UNIVERGE SV9500

FP95-114 V4

Migration Guide

NWD-170372-001
ISSUE 6.0

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UNIVERGE SV9500
Migration Guide

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INTRODUCTION

1. General

This manual describes the installation and startup procedures when migrating the existing system to the SV9500 Appliance Model.

2. How to Follow This Manual

The contents of this manual are:

CHAPTER		DESCRIPTION
1	GENERAL	This chapter provides an overview of SV9500 migration.
2	BEFORE INSTALLATION	This chapter explains the installation design for preparing the required installation environment and materials.
3	INSTALLATION	This chapter explains the installation procedures needed to migrate your system.
4	SYSTEM STARTUP	This chapter describes how to start up the migrated system.
5	INSTALLATION TEST AND WORK AFTER INSTALLATION TEST	This chapter explains about the installation test and some works after the test.
APPENDIX A	CABLING DIAGRAM	This appendix describes the cabling diagrams.
APPENDIX B	OTHER CONFIGURATIONS	This appendix introduces some configuration patterns where additional PIR are installed to add more TDM-Module.

3. Reference Manuals

If necessary, when installing and setup the SV9500 Appliance Model, refer to the following manuals in addition to this manual.

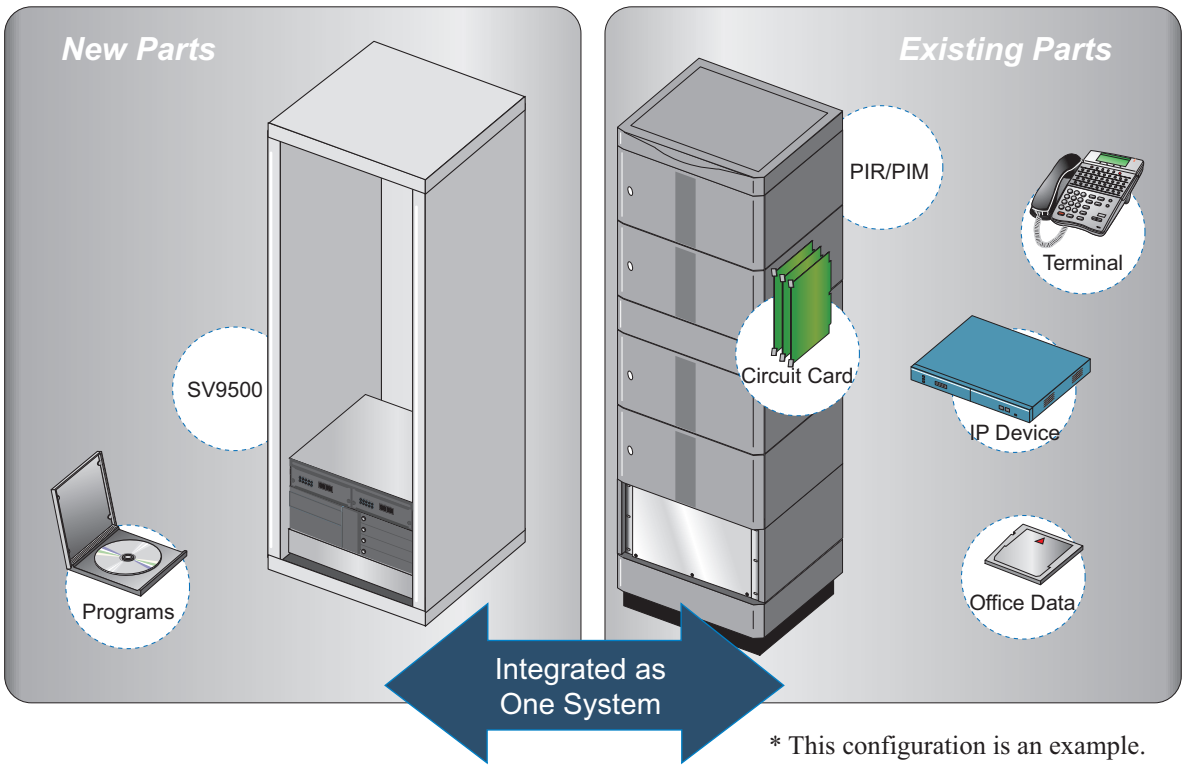
- Appliance Model Installation Manual
- Circuit Card Description
- Data Programming Manual
- Peripheral Equipment Description
- Operations and Maintenance Manual

CHAPTER 1
GENERAL

1. What is Migration?

The New IP Telephony Server UNIVERGE SV9500 (hereinafter called SV9500) can be installed into your system without wasting the existing assets, including SV8500 PIR, IPX PIM, circuit cards, terminals and IP devices used in UNIVERGE SV8500 (hereinafter called SV8500) system/UNIVERGE SV7000 (hereinafter called SV7000) system/UNIVERGE NEAX2400 IPX (hereinafter called IPX) system. You can reuse them in SV9500 system as in the previous system. This migration provides lower cost and requires a shorter period for installing the SV9500 system.

Outer View



* This configuration is an example.

This manual introduces five basic configurations for migrating a system, which are described in the following subsections respectively;

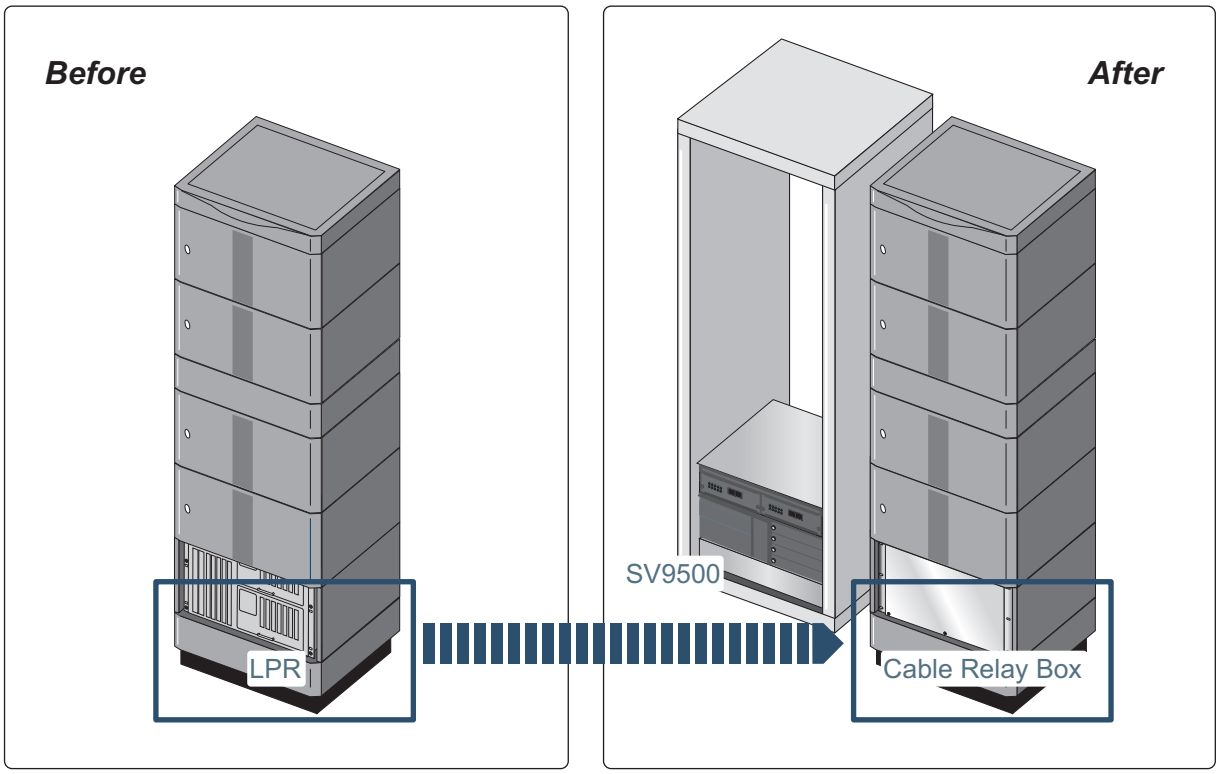
- Migration from 1-IMG IPX
- Migration from 4-IMG IPX
- Migration from SV7000
- Migration from AC-Powered Model SV8500
- Migration from DC-Powered Model SV8500

2. Migration from 1-IMG IPX

When you migrate from a 1-IMG IPX system, LPR is replaced with a cable relay box which is designed to connect SV9500 and IPX (PIM). You install the SV9500 server and TSW-BOX in a new 19-inch rack. Replace TSW cards in PIM0 to MUX cards and other circuit cards in PIM1, 2, 3 can be reused as they were.

Note: Only PH-SW10-A cards used as TSW cards in PIM0 of the IPX system can be used in the new system as MUX cards. If different cards were used, it is necessary to purchase PH-PC36 cards to use them as MUX cards in the new system.

Migration from 1-IMG IPX



LPR is removed and Cable Relay Box is installed instead.

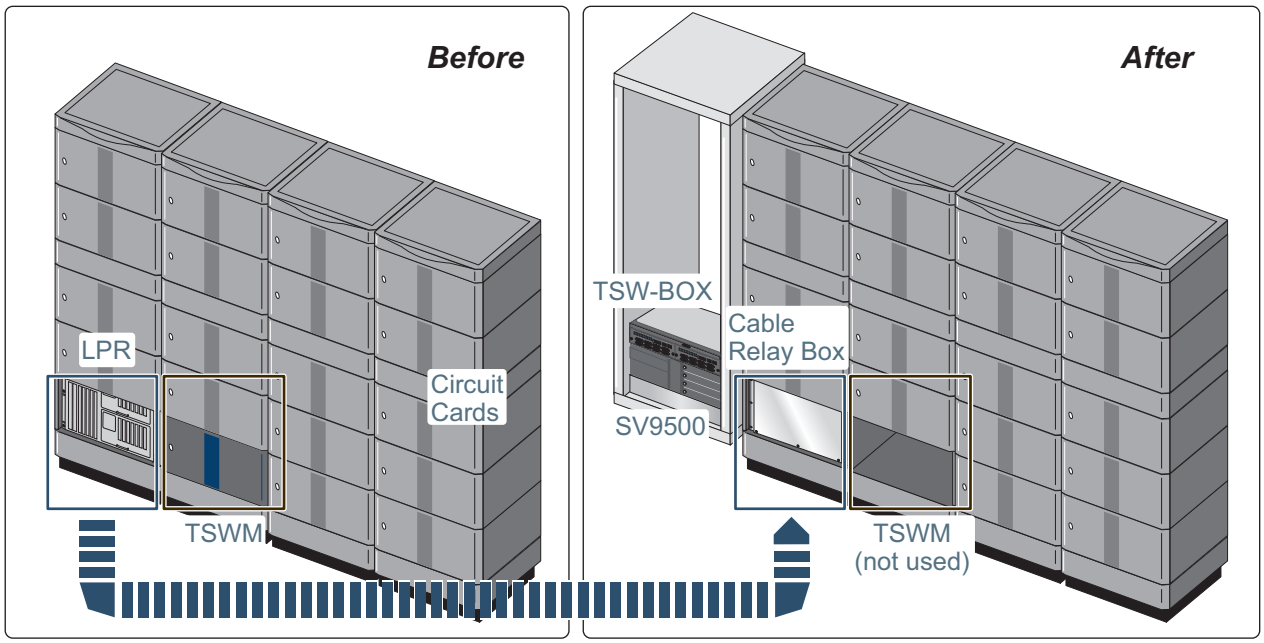
3. Migration from 4-IMG IPX

When you migrate from a 4-IMG IPX system, LPR is replaced with a cable relay box which is designed to connect SV9500 and IPX (PIM). You install the SV9500 server and TSW-BOX (**Note1**)/TSWR (**Note2**). When TSWR is used, circuit cards previously used in TSWM are moved to the TSWR. Other circuit cards in IPX PIM can be reused as they were.

Note 1: TSW-BOX for 4-IMG is available since FP95-112 V2.

Note 2: When there is a long distance between SV9500/TSW-BOX and cable relay box, long cables are used to extend distance between them. In that case, you need to use TSWR with the migrated system.

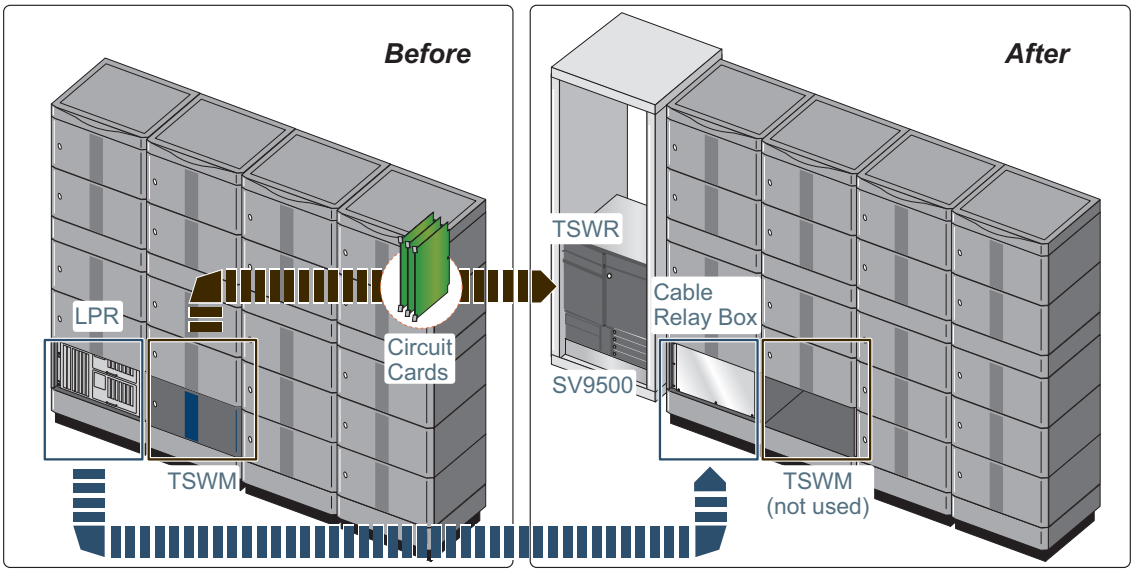
Migration from 4-IMG IPX (When Using TSW-BOX)



TSWM and circuit cards mounted in the TSWM are not used after the migration.

LPR is removed and Cable Relay Box is installed instead.

Migration from 4-IMG IPX (When Using TSWR)



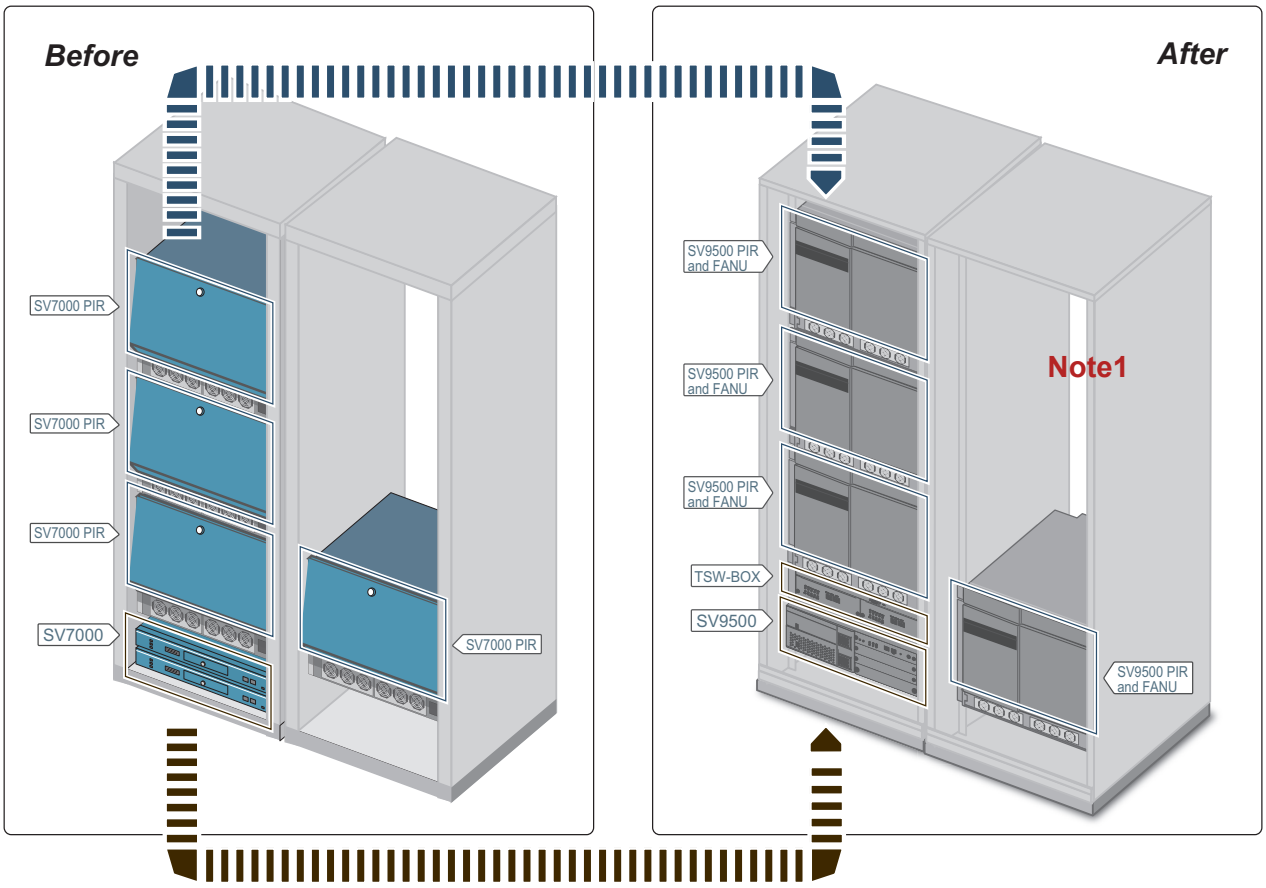
Circuit cards are moved from TSWM to TSWR.

LPR is removed and Cable Relay Box is installed instead.

4. Migration from SV7000

When you migrate from an SV7000 system, most of the circuit cards in the existing SV7000 PIR are the only migratable part.

Migration from SV7000



SV7000 server (SV7000T and SV7000S) is replaced with an SV9500 server and TSW-BOX is installed as a new module.

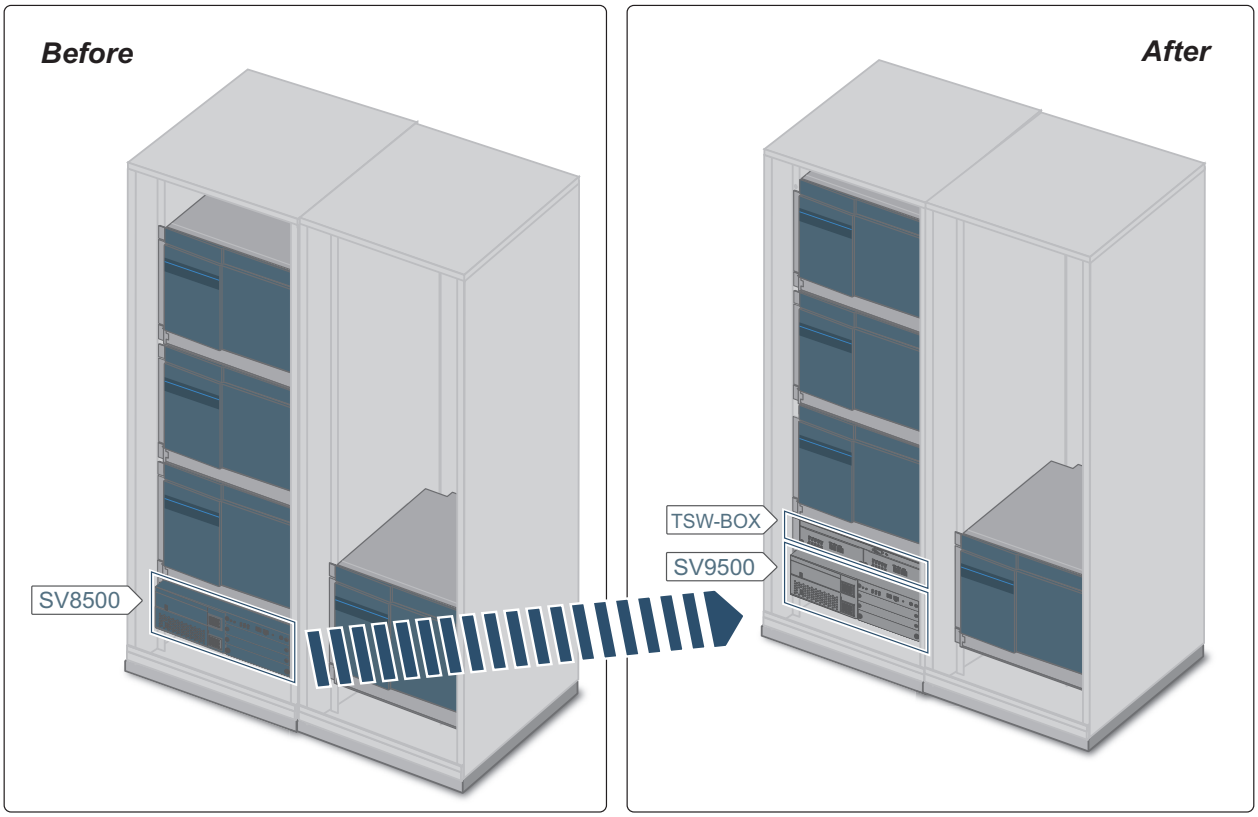
All SV7000 PIRs are replaced with SV9500 PIRs and FANUs. The existing circuit cards can be reused in the new system.

Note 1: SV7000 circuit cards can be installed in 8U-PIR but not in 7U-PIR.

5. Migration from AC-Powered Model SV8500

When you migrate from an AC-Powered Model SV8500 system, SV8500 is replaced with SV9500 and TSW-BOX. Most of the circuit cards in the existing SV8500 PIR can be reused in the new system as they were.

Migration from AC-Powered Model SV8500



☐ SV8500 server is replaced with an SV9500 server and TSW-BOX is installed as a new module.

Note: Another option for the module configuration different from the picture above is to install TSW-BOX, the SV9500 server and 7U-PIR in an adjacent rack. Leave the existing 8U-PIR rack as it is only removing the SV8500 server.

6. Migration from DC-Powered Model SV8500

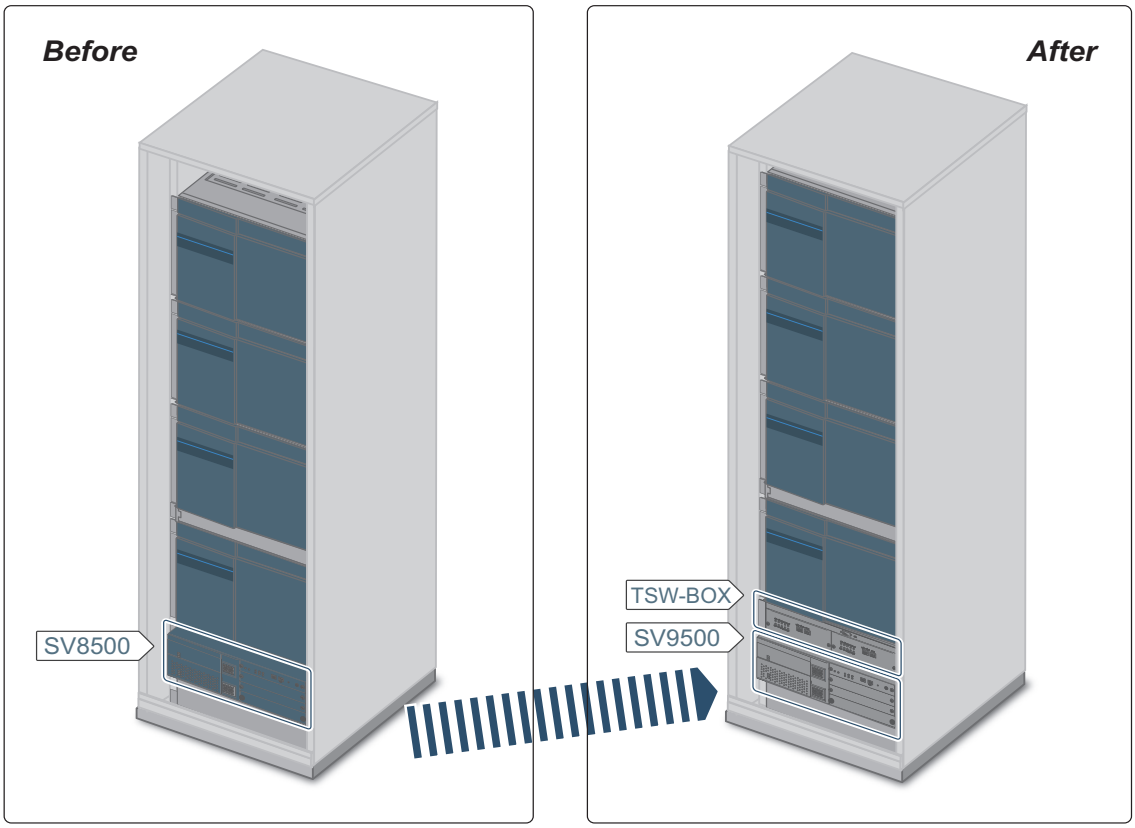
When you migrate from a DC-Powered Model 1-IMG SV8500 system, SV8500 server is replaced with SV9500 server and TSW-BOX. When you migrate from a DC-Powered Model 4-IMG SV8500 system, SV8500 is replaced with SV9500 and TSW-BOX (**Note1**)/TSWR (**Note2**). When SV8500 TSWR is used, circuit cards mounted in the TSWR can be used even after the migration. Most circuit cards in the existing SV8500 PIR can be reused in the new system as they were.

Note 1: TSW-BOX for 4-IMG is available since FP95-112 V2.

Note 2: When there is a long distance between SV9500/TSW-BOX and cable relay box, long cables are used to extend distance between them. In that case, you need to use TSWR with the migrated system.

6.1 Migration from DC-Powered Model 1-IMG SV8500

Migration from DC-Powered Model 1-IMG SV8500

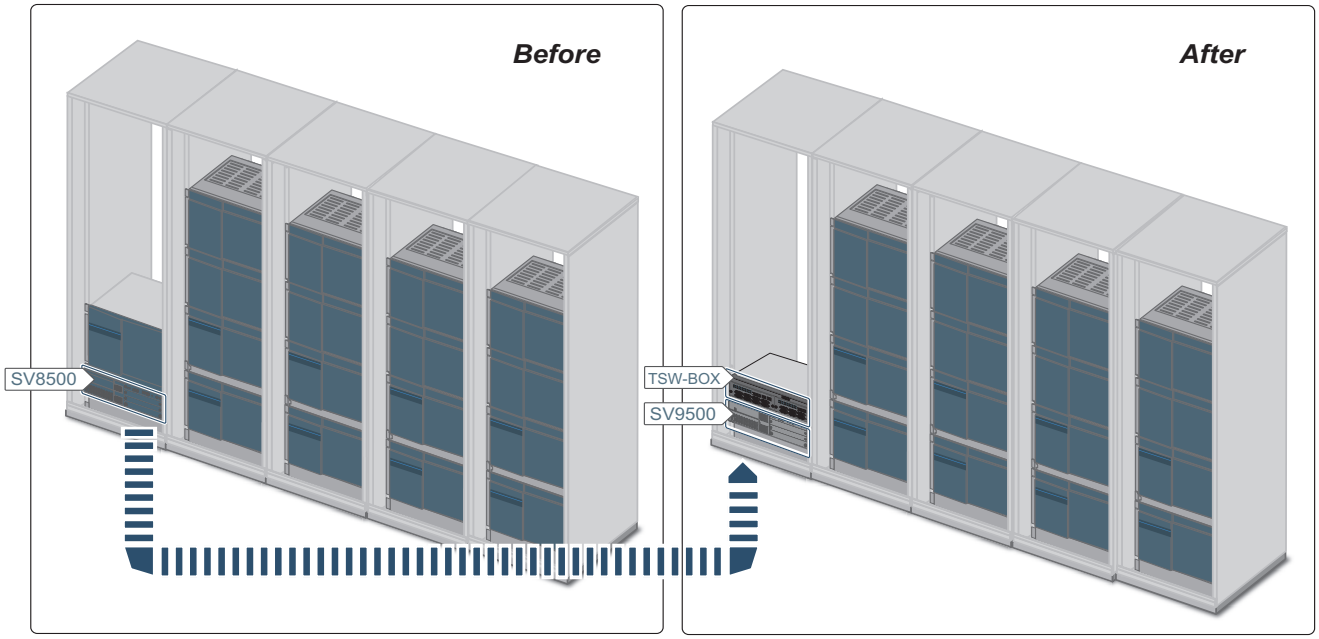


☐ SV8500 server is replaced with an SV9500 server and TSW-BOX is installed as a new module.

Note: Another option for the module configuration different from the picture above is to install TSW-BOX, the SV9500 server and 7U-PIR in an adjacent rack (with a new BASEU). Leave the existing 8U-PIR rack as it is only removing the SV8500 server.

6.2 Migration from DC-Powered Model 4-IMG SV8500 (When Using TSW-BOX)

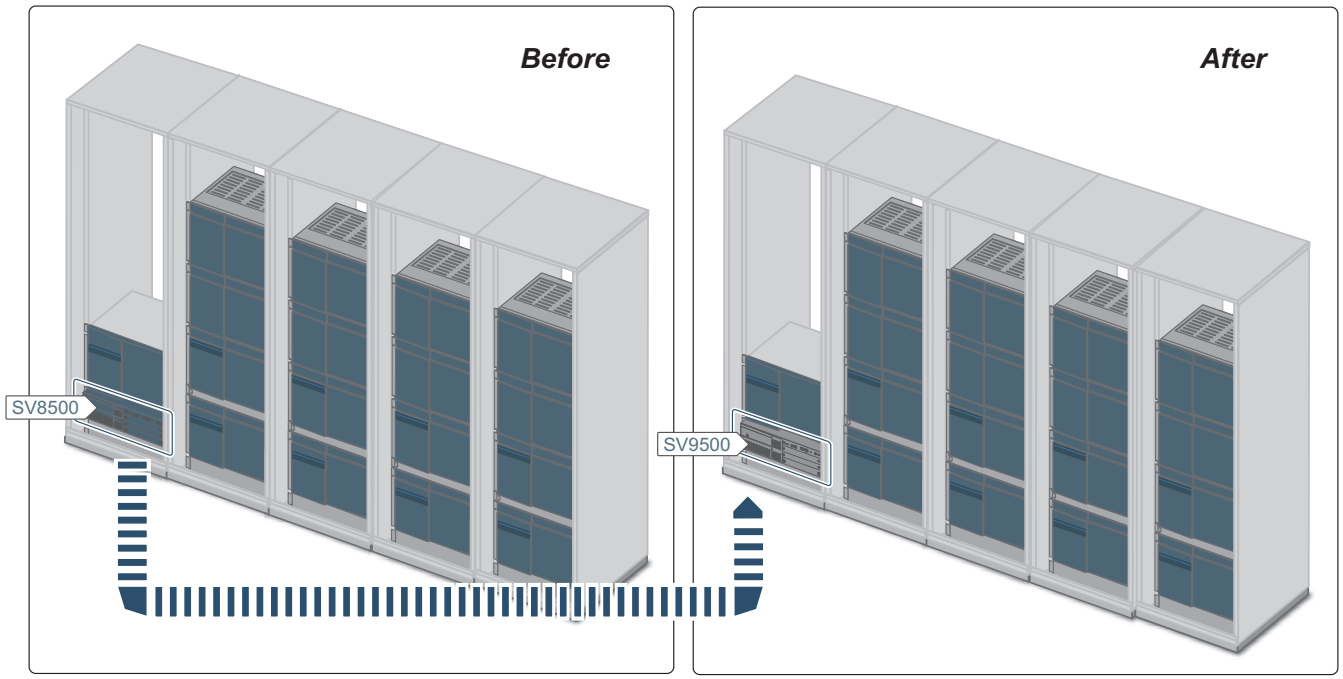
Migration from DC-Powered Model 4-IMG SV8500 (When Using TSW-BOX)



☐ SV8500 server is replaced with an SV9500 server and TSW-BOX is newly installed.

6.3 Migration from DC-Powered Model 4-IMG SV8500 (When Using TSWR)

Migration from DC-Powered Model 4-IMG SV8500 (When Using TSWR)



☐ SV8500 server is replaced with an SV9500 server.

7. Conditions

Before starting the migration procedure, the following conditions must be considered.

(1) The following existing system can migrate.

System Requirements

System	Board	CPU	Memory	Condition	Remarks
XP	CP23	V60/V70	16M	N/A	
ICS	-	V70	64M	N/A	
	-	80486/Pentium		N/A	
IMX	FIC	Pentium 133 90MHz	128M	N/A	
IPX	B1	Pentium 133 200MHz	256M	X	
	B2	Pentium III 600MHz	256M	X	
	B2	Pentium III 1GHz	512M	X	
SV7000	T10	Pentium III 600MHz	256M	X	
	T15	Pentium III 1GHz	512M	X	
	T20	Pentium IV 2.2GHz	512M	X	
SV8500	T30	Core2Duo 2.16GHz	2G/8G	X	

X: Available N/A: Not available

(2) The power model of the migrated system depends on the existing system;

- When migrating SV8500, SV9500 is configured as an AC-Powered Model or a DC-Powered Model.
- When migrating SV7000, SV9500 is configured as an AC-Powered Model.
- When migrating IPX, SV9500 is configured as a DC-Powered Model.

(3) Some circuit cards in the existing system can be reused. For more information, refer to System Description which lists the circuit cards available in the SV9500 system (migration system).

(4) Some of the system data in the existing system can be reused.

(5) The Client License and Optional Software cannot be reused.

[Conditions only for IPX]

The following are conditions related to migration from IPX.

(1) The length of the cable route between SV9500 PIR and a cable relay box must be within 3.0 m. Install 19-inch rack meeting this requirement.

Note: When migrating from 4-IMG IPX with a long distance between SV9500/TSWR and cable relay box, you can use a long cable to extend distance between them. For more information, refer to "Long Cable Unit".

(2) Migration system employs alarm lamps on the SV9500 server for the alarm check, but not the ones on TOPU of IPX.

[Conditions only for SV7000]

The following are the conditions related to migration from SV7000.

(1) Only circuit cards can be reused for migration from SV7000.

(2) SV7000 PIR is not supported in the SV9500 migration. SV9500 PIR needs to be used.

[Conditions only for SV8500]

The following are conditions related to migration from SV8500.

(1) Refer to New/Migration List for Peripheral Equipment in System Description for the already existing cards that can be migrated.

(2) When TSW-BOX is used, TSW function is performed by TSW-BOX replacing the existing TSW card.

(3) When TSW-BOX is used, clock interface (PLO) and external Music-on-Hold are connected with TSW-BOX. Please note that such connections are different in the case of SV8500.

(4) Licenses and optional software used in the system prior to the migration cannot be used after the migration.

(5) In the case of an SV9500 7U-PIR and SV8500 8U-PIR mixed configuration, the following conditions apply:

(a) Only the configurations designated in the manuals are supported. For the configurations patterns, refer to 7U-PIR and 8U-PIR Mixed Configuration Patterns List in SV9500 Appliance Model Installation Manual.

(b) 8U-PIRs do not have to be mounted above 7U-PIRs. Also, 8U-PIR can be mounted between two 7U-PIRs or below.

(c) In a migration of AC-Powered Model, when 7U-PIRs are added to the existing system, a ferrite core is needed to be attached to the AC power cable even for the existing 8U-PIR AC Power Unit. See SV9500 Appliance Model Installation Manual for how to attach the ferrite core to the cable.

(6) An FCCS connection cannot be established between SV8500 and SV9500 (FP95-112 V2 or later version). To establish a connection between SV8500 and SV9500 (FP95-112 V2 or later version), use CCIS over IP as a link between them, or SV8500 needs to be migrated to SV9500.

[Conditions for adding more TDM-Modules]

The following are conditions related to the case where more TDM-Module (SV9500 7U/8U-PIR, SV8500 8U-PIR and IPX PIM) are added to the system after the migration.

(1) In the case of migrating from 1-IMG IPX, we recommend installing IPX PIM as the additional TDM-Module.

(2) In the case of migrating from 4-IMG IPX, both IPX PIM and SV9500 PIR can be installed as additional TDM-Module.

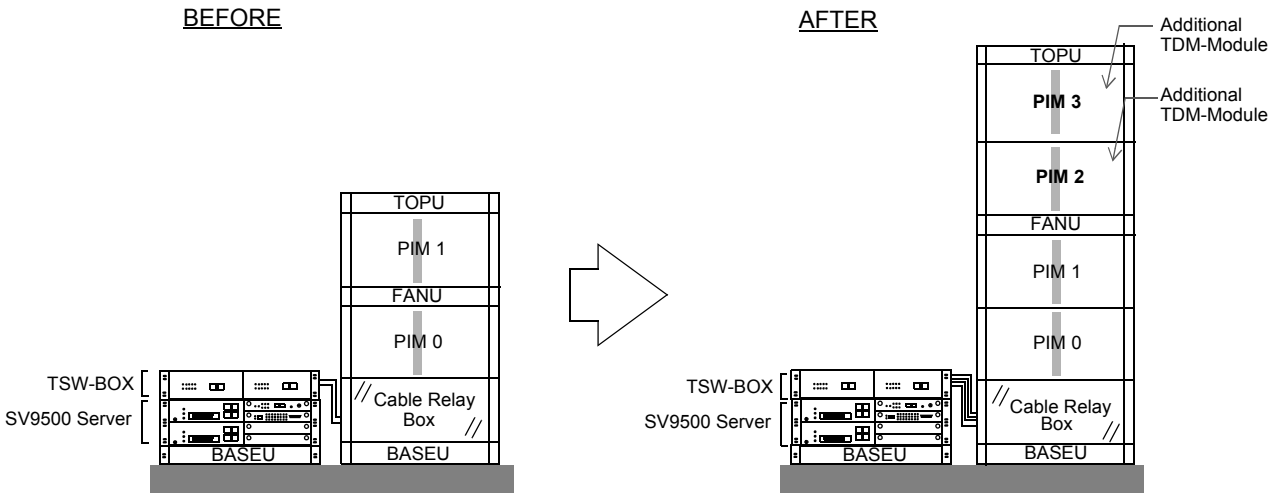
(3) In the case of migration system from SV7000, SV9500 PIR can be installed as additional TDM-Module.

(4) When adding more TDM-Module in a system migrated from 1-IMG IPX, meet the following requirements.

- The total number of SV9500 PIRs and IPX PIMs are up to four.
- Cabling and office data assignment are required according to the system configuration.

The figures below is a configuration example when adding TDM-Modules.

1-IMG Configuration with Additional TDM-Module

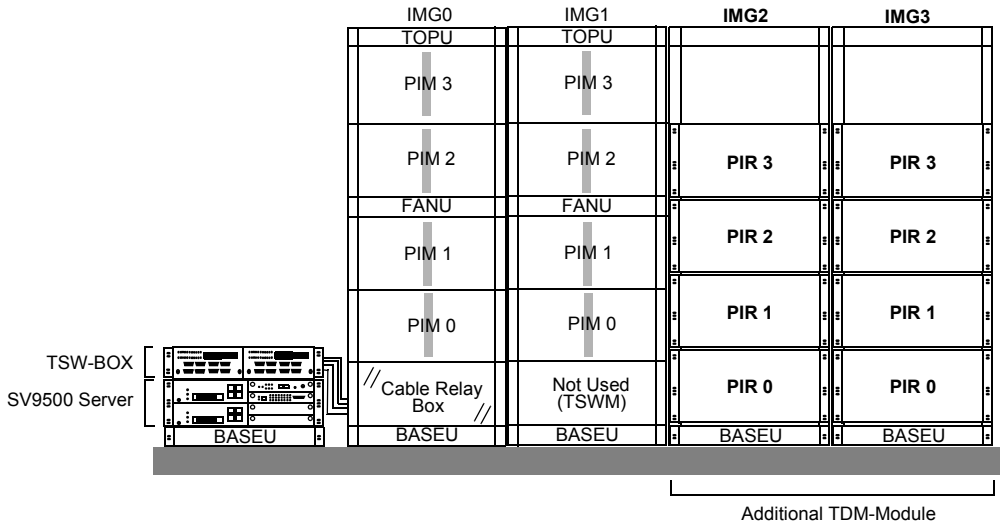


(5) When adding more TDM-Module into a system migrated from 4-IMG IPX, meet the following requirements.

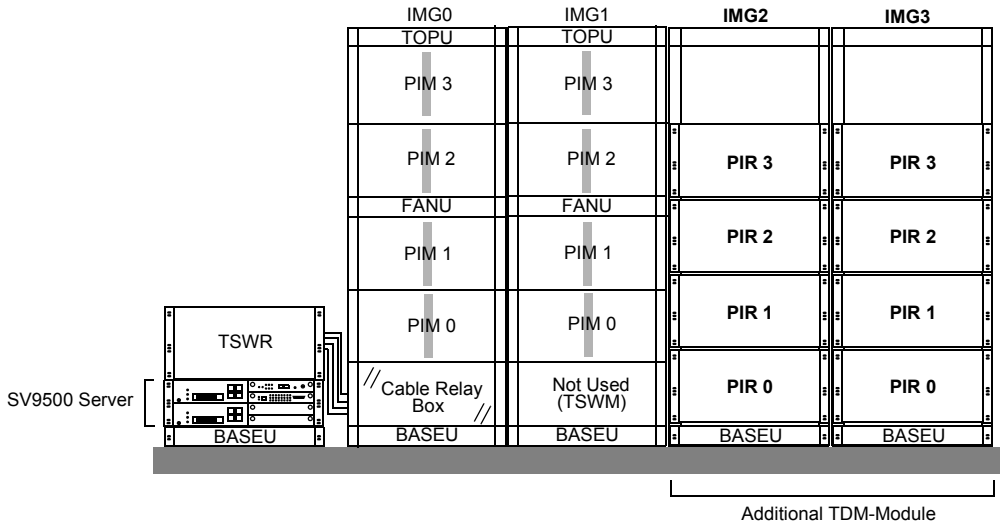
- Each IMG must consist of only SV9500 PIRs or only IPX PIMs.
- The total number of SV9500 PIRs and IPX PIMs are up to 16 (IMG x 4).
- Cabling and office data assignment are required according to the system configuration.

The figures below is a configuration example when adding TDM-Modules.

4-IMG Configuration with Additional TDM-Module (When Using TSW-BOX)



4-IMG Configuration with Additional TDM-Module (When Using TSWR)



CHAPTER 2
BEFORE INSTALLATION

1. Installation Design

The installation design is the preparation of the environment and the materials required to install the SV9500. Refer to SV9500 Appliance Model Installation Manual for this information.

2. Site Surveying

2.1 Equipment Location Check

[1] Environmental Requirements

- Operational Temperature Range: 0°C to 40°C (32°F to 104°F)
- Operational Humidity Range: 20% to 90% (non-condensing)
- Main Source Power: 100 VAC / 120 VAC / 230 VAC / 240 VAC ±10% (50/60 Hz), -48 VDC ±10%

[2] Floor Conditions

Do not place SV9500 system under any of the conditions listed below, doing so can cause operational trouble, failure, or electrical shock.

- On unstable floor, unsettled and sideling board
- Locations which might be wet with water, oil, and/or chemicals
- Dusty environment
- Locations exposed to direct sunlight
- Locations which receive strong electric wave from other equipment
- Any heavy equipment is loaded on the rack
- Locations with poor heat dissipation or poor ventilation
- Locations with vibration

2.2 Floor Layout Check

According to the floor layout, confirm that the equipment locations are appropriate:

- No obstructing objects, to allow easy maintenance
- C.O. lines can be easily brought in
- Local cables can be easily brought up to MDF
- Communication and security ground can be obtained as required

2.3 Power and Ground Supply

Confirm that power and ground are provided.

- AC voltage and current capacity is proper
- Circuit breaker (NFB) is provided exclusively for SV9500 system
- Ground terminals are provided separately from those of power supply system
- Single main power is provided to connect all of the IMGs

3. Installing Power Equipment



This section explains the procedure for installing the power equipment.

Note: The circuit breaker (NFB) for the rectifier's DC output must remain OFF.

Step1: Install the power equipment at the predetermined location using anchor bolts, etc. Install the framework for the backup batteries. Secure the framework using anchor bolts, etc.

Step2: Check the cabling at the primary and secondary sides of the power equipment and the cabling to the batteries.

Step3: Confirm that the specifications of the customer-installed AC PDB (NFB capacity, voltage, phase, etc.) conform to the rectifier specifications.

Step4: Confirm that the correct communication ground is available.

Step5: Connect the input power cable and grounding cable to the rectifier.

Step6: Supply electrolyte to each battery according to the battery’s specifications.

Step7: Charge the batteries, after verifying that the rectifier is operating normally.

4. Components

This section describes the components for the migration and the unpacking procedure. For the components, which depend on the system configuration before migration, see the subsection appropriate to your system in the following.

- 4.1Migration from 1-IMG IPX
- 4.2Migration from 4-IMG IPX
  - 4.2.1When Using TSW-BOX
  - 4.2.2When Using TSWR
- 4.3Migration from SV7000
- 4.4Migration from SV8500
  - 4.4.1AC-Powered Model
  - 4.4.2DC-Powered Model (1-IMG)
  - 4.4.3DC-Powered Model (4-IMG)
    - 4.4.3.1When Using TSW-BOX
    - 4.4.3.2When Using TSWR

For the unpacking procedure, see the following.

- 4.5Unpacking

4.1 Migration from 1-IMG IPX

The following shows components and accessories when migrating from 1-IMG IPX system.

Components and Accessories for Migration from 1-IMG IPX

ITEM	QUANTITY	REMARKS	
Telephony Server			
SV9500 server	1	Main module of the Telephony Server	
CF Card	1	Capacity of CF card: 8 GB	
CPU Card (SCF-CP02-B)	1	2 for a dual configuration	
EMA MAIN Card (SCG-PC00-C)	1		
EMA SUB-A Card (SCG-M03-B)	1		
IOC Card (SCG-IO00-B)	1	2 for a dual configuration	
TSW PWR Card (SCA-M01-A)	1		
EXB-TSWR Card (SCG-GT01-B)	1	2 for a dual configuration	
Module			
TSW-BOX	1		
TSW (SPZ-SW25-A)	1	Time Division Switching (accommodated in TSW-BOX) 2 for a dual-TSW configuration	
BASEU	1	Mounted on the bottom of 19-inch rack.	
Cable Relay Box	1		
Cable *Lists ones for migration only, others in SV9500 Appliance Model Installation Manual.			
D15-(PS20-ML2) CA-A	1/PIM	For ALM connection.	Leads between IPX PIM and Cable Relay Box.
MT24-D25 CA-B	1/PIM	For MUX connection. 2/PIM for a dual-TSW configuration	
D26-D25 TSW-PIR CA-A/B	1/PIM		Leads between TSW-BOX and Cable Relay Box.
D15 ST CA-B	1/IMG	For ALM connection.	Leads between SV9500 (MIG FALM CA-A) and Cable Relay Box.
MIG FALM CA-A	1		
Others			
SV9500 program install DVD	1	Labeled GENERIC SOFTWARE on the DVD's face.	
License sheet			
Manuals			

4.2 Migration from 4-IMG IPX

The following shows components and accessories when migrating from 4-IMG IPX system.

4.2.1 When Using TSW-BOX

Components and Accessories for Migration from 4-IMG IPX (When Using TSW-BOX)

ITEM	QUANTITY	REMARKS	
Telephony Server			
SV9500 server	1	Main module of the Telephony Server	
CF Card	1	Capacity of CF card: 8 GB	
CPU Card (SCF-CP02-B)	1	2 for a dual configuration	
EMA MAIN Card (SCG-PC00-C)	1		
EMA SUB-A Card (SCG-M03-B)	1		
EMA SUB-B Card (SCG-M02-B)	1		
IOC Card (SCG-IO00-B)	1	2 for a dual configuration	
EXB-TSWR Card (SCG-GT01-B)	1	2 for a dual configuration	
TSW PWR Card (SCA-M01-A)	1		
Module			
TSW-BOX	1/System		
TSW (SPZ-SW26-A)	1/System	Time Division Switching (accommodated in TSW-BOX) 2 for a dual-TSW configuration	
BASEU	1/Rack	Mounted on the bottom of 19-inch rack.	
Cable Relay Box	1		
Cable *Lists ones for migration only, others in SV9500 Appliance Model Installation Manual.			
D15-(PS20-ML2) CA-A	1/IMG	For ALM connection.	Leads between IPX PIM and Cable Relay Box.
MT24-D25 CA-B	1/PIM	For MUX connection. 2/PIM for a dual-TSW configuration	
D26-D25 TSW-PIR CA-B	1/PIM		Leads between TSW-BOX and Cable Relay Box.
D15 ST CA-B	1/IMG (PIR0)	For ALM connection.	Leads between SV9500 (MIG FALM CA-A) and Cable Relay Box.
MIG FALM CA-A	1		
D15 ST-F CA-B	1/IMG (PIR1-3)	For ALM connection.	Leads between SV9500 and Cable Relay Box.

Components and Accessories for Migration from 4-IMG IPX (When Using TSW-BOX)

ITEM	QUANTITY	REMARKS
Others		
SV9500 program install DVD	1	Labeled GENERIC SOFTWARE on the DVD's face.
License sheet		
Manuals		

4.2.2 When Using TSWR

Components and Accessories for Migration from 4-IMG IPX (When Using TSWR)

ITEM	QUANTITY	REMARKS	
Telephony Server			
SV9500 server	1	Main module of the Telephony Server	
CF Card	1	Capacity of CF card: 8 GB	
CPU Card (SCF-CP02-B)	1	2 for a dual configuration	
EMA MAIN Card (SCG-PC00-C)	1		
EMA SUB-A Card (SCG-M03-B)	1		
EMA SUB-B Card (SCG-M02-B)	1		
IOC Card (SCG-IO00-B)	1	2 for a dual configuration	
EXB-TSWR Card (SCG-GT01-B)	1	2 for a dual configuration	
Module			
TSWR	1/System		
BASEU	1/Rack	Mounted on the bottom of 19-inch rack.	
Cable Relay Box	1		
Cable *Lists ones for migration only, others in SV9500 Appliance Model Installation Manual.			
D15-(PS20-ML2) CA-A	1/IMG	For ALM connection.	Leads between IPX PIM and Cable Relay Box.
MT24-D25 CA-B	1/PIM	For MUX connection.	
D15 ST-F CA-B	1/IMG	For ALM connection.	Leads between SV9500 and Cable Relay Box.
D37-D25 CA-B	1/PIM	For MUX connection. 2/PIM for a dual-TSW configuration	
Others			
SV9500 program install DVD	1	Labeled GENERIC SOFTWARE on the DVD's face.	
License sheet			
Manuals			

4.3 Migration from SV7000

The following shows components and accessories when migrating from SV7000 system.

Components and Accessories for Migration from SV7000

ITEM	QUANTITY	REMARKS
Telephony Server		
SV9500 server	1	Main module of the Telephony Server
CF Card	1	Capacity of CF card: 8 GB
CPU Card (SCF-CP02-B)	1	2 for a dual configuration
EMA MAIN Card (SCG-PC00-C)	1	
EMA SUB-A Card (SCG-M03-B)	1	
IOC Card (SCG-IO00-B)	1	2 for a dual configuration
TSW PWR Card (SCA-M01-A)	1	
EXB-TSWR Card (SCG-GT01-B)	1	2 for a dual configuration
Module		
8U-PIR	As many as required	
TSW-BOX	1	
TSW (SPZ-SW25-A)	1	Time Division Switching (accommodated in TSW-BOX) 2 for a dual-TSW configuration
FANU	1/PIR	
Others		
SV9500 program install DVD	1	Labeled GENERIC SOFTWARE on the DVD's face.
License sheet		
Manuals		

Note: For cables used for Migration from SV7000 System, refer to SV9500 Appliance Model Installation Manual.

4.4 Migration from SV8500

4.4.1 AC-Powered Model

The following shows components and accessories when migrating from AC-Powered Model SV8500 system.

Components and Accessories for Migration from AC-Powered Model

ITEM	QUANTITY	REMARKS
Telephony Server		
SV9500 server	1	Main module of the Telephony Server
CF Card	1	Capacity of CF card: 8 GB
CPU Card (SCF-CP02-B)	1	2 for a dual configuration
EMA MAIN Card (SCG-PC00-C)	1	
EMA SUB-A Card (SCG-M03-B)	1	
IOC Card (SCG-IO00-B)	1	2 for a dual configuration
TSW PWR Card (SCA-M01-A)	1	
EXB-TSWR Card (SCG-GT01-B)	1	2 for a dual configuration
Module		
TSW-BOX	1	
TSW (SPZ-SW25-A)	1	Time Division Switching (accommodated in TSW-BOX) 2 for a dual-TSW configuration
Cable		
There are no cables specific to migrated system. For details on necessary cables, see SV9500 Appliance Model Installation Manual.		
Others		
SV9500 program install DVD	1	Labeled GENERIC SOFTWARE on the DVD's face.
License sheet		
Manuals		
Black front cover for FANU and 8U-PIR	1/ PIR or FANU	

4.4.2 DC-Powered Model (1-IMG)

The following shows components and accessories when migrating from DC-Powered Model SV8500 system (1-IMG).

Components and Accessories for Migration from DC-Powered Model (1-IMG)

ITEM	QUANTITY	REMARKS
Telephony Server		
SV9500 server	1	Main module of the Telephony Server
CF Card	1	Capacity of CF card: 8 GB
CPU Card (SCF-CP02-B)	1	2 for a dual configuration
EMA MAIN Card (SCG-PC00-C)	1	
EMA SUB-A Card (SCG-M03-B)	1	
IOC Card (SCG-IO00-B)	1	2 for a dual configuration
TSW PWR Card (SCA-M01-A)	1	
Module		
TSW-BOX	1	
TSW (SPZ-SW25-A)	1	Time Division Switching (accommodated in TSW-BOX) 2 for a dual-TSW configuration
Cable		
There are no cables specific to migrated system. For details on necessary cables, see SV9500 Appliance Model Installation Manual.		
Others		
SV9500 program install DVD	1	Labeled GENERIC SOFTWARE on the DVD's face.
License sheet		
Manuals		
Black front cover for FANU and 8U-PIR	1/ PIR or FANU	

4.4.3 DC-Powered Model (4-IMG)

The following shows components and accessories when migrating from DC-Powered Model SV8500 system (4-IMG).

4.4.3.1 When Using TSW-BOX

Components and Accessories for Migration from DC-Powered Model (4-IMG with TSW-BOX)

ITEM	QUANTITY	REMARKS
Telephony Server		
SV9500 server	1	Main module of the Telephony Server
CF Card	1	Capacity of CF card: 8 GB
CPU Card (SCF-CP02-B)	1	2 for a dual configuration
EMA MAIN Card (SCG-PC00-C)	1	
EMA SUB-A Card (SCG-M03-B)	1	
EMA SUB-B Card (SCG-M02-B)	1	
IOC Card (SCG-IO00-B)	1	2 for a dual configuration
EXB-TSWR (SCG-GT01-B)	1	2 for a dual configuration
TSW PWR Card (SCA-M01-A)	1	
Module		
TSW-BOX	1	
TSW (SPZ-SW26-A)	1	Time Division Switching (accommodated in TSW-BOX) 2 for a dual-TSW configuration
Cable		
There are no cables specific to migrated system. For details on necessary cables, see SV9500 Appliance Model Installation Manual. **Note1**		
Others		
SV9500 program install DVD	1	Labeled GENERIC SOFTWARE on the DVD's face.
License sheet		
Manuals		
Black front cover for FANU and 8U-PIR	1/ PIR or FANU	

Note 1: A particular cable: MIG FALM CA-A is required when the migrated system is configured as follows. For details on the connection method of the cable: MIG FALM CA-A, refer to APPENDIX A CABLING DIAGRAM - 2.3SV9500 DC (4-IMG) with TSW-BOX x SV8500 PIR - 2.3.2SV9500 DC with TSW-BOX x IMG0 (4-IMG SV8500).

- There are no PIRs in the rack where BASE + SV9500 server + TSW-BOX are mounted.
- The system consists of only BASE and SV9500 server (there are no PIRs in the system).

4.4.3.2 When Using TSWR

Components and Accessories for Migration from DC-Powered Model (4-IMG with TSWR)

ITEM	QUANTITY	REMARKS
SV9500 server	1	Main module of the Telephony Server
CF Card	1	Capacity of CF card: 8 GB
CPU Card (SCF-CP02-B)	1	2 for a dual configuration
EMA MAIN Card (SCG-PC00-C)	1	
EMA SUB-A Card (SCG-M03-B)	1	
EMA SUB-B Card (SCG-M02-B)	1	
IOC Card (SCG-IO00-B)	1	2 for a dual configuration
EXB-TSWR (SCG-GT01-B)	1	2 for a dual configuration
Cable		
There are no cables specific to migrated system. For details on necessary cables, see SV9500 Appliance Model Installation Manual.		
Others		
SV9500 program install DVD	1	Labeled GENERIC SOFTWARE on the DVD's face.
License sheet		
Manuals		
Black front cover for FANU, 8U-PIR and TSWR	1/ PIR, TSWR, or FANU	

4.5 Unpacking



[1] Before Unpacking

- Confirm the grounding.
  - Be sure to connect the 3M® Model 8012 Portable Field Service Kit to grounding.
  - Do not unpack the packages when grounding is not available.
- Make sure to use the service kit when unpacking the package of circuit card.
- During unpacking, handle the equipment carefully not to be shocked and damaged.

[2] Unpacking Procedure

START

1.	Package quantity check	Check the quantity of received packages with the packing list.
2.	Package visual check	Check the packaging for external damage.
3.	Unpack	
4.	Components check	Check the name and the quantity of all the components and accessories. If anything is missing, report it to the supplier immediately.
5.	Visual check	Visually check the equipment and accessories. - Surface deformed? - Connectors cracked? - Keys and lamps damaged? - Loose wires and parts? If any damage is found, report it to the supplier immediately.

END

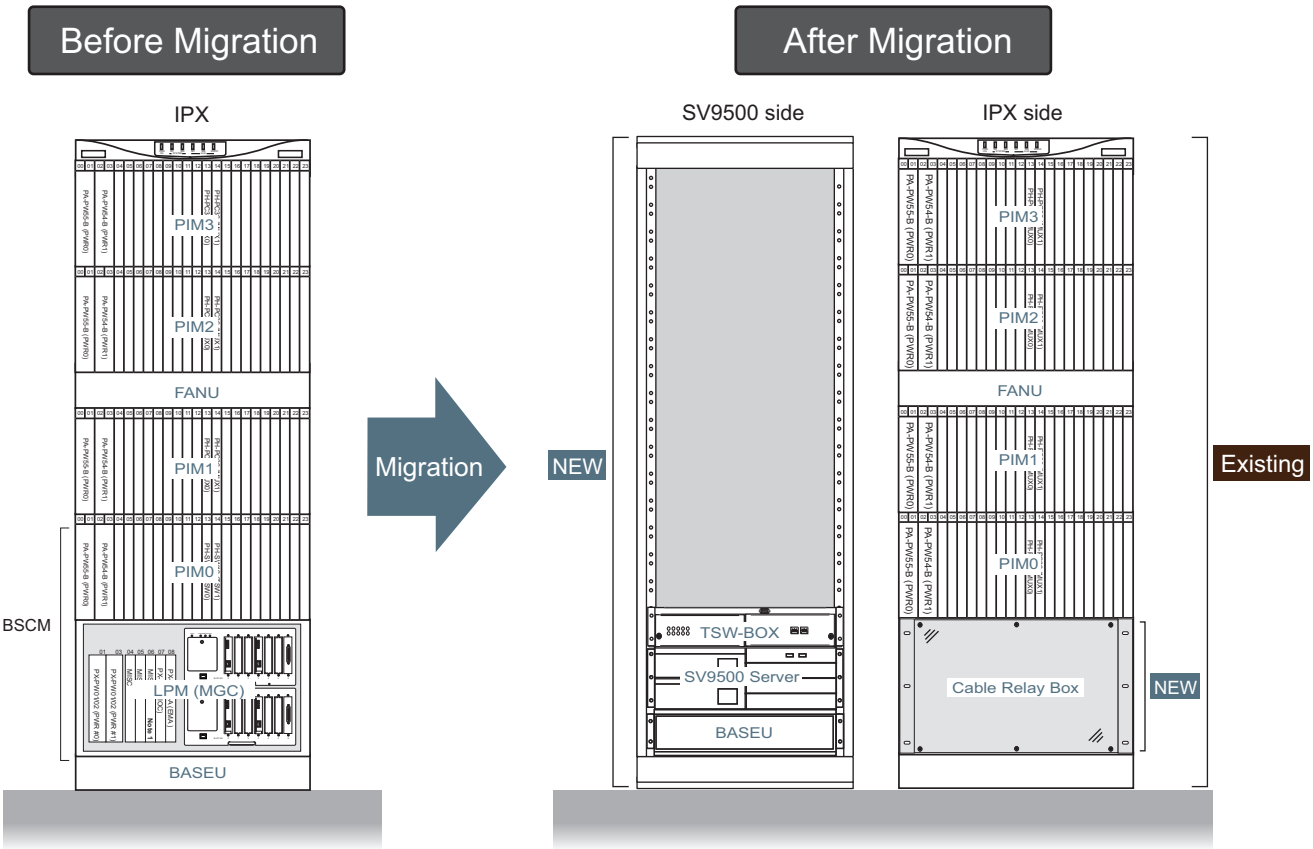
5. Mounting MDF

If you need to reinstall Main Distribution Frame (MDF), refer to SV9500 Appliance Model Installation Manual for this information.

CHAPTER 3
INSTALLATION

1.From IPX (1-IMG) to SV9500 (1-IMG)

This section describes the installation procedures needed to migrate your system from UNIVERGE NEAX2400 IPX (1-IMG) to UNIVERGE SV9500 (1-IMG). Before beginning the installation, thoroughly read "Chapter2 BEFORE INSTALLATION" and observe the precautions while performing the installation.



Installation Procedure

Start

↓

1 Install 19-Inch Rack, SV9500 Server and PIR

↓

2 Collect Billing Information, Traffic Data and System Messages

↓

3 Temporarily Stop Routine Diagnostics

↓

4 Back Up IPX Office Data

↓

5 Turn OFF Peripheral Equipment Connected to the Rectifier

↓

6 Turn OFF the IPX

↓

7 Turn OFF the Rectifier

↓

8 Remove Unnecessary Cables from IPX

↓

9 Extract the CPR and Circuit Cards from the LPM

↓

10 Extract the LPM Inner Box

↓

11 Mount the Cable Relay Box

↓

12 Cable Connections

↓

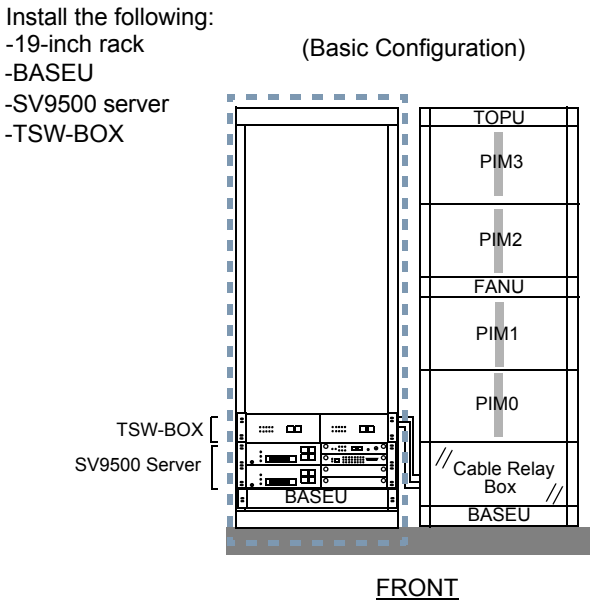
End

1.1 Install 19-Inch Rack, SV9500 Server and PIR



Install the 19-inch rack, SV9500 Telephony Server and PIRs referring to SV9500 Appliance Model Installation Manual. Install them according to your system configuration.

1-IMG System Configuration



Note: When installing a 19-inch rack, consider the length of the cables between TSW-BOX and the cable relay box.

D26-D25 TSW-PIR CA-A: 1500mm

D26-D25 TSW-PIR CA-B: 3000mm

1.2 Collect Billing Information, Traffic Data and System Messages

Collect the billing information, the traffic data, and the system messages as necessary.

1.3 Temporarily Stop Routine Diagnostics

Temporarily suspend Routine Cyclic Diagnostics, using the ASYD command. Set SYS 1, Index 87 and 88 to FFH (hexadecimal). After the migration, return the indexes to their original values.

ASYD SYS1

Index 87: FFH (Hour of Routine Diagnosis Start Time)

Index 88: FFH (Minute of Routine Diagnosis Start Time)

1.4 Back Up IPX Office Data

1.4.1 Back up Office Data from IPX

Step1: Backup the IPX office data by using the MEM_HDD command.

Check [All Select] to select all the data type. Select [LP Select] according to the office status. Ignore that the following data types are displayed unavailable in the operation log.

- ACD Data Memory
- ICB/DR
- SR-MGC

The following data types may be displayed as an error in the operation log when verified.

- Wireless Call Forwarding
- SIP Terminal Call Transfer

Note: An error will occur if WLAN Handset (MH Series) moves between Access Points while being verified.

Step2: Save the one-touch speed call memory data of Digital terminals to the PC or a floppy disk by using the BOSD command. On the command, select [PBX memory to MAT]. It is recommended that the back up be divided per Unit or MG.

Note: The one-touch speed calling memory data of IP terminal is written in the IPX server.

Step3: Log off from IPX by using the CFCS command and remove the CF card from the slot.

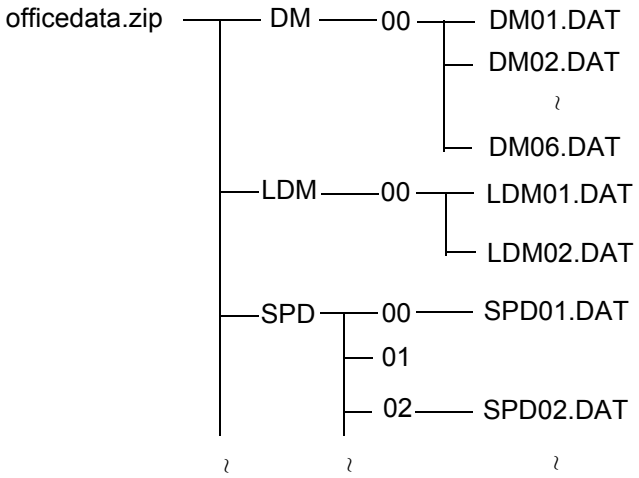
1.4.2 Converting IPX Office Data to SV9500 Office Data

Step1: Insert the CF card removed from the IPX to the PC and save the office data to the PC by using the FLCVTR.

Step2: Zip the saved IPX office data. Specify the file name as “officedata.zip”.

Note: For North America: If the IPX Software Revision is R24 or lower, the ACD Database must first be converted from 2M to 4M prior to Step-2.

Note: In the zip file, configure the file directory as follows. Delete the [ICSBOOT.SYS] and [SC-xxxx.COD]
* For North America, also delete the README.TXT file.



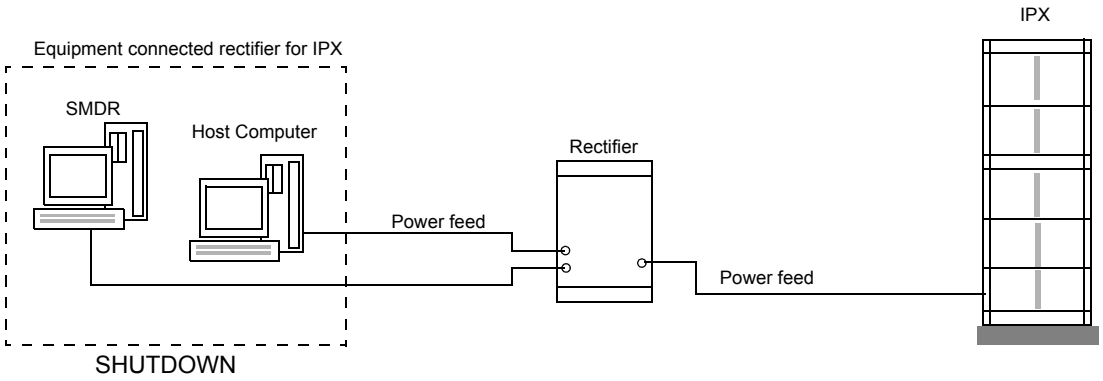
Step3: Make a folder to drop the zip file in.

1.5 Turn OFF Peripheral Equipment Connected to the Rectifier



Turn OFF the peripheral equipment such as the SMDR terminal and the printer that receives power from the rectifier that provides operating power to the IPX.

Note: When the equipment is connected to another rectifier, this step is not necessary.

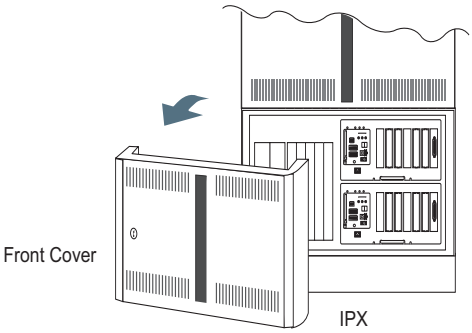


1.6 Turn OFF the IPX

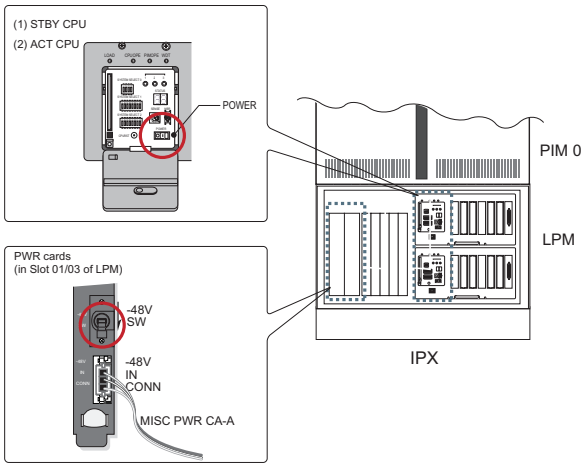


Turn off the power of the IPX in the following procedures.

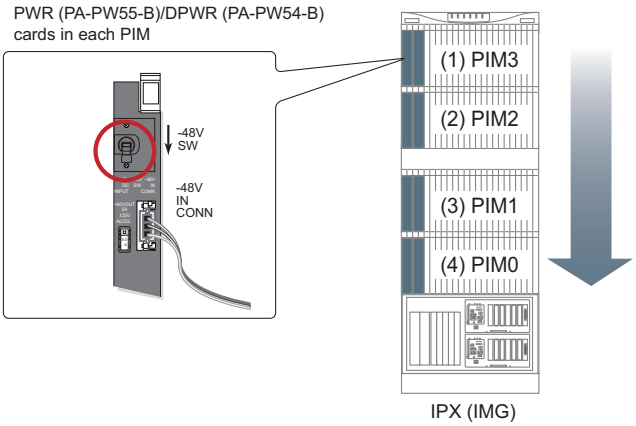
Step1: Remove the front cover from LPM for facilitating installation.



Step2: Turn off the power of the LPM.



Step3: Turn OFF the -48V SW on the PWR (PA-PW55-B) and DPWR (PA-PW54-B) cards mounted respectively in slot 01 and 03 of each PIM as shown below.



1.7 Turn OFF the Rectifier



Turn OFF the rectifier. For more information, refer to the rectifier's operation manual.

Note: Before turning off the rectifier, make sure that no voltage is applied to the power receiving terminal.

1.8 Remove Unnecessary Cables from IPX

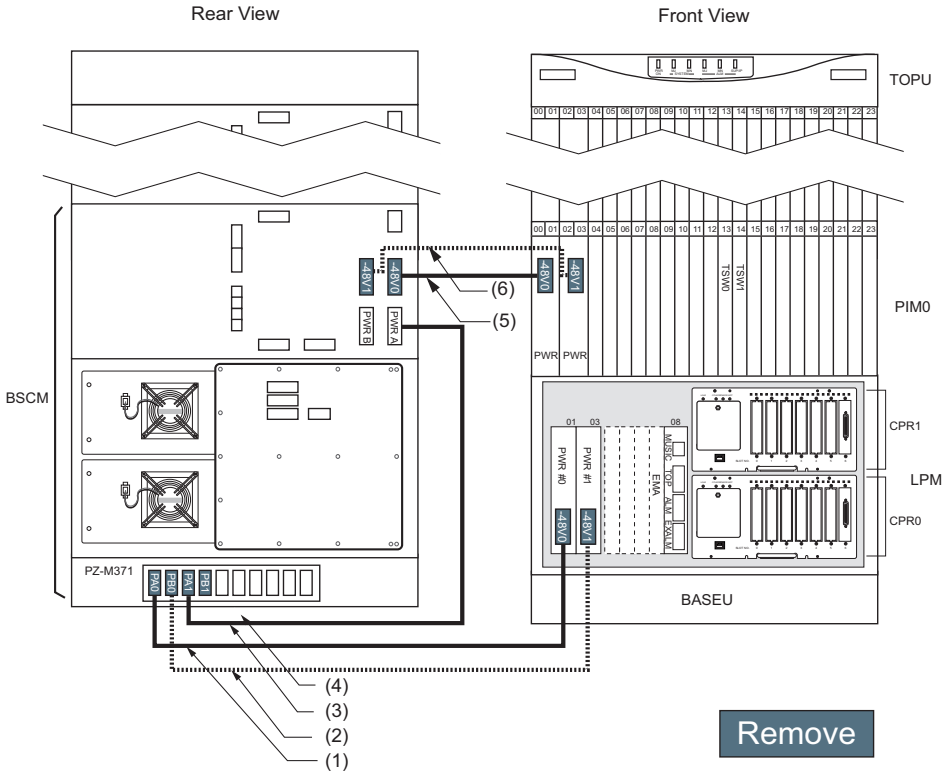
ATTENTION
Contents
Static Sensitive
Handling
Precautions Required

[Power Cable]

Remove the following unnecessary power cables from the IPX LPM and PIM0

Unnecessary Power Cable Details: Single IMG Configuration

Remove the power cables as shown below. The dotted lines indicate power cables for a dual-system.



Unnecessary Power Cables: Single IMG Configuration

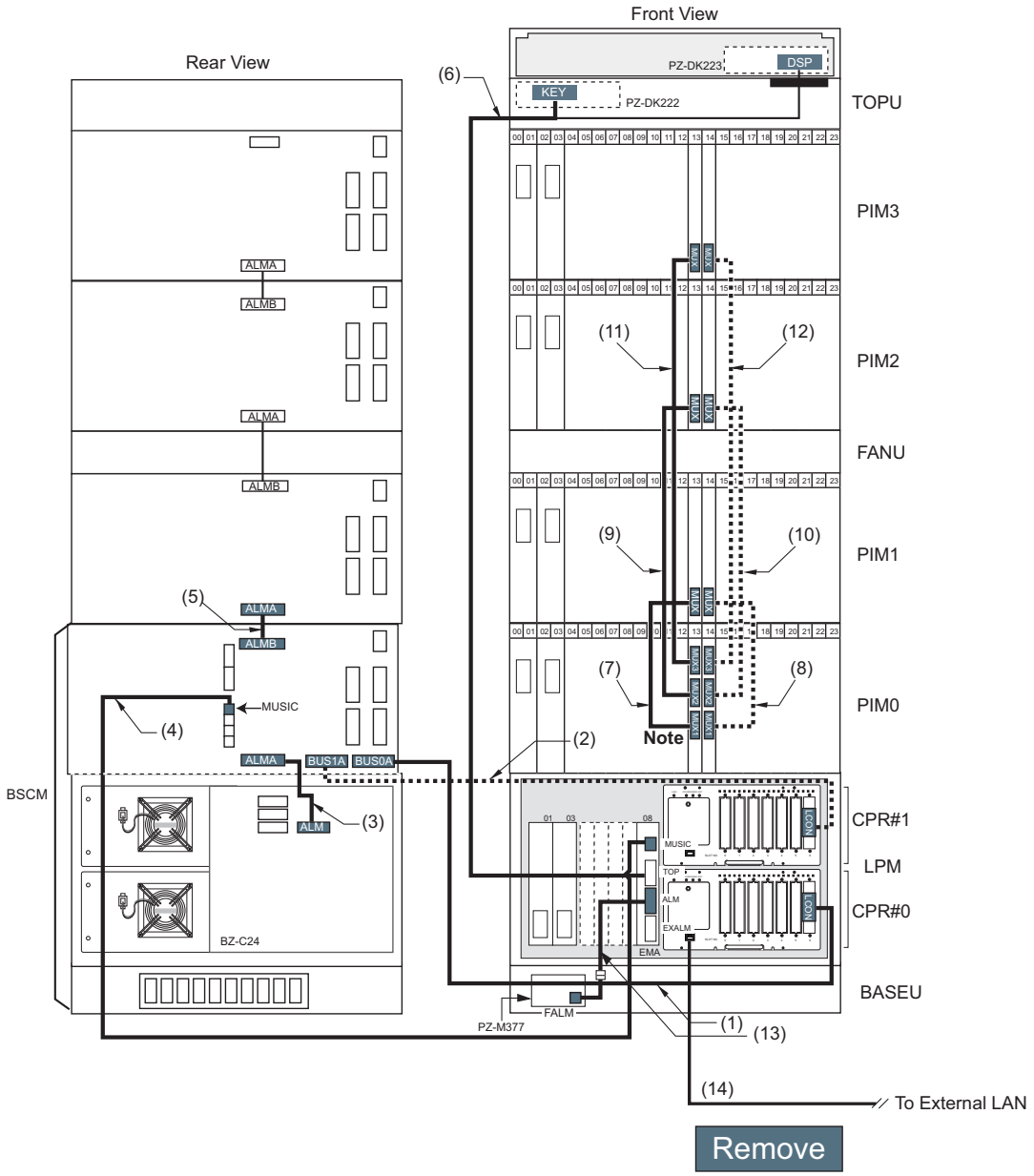
No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	BASEU	PA 0	LPM (PWR)	-48V IN CONN	MISC PWR CA-A	
2	BASEU	PB 0	LPM (PWR)	-48V IN CONN	MISC PWR CA-B	

[Bus Cable]

Remove the following unnecessary bus cables from IPX BASEU, LPM, PIMs and TOPU

Unnecessary Bus Cable Details: Single IMG Configuration

Remove the bus cables as shown below. The dotted lines indicate bus cables for a dual-system.



Note: The MUX number has logical meaning, which does not depend on the physical mounting location.

Unnecessary Bus Cables: 1-IMG Configuration

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/ Module	Connector Name		
1	LPM (CPR 0)	LCON (GT-25 front connector)	PIM0	BUS 0A	IPX GT BUS CA-A	
(2)	LPM (CPR 1)	LCON (GT-25 front connector)	PIM0	BUS 1A	IPX GT BUS CA-A	
3	LPM	ALM	PIM0	ALMA	20AL-(60) FLT CA	
4	LPM	MUSIC (EMA front connector)	PIM0	MUSIC 0	IPX MUSIC CA-A	
5	PIM0	ALM B	PIM1	ALMA	20AL-(10) FLT CA	
6	LPM	TOP (EMA front connector)	TOPU	KEY and DSP (DSPL for single stack)	DSPKEY CA-A **Note 1**	
7	PIM0	MUX1 (PH-SW10 front connector)	PIM1	MUX (PH-PC36 front connector)	MT24 TSW CA-90	Only for 2/3/4-PIM Configuration
(8)	PIM0	MUX1 (PH-SW10 front connector)	PIM1	MUX (PH-PC36 front connector)	MT24 TSW CA-90	Only for 2/3/4-PIM Configuration
9	PIM0	MUX2 (PH-SW10 front connector)	PIM2	MUX (PH-PC36 front connector)	MT24 TSW CA-140	Only for 3/4-PIM Configuration
(10)	PIM0	MUX2 (PH-SW10 front connector)	PIM2	MUX (PH-PC36 front connector)	MT24 TSW CA-140	Only for 3/4-PIM Configuration
11	PIM0	MUX3(PH-SW10 front connector)	PIM3	MUX (PH-PC36 front connector)	MT24 TSW CA-180	Only for 4-PIM Configuration
(12)	PIM0	MUX3 PH-SW10 front connector)	PIM3	MUX (PH-PC36 front connector)	MT24 TSW CA-180	Only for 4-PIM Configuration
13	LPM	ALM (EMA front connector)	BASEU	(FALM)	FALM CA-A	
14	LPM (CPR0)	RJ45 connector	HUB (External LAN)		10 BASE-T straight Cable	

Note: If a cable number is in parentheses, then the cable is for a dual-system.

Note 1: Alarm lamps on IPX TOPU are not used in the migrated system.

1.9 Extract the CPR and Circuit Cards from the LPM

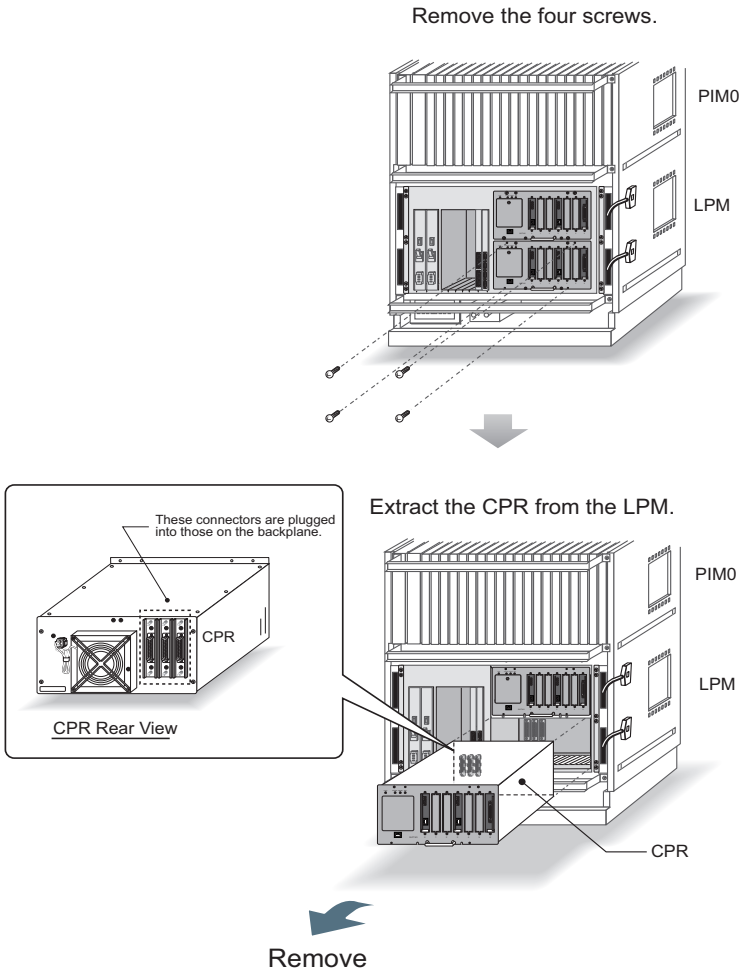


Extract the CPR and circuit cards such as IOC, EMA and MISC, from the LPM.

Note: The CPR is plugged into the three connectors on the LPM backplane.

How to Extract CPR from LPM

Remove the four screws fastened onto the CPR (keep the removed screws).
Then, extract the CPR from the LPM with care.



1.10 Extract the LPM Inner Box

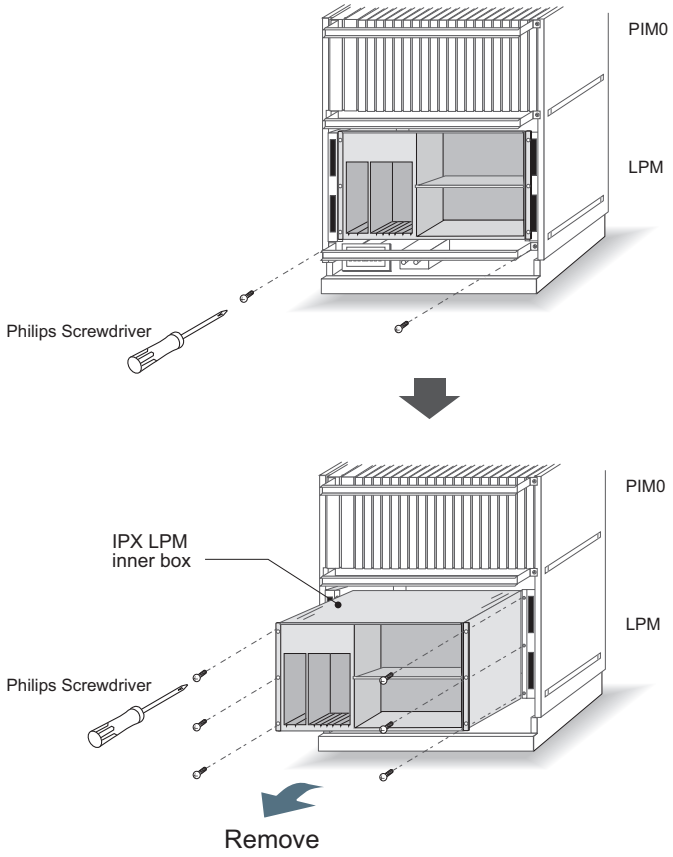


Remove the LPM inner box from the LPM as shown below.

Note: The inner box is supported within the LPM by six screws. Hold the LPM inner box firmly when removing the screws, to ensure the box does not fall.

How to Extract LPM Inner Box

- Removing IPX-LPM inner box



1.11 Mount the Cable Relay Box

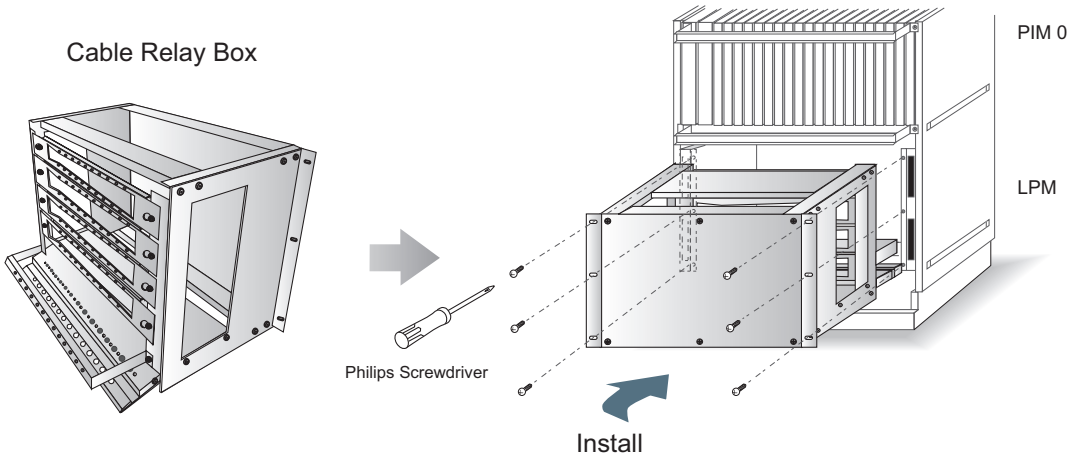


Mount the cable relay box into the LPM inner box mounted position.

Note: The cable relay box is supported within the LPM by six screws. Hold the cable relay box firmly when fastening the screws not to drop the box.

How to Install Cable Relay Box

- Installing Cable Relay Box



1.12 Cable Connections



This section only describes the cable connections specific to the migrated system between TSW-BOX and IPX PIMs. For the detailed cable connections other than those described below, such as cable connections between SV9500 server and TSW-BOX, please refer to the SV9500 Appliance Model Installation Manual.

1.12.1 Power Cable Connection

(1) For SV9500 Side

When you migrate your system from IPX to SV9500, the SV9500 telephony server and TSW-BOX will be operated on DC power. For details on power cable connection refer to the following:

- The power cable connection for SV9500 Telephony Server

  Refer to “Source Power Cable and Ground Cable Connection on BASEU” and “Cable Connection to SV9500 Server” - “Power Cable Connection for DC-Powered Model” in Chapter 3 of SV9500 Appliance Model Installation Manual.

- The power cable connection for TSW-BOX

  Refer to “Cable Connection for DC-Powered Model (1-IMG Configuration)” in Chapter 4 of SV9500 Appliance Model Installation Manual.

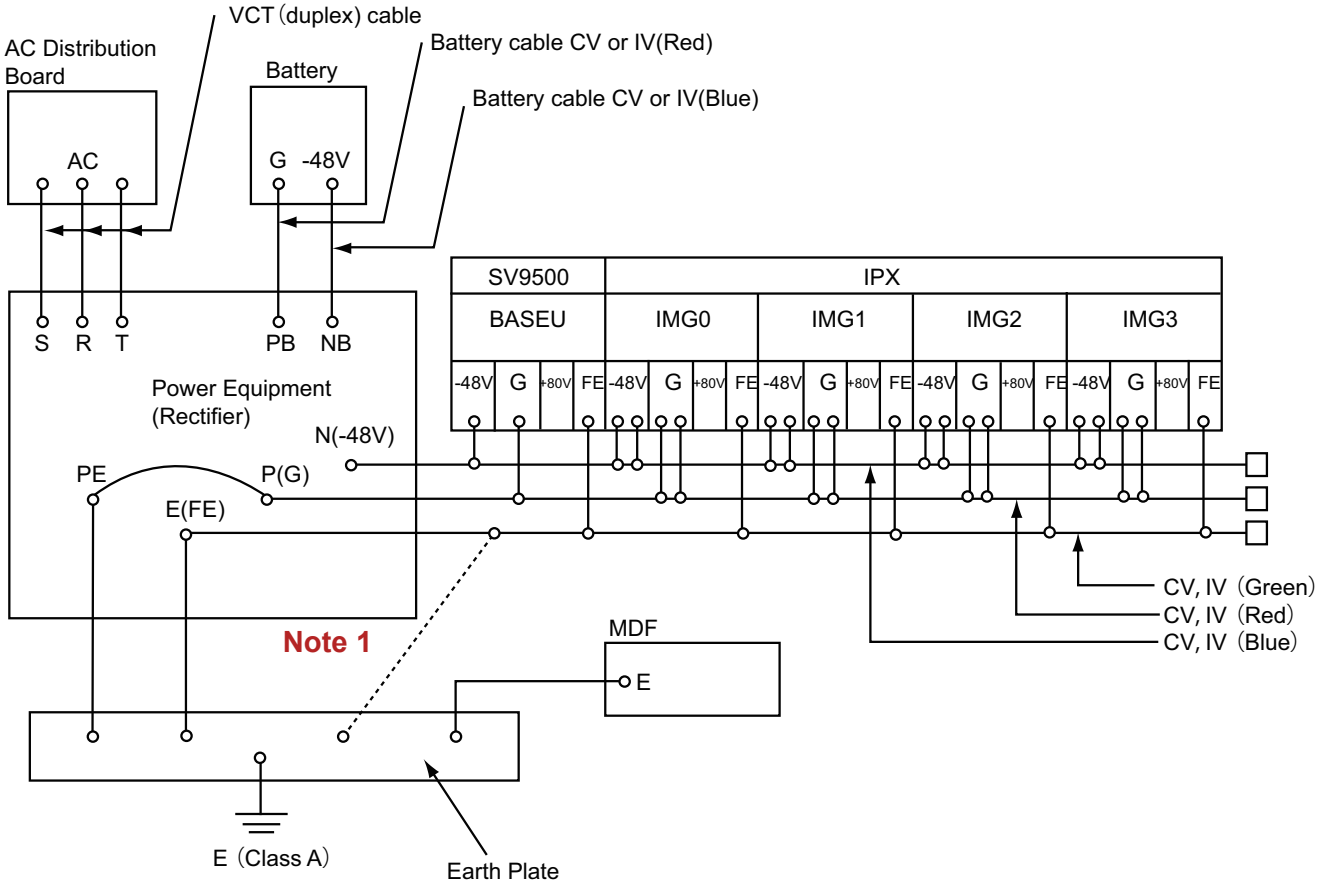
(2) For IPX Side

The power cable connection for IPX PIM is the same as the existing connection. Therefore, if you use the existing cable connection, there is no particular work for the power cable connection.

(3) Electrical Power Equipment

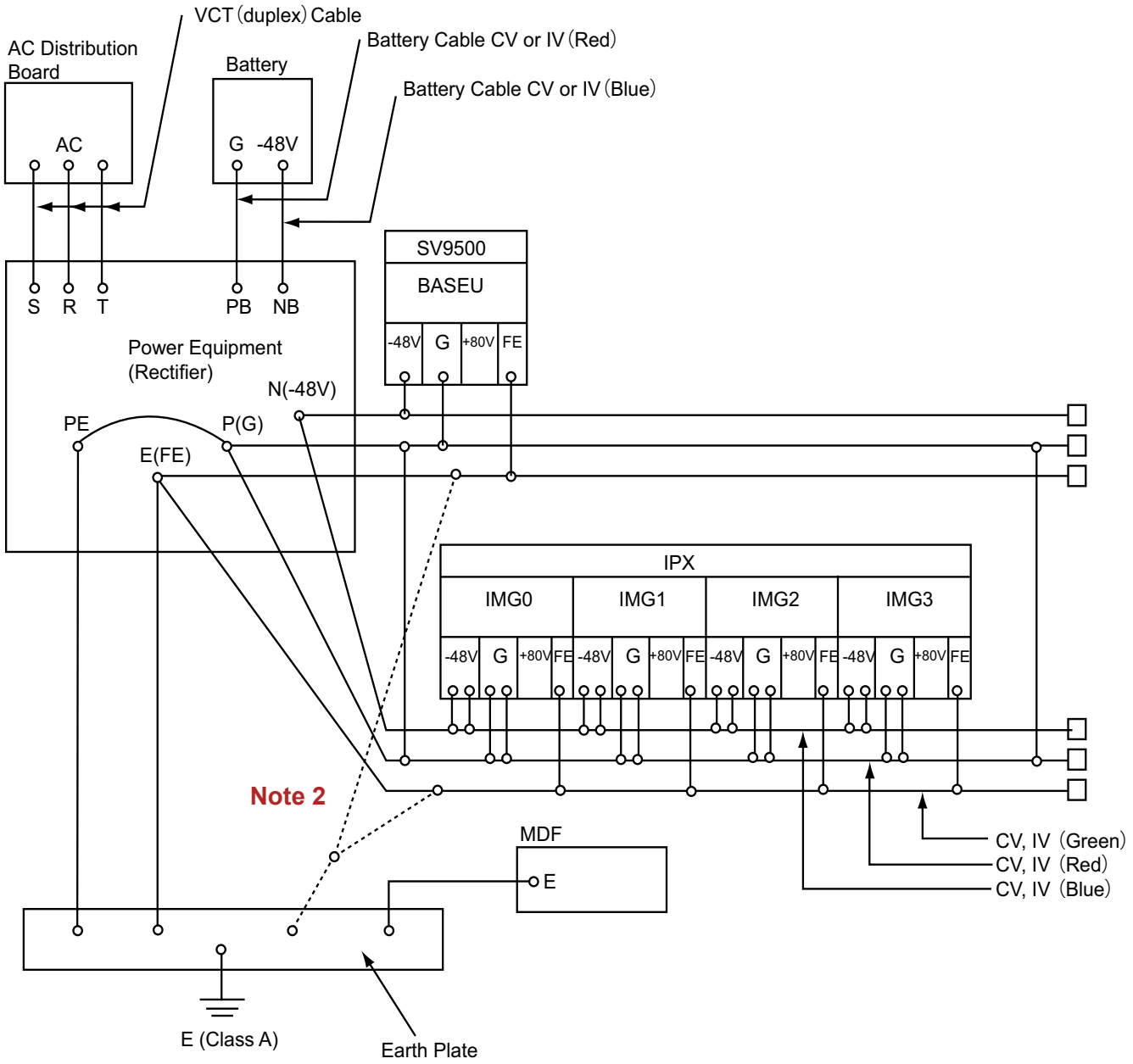
Connect to SV9500 BASEU and each IMG using G (ground) wires as follows:

Example 1



Note 1: When PE and E (the lead names may differ, depending on electrical power equipment.) are directly connected inside of power equipment, bypass any other electrical power equipment and use the cable indicated with a dot line to connect to the earth plate directly.

Example 2



Note 2: When PE and E (the lead names may differ, depending on electrical power equipment.) are directly connected inside of power equipment, bypass any other electrical power equipment and use the cables indicated with dot lines to connect to the earth plate directly.

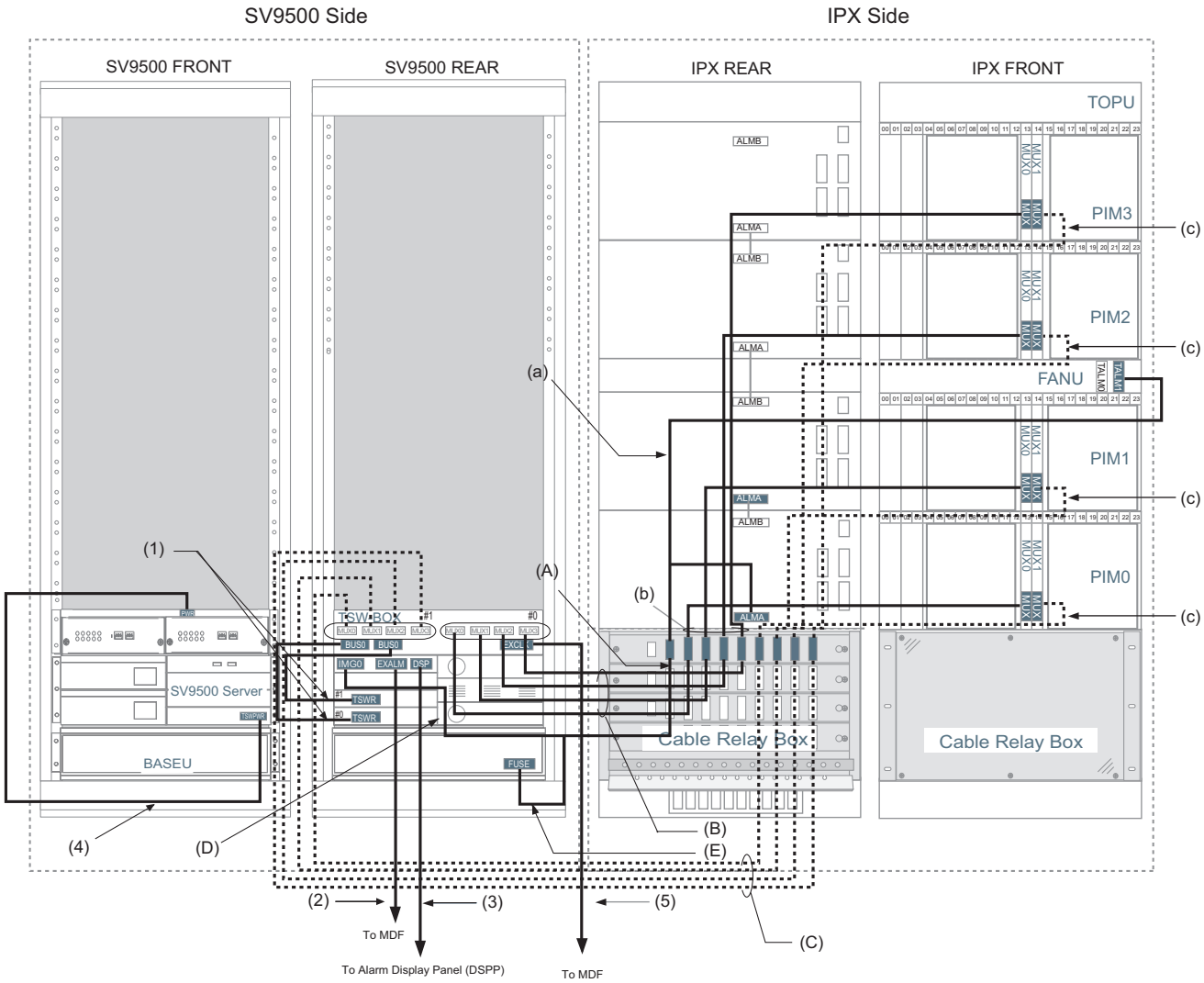
1.12.2 Bus Cable Connection

ATTENTION
Contents
Static Sensitive
Handling
Precautions Required

(1) Overview of Bus Cable Connections

The following figure describes the overview of the bus cable connections for the migrated system. In the figure below, the cables (1) to (5) indicate connections applied to both the SV9500 standard system and the migrated system. The cables (A/a) to (C/c), (D) and (E) indicate connections specific to the migrated system. For details on the cable connections specific to the migrated system, see (2)Bus Cable Connection between SV9500 server/ TSW-BOX and IPX PIMs.

Overview of Bus Cable Connections



Cable Connections Applied to both SV9500 Standard System and Migrated System

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/ Module	Connector Name		
(1)	SV9500 server (EXB-TSWR card #0)	TSWR	TSW-BOX	BUS0	D37-SC50 CA-E	
	SV9500 server (EXB-TSWR card #1)			BUS1		
(2)	SV9500 server (EMA SUB-A card)	EXALM	MDF		D25 EXALM CA-A	Necessary when External Alarm Indication Panel is used
(3)	SV9500 server (EMA SUB-A card)	DSP	Alarm Display Panel (DSPP)	J1	D15 ST-FF CA-C	Necessary when Alarm Display Panel (DSPP) is used
(4)	SV9500 server (TSWPWR card)	TSWPWR	TSW-BOX	PWR	D09 POW CA-A	
(5)	TSW-BOX	EXCLK	MDF		D37 EXCLK CA-A	Necessary when clock synchronization is performed Necessary when Music-On-Hold is used

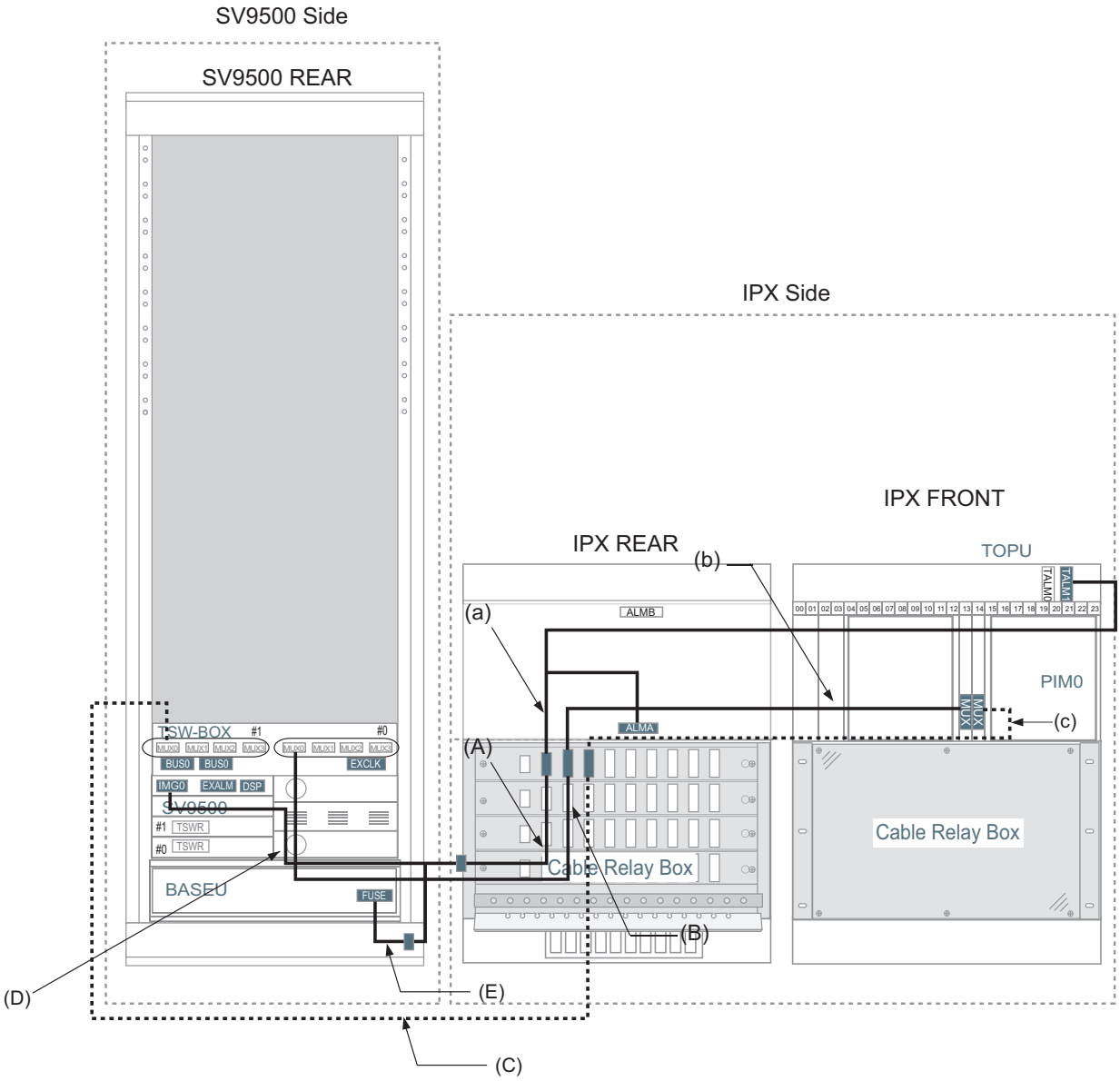
Note: For details on the above cable connections applied to both the SV9500 standard system and the migrated system, refer to SV9500 Appliance Model Installation Manual. For the bus cable connections specific to the migrated system, see (2)Bus Cable Connection between SV9500 server/TSW-BOX and IPX PIMs.

(2) Bus Cable Connection between SV9500 server/TSW-BOX and IPX PIMs

Run the bus cables between SV9500 server, TSW-BOX and IPX PIMs through the cable relay box as follows:

[SV9500 server/TSW-BOX - IPX PIM0]

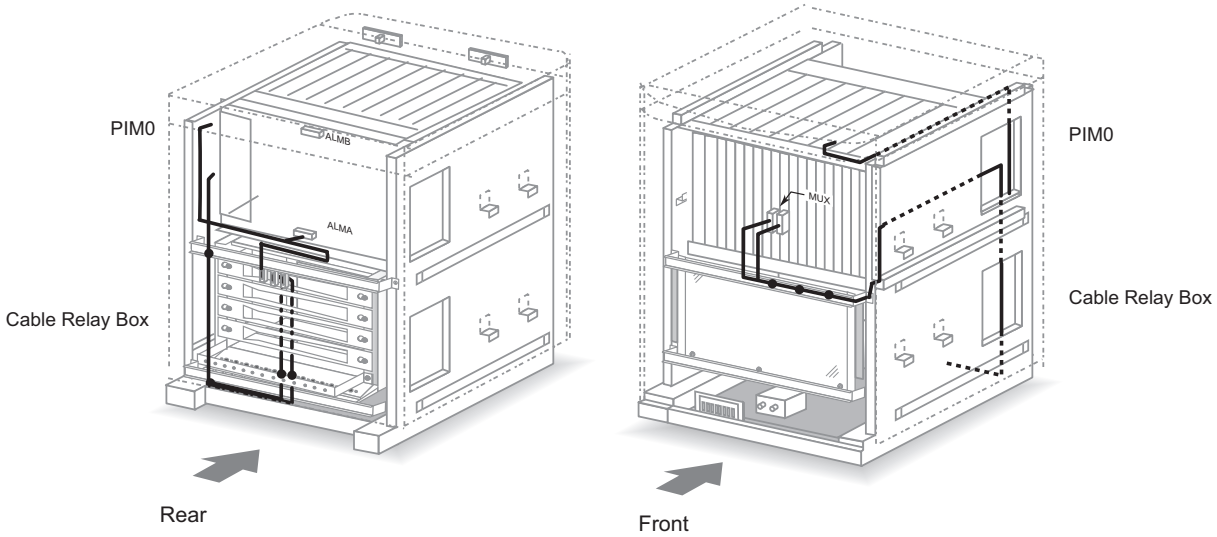
Cable Connections between SV9500 server/TSW-BOX and IPX PIMs (1-PIM Configuration)



	From (SV9500 server, TSW-BOX)			Cable Relay Box		To (IPX PIM0)		
	Unit/ Module/ Cable	Connector Name	Cable Name			Unit/Mod-ule	Connector Name	Cable Name
(A)	MIG FALM CA-A		D15 ST-F CA-B		(a)	IPX PIM1	ALMA	D15-(PS20-ML2) CA-A
						TOPU	TALM1	
(B)	TSW-BOX (TSW#0)	MUX0	D26-D25 TSW-PIR CA-A/B		(b)	IPX PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
(C)	TSW-BOX (TSW#1)	MUX0	D26-D25 TSW-PIR CA-A/B		(c)	IPX PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B

	From		To		Cable Name	
	Unit/Module	Connector Name	Unit/ Module	Connector Name		
(D)	SV9500 server (EMA SUB-A card)	IMG0	(A) Cable Relay Box		MIG FALM CA-A	D15 ST-F CA-B
			(E) BASEU	FUSE		D09 ST CA-A

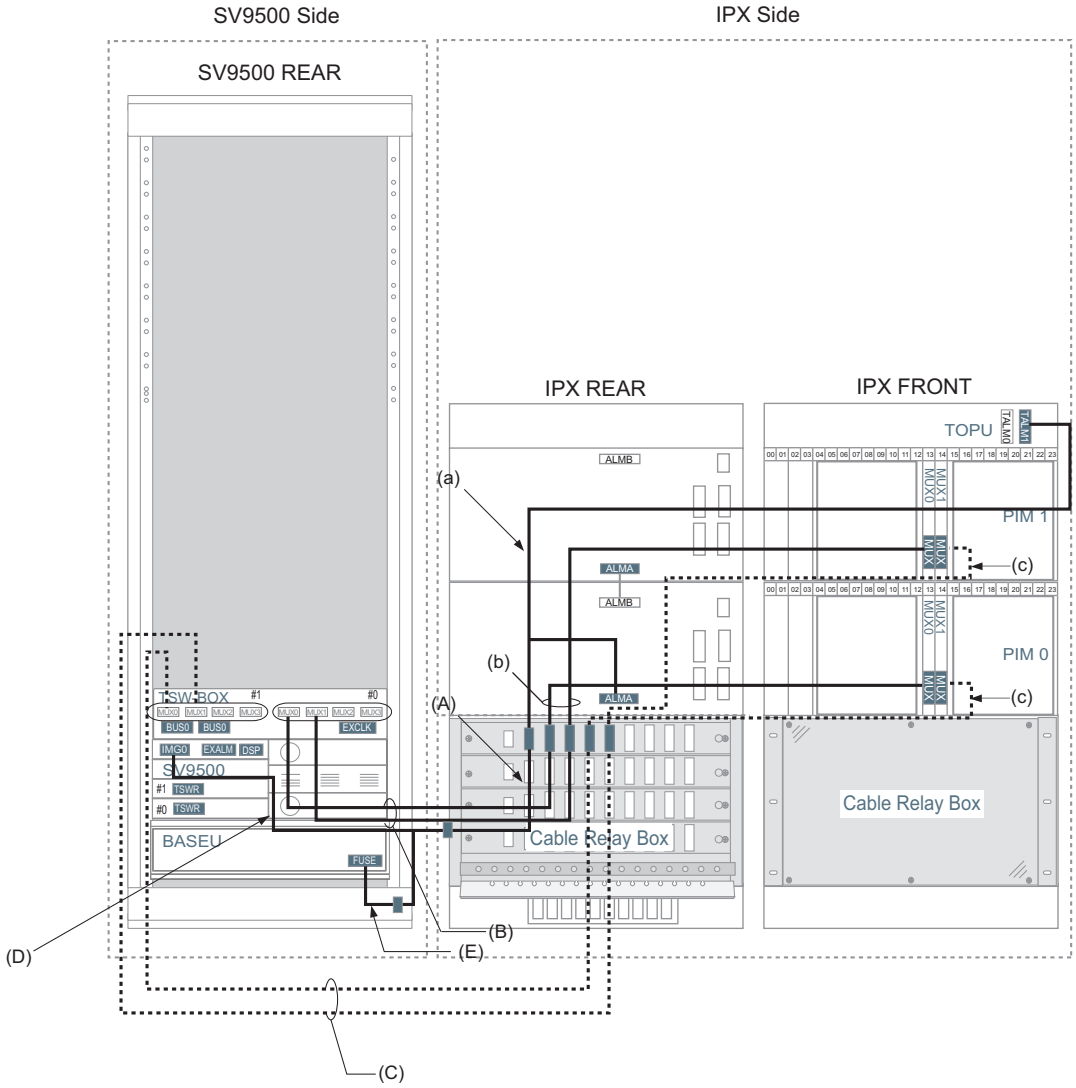
Note: To complete the cable connection smoothly, connect the IPX-side bus cables (D15-(PS20-ML2) CA-A and MT24-D25 CA-B) first, and then connect the SV9500-side bus cables. The figure below describes how to run the IPX-side bus cables for a 1-PIM configuration.



The cables can be fastened onto the cabinet at the proposed locations where small dots (•) are provided in this figure.

[SV9500 server/TSW-BOX - IPX PIM0, 1]

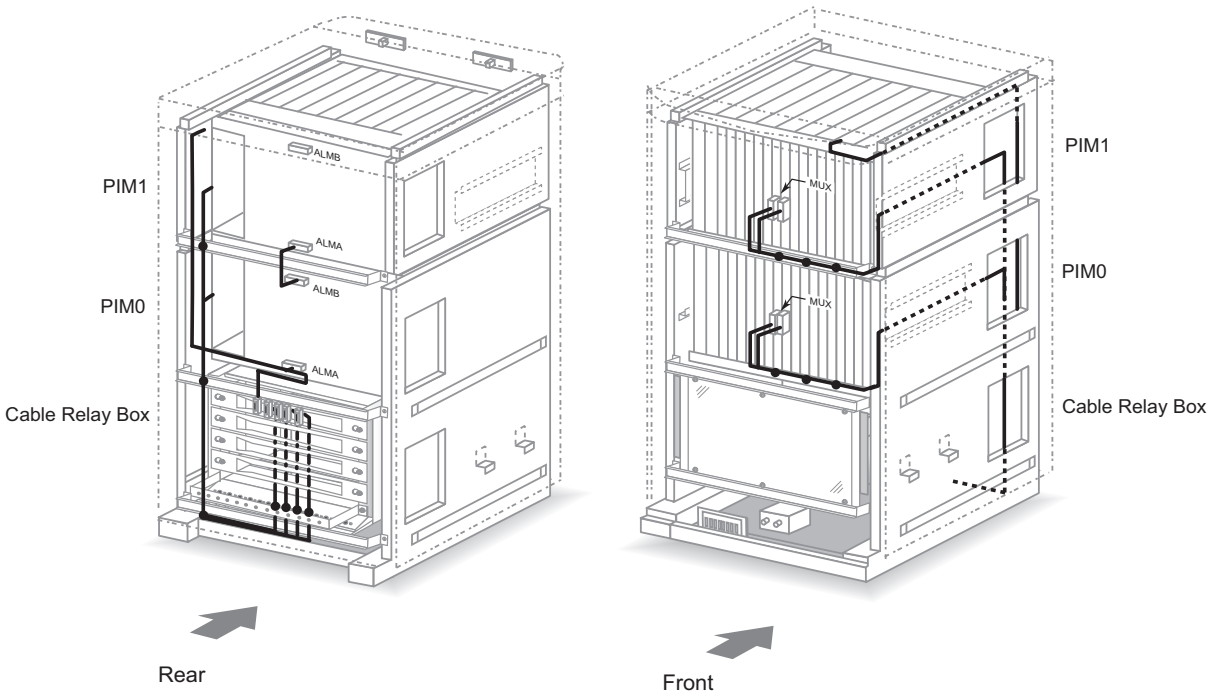
Cable Connections between SV9500 server/TSW-BOX and IPX PIMs (2-PIM Configuration)



	From (SV9500 server, TSW-BOX)			Cable Relay Box		To (IPX PIM0, 1)		
	Unit/ Module/ Cable	Connector Name	Cable Name			Unit/Mod-ule	Connector Name	Cable Name
(A)	MIG FALM CA-A		D15 ST-F CA-B		(a)	IPX PIM1	ALMA	D15-(PS20-ML2) CA-A
						FANU	TALM1	
(B)	TSW-BOX (TSW#0)	MUX0	D26-D25 TSW-PIR CA-A/B		(b)	IPX PIM0	MUX (PH-PC36 front con-nector)	MT24-D25 CA-B
		MUX1				IPX PIM1		
(C)	TSW-BOX (TSW#1)	MUX0	D26-D25 TSW-PIR CA-A/B		(c)	IPX PIM0	MUX (PH-PC36 front con-nector)	MT24-D25 CA-B
		MUX1				IPX PIM1		

	From		To		Cable Name	
	Unit/Module	Connector Name	Unit/ Module	Connector Name		
(D)	SV9500 server (EMA SUB-A card)	IMG0	(A) Cable Relay Box		MIG FALM CA-A	D15 ST-F CA-B
			(E) BASEU	FUSE		D09 ST CA-A

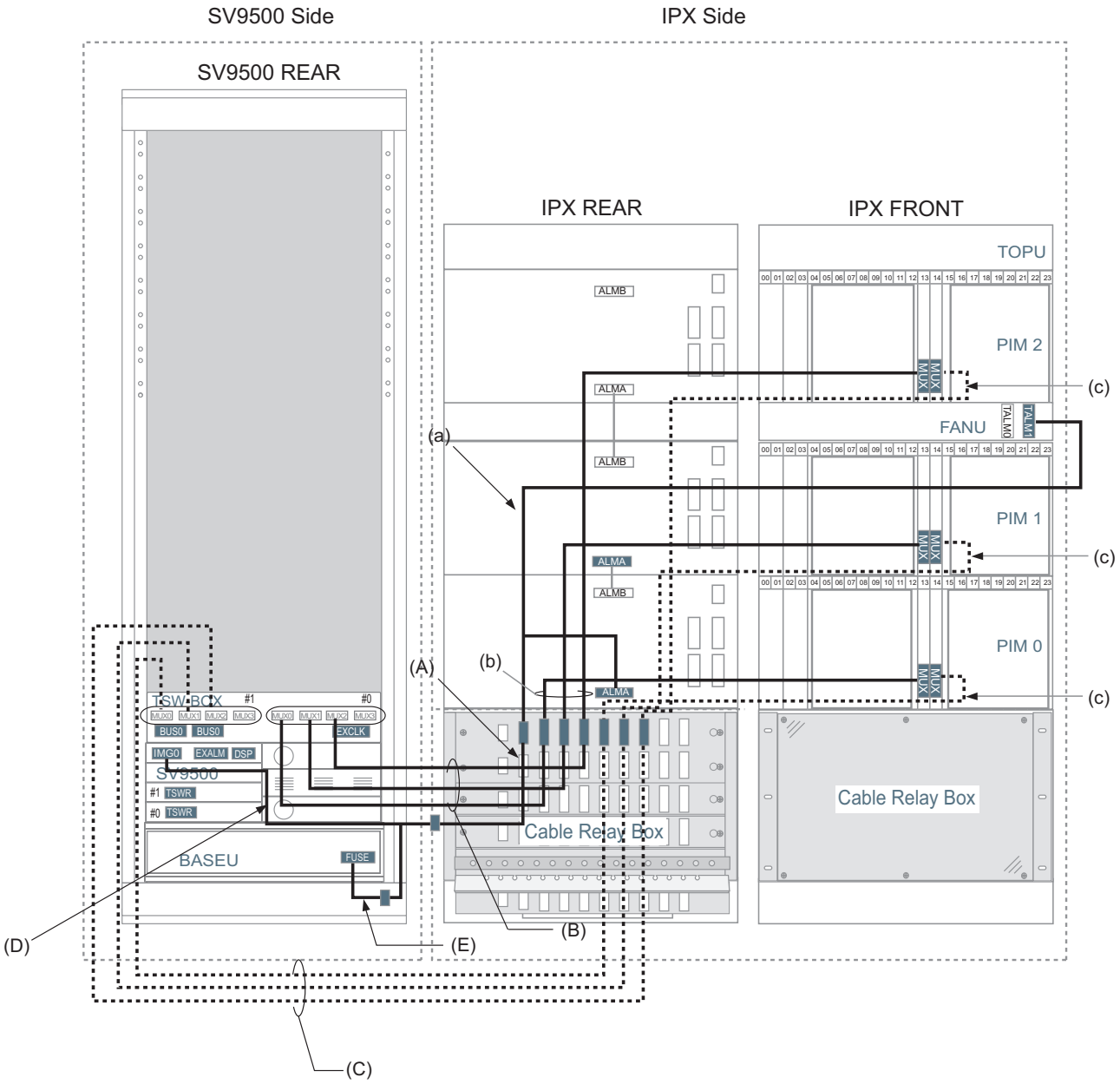
Note: To complete the cable connection smoothly, connect the IPX-side bus cables (D15-(PS20-ML2) CA-A and MT24-D25 CA-B) first, and connect the SV9500-side bus cables. The figure below describes how to run the IPX-side bus cables for a 2-PIM configuration, see the figure below.



The cables can be fastened onto the cabinet at the proposed locations where small dots (•) are provided in this figure.

[SV9500 server/TSW-BOX - IPX PIM0, 1, 2]

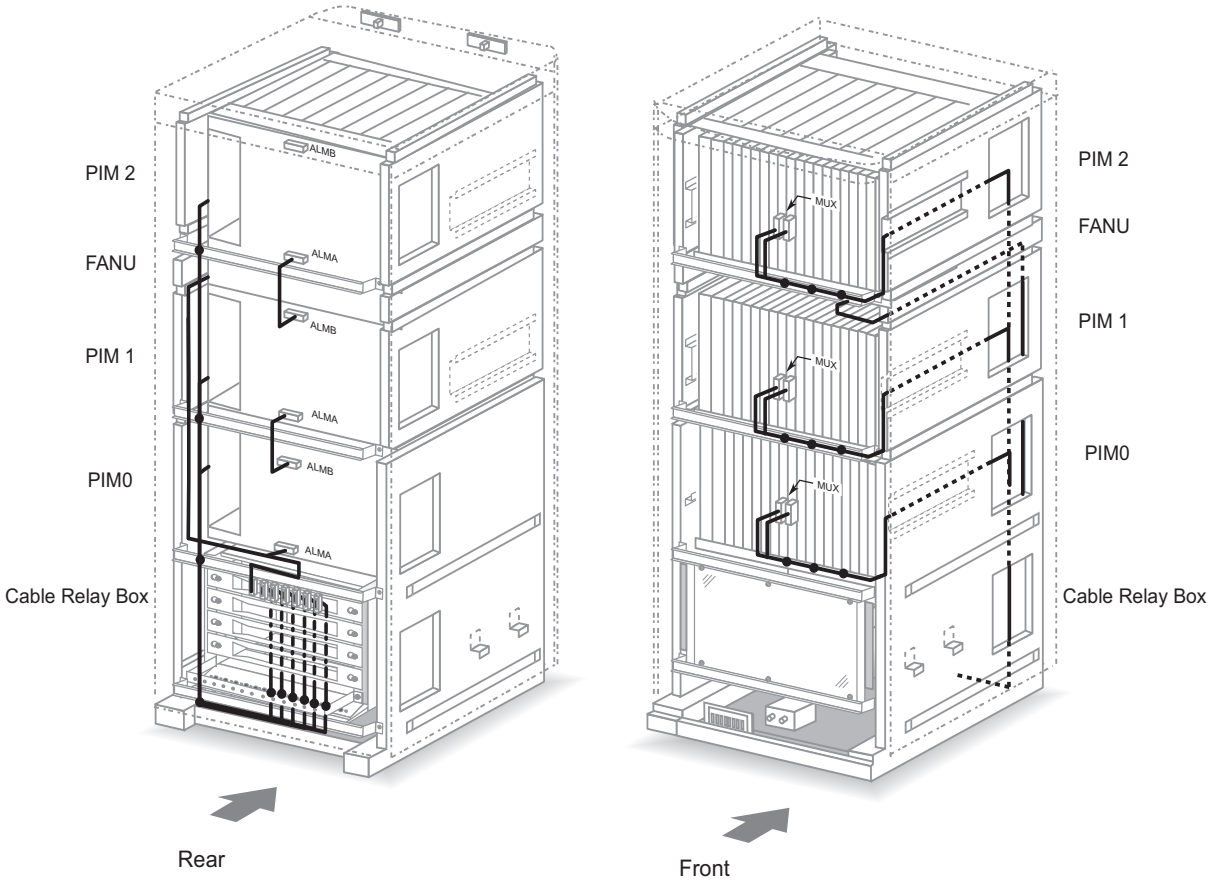
Cable Connections between SV9500 server/TSW-BOX and IPX PIMs (3-PIM Configuration)



	From (SV9500 server, TSW-BOX)			Cable Relay Box		To (IPX PIM0, 1, 2, 3)		
	Unit/Module/ Cable	Connector Name	Cable Name			Unit/Mod-ule	Connector Name	Cable Name
(A)	MIG FALM CA-A		D15 ST-F CA-B		(a)	IPX PIM1	ALMA	D15-(PS20-ML2) CA-A
						FANU	TALM1	
(B)	TSW-BOX (TSW#0)	MUX0	D26-D25 TSW-PIR CA-A/B		(b)	IPX PIM0	MUX (PH-PC36 front con-nector)	MT24-D25 CA-B
		MUX1				IPX PIM1		
		MUX2				IPX PIM2		
(C)	TSW-BOX (TSW#1)	MUX0	D26-D25 TSW-PIR CA-A/B		(c)	IPX PIM0	MUX (PH-PC36 front con-nector)	MT24-D25 CA-B
		MUX1				IPX PIM1		
		MUX2				IPX PIM2		

	From		To		Cable Name	
	Unit/Module	Connector Name	Unit/ Module	Connector Name		
(D)	SV9500 server (EMA SUB-A card)	IMG0	(A) Cable Relay Box		MIG FALM CA-A	D15 ST-F CA-B
			(E) BASEU	FUSE		D09 ST CA-A

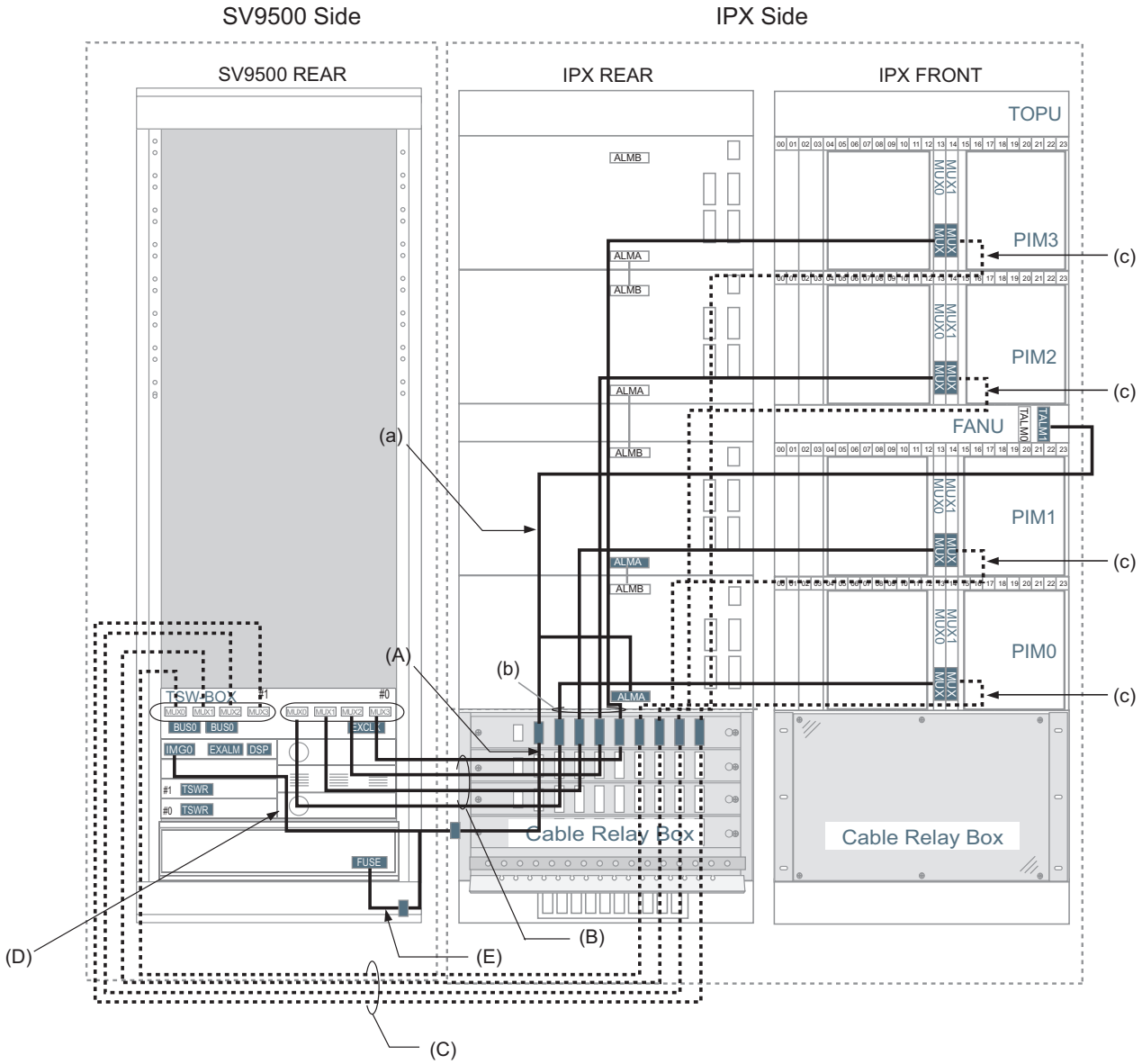
Note: To complete the cable connection smoothly, connect the IPX-side bus cables (D15-(PS20-ML2) CA-A and MT24-D25 CA-B) first, and connect the SV9500-side bus cables. The figure below describes how to run the IPX-side bus cables for a 3-PIM configuration, see the figure below.



The cables can be fastened onto the cabinet at the proposed locations where small dots (•) are provided in this figure.

[SV9500 server/TSW-BOX - IPX PIM0, 1, 2, 3]

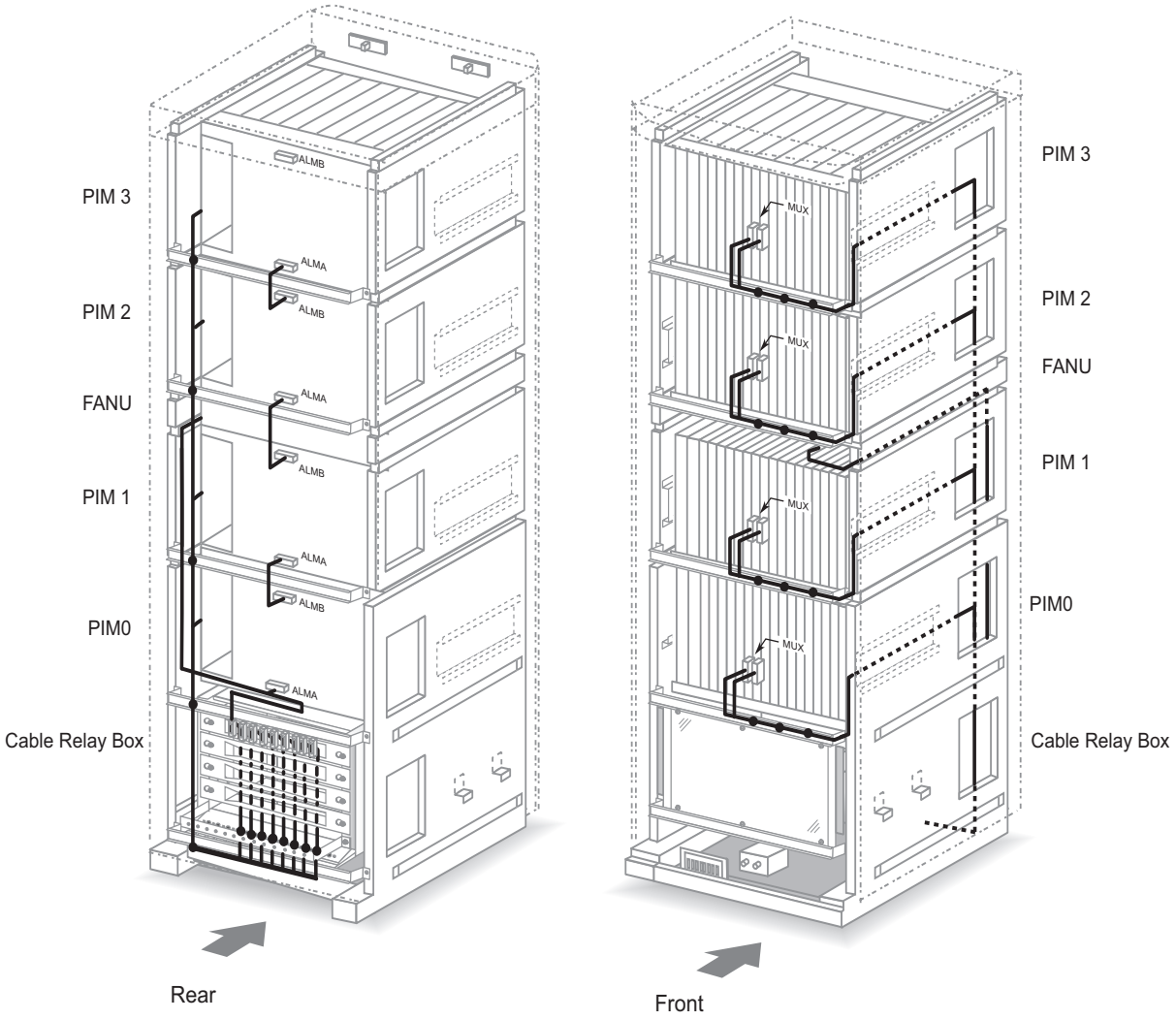
Cable Connections between SV9500 server/TSW-BOX and IPX PIMs (4-PIM Configuration)



	From (SV9500 server, TSW-BOX)			Cable Relay Box		To (IPX PIM0, 1, 2, 3, 4)		
	Unit/ Module/ Cable	Connector Name	Cable Name			Unit/Module	Connector Name	Cable Name
(A)	MIG FALM CA-A		D15 ST-F CA-B		(a)	IPX PIM1	ALMA	D15-(PS20-ML2) CA-A
						FANU	TALM1	
(B)	TSW-BOX (TSW#0)	MUX0	D26-D25 TSW-PIR CA-A/B		(b)	IPX PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
		MUX1				IPX PIM1		
		MUX2				IPX PIM2		
		MUX3				IPX PIM3		
(C)	TSW-BOX (TSW#1)	MUX0	D26-D25 TSW-PIR CA-A/B		(c)	IPX PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
		MUX1				IPX PIM1		
		MUX2				IPX PIM2		
		MUX3				IPX PIM3		

	From		To		Cable Name	
	Unit/Module	Connector Name	Unit/ Module	Connector Name		
(D)	SV9500 server (EMA SUB-A card)	IMG0	(A) Cable Relay Box		MIG FALM CA-A	D15 ST-F CA-B
			(E) BASEU	FUSE		D09 ST CA-A

Note: To complete the cable connection smoothly, connect the IPX-side bus cables (D15-(PS20-ML2) CA-A and MT24-D25 CA-B) first, and connect the SV9500-side bus cables. The figure below describes how to run the IPX-side bus cables for a 4-PIM configuration, see the figure below.

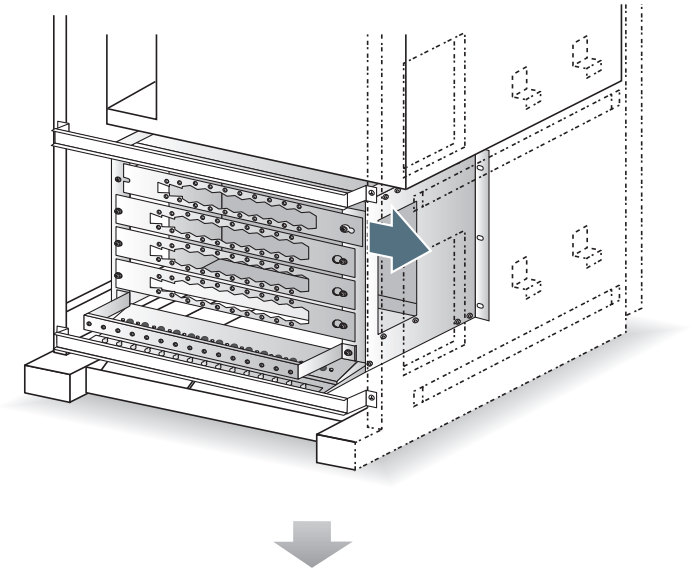


The cables can be fastened onto the cabinet at the proposed locations where small dots (•) are provided in this figure.

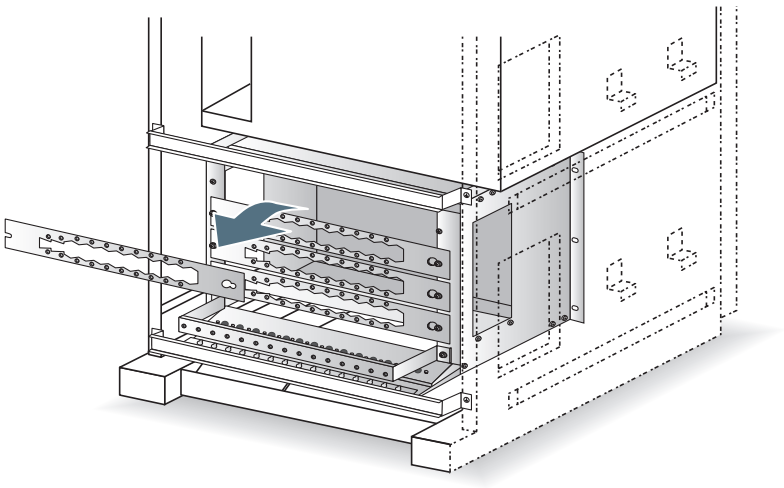
(3) How to Secure the Connector of IPX BUS Cable to Cable Relay Box

Step1: Remove a rear panel of the cable relay box.

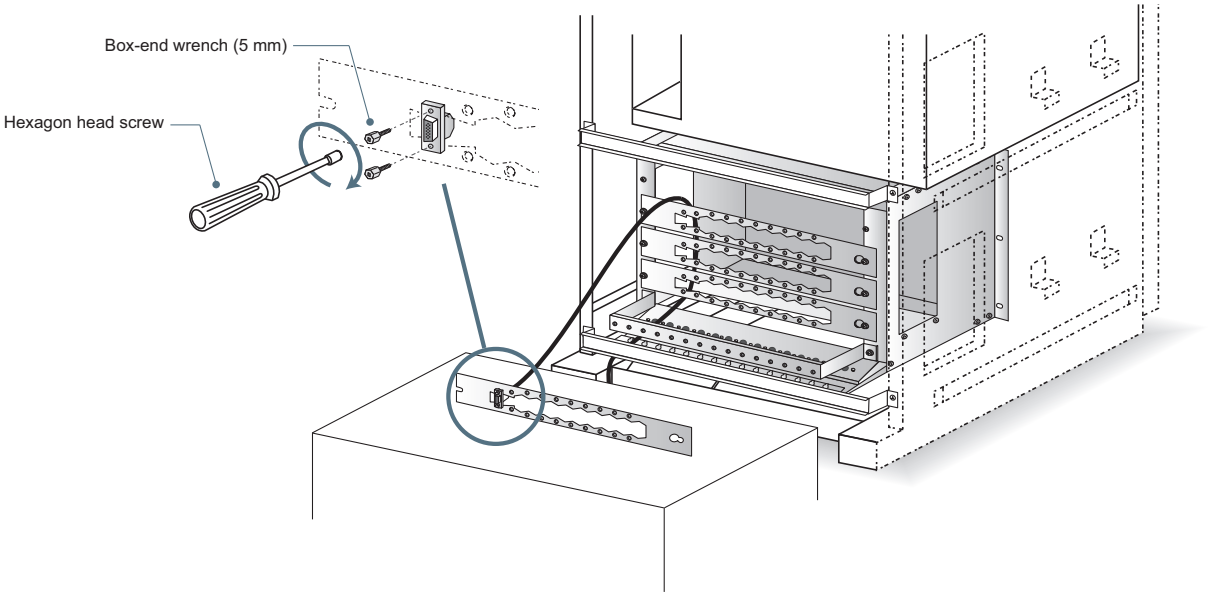
- Loosen the two screws located on both sides of the pannel.
- Slowly slide the pannel to the right.



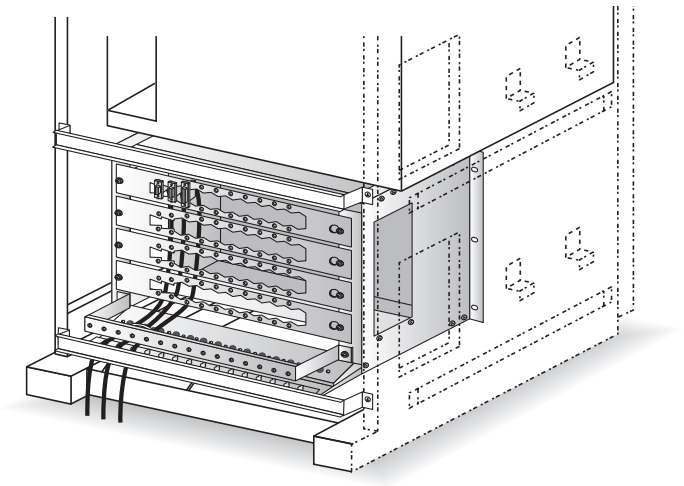
- Remove the pannel from the Cable Relay Box.



Step2: Secure the connector of the cable running from IPX PIM to the rear pannel.



Step3: Reinstall the rear panel to the cable relay box after all the necessary cables are attached.

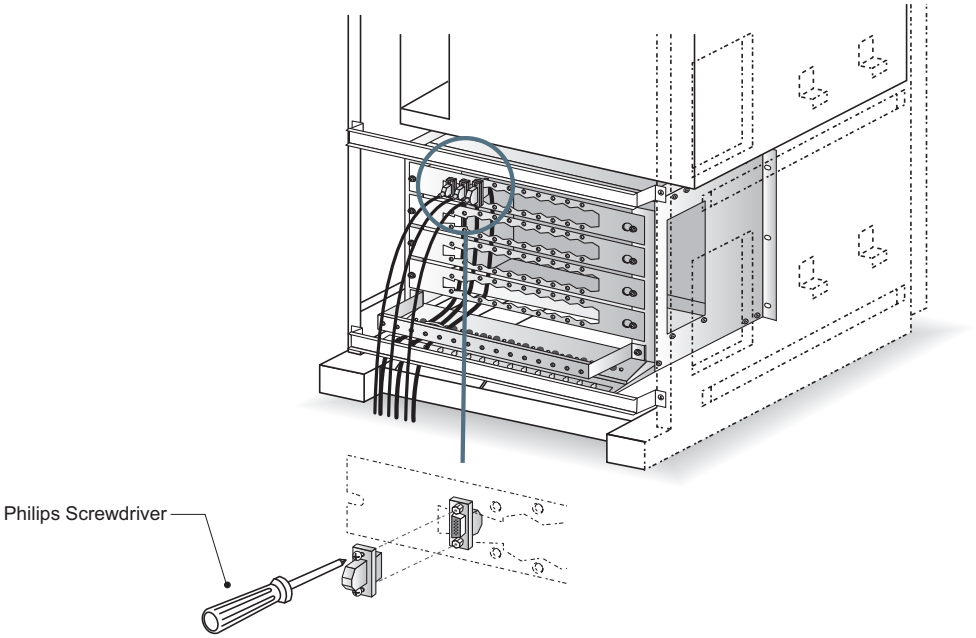


For reference

- If the rear side of the IPX is crowded with the cables and it is difficult to perform the above tasks from the rear side, you can remove the front panel of the cable relay box to secure the connector of IPX-side cable from the front side of the cable relay box.

(4) How to Secure the Connector of SV9500 BUS Cable to Cable Relay Box

Step1: Secure the connector of the cable running from SV9500 PIR to the connector of the cable running from IPX PIM by the screws as follows:



1.12.3 Ground Cable Connection



The following shows how to connect a cable for an enhanced ground when migrating from NEAX2400 IPX.

Connect a ground cable “ML04 GND CA-A” to an IMG frame.

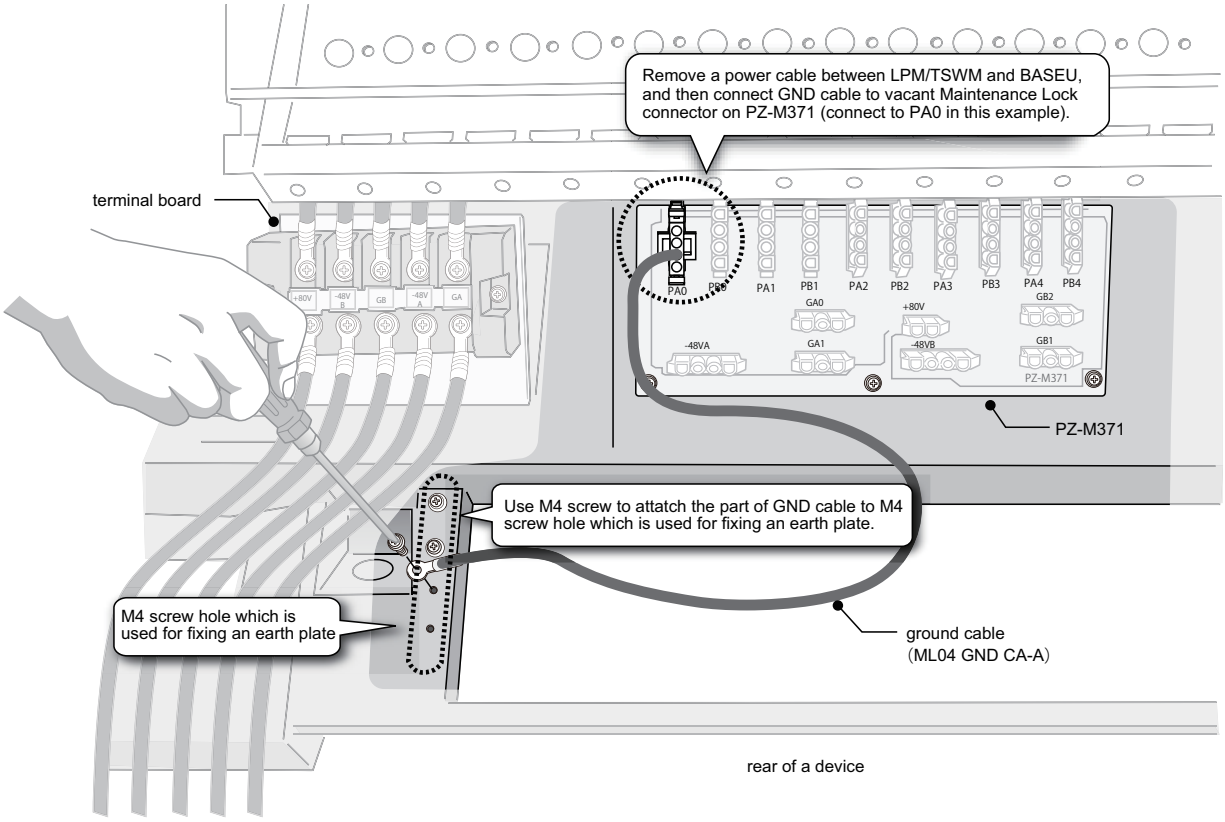
The following example explains how to connect the ground cable.

Note: The ground cable “ML04 GND CA-A” provides the lightning protection. For more details, see the following figures.

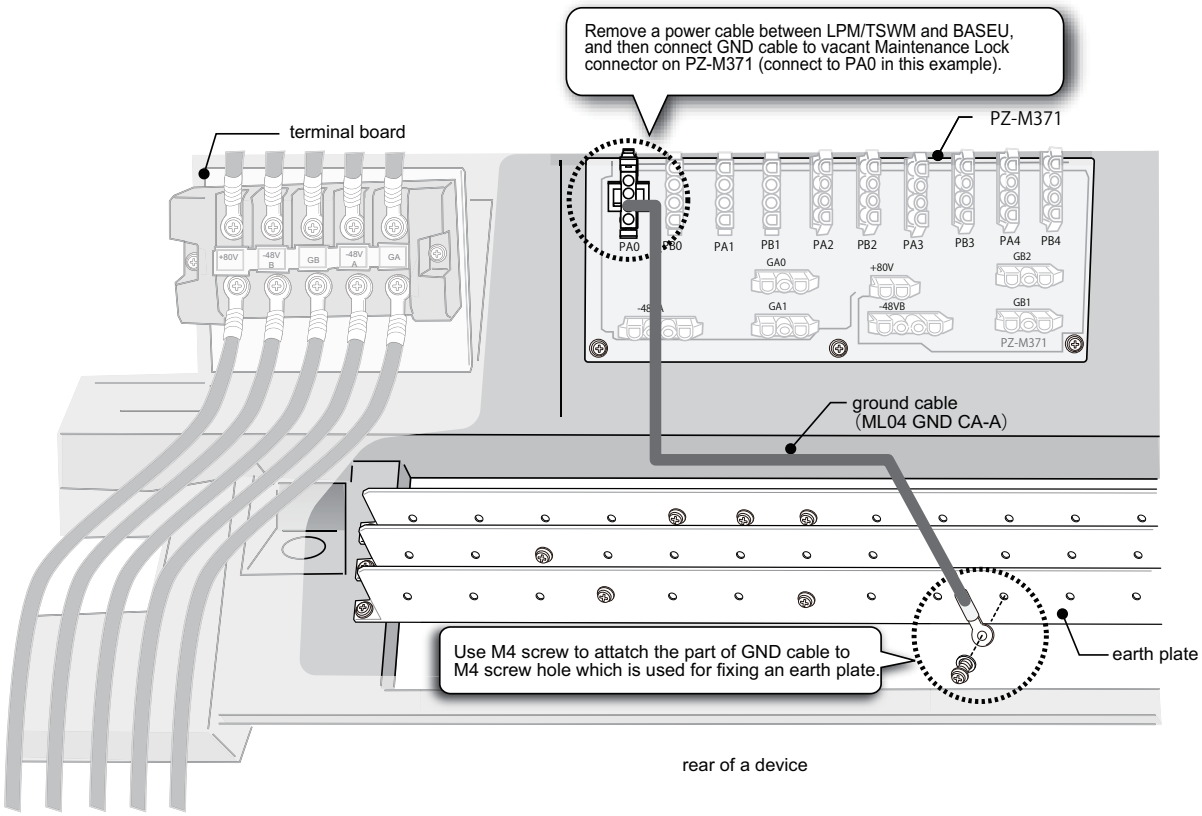
(1)When an earth plate is not used

(2)When an earth plate is used

(1) When an earth plate is not used



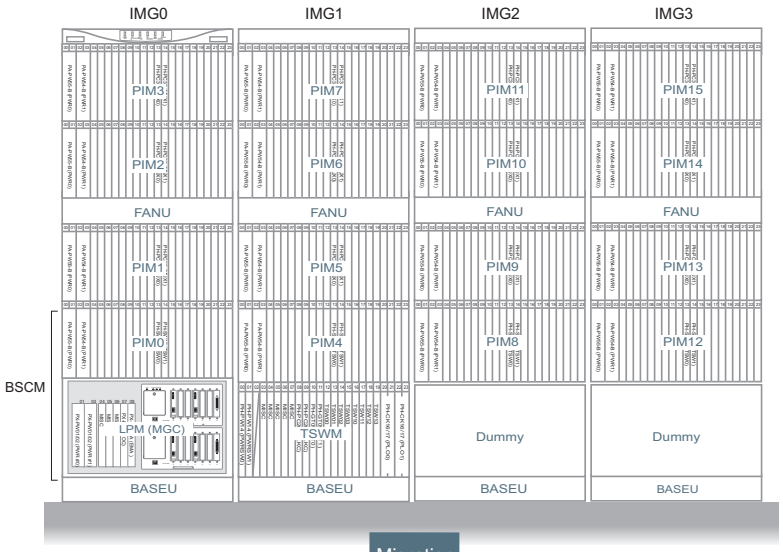
(2) When an earth plate is used



2. From IPX (4-IMG) to SV9500 (4-IMG with TSW-BOX)

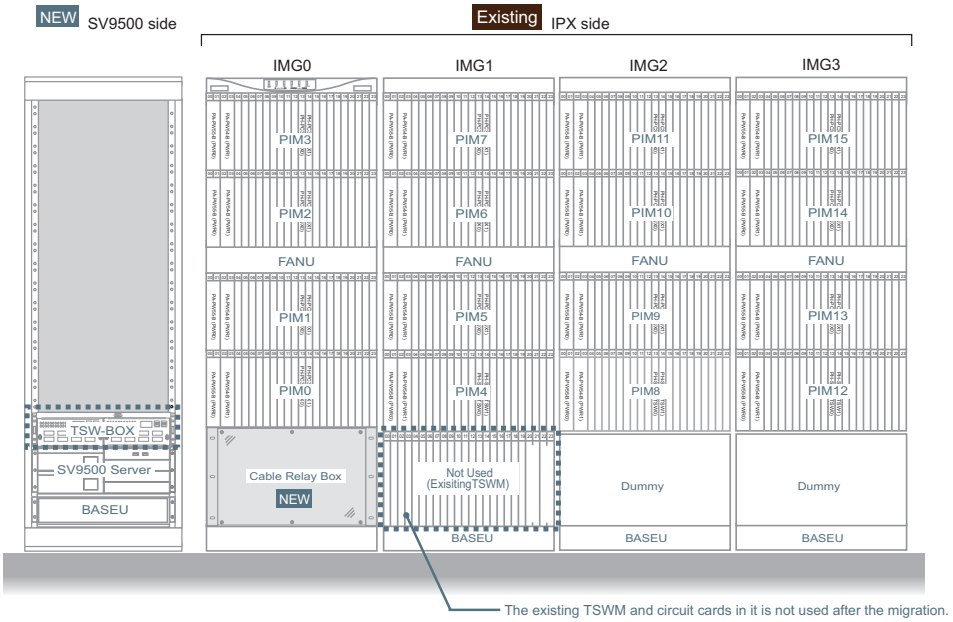
This section describes the installation procedures needed to migrate your system from UNIVERGE NEAX2400 IPX (4-IMG) to UNIVERGE SV9500 (4-IMG with TSW-BOX). Before beginning the installation, thoroughly read Chapter 2 BEFORE INSTALLATION and observe the precautions while performing the installation.

Before Migration



Migration

After Migration



Installation Procedure

Start

↓

1 Install 19-Inch Rack, SV9500 Server and TSW-BOX

↓

2 Collect Billing Information, Traffic Data and System Messages

↓

3 Temporarily Stop Routine Diagnostics

↓

4 Back Up IPX Office Data

↓

5 Turn OFF Peripheral Equipment Connected to the Rectifier

↓

6 Turn OFF the IPX

↓

7 Turn OFF the Rectifier

↓

8 Remove Unnecessary Cables from IPX

↓

9 Extract the CPR and Circuit Cards from the LPM

↓

10 Extract the LPM Inner Box

↓

11 Mount the Cable Relay Box

↓

12 Cable Connections

↓

End

2.1 Install 19-Inch Rack, SV9500 Server and TSW-BOX

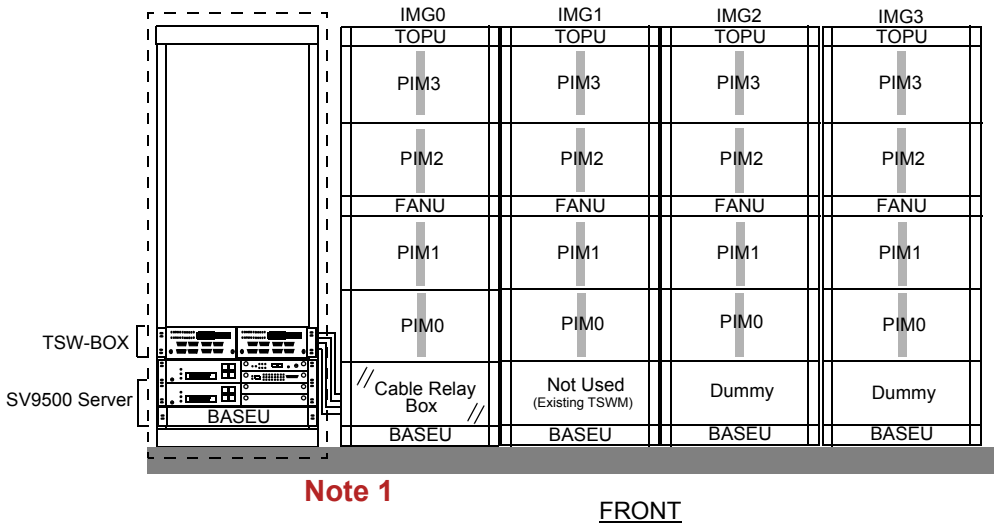


Install 19-inch rack, SV9500 Telephony Server and TSW-BOX, referring to SV9500 Appliance Model Installation Manual. The following figure shows the standard configuration of the migrated system. Install them depending on your system configuration.

4-IMG System Configuration

Install the following:
-19-inch rack
-BASEU
-SV9500 server
-TSW-BOX

Basic Configuration



Note 1: When installing a 19-inch rack, consider the length of the cables between SV9500 server/ TSW-BOX and a cable relay box.

Cable between SV9500 server (MIG FALM CA-A) and cable relay box (for PIR0) (D15 ST CA-B): 3000mm

Cable between SV9500 server and cable relay box (for PIR1-PIR3) (D15 ST-F CA-B): 2000mm

Cable between TSW-BOX and cable relay box (D26-D25 TSW-PIR CA-B): 3000mm

2.2 Collect Billing Information, Traffic Data and System Messages

Collect the billing information, the traffic data, and the system messages as necessary.

2.3 Temporarily Stop Routine Diagnostics

Temporarily suspend Routine Cyclic Diagnostics, using the ASYD command. Set SYS 1, Index 87 and 88 to FFH (hexadecimal). After the migration, return the indexes to their original values.

ASYD SYS1

Index 87: FFH (Hour of Routine Diagnosis Start Time)

Index 88: FFH (Minute of Routine Diagnosis Start Time)

2.4 Back Up IPX Office Data

(1) Back up Office Data from IPX

Step1: Backup the IPX office data by using the MEM_HDD command.

Check [All Select] to select all the data type. Select [LP Select] according to the office status. Ignore that the following data types are displayed unavailable in the operation log.

- ACD Data Memory
- ICB/DR
- SR-MGC

The following data types may be displayed as an error in the operation log when verified.

- Wireless Call Forwarding
- SIP Terminal Call Transfer

Note: An error will occur if WLAN Handset (MH Series) moves between Access Points while being verified.

Step2: Save the one-touch speed call memory data of Dterm to the PC or a floppy disk by using the BOSD command. On the command, select [PBX memory to MAT]. It is recommended that the back up be divided per Unit or MG.

Note: The one-touch speed calling memory data of IP terminal is written in the IPX server.

Step3: Log off from IPX by using the CFCS command and remove the CF card from the slot.

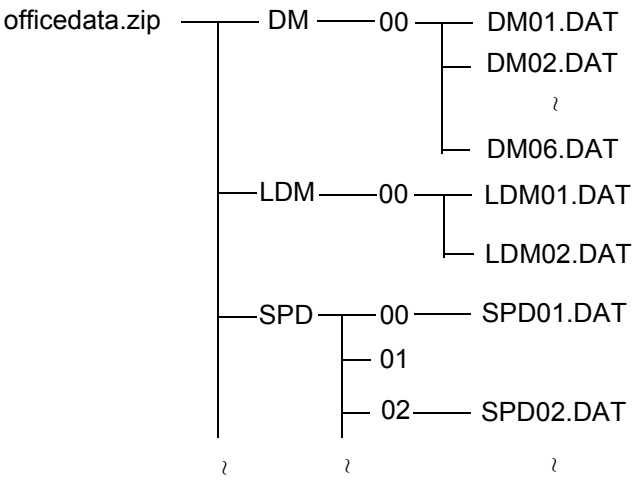
(2) Converting IPX Office Data to SV9500 Office Data

Step1: Insert the CF card removed from the IPX to the PC and save the office data to the PC by using the FLCVTR.

Step2: Zip the saved IPX office data. Specify the file name as “officedata.zip”.

Note: For North America: If the IPX Software Revision is R24 or lower, the ACD Database must first be converted from 2M to 4M prior to Step-2.

Note: In the zip file, configure the file directory as follows. Delete the [ICS-BOOT.SYS] and [SC-xxxx.COD]
* For North America, also delete the README.TXT file.



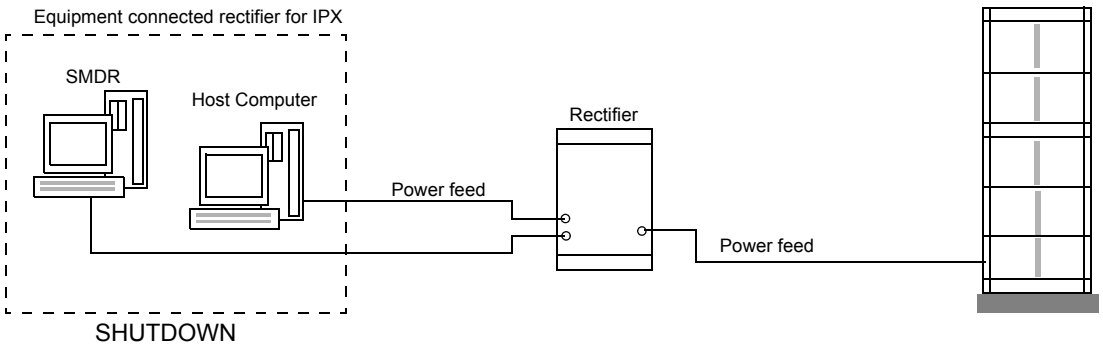
Step3: Make a folder to drop the zip file in.

2.5 Turn OFF Peripheral Equipment Connected to the Rectifier



Turn OFF the peripheral equipment such as the SMDR terminal and the printer that receives power from the rectifier that provides operating power to the IPX.

Note: When the equipment is connected to another rectifier, this step is not necessary.

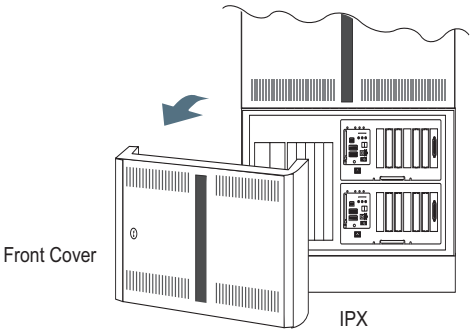


2.6 Turn OFF the IPX

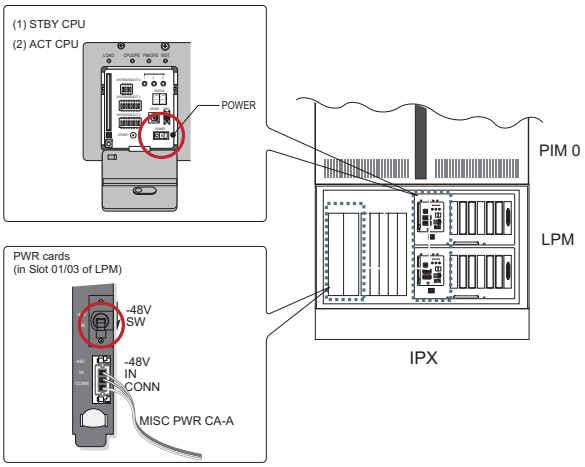


Turn off the power of the IPX in the following procedures.

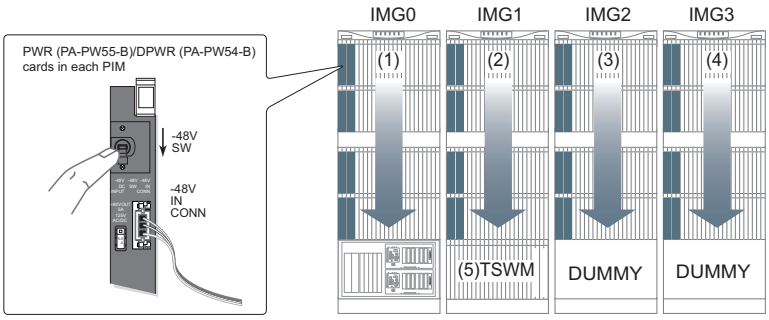
Step1: Remove the front cover from LPM for facilitating installation.



Step2: Turn off the power of the LPM.



Step3: Turn OFF the -48V SW on the PWR (PA-PW55-B) and DPWR (PA-PW54-B) cards mounted respectively in slot 01 and 03 of each PIM as shown below.



2.7 Turn OFF the Rectifier



Turn OFF the rectifier. For more information, refer to the rectifier's operation manual.

Note: Before turning off the rectifier, make sure that no voltage is applied to the power receiving terminal.

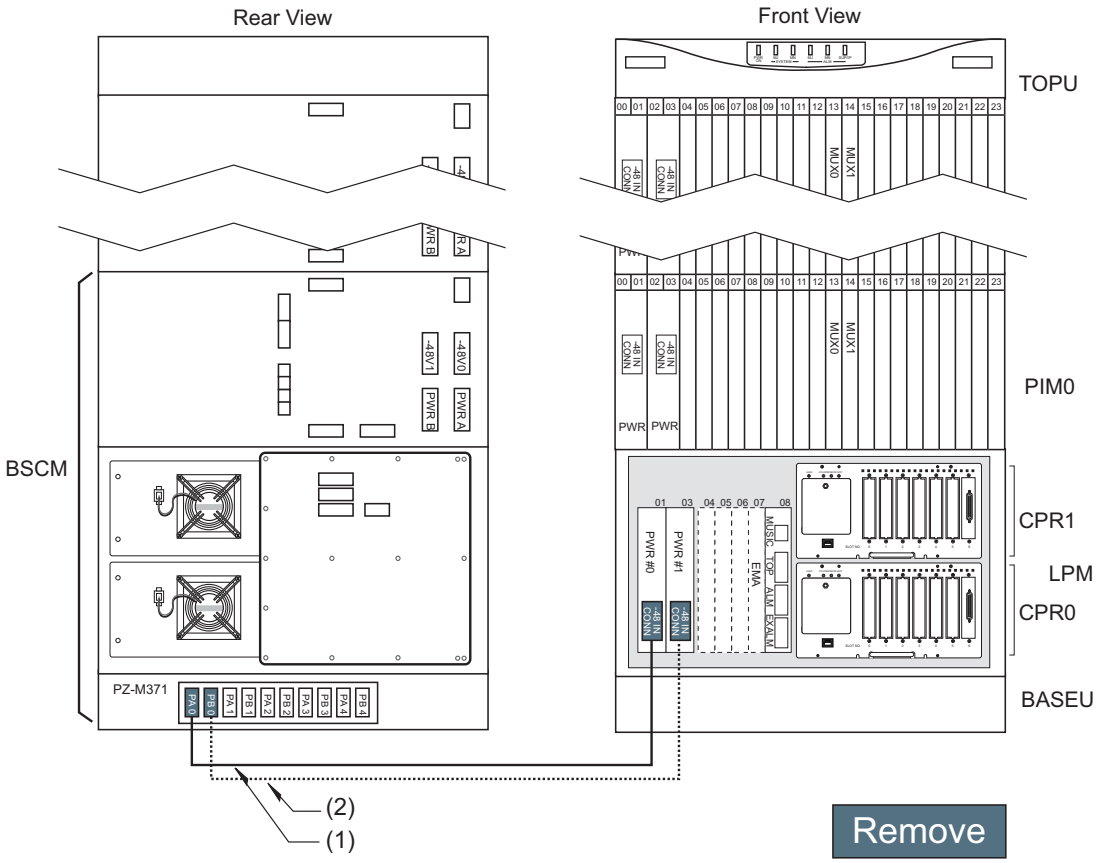
2.8 Remove Unnecessary Cables from IPX

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(1) Internal Power Cable

Remove the unnecessary power cables from IPX as follows:

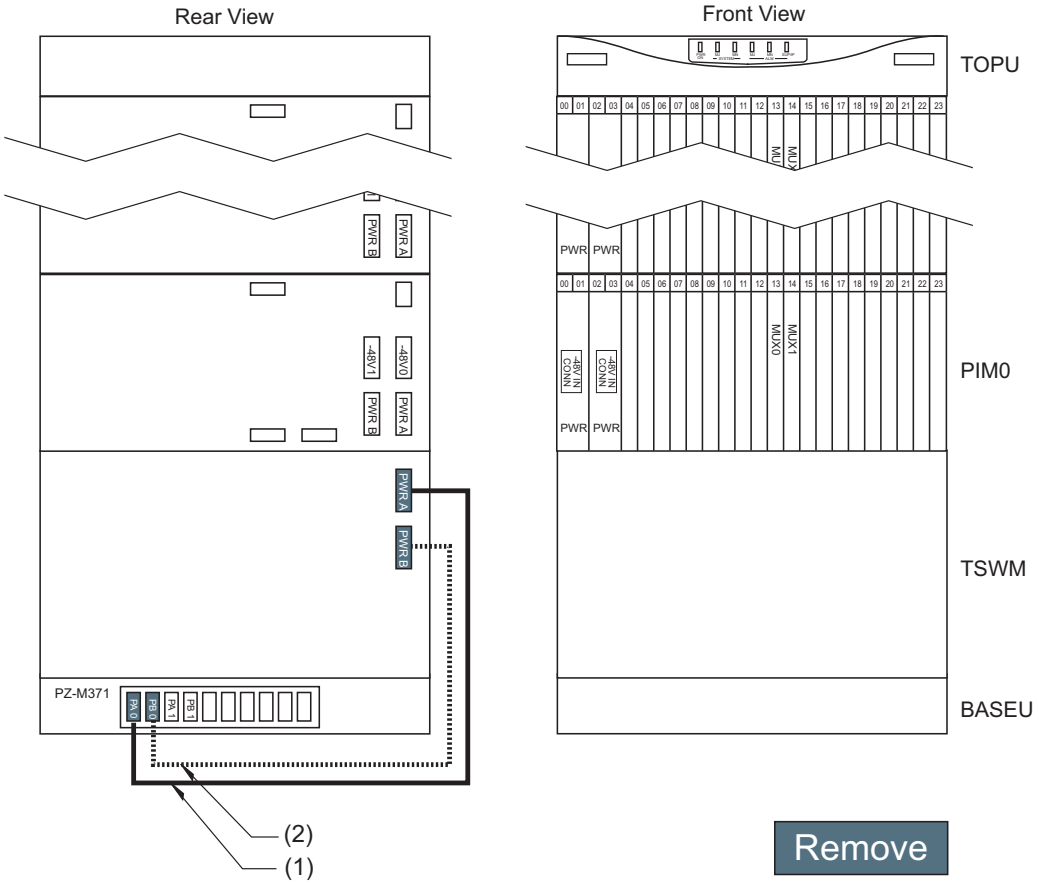
Remove Power Cables: IMG 0



Remove Power Cables: IMG 0

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	BASEU	PA 0	LPM (PWR)	-48V IN CONN	MISC PWR CA-A	
2	BASEU	PB 0	LPM (PWR)	-48V IN CONN	MISC PWR CA-B	

Remove Power Cables: IMG 1 (1/2/3/4-PIM Configuration)



Remove Power Cables: IMG 1 (1/2/3/4-PIM Configuration)

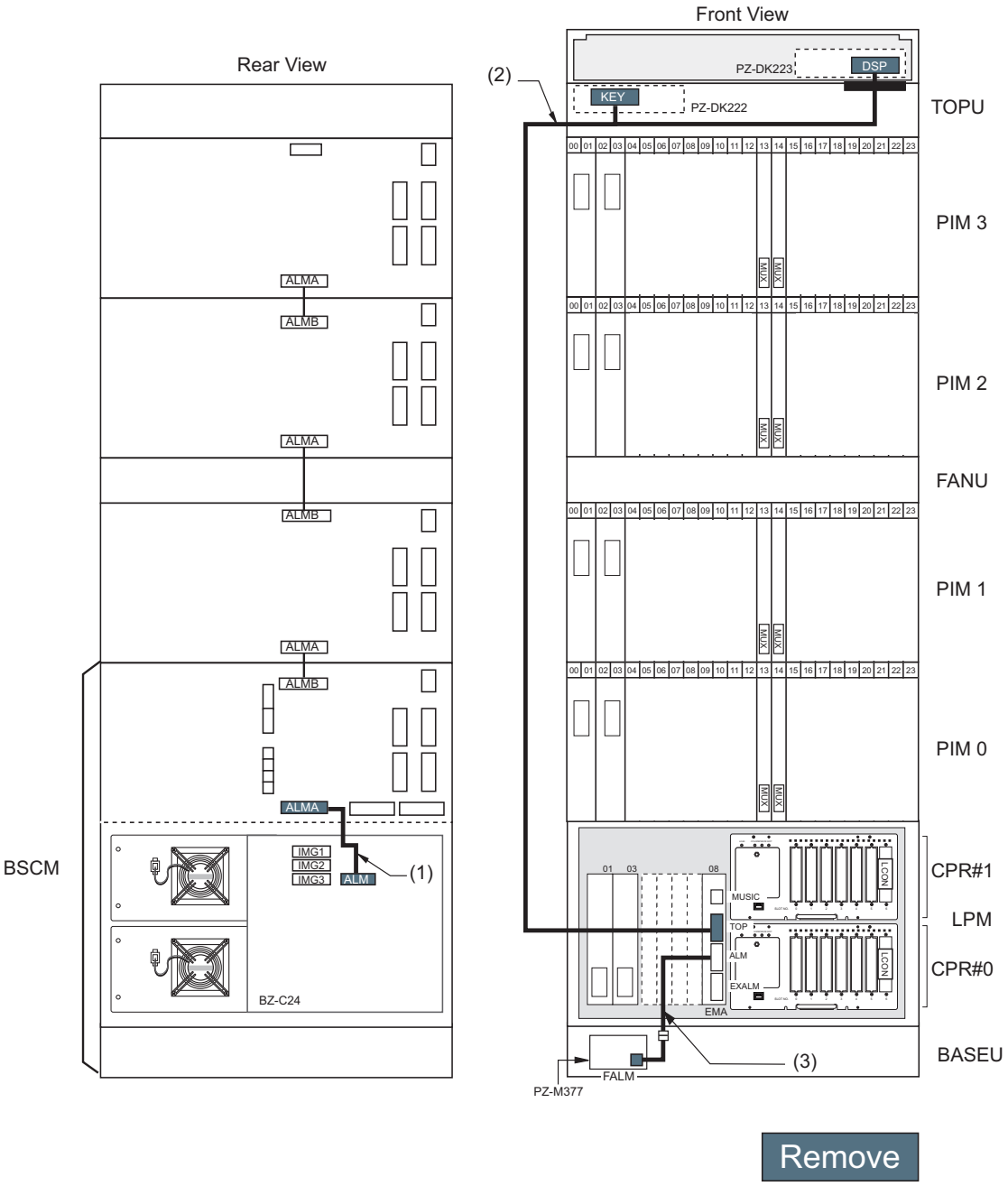
No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	BASEU	PA 0	TSWM	PWR A	4P PWR CA-A	
2	BASEU	PB 0	TSWM	PWR B	4P PWR CA-B	

(2) Internal Bus Cable

Remove the following unnecessary internal bus cables from IPX BASEU, LPM, PIMs and TOPU.



Remove Internal Bus Cables: IMG 0 (1/2/3/4-PIM Configuration)

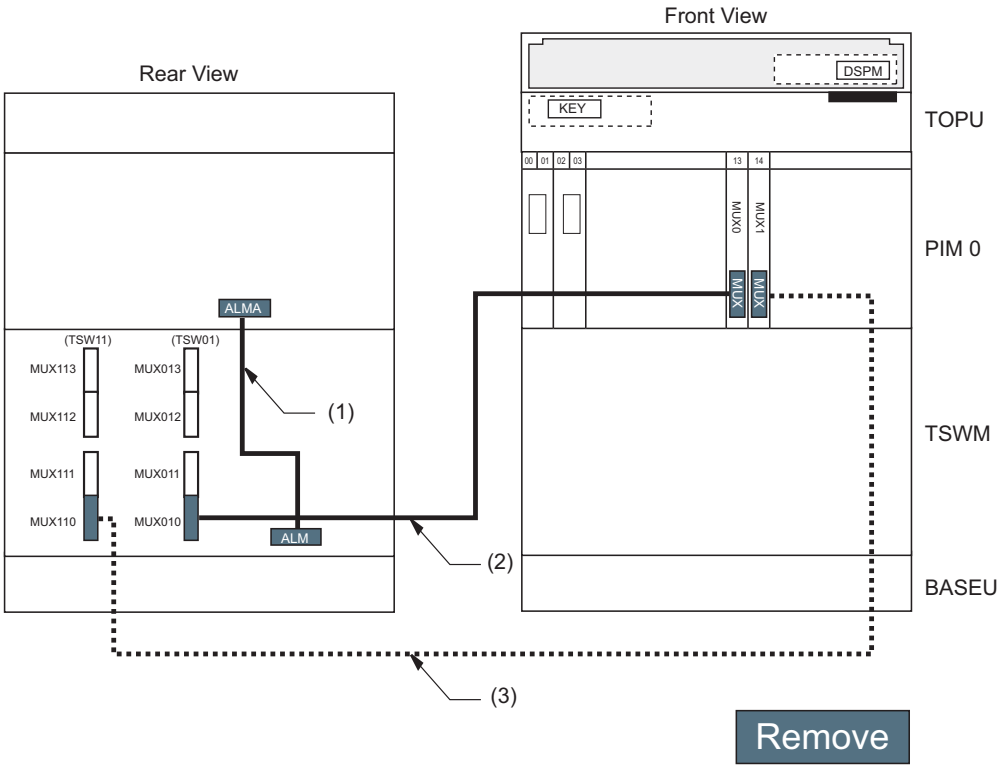


Remove Internal Bus Cables: IMG 0 (4-IMG Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/ Module	Connector Name		
1	LPM (CPR 0)	ALM	PIM0	ALMA	20AL-(60) FLT CA	
2	LPM	TOP (EMA front connector)	TOPU	KEY and DSP (DSPL for single stack)	DSPKEY CA-A **Note 1**	
3	LPM	TOP (EMA front connector)	BASEU	(FALM)	FALM CA-A	

Note 1: Alarm lamps on IPX TOPU are not used in the migrated system.

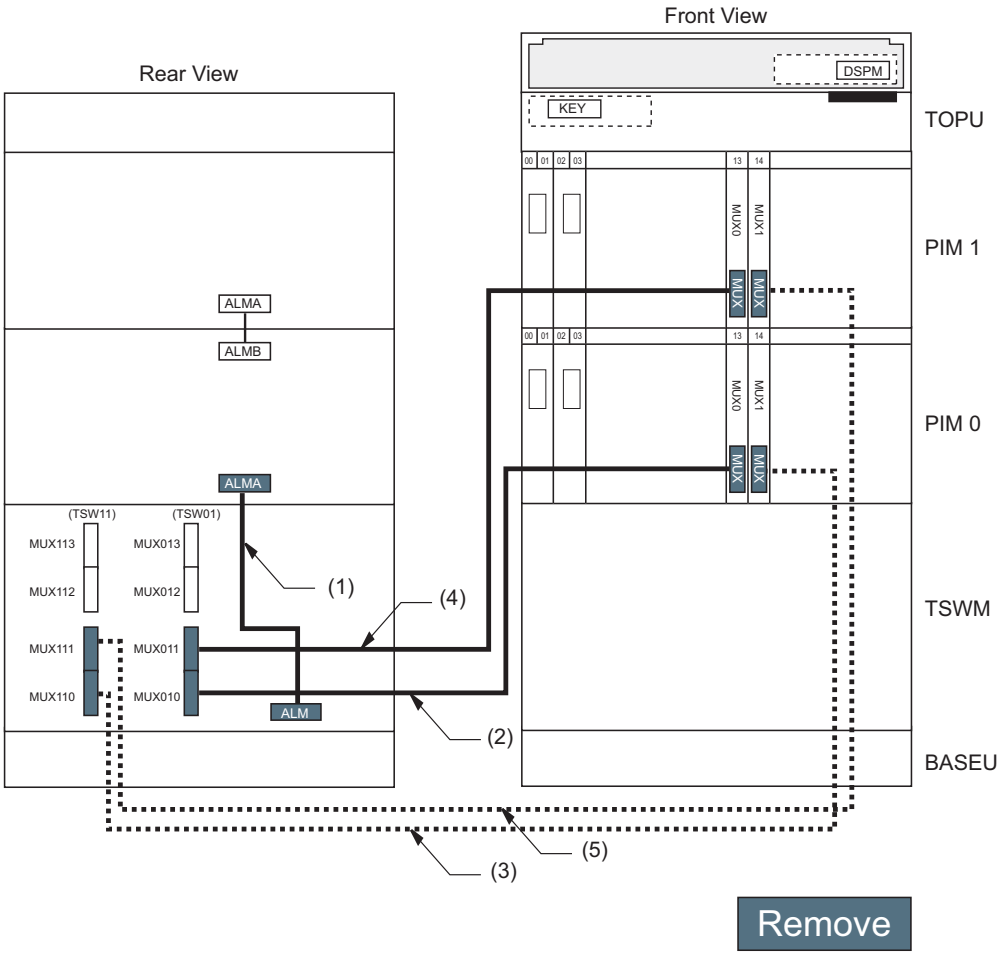
Remove Internal Bus Cables: IMG 1 (1-PIM Configuration)



Remove Internal Bus Cables: IMG 1 (1-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	ALM	PIM0	ALMA	20AL-(60) FLT CA	
2	TSWM	MUX 010	PIM0	MUX (slot 13)	34PH MT24 TSW CA-D	TSW 01
3	TSWM	MUX 110	PIM0	MUX (slot 14)	34PH MT24 TSW CA-D	TSW 11

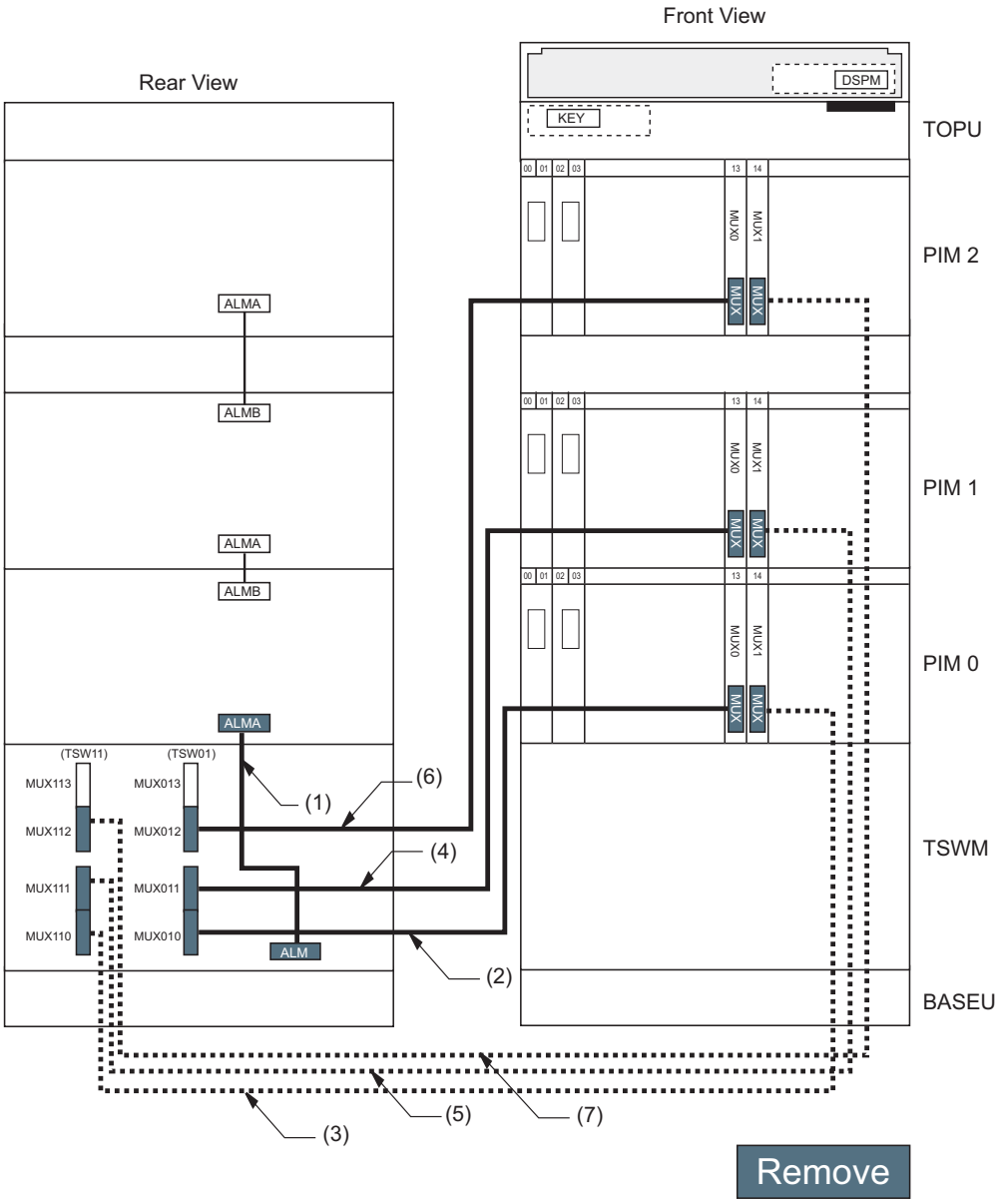
Remove Internal Bus Cables: IMG 1 (2-PIM Configuration)



Remove Internal Bus Cables: IMG 1 (2-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	ALM	PIM0	ALMA	20AL-(60) FLT CA	
2	TSWM	MUX 010	PIM0	MUX (slot 13)	34PH MT24 TSW CA-D	TSW 01
3	TSWM	MUX 110	PIM0	MUX (slot 14)	34PH MT24 TSW CA-D	TSW 11
4	TSWM	MUX 011	PIM1	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 01
5	TSWM	MUX 111	PIM1	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 11

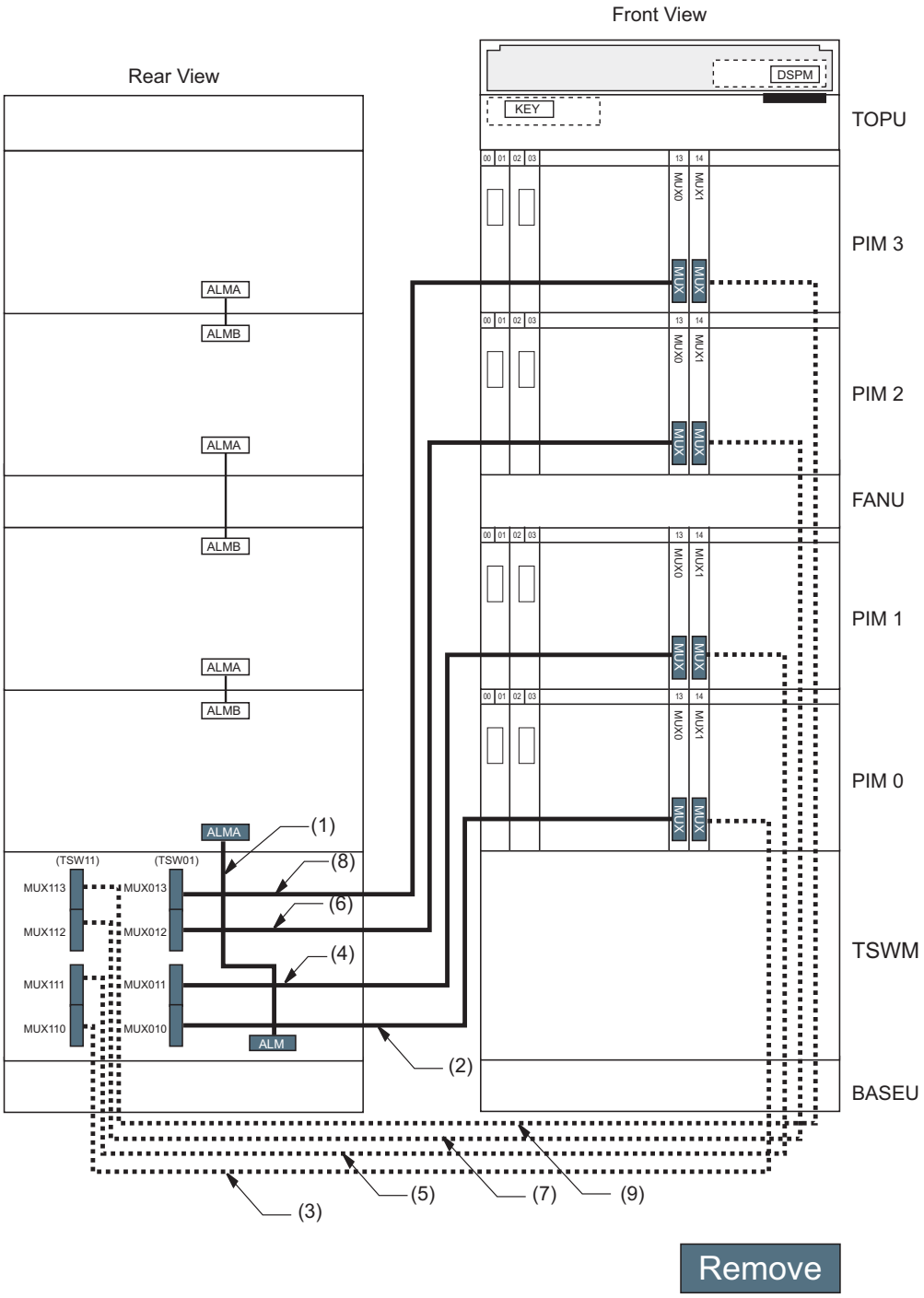
Remove Internal Bus Cables: IMG 1 (3-PIM Configuration)



Remove Internal Bus Cables: IMG 1 (3-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	ALM	PIM0	ALMA	20AL-(60) FLT CA	
2	TSWM	MUX 010	PIM0	MUX (slot 13)	34PH MT24 TSW CA-D	TSW 01
3	TSWM	MUX 110	PIM0	MUX (slot 14)	34PH MT24 TSW CA-D	TSW 11
4	TSWM	MUX 011	PIM1	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 01
5	TSWM	MUX 111	PIM1	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 11
6	TSWM	MUX 012	PIM2	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 01
7	TSWM	MUX 112	PIM2	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 11

Remove Internal Bus Cables: IMG 1 (4-PIM Configuration)



Remove Internal Bus Cables: IMG 1 (4-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	ALM	PIM 0	ALMA	20AL-(60) FLT CA	
2	TSWM	MUX 010	PIM 0	MUX (slot 13)	34PH MT24 TSW CA-D	TSW 01
3	TSWM	MUX 110	PIM 0	MUX (slot 14)	34PH MT24 TSW CA-D	TSW 11
4	TSWM	MUX 011	PIM 1	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 01
5	TSWM	MUX 111	PIM 1	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 11
6	TSWM	MUX 012	PIM 2	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 01
7	TSWM	MUX 112	PIM 2	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 11
8	TSWM	MUX 013	PIM 3	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 01
9	TSWM	MUX 113	PIM 3	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 11

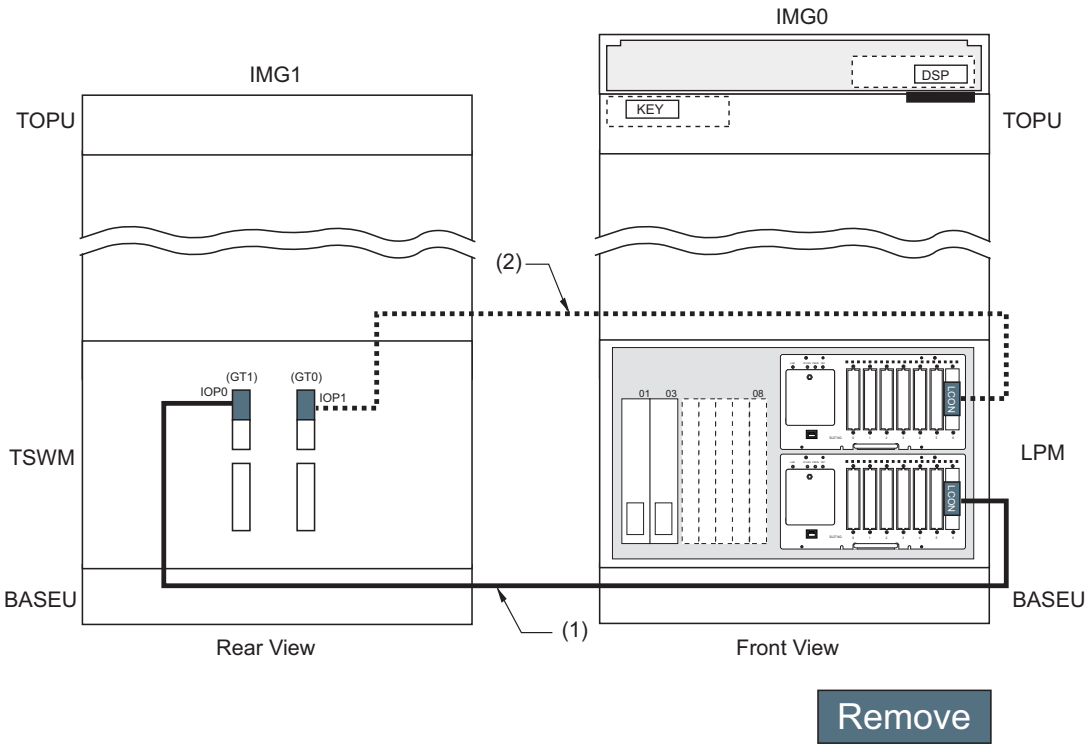
(3) Frame-to-Frame Cable

[Inter-Frame ISA Bus Cable]

Remove the following unnecessary inter-frame ISA bus cables between IMG 0 and IMG 1.

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Remove Inter-Frame ISA Bus Cables: IMG 0 to IMG 1



Remove Inter-Frame ISA Bus Cables: IMG 0 to IMG 1

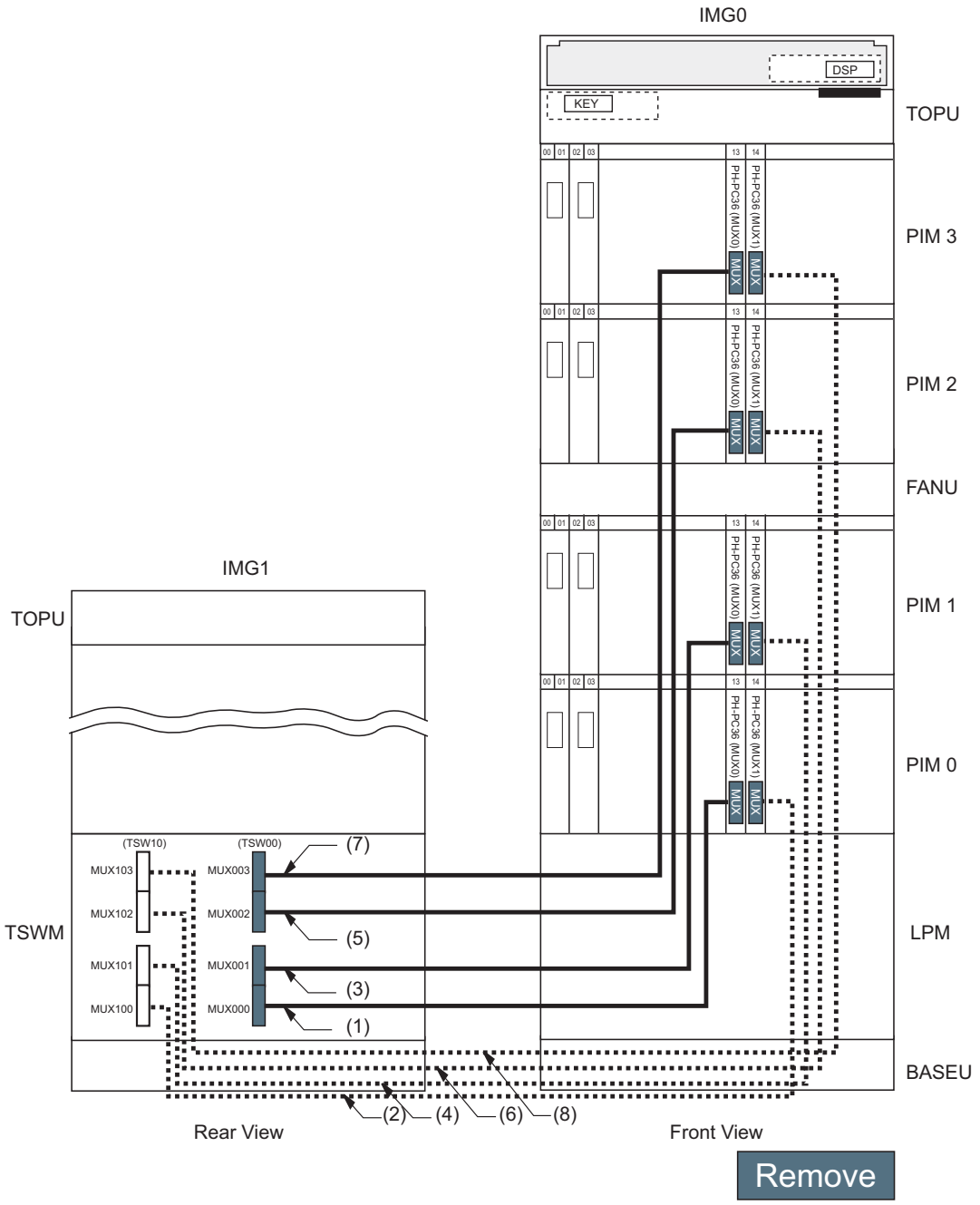
No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	CPR 0 in LPM	LCON (PZ-GT26)	TSWM	IOP 0 (slot 11)	34PH 50AL CA-A	
2	CPR 1 in LPM	LCON (PZ-GT26)	TSWM	IOP 1 (slot 10)	34PH 50AL CA-A	

[Inter-Frame Bus Cable]

Remove the following unnecessary inter-frame bus cables.

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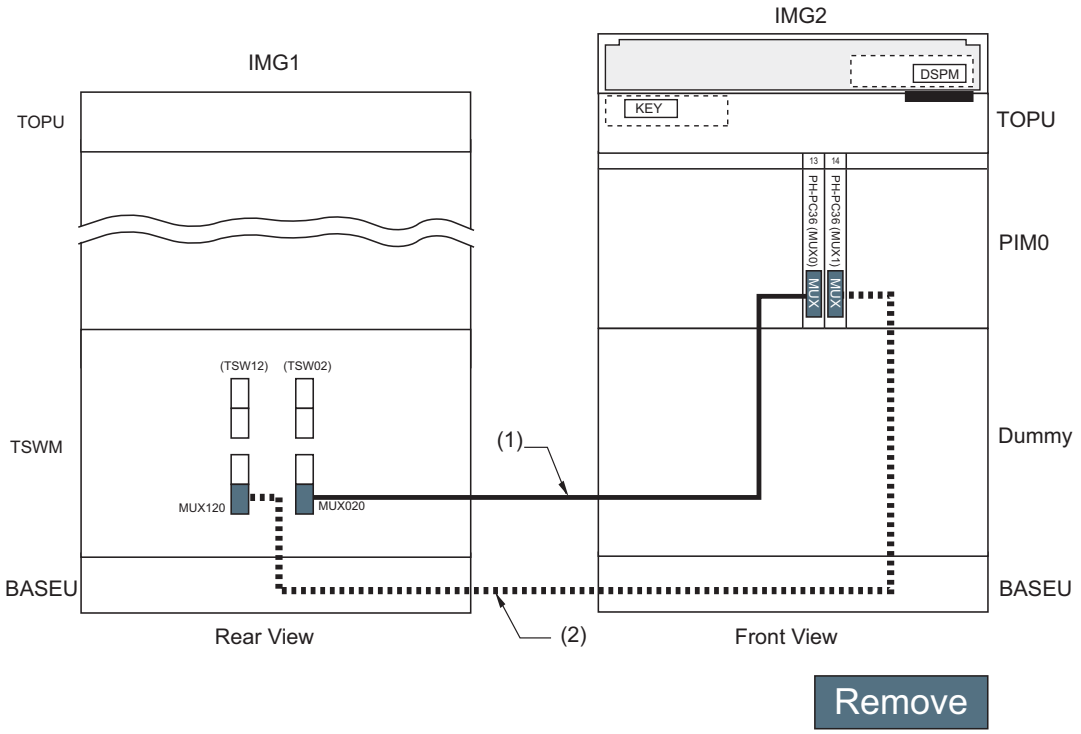
Remove Inter-Frame Bus Cables: IMG 0 to IMG 1



Remove Inter-Frame Bus Cables: IMG 0 to IMG 1

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 000	PIM0 (IMG0)	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 00
2	TSWM	MUX 100	PIM0 (IMG0)	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 10
3	TSWM	MUX 001	PIM1 (IMG0)	MUX (slot 13)	34PH MT24 TSW CA-E	TSW 00
4	TSWM	MUX 101	PIM1 (IMG0)	MUX (slot 14)	34PH MT24 TSW CA-E	TSW 10
5	TSWM	MUX 002	PIM2 (IMG0)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 00
6	TSWM	MUX 102	PIM2 (IMG0)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 10
7	TSWM	MUX 003	PIM3 (IMG0)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 00
8	TSWM	MUX 103	PIM3 (IMG0)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 10

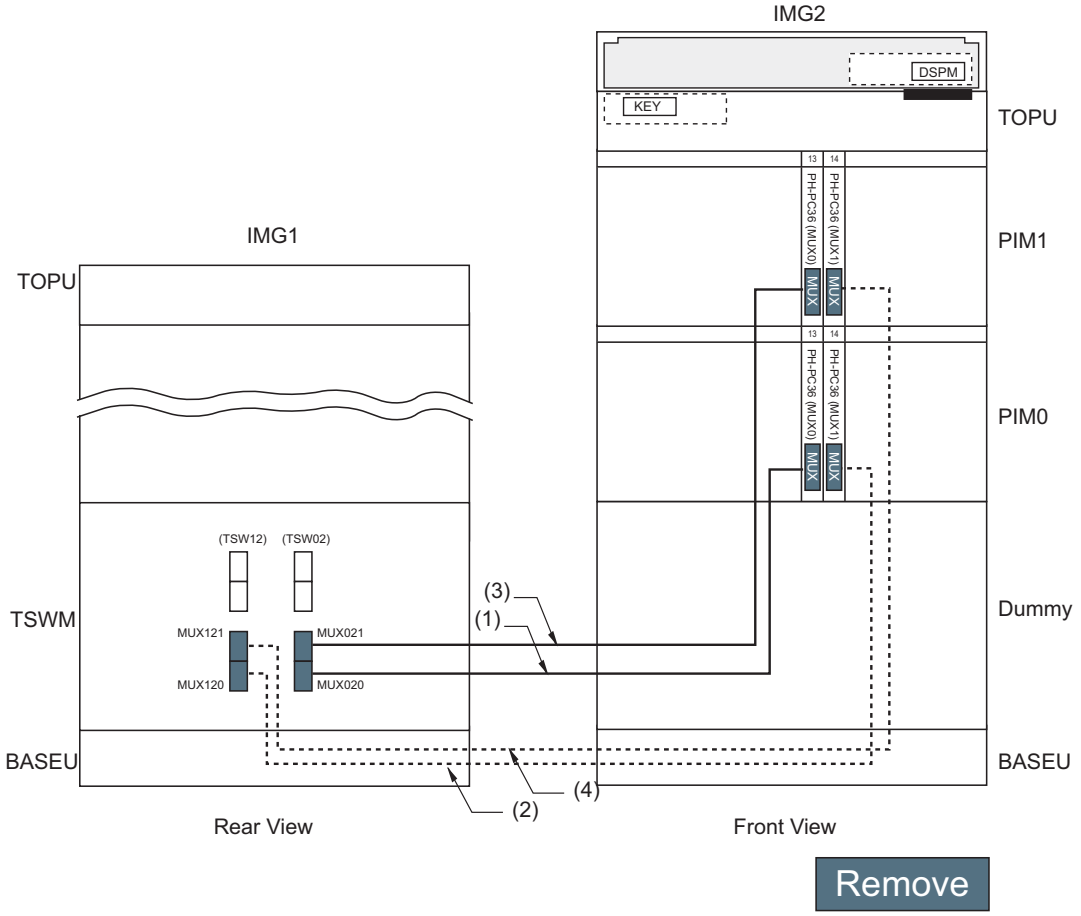
Remove Inter-Frame Bus Cables: IMG1 to IMG2 (1-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (1-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 020	PIM0 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 02
2	TSWM	MUX 120	PIM0 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 12

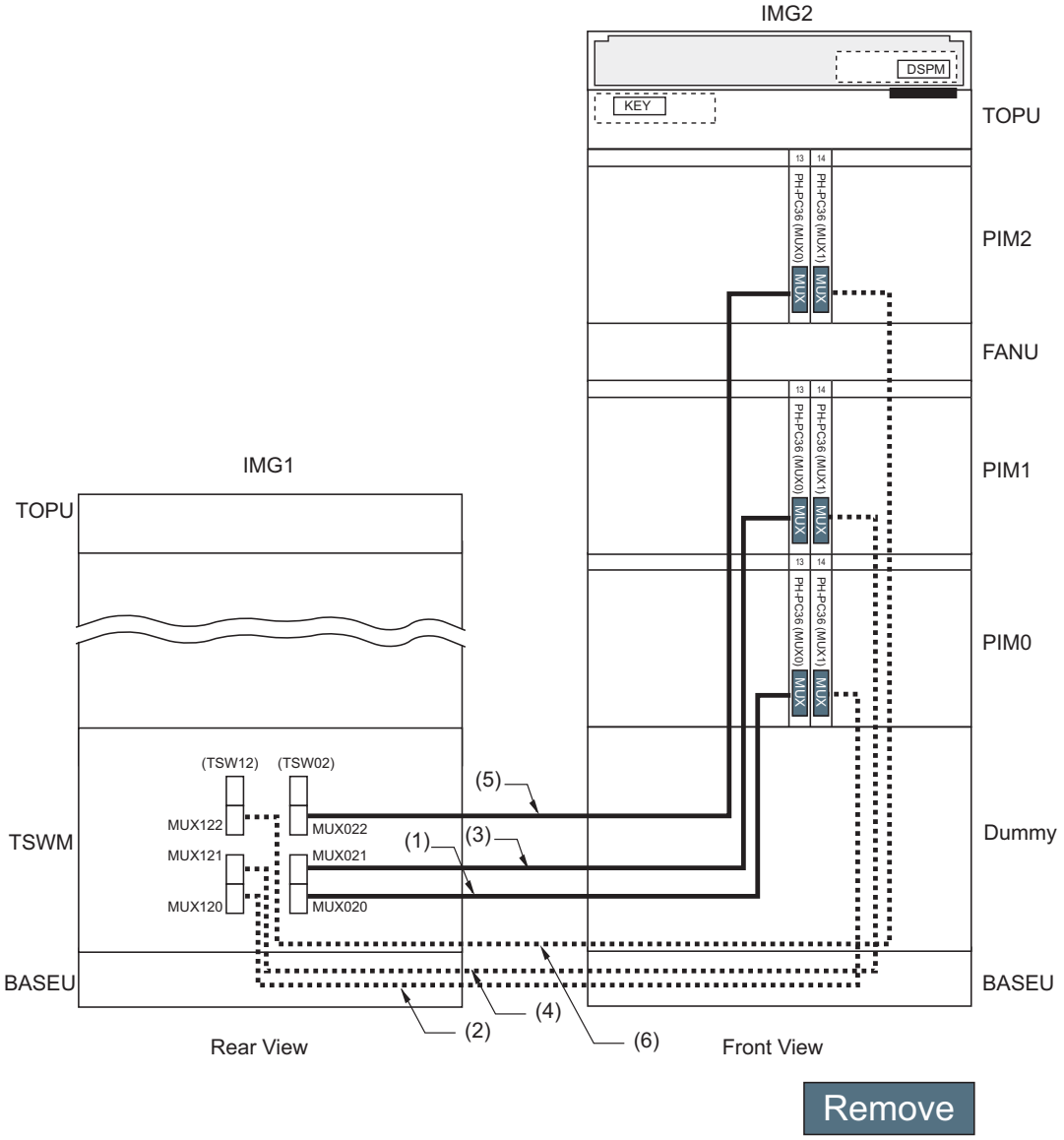
Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (2-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (2-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 020	PIM0 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 02
2	TSWM	MUX 120	PIM0 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 12
3	TSWM	MUX 021	PIM1 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 02
4	TSWM	MUX 121	PIM1 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 12

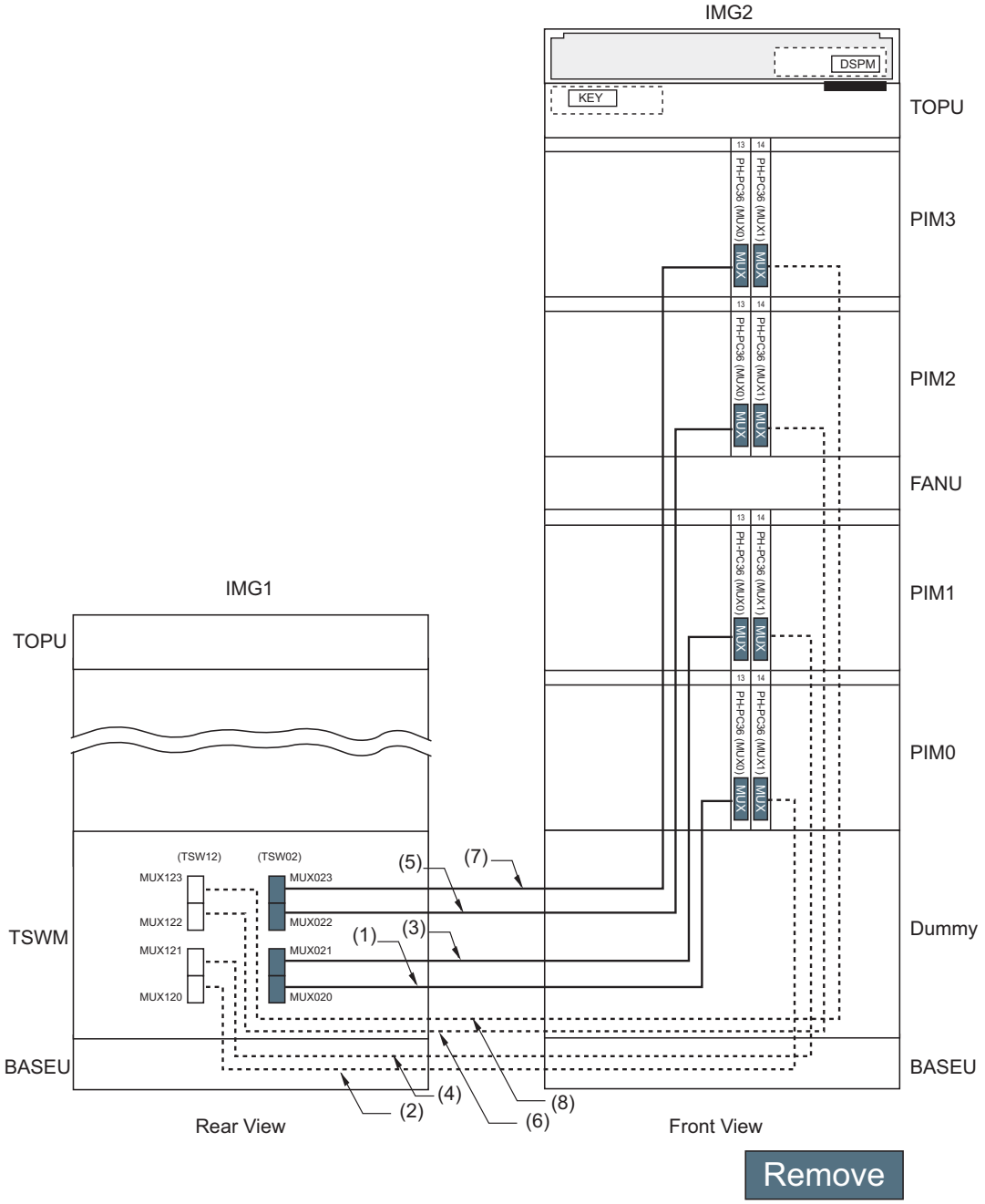
Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (3-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (3-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 020	PIM0 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 02
2	TSWM	MUX 120	PIM0 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 12
3	TSWM	MUX 021	PIM1 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 02
4	TSWM	MUX 121	PIM1 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 12
5	TSWM	MUX 022	PIM2 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 02
6	TSWM	MUX 122	PIM2 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 12

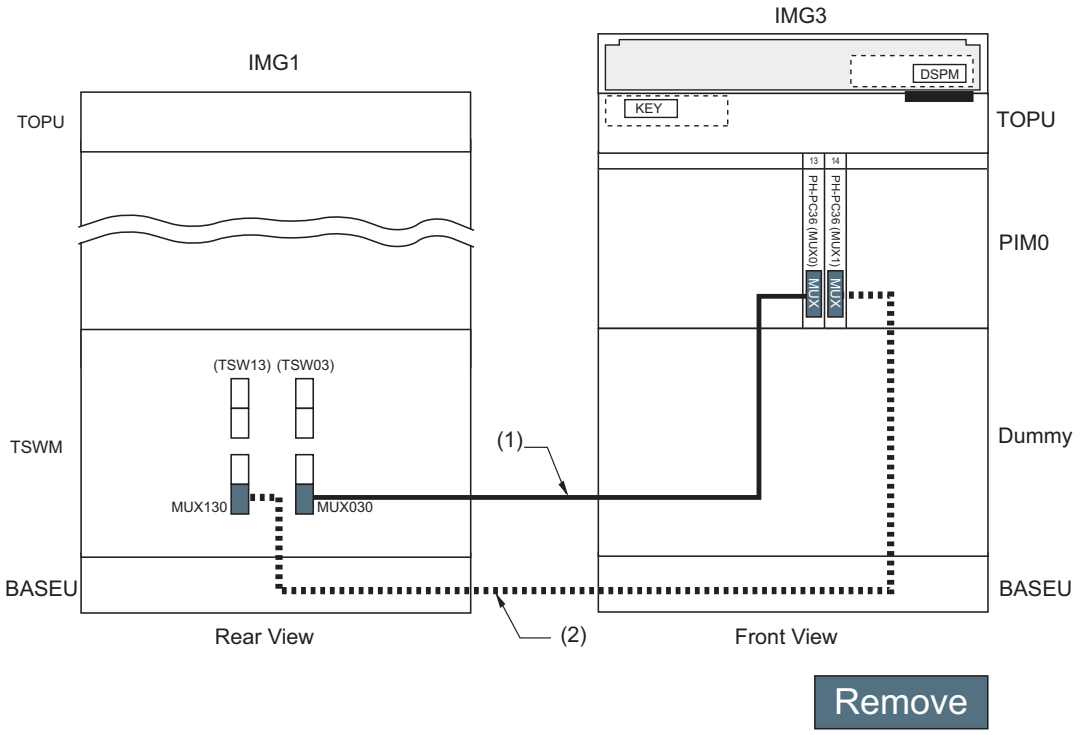
Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (4-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (4-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 020	PIM0 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 02
2	TSWM	MUX 120	PIM0 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 12
3	TSWM	MUX 021	PIM1 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 02
4	TSWM	MUX 121	PIM1 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 12
5	TSWM	MUX 022	PIM2 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 02
6	TSWM	MUX 122	PIM2 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 12
7	TSWM	MUX 023	PIM3 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 02
8	TSWM	MUX 123	PIM3 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 12

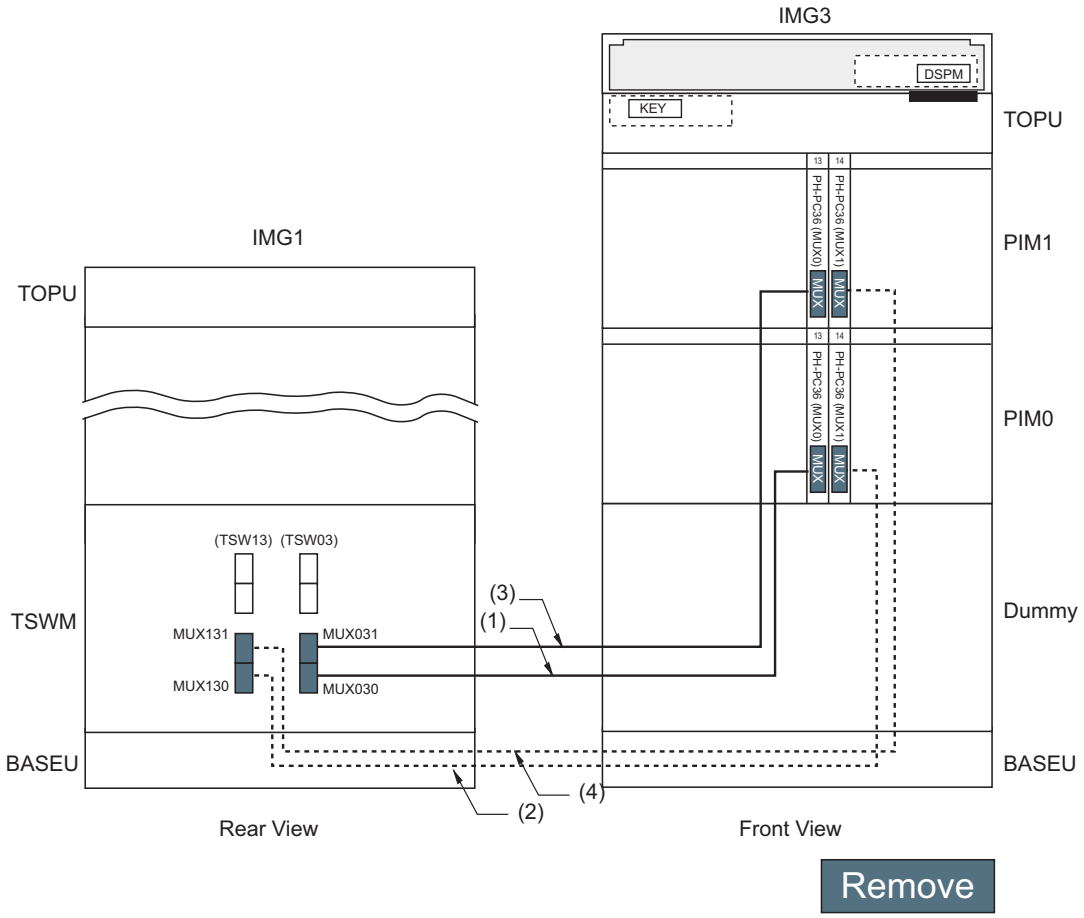
Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (1-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (1-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 030	PIM 0 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
2	TSWM	MUX 130	PIM 0 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13

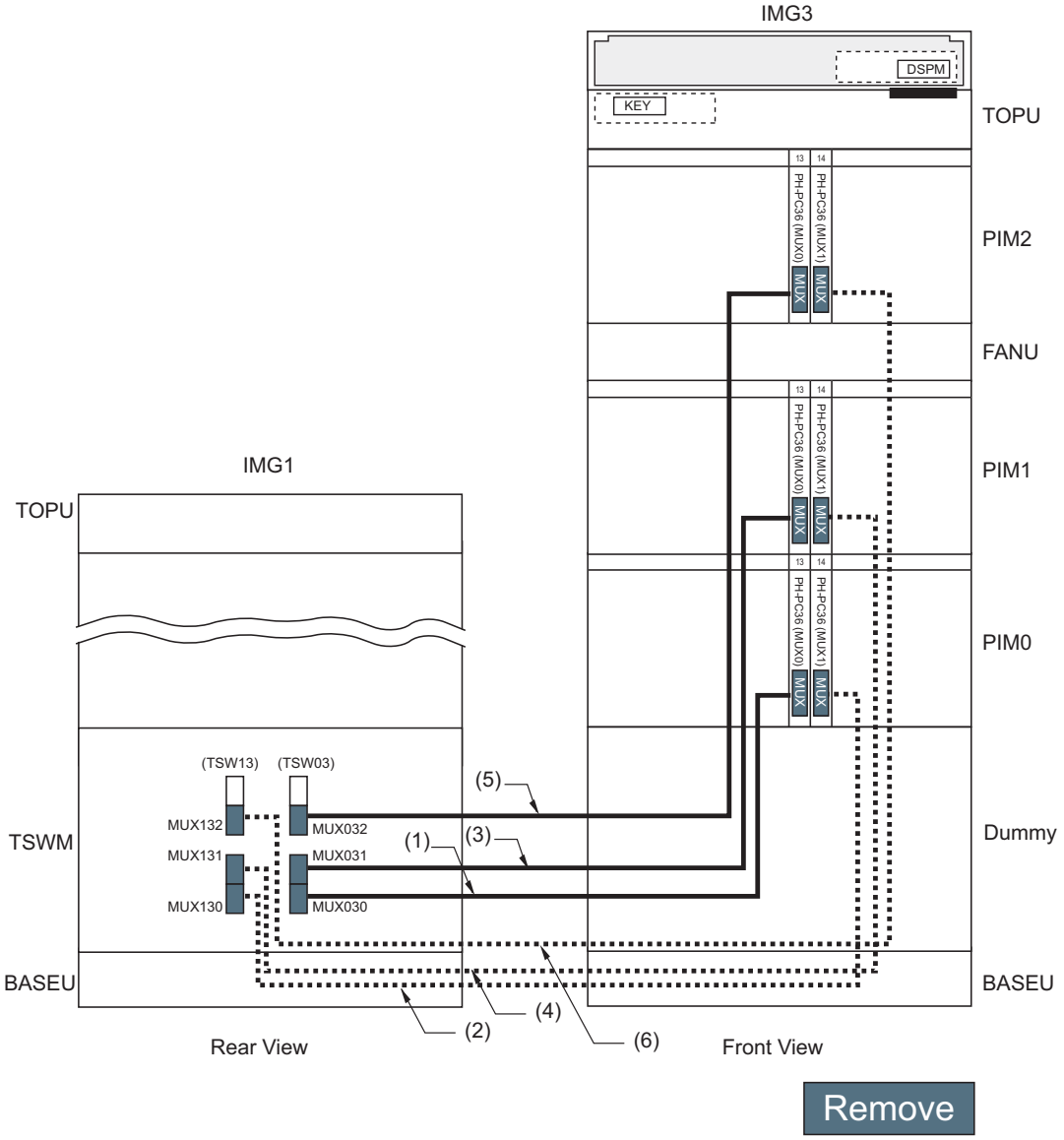
Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (2-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (2-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 030	PIM0 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
2	TSWM	MUX 130	PIM0 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13
3	TSWM	MUX 031	PIM1 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
4	TSWM	MUX 131	PIM1 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13

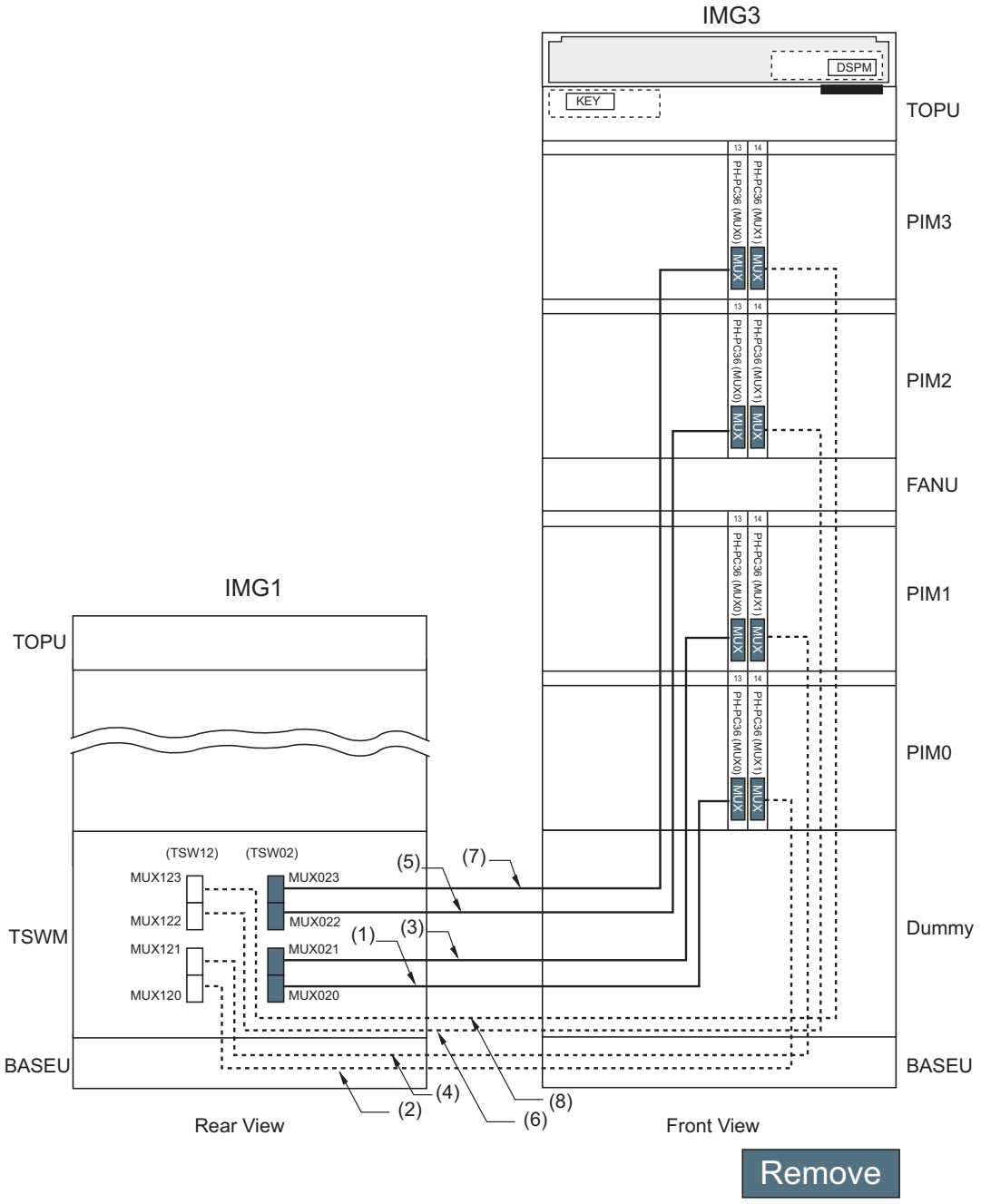
Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (3-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (3-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 030	PIM0 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
2	TSWM	MUX 130	PIM0 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13
3	TSWM	MUX 031	PIM1 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
4	TSWM	MUX 131	PIM1 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13
5	TSWM	MUX 032	PIM2 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-I	TSW 03
6	TSWM	MUX 132	PIM2 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-I	TSW 13

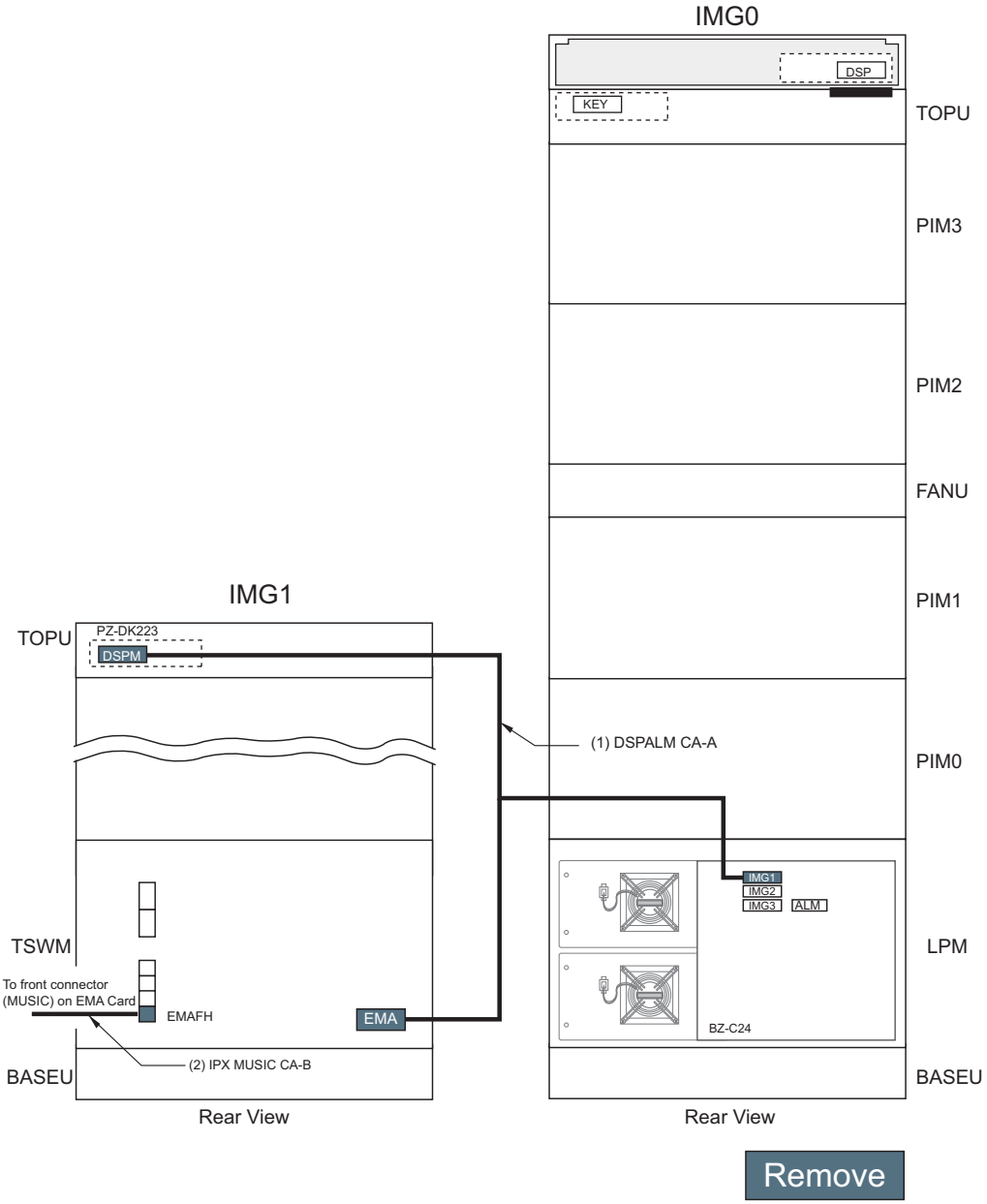
Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (4-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (4-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 030	PIM0 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
2	TSWM	MUX 130	PIM0 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13
3	TSWM	MUX 031	PIM1 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
4	TSWM	MUX 131	PIM1 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13
5	TSWM	MUX 032	PIM2 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-I	TSW 03
6	TSWM	MUX 132	PIM2 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-I	TSW 13
7	TSWM	MUX 033	PIM3 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-J	TSW 03
8	TSWM	MUX 133	PIM3 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-J	TSW 13

Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 1

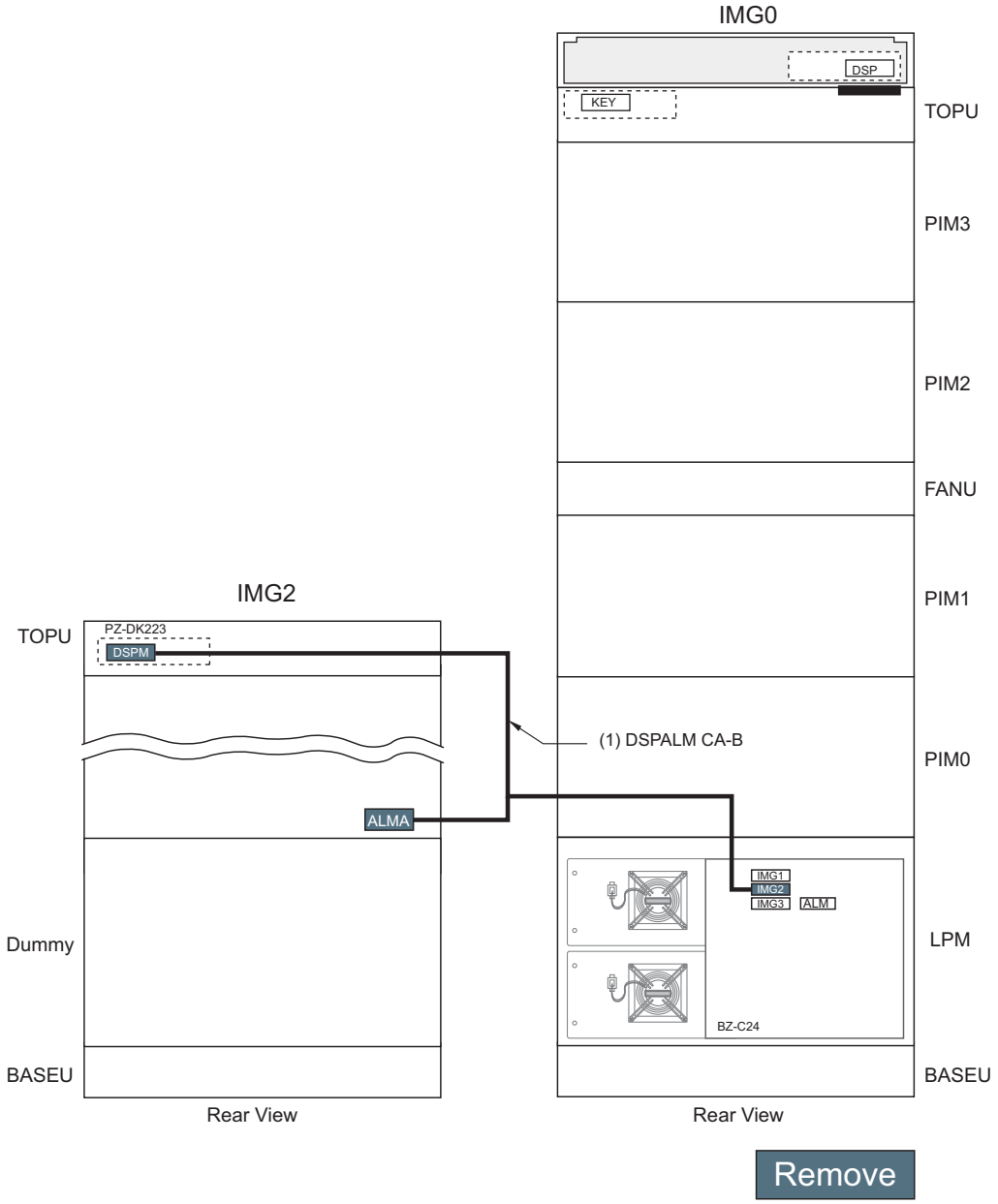


Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 1

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	LPM	IMG 1	TOPU (IMG 1)	DSP	DSPALM CA-A **Note 2**	
			TSWM	EMA		

Note 2: Alarm lamps on IPX TOPU are not used in the migrated system.

Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 2

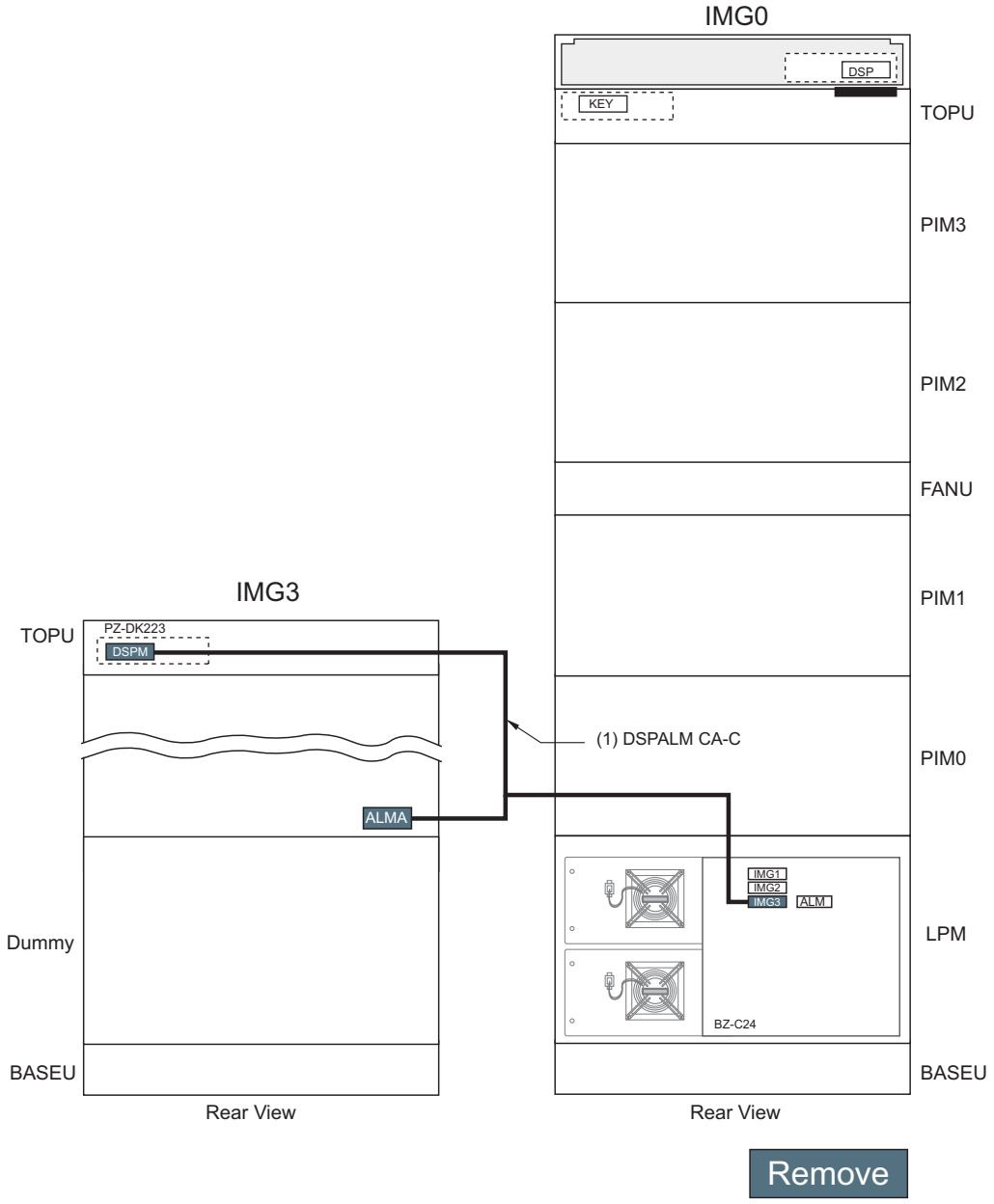


Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 2

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	LPM	IMG 2	TOPU (IMG2)	DSP	DSPALM CA-B **Note 3**	
			PIM0 (IMG2)	ALMA		

Note 3: Alarm lamps on IPX TOPU are not used in the migrated system.

Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 3



Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 3

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	LPM	IMG 3	TOPU (IMG3)	DSP	DSPALM CA-C **Note 4**	
			PIM0 (IMG3)	ALMA		

Note 4: Alarm lamps on IPX TOPU are not used in the migrated system.

2.9 Extract the CPR and Circuit Cards from the LPM

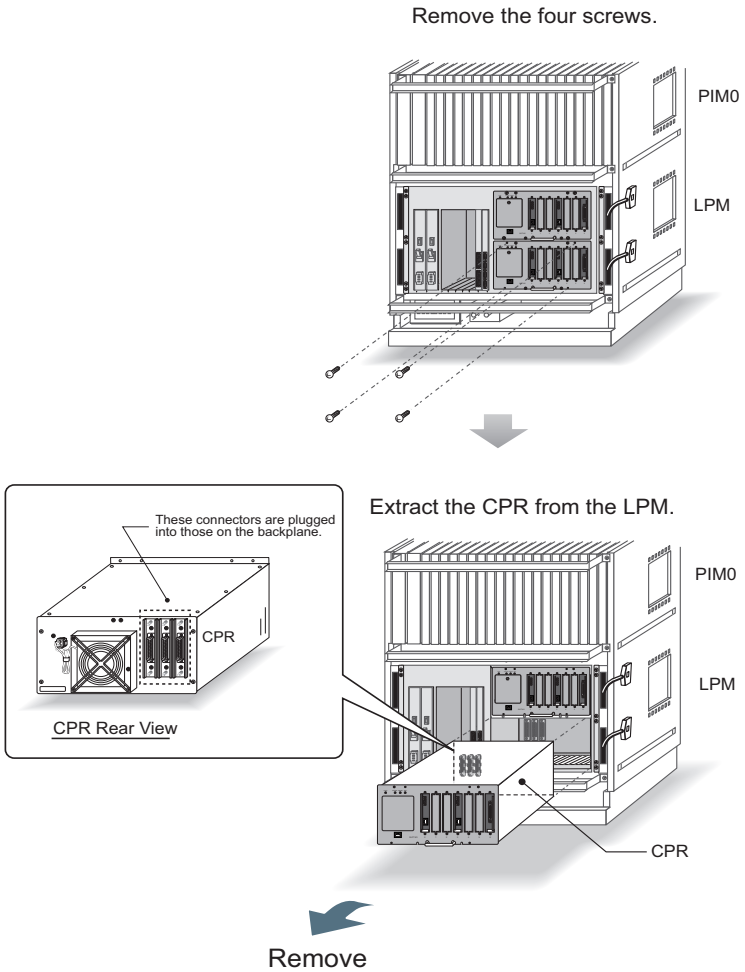


Extract the CPR and circuit cards such as IOC, EMA and MISC, from the LPM.

Note: The CPR is plugged into the three connectors on the LPM backplane.

How to Extract CPR from LPM

Remove the four screws fastened onto the CPR (keep the removed screws).
Then, extract the CPR from the LPM with care.



2.10 Extract the LPM Inner Box

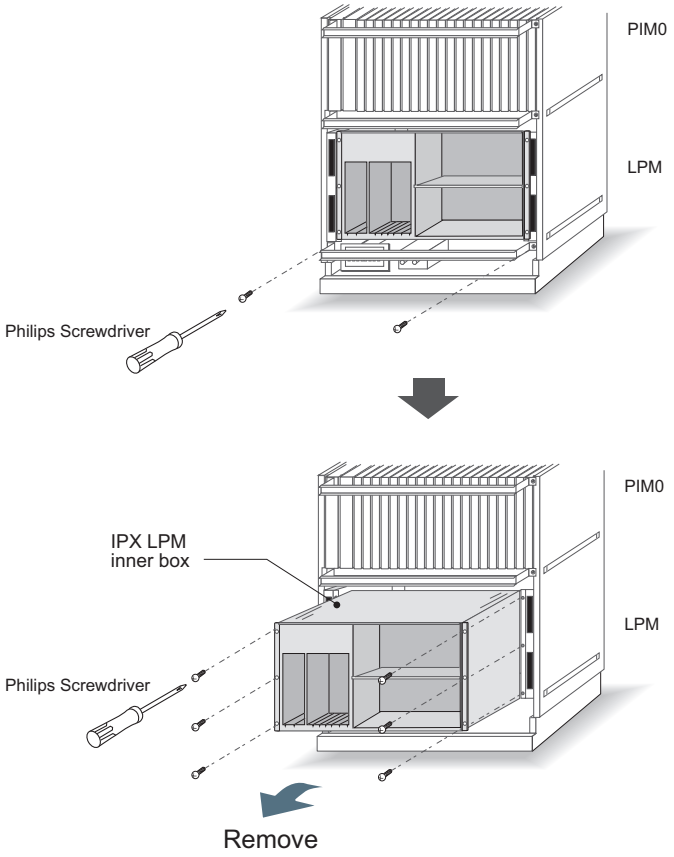


Remove the LPM inner box from the LPM as shown below.

Note: The inner box is supported within the LPM by six screws. Hold the LPM inner box firmly when removing the screws, to ensure the box does not fall.

How to Extract LPM Inner Box

- Removing IPX-LPM inner box



2.11 Mount the Cable Relay Box

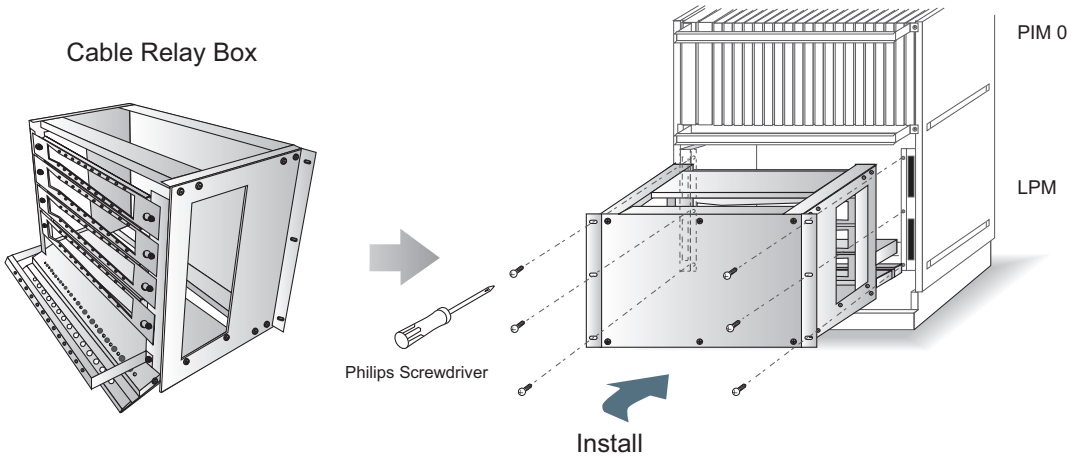


Mount the cable relay box into the LPM inner box mounted position.

Note: The cable relay box is supported within the LPM by six screws. Hold the cable relay box firmly when fastening the screws not to drop the box.

How to Install Cable Relay Box

- Installing Cable Relay Box



2.12 Cable Connections



This section only describes the cable connections specific to the migrated system between SV9500 server/TSW-BOX and IPX PIMs. For the other normal cable connections for SV9500 and IPX, please refer to the SV9500 Appliance Model Installation Manual and the NEAX2400 IPX Installation Manual.

2.12.1 Power Cable Connection

(1) For SV9500 Side

When you migrate your system from IPX to SV9500, the SV9500 telephony server and TSW-BOX will be operated on DC power. For details on power cable connection refer to the following:

- The power cable connection for SV9500 Telephony Server

  Refer to “Source Power Cable and Ground Cable Connection on BASEU” and “Cable Connection to SV9500 Server” - “Power Cable Connection for DC-Powered Model” in Chapter 3 of SV9500 Appliance Model Installation Manual.

- The power cable connection for TSW-BOX

  Refer to “Cable Connection for DC-Powered Model (4-IMG Configuration)” in Chapter 4 of SV9500 Appliance Model Installation Manual.

(2) For IPX Side

The power cable connection for IPX PIM is the same as the existing connection. If you use the existing cable connection, there is no particular work for the power cable connection. Refer to 1.12.1Power Cable Connection for more information.

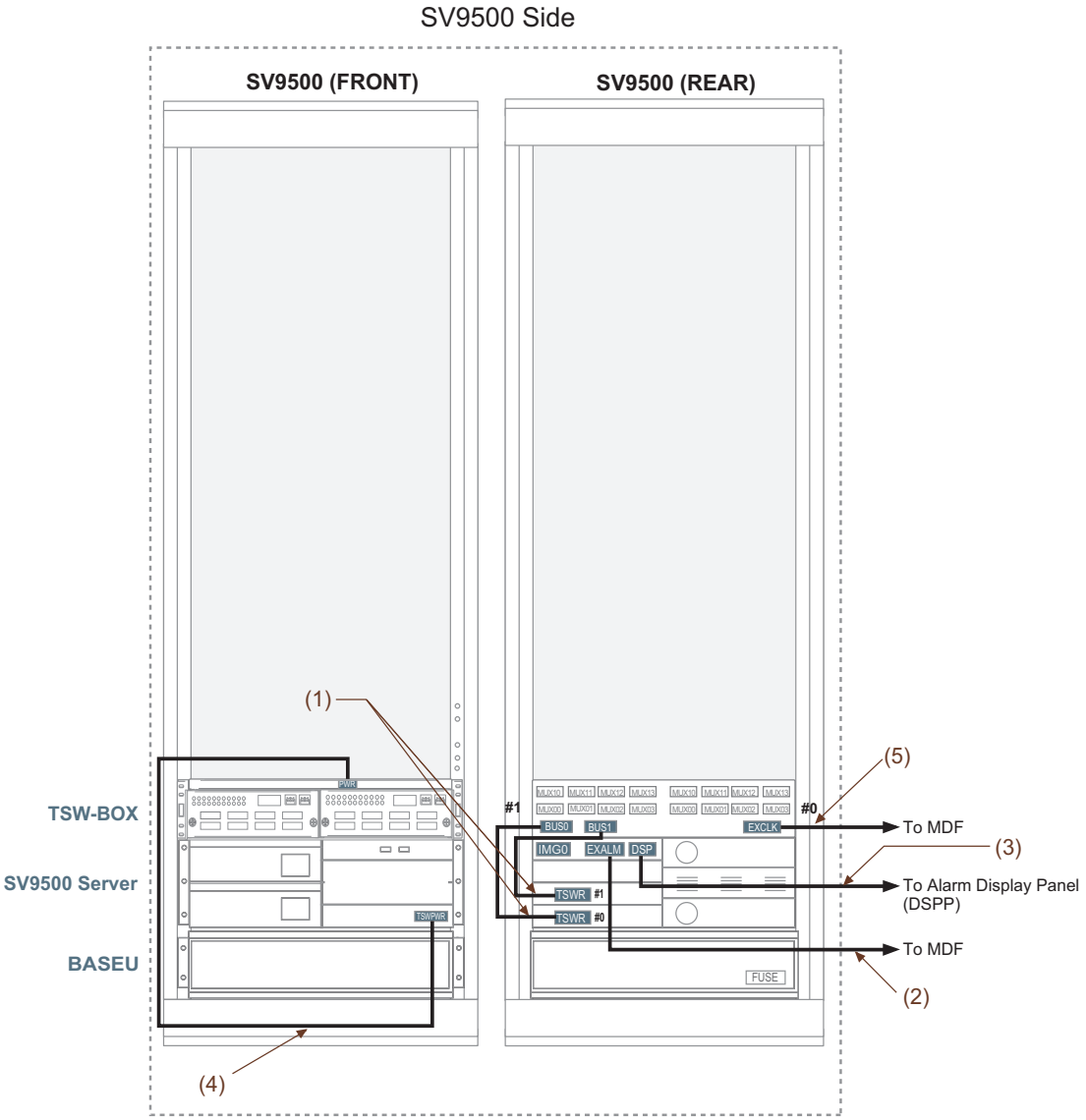
2.12.2 Bus Cable Connection

(1) Cable Connections Common to Both SV9500 Standard System and Migrated System

The figure below describes the cable connections common to both SV9500 standard system and the migrated system. For more details, see SV9500 Appliance Model Installation Manual.

Cable connections specific to the migrated system are explained in (2)Bus Cable Connection between TSW-BOX and IPX PIMs and (3)Alarm Cable Connection between SV9500 Server and IPX PIMs.

Overview of Bus Cable Connections



Cable Connections Applied to both SV9500 Standard and Migrated System

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/ Module	Connector Name		
(1)	SV9500 server (EXB-TSWR card #0)	TSWR	TSW-BOX	BUS0	D37-SC50 CA-E	
	SV9500 server (EXB-TSWR card #1)			BUS1		
(2)	SV9500 server (EMA SUB-A card)	EXALM	MDF		D25 EXALM CA-A	Necessary when External Alarm Indication Panel is used
(3)	SV9500 server (EMA SUB-A card)	DSP	Alarm Display Panel (DSPP)	J1	D15 ST-FF CA-C	Necessary when Alarm Display Panel (DSPP) is used
(4)	SV9500 server (TSWPWR card)	TSWPWR	TSW-BOX	PWR	D09 POW CA-A	
(5)	TSW-BOX	EXCLK	MDF		D37 EXCLK CA-A	Necessary when clock synchronization is performed Necessary when Music-On-Hold is used

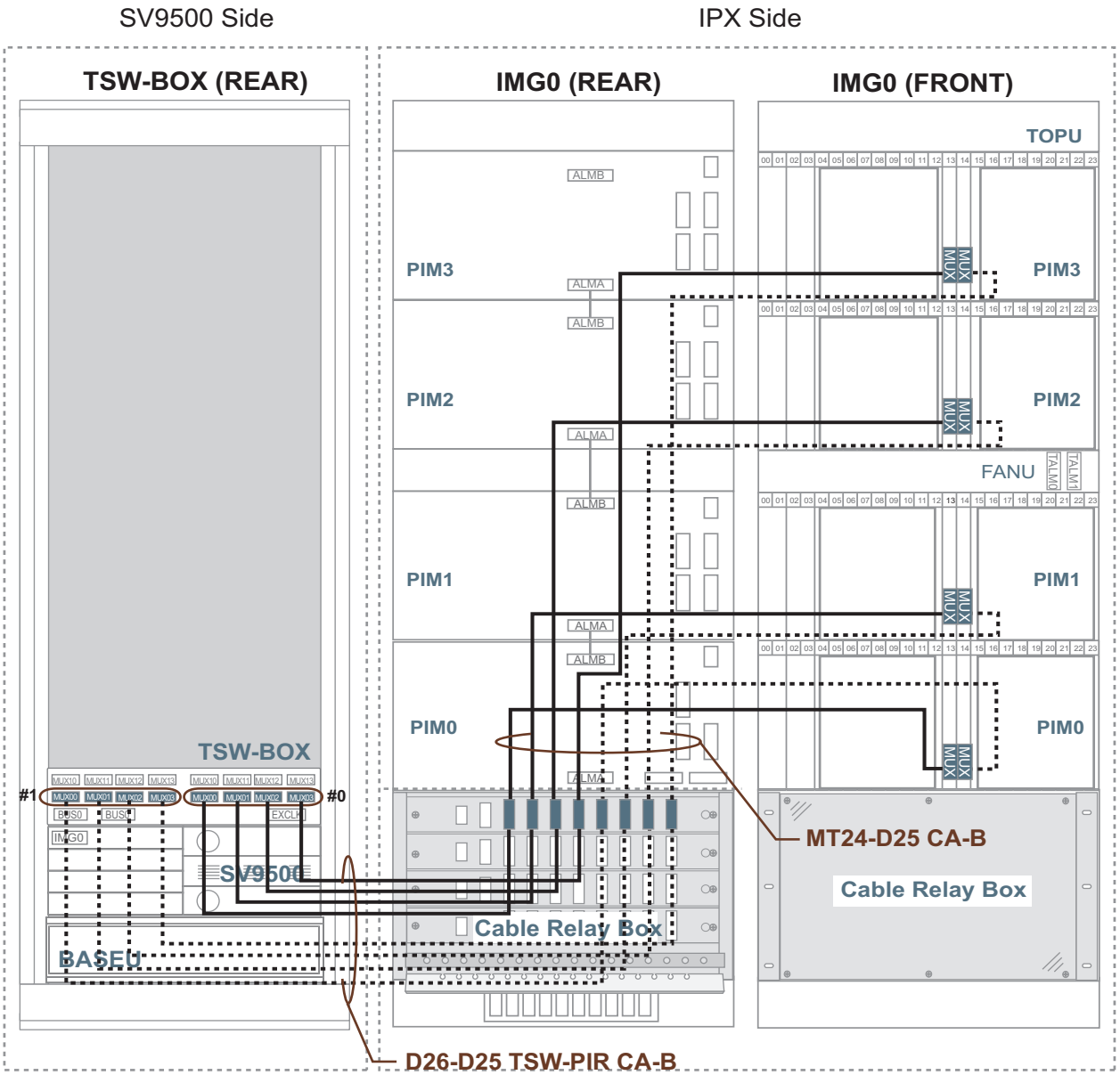
Note: For details on the above cable connections applied to both the SV9500 standard system and the migrated system, refer to SV9500 Appliance Model Installation Manual. For the bus cable connections specific to the migrated system, see (2)Bus Cable Connection between TSW-BOX and IPX PIMs.

(2) Bus Cable Connection between TSW-BOX and IPX PIMs

Run the bus cables between TSW-BOX and IPX PIMs through the cable relay box as follows:

[TSW-BOX - IPX PIMs of IMG0]

Cable Connections between TSW-BOX and IPX PIMs of IMG 0

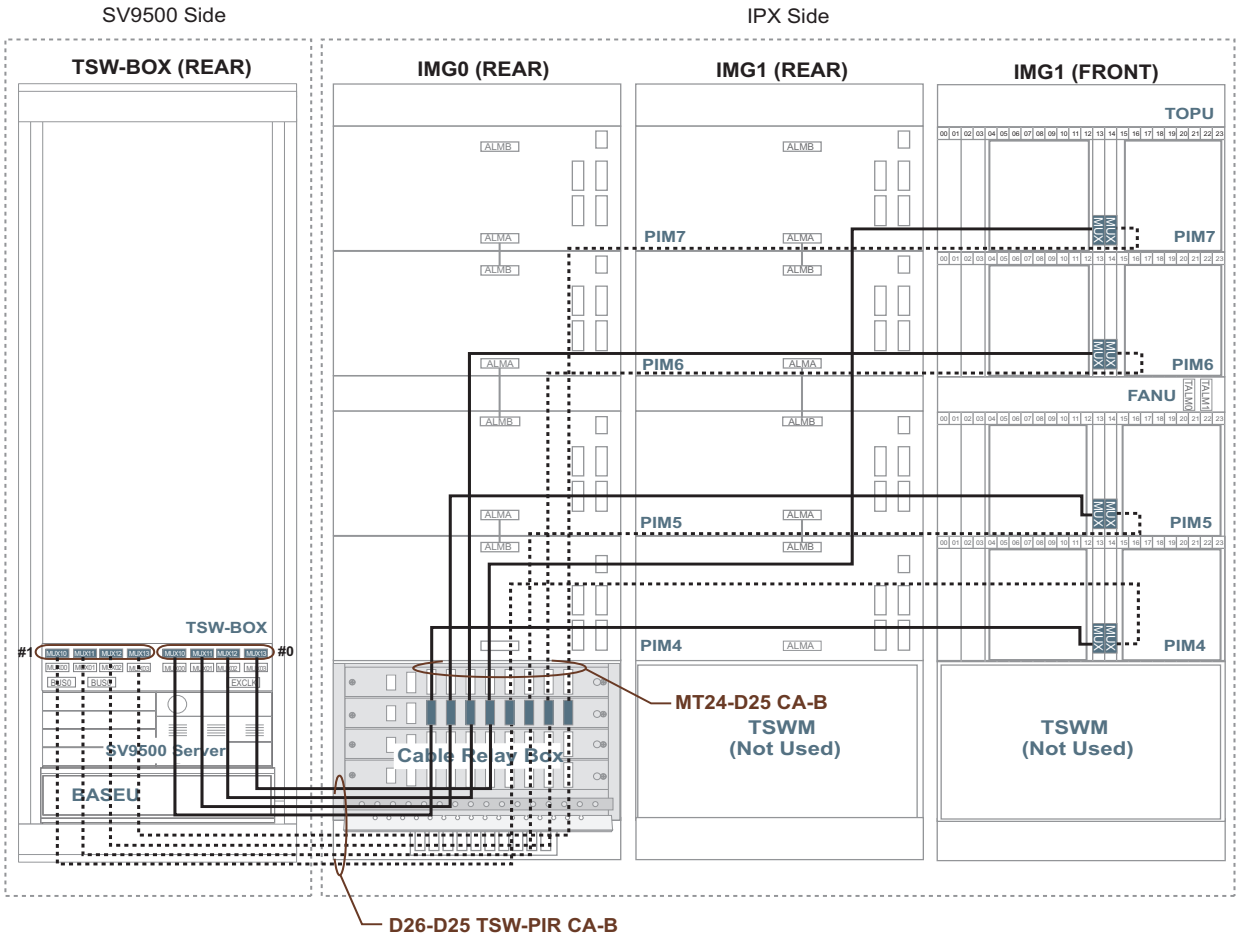


From TSW-BOX			Cable Relay Box	To IPX IMG 0			
Unit/Module	Connector	Cable		Unit/ Module	Connector		Cable
TSW-BOX (TSW #0)	MUX00	D26-D25 TSW-PIR CA-B		PIM0	MUX #0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
	MUX01			PIM1			
	MUX02			PIM2			
	MUX03			PIM3			
TSW-BOX (TSW #1)	MUX00			PIM0	MUX #1		
	MUX01			PIM1			
	MUX02			PIM2			
	MUX03			PIM3			

Note: To complete the cable connection smoothly, connect the IPX-side bus cables (MT24-D25 CA-B) first, and connect the SV9500-side bus cables (D26-D25 TSW-PIR CA-B).

[TSW-BOX - IPX PIMs of IMG1]

Cable Connections between TSW-BOX and IPX PIMs of IMG1

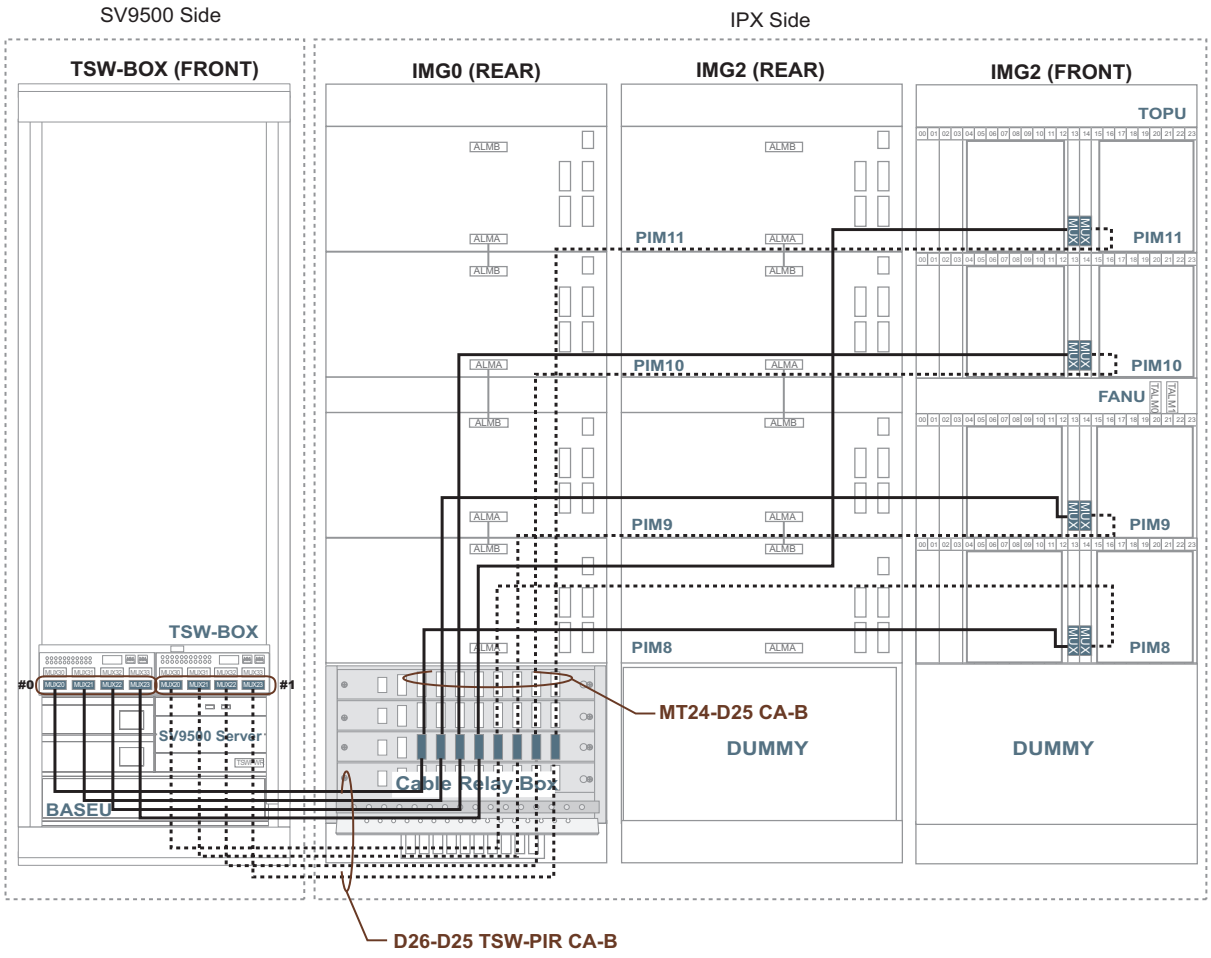


From TSW-BOX			Cable Relay Box	To IPX IMG 1			
Unit/Module	Connector	Cable		Unit/ Module	Connector		Cable
TSW-BOX (TSW #0)	MUX10	D26-D25 TSW-PIR CA-B		PIM0	MUX #0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
	MUX11			PIM1			
	MUX12			PIM2			
	MUX13			PIM3			
TSW-BOX (TSW #1)	MUX10			PIM0	MUX #1		
	MUX11			PIM1			
	MUX12			PIM2			
	MUX13			PIM3			

Note: To complete the cable connection smoothly, connect the IPX-side bus cables (MT24-D25 CA-B) first, and connect the SV9500-side bus cables (D26-D25 TSW-PIR CA-B).

[TSW-BOX - IPX PIMs of IMG2]

Cable Connections between TSW-BOX and IPX PIMs of IMG2

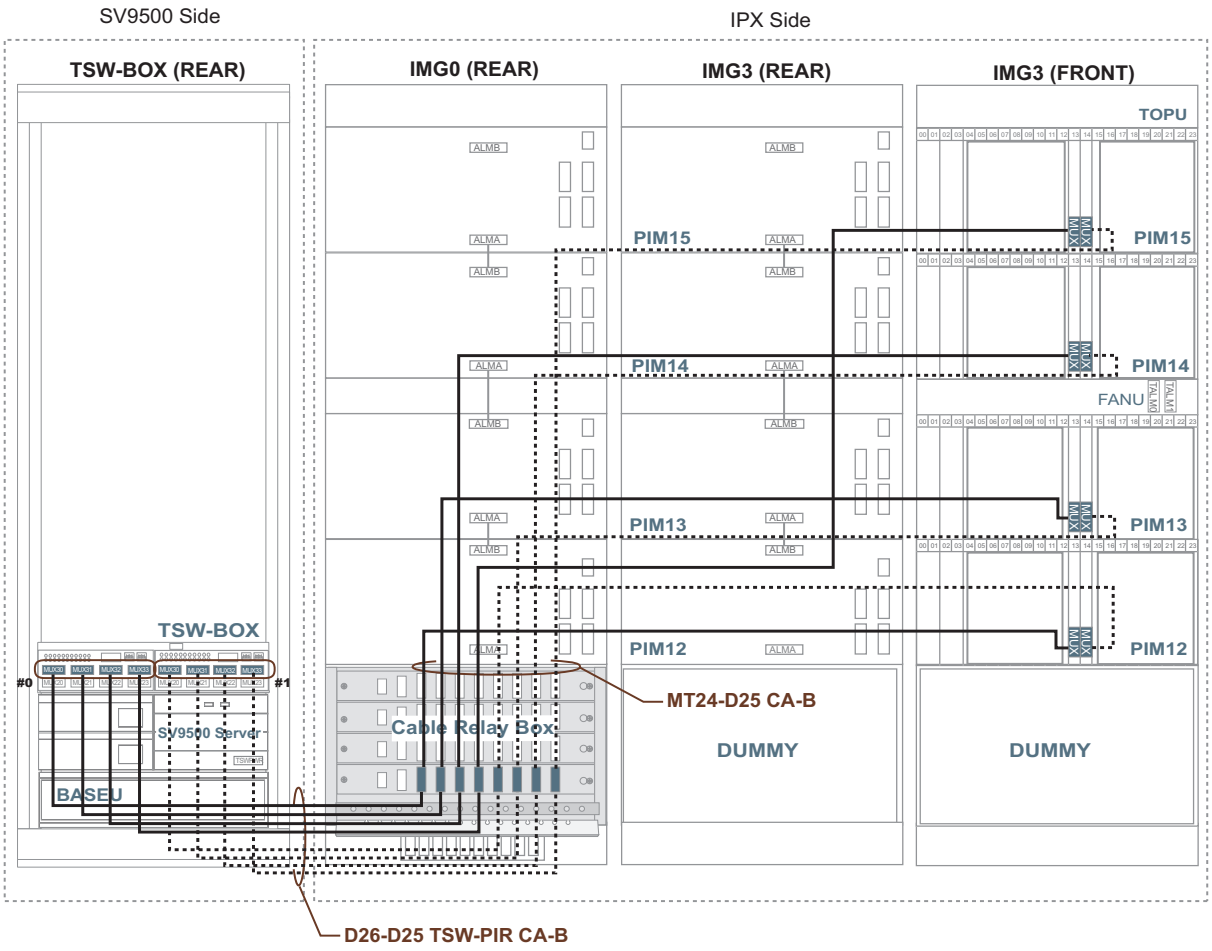


From TSW-BOX			Cable Relay Box	To IPX IMG 2			
Unit/Module	Connector	Cable		Unit/ Module	Connector		Cable
TSW-BOX (TSW #0)	MUX20	D26-D25 TSW-PIR CA-B		PIM8	MUX #0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
	MUX21			PIM9			
	MUX22			PIM10			
	MUX23			PIM11			
TSW-BOX (TSW #1)	MUX20			PIM8	MUX #1		
	MUX21			PIM9			
	MUX22			PIM10			
	MUX23			PIM11			

Note: To complete the cable connection smoothly, connect the IPX-side bus cables (MT24-D25 CA-B) first, and connect the SV9500-side bus cables (D26-D25 TSW-PIR CA-B).

[TSW-BOX - IPX PIMs of IMG3]

Cable Connections between TSW-BOX and IPX PIMs of IMG3



From TSW-BOX			Cable Relay Box	To IPX IMG3			
Unit/Module	Connector	Cable		Unit/ Module	Connector		Cable
TSW-BOX (TSW #0)	MUX30	D26-D25 TSW-PIR CA-B		PIM12	MUX #0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
	MUX31			PIM13			
	MUX32			PIM14			
	MUX33			PIM15			
TSW-BOX (TSW #1)	MUX30			PIM12	MUX #1		
	MUX31			PIM13			
	MUX32			PIM14			
	MUX33			PIM15			

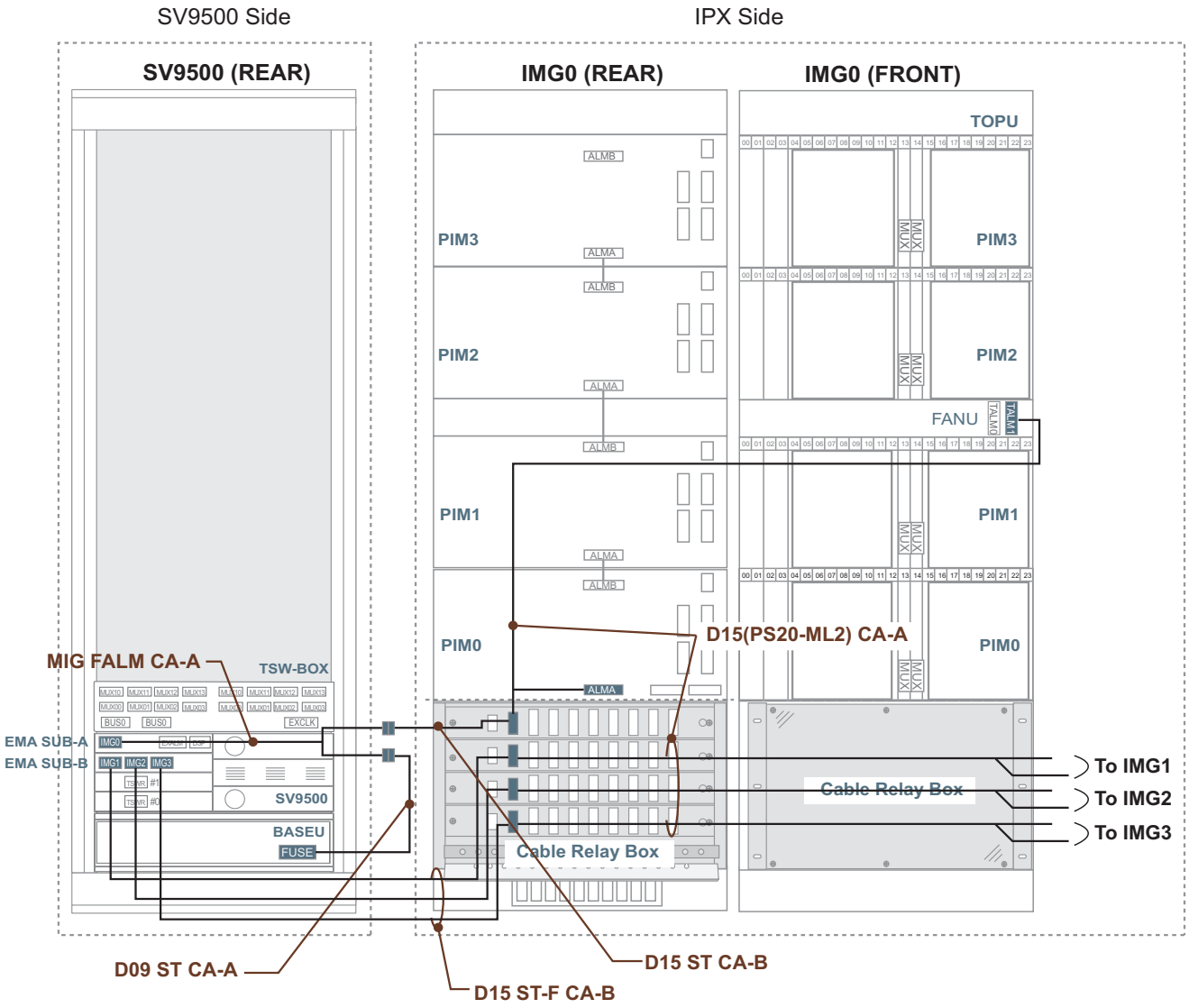
Note: To complete the cable connection smoothly, connect the IPX-side bus cables (MT24-D25 CA-B) first, and connect the SV9500-side bus cables (D26-D25 TSW-PIR CA-B).

(3) Alarm Cable Connection between SV9500 Server and IPX PIMs

Run the alarm cables between SV9500 (EMA SUB-A and EMA SUB-B) and IPX PIMs through the cable relay box as follows:

[SV9500 Server - IPX PIMs of IMG0/1/2/3]

Cable Connections between SV9500 Server and IPX PIMs of IMG 0/1/2/3



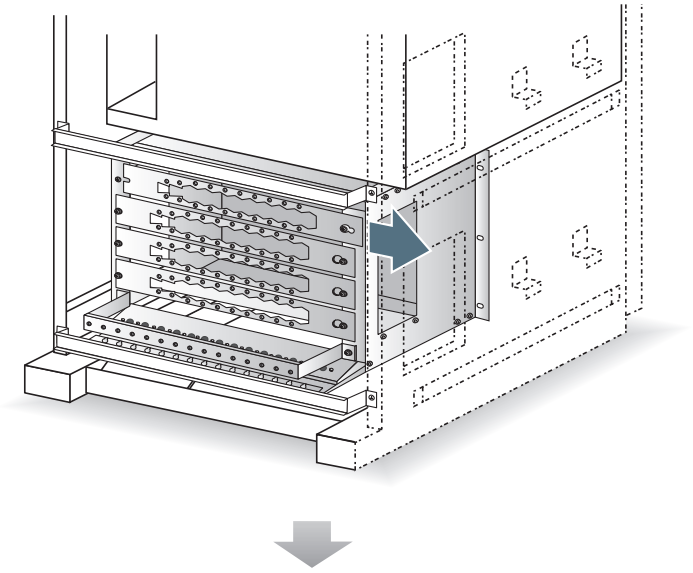
<table>
<tr><th colspan="3">From SV9500 Server</th><th rowspan="2">Cable Relay Box</th><th colspan="3">To IPX IMG0/1/2/3</th></tr>
<tr><th>Unit/Module</th><th>Connector</th><th>Cable</th><th>Unit/Module</th><th>Connector</th><th>Cable</th></tr>
<tr><td rowspan="2">SV9500 Server (EMA SUB-A)</td><td rowspan="2">IMG0</td><td>MIG FALM CA-A
+
D15 ST CA-B</td><td rowspan="2">Cable Relay Box</td><td>PIM0</td><td>ALMA</td><td rowspan="2">D15-(PS20-ML2) CA-A</td></tr>
<tr><td>MIG FALM CA-A
+
D09 ST CA-A</td><td>FANU (IMG0)</td><td>TALM1</td></tr>
<tr><td rowspan="6">SV9500 Server (EMA SUB-B)</td><td rowspan="2">IMG1</td><td rowspan="6">D15 ST-F CA-B</td><td rowspan="6">Cable Relay Box</td><td colspan="3">FUSE (SV9500-side BASEU)</td></tr>
<tr><td>PIM4</td><td>ALMA</td><td rowspan="6">D15-(PS20-ML2) CA-A</td></tr>
<tr><td rowspan="2">IMG2</td><td>FANU (IMG1)</td><td>TALM1</td></tr>
<tr><td>PIM8</td><td>ALMA</td></tr>
<tr><td rowspan="2">IMG3</td><td>FANU (IMG2)</td><td>TALM1</td></tr>
<tr><td>PIM12</td><td>ALMA</td></tr>
<tr><td>FANU (IMG3)</td><td>TALM1</td></tr>
</table>

Note: To complete the cable connection smoothly, connect the IPX-side bus cables (D15-(PS20-ML2) CA-A) first, and connect the SV9500-side bus cables (D15 ST CA-B/D15 ST-F CA-B).

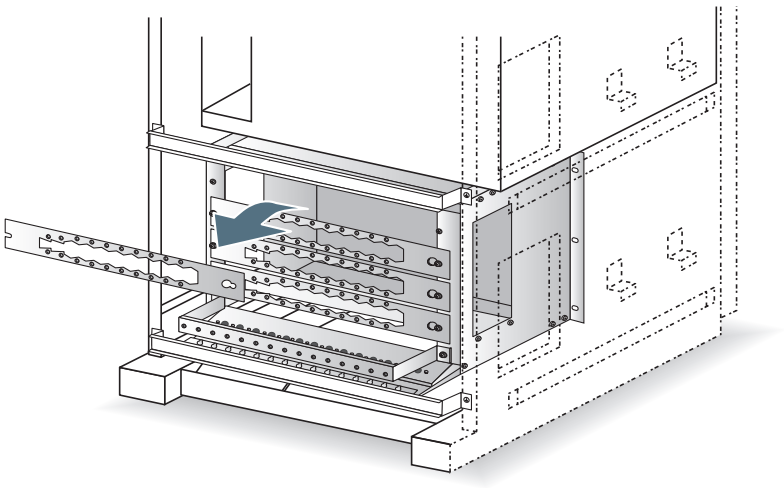
(4) How to Secure the Connector of IPX BUS/Alarm Cables to Cable Relay Box

Step1: Remove a rear panel of the cable relay box.

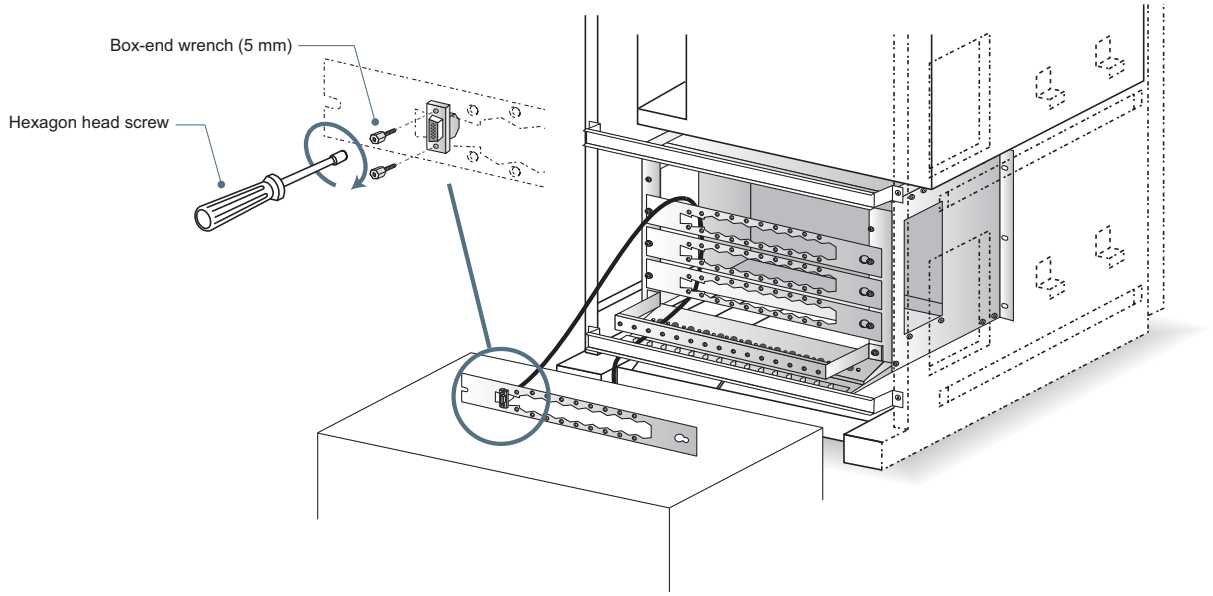
- Loosen the two screws located on both sides of the pannel.
- Slowly slide the pannel to the right.



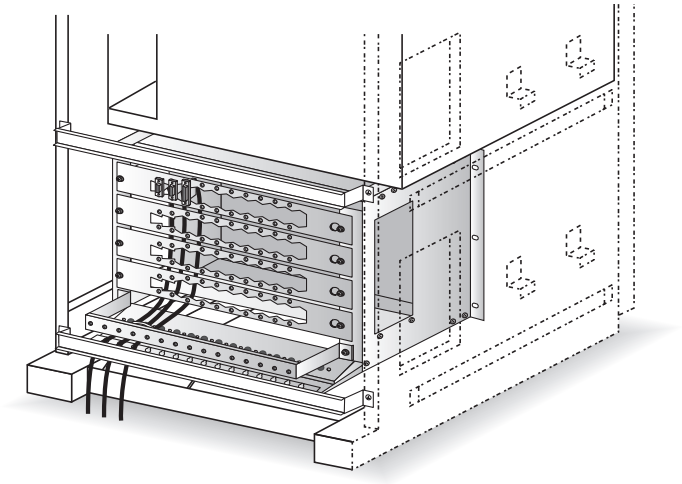
- Remove the pannel from the Cable Relay Box.



Step2: Secure the connector of the cable running from IPX PIM to the rear pannel.



Step3: Reinstall the rear panel to the cable relay box after all the necessary cables are attached.

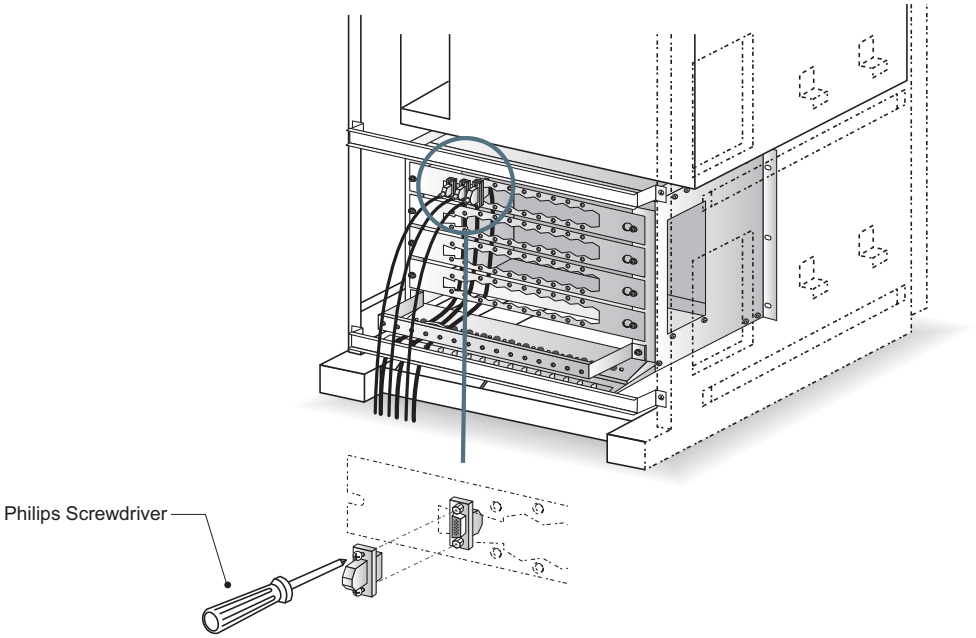


For reference

- If the rear side of the IPX is crowded with the cables and it is difficult to perform the above tasks from the rear side, you can remove the front panel of the cable relay box to secure the connector of IPX-side cable from the front side of the cable relay box.
- For 4-IMG system, it is recommended to perform cabling work for each IMG descendingly (from IMG3 to IMG0).

(5) How to Secure the Connector of SV9500 BUS/Alarm Cable to Cable Relay Box

Step1: Secure the connector of the cable running from SV9500 TSWR to the connector of the cable running from IPX PIM by the screws as follows:



2.12.3 Ground Cable Connection



The following shows how to connect a cable for an enhanced ground when migrating from NEAX2400 IPX.

Connect a ground cable “ML04 GND CA-A” to each IMG frame.

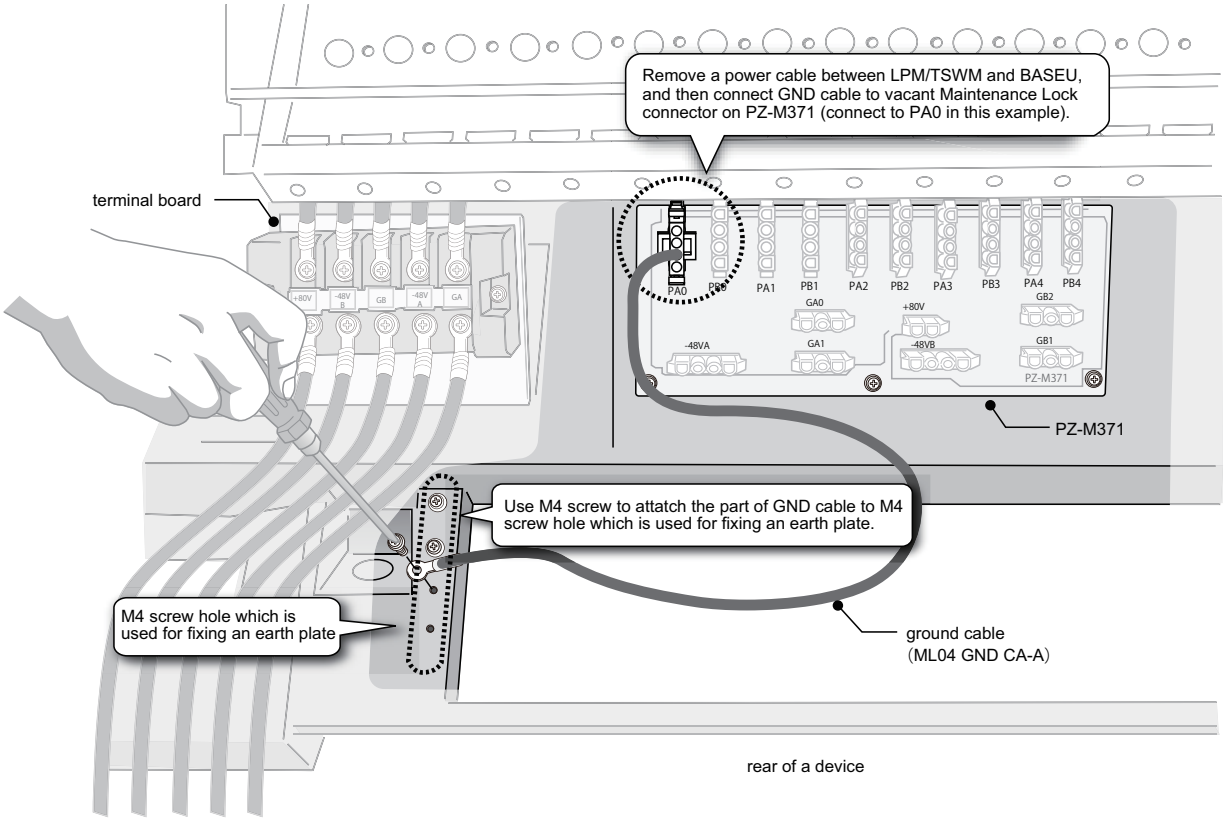
The following example explains how to connect the ground cable.

Note: The ground cable “ML04 GND CA-A” provides the lightning protection. For more details, see the following figures.

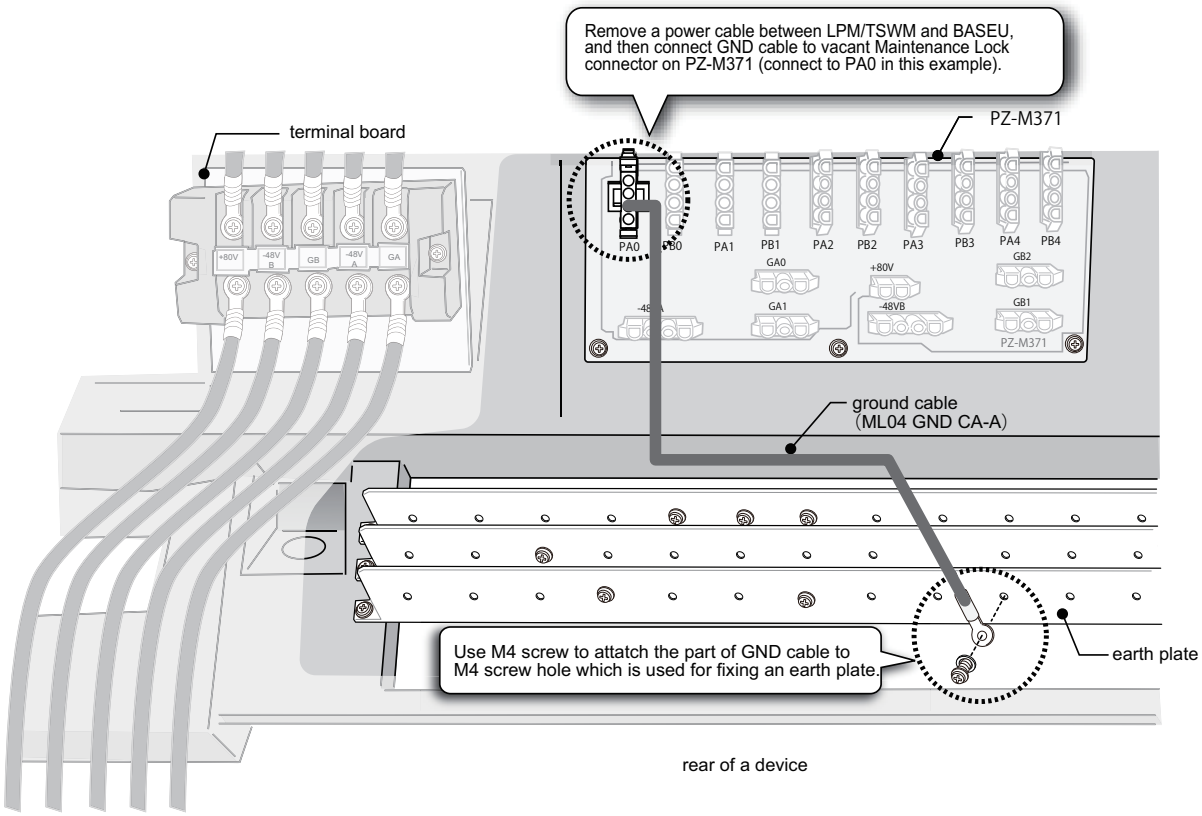
(1)When an earth plate is not used

(2)When an earth plate is used

(1) When an earth plate is not used



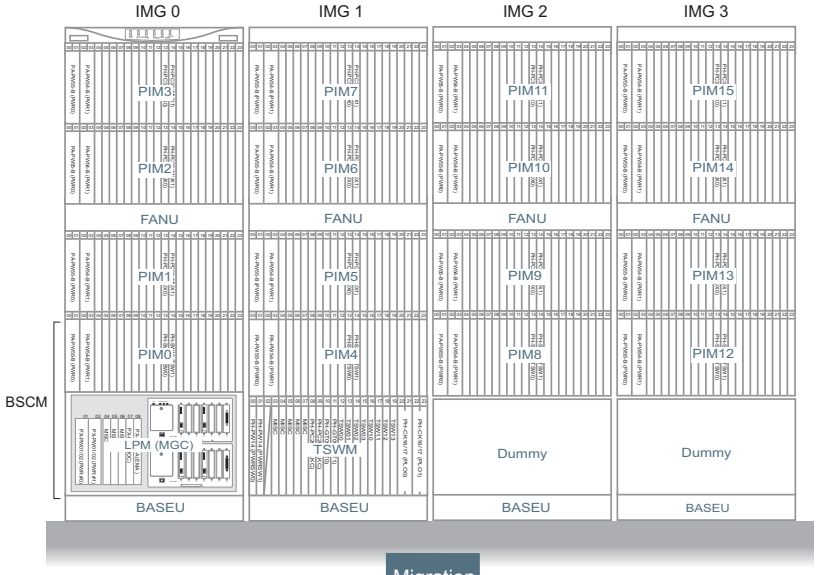
(2) When an earth plate is used



3. From IPX (4-IMG) to SV9500 (4-IMG with TSWR)

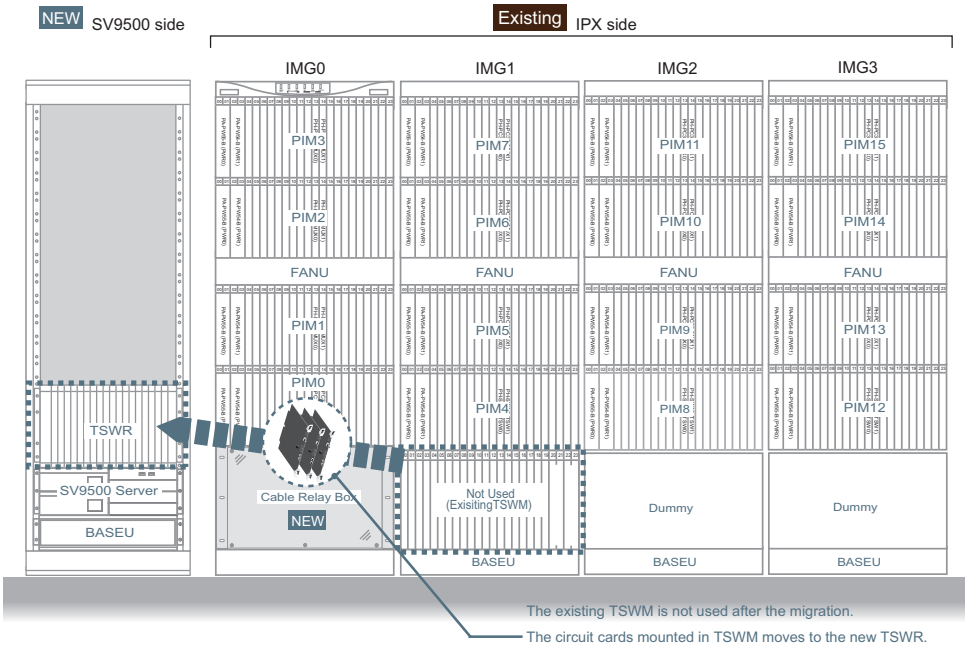
This section describes the installation procedures needed to migrate your system from UNIVERGE NEAX2400 IPX (4-IMG) to UNIVERGE SV9500 (4-IMG with TSWR). Before beginning the installation, thoroughly read Chapter 2 BEFORE INSTALLATION and observe the precautions while performing the installation.

Before Migration



Migration

After Migration



Installation Procedure

Start

↓

1 Install 19-Inch Rack, SV9500 Server and TSWR

↓

2 Collect Billing Information, Traffic Data and System Messages

↓

3 Temporarily Stop Routine Diagnostics

↓

4 Back Up IPX Office Data

↓

5 Turn OFF Peripheral Equipment Connected to the Rectifier

↓

6 Turn OFF the IPX

↓

7 Turn OFF the Rectifier

↓

8 Remove Unnecessary Cables from IPX

↓

9 Extract the CPR and Circuit Cards from the LPM

↓

10 Extract the LPM Inner Box

↓

11 Mount the Cable Relay Box

↓

12 Cable Connections

↓

13 Move Circuit Cards from TSWM to TSWR

↓

End

3.1 Install 19-Inch Rack, SV9500 Server and TSWR

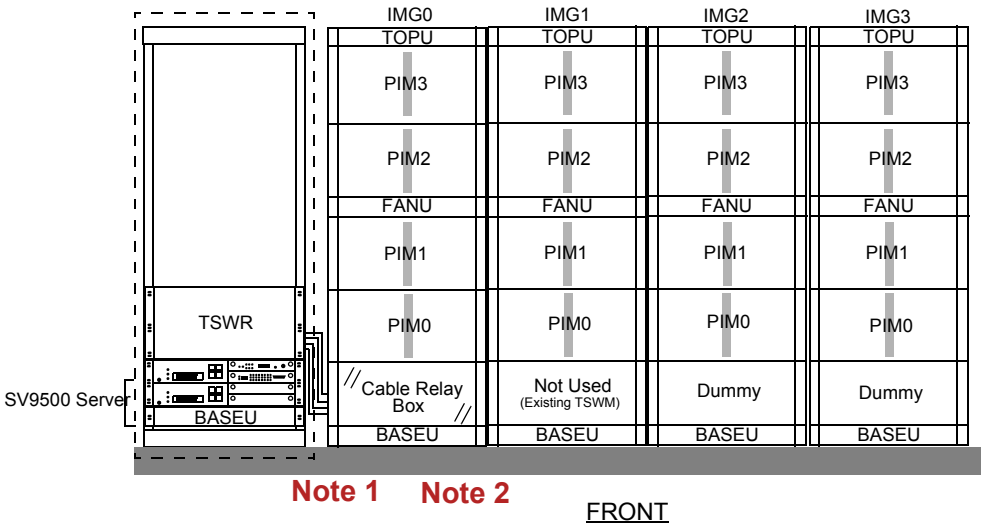


Install 19-inch rack, SV9500 Telephony Server and TSWR, referring to SV9500 Appliance Model Installation Manual. The following figure shows the standard configuration of the migrated system. Install them depending on your system configuration.

4-IMG System Configuration

Install the following:
-19-inch rack
-BASEU
-SV9500 server
-TSWR

Basic Configuration



Note 1: When installing a 19-inch rack, consider the length of the cables between SV9500 server/ TSWR and a cable relay box.

Cable between SV9500 server and cable relay box (D15 ST-F CA-B): 2000mm

Cable between TSWR and cable relay box (D37-D25 CA-B): 3000mm

Note 2: Migrating 4-IMG IPX with a long distance between SV9500/TSWR and cable relay box, you can use a long cable to extend distance between them. For more information, refer to "Long Cable Unit".

Cable between SV9500 server and cable relay box (D15 ST-F CA-D): 12000mm

Cable between TSWR and cable relay box (D37-D25 CA-1): 10000mm

3.2 Collect Billing Information, Traffic Data and System Messages

Collect the billing information, the traffic data, and the system messages as necessary.

3.3 Temporarily Stop Routine Diagnostics

Temporarily suspend Routine Cyclic Diagnostics, using the ASYD command. Set SYS 1, Index 87 and 88 to FFH (hexadecimal). After the migration, return the indexes to their original values.

ASYD SYS1

Index 87: FFH (Hour of Routine Diagnosis Start Time)

Index 88: FFH (Minute of Routine Diagnosis Start Time)

3.4 Back Up IPX Office Data

(1) Back up Office Data from IPX

Step1: Backup the IPX office data by using the MEM_HDD command.

Check [All Select] to select all the data type. Select [LP Select] according to the office status. Ignore that the following data types are displayed unavailable in the operation log.

- ACD Data Memory
- ICB/DR
- SR-MGC

The following data types may be displayed as an error in the operation log when verified.

- Wireless Call Forwarding
- SIP Terminal Call Transfer

Note: An error will occur if WLAN Handset (MH Series) moves between Access Points while being verified.

Step2: Save the one-touch speed call memory data of Dterm to the PC or a floppy disk by using the BOSD command. On the command, select [PBX memory to MAT]. It is recommended that the back up be divided per Unit or MG.

Note: The one-touch speed calling memory data of IP terminal is written in the IPX server.

Step3: Log off from IPX by using the CFCS command and remove the CF card from the slot.

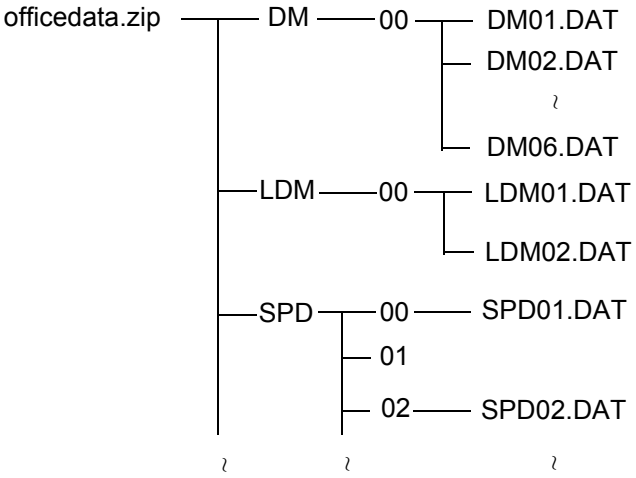
(2) Converting IPX Office Data to SV9500 Office Data

Step1: Insert the CF card removed from the IPX to the PC and save the office data to the PC by using the FLCVTR.

Step2: Zip the saved IPX office data. Specify the file name as “officedata.zip”.

Note: For North America: If the IPX Software Revision is R24 or lower, the ACD Database must first be converted from 2M to 4M prior to Step-2.

Note: In the zip file, configure the file directory as follows. Delete the [ICS-BOOT.SYS] and [SC-xxxx.COD]
* For North America, also delete the README.TXT file.



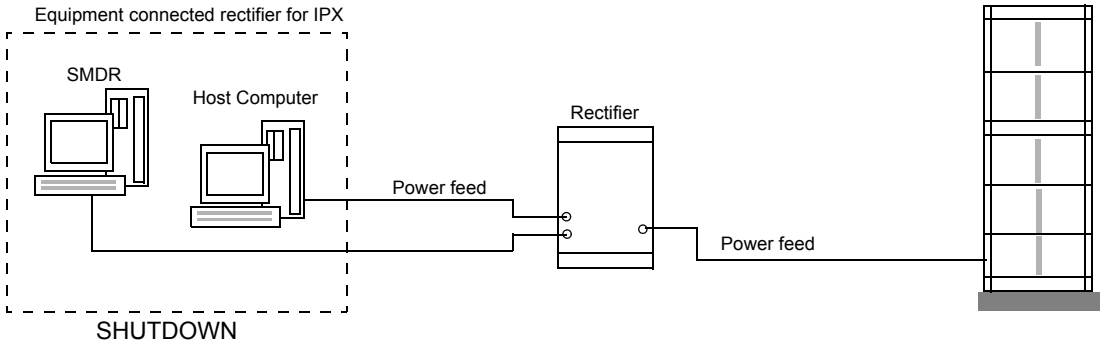
Step3: Make a folder to drop the zip file in.

3.5 Turn OFF Peripheral Equipment Connected to the Rectifier



Turn OFF the peripheral equipment such as the SMDR terminal and the printer that receives power from the rectifier that provides operating power to the IPX.

Note: When the equipment is connected to another rectifier, this step is not necessary.

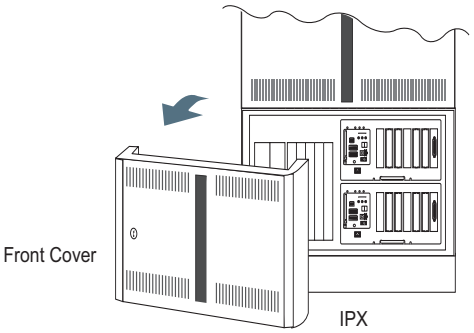


3.6 Turn OFF the IPX

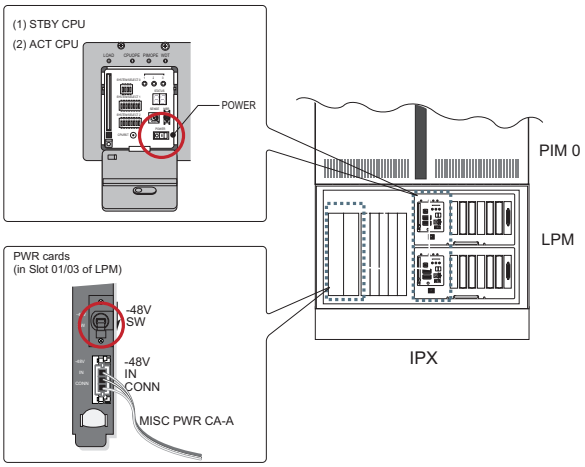


Turn off the power of the IPX in the following procedures.

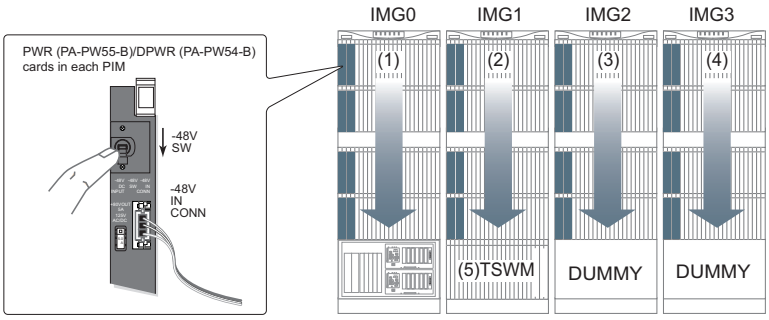
Step1: Remove the front cover from LPM for facilitating installation.



Step2: Turn off the power of the LPM.



Step3: Turn OFF the -48V SW on the PWR (PA-PW55-B) and DPWR (PA-PW54-B) cards mounted respectively in slot 01 and 03 of each PIM as shown below.



3.7 Turn OFF the Rectifier



Turn OFF the rectifier. For more information, refer to the rectifier's operation manual.

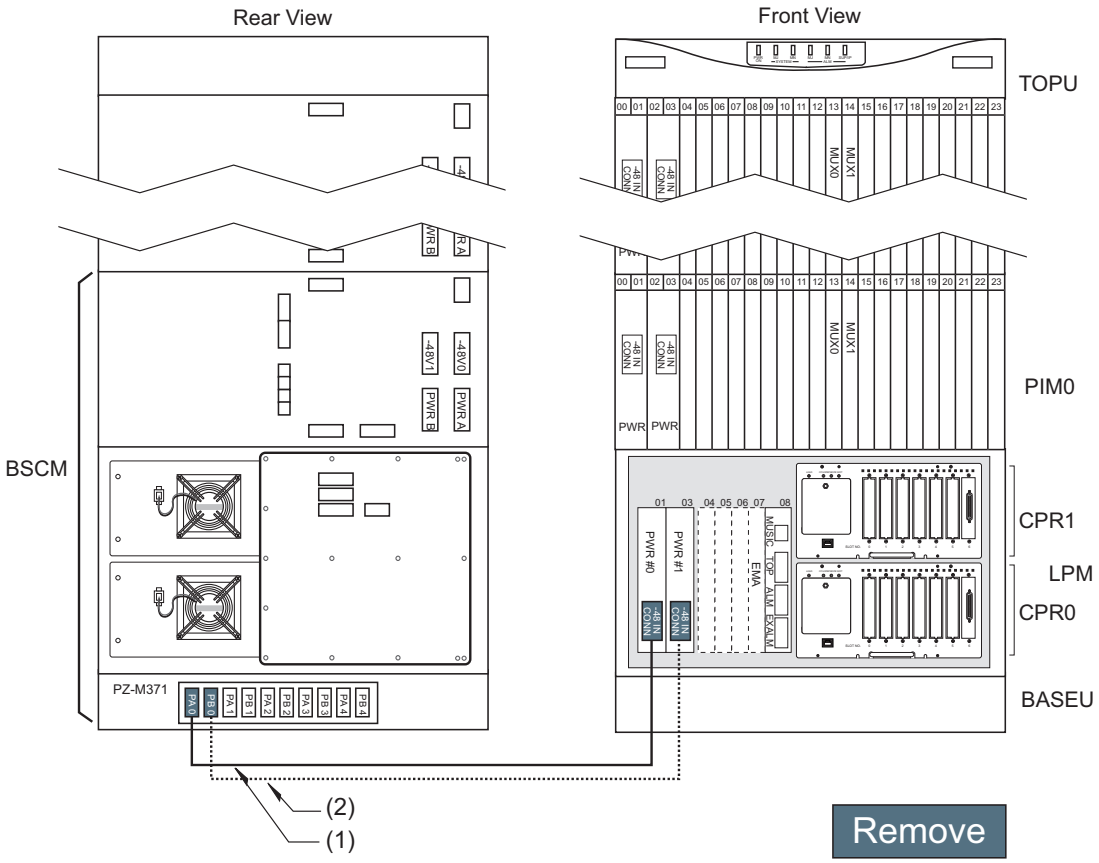
Note: Before turning off the rectifier, make sure that no voltage is applied to the power receiving terminal.

3.8 Remove Unnecessary Cables from IPX

(1) Internal Power Cable

Remove the unnecessary power cables from IPX as follows:

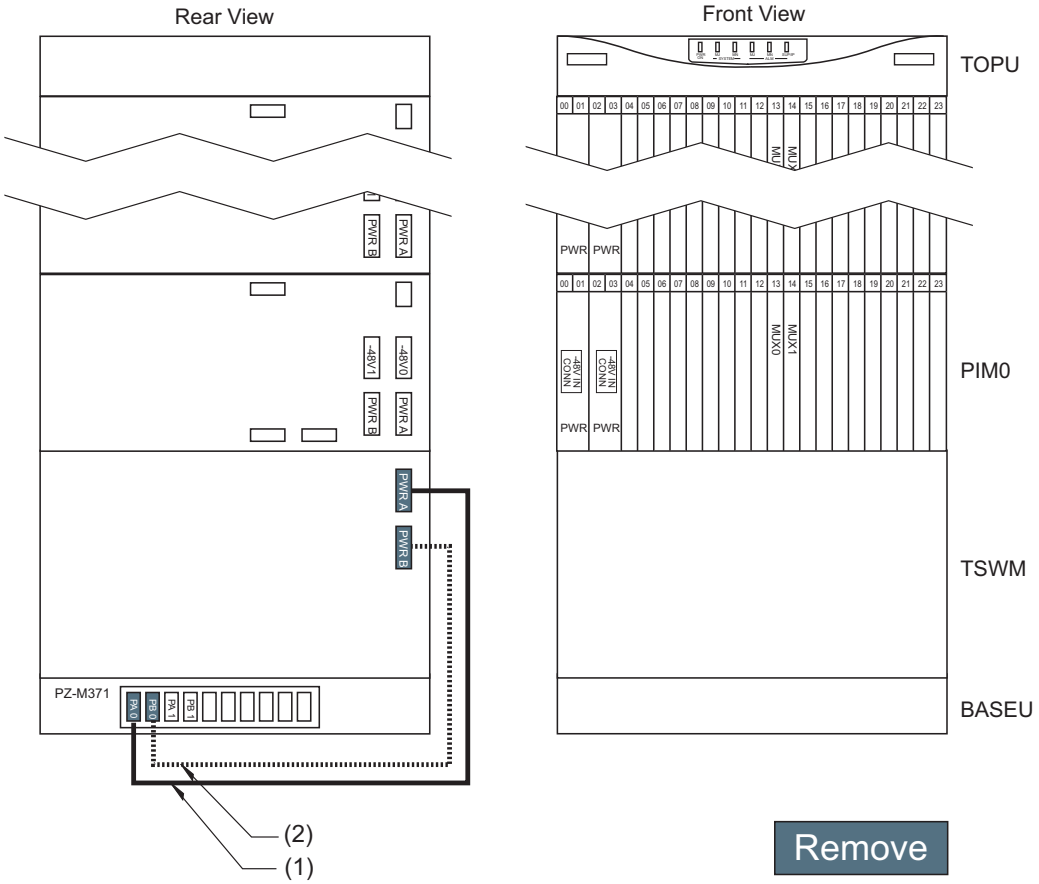
Remove Power Cables: IMG 0



Remove Power Cables: IMG 0

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	BASEU	PA 0	LPM (PWR)	-48V IN CONN	MISC PWR CA-A	
2	BASEU	PB 0	LPM (PWR)	-48V IN CONN	MISC PWR CA-B	

Remove Power Cables: IMG 1 (1/2/3/4-PIM Configuration)



Remove Power Cables: IMG 1 (1/2/3/4-PIM Configuration)

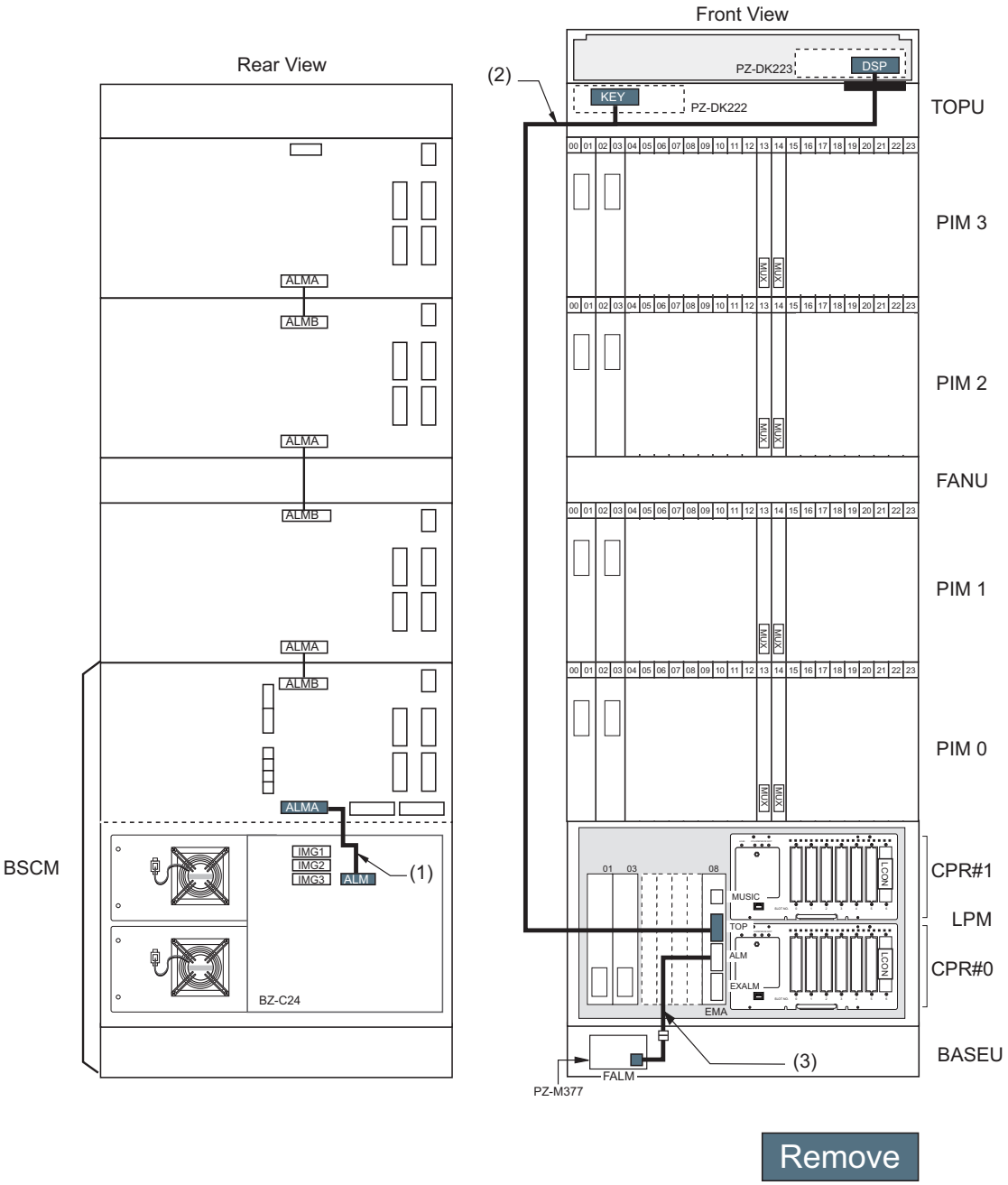
No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	BASEU	PA 0	TSWM	PWR A	4P PWR CA-A	
2	BASEU	PB 0	TSWM	PWR B	4P PWR CA-B	

(2) Internal Bus Cable

Remove the following unnecessary internal bus cables from IPX BASEU, LPM, PIMs and TOPU.



Remove Internal Bus Cables: IMG 0 (1/2/3/4-PIM Configuration)

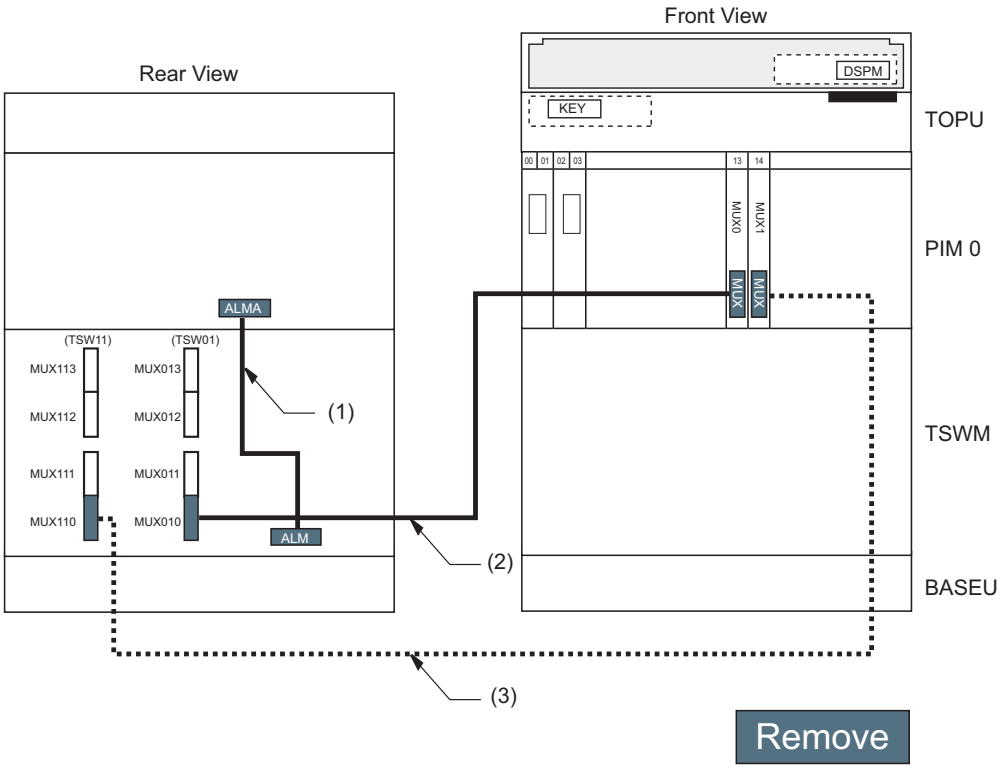


Remove Internal Bus Cables: IMG 0 (4-IMG Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/ Module	Connector Name		
1	LPM (CPR 0)	ALM	PIM0	ALMA	20AL-(60) FLT CA	
2	LPM	TOP (EMA front connector)	TOPU	KEY and DSP (DSPL for single stack)	DSPKEY CA-A **Note 1**	
3	LPM	TOP (EMA front connector)	BASEU	(FALM)	FALM CA-A	

Note 1: Alarm lamps on IPX TOPU are not used in the migrated system.

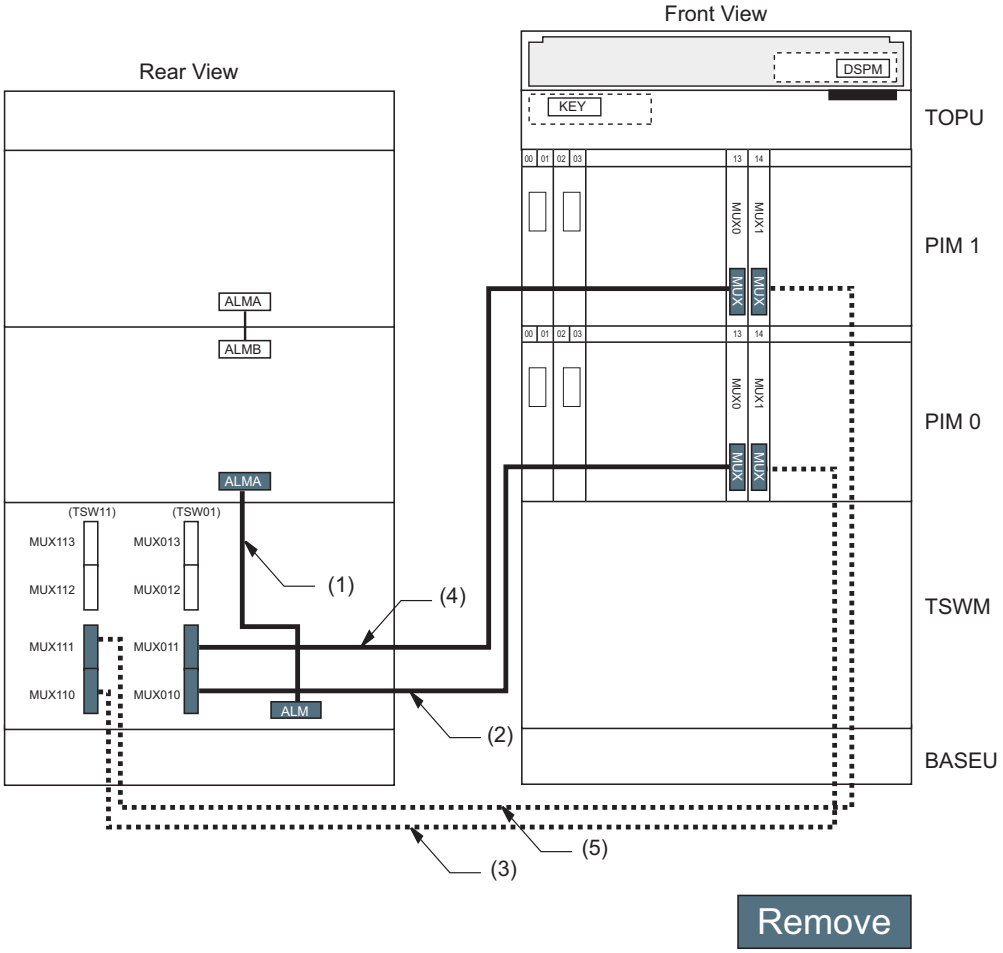
Remove Internal Bus Cables: IMG 1 (1-PIM Configuration)



Remove Internal Bus Cables: IMG 1 (1-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	ALM	PIM0	ALMA	20AL-(60) FLT CA	
2	TSWM	MUX 010	PIM0	MUX (slot 13)	34PH MT24 TSW CA-D	TSW 01
3	TSWM	MUX 110	PIM0	MUX (slot 14)	34PH MT24 TSW CA-D	TSW 11

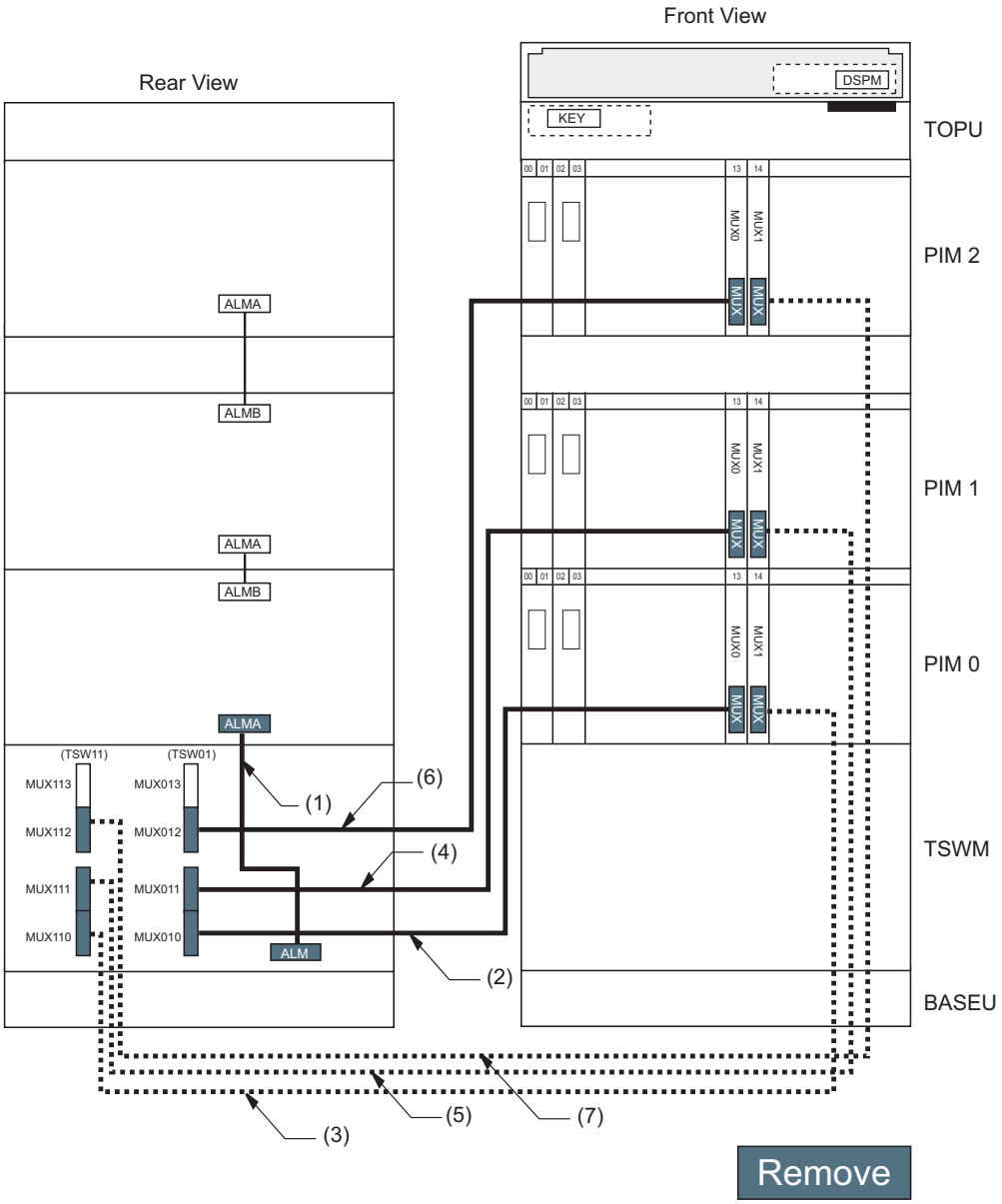
Remove Internal Bus Cables: IMG 1 (2-PIM Configuration)



Remove Internal Bus Cables: IMG 1 (2-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	ALM	PIM0	ALMA	20AL-(60) FLT CA	
2	TSWM	MUX 010	PIM0	MUX (slot 13)	34PH MT24 TSW CA-D	TSW 01
3	TSWM	MUX 110	PIM0	MUX (slot 14)	34PH MT24 TSW CA-D	TSW 11
4	TSWM	MUX 011	PIM1	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 01
5	TSWM	MUX 111	PIM1	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 11

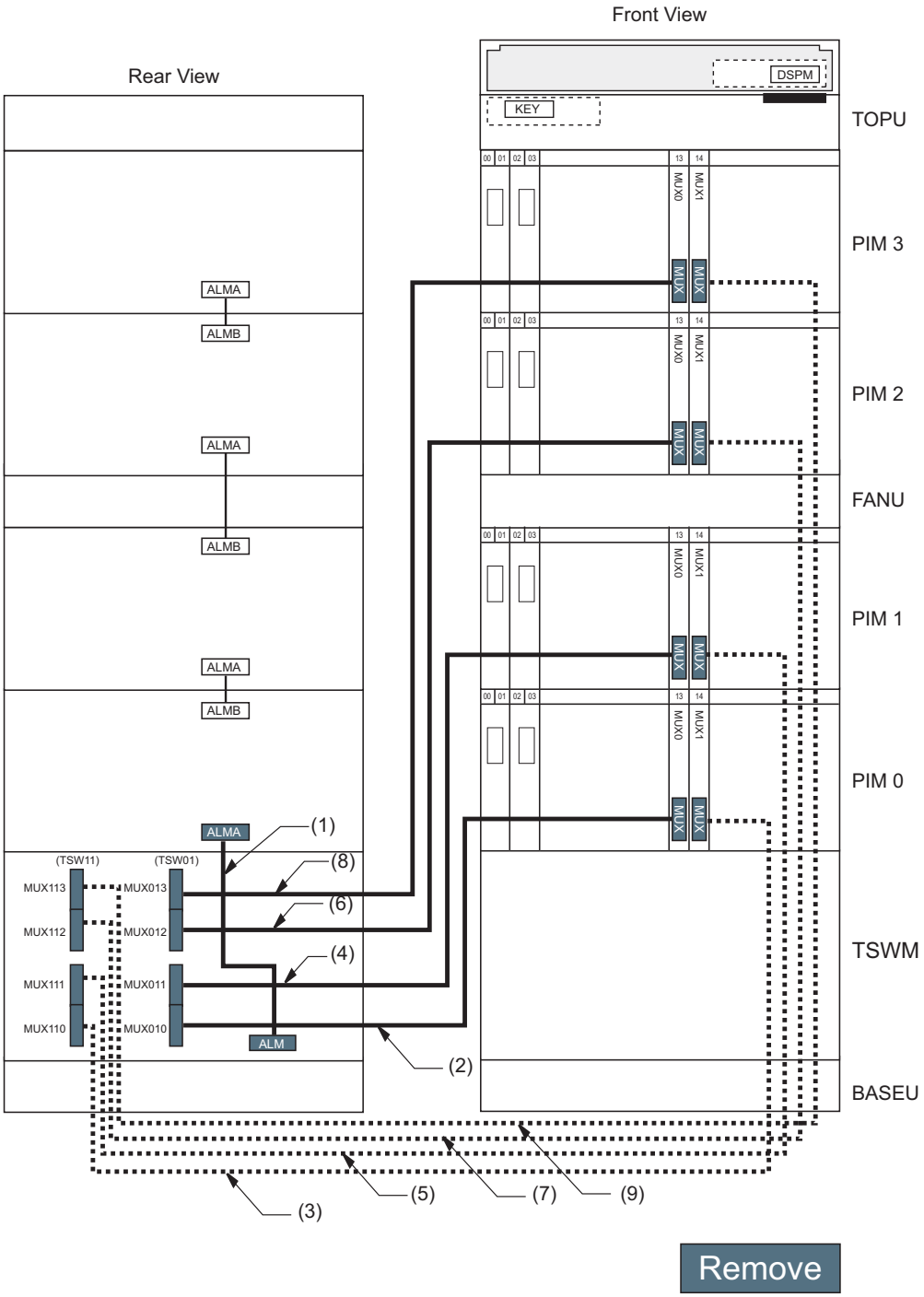
Remove Internal Bus Cables: IMG 1 (3-PIM Configuration)



Remove Internal Bus Cables: IMG 1 (3-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	ALM	PIM0	ALMA	20AL-(60) FLT CA	
2	TSWM	MUX 010	PIM0	MUX (slot 13)	34PH MT24 TSW CA-D	TSW 01
3	TSWM	MUX 110	PIM0	MUX (slot 14)	34PH MT24 TSW CA-D	TSW 11
4	TSWM	MUX 011	PIM1	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 01
5	TSWM	MUX 111	PIM1	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 11
6	TSWM	MUX 012	PIM2	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 01
7	TSWM	MUX 112	PIM2	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 11

Remove Internal Bus Cables: IMG 1 (4-PIM Configuration)



Remove Internal Bus Cables: IMG 1 (4-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	ALM	PIM 0	ALMA	20AL-(60) FLT CA	
2	TSWM	MUX 010	PIM 0	MUX (slot 13)	34PH MT24 TSW CA-D	TSW 01
3	TSWM	MUX 110	PIM 0	MUX (slot 14)	34PH MT24 TSW CA-D	TSW 11
4	TSWM	MUX 011	PIM 1	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 01
5	TSWM	MUX 111	PIM 1	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 11
6	TSWM	MUX 012	PIM 2	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 01
7	TSWM	MUX 112	PIM 2	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 11
8	TSWM	MUX 013	PIM 3	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 01
9	TSWM	MUX 113	PIM 3	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 11

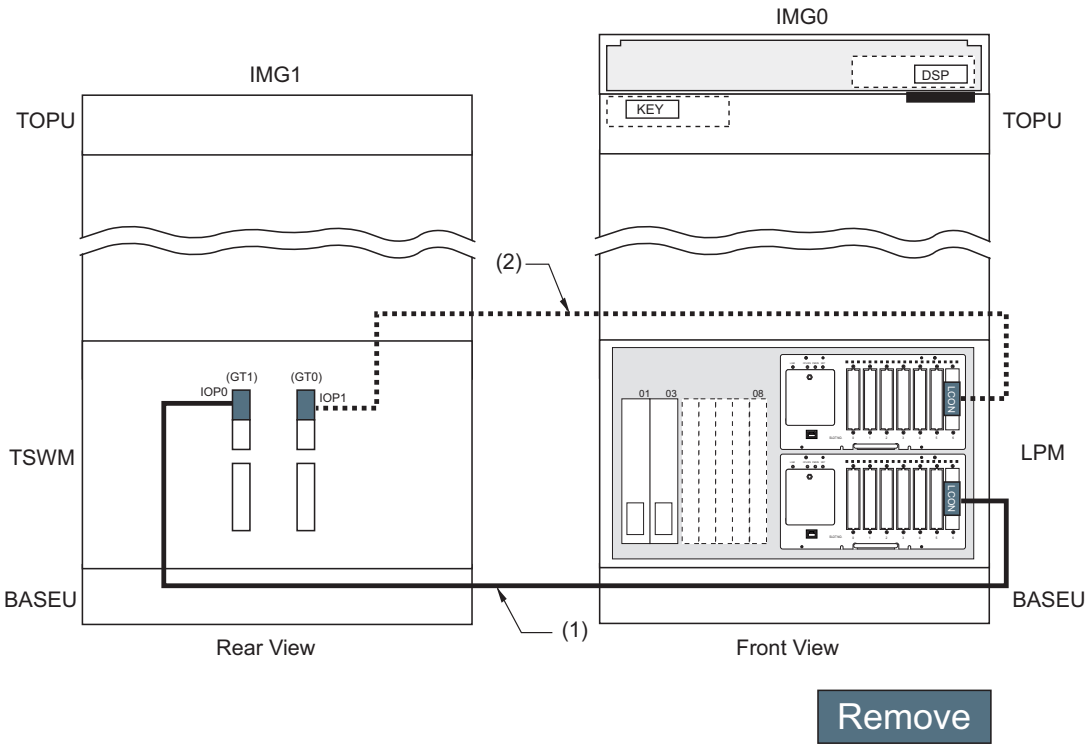
(3) Frame-to-Frame Cable

[Inter-Frame ISA Bus Cable]

Remove the following unnecessary inter-frame ISA bus cables between IMG 0 and IMG 1.

ATTENTION
Contents
Static Sensitive
Handling
Precautions Required

Remove Inter-Frame ISA Bus Cables: IMG 0 to IMG 1



Remove Inter-Frame ISA Bus Cables: IMG 0 to IMG 1

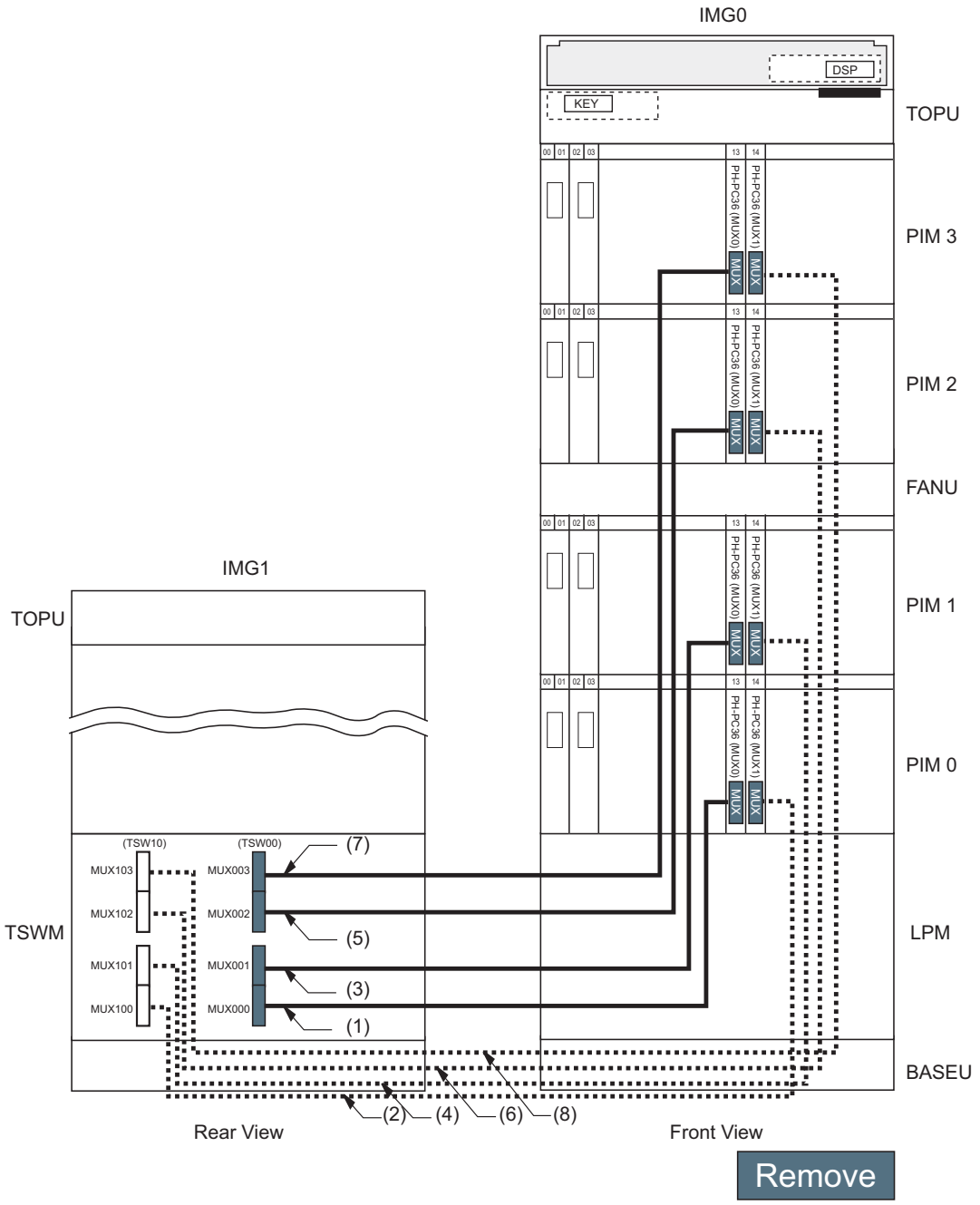
No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	CPR 0 in LPM	LCON (PZ-GT26)	TSWM	IOP 0 (slot 11)	34PH 50AL CA-A	
2	CPR 1 in LPM	LCON (PZ-GT26)	TSWM	IOP 1 (slot 10)	34PH 50AL CA-A	

[Inter-Frame Bus Cable]

Remove the following unnecessary inter-frame bus cables.

ATTENTION
Contents
Static Sensitive
Handling
Precautions Required

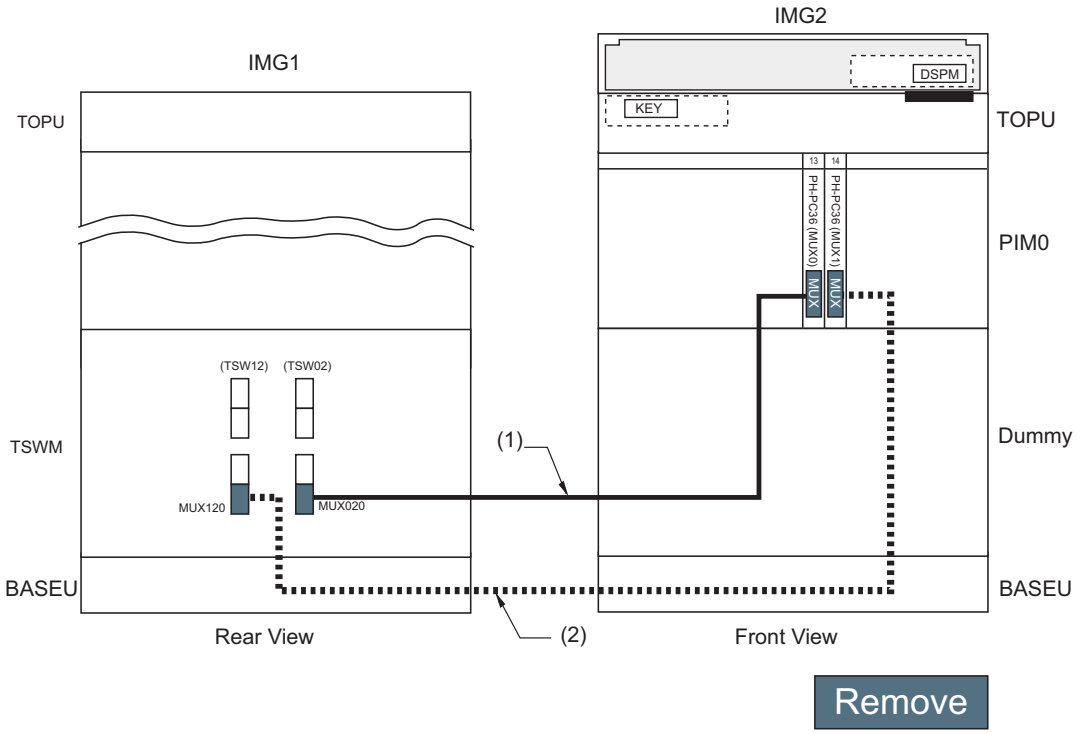
Remove Inter-Frame Bus Cables: IMG 0 to IMG 1



Remove Inter-Frame Bus Cables: IMG 0 to IMG 1

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 000	PIM0 (IMG0)	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 00
2	TSWM	MUX 100	PIM0 (IMG0)	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 10
3	TSWM	MUX 001	PIM1 (IMG0)	MUX (slot 13)	34PH MT24 TSW CA-E	TSW 00
4	TSWM	MUX 101	PIM1 (IMG0)	MUX (slot 14)	34PH MT24 TSW CA-E	TSW 10
5	TSWM	MUX 002	PIM2 (IMG0)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 00
6	TSWM	MUX 102	PIM2 (IMG0)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 10
7	TSWM	MUX 003	PIM3 (IMG0)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 00
8	TSWM	MUX 103	PIM3 (IMG0)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 10

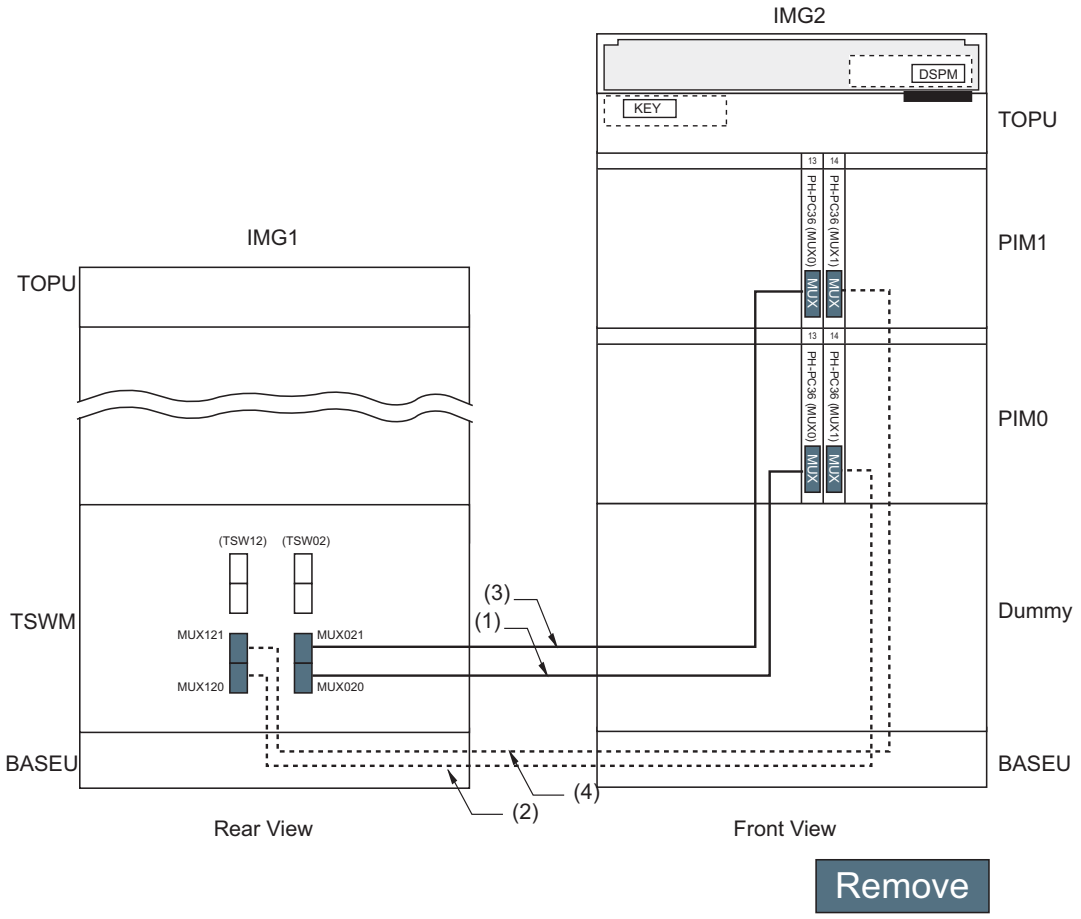
Remove Inter-Frame Bus Cables: IMG1 to IMG2 (1-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (1-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 020	PIM0 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 02
2	TSWM	MUX 120	PIM0 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 12

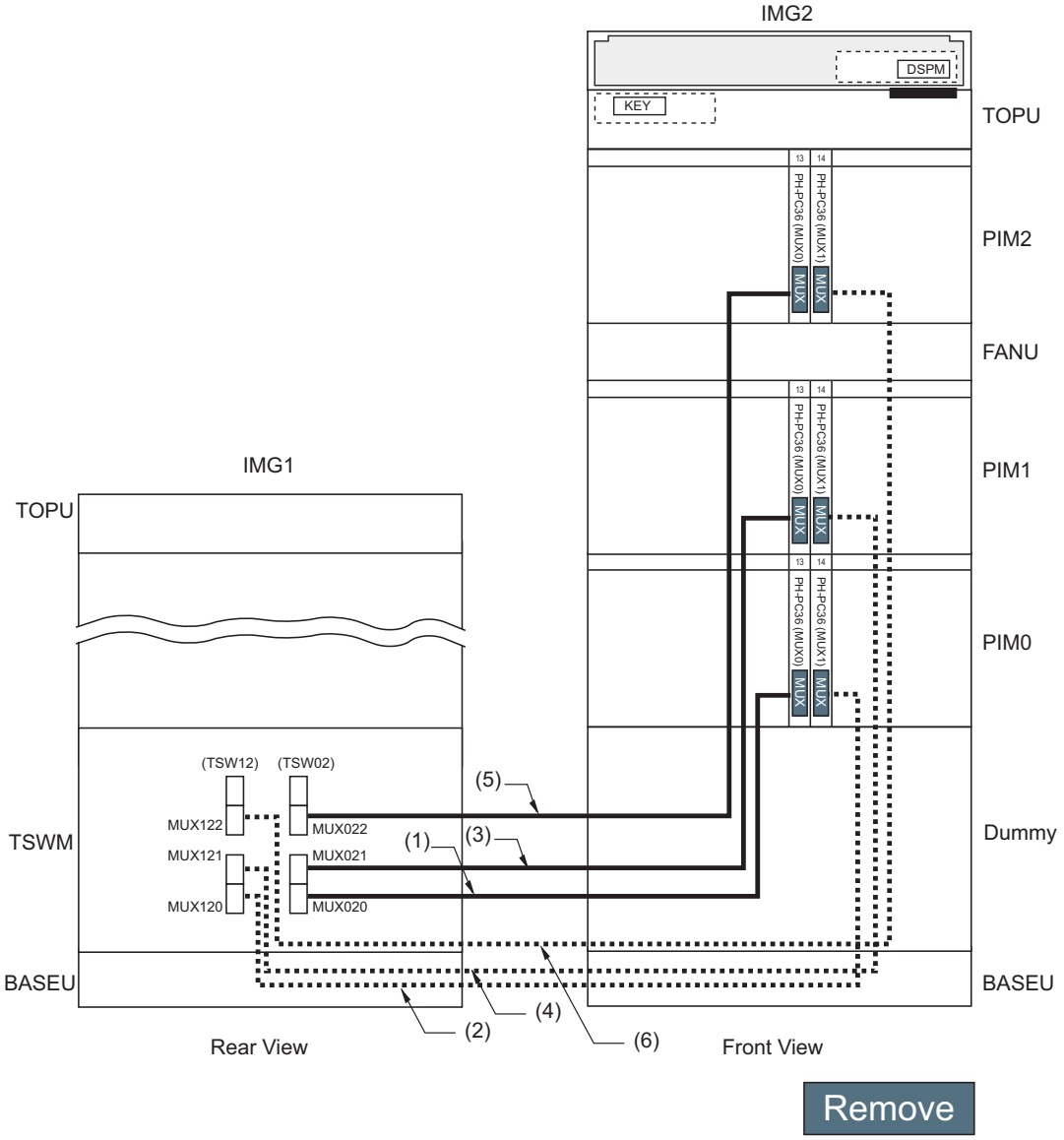
Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (2-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (2-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 020	PIM0 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 02
2	TSWM	MUX 120	PIM0 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 12
3	TSWM	MUX 021	PIM1 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 02
4	TSWM	MUX 121	PIM1 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 12

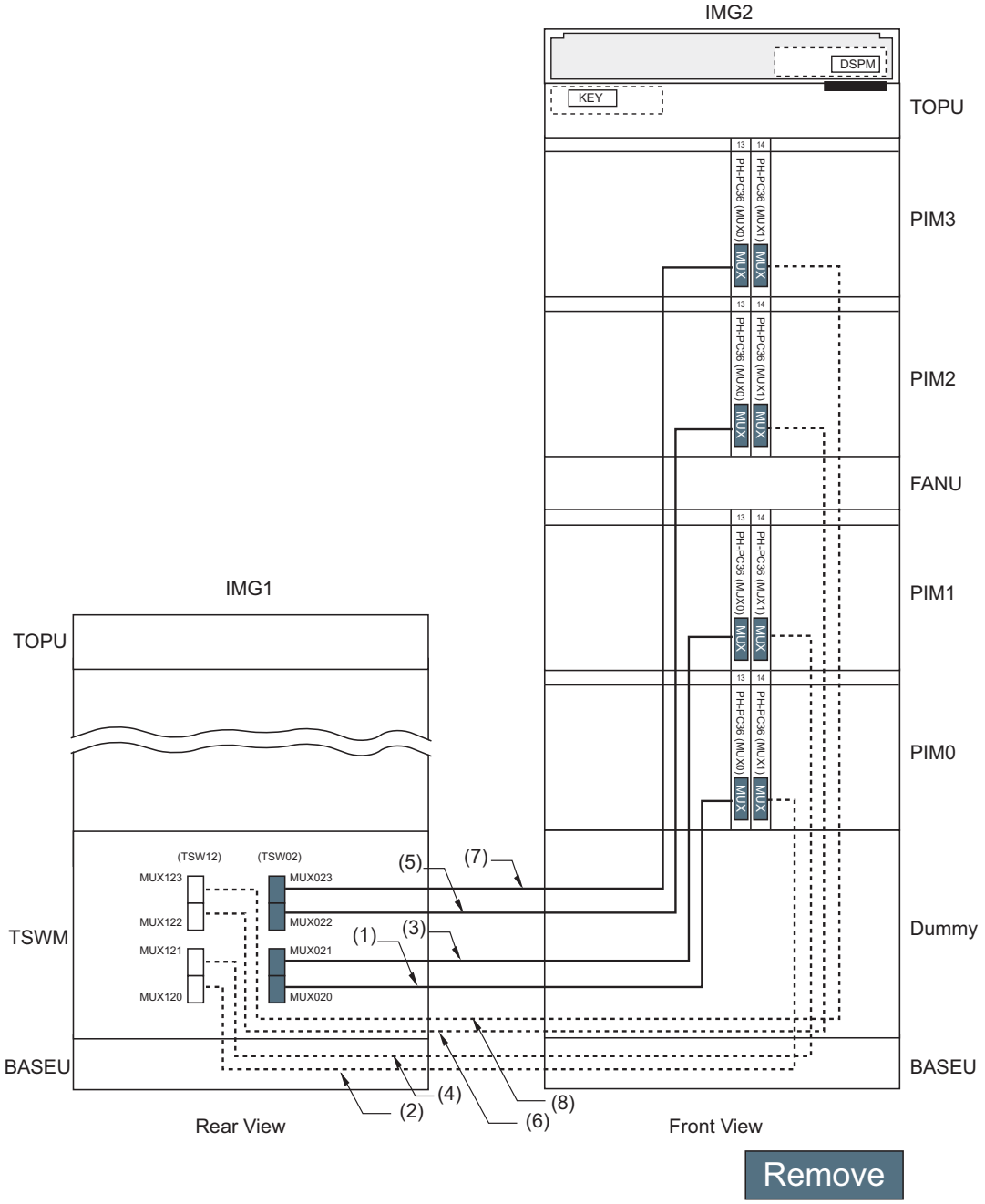
Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (3-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (3-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 020	PIM0 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 02
2	TSWM	MUX 120	PIM0 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 12
3	TSWM	MUX 021	PIM1 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 02
4	TSWM	MUX 121	PIM1 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 12
5	TSWM	MUX 022	PIM2 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 02
6	TSWM	MUX 122	PIM2 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 12

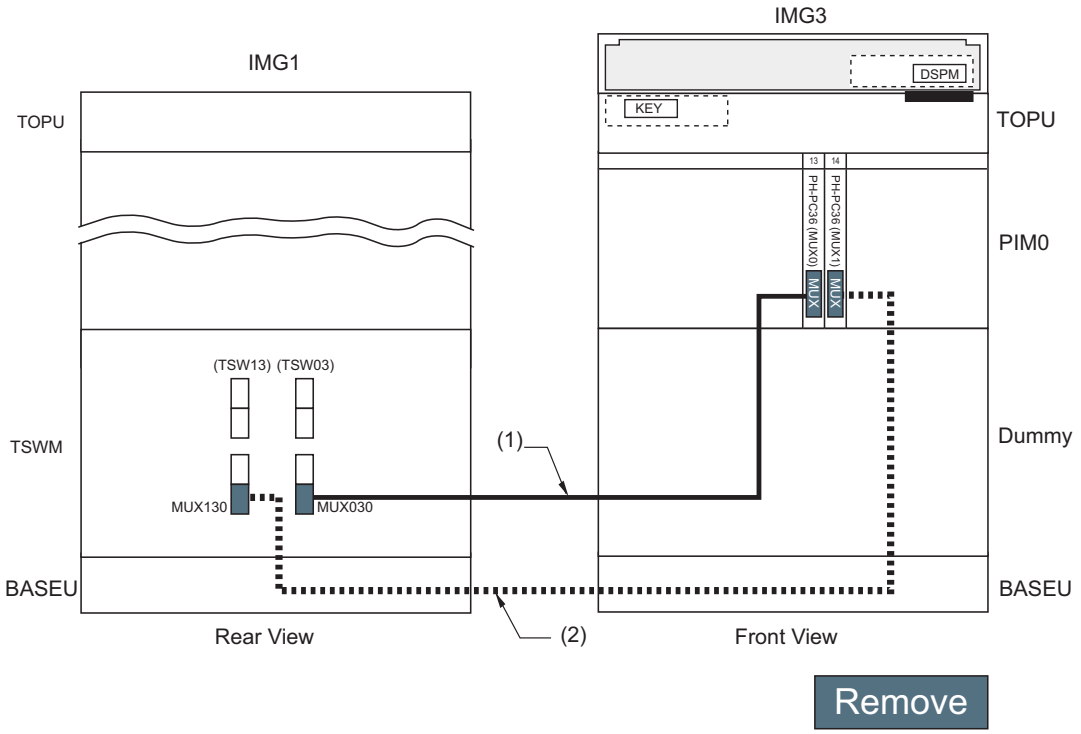
Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (4-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 2 (4-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 020	PIM0 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-F	TSW 02
2	TSWM	MUX 120	PIM0 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-F	TSW 12
3	TSWM	MUX 021	PIM1 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-G	TSW 02
4	TSWM	MUX 121	PIM1 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-G	TSW 12
5	TSWM	MUX 022	PIM2 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 02
6	TSWM	MUX 122	PIM2 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 12
7	TSWM	MUX 023	PIM3 (IMG2)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 02
8	TSWM	MUX 123	PIM3 (IMG2)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 12

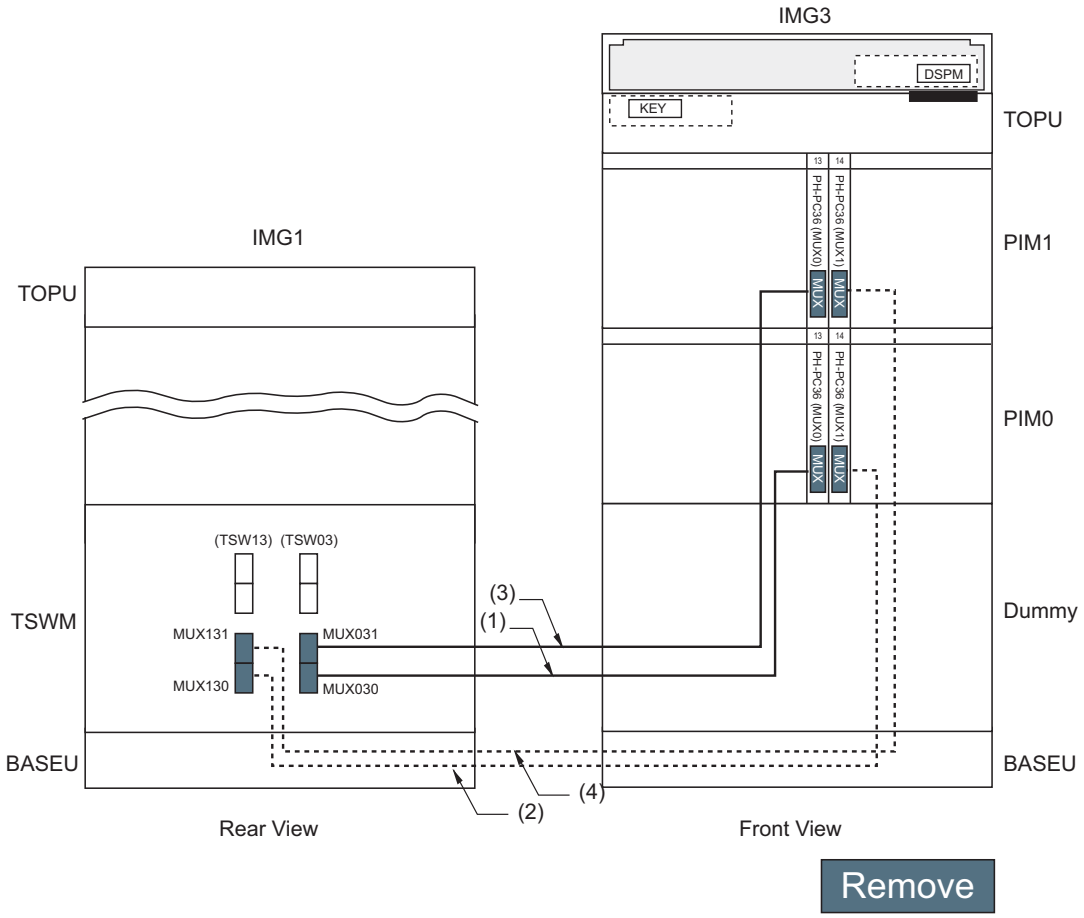
Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (1-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (1-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 030	PIM 0 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
2	TSWM	MUX 130	PIM 0 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13

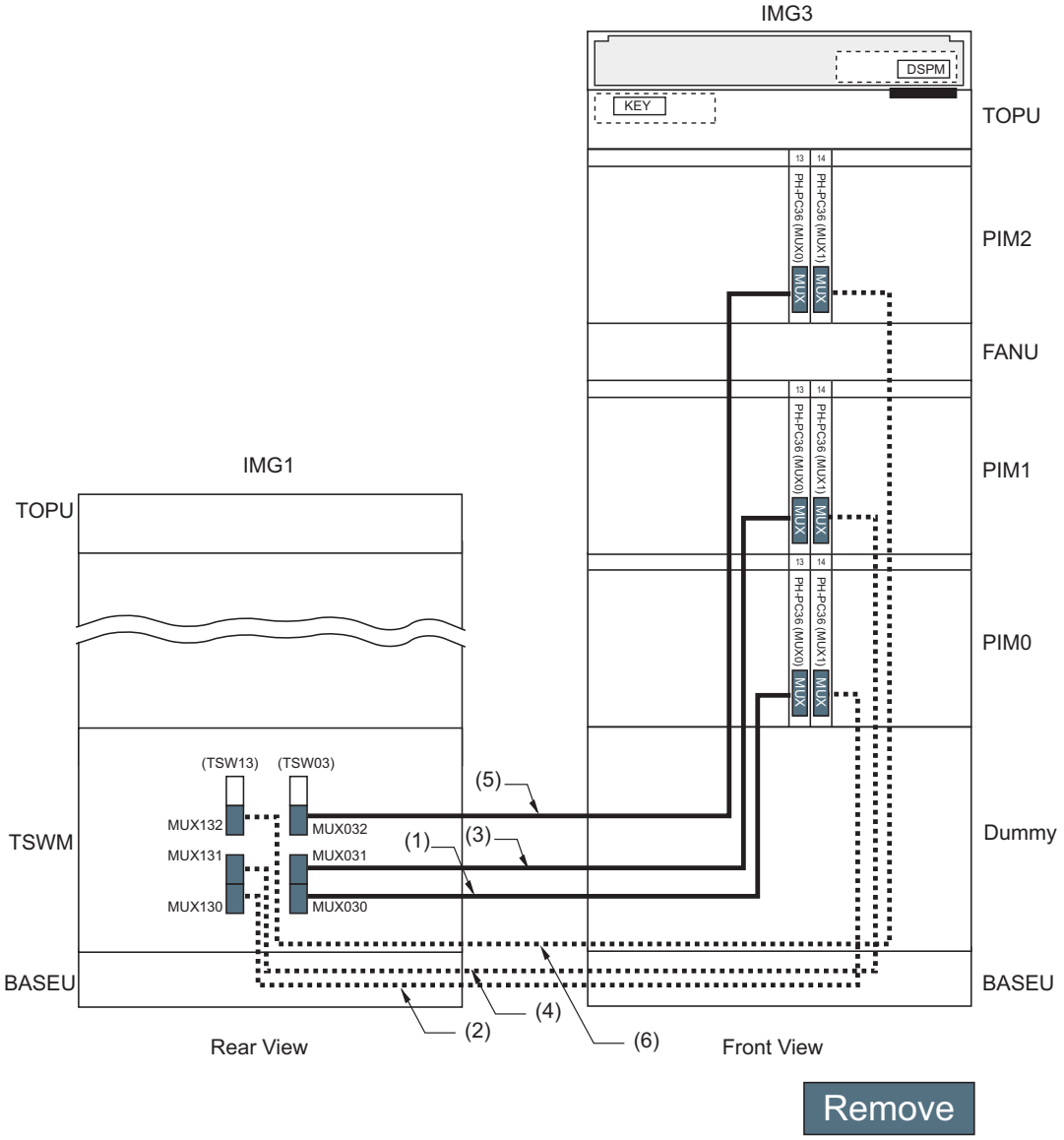
Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (2-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (2-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 030	PIM0 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
2	TSWM	MUX 130	PIM0 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13
3	TSWM	MUX 031	PIM1 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
4	TSWM	MUX 131	PIM1 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13

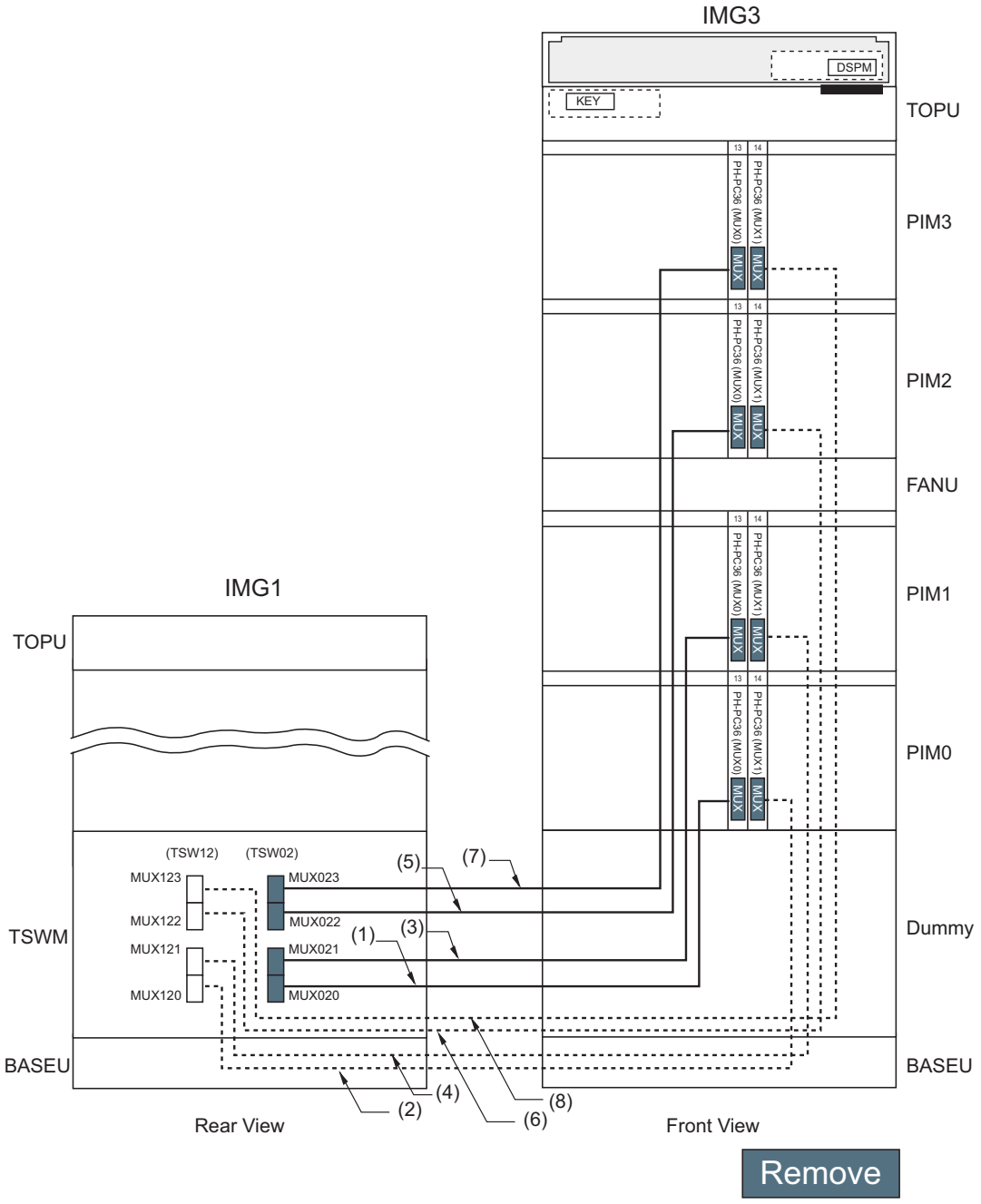
Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (3-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (3-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 030	PIM0 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
2	TSWM	MUX 130	PIM0 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13
3	TSWM	MUX 031	PIM1 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
4	TSWM	MUX 131	PIM1 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13
5	TSWM	MUX 032	PIM2 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-I	TSW 03
6	TSWM	MUX 132	PIM2 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-I	TSW 13

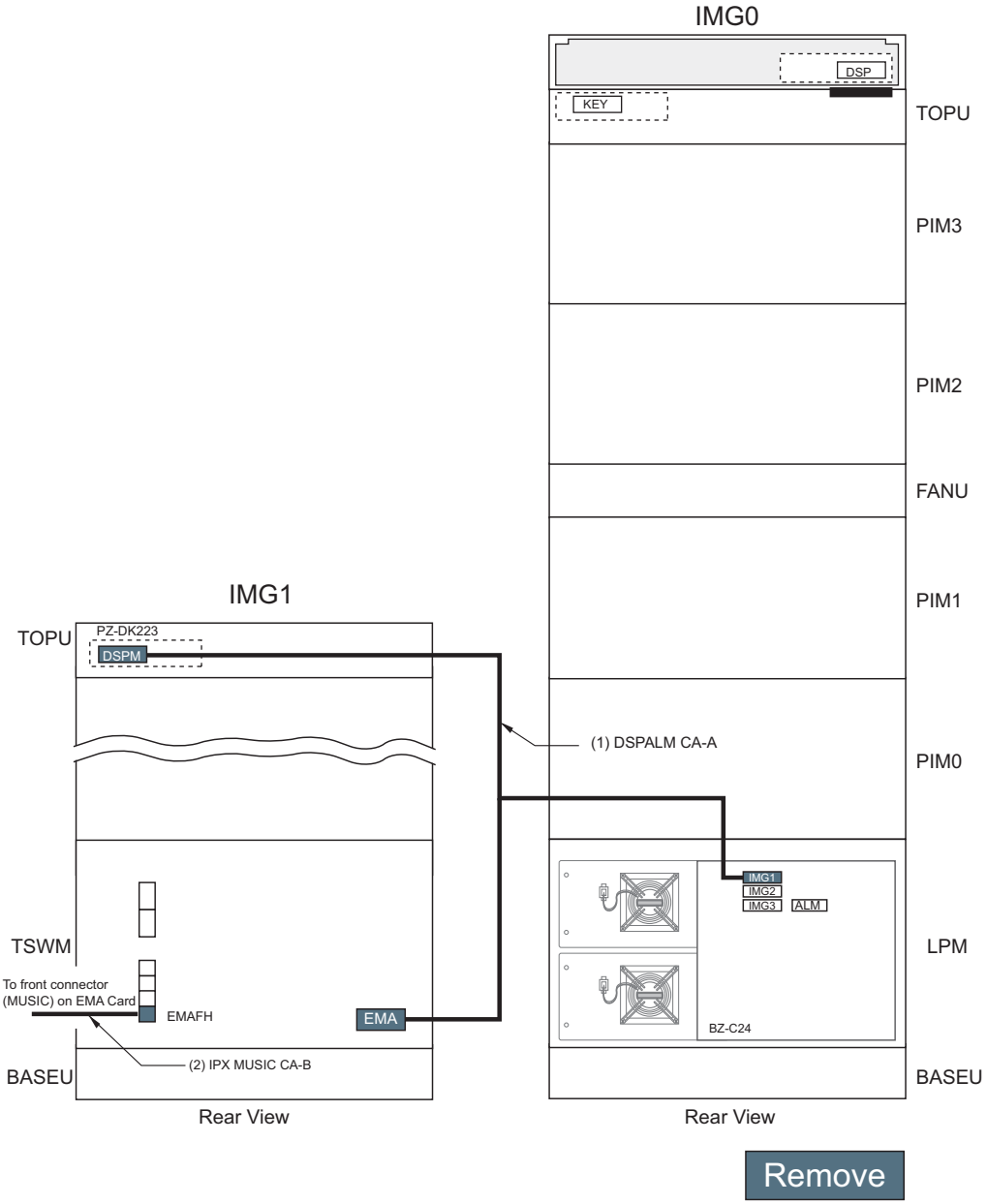
Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (4-PIM Configuration)



Remove Inter-Frame Bus Cables: IMG 1 to IMG 3 (4-PIM Configuration)

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	TSWM	MUX 030	PIM0 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
2	TSWM	MUX 130	PIM0 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13
3	TSWM	MUX 031	PIM1 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-H	TSW 03
4	TSWM	MUX 131	PIM1 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-H	TSW 13
5	TSWM	MUX 032	PIM2 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-I	TSW 03
6	TSWM	MUX 132	PIM2 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-I	TSW 13
7	TSWM	MUX 033	PIM3 (IMG3)	MUX (slot 13)	34PH MT24 TSW CA-J	TSW 03
8	TSWM	MUX 133	PIM3 (IMG3)	MUX (slot 14)	34PH MT24 TSW CA-J	TSW 13

Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 1

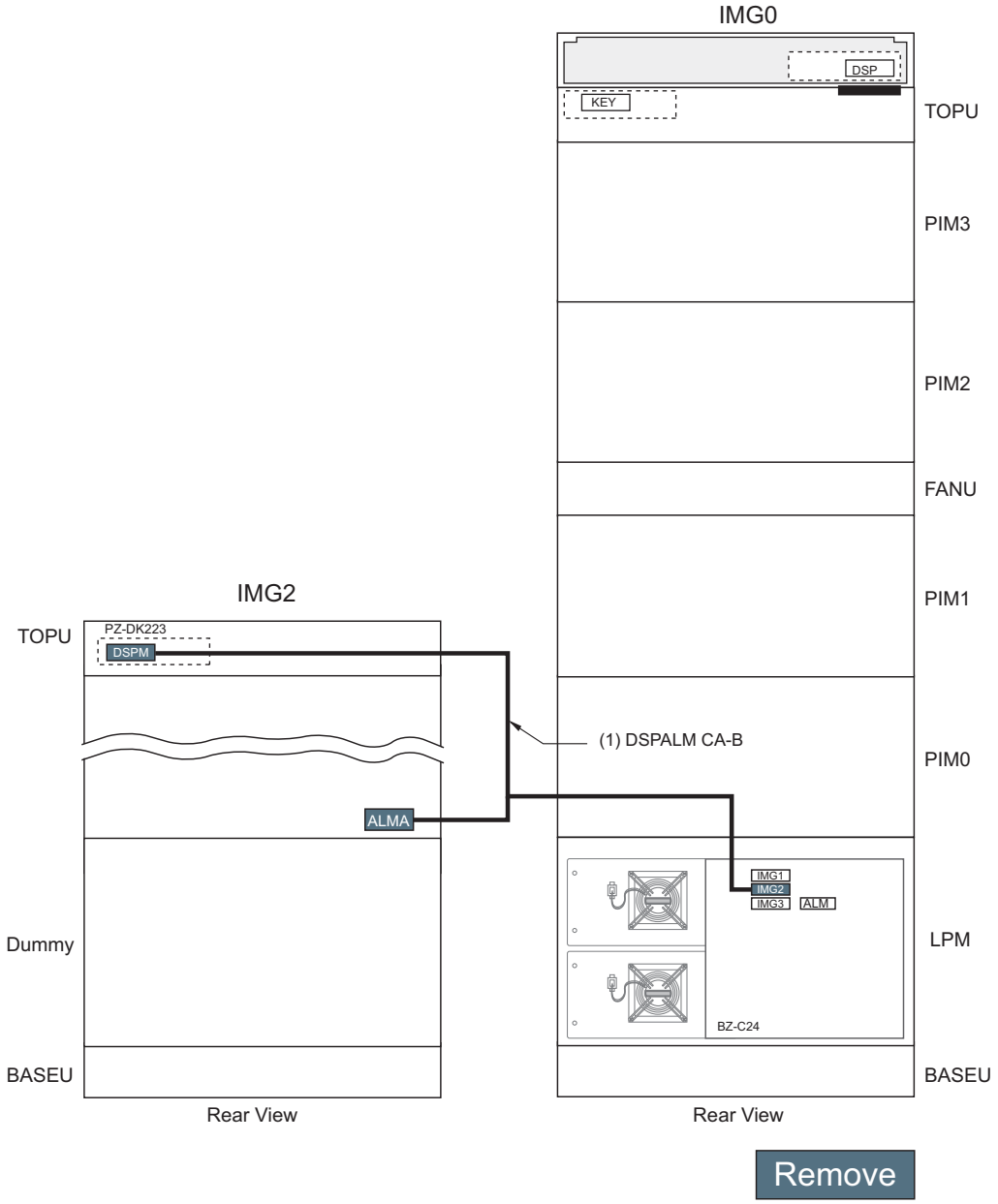


Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 1

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	LPM	IMG 1	TOPU (IMG 1)	DSP	DSPALM CA-A **Note 2**	
			TSWM	EMA		

Note 2: Alarm lamps on IPX TOPU are not used in the migrated system.

Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 2

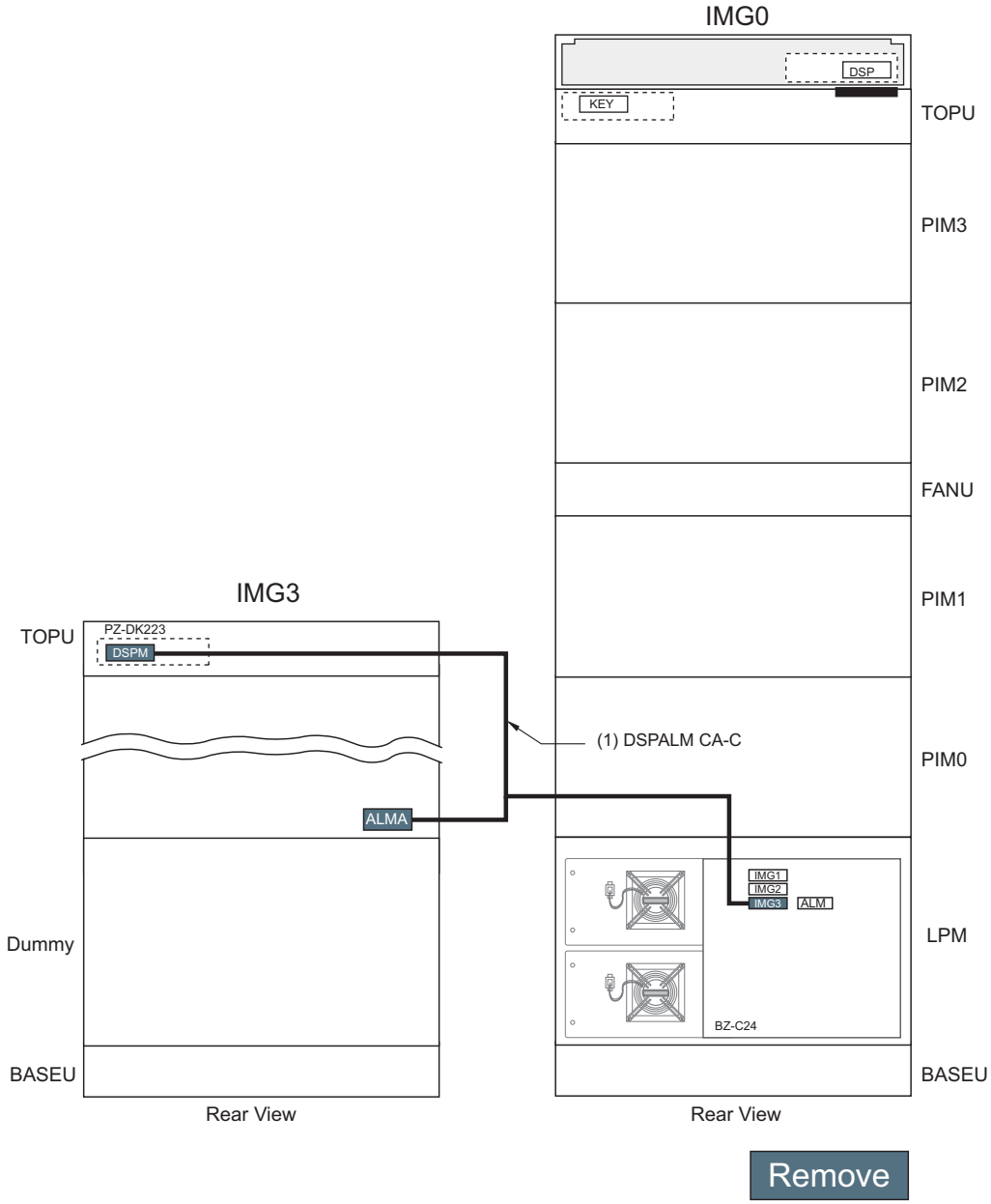


Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 2

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	LPM	IMG 2	TOPU (IMG2)	DSP	DSPALM CA-B **Note 3**	
			PIM0 (IMG2)	ALMA		

Note 3: Alarm lamps on IPX TOPU are not used in the migrated system.

Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 3



Remove Inter-Frame Alarm Bus Cables: IMG 0 to IMG 3

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	LPM	IMG 3	TOPU (IMG3)	DSP	DSPALM CA-C **Note 4**	
			PIM0 (IMG3)	ALMA		

Note 4: Alarm lamps on IPX TOPU are not used in the migrated system.

3.9 Extract the CPR and Circuit Cards from the LPM

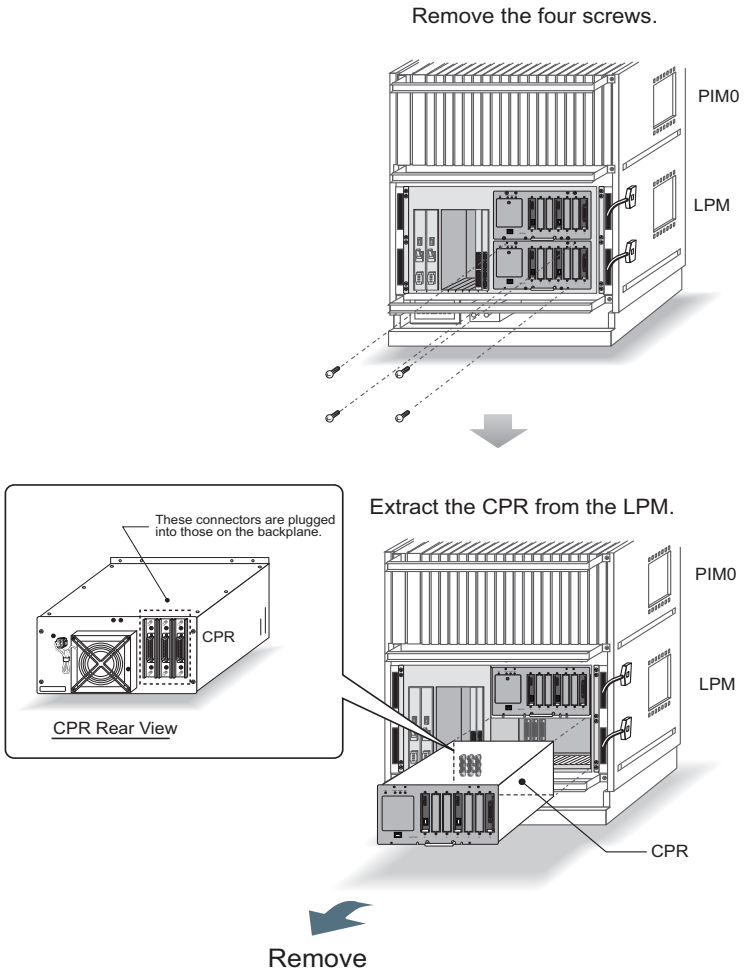


Extract the CPR and circuit cards such as IOC, EMA and MISC, from the LPM.

Note: The CPR is plugged into the three connectors on the LPM backplane.

How to Extract CPR from LPM

Remove the four screws fastened onto the CPR (keep the removed screws).
Then, extract the CPR from the LPM with care.



3.10 Extract the LPM Inner Box

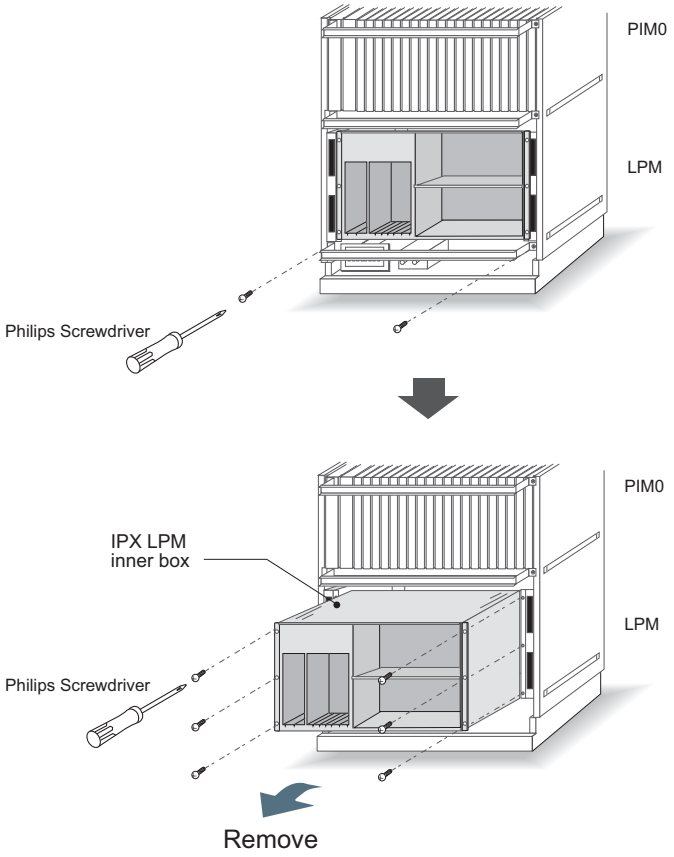


Remove the LPM inner box from the LPM as shown below.

Note: The inner box is supported within the LPM by six screws. Hold the LPM inner box firmly when removing the screws, to ensure the box does not fall.

How to Extract LPM Inner Box

- Removing IPX-LPM inner box



3.11 Mount the Cable Relay Box

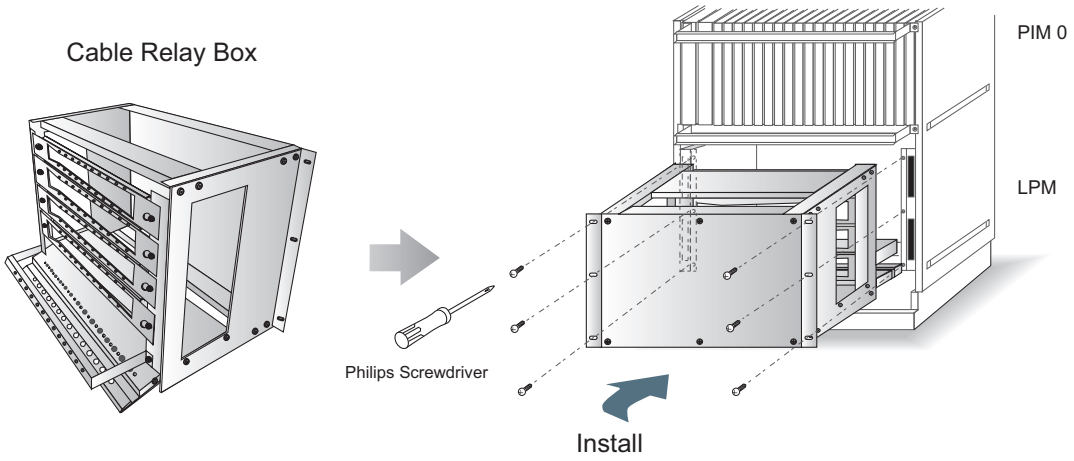


Mount the cable relay box into the LPM inner box mounted position.

Note: The cable relay box is supported within the LPM by six screws. Hold the cable relay box firmly when fastening the screws not to drop the box.

How to Install Cable Relay Box

- Installing Cable Relay Box



3.12 Cable Connections



This section only describes the cable connections specific to the migrated system between SV9500 server/TSWR and IPX PIMs. For the other normal cable connections for SV9500 and IPX, please refer to the SV9500 Appliance Model Installation Manual and the NEAX2400 IPX Installation Manual.

3.12.1 Power Cable Connection

(1) For SV9500 Side

When you migrate your system from IPX to SV9500, the SV9500 telephony server and TSWR will be operated on DC power. For details on power cable connection refer to the following:

- The power cable connection for SV9500 Telephony Server

  Refer to “Source Power Cable and Ground Cable Connection on BASEU” and “Cable Connection to SV9500 Server” - “Power Cable Connection for DC-Powered Model” in Chapter 3 of SV9500 Appliance Model Installation Manual.

- The power cable connection for TSWR

  Refer to “Cable Connection for DC-Powered Model (4-IMG Configuration)” in Chapter 4 of SV9500 Appliance Model Installation Manual.

(2) For IPX Side

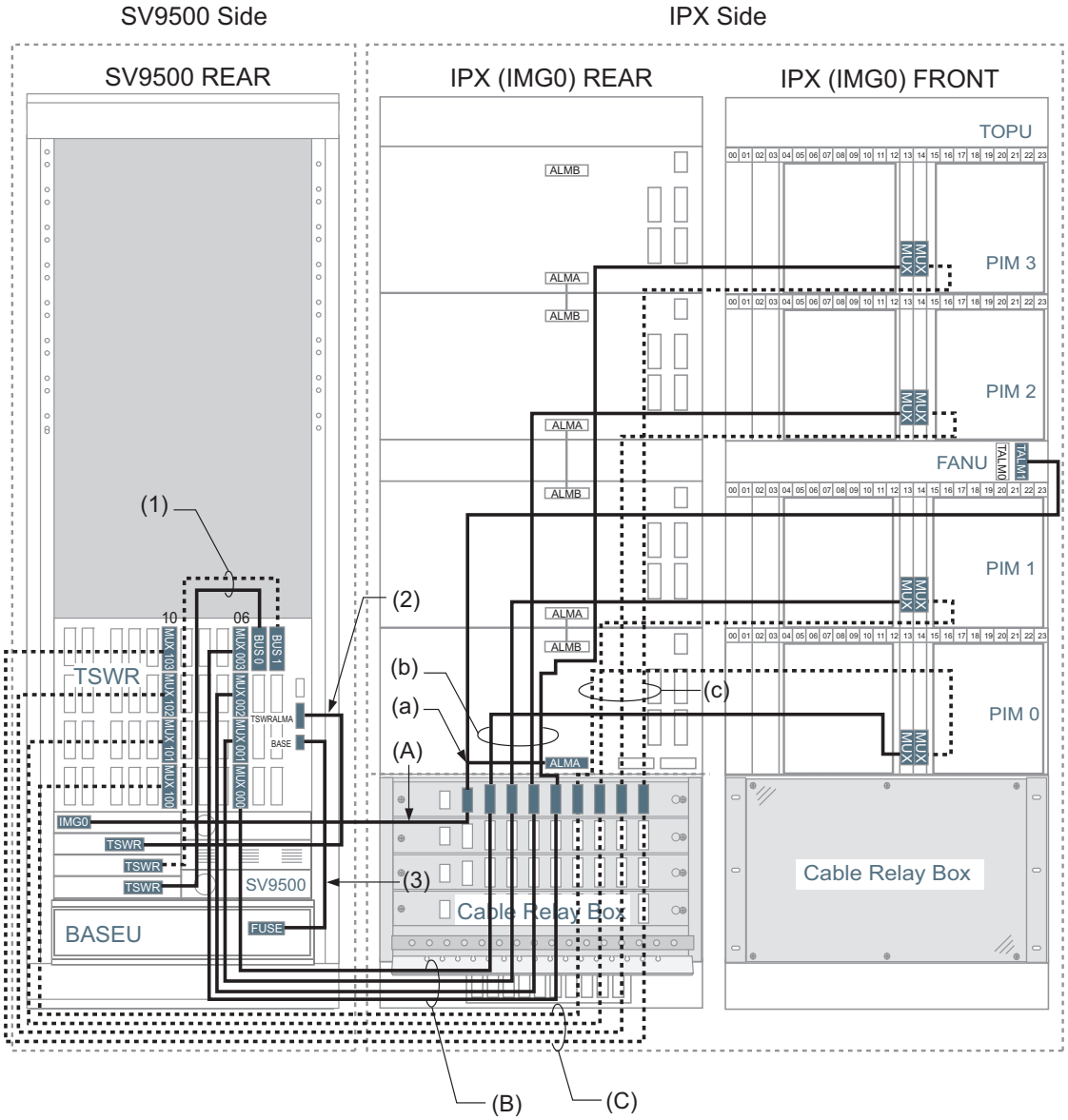
The power cable connection for IPX PIM is the same as the existing connection. If you use the existing cable connection, there is no particular work for the power cable connection. Refer to 1.12.1Power Cable Connection for more information.

3.12.2 Bus Cable Connection

(1) Overview of Bus Cable Connections

The following figure describes the overview of the bus cable connections for the migrated system. In the figure below, the cables (1) to (3) indicate connections applied to both the SV9500 standard system and the migrated system. The cables from (A/a) to (C/c) are connections specific to the migrated system. For details on the cable connections specific to the migrated system, see (2)Bus Cable Connection between SV9500 Server/SV9500 TSWR and IPX PIMs.

Overview of Bus Cable Connections



Overview of Bus Cable Connections - SV9500 Cables

No.	From		To		Cable Name	Remarks
	Unit/Module	Connector Name	Unit/Module	Connector Name		
1	SV9500 server (EXB-TSWR card #0)	TSWR	TSWR	BUS0 (SLOT 05)	D37-SC50 CA-B	**Note 1**
	SV9500 server (EXB-TSWR card #1)			BUS1 (SLOT 04)		Required for dual-TSW configuration. **Note 2**
2	SV9500 server (EMA SUB-B card)	TSWR	TSWR	TSWRALMA	D15 ST(S)-A	
3	BASEU	FUSE	TSWR	BASE	D09 ST CA-A	

Note: For details on the above cable connections applied to both the SV9500 standard system and the migrated system, refer to SV9500 Appliance Model Installation Manual. For the bus cable connections specific to the migrated system, see (2)Bus Cable Connection between SV9500 Server/SV9500 TSWR and IPX PIMs.

Note 1: Insert PH-GT09 circuit card into Slot 04 for TSW #0.

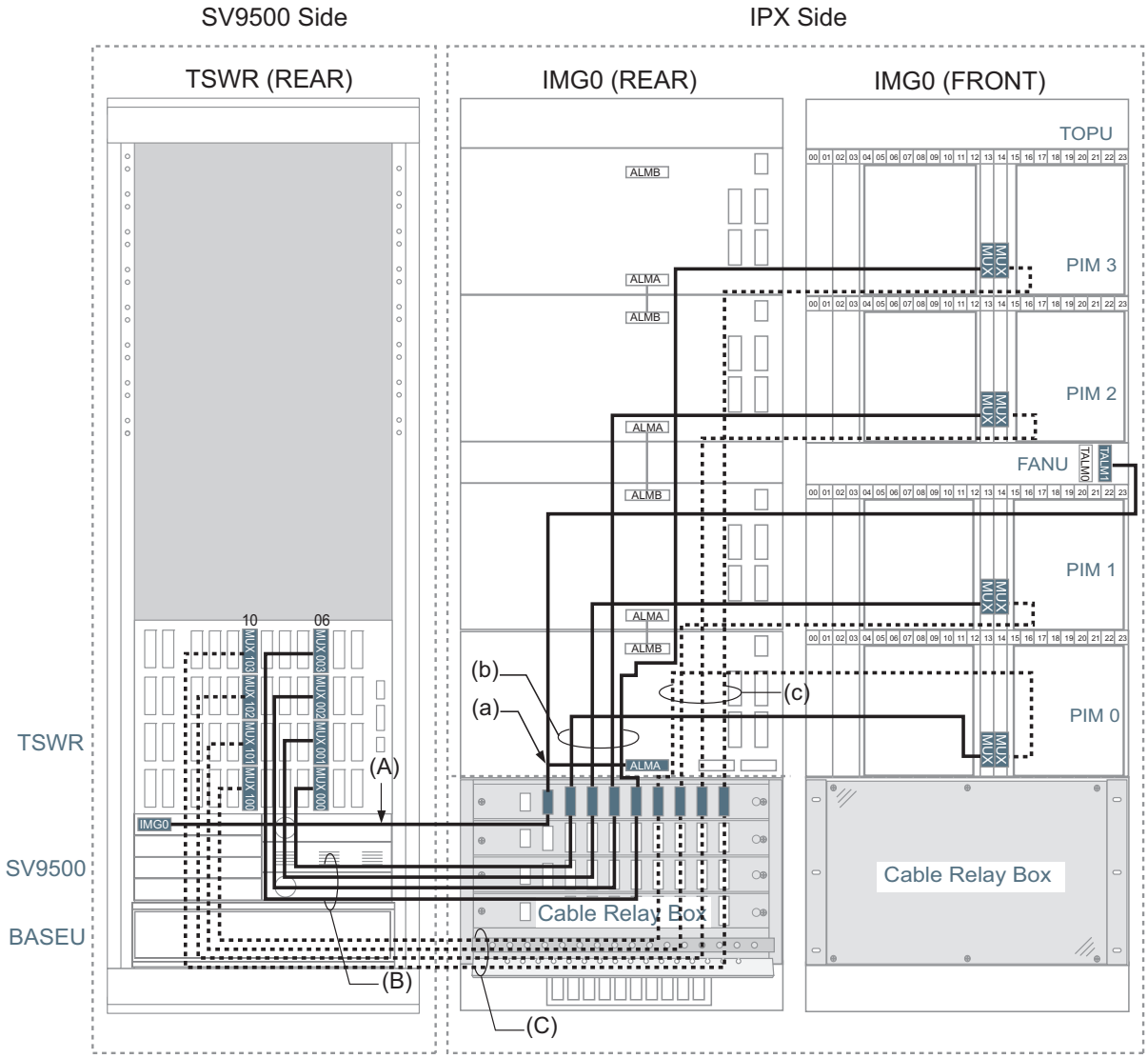
Note 2: Insert PH-GT09 circuit card into Slot 05 for TSW #1.

(2) Bus Cable Connection between SV9500 Server/SV9500 TSWR and IPX PIMs

Run the bus cables between SV9500 server/SV9500 TSWR and IPX PIMs through the cable relay box as follows:

[SV9500 TSWR - IPX PIMs of IMG0]

Cable Connections between SV9500 Server/SV9500 TSWR and IPX PIMs of IMG 0



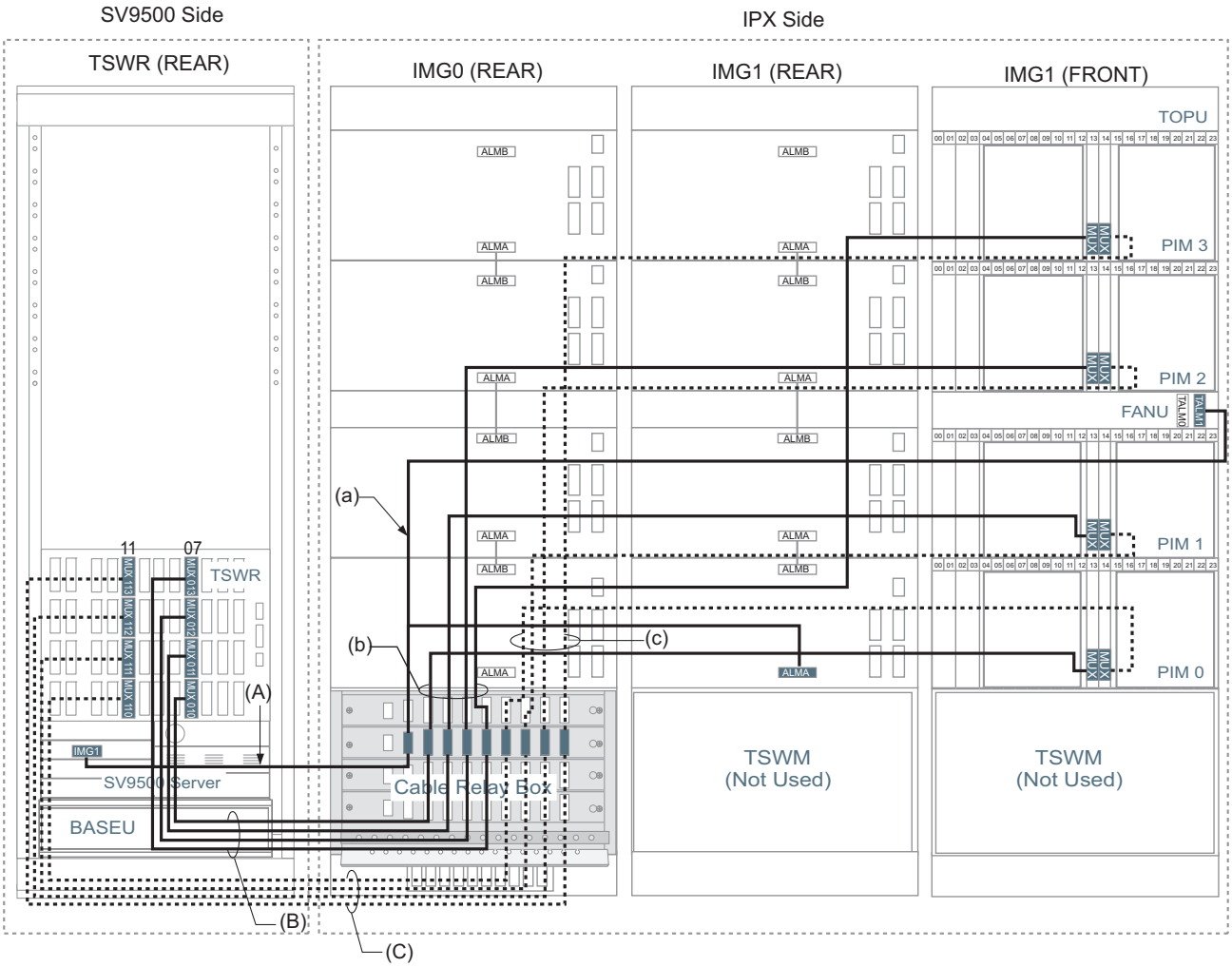
	From (SV9500 Server/TSWR)			Cable Relay Box		To (IPX IMG 0)		
	Unit/Module	Connector Name	Cable Name			Unit/ Module	Connector Name	Cable Name
A	SV9500 Server (EMA SUB-A card)	IMG0	D15 ST-F CA-B D15 ST-F CA-D **Note 3**		a	PIM0	ALMA	D15-(PS20-ML2) CA-A
						FANU	TALM1	
B	TSWR	MUX000 (slot 06)	D37-D25 CA-B D37-D25 CA-1 **Note 3**		b	PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
		MUX001 (slot 06)				PIM1	MUX (PH-PC36 front connector)	
		MUX002 (slot 06)				PIM2	MUX (PH-PC36 front connector)	
		MUX003 (slot 06)				PIM3	MUX (PH-PC36 front connector)	
C	TSWR	MUX100 (slot 10)	D37-D25 CA-B D37-D25 CA-1 **Note 3**		c	PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
		MUX101 (slot 10)				PIM1	MUX (PH-PC36 front connector)	
		MUX102 (slot 10)				PIM2	MUX (PH-PC36 front connector)	
		MUX103 (slot 10)				PIM3	MUX (PH-PC36 front connector)	

Note: To complete the cable connection smoothly, connect the IPX-side bus cables (D15-(PS20-ML2) CA-A and MT24-D25 CA-B) first, and connect the SV9500-side bus cables.

Note 3: Migrating 4-IMG IPX with a long distance between SV9500/TSWR and cable relay box, you can use a long cable to extend distance between them. For more information, refer to "Long Cable Unit".

[SV9500 TSWR - IPX PIMs of IMG1]

Cable Connections between SV9500 TSWR and IPX PIMs of IMG1



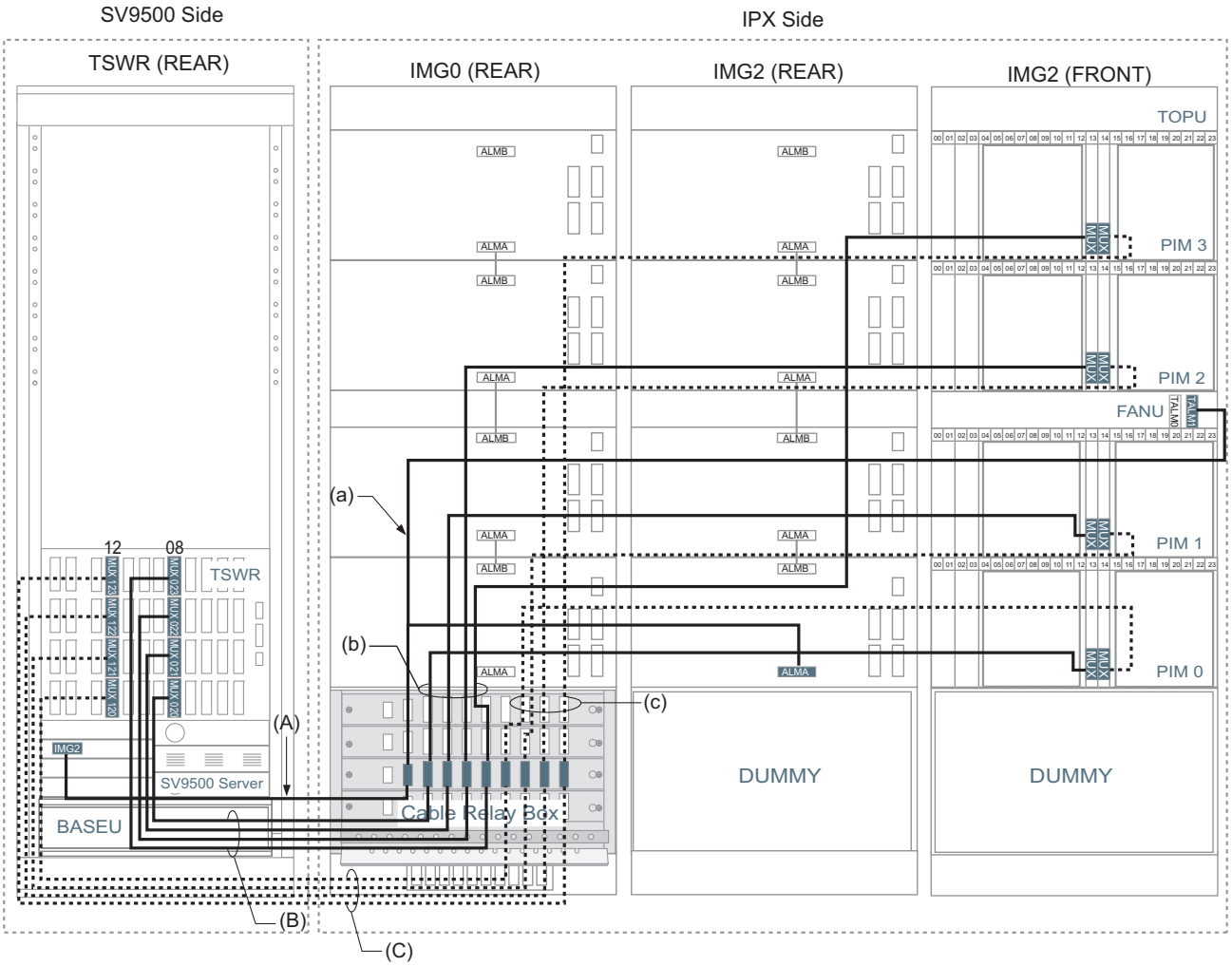
	From (SV9500 Server/TSWR)			Cable Relay Box		To (IPX IMG 1)		
	Unit/Module	Connector Name	Cable Name			Unit/ Module	Connector Name	Cable Name
A	SV9500 Server (EMA SUB-B card)	IMG1	D15 ST-F CA-B D15 ST-F CA-D **Note 4**		a	PIM0	ALMA	D15-(PS20-ML2) CA-A
						FANU	TALM1	
B	TSWR	MUX010 (slot 07)	D37-D25 CA-B D37-D25 CA-1 **Note 4**		b	PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
		MUX011 (slot 07)				PIM1	MUX (PH-PC36 front connector)	
		MUX012 (slot 07)				PIM2	MUX (PH-PC36 front connector)	
		MUX013 (slot 07)				PIM3	MUX (PH-PC36 front connector)	
C	TSWR	MUX110 (slot 11)	D37-D25 CA-B D37-D25 CA-1 **Note 4**		c	PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
		MUX111 (slot 11)				PIM1	MUX (PH-PC36 front connector)	
		MUX112 (slot 11)				PIM2	MUX (PH-PC36 front connector)	
		MUX113 (slot 11)				PIM3	MUX (PH-PC36 front connector)	

Note: To complete the cable connection smoothly, connect the IPX-side bus cables (D15-(PS20-ML2) CA-A and MT24-D25 CA-B) first, and connect the SV9500-side bus cables.

Note 4: Migrating 4-IMG IPX with a long distance between SV9500/TSWR and cable relay box, you can use a long cable to extend distance between them. For more information, refer to "Long Cable Unit".

[SV9500 TSWR - IPX PIMs of IMG2]

Cable Connections between SV9500 TSWR and IPX PIMs of IMG2



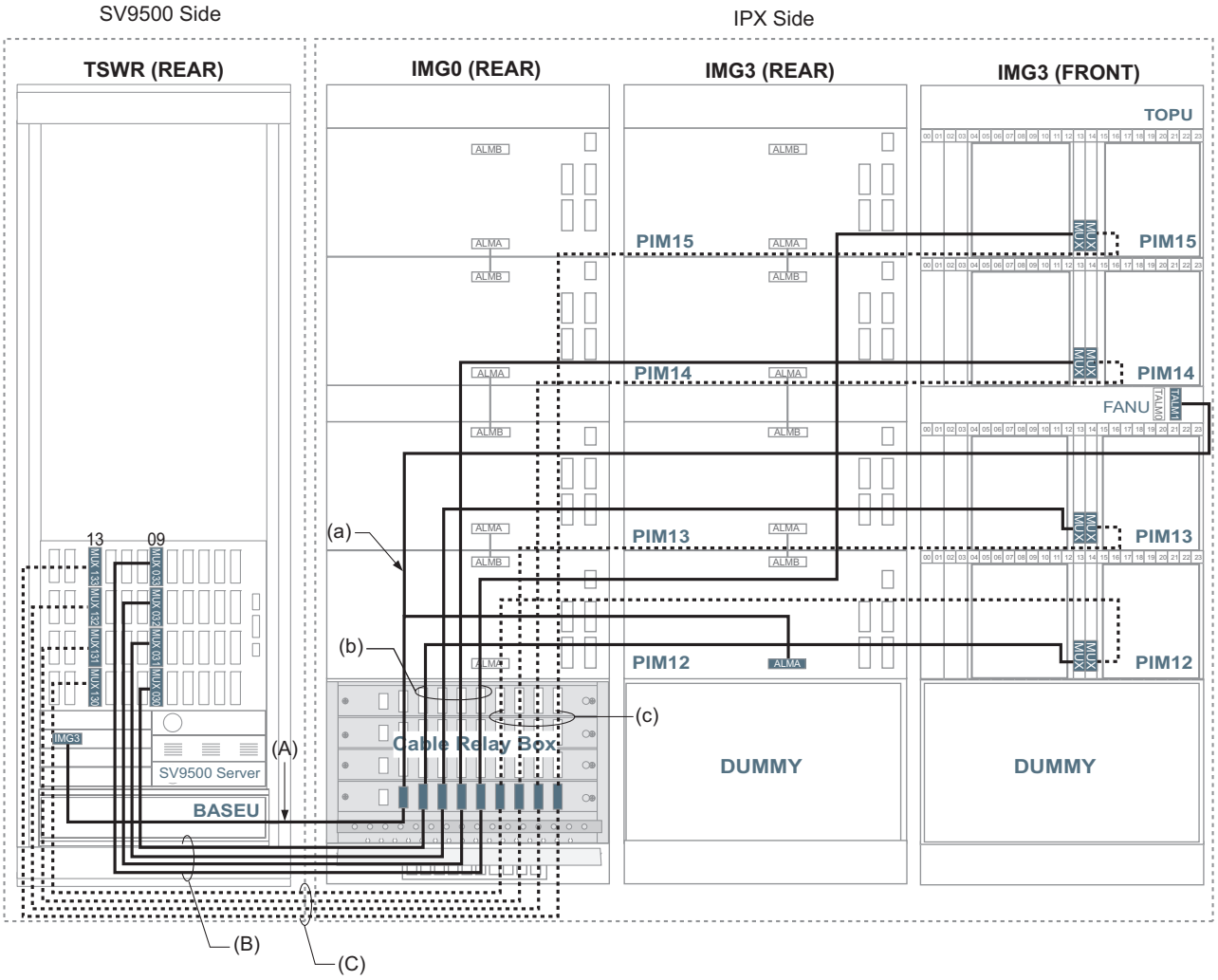
	From (SV9500 Server/TSWR)			Cable Relay Box		To (IPX IMG 2)		
	Unit/Module	Connector Name	Cable Name			Unit/ Module	Connector Name	Cable Name
A	SV9500 Server (EMA SUB-B card)	IMG2	D15 ST-F CA-B D15 ST-F CA-D **Note 5**		a	PIM0	ALMA	D15-(PS20-ML2) CA-A
						FANU	TALM1	
B	TSWR	MUX020 (slot 08)	D37-D25 CA-B D37-D25 CA-1 **Note 5**		b	PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
		MUX021 (slot 08)				PIM1	MUX (PH-PC36 front connector)	
		MUX022 (slot 08)				PIM2	MUX (PH-PC36 front connector)	
		MUX023 (slot 08)				PIM3	MUX (PH-PC36 front connector)	
C	TSWR	MUX120 (slot 12)	D37-D25 CA-B D37-D25 CA-1 **Note 5**		c	PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
		MUX121 (slot 12)				PIM1	MUX (PH-PC36 front connector)	
		MUX122 (slot 12)				PIM2	MUX (PH-PC36 front connector)	
		MUX123 (slot 12)				PIM3	MUX (PH-PC36 front connector)	

Note: To complete the cable connection smoothly, connect the IPX-side bus cables (D15-(PS20-ML2) CA-A and MT24-D25 CA-B) first, and connect the SV9500-side bus cables.

Note 5: Migrating 4-IMG IPX with a long distance between SV9500/TSWR and cable relay box, you can use a long cable to extend distance between them. For more information, refer to "Long Cable Unit".

[SV9500 TSWR - IPX PIMs of IMG3]

Cable Connections between SV9500 TSWR and IPX PIMs of IMG3



	From (SV9500 Server/TSWR)			Cable Relay Box		To (IPX IMG 3)		
	Unit/Module	Connector Name	Cable Name			Unit/ Module	Connector Name	Cable Name
A	SV9500 Server (EMA SUB-B card)	IMG3	D15 ST-F CA-B D15 ST-F CA-D **Note 6**		a	PIM0	ALMA	D15-(PS20-ML2) CA-A
						FANU	TALM1	
B	TSWR	MUX030 (slot 09)	D37-D25 CA-B D37-D25 CA-1 **Note 6**		b	PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
		MUX031 (slot 09)				PIM1	MUX (PH-PC36 front connector)	
		MUX032 (slot 09)				PIM2	MUX (PH-PC36 front connector)	
		MUX033 (slot 09)				PIM3	MUX (PH-PC36 front connector)	
C	TSWR	MUX130 (slot 13)	D37-D25 CA-B D37-D25 CA-1 **Note 6**		c	PIM0	MUX (PH-PC36 front connector)	MT24-D25 CA-B
		MUX131 (slot 13)				PIM1	MUX (PH-PC36 front connector)	
		MUX132 (slot 13)				PIM2	MUX (PH-PC36 front connector)	
		MUX133 (slot 13)				PIM3	MUX (PH-PC36 front connector)	

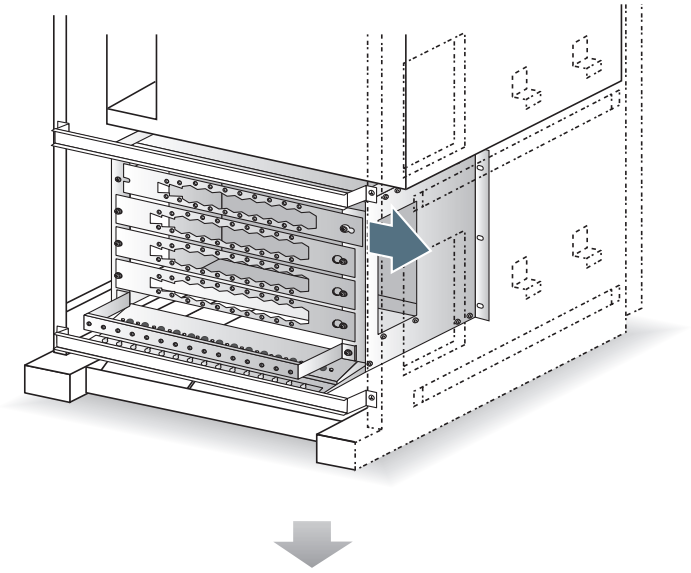
Note: To complete the cable connection smoothly, connect the IPX-side bus cables (D15-(PS20-ML2) CA-A and MT24-D25 CA-B) first, and connect the SV9500-side bus cables.

Note 6: Migrating 4-IMG IPX with a long distance between SV9500/TSWR and cable relay box, you can use a long cable to extend distance between them. For more information, refer to "Long Cable Unit".

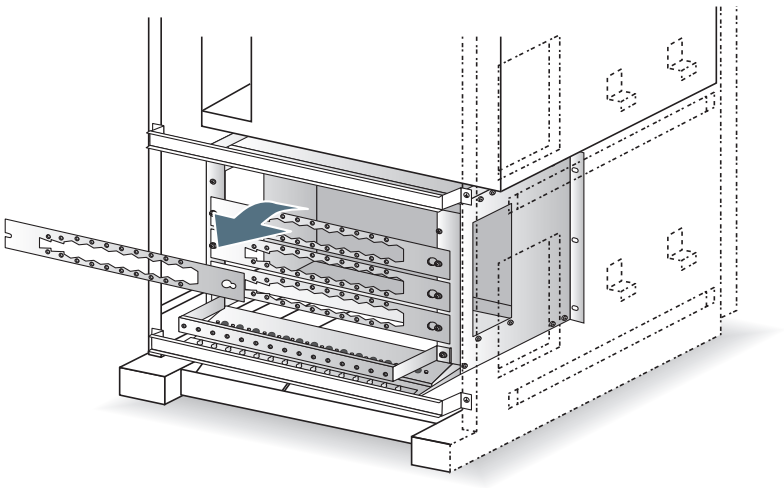
(3) How to Secure the Connector of IPX BUS Cable to Cable Relay Box

Step1: Remove a rear panel of the cable relay box.

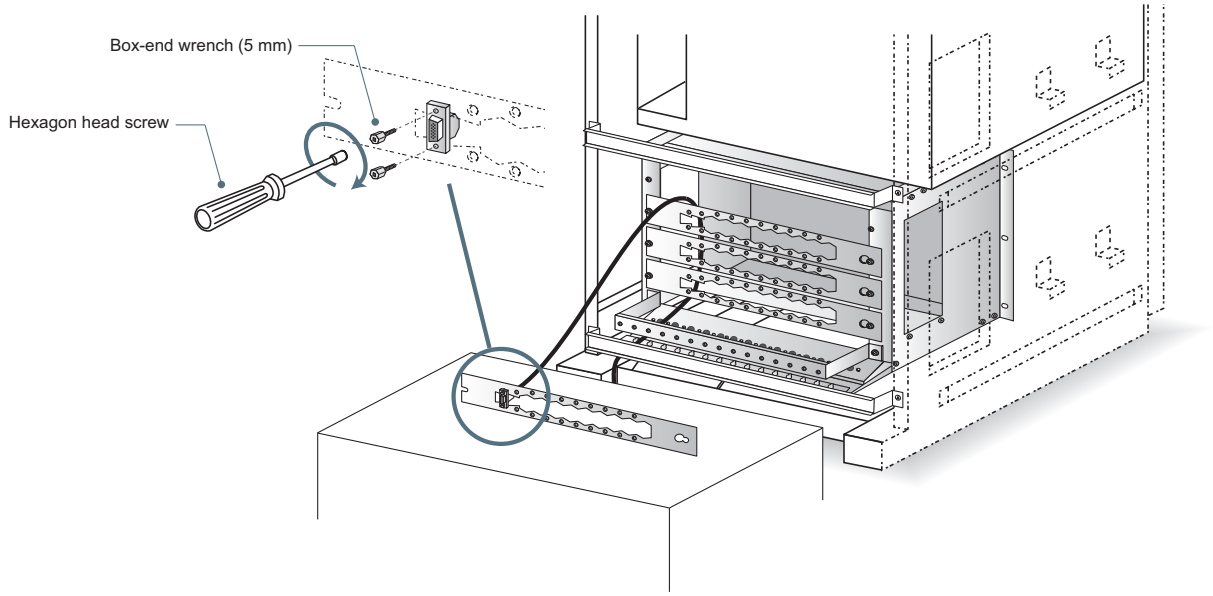
- Loosen the two screws located on both sides of the pannel.
- Slowly slide the pannel to the right.



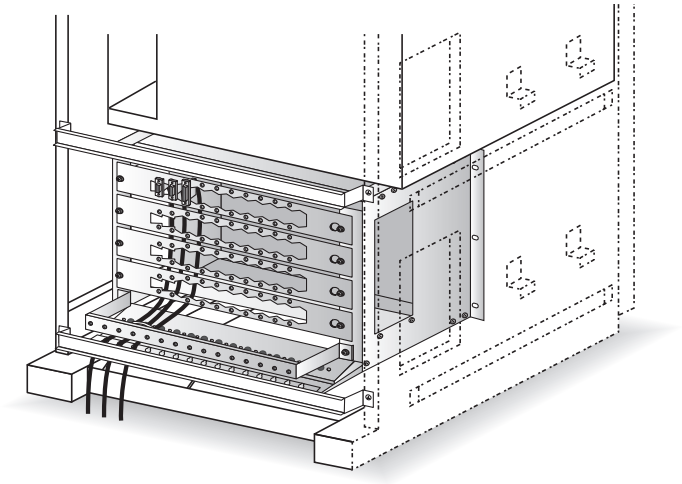
- Remove the pannel from the Cable Relay Box.



Step2: Secure the connector of the cable running from IPX PIM to the rear pannel.



Step3: Reinstall the rear panel to the cable relay box after all the necessary cables are attached.

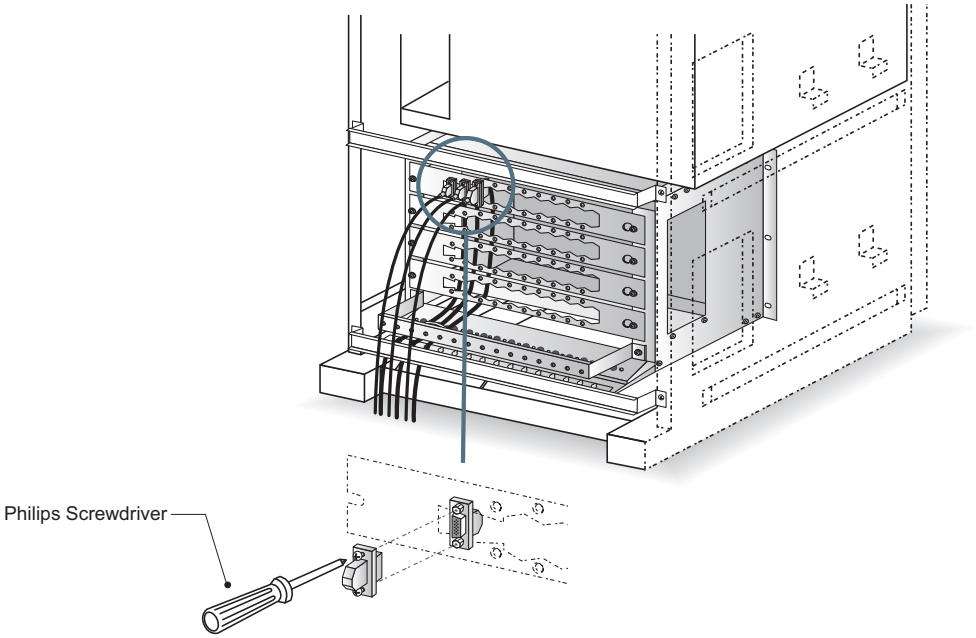


For reference

- If the rear side of the IPX is crowded with the cables and it is difficult to perform the above tasks from the rear side, you can remove the front panel of the cable relay box to secure the connector of IPX-side cable from the front side of the cable relay box.
- For 4-IMG system, it is recommended to perform cabling work for each IMG descendingly (from IMG3 to IMG0).

(4) How to Secure the Connector of SV9500 BUS Cable to Cable Relay Box

Step1: Secure the connector of the cable running from SV9500 TSWR to the connector of the cable running from IPX PIM by the screws as follows:

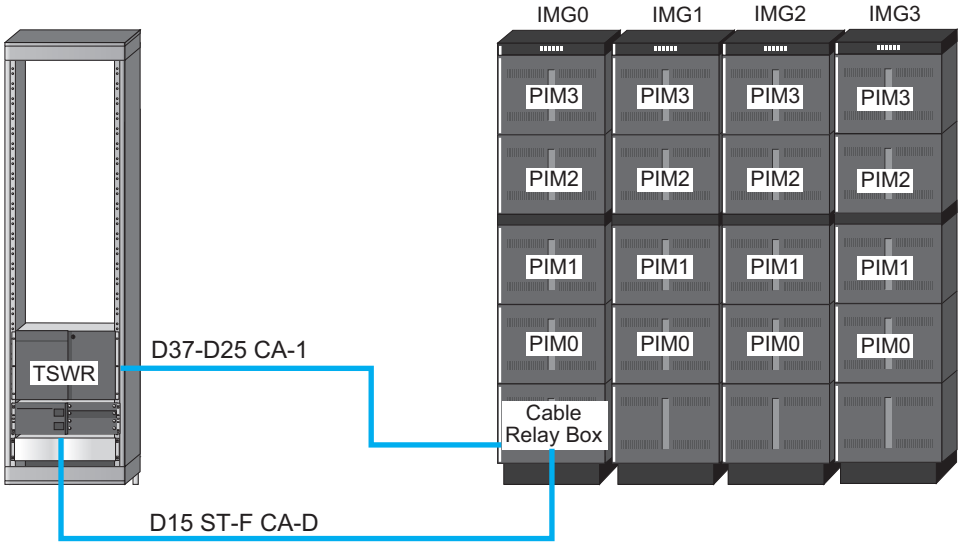


(5) Long Cable Unit

Migrating 4-IMG IPX with a long distance between SV9500/TSWR and cable relay box, you can use a long cable to connect them.

Locations To Be Connected With Long Cable	Cable Name	Length
Between SV9500 sever and a cable relay box	D15 ST-F CA-D **Note 7**	12000mm
Between TSWR and a cable relay box	D37-D25 CA-1 **Note 8**	10000mm

Locations To Be Used with Long Cable Unit



Note 7: When you use the long cable, the following attached cables are left unused.
- D15 ST-F CA-B (One wire) × The number of IMGs

Note 8: When you use the long cable, the following attached cables are left unused.
- D37-D25 CA-B (Two wires) × The number of PIMs

3.12.3 Ground Cable Connection



The following shows how to connect a cable for an enhanced ground when migrating from NEAX2400 IPX.

Connect a ground cable “ML04 GND CA-A” to each IMG frame.

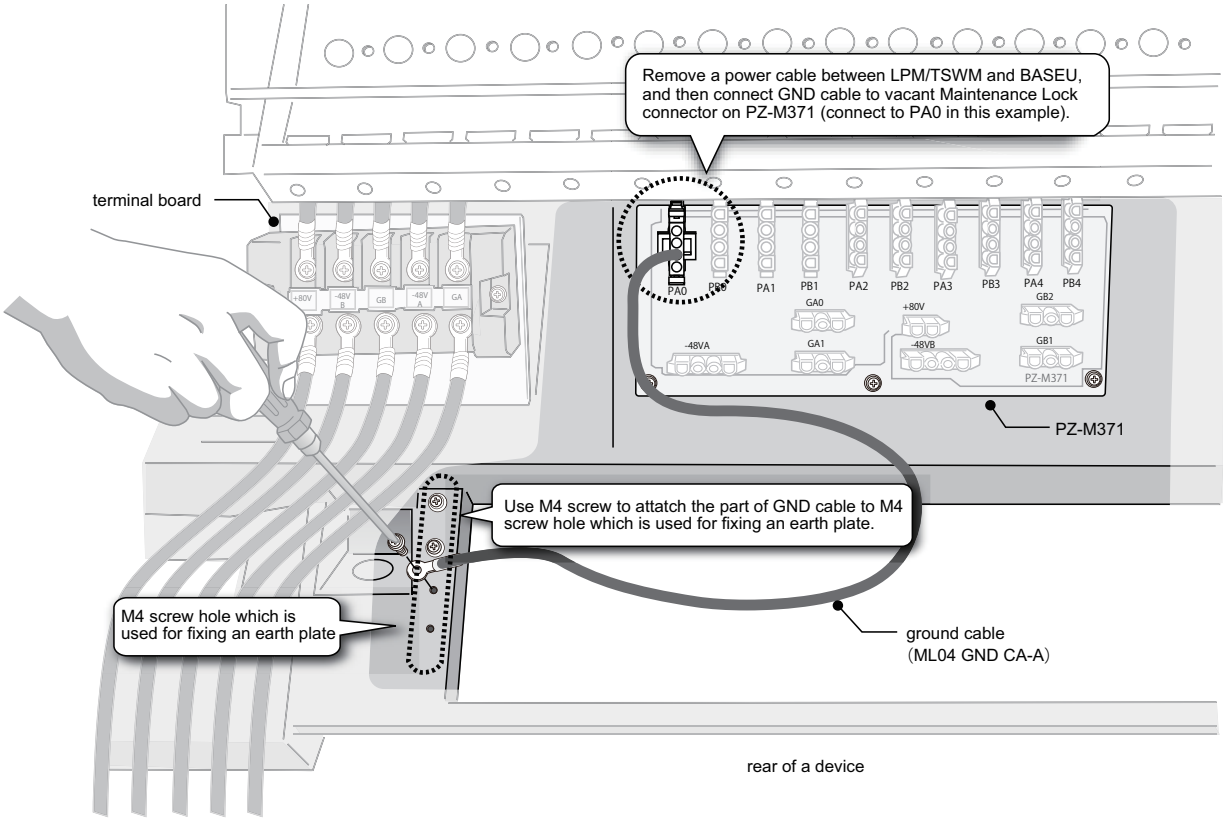
The following example explains how to connect the ground cable.

Note: The ground cable “ML04 GND CA-A” provides the lightning protection. For more details, see the following figures.

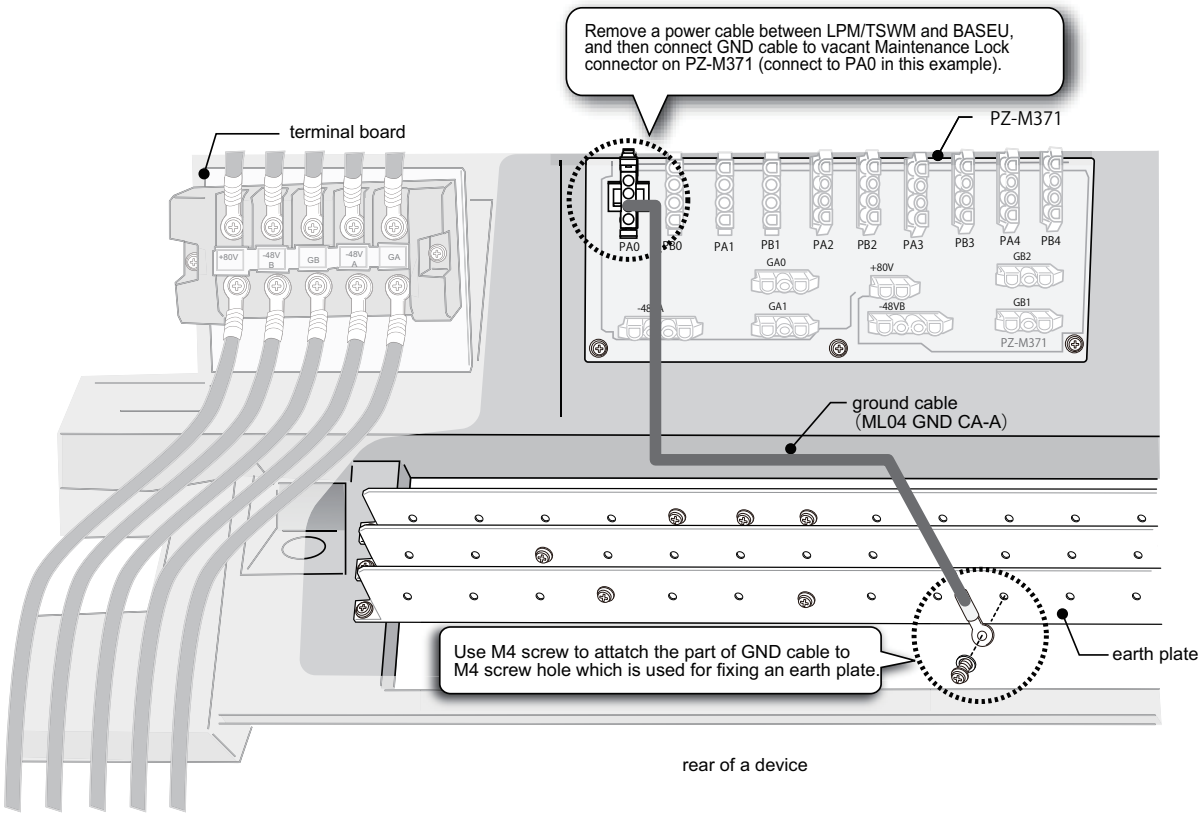
(1)When an earth plate is not used

(2)When an earth plate is used

(1) When an earth plate is not used



(2) When an earth plate is used



3.13 Move Circuit Cards from TSWM to TSWR



If you migrate your system from IPX to SV9500, TSWR is used instead of the existing TSWM. Therefore, you need to move the circuit cards mounted in the exiting TSWM to the new TSWR.

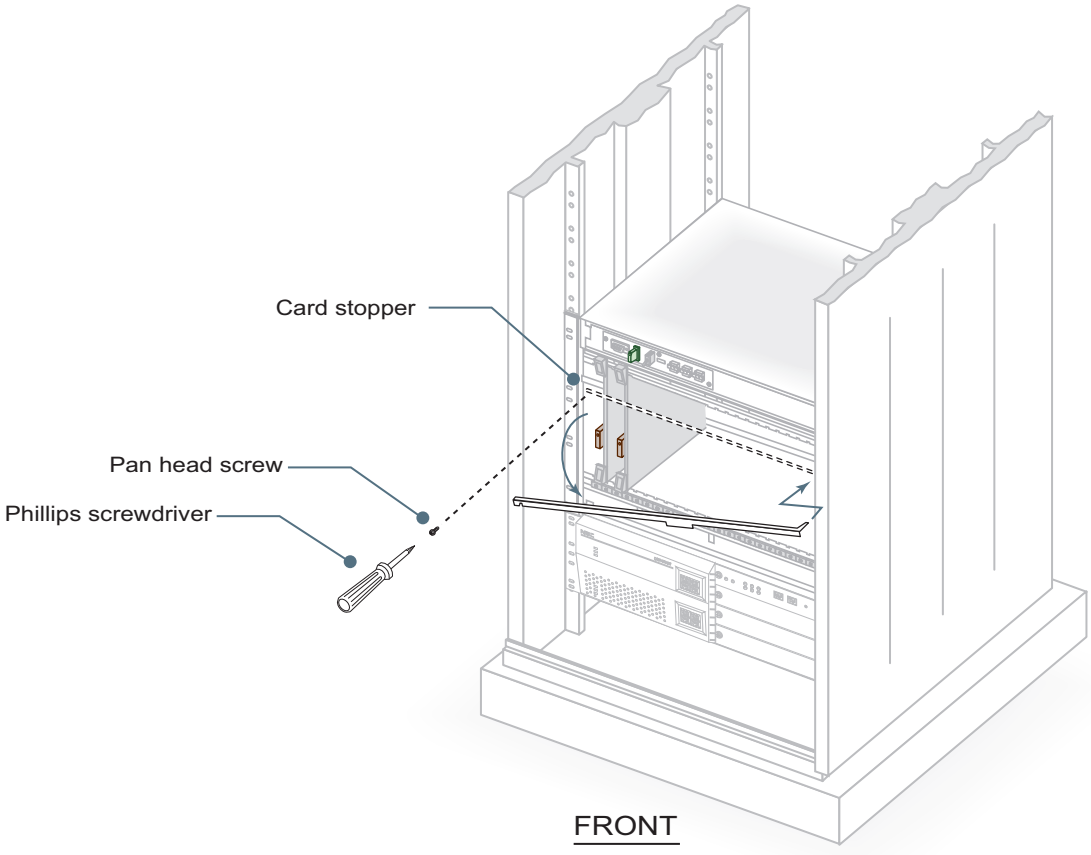
Note: Do not touch the surface, the mounted components, and the gold-coated connectors of circuit card with barehands.

Note: Take countermeasures against static electricity when handling circuit cards.

Note: For the circuit cards which can be used in the migrated system, refer to the SV9500 Circuit Card Description.

3.13.1 How to Mount Circuit Card in TSWR

Step1: Loosen the screw using a Phillips screwdriver and remove the card stopper attached on the front of PIR. (Do not take off the screw from the TSWR here.) The removed card stopper needs to be attached again after inserting circuit cards for insuring accelerated-resistance 1.1G.

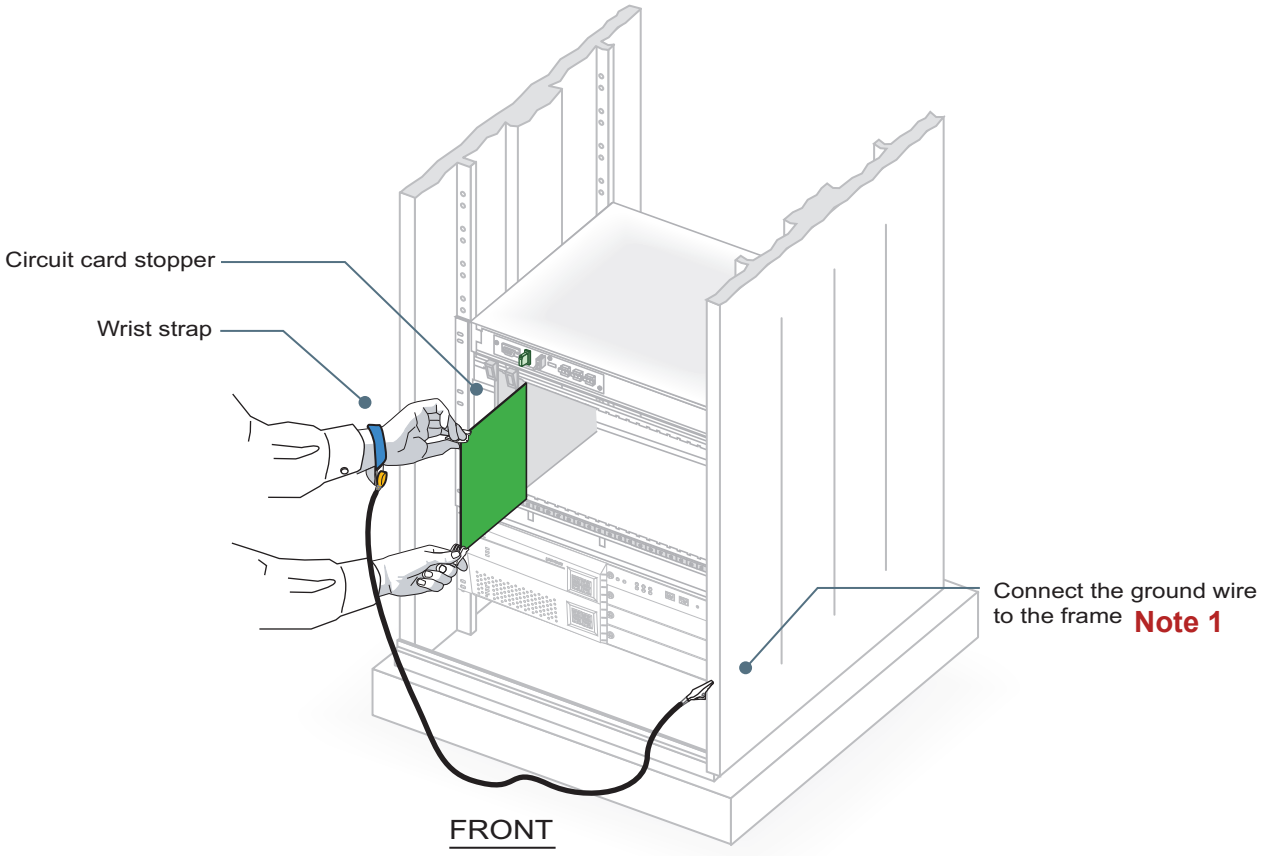


Step2: Wipe off the both sides of connectors on the circuit card using a soft cloth moistened with pure trichloroethylene or methanol (medical alcohol). Make sure no lint or dust remains on the connectors.

Step3: Check the mounting slot of each card. Check the slot number and the color of card-puller tab.

Step4: Set the switches on each circuit card. See SV9500 Circuit Card Description for the switch setting of each card.

Step5: Insert the circuit card into the proper slot, ensuring the card is correctly aligned to the rail at the top and bottom. (Do not fix the circuit card to the backboard connector here. Partially insert the circuit cards about 50 mm (two inches) from the backboard connectors.) If no problem is found, insert the circuit card to the connectors on the back plate firmly.



Step6: After all the circuit cards are inserted, fasten the card stopper.

Note 1: Without a proper frame grounding to 19-inch rack, even when a wrist strap is connected, static electricity cannot be released and it may cause equipment failure.

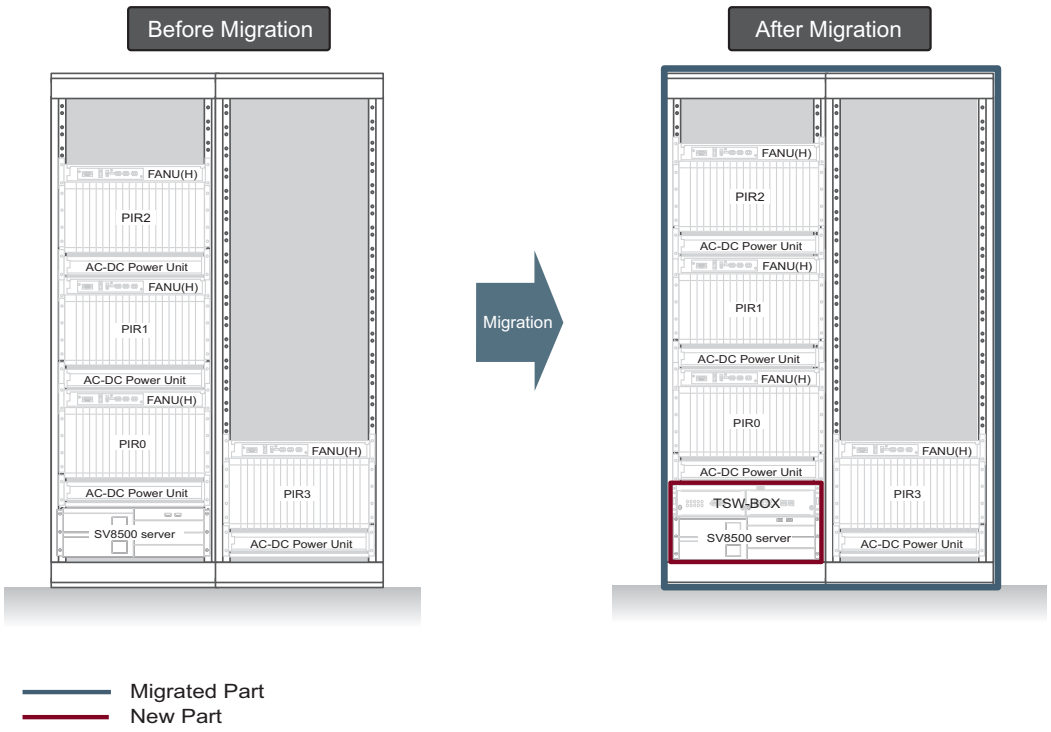
4. From SV7000 to SV9500

In the case of migrating from SV7000, only the circuit cards that can be used in SV9500 are migratable. For installing SV9500, see SV9500 Appliance Model Installation Manual.

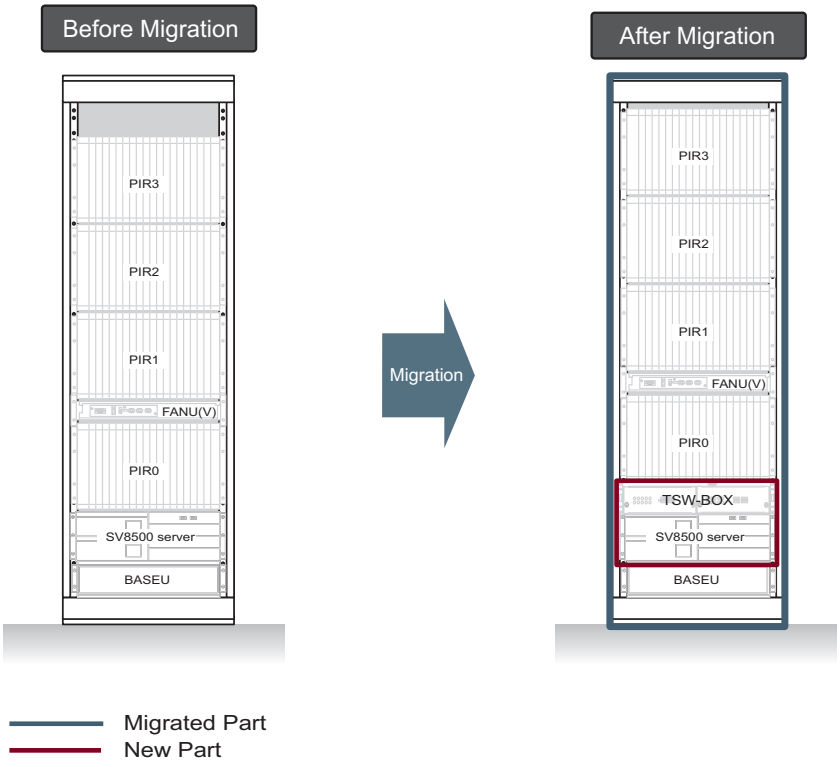
5. From SV8500 to SV9500

This section describes the installation procedures needed to migrate your system from UNIVERGE SV8500 (1-IMG and 4-IMG) to UNIVERGE SV9500 (1-IMG and 4-IMG). Before beginning the installation, thoroughly read "Chapter2 BEFORE INSTALLATION" and observe the precautions while performing the installation.

Migration From AC-Powered Model SV8500 (1-IMG)



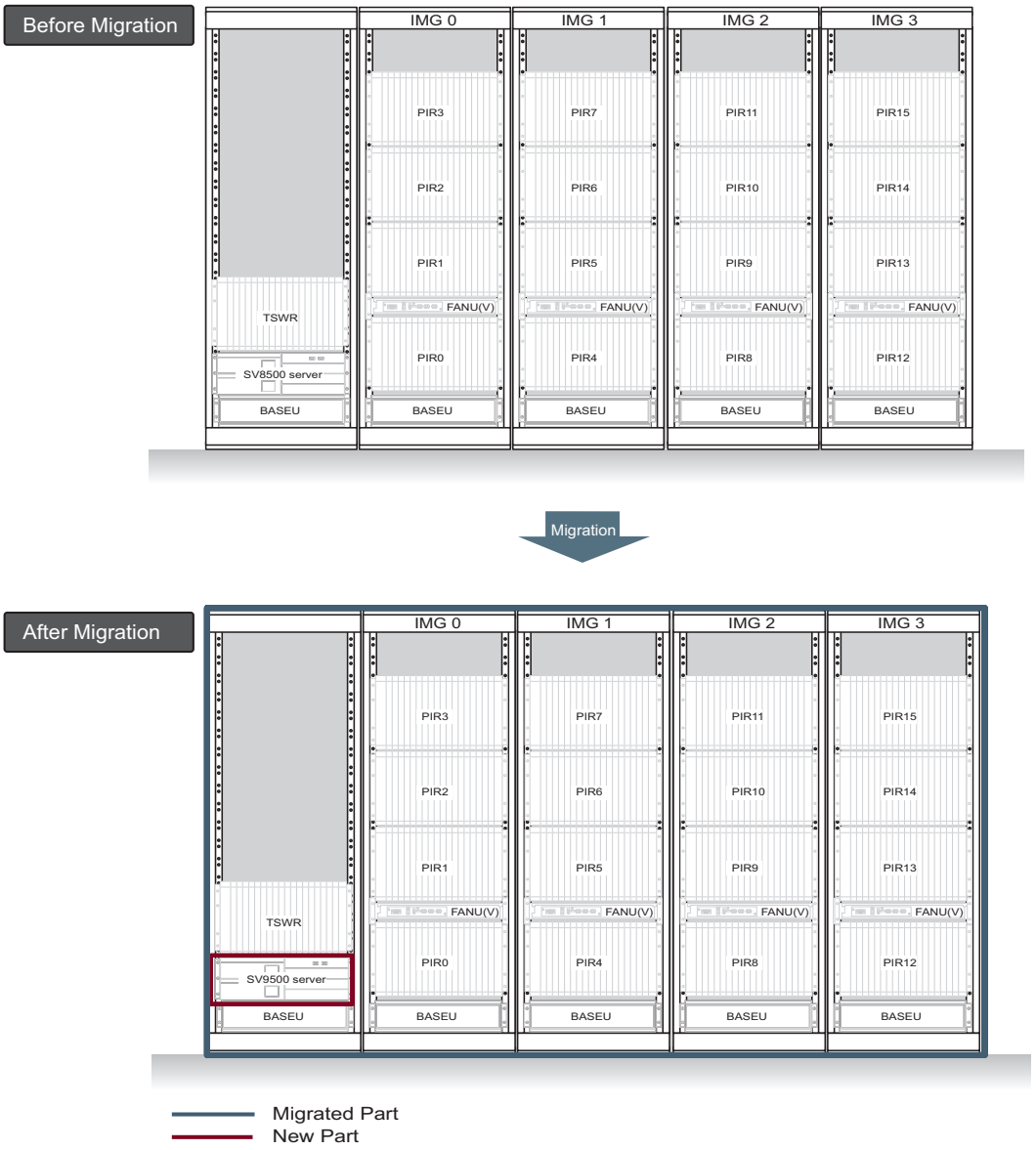
Migration From DC-Powered Model SV8500 (1-IMG)



Migration From SV8500 4-IMG to SV9500 4-IMG (When Using TSW-BOX)



Migration From SV8500 4-IMG to SV9500 4-IMG (When Using TSWR)



Installation Procedure

Start

↓

1 Collect Billing Information, Traffic Data and System Messages

↓

2 Temporarily Stop Routine Diagnostics

↓

3 Back Up SV8500 Office Data

↓

4 Power Off Peripheral Equipment Connected to the Rectifier

↓

5 Remove SV8500 Front Covers

↓

6 Power Off SV8500

↓

7 Remove Cables from SV8500

↓

8 Remove SV8500 Telephony Server

↓

9 Install SV9500 Telephony Server

↓

10 Install TSW-BOX

↓

11 Connect Cables in SV9500

↓

End

5.1 Collect Billing Information, Traffic Data and System Messages

Collect the billing information, the traffic data, and the system messages as necessary.

5.2 Temporarily Stop Routine Diagnostics

Temporarily suspend Routine Cyclic Diagnostics, using the ASYD command. Set SYS 1, Index 87 and 88 to FFH (hexadecimal). After the migration, return the indexes to their original values.

ASYD SYS1

Index 87: FFH (Hour of Routine Diagnosis Start Time)

Index 88: FFH (Minute of Routine Diagnosis Start Time)

5.3 Back Up SV8500 Office Data

5.3.1 Back up Office Data from SV8500

Step1: Backup the SV8500 office data by using the MEM_HDD command.

Check [All Select] to select all the data type. Select [LP Select] according to the office status. Ignore that the following data types are displayed unavailable in the operation log.

- ACD Data Memory
- ICB/DR
- SR-MGC

The following data types may be displayed as an error in the operation log when verified.

- Wireless Call Forwarding
- SIP Terminal Call Transfer

Note: An error will occur if WLAN Handset (MH Series) moves between Access Points while being verified.

Step2: Save the one-touch speed call memory data of Desktop terminals term to the PC by using the BOSD command. On the command, select [PBX memory to MAT]. It is recommended that the back up be divided per Unit or MG.

Note: The one-touch speed calling memory data of IP terminal is written in the Telephony Server.

5.3.2 Download Office Data Backup from SV8500

5.3.2.1 In case of S6 or later versions

Step1: Start Internet Explorer and type “http://xxx.xxx.xxx.xxx:9801/” into the address bar.

Note: xxx.xxx.xxx.xxx represents the LAN1 IP address (ex. 10.100.1.11).

Step2: A login screen appears. Type a user name and password. **Telephony Server Maintenance Menu** screen appears.

Note: When you type a user name and password, note the following points.
- The default for both user name and password is “admin”.
- Contact NEC maintenance personnel if you forget your user Name and password.

Step3: Select **Office Data** from **Download**.

Step4: **Office Data Download** screen appears. Select **Drive B**.

Step5: Click **Download** in the **Office Data Download** screen.

Step6: A download screen appears. Choose a folder to save the data.

5.3.2.2 In case of S5 or earlier versions

See the sections below in Preparation, Procedure of Program Version Upgrade (for upgrades from S5 or earlier to S6 or later), chapter 5 SYSTEM STARTUP, SV8500 Installation Manual and save the data in a folder of your choice.

7.2.5 Connection Account Setting for PCPro Tools

↓

7.2.6 Backup of the Current Data

↓

7.2.7 Export of Office Data

Note: When your system provides the OPTIONAL LANGUAGE PACK LOADING [O-42] service, refer to Optional Language Pack Loading [O-42] in Data Programming Manual - Business to back up the Extension Language data.

5.4 Power Off Peripheral Equipment Connected to the Rectifier

Turn off the peripheral equipment such as the SMDR terminal and the printer that receives power from the rectifier that provides operating power to the SV8500.

Note: When such equipment is not powered with the rectifier, this step is not necessary.

5.5 Remove SV8500 Front Covers

To remove the front covers of FANU, SV8500 server and PIR see Attach Front Covers in chapter 8 WORK AFTER INSTALLATION TEST, SV8500 Installation Manual.

5.6 Power Off SV8500

To power off SV8500 see Power ON/OFF Procedure in chapter 5 SYSTEM START UP, SV8500 Installation Manual.

5.7 Remove Cables from SV8500

Before installing TSW-BOX and the Telephony Server, remove both any unused cables and the cables that will be used after migration.

Power Cable Removal
BUS Cable Removal

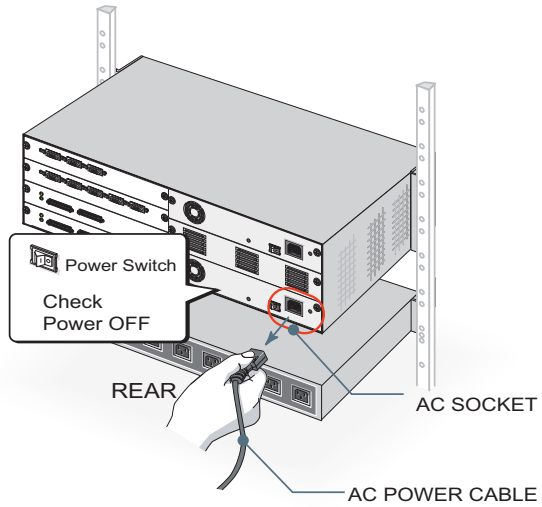
5.7.1 Power Cable Removal

Remove the following power cables.

5.7.1.1 In case of AC Power Configuration

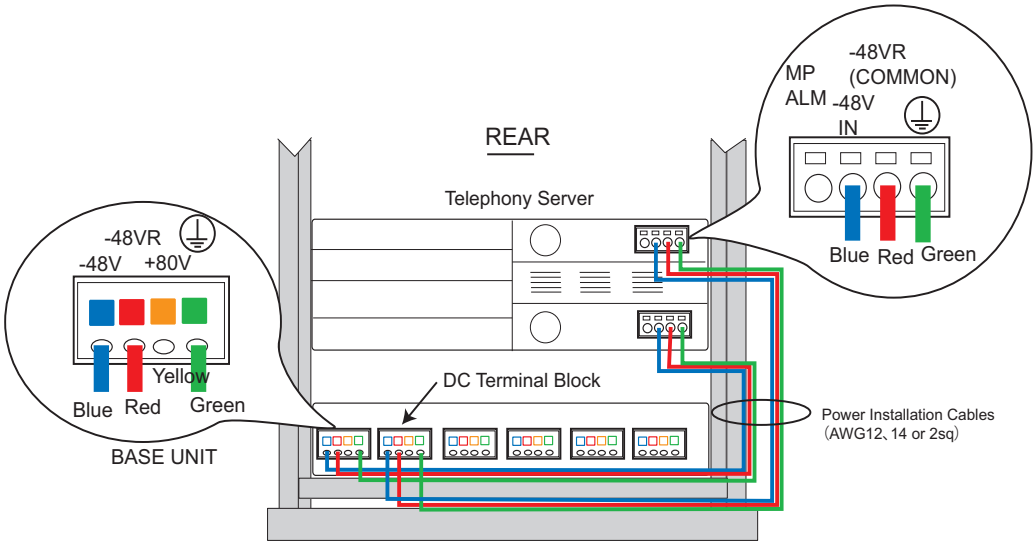
Note: AC-powered model is only available in 1-IMG configuration.

Remove the AC power cable from the socket in the rear panel



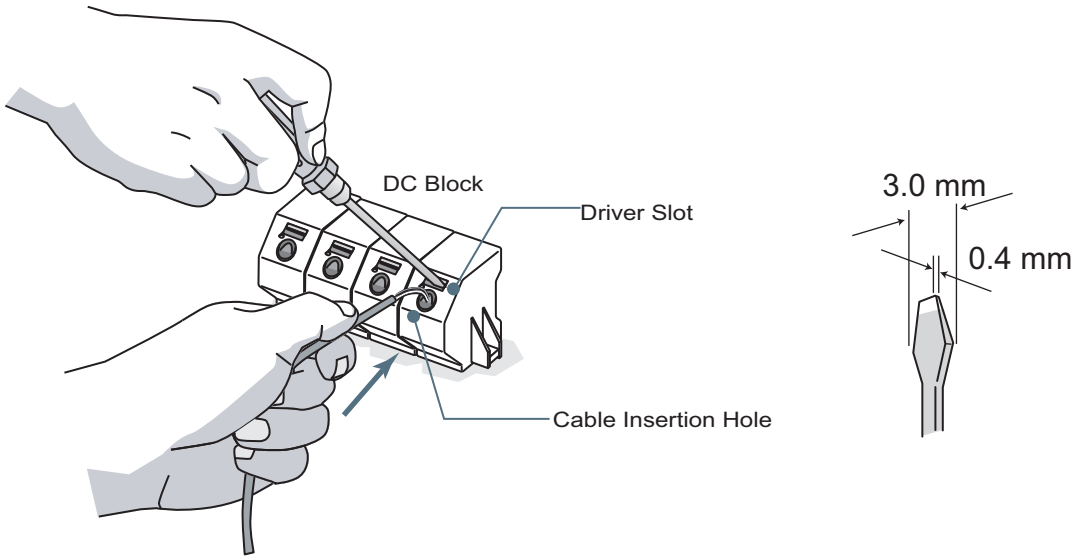
5.7.1.2 In Case of DC Power Configuration

Remove the power installation cables between the Telephony Server and BASE UNIT.



Note: Use a flat-blade driver to remove power cables (AWG12, 14 or 2sq) from DC terminals.

Note: Be careful not to touch an electric pole with the metallic part of the driver when removing the power cable.



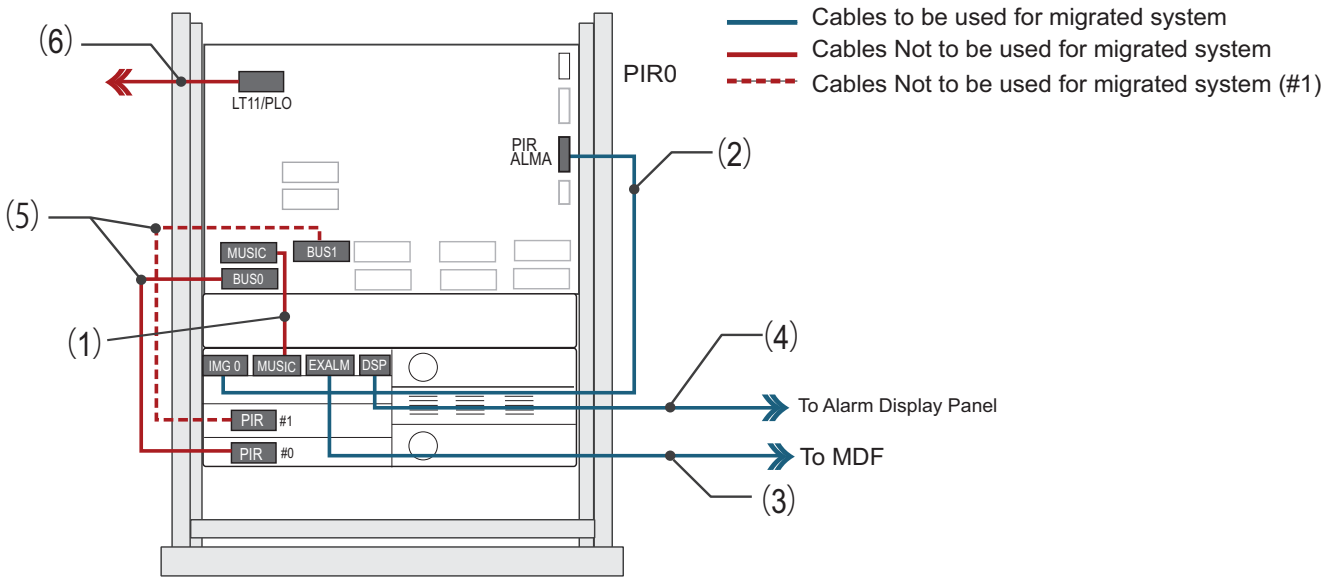
5.7.2 BUS Cable Removal

Remove the following BUS cables.

5.7.2.1 1-IMG Configuration

Remove the cables that connect the Telephony Server with peripheral equipment and PIR0.

Note: Note the following points.
- The operations are the same for AC and DC power configuration.
- Do not forget to keep the cables that will be used after migration.



Bus Cable Removal (1-IMG Configuration)

No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
1	Telephony Server (EMA SUB-A Card)	MUSIC	PIR0	MUSIC	D15 ST-FF CA-A	Not used	
2	Telephony Server (EMA SUB-A Card)	IMG0	PIR0	PIRALMA	D15 ST-F CA-A	Used	

Bus Cable Removal (1-IMG Configuration)

No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
3	Telephony Server (EMA SUB-A Card) (CG-M00)	EXALM	-	MDF	D15F EXALM CA-A	Not used	For External Alarm Indication Panel use For external music-on-hold **Note1**
	Telephony Server (EMA SUB-A Card) (CG-M03)	EXALM	-	MDF	D25 EXALM CA-A	Used	For External Alarm Indication Panel use For external music-on-hold **Note1**
4	Telephony Server (EMA SUB-A Card) (CG-M03)	DSP	Alarm Display Panel	J1	D15 ST-FF CA-C	Used	For Alarm Display Panel Use
5	Telephony Server (EXB-PIR Card #0)	PIR	PIR0	BUS0	D37-SC50 CA-A	Not used	
	Telephony Server (EXB-PIR Card #1)	PIR	PIR0	BUS1			
6	PIR0	LT11/PLO	-	MDF	LT Cable	Not used	**Note2**

Note 1: In SV9500 the External Music-on-Hold is connected with TSW-BOX.

Note 2: After migration, PLO connection is performed with TSW-BOX. Therefore it is not necessary for PLO connection.

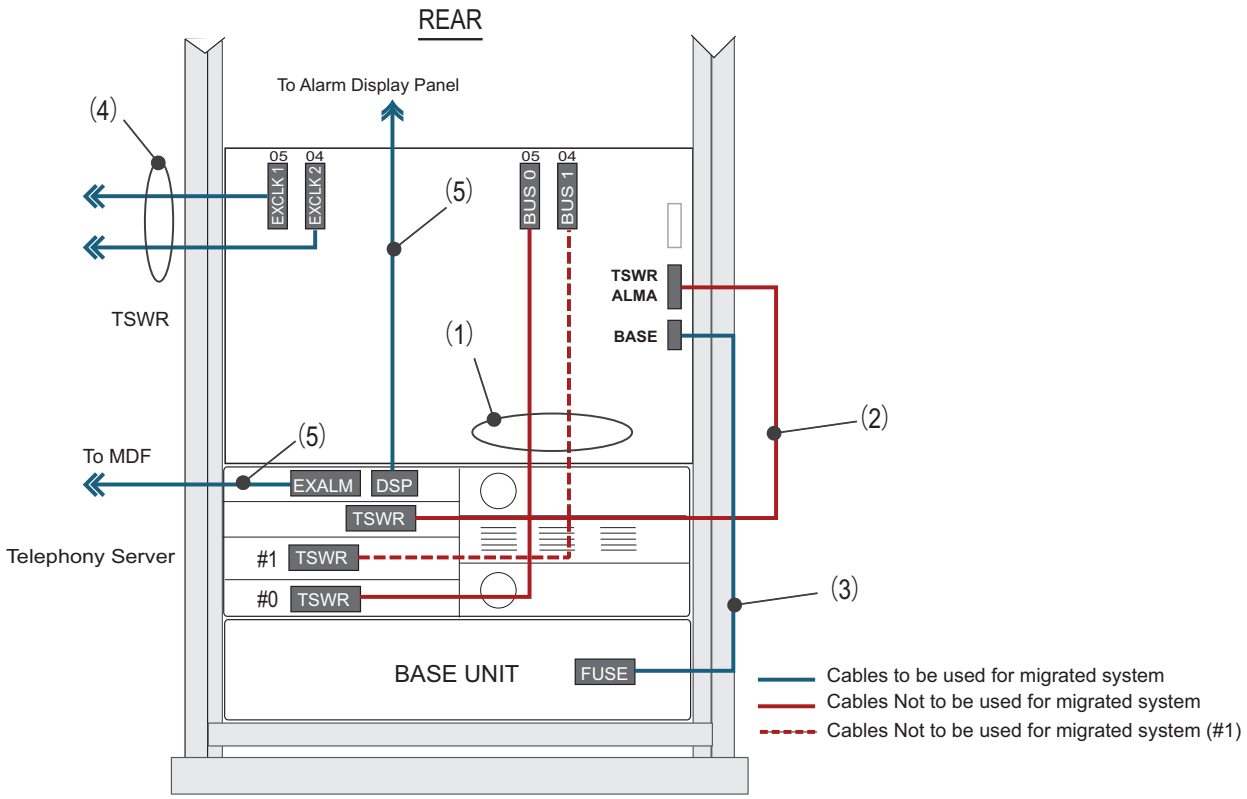
5.7.2.2 4-IMG Configuration (When Using TSW-BOX after Migration)

Remove the cables that connect the Telephony Server and TSWR with peripheral equipment and IMG.

Note: Do not forget to keep the cables that will be used after migration.

[TSW Part]

TSW Part Removal



TSW Part Removal

No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
1	Telephony Server (EXB-TSWR Card #0)	TSWR	TSWR	BUS0 (Slot05)	D37-SC50 CA-B	Not used	#0
	Telephony Server (EXB-TSWR Card #1)	TSWR	TSWR	BUS1 (Slot04)	D37-SC50 CA-B	Not used	#1

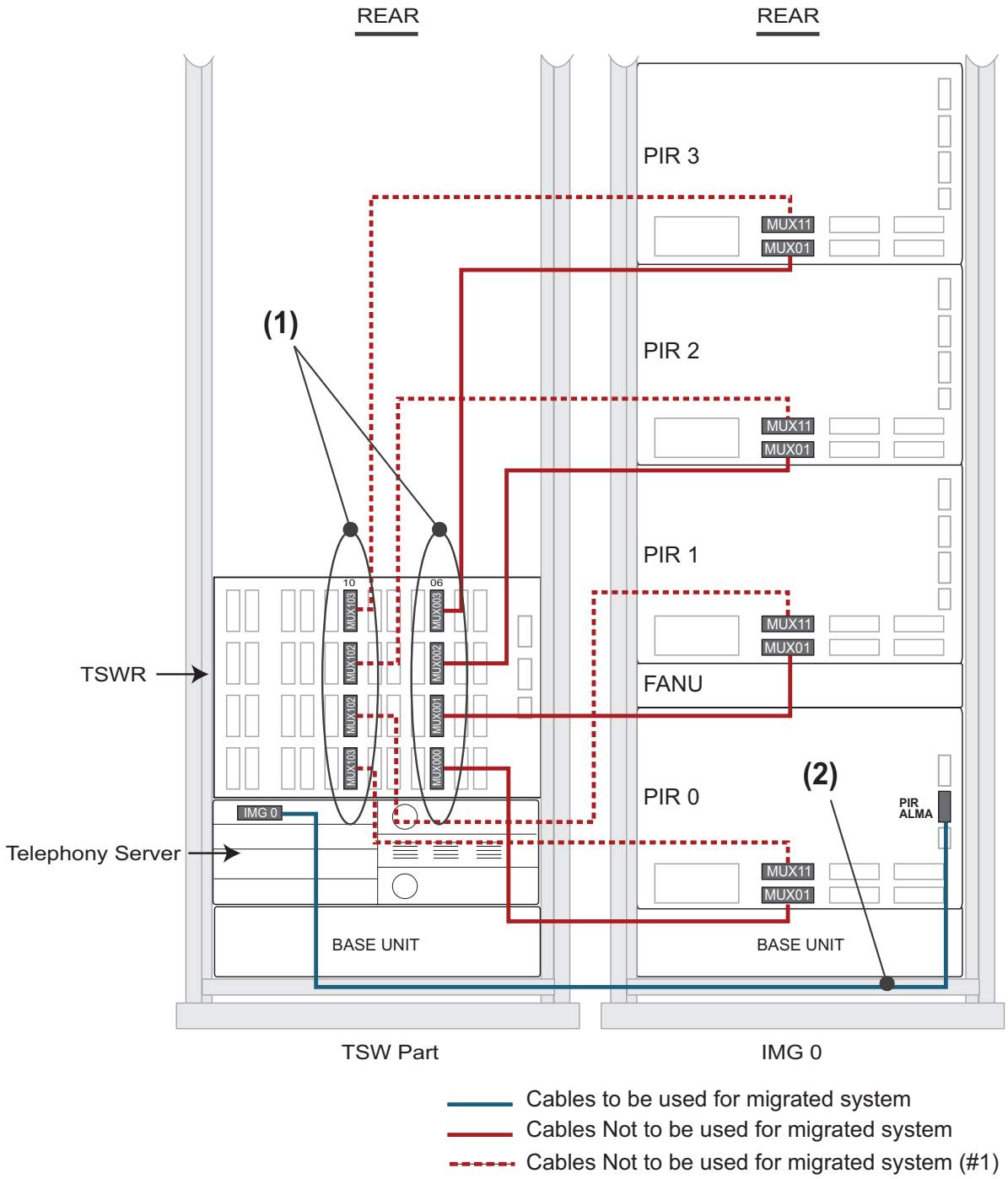
No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
2	Telephony Server Telephony Server (EMA SUB-B Card) (CG-M01)	TSWR	TSWR	TSWRAL-MA	D15 ST-F CA-A	Not used	
	Telephony Server (EMA SUB-B Card) (CG-M02)				D15 ST CA(S)-A	Not used	
3	BASE Unit	FUSE	TSWR	BASE	D09 ST CA-A	Used	
4	TSWR	EXCLK0 (Slot14)	MDF		D37 EXCLK CA-A	Used	**Note1 Note2**
		EXCLK0 (Slot15)					
3	Telephony Server (EMA SUB-A Card) (CG-M00)	EXALM	MDF		D15F EXALM CA-A	Not used	For External Alarm Indication Panel use
	Telephony Server (EMA SUB-A Card) (CG-M03)	EXALM	MDF		D25 EXALM CA-A	Used	For External Alarm Indication Panel use
4	Telephony Server (EMA SUB-A Card) (CG-M03)	DSP	For Alarm Display Panel Use	J1	D15 ST-FF CA-C	Used	For Alarm Display Panel Use

Note 1: Only one cable is necessary after the migration.

Note 2: After the migration, TSW-BOX is used for PLO and External Music-on-Hold connections.

[Between TSW Part and IMG0]

Cables between TSW Part and IMG0

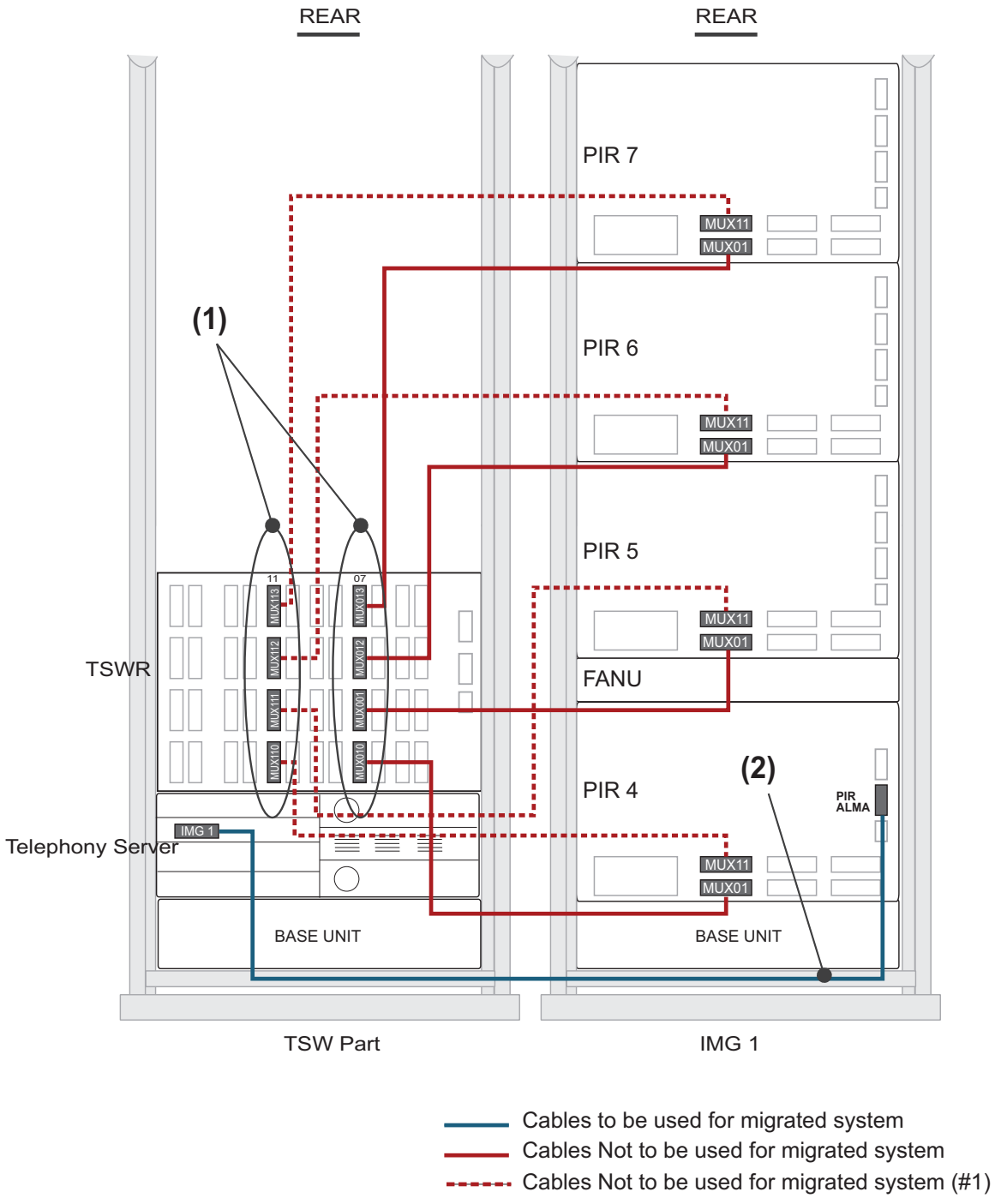


Cables between TSW Part and IMG0

No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
1	TSWR	MUX000 (Slot06)	PIR0	MUX01	D37-D25 CA-A	Not used	#0
		MUX100 (Slot10)	PIR0	MUX11			#1
		MUX001 (Slot06)	PIR1	MUX01			#0
		MUX101 (Slot10)	PIR1	MUX11			#1
		MUX002 (Slot06)	PIR2	MUX01			#0
		MUX102 (Slot10)	PIR2	MUX11			#1
		MUX003 (Slot06)	PIR3	MUX01			#0
		MUX103 (Slot10)	PIR4	MUX11			#1
2	Telephony Server (EMA SUB-A Card)	IMG0	PIR0	PIRALMA	D15 ST-F CA-C	Used	

[Between TSW Part and IMG1]

Cables between TSW Part and IMG1

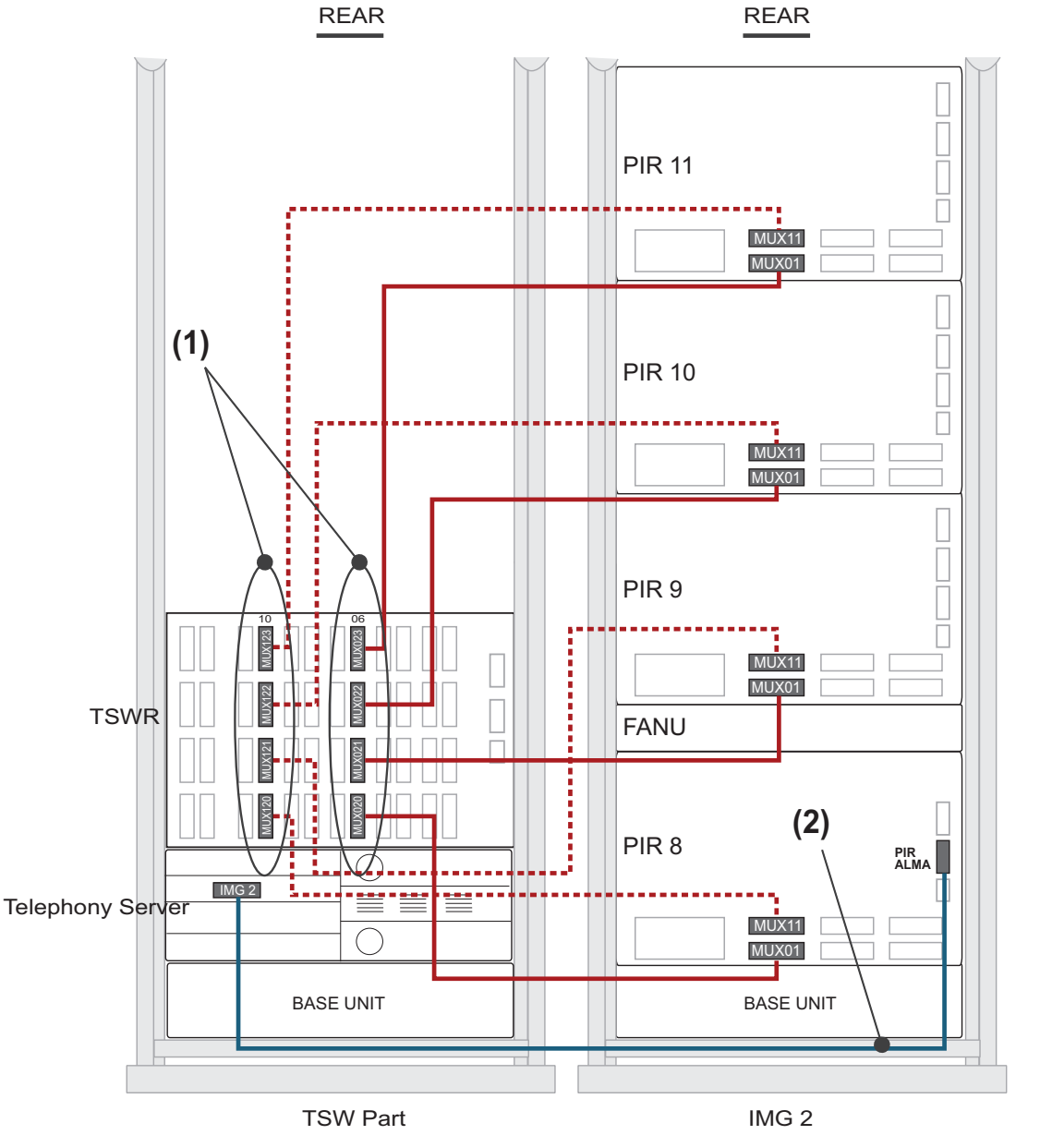


Cables between TSW Part and IMG1

No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
1	TSWR	MUX010 (Slot07)	PIR4	MUX01	D37-D25 CA-A	Not used	#0
		MUX110 (Slot11)	PIR4	MUX11			#1
		MUX011 (Slot07)	PIR5	MUX01			#0
		MUX111 (Slot11)	PIR5	MUX11			#1
		MUX012 (Slot07)	PIR6	MUX01			#0
		MUX112 (Slot11)	PIR6	MUX11			#1
		MUX013 (Slot07)	PIR7	MUX01			#0
		MUX113 (Slot11)	PIR7	MUX11			#1
2	Telephony Server (EMA SUB-B Card)	IMG1	PIR4	PIRALMA	D15 ST-F CA-C	Used	

[Between TSW Part and IMG2]

Cables between TSW Part and IMG2

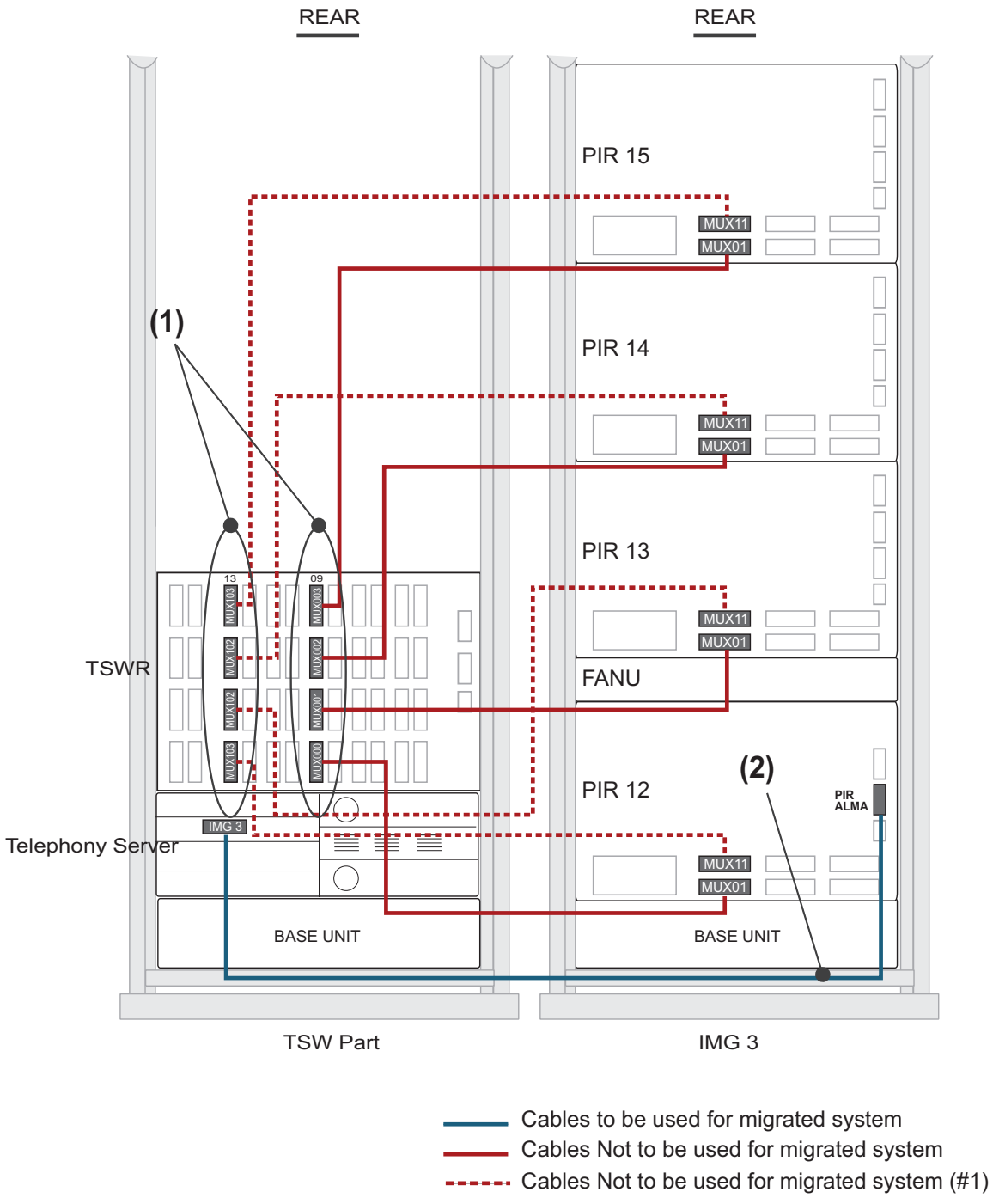


Cables between TSW Part and IMG2

No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
1	TSWR	MUX020 (Slot08)	PIR8	MUX01	D37-D25 CA-A	Not used	#0
		MUX120 (Slot12)	PIR8	MUX11			#1
		MUX021 (Slot08)	PIR9	MUX01			#0
		MUX121 (Slot11)	PIR9	MUX11			#1
		MUX022 (Slot08)	PIR10	MUX01			#0
		MUX122 (Slot12)	PIR10	MUX11			#1
		MUX023 (Slot08)	PIR11	MUX01			#0
		MUX123 (Slot12)	PIR11	MUX11			#1
2	Telephony Server (EMA SUB-B Card)	IMG2	PIR8	PIRALMA	D15 ST-F CA-C	Used	

[Between TSW Part and IMG3]

Cables between TSW Part and IMG3



Cables between TSW Part and IMG3

No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
1	TSWR	MUX030 (Slot09)	PIR12	MUX01	D37-D25 CA-A	Not used	#0
		MUX130 (Slot13)	PIR12	MUX11			#1
		MUX031 (Slot09)	PIR13	MUX01			#0
		MUX131 (Slot13)	PIR13	MUX11			#1
		MUX032 (Slot09)	PIR14	MUX01			#0
		MUX132 (Slot13)	PIR14	MUX11			#1
		MUX033 (Slot09)	PIR15	MUX01			#0
		MUX133 (Slot13)	PIR15	MUX11			#1
2	Telephony Server (EMA SUB-B Card)	IMG3	PIR12	PIRALMA	D15 ST-F CA-C	Used	

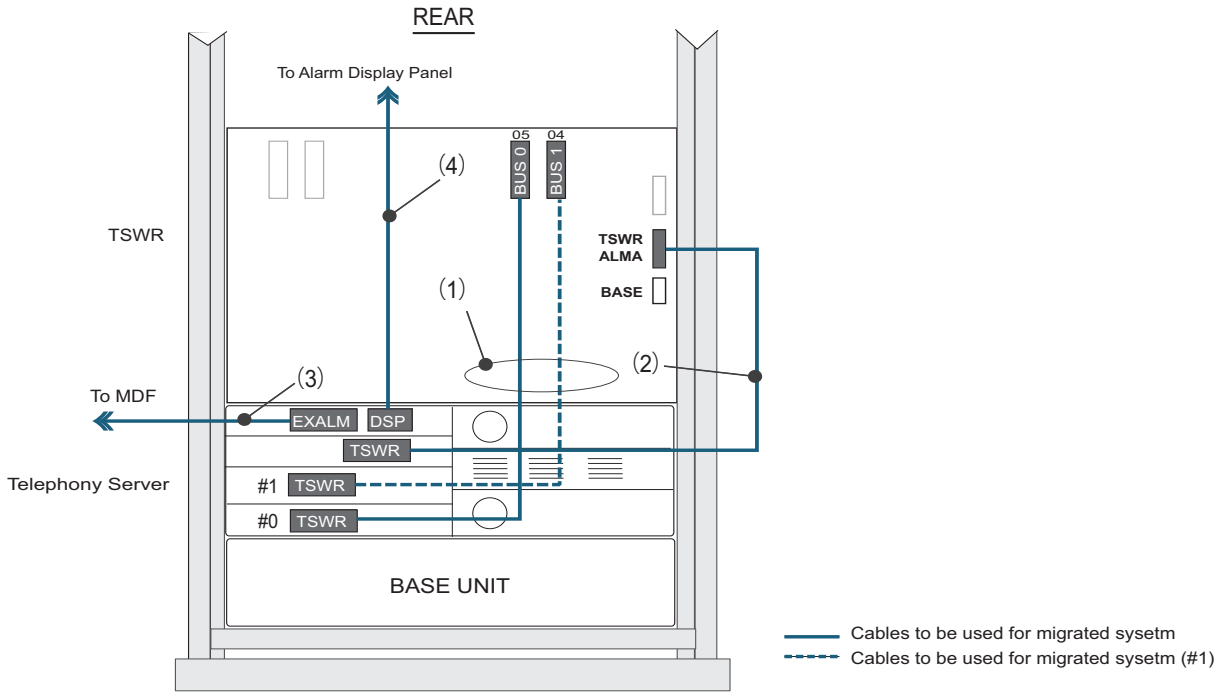
5.7.2.3 4-IMG Configuration (When Using TSWR after Migration)

Remove the cables that connect the Telephony Server and TSWR with peripheral equipment and IMG.

Note: Do not forget to keep the cables that will be used after migration.

[TSW Part]

TSW Part Removal



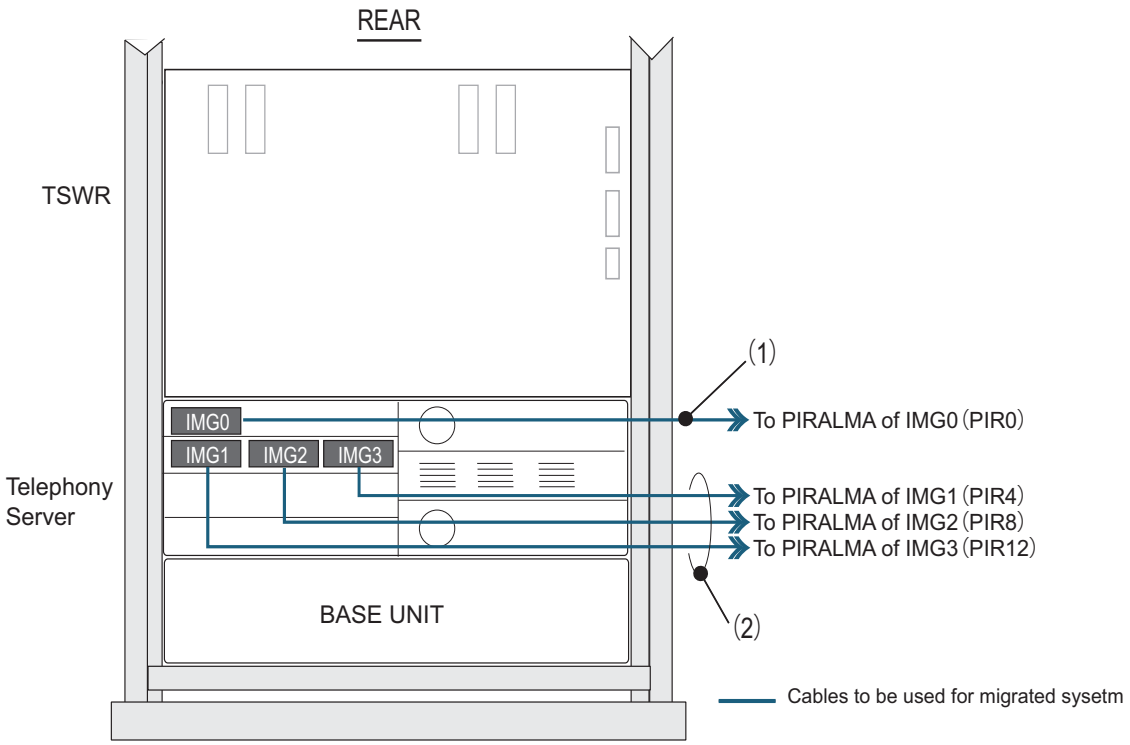
TSW Part Removal

No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
1	Telephony Server (EXB-TSWR Card #0)	TSWR	TSWR	BUS0 (Slot05)	D37-SC50 CA-B	Used	#0
	Telephony Server (EXB-TSWR Card #1)	TSWR	TSWR	BUS1 (Slot04)	D37-SC50 CA-B	Used	#1
2	Telephony Server Telephony Server (EMA SUB-B Card) (CG-M01)	TSWR	TSWR	TSWRALMA	D15 ST-F CA-A	Not used	
	Telephony Server (EMA SUB-B Card) (CG-M02)				D15 ST CA(S)-A	Used	

TSW Part Removal

No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
3	Telephony Server (EMA SUB-A Card) (CG-M00)	EXALM	MDF		D15F EXALM CA-A	Not used	For External Alarm Indication Panel use
	Telephony Server (EMA SUB-A Card) (CG-M03)	EXALM	MDF		D25 EXALM CA-A	Used	For External Alarm Indication Panel use
4	Telephony Server (EMA SUB-A Card) (CG-M03)	DSP	For Alarm Display Panel Use	J1	D15 ST-FF CA-C	Used	For Alarm Display Panel Use

Cable Removal Between TSW Part and Each IMG



Cable Removal between TSW Part and Each IMG

No.	FROM		TO		Cable Name	Usability	Remarks
	Unit/Module	Connector	Unit/Module	Connector			
1	Telephony Server (EMA SUB-A Card)	IMG0	PIR0	PIRALMA	D15 ST-F CA-C	Used	
2	Telephony Server (EMA SUB-B Card)	IMG1/IMG2/ IMG3	PIR4/PIR8/ PIR12	PIRALMA	D15 ST-F CA-C	Used	

5.8 Remove SV8500 Telephony Server

To remove the SV8500 Telephony Server, see Installing SV8500 Server in chapter 3 INSTALLATION - SV8500 SERVER, SV8500 Installation Manual.

5.9 Install SV9500 Telephony Server

To install the SV9500 server, see Installing the Telephony Server in chapter 3 SV9500 SERVER INSTALLATION - ASSEMBLING SV9500 SERVER MODULE, Appliance Model Installation Manual.

5.10 Install TSW-BOX

To install TSW-BOX see chapter 5 MODULES MOUNTING AND CONNECTION (7U-PIR AND 8U-PIR MIXED CONFIGURATION) in SV9500 Appliance Model Installation Manual.

Note: TSW-BOX needs to be mounted right above the server module.

5.11 Connect Cables in SV9500

For cable connections see Cable Connections in chapter 5 MODULES MOUNTING AND CONNECTION (7U-PIR AND 8U-PIR MIXED CONFIGURATION), SV9500 Appliance Model Installation Manual.

Note: As for 4-IMG system, a particular cable: MIG FALM CA-A is required when the migrated system is configured as follows. For details on the connection method of the cable: MIG FALM CA-A, refer to APPENDIX A CABLING DIAGRAM - 2.3 SV9500 DC (4-IMG) with TSW-BOX x SV8500 PIR - 2.3.2 SV9500 DC with TSW-BOX x IMG0 (4-IMG SV8500).

- There are no PIRs in the rack where BASE + SV9500 server + TSW-BOX are mounted.
- The system consists of only BASE and SV9500 server (there are no PIRs in the system).

CHAPTER 4
SYSTEM STARTUP

1. Precautions in System Startup

This chapter describes how to start up the system.

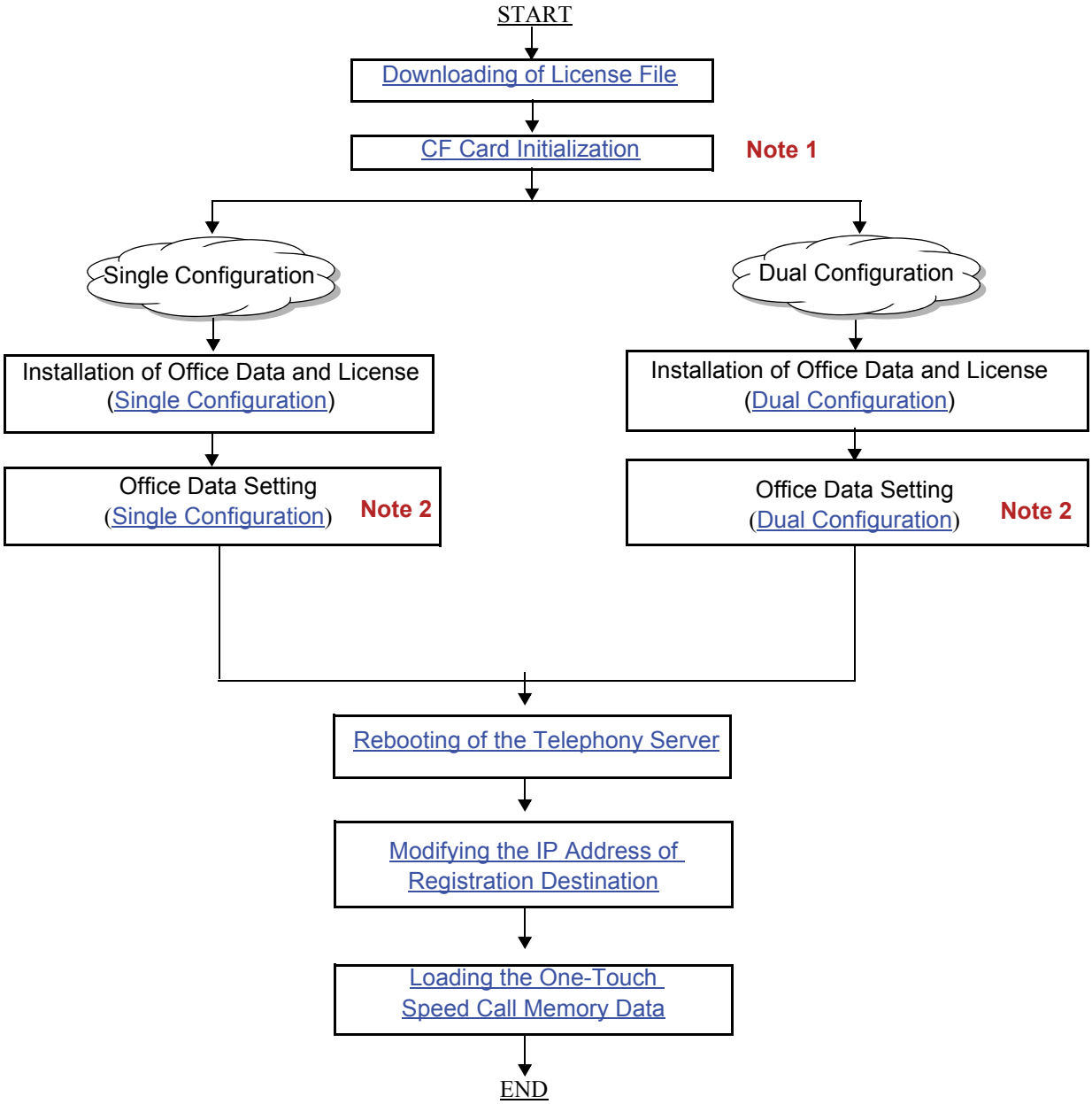
The initial startup process of the Telephony Server includes many procedures for setting and operation.The instructions in the following sections will help you perform the initial startup more easily by giving a detailed description on each setting.

In the sections of the initial startup procedure, **Note** states the precautions required when performing each initial startup procedure. An error or failure may occur if these precautions are missed. Be sure to follow each precautions without exception. **Point** states tips and supplemental remarks to be considered when performing each initial startup procedure.

Refer to "3.4 Troubleshooting" and check for any similar cases when the procedures could not be performed as the instructions or an error occurs.

2. Initial Startup Using the Existing Office Data

This section explains the initial startup procedure of the Telephony Server. Follow the flow chart below to configure the initial startup.Take notice that some parts of the procedure may differ between single configuration and dual configuration.



Note 1: For Asia and North America, this step is not required because the CF card is shipped preloaded with an OS and applications.

Note 2: In the case of a migration from SV8500, perform only the steps in the Startup of the Telephony Server process and in the Registration of Activation Code process at this stage.

2.1 Downloading of License File

Access the License Management Server (LMS) to download a license file (svi.zip) and obtain Activation Code on the basis of the Software Key Code found in the license sheet supplied with the product.

Note: Be sure to note the following conditions.

- A new Registration Activation code is necessary when the license is upgraded.
- The SVI file is downloaded in a zip format. Do not unzip the SVI file since this file is used as is.
- You can rename the saved SVI file, but do not change the extension of the file.

2.2 CF Card Initialization

To initialize CF card and install OS, SV9500 program and default Office Data into the card, refer to the CF Card Initialization section in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Note: For North America and Asia, the CF card is shipped pre-loaded. Only use this procedure when the CF card must be re-loaded. If this procedure is not required, skip this section and go to 2.3 Installation of Office Data and License.

Note: For North America, existing SV8500 8G CF cards can be re-used but existing 2G CF cards cannot be re-used.

2.3 Installation of Office Data and License

Connect a maintenance PC to the Telephony Server to install the office data which is used in the previous system and the license which was downloaded in 2.1 Downloading of License File into the CF card.

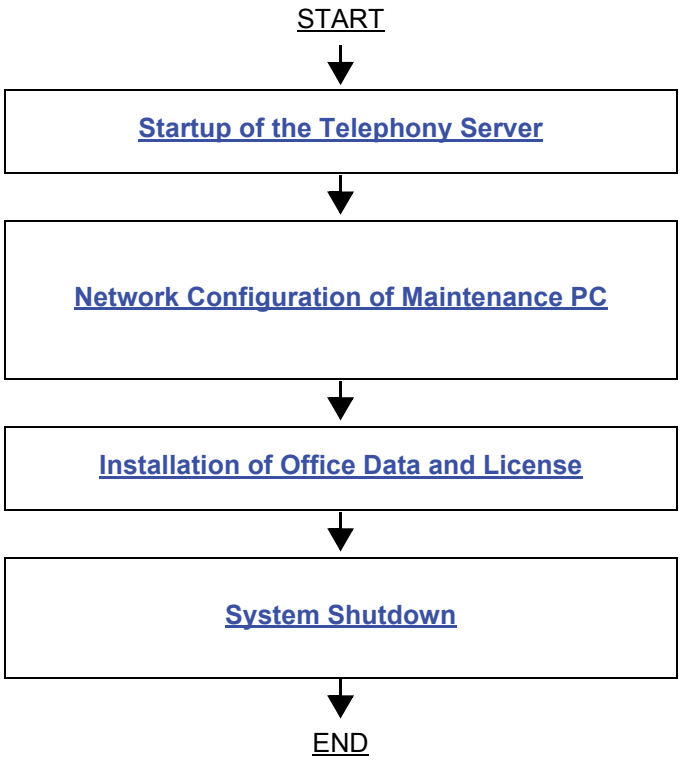
This section explains the installation procedure for each configuration listed below.

- Single Configuration
- Dual Configuration

2.3.1 Single Configuration

This section explains the procedure of program installation for a system in a single configuration.

Follow the flow chart below to install the initial setting data into CF card.



Refer to **2.3.1.1 Startup of the Telephony Server** in this chapter.

Refer to the Network Configuration of Maintenance PC section (in a single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

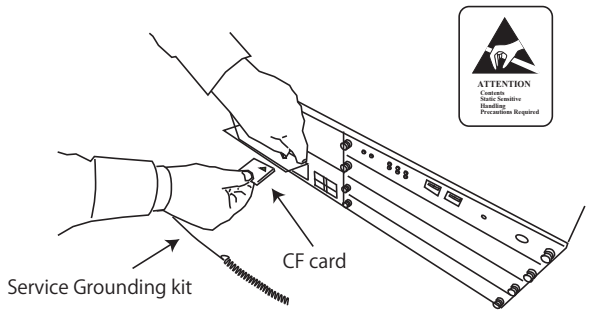
Refer to **2.3.1.3 Installation of Office Data and License** in this chapter.

Refer to the System Shutdown section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

2.3.1.1 Startup of the Telephony Server

This section explains the procedure for starting up the Telephony Server which is required as a first process when installing the program.

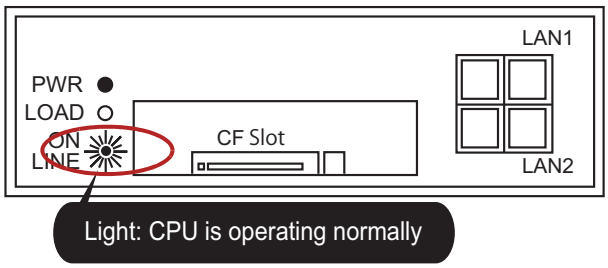
1 Insert CF card into CF slot on CPU card.



Point:
Use only the CF cards supported by NEC.

2 Turn on the power switch on the rear panel of the Telephony Server.

3 Verify that ON LINE lamp on the front panel of CPU card goes on after a few minutes.



Point:
For detailed information on ON LINE lamp, refer to “2.2.1 CPU Card” in Chapter 1: General of SV9500 Appliance Model Installation Manual.

2.3.1.2 Network Configuration of Maintenance PC

For this section, refer to the Network Configuration of Maintenance PC section (in a single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

2.3.1.3 Installation of Office Data and License

This section explains the procedure to install the office data which is used in the previous system and license which is downloaded to a maintenance PC to CF card.

1 Start Internet Explorer on a Maintenance PC, and type "http://xxx.xxx.xxx.xxx:9801/" into the address bar.
Replace "xxx.xxx.xxx.xxx" with the LAN1 IP address (e.g. 10.100.1.11) assigned in STEP7 of "CF Card Initialization" in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

Note: For North America, enter the IP address pre-loaded in the CF card.

Note: For Asia, the following default IP address is set for LAN 1. Type "http://192.168.0.2:9801/" into the address bar.
- LAN 1 IP Address: 192.168.0.2
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.168.0.254

Note:
- Microsoft Internet Explorer® 7.0 or higher is required to access Telephony Server Maintenance Menu.

2 (1) **Telephony Server Maintenance Menu Login** screen appears. Type a user name and password.
(2) Click **OK** to log in to **Telephony Server Maintenance Menu**.

Note:
- The default for both user name and password is "admin". You are recommended to change user name and password from **Advanced Menu**.
- Contact NEC maintenance personnel if you forget your User Name and Password.
- After logging in to SV9500 Maintenance Menu, do not use Back button on the browser.

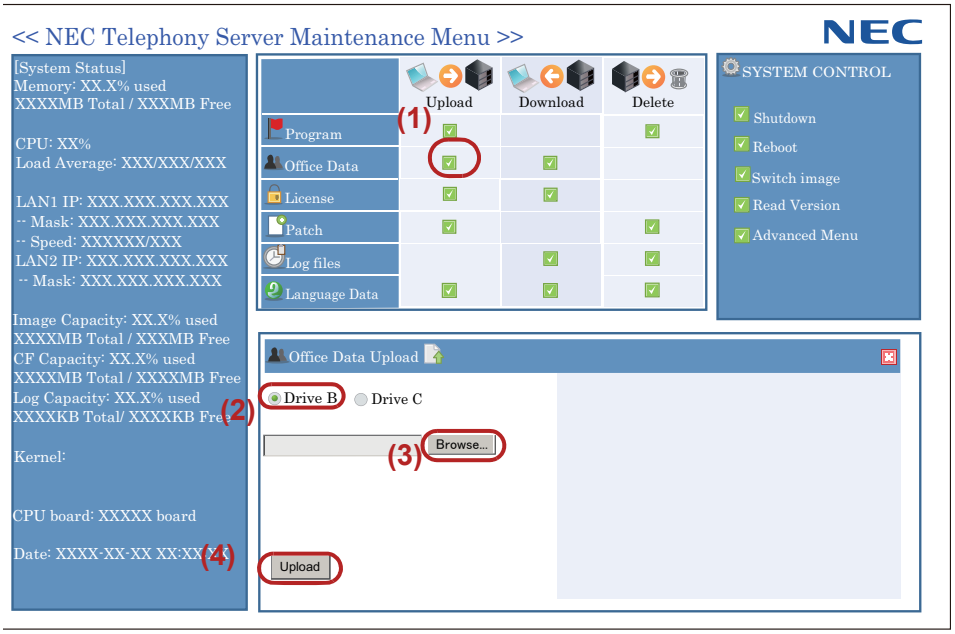
3

(1) Click **Upload** for **Office Data** in the **SYSTEM CONTROL** area. The **Office Data Upload** dialog box appears.

(2) Select **Drive B**.

(3) Click "Browse" in the Office Data Upload are and specify the office data file that is backed up from the previous system and converted for SV9500 (officedata.zip). For more information about the backup office data, refer to 4. Back Up IPX Office Data in Chapter 3.

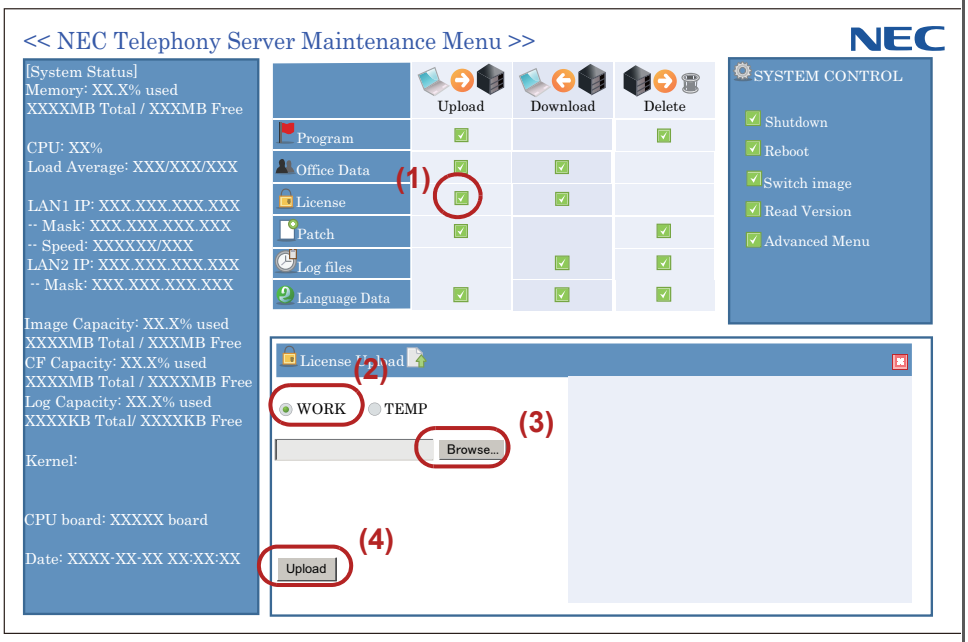
(4) Click the **Upload** button.
When the installation of office data is complete, check the processing results displayed on the bottom of the dialog box.



Note:
When the office data upload is not successful, "An error occurred! Please check the logs." is displayed and the details are displayed in the lower right portion of the screen.

4

(1) Click the **Upload** button for **License**. The **License Upload** dialog box appears in the lower right portion of the screen.
(2) Select **WORK**.
(3) Click the **Browse** button in the dialog box and then specify the License file downloaded in 2.1 Downloading of License File.
(4) Click the **Upload** button. When the installation is complete, check the processing results to be displayed on the bottom of the dialog box.



Point:
The Language Data button needs to be clicked only when OPTIONAL LANGUAGE PACK LOADING [O-42] is used. For more details on OPTIONAL LANGUAGE PACK LOADING [O-42], see Data Programming Manual - Business.

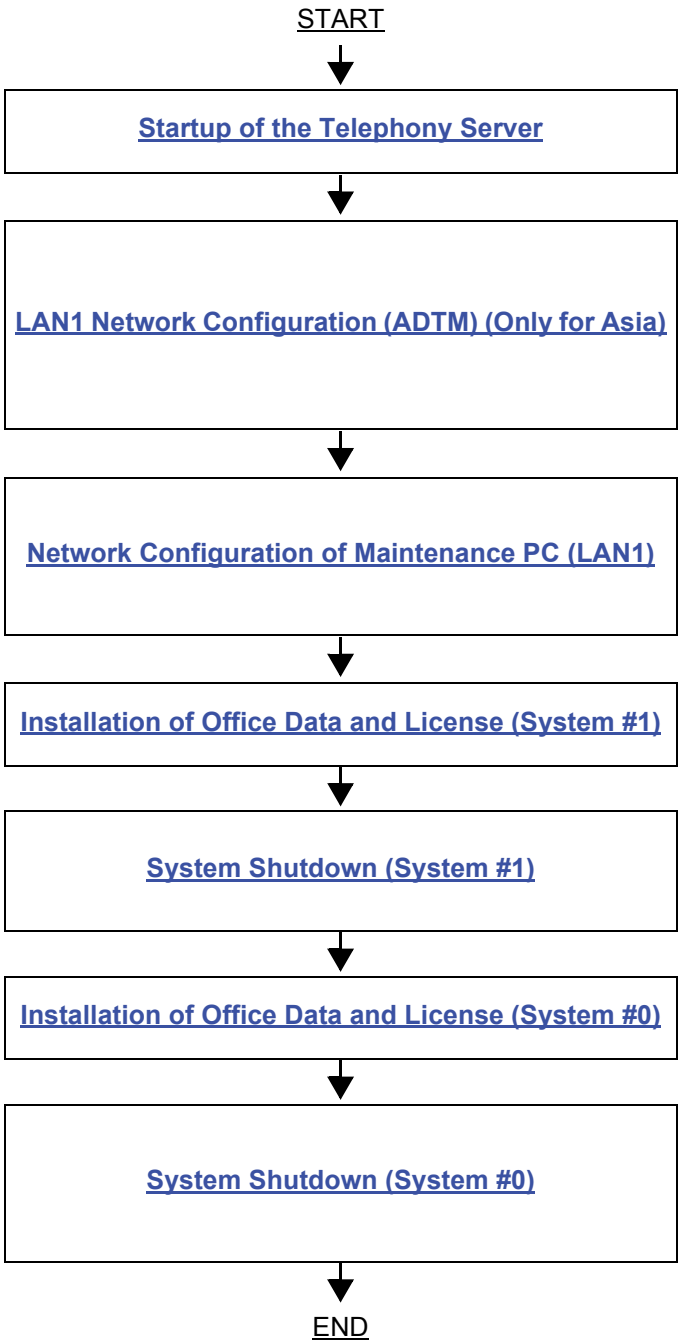
Note:
When the License upload is not successful, "An error occurred! Please check the logs." is displayed and the details are displayed in the lower right portion of the screen.

2.3.1.4 System Shutdown

For this section, refer to the System Shutdown section (for single configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.3.2 Dual Configuration

This section explains the procedure to install the office data and license on to the CF card in dual configuration. Follow the flow chart below to install the initial setting data into CF card.



Refer to 2.3.2.1 Startup of the Telephony Server in this chapter.

Refer to the LAN1 Network Configuration (ADTM) (Only for Asia) (in a dual configuration) section in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Note: This procedure is required for Asia only.

Refer to the Network Configuration of Maintenance PC (LAN1) (in a dual configuration) section in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Refer to 2.3.2.4 Installation of Office Data and License (System #1) in this chapter.

Refer to the System Shutdown (System #1) (in a dual configuration) section in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

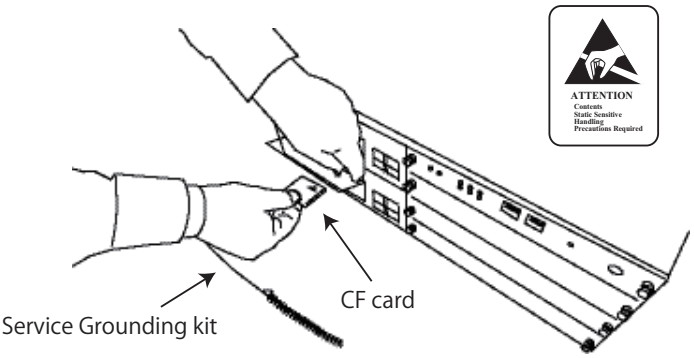
Refer to 2.3.2.6 Installation of Office Data and License (System #0) in this chapter.

Refer to the Startup of the System Shutdown (System #0) (in a dual configuration) section in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

2.3.2.1 Startup of the Telephony Server

This section explains the procedure for starting up the Telephony Server which is required as a first process when installing the program.

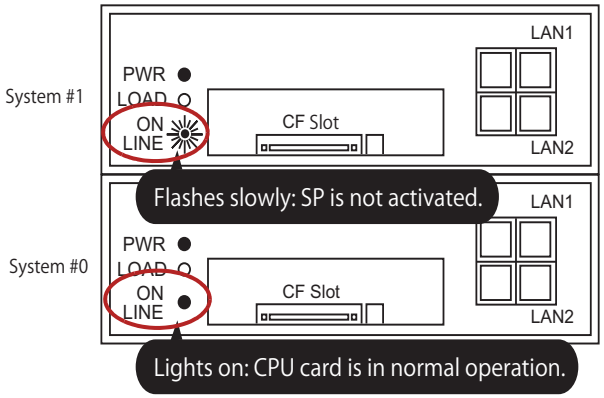
1 Insert CF cards into CF slot on both CPU cards of System #0 and #1.



Point:
Use only the CF cards supported by NEC.

2 Turn on the power switch on the rear panel of the Telephony Server.

3 Verify that ON LINE lamp on the front panel of CPU card for System #0 goes on and ON LINE lamp on the front panel of CPU for System #1 flashes slowly.



Point:
For detailed information on ON LINE lamp, refer to "2.2.1 CPU Card" in Chapter 1: General of SV9500 Appliance Model Installation Manual.

2.3.2.2 LAN1 Network Configuration (ADTM) (Only for Asia)

Note: This procedure is required for Asia only.

For this section, refer to the LAN1 Network Configuration (ADTM) (Only for Asia) (in a dual configuration) section in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.3.2.3 Network Configuration of Maintenance PC (LAN1)

For this section, refer to the Network Configuration of Maintenance PC (LAN1) (in a dual configuration) section in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

2.3.2.4 Installation of Office Data and License (System #1)

This section explains the procedure to install an initial data imported in the maintenance PC to CF card.

1 Start Internet Explorer on a Maintenance PC, and type “http://xxx.xxx.xxx.xxx:9801/” into the address bar.
Enter the IP address that is set for System #1 LAN1 (e.g. 10.100.1.31) set at STEP7 in CF Card Initialization in “xxx.xxx.xxx.xxx”.

Note: For Asia, "xxx.xxx.xxx.xxx" represents the LAN1 IP address for System #1 set in LAN1 Network Configuration (ADTM) (Only for Asia).

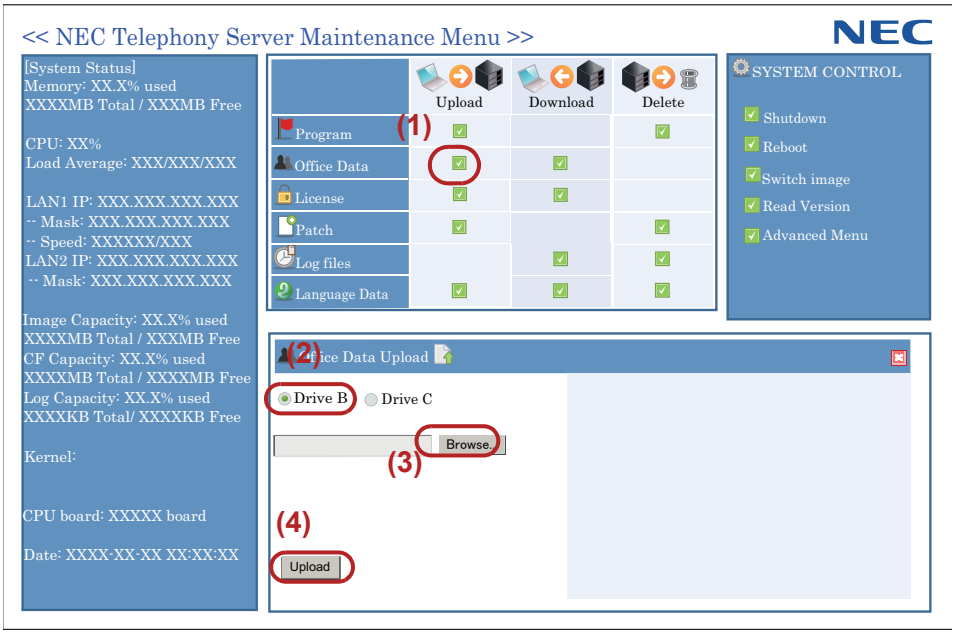
Note:
- Microsoft Internet Explorer® 7.0 or higher is required to access Telephony Server Maintenance Menu.

2 (1) **Telephony Server Maintenance Menu Login** screen appears. Type a user name and password.
(2) Click **OK** to log in to **Telephony Server Maintenance Menu**.

Note:
- The default for both user name and password is “admin”. You are recommended to change user name and password from **Advanced Menu**.
- Contact NEC maintenance personnel if you forget your User Name and Password.
- After logging in to SV9500 Maintenance Menu, do not use Back button on the browser.

3

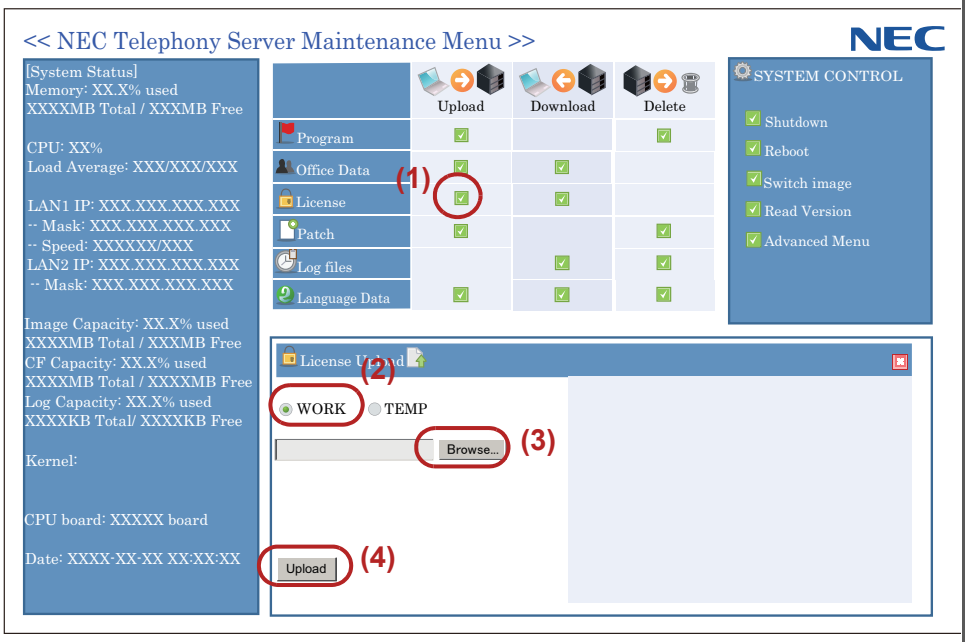
(1) Click **Upload** for **Office Data** in the **SYSTEM CONTROL** area. The **Office Data Upload** dialog box appears.
(2) Select **Drive B**.
(3) Click "Browse" in the Office Data Upload are and specify the office data file that is backed up from IPX and converted for SV9500 (officedata.zip). For more information about the backup office data, refer to 4. Back Up IPX Office Data in Chapter 3.
(4) Click the **Upload** button.
When the installation of office data is complete, check the processing results displayed on the bottom of the dialog box.



Note:
When the office data upload is not successful, "An error occurred! Please check the logs" message is displayed and the detailed information is stored in a log file. You can download the log file from "Download - Log files".

4

(1) Click the **Upload** button for **License**. The **License Upload** dialog box appears in the lower right portion of the screen.
(2) Select **WORK**.
(3) Click the **Browse** button in the dialog box and then specify the License file downloaded in 2.1 Downloading of License File.
(4) Click the **Upload** button. When the installation is complete, check the processing results to be displayed on the bottom of the dialog box.



Point:
The Language Data button needs to be clicked only when OPTIONAL LANGUAGE PACK LOADING [O-42] is used. For more details on OPTIONAL LANGUAGE PACK LOADING [O-42], see Data Programming Manual - Business.

Note:
When the License upload is not successful, "An error occurred! Please check the logs" message is displayed and the detailed information is stored in a log file. You can download the log file from "Download - Log files".

2.3.2.5 System Shutdown (System #1)

For this section, refer to the System Shutdown (System #1) (in a dual configuration) section in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.3.2.6 Installation of Office Data and License (System #0)

This section explains the procedure to install an initial data imported in the maintenance PC to CF card.

1 Start Internet Explorer on a Maintenance PC, and type “http://xxx.xxx.xxx.xxx:9801/” into the address bar.
Enter the IP address that is set for System #0 LAN1 (e.g. 10.100.1.11) set at STEP7 in CF Card Initialization in “xxx.xxx.xxx.xxx”.

Note: For Asia, "xxx.xxx.xxx.xxx" represents the LAN1 IP address for System #0 set in LAN1 Network Configuration (ADTM) (Only for Asia).

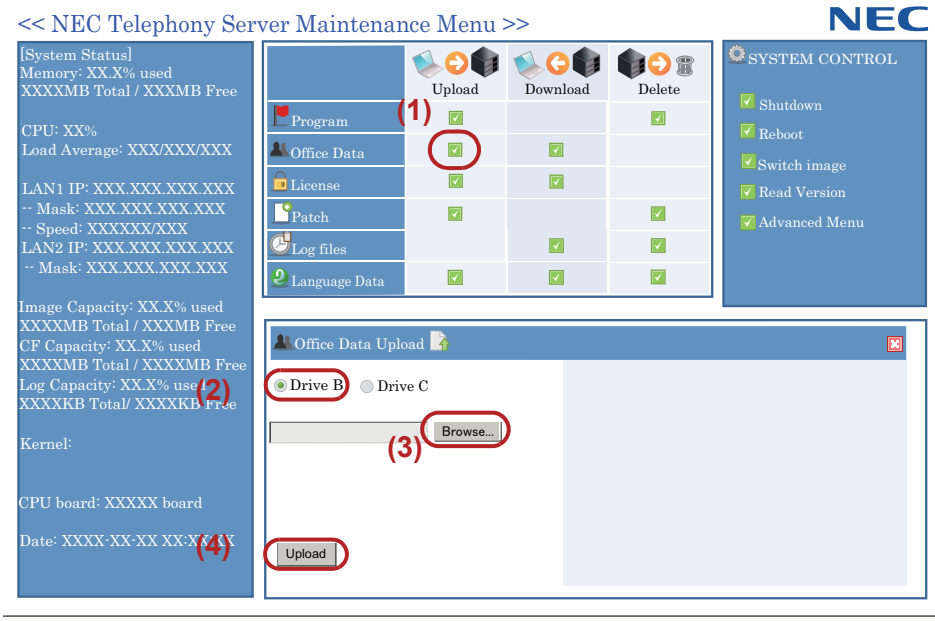
Note:
- Microsoft Internet Explorer® 7.0 or higher is required to access Telephony Server Maintenance Menu.

2 (1) **Telephony Server Maintenance Menu Login** screen appears. Type a user name and password.
(2) Click **OK** to log in to **Telephony Server Maintenance Menu**.

Note:
- The default for both user name and password is “admin”. You are recommended to change user name and password from **Advanced Menu**.
- Contact NEC maintenance personnel if you forget your User Name and Password.
- After logging in to SV9500 Maintenance Menu, do not use Back button on the browser.

3

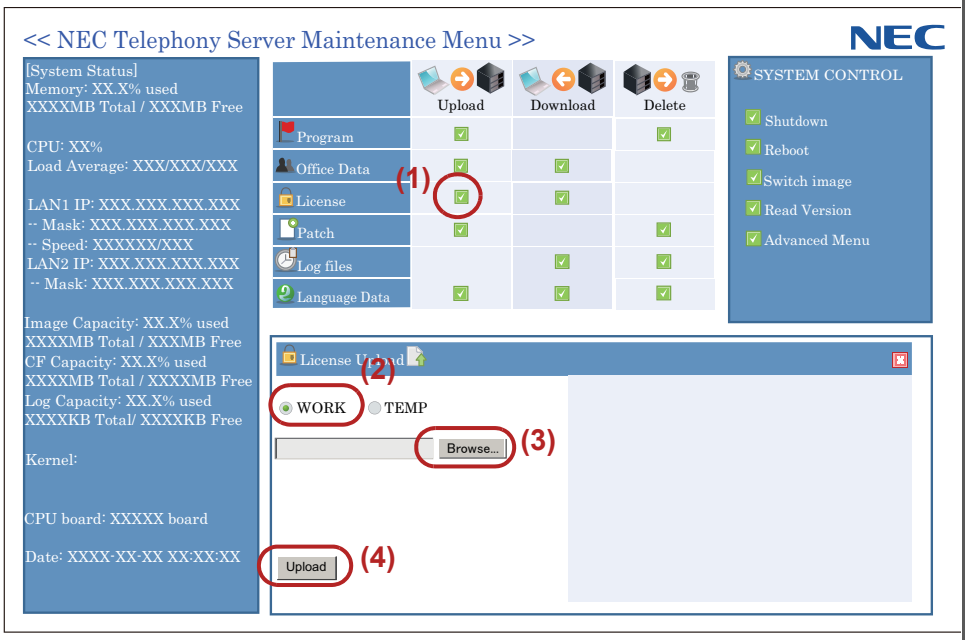
(1) Click **Upload** for **Office Data** in the **SYSTEM CONTROL** area. The **Office Data Upload** dialog box appears.
(2) Select **Drive B**.
(3) Click "Browse" in the Office Data Upload are and specify the office data file that is backed up from IPX and converted for SV9500 (officedata.zip). For more information about the backup office data, refer to 4. Back Up IPX Office Data in Chapter 3: Installation.
(4) Click the **Upload** button.
When the installation of office data is complete, check the processing results displayed on the bottom of the dialog box.



Note:
When the office data upload is not successful, "An error occurred! Please check the logs." is displayed and the details are displayed in the lower right portion of the screen.

4

(1) Click the **Upload** button for **License**. The **License Upload** dialog box appears in the lower right portion of the screen.
(2) Select **WORK**.
(3) Click the **Browse** button in the dialog box and then specify the License file downloaded in 2.1 Downloading of License File.
(4) Click the **Upload** button. When the installation is complete, check the processing results to be displayed on the bottom of the dialog box.



Point:
The Language Data button needs to be clicked only when OPTIONAL LANGUAGE PACK LOADING [O-42] is used. For more details on OPTIONAL LANGUAGE PACK LOADING [O-42], see Data Programming Manual - Business.

Note:
When the License upload is not successful, "An error occurred! Please check the logs." is displayed and the details are displayed in the lower right portion of the screen.

2.3.2.7 System Shutdown (System #0)

For this section, refer to the Startup of the System Shutdown (System #0) (in a dual configuration) section in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4 Office Data Setting

This section explains the procedure to set the Office Data used to operate the Telephony Server.

The procedure differs between the following configurations listed below.

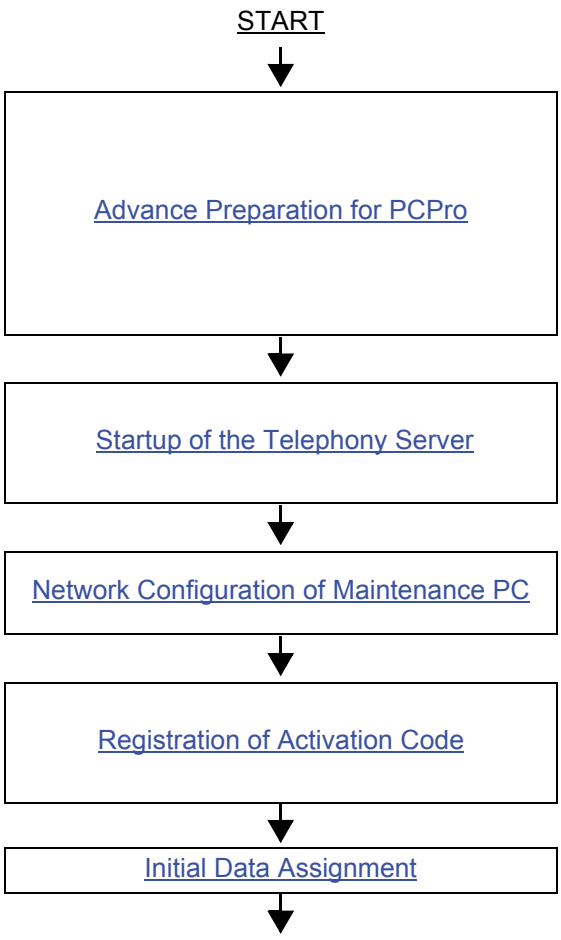
- Single Configuration
- Dual Configuration

2.4.1 Single Configuration

This section explains the procedure to set the Office Data for Single Configuration.

Follow the flow chart below to set the Office Data for migration from the old system (in single configuration system).

Note: In the case of a migration from SV8500, perform only the steps in the Startup of the Telephony Server process and in the Registration of Activation Code process at this stage.



Refer to the Advance Preparation for PCPro section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Note: In the referred section, the default IP address of LAN2 should be understood as the IP address used as ACT side of the old system.

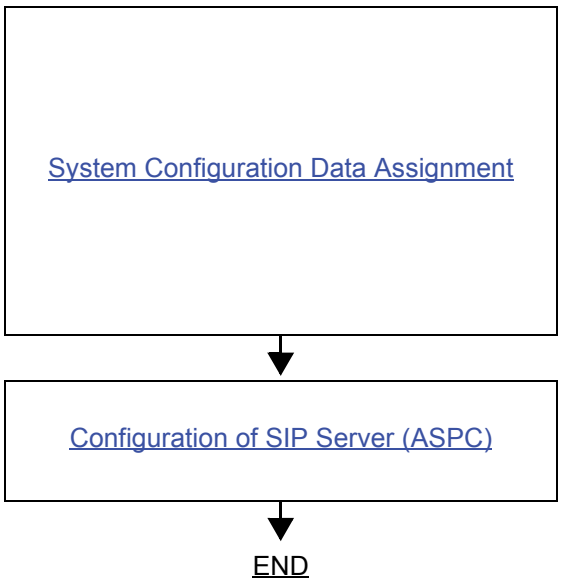
Refer to the Startup of the Telephony Server section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Refer to 2.4.1.3 Network Configuration of Maintenance PC in this chapter.

Refer to the Registration of Activation Code section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Refer to 3.2 Initial Data Assignment. in this chapter.

LAN2 Network Configuration (ADTM) (IPv4)	Refer to the LAN2 Network Configuration (ADTM) (IPv4) section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual. **Note:** In the referred section, the default IP address of LAN2 should be understood as the IP address used as ACT side of the old system. **Note:** Configuration for LAN2 Connector must be performed first, since IP address data for ACT side of the old system remains as the IP address of LAN2 for ACT side.
↓	
Modifying Network Configuration of Maintenance PC	Refer to 2.4.1.7 Modifying Network Configuration of Maintenance PC in this chapter.
↓	
LAN1 Network Configuration (ADTM) (IPv4)	Refer to 2.4.1.8 LAN1 Network Configuration (ADTM) (IPv4) in this chapter.
↓	
LAN1 Network Configuration (ADTM) (IPv6)	Refer to the LAN1 Network Configuration (ADTM) (IPv6) section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.
↓	
LAN Interface Configuration (ADTM)	Refer to the LAN Interface Configuration (ADTM) section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.
↓	
Assignment for Routing Data / NIC Card Data (ADTM) (IPv4)	Refer to the Assignment for Routing Data / NIC Card Data (ADTM) (IPv4) section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.
↓	
Assignment for Routing Data (ADTM) (IPv6)	Refer to the Assignment for Routing Data (ADTM) (IPv6) section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.
↓	
Assignment for LAN Interface Data (ADTM) (IPv6)	Refer to the Assignment for LAN Interface Data (ADTM) (IPv6) section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.
↓	
Data Deletion of Internal PHD/PHD Circuit Card	Refer to 2.4.1.14 Data Deletion of Internal PHD/PHD Circuit Card in this chapter.
↓	



Refer to 3.1 System Configuration Data Assignment in this chapter.

Note: Be sure to assign ASYDL SYS1 Index 1026 (UNIT use on MG00-MG03) and 1027 (UNIT use on MG04-MG07).

Note: Assign the ASYDL SYS1 Index 965 Bit1=0 to disable FTP server activation. FTP server which had been used in the previous system (SV7000 or IPX) cannot be used in SV9500.

Refer to the Configuration of SIP Server (ASPC) section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Note: The following settings are only for the IPv6 connection. If you use only IPv4 addresses, these settings are not required.
LAN1 Network Configuration (ADTM) (IPv6)
Assignment for Routing Data (ADTM) (IPv6)
Assignment for LAN Interface Data (ADTM) (IPv6)

2.4.1.1 Advance Preparation for PCPro

For this section, refer to the Advance Preparation for PCPro section (for single configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

Note: In the referred section, the default IP address of LAN2 should be understood as the IP address used as ACT side of the old system.

2.4.1.2 Startup of the Telephony Server

For this section, refer to the Startup of the Telephony Server section (for single configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.1.3 Network Configuration of Maintenance PC

This section explains the procedure to set the network configuration of the maintenance PC to connect to the Telephony Server.

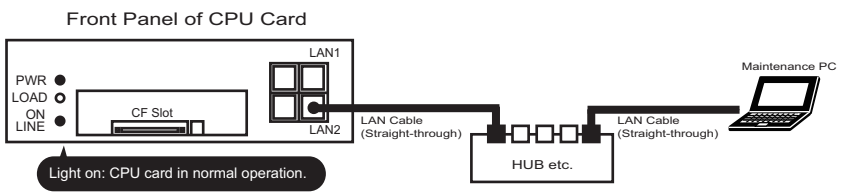
1 Modify the IP address of the maintenance PC to conform to the network configuration for IP address (e.g. 10.100.1.12/24) used as ACT side of the old system.
(Example for IP address of the maintenance PC: 10.100.1.50/24)

Note: IP addresses listed in the table below cannot be assigned to the maintenance PC.
The table below is an example when the IP address used as ACT side of the old system is "10.100.1.12/24".

IP address	Reason
10.100.1.0	This IP address is a network address.
10.100.1.12	This IP address is set as a IP address of LAN2.
10.100.1.255	This IP address is a broadcast address.

Note1: Only in case of migrating from IPX without SIP BOX.

2 Connect LAN2 connector on CPU card and the maintenance PC with a LAN cable.



Note: Do not connect a cable to any LAN connector other than LAN2 connector.

3 Execute ping command from the maintenance PC to the IP address (e.g. 10.100.1.12/24) used as ACT side of the old system and verify that a response is sent back.
If no response is confirmed, check the settings including the network configuration and cable connection.

Note: Execute ping command after verifying ON LINE lamp on the front panel of CPU card lights on.

2.4.1.4 Registration of Activation Code

For this section, refer to the Registration of Activation Code section (for single configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.1.5 Initial Data Assignment

In this section, Initial Data Assignment is required.

Refer to 3.2 Initial Data Assignment.

2.4.1.6 LAN2 Network Configuration (ADTM) (IPv4)

For this section, refer to the LAN2 Network Configuration (ADTM) (IPv4) section (for single configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

Note: In the referred section, the default IP address of LAN2 should be understood as the IP address used as ACT side of the old system.

Note: Configuration for LAN2 Connector must be performed first, since IP address data for ACT side of the old system remains as the IP address of LAN2 for ACT side.

2.4.1.7 Modifying Network Configuration of Maintenance PC

This section explains the procedure to modify the network configuration of the maintenance PC to conform with the IP address of LAN2 in the actual environment (e.g. 10.100.20.12).

1 Modify the IP address of the maintenance PC to conform with the actual network environment in order to connect with the IP address (e.g. 10.100.20.12) assigned by ADTM command.
(Example for IP address of the maintenance PC: 10.100.20.50)

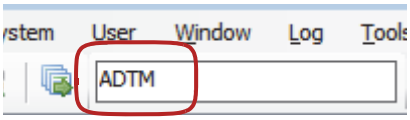
2 Execute ping command from the maintenance PC toward the connector of LAN2 and verify that the IP address is configured correctly.

2.4.1.8 LAN1 Network Configuration (ADTM) (IPv4)

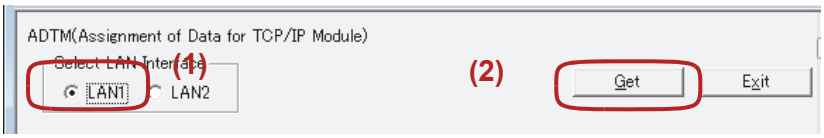
This section explains the procedure to assign as the IP address of LAN1 the IP address used for ACT side of the old system (e.g. 10.100.1.12/24).

1 Connect to PCPro using the connection account assigned for the IP address of LAN2 connector.
For procedure to connect to PCPro, refer to "4. Connection Between PCPro and Telephony Server" in Chapter 3: Setting Up PCPro of PCPro Setup Manual.

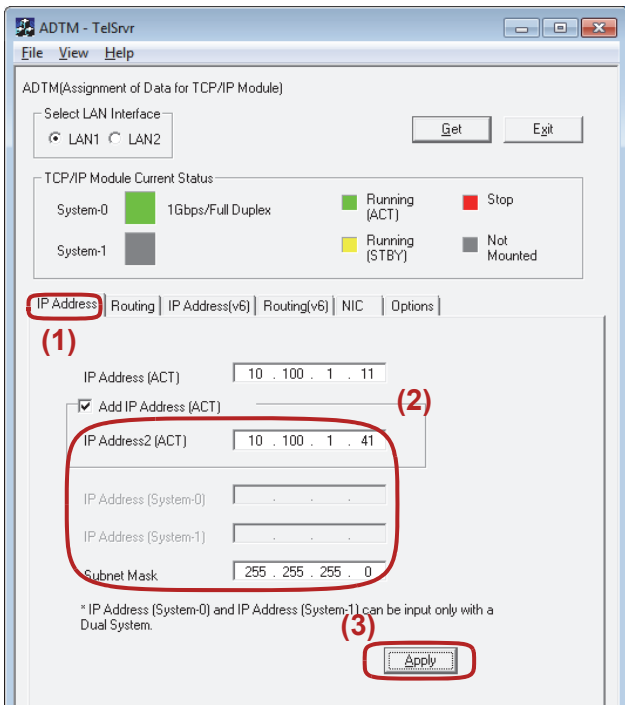
2 Execute the ADTM command.



3
(1) Select "LAN1" for [Select LAN Interface].
(2) Click [Get] button.

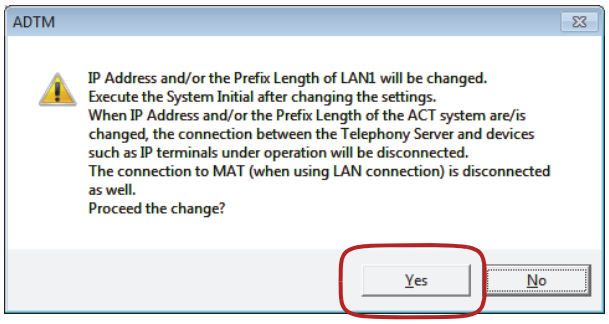


4
(1) Click [IP Address] tab.
(2) Set the values corresponding to your actual network environment for [IP Address (ACT)] and [Subnet Mask].
(3) Click [Apply] button.



Note:
By assigning the IP address that is used in ACT side of the old system (e.g. 10.100.1.12/24) to [IP Address (ACT)], the configuration setting changes for existing IP devices are minimized.

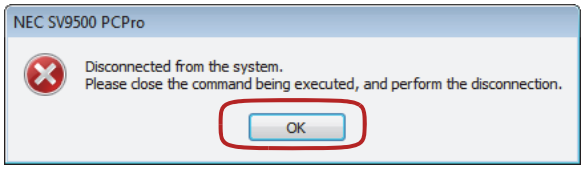
5 The following confirmation message appears.
Click [Yes] button to apply the modification.



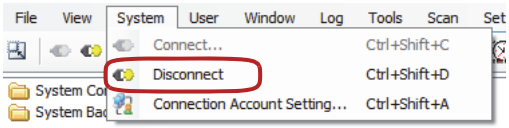
6 Click [Exit] to exit ADTM command.



7 The following message will be displayed by PCPro.
Click [OK] button to close the message box.



8 Select [Disconnect] from [System] on the Main Menu of PCPro.



For detailed disconnecting procedure, refer to "5. Clearing the Communication Link" in Chapter 3 in PCPro Setup Manual.

Note:
Do not execute a system initialization although the message recommends you to initialize the system.

Point:
The connection to PCPro will be disconnected when the data is modified.

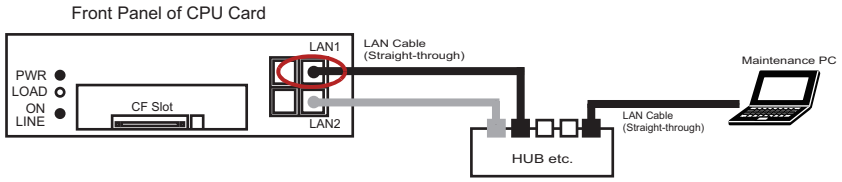
2.4.1.9 LAN1 Network Configuration (ADTM) (IPv6)

For this section, refer to the LAN1 Network Configuration (ADTM) (IPv6) section (for single configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.1.10 LAN Interface Configuration (ADTM)

This section explains the procedure to set the network configuration of the Telephony Server to conform with the actual network environment.

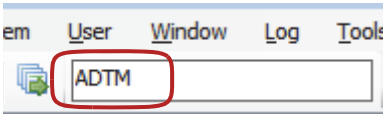
1 Connect a LAN cable to LAN1 connector.



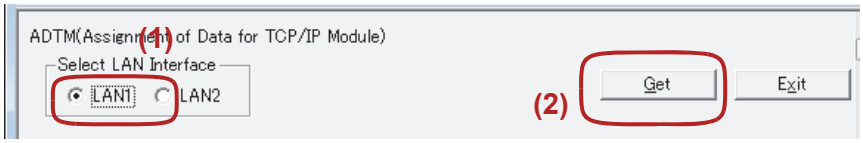
2 Execute ping command from the maintenance PC toward the connector of LAN1 and verify that the IP address is configured correctly.

3 Connect to PCPro using the connection account (e.g. LAN2_SV9500) assigned for the IP address of LAN2 connector.
For procedure to connect to PCPro, refer to "4. Connection Between PCPro and Telephony Server" in Chapter 3: Setting Up PCPro of PCPro Setup Manual.

4 Execute the ADTM command.

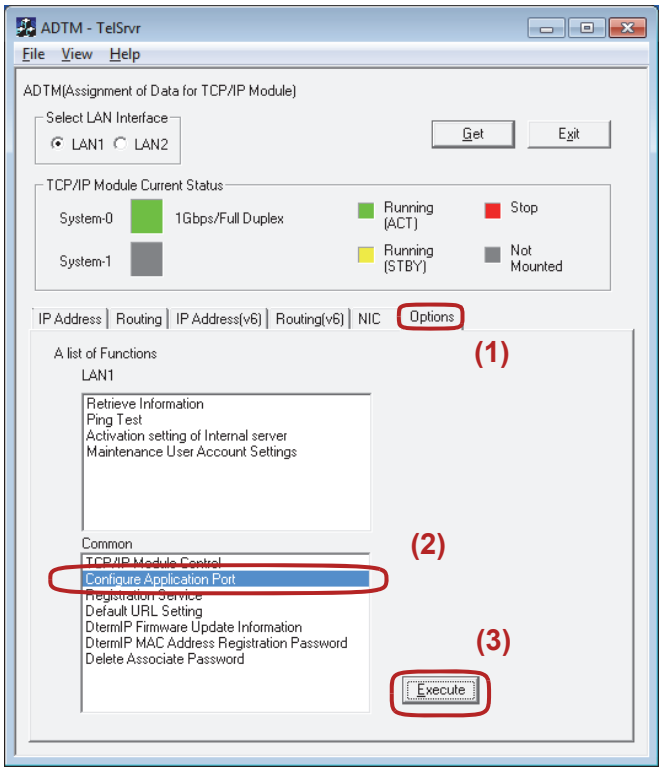


5 (1) Select "LAN1" for [Select LAN Interface].
(2) Click [Get] button.



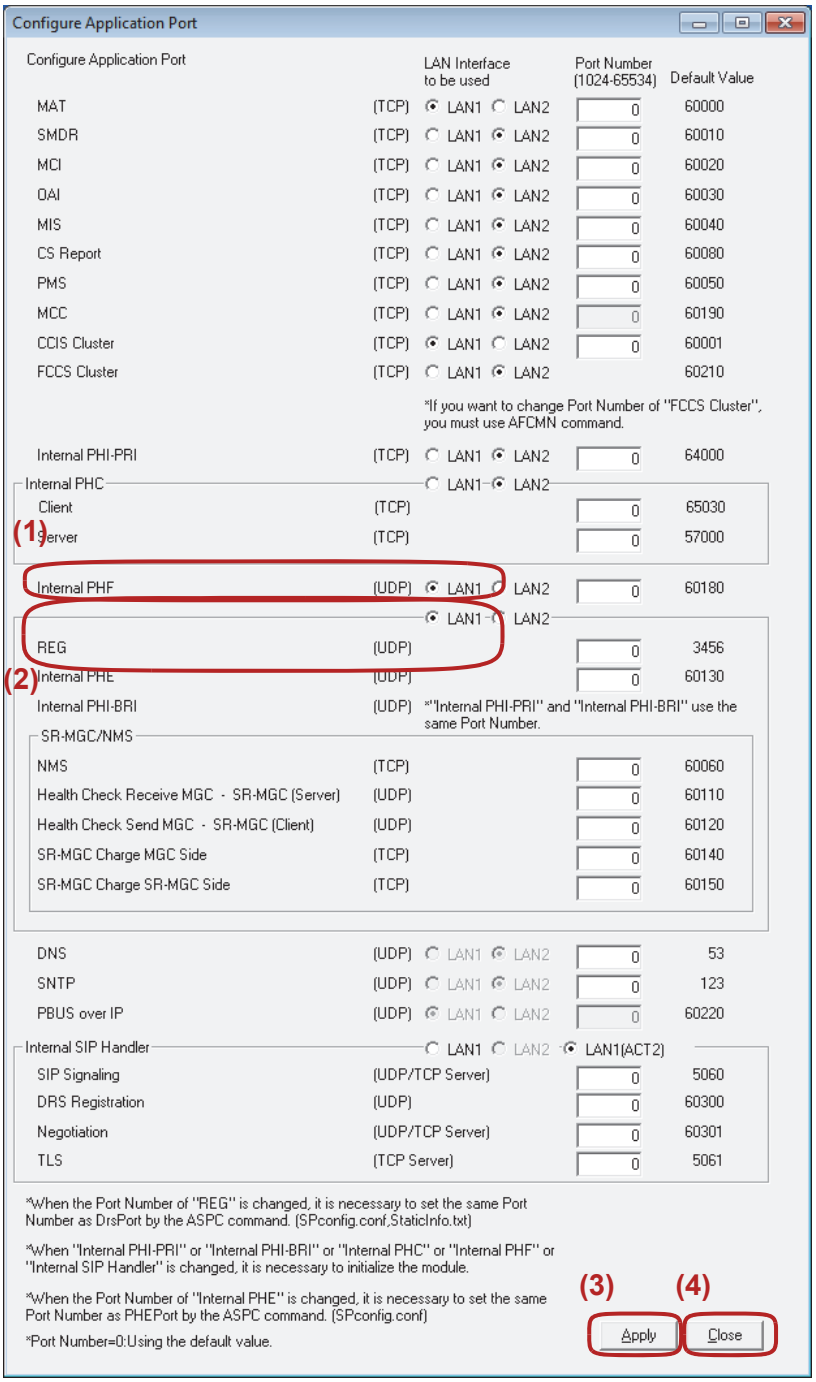
6

(1) Click [Options] tab.
(2) Select “Configure Application Port” in [Common] list box for [A list of Functions].
(3) Click [Execute] button.
[Configure Application Port] window appears.



7

(1) Select “LAN1” from [LAN Interface to be used] for [Internal PHF].
(2) Select “LAN1” from [LAN Interface to be used] for [REG].
(3) Click [Apply] button.
(4) Click [Close] button.



Note: When migrating from IPX without SIP BOX:

- When the device operates in Proprietary Protocol Mode, there is no need to modify the registration destination.
  The devices registered to ACT side of IPX will be registered to LAN1 (ACT side) after migration, however the IP addresses for both destinations will be the same.
- To use CCIS over IP, the data assignment for APIPL/APIPN command must be modified for all nodes within the network that uses the node migrated to SV9500 as a destination node.
- "LAN1" is set as the default value for [Internal PHF] and [REG]. Therefore this data configuration is not required in normal cases.

Note: When migrating from IPX with SIP BOX or SV7000:

- The existing IP equipment is in Proprietary Protocol Mode or SIP Mode, there is no need to modify the registration destination for existing IP devices. Refer to "Accommodation Inheritance" for details.
- When using FCCS over IP continuously from the existing system, there is no need to modify the IP address (IP address which conforms to the FPC assigned with AFIPN command) used for an FCCS network within the node used after migration.
- "LAN1" is set as the default value for [Internal PHF] and [REG]. Therefore this data configuration is not required in normal cases.

2.4.1.11 Assignment for Routing Data / NIC Card Data (ADTM) (IPv4)

For this section, refer to the Assignment for Routing Data / NIC Card Data (ADTM) (IPv4) section (for single configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.1.12 Assignment for Routing Data (ADTM) (IPv6)

For this section, refer to the Assignment for Routing Data (ADTM) (IPv6) section (for single configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.1.13 Assignment for LAN Interface Data (ADTM) (IPv6)

For this section, refer to the Assignment for LAN Interface Data (ADTM) (IPv6) section (for single configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.1.14 Data Deletion of Internal PHD/PHD Circuit Card

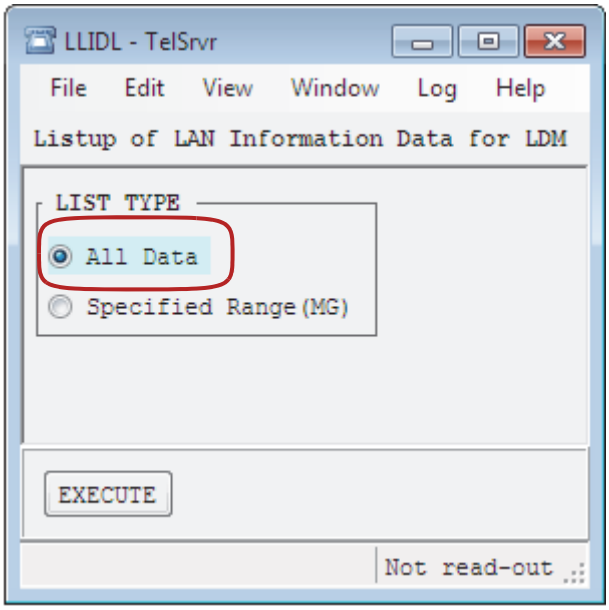
If Internal PHD or PHD circuit card was used in the old system, the data must be deleted.

This section explains the procedure to delete the data of Internal PHD and PHD circuit card. Follow the procedures below to delete the data. If neither Internal PHD or PHD circuit card was used, skip the procedures in this section and move on to "2.4.1.15 System Configuration Data Assignment".

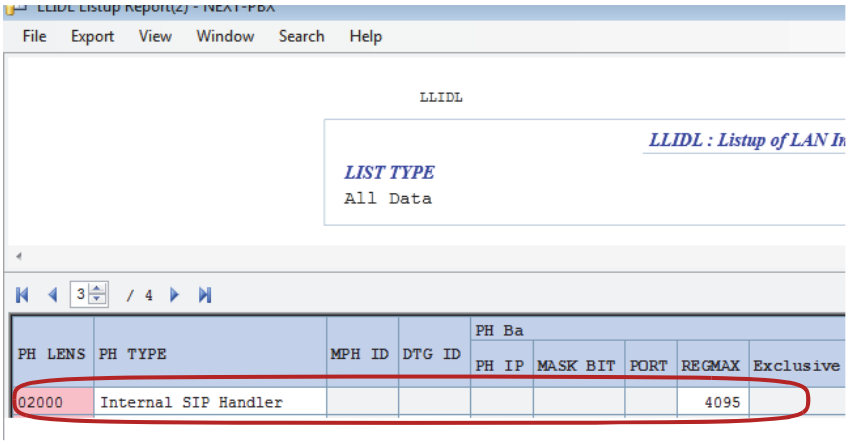
1 Execute the LLIDL command.



2 Select [ALL DATA] from the LIST TYPE field and click [Execute] button.



3 Verify the PH LENS data of "Internal PHD" and "PHD" for [PHD TYPE].



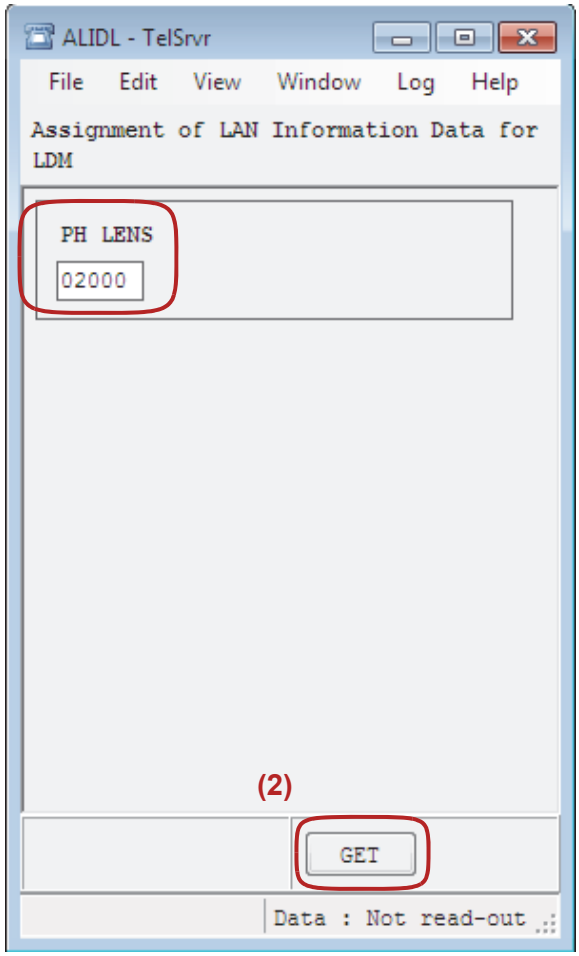
Note:
PCPro displays Internal PHD data as Internal SIP Handler in the PH type.

4 Execute the ALIDL command.

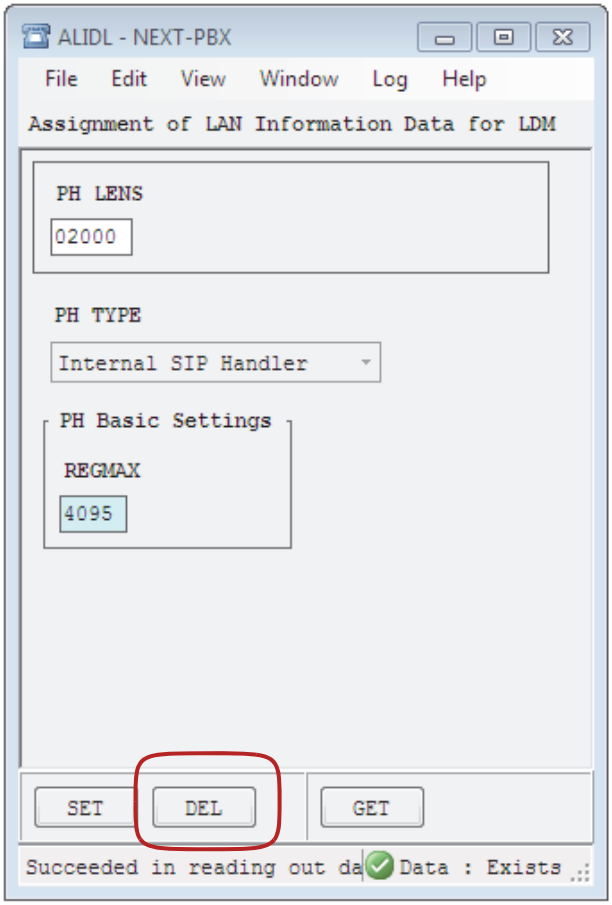


5

(1) Enter the LENS verified in STEP3.
(2) Click [Get] button.



6 Click the [Del] button.



7

(1) Repeat the procedures in STEP5 to STEP6 and delete all LENS verified in STEP3.

(2) After finish, close the command screen.

8

(1) Execute ASYDL command.

(2) Set the data below.

SYS1 Index 880 bit 0 = 0

(3) Exit ASYDL command.

Note:
Verify Internal PHD is deleted with ALIDL command before assigning the data "SYS1 Index 880 bit 0 = 0" for ASYDL command.

2.4.1.15 System Configuration Data Assignment

Basic data assignment of the Office Data must be set to start up the system.

Refer to 3.1 System Configuration Data Assignment.

Note: Be sure to assign ASYDL SYS1 Index 1026 (UNIT use on MG00-MG03) and 1027 (UNIT use on MG04-MG07).

Note: Assign the ASYDL SYS1 Index 965 Bit1=0 to disable FTP server activation. FTP server which had been used in the previous system (SV7000 or IPX) cannot be used in SV9500.

2.4.1.16 Configuration of SIP Server (ASPC)

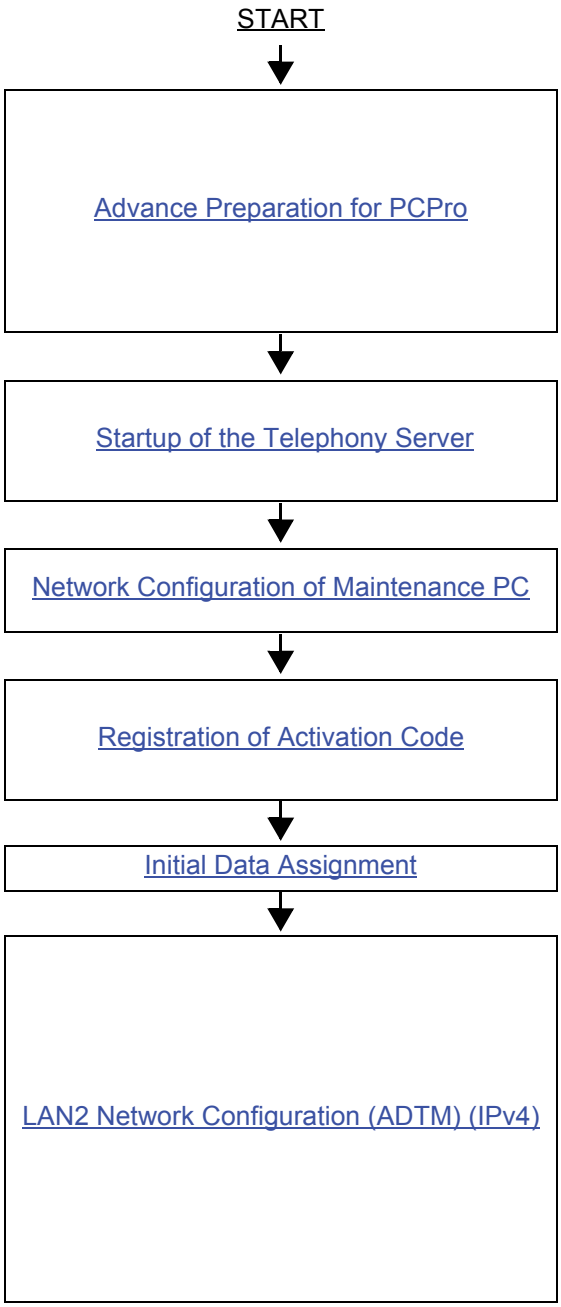
This section explains the procedure to configure the SP part of the system. For this section, refer to the Configuration of SIP Server (ASPC) section (for single configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

2.4.2 Dual Configuration

This section explains the procedure to set the Office Data for Dual Configuration.

Follow the flow chart below to set the Office Data for migration from the old system (in dual configuration system).

Note: In the case of a migration from SV8500, perform only the steps in the Startup of the Telephony Server process and in the Registration of Activation Code process at this stage.



Refer to the Advance Preparation for PCPro section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Note: In the referred section, the default IP address of LAN2 should be understood as the IP address used as ACT side of the old system.

Refer to the Startup of the Telephony Server section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Refer to 2.4.1.3 Network Configuration of Maintenance PC in this chapter.

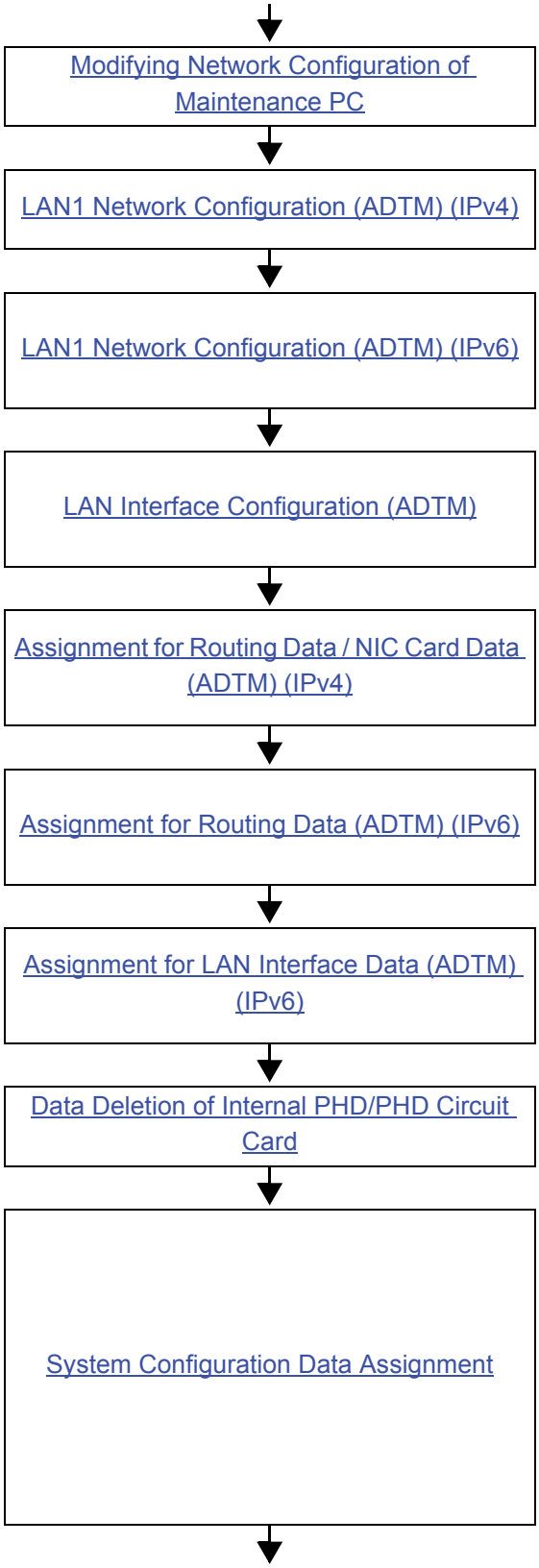
Refer to the Registration of Activation Code section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Refer to 3.2 Initial Data Assignment. in this chapter.

Refer to the LAN2 Network Configuration (ADTM) (IPv4) section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Note: In the referred section, the default IP address of LAN2 should be understood as the IP address used as ACT side of the old system.

Note: Configuration for LAN2 Connector must be performed first, since IP address data for ACT side of the old system remains as the IP address of LAN2 for ACT side.



Refer to Modifying Network Configuration of Maintenance PC in this chapter.

Refer to LAN1 Network Configuration (ADTM) (IPv4) in this chapter.

Refer to the LAN1 Network Configuration (ADTM) (IPv6) section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Refer to the LAN Interface Configuration (ADTM) section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Refer to the Assignment for Routing Data / NIC Card Data (ADTM) (IPv4) section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Refer to the Assignment for Routing Data (ADTM) (IPv6) section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Refer to the Assignment for LAN Interface Data (ADTM) (IPv6) section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Refer to 2.4.1.14 Data Deletion of Internal PHD/PHD Circuit Card in this chapter.

Refer to 3.1 System Configuration Data Assignment in this chapter.

Note: Be sure to assign ASYDL SYS1 Index 1026 (UNIT use on MG00-MG03) and 1027 (UNIT use on MG04-MG07).

Note: Assign the ASYDL SYS1 Index 965 Bit1=0 to disable FTP server activation. FTP server which had been used in the previous system (SV7000 or IPX) cannot be used in SV9500.

Configuration of SIP Server (ASPC)

↓

END

Refer to the Configuration of SIP Server (ASPC) section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Note: The following settings are only for the IPv6 connection. If you use only IPv4 addresses, these settings are not required.
LAN1 Network Configuration (ADTM) (IPv6)
Assignment for Routing Data (ADTM) (IPv6)
Assignment for LAN Interface Data (ADTM) (IPv6)

2.4.2.1 Advance Preparation for PCPro

For this section, refer to the Advance Preparation for PCPro section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

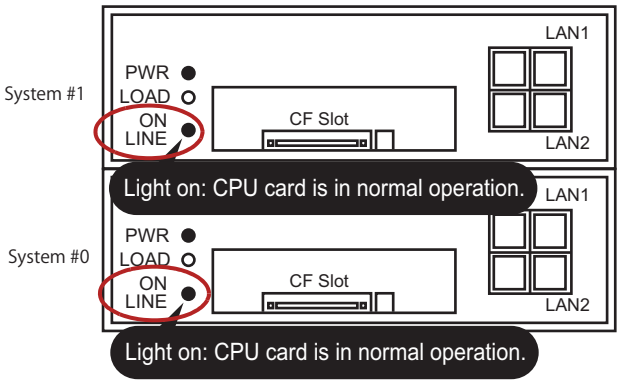
Note: In the referred section, the default IP address of LAN2 should be understood as the IP address used as ACT side of the old system.

2.4.2.2 Startup of the Telephony Server

This section explains the procedure for starting up the Telephony Server which is required as a first process when setting the Office Data.

1 Turn on the power switch on the rear panel of the Telephony Server.

2 Verify that ON LINE lamp on the front panel of CPU card changes in the following order.
[1] OFF → [2] flash fast → [3] flash slowly → [4] ON



Point:
For detailed information on ON LINE lamp, refer to “2.2.1 CPU Card” in Chapter 1: General of SV9500 Appliance Model Installation Manual.

2.4.2.3 Network Configuration of Maintenance PC

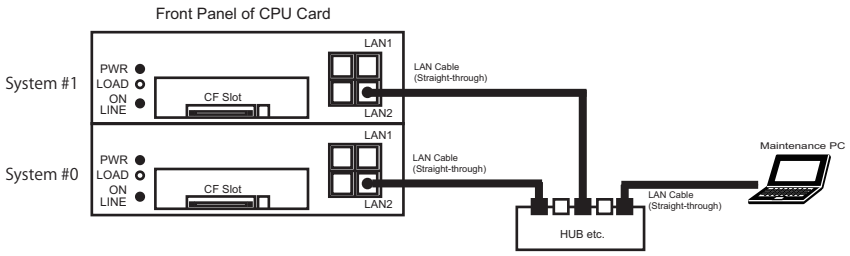
This section explains the procedure to set the network configuration of the maintenance PC to connect to the Telephony Server.

1 Modify the IP address of the maintenance PC to conform to the network configuration for IP address (e.g. 10.100.1.12/24) used as ACT side of the old system.
(Example for IP address of the maintenance PC: 10.100.1.50/24)

Note: IP addresses listed in the table below cannot be assigned to the maintenance PC.
The table below is an example when the IP address used as ACT side of the old system is "10.100.1.12/24".

IP address	Reason
10.100.1.0	This IP address is a network address.
10.100.1.12	This IP address is set as a IP address of LAN2.
10.100.1.255	This IP address is a broadcast address.

2 Connect LAN2 connector on CPU card of System #0 and #1 to the maintenance PC with a LAN cable.



Note: Do not connect a cable to any LAN connector other than LAN2 connector of System #0 or #1.

3 Execute ping command from the maintenance PC to the IP address (e.g. 10.100.1.12/24) used as ACT side of the old system and verify that a response is sent back.

Note: Execute ping command after verifying ON LINE lamp on the front panel of CPU card lights on.

2.4.2.4 Registration of Activation Code

For this section, refer to the Registration of Activation Code section (for dual configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.2.5 Initial Data Assignment

In this section, Initial Data Assignment is required.

Refer to 3.2 Initial Data Assignment.

2.4.2.6 LAN2 Network Configuration (ADTM) (IPv4)

For this section, refer to the LAN2 Network Configuration (ADTM) (IPv4) section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Note: In the referred section, the default IP address of LAN2 should be understood as the IP address used as ACT side of the old system.

Note: Configuration for LAN2 Connector must be performed first, since IP address data for ACT side of the old system remains as the IP address of LAN2 for ACT side.

2.4.2.7 Modifying Network Configuration of Maintenance PC

This section explains the procedure to modify the network configuration of the maintenance PC to conform with the IP address of LAN2 in the actual environment (e.g. 10.100.20.12).

1. Modify the IP address of the maintenance PC to conform with the actual network environment in order to connect with the IP address (e.g. 10.100.20.12) assigned by ADTM command.
(Example for IP address of the maintenance PC: 10.100.20.50)

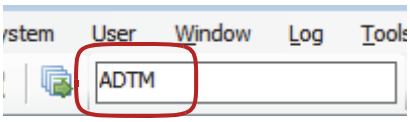
2. Execute ping command from the maintenance PC toward the connector of LAN2 for System #0 and #1, and verify that the IP address is configured correctly.

2.4.2.8 LAN1 Network Configuration (ADTM) (IPv4)

This section explains the procedure to assign as the IP address of LAN1 the IP address used for ACT side of the old system (e.g. 10.100.1.12/24).

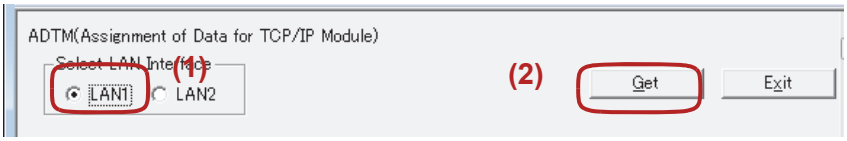
1. Connect to PCPro using the connection account assigned for the IP address of LAN2 connector.
For procedure to connect to PCPro, refer to “4. Connection Between PCPro and Telephony Server” in Chapter 3: Setting Up PCPro of PCPro Setup Manual.

2. Execute the ADTM command.



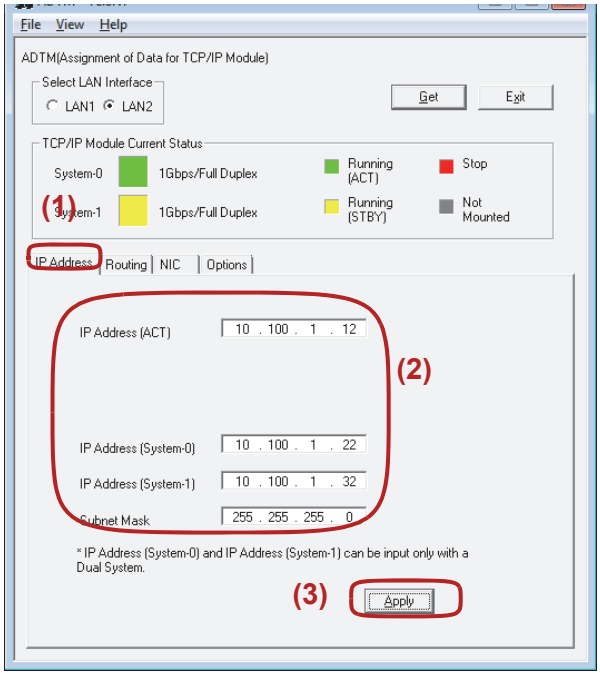
3

(1) Select "LAN1" for [Select LAN Interface].
(2) Click [Get] button.



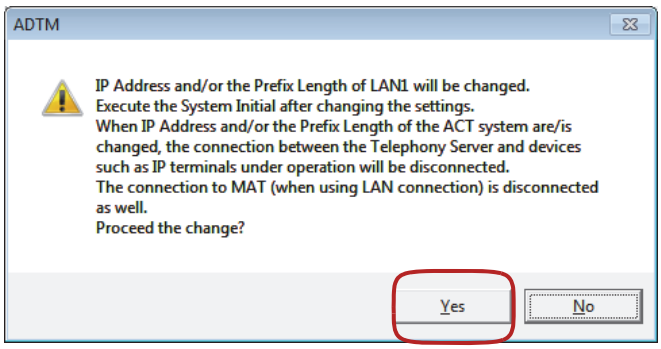
4

(1) Click [IP Address] tab.
(2) Set the values corresponding to your actual network environment for [IP Address (ACT)], [IP Address (System-0], [IP Address (System-1)] and [Subnet Mask].
(3) Click [Apply] button.



5

The following confirmation message appears.
Click [Yes] button to apply the modification.

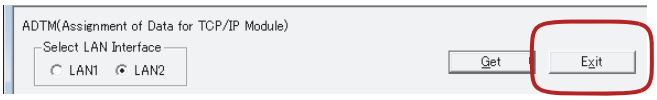


Note:
By assigning the IP address that is used in ACT side of the old system (e.g. 10.100.1.12/24) to [IP Address (ACT)], the configuration setting changes for existing IP devices are minimized.

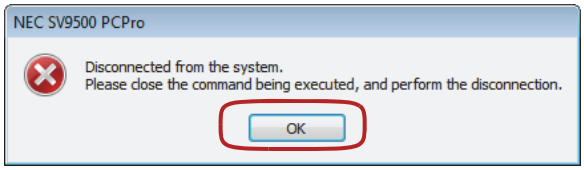
Note:
Do not execute a system initialization although the message recommends you to initialize the system.

Point:
The connection to PC-Pro will be disconnected when the data is modified.

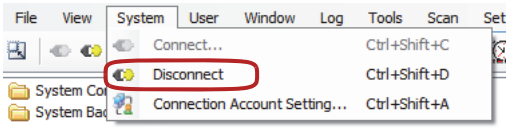
6 Click [Exit] to exit ADTM command.



7 The following message will be displayed by PCPro.
Click [OK] button to close the message box.



8 Select [Disconnect] from [System] on the Main Menu of PCPro.



For detailed disconnecting procedure, refer to "6. Disconnecting the Communication Link" in Chapter 3: Setting Up PCPro of PCPro Setup Manual.

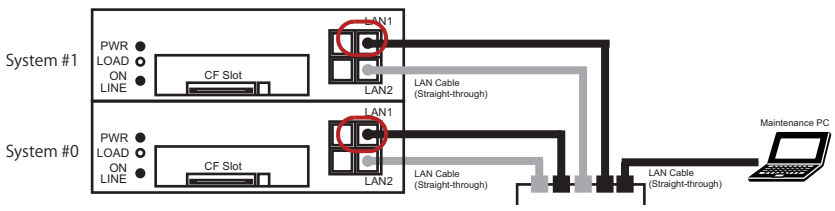
2.4.2.9 LAN1 Network Configuration (ADTM) (IPv6)

For this section, refer to the LAN1 Network Configuration (ADTM) (IPv6) section (for dual configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.2.10 LAN Interface Configuration (ADTM)

This section explains the procedure to set the network configuration of the Telephony Server to conform with the actual network environment.

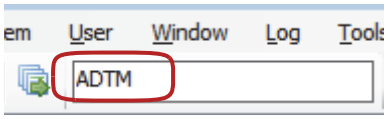
1 Connect a LAN cable to LAN1 connector for System #0 and #1.



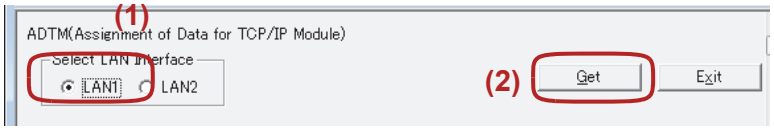
2 Execute ping command from the maintenance PC toward the connector of LAN1 and verify that the IP address is configured correctly.

3 Connect to PCPro using the connection account (e.g. LAN2_SV9500) assigned for the IP address of LAN2 connector.
For procedure to connect to PCPro, refer to "4. Connection Between PCPro and Telephony Server" in Chapter 3: Setting Up PCPro of PCPro Setup Manual.

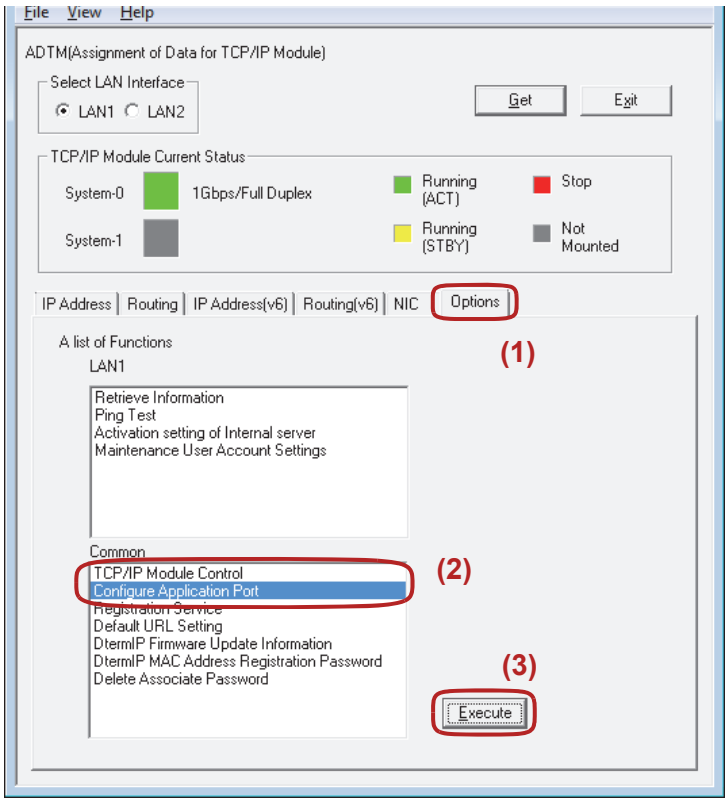
4 Execute the ADTM command.



5 (1) Select "LAN1" for [Select LAN Interface].
(2) Click [Get] button.

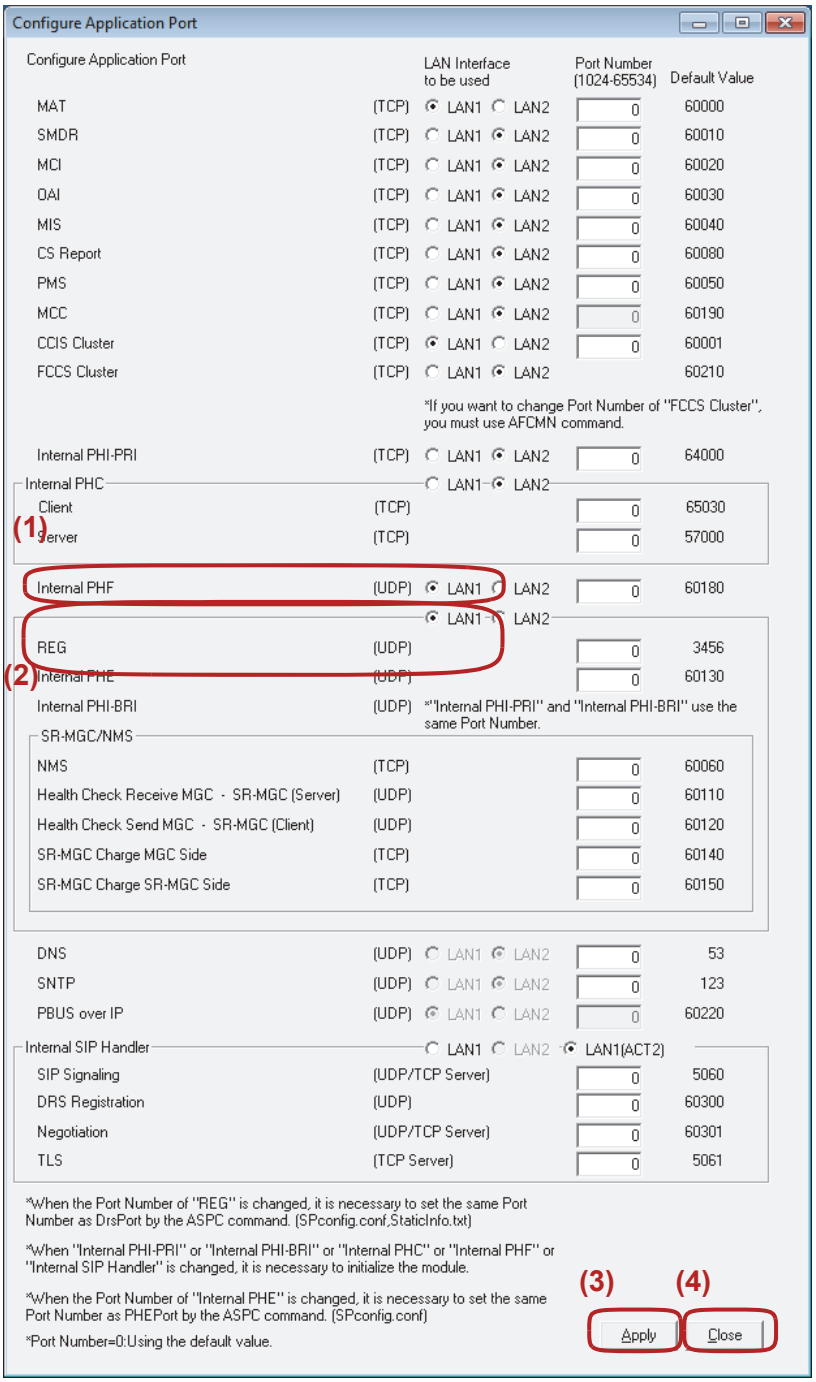


6 (1) Click [Options] tab.
(2) Select "Configure Application Port" in [Common] list box for [A list of Functions].
(3) Click [Execute] button.
[Configure Application Port] window appears.



7

(1) Select “LAN1” from [LAN Interface to be used] for [Internal PHF].
(2) Select “LAN1” from [LAN Interface to be used] for [REG].
(3) Click [Apply] button.
(4) Click [Close] button.



Note:
The MAT uses LAN2 by default.

Note: When migrating from IPX without SIP BOX:

- When the device operates in Proprietary Protocol Mode, there is no need to modify the registration destination.
  The devices registered to ACT side of IPX will be registered to LAN1 (ACT side) after migration, however the IP addresses for both destinations will be the same.
- To use CCIS over IP, the data assignment for APIPL/APIPN command must be modified for all nodes within the network that uses the node migrated to SV9500 as a destination node.
- "LAN1" is set as the default value for [Internal PHF] and [REG]. Therefore this data configuration is not required in normal cases.

Note: When migrating from IPX with SIP BOX or SV7000:

- The existing IP equipment is in Proprietary Protocol Mode or SIP Mode, there is no need to modify the registration destination for existing IP devices. Refer to "Accommodation Inheritance" for details.
- When using FCCS over IP continuously from the existing system, there is no need to modify the IP address (IP address which conforms to the FPC assigned with AFIPN command) used for an FCCS network within the node used after migration.
- "LAN1" is set as the default value for [Internal PHF] and [REG]. Therefore this data configuration is not required in normal cases.

2.4.2.11 Assignment for Routing Data / NIC Card Data (ADTM) (IPv4)

For this section, refer to the Assignment for Routing Data / NIC Card Data (ADTM) (IPv4) section (for dual configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.2.12 Assignment for Routing Data (ADTM) (IPv6)

For this section, refer to the Assignment for Routing Data (ADTM) (IPv6) section (for dual configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.2.13 Assignment for LAN Interface Data (ADTM) (IPv6)

For this section, refer to the Assignment for LAN Interface Data (ADTM) (IPv6) section (for dual configuration) in Chapter 6 "System Startup" of SV9500 Appliance Model Installation Manual.

2.4.2.14 Data Deletion of Internal PHD/PHD Circuit Card

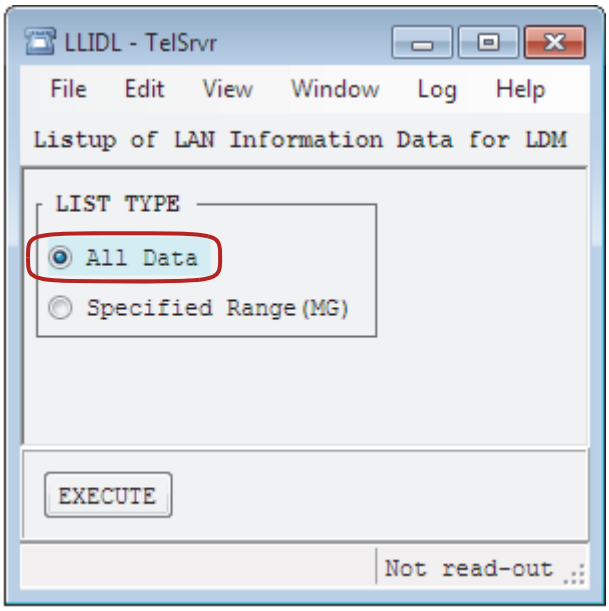
If Internal PHD or PHD circuit card was used in the old system, the data must be deleted.

This section explains the procedure to delete the data of Internal PHD and PHD circuit card. Follow the procedures below to delete the data. If neither Internal PHD or PHD circuit card was used, skip the procedures in this section and move on to "2.4.2.15 System Configuration Data Assignment".

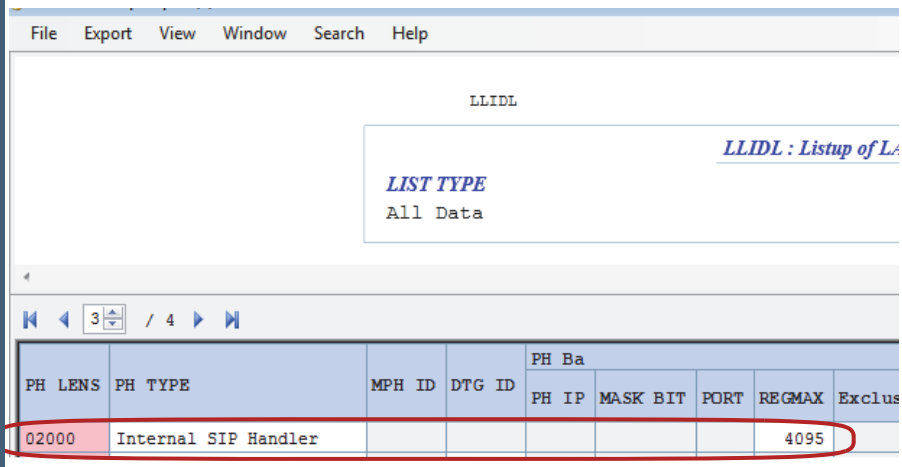
1 Execute the LLIDL command.



2 Select “All data” from [LIST TYPE] and click [Execute] button.



3 Verify the LENS data of “Internal PHD” and “PHD” for [Type].



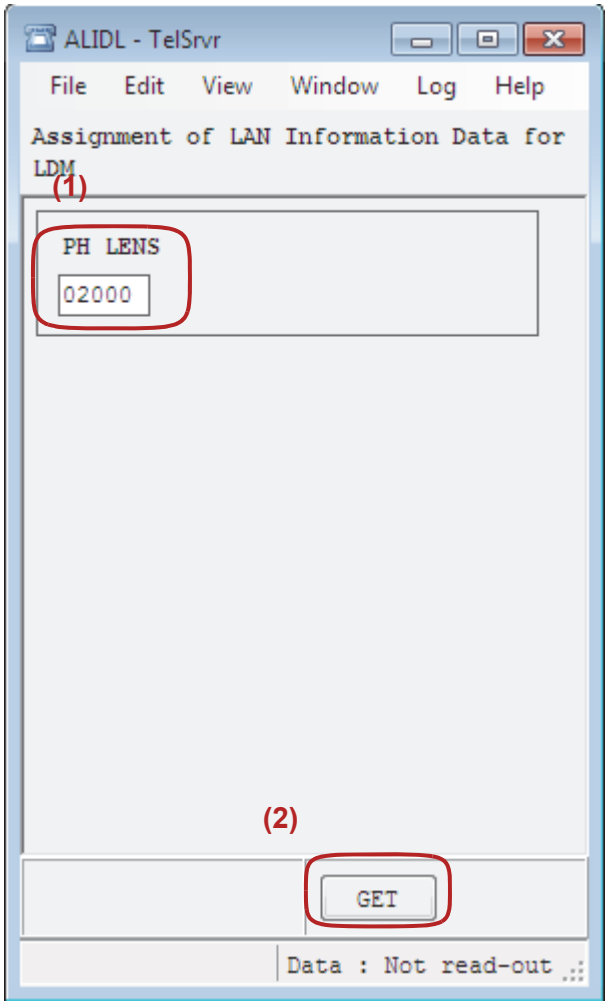
4 Execute the ALIDL command.



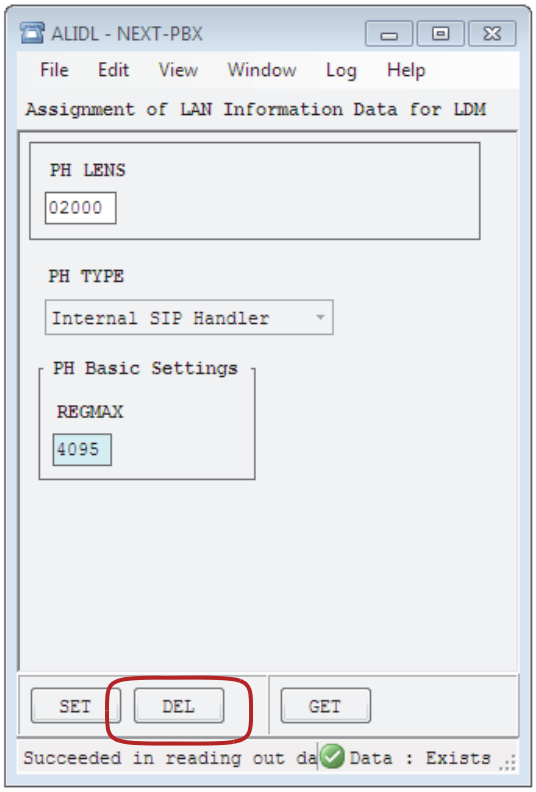
Note:
PCPro displays Internal PHD data as Internal SIP Handler in the PH type.

5

(1) Enter the LENS verified in STEP3.
(2) Click [Get] button.



6 Click the [Del] button.



7

(1) Repeat the procedures in STEP5 to STEP6 and delete all LENS verified in STEP3.

(2) After finish, close the command screen.

8

(1) Execute ASYDL command.

(2) Set the data below.

SYS1 Index 880 bit 0 = 0

(3) Exit ASYDL command.

Note:
Verify internal PHD is deleted with ALIDL command before assigning the data "SYS1 Index 880 bit 0 = 0" for ASYDL command.

2.4.2.15 System Configuration Data Assignment

Basic data assignment of the Office Data must be set to start up the system.

Refer to 3.1 System Configuration Data Assignment.

Note: Be sure to assign ASYDL SYS1 Index 1026 (UNIT use on MG00-MG03) and 1027 (UNIT use on MG04-MG07).

Note: Assign the ASYDL SYS1 Index 965 Bit1=0 to disable FTP server activation. FTP server which had been used in the previous system (SV7000 or IPX) cannot be used in SV9500.

2.4.2.16 Configuration of SIP Server (ASPC)

For this section, refer to the Configuration of SIP Server (ASPC) section (for dual configuration) in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

2.5 Rebooting of the Telephony Server

For this section, refer to the Rebooting of the Telephony Server section in Chapter 6 “System Startup” of SV9500 Appliance Model Installation Manual.

Note: If migrating from SV7000, MPH-ID for ALIDL command will be overwritten forcefully from “0” to “1” or “1” to “2” when system initialization is executed. Therefore, when MPH-ID is set to values other than “1” or “2” in existing SV7000 system, assign the data for MPH-ID in ALIDL command.

2.6 Modifying the IP Address of Registration Destination

The IP address of registration destination must be modified. Refer to "Additional Information on System Start-up - 3.3 Accommodation Inheritance" to modify the registration destination of each devices when connecting the devices used with the existing IPX or SV7000 to SV9500.

Note: In case of a migration from SV8500 this step is not necessary. Skip to the next step.

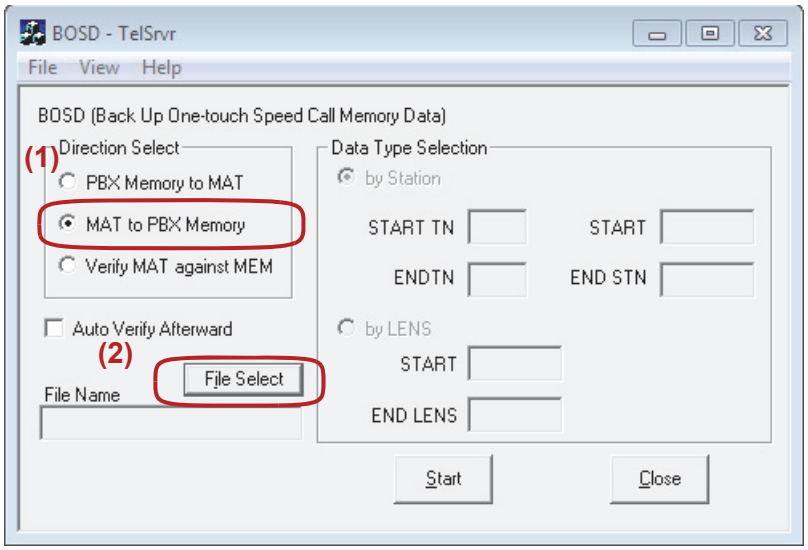
2.7 Loading the One-Touch Speed Call Memory Data

This section explains the procedure to load the saved data of One-Touch Speed Call Memory for Desktop terminals with BOSD command.

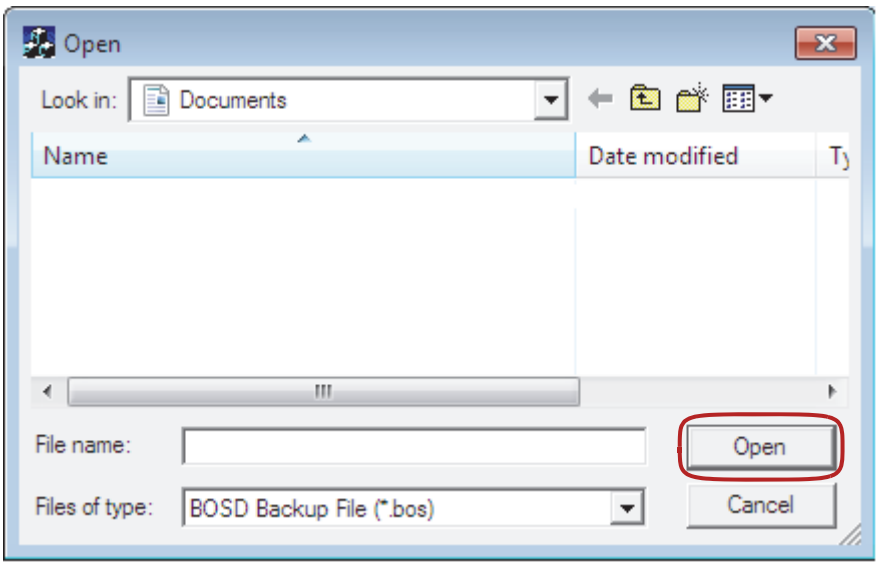
1 Execute BOSD command.



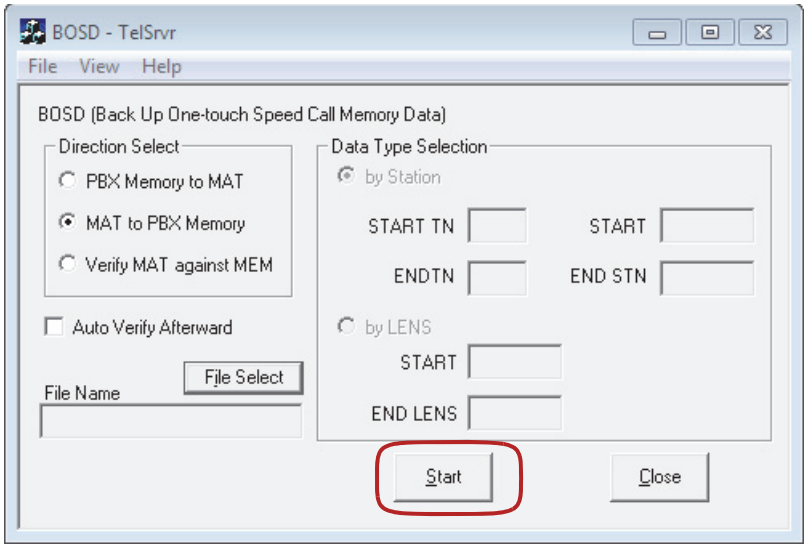
2 (1) Select "MAT to PBX Memory" from [Direction Select].
(2) Click [File Select] button.



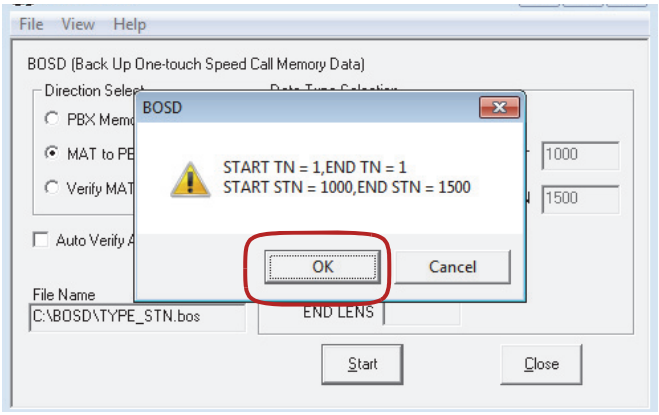
3 [Open] dialog appears.
Select the saved data file of One-Touch Speed Call Memory and click [Open] button.



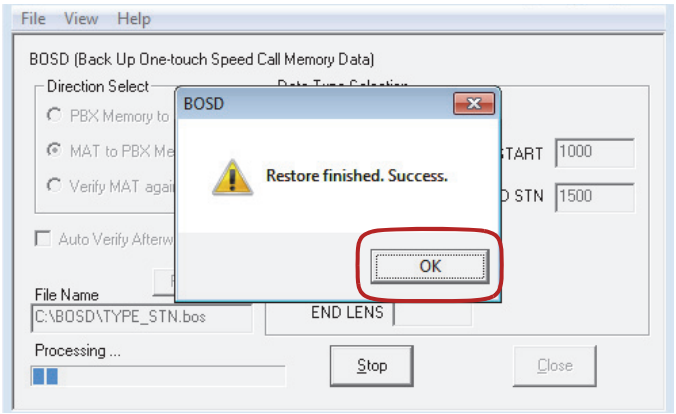
4 Click [Start] button.



5 Click [OK] button.
The data of One-Touch Speed Call Memory begins to load.

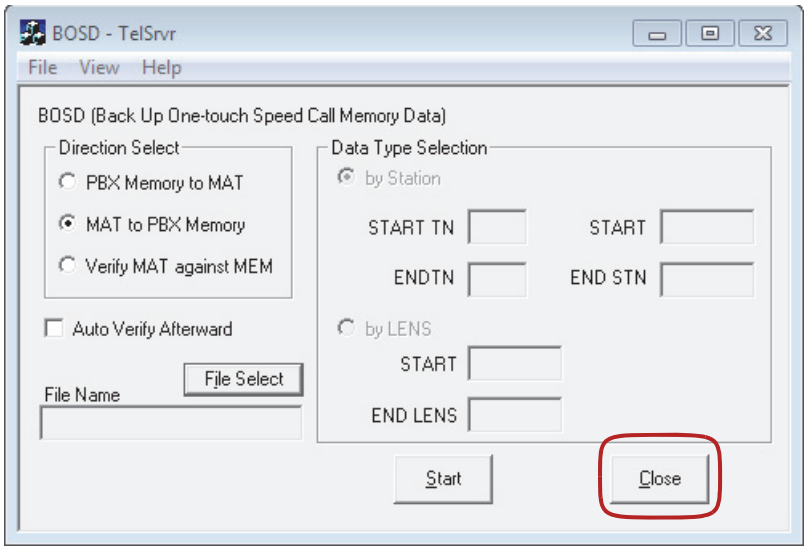


6 "Restore finished. Success." message appears.
Click [OK] button.

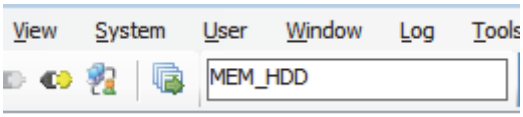


Note: It takes about 10 seconds per each station.

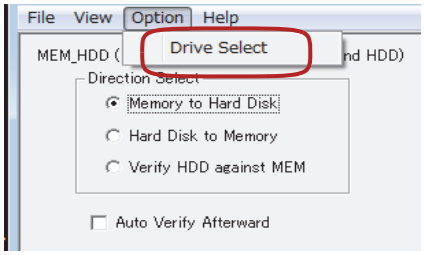
7 Click [Close] button.



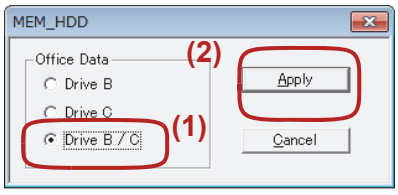
8 Execute the [MEM_HDD] command.



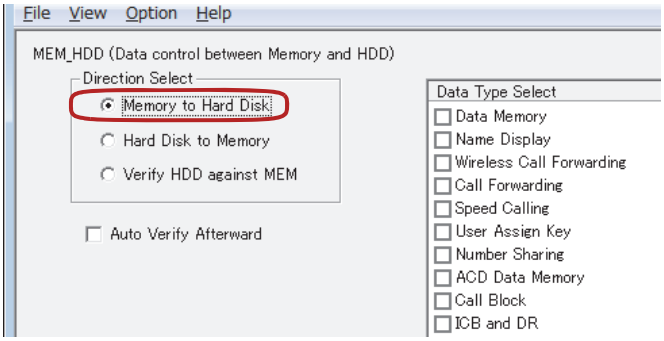
9 Select [Drive Select] from the [Option menu].



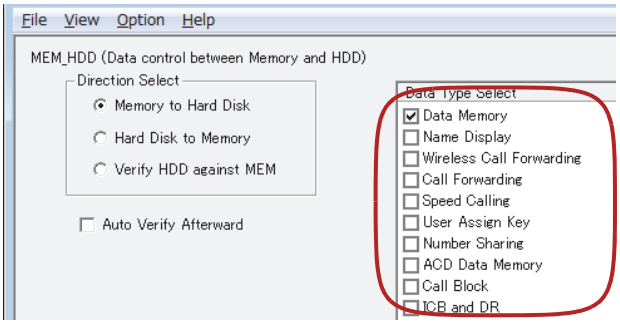
10 (1) Select [Drive B / C] for Office Data.
(2) Click the [Apply] button.



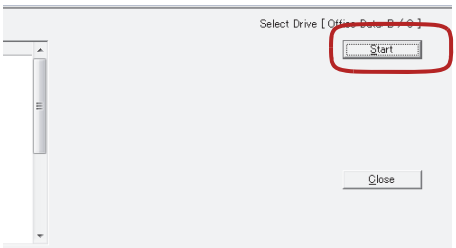
11 Select [Memory to Hard Disk] for Direction Select.



12 Select the used data type for Data Type Select.



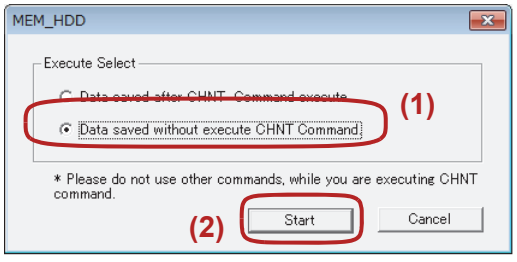
13 Click the [Start] button.



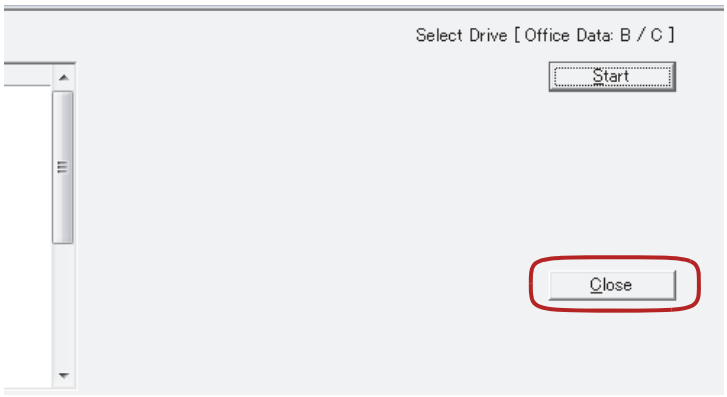
14 Select [Data saved without execute CHNT Command] for [Execute Select].

(1) Click the [Start] button.

(2) The data backup begins.



15 After the backup is completed, click the [Close] button to exit the MEM_HDD command.



16 Refer to “SV9500 Appliance Model Installation Manual” - “Chapter 7 Installation Test” - “2. System Initialization Test” - “2.1 System Initialization Test” and turn on the power of the Telephony Server.

17 When the System Initialization is completed, the ON LINE lamp turns on.
Verify that ON LINE lamp on the front panel of CPU card changes in the following order.
[1] OFF → [2] flash fast → [3] flash slowly → [4] ON

18 Refer to “SV9500 Operations and Maintenance Manual” - “Chapter 7 Maintenance Commands” and execute a system test and verify that all tests are done successfully.
Connect the Telephony Server to the network and verify that services operate properly conforming to the environment in use.

3. Additional Information on System Startup

3.1 System Configuration Data Assignment

For this section, refer to the System Configuration Data Assignment section, System Startup chapter, SV9500 Appliance Model Installation Manual.

3.2 Initial Data Assignment

For this section, refer to the Initial Data Assignment section, System Startup chapter, SV9500 Appliance Model Installation Manual.

3.3 Accommodation Inheritance

The following describes how to inherit server-side interfaces for accommodation of IP equipment and/or communication of CCIS over IP/FCCS over IP network from the existing system to the migration system. The basic idea of accommodation inheritance is the following: when migrating the system from the existing one to the new one (SV9500), reuse the interface information in the existing system as much as possible to minimize re-settings outside SV9500 such as configuration setting of IP equipment and office data assignment in other nodes in CCIS over IP/FCCS over IP network.

Step1: IP Address Inheritance;

Execute the ADTM command to allocate the existing IPX/SV7000T/SV8500 LAN2 addresses to SV9500 LAN2 and the existing SIP BOX/SV7000S addresses to SV9500 LAN1 respectively. The following are recommended inheritance, but assign them according to your environment. For detailed procedure of the assignment, refer to Command Manual.

IP Address Inheritance from IPX/SV7000 to SV9500

IP Address in the Existing System			→	IP Address in the Migration System
When IPX	When SV7000	When SV8500		SV9500
IPX (ACT)	SV7000T (ACT)	LAN2 (ACT)	→	LAN2 (ACT)
IPX (STBY)	SV7000T (STBY)	LAN2 (#0/#1)	→	LAN2 (#0/#1) **Note1**
SIP BOX (ACT)	SV7000S (Virtual IP Address)	LAN1 (ACT)	→	LAN1 (ACT) **Note2**
SIP BOX (#0)	SV7000S (#0)	LAN1 (#0)	→	LAN1 (#0)
SIP BOX (#1)	SV7000S (#1)	LAN1 (#1)	→	LAN1 (#1)

Note 1: When migrating from IPX or SV7000, one of the IP addresses is to be newly assigned.

Note 2: To be newly assigned if SIP Wireless Terminal Backup [S-154] has not been used in the existing system.

In the case of above setting, the following apply.

- SIP mode equipment
  - (1) IP equipment in SIP mode was accommodated in SIP BOX/SV7000S/SV8500 LAN1.
  - (2) IP equipment in SIP mode is accommodated in LAN1 on SV9500.
  - (3) SIP BOX/SV7000S/SV8500 LAN1 and SV9500 LAN1 have the same IP addresses, so registration destination of IP equipment in SIP mode does not change.
- Proprietary Protocol mode equipment
  - (1) IP equipment in Proprietary Protocol mode was accommodated in IPX/SV7000T/SV8500 LAN1.
  - (2) IP equipment in Proprietary Protocol mode is accommodated in LAN1 on SV9500.
  - (3) IPX/SV7000T and SV9500 LAN1 have different IP addresses, so registration destination of IP equipment in Proprietary Protocol mode changes (you need to modify).
- CCIS over IP
  - (1) IP address of IPX/SV7000T/SV8500 LAN2 was allocated for its own PC (Point Code).
  - (2) IP address of SV9500 LAN2 is allocated for its own PC.
  - (3) IPX/SV7000T/SV8500 LAN2 and SV9500 LAN2 have the same IP addresses, so all counter nodes connecting to the migrated node via CCIS over IP do not need to change the destination address.
- FCCS over IP
  - (1) IP address of IPX/SV7000T/SV8500 LAN1 was allocated for its own FPC (Fusion Point Code).
  - (2) IP address of SV9500 LAN1 is allocated for its own FPC.
  - (3) IPX/SV7000T and SV9500 LAN1 have different IP addresses, so NCN needs to change the migrated node's IP address allocated for the FPC.

For now, settings for IP equipment in Proprietary Protocol mode and FCCS over IP have to be reconfigured.

Step2: Switch LAN Interface to be used;

Note: This Step changes LAN interface settings, which is not recommended. Unless you never want to change IP equipment's settings or office data settings in other nodes, do not execute this step.

IP equipment in Proprietary Protocol mode is configured to register to the IP address on which SV9500 LAN2 interface is placed. Also, the NCN in FCCS over IP network has the IP address in the setting as destination address to the migrated node's FPC. But SV9500 cannot accommodate the IP equipment's registration and FCCS over IP connection by default because LAN1 is configured to accommodate them, but not LAN2. So execute the ADTM command to switch LAN interface for them from LAN1 to LAN2. For detailed procedure of the assignment, refer to Command Manual.

LAN Interface Switch

Application	LA N Interface to be used	Remarks
Internal PHF	LAN2	Set for inheritance of FCCS over IP setting.
REG (DRS)	LAN2 * Use the same LAN interface between them.	Set for inheritance of IP equipment in Proprietary Protocol mode accommodation.
Internal PHE		
Internal PHI-BRI		
SR-MGC/NMS **Note 3**		

Note 3: NMS stands for Network Management System, which monitors network elements, detects problems and reports all the events.

In the case of above setting, the following apply.

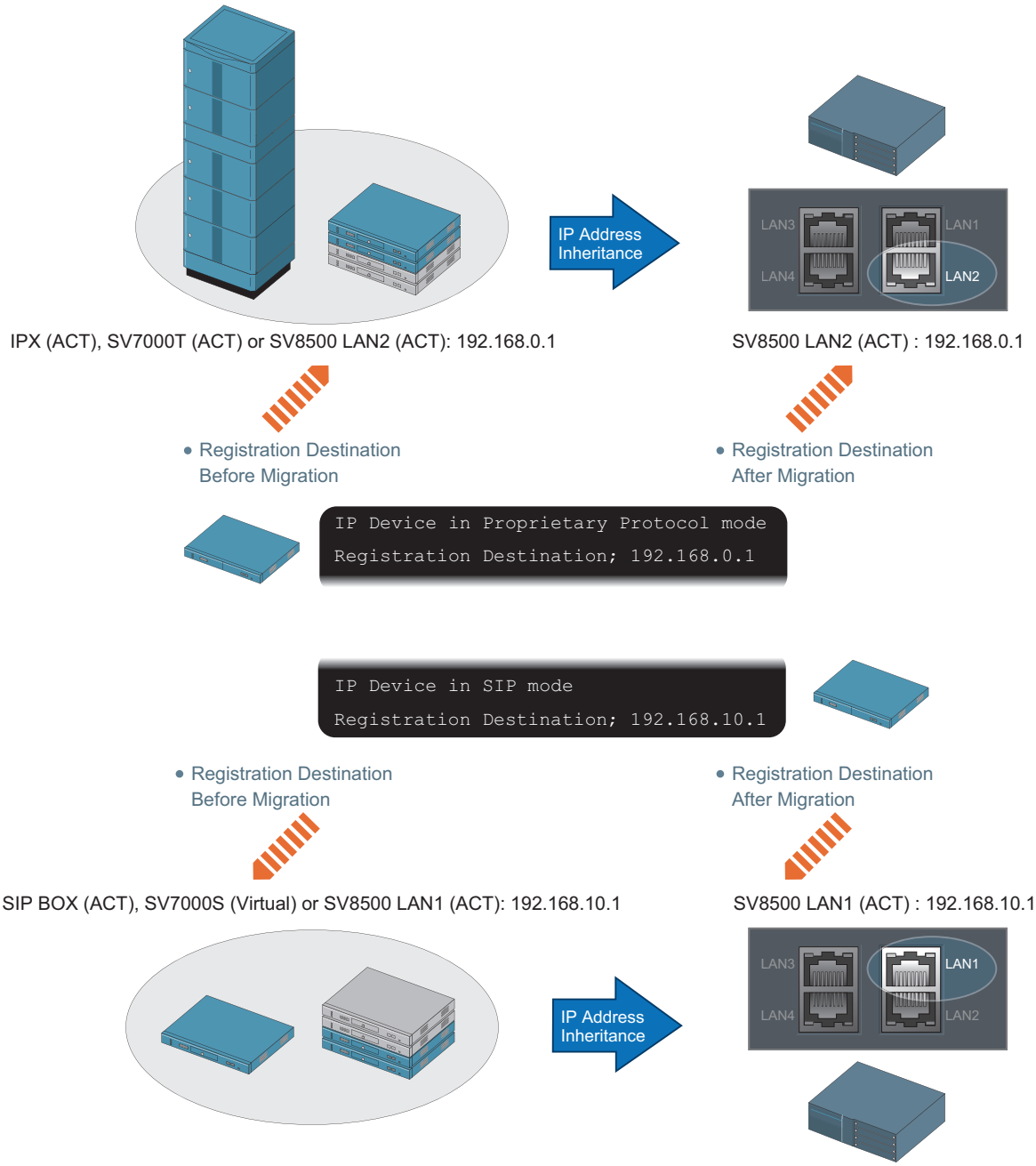
- SIP mode equipment
  - (1) IP equipment in SIP mode was accommodated in SIP BOX/SV7000S/SV8500 LAN1.
  - (2) IP equipment in SIP mode is accommodated in LAN1 on SV9500.
  - (3) SIP BOX/SV7000S/SV8500 LAN1 and SV9500 LAN1 have the same IP addresses, so registration destination of IP equipment in SIP mode does not change.
- Proprietary Protocol mode equipment
  - (1) IP equipment in Proprietary Protocol mode was accommodated in IPX/SV7000T/SV8500 LAN2.
  - (2) IP equipment in Proprietary Protocol mode is accommodated in LAN2 on SV9500.
  - (3) IPX/SV7000T/SV8500 LAN2 and SV9500 LAN2 have the same IP addresses, so registration destination of IP equipment in Proprietary Protocol mode does not change.
- CCIS over IP
  - (1) IP address of IPX/SV7000T/SV8500 LAN2 was allocated for its own PC (Point Code).
  - (2) IP address of SV9500 LAN2 is allocated for its own PC.
  - (3) IPX/SV7000T/SV8500 LAN2 and SV9500 LAN2 have the same IP addresses, so all counter nodes connecting to the migrated node via CCIS over IP do not need to change the destination address.

- FCCS over IP

  (1) IP address of IPX/SV7000T/SV8500 LAN2 was allocated for its own FPC (Fusion Point Code).

  (2) IP address of SV9500 LAN2 is allocated for its own FPC.

  (3) IPX/SV7000T/SV8500 LAN2 and SV9500 LAN2 have the same IP addresses, so NCN does not need to change the migrated node's IP address allocated for the FPC.



When you switch LAN interface to be used; Internal PHF or REG (DRS), Internal PHE, Internal PHI-BRI and SR-MGC/NMS, follow the following conditions.

General Conditions

Follow the following conditions to switch the LAN interface to be used for Internal PHF or REG (DRS), Internal PHE, Internal PHI-BRI and SR-MGC/NMS to LAN2.

[1] LAN1is the default LAN interface for Internal PHF, REG (DRS), Internal PHE, Internal PHI-BRI, and SR-MGC/NMS. LAN2 can be used by setting with the ADTM command. Refer to Command Manual for the detail.
* When the LAN interface is changed, execute the ADPM command to initialize TCP/IP module. When initialized, the IP equipment will reboot.

Note: The application ports, REG (DRS), Internal PHE, Internal PHI-BRI and SR-MGC/NMS can select only the same LAN interface.

[2] To use REG (DRS), Internal PHE, Internal PHI-BRI, and SR-MGC/NMS at LAN2, the network must be able to communicate between LAN1 and LAN2; set the same subnet IP address to LAN1 and LAN2, or install a router to ensure the communication.

[3] REG, which represents DRS (Device Registration Server), does not accommodate all kinds of IP equipment, but only one in Proprietary Protocol mode. The equipment in SIP mode is accommodated via another port (SipSrvSipPort), so even if switching the interface for REG, the registration destination of the equipment in SIP mode is not changed. For detailed information on registration destination of IP equipment, refer to Registration Destination of IP Devices/Stations in CHAPTER 3 IP EQUIPMENT of System Description.

[4] When the migrated node switches the interface for REG (DRS), all nodes registering the interface address as MGC Search Address needs to change the setting corresponding to the switching; ADTM → Options tab → Registration Service → MGC Search Address.

[5] When using REG (DRS), Internal PHE, Internal PHI-BRI, and SR-MGC/NMS at LAN2, the maximum time the following terminals take to detect a failure increases, approximately, by five minutes to 12 minutes; SIP Multiple Line terminal and Softphone (SIP).

Note: When using those application ports at LAN1; IP terminal takes about 2-4 minutes; SIP Multiple Line terminal and Softphone (SIP) take about 2-7 minutes.

[6] When using REG (DRS), Internal PHE, Internal PHI-BRI, and SR-MGC/NMS at LAN2, make sure of the following conditions related to the ADTM command:

- Changing the following data with the ADTM command involves initialization of SIP-controlling part in both of system-0 and system-1: IP address (ACT) on LAN2 on the IP Address tab; LAN Interface to be used of REG (DRS), Internal PHE, Internal PHI-BRI, and SR-MGC/NMS on the Configure Application Port of the Options tab (LAN1 to LAN2, LAN2 to LAN1).
- If you change LAN Interface to be used of REG (DRS), Internal PHE, Internal PHI-BRI, and SR-MGC/NMS on the Configure Application Port of the Options tab (LAN1 to LAN2, LAN2 to LAN1), execute Restart on TCP/IP Module Control of the Options tab. The restart involves initialization of SIP-controlling part.

Conditions for SR-MGC

The following are conditions for SR-MGC, related only when setting the application ports (REG (DRS), Internal PHE, Internal PHI-BRI, and SR-MGC/NMS) to LAN2 in the ADTM command, which means that SR-MGC in the system communicates with SV9500 LAN2. For the conditions for SR-MGC on setting to LAN1, which are not included here, see SURVIVAL REMOTE MGC [S-141] in Data Programming Manual - Business.

[1] You can select the LAN interface to communicate with SR-MGC by setting the following application ports to LAN1 or LAN2.

- NMS
- Receiving Health Check from SR-MGC (Server)
- Sending Health Check to SR-MGC (Client)
- SR-MGC Charge MGC Side
- SR-MGC Charge SR-MGC Side

[2] The followings describe the setting of LAN interface for the applications (**Note4**) communicating with SR-MGC from the Telephony Server side.

To communicate with SR-MGC, the Telephony Server uses the specified LAN interface. By default, LAN1 interface is used for the applications communicating with SR-MGC (**Note5**). This communication includes Health Check between the Telephony Server and SR-MGC. Therefore, a failure that occurs on the LAN2 port cannot be notified to SR-MGC.

Note 4: The applications communicating with SR-MGC refer to all applications: Health Check, SMDR, Office Data Copy, DRS and Internal PHx.

Note 5: OS version upgrading function uses LAN1 for performing the program copy, regardless of the setting of LAN interface for the applications used by SR-MGC.

[3] Only LAN1 interface can be used for communicating with the Telephony Server. LAN2 interface cannot be selected.

[4] Note the followings when LAN1 is set according to the LAN interface setting described in General Conditions:

When the IP equipment (MG(PRI) in Proprietary Protocol mode) to be rescued by SR-MGC uses LAN2 port, the IP equipment must be assigned the same Location ID (LOC-ID) as the SR-MGC. SR-MGC does not rescue IP equipment that is assigned different Location ID. However, by the office data setting, the IP equipment using LAN2 can be switched to the operation by SR-MGC. If the following conditions are met, the equipment using LAN2 also can be rescued by SR-MGC by assigning the system data (ASYDL, SYS1, Index 846, bit 2 = 1):

- LAN1/LAN2 of the Telephony Server is assigned to different segments (IP addresses)
- LOC-IDs are assigned per SR-MGC

Assign ASYDL, SYS1, Index 846, bit 2 = 0 if the above conditions cannot be met.

Note: If installing SR-MGC onto the system where LAN2 accommodates MG(PRI) in Proprietary Protocol mode and LAN1 accommodates other IP equipment, pay close attention to the office data assignment and the system environments/conditions. Due to an incorrect office data setting or operating status of SR-MGC, MG(PRI) in Proprietary Protocol mode may suddenly become unavailable.

[5] When the IP equipment (MG(PRI) in Proprietary Protocol mode) to be rescued by SR-MGC uses LAN2 port of the Telephony Server in a dual CPU configuration, assign ASYDL, SYS1, Index 846, bit 2 = 0.

[6] As "MGC IP Address" in the AIPA command, specify an ACT-side IP address of the LAN interface used by the application port "REG (DRS), Internal PHE, Internal PHI-BRI, SR-MGC/NMS".

[7] When operating SR-MGC with LAN1, meaning the application ports listed in [1] are set to LAN1, the operation of SR-MGC that performs Health Check between the Telephony Server and SR-MGC by using LAN1 of the Telephony Server varies depending on the status of the LAN interfaces.

*By default, a rescue by SR-MGC is not performed for the failure occurring on LAN2. Also, the IP equipment that is generally operated by LAN2 is not rescued by SR-MGC when a failure occurs on LAN1 only.

Relationship between LANs Conditions and SR-MGC (through LAN1) Operations

LAN Port		Rescue by SR-MGC	Remarks
LAN1	LAN2		
Normal	Normal	-	
Normal	Failure	NOT Available	
Failure	Normal	Available	IP equipment using LAN2 can be also rescued by the office data setting. Refer to the system data (Changeover to SR-MGC is performed on both LAN1 and LAN2 sides of Telephony Server: ASYDL, SYS1, Index 846, bit 2).
Failure	Failure	Available	

[8] When operating SR-MGC with LAN2, meaning the application ports listed in [1] are set to LAN2, the SR-MGC operation varies depending on the failed LAN interface. See the following.

Relationship between LANs Conditions and SR-MGC (through LAN2) Operations

LAN Port		Rescue by SR-MGC	Remarks
LAN1	LAN2		
Normal	Normal	-	
Normal	Failure	Available	
Failure	Normal	Available	Changeover to SR-MGC by detecting SP failure. **Note6**
Failure	Failure	Available	

Note: To handle a failure only at LAN1 during LAN2 being used, rescue it by CPU related changeover in dual system of MGC. However, the changeover is available only when detecting L1 failure (link disconnection).

Note 6: The rescue is available only when SP Failure Detection is valid in the following office data.

ASYDL SYS1 Index 843

Bit1	Bit2	Meaning	Rescue by SR-MGC
0	0	SP Failure Detection is valid.	Available
1	1	SP Failure Detection is invalid.	NOT Available

[9] Even if the application ports listed in [1] are set to LAN2, office data copy from an MGC to the SR-MGC(E) uses LAN2 as well as LAN1 by default; to make it use LAN2 only, assign the following system data: ASYDL, SYS1, Index 847 Bit6=1 (SR-MGC office data copy method = the existing method)

Note: If you set the preceding ports to LAN1, office data copy uses LAN1 only regardless of the system data.

[10] An SR-MGC cannot rescue a Softphone (Proprietary Protocol) registering to LAN2 if failure occurs only on LAN1.

Note: A Softphone (Proprietary Protocol) of software version 16 and later can be rescued.

[11] If reusing the existing office data whose MPH-ID is not 1, an SR-MGC needs to be reassigned:

Step1: Perform the ASPC command; select 4: MPH [MPHconfig.conf]; click the Restore with default settings button.

Step2: Perform office data copy to apply MGC data as the RNIP system to the SR-MGC.

[12] For other conditions, see SURVIVABLE REMOTE MGC [S-141] in Data Programming Manual - Business.

Conditions for FCCS Cluster

The following are conditions for FCCS Cluster, related only when setting the application ports Internal PHF, (REG (DRS), Internal PHE, Internal PHI-BRI, and SR-MGC/NMS) to LAN2 in the ADTM command. For the conditions on setting these application ports to LAN1 (default), see LOCATION DIVERSITY [L-55] in Data Programming Manual - Business.

[1] Assign the following application ports to the same LAN interface, regardless of primary node or backup node.

- DRS(REG), Internal PHE, Internal PHI-BRI, SR-MGC/NMS
- Internal PHF
- Internal PHI-PRI
- FCCS Cluster

Note: The above applications are available both at LAN1/LAN2. However, LAN1 is recommended for both primary and backup nodes since switching the setting from LAN1 to LAN2 may cause some devices to change their control nodes.

Note: When setting the application ports to LAN2, all of the LAN1 and LAN2 IP addresses (ACT, #0, #1) must have IP addresses with the same subnet, and connect to the same segment in the network.

Note: The system checks internal connectivity in the following ways:
- For a connectivity check between nodes, the system uses *an* LAN interface registered for REG (DRS) and Internal PHF; it should be a single interface.
- For a connectivity check between primary node and IP equipment in SIP mode, the system uses an LAN interface registered for REG (DRS).

[2] The following table shows FCCS Cluster operation when a failure occurs at the primary node where the following application ports are set to LAN1; DRS(REG), Internal PHE, Internal PHI-BRI, SR-MGC/NMS, Internal PHF, Internal PHI-PRI, and FCCS Cluster.

FCCS Cluster Operation - LAN1

Equipment supporting FCCS Cluster	Failure/Recovery Pattern	Operation at Failure/Recovery
<Registration to Internal PHE> Analog 2MC/MC&MG-COT (MC part)/UG50-2MC/UG50-4LC2COTA (COT) (MC part)/UG50-4LC2COTA (PGT) (MC part)	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to primary node. (No status change)
	LAN2 Recovered	To be registered to primary node. (No status change)

FCCS Cluster Operation - LAN1

Equipment supporting FCCS Cluster	Failure/Recovery Pattern	Operation at Failure/Recovery
<Registration to SP-PHD (SIP mode) > SIP Multiple Line Terminal/Softphone [SIP]	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to primary node. (No status change)
	LAN2 Recovered	To be registered to primary node. (No status change)
<Registration to SP-PHI (SIP mode) > MG(BRI) [SIP]/MG(PRI) [SIP]/MG(6COT) [SIP]/ 8LC/UG50-24PRIA [SIP]/UG50-30PRIA [SIP]/ UG50-8LC/UG50-6COT [SIP]	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to primary node. (No status change)
	LAN2 Recovered	To be registered to primary node. (No status change)
<Registration to SP-PHD (Proprietary Protocol mode) > IP Terminal/Softphone [Proprietary Protocol]	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to primary node. (No status change)
	LAN2 Recovered	To be registered to primary node. (No status change)
<Registration to SP-PHI (Proprietary Protocol mode) > MC&MG(COT) [MG part]/MG(BRI) [Proprietary Protocol]/MG(6COT) [Proprietary Protocol]/ UG50-4LC2COTA (COT) (MG part)/UG50-4LC2COTA (PGT) (MG part)	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to primary node. (No status change)
	LAN2 Recovered	To be registered to primary node. (No status change)
<Registration to Internal PHI-BRI (Proprietary Protocol mode) > MC&MG(COT) [MG part]/MG(BRI) [Proprietary Protocol]/MG(6COT) [Proprietary Protocol]/ MG(SIP)/UG50-4LC2COTA (COT) (MG part)/ UG50-6COT [Proprietary Protocol]/UG50-4LC2COTA (PGT) (MG part)	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to primary node. (No status change)
	LAN2 Recovered	To be registered to primary node. (No status change)
<Registration to Internal PHI -PRI (Proprietary Protocol mode) > MG(PRI) [Proprietary Protocol]/UG50-24PRIA[Proprietary Protocol]/UG50-30PRIA [Proprietary Protocol] Note8	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to primary node. (No status change)
	LAN2 Recovered	To be registered to primary node. (No status change)

[3] The following table shows FCCS Cluster operation when a failure occurs at the primary node where the following application ports are set to LAN2; DRS(REG), Internal PHE, Internal PHI-BRI, SR-MGC/NMS, Internal PHF, Internal PHI-PRI, and FCCS Cluster.

FCCS Cluster Operation - LAN2

Equipment supporting FCCS Cluster	Failure/Recovery Pattern	Operation at Failure/Recovery
<Registration to Internal PHE> Analog 2MC/MC&MG-COT (MC part)/UG50-2MC/UG50-4LC2COTA (COT) (MC part)/UG50-4LC2COTA (PGT) (MC part)	LAN1 Failed	To be registered to primary node. (No status change) **Note7**
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to backup node.
	LAN2 Recovered	To be registered to primary node.
<Registration to SP-PHD (SIP mode) > SIP Multiple Line Terminal/Softphone [SIP]	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to backup node.
	LAN2 Recovered	To be registered to primary node.
<Registration to SP-PHI (SIP mode) > MG(BRI) [SIP]/MG(PRI) [SIP]/MG(6COT) [SIP]/8LC/UG50-24PRIA [SIP]/UG50-30PRIA [SIP]/UG50-8LC/UG50-6COT [SIP]	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to backup node.
	LAN2 Recovered	To be registered to primary node.
<Registration to SP-PHD (Proprietary Protocol mode) > IP Terminal/Softphone [Proprietary Protocol]	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to backup node.
	LAN2 Recovered	To be registered to primary node.
<Registration to SP-PHI (Proprietary Protocol mode) > MC&MG(COT) [MG part]/MG(BRI) [Proprietary Protocol]/MG(6COT) [Proprietary Protocol]/UG50-4LC2COTA (COT)(MG part)/UG50-4LC2COTA (PGT) (MG part)	LAN1 Failed	To be registered to backup node.
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to backup node.
	LAN2 Recovered	To be registered to primary node.
<Registration to Internal PHI-BRI (Proprietary Protocol mode) > MC&MG(COT) [MG part]/MG(BRI) [Proprietary Protocol]/MG(6COT) [Proprietary Protocol]/MG(SIP)/UG50-4LC2COTA (COT) (MG part)/UG50-6COT [Proprietary Protocol]/UG50-4LC2COTA (PGT) (MG part)	LAN1 Failed	To be registered to primary node. (No status change) **Note7**
	LAN1 Recovered	To be registered to primary node.
	LAN2 Failed	To be registered to backup node.
	LAN2 Recovered	To be registered to primary node.

FCCS Cluster Operation - LAN2

Equipment supporting FCCS Cluster	Failure/Recovery Pattern	Operation at Failure/Recovery
<Registration to Internal PHI -PRI (Proprietary Protocol mode) > MG(PRI) [Proprietary Protocol]/UG50-24PRIA[Proprietary Protocol]/UG50-30PRIA[Proprietary Protocol] **Note8**	LAN1 Failed	To be registered to primary node. (No status change) **Note7**
	LAN1 Recovered	To be registered to primary node. (No status change)
	LAN2 Failed	To be registered to backup node.
	LAN2 Recovered	To be registered to primary node.

Note 7: When FCCS Cluster and SR-MGC coexist, which means that the office data for SR-MGC (the CMNT command) and SP Failure Detection valid (ASYDL - Sys1, Index 843, Bit0=0, Bit1=0) are assigned in primary node/backup node, the operation will change; to be registered to backup node.

[4] For using this feature with SIP Multiple Line terminal that requires SIP terminal authentication, be sure to register to primary node at first. Otherwise, registration to backup node will not be available.

[5] Ping signal needs to go through the Primary Node and the terminal when performing this feature. When using the Softphone on Windows XP SP2 with Windows Firewall enabled, the Ping return must be allowed by adding a check into the [Allow incoming echo request] check box by accessing [Control Panel] → [Windows Firewall] → [Advanced] tab → [ICMP] field.

[6] For Location ID assignment, the same data has to be assigned to all nodes.

[7] Master Node IP Address or Sub Master Node IP Address has to be assigned to each node by using the ACFMN command (Node Date Setting screen) before using this feature. Refer to the Command Manual for further details.

Note 8: UG50-24PRIA [Proprietary Protocol] and UG50-30PRIA [Proprietary Protocol], set the IP address of LAN1 as a registration destination. However, LAN2 is used for transmitting a call control signal after registration.

Note 9: To change Master Node IP address or Sub Master Node IP address, follow the procedure below. If you do not follow the procedure below, FCCS Cluster information of Backup Station/Route may be deleted and it may become impossible to make/receive a call.

(1) Make sure that no terminal registers to Backup Node.

(2) Assign ASYDN, SYS1, Index 963, Bit 1 = 0.

(3) Change Master Node IP address and Sub Master Node IP address.

(4) Assign ASYDN, SYS1, Index 963, Bit 1 = 1.

[8] A total number of Primary Stations and Backup Stations cannot exceeds the amount of the system capac-

ity license within each node. The maximum number of Stations and MGs (in total) using this feature is 32,000 within FCCS Network

[9] When using this feature, it is recommended to operate terminals in MAC Authentication mode. MAC data can be assigned to NDM from AMACN (directly) or each terminal (the password used for assigning MAC data to NDM from each terminal needs to be assigned on the MAC Address Setting Password (NDM) screen of AFCMN).

Note: MAC Authentication mode is not available for Softphone. Thus, Softphone does not support the encryption of this feature.

[10] If specifying “After confirmation of connection establishment with the Home Node” or “After station data synchronization is completed” on the Home Node monitoring interval screen of AFCMN command, Softphone does not register to Primary Node automatically because Softphone always operates in Login Mode. By pressing the Visitor key, Softphone is reset and registers to Primary Node.

[11] Virtual line moves together with the Master Station preassigned by AUPDN command. The call origination/termination from/to the virtual line accommodated within the IP station, is available only if Master station is accommodated under the same node. When the Master station and the virtual line are accommodated in different nodes, virtual line key button of the terminal within other node will turn red to indicate that the call origination/termination from/to that line is restricted.

[12] Be sure to assign the specified virtual line to a function key of the Master Station.

[13] When the node previously registered is isolated (before the Master Station and virtual line move), in a situation which the Master node and Sub master node cannot communicate, virtual line is only available within the isolated node (because the exchange of FCCS Cluster information is not available between the nodes). Button will be lit in red and call origination/termination will be restricted only when Master node and Sub master node can communicate.

3.4 Troubleshooting

This section explains instructions on how to solve troubles including errors.

[About 10 minutes has passed after turning on the switch of the Telephony Server with no initial setting data installed, but ON LINE lamp has not flashed fast yet]

<Causes>

The causes may be the following:

- The CF cards are not ones provided by NEC.
- The CF cards are not inserted in the CF slots properly.
- There is invalid data written on the CF cards.

<Solutions>

Verify the following:

- The CF cards are provided by NEC.
- The CF cards are inserted in the CF slots properly.

If the preceding solutions do not solve your problems, initialize the CF cards referring to the following.

- Refer to 2.2 CF Card Initialization in this chapter.

[Failed to receive responses properly after executing PING to LAN1 and LAN2 (on each of System #0 and System #1 for dual configuration)]

<Causes>

The cause may be the following:

- The network settings are not configured properly.
- The cables are not connected properly.

<Solutions>

Check the network settings and cable connections.

[About 15 minutes has passed after turning on the switch of the Telephony Server with initial setting data installed, but ON LINE lamp has not flashed slowly yet]

<Causes>

The cause may be the following:

- Initial setting data is not installed properly.

<Solutions>

Verify that the install DVD/CD “GENERIC SOFTWARE” and license file you are using are correct.

Then, install the correct initial setting data again. Follow the procedures in 2.3 Installation of Office Data and License.

If the initial setting data are not successfully installed, initialize the CF cards referring to the following.

- Refer to 2.2 CF Card Initialization in this chapter

[Failed to backup the Office Data by executing MEM_HDD command]

<Causes>

The cause may be the following:

- Another command has been executed on the Telephony Server.

<Solutions>

Check if your maintenance PC or other PCs are executing another command on the Telephony Server.

If one is executing, wait for a while for the command process to complete. Check whether the command execution has completed and backup again.

CHAPTER 5
INSTALLATION TEST AND WORK AFTER INSTALLATION TEST

1. Installation Test

After the system startup, some installation tests, such as system initialization test, DT/station-to-station connection test, circuit card initialization test, etc., are absolutely necessary to avoid the system trouble. For the installation test procedure, refer to the chapter 7 INSTALLATION TEST of SV9500 Appliance Model Installation Manual.

2. Work After Installation Test

After completing the installation tests, the following sundry tasks and site cleaning must be performed. For details on each tasks, refer to the chapter 9 WORK AFTER INSTALLATION TEST of SV9500 Appliance Model Installation Manual.

[1] Manage the Office Data

[2] Prepare the Test Results Report

[3] Mount the Front, Side and Rear Covers

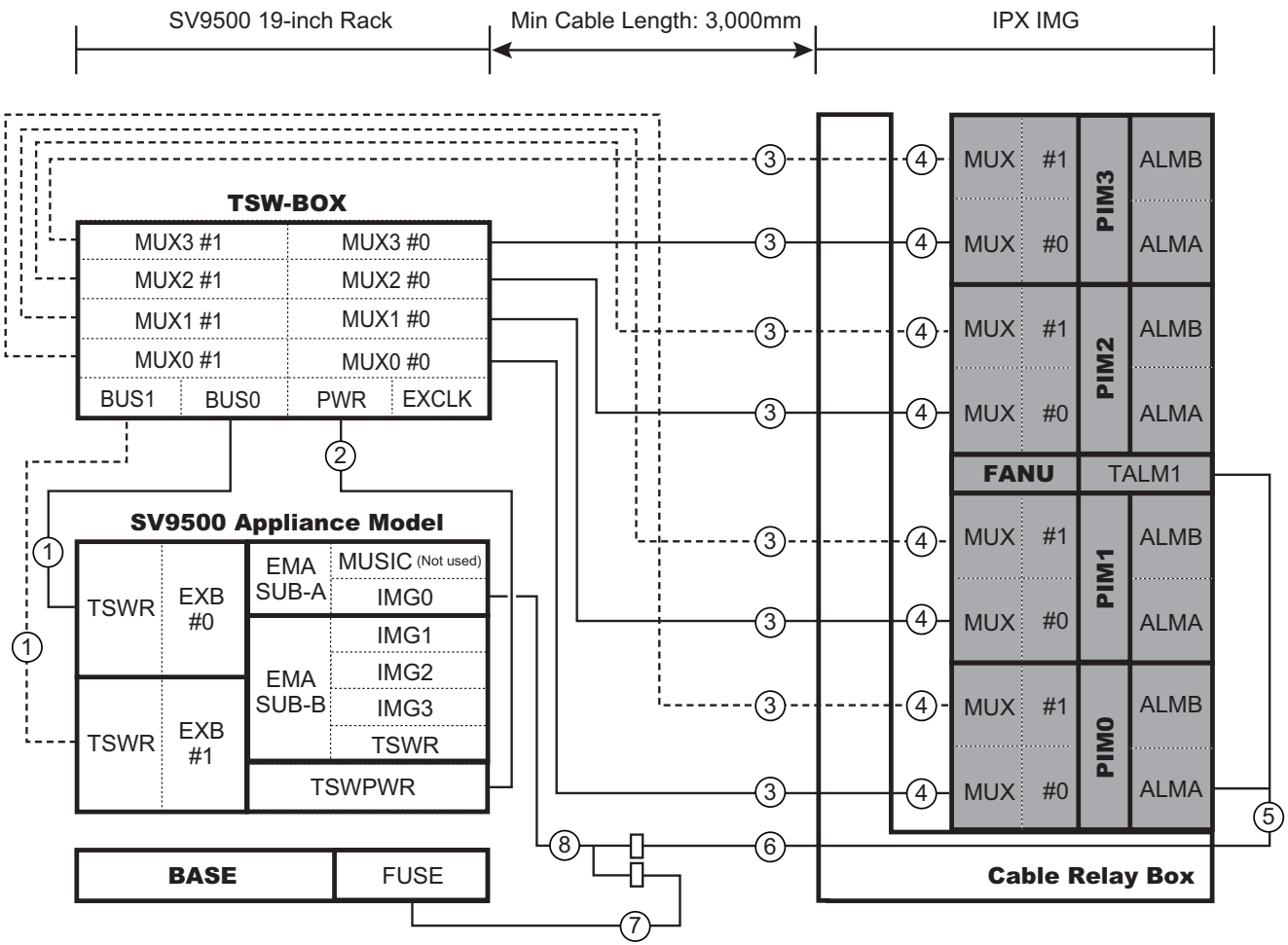
[4] Clean the Site

APPENDIX A
CABLING DIAGRAM

1.Migration from IPX to SV9500

1.1 SV9500 x 1-IMG IPX

The following is the diagram of cable connections between SV9500 and IPX when migrating 1-IMG IPX:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D26-D25 TSW-PIR CA-B	3,000mm
4	MT24-D25 CA-B	6,000mm
5	D15-(PS20-ML2) CA-A	5,000mm
6	D15 ST CA-B	3,000mm
7	D09 ST CA-A	1,000mm
8	MIG FALM CA-A	300mm

Changed or increased part

Existing part

#0 Cable

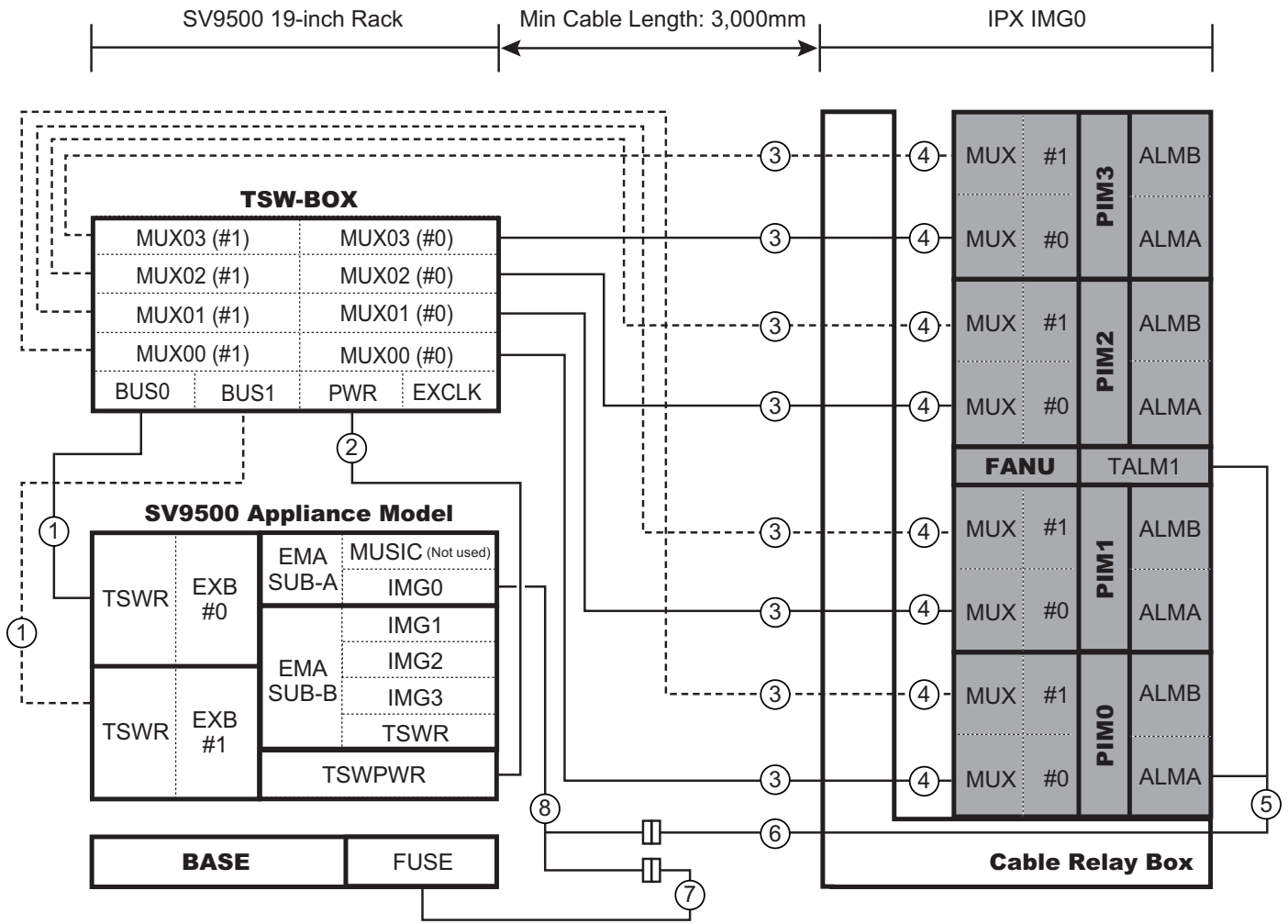
#1 Cable

Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

1.2 SV9500 (with TSW-BOX) x IMG0 (4-IMG IPX)

The following is the diagram of cable connections between SV9500 with TSW-BOX and IPX IMG0 when migrating 4-IMG IPX:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D26-D25 TSW-PIR CA-B	3,000mm
4	MT24-D25 CA-B	6,000mm
5	D15-(PS20-ML2) CA-A	5,000mm
6	D15 ST CA-B	3,000mm
7	D09 ST CA-A	1,000mm
8	MIG FALM CA-A	300mm

Changed or increased part

Existing part

#0 Cable

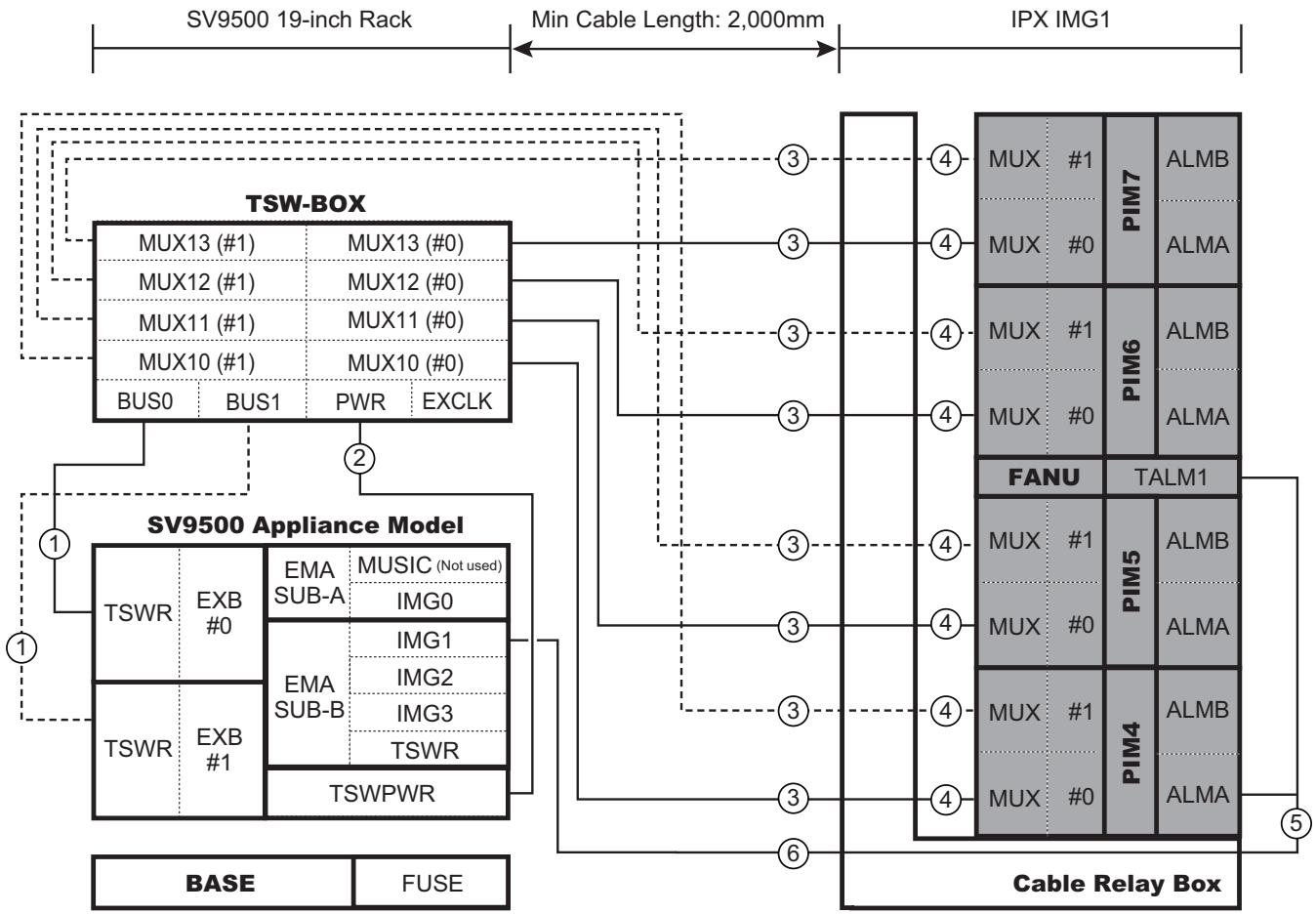
#1 Cable

Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

1.3 SV9500 (with TSW-BOX) x IMG1 (4-IMG IPX)

The following is the diagram of cable connections between SV9500 with TSW-BOX and IPX IMG1 when migrating 4-IMG IPX:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D26-D25 TSW-PIR CA-B	3,000mm
4	MT24-D25 CA-B	6,000mm
5	D15-(PS20-ML2) CA-A	5,000mm
6	D15 ST-F CA-B	2,000mm

Changed or increased part

Existing part

#0 Cable

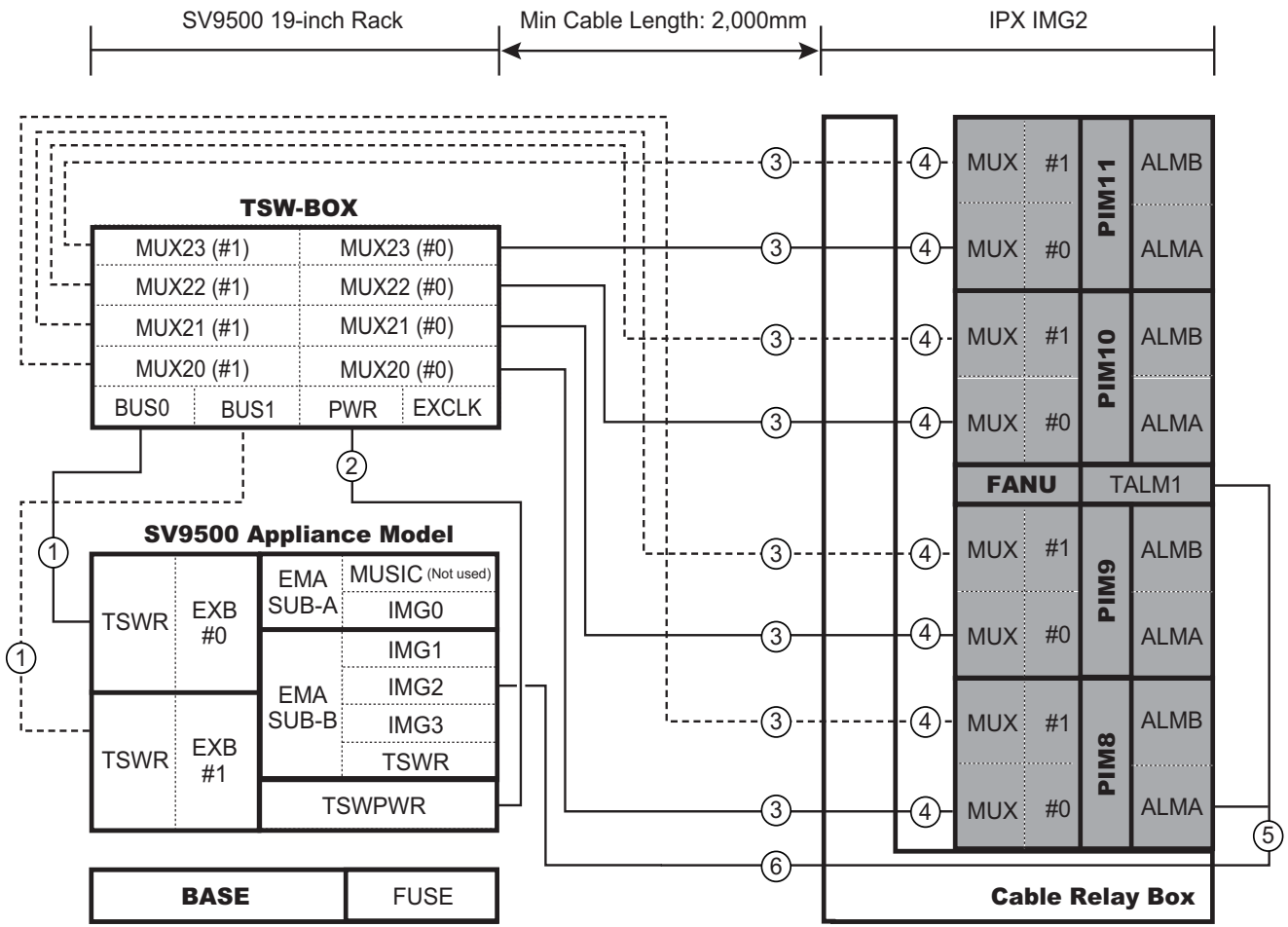
#1 Cable

Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

1.4 SV9500 (with TSW-BOX) x IMG2 (4-IMG IPX)

The following is the diagram of cable connections between SV9500 with TSW-BOX and IPX IMG2 when migrating 4-IMG IPX:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D26-D25 TSW-PIR CA-B	3,000mm
4	MT24-D25 CA-B	6,000mm
5	D15-(PS20-ML2) CA-A	5,000mm
6	D15 ST-F CA-B	2,000mm

Changed or increased part

Existing part

#0 Cable

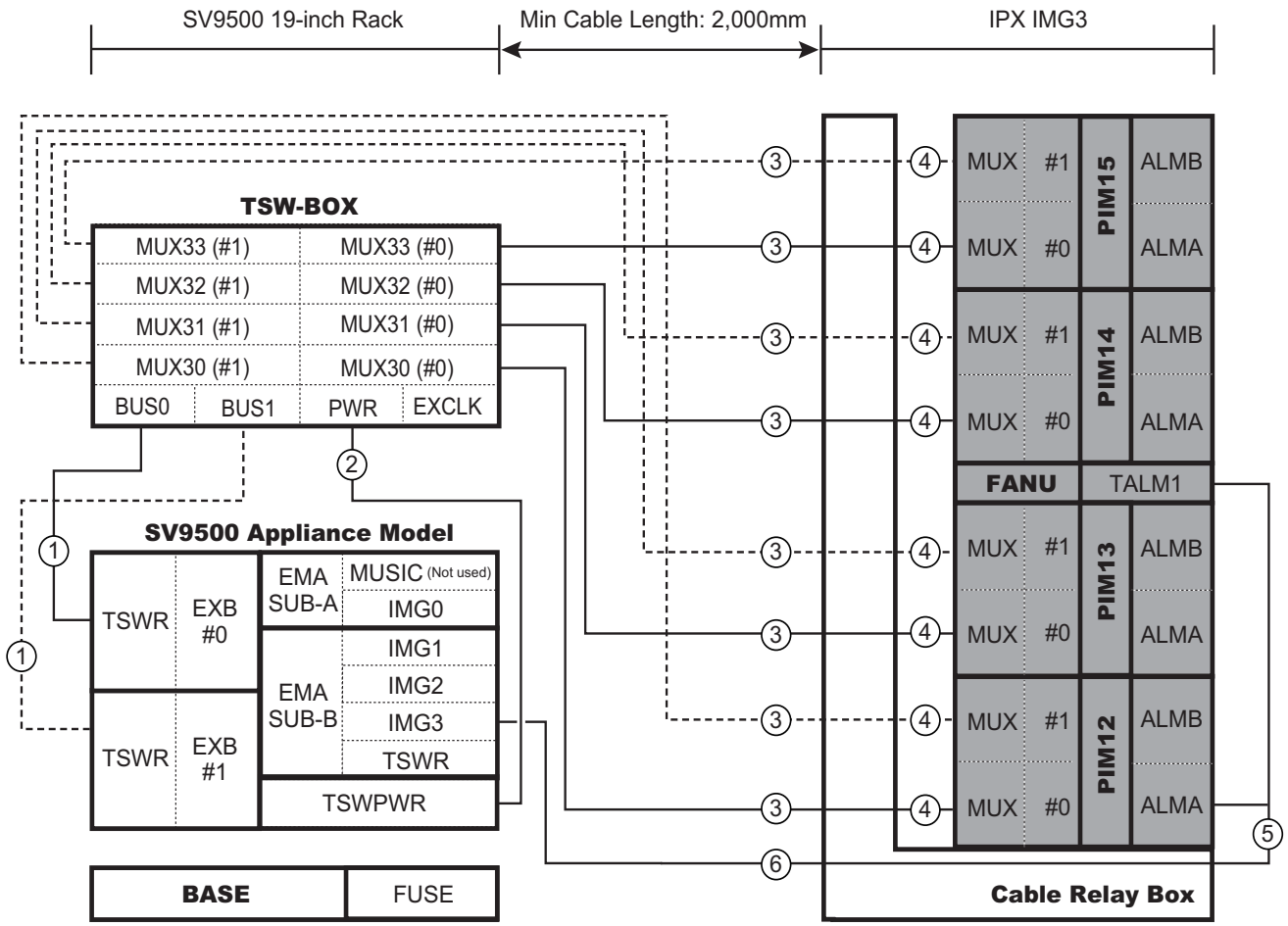
#1 Cable

Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

1.5 SV9500 (with TSW-BOX) x IMG3 (4-IMG IPX)

The following is the diagram of cable connections between SV9500 with TSW-BOX and IPX IMG3 when migrating 4-IMG IPX:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D26-D25 TSW-PIR CA-B	3,000mm
4	MT24-D25 CA-B	6,000mm
5	D15-(PS20-ML2) CA-A	5,000mm
6	D15 ST-F CA-B	2,000mm

Changed or increased part

Existing part

#0 Cable

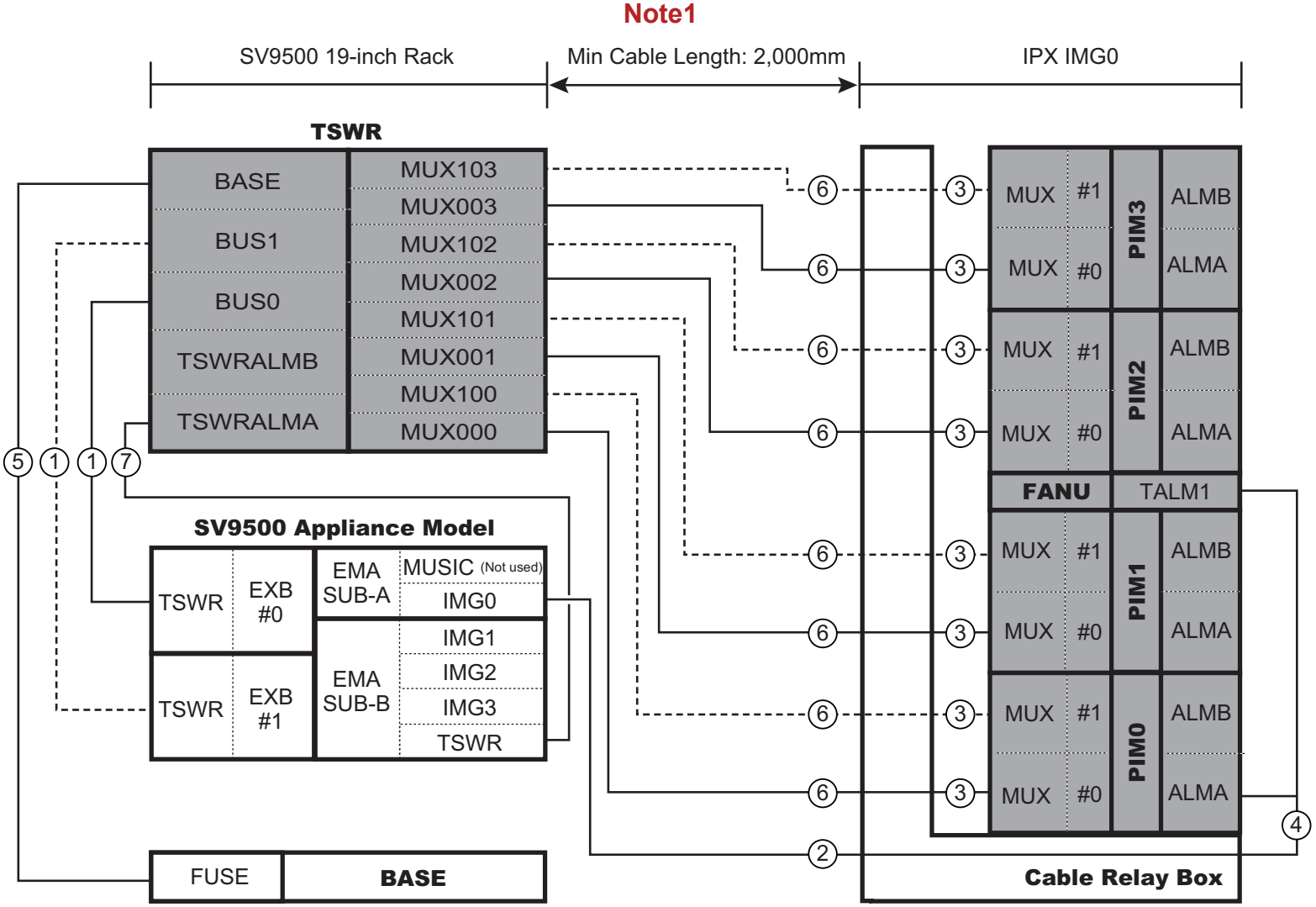
#1 Cable

Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

1.6 SV9500 (with TSWR) x IMG0 (4-IMG IPX)

The following is the diagram of the cable connections between SV9500 with TSWR and IPX IMG0 when migrating 4-IMG IPX:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST-F CA-B	2,000mm
	D15 ST-F CA-D Note1	12,000mm
3	MT24-D25 CA-B	6,000mm
4	D15-(PS20-ML2)CA-A	5,000mm
5	D09 ST CA-A	1,000mm
6	D37-D25 CA-B	3,000mm
	D37-D25 CA-1 Note1	10,000mm
7	D15 ST CA(S)-A	900mm

Changed or increased part

Existing part

#0 Cable

#1 Cable

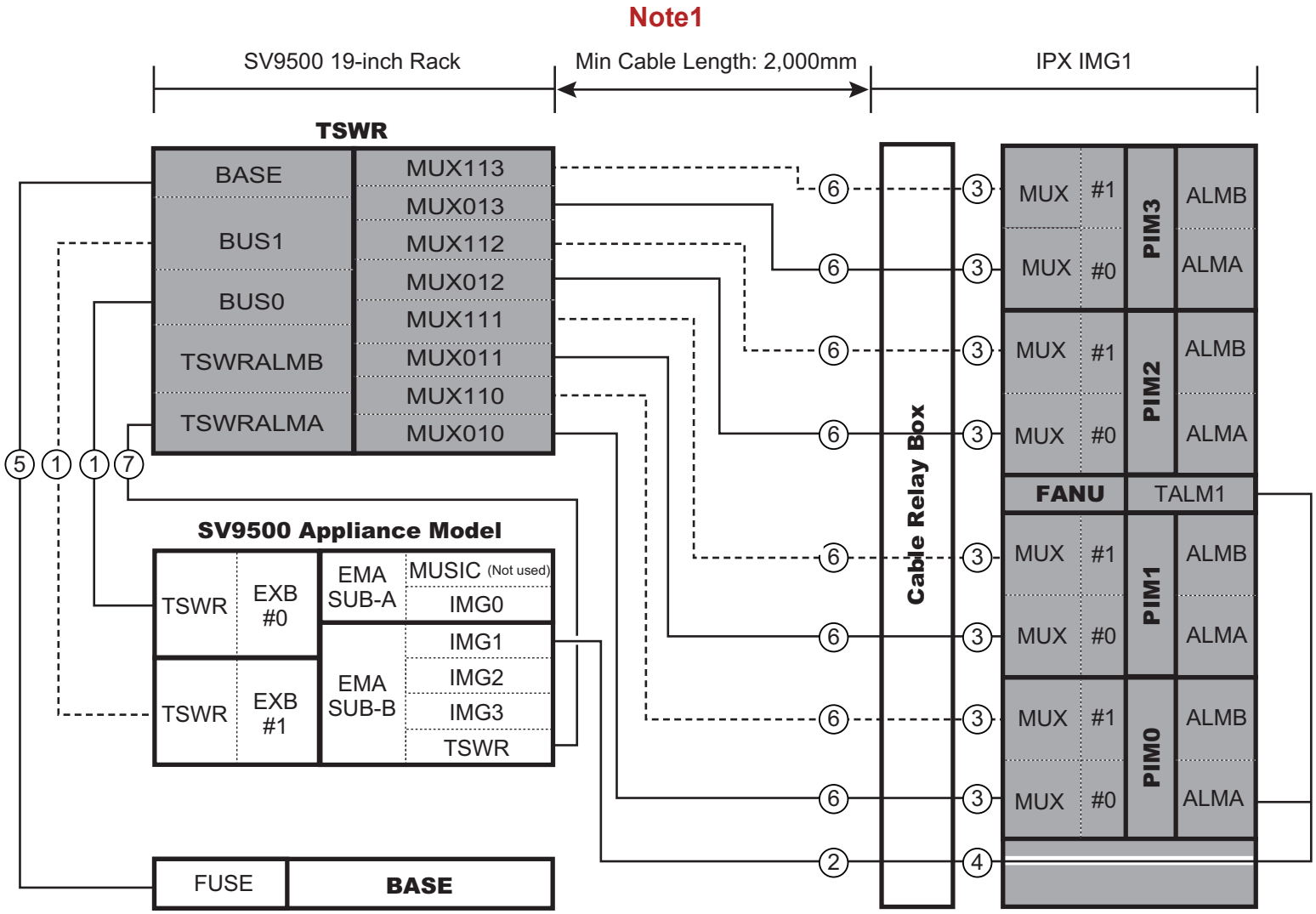
Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

Note 1: If the cable length is not enough, you can use a long cable. For more information, refer to "Long Cable Unit".

1.7 SV9500 (with TSWR) x IMG1 (4-IMG IPX)

The following is the diagram of cable connections between SV9500 with TSWR and IPX IMG1 when migrating 4-IMG IPX:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST-F CA-B	2,000mm
	D15 ST-F CA-D **Note1**	12,000mm
3	MT24-D25 CA-B	6,000mm
4	D15-(PS20-ML2)CA-A	5,000mm
5	D09 ST CA-A	1,000mm
6	D37-D25 CA-B	3,000mm
	D37-D25 CA-1 **Note1**	10,000mm
7	D15 ST CA(S)-A	900mm

Changed or increased part

Existing part

#0 Cable

#1 Cable

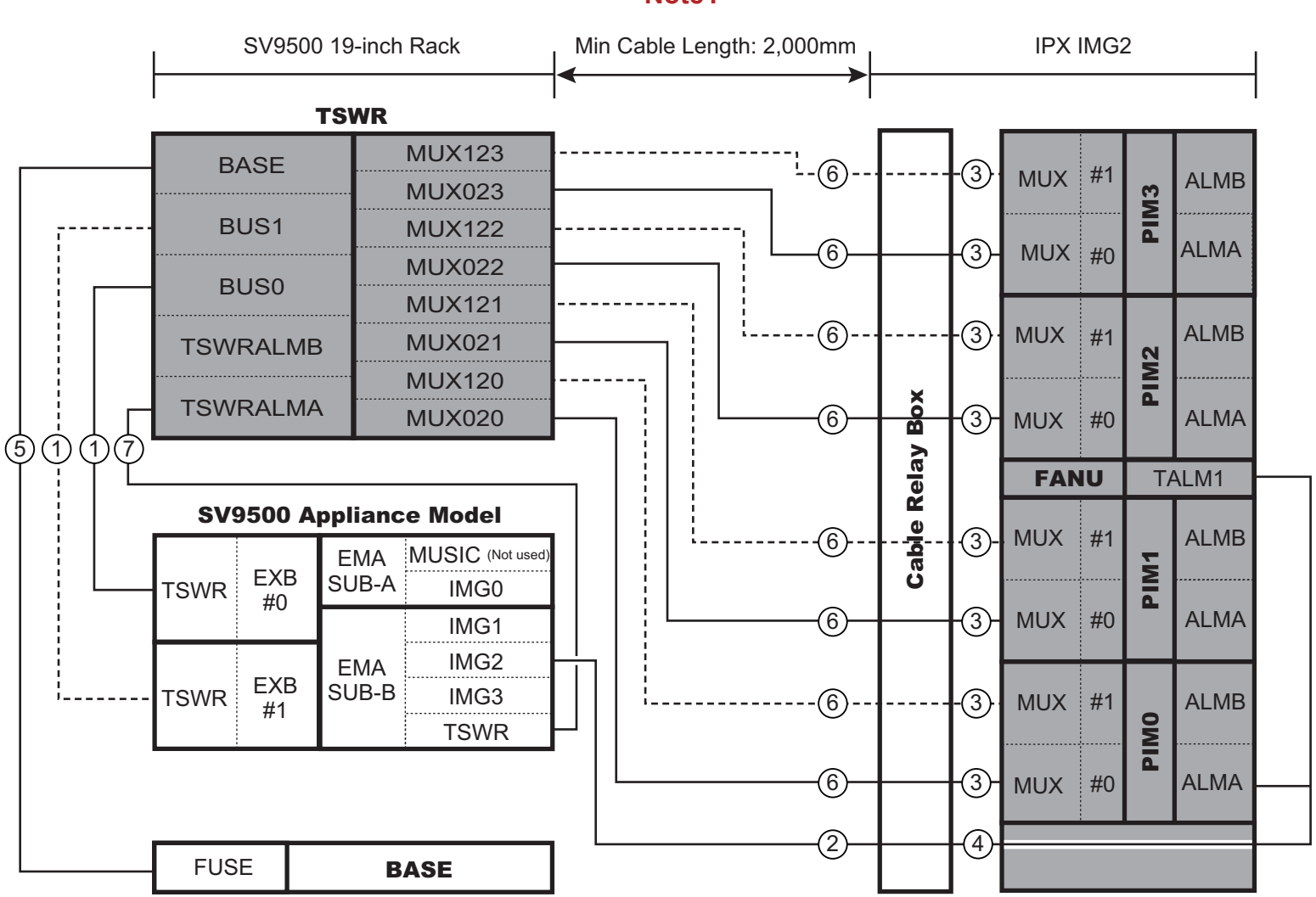
Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

Note 1: If the cable length is not enough, you can use a long cable. For more information, refer to "Long Cable Unit".

1.8 SV9500 (with TSWR) x IMG2 (4-IMG IPX)

The following is the diagram of cable connections between SV9500 with TSWR and IPX IMG2 when migrating 4-IMG IPX:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST-F CA-B	2,000mm
	D15 ST-F CA-D **Note1**	12,000mm
3	MT24-D25 CA-B	6,000mm
4	D15-(PS20-ML2)CA-A	5,000mm
5	D09 ST CA-A	1,000mm
6	D37-D25 CA-B	3,000mm
	D37-D25 CA-1 **Note1**	10,000mm
7	D15 ST CA(S)-A	900mm

Changed or increased part

Existing part

#0 Cable

#1 Cable

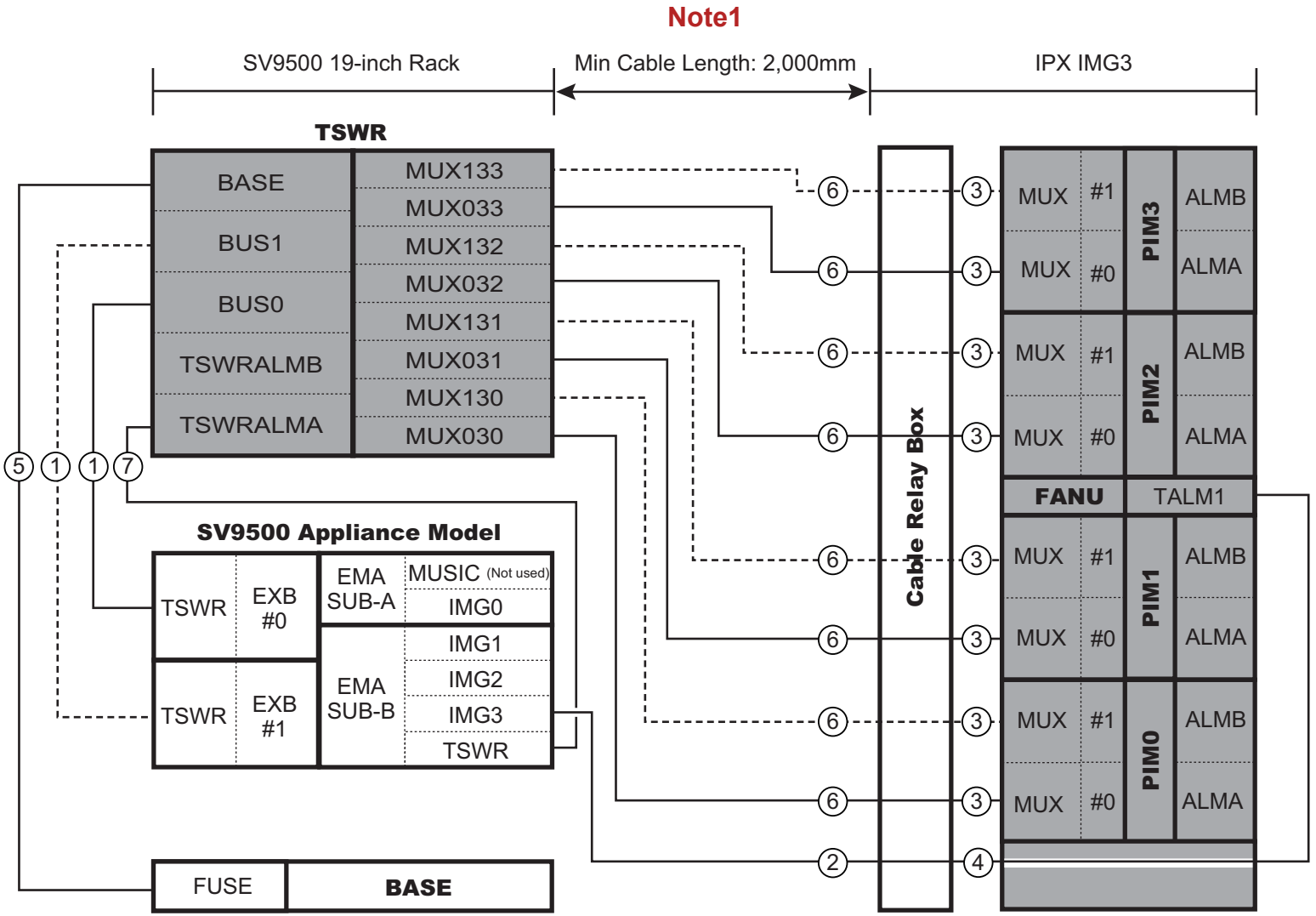
Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

Note 1: If the cable length is not enough, you can use a long cable. For more information, refer to "Long Cable Unit".

1.9 SV9500 (with TSWR) x IMG3 (4-IMG IPX)

The following is the diagram of cable connections between SV9500 with TSWR and IPX IMG3 when migrating 4-IMG IPX:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST-F CA-B	2,000mm
	D15 ST-F CA-D **Note1**	12,000mm
3	MT24-D25 CA-B	6,000mm
4	D15-(PS20-ML2)CA-A	5,000mm
5	D09 ST CA-A	1,000mm
6	D37-D25 CA-B	3,000mm
	D37-D25 CA-1 **Note1**	10,000mm
7	D15 ST CA(S)-A	900mm

Changed or increased part

Existing part

#0 Cable

#1 Cable

Note: Connections described in dotted lines are necessary only for the dual configuration.

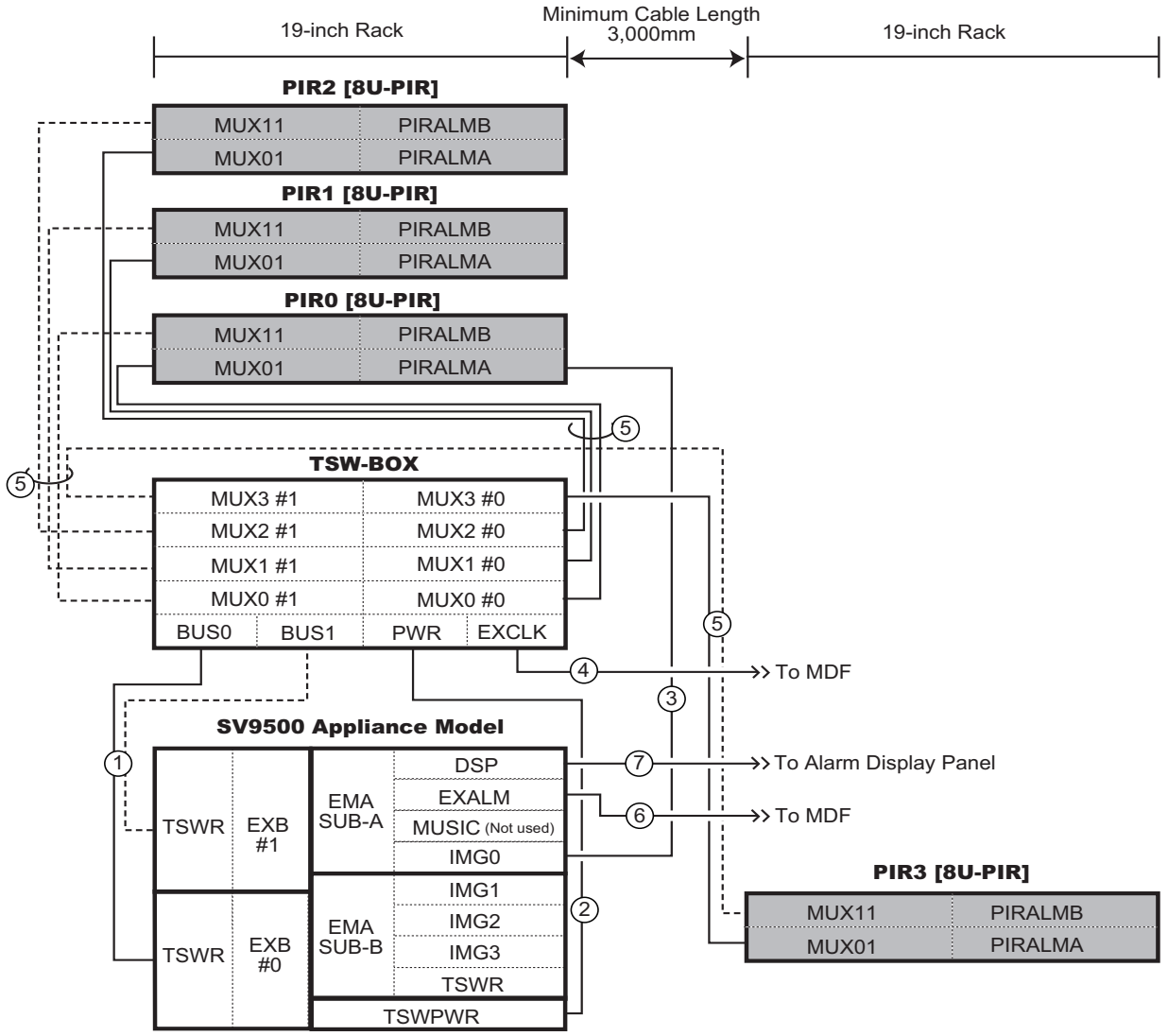
Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

Note 1: If the cable length is not enough, you can use a long cable. For more information, refer to "Long Cable Unit".

2. Migration from SV8500 to SV9500

2.1 SV9500 AC (1-IMG) x SV8500 PIR

The following is the diagram of cable connection between SV9500 (1-IMG) AC power model and SV8500 PIR when migrating 1-IMG SV8500:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D15 ST-F CA-A	900mm
4	D37 EXCLK CA-A	2,000mm
5	D26-D25 TSW-PIR CA-A/B	1,800mm/ 3,000mm
6	D25 EXALM CA-A	2,000mm
7	D15 ST-FF CA-C	6,000mm

Changed or increased part

Existing part

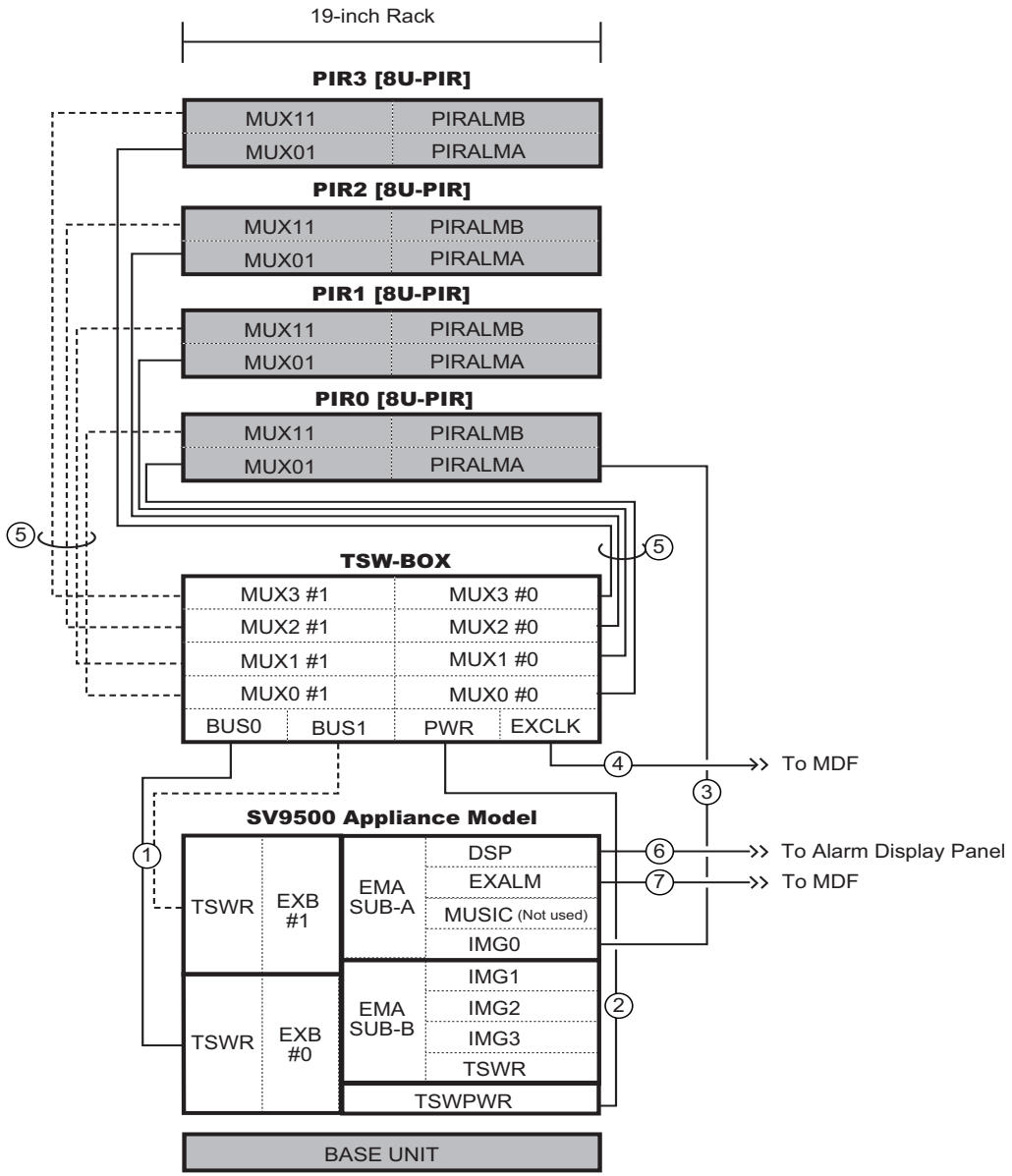
#0 Cable

#1 Cable

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

2.2 SV9500 DC (1-IMG) x SV8500 PIR

The following is the diagram of cable connection between SV9500 (1-IMG) DC power model and SV8500 PIR when migrating 1-IMG SV8500:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D15 ST-F CA-A	900mm
4	D37 EXCLK CA-A	2,000mm
5	D26-D25 TSW-PIR CA-A/B	1,800mm/ 3,000mm
6	D15 ST-FF CA-C	6,000mm
7	D25 EXALM CA-A	2,000mm

Changed or increased part

Existing part

#0 Cable

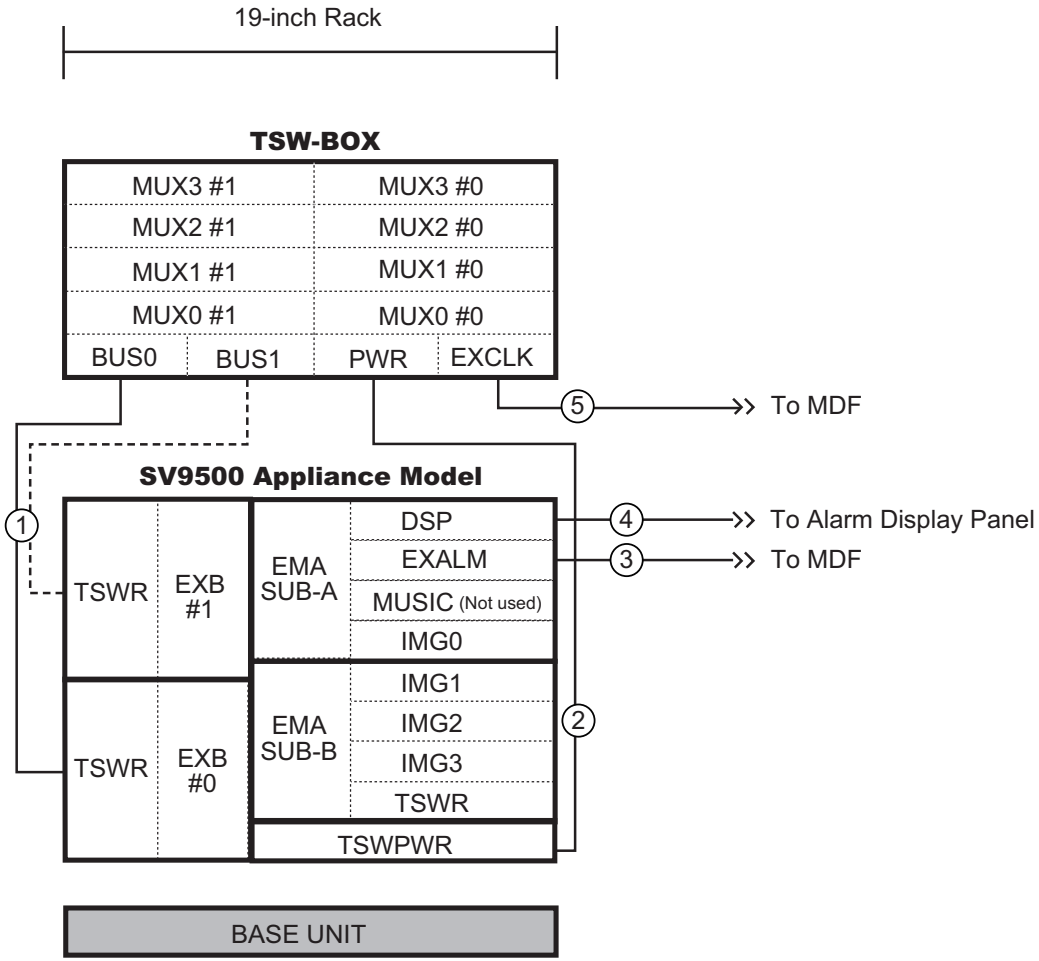
#1 Cable

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

2.3 SV9500 DC (4-IMG) with TSW-BOX x SV8500 PIR

The following is the diagram of cable connection between SV9500 (4-IMG) DC power model with TSW-BOX and SV8500 PIR when migrating 4-IMG SV8500:

2.3.1 SV9500 DC (4-IMG) x TSW-BOX



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D25 EXALM CA-A	2,000mm
4	D15 ST-FF CA-C	6,000mm
5	D37 EXCLK CA-A	2,000mm

Changed or increased part

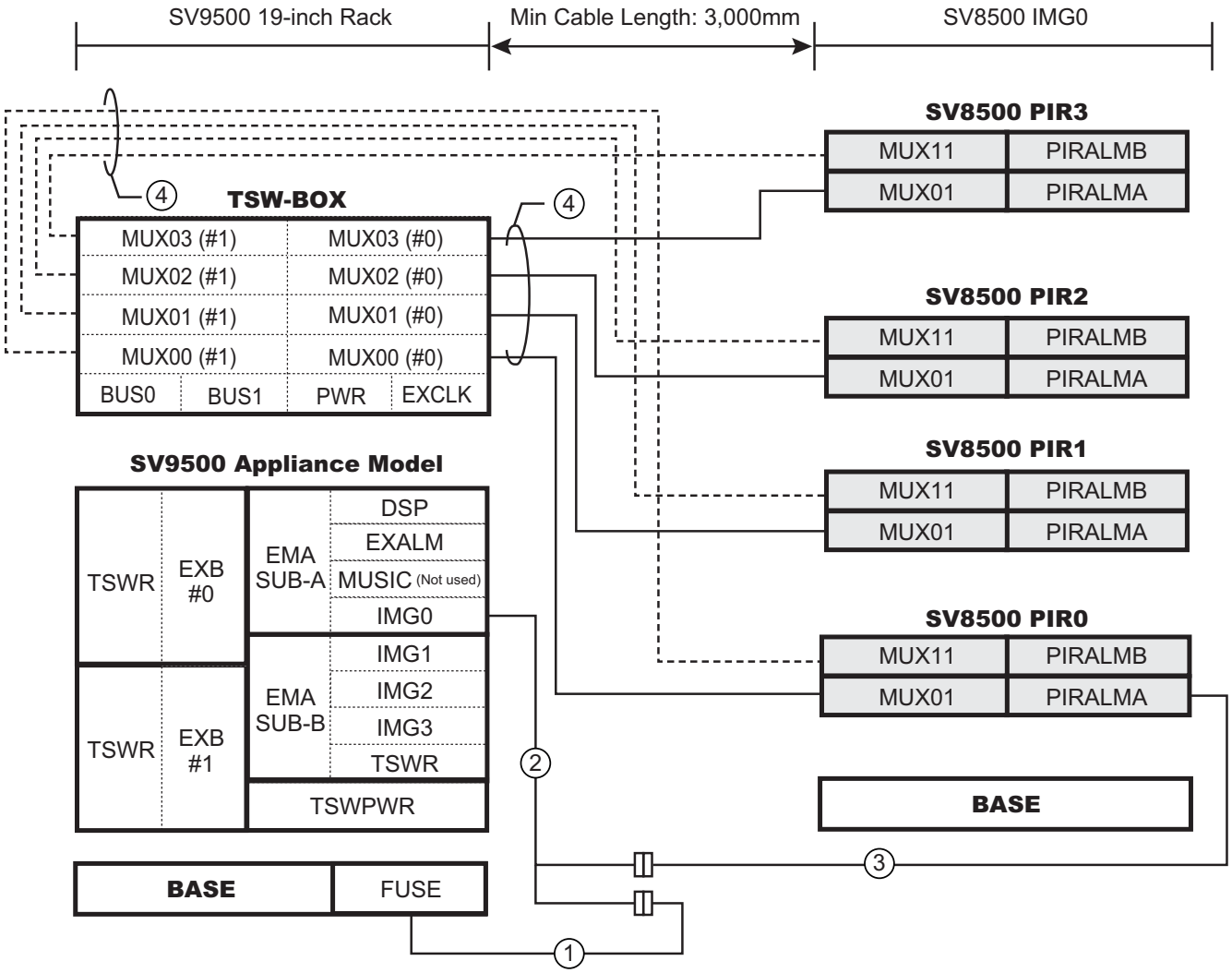
Existing part

#0 Cable

#1 Cable

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

2.3.2 SV9500 DC with TSW-BOX x IMG0 (4-IMG SV8500)



Cable Specifications

No.	Item	Length
1	D09 ST CA-A	1,000mm
2	MIG FALM CA-A	300mm
3	D15 ST CA-B	3,000mm
4	D26-D25 TSW-PIR CA-C	6,000mm

Changed or increased part

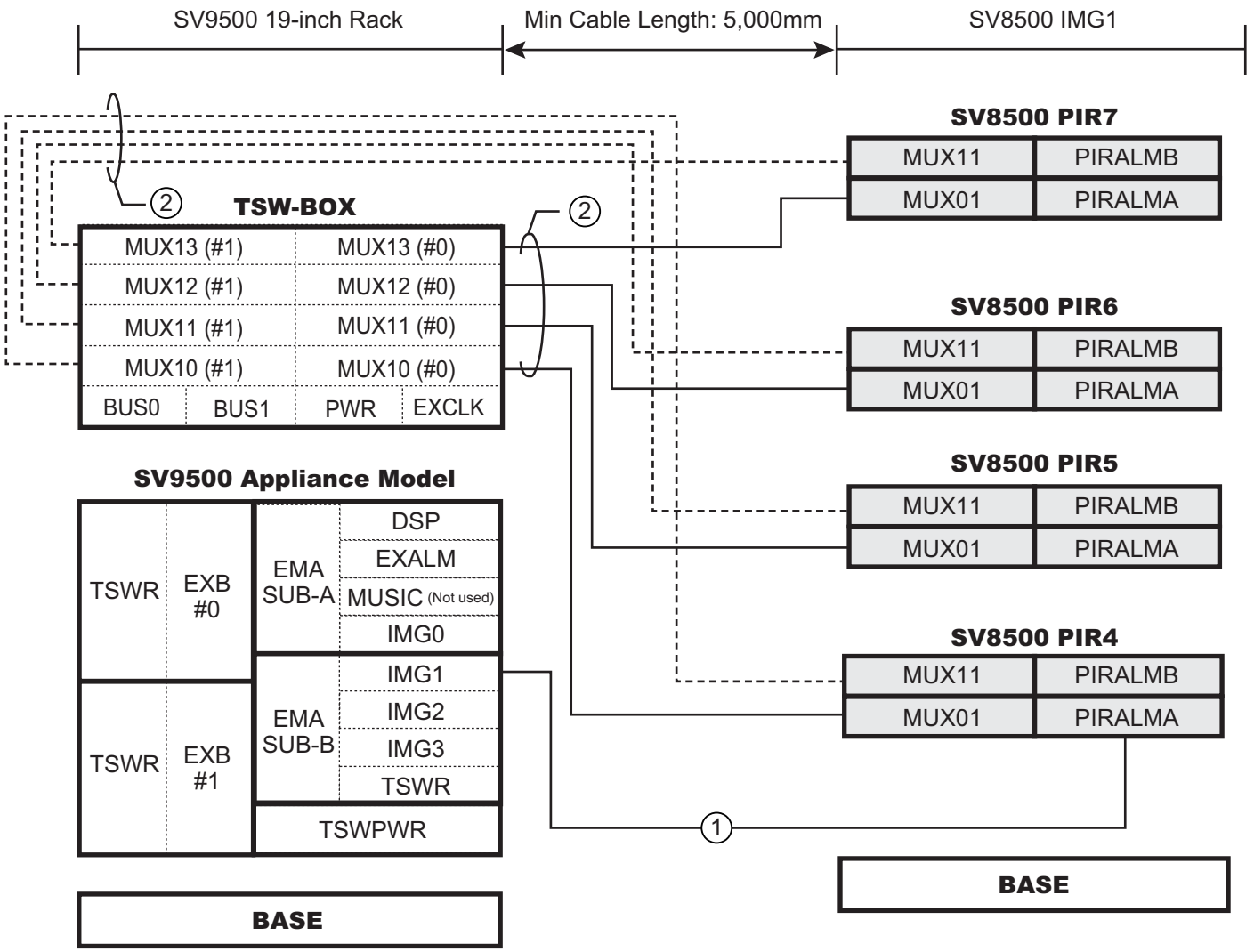
Existing part

#0 Cable

#1 Cable

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

2.3.3 SV9500 DC with TSW-BOX x IMG1 (4-IMG SV8500)



Cable Specifications

No.	Item	Length
1	D15 ST-F CA-C	5,000mm
2	D26-D25 TSW-PIR CA-C	6,000mm

Changed or increased part

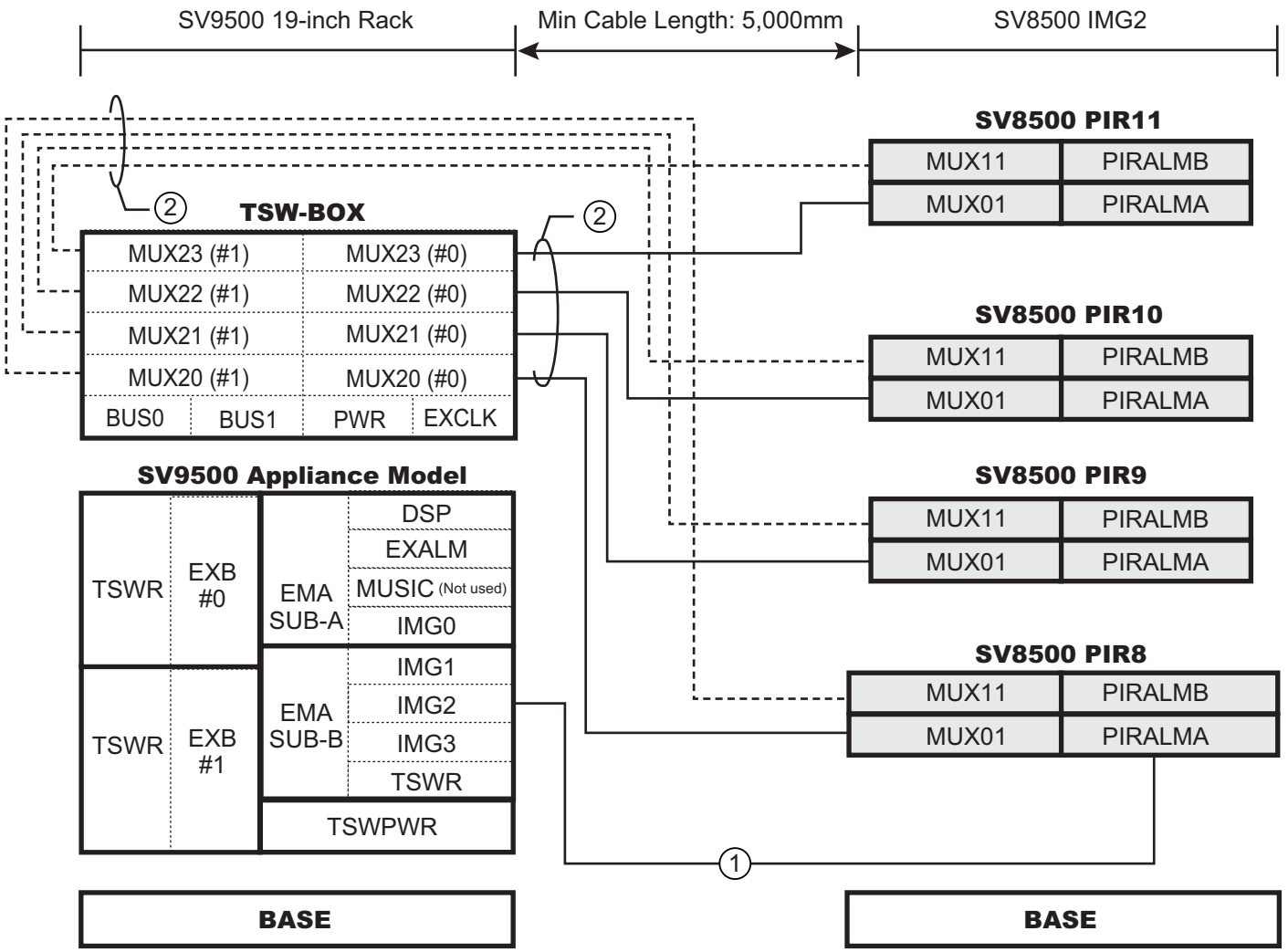
Existing part

#0 Cable

#1 Cable

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

2.3.4 SV9500 DC with TSW-BOX x IMG2 (4-IMG SV8500)



Cable Specifications

No.	Item	Length
1	D15 ST-F CA-C	5,000mm
2	D26-D25 TSW-PIR CA-C	6,000mm

Changed or increased part

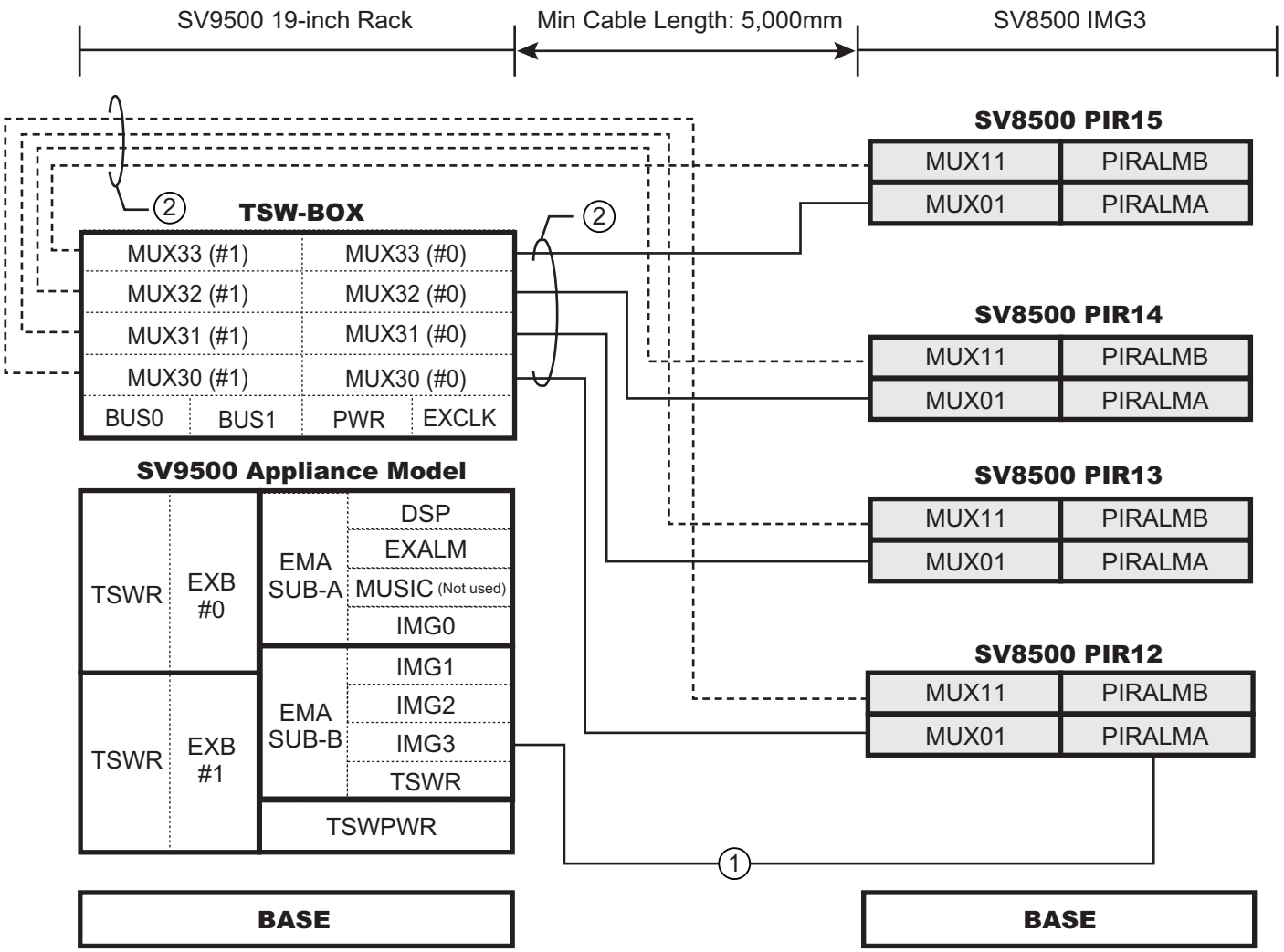
Existing part

#0 Cable

#1 Cable

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

2.3.5 SV9500 DC with TSW-BOX x IMG3 (4-IMG SV8500)



Cable Specifications

No.	Item	Length
1	D15 ST-F CA-C	5,000mm
2	D26-D25 TSW-PIR CA-C	6,000mm

Changed or increased part

Existing part

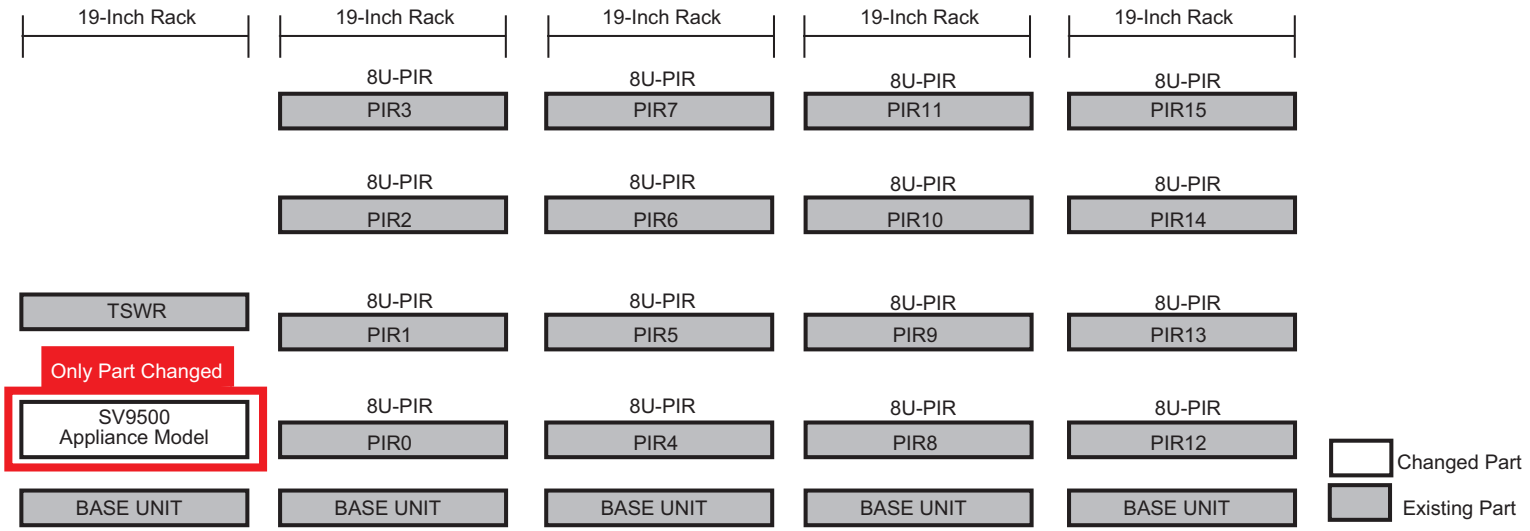
#0 Cable

#1 Cable

Note: Only the changed or new cables are described. For other cables needed refer to Appliance Model Installation Manual.

2.4 SV9500 DC (4-IMG) with TSWR x SV8500 PIR

When migrating from SV8500 to SV9500 (4-IMG) DC power model with TSWR, regarding the hardware, only the Telephony Server is changed. Cables are the same as before migration. As for connections, refer to SV9500 Appliance Model Installation Manual.



Note: Since the same cables are used with the same connections as in the configuration before migration, no cable information is necessary.

APPENDIX B
OTHER CONFIGURATIONS

This appendix introduces some configuration patterns where additional PIR (**Note1**) are installed to add more TDM-Module. These configurations are not recommended because, as they are different from the basic configurations (consisting of no additional PIR), their cabling and data setting are likely to be complicated. Before installing additional PIR, refer to [Conditions for adding more TDM-Modules] as well for conditions to add PIR.

Note 1: Here “additional PIR” represents SV9500 PIR added to the migrated system.

3. Other Configurations for Migration from IPX System

3.1 Basic Knowledge of Cable Connection

When you plan to have a configuration which is not described in this manual, make sure that its cabling will be based on the following as well as follow other conditions. Different configurations make ALM connections and MUX connections vary. Each of them are explained here.

- When migrating from 1-IMG IPX

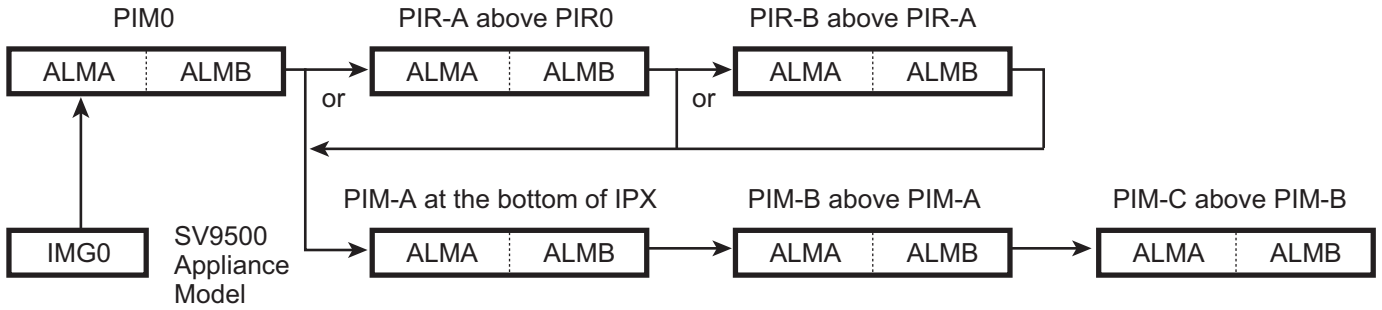
ALM: PIRALMB of PIR0 is connected to "PIR above the PIR0" or "PIM at the bottom of IPX 1-IMG". Remember that "PIR on the PIR0" does not have to be PIR1 because ALM connection does not determine PIR's logical number (PIR0, PIR1, PIR2 etc.). By the same token, "PIM at the bottom of IPX 1-IMG" does not have to be PIM1. ALMs are connected in order of physical location, not logical one.

MUX: MUXs are connected with each other based on logical configuration. PIR/PIM's logical location depends on MUX connection in which MUX connectors of TSW-BOX are connected to MUXs of each PIR/PIM as follows:

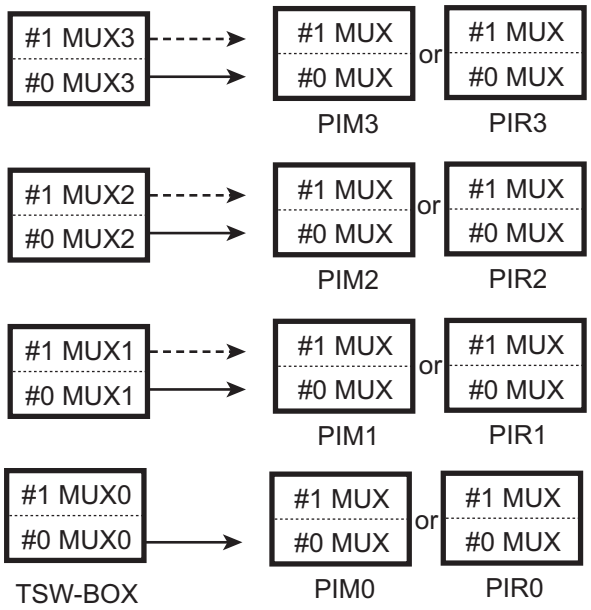
MUX Connector	PIR/PIM Module
MUX3 of TSW #0	PIR/PIM 3
MUX3 of TSW #1	
MUX2 of TSW #0	PIR/PIM 2
MUX2 of TSW #1	
MUX1 of TSW #0	PIR/PIM 1
MUX1 of TSW #1	
MUX0 of TSW #0	PIR/PIM 0
MUX0 of TSW #1	

MUX connection does not have to follow physical location, so for example, you can configure; TSW-BOX - PIM0 - PIM1 - PIM2 - PIR0, where even PIM2 can be located under PIM1 physically.

[ALM Connection Diagram]



[MUX Connection Diagram]

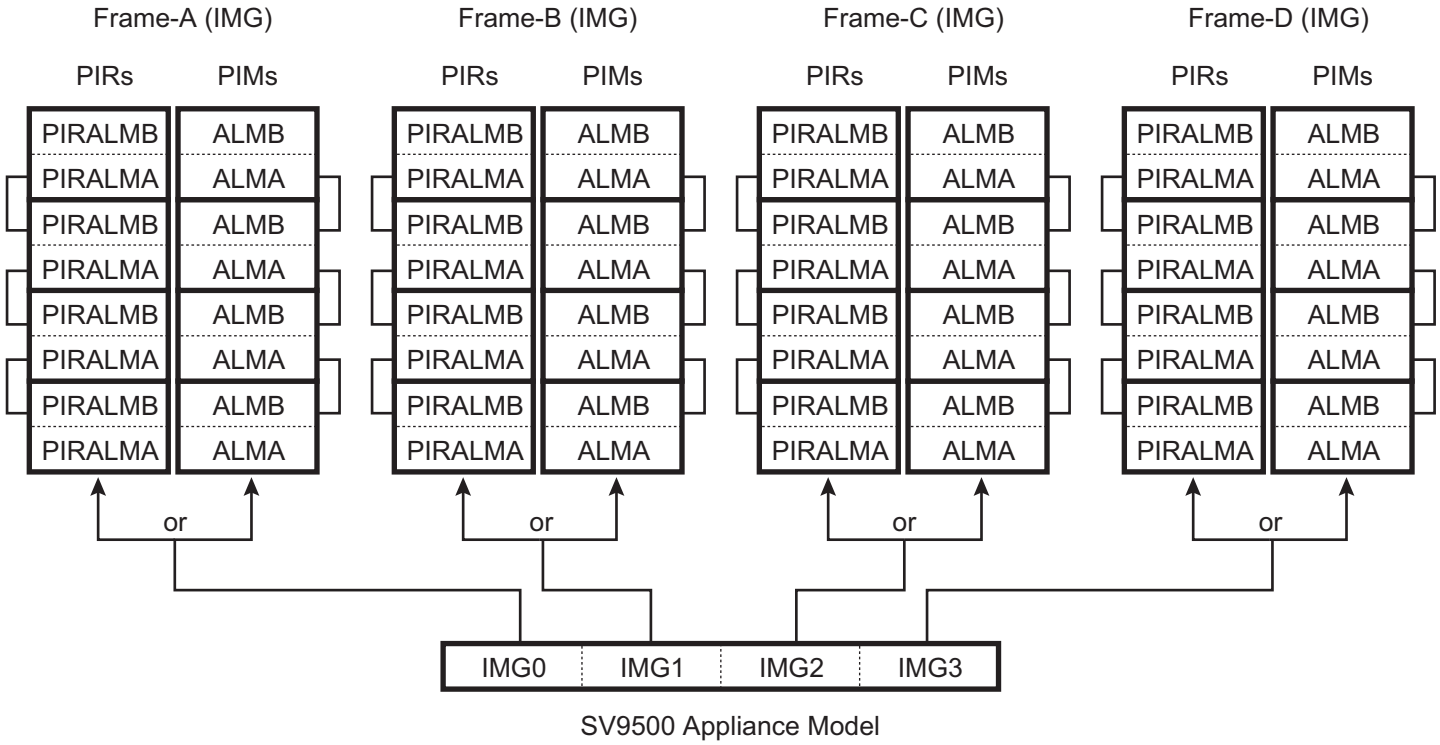


- When migrating 4-IMG IPX

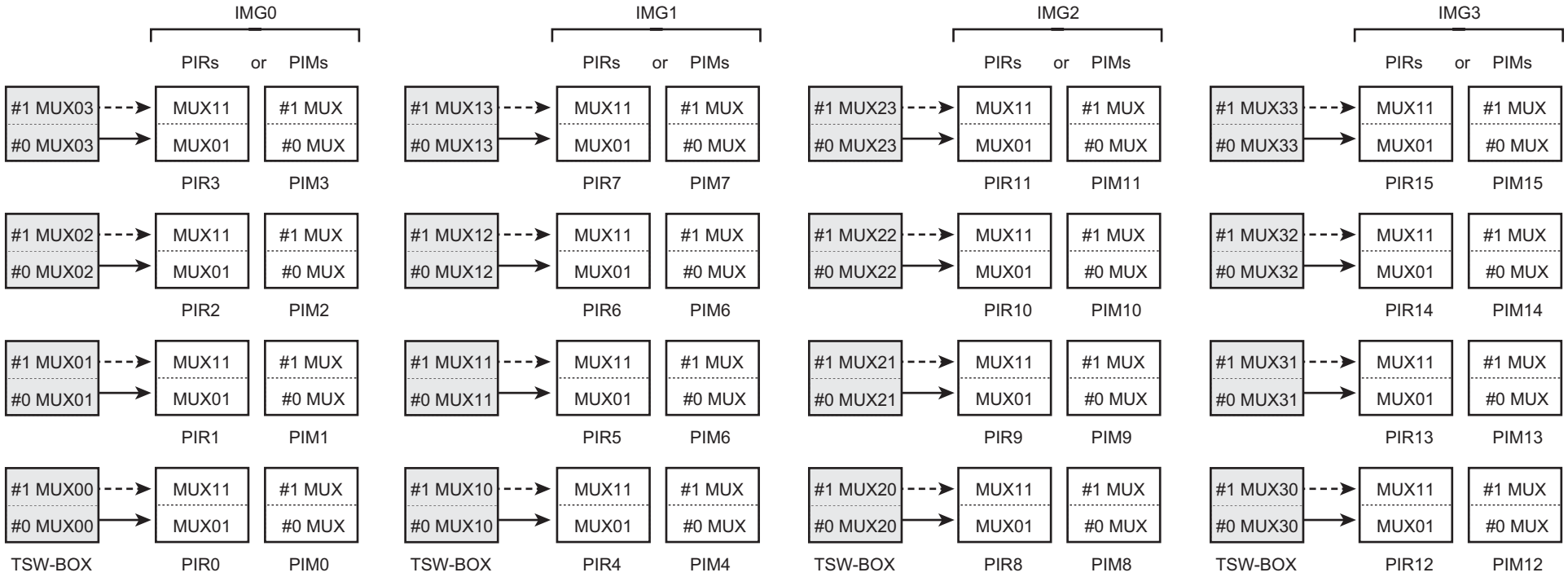
ALM: ALMs are connected with each other based on physical configuration. In each frame (IMG) consisting of PIRs or PIMs, ALMB of lower PIR/PIM and PIRALMA/ALMA of upper PIR/PIM are connected from bottom to top. PIRALMA/ALMA of bottom PIR/PIM in each IMG is connected to SV9500 Appliance Model: IMG0, IMG1, IMG2 or IMG3.

MUX: MUXs are connected with each other based on logical configuration. PIR/PIM's logical location depends on MUX connection in which MUX connectors of TSW-BOX/TSWR are connected to MUXs of each PIR/PIM. Each MUX on TSW-BOX/TSWR has two/three digits number which represents, in a direction from left to right, CPU-side (#0 or #1) - IMG number (IMG0, IMG1 and so on) - PIR/PIM number (PIR0, PIR1 and so on).

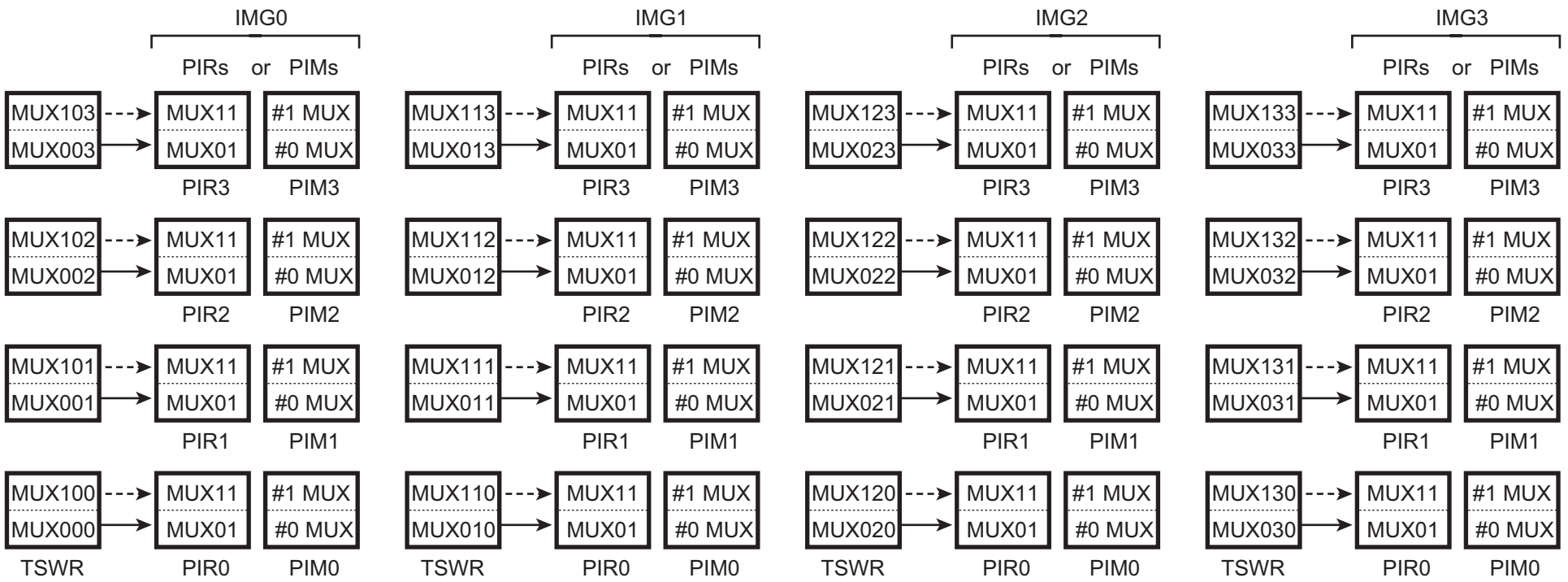
[ALM Connection Diagram]



[MUX Connection Diagram (TSW-BOX x PIRs/PIMs)]



[MUX Connection Diagram (TSWR x PIRs/PIMs)]



3.2 Other Configuration Examples

The following are examples of other configurations and their cabling diagrams when PIMs and PIRs are used.

Example A: When migrating from IPX 1-IMG, an additional PIR is installed as PIR0 and the following PIMs are numbered PIM0, PIM1 and PIM2.

Example A (IMG) [SV9500 x IPX in PIM0 - PIM1 - PIM2 - PIR0]

Example B: When migrating from IPX 4-IMG, eight PIRs are added as IMG2 and IMG3, following eight PIMs of IMG0 and IMG1.

Example B (4-IMG) [SV9500 x IMG0 in IMG0(PIMs) - IMG1(PIMs) - IMG2(PIRs) - IMG3(PIRs)]

Example B (4-IMG) [SV9500 x IMG1 in IMG0(PIMs) - IMG1(PIMs) - IMG2(PIRs) - IMG3(PIRs)]

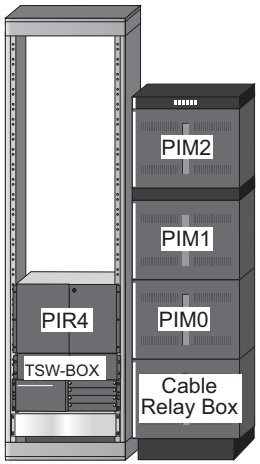
Example B (4-IMG) [SV9500 x IMG2 in IMG0(PIMs) - IMG1(PIMs) - IMG2(PIRs) - IMG3(PIRs)]

Example B (4-IMG) [SV9500 x IMG3 in IMG0(PIMs) - IMG1(PIMs) - IMG2(PIRs) - IMG3(PIRs)]

Other Configuration Examples when PIMs and PIRs are used

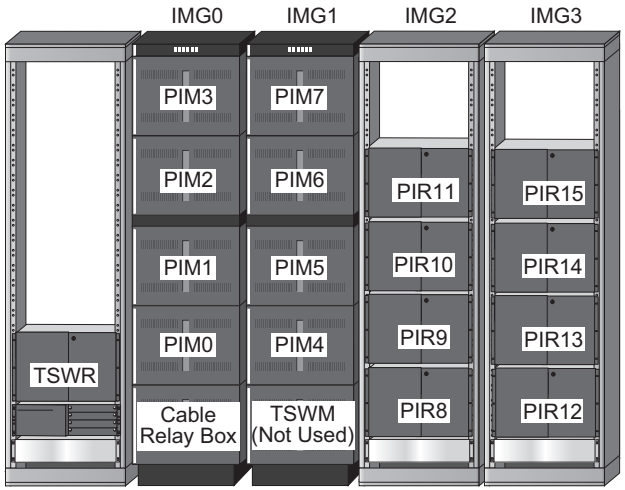
Example A (IMG) :

[PIM0 - PIM1 - PIM2 - PIR0]



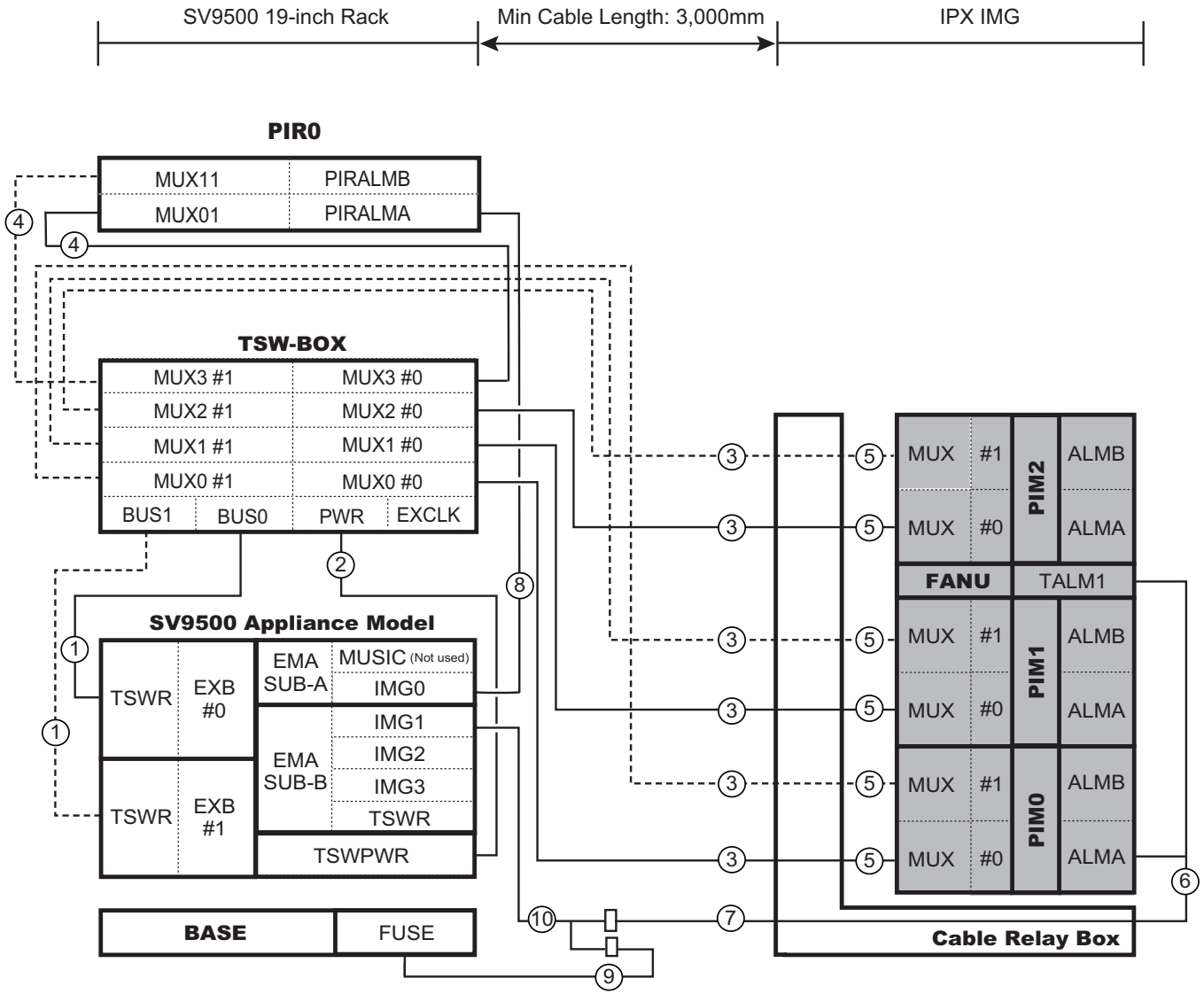
Example B (MMG) :

[IMG0(PIMs) - IMG1(PIMs) - IMG2(PIRs) - IMG3(PIRs)]



Example A (IMG) [SV9500 x IPX in PIM0 - PIM1 - PIM2 - PIR0]

The diagram of cable connections between SV9500 and IPX when migrating 1-IMG IPX in configuration of PIM0-PIM1-PIM2-PIR0 is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D26-D25 TSW-PIR CA-B	3,000mm
4	D26-D25 TSW-PIR CA-A	1,800mm
5	MT24-D25 CA-B	6,000mm
6	D15-(PS20-ML2)CA-A	5,000mm
7	D15 ST CA-B	3,000mm
8	D15 ST-F CA-A	900mm
9	D09 ST CA-A	1,000mm
10	MIG FALM CA-A	300mm

Changed or increased part

Existing part

#0 Cable

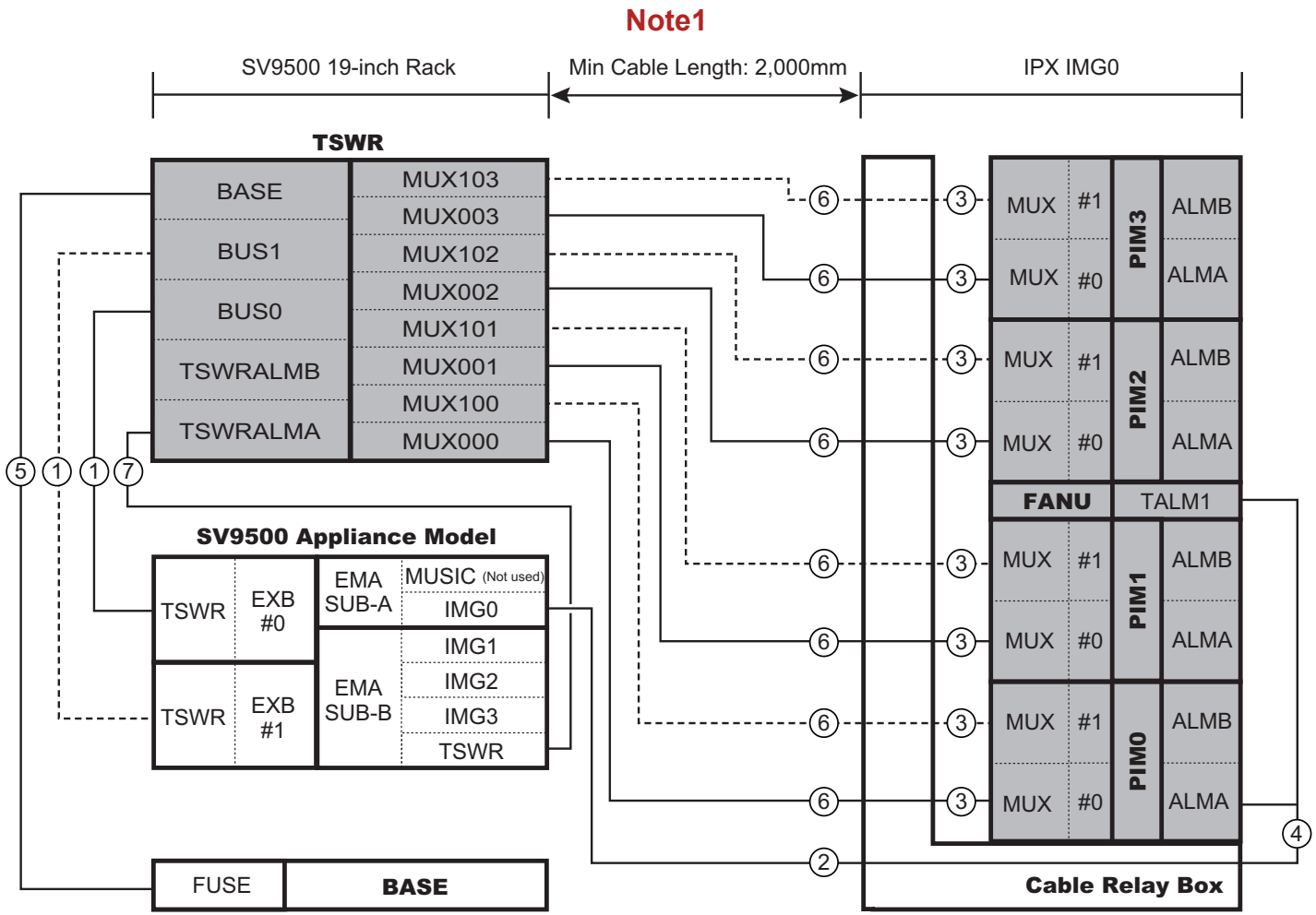
#1 Cable

Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

Example B (4-IMG) [SV9500 x IMG0 in IMG0(PIMs) - IMG1(PIMs) - IMG2(PIRs) - IMG3(PIRs)]

The diagram of cable connections between SV9500 and IMG0 when migrating 4-IMG IPX in configuration of IMG0(PIMs)-IMG1(PIMs)-IMG2(PIRs)-IMG3(PIRs) is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST-F CA-B	2,000mm
	D15 ST-F CA-D Note1	12,000mm
3	MT24-D25 CA-B	6,000mm
4	D15-(PS20-ML2)CA-A	5,000mm
5	D09 ST CA-A	1,000mm
6	D37-D25 CA-B	3,000mm
	D37-D25 CA-1 Note1	10,000mm
7	D15 ST CA(S)-A	900mm

Changed or increased part

Existing part

#0 Cable

#1 Cable

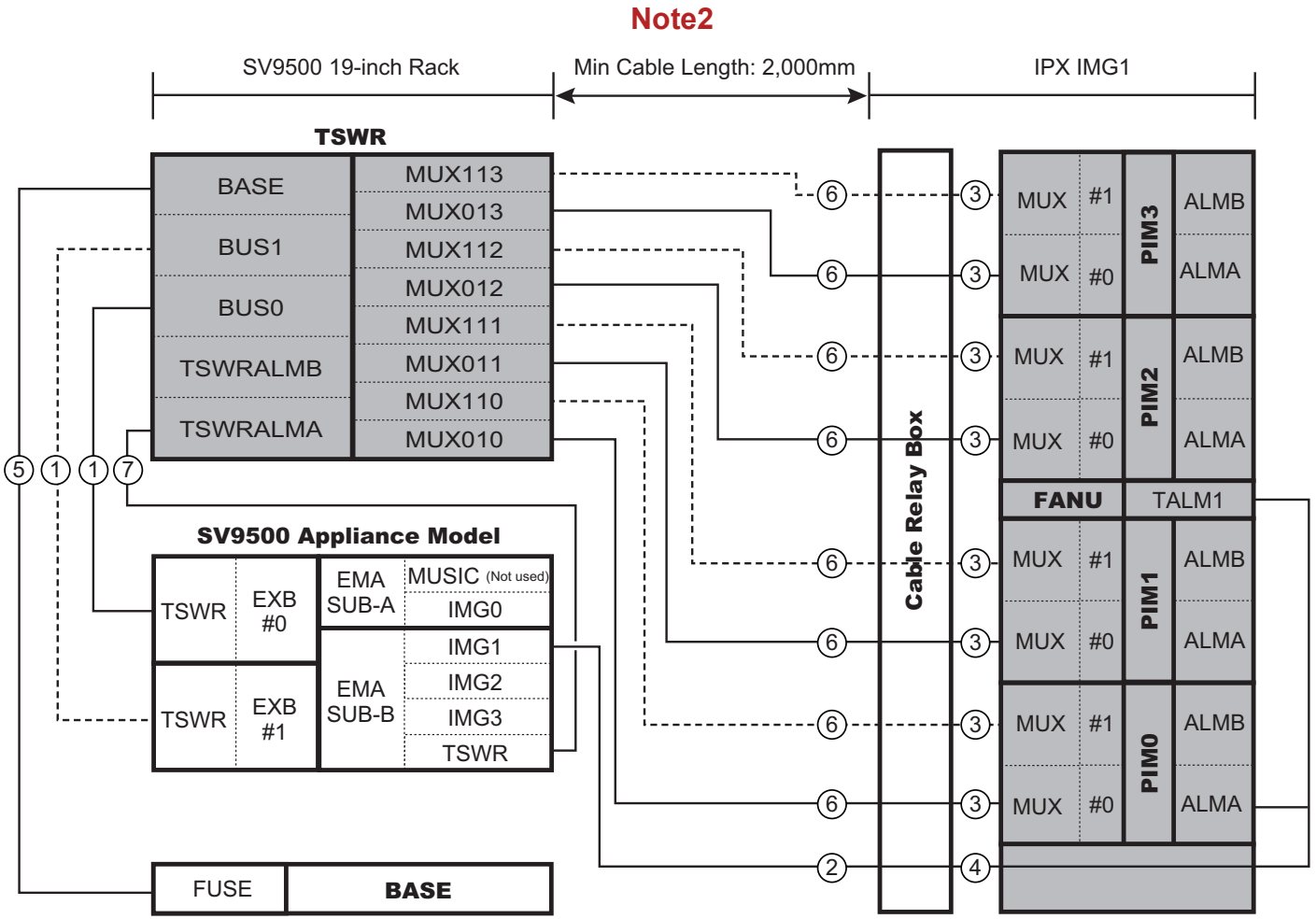
Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

Note 1: If the cable length is not enough, you can use a long cable. For more information, refer to "Long Cable Unit".

Example B (4-IMG) [SV9500 x IMG1 in IMG0(PIMs) - IMG1(PIMs) - IMG2(PIRs) - IMG3(PIRs)]

The diagram of cable connections between SV9500 and IMG1 when migrating 4-IMG IPX in configuration of IMG0(PIMs)-IMG1(PIMs)-IMG2(PIRs)-IMG3(PIRs) is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST-F CA-B	2,000mm
	D15 ST-F CA-D **Note2**	12,000mm
3	MT24-D25 CA-B	6,000mm
4	D15-(PS20-ML2)CA-A	5,000mm
5	D09 ST CA-A	1,000mm
6	D37-D25 CA-B	3,000mm
	D37-D25 CA-1 **Note2**	10,000mm
7	D15 ST CA(S)-A	900mm

Changed or increased part

Existing part

#0 Cable

#1 Cable

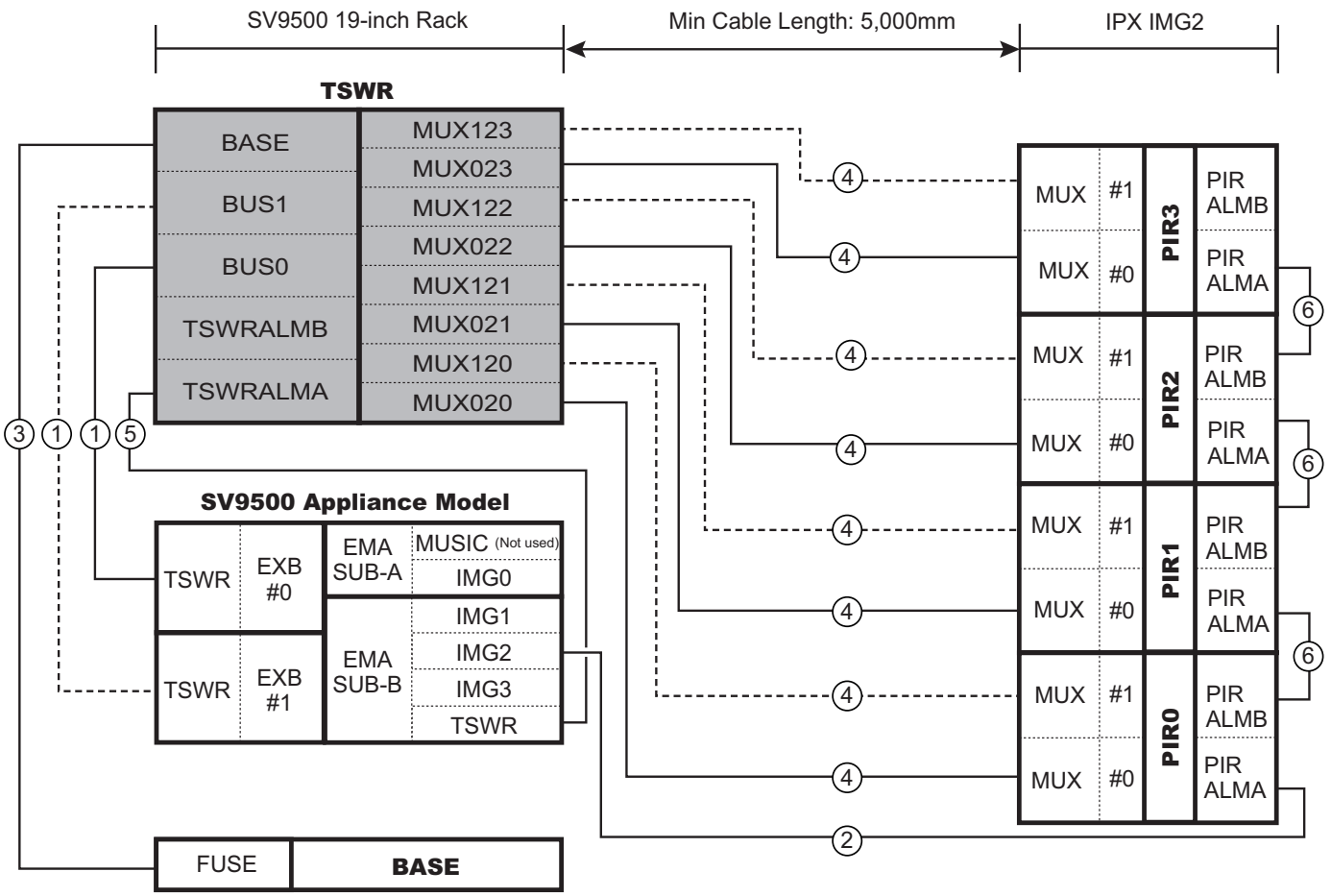
Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

Note 2: If the cable length is not enough, you can use a long cable. For more information, refer to "Long Cable Unit".

Example B (4-IMG) [SV9500 x IMG2 in IMG0(PIMs) - IMG1(PIMs) - IMG2(PIRs) - IMG3(PIRs)]

The diagram of cable connections between SV9500 and IMG2 when migrating 4-IMG IPX in configuration of IMG0(PIMs)-IMG1(PIMs)-IMG2(PIRs)-IMG3(PIRs) is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST-F CA-C	5,000mm
3	D09 ST CA-A	1,000mm
4	D37-D25 CA-A	6,000mm
5	D15 ST CA(S)-A	900mm
6	D15 ST CA-A	500mm

Changed or increased part

Existing part

#0 Cable

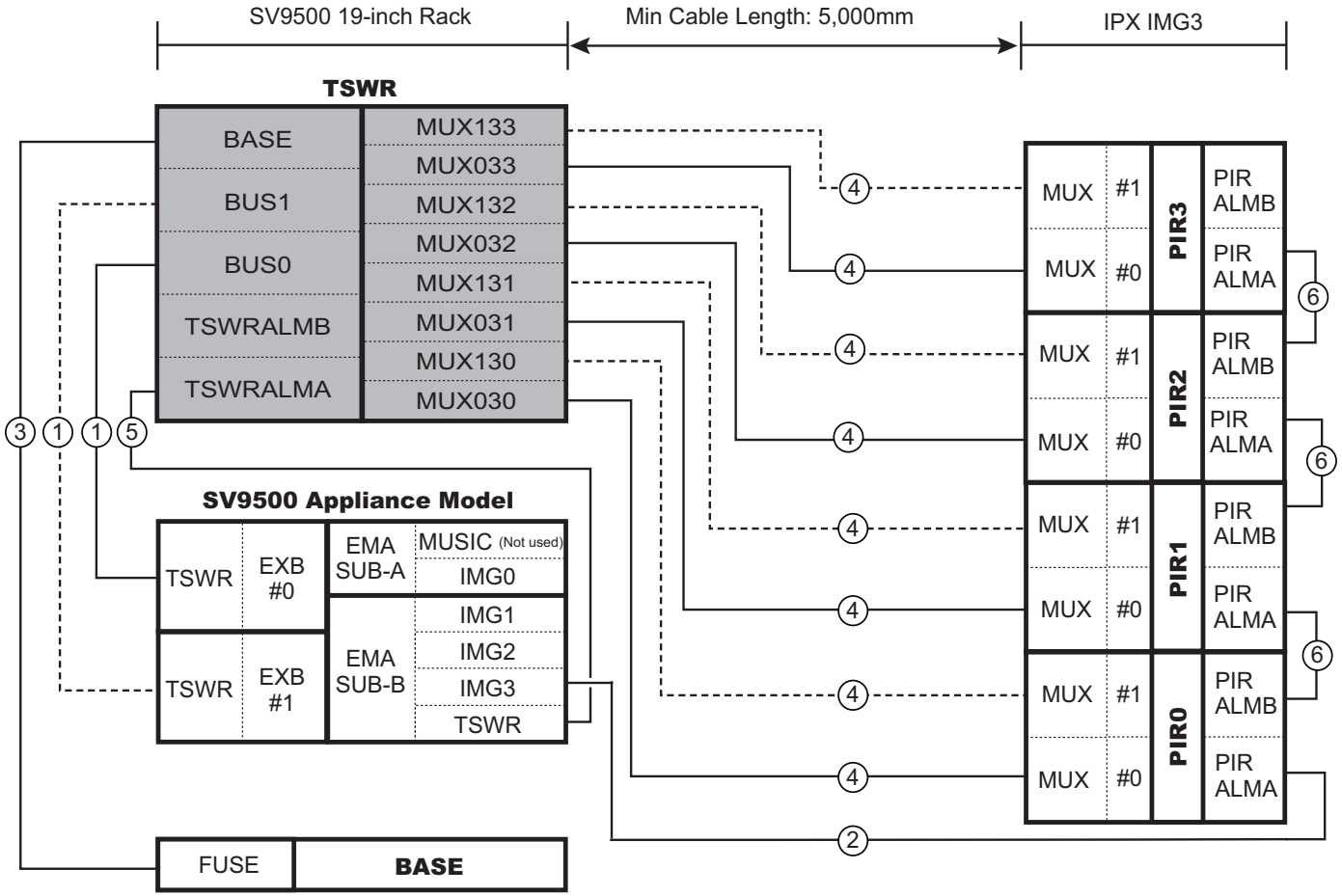
#1 Cable

Note: Connections described in dotted lines are necessary only for the dual configuration.

Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

Example B (4-IMG) [SV9500 x IMG3 in IMG0(PIMs) - IMG1(PIMs) - IMG2(PIRs) - IMG3(PIRs)]

The diagram of cable connections between SV9500 and IMG3 when migrating 4-IMG IPX in configuration of IMG0(PIMs)-IMG1(PIMs)-IMG2(PIRs)-IMG3(PIRs) is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST-F CA-C	5,000mm
3	D09 ST CA-A	1,000mm
4	D37-D25 CA-A	6,000mm
5	D15 ST CA(S)-A	900mm
6	D15 ST CA-A	500mm

Changed or increased part

Existing part

#0 Cable

#1 Cable

Note: Connections described in dotted lines are necessary only for the dual configuration.

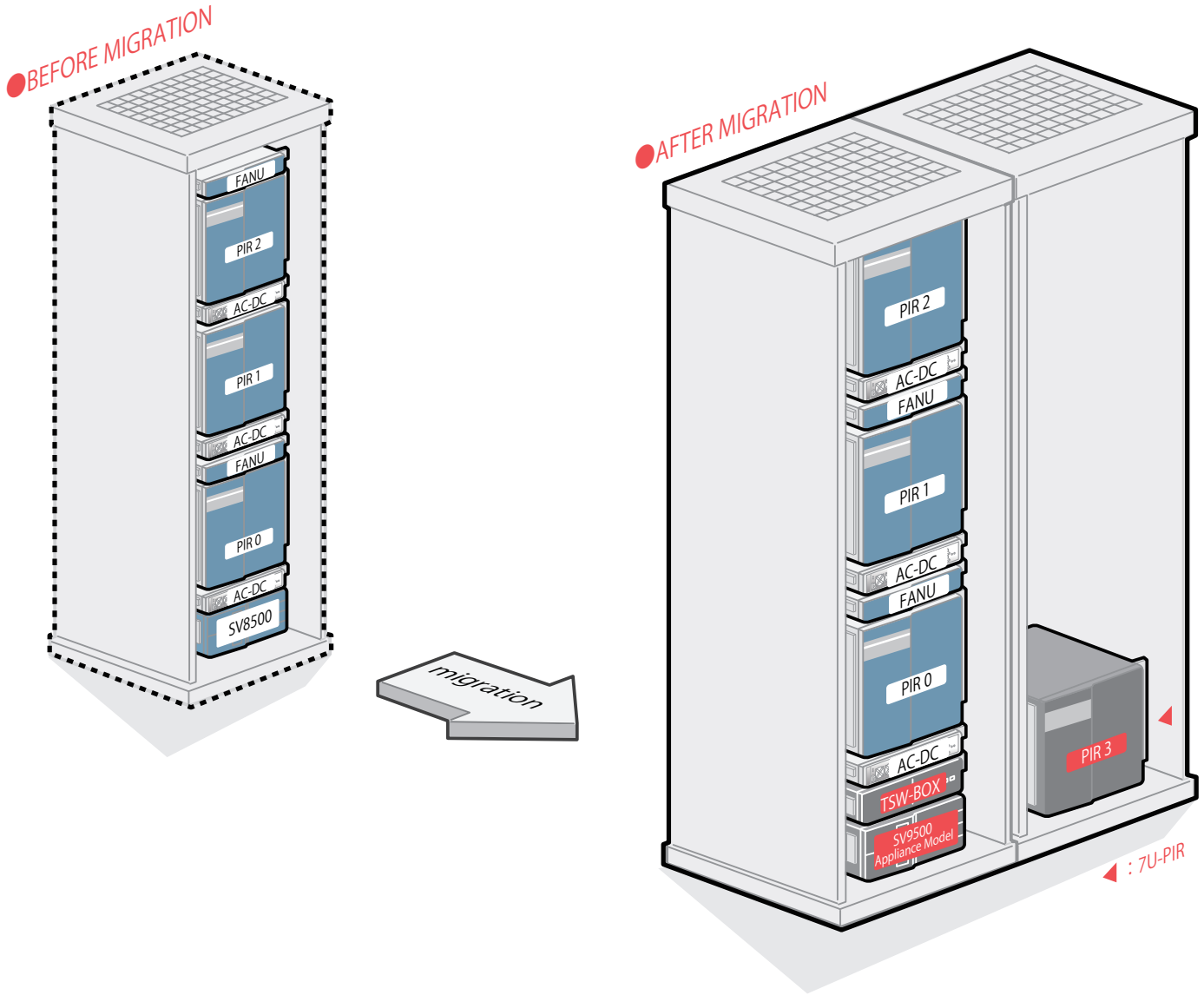
Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

4. Other Configurations for Migration from SV8500 System

4.1 Other Configuration Examples

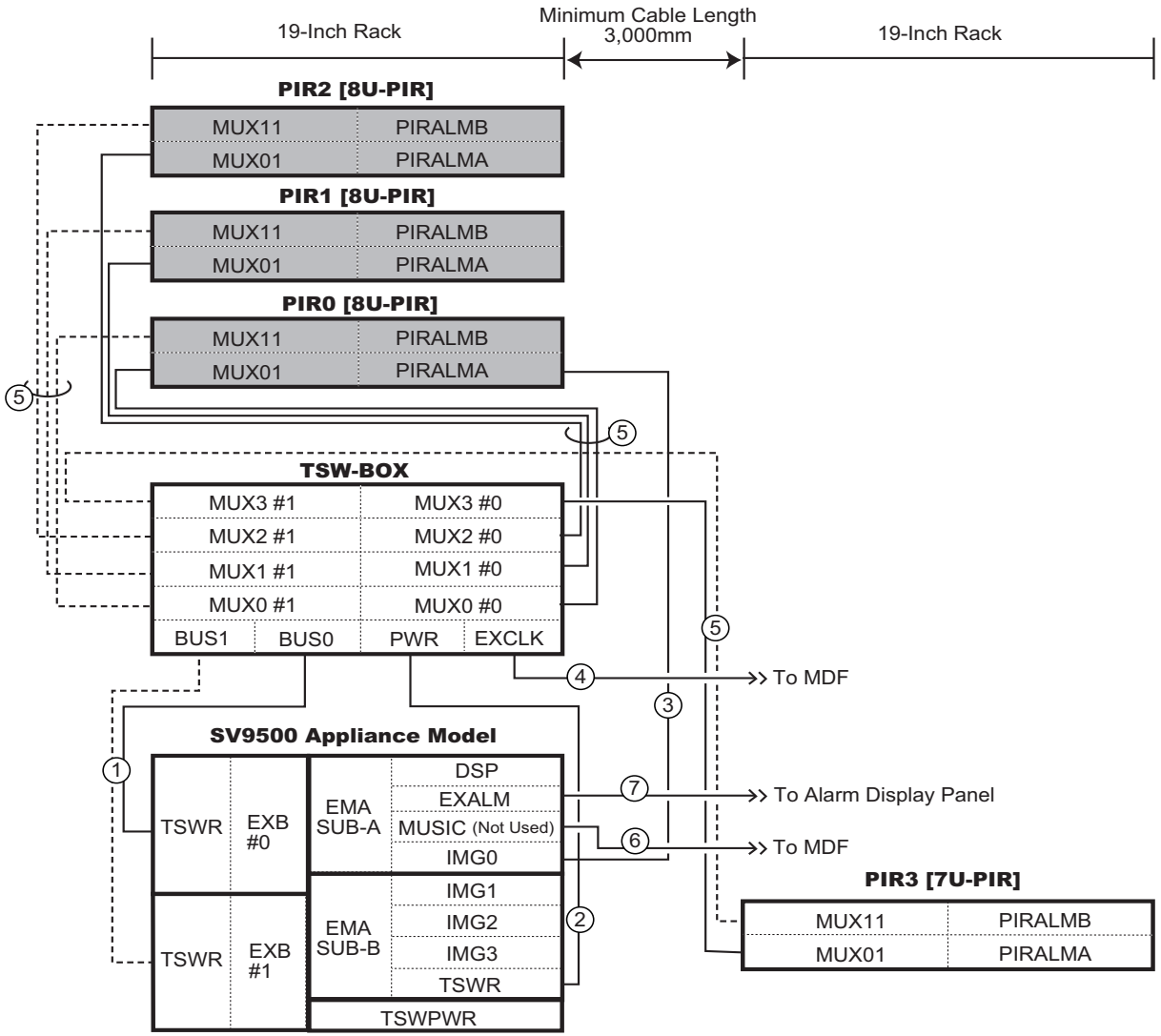
Example A: 7U-PIR is Added to AC Powered Model on 1-IMG Configuration
Example B: 7U-PIR is Added to DC Powered Model on 1-IMG Configuration
Example C: 7U-PIRs are Added to a DC Powered Model on 4-IMG Configuration

Example A: 7U-PIR is Added to AC Powered Model on 1-IMG Configuration



Note: Another option for the module configuration different from the picture above is to install TSW-BOX, the SV9500 server and 7U-PIR in a rack. Leave the existing 8U-PIR rack as it is only removing the SV8500 server.

The diagram of cable connections between SV9500 and PIR when migrating to SV9500 1-IMG (AC powered model) in configuration of PIR0 (8U-PIR) - PIR1 (8U-PIR) - PIR2 (8U-PIR) - PIR3 (7U-PIR) is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D15 ST-F CA-A	900mm
4	D37 EXCLK CA-A	2,000mm
5	D26-D25 TSW-PIR CA-A/B	1,800mm/ 3,000mm
6	D25 EXALM CA-A	2,000mm
7	D15 ST-FF CA-C	6,000mm

Changed or increased part

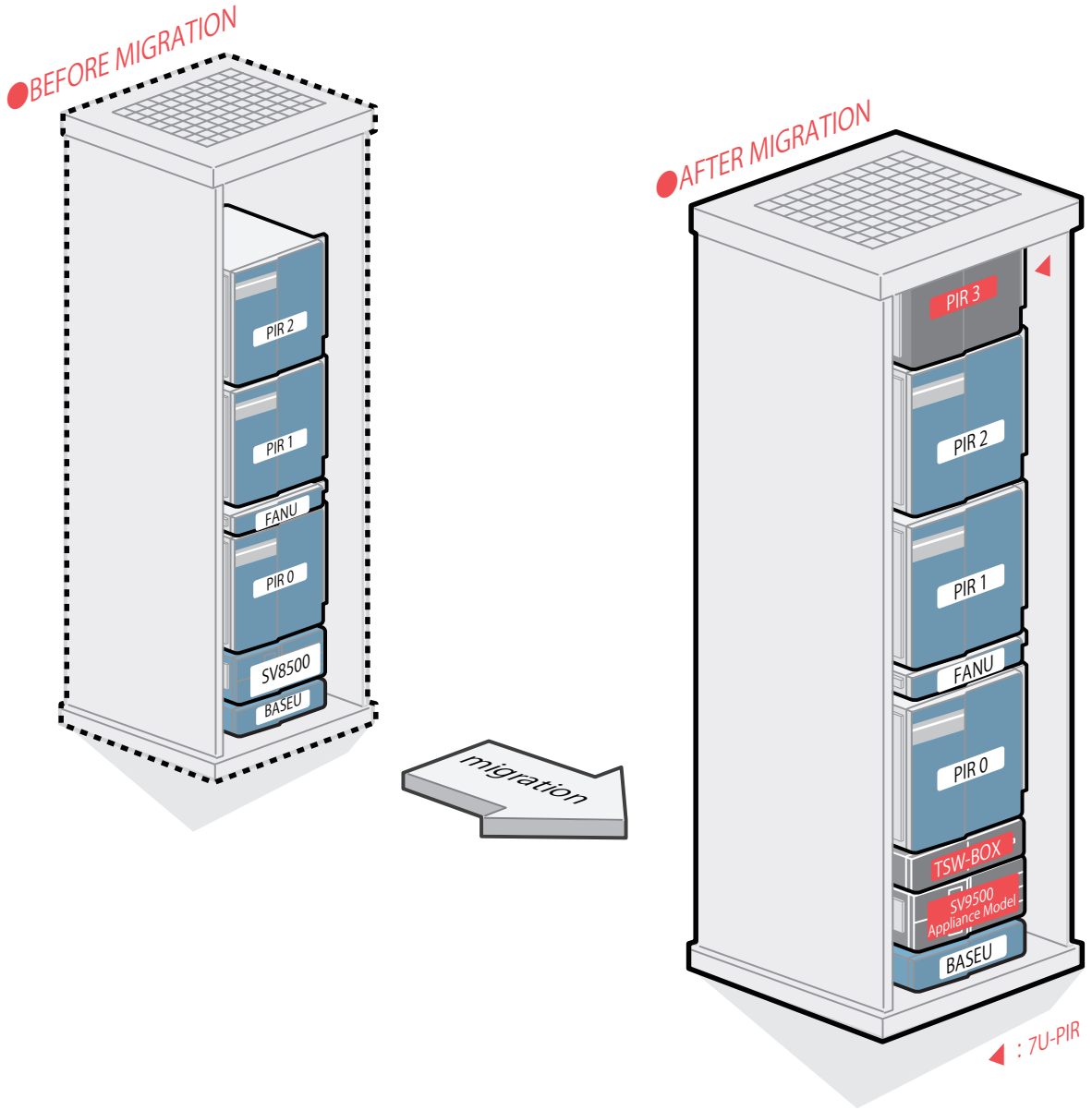
Existing part

#0 Cable

#1 Cable

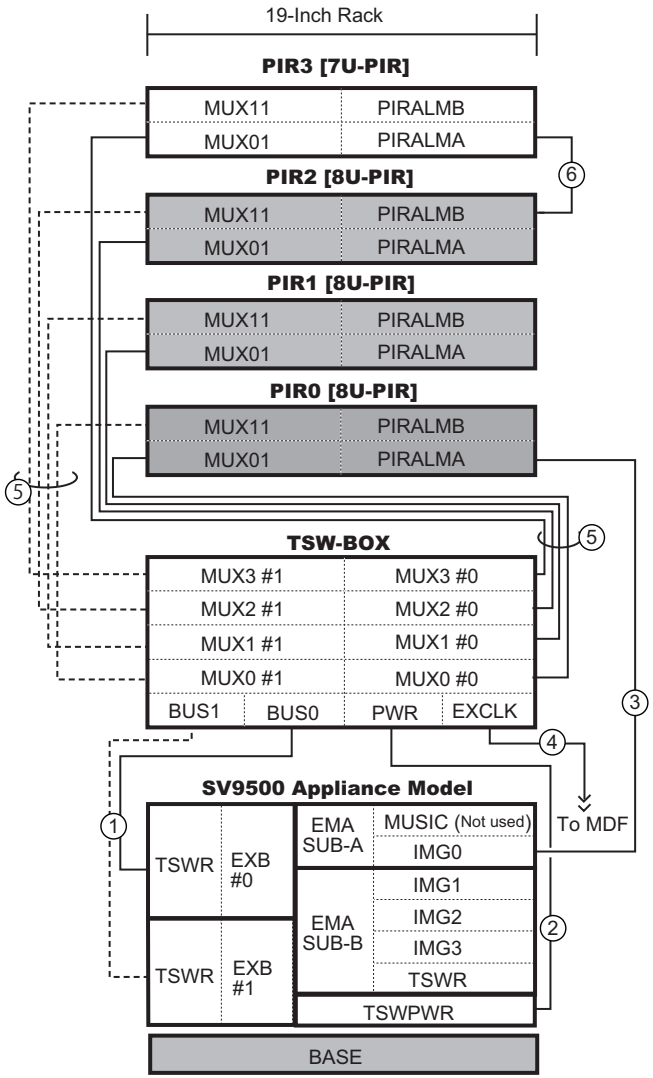
Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

Example B: 7U-PIR is Added to DC Powered Model on 1-IMG Configuration



Note: Another option for the module configuration different from the picture above is to install TSW-BOX, the SV9500 server and 7U-PIR in a rack (with a new BASEU). Leave the existing 8U-PIR rack as it is only removing the SV8500 server.

The diagram of cable connections between SV9500 and PIR when migrating to SV9500 1-IMG (DC powered model) in configuration of PIR0 (8U-PIR)-PIR1(8U-PIR)-PIR2(8U-PIR)-PIR3(7U-PIR) is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-E	350mm
2	D09 POW CA-A	500mm
3	D15 ST-F CA-A	900mm
4	D37 EXCLK CA-A	2,000mm
5	D26-D25 TSW-PIR CA-A	1,800mm
6	D15 ST CA-A	500mm

Changed or increased part

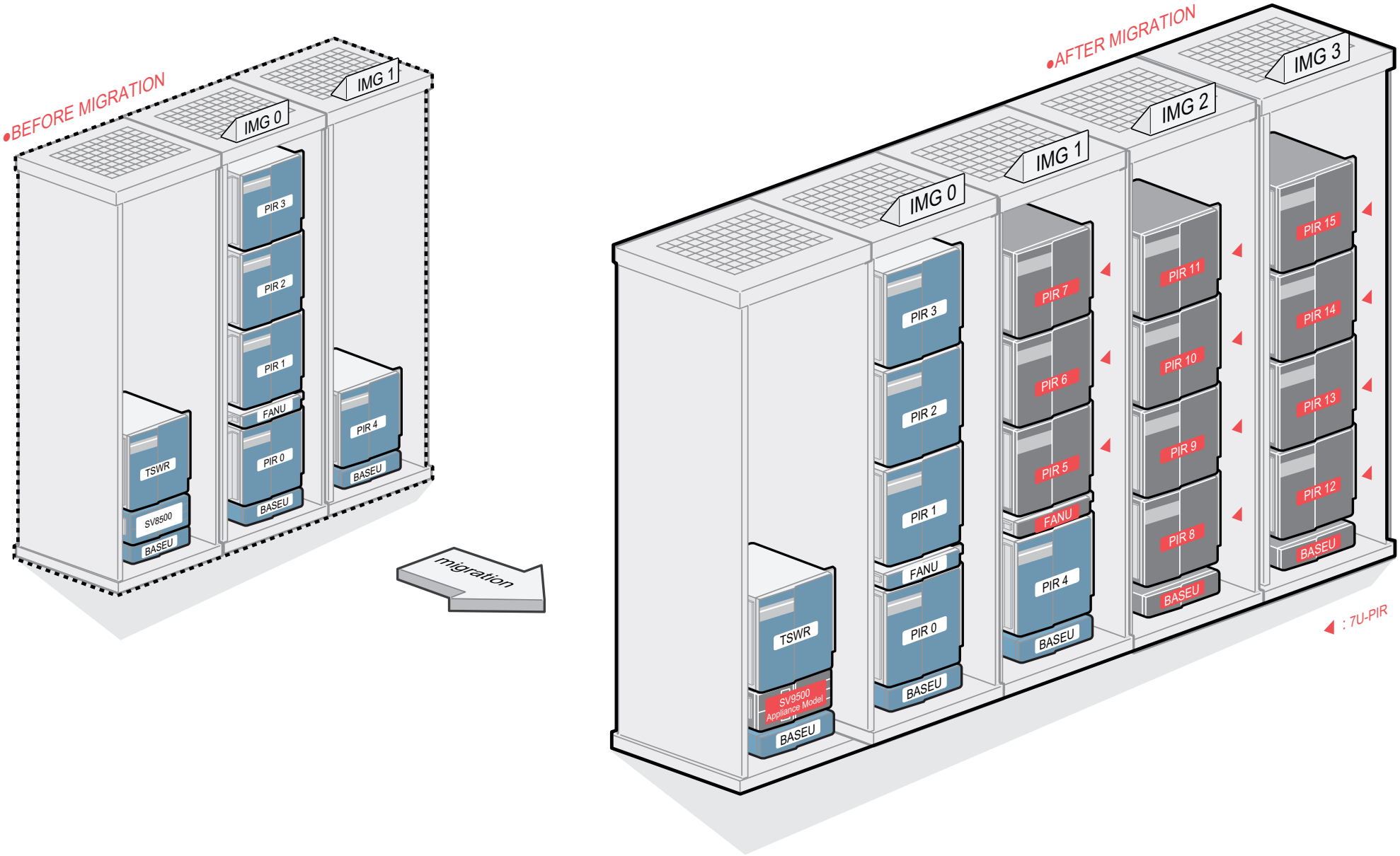
Existing part

#0 Cable

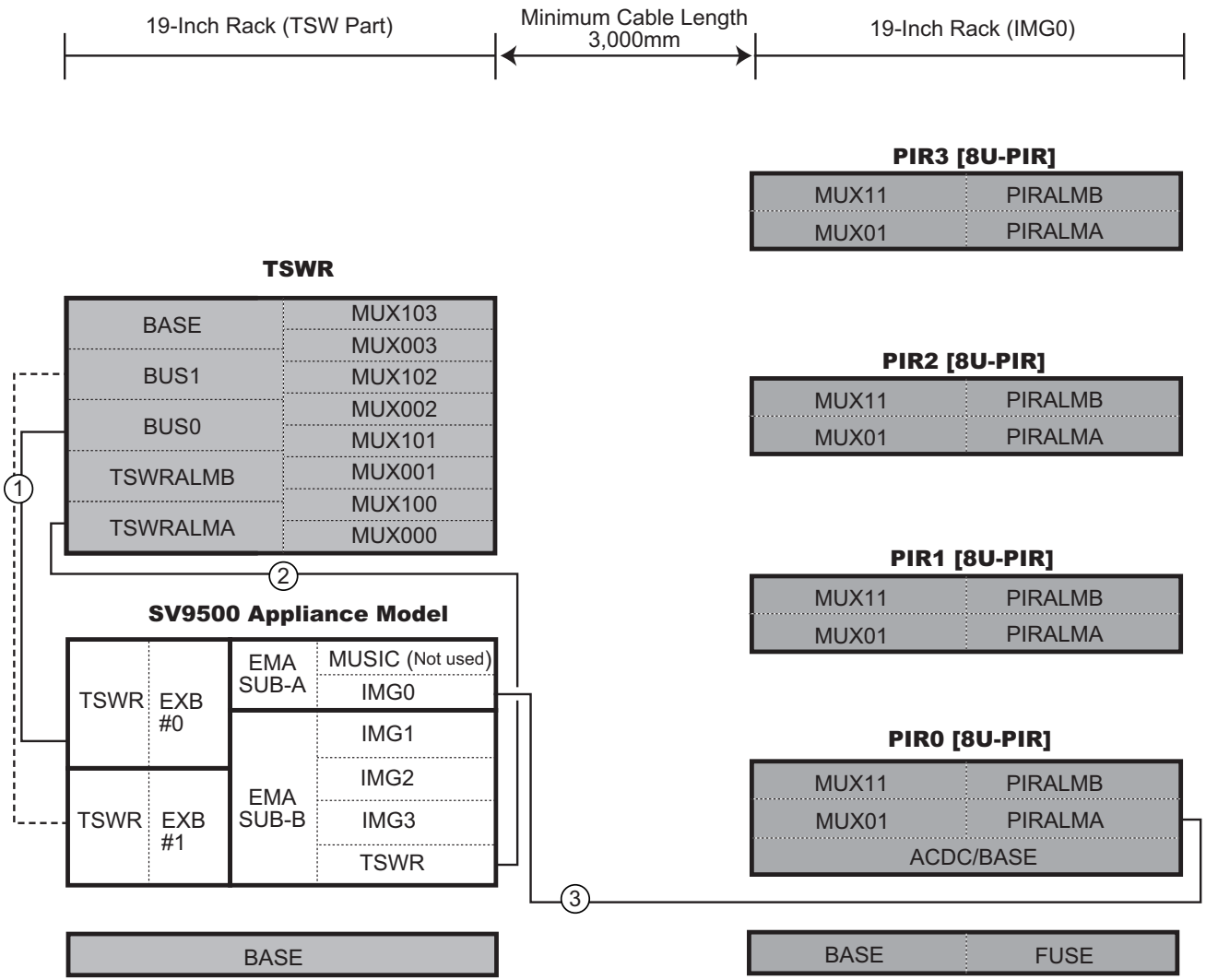
#1 Cable

Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

Example C: 7U-PIRs are Added to a DC Powered Model on 4-IMG Configuration



The diagram of cable connections between TSW and IMG0 when migrating to SV9500 4-IMG (DC powered model) in configuration of IMG0 (8U-PIRs) - IMG1 (8U-PIR/7U-PIRs) - IMG2 (7U-PIRs) - IMG3 (7U-PIRs) is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST CA(S)-A	900mm
3	D15 ST-F CA-C	5,000mm

Changed or increased part

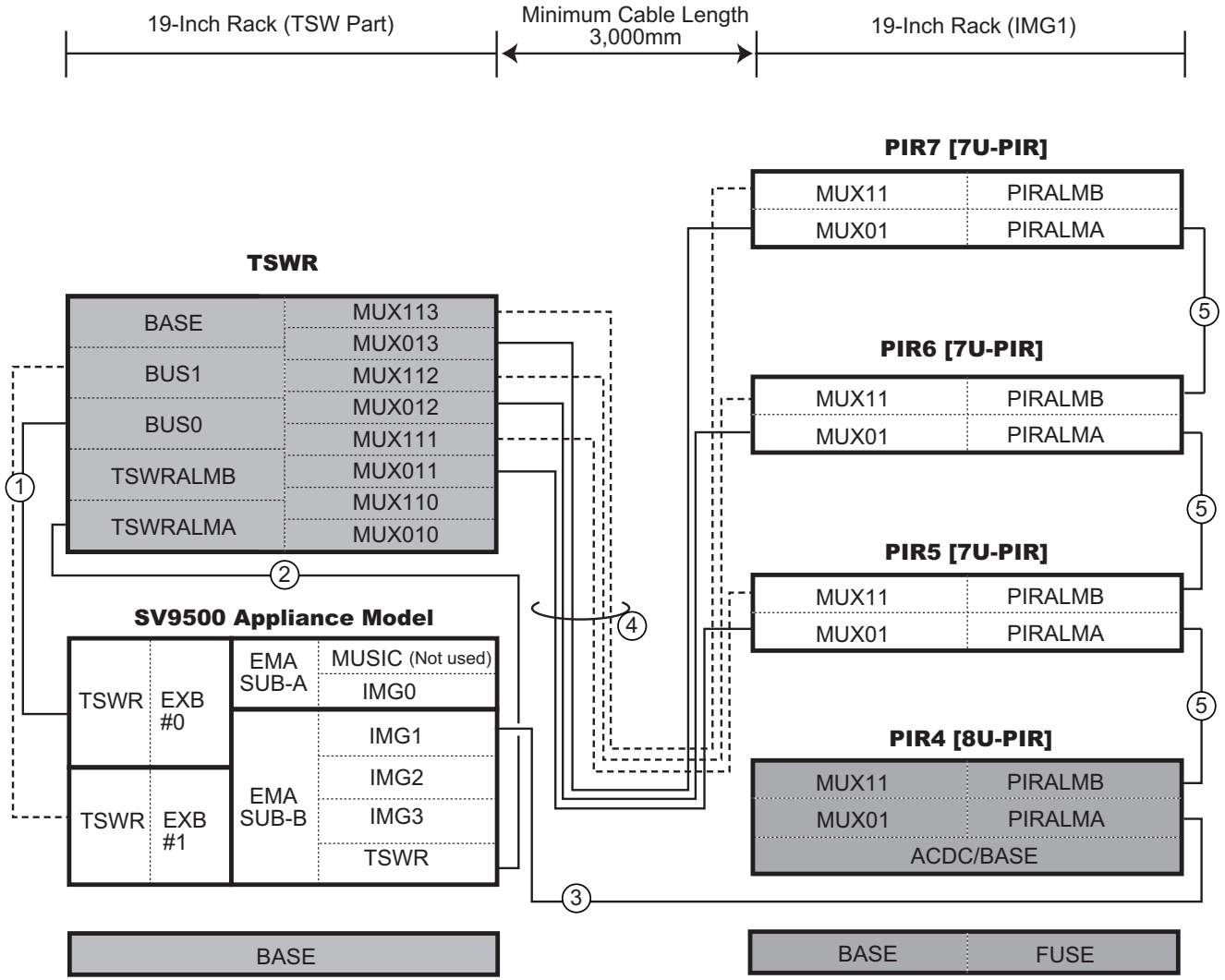
Existing part

#0 Cable

#1 Cable

Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

The diagram of cable connections between TSW and IMG1 when migrating to SV9500 4-IMG (DC powered model) in configuration of IMG0 (8U-PIRs) - IMG1 (8U-PIR/7U-PIRs) - IMG2 (7U-PIRs) - IMG3 (7U-PIRs) is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST CA(S)-A	900mm
3	D15 ST-F CA-C	5,000mm
4	D37-D25 CA-A	6,000mm
5	D15 ST CA-A	500mm

Changed or increased part

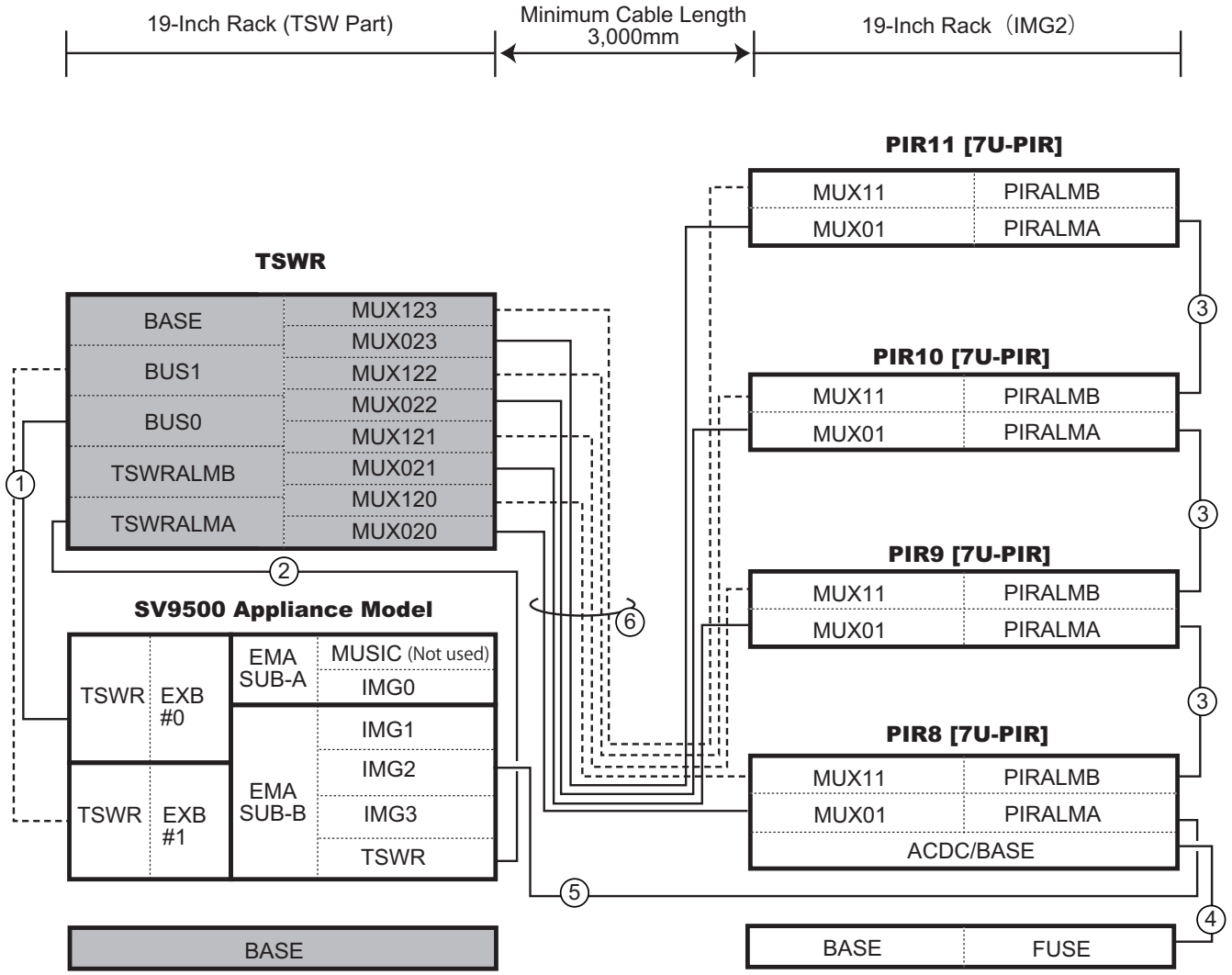
Existing part

#0 Cable

#1 Cable

Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

The diagram of cable connections between TSW and IMG2 when migrating to SV9500 4-IMG (DC powered model) in configuration of IMG0 (8U-PIRs) - IMG1 (8U-PIR/7U-PIRs) - IMG2 (7U-PIRs) - IMG3 (7U-PIRs) is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST CA(S)-A	900mm
3	D15 ST CA-A	500mm
4	D09 ST CA-A	1,000mm
5	D15 ST-F CA-C	5,000mm
6	D37-D25 CA-A	6,000mm

Changed or increased part

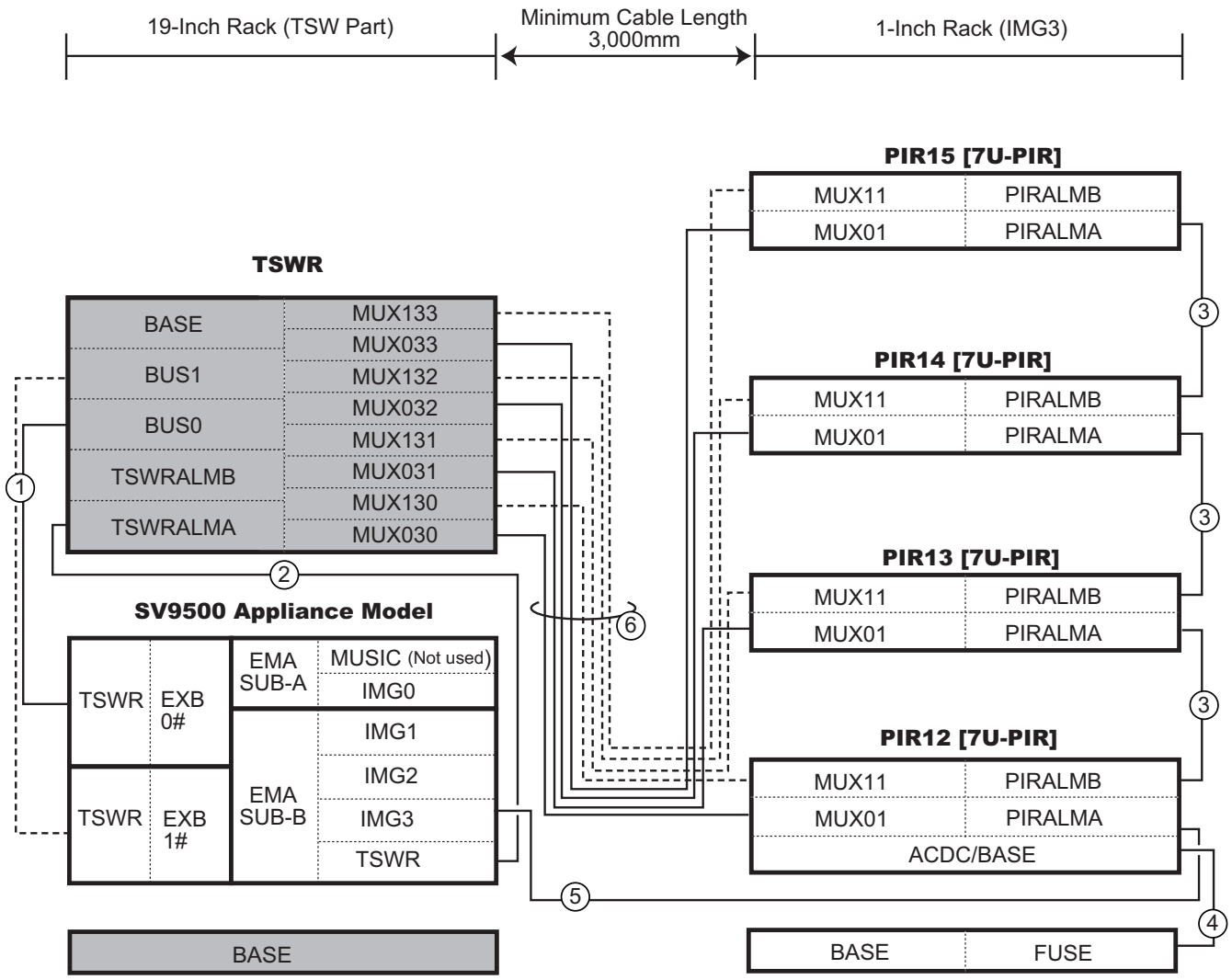
Existing part

#0 Cable

#1 Cable

Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

The diagram of cable connections between TSW and IMG3 when migrating to SV9500 4-IMG (DC powered model) in configuration of IMG0 (8U-PIRs) - IMG1 (8U-PIR/7U-PIRs) - IMG2 (7U-PIRs) - IMG3 (7U-PIRs) is as follows:



Cable Specifications

No.	Item	Length
1	D37-SC50 CA-B	1,000mm
2	D15 ST CA(S)-A	900mm
3	D15 ST CA-A	500mm
4	D09 ST CA-A	1,000mm
5	D15 ST-F CA-C	5,000mm
6	D37-D25 CA-A	6,000mm

Changed or increased part

Existing part

#0 Cable

#1 Cable

Note: Only the changed or new cables are displayed. For other cables needed refer to Appliance Model Installation Manual.

UNIVERGE SV9500
Migration Guide

NWD-170372-001

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