Lucent Technologies
Bell Labs Innovations

MERLIN MAGIX™ Integrated System Release 1.0

System Planning Supplement

555-710-112
Comcode 108522301
Issue 1
October 1999

Document 555-710-112
Comcode 108522301
Issue 1
October 1999

Notice

Every effort has been made to ensure that the information in this guide is complete and accurate at the time of printing. Information, however, is subject to change. See Appendix A, “Customer Support Information,” in *System Programming* for important information.

Your Responsibility for Your System’s Security

Toll fraud is the unauthorized use of your telecommunications system by an unauthorized party—for example, persons other than your company’s employees, agents, subcontractors, or persons working on your company’s behalf. Note that there may be a risk of toll fraud associated with your telecommunications system, and, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

You and your System Manager are responsible for the security of your system, such as programming and configuring your equipment to prevent unauthorized use. The System Manager is also responsible for reading all installation, instruction, and system administration documents provided with this product in order to fully understand the features that can introduce risk of toll fraud and the steps that can be taken to reduce that risk. Lucent Technologies does not warrant that this product is immune from or will prevent unauthorized use of common-carrier telecommunication services or facilities accessed through or connected to it. Lucent Technologies will not be responsible for any charges that result from such unauthorized use. For important information regarding your system and toll fraud, see Appendix A, “Customer Support Information,” in *System Programming*.

Federal Communications Commission Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their own expense. For further FCC information, see Appendix A, “Customer Support Information,” in *System Programming*.

Canadian Department of Communications (DOC) Interference Information

This digital apparatus does not exceed the Class A limits for radio noise emissions set out in the radio interference
regulations of the Canadian Department of Communications.

Le Présent Appareil Numérique n’émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A préscrites dans le réglement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

Year 2000 Compliance

The MERLIN MAGIX Integrated System is certified to be Year 2000 compliant. Additional information on this certification, and other issues regarding Year 2000 compliance, is available online at http://www.lucent.com/enterprise/sig/yr2000.

Trademarks

5ESS, AUDIX, CONVERSANT, CentreVu, DEFINITY, Magic On Hold, MERLIN, MERLIN LEGEND, MERLIN Mail, PARTNER, PassageWay, MLX-10, MLX-20L, MLX-28D, MLS-6, MLS-12, MLS-12D, MLS-18D, MLS-34D, SYSTIMAX, TransTalk, and Voice Power are registered trademarks and 4ESS, Intuity, Lucent Technologies, MERLIN MAGIX, and Prologix are trademarks of Lucent Technologies in the US and other countries.

Acculink, ACCUNET, MEGACOM, MulitiQuest, MLX-5, MLX-5D, MLX-16DP, MLX-10D, MLX-10DP, and NetPROTECT are registered trademarks of AT&T.

Microsoft, Windows, Windows NT, and MS-DOS are registered trademarks of Microsoft Corporation.

ProComm and ProComm Plus are registered trademarks of DataStorm Technologies, Inc.

Supra, Supra NC, StarSet, and Mirage are registered trademarks of Plantronics, Inc.

UNIX is a registered trademark of UNIX System Laboratories, Inc.

PagePac is a registered trademark and Powermate and Zonemate are trademarks of DRACON, a division of Harris Corporation.

Okidata is a registered trademark of Okidata Corporation.

Pipeline is a trademark of Ascend Communications, Inc.

Intel and Pentium are registered trademarks of Intel Corporation.

Apple and Macintosh are registered trademarks of Apple Computer, Inc.

IBM is a registered trademark of International Business Machines, Inc.

Novell and NetWare are registered trademarks of Novell Corporation.

CLASS is a servicemark of Bellcore.

Support Telephone Number

Lucent Technologies provides a toll-free customer helpline 24 hours a day. Call the Lucent Technologies Helpline at **1 800 628-2888** or your Lucent Technologies authorized dealer if you need assistance when installing, programming, or using your system. Outside the continental US, contact your local Lucent Technologies authorized representative.

Network Engineering Group

For assistance in designing a private network, call the Network Engineering Group at **1 888 297-4700**.

Lucent Technologies Corporate Security

Whether or not immediate support is required, all toll fraud incidents involving Lucent Technologies products or services *should be reported* to Lucent Technologies Corporate Security at **1 800 821-8235**. In addition to recording the incident, Lucent Technologies Corporate Security is available for consultation on security issues, investigation support, referral to law enforcement agencies, and educational programs.

Lucent Technologies Fraud Intervention

If you *suspect you are being victimized* by toll fraud and you need technical support or assistance, call BCS National Service Assistance Center at **1 800 628-2888**.

Warranty

Lucent Technologies provides a limited warranty on this product. Refer to “Limited Warranty and Limitation of Liability” in Appendix A, “Customer Support Information,” of *System Programming*.

IMPORTANT SAFETY INSTRUCTIONS

The exclamation point in an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

To reduce the risk of fire, electrical shock, and injury to persons, follow these basic safety precautions when installing telephone equipment:

- Read and understand all instructions.
- Follow all warnings and instructions marked on or packed with the product.
- Never install telephone wiring during a lightning storm.
- Never install a telephone jack in a wet location unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone wiring has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.
- Use only Lucent Technologies-manufactured MERLIN MAGIX Integrated System circuit modules, carrier assemblies, and power units in the MERLIN MAGIX Integrated System control unit.
- Use only Lucent Technologies-recommended/approved MERLIN MAGIX Integrated System accessories.
- If equipment connected to the TDL telephone modules (412 LS-ID-TDL and 024 TDL), the MLX telephone modules (008 MLX, 408 GS/LS-MLX, 408 GS/LS-ID-MLX, and 016 MLX), or the ETR telephone module (016 ETR) is to be used for in-range out-of-building (IROB) applications, IROB protectors are required.
- Do not install this product near water—for example, in a wet basement location.
- Do not overload wall outlets, as this can result in the risk of fire or electrical shock.
- The MERLIN MAGIX Integrated System is equipped with a 3-wire grounding-type plug with a third (grounding) pin. This plug will fit only into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace the obsolete outlet. Do not defeat the safety purpose of the grounding plug.
- The MERLIN MAGIX Integrated System requires a supplementary ground.
- Do not attach the power supply cord to building surfaces. Do not allow anything to rest on the power cord. Do not locate this product where the cord will be abused by persons walking on it.
- Slots and openings in the module housings are provided for ventilation. To protect this equipment from overheating, do not block these openings.
- Never push objects of any kind into this product through module openings or expansion slots, as they may touch dangerous voltage points or short out parts, which could result in a risk of fire or electrical shock. Never spill liquid of any kind on this product.

- Unplug the product from the wall outlet before cleaning. Use a damp cloth for cleaning. Do not use cleaners or aerosol cleaners.
- Auxiliary equipment includes answering machines, alerts, modems, and fax machines. To connect one of these devices, you must first have a Multi-Function Module (MFM).
- Do not operate telephones if chemical gas leakage is suspected in the area. Use telephones located in some other safe area to report the trouble.

⚠ WARNING:

- To eliminate the risk of personal injury due to electrical shock, DO NOT attempt to install or remove an MFM from your MLX telephone. Opening or removing the module cover of your telephone may expose you to dangerous voltages.
- ONLY an authorized technician or dealer representative shall install, set options, or repair an MFM.

SAVE THESE INSTRUCTIONS

Contents

Overview

1

The MERLIN MAGIX™ Integrated System provides powerful features and advanced telephone network applications and services. Planning a MERLIN MAGIX system is very similar to planning a MERLIN LEGEND® Communications System. Therefore, use this supplement with the existing *MERLIN LEGEND Communications System, Release 7.0, System Planning* guide. This supplement explains only the planning procedures that are different from the MERLIN LEGEND procedures.

Metal Carriers

The MERLIN MAGIX system's control unit consists of one basic carrier and up to two expansion carriers, just like the MERLIN LEGEND system. However, the carriers in the MERLIN MAGIX system are made of metal, not plastic, and take up less space. The MERLIN MAGIX control unit's size depends on the number of carriers:

- Basic carrier: 11 inches wide by 19 inches high by 11 inches deep
- Basic carrier and one expansion carrier: 22½ inches wide by 19 inches high by 11 inches deep
- Basic carrier and two expansion carriers: 34 inches wide by 19 inches high by 11 inches deep

New Modules

The modules used in the MERLIN MAGIX system consist of a faceplate with jacks attached to a circuit board. They are not surrounded by a plastic shell, as in the MERLIN LEGEND system. To install a module, you slide it into a slot on the carrier. Three modules are being introduced with the MERLIN MAGIX Integrated System:

- 100R
- 412 LS-ID-TDL
- 024 TDL

100R Module

The 100R module (also known as the RouteX module) combines the functions of the 100D module, a data router, and a channel service unit or data service unit. This module provides a T1 or PRI interface to give the MERLIN MAGIX system fast access to the Internet. Besides allocating channels for voice and data, the 100R module also contains an internal channel service unit (CSU), thereby eliminating the need for an external one. The module accommodates up to 23 PRI channels or 24 T1 channels.

412 LS-ID-TDL Module

The 412 LS-ID-TDL module provides four loop-start line jacks and twelve extension jacks, as well as the ability to receive Caller ID information. These extension jacks support the 4400-Series telephones.

Like an MLX extension jack, each TDL extension jack is given two extension numbers by the system. The first extension is assigned to the telephone. The system assigns the second extension number just as extensions are assigned to MFMs used with MLX telephones. For example, if extension 22 is assigned to the telephone, the second extension assigned is 722. You can use the second extension number assigned to each TDL port as a phantom extension (for example, to configure call handling for messaging systems).

This module contains four Touch-Tone Receivers (TTRs) and has two potential operator positions in the first and fifth extension ports. If the 412 LS-ID-TDL module resides in the first slot in the control unit, you can connect a 4424LD+ telephone to the first extension jack and use the telephone as the system programming console.

024 TDL Module

The 024 TDL module provides 24 extension jacks that support the 4400-Series telephones. Like an MLX extension jack, each TDL extension jack is given two extension numbers by the system. The first extension is assigned to the telephone. The system assigns the second extension number just as extensions are assigned to MFMs used with MLX telephones. For example, if extension 22 is assigned to the telephone, the second extension assigned is 722. You can use the second extension number assigned to each TDL port as a phantom extension (for example, to configure call handling for messaging systems).

This module contains eight TTRs and has four potential operator positions: the first, fifth, thirteenth, and seventeenth ports. If the 024 TDL module resides in the first slot in the control unit, you can connect a 4424LD+ telephone to the first jack and use the telephone as the system programming console.

Modules No Longer Supported

Certain modules that have been supported by the MERLIN LEGEND Communications System are not supported in the MERLIN MAGIX Integrated System. The MERLIN MAGIX system does not support analog multiline modules or telephones. In addition, some older versions of MLX and tip/ring (T/R) modules are not supported.

The modules not supported in the MERLIN MAGIX system are:

- 008 ATL
- 012 (T/R)
- 400 LS
- 400 GS/LS
- 408 LS-ATL
- 408 GS/LS
- 408 GS/LS-MLX (module without Caller ID)
- 800 LS
- 800 GS/LS (module without Caller ID)
- MERLIN LEGEND® Mail

4400-Series Telephones

A new family of telephones, the 4400-Series telephones, is supported by the MERLIN MAGIX system. These telephones range from a single-line non-display telephone to a 24-button telephone with a large display. All the 4400-Series telephones are digital.

The 4400-Series telephones are:

- 4400
- 4400D
- 4406D+
- 4412D+
- 4424D+
- 4424LD+

The “D” in the designation stands for “display,” the “LD” represent “large display,” and the “+” indicates that the telephone has a speakerphone.

The Direct Station Selector (DSS) unit for the 4400-Series telephones is the DSS 4450.

4400 Telephone

The 4400 telephone is a single-line digital telephone that does not have a display. In general, the 4400 telephone functions much like a tip/ring single-line telephone. It has the following buttons:

- Volume button
- Flash button

4400D Telephone

The 4400D telephone also is a single-line digital telephone that has a display. The 2-line x 16-character display provides visual feedback and prompting only; you cannot select items from the display. Like the 4400 telephone, the 4400D telephone also functions much like a tip/ring single-line telephone. The following buttons appear on the 4400D telephone:

- Volume button
- Hold button
- Conf (Conference) button
- Trnsfr (Transfer) button
- Redial button

4406D+ Telephone

The 4406D+ telephone is a digital multiline telephone with a display and a speakerphone. The 2-line x 16-character display is for visual feedback and prompting only; you cannot select items from the display. The following buttons appear on the 4406D+ telephone:

- Volume button
- Hold button
- Conf (Conference) button
- Trnsfr (Transfer) button
- Redial button
- Spkr (Speaker) button
- Mute button
- 6 line buttons

4412D+ Telephone

The 4412D+ digital multiline telephone has 12 line buttons with LEDs and 12 line buttons without LEDs. Along with a speakerphone, this telephone has four softkeys, which you use to select items on the 2-line x 24-character display. The following buttons appear on the 4412D+ telephone:

- Volume button
- Hold button
- Conf (Conference) button
- Trnsfr (Transfer) button
- Redial button
- Spkr (Speaker) button
- Mute button
- Menu button
- Exit button
- ► button
- ◄ button
- Four softkeys
- 24 line buttons (12 with LEDs)

4424D+ Telephone

The 4424D+ digital multiline telephone has 24 line buttons with LEDs, a speakerphone, and a display with associated softkeys. Use the softkeys to select items on the 2-line x 24-character display. The 4424D+ telephone may function as a Direct-Line Console (DLC) operator position. The following buttons appear on the 4424D+ telephone:

- Volume button
- Hold button
- Conf (Conference) button
- Trnsfr (Transfer) button
- Redial button
- Spkr (Speaker) button
- Mute button
- Menu button
- Exit button
- ► button
- ◄ button
- Four softkeys
- 24 line buttons (all with LEDs)

4424LD+ Telephone

The 4424LD+ digital multiline telephone has 24 line buttons with LEDs, a speakerphone, ten softkeys, and a large 7-line x 24-character display. Use the softkeys to select items from the display. The 4424LD+ telephone may serve as a DLC operator, a Queued Call Console (QCC) operator, and as the MERLIN MAGIX Integrated System programming console. Because of the larger display, a separate power supply comes with the 4424LD+ telephone. The following buttons appear on the 4424LD+ telephone:

- Volume button
- Hold button
- Conf (Conference) button
- Trnsfr (Transfer) button
- Redial button
- Spkr (Speaker) button
- Mute button
- Menu button
- Exit button
- ► button
- ◄ button
- Ten softkeys
- 24 line buttons (all with LEDs)

DSS 4450

The DSS 4450 is the Direct Station Selector (DSS) connected to a 4424LD+ or 4424D+ telephone to enhance the call-handling capabilities of a system operator with a Direct-Line Console (DLC) or a Queued Call Console (QCC). You can connect one or two DSS 4450s to a 4424D+ or 4424LD+ telephone. Like the DSS used for MLX telephones, the DSS 4450 provides three pages of 50 extensions each.

The DSS 4450 requires additional power to work properly. If you connect a DSS 4450 to a 4424LD+ telephone, the DSS 4450 runs off the Auxiliary Power Supply Unit shipped with the telephone. However, if you use a DSS 4450 with a 4424D+ telephone, you must purchase an Auxiliary Power Supply Unit.

NOTE► If you connect two DSS 4450s to a 4424D+ telephone, you need only one power supply for both DSSs.

Redial Feature

The Last Number Dial feature has been renamed as the Redial feature. This is a more accurate description of the feature and matches the functionality of the Redial button on the 4400-Series telephones.

Control Unit Configuration

2

The following information relates to Chapter 2, “Control Unit Configuration,” from the *MERLIN LEGEND Communications System, Release 7.0, System Planning* guide. This information contains the changes and additions supported by the MERLIN MAGIX Integrated System. The major headings are the same as those used in *System Planning*.

Planning Module Placement

Keep the following in mind when planning module placement in the MERLIN MAGIX system.

Extension Capacity

Two extension numbers are assigned to each extension jack on a 412 LS-ID-TDL or 024 TDL module.

Each 100R module is assigned 24 logical IDs, even though the module has only one physical jack (see Planning Form 1).

Control Unit Diagram—Module Placement

In Hybrid/PBX mode only, if the system includes a Queued Call Console (QCC), the first line/trunk and/or extension module must be a 412 LS-ID-TDL, 024 TDL, 408 GS/LS-ID-MLX, 008 MLX, or 016 MLX module. The first port of this module must be programmed as a QCC.

Recording System Operating Conditions

The following information concerns the recording of the system operator positions.

Programming Equipment

In the MERLIN MAGIX system, you can use a 4424LD+ telephone or an MLX-20L telephone as the system programming console. If you use a personal computer for programming, the PC must have WinSPM software. WinSPM is a Windows-based software program that provides a graphical user interface for system programming.

Language Selection

Selecting English, Canadian French, or Latin American Spanish affects the displays of the 4400-Series telephones.

Numbering the System

The following information affects “Numbering the System” in Chapter 2 of *System Planning*.

Identifying Extension Jacks

Module Types and Extension Jack Types

Because analog multiline telephones are not supported in the MERLIN MAGIX system, the “A” column under “Jack Type” has been removed from Planning Form 2a. Check “D” under “Jack” Type for all TDL extensions.

Touch-Tone Receivers

The 412 LS-ID-TDL module provides four Touch-Tone Receivers (TTRs), and the 024 TDL module provides eight TTRs.

NOTE▶ The system recognizes the first 44 TTRs; any TTRs over this amount are disregarded.

Jack for Primary Operator Position

The factory setting for the primary operator position is the lowest extension jack on the first TDL or MLX module. A Queued Call Console (QCC) can be a 4424LD+ telephone or an MLX-20L telephone.

Jacks for Additional Operator Positions

The MERLIN MAGIX system supports a maximum of four QCCs. The QCCs can be 4424LD+ or MLX-20L telephones.

The 4424D+, 4424LD+, MLX-20L, and MLX-28D telephones can be Direct-Line Consoles (DLCs).

The MERLIN MAGIX system does not support the Call Management System application.

Jacks for 4400-Series Telephones

The system assigns two extension numbers for each extension jack on a 412 LS-ID-TDL or 024 TDL module. Each 4400-Series telephone connected to the system decreases the system capacity for endpoints by two.

Jacks for Tip/Ring Equipment and Applications

The MERLIN MAGIX system does not support MERLIN LEGEND Mail, MERLIN Mail®, Lucent Technologies™ Attendant, or the Integrated Solution II applications. The system does support MERLIN® Messaging System, the MERLIN MAGIX Enhanced Customer Care Solution (formerly known as the Enhanced Service Center), and the Octel 100 Voice Messaging System (formerly known as Messaging 2000), as well a many other applications.

Under the Appl column on Planning Form 2a, write **MMS** for the MERLIN Messaging System and **OCT100** for the Octel 100 system.

Lines/Trunks

3

The following information relates to Chapter 3, “Lines/Trunks” from the *MERLIN LEGEND Communications System, Release 7.0, System Planning* guide. This information contains the changes and additions supported by the MERLIN MAGIX Integrated System. The major headings are the same as those used in *System Planning*.

Identifying Line/Trunk Jacks

The following information concerns the identification and designation of line/trunk jacks.

Module Types and Line/Trunk Jack Types

The 412 LS-ID-TDL module has four loop-start line jacks and 12 extension jacks for 4400-Series telephones. The 024 TDL module has 24 extension jacks for 4400-Series telephones.

When completing Form 2c, remember that the 100R module occupies 24 logical IDs even though it has only one physical jack (like the 100D module).

LS-ID Delay Option

The LS-ID Delay option also applies to the 412 LS-ID-TDL module.

Selecting Line/Trunk Options

Form 3b: Incoming Trunks: DS1 Connectivity now includes both the 100D and the 100R modules.

DS1 Connectivity (100D and 100R Modules)

The MERLIN MAGIX system can have a combined total of three 100D or 100R modules. A combined total of two 100D or 100R modules can be in one carrier. Each 100D or 100R module supports up to 24 logical IDs even though each module has only one physical jack.

On Form 2c, System Numbering: Line/Trunk Jacks, write **ROUT** in the Incoming Line/Trunk Type column for each channel that is to be connected to the Internet router.

On Form 3b, Incoming Trunks: DS1 Connectivity (100D and 100R Modules), enter the 100R module information in the same way as the 100D module information, with the following exceptions:

- You cannot use common-channel signaling when the 100R module is operating in T1 signaling mode.
- Check “1” for the Line Compensation setting because the 100R module has an internal Channel Service Unit (CSU) and, therefore, the cable feet between the module and the CSU is 0.
- Check “Activate” or “Deactivate” under the Channel Service Unit for the 100R module only.

NOTE Setting the CSU to “Deactivate” may affect voice calls.

You can use the 100R module for Clock Synchronization in the same manner as you can use the 100D module.

Assigning Lines/Trunks

In addition to the forms listed in *System Planning*, use the new forms (4k, 4400 and 4400D Telephones, and 4m, Multiline 4400-Series Telephone) for assigning 4400-Series telephones to extensions.

Assigning Telephone Buttons

Use Form 4k, 4400 and 4400D Telephones, and Form 4m, Multiline 4400-Series Telephone, to assign telephone buttons.

Telephones in Hybrid/PBX Mode

Figure 3-1 shows the factory-set button assignments for 4412D+, 4424D+, and 4424LD+ telephones in Hybrid/PBX mode. Figure 3-2 shows the factory-set button assignments for the 4406D+ telephone in Hybrid/PBX mode.

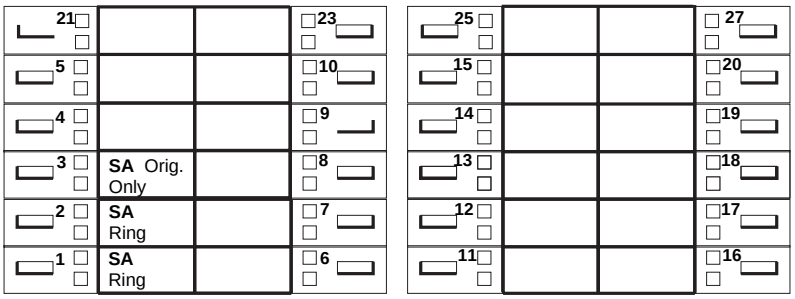


Figure 3-1. Factory-Set Assignment for 4412D+, 4424D+, and 4424LD+ Telephones (Hybrid/PBX Mode)

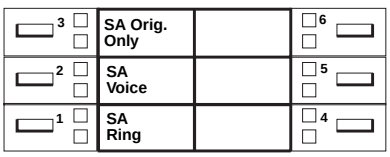
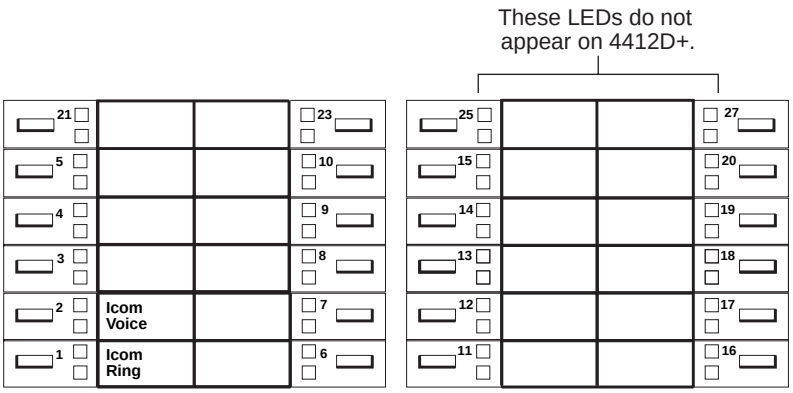


Figure 3-2. Factory-Set Assignment for the 4406D+ Telephone (Hybrid/PBX Mode)

Telephones in Key and Behind Switch Mode

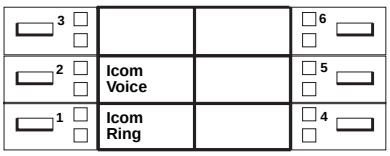
Figure 3-3 shows the factory-set button assignments for 4412D+, 4424D+, and 4424LD+ telephones in Key and Behind Switch mode. Figure 3-4 shows the factory-set button assignments for the 4406D+ telephone in Key and Behind Switch mode.



Key Mode:
Up to 8 personal line buttons are assigned beginning at button 3.

Behind Switch Mode:
One prime line button is assigned to button 3.

Figure 3-3. Factory-Set Assignment for 4412D+, 4424D+, and 4424LD+ Telephones (Key and Behind Switch Modes)



Key Mode:
Up to 4 personal line buttons are assigned beginning at button 3.

Behind Switch Mode:
One prime line is assigned to button 3.

Figure 3-4. Factory-Set Assignment for the 4406D+ Telephone (Key and Behind Switch Modes)

Direct-Line Consoles

Figure 3-5 shows the factory-set button assignments for 4424D+ and 4424LD+ telephones used as Direct-Line Consoles.

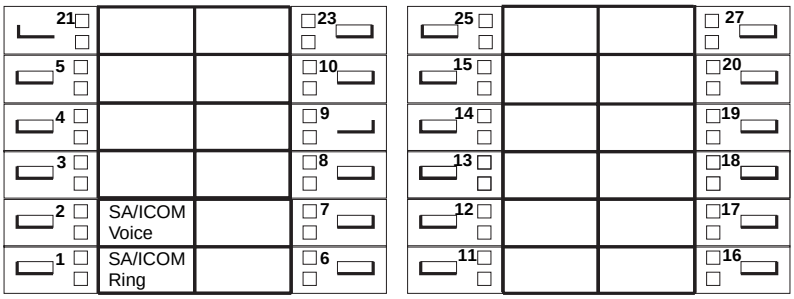


Figure 3-5. Factory-Set Assignments for 4424D+ and 4424LD+ Telephones used as Direct-Line Consoles

Features

4

The following information relates to Chapter 4, “Features,” from the *MERLIN LEGEND Communications System, Release 7.0, System Planning* guide. This information contains the changes and additions supported by the MERLIN MAGIX Integrated System. The major headings are the same as those used in *System Planning*.

Telephone and Extension Features

Any 4400-Series telephone (except when a QCC) can be a member of a Service Observing group. The 4406D+, 4412D+, 4424D+, and 4424LD+ telephones can be Service Observers.

Use Form 4k, 4400 and 4400D Telephones, and Form 4m, Multiline 4400-Series Telephone, to assign features.

Hotline

No 4400-Series telephone can be assigned as a Hotline extension.

Extension Copy

By using the Extension Copy feature, you can copy an extension’s programmed buttons to one or more extensions. Use Form 4l, Extension Copy: Multiline 4400-Series Telephone Template, to indicate the master extension and the extensions copied to.

You can copy the programmed Feature, Drop, Inspect, and HFAI buttons on one multiline 4400-Series telephone extension to another multiline 4400-Series telephone extension.

Service Observing

Any multiline 4400-Series telephone can be a Service Observing extension. Any 4400-Series telephone (except when a QCC) can be a member of a Service Observing group.

Group-Assigned Features

Add Form 4m, Multiline 4400-Series Telephone, to the list of Forms Needed.

Coverage

Add Form 4m, Multiline 4400-Series Telephone, to the list of Forms Needed.

System Features

The following information concerns the system features.

Extension Status

Call Management System is not supported by the MERLIN MAGIX system.

Station Message Detail Recording (SMDR)

The MERLIN LEGEND® Reporter has been renamed the MERLIN MAGIX™ Reporter.

System Forms

A

This appendix contains one copy of each system planning form. This appendix replaces Appendix B of the *MERLIN LEGEND Communications System, Release 7.0, System Planning* guide in its entirety. The forms are in numerical order and organized according to planning purpose, as shown in Table A-1. You should make copies of these forms and use the copies, keeping the originals for future use. Planning forms for data communications are contained in Appendix C in *System Planning*. The T1/PRI Planner is contained in Appendix D of *System Planning*. The NI-1 BRI Planner is contained in Appendix G of *System Planning*. The Network Engineering forms are contained in Appendix I of *System Planning*.

Table A-1. System Forms

Used for Planning...	Form No.	Form Title
Features and Calling Privileges	N/A	Employee Communication Survey
Control Unit Assembly and Operating Conditions	1	System Planning
System Component Numbering	2a	System Numbering: Extension Jacks
	2b	System Numbering: Digital Adjuncts
	2c	System Numbering: Line/Trunk Jacks
	2d	System Numbering: Special Renumbers

Table A-1. System Forms — *Continued*

Used for Planning...	Form No.	Form Title
Incoming Line/Trunk Connections	3a	Incoming Trunks: Remote Access
	3b	Incoming Trunks: DS1 Connectivity (100D Module)
	3c	Incoming Trunks: Tie
	3d	Incoming Trunks: DID
	3e	Automatic Route Selection Worksheet
	3f	Automatic Route Selection Tables
	3g	Automatic Route Selection Default and Special Numbers Tables
	3h	LS-ID Delay
	3i	Incoming Trunks: BRI Options
	4c	Extension Copy: MLX Telephone Template
	4d	MLX Telephone
	4e	MFM Adjunct: MLX Telephone
	4f	Tip/Ring Equipment
	4g	Extension Copy: ETR Telephone Template
	4h	ETR Telephone
	4i	Extension Copy: MLS Telephone Template
	4j	MLS Telephone
	4k	4400 and 4400D Telephones
	4l	Extension Copy: Multiline 4400-Series Telephone Template
	4m	Multiline 4400-Series Telephone
	5b	Direct-Line Console (DLC)
	5c	MFM Adjunct: MLX-20L or MLX-28D DLC
	5d	Queued Call Console (QCC)
Features for Operators	6a	Optional Operator Features
Features for User Groups	6b	Optional Extension Features
	6c	Principal User of Personal Line
Features for Systemwide Use	6d	Message-Waiting Receivers
	6e	Allowed Lists
	6f	Disallowed Lists

Table A-1. System Forms — *Continued*

Used for Planning...	Form No.	Form Title
	6g	Call Restriction Assignments and Lists
	6h	Authorization Codes
	6i	Pool Dial-Out Code Restrictions
	7a	Call Pickup Groups
	7b	Group Paging
	7c	Group Coverage
	7d	Group Calling
	8a	System Features
	9a	Night Service: Group Assignment
	9b	Night Service: Outward Restriction
	9c	Night Service: Time Set
	10a	Label Form: Posted Message
	10b	System Speed Dial
	11	Service Observing: Group Assignment

Line/Trunk Capacity*

System Planning

Module Type	Number of Modules		Trunks Supported by Module	Total Trunks by Module Type
408 GS/LS-ID-MLX		x	4	
412 LS-ID-TDL		x	4	
400EM		x	4	
800 DID†		x	8	
100D‡		x	24	
100R‡		x	24	
800 GS/LS-ID		x	8	
800 NI-BRI¶		x	16	
System Totals				

Extension Capacity*

Module Type	Number of Modules		Physical Jacks per Module	Physical Jacks by Module Type		Extensions Assigned	Total Extensions Assigned
008 MLX		x	8		x	2	
408 GS/LS-ID-MLX		x	8		x	2	
412 LS-ID-TDL		x	12		x	2	
016 (T/R)		x	16		x	1	
016 MLX		x	16		x	1	
016 ETR		x	16		x	1	
024 TDL		x	24		x	2	
008 OPT		x	8		+	(___x4)§	
MERLIN Messaging	N /A	x	7	N /A	x	12**	
System Totals							

* *System capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† *Hybrid/PBX mode only.*

‡ *The 100D and 100R modules have one physical jack that supports 24 trunks.*

§ *The 008 OPT module is assigned 12 extension numbers although there are only 8 physical extension jacks.*

¶ *The 800 NI-BRI module has 8 physical jacks that support 16 trunks. Up to five 800 NI-BRI modules (or any combination of LINE/TRUNK modules up to the system maximum of 80 trunks) may be placed in the system. However, the number of 800 NI-BRI modules plus 100D and 100R modules cannot exceed 3 per carrier.*

** *The MERLIN Messaging module has 7 dedicated internal ports, but assigns 12 total extensions.*

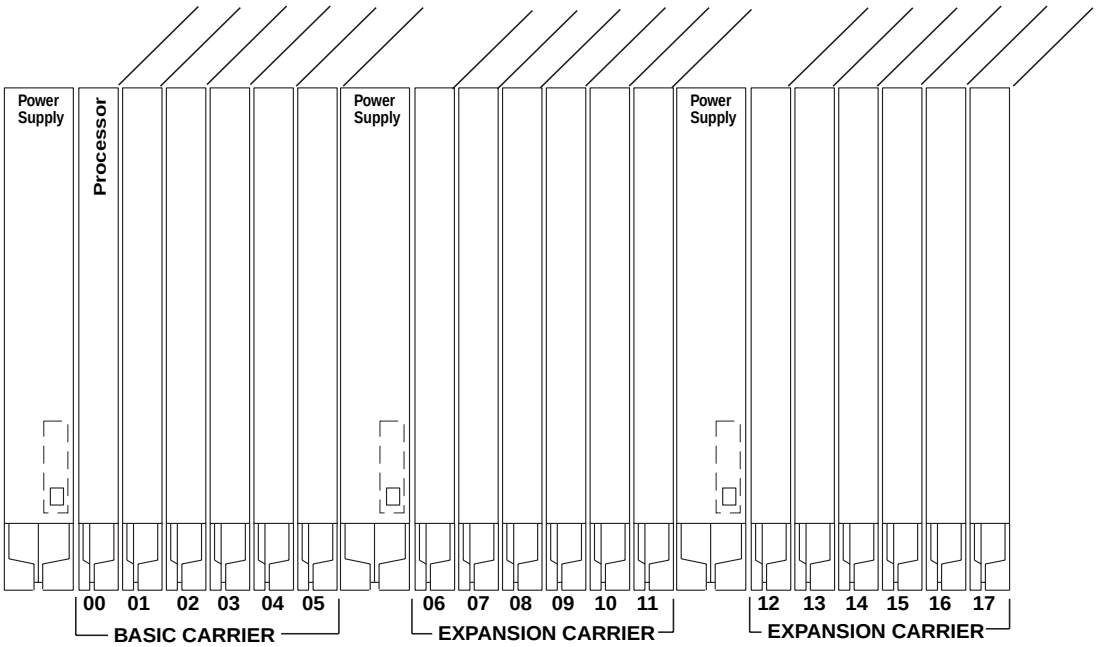
System Planning

Control Unit Diagram

Unit Load Total_____
Auxiliary Power Required
❑ Yes
❑ No

Unit Load Total_____
Auxiliary Power Required
❑ Yes
❑ No

Unit Load Total_____
Auxiliary Power Required
❑ Yes
❑ No



System Operating Conditions

Programming Equipment
❑ System Programming Console
Logical ID _____ Ext. No. ____
❑ PC with WinSPM software
❑ PCMCIA Memory Card

System Mode
❑ Key ✦
❑ Hybrid/PBX*
❑ Behind Switch
Host Dial Codes:
❑ Transfer _____
❑ Conference _____
❑ Drop _____
❑ Permanent Key

Language Selection
System:
❑ English ✦ ❑ French ❑ Spanish
SMDR:
❑ English ✦ ❑ French ❑ Spanish
Printer:
❑ English ✦ ❑ French ❑ Spanish

Automatic Maintenance Busy
❑ Enable
❑ Disable ✦

Set System Date
❑ Yes

Backup
❑ Automatic
Weekly at _____
Daily at _____
❑ Manual

System Consoles
❑ QCC (s)
____ ____ ____ ____
❑ DLC (s)
____ ____ ____ ____
____ ____ ____ ____

Second Dial Tone Timer
_____ (0✦ – 5000 ms)

✦ *Factory Setting for system software*
* *Factory Setting for hardware*

Applications*

- ❑ Automated Document Delivery System (ADDS)
  Notes: _____
- ❑ Call Accounting System (CAS) for Plus V3†
  Notes: _____
- ❑ Call Accounting System for Windows
  Notes: _____
- ❑ Call Accounting Terminal (CAT)
  - ❑ Business
  - ❑ Hospitality

  Notes: _____
- ❑ Centrex
  Notes: _____
- ❑ CONVERSANT®
  Notes: _____
- ❑ MERLIN Messaging™ Voice Messaging System
  Notes: _____
- ❑ MERLIN MAGIX Reporter
  Notes: _____
- ❑ Group IV Fax
  - ❑ Primary Rate Interface (PRI)
  - ❑ Basic Rate Interface (BRI)

  Notes: _____
- ❑ Windows™ System Programming and Maintenance (WinSPM)
  Notes: _____
- ❑ Video Conferencing
  Notes: _____

* *CAUTION: General information about these applications is in the Feature Reference. But to ensure proper operation, you must review the documentation provided with the applications.*

† *Orderable only as an upgrade to existing CAS installations.*

❑ IS III*
- ❑ IVP/Auto Attendant ❑ AUDIX Voice Power ❑ CAS
- ❑ FAX Attendant System™ ❑ Integrated Administration

Notes: _____

❑ PassageWay Direct Connect Solution
Notes: _____

❑ Computer Telephony Integration
- ❑ NetWare ❑ Windows NT

Telephony Application:

Notes: _____

❑ Octel 100 (also known as Messaging 2000)
Notes:

❑ Enhanced Customer Care Solution
Notes: _____

❑ Other _____
- ❑ _____
- ❑ _____
- ❑ _____
- ❑ _____

Notes: _____

* *Not Orderable*

System Numbering: Extension Jacks

Renumber System*
❑ 2-Digit ❖ ❑ Selected Extension Numbers ❑ 3-Digit ❑ Set Up Space

Networked Switch
❑ No ❑ Yes

Centralized Voice Messaging
❑ No ❑ Yes

Mod. Type	Log. ID	Jack Type D†	Jack Type T	Jack Type E	Equipment	2-Dig. Ext. No.❖	3-Dig. Ext. No.	Set Up Space	Renumber to	Label	Old Ext. No.	Wire No.	Person, Location, or Function	Ring Freq.‡	Appl#	Rot. Dial	CTI Link**
	1					10	100	7100									N/A
	2					11	101	7101									
	3					12	102	7102									
	4					13	103	7103									
	5					14	104	7104									N/A
	6					15	105	7105									
	7					16	106	7106									
	8					17	107	7107									
	9					18	108	7108									N/A
	10					19	109	7109									
	11					20	110	7110									
	12					21	111	7111									
	13					22	112	7112									N/A
	14					23	113	7113									
	15					24	114	7114									
	16					25	115	7115									
	17					26	116	7116									N/A
	18					27	117	7117									
	19					28	118	7118									
	20					29	119	7119									
	21					30	120	7120									N/A
	22					31	121	7121									
	23					32	122	7122									
	24					33	123	7123									

Shaded lines indicate possible operator positions.

❖ Factory Setting

** The system capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† Use Form 2b for adjuncts connected via MFM.

‡ Ringing Frequency is programmable on the 016 T/R module only.

 # The maximum number of VMI ports is 24.

*** The maximum number of CTI links is 1.*

System Numbering: Extension Jacks

Mod. Type	Log. ID	Jack Type D†	Jack Type T	Jack Type E	Equipment	2-Dig. Ext. No.◆	3-Dig. Ext. No.	Set Up Space	Renumber to	Label	Old Ext. No.	Wire No.	Person, Location, or Function	Ring Freq.‡	Appl#	Rot. Dial	CTI Link**
	25					34	124	7124									N/A
	26					35	125	7125									
	27					36	126	7126									
	28					37	127	7127									
	29					38	128	7128									N/A
	30					39	129	7129									
	31					40	130	7130									
	32					41	131	7131									
	33					42	132	7132									N/A
	34					43	133	7133									
	35					44	134	7134									
	36					45	135	7135									
	37					46	136	7136									N/A
	38					47	137	7137									
	39					48	138	7138									
	40					49	139	7139									
	41					50	140	7140									N/A
	42					51	141	7141									
	43					52	142	7142									
	44					53	143	7143									
	45					54	144	7144									N/A
	46					55	145	7145									
	47					56	146	7146									
	48					57	147	7147									

Shaded lines indicate possible operator positions.

◆ *Factory Setting*

* *The system capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† *Use Form 2b for adjuncts connected via MFM.*

‡ *Ringing Frequency is programmable on the 016 T/R module only.*

\# *The maximum number of VMI ports is 24.*

** *The maximum number of CTI links is 1.*

System Numbering: Extension Jacks

Mod. Type	Log. ID	Jack Type D†	Jack Type T	Jack Type E	Equipment	2-Dig. Ext. No.✦	3-Dig. Ext. No.	Set Up Space	Renumber to	Label	Old Ext. No.	Wire No.	Person, Location, or Function	Ring Freq.‡	Appl#	Rot. Dial	CTI Link**
	49					58	148	7148									N/A
	50					59	149	7149									
	51					60	150	7150									
	52					61	151	7151									
	53					62	152	7152									N/A
	54					63	153	7153									
	55					64	154	7154									
	56					65	155	7155									
	57					66	156	7156									N/A
	58					6700	157	7157									
	59					6701	158	7158									
	60					6702	159	7159									
	61					6703	160	7160									N/A
	62					6704	161	7161									
	63					6705	162	7162									
	64					6706	163	7163									
	65					6707	164	7164									N/A
	66					6708	165	7165									
	67					6709	166	7166									
	68					6710	167	7167									
	69					6711	168	7168									N/A
	70					6712	169	7169									
	71					6713	170	7170									
	72					6714	171	7171									

Shaded lines indicate possible operator positions.

✦ Factory Setting

** The system capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† Use Form 2b for adjuncts connected via MFM.

‡ Ringing Frequency is programmable on the 016 T/R module only.

 # The maximum number of VMI ports is 24.

*** The maximum number of CTI links is 1.*

System Numbering: Extension Jacks

Mod. Type	Log. ID	Jack Type D†	Jack Type T	Jack Type E	Equipment	2-Dig. Ext. No.◆	3-Dig. Ext. No.	Set Up Space	Renumber to	Label	Old Ext. No.	Wire No.	Person, Location, or Function	Ring Freq.‡	Appl#	Rot. Dial	CTI Link**
	73					6715	172	7172									N/A
	74					6716	173	7173									
	75					6717	174	7174									
	76					6718	175	7175									
	77					6719	176	7176									N/A
	78					6720	177	7177									
	79					6721	178	7178									
	80					6722	179	7179									
	81					6723	180	7180									N/A
	82					6724	181	7181									
	83					6725	182	7182									
	84					6726	183	7183									
	85					6727	184	7184									N/A
	86					6728	185	7185									
	87					6729	186	7186									
	88					6730	187	7187									
	89					6731	188	7188									N/A
	90					6732	189	7189									
	91					6733	190	7190									
	92					6734	191	7191									
	93					6735	192	7192									N/A
	94					6736	193	7193									
	95					6737	194	7194									
	96					6738	195	7195									

Shaded lines indicate possible operator positions.

◆ Factory Setting

** The system capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† Use Form 2b for adjuncts connected via MFM.

‡ Ringing Frequency is programmable on the 016 T/R module only.

 # The maximum number of VMI ports is 24.

*** The maximum number of CTI links is 1.*

System Numbering: Extension Jacks

Mod. Type	Log. ID	Jack Type D†	Jack Type T	Jack Type E	Equipment	2-Dig. Ext. No.✦	3-Dig. Ext. No.	Set Up Space	Renumber to	Label	Old Ext. No.	Wire No.	Person, Location, or Function	Ring Freq.‡	Appl#	Rot. Dial	CTI Link**
	97					6739	196	7196									N/A
	98					6740	197	7197									
	99					6741	198	7198									
	100					6742	199	7199									
	101					6743	200	7200									N/A
	102					6744	201	7201									
	103					6745	202	7202									
	104					6746	203	7203									
	105					6747	204	7204									N/A
	106					6748	205	7205									
	107					6749	206	7206									
	108					6750	207	7207									
	109					6751	208	7208									N/A
	110					6752	209	7209									
	111					6753	210	7210									
	112					6754	211	7211									
	113					6755	212	7212									N/A
	114					6756	213	7213									
	115					6757	214	7214									
	116					6758	215	7215									
	117					6759	216	7216									N/A
	118					6760	217	7217									
	119					6761	218	7218									
	120					6762	219	7219									

Shaded lines indicate possible operator positions.

✦ Factory Setting

** The system capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† Use Form 2b for adjuncts connected via MFM.

‡ Ringing Frequency is programmable on the 016 T/R module only.

 # The maximum number of VMI ports is 24.

*** The maximum number of CTI links is 1.*

System Numbering: Extension Jacks

Mod. Type	Log. ID	Jack Type D†	Jack Type T	Jack Type E	Equipment	2-Dig. Ext. No.◆	3-Dig. Ext. No.	Set Up Space	Renumber to	Label	Old Ext. No.	Wire No.	Person, Location, or Function	Ring Freq.‡	Appl#	Rot. Dial	CTI Link**
	121					6763	220	7220									N/A
	122					6764	221	7221									
	123					6765	222	7222									
	124					6766	223	7223									
	125					6767	224	7224									N/A
	126					6768	225	7225									
	127					6769	226	7226									
	128					6770	227	7227									
	129					6771	228	7228									N/A
	130					6772	229	7229									
	131					6773	230	7230									
	132					6774	231	7231									
	133					6775	232	7232									N/A
	134					6776	233	7233									
	135					6777	234	7234									
	136					6778	235	7235									
	137					6779	236	7236									N/A
	138					6780	237	7237									
	139					6781	238	7238									
	140					6782	239	7239									
	141					6783	240	7240									N/A
	142					6784	241	7241									
	143					6785	242	7242									
	144					6786	243	7243									

Shaded lines indicate possible operator positions.

◆ Factory Setting

** The system capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† Use Form 2b for adjuncts connected via MFM.

‡ Ringing Frequency is programmable on the 016 T/R module only.

 # The maximum number of VMI ports is 24.

*** The maximum number of CTI links is 1.*

System Numbering: Extension Jacks

Mod. Type	Log. ID	Jack Type D†	Jack Type T	Jack Type E	Equipment	2-Dig. Ext. No.◆	3-Dig. Ext. No.	Set Up Space	Renumber to	Label	Old Ext. No.	Wire No.	Person, Location, or Function	Ring Freq.‡	Appl#	Rot. Dial	CTI Link**
	145					6787	244	7244									N/A
	146					6788	245	7245									
	147					6789	246	7246									
	148					6790	247	7247									
	149					6791	248	7248									N/A
	150					6792	249	7249									
	151					6793	250	7250									
	152					6794	251	7251									
	153					6795	252	7252									N/A
	154					6796	253	7253									
	155					6797	254	7254									
	156					6798	255	7255									
	157					6799	256	7256									N/A
	158					6800	257	7257									
	159					6801	258	7258									
	160					6802	259	7259									
	161					6803	260	7260									N/A
	162					6804	261	7261									
	163					6805	262	7262									
	164					6806	263	7263									
	165					6807	264	7264									N/A
	166					6808	265	7265									
	167					6809	266	7266									
	168					6810	267	7267									

Shaded lines indicate possible operator positions.

◆ *Factory Setting*

* *The system capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† *Use Form 2b for adjuncts connected via MFM.*

‡ *Ringing Frequency is programmable on the 016 T/R module only.*

\# *The maximum number of VMI ports is 24.*

** *The maximum number of CTI links is 1.*

System Numbering: Extension Jacks

Mod. Type	Log. ID	Jack Type D†	Jack Type T	Jack Type E	Equipment	2-Dig. Ext. No.✦	3-Dig. Ext. No.	Set Up Space	Renumber to	Label	Old Ext. No.	Wire No.	Person, Location, or Function	Ring Freq.‡	Appl#	Rot. Dial	CTI Link**
	169					6811	268	7268									N/A
	170					6812	269	7269									
	171					6813	270	7270									
	172					6814	271	7271									
	173					6815	272	7272									N/A
	174					6816	273	7273									
	175					6817	274	7274									
	176					6818	275	7275									
	177					6819	276	7276									N/A
	178					6820	277	7277									
	179					6821	278	7278									
	180					6822	279	7279									
	181					6823	280	7280									N/A
	182					6824	281	7281									
	183					6825	282	7282									
	184					6826	283	7283									
	185					6827	284	7284									N/A
	186					6828	285	7285									
	187					6829	286	7286									
	188					6830	287	7287									
	189					6831	288	7288									N/A
	190					6832	289	7289									
	191					6833	290	7290									
	192					6834	291	7291									

Shaded lines indicate possible operator positions.

✦ Factory Setting

** The system capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† Use Form 2b for adjuncts connected via MFM.

‡ Ringing Frequency is programmable on the 016 T/R module only.

 # The maximum number of VMI ports is 24.

*** The maximum number of CTI links is 1.*

System Numbering: Extension Jacks

Mod. Type	Log. ID	Jack Type D†	Jack Type T	Jack Type E	Equipment	2-Dig. Ext. No.◆	3-Dig. Ext. No.	Set Up Space	Renumber to	Label	Old Ext. No.	Wire No.	Person, Location, or Function	Ring Freq.‡	Appl#	Rot. Dial	CTI Link**
	193					6835	292	7292									N/A
	194					6836	293	7293									
	195					6837	294	7294									
	196					6838	295	7295									
	197					6839	296	7296									N/A
	198					6840	297	7297									
	198					6841	298	7298									
	200					6842	299	7299									

Shaded lines indicate possible operator positions.

◆ *Factory Setting*

* *The system capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† *Use Form 2b for adjuncts connected via MFM.*

‡ *Ringing Frequency is programmable on the 016 T/R module only.*

\# *The maximum number of VMI ports is 24.*

** *The maximum number of CTI links is 1.*

System Numbering: Digital Adjuncts

(Make additional copies of this form as needed.)
Maximum: 200 Adjuncts

Networked Switch
❑ No ❑ Yes

Log. ID	Factory-Set			Renumber to	Adjuncts	2B	Pass. Bus	MLX Telephone Ext. No.	Person, Location, Function, and Equipment Type
	2-digit	3-digit	Set Up Space						
1	710	300	7300						
2	711	301	7301						
3	712	302	7302						
4	713	303	7303						
5	714	304	7304						
6	715	305	7305						
7	716	306	7306						
8	717	307	7307						
9	718	308	7308						
10	719	309	7309						
11	720	310	7310						
12	721	311	7311						
13	722	312	7312						
14	723	313	7313						
15	724	314	7314						
16	725	315	7315						
17	726	316	7316						
18	727	317	7317						
19	728	318	7318						
20	729	319	7319						
21	730	320	7320						
22	731	321	7321						
23	732	322	7322						
24	733	323	7323						
25	734	324	7324						
26	735	325	7325						
27	736	326	7326						
28	737	327	7327						
29	738	328	7328						
30	739	329	7329						
31	740	330	7330						
32	741	331	7331						
33	742	332	7332						
34	743	333	7333						
35	744	334	7334						
36	745	335	7335						
37	746	336	7336						
38	747	337	7337						
39	748	338	7338						
40	749	339	7339						

System Numbering: Digital Adjuncts

(Make additional copies of this form as needed.)
Maximum: 200 Adjuncts

Log. ID	Factory-Set			Renumber to	Adjuncts	2B	Pass. Bus	MLX Telephone Ext. No.	Person, Location, Function, and Equipment Type
	2-digit	3-digit	Set Up Space						
41	750	340	7340						
42	751	341	7341						
43	752	342	7342						
44	753	343	7343						
45	754	344	7344						
46	755	345	7345						
47	756	346	7346						
48	757	347	7347						
49	758	348	7348						
50	759	349	7349						
51	760	350	7350						
52	761	351	7351						
53	762	352	7352						
54	763	353	7353						
55	764	354	7354						
56	765	355	7355						
57	766	356	7356						
58	6850	357	7357						
59	6851	358	7358						
60	6852	359	7359						
61	6853	360	7360						
62	6854	361	7361						
63	6855	362	7362						
64	6856	363	7363						
65	6857	364	7364						
66	6858	365	7365						
67	6859	366	7366						
68	6860	367	7367						
69	6861	368	7368						
70	6862	369	7369						
71	6863	370	7370						
72	6864	371	7371						
73	6865	372	7372						
74	6866	373	7373						
75	6867	374	7374						
76	6868	375	7375						
77	6869	376	7376						
78	6870	377	7377						
79	6871	378	7378						
80	6872	379	7379						

System Numbering: Digital Adjuncts

(Make additional copies of this form as needed.)
Maximum: 200 Adjuncts

Log. ID	Factory-Set			Renumber to	Adjuncts	2B	Pass. Bus	MLX Telephone Ext. No.	Person, Location, Function, and Equipment Type
	2-digit	3-digit	Set Up Space						
81	6873	380	7380						
82	6874	381	7381						
83	6875	382	7382						
84	6876	383	7383						
85	6877	384	7384						
86	6878	385	7385						
87	6879	386	7386						
88	6880	387	7387						
89	6881	388	7388						
90	6882	389	7389						
91	6883	390	7390						
92	6884	391	7391						
93	6885	392	7392						
94	6886	393	7393						
95	6887	394	7394						
96	6888	395	7395						
97	6889	396	7396						
98	6890	397	7397						
99	6891	398	7398						
100	6892	399	7399						
101	6893	400	7400						
102	6894	401	7401						
103	6895	402	7402						
104	6896	403	7403						
105	6897	404	7404						
106	6898	405	7405						
107	6899	406	7406						
108	6900	407	7407						
109	6901	408	7408						
110	6902	409	7409						
111	6903	410	7410						
112	6904	411	7411						
113	6905	412	7412						
114	6906	413	7413						
115	6907	414	7414						
116	6908	415	7415						
117	6909	416	7416						
118	6910	417	7417						
119	6911	418	7418						
120	6912	419	7419						

System Numbering: Digital Adjuncts

(Make additional copies of this form as needed.)
Maximum: 200 Adjuncts

Log. ID	Factory-Set			Renumber to	Adjuncts	2B	Pass. Bus	MLX Telephone Ext. No.	Person, Location, Function, and Equipment Type
	2-digit	3-digit	Set Up Space						
121	6913	420	7420						
122	6914	421	7421						
123	6915	422	7422						
124	6916	423	7423						
125	6917	424	7424						
126	6918	425	7425						
127	6919	426	7426						
128	6920	427	7427						
129	6921	428	7428						
130	6922	429	7429						
131	6923	430	7430						
132	6924	431	7431						
133	6925	432	7432						
134	6926	433	7433						
135	6927	434	7434						
136	6928	435	7435						
137	6929	436	7436						
138	6930	437	7437						
139	6931	438	7438						
140	6932	439	7439						
141	6933	440	7440						
142	6934	441	7441						
143	6935	442	7442						
144	6936	443	7443						
145	6937	444	7444						
146	6938	445	7445						
147	6939	446	7446						
148	6940	447	7447						
149	6941	448	7448						
150	6942	449	7449						
151	6943	450	7450						
152	6944	451	7451						
153	6945	452	7452						
154	6946	453	7453						
155	6947	454	7454						
156	6948	455	7455						
156	6949	456	7456						
157	6950	457	7457						
158	6951	458	7458						
159	6952	459	7459						

System Numbering: Digital Adjuncts

(Make additional copies of this form as needed.)
Maximum: 200 Adjuncts

Log. ID	Factory-Set			Renumber to	Adjuncts	2B	Pass. Bus	MLX Telephone Ext. No.	Person, Location, Function, and Equipment Type
	2-digit	3-digit	Set Up Space						
160	6953	460	7460						
161	6954	461	7461						
162	6955	462	7462						
163	6956	463	7463						
164	6957	464	7464						
165	6958	465	7465						
166	6959	466	7466						
167	6960	467	7467						
168	6961	468	7468						
169	6962	469	7469						
170	6963	470	7470						
171	6964	471	7471						
172	6965	472	7472						
173	6966	473	7473						
174	6967	474	7474						
175	6968	475	7475						
176	6969	476	7476						
177	6970	477	7477						
178	6971	478	7478						
179	6972	479	7479						
180	6973	480	7480						
181	6974	481	7481						
182	6975	482	7482						
183	6976	483	7483						
184	6977	484	7484						
185	6978	485	7485						
186	6979	486	7486						
187	6980	487	7487						
188	6981	488	7488						
189	6982	489	7489						
190	6983	490	7490						
191	6984	491	7491						
192	6985	492	7492						
193	6986	493	7493						
194	6987	494	7494						
195	6988	495	7495						
196	6989	496	7496						
197	6990	497	7497						
198	6991	498	7498						
199	6992	499	7499						
200	6993	500	7500						

System Numbering: Line/Trunk Jacks

Music On Hold, Line/Trunk No. _____ Source _____

Loudspeaker Page, Line/Trunk No(s). _____

Maintenance Alarm, Line/Trunk No. _____

Loop-Start Reliable Disconnect*
☐ No ❖ ☐ Yes

Module Type and Slot No.	Log. ID	Jack Type (LS, GS, DID, Tie, etc.)	Line/ Trunk No.	Pool Dial-Out Code†‡	Re-number to	Incoming Line/Trunk Type (Main No., Personal Line, WATS, FX, NI-BRI, etc.)	Telephone Number or Equipment	Label	Outmode Signaling		Toll Type Prefix Req'd for LD		Hold Disc. Interval		QCC Operator to Receive Calls† (No ❖)	QCC Queue Priority Level† (4 ❖)	Function
									TT❖	R	Yes❖	No	Short	Long ❖			
	1		801														
	2		802														
	3		803														
	4		804														
	5		805														
	6		806														
	7		807														
	8		808														
	9		809														
	10		810														
	11		811														
	12		812														
	13		813														
	14		814														
	15		815														
	16		816														
	17		817														
	18		818														
	19		819														
	20		820														

❖ *Factory Setting*

* *If the system has AUDIX Voice Power/FAX Attendant System™, Integrated Administration will automatically set Loop-Start Reliable Disconnect to Yes.*

† *Hybrid/PBX mode only.*

‡ *Maximum: 11 pools with up to 80 trunks per pool. Factory settings: 70 (main), 891 (dial-in tie), 892 (automatic-in tie).*

System Numbering: Line/Trunk Jacks

Module Type and Slot No.	Log. ID	Jack Type (LS, GS, DID, Tie, etc.)	Line/ Trunk No.	Pool Dial-Out Code†‡	Re-number to	Incoming Line/Trunk Type (Main No., Personal Line, WATS, FX, NI-BRI, etc.)	Telephone Number or Equipment	Label	Outmode Signaling		Toll Type Prefix Req'd for LD		Hold Disc. Interval		QCC Operator to Receive Calls† (No ✦)	QCC Queue Priority Level† (4 ✦)	Function
									TT✦	R	Yes✦	No	Short	Long ✦			
	21		821														
	22		822														
	23		823														
	24		824														
	25		825														
	26		826														
	27		827														
	28		828														
	29		829														
	30		830														
	31		831														
	32		832														
	33		833														
	34		834														
	35		835														
	36		836														
	37		837														
	38		838														
	39		839														
	40		840														

✦ *Factory Setting*
† *Hybrid/PBX mode only.*
‡ *Maximum: 11 pools with up to 80 trunks per pool.*
Factory settings: 70 (main), 891 (dial-in tie), 892 (automatic-in tie).

System Numbering: Line/Trunk Jacks

Module Type and Slot No.	Log. ID	Jack Type (LS, GS, DID, Tie, etc.)	Line/ Trunk No.	Pool Dial-Out Code†‡	Re-number to	Incoming Line/Trunk Type (Main No., Personal Line, WATS, FX, NI-BRI, etc.)	Telephone Number or Equipment	Label	Outmode Signaling		Toll Type Prefix Req'd for LD		Hold Disc. Interval		QCC Operator to Receive Calls† (No ❖)	QCC Queue Priority Level† (4 ❖)	Function
									TT❖	R	Yes❖	No	Short	Long ❖			
	41		841														
	42		842														
	43		843														
	44		844														
	45		845														
	46		846														
	47		847														
	48		848														
	49		849														
	50		850														
	51		851														
	52		852														
	53		853														
	54		854														
	55		855														
	56		856														
	57		857														
	58		858														
	59		859														
	60		860														

❖ *Factory Setting*

† *Hybrid/PBX mode only.*

‡ *Maximum: 11 pools with up to 80 trunks per pool.*
Factory settings: 70 (main), 891 (dial-in tie), 892 (automatic-in tie).

System Numbering: Line/Trunk Jacks

Module Type and Slot No.	Log. ID	Jack Type (LS, GS, DID, Tie, etc.)	Line/ Trunk No.	Pool Dial-Out Code†‡	Re-number to	Incoming Line/Trunk Type (Main No., Personal Line, WATS, FX, NI-BRI, etc.)	Telephone Number or Equipment	Label	Outmode Signaling		Toll Type Prefix Req'd for LD		Hold Disc. Interval		QCC Operator to Receive Calls† (No ❖)	QCC Queue Priority Level† (4 ❖)	Function
									TT❖	R	Yes❖	No	Short	Long ❖			
	61		861														
	62		862														
	63		863														
	64		864														
	65		865														
	66		866														
	67		867														
	68		868														
	69		869														
	70		870														
	71		871														
	72		872														
	73		873														
	74		874														
	75		875														
	76		876														
	77		877														
	78		878														
	79		879														
	80		880														

❖ *Factory Setting*

† *Hybrid/PBX mode only.*

‡ *Maximum: 11 pools with up to 80 trunks per pool.*
Factory settings: 70 (main), 891 (dial-in tie), 892 (automatic-in tie).

System Numbering: Special Renumbers

Pools* (Form 2c) Description	Factory-Set Number	Renumber to
	70	
	890	
	891	
	892	
	893	
	894	
	895	
	896	
	897	
	898	
	899	

Group Paging (Form 7b) Group ID	Factory-Set Number	Renumber to
	793	
	794	
	795	
	796	
	797	
	798	
	799	

Park Zone (Form 6a) Description	Factory-Set Number	Renumber to
	881	
	882	
	883	
	884	
	885	
	886	
	887	
	888	

DSS Page Buttons	
PAGE 1	Beginning extension for range _____
PAGE 2	Beginning extension for range _____
PAGE 3	Beginning extension for range _____

ARS Dial-Out Code†	Default	Renumber to
	9	

Group Calling (Form 7d) Group ID Label	Factory-Set Number	Renumber to
	770	
	771	
	772	
	773	
	774	
	775	
	776	
	777	
	778	
	779	
	780	
	781	
	782	
	783	
	784	
	785	
	786	
	787	
	788	
	789	
	790	
	791	
	7920	
	7921	
	7922	
	7923	
	7924‡	
	7925‡	
	7926‡	
	7927‡	
	7928‡	
	7929‡	

Listed Directory Number* (QCC Queue)	Factory-Set Number	Renumber to
	800	

Remote Access Code (Form 3a)	Factory-Set Number	Renumber to
	889	

* *Hybrid/PBX mode only.*
† *ARS Dial-Out Code is Idle Line Preference Code in Key mode.*
‡ *Reserved for AUDIX Voice Power/FAX Attendant System.*

Incoming Trunks: Remote Access

DID and Tie Trunks
- ❑ Remote Access Code: 889
- ❑ Renumber to _______________

Automatic Callback
- ❑ Enable
- ❑ Disable ✥

Barrier Codes Required for Tie Trunks
- ❑ Yes ✥
- ❑ No

Barrier Codes Required for Non-Tie Trunks
- ❑ Yes ✥
- ❑ No

Number of Digits in Barrier Codes
- ❑ 4–11 (7✥)

Logical ID	Trunk No.	DID or Tie Trunk	Non-Tie Trunk	Trunk Type and Description	Dedicated	Shared

✥ *Factory Setting*

Incoming Trunks: Remote Access

Logical ID	Trunk No.	DID or Tie Trunk	Non-Tie Trunk	Trunk Type and Description	Dedicated	Shared

Class of Restriction without Barrier Codes

DID* and Tie Trunks

Network Calls
- ❑ None
- ❑ Tandem
- ❑ ARS

Restriction
- ❑ Unrestricted
- ❑ Outward Restrict ✦
- ❑ Toll Restrict

ARS Restriction Level*
- ❑ 0
- ❑ 1
- ❑ 2
- ❑ 3 ✦
- ❑ 4
- ❑ 5
- ❑ 6

Disallowed List Access
- ❑ List Numbers (0–7)

_____ _____ _____ _____
_____ _____ _____ _____

Non-Tie Trunks

Network Calls
- ❑ None
- ❑ Tandem
- ❑ ARS

Restriction
- ❑ Unrestricted
- ❑ Outward Restrict ✦
- ❑ Toll Restrict

ARS Restriction Level*
- ❑ 0
- ❑ 1
- ❑ 2
- ❑ 3 ✦
- ❑ 4
- ❑ 5
- ❑ 6

Disallowed List Access
- ❑ List Numbers (0–7)

_____ _____ _____ _____
_____ _____ _____ _____

✦ *Factory Setting*
* *Hybrid/PBX mode only*

Class of Restriction with Barrier Codes

Maximum: 16 barrier codes. (Make copies if more than 4 are assigned.)

Barrier Code
Number ____________________
Digits _____________ (0–9, plus ✳)

Restriction
❑ Unrestricted
❑ Outward Restrict ✥
❑ Toll Restrict

ARS Restriction Level*
❑ 0 ❑ 4
❑ 1 ❑ 5
❑ 2 ❑ 6
❑ 3 ✥

Disallowed List Access
❑ List Numbers (0–7)
______ ______ ______ ______
______ ______ ______ ______

Barrier Code
Number ____________________
Digits _____________ (0–9, plus ✳)

Restriction
❑ Unrestricted
❑ Outward Restrict ✥
❑ Toll Restrict

ARS Restriction Level*
❑ 0 ❑ 4
❑ 1 ❑ 5
❑ 2 ❑ 6
❑ 3 ✥

Disallowed List Access
❑ List Numbers (0–7)
______ ______ ______ ______
______ ______ ______ ______

Barrier Code
Number ____________________
Digits _____________ (0–9, plus ✳)

Restriction
❑ Unrestricted
❑ Outward Restrict ✥
❑ Toll Restrict

ARS Restriction Level*
❑ 0 ❑ 4
❑ 1 ❑ 5
❑ 2 ❑ 6
❑ 3 ✥

Disallowed List Access
❑ List Numbers (0–7)
______ ______ ______ ______
______ ______ ______ ______

Barrier Code
Number ____________________
Digits _____________ (0–9, plus ✳)

Restriction
❑ Unrestricted
❑ Outward Restrict ✥
❑ Toll Restrict

ARS Restriction Level*
❑ 0 ❑ 4
❑ 1 ❑ 5
❑ 2 ❑ 6
❑ 3 ✥

Disallowed List Access
❑ List Numbers (0–7)
______ ______ ______ ______
______ ______ ______ ______

✥ *Factory Setting*
* *Hybrid/PBX mode only*

Incoming Trunks: DS1 Connectivity (100D and 100R Module)

Module 1 Slot No. _____

Type of Service
- ❑ T1 ✥*
- ❑ PRI†‡

Switch Type
- ❑ 4ESS✥*‡
- ❑ 5ESS‡
- ❑ DMS-100
- ❑ DMS-250

(PRI Service Only)
- ❑ DEX600E
- ❑ Legend-PBX
- ❑ Legend-NTWK

T1 Trunks

Trunk Type	Channel Number(s)	For Tie/All Tie		
		Tie-PBX	Toll	S56
Ground-Start				
Loop-Start				
Tie				
Unequipped				
All Ground-Start				
All Loop-Start				
All Tie				
All Unequipped				
DID				
All DID				
S56 Data				
All S56 Data				

Frame Format
- ❑ D4 Compatible ✥
- ❑ Extended Superframe (ESF)

Suppression (Line Code)
- ❑ AMI-ZCS ✥
- ❑ B8ZS

Signaling Mode (not for PRI)
- ❑ Robbed-Bit Signaling (RBS) ✥
- ❑ Common-Channel Signaling (CCS)

Line Compensation
_____ Cable Feet
- ❑ 1 (-.6 dB) ✥
- ❑ 2 (-1.2 dB)
- ❑ 3 (-1.8 dB)
- ❑ 4 (-2.4 dB)
- ❑ 5 (-3.0 dB)

Clock Synchronization

Priority
- ❑ Primary ✥
- ❑ Secondary
- ❑ Tertiary
- ❑ None

Source
- ❑ Loop ✥
- ❑ Local

Activation
- ❑ Active ✥
- ❑ Not Active

Channel Service Unit

Access
- ❑ Foreign Exchange ✥
- ❑ Special Access

Activation
- ❑ Activated ✥
- ❑ Deactivated

Module 2 Slot No. _____

Type of Service
- ❑ T1 ✥*
- ❑ PRI†‡

Switch Type
- ❑ 4ESS✥*‡
- ❑ 5ESS‡
- ❑ DMS-100
- ❑ DMS-250

(PRI Service Only)
- ❑ DEX600E
- ❑ Legend-PBX
- ❑ Legend-NTWK

T1 Trunks

Trunk Type	Channel Number(s)	For Tie/All Tie		
		Tie-PBX	Toll	S56
Ground-Start				
Loop-Start				
Tie				
Unequipped				
All Ground-Start				
All Loop-Start				
All Tie				
All Unequipped				
DID				
All DID				
S56 Data				
All S56 Data				

Frame Format
- ❑ D4 Compatible ✥
- ❑ Extended Superframe (ESF)

Suppression (Line Code)
- ❑ AMI-ZCS ✥
- ❑ B8ZS

Signaling Mode (not for PRI)
- ❑ Robbed-Bit Signaling (RBS) ✥
- ❑ Common-Channel Signaling (CCS)

Line Compensation
_____ Cable Feet
- ❑ 1 (-.6 dB) ✥
- ❑ 2 (-1.2 dB)
- ❑ 3 (-1.8 dB)
- ❑ 4 (-2.4 dB)
- ❑ 5 (-3.0 dB)

Clock Synchronization

Priority
- ❑ Primary ✥
- ❑ Secondary
- ❑ Tertiary
- ❑ None

Source
- ❑ Loop ✥
- ❑ Local

Activation
- ❑ Active ✥
- ❑ Not Active

Channel Service Unit

Access
- ❑ Foreign Exchange ✥
- ❑ Special Access

Activation§
- ❑ Activated ✥
- ❑ Deactivated

NOTE: Do not configure 100D or 100R modules to do trunk-to-trunk transfers between DS1 and LS lines/trunks.

✥ *Factory Setting*

* *The factory setting of T1 is **not** automatically selected if you enter nothing; it must be entered.*

† *PRI must be selected as the Type of DS1 connectivity before PRI options are entered.*

‡ *AT&T Toll and 5ESS local PRI service requires service provider switching equipment to be either 4ESS Generic 13 through Generic 16, 5ESS Generic 6, or a 5ESS serving the FTS2000 network.*

§ *For 100R module only.*

Module 3 Slot No. _____

Type of Service
- ❑ T1 ✦*
- ❑ PRI†‡

Switch Type
- ❑ 4ESS✦*‡
- ❑ 5ESS‡
- ❑ DMS-100
- ❑ DMS-250

(PRI Service Only)
- ❑ DEX600E
- ❑ Legend-PBX
- ❑ Legend-NTWK

T1 Trunks

Trunk Type	Channel Number(s)	For Tie/All Tie		
		Tie-PBX	Toll	S56
Ground-Start				
Loop-Start				
Tie				
Unequipped				
All Ground-Start				
All Loop-Start				
All Tie				
All Unequipped				
DID				
All DID				
S56 Data				
All S56 Data				

Frame Format
- ❑ D4 Compatible ✦
- ❑ Extended Superframe (ESF)

Suppression (Line Code)
- ❑ AMI-ZCS ✦
- ❑ B8ZS

Signaling Mode (not for PRI)
- ❑ Robbed-Bit Signaling (RBS) ✦
- ❑ Common-Channel Signaling (CCS)

Line Compensation

_____ Cable Feet
- ❑ 1 (-.6 dB) ✦
- ❑ 2 (-1.2 dB)
- ❑ 3 (-1.8 dB)
- ❑ 4 (-2.4 dB)
- ❑ 5 (-3.0 dB)

Clock Synchronization

Priority
- ❑ Primary ✦
- ❑ Secondary
- ❑ Tertiary
- ❑ None

Source
- ❑ Loop ✦
- ❑ Local

Activation
- ❑ Active ✦
- ❑ Not Active

Channel Service Unit

Access
- ❑ Foreign Exchange ✦
- ❑ Special Access

Activation§
- ❑ Activated ✦
- ❑ Deactivated

NOTE: Do not configure 100D or 100R modules to do trunk-to-trunk transfers between DS1 and LS lines/trunks.

✦ *Factory Setting*
* *The factory setting of T1 is **not** automatically selected if you enter nothing; it must be entered.*
† *PRI must be selected as the Type of DS1 connectivity before PRI options are entered.*
‡ *AT&T Toll and 5ESS local PRI service requires service provider switching equipment to be either 4ESS Generic 13 through Generic 16, 5ESS Generic 6, or a 5ESS serving the FTS2000 network.*
§ *For 100R module only.*

PRI Options*

B-Channel Groups

Maximum: 80 groups with up to 23 channels per group.

B-Channel Group No.	B-Channel Slot and Port No.	Trunk No.

B-Channel Group No.	B-Channel Slot and Port No.	Trunk No.

** PRI must be selected as the Type of DS1 connectivity before PRI options are entered.*

NOTE: ***To ensure optimal performance of the PRI facility, the B-channels must be assigned to the B-channel groups in the order opposite to that of the sequence in which the inbound calls are delivered by the network service provider.***

PRI Services

Maximum: 3 Modules. (Make copies of this page for additional modules.)

Module Slot No. _____

B-Channel Group No.	Outgoing Services*	Incoming Services*	Incoming Routing	
			Dial Plan Routing†‡	Line Appearance§

* *Services:*
AT&T Toll: Megacom WATS, Megacom 800, ACCUNET® SDS, Software Defined Network (SDN), MultiQuest, Long Distance.
5ESS Local: OUTWATS, 56/64 Digital, Virtual Private Network, INWATS.
MCI Toll: MCI PRISM, MCI Vnet, MCI 800, MCI 900
DMS-100 Local: DMS Private, DMS INWATS, DMS OUTWATS, DMS Foreign Exchange (FX), DMS Tie Trunk.
Other: Call-by-Call, Other.

† *Hybrid/PBX mode only.*

‡ *If you select Dial Plan Routing, complete "Dial Plan Routing" information on Form 3b-6.*

§ *If you select Line Appearance, complete "Line Appearance Routing" information on Form 3b-5.*

Line Appearance Routing (Incoming Services)*

B-Channel Group No.	Trunk No.*	Telephone Number (up to12 digits)	B-Channel Group No.	Trunk No.*	Telephone Number (up to12 digits)

**Trunks must be administered to terminate on an internal endpoint, for example, an extension, a Calling Group, etc.*

Dial Plan Routing (Incoming Services)*

Maximum: 16 entries

Entry No.	0	1	2	3	4	5	6	7
Service†								
Pattern to Match‡								
Total Digits in Dialed Number (0–14)								
Delete Digits (0–14)								
Add Digits (0–4)								

Entry No.	8	9	10	11	12	13	14	15
Service†								
Pattern to Match‡								
Total Digits in Dialed Number (0–14)								
Delete Digits (0–14)								
Add Digits (0–4)								

* *Hybrid/PBX mode only.*

† *Services:*
AT&T Toll: Megacom WATS, Megacom 800, ACCUNET® SDS, Software Defined Network (SDN), MultiQuest, Long Distance.
5ESS Local: OUTWATS, 56/64 Digital, Virtual Private Network, INWATS.
MCI Toll: MCI PRISM, MCI Vnet, MCI 800, MCI 900
DMS-100 Local: DMS Private, DMS INWATS, DMS OUTWATS, DMS Foreign Exchange (FX), DMS Tie Trunk.
Other: Call-by-Call, Other.

‡ *Pattern of up to 8 digits.*

Outgoing Tables (Outgoing Services)

Network Selection Table
Maximum: 4 entries

Entry No.	0✥	1✥	2	3
Dial Prefix*	101***	10***		

Special Services Table
Maximum: 8 entries

Entry No.	0	1	2	3	4	5	6	7
Pattern to Match†	011	010	01	00	0	1		
Operator‡	none	OP	OP	P	OP	none		
Type of No. (N=Nat'l; I=Int'l)	I	I	I	N	N	N		
Delete Digits (0–4)	3	3	2	2	1	1		

✥ *Defaults.*
* *Dial Pattern can be up to 8 digits (* is a wildcard); must include at least one number; cannot begin with *.*
† *Pattern can be up to 4 digits; no asterisks(*).*
‡ *Operator: Local Operator (OP), Presubscribed Carrier (P), No operator (none).*

Call-By-Call Service Table

Maximum: 10 entries

Entry No.	0	1	2	3	4
Pattern to Match (up to 10 entries)					
Call Type (Voice/Data/Both)					
Service*					
Delete Digits (0–8)					

Entry No.	5	6	7	8	9
Pattern to match (up to 10 entries)					
Call-Type (Voice/Data/Both)					
Service*					
Delete Digits (0–8)					

** Services:*

AT&T Toll: Megacom WATS, Megacom 800, ACCUNET® SDS, Software Defined Network (SDN), MultiQuest, Long Distance.
5ESS Local: OUTWATS, 56/64 Digital, Virtual Private Network, INWATS.
MCI Toll: MCI PRISM, MCI Vnet, MCI 800, MCI 900
DMS-100 Local: DMS Private, DMS INWATS, DMS OUTWATS, DMS Foreign Exchange (FX), DMS Tie Trunk.
Other: Call-by-Call, Other.

Number to Send

- ❑ Extension Only
- ❑ Base Number with Extension ____________________ (up to 12 digits)
- ❑ Line Telephone Number:
  (Maximum: 69 telephone numbers)

Trunk No.	Telephone Number to Send (up to12 digits)	Trunk No.	Telephone Number to Send (up to12 digits)

Test Telephone Numbers

Module 1: _____ **Module 2:** _____ **Module 3:** _____

PRI Protocol

Timers and Counters

	Factory Setting	Change to
T200 Timer	1 second	(1000–3000 ms)
T203 Timer	30 seconds	(1–60 seconds)
N200 Counter	3 transmissions	(1–5 transmissions)
N201 Counter	260 octets	(16–260 octets)
K Counter	7 frames	(1–15 frames)
T303 Timer	4 seconds	(4–12 seconds)
T305 Timer	4 seconds	(4–30 seconds)
T308 Timer	4 seconds	(4–12 seconds)
T309 Timer	90 seconds	(30–120 seconds)
T310 Timer	60 seconds	(2–120 seconds)
T313 Timer	4 seconds	(4–60 seconds)
T316 Timer	120 seconds	(3–120 seconds)

Terminal Equipment Identifier (TEI)

❑ 0 ✦

❑ _____ (1–63)

✦ *Factory Setting*

T1 Switch 56 Options*

Maximum: 3 modules (Make additional copies of this page as needed.)

Module Slot No.: _____ **Channel No.:** _____

Type
- ❑ Incoming
- ❑ Outgoing
- ❑ Two Way ✦

Incoming Signaling Type
- ❑ Wink ✦
- ❑ Auto
- ❑ Delay

Outgoing Signaling Type
- ❑ Wink ✦
- ❑ Auto
- ❑ Delay

Incoming Signaling Mode
- ❑ Rotary
- ❑ Touch-tone ✦

Incoming Signaling Mode
- ❑ Rotary
- ❑ Touch-tone ✦

Dial Plan Routing Options

Expected Digits
- ❑ 1
- ❑ 2
- ❑ 3 ✦
- ❑ 4

Delete Digits
- ❑ 0 ✦
- ❑ 1
- ❑ 2
- ❑ 3
- ❑ 4

Add Digits
- ❑ 0 digits ✦
- ❑ Add these digits _____
  (Any number from 1–9999)

✦ *Factory Setting*
* *T1 must be selected as the Type of DS1 connectivity. The T1 Truck Type must be configured as S56 (not T1-tie).*

Incoming Trunks: Tie

(Make as many copies as needed.)

Logical ID	Trunk No.	Direction			Signaling Type (Intype/Outtype)								E&M Signal			Inmode		Outmode		Dial Tone		Answer Supv. Time		Disconnect Time	
		Two Way ◆	Outgoing	Incoming	Wink ◆		Delay		Immediate		Automatic		1S◆	1C	5	Touch-Tone	Rotary◆	Touch-Tone	Rotary◆	Remote ◆	Local	300◆	Other	300◆	Other
					In	Out	In	Out	In	Out	In	Out													

◆ *Factory Setting*

Incoming Trunks: Tie

Logical ID	Trunk No.	Direction			Signaling Type (Intype/Outtype)								E&M Signal			Inmode		Outmode		Dial Tone		Answer Supv. Time		Disconnect Time	
		Two Way ◆	Outgoing	Incoming	Wink ◆		Delay		Immediate		Automatic														
					In	Out	In	Out	In	Out	In	Out	1S◆	1C	5	Touch-Tone	Rotary◆	Touch-Tone	Rotary◆	Remote ◆	Local	300◆	Other	300◆	Other

◆ *Factory Setting*

Incoming Trunks: DID*

(Make copies for each block.)

Block Number (1 or 2) _____

Type
- ❑ Immediate-Start
- ❑ Wink-Start ✦

Expected Digits
- ❑ 1
- ❑ 2
- ❑ 3 ✦
- ❑ 4

Delete Digits
- ❑ 0 ✦
- ❑ 1
- ❑ 2
- ❑ 3
- ❑ 4

Add Digits
- ❑ 0 digits ✦
- ❑ Add these digits _____ (any number from 1–9999)

Signaling
- ❑ Rotary ✦
- ❑ Touch-tone

Invalid Destination
- ❑ Send to backup position ✦
- ❑ Return to fast busy

Trunks Included in Block

Logical ID	Trunk No.	Telephone No.	Disconnect Time	
			500 ms✦	Other (10 to 2550)

✦ *Factory Setting*
* *Hybrid/PBX mode only*

Incoming Trunks: DID*

Logical ID	Trunk Number	Telephone Number	Disconnect Time	
			500 ms❖	Other (10 to 2550)

Trunks Included in Block

Logical ID	Trunk Number	Telephone Number	Disconnect Time	
			500 ms❖	Other (10 to 2550)

❖ Factory Setting
** Hybrid/PBX mode only*

Automatic Route Selection Worksheet*

Number of exchanges in the calling area ____________________

Trunk Pool No.	Trunk Type	Type of Dial			Number of Area Codes, Exchanges, or Network Destinations for which Trunk Pool Is Used
		Toll	Local	Network	

Preferred Trunk Pools

For toll calls (Table 17) _______________

For local calls (Table 18) _______________

** Hybrid/PBX mode only*

Automatic Route Selection Tables*

Maximum: 16 Tables. (Make a copy for each table.)

Table No. _____

Type of Table

- ❑ 6-Digit
- ❑ Area Code
- ❑ Exchange
- ❑ 1 + 7, dialing from
  - ❑ within area code
  - ❑ not within area code ✦

Area Code/Exchanges

001_____	021_____	041_____	061_____	081_____
002_____	022_____	042_____	062_____	082_____
003_____	023_____	043_____	063_____	083_____
004_____	024_____	044_____	064_____	084_____
005_____	025_____	045_____	065_____	085_____
006_____	026_____	046_____	066_____	086_____
007_____	027_____	047_____	067_____	087_____
008_____	028_____	048_____	068_____	088_____
009_____	029_____	049_____	069_____	089_____
010_____	030_____	050_____	070_____	090_____
011_____	031_____	051_____	071_____	091_____
012_____	032_____	052_____	072_____	092_____
013_____	033_____	053_____	073_____	093_____
014_____	034_____	054_____	074_____	094_____
015_____	035_____	055_____	075_____	095_____
016_____	036_____	056_____	076_____	096_____
017_____	037_____	057_____	077_____	097_____
018_____	038_____	058_____	078_____	098_____
019_____	039_____	059_____	079_____	099_____
020_____	040_____	060_____	080_____	100_____

Subpattern A Time of Day

_____

Pool	FRL (3 ✦)‡	Other Digits	Absorb	Call Type† (Both ✦)
1_____	_____	_____	1_____	_____
2_____	_____	_____	2_____	_____
3_____	_____	_____	3_____	_____
4_____	_____	_____	4_____	_____
5_____	_____	_____	5_____	_____
6_____	_____	_____	6_____	_____

Subpattern B Time of Day

_____

Pool	FRL (3 ✦)‡	Other Digits	Absorb	Call Type† (Both ✦)
1_____	_____	_____	1_____	_____
2_____	_____	_____	2_____	_____
3_____	_____	_____	3_____	_____
4_____	_____	_____	4_____	_____
5_____	_____	_____	5_____	_____
6_____	_____	_____	6_____	_____

✦ *Factory Setting*
* *Hybrid/PBX mode only*
† *Select Voice only, Data only, or Both.*
‡ *Local tables default FRL is 2.*

Table No. _____

Type of Table

- ❑ 6-Digit
- ❑ Area Code
- ❑ Exchange
- ❑ 1 + 7, dialing from
  - ❑ within area code
  - ❑ not within area code ✦

Area Code/Exchanges

001_____	021_____	041_____	061_____	081_____
002_____	022_____	042_____	062_____	082_____
003_____	023_____	043_____	063_____	083_____
004_____	024_____	044_____	064_____	084_____
005_____	025_____	045_____	065_____	085_____
006_____	026_____	046_____	066_____	086_____
007_____	027_____	047_____	067_____	087_____
008_____	028_____	048_____	068_____	088_____
009_____	029_____	049_____	069_____	089_____
010_____	030_____	050_____	070_____	090_____
011_____	031_____	051_____	071_____	091_____
012_____	032_____	052_____	072_____	092_____
013_____	033_____	053_____	073_____	093_____
014_____	034_____	054_____	074_____	094_____
015_____	035_____	055_____	075_____	095_____
016_____	036_____	056_____	076_____	096_____
017_____	037_____	057_____	077_____	097_____
018_____	038_____	058_____	078_____	098_____
019_____	039_____	059_____	079_____	099_____
020_____	040_____	060_____	080_____	100_____

Subpattern A Time of Day

_____

Pool	FRL (3 ✦)‡	Other Digits	Absorb	Call Type† (Both ✦)
1_____	_____	_____	1_____	_____
2_____	_____	_____	2_____	_____
3_____	_____	_____	3_____	_____
4_____	_____	_____	4_____	_____
5_____	_____	_____	5_____	_____
6_____	_____	_____	6_____	_____

Subpattern B Time of Day

_____

Pool	FRL (3 ✦)‡	Other Digits	Absorb	Call Type† (Both ✦)
1_____	_____	_____	1_____	_____
2_____	_____	_____	2_____	_____
3_____	_____	_____	3_____	_____
4_____	_____	_____	4_____	_____
5_____	_____	_____	5_____	_____
6_____	_____	_____	6_____	_____

✦ *Factory Setting*
* *Select Voice only, Data only, or Both.*
‡ *Local tables default FRL is 2.*

Automatic Route Selection Default and Special Numbers Tables*

Table 17: Default Toll Table

Subpattern A Time of Day					Subpattern B Time of Day				
Pool	FRL (3 ✥)	Other Digits	Absorb	Call Type† (Both ✥)	Pool	FRL (3 ✥)	Other Digits	Absorb	Call Type† (Both ✥)
1			1		1			1	
2			2		2			2	
3			3		3			3	
4			4		4			4	
5			5		5			5	
6			6		6			6	

Table 18: Default Local Table

Subpattern A Time of Day					Subpattern B Time of Day				
Pool	FRL (2 ✥)	Other Digits	Absorb	Call Type† (Both ✥)	Pool	FRL (2 ✥)	Other Digits	Absorb	Call Type† (Both ✥)
1			1		1			1	
2			2		2			2	
3			3		3			3	
4			4		4			4	
5			5		5			5	
6			6		6			6	

Table 19: Dial 0

Pool	FRL (3 ✥)	Other Digits
1		

Table 20: Special Number (411, 611, 811, 911)

Pool‡	FRL (3 ✥)	Other Digits
1 70		

✥ *Factory Setting*
* *Hybrid/PBX mode only*
† *Select Voice only, Data only, or Both.*
‡ *Always set to the first pool in the system; cannot be changed.*

LS-ID Delay

Note: Only for lines attached to 800 GS/LS-ID, 408 GS/LS-MLX-ID, or 412 LS-ID-TDL modules.

Line	Yes	No✦
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		

Line	Yes	No✦
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		

Line	Yes	No✦
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		

✦ *Factory Setting*

Incoming Trunks: BRI Options (800 NI-BRI Module)

Logical ID	Line Number	Directory Number	Service Profile Identifier	Service Configuration: IOC "S"	Service Configuration: MLHG	Service Configuration: Series Comp	Hunt Pattern: Linear	Hunt Pattern: Circular	CPN/BN

CPN/BN = Calling Party Number/Billing Number
MLHG = Multi-Line Hunt Group

Clock Synchronization—100D, 100R, or BRI Modules*

Primary Clock Synchronization

Slot No. _____

DSL No. _____ (BRI only)

Source

❑ Loop

❑ Local (100D only)

Secondary Clock Synchronization

Slot No. _____

DSL No. _____ (BRI only)

Source

❑ Loop ✦

❑ Local (100D only)

Tertiary Clock Synchronization

Slot No. _____

DSL No. _____ (BRI only)

Source

❑ Loop ✦

❑ Local (100D only)

Timers

T200 Timer

❑ 1,000 ms. ✦

❑ _____ ms. (500 to 5,000 ms. in increments of 500 ms)

T203 Timer

❑ 33 seconds ✦

❑ _____ seconds (10 to 255 seconds in increments of 1 second)

T303 Timer

❑ 4 seconds ✦

❑ _____ seconds (2 to 10 seconds in increments of 1 second)

T305 Timer

❑ 30 seconds ✦

❑ _____ seconds (2 to 60 seconds in increments of 1 second)

T308 Timer

❑ 4 seconds ✦

❑ _____ seconds (2 to 10 seconds in increments of 1 second)

✦ *Factory Setting*

* *If the system includes 800 NI-BRI modules, 100D modules, and 100R modules, sychronization planning should be completed at the same time. Refer to Form 3b while completing this form.*

Extension Copy: Analog Multiline Telephone Template

Discontinued

Discontinued

Analog Multiline Telephone

Discontinued

Discontinued

Extension Copy: MLX Telephone Template

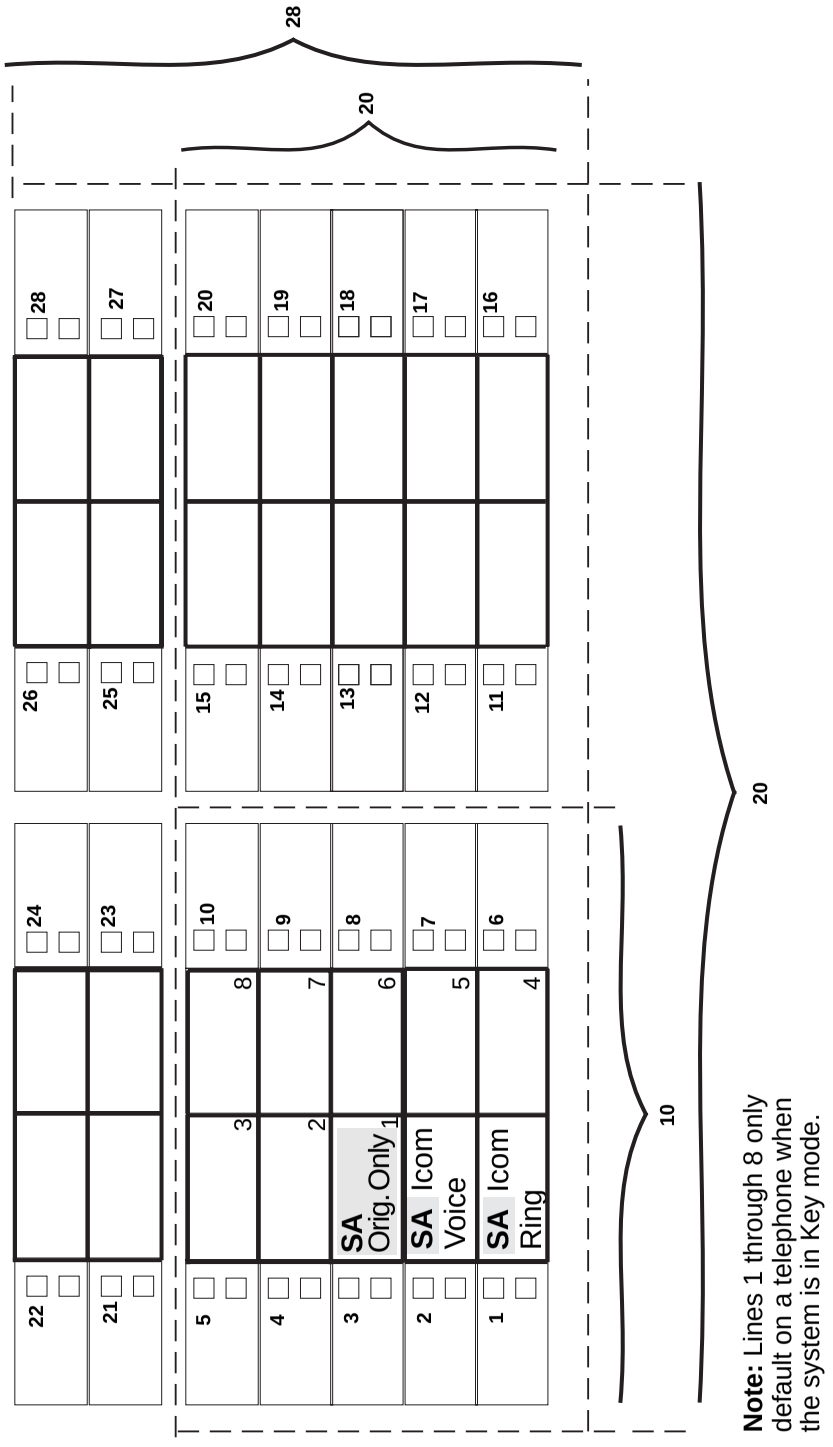
(Make a copy of this form for each Master Extension.)

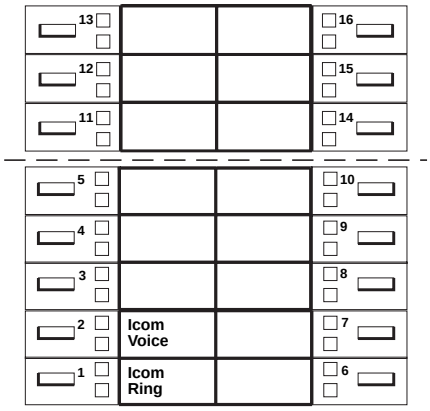
Master Extension (Template Extension)

Master Ext. No.	Person/Location

Extensions Copied to

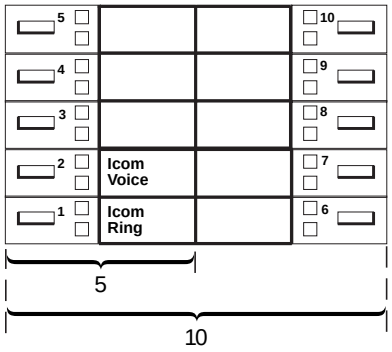
Button Diagram





Key Mode:
Up to 8 personal line buttons are assigned beginning at button 3.

Behind Switch Mode:
One prime line button is assigned to button 3.



Behind Switch Mode:
One prime line is assigned to button 3

MLX Telephone

(Make a copy of this form for each telephone.)

Logical ID _____ Extension No. _____ Person or Location _____

❑ Copied from Master Ext. No. _____

❑ Wall Mount

Telephone Model

❑ MLX-20L®*

❑ MLX-28D®

❑ MLX-16DP®

❑ MLX-10D®

❑ MLX-10DP®†

❑ MLX-10®

❑ MLX-5D®

❑ MLX-5®

Adjuncts

❑ Headset

❑ Hearing-impaired handset

❑ Noisy environment

❑ Multi-Function Module (MFM) (Not supported on the MLX-5 and MLX-5D) Extension No. _____

- ❑ FAX machine
- ❑ Answering machine
- ❑ Data terminal
- ❑ Alert device, type _____
- ❑ Other _____

❑ Off Premises

❑ Passageway

Personal Lines

_____ _____ _____ _____

_____ _____ _____ _____

Shared Extension No. _____

❑ Ring

❑ No Ring

Auto Line Selection

_____ _____ _____ _____

_____ _____ _____ _____

Centralized Programming Requirements**

❑ Assign Service Observing Button

Optional Features

Abbreviated Ring

❑ Off

❑ On ✦

Auto Callback

❑ Off ✦

❑ On

Call Waiting

❑ Off ✦

❑ On

Voice-Announced Calls

❑ On ✦

❑ Off

❑ On Idle Only

Coverage Inside

❑ Off

❑ On ✦

Cover Ring Delay

Primary Cover Ring Delay

❑ 2 Rings ✦

❑ ____rings (1–6)

Secondary Cover Ring Delay

❑ 2 Rings ✦

❑ ____rings (1–6)

Group Coverage Ring Delay

❑ 3 Rings ✦

❑ ____rings (1–9)

Computer Telephony Integrated Client PC

❑ Yes

❑ No ✦

✦ *Factory Setting*

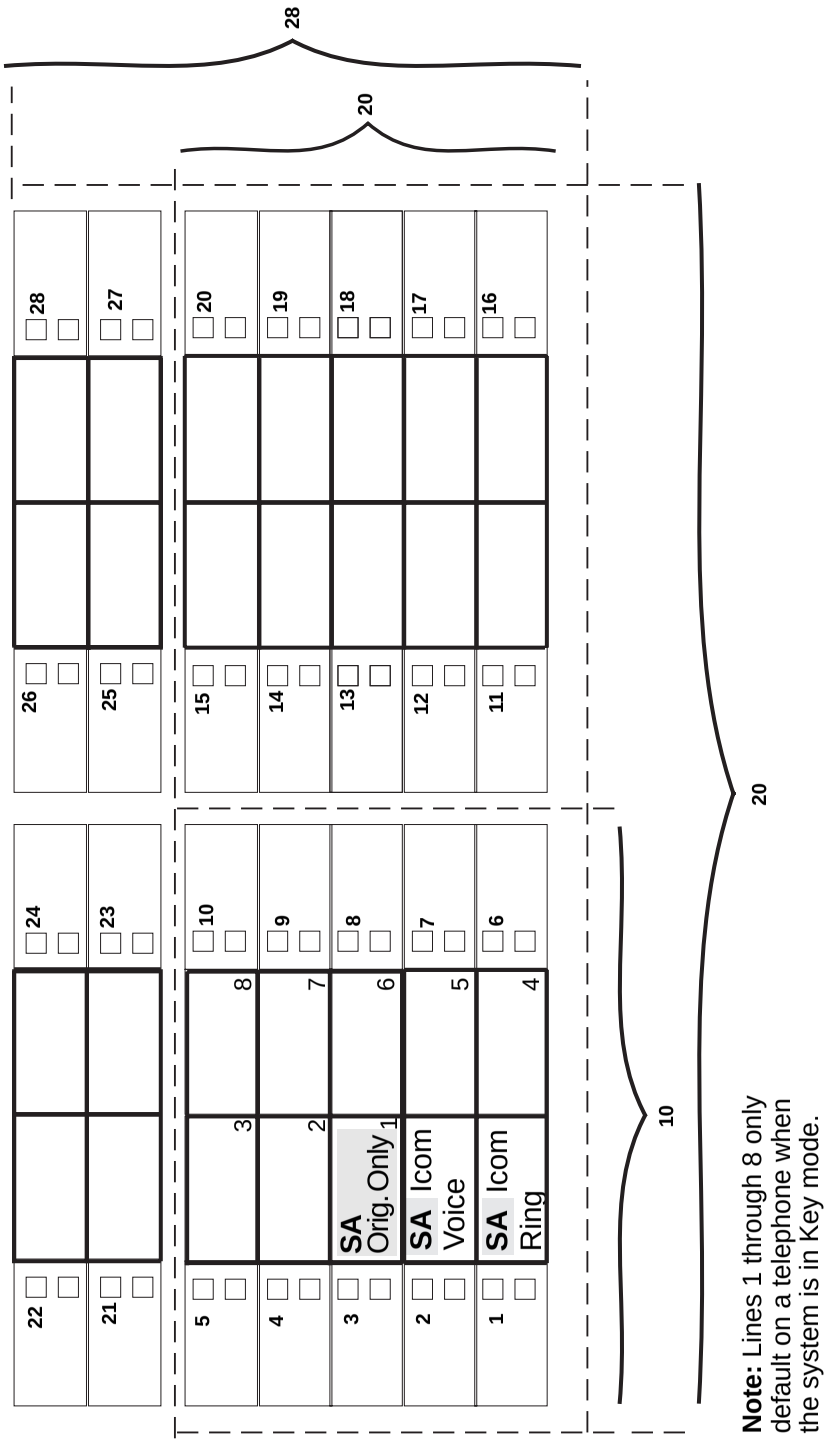
* *The system capacity for Personal Directories is decreased by one whenever an MLX-20L telephone is connected to an MLX port.*

† *This telephone is the same as the MLX-10D except it has an adjunct plug in the back for connection to a PC when programming telephone features using the PassageWay™ Direct Connect Solution software application. This telephone is available with Release 2.1 and later.*

** *Refer to Form 11 to assign as a Service Observer.*

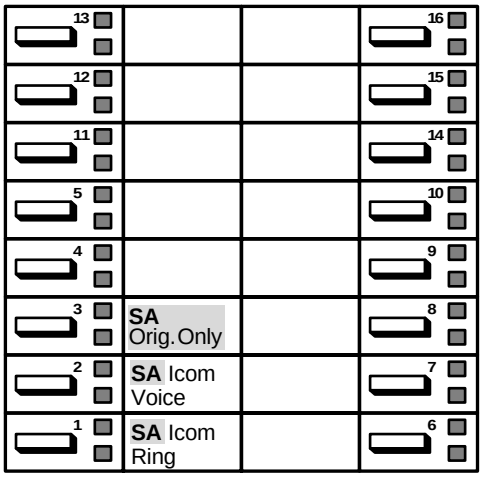
Button Diagram

❑ See Master Extension



Button Diagram

❑ See Master Extension



Button Diagram for MLX-16DP Telephone

MFM Adjunct: MLX Telephone

Extension No. _____ Person or Location _____

Connected to MLX extension No. _____

Copied from Master Extension No. _____

Adjuncts

- ❑ FAX machine
- ❑ Answering machine
  - ❑ Used as delay announcement device for calling groups
    Ext. No.
    _____ _____ _____ _____
    _____ _____ _____ _____
- ❑ Data terminal
- ❑ Alert device, type _____
  - ❑ Used as Calls-in-Queue Alarm device for calling groups
    Ext. No. _____
- ❑ Other _____

Button Diagram

- ❑ See Master Extension

Line 3	5	Line 8	10
Line 2	4	Line 7	9
Line 1 SA Orig. Only	3	Line 6	8
SA Icom Voice	2	Line 5	7
SA Icom Ring	1	Line 4	6

Note: Lines 1 through 8 only default on a telephone when the system is in Key mode.

Centralized Programming Requirements

- ❑ Disable Voice Announce – change button 2 assignment to System Access Originate Only and remove button 3 assignment
- ❑ Enable Ringing/Idle Line Preference
- ❑ Change Automatic Line Selection order to: (1) System Access Ring, (2) System Access Originate Only, (3) outside trunks assigned to buttons 3 through 10
- ❑ Set Ringing Option to No Ring for each personal line on which calls are **not** received

Auto Line Selection

_____ _____ _____ _____

_____ _____ _____ _____

Optional Features

Auto Callback

- ❑ Off ✦
- ❑ On

Call Waiting

- ❑ Off ✦
- ❑ On

Coverage Inside

- ❑ Off
- ❑ On ✦

Cover Ring Delay

Primary Cover Ring Delay

- ❑ 2 Rings ✦
- ❑ ____rings (1–6)

Secondary Cover Ring Delay

- ❑ 2 Rings ✦
- ❑ ____rings (1–6)

Group Coverage Ring Delay

- ❑ 3 Rings ✦
- ❑ ____rings (1–9)

✦ *Factory Setting*

Tip/Ring Equipment

(Make a copy of this form for each device.)

Logical ID _____ Extension No. _____ Person or Location _____

Type

- ❑ Single-line telephone
- ❑ Answering machine
  - ❑ Used as delay announcement device for calling groups
    Ext. No.
    _____ _____ _____ _____
    _____ _____ _____ _____
- ❑ FAX machine
- ❑ PARTNER Doorphone (008 OPT or 016 ETR module)
- ❑ Other _____

Adjuncts

- ❑ Speakerphone
- ❑ Hearing-impaired handset
- ❑ Noisy environment
- ❑ Off Premises via OPRE

Auto Line Selection

_____ _____ _____ _____

Button Diagram

Line 3	5	Line 8	10
Line 2	4	Line 7	9
Line 1 SA Orig. Only	3	Line 6	8
SA Icom Ring	2	Line 5	7
SA Icom Ring	1	Line 4	6

_____ _____ _____ _____

Optional Features

Auto Callback

- ❑ Off ✦
- ❑ On

Call Waiting

- ❑ Off ✦
- ❑ On

Coverage Inside

- ❑ Off
- ❑ On ✦

HotLine

- ❑ Off ✦
- ❑ On
  Tel. No. or Ext. No. _____

Cover Ring Delay

Primary Cover Ring Delay

- ❑ 2 Rings ✦
- ❑ ____rings (1–6)

Secondary Cover Ring Delay

- ❑ 2 Rings ✦
- ❑ ____rings (1–6)

Group Coverage Ring Delay

- ❑ 3 Rings ✦
- ❑ ____rings (1–9)

Centralized Programming Requirements

- ❑ Remove all but one SA button to disable features such as Transfer and Conference.

✦ *Factory Setting*

Extension Copy: ETR Telephone Template

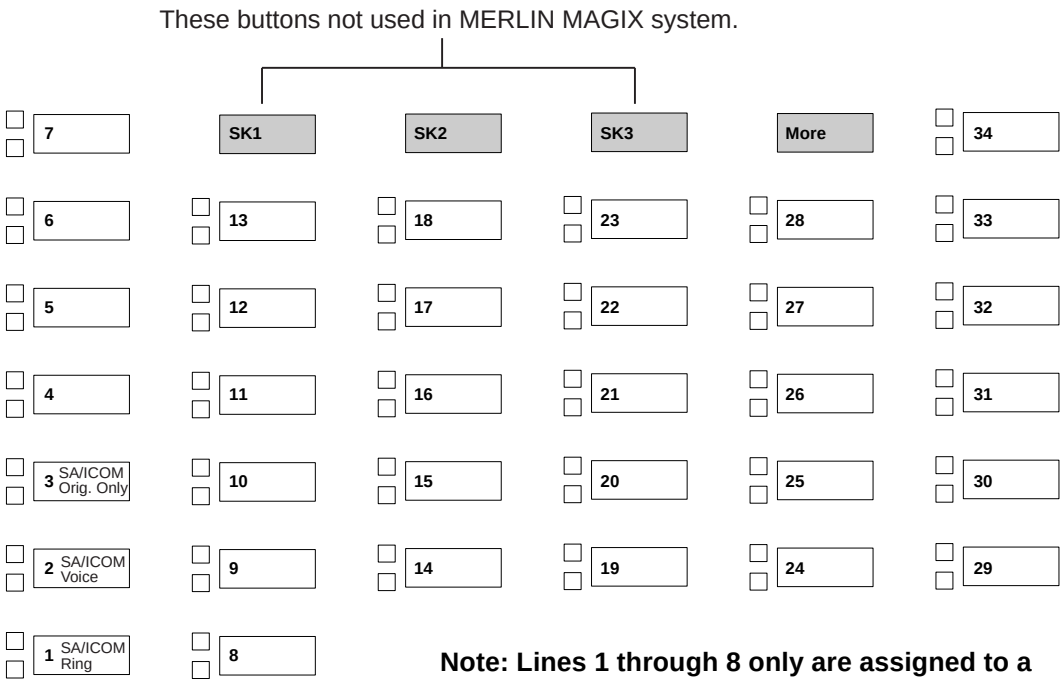
(Make a copy of this form for each Master Extension.)

Master Extension (Template Extension)

Master Ext. No.	Person/Location

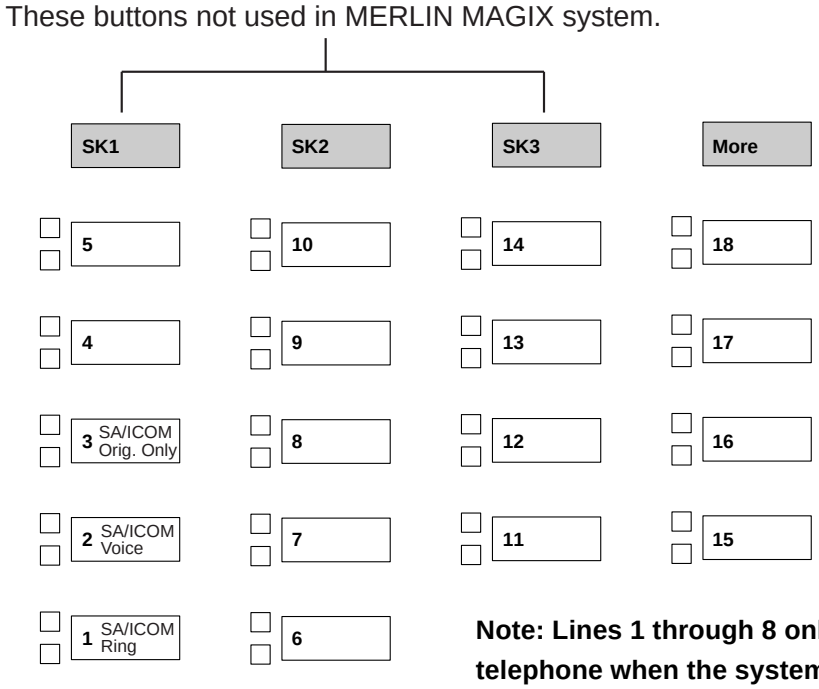
Extensions Copied to

ETR-34D Button Diagram



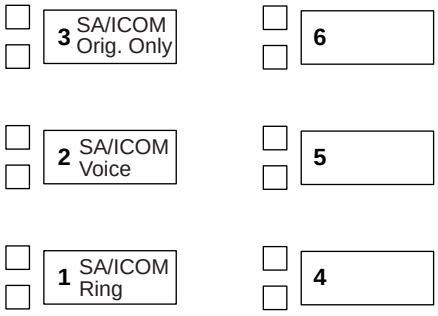
Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

ETR-18/18D Button Diagram



Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

ETR-6 Button Diagram



ETR Telephone

(Make a copy of this form for each telephone.)

Logical ID _____ Extension No. _____ Person or Location _____

❑ Copied from Master Ext. No. _____

Telephone Model

❑ ETR-34D®

❑ ETR-18D®

❑ ETR-18®

❑ ETR-6®

Adjuncts

❑ Off Premises via OPRE

Personal Lines

_____ _____ _____ _____

_____ _____ _____ _____

Shared Extension No. _____

❑ Ring

❑ No Ring

Auto Line Selection

_____ _____ _____ _____

_____ _____ _____ _____

Optional Features

Abbreviated Ring

❑ Off

❑ On ✥

Auto Callback

❑ Off ✥

❑ On

Call Waiting

❑ Off ✥

❑ On

Coverage Inside

❑ Off

❑ On ✥

Computer Telephony Integrated Client PC

❑ Yes

❑ No✥

Cover Ring Delay

Primary Cover Ring Delay

❑ 2 Rings ✥

❑ ____rings (1–6)

Secondary Cover Ring Delay

❑ 2 Rings ✥

❑ ____rings (1–6)

Group Coverage Ring Delay

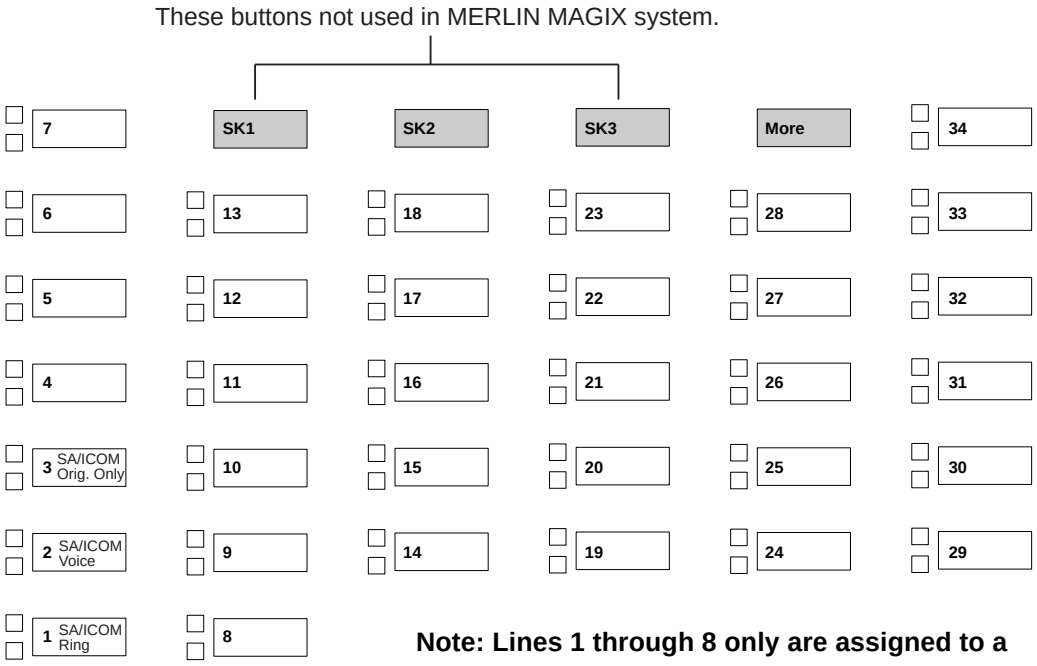
❑ 3 Rings ✥

❑ ____rings (1–9)

✥ *Factory Setting*

ETR-34D Button Diagram

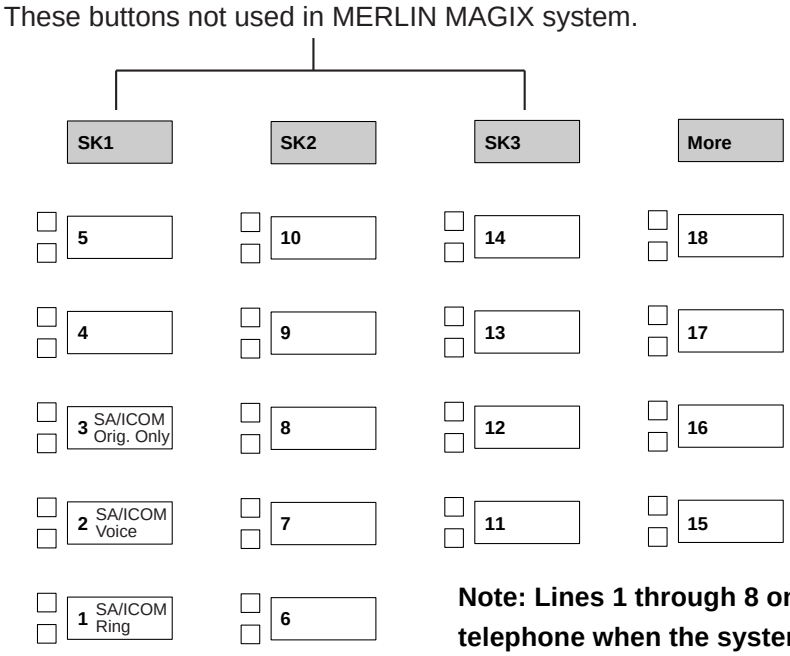
❑ See Master Extension



Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

ETR-18/18D Button Diagram

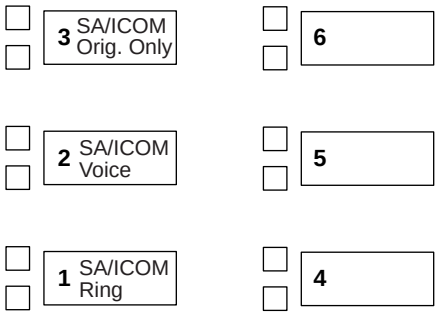
❑ See Master Extension



Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

ETR-6 Button Diagram

❑ See Master Extension



Extension Copy: MLS Telephone Template

(Make a copy of this form for each Master Extension.)

Master Extension (Template Extension)

Master Ext. No.	Person/Location

Extensions Copied to

MLS-34D Button Diagram

6	12	18	24	29	34
5	11	17	23	28	33
4	10	16	22	27	32
3 SA/ICOM Orig. Only	9	15	21	26	31
2 SA/ICOM Voice	8	14	20		
1 SA/ICOM Ring	7	13	19	25	30

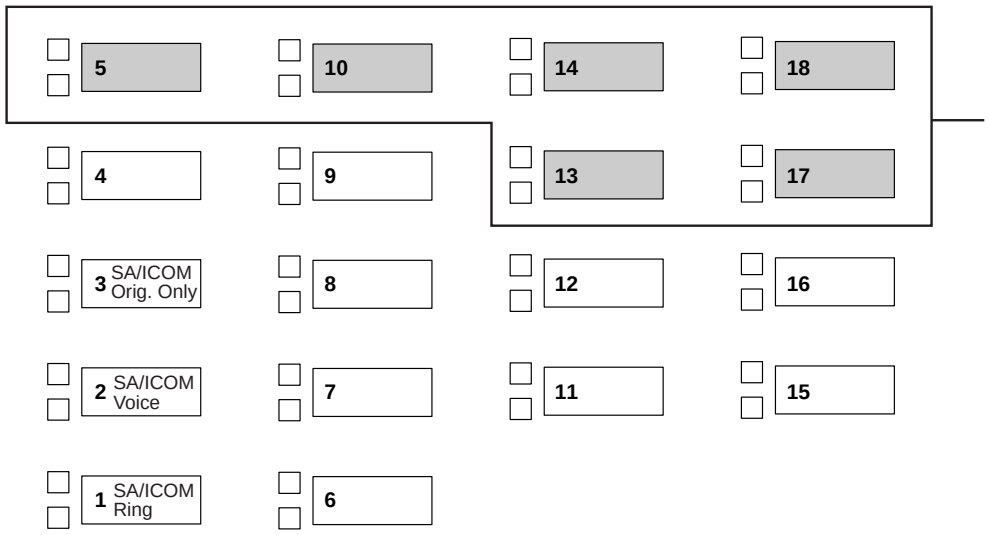
Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

MLS-18D Button Diagram

5	10	14	18
4	9	13	17
3 SA/ICOM Orig. Only	8	12	16
2 SA/ICOM Voice	7	11	15
1 SA/ICOM Ring	6		

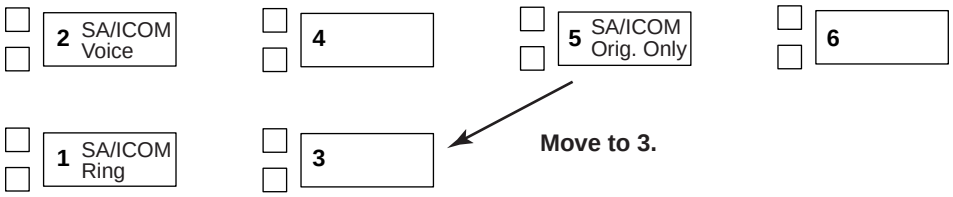
Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

MLS-12/12D Button Diagram



Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

MLS-6 Button Diagram



MDW 9031 Button Diagrams

Hybrid/PBX Mode

Blank 5	Blank 6	Blank 7	Blank 8
SA OO 1	Blank 2	Blank 3	Blank 4
SA Ring A	SA Voice B	Blank C	Drop D

Key Mode

Line 5 5	Line 6 6	Line 7 7	Line 8 8
Line 1 1	Line 2 2	Line 3 3	Line 4 4
ICOM Ring A	ICOM Voice B	Blank C	Blank D

Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

Business Cordless 905 Button Diagrams

Hybrid/PBX Mode

SA Ring 1	SA Voice 2	SA OO 3	Blank 4	Drop 5

Key Mode

ICOM Ring 1	ICOM Voice 2	Blank 3	Blank 4	Blank 5

MLS Telephone*

(Make a copy of this form for each telephone.)

Logical ID _____ Extension No. _____ Person or Location _____

❑ Copied from Master Ext. No. _____

Telephone Model

❑ MLS-34D®
❑ MLS-18D®
❑ MLS-12D®
❑ MLS-12
❑ MLS-6®
❑ TransTalk®
❑ Business Cordless 905®

Adjuncts

❑ Off Premises via OPRE

Personal Lines

_____ _____ _____ _____
_____ _____ _____ _____

Shared Extension No. _____

❑ Ring
❑ No Ring

Auto Line Selection

_____ _____ _____ _____
_____ _____ _____ _____

Optional Features

Abbreviated Ring

❑ Off
❑ On ✦

Auto Callback

❑ Off ✦
❑ On

Call Waiting

❑ Off ✦
❑ On

Coverage Inside

❑ Off
❑ On ✦

Computer Telephony Integrated Client PC

❑ Yes
❑ No✦

Cover Ring Delay

Primary Cover Ring Delay

❑ 2 Rings ✦
❑ ____rings (1–6)

Secondary Cover Ring Delay

❑ 2 Rings ✦
❑ ____rings (1–6)

Group Coverage Ring Delay

❑ 3 Rings ✦
❑ ____rings (1–9)

✦ *Factory Setting*
* *No longer available*

MLS-34D Button Diagram

❑ See Master Extension

6	12	18	24	29	34
5	11	17	23	28	33
4	10	16	22	27	32
3 SA/ICOM Orig. Only	9	15	21	26	31
2 SA/ICOM Voice	8	14	20		
1 SA/ICOM Ring	7	13	19	25	30

Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

MLS-18D Button Diagram

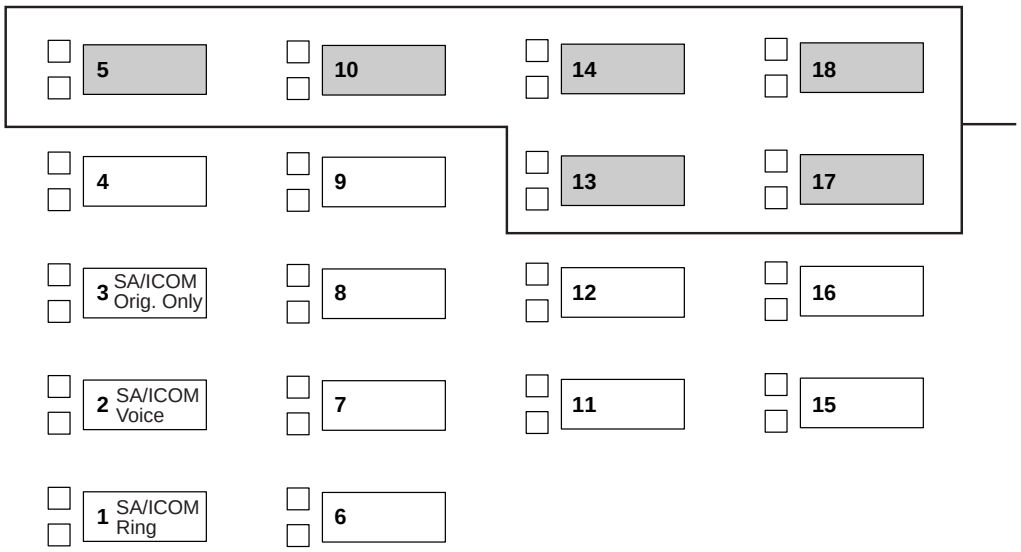
❑ See Master Extension

5	10	14	18
4	9	13	17
3 SA/ICOM Orig. Only	8	12	16
2 SA/ICOM Voice	7	11	15
1 SA/ICOM Ring	6		

Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

MLS-12/12D Button Diagram

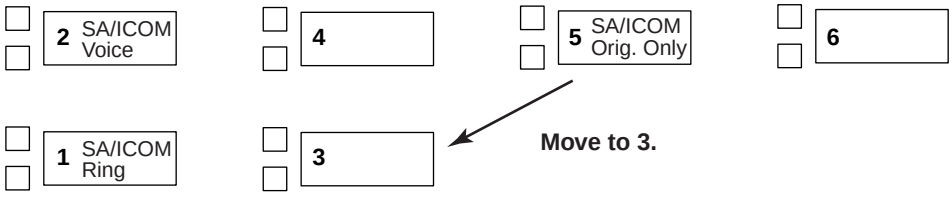
❑ See Master Extension



Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

MLS-6 Button Diagram

❑ See Master Extension



MDW 9031 Button Diagrams

❑ **See Master Extension**

Hybrid/PBX Mode

Blank 5	Blank 6	Blank 7	Blank 8
SA OO 1	Blank 2	Blank 3	Blank 4
SA Ring A	SA Voice B	Blank C	Drop D

Key Mode

Line 5 5	Line 6 6	Line 7 7	Line 8 8
Line 1 1	Line 2 2	Line 3 3	Line 4 4
ICOM Ring A	ICOM Voice B	Blank C	Blank D

Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

Business Cordless 905 Button Diagrams

❑ **See Master Extension**

Hybrid/PBX Mode

SA Ring 1	SA Voice 2	SA OO 3	Blank 4	Drop 5

Key Mode

ICOM Ring 1	ICOM Voice 2	Blank 3	Blank 4	Blank 5

4400/4400D Telephone

(Make a copy of this form for each device.)

Logical ID _____ Extension No. _____ Person or Location _____

Telephone

- ❑ 4400
- ❑ 4400D

Auto Line Selection

_____ _____ _____ _____

_____ _____ _____ _____

Optional Features

Auto Callback

- ❑ Off ✦
- ❑ On

Call Waiting

- ❑ Off ✦
- ❑ On

Coverage Inside

- ❑ Off
- ❑ On ✦

Cover Ring Delay

Primary Cover Ring Delay

- ❑ 2 Rings ✦
- ❑ ____rings (1–6)

Secondary Cover Ring Delay

- ❑ 2 Rings ✦
- ❑ ____rings (1–6)

Group Coverage Ring Delay

- ❑ 3 Rings ✦
- ❑ ____rings (1–9)

Centralized Programming Requirements

- ❑ Remove all but one SA button to disable features such as Transfer and Conference.

Reviewers: Is this valid for 4400/4400D?

✦ *Factory Setting*

Extension Copy: Multiline 4400-Series Telephone Template

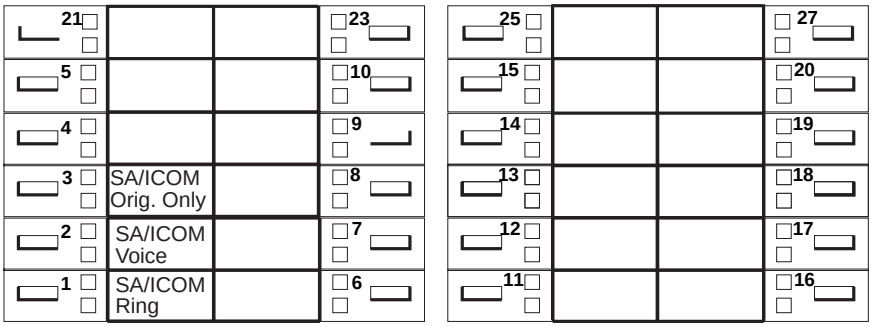
(Make a copy of this form for each Master Extension.)

Master Extension (Template Extension)

Master Ext. No.	Person/Location

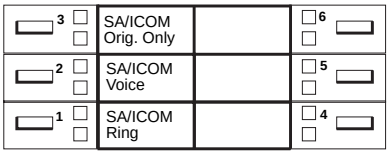
Extensions Copied to

4424LD+, 4424D+, and 4412D+ Button Diagram



Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

4406D+ Button Diagram



Multiline 4400-Series Telephone

(Make a copy of this form for each telephone.)

Logical ID _____ Extension No. _____ Person or Location _____

❑ Copied from Master Ext. No. _____

❑ Wall Mount

Telephone Model

❑ 4424LD+®

❑ 4424D+®

❑ 4412D+®

❑ 4406D+®

Adjuncts

❑ Headset

❑ Hearing-impaired handset

❑ Noisy environment

❑ Off Premises

Personal Lines

_____ _____ _____ _____

_____ _____ _____ _____

Shared Extension No. _____

❑ Ring

❑ No Ring

Auto Line Selection

_____ _____ _____ _____

_____ _____ _____ _____

Centralized Programming Requirements*

❑ Assign Service Observing Button

Optional Features

Abbreviated Ring

❑ Off

❑ On ✦

Auto Callback

❑ Off ✦

❑ On

Call Waiting

❑ Off ✦

❑ On

Voice-Announced Calls

❑ On ✦

❑ Off

Coverage Inside

❑ Off

❑ On ✦

Cover Ring Delay

Primary Cover Ring Delay

❑ 2 Rings ✦

❑ ____rings (1–6)

Secondary Cover Ring Delay

❑ 2 Rings ✦

❑ ____rings (1–6)

Group Coverage Ring Delay

❑ 3 Rings ✦

❑ ____rings (1–9)

Computer Telephony Integrated Client PC

❑ Yes

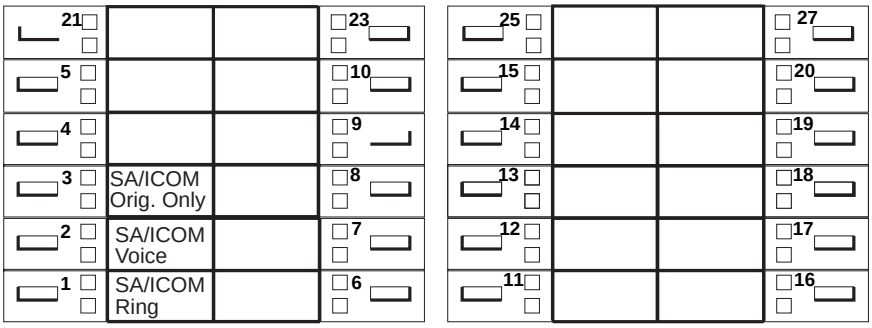
❑ No✦

✦ *Factory Setting*

* *Refer to Form 11 to assign as a Service Observer.*

4424LD+, 4424D+, and 4412D+ Button Diagram

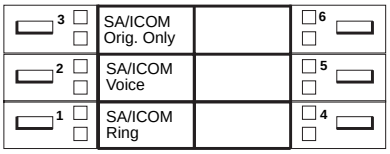
❑ See Master Extension



Note: Lines 1 through 8 only are assigned to a telephone when the system is in Key mode.

4406D+ Button Diagram

❑ See Master Extension



Direct-Line Console (DLC): Analog

Discontinued

Discontinued

Direct-Line Console (DLC)

(Make a copy of this form for each console.)

Logical ID _____ Extension No. _____ Person or Location _____

❑ Copied from Master Ext. No. _____

Console Model

❑ 4424LD+™
❑ 4424D+™
❑ MLX-20L™
❑ MLX-28D™

Adjuncts

❑ Direct Station Selector
Number (1 or 2) _____
❑ Multi-Function Module (MFM) Extension No.* _____
  ❑ FAX machine
  ❑ Answering machine
  ❑ Data terminal
  ❑ Alert device
  type _____
  ❑ Other _____
❑ Headset
❑ Hearing-impaired handset
❑ Noisy environment
❑ CTI PC

Personal Lines

_____ _____ _____ _____
_____ _____ _____ _____

Auto Line Selection

_____ _____ _____ _____
_____ _____ _____ _____

Optional Features

Abbreviated Ring

❑ Off
❑ On ✦

Auto Callback

❑ Off ✦
❑ On

Call Waiting

❑ Off ✦
❑ On

Voice-Announced Calls

❑ On ✦
❑ Off

Coverage Inside

❑ Off
❑ On ✦

Cover Ring Delay

Primary Cover Ring Delay

❑ 2 Rings ✦
❑ ____rings (1–6)

Secondary Cover Ring Delay

❑ 2 Rings ✦
❑ ____rings (1–6)

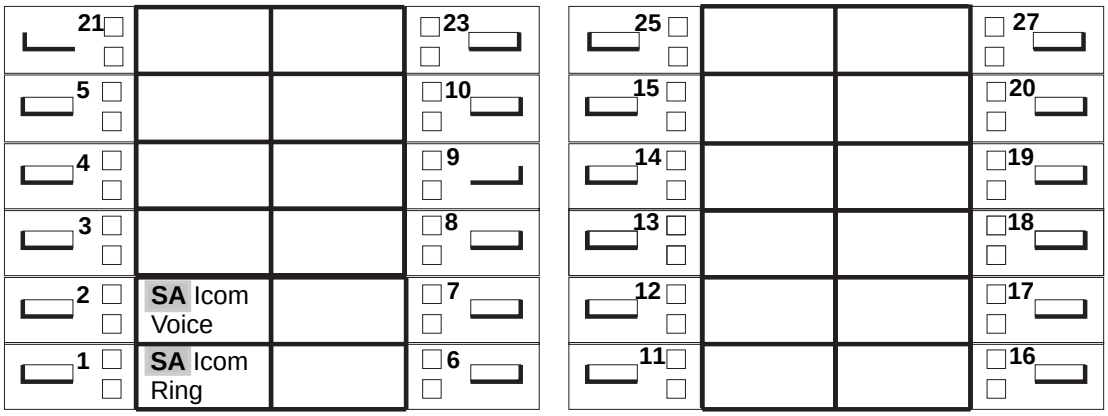
Group Coverage Ring Delay

❑ 3 Rings ✦
❑ ____rings (1–9)

✦ *Factory Setting*
* *MLX DLC only.*

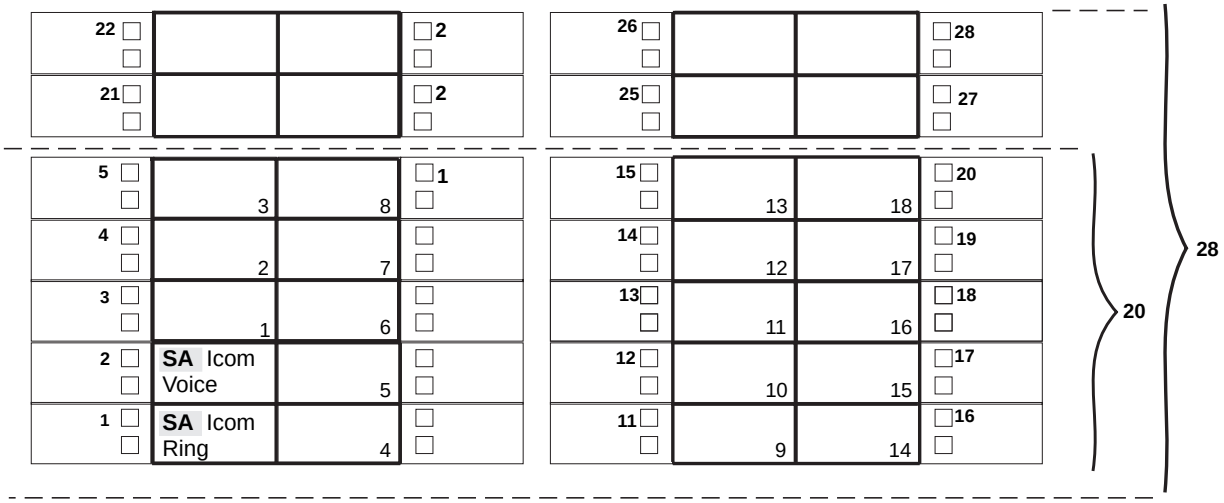
4424LD+ or 4424D+ DLC Button Diagram

❑ See Master Extension



MLX-20L or MLX-28D DLC Button Diagram

❑ See Master Extension



Assignment of outside trunks to console buttons begins with number 3.

MFM Adjunct: MLX-20L or MLX-28D DLC

Extension No._____ Person or Location_____

Connected to MLX extension No._____

Copied from Master Extension No._____

Adjuncts

- ❑ FAX machine
- ❑ Answering machine
  - ❑ Used as delay announcement device for calling groups
    Ext. No.
    _____ _____ _____ _____
    _____ _____ _____ _____
- ❑ Data terminal
- ❑ Alert device, type _____
  - ❑ Use as Calls-in-Queue Alarm device for calling groups
    Ext. No. _____
- ❑ Other _____

Button Diagram

- ❑ See Master Extnsions

Line 3	Line 8
Line 2	Line 7
Line 1 SA Orig. Only	Line 6
SA Icom Voice	Line 5
SA Icom Ring	Line 4

Note: Lines 1 through 8 only default on a telephone when the system is in Key mode.

Centralized Programming Requirements

- ❑ Disable Voice Announce – change button 2 assignment to System Access Originate Only and remove button 3 assignment
- ❑ Enable Ringing/Idle Line Preference
- ❑ Change Automatic Line Selection order to: (1) System Access Ring, (2) System Access Originate Only, (3) outside trunks assigned to buttons 3 through 10
- ❑ Set Ringing Option to No Ring for each personal line on which calls are **not** received

Auto Line Selection

_____ _____ _____ _____

_____ _____ _____ _____

Optional Features

Auto Callback

- ❑ Off ✦
- ❑ On

Call Waiting

- ❑ Off ✦
- ❑ On

Coverage Inside

- ❑ Off
- ❑ On ✦

Cover Ring Delay

Primary Cover Ring Delay

- ❑ 2 Rings ✦
- ❑ ____rings (1–6)

Secondary Cover Ring Delay

- ❑ 2 Rings ✦
- ❑ ____rings (1–6)

Group Coverage Ring Delay

- ❑ 3 Rings ✦
- ❑ ____rings (1–9)

✦ *Factory Setting*

Queued Call Console (QCC)*

(Make a copy of this form for each console.)

Logical ID _____ Extension No. _____ Person or Location _____

Adjuncts

- ❑ Direct Station Selector
- ❑ Number (1 or 2) _____
- ❑ Headset
- ❑ Hearing-impaired handset
- ❑ Noisy environment

Message Center Operator

- ❑ No
- ❑ Yes

* *Hybrid/PBX mode only.*

4424LD+ QCC Button Diagram

	Feature	*HFAI*			*Drop*	*Inspect*	
	G *Call 5*	*H* *Position Busy*			*I* *Alarm*	*J* *Forced Release*	
	K *Call 4*	*L* *Send/Remove Message*			*M* *Night Service*	*N* *Pool Status*	
	O *Call 3*	*P* *Loudspeaker Page*			*Q* *Headset Status*	*R* *Headset Auto Ans*	
	S *Call 2*	*T* *Source*			*U* *Destination*	*V* *Join*	
	W *Call 1*	*X* *Start*			*Y* *Release*	*Z* *Cancel*	

MLX-20L QCC Button Diagram

5	G CALL 5/VA	H POSITION BUSY	10	15	I ALARM	J FORCED RELEASE	20
4	K CALL 4	L SEND/REMOVE MSG	9	14	M NIGHT SERVICE	N POOL STATUS	19
3	O CALL 3	P HEADSET MUTE	8	13	Q HEADSET STATUS	R HEADSET AUTO ANSWER	18
2	S CALL 2	T SOURCE	7	12	U DESTINATION	V JOIN	17
1	W CALL 1	X START	6	11	Y RELEASE	Z CANCEL	16

Optional Operator Features

Direct-Line Console

Operator Hold Timer
- ❑ 60 seconds ✦
- ❑ _____ seconds (10–255)

DLC Automatic Hold
- ❑ Disable ✦
- ❑ Enable

Queued Call Console*

Hold Return
- ❑ Remain on hold ✦
- ❑ Return to queue

Automatic Hold or Release
- ❑ Automatic Release ✦
- ❑ Automatic Hold

Calls-in-Queue Alert
- ❑ Disable ✦
- ❑ Enable, Operator Extension No(s).

  _____ _____ _____ _____

Queue Over Threshold
- ❑ 0 calls ✦ (operators not notified when calls are in queue)
- ❑ _____ calls (1–99)

Elevate Priority
- ❑ 0 seconds ✦ (calls are not automatically reprioritized)
- ❑ _____ seconds (5–30)

Message Center
- ❑ No
- ❑ Yes, Operator Extension No. _____

Extended Call Completion
- ❑ Automatic completion ✦
- ❑ Manual completion

Return Ring
- ❑ 4 rings ✦
- ❑ _____ rings (1–15)

Position Busy Backup
- ❑ No ✦
- ❑ Yes, Extension no. of calling group backup _____

Operator Hold Timer
- ❑ 60 seconds ✦
- ❑ _____ seconds (10–255)

Voice Announce
- ❑ Disable ✦
- ❑ Enable

Direct Station Selector

Page Buttons

Page Button	1	2	3
Beginning extension for range			

Enter first extension number for range of 50 (1 DSS) or 100 (2 DSSs) extensions for each **Page** *button.*

Call Park Codes (See Form 2d)

Factory-Set Extension No.	Renumber to	Factory-Set Extension No.	Renumber to
881		885	
882		886	
883		887	
884		888	

✦ *Factory Setting*
* *Hybrid/PBX mode only*

Call Types*

Call Types	QCC Operator to Receive Calls	QCC Queue Priority Level (4✥)
Dial 0		
Call Follow/Forward	N/A	
Unassigned DID		
Listed Directory Number		
QCC Extension	N/A	
Returning		

Group Coverage Calls

Group No.	QCC Operator to Receive Calls	QCC Queue Priority Level (4✥)	Group No.	QCC Operator to Receive Calls	QCC Queue Priority Level (4✥)
1			16		
2			17		
3			18		
4			19		
5			20		
6			21		
7			22		
8			23		
9			24		
10			25		
11			26		
12			27		
13			28		
14			29		
15			30		

✥ *Factory Setting*
* *Hybrid/PBX mode only*

Optional Extension Features

Extension Number	Forced Account Code Entry		Microphone*		Remote Call Forwarding			Language*			Trunk-to-Trunk Transfer†	
	No❖	Yes	Enable❖	Disable	Not Allowed❖	Allowed	Delay 0❖-9	English❖	French	Spanish	No❖	Yes

❖ Factory Setting *† Single-line telephones are restricted from completing a trunk-to-trunk transfer.*
** Multiline 4400-Series, MLX, and ETR telephones only*

Principal User of Personal Line

Factory-Set Trunk No.	Extension No.
801	
802	
803	
804	
805	
806	
807	
808	
809	
810	
811	
812	
813	
814	
815	
816	
817	
818	
819	
820	

Factory-Set Trunk No.	Extension No.
821	
822	
823	
824	
825	
826	
827	
828	
829	
830	
831	
832	
833	
834	
835	
836	
837	
838	
839	
840	

Factory-Set Trunk No.	Extension No.
841	
842	
843	
844	
845	
846	
847	
848	
849	
850	
851	
852	
853	
854	
855	
856	
857	
858	
859	
860	

Factory-Set Trunk No.	Extension No.
861	
862	
863	
864	
865	
866	
867	
868	
869	
870	
871	
872	
873	
874	
875	
876	
877	
878	
879	
880	

Note: Lines must be assigned to the principal user's extension before the principal users can be programmed.
See Form 2c, page1 for telephone numbers and extension numbers assigned to trunks.

Message-Waiting Receivers

System Notification Threshold (0-30 seconds)_____
(factory setting is 10 seconds)

	Fax Machine Extension No.	Receivers			
		Ext. No.	Ext. No.	Ext. No.	Ext. No.
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

Allowed Lists

List 0 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

List 1 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

List 2 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

List 3 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

Allow to Ext. Nos.

Allow to Ext. Nos.

Allow to Ext. Nos.

Allow to Ext. Nos.

List 4 ______		List 5 ______		List 6 ______		List 7 ______	
0		0		0		0	
1		1		1		1	
2		2		2		2	
3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	
9		9		9		9	

Allow to Ext. Nos.	Allow to Ext. Nos.	Allow to Ext. Nos.	Allow to Ext. Nos.

Disallowed Lists

List 0 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

List 1 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

List 2 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

Disallow to Ext. Nos.

Disallow to Ext. Nos.

Disallow to Ext. Nos.

List 3 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

List 4 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

List 5 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

Disallow to Ext. Nos.

Disallow to Ext. Nos.

Disallow to Ext. Nos.

List 6 _____	
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	

List 7 _____		List 7 _____
Default Entries✦		
0	0	
1	10	
2	11	
3	1809	
4	1700	
5	1900	
6	976	
7	1PPP976	
8	*	
9		

Disallow to Ext. Nos.

Disallow to Ext. Nos.

✦ *Factory Setting*

Call Restriction Assignments and Lists

Ext No.	Copy From	Restriction Type			Allowed List No.	Disallowed List No.	ARS Restriction Levels (FRL)*
		Out.	Toll	Unrest.			

** Hybrid/PBX mode only.*

Ext No.	Copy From	Restriction Type			Allowed List No.	Disallowed List No.	ARS Restriction Levels (FRL)*
		Out.	Toll	Unrest.			

** Hybrid/PBX mode only.*

Authorization Codes

Note: Keep this form in a secure place.

Option for SMDR Account Code Field: ❑ **Authorization Code**
❑ **Home Extension** ✥

Extension Number	Authorization Code	Extension Number	Authorization Code

✥ *Factory Setting*

Authorization Codes

Note: Keep this form in a secure place.

Option for SMDR Account Code Field: ❑ **Authorization Code**
❑ **Home Extension** ✥

Extension Number	Authorization Code	Extension Number	Authorization Code

✥ *Factory Setting*

Pool Dial-Out Code Restrictions

Extension Number	Pool Dial-Out Codes											
	70	890	891	892	893	894	895	896	897	898	899	Factory Set
												Renumber To

Factory Setting: Restricted for all codes. Enter unrestricted codes on this form.

Hybrid/PBX mode only.

Call Pickup Groups

Maximum: 30 groups. (Make additional copies if more than 8 groups are assigned.)

Group Number ___________
Group ID ______________________

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Group Number ___________
Group ID ______________________

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Group Number ___________
Group ID ______________________

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Group Number ___________
Group ID ______________________

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Group Number ___________
Group ID ______________________

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Group Number ___________
Group ID ______________________

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Group Number ___________
Group ID ______________________

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Group Number ___________
Group ID ______________________

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		

Group Paging

(See Form 2d)

Group No. 1 Group ID _____
Factory-Set Ext. No. 793 Renumber to _____

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Group No. 2 Group ID _____
Factory-Set Ext. No. 794 Renumber to _____

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Group No. 3 Group ID _____
Factory-Set Ext. No. 795 Renumber to _____

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Group No. 4 Group ID _____
Factory-Set Ext. No. 796 Renumber to _____

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Group No. 5 Group ID _____
Factory-Set Ext. No. 797 Renumber to _____

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Group No. 6 Group ID _____
Factory-Set Ext. No. 798 Renumber to _____

	Ext. No.	Person or Location
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Group No. 7 Page All
Factory-Set Ext. No. 799 Renumber to _____

Group Coverage

Maximum: 32 groups. Make additional copies if more than 8 groups are assigned.

Group No.* _____ Senders Extension Nos.		Group No.* _____ Senders Extension Nos.		Group No.* _____ Senders Extension Nos.		Group No.* _____ Senders Extension Nos.	
↓		↓		↓		↓	
Receivers†		Receivers†		Receivers†		Receivers†	
❑ Calling Group		❑ Calling Group		❑ Calling Group		❑ Calling Group	
or		or		or		or	
❑ QCC queue‡		❑ QCC queue‡		❑ QCC queue‡		❑ QCC queue‡	
1		1		1		1	
2		2		2		2	
3		3		3		3	
4		4		4		4	
5		5		5		5	
6		6		6		6	
7		7		7		7	
8		8		8		8	

* *If a group is the coverage group for AUDIX Voice Power/FAX Attendant System (the default is Group No. 30 but can be changed), write "AUDIX/FA" by the group number and list the extensions of AUDIX Voice Power/FAX Attendant System subscribers (see Form 2a).*

† *A maximum of 8 multiline telephones can be used as receivers.The QCC queue can also be a receiver for Hybrid/PBX mode only, but it is not counted in the 8 receiver maximum. If a calling group is the receiver, it must be the only receiver for a coverage group. If the system has AUDIX Voice Power/FAX Attendant System, you do not need to fill in receivers here.*

‡ *Hybrid/PBX mode only.*

Group No.* ______ Senders Extension Nos.		Group No.* ______ Senders Extension Nos.		Group No.* ______ Senders Extension Nos.		Group No.* ______ Senders Extension Nos.	

↓ Receivers† ↓ Receivers† ↓ Receivers† ↓ Receivers†

❑ Calling Group	❑ Calling Group	❑ Calling Group	❑ Calling Group
or	or	or	or
❑ QCC queue‡	❑ QCC queue‡	❑ QCC queue‡	❑ QCC queue‡
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8

* *If a group is the coverage group for AUDIX Voice Power/FAX Attendant System (the default is Group No. 30 but can be changed), write "AUDIX/FA" by the group number and list the extensions of AUDIX Voice Power/FAX Attendant System subscribers (see Form 2a).*

‡ *A maximum of 8 multiline telephones can be used as receivers. The QCC queue can also be a receiver for Hybrid/PBX mode only, but it is not counted in the 8 receiver maximum. If a calling group is the receiver, it must be the only receiver for a coverage group.*

‡ *Hybrid/PBX mode only.*

Group Calling*

Maximum: 32 groups. (Make a copy of this form for each group.)

Group Number (1–32)† _____ Group ID† _____
Factory-Set Ext. No. _____ Renumber to _____
(See Form 2d)

Provide coverage for Coverage Group Numbers _____

Extensions

	Ext. No.	Person or Location		Ext. No.	Person or Location		Ext. No.	Person or Location		Ext. No.	Person or Location
1			6			11			16		
2			7			12			17		
3			8			13			18		
4			9			14			19		
5			10			15			20		

Trunks/Pools

* *Before adding to a calling group when programming, you must first remove trunks from the QCC.*

† *If the system has AUDIX Voice Power/FAX Attendant System, fill in only the Group Number and Group Name here, then fill in the rest of the Group Calling information on Forms B & C of the AUDIX Voice Power planning forms.*

Group Number _____

Group ID _____

Ext. No. _____

Calling Group Options*

Hunt Type
- ❑ Circular ✦
- ❑ Linear
- ❑ Most-Idle

Primary Delay Announcements
- ❑ No ✦
- ❑ Yes, Extension No. _____

_____ _____ _____ _____
_____ _____ _____ _____

Secondary Delay Announcement
- ❑ No ✦
- ❑ Yes, Extension No. _____
  Delay Interval _____(0✦-900 sec.)
  - ❑ Disabled ✦
  - ❑ Enabled

Message-Waiting Receiver
- ❑ No ✦
- ❑ Yes, Extension No. _____

First Calls-in-Queue Alarm Threshold
- ❑ 1 call ✦
- ❑ _____ calls (2–99)

Second Calls-in-Queue Alarm Threshold
- ❑ 1 call ✦
- ❑ _____ calls (2–99)

Third Calls-in-Queue Alarm Threshold
- ❑ 1 call ✦
- ❑ _____ calls (2–99)

External Alert for Calls-in-Queue Alarm
- ❑ No ✦
- ❑ Yes, Extension No. _____

Overflow Coverage
- ❑ No ✦
- ❑ Yes, Calling Group No. _____
- ❑ Yes, QCC LDN (queue) Extension No. _____

Overflow Threshold
- ❑ 1 call ✦
- ❑ _____ calls (2–99)

Overflow Threshold Time
- ❑ 0 seconds ✦
- ❑ _____ seconds (1–900)

Group Type
- ❑ Auto Login
- ❑ Auto Logout ✦
- ❑ Integrated VMI†
- ❑ Generic VMI†

Prompt-Based Overflow
- ❑ Disabled ✦
- ❑ Enabled

Queue Control
- ❑ 99 calls ✦
- ❑ _____ calls (0–98)

Priority Call Queuing
- ❑ No ✦
- ❑ Yes
  Home Group Priority Level _____
  (1–32; 16 is the factory setting.)
  Support Group Extension No. _____
  (Support Group Priority Level) _____

* *If the system has AUDIX Voice Power/FAX Attendant System, you do not need to fill in this information. Settings will be automatically set by Integrated Administration to defaults assumed by the AUDIX Voice Power system (and not necessarily those listed on this form). Changing the assumed defaults could affect how the AUDIX Voice Power system works. If you change them, DO SO WITH CAUTION, and record the settings on this form. For more information, see the AUDIX Voice Power documentation.*

† *Any port programmed as a VMI port is, by default, restricted from making outgoing calls.*

System Features

Transfer Options**

Return Time Interval†
- ❑ 4 rings ✦
- ❑ 0 rings
- ❑ _____ rings (1–9)

One-Touch Call Handling
- ❑ One-Touch Transfer ✦
  - ❑ Manual Completion
  - ❑ Automatic Completion ✦
- ❑ One-Touch-Hold

Transfer Audible
- ❑ Music On Hold ✦
- ❑ Ringback

Type of Transfer
- ❑ Voice button
- ❑ Ring button ✦

Camp-On Return Time
- ❑ 90 seconds ✦
- ❑ _____ seconds (30–300)

Call Park Return Time
- ❑ 180 seconds ✦
- ❑ _____ seconds (30–300)

Automatic Callback Interval
- ❑ 3 rings ✦
- ❑ _____ rings (1–6)

Extension Status
- ❑ Hotel
  - ❑ Assign to operator positions
    _____ _____ _____ _____
    _____ _____ _____ _____
- ❑ Group Calling/CMS ✦

SMDR Options

Call Report Format
- ❑ Basic ✦
- ❑ ISDN

Calls Reported (non-UDP)
- ❑ Incoming and outgoing ✦
- ❑ Outgoing only

Talk Time
- ❑ Enabled
- ❑ Disabled ✦

Inside Dial Tone
- ❑ Inside ✦
- ❑ Outside

Reminder Service Cancel
- ❑ No
- ❑ Yes, _____ time of day

Calls to Unassigned Extensions
- ❑ QCC Queue _____§
- ❑ Extension ✦, No. _____ (default is the primary operator extension)
- ❑ Calling Group, Extension No. _____

Recall Timer
- ❑ 350 ms
- ❑ 450 ms ✦
- ❑ 650 ms
- ❑ 1 sec

Rotary
- ❑ Delay ✦
- ❑ No Delay

Call Length‡
- ❑ 40 seconds ✦
- ❑ _____ seconds (0–255)

Calls Reported (UDP)
- ❑ Incoming and outgoing
- ❑ None ✦

Note: If you use equipment that rebroadcasts music or other copyrighted material, you may be required to obtain a copyright license from, and pay license fees to, a third party such as the American Society of Composers, Artists, and Producers (ASCAP) or Broadcast Music Incorporated (BMI). Or you can purchase a Magic-on-Hold system, which does not require you to obtain such a license, from Lucent Technologies or an authorized representative.

✦ *Factory Setting*
* *Calls received on personal lines with Do Not Disturb on will go immediately to Coverage instead of waiting for the Cover Delay Interval.*
† *If the system has AUDIX Voice Power/FAX Attendant System, Integrated Administration will automatically set the Return Time Interval to "6."*
‡ *For systems where the majority of lines are PRI, the SMDR Call Length should be one second.*
** *Transfer features (and any feature that requires more than one SA button) can be disabled on single-line telephones by removing all but one SA button via Centralized Programming.*
§ *Hybrid/PBX mode only*

Night Service: Group Assignment*

Maximum: 8 groups. (Make a copy of this form for each group.)

Operator Ext. No._____ Group ID_____

Extensions

	Ext. No.	Person or Calling Group Name		Ext. No.	Person or Calling Group Name		Ext. No.	Person or Calling Group Name		Ext. No.	Person or Calling Group Name
1			6			11			16		
2			7			12			17		
3			8			13			18		
4			9			14			19		
5			10			15			20		

Trunks/Pools

* *If the system has AUDIX Voice Power/FAX Attendant System, for each operator that will use Night Service with that system, fill in the operator's extension number and the calling group number for Automated Attendant. The information will be programmed using Integrated Administration.*

Extensions

	Ext. No.	Person or Calling Group Name		Ext. No.	Person or Calling Group Name		Ext. No.	Person or Calling Group Name		Ext. No.	Person or Calling Group Name
1			6			11			16		
2			7			12			17		
3			8			13			18		
4			9			14			19		
5			10			15			20		

Trunks/Pools

Night Service: Outward Restriction

Password _____ (To keep the password private, do not fill in the blank.)

Emergency Allowed List			
Item No.	Telephone No. (12 digits maximum)	Item No.	Telephone No. (12 digits maximum)
0		5	
1		6	
2		7	
3		8	
4		9	

Exclusion List (Telephones not restricted during Night Service)*					
Ext. No.	Name	Ext. No.	Name	Ext. No.	Name

** All AUDIX Voice Power/FAX Attendant System ports are automatically included in the Exclusion List by Integrated Administration. However, to keep a record of these, you may choose to review Form 2a and, for all extensions listed as ports, copy the extension number to this list.*

Exclusion List (Telephones not restricted during Night Service)					
Ext. No.	Name	Ext. No.	Name	Ext. No.	Name

Night Service: Options

Day	Start Time*	Stop Time*
Sunday (0)		
Monday (1)		
Tuesday (2)		
Wednesday (3)		
Thursday (4)		
Friday (5)		
Saturday (6)		

** Hours and minutes in 24-hour (military) time*

Note: Start time is the END of your business day.
Stop time is the BEGINNING of your business day.

Coverage Control

❑ Enable

❑ Disable ✦

✦ Factory Setting

Label Form: Posted Message

Message No.	Default Label	Revised Message (16 characters maximum)
1	DO NOT DISTURB	(Cannot be changed)
2	OUT TO LUNCH	
3	AT HOME	
4	OUT SICK	
5	IN A MEETING	
6	IN CONFERENCE	
7	WITH A CLIENT	
8	WITH A CUSTOMER	
9	AWAY FROM DESK	
10	OUT ALL DAY	
11	CUSTM MSG11	
12	CUSTM MSG12	
13	CUSTM MSG13	
14	CUSTM MSG14	
15	CUSTM MSG15	
16	CUSTM MSG16	
17	CUSTM MSG17	
18	CUSTM MSG18	
19	CUSTM MSG19	
20	CUSTM MSG20	

System Speed Dial

Dial Code	Name (11 characters maximum)	Telephone Number (40 digits maximum)	Display	
			Yes ✦	No*
#600				
#601				
#602				
#603				
#604				
#605				
#606				
#607				
#608				
#609				
#610				
#611				
#612				
#613				
#614				
#615				
#616				
#617				
#618				
#619				
#620				
#621				

✦ *Factory Setting*
* *If you select "No" display, this indicates a Marked System Speed Dial number which can override calling restrictions.*

Dial Code	Name (11 characters maximum)	Telephone Number (40 digits maximum)	Display Yes ❖	Display No*
#622				
#623				
#624				
#625				
#626				
#627				
#628				
#629				
#630				
#631				
#632				
#633				
#634				
#635				
#636				
#637				
#638				
#639				
#640				
#641				
#642				
#643				

❖ *Factory Setting*
* *If you select "No" display, this indicates a Marked System Speed Dial number which can override calling restrictions.*

System Speed Dial

Dial Code	Name (11 characters maximum)	Telephone Number (40 digits maximum)	Display Yes ✦	Display No*
#644				
#645				
#646				
#647				
#648				
#649				
#650				
#651				
#652				
#653				
#654				
#655				
#656				
#657				
#658				
#659				
#660				
#661				
#662				
#663				
#664				
#665				

✦ *Factory Setting*
* *If you select "No" display, this indicates a Marked System Speed Dial number which can override calling restrictions.*

Dial Code	Name (11 characters maximum)	Telephone Number (40 digits maximum)	Display Yes ✦	Display No*
#666				
#667				
#668				
#669				
#670				
#671				
#672				
#673				
#674				
#675				
#676				
#677				
#678				
#679				
#680				
#681				
#682				
#683				
#684				
#685				
#686				
#687				

✦ *Factory Setting*
* *If you select "No" display, this indicates a Marked System Speed Dial number which can override calling restrictions.*

System Speed Dial

Dial Code	Name (11 characters maximum)	Telephone Number (40 digits maximum)	Display Yes ✦	Display No*
#688				
#689				
#690				
#691				
#692				
#693				
#694				
#695				
#696				
#697				
#698				
#699				
#700				
#701				
#702				
#703				
#704				
#705				
#706				
#707				
#708				
#709				

✦ *Factory Setting*
* *If you select "No" display, this indicates a Marked System Speed Dial number which can override calling restrictions.*

Dial Code	Name (11 characters maximum)	Telephone Number (40 digits maximum)	Display Yes ❖	Display No*
#710				
#711				
#712				
#713				
#714				
#715				
#716				
#717				
#718				
#719				
#720				
#721				
#722				
#723				
#724				
#725				
#726				
#727				
#728				
#729				

❖ *Factory Setting*
* *If you select "No" display, this indicates a Marked System Speed Dial number which can override calling restrictions.*

Service Observing: Group Assignment

(Make additional copies of this form as needed.)
Maximum: 16 Service Observing Groups

Group No. _____		Group No. _____		Group No. _____		Group No. _____	
Observer Ext. No.* _____		Observer Ext. No.* ____		Observer Ext. No.* ____		Observer Ext. No.* _____	
Warning Tone: ❑ Yes✥ ❑ No		Warning Tone: ❑ Yes✥ ❑ No		Warning Tone: ❑ Yes✥ ❑ No		Warning Tone: ❑ Yes✥ ❑ No	
Member Ext. No.†	Member Name	Member Ext. No.†	Member Name	Member Ext. No.†	Member Name	Member Ext. No.†	Member Name

* *Observer extension must be a multiline 4400-Series or MLX telephone but cannot be a QCC or CTI Link. The Service Observing button on the Observer's telephone must be programmed via Centralized Telephone Programming.*

† *Member extensions may be any telephone type but cannot be a QCC or CTI Link. The number of members in a Service Observing Group may equal the maximum number of system extensions.*

✥ *Factory Setting*

Service Observing: Group Assignment

(Make additional copies of this form as needed.)
Maximum: 16 Service Observing Groups

Group No. _____		Group No. _____		Group No. _____		Group No. _____	
Observer Ext. No.* _____		Observer Ext. No.* ____		Observer Ext. No.* ____		Observer Ext. No.* _____	
Warning Tone: ❑ Yes✥ ❑ No		Warning Tone: ❑ Yes✥ ❑ No		Warning Tone: ❑ Yes✥ ❑ No		Warning Tone: ❑ Yes✥ ❑ No	
Member Ext. No.†	Member Name	Member Ext. No.†	Member Name	Member Ext. No.†	Member Name	Member Ext. No.†	Member Name

* *Observer extension must be a multiline 4400-Series or MLX telephone but cannot be a QCC or CTI Link. The Service Observing button on the Observer's telephone must be programmed via Centralized Telephone Programming.*

† *Member extensions may be any telephone type but cannot be a QCC or CTI Link. The number of members in a Service Observing Group may equal the maximum number of system extensions.*

✥ *Factory Setting*