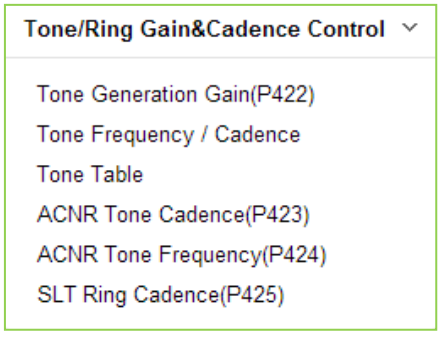


Figure 4.5.17-1 Tone/Ring Gain & Cadence Control Main Page

Control system tone/ring cadence and frequency.

System announcement or music can be provided instead of system ring/tone if it is assigned in tone table.

4.5.18 Appliances Control

The Appliances Control page, Figure 4.5.18-1, permits control of several characteristics of IP phones and analog CO lines such as Comfort Noise level and side tone. For more information to change Value, it is recommended that you ask your dealer or an authorized Ericsson-LG Enterprise representative. We can't guarantee the damage according to changing Value arbitrarily.

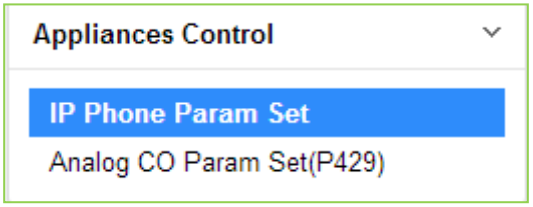


Figure 4.5.18-1 Appliances Control Main Page

4.6 Station Program (User Portal)

This Station Program helps our customer program each station so that each station can be easily set the value and find which features are used. As you know well, the range is different between eMG80 and eMG800 for some station programs. For information, refer to the above section.

To access Station program:

First, set the station authorization code table (PGM 227) for each station as shown in Figure 4.6-1 and then click **[Log Out]**.

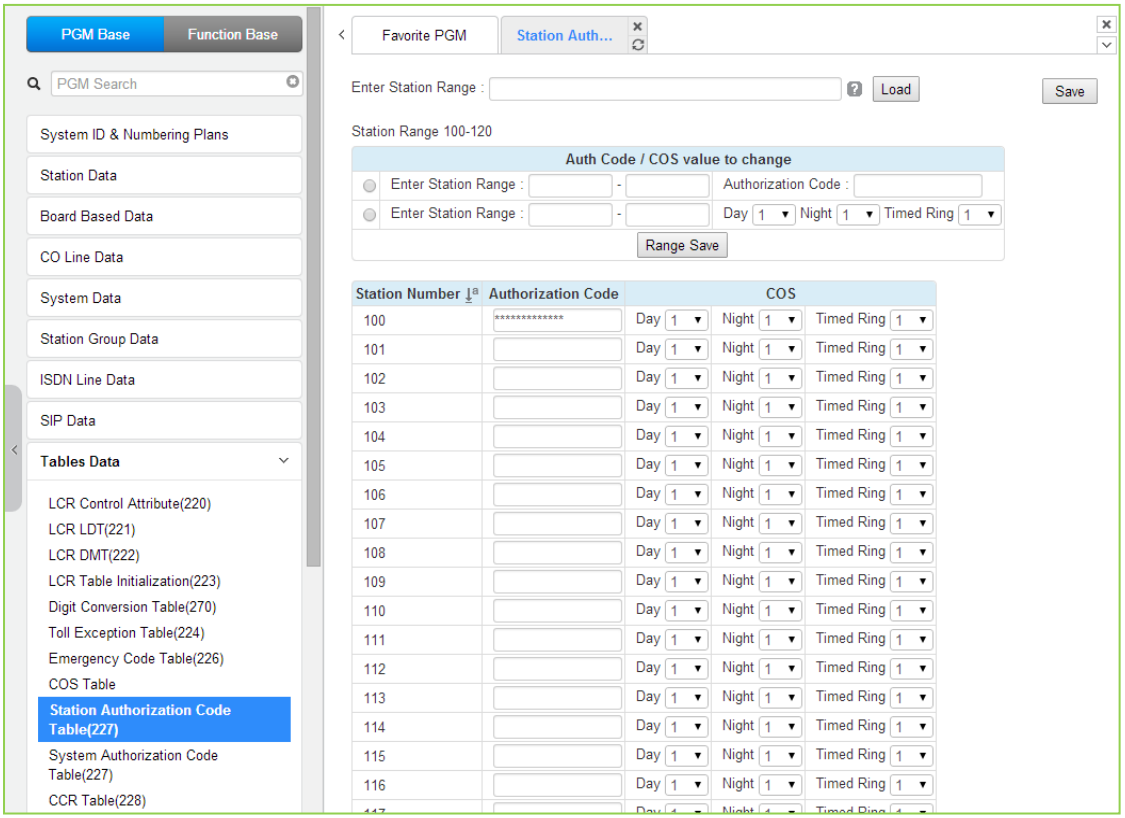


Figure 4.6-1 Station Authorization Code Table – PGM 227

Second, enter the desired station number in the user ID and enter the authorization code in the password as shown in Figure 4.6-2. (E. g. enter Station number ‘100’ for eMG80 & ‘1000’ for eMG800 and Authorization code).

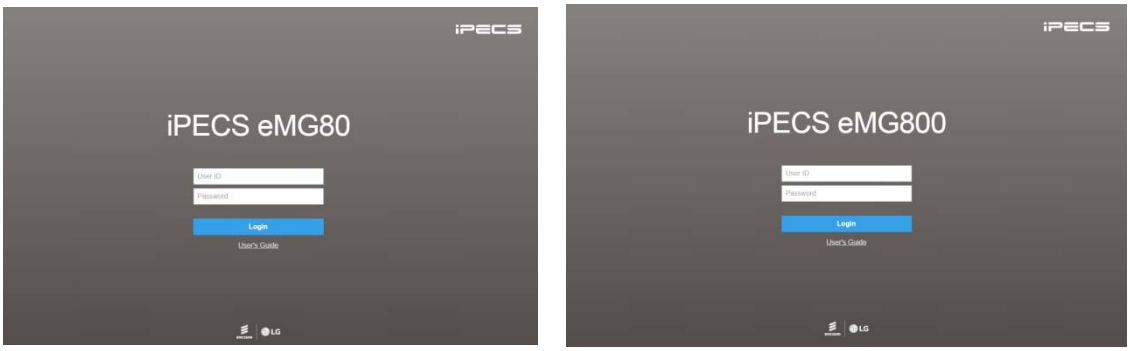


Figure 4.6-2 Login Page

You will see the below Web page and find Station program sub-menu in the left frame.

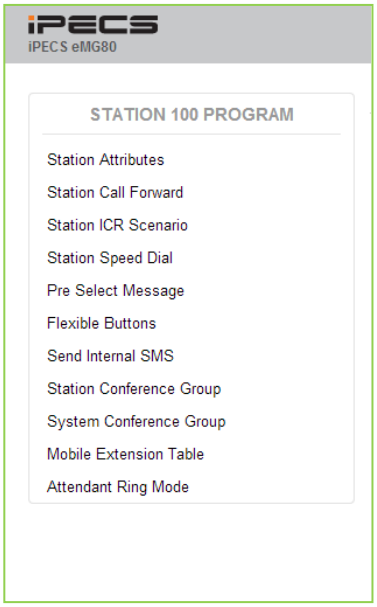


Figure 4.6-3 eMG80 Station Program Main Page

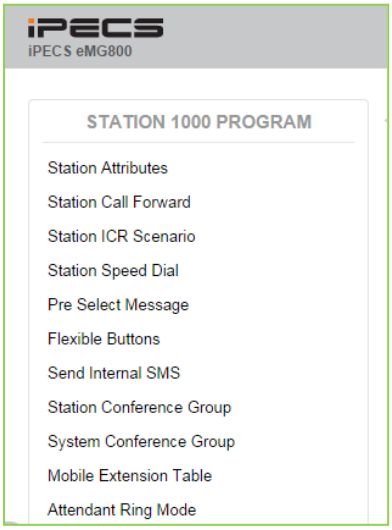


Figure 4.6-4 eMG800 Station Program Main Page

In the Station Program, users can modify various station attributes, set-up call forwarding, create Station ICR scenarios, assign flexible buttons, program Station Speed dial numbers, send SMS and create conference groups. The following sections provide details on each of the available Station Program Web pages.

The Station Program main page has three sections,

Station selected – Upper frame

Web site directory & navigation section – Left frame

Info and Entry section – Central frame

4.6.1 Station Attributes

Selecting Station Attributes will display the input entry page, Figure 4.6.1-1. Selecting the blue colored text in the Table header will sort the table based on the selected column.

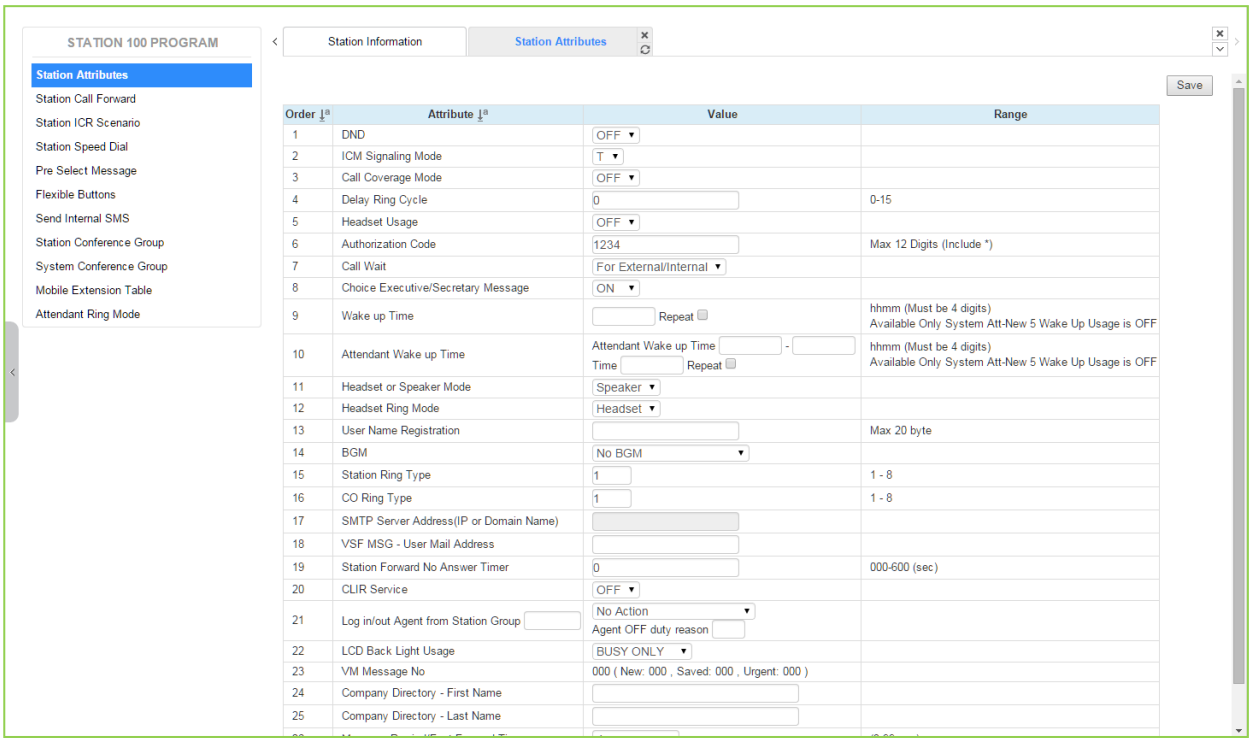


Figure 4.6.1-1 Station Portal Station Attributes

Station Attributes define features and functions available to the station. Refer to Table 4.6.1-1 for a description of the features and the input required.

Table 4.6.1-1 STATION ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
DND	Enables DND to be activated by the station.	OFF ON	OFF
ICM Signaling Mode	Selects Hands free, Privacy or Tone ring ICM Signaling mode.	H/T/P	T
Call Coverage Mode	The Call Coverage feature permits an iPECS Phone user to receive ring and answer calls at other stations.	OFF ON	OFF
Delay Ring Cycle	When a covered station rings, the **{CALL COVERAGE}** button LED will flash at the covering station and the station will receive ring (immediate or delayed, 0 to 9 ring cycles).	0~15	0
Headset Usage	Select Headset usage for New IP Phone.	OFF ON	OFF
Authorization Code	Authorization codes are employed to control access to the system resources and facilities. Walking COS, CO/IP Group access DISA callers and certain Call Forward types may require the input of a valid Authorization code. Codes up to 12 digits may be entered into the system	Max 12 Digits	N/A

Table 4.6.1-1 STATION ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
	database.		
Call Wait	When a busy station receives a call, the call may queue to the station instead of receiving busy tone. With Call Wait, the caller hears Ring-back and the user sees the CO line button LED flash.	OFF, For External/Internal, For External, For Internal	For External/Internal
Choice Exec/Sec Message	When a call is forward to the Secretary of an Executive/Secretary pair, messages can be left for the Executive (ON) or Secretary (OFF).	OFF ON	ON
Wake up Time	The user can register a Wake-up time and set the Wake-up alarm to repeat on a daily basis. Available only system Attendant New 5 Wake up usage is Off.	hhmm (Must be 4 digits)	
Attendant Wake up time	The user can register Attendant Wake-up time and set the Wake-up alarm to repeat on a daily basis. Available only system Attendant New 5 Wake up usage is Off.	hhmm (Must be 4 digits)	
Headset or Speaker Mode	The device, Speakerphone or Headset, to receive audio for a call can be selected.	Speaker/ Headset	Speaker
Headset Ring Mode	Ring for an incoming call can be delivered to the Headset, Speaker or both the Headset and Speaker.	Speaker/ Headset	Headset
User Name Registration	Enables user name entry. The name is displayed on the LCD of iPECS Phones.	Max. 20 characters	
BGM	Enables background music. The BGM is played while the iPECS phone is idle.	No BGM, Internal/External1, External Music 2, VSF MOH, SLT MOH1~5, VSF MOH2~3	No BGM
Station Ring Type	Select Station Ring type from 1 to 15.	1-15	1
CO Ring Type	Select Station Ring type from 1 to 15.	1-15	1
SMTP Server Address	This field defines the address or url of the SMTP mail server for the notification.	IP v4 addressor Mail server name	
VSF MSG – User Mail Address	The VMIU and VMIB include notification of new messages to the user's voice mail. This field defines the e-mail address to notify when a new message is received at the VMIU or VMIB.	e-mail address	
Station Forward No Answer Timer	This timer determines the duration the station will ring prior to Ring-No-Answer Forward. This setting affects both manual and Preset Call Forward and overrides the System No answer forward timer.	000-600 (Sec.)	000
CLIR Service	CLIR (Calling Line Identification Restriction), an ISDN service, removes calling party Id sent from the ISDN to the called party with a RESTRICT instruction in the SETUP message. If enabled here, the system will send the RESTRICT instruction to the PSTN when an outgoing ISDN call is placed.	OFF ON	OFF
Log in/out Agent from Station Group	Log in & Log out code.	No Action/ Log in Agent-ON	No Action

Table 4.6.1-1 STATION ATTRIBUTES

ATTRIBUTE	DESCRIPTION	RANGE	DEFAULT
		Duty/ Log out Agent- OFF Duty	
LCD Back Light Usage	The backlight of iPECS IP and LDP Phones is assigned to stay off, light only when the station is busy, or light constantly.	ALWAYS OFF, BUSY ONLY, ALWAYS ON	BUSY ONLY
VM Message No	This field displays the message status of the built-in Voice Mail. The number of New, Saved and Urgent messages is shown.		
Company Directory - First Name	The user's First Name for the Company Directory is assigned.		
Company Directory - Last Name	The user's Last Name for the Company Directory is assigned.		
Message Rewind/Fast-Forward Time	When the user selects to Rewind or Fast-forward while listening to a message in the built-in Voice Mailbox, the message will rewind or Fast-forward by the time entered.	3-99 (Sec.)	4

4.6.2 Station Call Forward

Stations can be programmed so that incoming calls are re-routed to other stations (local or networked), station groups, the VSF, or over a system CO/IP line (Off-Net). Call Forward can be separately assigned UNCONDITIONAL, BUSY, NO ANSWER, BUSY/NO ANSWER, Attendant OFF-PREMISE forwarding to any station, Station group or system speed dial bin (Off-net). In the portal, users can establish forwarding scenarios under the Station ICR selection.

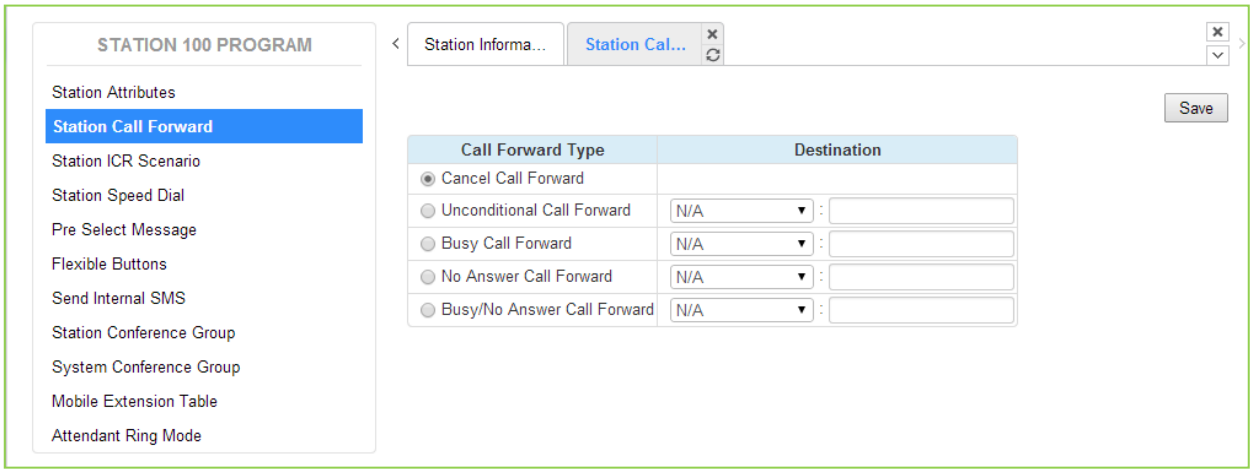


Figure 4.6.2-1 station call forward

4.6.3 Station ICR Scenario

Selecting Station ICR Scenario displays the input entry page, Figure 4.6.3-1.

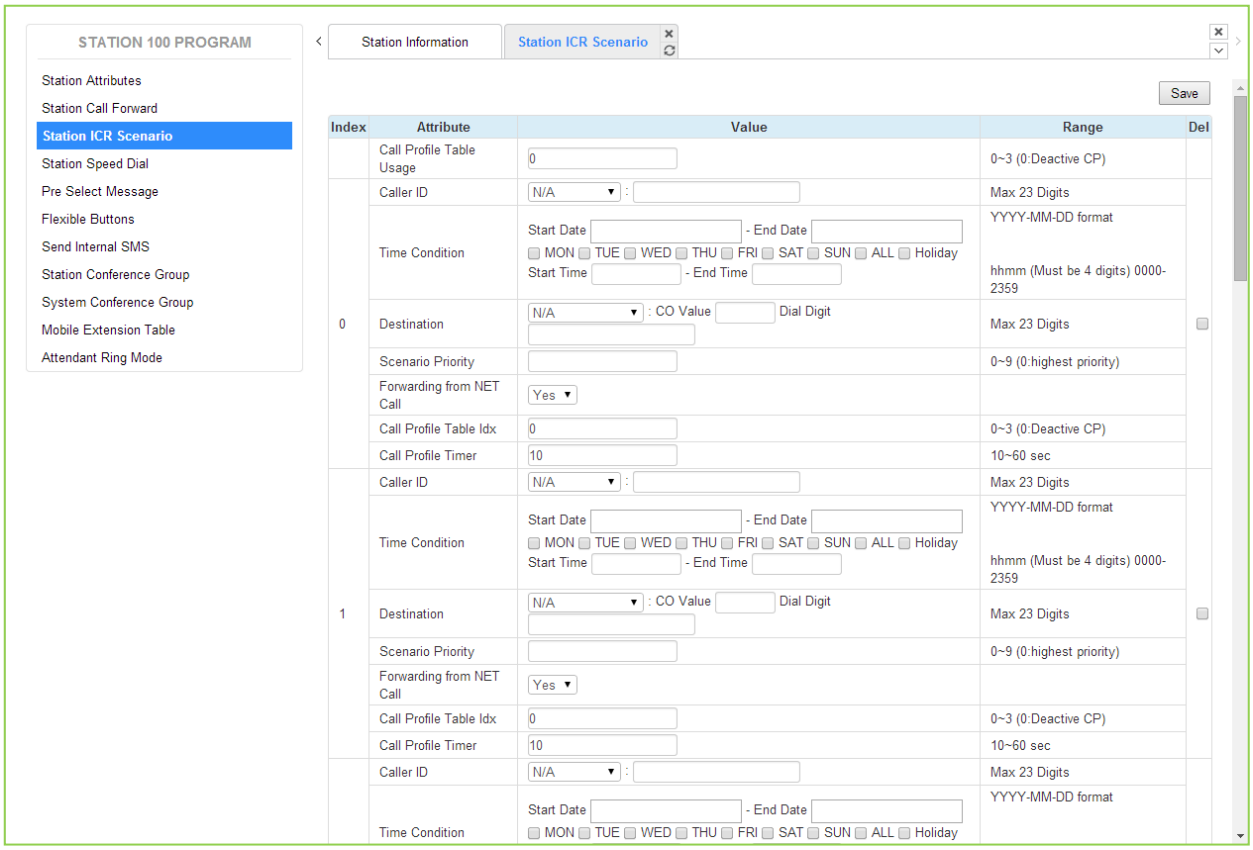


Figure 4.6.3-1 Station ICR Scenario

Station ICR is an extension of call forward where the user enters scenarios to define the call forward feature. Each station has ten (10) routing scenarios, which define conditions for routing a user's incoming calls. Each scenario may define time of day, day of week, date, caller ID and destination for incoming calls. In addition, the scenarios may be prioritized; calls are routed to the destination in highest priority matching scenario.

4.6.4 Station Speed Dial

Selecting Station Speed Dial will display the input entry page, Figure 4.6.4-1.

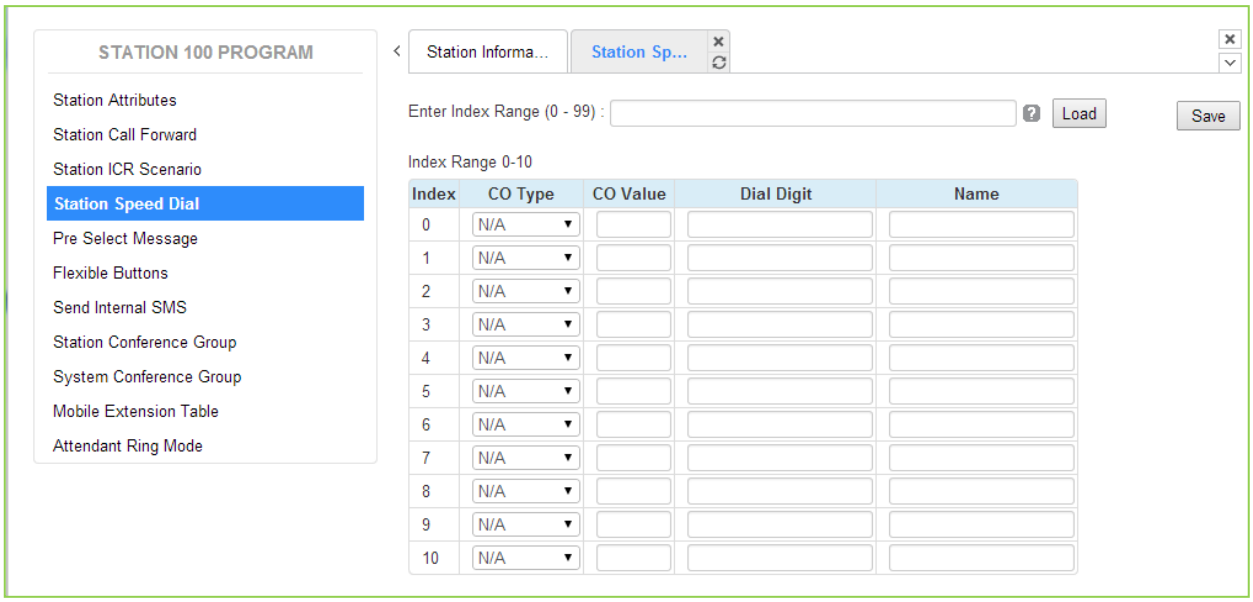


Figure 4.6.4-1 Station Speed Dial

Each station can store commonly dialed numbers for easy access using Station Speed Dial bins. Each Speed Dial number can be up to 25 characters in length and may include special instruction codes for analog and ISDN lines. The CO Line used with the Speed Dial number and a name can be entered.

4.6.5 Pre-selected Message

Selecting Pre-selected Message will display the input entry page, Figure 4.6.5-1.

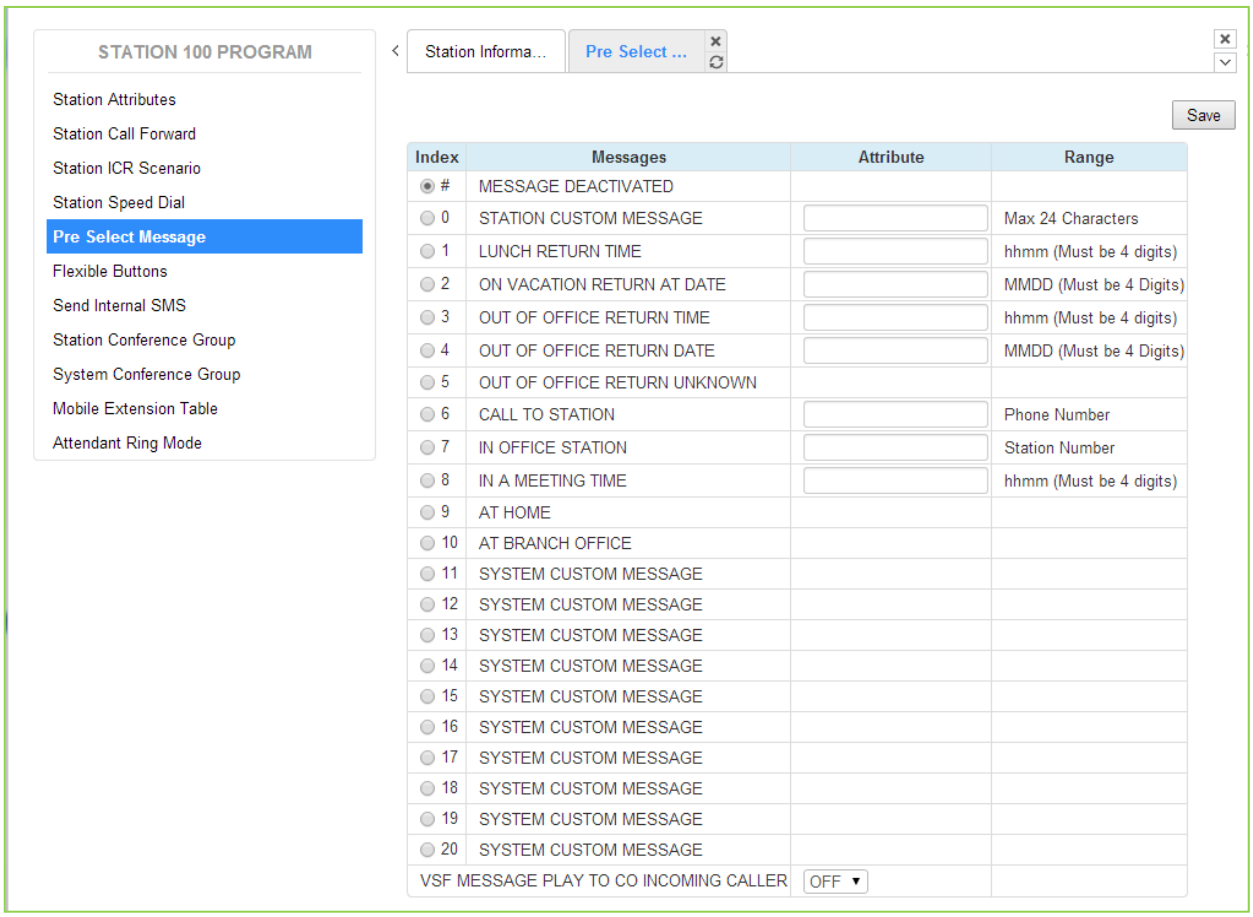


Figure 4.6.5-1 Pre-selected Message

A user can select a message to be displayed on the LCD of a calling iPECS Phone. There are ten pre-defined messages (index 1-10), several allow for auxiliary information such as a time, date or number.

A user may activate Custom Display Messaging to send a custom text message to the LCD of a calling iPECS Phone. Up to 11 Custom Messages (ten system level and one for each user) may be entered in the system database. System level Custom Messages (index 11-20) may be entered from the Attendant or Administrator's phone or via the "Admin & Maintenance" Web page. The User's Custom Message (index 0) may also be assigned from the user's phone or via the Station Program User portal Web page.

4.6.6 Flex Buttons

Selecting Flexible Buttons will display the input entry page. Select the Station Type from the drop-down menu then select **[Load]** to modify the Flexible Button data.

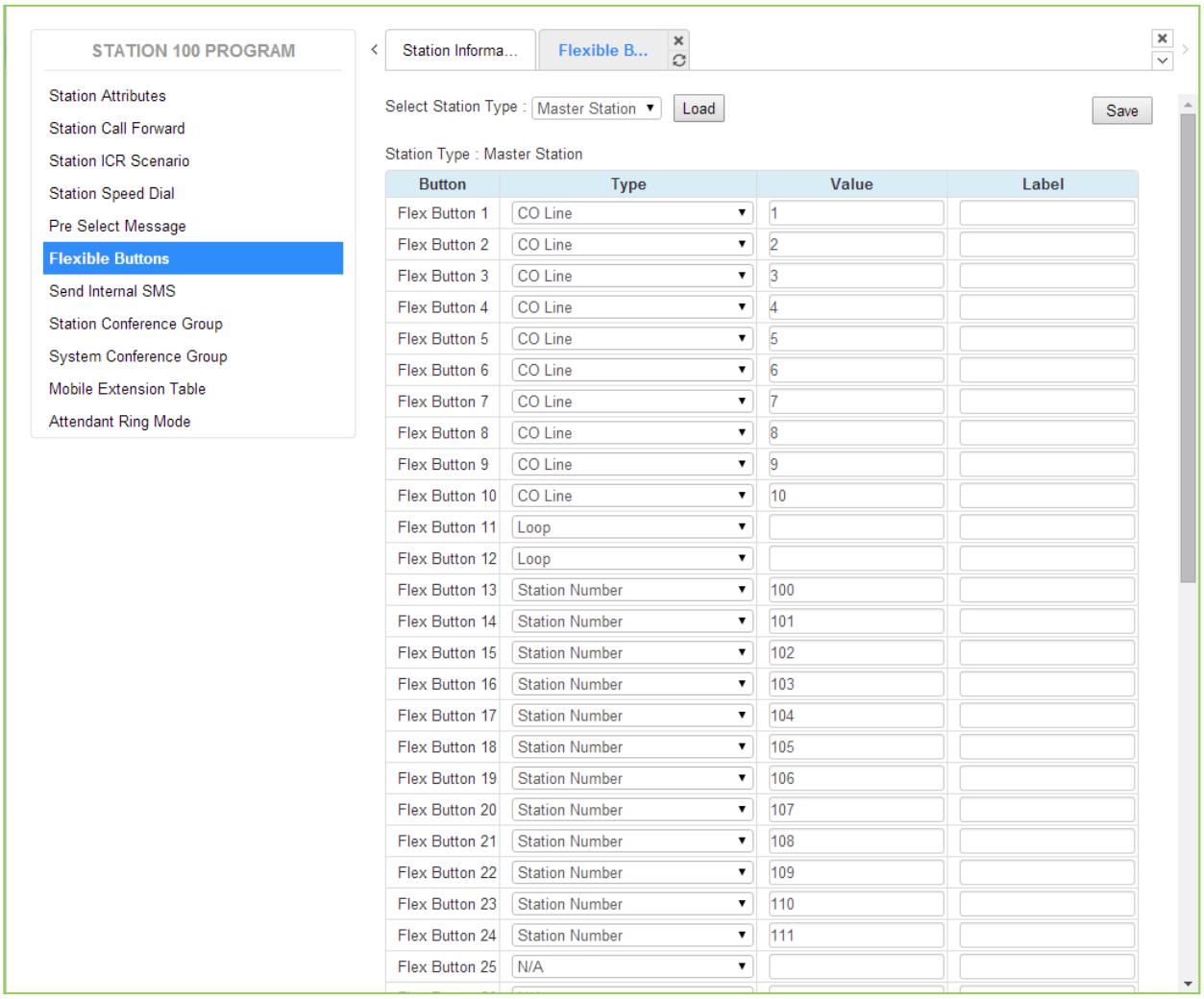


Figure 4.6.6-1 Flex Buttons

Each Flex button for each iPECS Phone/DSS Console can be assigned a function (TYPE) from the pull down menu. After selecting the Type for a button, enter the value, if required.

If the station is an LIP-8040x, LIP-8050x or LIP-9070, LIP-9071, the DSS Label field can be used to assign a label that is displayed in the LCD screen of the station.

4.6.7 Send Internal SMS

Selecting Send Internal SMS displays the input entry page, Figure 4.6.7-1.

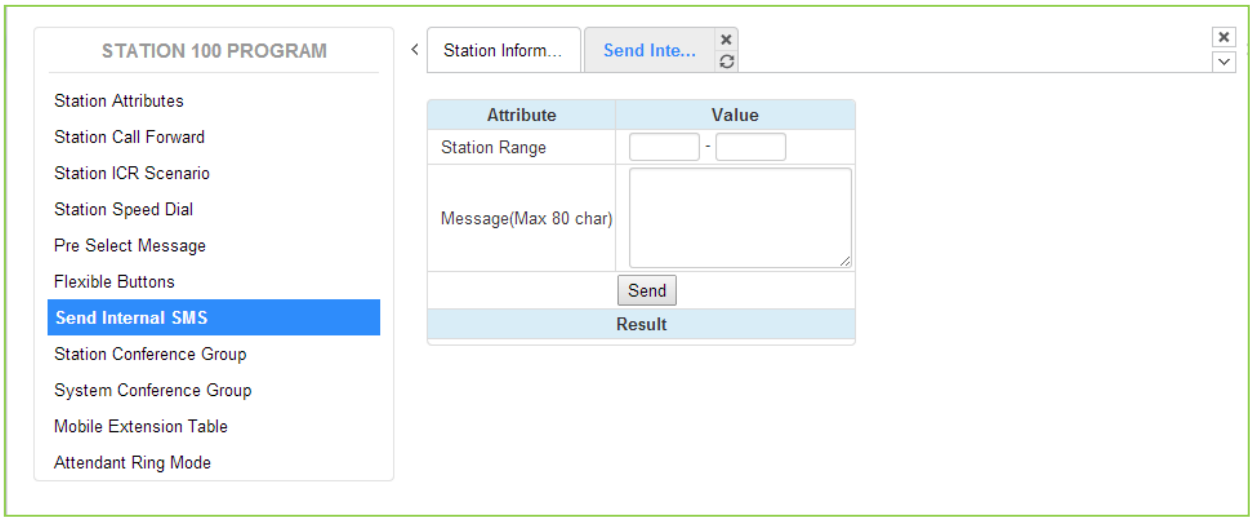


Figure 4.6.7-1 Internal SMS

4.6.8 Station Conference Group

Selecting Station Conference Group displays the input entry page, Figure 4.6.8-1.

Enter Station Conference Group Number: eMG80 : 0-19 / eMG800: 0-99

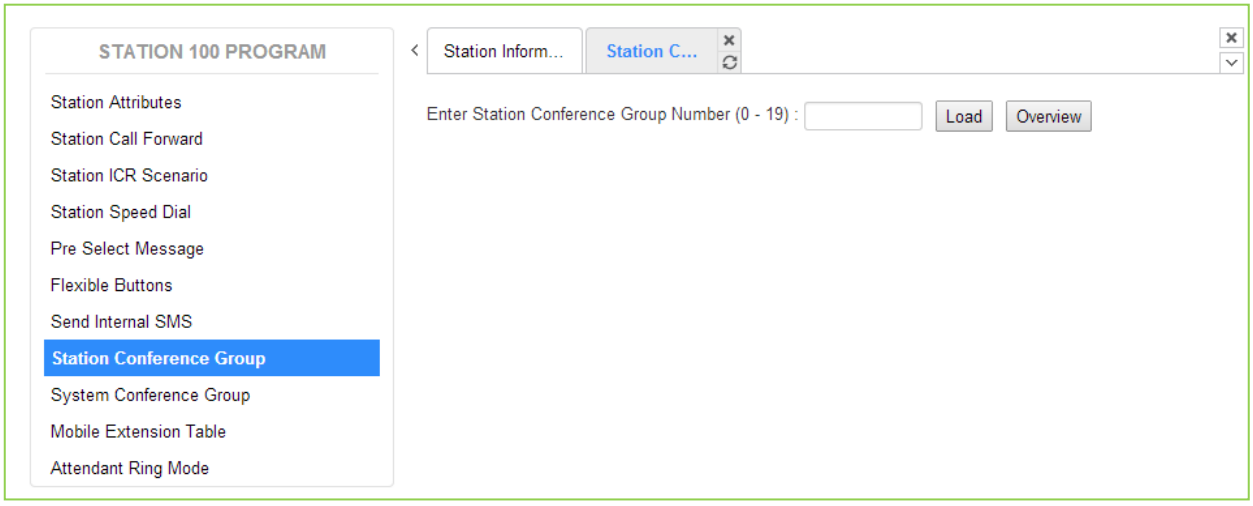


Figure 4.6.8-1 Station Conference Group

Selecting the number of conference group, Figure 4.6.8-2.

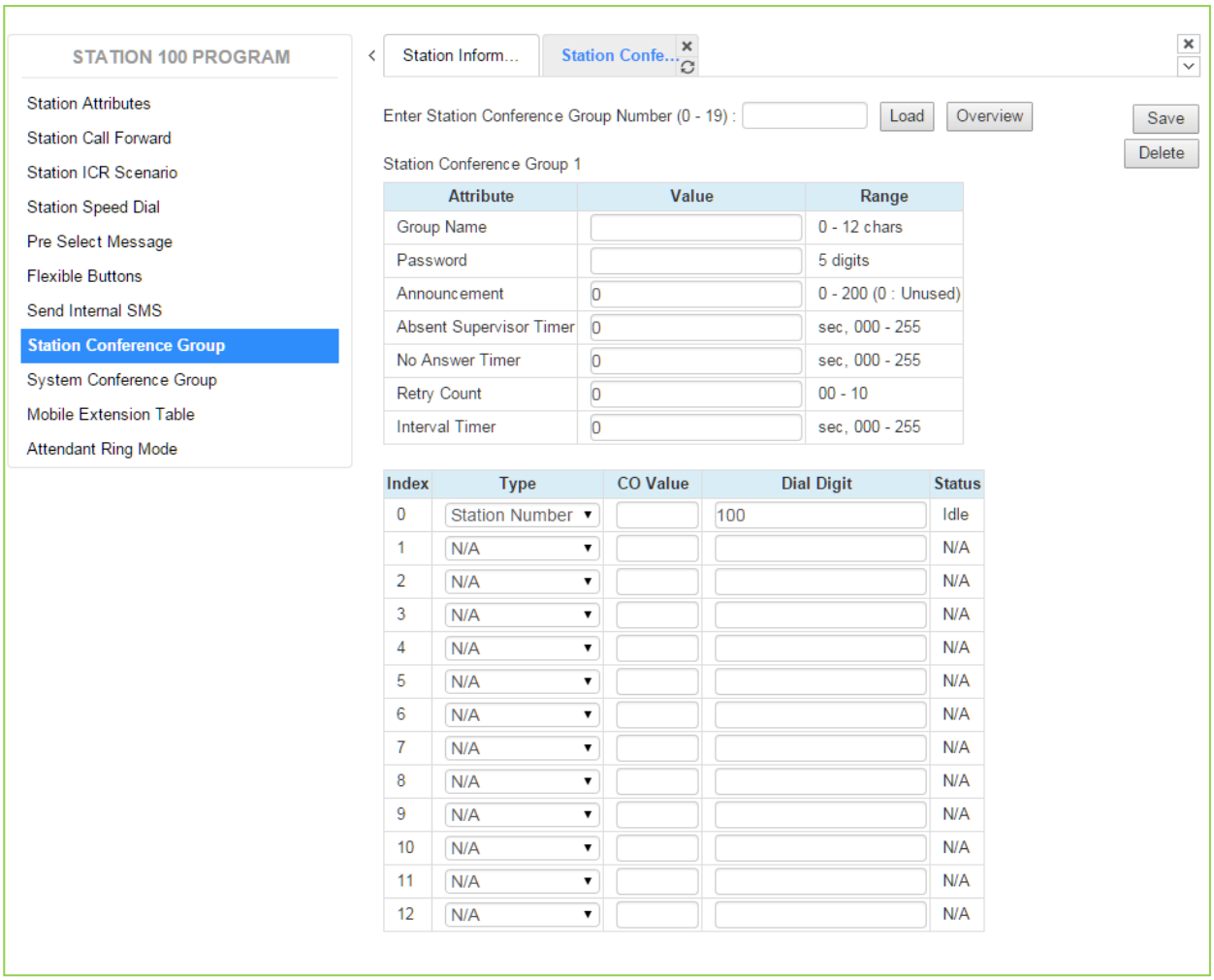


Figure 4.6.8-2 Station Conference Group

Program the attributes of group, and set the type, co dial number of member.

4.6.9 System Conference Group

Selecting System Conference Group displays the input entry page, Figure 4.6.9-1.

Enter System Conference Group Number: eMG80 : 100-139 / eMG800: 100-259

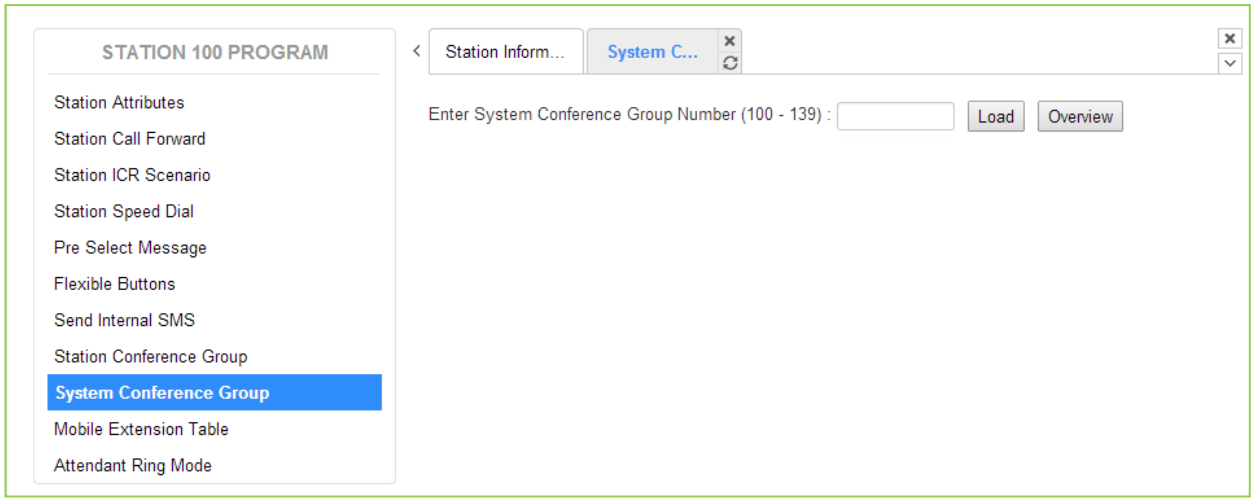


Figure 4.6.9-1 System Conference Group

Selecting the number of conference group, Figure 4.6.9-2.

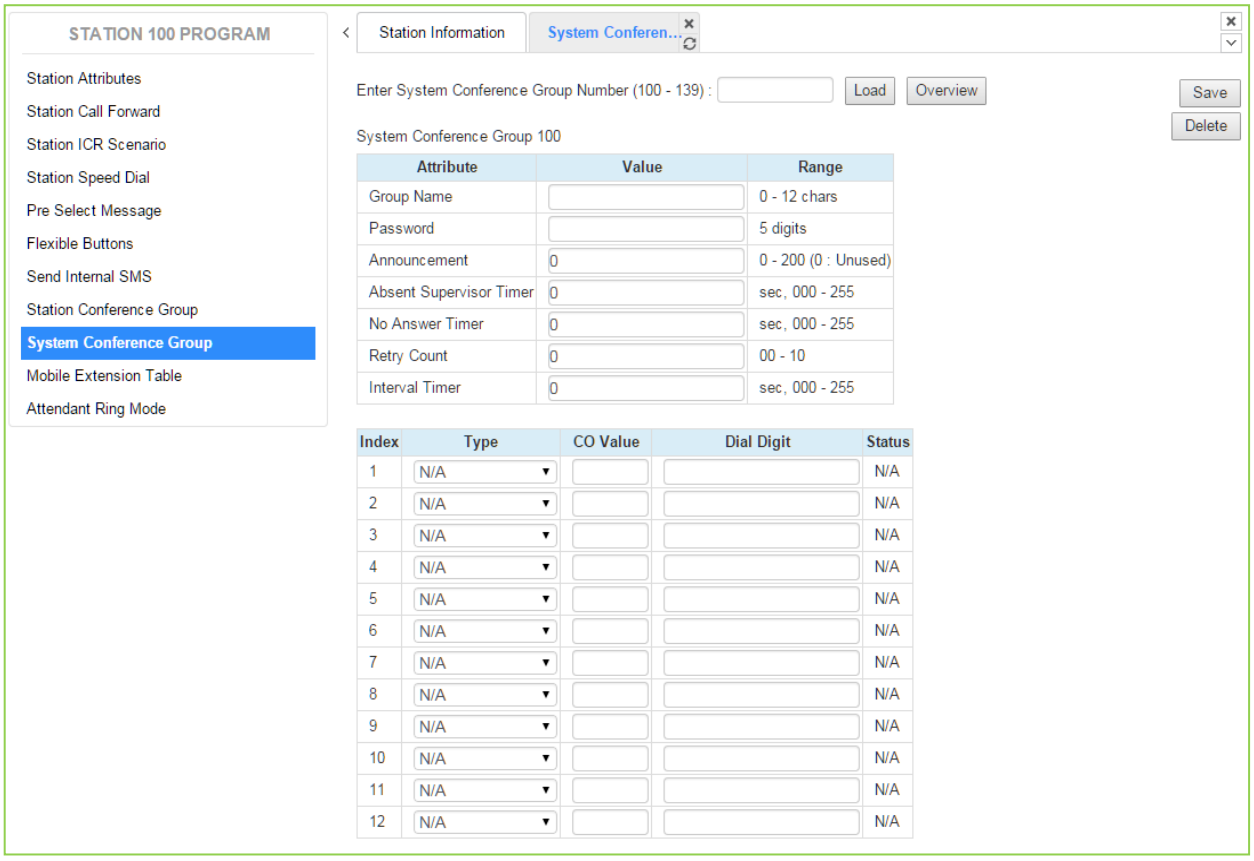


Figure 4.6.9-2 System Conference Group

Program the attributes of group, and set the type, co dial number of member.

4.6.10 Mobile extension Table

User can setup mobile extension attributes, Figure 4.6.10-1.

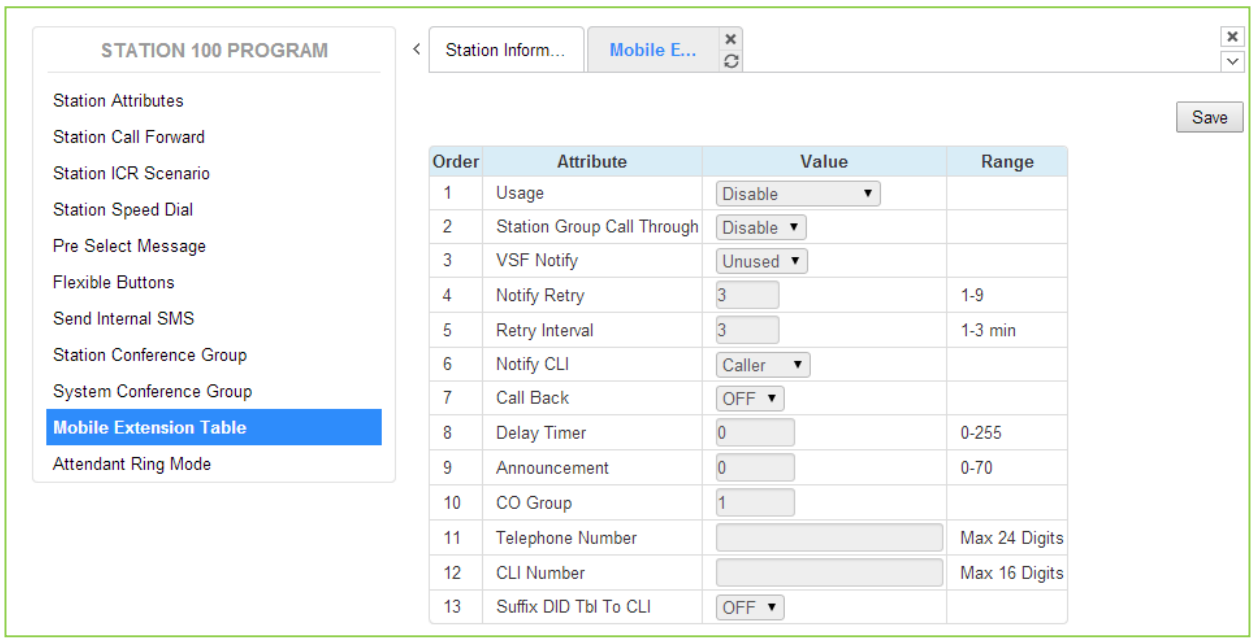


Figure 4.6.10-1 Mobile extension

Mobile Extension attributes enable Mobile Extension and control the feature use. The user can activate Mobile Extension to receive business calls on their mobile and request Mobile notification of new Voice messages.

4.6.11 Attendant ring mode

Attendant can setup system ring mode, Figure 4.6.11-1. An Attendant can change the active system Ring mode from the Auto mode and select a specific mode including a specified scenario group for incoming call routing.

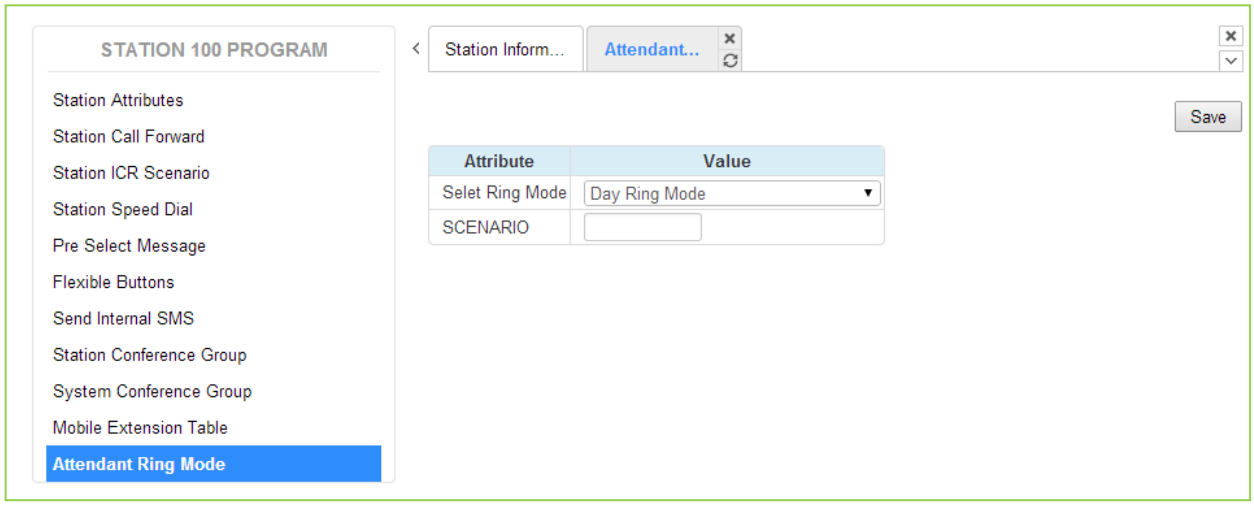


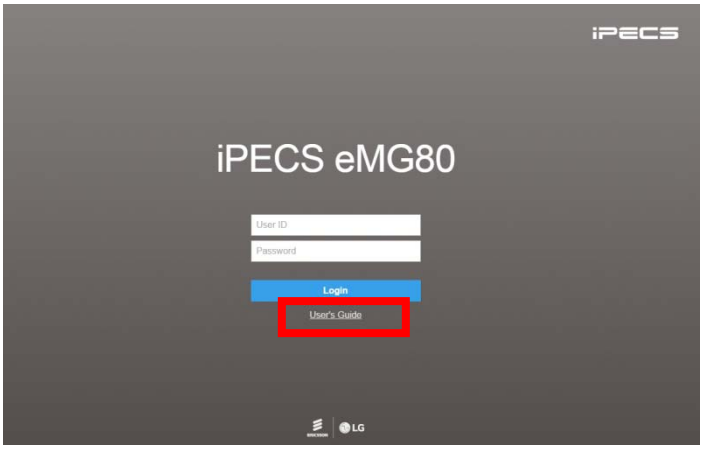
Figure 4.6.11-1 Attendant ring mode

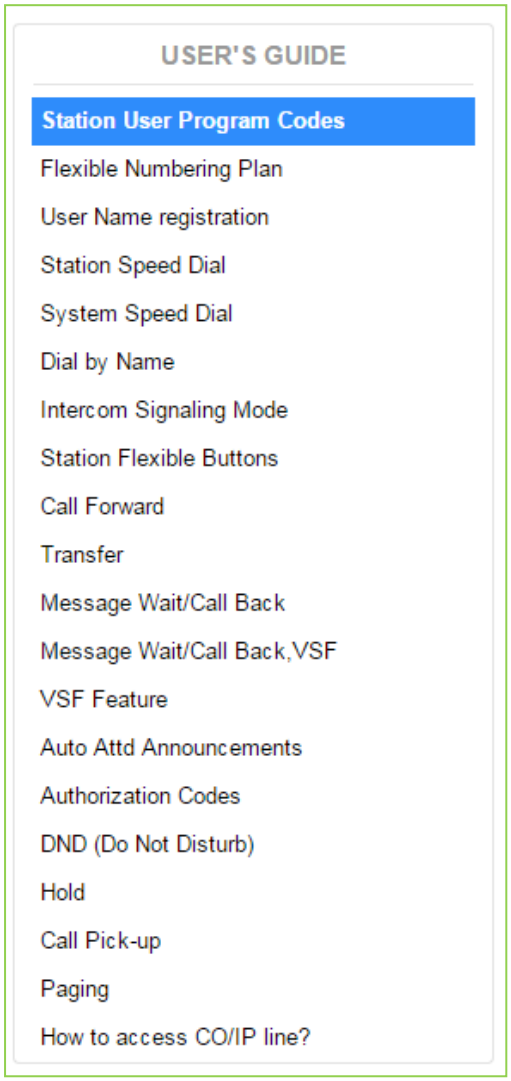
4.7 On-Line web user guide

We provide On-line web user guide about the frequent use of features to a user.

You can access it in the login page as below without entering ID and Password.

We didn't explain the user guide because you can easily get the information on the following features on the web.





Appendix A

USER PROGRAM CODES

Fixed Function Codes, refer to Table A-1 and A-2, are digit sequences users and the Attendant may dial while in the User Program Mode to assign certain Flex buttons and affect the status of a feature or setting.

Many of these Function Codes may be assigned to a button of an iPECS IP or LDP Phone by pressing the **[PGM]** button as the first entry of a Flexible button assignment, see Flex button Programming in the **iPECS eMG Features and Operation Manual**.

Table A-1 STATION USER PROGRAM CODES

Code	Description	Code	Description
11X	Intercom Differential Ring	82	{COLR} Button Assignment
12X	CO Line Differential Ring	83	{ATD DND} button assignment
13	Intercom Answer Mode (1: HF/2: TONE/3: PV)	84	{Account Code} Button Assignment
14X	Call Coverage Attribute Setting	85	{LOOP} Button Assignment
15X	Station Ring Download	86	{ATD Intrusion} Button Assignment
21	Knock Down Station COS	87	{INTERCOM} Button Assignment
22	Restore Station COS	88	{Camp-on} Button Assignment
23	Walking COS	89	{Send Keypad Facility IE} Button Assignment
24	ICR Scenario	8#	{OHVO} Button Assignment
25	LIP Keyset Stat	8*1	DID Restiction Button Assignment
26	Call Profile	8*2	DISA Restiction Button Assignment
30	VM Mobile Notify	8*3	Bomb Threat History Button Assignment
31	Message Retrieve Method	8*5	Headset Button Assignment
32	Message Retrieve Example	8*6XYZA	Toggle Ring Mode Button Assignment X,Y,Z,A : 1(Day), 2(Night), 3(Timed), 4(Auto)
33	User Authorization Code Registration	90	{SPEED} Button Assignment
34	DID Call Wait	91	{CONFERENCE} button assignment
35	Message Wait in Executive/Secretary pair	92	{CALLBACK} button assignment
36	Send SMS Message	93	{DND} button assignment
37	Register Mobile Extension	94	{FLASH} button assignment
38	Make Mobile Extension active	95	{MUTE} button assignment
39	Register Mobile Extension CLI	96	{MONITOR} button assignment
41	Set Wake-Up Time	97	{REDIAL} button assignment
42	Wake-Up Time Disable	98	{CALL FORWARD} button assignment
51XX	Custom/Pre-select Message Display (XX = 00-20)	99	{PTT} button assignment
52	Register Custom Message (Message 00)	9*XX	{In-Room Indication} button assignment (XX = 01-10)
53	Active Conference Room	*6XXX	Set Forced Fwd Dest (XXX : hunt group no.)
54	Deactive Conference Room	*7XXX	Forced FWD To Dest (XXX : hunt group no.)
55	Monitor Conference Group	*8	Register Bluetooth
57	{Call Log Display} Button Assignment	*9	Bluetooth Usage
61	Headset/Speakerphone Mode	*0	Hotdesk Login
62	Change Ring Mode	**	Hotdesk Logout
71	LCD Display Mode		
72	Version Display		
73	Background Music		
74	Station User Name Registration		
75	Display Phone IP Address		
76	Change Phone IP Address		
77	Display Phone MAC Address		
78	Network Config		
79	Display Phone Version		
7#	Forced Release Button Assignment		
7*	Display Serial number/Package for SMEMU		
80	{Record} Button Assignment - With Voice Mail		
81	{CLIR} Button Assignment		

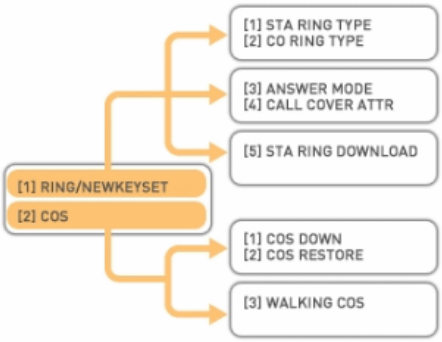


Table A-2 ATTENDANT USER PROGRAM FIXED FUNCTION CODES

FUNCTION CODE	FUNCTION
0111	Print SMDR, by Station
0112	Delete SMDR, by Station
0113	Display Call Charge
0114	Abort Print
0115	Print Lost Call Report
0116	Delete Lost Call Report
0121	Print Traffic Analysis (All summary)
0122	Print Traffic Analysis (All summary periodically)
0123	Abort “Print Traffic Analysis (All summary periodically)”
0124	Print Traffic Analysis (Attendant)
0125	Print Traffic Analysis (Call summary)
0126	Print Traffic Analysis (Call Hourly)
0127	Print Traffic Analysis (H/W Usage)
0128	Print Traffic Analysis (CO summary)
0129	Print Traffic Analysis (CO Hourly)
021	Set ICM only Mode
022	Restore Station COS
031	Authorization Code Registration
032	Erase Authorization
041	System Date/Time set
042	LCD Date Mode
043	LCD Time Mode
044	Set Wake Up Time from Attendant
045	Wake Up Disable from Attendant
046	PX Clock Set through ISDN message
047	Hot Desk login
048	Hot Desk logout
051	Custom/Pre-select Message
052	DND/Call Forward/Pre-selected MSG Cancel
053	Custom Display Message (11-20)
054	Monitor Conference Room
055	Delete Conference Room
06	VSF – Record System Greeting
071	Register Station Name
072	Isolate CO Fault Line
073	Automatic Day/Night/Timed Ring Table
074	External Page Music -1 Assignment/Cancel
075	External Page Music -2 Assignment/Cancel
076	LCD Display Language
077	PTT Login / Logout
078	Display CPU redundancy state
079	Font Set
070	Contrast Set
08	Emergency History about emergency call
*#	Admin Programming Code to enter

Appendix B

FLEXIBLE NUMBERING PLAN (WEB BASED)

The System Numbering Plan can be selected from 1 of 9 basic Numbering Plans. Table B-1 provides a brief description of the plans and Table B-2 and Table B-3 provide the Numbering Plan codes for each of the eight basic plans. The Number Plan is selected in Program 100 and individual codes in the plan can be changed using the Flexible Numbering Plan Programs 106 to 109.

Table B-1 Numbering Plan Description

Plan Number	Description	eMG80	eMG800
1	Basic Numbering Plan	100 - 239	1000-2199
2	The station number can be within 799	100 - 239	1000-2199
3	Australia Default	100 - 239	1000-2199
4	New Zealand Default	700– 839	7000-8199
5	Italy Default	200– 339	2000-3199
6	Finland Default	210 – 349	2100-3299
7	Default for Sweden	100– 239	1000-2199
8	Default for Norway	100– 239	1000-2199
9	Default for Israel	100– 239	1000-2199

Table B-2 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
	Intercom Call for eMG80	100 ~239	100-239	100-239	700-839	
	Intercom Call for eMG800	1000-2199	1000-2199	1000-2199	1000-2199	
1	Internal Page Zone	eMG80:301~335 eMG800:*301~*400	*301~*335	*101~*135	#101~#135	
2	Internal All Call Page	543	*543	#3	#3	
3	Meet Me Page	544	*544	##	##	
4	External Page Zone 1	545	*545	#41	#41	
5	External All Call Page	548	*548	#5	#5	
6	All Call Page (Internal/External)	549	*549	#00	#00	
7	SMDR Account Code Enter	550	*550	550	550	SLT
8	Flash Command to CO Line	551	*551	551	551	SLT
9	SLT Last Number Redial	552	*552	552	552	SLT
10	Do Not Disturb (Toggle On/Off)	553	*553	553	553	SLT
11	Call Forward	554	*554	554	554	
12	Speed Dial Programming	555	*555	555	555	SLT
13	Activate Message Wait/Callback	556	*556	556	556	SLT
14	Message Wait/Callback Answer	557	* 557	557	557	SLT
15	SLT Speed Dial Access	558	* 558	558	558	SLT
16	DND/FWD Cancel	559	* 559	559	559	SLT
17	SLT CO System Hold	560	* 560	560	560	SLT

Table B-2 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
18	SLT Program Mode Access	561	* 561	561	561	SLT
19	Attendant Unavailable	562	* 562	562	562	
20	AME Feature	564	* 564	564	564	
21	Alarm Reset	565	* 565	565	* 565	
22	Group Call Pickup	566	**	**	*1	
23	Universal Night Answer	567	* 567	567	567	
24	Account Code with bin	568	* 568	568	568	
25	Walking COS	569	* 569	569	569	
26	ACD agent On/Off Duty	571	* 571	571	571	
27	ACD Supervisor Login	572	* 572	572	572	
28	ACD Supervisor Logout	573	* 573	573	573	
29	ACD Help Code	574	* 574	574	574	
30	ACD Calls In Queue Display	575	* 575	575	575	
31	ACD Supervisor Status	576	* 576	576	576	
32	ACD Supervisor Monitor	577	* 577	577	577	
33	ACD Reroute Queued Call Answer	578	* 578	578	578	
34	ACD Reroute Queued Call No answer	579	* 579	579	579	
35	Camp-On Answer	621	* 621	*521	*521	SLT
36	Call Park Locations	eMG80:#601~#619 eMG800:#601~#800	#601 -#619	#601 – #619	#601 – #619	
37	Station Group Pilot Number	eMG80:401~449 eMG800:401~500	*401 – *440	*620 – *659	*620 – *659	
38	Station User VSF Features Access	*66	66	*78	*78	
39	Call Coverage Ring	76	*76	*76	*76	
40	Direct Call Pickup	*77	*77	*77	*77	
41	Access CO Group	89	89	#89	#89	
42	Access Individual CO/IP Line	88	88	#88	#88	
43	Access Held CO/IP	8*	8*	#8*	#8*	
44	Access Held Individual CO/IP	8#	8#	#8#	#8#	
45	Access CO in First CO Group	9	9	9	0	
46	Attendant Call	0	0	0	9	
47	VM Message Wait Enabled	*8	*8	*8	*8	
48	VM Message Wait cancel	*9	*9	*9	*9	
49	Door Open (1st Door)	#*1	#*1	#*1	#*1	
50	Door Open (2nd Door)	#*2	#*2	#*2	#*2	
51	MCID Request	*0	*0	*0	*0	
52	Unsupervised conference time Extension code	##	##	*##	*##	
53	PTT Group Login/Logout	#0	#0	#*0	#*0	
54	ACD Agent primary login	581	* 581	581	581	
55	ACD Agent primary logout	582	* 582	582	582	
56	ACD Agent secondary login	583	* 583	583	583	
57	ACD Agent secondary logout	584	* 584	584	584	
58	Wrap-up end	585	* 585	585	585	
59	T-NET CM Login/out	586	* 586	586	586	
60	Enter Into Conf-Room	59	* 59	*59	*59	

Table B-2 Basic Numbering Plan 1-4, Default Values

	Feature	Basic Numbering Plan				
		1	2	3	4	Remark
61	Enter Into Conf-Group	68	* 68	*79	*79	
62	Station ICR	587	* 587	587	587	
63	Pick up Group Pick-Up	588	* 588	588	588	
64	Emergency Page	589	* 589	589	589	
65	Remote Mobile Extension Control	580	* 580	580	580	
66	ACD agent ON/OFF Duty-All group	58*	* 58*	58*	58*	
67	SLT ACNR	58#	* 58#	58#	58#	
68	ACD Supervisor Ring Mode	570	* 570	570	570	
69	Company Directory Name	563	* 563	563	563	
70	ISDN Supplementary Hold	57*	*57*	57*	57*	
71	ISDN Supplementary Conf	57#	*57#	57#	57#	
72	Forced Channel Seize	56*	*56*	56*	56*	
73	Override DND/Forward	56#	*56#	56#	56#	
74	Cancel Call Back					
75	Transfer to VSF Number	55*	*55*	55*	55*	
76	CCR	#2	#2	#2	#2	
77	Room type conf Group join	5*0	5*0	5*0	5*0	
77	Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset
78	Save Number Redial	[Save]	[Save]	[Save]	[Save]	Keyset
79	Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	
80	System Speed Dial Access	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	

Table B-3 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
	Intercom Call for eMG80	200-339	210-349	100-239	100-239	100 ~239	
	Intercom Call for eMG800	2000-3199	2100-3299	1000-2199	1000-2199	1000-2199	
1	Internal Page Zone	*101-*135	*301-*335	401- 429	*301- *335	301~335	
2	Internal All Call Page	#3	*543	43	*543	543	
3	Meet Me Page	##	*544	44	*544	544	
4	External Page Zone 1	#41	*545	45	*545	545	
5	External All Call Page	#5	*548	48	*548	548	
6	All Call Page (Internal/External)	#00	*549	49	*549	549	
7	SMDR Account Code Enter	50	*550		*550	550	SLT
8	Flash Command to CO Line	51	*551	51	*551	551	SLT
9	SLT Last Number Redial	52	*552	52	*552	552	SLT
10	Do Not Disturb (Toggle On/Off)	53	*553	53	*553	553	SLT
11	Call Forward	54	*554	54	*554	554	
12	Speed Dial Programming	55	*555	55	*555	555	SLT

Table B-3 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
13	Activate Message Wait/Callback	56	*556	56	*556	556	SLT
14	Message Wait/Callback Answer	57	*557	57	*557	557	SLT
15	SLT Speed Dial Access	58	*558	58	*558	558	SLT
16	DND/FWD Cancel	59	*559	59	*559	559	SLT
17	SLT CO System Hold	690	*560	*10	*560	560	SLT
18	SLT Program Mode Access	691	*561	50	*561	561	SLT
19	Attendant Unavailable	692	*562	*12	*562	562	
20	AME Feature	694	*564	*36	*564	564	
21	Alarm Reset	695	*565	*13	*565	565	
22	Group Call Pickup	**	*566	*14	*566	**	
23	Universal Night Answer	697	*567	*15	*567	567	
24	Account Code with bin	698	*568	*16	*568	568	
25	Walking COS	699	*569	*17	*569	569	
26	ACD agent On/Off Duty	671	*571	*20	*571	571	
27	ACD Supervisor Login	672	*572	*21	*572	572	
28	ACD Supervisor Logout	673	*573	*22	*573	573	
29	ACD Help Code	674	*574	*23	*574	574	
30	ACD Calls In Queue Display	675	*575	*24	*575	575	
31	ACD Supervisor Status	676	*576	*25	*576	576	
32	ACD Supervisor Monitor	677	*577	*26	*577	577	
33	ACD Reroute Queued Call Answer	678	*578	*27	*578	578	
34	ACD Reroute Queued Call No answer	679	*579	*28	*579	579	
35	Camp-On Answer	621	*621	*29	*621	*621	SLT
36	Call Park Locations	#601 – #619	#601 – #619	601 – 619	#601 – #619	#601~#619	
37	Station Group Pilot Number	720 – 759	*401 - *440	620 – 659	*401 - *440	620~659	
38	Station User VSF Features Access	*66	66	*11	66	*66	
39	Call Coverage Ring	*76	*76	*30	*76	76	
40	Direct Call Pickup	*77	*77	7	*77	*77	
41	Access CO Group	89	89	89	#89	89	
42	Access Individual CO/IP Line	88	88	88	#88	88	
43	Access Held CO/IP	8*	8*	8*	#8*	8*	
44	Access Held Individual CO/IP	8#	8#	8#	#8#	8#	
45	Access CO in First CO Group	0	9	9	0	9	
46	Attendant Call	9	0	0	#9	0	
47	VM Message Wait Enabled	*8	*8	*8	*8	*8	

Table B-3 Basic Numbering Plan 5-9, Default Values

	Feature	Basic Numbering Plan					
		5	6	7	8	9	Remark
48	VM Message Wait cancel	*9	*9	*9	*9	*9	
49	Door Open (1st Door)	#*1	#*1	*31	#*1	#*1	
50	Door Open (2nd Door)	#*2	#*2	*32	#*2	#*2	
51	MCID Request	*0	*0	*35	*0	*0	(Except USA version)
52	Unsupervised conference time Extension code	*##	##	*37	##	##	
53	PTT Group Login/Logout	#*0	#0	*38	#0	#0	
54	ACD Agent primary login	681	*581	*40	*581	581	
55	ACD Agent primary logout	682	*582	*41	*582	582	
56	ACD Agent secondary login	683	*583	*42	*583	583	
57	ACD Agent secondary logout	684	*584	*43	*584	584	
58	Wrap-up end	685	*585	*44	*585	585	
59	T-NET CM Login/out	686	*586	*45	*586	586	
60	Enter Into Conf-Room	*59	*59	*46	*59	59	
61	Enter Into Conf-Group	*68	*68	*47	*68	*68	
62	Station ICR	687	*587	*48	*587	587	
63	Pick up Group Pick-Up	688	*588	*49	*588	588	
64	Emergency Page	689	*589	*50	*589	589	
65	Remote Mobile Extension Control	680	*580	**	580	580	
66	ACD Agent ON/OFF Duty-All group	68*	*58*	*5#	*58*	58*	
67	SLT ACNR	68#	*58#	*51	*58#	58#	
68	ACD Supervisor Ring Mode	67*	*570	*52	*570	570	
69	Company Directory Name	*21	*563	*53	*563	563	
70	ISDN Supplementary Hold	*22	*57*	*54	*57*	57*	
71	ISDN Supplementary Conf	*23	*57#	*55	*57#	57#	
72	Forced Channel Seize	*24	*56*	*56	*56*	56*	
73	Override DND/Forward	*25	*56#	*57	*56#	56#	
74	Cancel Call Back			*58			
75	Transfer to VSF Number	*55	*55*	*59	*55*	55*	
76	CCR	#2	#2*		#2	#2	
77	Room type conf Group join	5*0	5*0	*61	5*0		
77	Last Number Redial (LNR)	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	[REDIAL]	Keyset
78	Save Number Redial	[Save]	[Save]	[Save]	[Save]	[Save]	Keyset
79	Station Speed Dial Access	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	[SPEED] + XXX	
80	System Speed Dial Access	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	[SPEED] + XXXX	

Appendix C

DATABASE DETAILS & DEFAULT FOR STATION ADMINISTRATION

The following Tables, divided based on the Program group and Program, provide the default values assigned to all Admin entries. Prior to changing an entry during programming assure you have an understanding of the **PROGRAM** and its purpose.

Table C-1 SYSTEM ID

BTN	SUB-MENU	DEFAULT	REMARK
PGM: 100 -System ID			
1	Country Code	1	Maximum 4 digits
2	Customer Site Name		Maximum 24 characters
3	My Area Code		Maximum 6 digits
4	Numbering Plan Type	1	Overall default Numbering Plan, the 1st station digit should be 1 – 4.
		2	The station number can be from 100~799.
		3	Australia Default
		4	New Zealand Default
		5	Italy Default
		6	Finland Default, Max Station Ports is 60. Stations above Max ports will be displayed "***".
		7	Max Station Ports 70 Stations above Max ports will be displayed "***".
		8	The station number can be from 100~ 999.
5	PRIFIX Usage		
6	System ID reset		System reset

Table C-2 Numbering Plans

BTN	SUB-MENU	DEFAULT	REMARK
PGM: 102 -System IP Address Plan			
1	MPB Address	10.10.10.2	Public IP Address for H.323 calls
2	MPB Subnet mask	255.255.255.0	
3	Router IP Address	10.10.10.1	Router IP Address for WAN access
4	System start IP address	10.10.10.10	Private start address for system to module & terminal communications
5	System end IP address	10.10.10.254	Private end address for system to module & terminal communications
6	System Subnet mask	255.255.255.0	
7	Automatic IP Address Assignment	ON	
8	Second System IP Address	0.0.0.0	Second Private IP Address for modules

Table C-2 Numbering Plans

BTN	SUB-MENU	DEFAULT	REMARK
9	Second System Net Mask	255.255.255.0	Second Private Sub-net Mask for modules
10	Firewall IP Address	0.0.0.0	IP Address of firewall for external network (WAN/IP) access
11	First Start Mac Address	00:00:00:00:00:00	First : Start MAC Address to register a device regardless of the 3rd dip switch
12	First End Mac Address	00:00:00:00:00:00	First : End MAC Address to register a device regardless of the 3rd dip switch
13	Second Start Mac Address	00:00:00:00:00:00	Second : Start MAC Address to register a device regardless of the 3rd dip switch
14	Second End Mac Address	00:00:00:00:00:00	Second : End MAC Address to register a device regardless of the 3rd dip switch
15	System IP Address plan Reset		Returns System IP Address Plan to default values.
16	Unused	0.0.0.0	
17	Unused	0.0.0.0	
18	MPB DNS IP Address	0.0.0.0	
19	MPB DHCP	OFF	
PGM: 103 Device IP Address Plan			
1	CO/IP Device IP Address	10.10.10.10~254 - OFF MCAST	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)
2	Station IP Address	10.10.10.10~254 - OFF MCAST	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)
3	MISU IP Address	10.10.10.10~254 - OFF MCAST	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)
4	VMIB & VSF IP Address	10.10.10.10~254 - On On	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)
5	MCIB_V IP Address	10.10.10.10~254 - OFF MCAST	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)

Table C-2 Numbering Plans

BTN	SUB-MENU	DEFAULT	REMARK
6	Device IP Address Plan	System Reset	
7	WITB IP Address	10.10.10.10~254 - OFF MCAST	Flex 1: Set IP Address Flex 2: Set Mac Address Flex 3: ARP Flex 4: Registration Flex 5: CPU Type Flex 6: Device ID (type)
PGM: 104 - CO/IP Device Sequence Number			
	CO/IP Device Sequence Assignment	Next available	Sequence numbers are assigned to the maximum available for the system.
PGM: 105 - Flexible Station Number, Base 1			
	Flexible Station Number	1~140	Default Numbering Plan Country Code 1.
PGM: 106 -Flexible Numbering Plan part A, Base 1			
1	Internal Page Zone	301~335	
2	Internal All Call Page	543	
3	Meet Me Page	544	
4	External Page Zone 1	545	
5	Unused		
6	External All Call Page	548	
7	All Call Page (Internal & External)	549	
8	SMDR Account Code Enter	550	SLT
9	Flash Command to CO Line	551	SLT
10	Last Number Redial	552	SLT
11	DND (Toggle On/Off)	553	SLT
12	Call Forward	554	
13	Speed Dial Programming	555	SLT
14	Message Wait/Callback Enable	556	SLT
15	Message Wait/Callback Return	557	SLT
16	Speed Dial Access	558	SLT
17	Cancel DND/FWD/Pre-MSG	559	SLT
18	CO System Hold	560	SLT
19	Programming Mode Enter Code	561	SLT
20	Attendant Unavailable	562	
21	Alarm Reset	565	
22	Group Call Pickup	566	
23	Universal Night Answer	567	
24	Account Code	568	
PGM: 107 -Flexible Numbering Plan part B, Base 1			
1	Walking COS Code	569	
2	ACD Agent On/Off Duty	571	
3	ACD/UCD Supervisor Login	572	
4	ACD/UCD Supervisor Logout	573	
5	ACD/UCD Help Code	574	
6	ACD/UCD Calls In Queue Display	575	
7	ACD/UCD Supervisor Status Display	576	
8	ACD Supervisor Monitor	577	
9	ACD Reroute Queued Call w/ answer	578	

Table C-2 Numbering Plans

BTN	SUB-MENU	DEFAULT	REMARK
10	ACD Reroute Queued Call w/o answer	579	
11	Camp-On Answer	621	
12	Call Park Locations	#601~#619	
13	Group Pilot Number	401-440	
14	Station User VSF Features	*66	
15	Call Coverage Ring	76	
16	Direct Call Pickup	*77	
17	CO/IP Group Access	89	
18	Individual CO/IP Access	88	
19	Retrieve Last Held CO/IP	8*	
20	Retrieve Held Individual CO/IP	8#	
21	Access 1st available CO Line	9	
22	Attendant Call	0	
23	VM Message Waiting Enable	*8	
24	VM Message Waiting Cancel	*9	
PGM: 108 - Flexible Numbering Plan part C, Base 1			
1	1st Door Open	#*1	
2	2nd Door Open	#*2	
PGM: 109 - Flexible Numbering Plan part D, Base 1			
1	MCID Request	*0	
2	Answering Machine Emulation	564	
3	Unsupervised conference extend code	##	
4	PTT Group login in-out code	#0	
5	ACD Agent Primary Login Code	581	
6	ACD Agent Primary Logout Code	582	
7	ACD Agent Secondary Login Code	583	
8	ACD Agent Secondary Logout Code	584	
9	ACD Wrap-up End	585	
10	TNET Login/out Code	586	
11	Enter Into Conf-Room	59	
12	Enter into Conf-Group	68	
13	Station ICR	587	
14	Pick Up Group Pick-up	588	
15	Emergency Page	589	
16	Remote MEX Control	580	
17	All Group Agent On/Off Duty	58*	
18	SLT ACNR Code	58#	
19	ACD Supervisor Ring Mode	570	
20	Company Directory Name	563	
21	ISDN SUPPLEMENT HOLD	57*	
22	ISDN SUPPLEMENT CONFERENCE	57#	
23	Forced Seize Busy Station/CO	56*	
24	Added Flexible Numbering Plan		
24-1	Override DND/Call forward	56#	
24-2	Cancel Call Back		
24-3	Transfer To VSF Announcement Number	55*	
24-4	CCR	#2	

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 110 - Station Type				
1	Station Type	1-8		
2	DSS/DLS MAP	Station		
PGM: 111 -Station Attributes I				
1	Auto Speaker Selection	1: ON, 0: OFF	ON	
2	Call Forward	1: ON, 0: OFF	OFF	
3	DND	0: OFF, 1:ALL, 2:icm call only, 3:co call only	OFF	
4	Data Line Security	1: ON, 0: OFF	OFF	
5	Howler Tone	1: ON, 0: OFF	ON	
6	No Touch Answer	1: ON, 0: OFF	OFF	
7	Page Access	1: ON, 0: OFF	OFF	
8	Speaker/Headset Ring	S/H/BOTH	Speaker	SPKR: Speakerphone
9	Speakerphone/Headset	ON/OFF	Speaker	ON: Speakerphone
10	LCD Display LED	Ring/MWI	MWI	
11	Loop LCR Account	1: ON, 0: OFF	OFF	Station based LOOP LCR authorization option
12	Call Coverage	1: ON, 0: OFF	OFF	
13	Call Coverage Delay Ring	0~9	0	
14	Off-net Forward Disable	0:ENA, 1:DIS	Enable	Off-net Forward Activation (Except USA version)
15	Forced ICM Mode Change	1:ON, 0:OFF	OFF	
16	Active PTT Group	0~9		
17	Station ICM Tenancy Group	1~15	1	
18	VMIU/VMIB Board			Sequence Number
19	SIP User ID Table Index	000-140	000	Index to Station SIP Attributes Table (PGM 126, Web only)
20	Camp on Tone	1: ON, 0: OFF	ON	
21	Serial DSS	1: Disable 0 : Enable	Enable	
22	ICM Dial Tone Source	0: dial tone 1: Int/Ext 1 2: Ext 2 3: VSF 4~8:SLT MOH1~5 9~10:VSF MOH2~3	dial tone	
23	ICM Ring Back Tone Source	0: ring back tone 1: Int/Ext 1 2: Ext 2 3: VSF 4~8:SLT MOH1~5 9~10:VSF MOH2~3	ring back tone	
24	UMS Attach Message	1: ON, 0: OFF	ON	
PGM: 112 - Station Attributes II				
1	CO Call Time Tone	1: ON, 0: OFF	OFF	
2	Automatic Hold	1: ON, 0: OFF	ATD:ON Others: OFF	

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
3	CO Call Time Restriction	1: ON, 0: OFF	OFF	
4	CO Line Access	EN/DIS	ENABLE	
5	CO/IP Line Queuing	EN/DIS	ENABLE	
6	CO PGM	EN/DIS	DISABLE	
7	Ringing Line Preference	EN/DIS	ENABLE	
8	Speed Dial Access	EN/DIS	ENABLE	
9	UCD Group Service	1: ON, 0: OFF	OFF	
10	Ring Group Service	1: ON, 0: OFF	OFF	
11	Two Way Record	1: ON, 0: OFF	OFF	
12	Message Speed Scroll	0-7	3	Scroll speed for Graphic LCD Key-set
13	Hot Desk Station	1:ON, 0:OFF	OFF	
14	Prefer CO/CO Group	CO Access Code Or CO Group Access Code	..	
15	Send SLT CLI	1:ON, 0:OFF	ON	Send CLI info to SLT/Soft/Wit phone.
16	ACD Member Priority	0 ~ 9	0	
17	ez Attendant Password	1: ON, 0: OFF	OFF	
18	Emergency CO	CO Access Code Or CO Group Access Code	Any CO	
19	Station Account code required	1: ON, 0: OFF	OFF	
20	Auto Call recording	1: ON, 0: OFF	OFF	
21	Call Recording Station	Station number		
22	Voice Mail Back-up	1: ON, 0: OFF	OFF	
23	VM Back-up Station	Station number		
24	VM Back-up Prompt	1: ON, 0: OFF	OFF	
PGM: 113 - Station Attributes III				
1	ADMIN	EN/DIS	ENABLE	
2	VSF Access	EN/DIS	ENABLE	
3	Group Listen	EN/DIS	DISABLE	
4	Override Privilege	EN/DIS	DISABLE	
5	SMDR Hidden Dialed Digits	EN/DIS	DISABLE	
6	Voice Over	EN/DIS	ENABLE	
7	Prime Line	1: HOT, 0: WARM	WARM	
8	Alarm/Door Bell Attribute	EN/DIS	DISABLE	
9	DID Call Wait	1: ON, 0: OFF	ON	
10	Left Message Executive	1: ON, 0: OFF	ON	
11	E & MIC Headset	1: ON, 0: OFF	OFF	For new Soft-Key Key-set
12	En-block Mode	1: ON, 0: OFF	OFF	For new Soft-Key Key-set
13	VSF Message Retrieve	1: FIFO, 0: LIFO	FIFO	
14	VMID Number	Station number	STA #	For adjunct Voice Mail-box id
15	Auto ACD DND	dial-pad digit	0	0=no reason code
16	Fwd if OOS	1: ON, 0: OFF	OFF	
17	Backlight	0 ~2	busy	0: Off, 1: busy, 2: always on
18	VSF Mail Server IP address	0.0.0.0		
19	VSF Mail Address			Web Admin 132 to modify
20	Block Back Call	1: ON, 0: OFF	OFF	

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
21	By Pass DTMF	1: ON, 0: OFF	OFF	
22	Proctor Monitor	1: ON, 0: OFF	OFF	
23	VSF Mail Server ID			Web Admin
24	Added Station Attribute (2nd)			
24-1	VSF Mail Server P/W			Web Admin
24-2	Door Open	EN/DIS	ENABLE	
24-3	VSF MSG DD/TM	1: ON, 0: OFF	ON	
24-4	OGM DEST		NOT ASSIGNED	
24-5	VSF DEL MSG	1: ON, 0: OFF	OFF	
24-6	VM PWD CHECK	0: No password 1: PWD only 2: Station number and Password	Station number and password	
24-7	Barge In Mode	0: Disable 1: Monitor 2:Monitor&Join & Disconnect	Disable	
24-8	SLT Flash Mode	0: Transfer 1: Drop 2: Ignore 3: Hold Release	Transfer	
24-9	RLS Cost Display	1: ON, 0: OFF	OFF	
24-10	LDT Table Index	No. of LDT Table	1	
24-11	WEB Call Back	EN/DIS	DISABLE	
24-12	VSF SMTP Security	0-2	0	0 : NO Security / 1 : SSL / 2 : TLS
24-13	VSF SMTP Port	00001-65535	25	
24-14	VSF Sender Mail Address			Web Admin
24-15	Prepaid call	0: OFF 1: ON	OFF	
24-16	Prepaid money	000000 -999999	0	
24-17	Default VM number			
24-18	SKT mode	0: Default 1: Short 2: Long 3: Far	Default (0)	
24-19	Off hook ring	0: BURST 1: MUTE 2: SYSTEM 3:SILENCE	Refer to System (2)	
24-20	SIP color ring			
24-21	Forced account code	0: OFF, 1: ON	OFF	
24-22	Flexible Bin PGM	0: OFF, 1: ON	ON	
24-23	Station Web level	LEVEL 1 ~ LEVEL 3	LEVEL 1	
24-24	Headset page	1~3 (SPKR/ HEADSET/ Both)	1: SPKR	

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 114 - Station Attributes IV				
1	CLIP Display	1: ON, 0: OFF	OFF	
2	COLP Display	1: ON, 0: OFF	OFF	
3	Progress Indication	1: ON, 0: OFF	OFF	
4	CLIR Service	1: ON, 0: OFF	OFF	
5	COLR Service	1: ON, 0: OFF	OFF	
6	Station CLI 1	Max 12 digits	Station No	
7	3.1 kHz Audio	1: ON, 0: OFF	OFF	
8	CLI Name Display	1: ON, 0: OFF	OFF	
9	CLI/IP Redirect Display	1: Red, 0: CLI	CLI	
10	CLI Message Wait	1: ON, 0: OFF	OFF	
11	EXT OR ATD	1: ATD,0: EXT	EXT	
12	MSN Wait	1: ON, 0: OFF	OFF	
13	Unused			
14	DID Restriction	1: ON, 0: OFF	OFF	
15	DISA Restriction	1: ON, 0: OFF	OFF	
16	Unused			
17	Modem Enable	1: ON, 0: OFF	OFF	
18	FAST CLI For Transfer Call	1: ORI, 0: TRN	TRN	
19	Unused			
20	PICK UP By Flex Button	1: ON, 0: OFF	ON	
21	Multi Language	Prompt 1 – 6	1	
22	Pre-Sel Msg DND	1: ON, 0: OFF	OFF	
23	Pre-Sel Msg Language	Prompt 1 – 6	1	
24	Added station attributes			
24-1	Station CLI 2	Max 16 Chars	Station No	
24-2	Station CLI 3	Max 16 Chars	Station No	
24-3	Station CLI 4	Max 16 Chars	Station No	
24-4	Station CLI 5	Max 16 Chars	Station No	
24-5	SLT CID type	(0:FSK/1:DTMF)	FSK	
24-6	Wakeup announcement	0-200	0	
24-7	Camp on enable	0: OFF 1: ON	ON	
24-8	Gain table	1–3	1	
24-9	Tone table	1–5	1	
24-10	Digit conversion table	eMG80: 1-15 eMG800: 1-32	0	
24-11	Video on calling	1: ON, 0: OFF	OFF	
24-12	E.164 CLI To	1: ON, 0: OFF	OFF	
24-13	Flexible page	1-3	3 page	
24-14	Align LCD	0-2	0	0: Not align, 1: Left, 2: Right
24-15	Two way recording	0-200	00	
24-16	LDT Zone	001-100	001	
24-17	ECM Fax (T38)	1: ON, 0: OFF	ON	
24-18	Display restrict	1: ON, 0: OFF	OFF	
24-19	Small popup use	1: ON, 0: OFF	OFF	
24-20	Large popup timer	0-5	0	
24-21	MWI LED	0-4	0	0:ALL MWI, 1:VM MWI

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
				2: CLI MWI, 3: SMS MWI 4: ICM MWI
24-22	NFC Auth use	1: ON, 0: OFF	ON	
24-23	Short Modem	1: ON, 0: OFF	OFF	
PGM: 115 - Flexible Buttons Assignment				
01~24	Flexible Buttons Assignment	1: Empty Button		
		2: Station PGM Button		
		3: **{Speed Dial xx}**Button		
		4: Numbering Plan Button		
		5: Network DSS Number		
		6: MSN Number		
PGM: 116 - Station COS				
1	Station COS: Day Ring	1~11	1	
2	Station COS: Night Ring	1~11	1	
3	Station COS: Timed Ring	1~11	1	
PGM: 117 - CO Line/IP Channel Group Access				
	CO/IP Group	01~20	1	
PGM: 118 - Internal Page Zone Access				
	Internal Page Zone Access	001-024	Group 01	
PGM: 119 - PTT Group Access				
	PTT Page Zone	01~10		
PGM: 120 - Preset Call Forward				
	Preset Call Forward	1~8 + destination	-	1: Unconditional Forward 2: Internal Busy Forward 3: Internal No Answer Forward 4: External Busy Forward 5: External No Answer Forward 6: Voice Mail box 7: Internal DND 8: External DND
PGM: 121 - Idle Line Selection				
	Type	1~7	-	1: Flex Button 2: CO Line 3: CO Group 4: Station Number 5: Hunt Group 6: Station Speed 7: System Speed
PGM: 122 – Station IP Attributes				
1	Direct IP Call	EN/DIS	ENABLE	
PGM: 123 - Station Timers				

Table C-3 STATION DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
1	Station Fwd No-Answer Timer	000~600	000	1 second increments
2	Cur off timer	00~99	00	1 minute increments
PGM: 124 - Linked Pair Station Attributes				
1	Set IP Address	xxx.xxx.xxx.xxx		
2	Router IP Address	xxx.xxx.xxx.xxx		
3	Set Mac Address	xx:xx:xx:xx:xx:xx		
PGM: 125 - ICM Tenant Group				
1	Group Attendant	Station No.		
2	Group Access	Group 01~15	Group 01	
PGM: 127 – Station VM Attributes				
1	VM COS	1-5	1	
2	Administrator Mail Box	EN/DIS	DISABLE	
3	Announce Only Mail Box	EN/DIS	DISABLE	
4	Announce Only Option	Previous Menu Hang Up	Previous Menu	
5	Company Directory – First Name			
6	Company Directory – Last Name			
7	Cascade Mail Box			
8	Cascade Type	1: ON, 0: OFF	OFF	
9	Message Rewind/Fast Forward Time	3-99(SEC)	4	
10	Notify Retry count	00-99	3	
11	Notify Dial time	00-99	5	
PGM: 128 – Station CCR Table				
1-10	Station CCR	1-14		
11	CCR table usage	1: ON, 0: OFF	OFF	
12	CCR One Digit	1: ON, 0: OFF	OFF	
13	* Button Used As	0-3	0	
14	# Button Used As	0-3	0	
PGM: 129 - DSS Label Edit				
	LSS Label	LSS index + button	…	Max 16 char.

Table C-4 BOARD DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 130 - H.323 VoIP Attributes				
1	H.323 Setup Mode	0~1	Fast	0: Fast/1: Normal
2	H.323 Tunneling Mode	1: ON, 0: OFF	ON	0:Off/1:On
3	H.323 DTMF Path	0~1	0: In-band	1:Out/0:In
4	H.323 DiffServ Pre tagging	00~63	4	
5	RAS Usage	1: ON, 0: OFF	OFF	
6	RAS Multi-cast IP Address	IP address	224.0.1.41	
7	RAS Multi-cast IP port	Port number	1718	
8	RAS Uni-cast IP Address	IP address	82.134.80.2	
9	RAS Uni-cast IP port	Port number	1719	
10	RAS Keep-alive Timer	001 ~ 999	120	1 second increments

Table C-4 BOARD DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
11	RAS Numbering Plan prefix	24 digits		
12	RAS Gateway Id	128 characters		Web Admin only
13	RAS Light RRQ	1: ON, 0: OFF	OFF	
14	TCP Keep Alive	1: ON, 0: OFF	ON	
15	FAIL OVER USAGE	1: ON, 0: OFF	OFF	
16	Fail over Time	03-10 (Sec.)	5	
17	Fail over Group	01-21		
18	Q931 START PORT	00001-65535	2048	
19	Q931 END PORT	00001-65535	2559	
20	H245 START PORT	00001-65535	2560	
21	H245 END PORT	00001-65535	3071	
22	RAS START PORT	00001-65535	2048	
23	RAS END PORT	00001-65535	3071	
24	H.323 VoIP Attributes			
24-1	MEDIA START PORT	00001-65535	6000	
24-2	MEDIA END PORT	00001-65535	7036	
24-3	DATA START PORT	00001-65535	8500	
24-4	DATA END PORT	00001-65535	8548	
PGM: 131 -T1/E1/PRI Attributes				
1	T1 Setup Mode	0~1	D4	0:D4/1:ESF
2	T1 Line Mode	0~1	B8ZS	0: B8ZS/1:AMI
3	PRI Line Mode	0~1	TE	0:NT/1:TE
4	PRI/E1 CRC Check	1: ON, 0: OFF	OFF	
5	E1 R2 DSP Check	1: ON, 0: OFF	OFF	
6	DCO PX Type	1: S1240 2: TDX1B 3: STANDARD 4: CONGES_DIS	STANDARD	
PGM: 132 - Board Base Attributes				
1	Router IP address	IP Address		
2	Device CODEC Type	0-4	4	0: G.711, 1: G.723.1, 2: G.729, 3: G.722 4: System Codec refer to PGM 161-button 9.
3	Firewall IP address	IP Address		
4	RTP Security	1: ON, 0: OFF	ON	
5	TNET Enable	1: ON, 0: OFF	OFF	
6	UMS Sender e-mail address	40 Characters		Web only to modify
7	T38 Enable	1: ON, 0: OFF	OFF	
8	USE Board IP for SIP	1: ON, 0: OFF	OFF	
9	RTP firewall IP	IP address		
10	T38 Port Usage	0: DIFF WITH VOICE 1: SAME AS VOICE 2: TRIGGERING	0	

Table C-4 BOARD DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
11	RFC2833 Payload	000-127	0	
12	RFC2833 Volume	00-36	0	-dB
13	RFC2833 Redundancy	1-8	0	

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 140 - CO Service Attributes				
	CO Service Type	Flex 1~4	1 (Normal)	1: Normal CO line, 2: DID, 3: TIE Line, 4: Unused
PGM: 141 - CO/IP Line Attributes I				
1	CO/IP Group Assignment	01-20		
2	CO Line COS	1~5	1	
3	CO Start Signal	1: Ground, 0: Loop	Loop	
4	CO Line Type	1: PBX, 0: CO	CO	
5	CO Line Signal Type	1: DTMF, 0: Pulse	DTMF	
6	Flash Type	1: Ground, 0: Loop	Loop	
7	Universal Night Answer	1: ON, 0: OFF	OFF	
8	CO/IP Group Auth	1: ON, 0: OFF	OFF	
9	Data Station No	4 digits		FAX/Modem can be assigned to STA
10	Tenancy Group	00~ 15	00	
11	CO VoIP Mode	1 ~ 6	Common	1: Common, 2: H.323 only, 3: SIP only, 4: RTP RLY, 5: H.323/TRP RLY, 6: SIP/RTP RLY
12	PROCTOR ON/OFF	1: ON, 0: OFF	OFF	
13	WAIT IF VSF BUSY	1: ON, 0: OFF	ON	
14	Unused			
15	Unused			
16	COL RING TONE	1-12	0	0 is Not Available
17	Unused			
18	Gain table index	1-3	1	
19	Tone table index	1-5	1	
20	Digit conversion table index	01-15	01	
PGM: 142 - CO/IP Line Attributes II				
1	CO Line Name Display	1: ON, 0: OFF	OFF	
2	CO Line Name Assign	12 characters	-	Max 12 character, alpha entry
3	Metering Unit	0~6	0	
4	Line Drop using CPT	1: ON, 0: OFF	OFF	Not Supported
5	DISA Authorization Code	1: ON, 0: OFF	ON	
6	CO Line MOH	0~10	1	0: Refer to System hold, 1: INT Music, 2: EXT music, 3: VSF MOH, 4~8: SLT MOH1~5, 9~10: VSF MOH2~3
7	CO Dial Tone	1: ON, 0: OFF	ON	
8	CO Ring Back Tone	1: ON, 0: OFF	OFF	
9	CO Error Tone	1: ON, 0: OFF	OFF	

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
10	CO Busy Tone	1: ON, 0: OFF	OFF	
11	DISA CO Access	1: ON, 0: OFF	OFF	
12	CO Flash Timer	000~300	050	10 msec. Increments
13	Open Loop Detect Timer	00~20	04	100 msec. Increments
14	ICLID Detect Timer	00~20	00	1 sec. Increments
15	SMS OUTGOING	0: Disable 1: Enable	Disable	
16	SMS RCV STATION			
17	CO Line Dial Tone Source	0: dial tone 1: INT Music, 2: EXT music, 3: VSF MOH, 4~8: SLT MOH1~5, 9~10: VSF MOH2~3	dial tone	
18	CO Line Ring Back Tone Source	0: ring back tone 1: INT Music, 2: EXT music, 3: VSF MOH, 4~8: SLT MOH1~5, 9~10: VSF MOH2~3	ring back tone	
19	REJECT ANONYMOUS	1: ON / 0:OFF	OFF	
20	PREFIX TABLE ID	0-6	0	If prefix table ID is set to 0, then prefix dialing call cannot be applied. If prefix table ID is set to (1-6), then prefix dialing call can be applied with PREFIX DIALING TABLE(PGM 206)
21	Cut Off Timer	00-99	00	Co base call cut off timer can be set at this field.
22	DISA Delay Timer	0-9	0	
23	LDT Table Index	1-10	1	
24	DISA Answer Timer	0-9	0	
PGM: 143 - ISDN Line Attributes				
1	COLP Table Index		None	
2	CLIP Table Index		None	
3	EN-BLOC Sending	1: ON, 0: OFF	ON	
4	Type Of Number	0~4	International	0: Unknown 1: International 2: National 3: Unused 4: Subscriber
5	DID Remove digit count	00~99	00	Received digits deleted from left
6	TEI Type	1: Auto, 0: Fixed	Auto	
7	ISDN-SS CD/CR	1: ON, 0: OFF	Disable	0: Disable, 1: Deflect, 3: Reroute (Except USA version)
8	ISDN One Digit Remove	1: ON, 0: OFF	OFF	(For Italy)
9	Advice of Charge Type	0~5	0	0: None

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
				1: Italy/Spain 2: Finland 3: Australia 4: Belgium 5: ETSI Standard
10	ISDN Line Type	1: μ-Law, 0: A-Law	μ-Law	
11	Calling Sub-address	1: ON, 0: OFF	OFF	
12	Incoming Prefix Code Insertion	1: ON, 0: OFF	OFF	
13	Outgoing Prefix Code Insertion	1: ON, 0: OFF	ON	
14	International Access Code	Max 4 digit		
15	My Area Code	Max 6 Digits		
16	My Area Prefix Code	Max 4 Digits		
17	CLI Transit Code	1: ORI 0: CFW	CFW	
18	Preserve Name for DID calls	1: ON, 0: OFF	OFF	
19	ISDN Redirecting number	No SVC / ORI/CFW	No SVC	
20	Choice Incoming CLI	Transit Point CLI / Original CLI	Transit Point CLI	
21	Calling Party Numbering Plan	0-6	1	0: Unknown. 1: ISDN / Telephony. 2: Data / Numbering. 3: Telex. 4: National Standard. 5: Private. 6: Reserved.
22	Called Party Numbering Plan	0-6	0	0: Unknown. 1: ISDN / Telephony. 2: Data / Numbering. 3: Telex. 4: National Standard. 5: Private. 6: Reserved.
23	Screening Indicator	0-3	0	0: User Provided, No Service. 1: User Provided, Pass. 2: User Provided, Fail. 3: Network Provided.
24	Added CO line attributes			
24-1	Station CLI Type	Station CLI 1-5	Station CLI 1	
24-2	ISDN PLUS Code	Max 4 digits	-	
24-3	CP/ALERT INBAND	1: ON, 0: OFF	OFF	
24-4	Disconnect INBAND	1: ON, 0: OFF	OFF	
24-5	Bursting to Caller	1: ON, 0: OFF	OFF	
PGM: 144 - CO Ring Assignment				
1	Day	Station/Group		Dial 1: Station + Delay (0~9 ring cycles) Dial 2: Hunt group Dial 3: VSF announcement (01~70) Dial 4: AA Ring delay Time (00~30 sec.)
2	Night	Station/Group		
3	Timed Ring	Station/Group		

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 145 - DID Service Attributes				
1	DID Signal	1: Immediate 2: Wink 3: Delayed Dial	Wink	
2	DID conversion Type	0-2	1	0: DID Data Conversion (PGM230) 1: call to the valid extension. 2: convert with Flex DID Table (PGM231)
3	DID Digit Receive Number	2-4	3	
4	DID Digit Mask	4 digits	#***	
PGM: 146 - DISA Service Attributes				
	DISA (Day/Night/Timed Ring)	Flex 1: Day Flex 2: Night Flex 3: Timed		Enter VMIB/VMIU Announcement number.
PGM: 147 - CO Preset Forward Attributes				
1	CO Preset Forward Timer	00~99	00	1 second increments
2	ICLID Ring Table Index	001~250	None	
3	VMID Number	0000~9999	None	
PGM: 148 – CO Additional Attribute				
1	CID type	0: Disabled 1: FSK 2: DTAS FSK 3: DTMF 4: Russian CID	FSK	
2	RCID detect	0: LOCAL 1: ALL	ALL	
3	RCID request	0: USER 1: AUTO	AUTO	
4	RCID request first delay timer	10-150(10msec)	20	
5	RCID no answer timer	1-300(sec)	20	
6	RCID digit number	4-10	7	
7	RCID request count	1-3	1	
8	RCID request retry delay timer	10-30(10msec)	10	
9	COLLECT CALL BLOCKING	0: Disabled 1: Double Answer 2: With Indication	Disabled	
10	COLLECT CALL ANSWER TIMER	1-250	10	
11	COLLECT CALL IDLE TIMER	1-250	20	
12	Analog line monitoring	ON/OFF	ON	
13	Ring detection register	000-255	000	
PGM: 150 - NA ISDN Line Attributes				
1	Local Exchange Type	1~4	NI 1	1: NI 1 2: NI 2 3: 5 ESS 4: NORTEL
2	SPID Number	9~23 digits		
3	Directory Number	23 digits		
4	EKTS Mode	1:EKTS /0:NONE	NONE	

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
5	Type for 1/2/3	0~5	0	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated
6	Type for 4/5/6	0~5	0	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated
7	Type for 7/8/9	0~5	0	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated
8	Type for 10/11	0~5	0	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated
5	Type for 1/2/3	0~5	0	0: Unknown 1: International 2: National 3: Network 4: Subscriber 5: Abbreviated
PGM: 151 - ISDN CO Line Attributes				
1	T200	1~5 (Sec.)	1	
2	T201	1~5 (Sec.)	1	
3	T202	1~5 (Sec.)	2	
4	T203	5~15 (Sec.)	10	
5	T204	5~15 (Sec.)	10	
6	T302	10~30 (Sec.)	15	
7	T303	1~10 (Sec.)	4	
8	T305	10~60 (Sec.)	30	
9	T308	1~10 (Sec.)	4	
10	T309	1~100 (Sec.)	90	
11	T310	10~60 (Sec.)	40	
12	N200	1%	3	
13	N201	250~300 (bytes)	260	
14	N202	1~5	3	
15	N204	1~5	1	
16	K_Valule	1~5	1	
PGM: 152 - T1 Line Timers Attributes				

Table C-5 CO LINE DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
1	Pause Time	1~9	2	1 sec increments
2	Release Guard Time	01~60	20	100 msec increments
3	Dial-Tone Delay Time	02~50	10	100 msec increments
4	Inter-Digit Time	15~30	15	20 msec increments
5	Wink Time	07~15	10	20 msec increments
6	Pulse Rate	0~3	0	0 : 60-40(10pps) 1 : 66-33(10pps) 2 : 60-40(20pps) 3 : 66-33(20pps)
7	Seize DTC Time	0~127	3	20 msec increments
8	Release Time	0~127	7	20 msec increments
9	Address Signaling Type	1:DTMF, 0:Pulse	DTMF	
10	Ring Start Time	2~9	2	100 msec increments
11	Ring Stop Time	10~60	60	100 msec increments
12	Collect Digit	1~6	3	
13	Digit Store Time	01~15	15	1 sec increments
PGM: 153 - DCOB CO Line Attributes				
1	Line Status	1~9	6	
2	DNIS Service	1: ON, 0: OFF	OFF	
3	Number of CLI Digits	01-15	10	
4	DCOB Type	0-2	2	
5	Call Category	1-9	1	
6	DID Digit number	00~32	0	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 160 - System Attributes I				
1	Attendant Call Queuing Ring-Back Tone	1: RBT, 0: MOH	MOH	
2	Camp-on, MOH/Ring-Back Tone	1: RBT, 0: MOH	MOH	
3	CO Dial-Tone Detect	1: ON, 0: OFF	OFF	
4	CO Line Choice	0 ~ 2	Last	0: Round Robin,1: Last Used, 2: First
5	DISA Retry Counter	1~9	3	
6	External Night Ring	1: ON, 0: OFF	OFF	
7	Hold Preference	1: Sys, 0: Excl	System	System/Exclusive Hold
8	Print LCR Converted Digit	1: LCR, 0: User	LCR	
9	Attendant Call Queue Available	1: ON, 0: OFF	OFF	
10	All Attendant PGM '0' Access	1: ON, 0: OFF	OFF	(Except USA version)
11	Off-Net Prompt Usage	1: ON, 0: OFF	OFF	(Except USA version)
12	Unsupervised Conf Timer Extension	1: ON, 0: OFF	OFF	
13	ACD Information Print	1: ON, 0: OFF	OFF	
14	Call Log List Number	15 ~ 50	15	
15	Off-net DTMF Tone	1: ON, 0: OFF	ON	
16	Authorization Retry Counter	1 ~ 9	3	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
17	Conference Room Telephone number	8 digits		
18	MPB DIFFSERV	00-63	04	
19	UPGRADE MODE	1: FTP, 0: TFTP	FTP	
20	TRANSFER TONE	1: RBT, 0: MOH	RBT	
21	CONF WARN TONE	1: ON, 0: OFF	ON	
22	TLS for WEB	1: ON, 0: OFF	OFF	
23	DUMMY DIAL TONE	1: ON, 0: OFF	OFF	
24	ADDED ATTR		ADDED ATTR	
24-1	SIP STA MODE	0: RTD, 1: PTP	RTD	
24-2	SYS AUTH END CODE	0: OFF, 1: ON	OFF	
24-3	STN VM FEATURE USAGE	0: OFF, 1: ON	ON	
24-4	Remote VM access	0: OFF, 1: ON	ON	
24-5	Transfer Tone usage	0: OFF, 1: ON	OFF	
24-6	LCR Dial tone detect	0: OFF, 1: ON	OFF	
24-7	ICM Call log	0: OFF, 1: ON	OFF	
24-8	ATD password usage	0: OFF, 1: ON	OFF	
24-9	Pickup STA name usage	0: OFF, 1: ON	OFF	
24-10	Display LCR mode	0: OFF, 1: ON	ON	
24-11	Easy 5 wake up usage	0: OFF, 1: ON	OFF	
24-12	WEB login usage	0: OFF, 1: ON	OFF	
24-13	VM MEX notify over LCO	0: DISABLE 1: ENABLE	DISABLE	
24-14	Modem ASC CO line	00-74	0	
24-15	Meet me soft display	0: OFF, 1: ON	ON	
24-16	Device information request interval time	015-255	015	
24-17	Number of CLI Wait list	000-255	000	
PGM: 161 - System Attributes II				
1	Off-Hook Ring Signal Type	1: Mute, 0: Burst	Mute	
2	Page Warning Tone	1: ON, 0: OFF	ON	
3	Privacy	1: ON, 0: OFF	ON	
4	Privacy Warning Tone	1: ON, 0: OFF	ON	
5	ACD PRNT Enable	1: ON, 0: OFF	OFF	
6	ACD PRNT Timer	001~255	10	10 second increments
7	ACD Clear after PRNT	1: ON, 0: OFF	OFF	
8	Override 1st CO Group	1: ON, 0: OFF	ON	
9	Base Codec Type	0-3	G711	0: G711, 1: G.723.1, 2: G.729, 3: G.722
10	G.711 Packetization	10/20/30	20	1 msec increments
11	G.723 Packetization	30/60	30	1 msec increments
12	Network Time/Date	0: DISABLE 1: ISDN CLOCK 2: NTP	DISABLE	(USA version do not support ISDN CLOCK)
13	Incoming Call Toll Check	1: ON, 0: OFF	ON	
14	Web Server TCP port	00001~65535	00080	
15	Web Password Security	1: ON, 0: OFF	OFF	
16	Old Auth. Code Usage	1: ON, 0: OFF	ON	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
17	COS 7 on Auth code entry failure	1: ON, 0: OFF	OFF	
18	Unified Message Format	1: ON, 0: OFF	OFF	
19	Record Warning Tone	1: ON, 0: OFF	ON	
20	Unused			
21	Unused			
22	SMS CENTER NUMBER	23 digits		
23	SMS PROTOCOL	0 ~ 8	NONE	0: No PSTN SMS support, 1: ETSI-P1 2: ETSI-P2 3: KT-LivingNet 4: SIP-Text 5: SIP-XML 6: KT-IP-PBX 7: SKN-IP-PBX 8: KT XML
24	ADDED ATTR			
24-1	G.722 PACKETIZATION(1ms)	10/20/30 msec	20	
24-2	Unused			
24-3	SMS CENTER CLI	23 digits		
24-4	TRANSIT-OUT SECURITY	1: ON, 0: OFF	ON	
24-5	EMR CALL ATD NOTIFY	1: ON, 0: OFF	ON	
24-6	Unused			
24-7	FIRST DIGIT * IN SPD	0: DISPLAY SECURITY 1: DIGIT *	DISPLAY SECURITY	
24-8	Strong password	1: ON, 0: OFF	ON	
24-9	VSF/VMIB SMTP PORT	0 – 65535	25	
24-10	ICM BUSY SVC	1: OHVO, 0: INTR	OHVO	
24-11	AUTO SAVE NEW MSG	1: ON, 0: OFF	OFF	
24-12	IGMP QUERY USAGE	1: ON, 0: OFF	OFF	
24-13	IGMP INTV_TMR(1sec)	0~3600 (Sec.)	180	
24-14	IGMP QUERY ALL HOSTS	1: ON, 0: OFF	ON	
24-15	IGMP QUERY GENERIC	1: ON, 0: OFF	OFF	
24-16	RING-GROUP INDICATION	1: ON, 0: OFF	OFF	
24-17	RESTRICT * AND #	1: ON, 0: OFF	OFF	
24-18	RESTRICT ANS DGT DISP	1: ON, 0: OFF	ON	
24-19	IP BIND USAGE	1: ON, 0: OFF	OFF	
24-20	ACD MAILSEND WEEKLY SET	0-7	0	
24-21	ACD MAILSEND DAILY SET	00-23		
24-22	ACD DEL AFTER MAILSEND	1: ON, 0: OFF	OFF	
24-23	NEW 5 WAKE UP USAGE	1: ON, 0: OFF	OFF	
24-24	ACD GROUP INDICATION	0: OFF, 1: ON RING, 2: ON LED	OFF	
PGM: 162 - System Password				
1	Admin Password	Max 12 digits	-	
2	Maintenance Password	Max 12 digits	-	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 163 - Alarm Attributes				
1	Alarm Enable	1: ON, 0: OFF	OFF	
2	Alarm Contact Type	1: Close, 0: Open	Close	
3	Alarm/Door Bell Mode	1: Alarm, 0: Door-Bell	Alarm	
4	Alarm Signal Mode	1: Repeat, 0: Once	Repeat	
5	Emergency call notification	0: OFF 1: ON	ON	
6	DCOB Fault notification	0: OFF 1: ON	ON	
7	SIP registration fault notification	0: OFF 1: ON	ON	
PGM: 164 - Attendant Assignment				
1	Attendant Assignment	Station	1: 100 (1000)	Button 1 : System Attendant Button 2: Main Attendants
PGM: 165 - Multicast RTP / RTCP				
1	Multicast RTP	Flex 1 – 61	8100-8220	Max 4 digit
2	Multicast RTCP	Flex 1 – 61	8101 - 8221	Max 4 digit
PGM: 166 - DISA COS				
1	Day mode COS	1~11	1	
2	Night mode COS	1~11	1	
3	Timed mode COS	1~11	1	
PGM: 167 - DID/DISA Destination				
1	Busy Destination	Flex 1~4	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt, F4: Announce
2	Error Destination	Flex 1~4	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt, F4: Announce
3	No Answer Destination	Flex 1~4	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt, F4: Announce
4	VSF Prompts usage	Flex 1~5	Flex 1~5: ON	1: ON, 0: OFF
5	Reroute Busy Destination	Flex 1~3	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt
6	Reroute Error Destination	Flex 1~3	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt
7	Reroute No Answer Destination	Flex 1~3	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt
8	DND Destination	Flex 1~3	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt
9	Reroute Net CO busy Destination	Flex 1~3	Flex 1(Tone)	F1: Tone, F2: Attendant, F3: Hunt
PGM: 168 - External Control Contacts				
1	First Contact	1~3	-	1: LBC, 2: Door, 3: Ext. 1,
2	Second Contact	1~3	-	1: LBC, 2: Door, 3: Ext. 1,
PGM: 169 - LCD Date/Time & Language Mode				
1	Date Display Mode	1: MMDDYY	MMDDYY	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
		0: DDMMYY		
2	Time Display Mode	1: 12H, 0: 24H	12H	
3	Language Display Mode	00~17	00 (Eng)	
4	Weekday Display Mode	0~2	0	0 : PGM 169 BTN 1 1 : MM/DD WDY 2 : MM DD WDY
PGM: 170 - Flexible Button LED Flashing Rate				
1	CO Incoming Ring Flashing Rate	00~14	FLASH 30 IPM (2)	
2	CO Transfer Ring Flashing Rate	00~14	FLASH 120 IPM (10)	
3	CO Queue Ring Flashing Rate	00~14	FLASH 240 IPM FLUTTER (6)	
4	CO Recall Ring Flashing Rate	00~14	FLASH 480 IPM FLUTTER (8)	
5	CO I Hold Flashing Rate	00~14	FLASH 30 IPM WINK (12)	
6	CO System Hold Flashing Rate	00~14	FLASH 60 IPM (3)	
7	CO Exclusive Hold Flashing Rate	00~14	FLASH 120 IPM (10)	
8	CO Out-going disabled Flashing Rate	00~14	FLASH 240 IPM FLUTTER (6)	
9	CO incoming call off-net forward Flashing Rate	00~14	FLASH 240 IPM FLUTTER (6)	
10	CO DISA Indication Flashing Rate	00~14	FLASH 240 IPM (5)	
11	CO supplementary call waiting Flashing Rate	00~14	FLASH 240 IPM FLUTTER (6)	
12	CO Supplementary Hold Flashing Rate	00~14	FLASH 480 IPM (7)	
13	DSS button Flashing Rate for CO Ring	00~14	FLASH 30 IPM (2)	
14	DSS button Flashing Rate for ICM all Call	00~14	FLASH 60 IPM (3)	
15	DSS button Flashing Rate for ICM Ring associate	00~14	FLASH 120 IPM (10)	
16	DSS button Flashing Rate for a station in DND	00~14	FLASH 60 IPM (3)	
17	DSS button Flashing Rate for a station in Lock-out	00~14	FLASH 480 IPM FLUTTER (8)	
18	DSS button Flashing Rate for a station in pre-selected message mode	00~14	FLASH 30 IPM (2)	
19	DSS button Flashing Rate for a station in ICM Hold	00~14	FLASH 60 IPM (3)	
20	DSS button Flashing Rate for a station in other case	00~14	FLASH 120 IPM (10)	
21	CIQ #1 Threshold	00~14	FLASH 60 IPM	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
			(3)	
22	CIQ #2 Threshold	00~14	FLASH 120 IPM (10)	
23	CIQ #3 Threshold	00~14	FLASH 240 IPM (5)	
24	ACD DND button	00~14	FLASH 120 IPM (10)	
25	ACD Warning tone	00~14	FLASH 120 IPM (10)	
26	ACD Help Button	00~14	FLASH 120 IPM (10)	
27	Voice Record button	00~14	FLASH 240 IPM (5)	
28	Message Wait button	00~14	FLASH 30 IPM (2)	
29	DSS Out-of-service state	00~14	FLASH OFF (00)	
30	On-demand Ring mode	00~14	FLASH 60 IPM (3)	
31	Night Ring mode	00~14	FLASH STEADY (01)	
32	Timed Ring mode	00~14	FLASH 240 IPM (5)	
33	Auto Ring mode	00~14	FLASH 480 IPM (7)	
34	Page Hold Button	00~14	FLASH 60 IPM (3)	
35	DSS Off duty	00~14	FLASH 120 IPM (10)	
PGM: 171 - Music Source				
1	BGM Type	0~10	1	00: No BGM 01: INT Music 02: EXT Music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3
2	MOH Type	0~10	1	00: Hold tone 01: INT Music 02: EXT Music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
				08: SLT MOH5 09: VSF MOH2 10: VSF MOH3
3	Int/Ext1 Music	00~12	Romance	00: ROMANCE 01: TURKISH MARCH 02: GREEN SLEEVE 03: FUR ELISE 04: CARMEN 05: WALTZ 06: PAVANE 07: SICHILIANO 08: SONATA 09: SPRING 10: CAMPANELLA 11: BADINERIE 12: BLUE DANUBE
4	SLT MOH	F1: SLTMOH1 F2: SLTMOH2 F3: SLTMOH3 F4: SLTMOH4 F5: SLTMOH5		
5	VSF MOH 2	01-70	N/A	
6	VSF MOH 3	01-70	N/A	
PGM: 172 - PBX Access Codes				
1 –4	PBX Access Code	Max 2 digits	-	Maximum 4 PBX access code
PGM: 173 - Ringing Line Preference Priority				
1	Transfer CO Call	1~4	1	
2	Recalling CO Call	1~4	2	
3	Incoming CO Call	1~4	3	
4	Queued CO Call	1~4	4	
PGM: 174 - RS-232 Port Settings				
1	Baud Rate	1~6	115200	1: Unused 2: 9600 BAUD 3: 19200 BAUD 4: 38400 BAUD 5: 57600 BAUD 6: 115200 BAUD
2	CTS/RTS	1: ON, 0: OFF	OFF	
3	Page Break	1: ON, 0: OFF	OFF	
4	Line Page	001~199	066	
5	XON/XOF	1: XON, 0: XOFF	XOFF	
PGM: 175 - Serial Port Function Selection				
	Print Port Selection	Flex 1~2		Flex 1: Select Print Port, Flex 2: Select TCP port
1	Select Print Port		SERIAL1	1-2: Serial, 3-5: dynamic TCP port
1-1	Off-line SMDR/Statistics Print	1~7	SERIAL1	
1-2	Admin Print	1~7	SERIAL1	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
1-3	Traffic Print	1~7	SERIAL1	
1-4	SMDI Print	1~7	SERIAL1	
1-5	Call Info Print	1~7	SERIAL1	
1-6	On-line SMDR Print	1~7	SERIAL1	
1-7	Trace Print	1~5	SERIAL1	
1-8	Debug Print	1~7	SERIAL1	
1-9	ACD Package Print	1~7	SERIAL1	
2	Select TCP port			
2-1	Off-line SMDR/Statistics Print	1-9999	NULL	
2-2	Admin Print	1-9999	NULL	
2-3	Traffic Print	1-9999	NULL	
2-4	SMDI Print	1-9999	NULL	
2-5	Call Info Print	1-9999	NULL	
2-6	On-line SMDR Print	1-9999	NULL	
2-7	Trace Print	1-9999	NULL	
2-8	Debug Print	1-9999	NULL	
2-9	ACD Package Print	1-9999	NULL	
2-10	ISMDR Print	1-9999	NULL	
PGM: 176 - Break/Make Ratio				
1	Break/Make ratio	1: 66/33 0: 60/40	60/40	
PGM: 177 - SMDR Attributes				
1	SMDR Save Enable	1: ON, 0: OFF	OFF	
2	SMDR Print Enable	1: ON, 0: OFF	ON	ON: Real-time, OFF: On-demand
3	SMDR Recording Call Type	1: LD, 0: ALL	LD	LD: Long Distance, ALL: All
4	SMDR LD Call Digit Counter	07~15	07	
5	Print Incoming Call	1: ON, 0: OFF	OFF	
6	Print Lost Call	1: ON, 0: OFF	ON	
7	Records in Detail	1: ON, 0: OFF	ON	
8	SMDR Dial Digit Hidden	0~9	0	
9	SMDR Currency unit	3 Characters	-	
10	SMDR Cost Per Unit Pulse	6 digits	000000	
11	SMDR Decimal Location	0~5	0	
12	SMDR Start Timer	000~250	000	1 sec increments
13	SMTP Mail Server Address	12 digits		
14	User Mail Address	e-mail address		40 character modify via Web only
	SMDR System Domain Name	18 characters		Web only
15	Mail Send Weekly Set	0-7	0	
16	Mail Send Daily Set	00-23	00	
17	Auto Send Mode	1: ON, 0: OFF	OFF	
18	Auto Delete Mode	1: ON, 0: OFF	OFF	
19	SMDR Long Distance Codes	Flex 1~Flex 5	0	Maximum 5 LD codes, 2 digits each
20	SMDR Ring/CLI/CPN (SVC_1)	0: Ring 1: CLI 2: CPN	RING	For incoming call, 0: Ring Service Time, 1: CLI, 2: CPN, 3: None Dialed number for

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
				outgoing call
21	MSN Print on SMDR	1: ON, 0: OFF	OFF	
22	SMDR Ring/CLI/CPN (SVC_2)	0: Ring 1: CLI 2: CPN 3: None	CPN	For incoming call, 0: Ring Service Time, 1: CLI, 2: CPN, 3: None
23	Print Serial No	1: ON, 0: OFF	OFF	
24	SMDR Attributes	01-19		
24-1	Hidden digit location	1: Right, 0: Left	Left	
24-2	SMDR Interface Service	1: ON, 0: OFF	OFF	
24-3	SMDR ICM Save	1: ON, 0: OFF	OFF	
24-4	SMDR ICM Print	1: ON, 0: OFF	OFF	
24-5	SMDR Disconnect Cause	1: ON, 0: OFF	OFF	
24-6	Long Time Call(10min)	000-144	000	
24-7	SMDR No Out Net Call	1: ON, 0: OFF	OFF	
24-8	Unused			
24-9	Unused			
24-10	SMTP Mail Server ID	40 characters		
24-11	SMTP Mail Server PWID	20 characters		
24-12	Transferred Call Charge Rate	0: Individual 1: Integrate Transferring Station 2: Integrate Transferred Station	Individual	
24-13	Attendant Transfer Charge Rate	0: Individual 1: Attendant Charging 2: Transferred Station Charging	Individual	
24-14	SMTP Mail Server Domain Address	100 Character		
24-15	SMTP sender Mail (WEB)	Max 40 Characters	-	
24-16	SMTP security	0-2 (0:No security 1:SSL 2:TLS)	0	
24-17	SMTP port	1-65535	25	
24-18	VSF VM Display	0:'I' 1:'V'	0:'I'	
24-19	Display N type	1:ON, 2:OFF	OFF	
PGM: 178 - System Date & Time				
1	System Time	HH:MM	-	Hour/Minute sequence.
2	System Date	MMDDYY	-	Month/Day/Year sequence
3	DST Enable Mode	0: OFF, 1: ON	OFF	Activate / deactivate DST ability
4	DST Start Time	See DST Table	2nd Sunday of March at 2:00 AM	Web Only, DST Table format

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
5	DST End Time	See DST Table	1st Sunday in Nov. at 2:00 AM	Web Only, DST Table format
PGM: 179 - Multi-Language Support				
1	1st language	1: ON, 0: OFF	ON	US
2	2nd Language	1: ON, 0: OFF	OFF	Korea
3	3rd Language	1: ON, 0: OFF	OFF	Turkey
4	4th Language	1: ON, 0: OFF	OFF	Russia
5	5th Language	1: ON, 0: OFF	OFF	Australia
6	6th Language	1: ON, 0: OFF	OFF	Germany
PGM: 180 - System Timers I				
1	ATD Recall Timer	00~60	01	1 min increments
2	Call Park Timer	000~600	120	1 sec increments
3	Camp-On Recall Timer	000~200	030	1 sec increments
4	Exclusive Hold Recall Timer	000~300	060	1 sec increments
5	I-Hold Recall Timer	000~300	030	1 sec increments
6	System Hold Recall Timer	000~300	030	1 sec increments
7	Transfer Recall Timer	000~300	030	1 sec increments
8	ACNR Delay Timer	000~300	030	1 sec increments
9	ACNR Pause Timer	030~300	030	1 sec increments
10	ACNR Retry Counter	1~13	3	
11	ACNR Tone Detect Timer	001~300	030	1 sec increments
12	Automatic CO Release Timer	000~300	030	1 sec increments
13	CCR Inter-digit Timer	000~300	030	100 msec increments
14	CO Restrict Timer	00~99	00	1 minute increments
15	CO Dial Delay Timer	00~99	05	100 msec increments
16	CO Release Guard Timer	010~150	020	100 msec increments
17	CO Ring Off Timer	010~150	060	100 msec increments
18	CO Ring On Timer	1~9	2	100 msec increments
19	CO Elapsed Call Timer	005~900	180	1 sec increments
20	Web Password Guard Timer	001~999	5	1 min increments
21	On hook idle Timer	00~99	0	1 sec increments
22	Call recording repeat time	000~999	0	
PGM: 181 - System Timers II				
1	Call Fwd No Answer Timer	000~600	015	1 sec increments
2	DID/DISA No Answer Timer	000~255	000	1 sec increments
3	VSF User Max Record Timer	000~999	60	1 sec increments
4	VSF Valid User Message Timer	0~9	4	1 sec increments
5	Door Open Timer	05~99	20	100 msec increments
6	ICM Dial Tone Timer	01~20	10	1 sec increments
7	Inter-Digit Timer	01~20	05	1 sec increments
8	Message Wait Reminder Tone Timer	00~60	00	1 min increments
9	Paging Timeout Timer	000~255	015	1 sec increments
10	Pause Timer	1~9	3	1 sec increments
11	3-Soft Auto Release Timer	01-30	10	1 sec increments (Reserved for new keyset)

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
12	VM Pause Timer	1-90	30	100 msec increments (Except USA version)
13	VSF cut error Timer	1-90	00	1 sec increments
14	Unused			
15	Emergency retry timer	00~99 (1 sec.)	00	1 sec increments
16	Error tone timer	005~180 (1 sec.)	30	1 sec increments
17	Howling tone timer	000~180 (1 sec.)	30	1 sec increments
18	Notification play delay	1~99 (1 sec.)	10	1 sec increments
19	Short Modem timer	1~60 (1 sec.)	10	1 sec increments
PGM: 182 - System Timers III				
1	SLT Hook Switch Bounce Timer	01~25	01	100 msec increments
2	SLT Max Hook Switch Flash Timer	01~25	07	100 msec increments
3	SLT Min Hook-flash Timer	000~250	010	10 msec increments
4	Station Auto Release Timer	000~300	060	1 sec increments
5	Unsupervised Conference Timer	00~99	10	1 minute increments
6	Prime Line Delay Timer	01~20	05	1 sec increments
7	Wink Timer	010~200	010	10 msec increments
8	En-block Inter-Digit Timer	01~20	5	1 sec increments
9	DTMF Duration Timer	04~99	10	10 msec increments
10	Flexible DID Timer	01~99	30	100 msec increments
11	Wakeup fail Timer	00~99	20	1 sec increments
12	Prepaid warn timer	00~99	00	1 sec increments
PGM: 183 -In room indication				
1	Supervisor			
2	Member 01~20			
PGM: 186 - DCOB System Attributes				
1	R2 Out manage Timer	01~50	14	1 sec increments
2	R2 Incoming manage Timer	01~50	14	1 sec increments
3	R2 Disappear Timer	01~50	14	1 sec increments
4	R2 Pulse Timer	01~30	07	20 msec increments
5	R2 Ready Timer	000~500	07	20 msec increments
6	R2 Dial tone Delay Timer	01~30	20	1 sec increments
PGM: 195 – NTP Attributes				
1	Network Time/Date	0 : Disable 1: ISDN 2: NTP	Disable	TIME SOURCE
PGM: 253 – VM COS Attributes				
1	Greeting Length	00-99	60	
2	Message Length	000-600	0	
3	Number Of Messages	000-250	0	

Table C-6 SYSTEM DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
4	Retention Time	00-99	0	
5	E-mail Notification	0: OFF 1: Notification 2: Notification & Delete	Notification & Delete	
6	Future Delivery Message	1: ON, 0: OFF	OFF	
7	Confirm Message Receipt	1: ON, 0: OFF	OFF	
8	Private Message Mark	1: ON, 0: OFF	OFF	
PGM: 260 – Personal Group				
1	Master Station	Station Range	-	
2	Member Station	Station Range	-	
PGM: 261 – Personal Group Attributes				
1	Use Master Wake Up	1: ON, 0: OFF	OFF	
2	Use Master Call Forward	1: ON, 0: OFF	ON	
3	Use Master DND	1: ON, 0: OFF	OFF	
4	Set linked pair	1: ON, 0: OFF	OFF	

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 190 - Station Group Assignment, 401 – 439				
1	Group Type	0~10	0	0: No Assignment 1: Circular 2: Terminal 3: UCD/ACD 4: Ring 5: VM 6: Pick-Up 7: VSF-VM 8: UMS 9: NET-VM 10: UCS
2	Pick-up Attribute	1: ON, 0: OFF	OFF	Not applicable VM group
3	Circular group			
PGM: 191 - Station Group Attributes, by Group Type				
CIRCULAR GROUP				
1	VSF Announce 1 Timer	000~999	015	1 second increments
2	VSF Announce 2 Timer	000~999	000	1 second increments
3	VSF Announce 1 Location	00~200	00	
4	VSF Announce 2 Location	00~200	00	
5	VSF Announce 2 Repeat Timer	000~999	000	1 second increments
6	VSF Announce 2 Repeat	1: ON, 0: OFF	OFF	
7	Overflow Destination	Station/Group/ VSF/Speed	-	
8	Overflow Timer	000~600	180	1 second increments
9	Wrap-Up Timer	000~999	002	1 second increments
10	No Answer Timer	00~99	15	1 second increments
11	Pilot Hunt	1: ON, 0: OFF	ON	

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
12	Report No Member	1: ON, 0: OFF	OFF	
13	Music Source	00~10	1	00: Ring-back 01: INT Music 02: EXT Music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3
14	Member Forward	1: ON, 0: OFF	ON	
15	Mailbox Message Wait Station	Station Number	None	
16	Mailbox Password	12 digits	None	
17	Forced destination	1~4		
18	Forced forward destination usage	1: ON, 0: OFF	OFF	
19	WAIT IF 1ST ANNC BUSY	1: ON, 0: OFF	ON	
20	Group name	20 character	….	
21	Maximum queue call count	00-99	99	
TERMINAL GROUP				
1	VSF Announce 1 Timer	000~999	015	1 second increments
2	VSF Announce 2 Timer	000~999	000	1 second increments
3	VSF Announce 1 Location	00~200	00	
4	VSF Announce 2 Location	00~200	00	
5	VSF Announce 2 Repeat Timer	000~999	000	1 second increments
6	VSF Announce 2 Repeat	1: ON, 0: OFF	OFF	
7	Overflow Destination	Station/Group/ VSF/Speed	-	
8	Overflow Timer	000~600	180	1 second increments
9	Wrap-Up Timer	000~999	002	1 second increments
10	No Answer Timer	00~99	15	1 second increments
11	Pilot Hunt	1: ON, 0: OFF	ON	
12	Report No Member	1: ON, 0: OFF	OFF	
13	Music Source	00~10	1	00: Ring-back 01: INT Music 02: EXT Music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3
14	Member Forward	1: ON, 0: OFF	ON	
15	Mailbox Message Wait Station	Station Number	None	
16	Mailbox Password	12 digits	None	
17	Forced destination	1~4		

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
18	Forced forward destination usage	1: ON, 0: OFF	OFF	
19	WAIT IF 1ST ANNC BUSY	1: ON, 0: OFF	ON	
20	Group name	20 character	….	
21	Maximum queue call count	00-99	99	
UCD/ACD GROUP				
1	VSF Announce 1 Timer	000~999	15	1 second increments
2	VSF Announce 2 Timer	000~999	000	1 second increments
3	VSF Announce 1 Location	00~200	00	
4	VSF Announce 2 Location	00~200	00	
5	VSF Announce 2 Repeat Timer	000~999	00	1 second increments
6	VSF Announce 2 Repeat	1: ON, 0: OFF	OFF	
7	Overflow Destination	Station/Group/ VSF/Speed	-	
8	Overflow Timer	000~600	180	1 second increments
9	Wrap-Up Timer	000~999	000	1 second increments
10	Report No Member	1: ON, 0: OFF	OFF	
11	Music Source	0~10	1	00: Ring-back 01: INT Music 02: EXT Music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3
12	ACD Warning Tone	1: ON, 0: OFF	OFF	
13	Alternate Destination	Station/Group /Speed		
14	Supervisor Timer	000~999	030	1 second increments
15	Supervisor Call Count	00~99	00	
16	WAIT IF 1ST ANNC BUSY	1: ON, 0: OFF	ON	
17	Maximum Queued Call Counter	00~99	99	
18	Supervisors	Station	-	Max, 5 station can be supervisors
19	UCD/ACD Station Priority	0~9	0	
20	ACD DND Wrap-up Timer	002~200	010	1 second increments
21	ACD ICLID Usage	1: ON, 0: OFF	OFF	When guaranteed announcement is used
22	ACD Group Name	20 Character	-	
23	ACD CIQ Route	Flex 1 ~ 10		Flex 10 : when caller dial “0” Flex 1~9 : caller digit 1~9 Ex.) When Flex 1 is pressed 1: Station Number 2: Hunt Group Number 3: System Speed Number 4: Network Station Number
24	ACD Sub Attribute	Flex 1-20		

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
24-1	Zap Tone	1: ON, 0: OFF	OFF	
24-2	Mailbox Message Wait Station	Station Number	None	
24-3	Mailbox Password	12 digits	None	
24-4	Call In Queue Display	1: ON, 0: OFF	OFF	
24-5	Forced forward destination usage	1: ON, 0: OFF	OFF	
24-6	Call In Queue #1 Threshold	00~99	10	
24-7	Call In Queue #1 Announcement Location	00~200		
24-8	Call In Queue #1 Page zone	00~15 or 00~40	00	
24-9	Call In Queue #1 Announcement Delay Timer	000~180	015	1 second increments
24-10	Call In Queue #1 Announcement Repeat Timer	000~180	045	1 second increments
24-11	Call In Queue #2 Threshold	00~99	20	
24-12	Call In Queue #2 Announcement Location	00~200		
24-13	Call In Queue #2 Page zone	00~15 or 00~40	00	
24-14	Call In Queue #2 Announcement Delay Timer	000~180	015	1 second increments
24-15	Call In Queue #2 Announcement Repeat Timer	000~180	025	1 second increments
24-16	Call In Queue #3 Threshold	00~99	30	
24-17	Call In Queue #3 Announcement Location	00~200		
24-18	Call In Queue #3 Page zone	00~15 or 00~40	00	
24-19	Call In Queue #3 Announcement Delay Timer	000~180	015	1 second increments
24-20	Call In Queue #3 Announcement Repeat Timer	000~180	005	1 second increments
24-21	Call in Queue Mention	1: ON, 0: OFF	OFF	
24-22	ACD No-answer Timer	000 ~ 180	000	1 second increments
24-23	Member Forward	1: ON, 0: OFF	ON	
24-24	Forward destination	1-4		
RING GROUP				
1	VSF Announce 1 Timer	000~999	015	1 second increments
2	VSF Announce 2 Timer	000~999	00	1 second increments
3	VSF Announce 1 Location	00~200	00	
4	VSF Announce 2 Location	00~200	00	
5	VSF Announce 2 Repeat Timer	000~999	000	1 second increments
6	VSF Announce 2 Repeat	1: ON, 0: OFF	OFF	
7	Overflow Destination	Station/Group/ VSF/Speed	-	
8	Overflow Timer	000~600	180	1 second increments
9	Wrap-Up Timer	000~999	002	1 second increments
10	Music Source	0~10	1	
11	Maximum Queued Call Counter	00~99	99	00: Ring-back 01: INT Music

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
				02: EXT Music 03: VSF MOH 04: SLT MOH1 05: SLT MOH2 06: SLT MOH3 07: SLT MOH4 08: SLT MOH5 09: VSF MOH2 10: VSF MOH3
12	Member Forward	1: ON, 0: OFF	ON	
13	Mailbox Message Wait Station	Station Number	None	
14	Mailbox Password	12 digits	None	
15	Forced destination	1~4		
16	Forced forward destination usage	1: ON, 0: OFF	OFF	
17	WAIT IF 1ST ANNC BUSY	1: ON, 0: OFF	ON	
18	Group name	20 characters	….	
External VM GROUP				
1	Wrap-Up Timer	000~999	000	1 second increments
2	Put Mail Index	1~4	1	
3	Get Mail Index	1~4	2	
4	VM Group Hunt Type	1: Circular 0: Terminal	Terminal	
5	Overflow Timer	000~600	180	1 second increments
6	Overflow Destination	Station/Group or System Speed	-	
7	Forced forward usage	0: OFF / 1: ON	OFF	
8	Forced forward destination	1-4	.	
9	Group name	20 characters	.	
10	Server type	0: IPCR 1: 3rd	3rd	
11	Server number	01-10		
12	Member type	0: SIP 1: SLT	SIP	
13	Server capacity	000~140	0	
PICK-UP GROUP				
1	Auto Pick-Up	1: ON, 0: OFF	OFF	
2	All Group Member Ringing	1: ON, 0: OFF	OFF	
VSF-VM GROUP				
1	Retention	00 ~ 99	00	1 Day increments
2	Dial time	00 ~ 99	15	1 second increments
3	Group name	20 characters	...	
UMS GROUP				
1	VSF Announce 1 Timer	000~999	15	1 second increments
2	VSF Announce 2 Timer	000~999	000	1 second increments
3	VSF Announce 1 Location	01~70	00	
4	VSF Announce 2 Location	01~70	00	
5	VSF Announce 2 Repeat Timer	000~999	00	

Table C-7 STATION GROUP DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
6	VSF Announce 2 Repeat	1: ON, 0: OFF	OFF	
7	Overflow Destination	Station/Group/ VSF/Speed	-	
8	Overflow Timer	000~600	180	1 second increments
9	No Answer Timer	00~99	15	1 second increments
10	Pilot Hunt	1: ON, 0: OFF	ON	
11	Alternate Destination	Station/Group		
12	Hunt Type	1: Circular 0: Terminal	Circular	
13	Wrap-Up Timer	002~999	002	1 second increments
14	Forced forward usage	0: OFF 1: ON	OFF	
15	Forced forward destination	1-4	...	
16	Group name	20 characters	...	
UCS GROUP				
	Select UCS	Flex 1		
1	UCS Server	01 ~ 16	1	Only selection 1 is supported
PGM: 192 - Pick up Group Assignment				
1	Member assignment	Station	-	

Table C-8 ISDN LINE & ICLID ROUTING DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 200 - ISDN Attributes				
1	CO ATD CODE	2 digits	-	
2	CLI Print To Serial	1: ON, 0: OFF	OFF	
3	Display DID info	1: ON, 0: OFF	OFF	
PGM: 201 - CLIP/COLP Table				
1	CLIP/COLP Table	00~49		
PGM: 202 - MSN Table				
1	CO range			
2	Index	000~999		Index to PGM 231 Table
3	Telephone number	23 digits		
PGM: 203 - ICLID Route Table				
1	Index	001~250	-	The bin no of PGM 204
2	ICLID Telephone number	24 digits	-	
3	ICLID Name	12 characters		
4	ICLID Tone	01~12		2 digits
PGM: 204 - ICLID RING Assignment Table				
1	Day	Station/Group		Flex 1: Station + Delay (0~9 ring cycles) Flex 2: Hunt group Flex 3: VSF announcement (01~70) Flex 4: AA Ring delay Time (00~30 sec.)
2	Night	Station/Group		
3	Timed Ring	Station/Group		

Table C-8 ISDN LINE & ICLID ROUTING DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 205 - PPP Attributes				
1	PPP Destination Station number	Station Number	None	
2	PPP User ID 1	12 Characters	Iikppp01	
3	PPP Password 1	12 Characters	Ipkts01	
4	PPP User ID 2	12 Characters	Iikppp02	
5	PPP Password 2	12 Characters	Ipkts02	
6	Server IP address	IP address		
7	Client IP address	IP address		
PGM: 206 - PREFIX Dialing Table Attributes				
1	PREFIX CODE	Max. 8 digits	-	
2	TABLE ID	0-6	0	
3	MIN DIGIT	00-30	0	
4	MAX DIGIT	00-30	0	
5	NUM OF TYPE	0-6	0 (UNKNOWN)	0:Unknown 1:International 2:National 3:Network Spec. 4:Subscriber 5:Abbreviated 6:Reserved
6	NUM PLAN	0-6	0 (UNKNOWN)	0:Unknonw 1:ISDN/Telephony 2:Data numbering 3:Telex 4:National standard 5:Private 6:Reserved
7	SENDING COMPLETE	1:ON / 0:OFF	OFF	
8	CALL CHARGE TYPE	0-5	0 (UNKNOWN)	0:Unknown 1:Local 2:Long Distance 3:International 4:Mobile 5:reserved
9	CALL CHARGE TIMER	000-999	000	
10	Prefix table			

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 220 - LCR Control Attributes				
1	LCR Access Mode	1~6	M00	1: M00 2: M01 3: M02 4: M11 5: M12 6: M13
2	Set the Day of week zone			

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
	1	MON	1~3	1
	2	TUE	1~3	1
	3	WED	1~3	1
	4	THUR	1~3	1
	5	FRI	1~3	1
	6	SAT	1~3	1
	7	SUN	1~3	1
3	Set the Time Zone of Day zone1			
	1	00~24		
	2	00~24		
	3	00~24		
4	Set the Time Zone of Day zone1			
	1	00~24		
	2	00~24		
	3	00~24		
5	Set the Time Zone of Day zone1			
	1	00~24		
	2	00~24		
	3	00~24		
PGM: 221 - LCR Leading Digit Table				
1	LCR Type	1~3	Both	1: Internal 2: CO Line, 3: Both
2	Code (leading digit)	Max. 12 digits	-	
3	Day Zone 1 DMT	6 digits		Time Zone 1~3: 2 digits each
4	Day Zone 2 DMT	6 digits		Time Zone 1~3: 2 digits each
5	Day Zone 3 DMT	6 digits		Time Zone 1~3: 2 digits each
6	Check Password	1: ON, 0: OFF	OFF	LCR code authorization
PGM: 222 - LCR Digit Modification Table				
1	Added Digit	Max. 25 digits		
2	Removal Position	01~12	01	
3	Number of Remove digits	00~12	00	
4	Add Position	01~13	01	
5	CO/IP Group	01-21	01	
6	Alt Index	00~99	-	
7	Net num plan bin	000~251		
8	SMDR code	4 digit		
PGM: 223 - LCR Table Initialization				
1	DMT Of Day zone 1	6 digits		Time Zone 1~3: 2 digits each
2	DMT Of Day zone 2	6 digits		Time Zone 1~3: 2 digits each
3	DMT Of Day zone 3	6 digits		Time Zone 1~3: 2 digits each
4	CO Group Init	01-21		
5	Alt Index Init	00~99		
6	Initialize All LCR			
PGM: 224 - TOLL Table				
1	Allow Table A (01~50)	Max. 20 digits	-	
2	Deny Table A (01~50)	Max. 20 digits	-	
3	Allow Table B (01~50)	Max. 20 digits	-	

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
4	Deny Table B (01~50)	Max. 20 digits	-	
5	Allow Table C (01~50)	Max. 20 digits	-	
6	Deny Table C (01~50)	Max. 20 digits	-	
7	Allow Table D (01~50)	Max. 20 digits	-	
8	Deny Table D (01~50)	Max. 20 digits	-	
9	Allow Table E (01~50)	Max. 20 digits	-	
10	Deny Table E (01~50)	Max. 20 digits	-	
PGM: 226 - Emergency Code Table				
	Emergency Code Table (01~10)	Max. 15 digits		
PGM: 227 - Authorization Code Table				
	Table entry	Max. 12 digits		Flex 1: Station Flex 2: System
1	Station Authorization code			
1-1	Station Authorization code	Max. 12 digits		
2	System Authorization code	001~360		
2-1	System Authorization code	Max. 12 digits		
2-2	Set COS	Flex1~3		
PGM: 228 - Customer Call Routing Table				
	CCR Table index	01 ~ 70		
1~14	Select Flex 1 ~ 14	Station	-	1: Station 2: Hunt Group 3: System Speed 4: PABX Xfer 5: VSF Announcement 6: Call Disconnect Announcement 7: Route to Networked Station 8: Conference Room 9: Internal Page 10: External Page 11: All Call Page 12: Voice Mail (Station Group) 13: Company Directory (USA Only) 14: Record VM Greeting (USA Only)
PGM: 229 - Executive/Secretary Pairs				
1	Executive/Secretary Pair	Station	36 entries	
2	CO Call to Secretary	ON/OFF	OFF	
3	Call to Exec if Secretary in DND	ON/OFF	OFF	
4	Executive grade	01 ~ 12	12	
5	ICM call to SEC	0: OFF 1: ON	OFF	
6	SEC auto answer	0: OFF 1: ON	OFF	
7	EXEC GROUP	00-50	00	
PGM: 231 - Flexible DID Conversion Table				
1	DID Destination Name	11 characters	-	

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
2	Day Destination	1~15	-	1: station 2: group 3: System 4: PBX Xfer 5: VSF 6: VSF & Disconnect 7: Networked Station 8: Conference Room 9: Int Page 10: Ext Page 11 : All Page 12 : VM 13 : ICLID Table 14 : Company Directory (USA Only) 15 : Record VM Greeting (USA Only)
3	Night Destination	1~15	-	
4	Timed Ring Destination	1~15	-	
5	Reroute Destination	1~15	-	
6	Use ICLID	ON/OFF	OFF	
7	Auto Ring Table	(00-16),16:N/A	N/A	
8	MOH	00-10	00	
9	Ring Tone	(00-12), 0:N/A	N/A	
PGM: 232 - System Speed Zone				
1	Speed Bin Range in Zone	2200~4999	2200~4999	
2	Station Range	100~239	100~239	
3	Toll Checking	1: ON, 0: OFF	ON	
4	Authorization check	1: ON, 0: OFF	ON	
PGM: 233 Auto Ring Mode Assignment (Day/Night/Timed RING) Table				
1	Monday Timer	0000~2359		Assign Day, Night and Timed start times Default 0900, 1800, none
2	Tuesday Timer	0000~2359		
3	Wednesday	0000~2359		
4	Thursday	0000~2359		
5	Friday	0000~2359		
6	Saturday	0000~2359		
7	Sunday	0000~2359		
PGM: 234 - Voice Mail Dial Table				
1	VM dial codes 1	12 digits	P#	1: Prefix/2: Suffix/Any digits
2	VM dial codes 2	12 digits	P##	1: Prefix/2: Suffix/Any digits
3	VM dial codes 3	12 digits	P#*3P	1: Prefix/2: Suffix/Any digits
4	VM dial codes 4	12 digits	P#*4P	1: Prefix/2: Suffix/Any digits
5	VM dial codes 5	12 digits	P#*5P	1: Prefix/2: Suffix/Any digits
6	VM dial codes 6	12 digits	P#*6P	1: Prefix/2: Suffix/Any digits
7	VM dial codes 7	12 digits		1: Prefix/2: Suffix/Any digits
8	VM dial codes 8	12 digits		1: Prefix/2: Suffix/Any digits
9	VM dial codes 9	12 digits	*****	1: Prefix/2: Suffix/Any digits
PGM: 235 – MAC Registration Table				
1	Mac Address Information		-	
2	Max port of device	00~99	0	
3	Device ID	0~255	0 (N/A)	

Table C-9 TABLES DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 236 - Mobile Extension Table				
1	Program Authority	1: ON, 0: OFF	OFF	
2	Access Authority	0: Disable 1: Mobile EXT. 2: Fail over	Disable	
3	CO Group	01-20	01	
4	Telephone number			
5	Mobile extension CLI			
6	Hunt Call enable	1: ON, 0: OFF	OFF	
7	VSF Notify	1: ON, 0: OFF	OFF	
8	Notify Retry	1 to 9 Times	3 Times	
9	Retry Interval	1 to 3 minute	3 minute	
10	Notify by My CLI	0: OFF, 1: ON	OFF	
11	Call back	0: OFF, 1: ON	OFF	
12	Delay timer	000~255	0	
13	Announcement	0~200	0	
14	Suffix DID table	0: OFF, 1: ON	OFF	
PGM: 250 –Hot Desk Attributes				
1	Number of Agents	000~140	000	
2	View Agent Range		N/A	
3	Auto Logout Timer	00~24	00	1 hours increments
PGM: 252 –CO Call Rerouting				
1	Enable CRR	1: ON, 0: OFF	OFF	
2	Init CRR			
3	CRR attributes	000~169		
3-1	Compare CO group	01~20	01	
3-2	Receive digit	Max. 12 digits		
3-3	CO+TEL number	Max. 20 digits		
3-4	Type			
PGM: 270 –Digit conversion table				
1	Apply time	0: Unconditional 1: Follow DNT 2: Follow LCR	Unconditional	
2	Dialed digit	Max. 24 digits		
3	Unconditionally changed	Max. 24 digits		
4-15	Changed digit	Max. 24 digits		
16	Ring mode table	00–15, none	0	
17	Apply option	0: All 1: Reserved 2: CO line 3: Disable	All	

Table C-10 NETWORKING DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 320 - Network Basic Attributes				
1	Networking Enable	1: ON, 0: OFF	OFF	

Table C-10 NETWORKING DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
2	Retry Count	00~99	00	
3	CNIP Enable	1: ON, 0: OFF	ON	
4	CONP Enable	1: ON, 0: OFF	OFF	
5	Signal Method	1: FAC, 0: UUS	FAC	
6	CAS Enable	1: ON, 0: OFF	OFF	(Not used)
7	VPN Enable	1: ON, 0: OFF	OFF	(Not used)
8	CC Retain Mode	1: ON, 0: OFF	OFF	(Not used)
PGM: 321 - Network Supplementary Attributes				
1	Transfer Mode	1: REROUTE 0: JOIN	REROUTE	
2	TCP Port for BLF	0000~9999	9500	
3	UDP Port for BLF	0000~9999	9501	
4	BLF Manager IP Address	IP address	0.0.0.0	(#: Skip)
5	Duration of BLF STS	01~99	10	100 ms increments
6	Multicast IP Address	IP address	0.0.0.0	(#: Skip)
7	Transfer Fault Recall Timer	001~300	10	1 second increments
8	VoIP Call Reroute	00~20	00	
9	BLF service usage	1: ON, 0: OFF	ON	
PGM: 322 - Network CO Line Attributes				
1	Network CO Line Group	00~24	00	CO group programming for Networking call between systems.
2	Net CO Line Type	0: PSTN 1: NET	PSTN	
PGM: 324 - Network Numbering Plan Table				
1	System Use	0: NET 1: PSTN	NET	
2	Numbering Plan Code	16 digits	-	
3	Numbering Plan Net CO Group	00~24		
4	CPN Information	Flex 1~2	-	
5	Alternate Speed Bin	2000~4999	-	
6	Destination MPB IP Address	IP address	0.0.0.0	(Skip: #)
7	Destination MPB Port No	0000-9999	5588	
8	Digit Repeat	0: NO, 1: YES	NO	
9	Net PSTN En-block	0: NO, 1: YES	NO	
10	CO ATD code CLI	1: ON, 0: OFF	OFF	
11	Firewall	1: ON, 0: OFF	OFF	
12	AUTHO CODE COS USE	0: NO, 1: YES	NO	
13	SMDR DIAL HIDDEN	0: NO, 1: YES	NO	
14	NET PSTN CLI	0: NET 1: PSTN	NET	
15	Site name	Max.12 characters		
16	Emergency reroute	00~10	00	
PGM: 325 - Network Feature Code				
1	Net Feature Code	16 digits	-	
2	Net Feature Destination	1~6	-	1 : INT PAGE

Table C-10 NETWORKING DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
				2 : EXT PAGE 3 : ALL CALL PAGE 4: DOOR OPEN 5:Conference Room (1-9) 6:Call park (01-19)

Table C-11 Zone Holiday Assignment

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 444 – Zone Holiday Assignment				
1	Ring Mode	0:DAY 1: NIGHT 2:TIMED 3: N/A	TIMED	
2	Vacation	12 digits	-	
3	Holiday	4 digits	-	

Table D-12 Green Mode Activation

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 500 – Green Mode Activation				
1	Power Save Usage	0: Disable 1: Enable	Disable	
2	Power On/Off	0: OFF 1: ON	ON	
3	Power Save Mode	Flex 1~6	-	
4	Power Current State	Flex 1~6	-	
PGM: 501 – Green Mode Time Setting				
1	Power ON Time			
2	Power OFF Time			

Table C-13 INITIALIZATION

ITEM	DESCRIPTION	REMARK
PGM: 450 - Initialization		
1	Flexible Numbering Plan	
2	Station Data	
3	CO Line Data	
4	System Data	
5	Station Group Data	
6	ISDN Data	
7	System Timer Data	
8	Toll Table Data	
9	LCR Table Data	
10	Other Tables	
11	Flexible Button Data	
12	Network	

Table C-13 INITIALIZATION

ITEM	DESCRIPTION	REMARK
13	All Data	
14	System Reset	
15	Unused	
16	Personal Group	
17	Default Password	

Table C-14 PRINT-OUT DATABASE

ITEM	DESCRIPTION	REMARK
1	Flexible Numbering Plan	
2	IP Setting Plan	
3	Station Data	Enter station range
4	CO Line Data	Enter CO range
5	System Data	
6	Station Group Data	
7	ISDN Data	
8	System Timer Data	
9	Toll Table Data	
10	LCR Table Data	
11	Other Tables	
12	Nation Specific Data	
13	Flexible Button Data	Enter station range
14	All Data	
15	LCD Message	
16	QUIT Print Out	
17	String Length	10 or 20 character
18	Board Base Attributes	
19	Networking Table	
20	Hotel Data	
21	String Length	
22	Working LCD Print-out	

Table C-15 VIRTUAL DIP SWITCH

BTN	SUB-MENU	RANGE	REMARK
PGM: 452 - Virtual Trace Dip Switch Access			
1	Call Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
2	VoIP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
3	HTTP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
4	Multicast Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
5	CTI Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
6	Raw Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)

Table C-15 VIRTUAL DIP SWITCH

BTN	SUB-MENU	RANGE	REMARK
7	MPMP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
8	CPU Redundancy Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
9	MISU/VMIU Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
10	DSP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
11	SIP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
12	ISMDR Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
13	SIP MSG Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
14	FULL SIP Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
15	Hotel Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
16	SIP EXT Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
17	DEBUG Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
18	IPATD Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
19	ISDN Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
20	SPI Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
21	DECT Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
22	HTTPXML Trace	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
PGM: 453 - Virtual Dip Switch Access			
1	Device Polling	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
2	SMDI Setting	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
3	Multicast LED	ON/OFF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is ON)
4	Auto Negotiation	MANUAL/AUTO	Press Flex Button (Toggle: ON/OFF, LED lights if trace is Manual)
5	Full or Half duplex	FULL/HALF	Press Flex Button (Toggle: ON/OFF, LED lights if trace is HALF)
6	100 M or 10 M Tx/Rx bps	100/10	Press Flex Button (Toggle: ON/OFF, LED lights if trace is 10 M bps)

Table C-16 DECT DATA

BTN	SUB-MENU	RANGE	DEFAULT	REMARK
PGM: 491 - DECT ATTRIBUTES				
1	AUTO CALL RLS	ON/OFF	OFF	
2	BASE FAULT ALARM	Enable/Disable	Disable	
3	CHAIN FAULT ALARM	Enable/Disable	Disable	

Table C-17 NATION SPECIFIC

BTN	SUB-MENU	RANGE	REMARK
PGM: 400 - IP Phone (H/S) Receive Gain Control			
-	IPKT Rx Gain	Flex 1-8	
PGM: 401 - IP Phone (H/F) Receive Gain Control			
-	IPKT Rx Gain	Flex 1-8	
PGM: 402 - SLT Receive Gain Control			
-	SLT Rx Gain	Flex 1-8	
PGM: 403 - ACO Receive Gain Control			
- -	ACO Rx Gain	Flex 1-8	
PGM: 404 - DCO Receive Gain Control			
- -	DCO Rx Gain	Flex 1-8	
PGM: 422 - Tone Generation Gain			
- -	Tone Generation Gain	01-37	
PGM: 423 - ACNR Tone Cadence			
- -	ACNR Tone Cadence	1-5	
PGM: 424 - ACNR Ring Frequency			
- -	ACNR-Ring Frequency	1-5	
PGM: 425 - SLT Tone Cadence			
- -	SLT Tone Cadence	1-2	
PGM: 426 - DTMF PCM Tone Generation Gain			
- -	DTMF PCM Tone Generation Gain	1-5	
PGM: 427 - DTMF RTP Tone Generation Gain			
- -	DTMF RTP Tone Generation Gain	1-4	
PGM: 429 - LCOB Configuration			
- -	LCOB Configuration Type	1-5	
PGM: 480 - WIT Phone Rx Gain Control			
- -	WIT Rx Gain	Flex 1-14	
PGM: 481 - WIT Phone Tx Gain Control			
- -	WIT Tx Gain	Flex 1-14	
PGM: 496 - DKT Phone (H/S) Rx Gain Control			
- -	DKT(H/S) Rx Gain	Flex 1-13	
PGM: 497 - DKT Phone (H/S) Tx Gain Control			
- -	DKT(H/S) Tx Gain	Flex 1-13	

Table C-17 NATION SPECIFIC

BTN	SUB-MENU	RANGE	REMARK
PGM: 498 - DKT Phone (H/F) Rx Gain Control			
- -	DKT(H/F) Rx Gain	Flex 1-13	
PGM: 499 - DKT Phone (H/F) Tx Gain Control			
- -	DKT(H/F) Tx Gain	Flex 1-13	

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