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### **PREFACE**

This manual is valid for the SOPHO 2000 IPS telephone system.

In this manual the term NEAX 2000 IPS or NEAX PBX telephone system represents the SOPHO 2000 IPS system.

This book might refer to products not included in the SOPHO portfolio.

Certain items in this manual do not apply to the European market.

In case of doubt, please contact your supplier.

#### LIST OF TERMS

Abbr. NEC Description Abbr. PBC Description / Remarks **PBC NEC** 

> (Trunk) Route Restriction Class **TRFC** Traffic Class

**ÀIMWorX** SMDR & CTI based management platform

**Authorization Code** PID code

Background music (feature) When phone is idle, user can have background music on speaker

Boss/Secretary dialing Executive/Secretary

Broker's call Shuttle: alternate between 2 parties

occupying one line

Group - Absent/Present switching Busy in/busy out - ACD

Class of Service Facility Class Mark (sometimes traffic class) Coin lines

Consecutive Speed Dialing Common number can be speed dial,

individual choice dialed manually Consultation hold **Enquiry** 

Development table Analysis tree: table within numbering plan

Dial conversion Conversion from pulse to DTMF Dynamic Dial Pad Pressing numeric keys grabs a line as well.

Executive calling VIP status assigned to a station. **Ground Start** Earth calling: analog trunk protocol

Hearing Aid Compatibility Voice volume control on terminals Home side trunk User side For ISDN trunks

trunk

Legacy TDM based equipment (non IP)

Location number Division based on capabilities or priorities in

the IP system

Subscriber signalling e.g. an ATU-SS Loop Start For ISDN trunks Mate side trunk Network

side trunk

MATWorX Operational Maintenance interface tool

SOPHO Set / ErgoLine : digital terminal with Multi line terminal

soft key assignment possible

Multiple Call Forwarding Multi hop (maximum 5 hops allowed)

My Line Users own station number.

Nailed down connection (data) Fixed connection between two data

adapters.

**PLE** Permanent Line Extension Night Connection - fixed Night connection - fixed Permanent Line Extension Night Connection - flexible CF on night extension

Office Code Cluster Identity used for Open Numbering CLID

**Plans** 

One touch key Dterm keys, work (and programmed) like

speed dial function OpenWorX CTI Application platform

Operator PSTN operator / provider Party lines

Peer to peer Peer to peer: one to one relation on functional level

Pilot number Group number

En-block dialing: prepare number and send Preset dialing

it in one go (versus overlap dialing) Seized line (trunk line or extension) when

going off-hook (or speaker)

**Restriction Class Traffic Class TRFC** 

Alternative routing when trunk(s) busy Route Advance Route Pattern

Tree: part of the number analysis table

Save and Repeat **LNR** Last Number Redial Secondary appearance park position / sub line

Prime Line

Abbr. NEC Description Abbr. PBC Description / Remarks **NEC PBC Analog Phone** Single line terminal Software Line Appearance Virtual Extension Split Call Forwarding Separate CF for internal and external calls. Stack Dial **LNNR** Last Number/Number Repetition Outgoing calling list (5 entries) Redial List: maximum 5 numbers Stack Dial Station Extension / DNR Station Class **FCM** Facility Class Mark Sub Line Lines on the stations, other then the prime **Tenant** Analysis group: multi company on one PBX Trunk Route Route Voice Call Announcement without 3rd party hearing it. Whisper page Account Code (Client Billing Code) AC PID Password integrated dialing **ACF Authorization Code Facility** OAI related. **ADF** OAI related. ALM DSPP (External) Alarm Display Panel Automatic Number Identification Caller subscriber number coming in with MF ANI signaling on T1 trunks **ANS** Answer Advice of charge **AOC** AP **Application Card** AΡ **Analog Port ATND** Attendant AttCon Attendant console Operator console **BATTM Battery Module** BGM Back Ground Music service **BHCA Busy Hour Call Attempts** BK Black **BSY** Busy BT **Busy Tone** CAMA Centralized Message Accounting A standard related to 911 service Centralized Attendant Service CAS CAT **Customer Administration terminal** Dterm used as programming device for PBX **CCIS** Common Channel Interoffice Comparable to IMP Signalling **CCSA** Common Control Switching Customer specific leased lines/network, US arrangement CCT **CCIS Trunk** CF-D Call Forwarding - Destination Call Forwarding - Destination : no preparation on originator necessary. CFT Conference trunk CIC Circuit Identification Code Trunk channel ID for virtual IP trunk channels (Line number) CID Call ID Display CIR Caller ID Receiver Call Information System CIS CM Command See Commands Manual **CNP** Closed Numbering Plan CO Central Office COT Central Office Trunk CPN Calling Party Number ISDN calling party number Calling Party Number CPN Central Processing Unit CPU Call Redirect CRD CS Cell Station CSU DAT Digital Announcement Trunk

Abbr. NEC Description Abbr. PBC Description / Remarks **NEC PBC** Commands Manual - AP00 card DBM DCH **D-Channel Handler** DD key Do not Disturb Key **Direct Distance Dialing** DDD DDI Direct Digital interface T1/E1 interface to public network DDOVR Do not Disturb Override Desk Console SV SuperVisor / Operator Console DeskCon Direct dialing in : not for FX and WATS DID calls **Direct Inward Dialing calls** DDI trunk (USA only) **Direct Inward System Access** Remote access to system DISA DID trunk / Direct Inward Termination PLE Permanent Line Extension(s): for limited DIT direct inward dialing: 1/more trunk(s) related to 1 station DLC **Digital Line Circuit** For Dterm, Attendant and Desk Console. Distributed Module DM Distributed Module Small **DMS DNIS** Dialed number Identification Service DOD **Direct Outward Dialing** DDO Direct Dialing Out: setting up external calls without attendant assistance DP (Rotary) Dial Pulse Pulse dialing DPC **Data Port Controller** DPC **Destination Point Code** Kind of Cluster ID; for terminating office DRS **Device Registration Server** Compare with Gatekeeper function: registering endpoints Differential Services (DiffServ) DS DSS/BLF Direct Station Select / Busy Lamp Field DSW Device Server WorX For Dterm assistant software DT **Dial Tone** DTE **Data Terminal Equipment** Digital (or IP) terminal Dterm Dterm Desktop Telephone (analog or digital) DTG Digital Tone Generator Digital Trunk Interface DTI FAC Forced Account Code **Federal Communications FCC** American regulation office Commission FD Floppy Disk FDA Forwarded - All calls Forwarded - Busy **FDB** Forwarded - No answer FDN Frame Ground FG **FGD** Feature Group D format Signalling format for ANI. Free Location Facility OIA related, Desksharing look-a-like. FLF NOT available for IPS 2000 FΡ Firmware Processor Compare with PMC FX Foreign Exchange Specific part of PSTN; US only **HDT** Hold Tone **HWT** howler tone Alarm tone ISDN channel handler ICH ICI Incoming Call Identification **ICM** Intercom **IEC** International Electro-technical Commission **ILC** ISDN line card ΙP IΡ Internet Protocol Internet Protocol **IPM** Indications per minute For flashing lamps / LEDs

**IPS** 

**IPT** 

**IPX** 

**IVS** 

Internet Protocol Server

Integrated Voice Server

Internet Protocol eXchange

IP trunk

Abbr. NEC Description Abbr. PBC Description / Remarks **NEC PBC** KF Key systems are operating directly on Key Feauture (registration) outside lines. **KTF Key Transfer Facility** OAI related. Local Area Network LAN Local Area Network LAN Least cost call routing: number analysis LCR Least Cost Routing LCCR development manner LDN Listed Directory Number LDT Loop Dial trunk Line Equipment Number LEN **EHWA** Equipment hardware Address : PIM nbr (0 ~ 7)+ Port nbr  $(00 \sim 63)$  LEN =  $(000 \sim 763)$ LT Line/Trunk MAT Maintenance Administration Terminal OMM Operation Maintenance module: PC needed in terminals mode **SETOUT** Set to Out Of Service : Out of Service / Not MB Make Busy installed situation for reset or maintenance MCI Message Center Interface Interface for Voice Mail system MEM Main Memory MFG **MFR** MF receiver / MFC receiver/sender MIB management Information Base MIC Microphone Microphone or its key MIS management Information System Major (alarm) MJ **MLDT** Melody Trunk Minor (alarm) MN MOC OM terminal window, part of MATWorX MP Main Processor Compare with CPU **MRF** Mode Reset Facility OAI related. Mode Set Feature OAI related. MSF MSG Message **NEC PBX** NEAX SOPHO NS **Network Station Number Transfer Facility** OAI related. NTF NTS Night Transfer Station Night Extension Open Application Interface CTI interface OAI **OD Trunk** ODT 2/4 wire E&M Outband Dialing Trunk ODT ONP Open Numbering Plan OPC Origional Point Code Kind of Cluster ID; for originating office OPR Operator Attendant PAD (IP) Packet Assembler / Used for TDM / IP translation Disassembler PBR Push Button Receiver DTMF receiver DTMF sender **PBSND** Push Button Sender PC Point Code **PCK** Pickup PFT Power Failure Transfer PIM Port Interface Module Shelf: comparable with CSM and PM shelves Phase Locked Oscillator PLO **PMS** Property Management System **PMS** Property Management System (in hotel environments) For example PN-8DLCC board PΝ Part Number **PNA** Phone line Network Alliance **PPS** Pulses per second Used in pulse dialing **PROTIMS** Proprietary protocol, used for building CCIS **PRT** ISDN primary rate interface trunk PS Personal Station PS Portable Station NEC wireless system QoS Quality of Service

Abbr. NEC Description Abbr. PBC Description / Remarks **NEC PBC** RAS Registration Admission Status Registration Admission Status **RBT** Ringback Tone RC Room Cutoff Ring Equivalence Number REN RLS Release **ROT** Reorder Tone **RPIM** Remote PIM Route restriction Class **RSC RST** Restricted RTP Real Time Protocol Switch Control Facility OAI related. SCF SDT Special Dial Tone Single Line Telephone SLT Analog telephone **SMDR** Station Message Detail Recording Full Detailed Call Recording **FDCR** Status Monitor Facility (Notification) OAI related. SMFN Status Monitor Facility (Request) SMFR SOC System on chip SP Soft Phone SPID Service Profile ID (ISDN) BSP-ID Basic Service Profile ID (ISDN) SPN Special Part Number **SSFM** Service Set facility Monitor OAI related. Service Set Facility Request OAI related. SSFR Service Set Tone SST Station STA STN Station TAH Trunk Appearance Hold TAS Trunk Answer Any Station Pickup incoming calls in night mode **TCF Terminal Control Facility** OAI related. (Deluxe) Travelling Class Mark TCM Time division multiplexing TDM **TDS** Time division switching Time Division Switch **TDSW** (Individual) Trunk identification Code TIC Line numbers of trunk lines **TMF** Terminal Multi-information transfer OAI related. Facility (Terminal) Mode Set Facility **TMSF** OAI related. Tone/Music source interface TNT **TRF** Transfer Time Switched **TSW** 

UAP User Application Processor UCD Uniform Call Distribution

UNP Uniform Numbering Plan (Network) numbering plan

Basic ACD. Distribution of calls based on

Other word for REN

USOC User Service Order Code
VC Voice Compression
VCT Voice CODEC circuit card

VDSL Very high data rate Digital Subscriber

Line

VM Voice Mail

VOIPVoice over IPVOIPVoice over IPWANWide Area NetworkWANWide Area Network

WATS Wide Area Telephone Service Specific part of PSTN, US only

WCS Wireless Communication System "Analog DECT"

WH White WU Wake up

ZT Zone Transceiver For Wireless system

# Dterm icon Meaning

→P Hold

R Transfer

→ Answer

Redial

△ Conf(erence)

**-**⊸ Recall

⇒ Feature

O MIC

Directory

-\_-+ -/+

? Help

**←**? Exit

# NEAX 2000 IPS Feature Programming Manual

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# INTRODUCTION

# **PURPOSE**

This manual explains the feature programming and hardware requirements for each business and hotel service feature in the NEAX 2000 IPS.

# **OUTLINE OF THIS MANUAL**

This manual consists of two chapters and three appendixes. The following paragraphs summarize Chapters 1 and 2, and Appendixes A through B.

#### CHAPTER 1 BUSINESS FEATURES

This chapter explains the programming procedure and hardware requirements for Business Features in this system.

### CHAPTER 2 HOTEL FEATURES

This chapter explains the system outline, system capacity, system specifications, system programming and hardware requirements for the Hotel System.

#### APPENDIX A TERMINAL KEY ASSIGNMENT

This appendix contains the key number layout of each D<sup>term</sup>, DESKCON, DSS Console, and Add-On Module.

Refer to this appendix to assign a key function by CM90 or CM97 in Chapter 1 and Chapter 2.

### APPENDIX B CHARACTER CODE TABLE

This appendix contains the character code table to set a station name displayed on D<sup>term</sup> or Attendant Console.

## **TERMS IN THIS MANUAL**

# **PBX System Designation**

PBX system is designated as "PBX" or "system" usually.

When we must draw a clear line between the PBX systems, they are designated as follows.

2000 IPS: NEAX 2000 IPS INTERNET PROTOCOL SERVER

2400 IPX: NEAX 2400 IPX Internet Protocol eXchange

 $\begin{array}{ll} {\rm IPS^{DMR}} & : {\rm NEAX~IPS^{DMR}~INTERNET~PROTOCOL~SERVER^{DMR}} \\ {\rm IPS^{DM}} & : {\rm NEAX~IPS^{DM}~INTERNET~PROTOCOL~SERVER^{DM}} \end{array}$ 

### **Terminal Name**

The following IP terminals are designated as "D<sup>term</sup>IP" usually, unless we need to mention the type of terminal in particular.

D<sup>term</sup>IP (IP Adapter Type)

D<sup>term</sup>IP (IP Bundled Type)

DtermIP INASET

D<sup>term</sup>SP20

D<sup>term</sup>SP30

**NOTE:**  $D^{term}75$  (Series E)/ $D^{term}85$  (Series i) terminal can be used as the IP terminal by attaching the IP Adapter (IP Enabled  $D^{term}$ ). This terminal provides users with all features currently available in  $D^{term}IP$ .

## REFERENCE MANUAL

For details of the service feature, operating procedure and the service conditions of the features which are mentioned in this manual, refer to the Business/Hotel/Data Features and Specifications.

For details of the system description of NEAX 2000 IPS system, refer to the System Manual.

For details of the description of each command, refer to the Command Manual.

For the features which are not mentioned in this manual, refer to the individual manuals listed below.

#### Business/Hotel/Data Features and Specifications:

This contains the Business/Hospitality Data Features and Specifications which explains each service feature, operating procedure, and service conditions.

#### System Manual:

Contains the system description, hardware installation procedure and the programming procedure for the NEAX 2000 IPS System.

#### Command Manual:

Contains the Customer Administration Terminal (CAT) operation, command functions, data required for programming the system and the Resident System Program.

#### AD-8 System Manual:

Contains the hardware installation procedure and the programming procedure for the NEAXMail AD-8 Voice Mail System.

#### IM-16 System Manual:

Contains the hardware installation procedure and the programming procedure for the NEAXMail IM-16 Voice Mail System.

#### **CCIS System Manual:**

Contains the system description, hardware installation procedure, programming procedure and the operation test procedure for the CCIS System.

#### ISDN System Manual:

Contains the system description, hardware installation procedure, programming procedure and the operation test procedure for the ISDN System.

#### Maintenance Manual:

Contains the programming procedure for maintenance service features and the recommended troubleshooting procedure.

### OAI System Manual:

Contains the system description, hardware installation procedure, programming procedure and troubleshooting procedure for Open Application Interface (OAI).

#### Q-SIG System Manual:

Contains the system description, hardware installation procedure, and programming procedure for the Q-SIG System.

### Remote PIM System Manual:

Contains the system description, hardware installation procedure, and troubleshooting procedure for the TDM based Remote PIM System.

**NOTE:** *TDM based Remote PIM System is not available from Series 3200 R6.2.* 

### WCS System Manual:

Contains the system description, hardware installation procedure, programming procedure for the Wireless (WCS) System.

### NEAX IPS<sup>DM</sup> Hardware Installation Guide:

Contains the general information and installation procedure for the NEAX IPS<sup>DM</sup> (Internet Protocol Server Distributed Model)/NEAX IPS<sup>DMR</sup> (Internet Protocol Server Distributed Model Remote) System.

## **HOW TO READ THIS MANUAL**

Chapter 1 and Chapter 2 explains the feature programming for each service feature about the following items.

#### **PROGRAMMING**

This section explains the programming procedure for each service feature.

The meanings of (1), (2) and marking are as follows.

(1) : 1st data

(2) : 2nd data

Initial data; With the system data clear command (CM00, CM01), the data with this marking is automatically set for each command.

INITIAL ) : A reset of the MP card is required after data setting.

Press SW1 switch on the MP card.

(AP00 INITIAL) : A reset of the AP00 card is required after data setting.

Set the Make Busy switch to UP and then DOWN.

CFT INITIAL ) : A reset of the CFTC card is required after data setting.

Set the Make Busy switch to UP and then DOWN.

DTI INITIAL ) : A reset of the DTI card is required after data setting.

Set the Make Busy switch to UP and then DOWN.

CIR INITIAL ) : A reset of the CIR card is required after data setting.

Set the Make Busy switch to UP and then DOWN.

OFF LINE : Command with this marking can be used only under Off-Line mode of the MP card.

To set Off-Line mode,

(1) Set SW3 on the MP card to "2" or "3".

(2) Press SW1 on the MP card.

AP OFF LINE : Command with this marking can be used only under Off-Line mode of the AP00

card.

#### HARDWARE REQUIRED

In this section, required hardware for each service feature is listed, except the following:

Single line telephone set and interface card (LC card) Central Office Trunk card (COT card) Attendant Console and interface card

For Direct Digital Interface, Message Center Interface (MCI), and Station Message Detail Recording (SM-DR), the following sections explain the system for further details.

SYSTEM OUTLINE
DTI\*
PLO\*
SYSTEM CAPACITY
SYSTEM OPERATION\*\*
TIME SLOT ALLOCATION\*
DTI SPECIFICATIONS\*
PROGRAMMING SUMMARY\*\*\*

\* : Direct Digital Interface only

\*\* : MCI only

\*\*\*: SMDR only

# **AVAILABLE VALUE OF FP/AP NUMBER**

For the setting of LEN by CM14, the range of the FP/AP number that must be assigned to the 1st data of CM14 is valid by the software version you use.

Assign the correct FP/AP number to each FP/AP, referring to the tables below.

### [For Series 3200 R6.1 software or before]

x: Available -: Not available

FP/AP No. FP/AP TYPE	00	01-03	04-15	16-19	20-31	32-59	60-63
FP card (PN-CP15)	_	×	_	×	_	_	_
MP built-in FP	×	_	_	_	_	_	_
DAIA/DAID card	_	×	_	×	_	_	_
Virtual FP for D <sup>term</sup> IP	_	×	_	×	_	_	_
AP card	_	_	×	_	×	_	_
Virtual AP (Virtual IPT)	_	_	×	_	×	_	_

### [For Series 3200 R6.2 software]

×: Available -: Not available

FP/AP No. FP/AP TYPE	00	01-03	04-15	16-19	20-31	32-59	60-63
FP card (PN-CP15)	_	×	_	×	_	_	_
MP built-in FP	×	_	_	_	_	_	_
Virtual FP for D <sup>term</sup> IP	_	×	×	×	×	_	_
AP card	_	_	×	_	×	_	_
Virtual AP (Virtual IPT)	_	_	×	_	×	_	_

# [For Series 3300 software]

×/Δ: Available **NOTE** —: Not available

FP/AP No. FP/AP TYPE	00	01-03	04-15	16-19	20-31	32-59	60-63
FP card (PN-CP15)	_	×	_	×	_	_	_
MP built-in FP	×	_	_	_	_	_	_
Virtual FP for D <sup>term</sup> IP	_	×	Δ	×	Δ	Δ	_
AP card	_	_	×	_	×	_	_
Virtual AP (Virtual IPT/ Virtual CSH [For PHS])	-	_	Δ	_	Δ	×	_
Virtual FP for PS Station	_	Δ	_	_	_	_	×

**NOTE:** Although FP/AP number marked with " $\Delta$ " is available to use, we recommend FP/AP number marked with " $\times$ ".

### [For Series 3400 software or later]

 $\times /\Delta$ : Available **NOTE 1** —: Not available

FP/AP No. FP/AP TYPE	00	01-03	04-15	16-19	20-31	32-59	60-63
FP card (PN-CP15)	_	×	_	×	_	_	_
MP built-in FP	×	_	_	_	_	_	_
Virtual FP for D <sup>term</sup> IP	_	×	Δ	×	Δ	Δ	_
AP card	<del>_</del>	_	×	_	×	_	_
Virtual AP (Virtual IPT/ Virtual CSH for IP-CS [For PHS]/Virtual CSH for WLAN) NOTE 3	-	_	Δ	_	Δ	×	-
Virtual FP for PS Station/ Virtual FP for WLAN Station NOTE 3	_	Δ	_	_	_	× NOTE 2	×

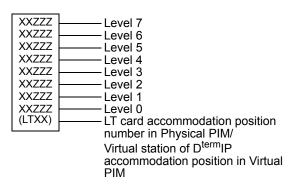
- **NOTE 1:** Although FP/AP number marked with " $\Delta$ " is available to use, we recommend FP/AP number marked with " $\times$ ".
- **NOTE 2:** We recommend the setting of the FP number (60-63), when providing 256 PS stations/WLAN stations or less and setting of the FP number (56-63), when providing 257 PS stations/WLAN stations or more.
- **NOTE 3:** Virtual CSH for WLAN and Virtual FP for WLAN Station are available for Series 3500 software or later.

# **LINE EQUIPMENT NUMBER (LEN)**

The system allows all the CM10 setting data to be also assigned by CM14 from Series 3200 R6.2. When your system contains Series 3200 R6.2 or later software, we recommend you to assign station number, trunk number and card number by CM14.

This manual explains the feature programming using CM10. For the feature programming using CM14, follow the LEN assignment shown below.

• LEN assignment by CM14



XX : FP Number (00-31)
ZZZ: Port Number of Physical PIM/
Virtual PIM (000-127)
[For Series 3200 R6.2 software or before]

XX : FP Number (00-59)
ZZZ: Port Number of Physical PIM/
Virtual PIM (000-127)
[For Series 3300 software or later]

# CONDITIONS ON CARD/TERMINAL NUMBER ASSIGNMENT BY CM14

In the Series 3200 R6.2 or later software, the card/terminal number can be assigned by CM14 same as CM10. But, you must consider the following conditions on the card/terminal number assignment.

- (1) Card Number of AMP Trunk (PN-2AMP) <C100-C163>
  - (a) The card number should be assigned to the FP No. 00-03 as follows.

For FP No. 00: C100-C115 For FP No. 01: C116-C131 For FP No. 02: C132-C147 For FP No. 03: C148-C163

- (b) Do not assign the card number to the other FP No. than above (a).
- (c) This data is not effective for a remote site of Remote PIM over IP system.
- (2) DSS Console number <E100-E131>
  - (a) For the FP No. 00-03, the DSS Console number should be assigned as follows.

### [Series 3400 R9.1 software or before]

For FP No. 00: E100-E107 For FP No. 01: E108-E115 For FP No. 02: E116-E123 For FP No. 03: E124-E131

(b) For the FP No. 00-03 of MP built-in FP/FP card of Main Site and MP built-in FP of Remote Site, the DSS Console number (E100-E131) can be assigned without limit as shown above (a). [Series 3500 software or later]

# (a) For the other ED No. then shove (a) the DSS Conse

- (c) For the other FP No. than above (a), the DSS Console number (E100-E131) can be assigned without limit as shown above (a).
- (d) This data is effective for a remote site of Remote PIM over IP system.
- (e) The same number (the last two digits of the data) should not be used for both DSS Console number (E100-E131) and Add-On Module number (EC00-EC31).

- (3) Card Number of PB receiver (PN-8RST) <E201-E215>
  - (a) The card number should be assigned to the FP No. 00-03 as follows.

For FP No. 00: E201-E203

For FP No. 01: E204-E207

For FP No. 02: E208-E211

For FP No. 03: E212-E215

- (b) For the other FP No. than above (a), the card number (E201-E215) can be assigned to without limit as shown above (a).
- (c) The card numbers (E200, E216-E230) are used for MP built-in DTMF Receiver. For details, refer to PB (DTMF) RECEIVER NUMBER. Page 14
- (4) Card Number of External Equipment Interface (PN-DK00) <E800-E831>
  - (a) The card number should be assigned to the FP No. 00-03 as follows.

For FP No. 00: E800-E807

For FP No. 01: E808-E815

For FP No. 02: E816-E823

For FP No. 03: E824-E831

- (b) Do not assign the card number to the other FP No. than above (a).
- (c) This data is not effective for a remote site of Remote PIM over IP system.
- (d) Circuit No. 3 of E831 is used for built-in External Equipment Interface of MP card by setting CM44.
- (5) Card Number of External Key Interface (PN-DK00) <E900-E963>
  - (a) The card number should be assigned to the FP No. 00-03 as follows.

For FP No. 00: E900-E915

For FP No. 01: E916-E931

For FP No. 02: E932-E947

For FP No. 03: E948-E963

- (b) Do not assign the card number to the other FP No. than above (a).
- (c) This data is not effective for a remote site of Remote PIM over IP system.
- (d) Circuit No. 3 of E963 is used for built-in External Key Interface of MP card by setting CM61.

- (6) Card Number of Digital Announcement Trunk (PN-2DATA/4DATA) <EB002-EB127>
  - (a) The card number should be assigned to the FP No. 00-03 as follows.

For FP No. 00: EB002-EB031

For FP No. 01: EB032-EB063

For FP No. 02: EB064-EB095

For FP No. 03: EB096-EB127

- (b) Do not assign the card number to the other FP No. than above (a).
- (c) This data is not effective for a remote site of Remote PIM over IP system.
- (d) The card numbers (EB000 and EB001) are dedicated to built-in Digital Announcement Trunk of MP card.
- (7) Add-On Module number <EC00-EC31>
  - (a) For the FP No. 00-03, the Add-On Module number should be assigned as follows.

For FP No. 00: EC00-EC07

For FP No. 01: EC08-EC15

For FP No. 02: EC16-EC23

For FP No. 03: EC24-EC31

- (b) For the other FP No. than above (a), the Add-On Module number (EC00-EC31) can be assigned without limit as shown above (a).
- (c) This data is effective for a remote site of Remote PIM over IP system.
- (d) The same number (the last two digits of the data) should not be used for both DSS Console number (E100-E131) and Add-On Module number (EC00-EC31).

# PB (DTMF) RECEIVER NUMBER

A system with Series 3200 R6.2 software provides the MP built-in PB (DTMF) Receiver for a Remote Site of Remote PIM over IP feature. For the Series 3200 R6.2 or later software, the DTMF Receiver card number is as follows.

• MP built-in DTMF Receiver in Main Site : E200 (This number is also used when a system is not

provided Remote PIM over IP feature.)

• 8RST card in Main Site : E201-E215 (This number is also used when a system

is not provided Remote PIM over IP feature.)

• MP built-in DTMF Receiver in Remote Site: E216-E230 (E216-E230 matches Remote Site number

01-15)

[For Series 3200 R6.2 software]

E216-E245 (E216-E245 matches Remote Site number

01-30)

[For Series 3300 software or later]

**NOTE:** When a system is not provided Remote PIM over IP feature or a system is a Main Site of Remote PIM over IP feature, you can assign maximum four DTMF Receiver card numbers per FP (includes the number for MP built-in DTMF Receiver). For the Remote Site, MP built-in DTMF Receiver can be used per Remote Site.

For CM45 setting data, DTMF Receiver number in Series 3200 R6.2 or later is as shown below.

- CM45 Y=0 (Make Busy)
  - (1) XX Z (DTMF Receiver No.)

XX: 00-30 (MP Built-in DTMF Receiver/8RST Card No.)

[For Series 3200 R6.2 software]

00-45 (MP Built-in DTMF Receiver/8RST Card No.)

[For Series 3300 software or later]

Z : 0-3 (Circuit No.)

- (2) 0 : Make busy
  - 1**◄**: In service
- CM45 Y=1 (DTMF Receiver for incoming call from Tie Line/DID)
  - (1) XX Z (DTMF Receiver No.)

XX: 00-30 (MP Built-in DTMF Receiver/8RST Card No.)

[For Series 3200 R6.2 software]

00-45 (MP Built-in DTMF Receiver/8RST Card No.)

[For Series 3300 software or later]

- Z : 0-3 (Circuit No.)
- (2) 0 : Only for incoming call from Tie Line/DID
  - 1◀: For both DTMF station and Tie Line/DID

- CM45 Y=2 (DTMF Receiver for Automated Attendant only)
  - (1) XX Z (DTMF Receiver No.)

XX: 00-30 (MP Built-in DTMF Receiver/8RST Card No.)

[For Series 3200 R6.2 software]

00-45 (MP Built-in DTMF Receiver/8RST Card No.)

[For Series 3300 software or later]

- Z : 0-3 (Circuit No.)
- (2) 0 : Only for Automated Attendant
  - 1◀: For both DTMF station and Tie Line/DID/Automated Attendant

## **PRECAUTIONS**

## **System Data Backup**

### **CAUTION**

• If you operate as follows without system data backup after system data setting or service memory setting (registration of the features such as "Call Forwarding" and "Speed Calling [Speed Dialing]" from a station), the data that has been set is invalid.

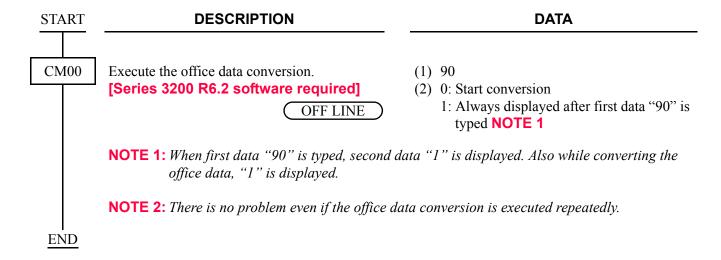
You must execute the system data backup before the following operations.

- -Turning Off the system
- -System Initialization (reset of MP card)
- -Changing the MP card to Off-Line Mode
- -Changing the MP card to On-Line Mode after system data setting under Off-Line Mode
- You can execute the system data backup by the following two ways.
  - -Executing the system data backup once a day at the time set by CM43 Y=5>00 (If no data is set, the default setting is 3:00 a.m.)
  - -Executing the system data backup from MAT/CAT by CMEC Y=6>0:0
- Do not reset the MP card while "SYSD" lamp on the MP card is flashing.

#### Office Data Conversion

When upgrading the software of the system from Series 3300 or before to Series 3400 or later, the office data conversion by CM00>90 is required. The office data that has been converted and the office data in Series 3400 software or later are incompatible with the software of Series 3300 or before. We recommend to execute the system data backup before the office data conversion.

**NOTE:** When upgrading the software in Retrofit system to Series 3400 or later, convert the office data using "Office Data Converter" in the MATWorX CD-ROM and then execute the office data conversion by CM00>90.



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## **CHAPTER 1**

## **BUSINESS FEATURES**

This chapter explains the programming procedure and hardware requirements for Business Features in this system.

Explanations are given in alphabetical order of the feature names except the features on the next page.

The following features require no programming.

- Alarm Indications
- Attendant Console
  - Attendant Called/Calling Number
  - Attendant Lamp Check
  - Attendant Training Jacks
  - Audible Indication Control
  - Call Processing Indication
  - Time Display
- · Attendant Lockout
- Elapsed Call Timer
- Feature Activation from Secondary Extension
- · Handsfree Answerback
- Handsfree Dialing and Monitoring
- · Non-exclusive Hold
- Night Service
  - Day/Night Mode Change by Attendant Console

- Maintenance Administration Terminal (MAT)
  - Battery Release Control
  - Configuration Report
- Power Failure Transfer
- Proprietary Multiline Terminal
  - Called Station Status Display
  - Handsfree Unit
  - I-Hold/I-Use Indication
  - Microphone Control
- · Reserve Power
- Resident System Program
- · Voice Mail Private Password

For the following features, refer to the NEAX 2000 IPS manuals mentioned below.

Refer to the System Manual:

- Automatic Program Download for IP Enabled D<sup>term</sup>/D<sup>term</sup>IP
- · Bandwidth Control
- Call Forwarding-Logout (D<sup>term</sup>IP)
- D<sup>term</sup>IP

- FAX over IP
- IP Enabled D<sup>term</sup>
- Modem over IP
- SNMP
- VoIP

Refer to the D<sup>term</sup> Assistant User Guide:

D<sup>term</sup> Assistant

Refer to the Open Application Interface (OAI) System Manual:

• Open Application Interface (OAI)

Refer to the Q-SIG System Manual:

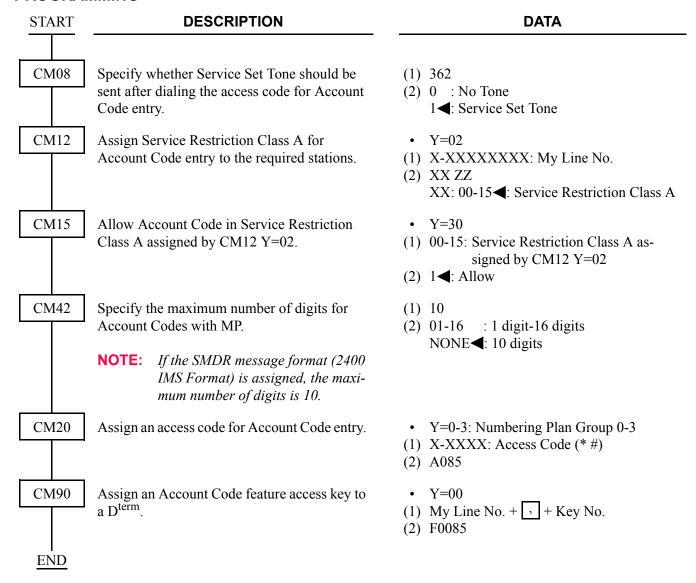
Q-SIG Circuit Switched Basic Call-ETSI Version

Refer to the Remote PIM System Manual:

• TDM based Remote PIM

## **ACCOUNT CODE**

#### **PROGRAMMING**



#### HARDWARE REQUIRED

SMDR (AP00 card and cables)

## **ADD-ON MODULE**

### **PROGRAMMING**

START	DESCRIPTION	DATA
CM10	Assign the Add-On Module number to its associated LEN.  NOTE: When the data assignment of both DSS Console and Add-On Module are required, the same number (the last two digits of the data) cannot be used.	(1) 000-763: LEN (2) EC00-EC31: Add-On Module No. For PIM0/1: EC00-EC07 For PIM2/3: EC08-EC15 For PIM4/5: EC16-EC23 For PIM6/7: EC24-EC31 NOTE
CM14	Assign the Add-On Module number to its associated LEN.  [Series 3200 R6.2 software required]  NOTE: When the data assignment of both DSS Console and Add-On Module are required, the same number (the last two digits of the data) cannot be used.	<ol> <li>XX ZZZ: LEN         XX : 00-59: FP No.         ZZZ: 000-127: Port No.</li> <li>EC00-EC31 : Add-On Module No.         For FP No. 00: EC00-EC07         For FP No. 01: EC08-EC15         For FP No. 02: EC16-EC23         For FP No. 03: EC24-EC31 NOTE</li> </ol>
CM98	Assign the D <sup>term</sup> which is associated with the Add-On Module.  NOTE: The D <sup>term</sup> and the Add-On Module must be in the same PIM.	<ul> <li>Y=0</li> <li>(1) 00-31: Last two digits of Add-On Module No.</li></ul>
	Assign the Service Restriction Class for the accommodation of Single-Line Telephone to D <sup>term</sup> . (Assignment for Single-Line Telephone only).	<ul><li>Y=05</li><li>(1) X-XXXXXXXXX: Station No.</li><li>(2) 0: Accommodated</li></ul>
CM90	Assign the station and trunk numbers to the keys on each Add-On Module.  NOTE: Single-Line, Virtual Line or My Line can be assigned on Add-On Module.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Add-On Module Key No. (30-54)</li> <li>(2) X-XXXXXXXXX: Station No. NOTE DXXX XXX: 000-255 (Trunk No.)</li> </ul>
A		



#### **DESCRIPTION**

#### **DATA**

CM90

Assign the Automatic/Manual/Dial Intercom key to each Add-On Module, if required. For details, refer to INTERCOM.

Assign the Station Speed Dialing to the keys on each Add-On Module, if required. For details, refer to STATION SPEED DIALING.

Specify the tone ringer enabled on call termination for Day mode to each line/trunk key on each Add-On Module, if required.

Assign the Delayed Ringing feature to each line/trunk key on an Add-On Module, if required.

NOTE: Delayed Ringing can be assigned to the first 16 line/trunk keys (Key No. 30-45).

• Y=00

(1) My Line No. + + + Add-On Module Key No. (30-54)

(2) A000-A031, A100-A131:
Automatic Intercom No.
A200-A700, A201-A701...A224-A724:
Manual Intercom No.
B000-B900, B001-B901...B024-B924:
Dial Intercom No.

• Y=00

(1) My Line No. + + + Add-On Module Key No. (30-89)

(2) F11XX XX: 00-99: Station Speed Dialing 00-99

• Y=01

(1) My Line No. + + + Add-On Module Key No. (30-54)

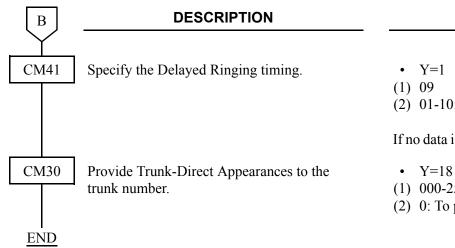
(2) 0 : Disabled 1◀: Enabled

• Y=03

(1) My Line No. + + + Add-On Module Key No. (30-45) **NOTE** 

(2) 0: Delayed Ringing

В



- (1) 000-255: Trunk No.
- (2) 0: To provide

### HARDWARE REQUIRED

**DSS** Console DLC card

# **DATA**

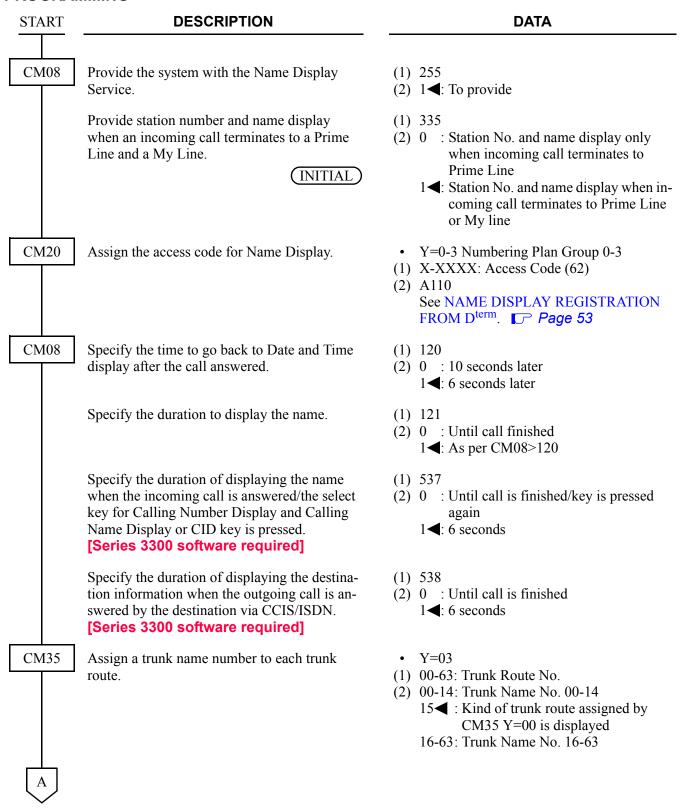
- Y=1
- (1) 09
- (2) 01-10: 2-20 seconds

(2 second increments)

If no data is set, the default setting is 10 seconds.

## **ALPHANUMERIC DISPLAY**

#### **PROGRAMMING**



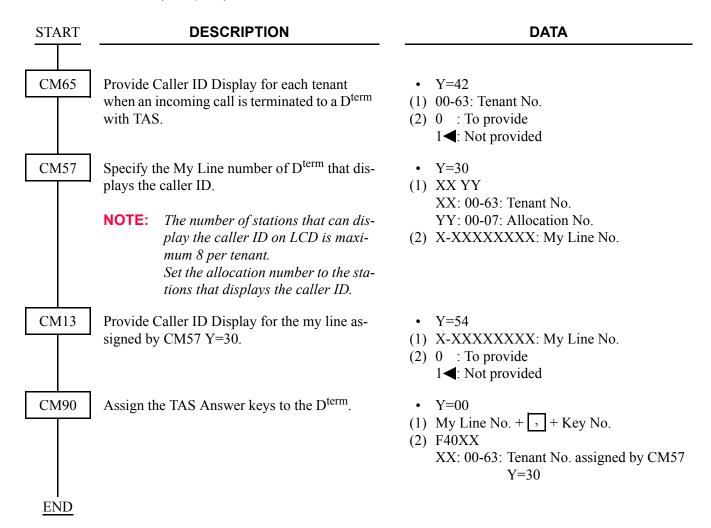
A	DESCRIPTION	DATA
CM77	Enter the desired station user's name to each station number by CM77 Y=0 or CM77 Y=1.	<ul> <li>Y=0 By Character Code</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) Character Code 20-7F (Maximum 32 digits)</li> <li>See APPENDIX B: Character Code Table.</li> <li>Page B2</li> </ul>
		<ul> <li>Y=1 By Character</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) A-Z, 0-9: Character (Maximum 16 characters)</li> </ul>
	Assign the desired trunk name to each trunk route by CM77 Y=2 or CM77 Y=3.	<ul> <li>Y=2 By Character Code</li> <li>(1) 00-14, 16-63: Trunk Name No. assigned by CM35 Y=03</li> <li>(2) Character Code 20-7F (Maximum 8 digits) See APPENDIX B: Character Code Table.</li> <li>Page B2</li> </ul>
		<ul> <li>Y=3 By Character</li> <li>(1) 00-14, 16-63: Trunk Name No. assigned by CM35 Y=03</li> <li>(2) A-Z, 0-9: Character (Maximum 4 characters)</li> </ul>
<u>END</u>		

- **NOTE 1:** The maximum number of stations that can be provided with the user's name display is 512. The maximum number of characters per name is eight, including spaces. The Maintenance Administration Terminal (MAT) or Customer Administration Terminal (CAT) can be used to register or change a name. A  $D^{term}$  can register or change the name assignment of that individual  $D^{term}$ .
- **NOTE 2:** *User names can be assigned to stations that do not have an LCD.*
- NOTE 3: The trunk name display is provided on a trunk-route basis. The maximum amount of characters in the trunk name display is four. The maximum number of trunk routes assignable is 16. The MAT or CAT can be used to register or change a trunk name display.
- **NOTE 4:** There are two ways to change a name that is currently programmed. (1) by overwriting with a new name, or (2) by inserting a blank space as the first character to cancel the existing name.

To display the Caller ID for each  $D^{term}$  before answer when an incoming call is terminated with TAS, do the following programming.

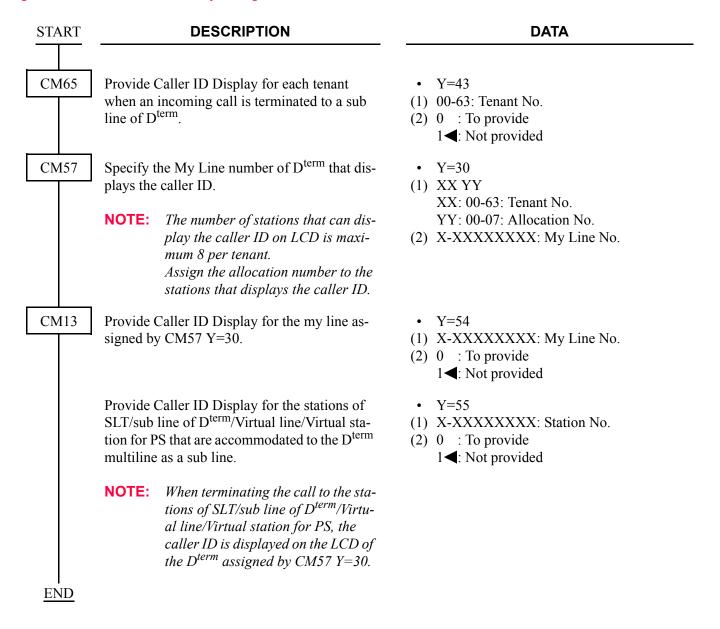
### [Series 3600 software required]

**NOTE:** This programming is effective only when CM76 Y=01-04 is set to D03 (Trunk Line [Direct] Appearance + TAS)/D13 (TAS), or CM30 Y=02/04/40/41 is set to 03 (Trunk Line [Direct] Appearance + TAS)/13 (TAS).



To display the Caller ID for each D<sup>term</sup> before answer when an incoming call is terminated to a sub line, do the following programming.

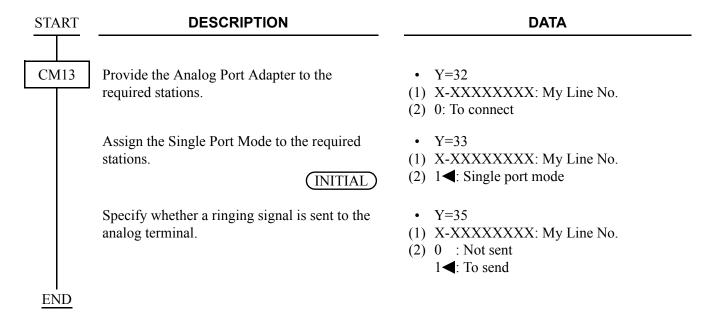
#### [Series 3600 software required]



## **ANALOG PORT ADAPTER**

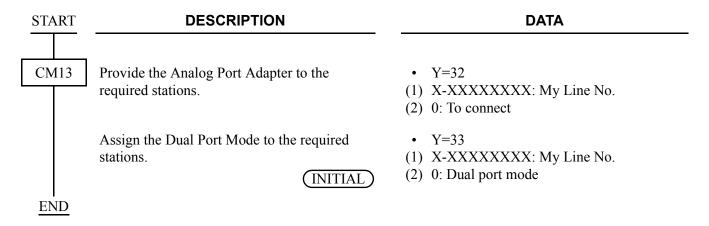
#### **PROGRAMMING**

To assign the Single Port Mode:



To assign the Dual Port Mode:

(1) Data Assignment for D<sup>term</sup> accommodates the Analog Port Adapter



Station No.

### (2) Data Assignment for Analog Terminal connected to the Analog Port Adapter

START

#### **DESCRIPTION**

#### DATA

(2) FX-FXXXXXXXX: Analog Terminal

CM10

NOTE:

Assign an analog terminal station number to the required LEN.

required LEN.

The analog terminal station number must be assigned to the following LEN.

Analog Terminal LEN=D<sup>term</sup> LEN + 8

For example, when the DLC card is mounted on LT01 slot; For D<sup>term</sup> LEN: 008-015

For Analog Terminal LEN: 016-023\*

\*LT02 slot must be vacant.

т

Assignment Example:

CM10 LEN 000=F 200 for D<sup>term</sup> Primary Extension

CM10 LEN 008=F 300 for Analog Terminal

If level 0 of the LEN is used for the D<sup>term</sup>, the adjacent level 0 must be used.

CM14

Assign an analog terminal station number to the required LEN.

[Series 3200 R6.2 software required]

**NOTE:** The analog terminal station number must be assigned to the following

LEN.

Analog Terminal LEN=D<sup>term</sup> LEN + 8.

For example, when the DLC card is mounted on LT01 slot;

For D<sup>term</sup> LEN: 00008-00015 For Analog Terminal LEN:

00016-00023\*

\*LT02 slot must be vacant.

(1) XX ZZZ: LEN

(1) 000-763: LEN

XX: 00-59: FP No.

ZZZ: 000-127: Port No.

(2) FX-FXXXXXXXX: Analog Terminal Station No.

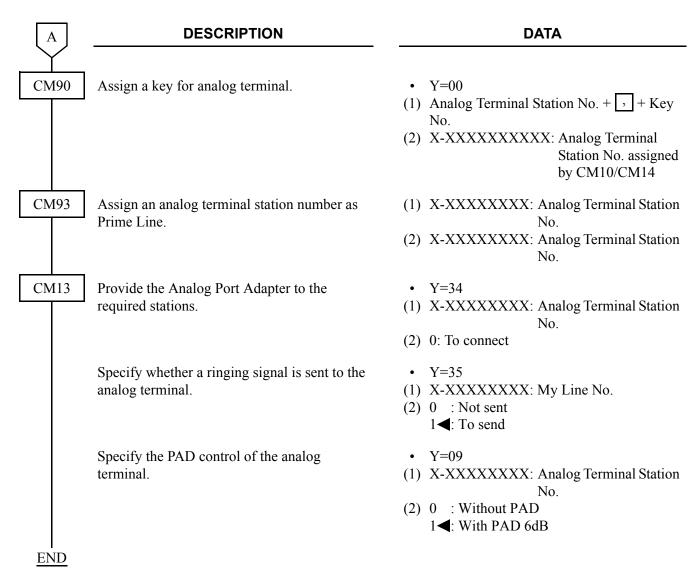
Assignment Example:

CM14 LEN 00000=F 200 for D<sup>term</sup> Primary Extension

CM14 LEN 00008=F 300 for Analog Terminal

If level 0 of the LEN is used for the D<sup>term</sup>, the adjacent level 0 must be used.

A



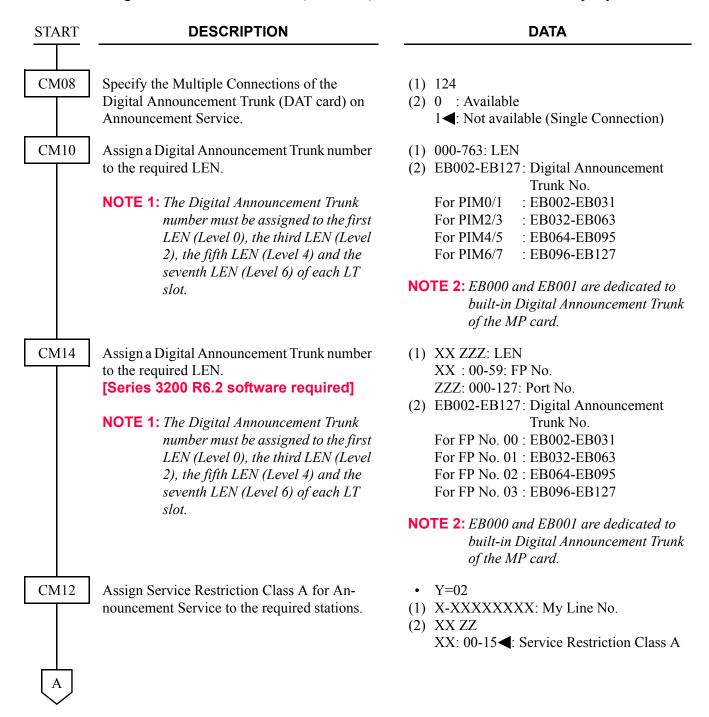
#### HARDWARE REQUIRED

Analog Port Adapter

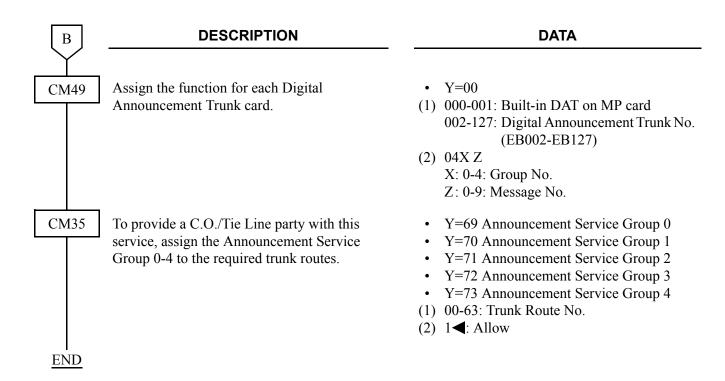
## **ANNOUNCEMENT SERVICE**

#### **PROGRAMMING**

To access the Digital Announcement Trunk (DAT card) from a station or C.O./Tie Line party:



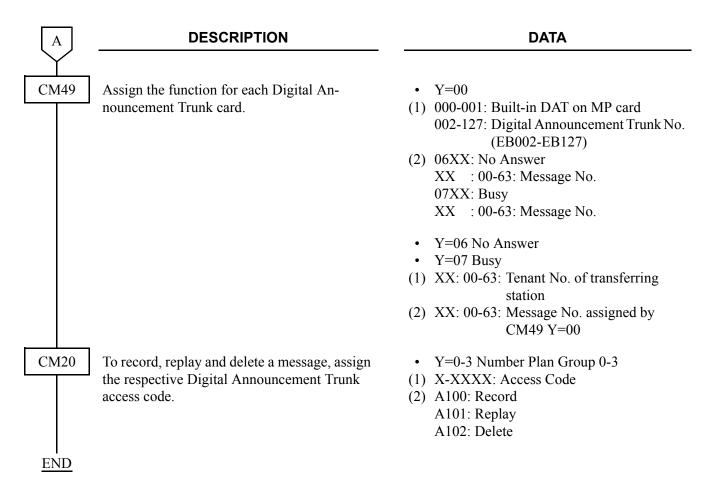
A	DESCRIPTION	DATA
CM15	Allow Announcement Service in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=34 Announcement Service Group 0 (Replay)</li> <li>Y=35 Announcement Service Group 1 (Replay)</li> <li>Y=36 Announcement Service Group 2 (Replay)</li> <li>Y=37 Announcement Service Group 3 (Replay)</li> <li>Y=38 Announcement Service Group 4 (Replay)</li> <li>Y=39 Announcement Service Group 0-4 (Record)</li> <li>00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>1 &lt; : Allow</li> </ul>
CM20	Assign access codes for Announcement Service.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A103: Announcement Service Group 0-4 (Record)</li> <li>A104: Announcement Service Group 0 (Replay)</li> <li>A105: Announcement Service Group 1 (Replay)</li> <li>A106: Announcement Service Group 2 (Replay)</li> <li>A107: Announcement Service Group 3 (Replay)</li> <li>A108: Announcement Service Group 4 (Replay)</li> <li>A109: Announcement Service Group 0-4 (Delete)</li> </ul>
CM41	When Multiple Connections are provided (CM08>124=0), specify the duration of message replay for the Announcement Service.	<ul> <li>Y=0</li> <li>(1) 53</li> <li>(2) 01-99: 4-396 seconds</li></ul>



- **NOTE 1:** A maximum of five different announcements can be accessed. There is a limit of 10 Digital Announcement Trunk Circuit for each of the five different announcements. When recording an announcement, each Digital Announcement Trunk Circuit must be recorded individually.
- **NOTE 2:** Each time a station is connected to a Digital Announcement Trunk Circuit, the message will be repeated three times. The station will then be disconnected.
- **NOTE 3:** For the single connection of a Digital Announcement Trunk Circuit, the duration of an announcement is limited to 120 seconds.
- **NOTE 4:** For the multi-connection of a Digital Announcement Trunk Circuit, the duration of replay for an announcement is programmable from 4 to 396 seconds.

To provide a voice message when an incoming C.O. line/Tie line call has been transferred and encounters a busy or no answer condition:

START	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN.  NOTE 1: The Digital Announcement Trunk Circuit number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM0/1 : EB002-EB031 For PIM2/3 : EB032-EB063 For PIM4/5 : EB064-EB095 For PIM6/7 : EB096-EB127  NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.
CM14	Assign a Digital Announcement Trunk card number to the required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The Digital Announcement Trunk  Circuit number must be assigned to the first LEN (Level 0), the third  LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN XX : 00-59: FP No. ZZZ: 000-127: Port No.</li> <li>(2) EB002-EB127: Digital Announcement Trunk Card No. For FP No. 00 : EB002-EB031 For FP No. 01 : EB032-EB063 For FP No. 02 : EB064-EB095 For FP No. 03 : EB096-EB127</li> <li>NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk</li> </ul>
CM12	Assign Service Restriction Class A for Digital Announcement Trunk Access (Record/Replay/Delete).	of the MP card.  • Y=02 (1) X-XXXXXXXXX: Station No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A
CM15	Allow Digital Announcement Trunk Access in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=33</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>
CM65	Assign the feature for a voice message connection to a transferred trunk when the transferred destination does not answer or the transferred destination is busy to the required tenant.	<ul> <li>Y=50 No Answer</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0</li> <li>Y=51 Busy</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0</li> </ul>



**NOTE:** Announcement Service can be used to provide a voice message when an incoming C.O. line/Tie line call has been transferred and encounters a busy or no answer condition. After the voice message is given, normal call processing continues.

- This application can be programmed on a tenant basis.
- Only one (1) message of up to the following seconds can be recorded on an individual Digital Announcement Trunk Circuit.

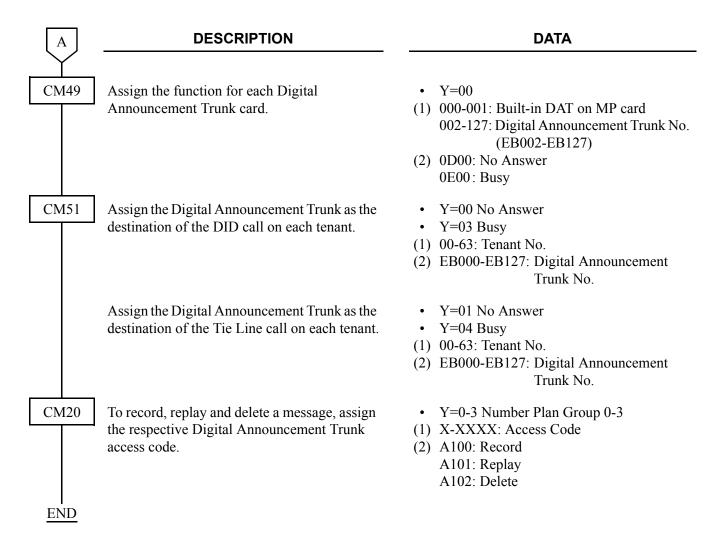
Built-in DAT on MP: 120 seconds

4DAT card: 120 seconds

- In this application, a minimum of two digital announcement Trunk Circuits is needed, one for busy condition, and one for no answer.
- More than one Digital Announcement Trunk Circuit can be used, depending on traffic conditions.
- System programming can be set to, wait until circuits become free or immediately follow preprogrammed normal call handling, if a busy condition is encountered.
- Digital Announcement Trunk Circuits can be shared among tenants.
- This feature does not function on Attendant transferred calls.

To provide a voice message when an incoming DID line/Tie line call has been terminated to a station and encounters a busy or no answer condition:

START	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN.  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM0/1 : EB002-EB031 For PIM2/3 : EB032-EB063 For PIM4/5 : EB064-EB095 For PIM6/7 : EB096-EB127  NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.
CM14	Assign a Digital Announcement Trunk card number to the required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN XX : 00-59: FP No. ZZZ: 000-127: Port No.</li> <li>(2) EB002-EB127: Digital Announcement Trunk Card No. For FP No. 00: EB002-EB031 For FP No. 01: EB032-EB063 For FP No. 02: EB064-EB095 For FP No. 03: EB096-EB127</li> <li>NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.</li> </ul>
CM12	Assign Service Restriction Class A for Digital Announcement Trunk Access (Record/Replay/Delete).	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15◀: Service Restriction Class A</li> </ul>
CM15	Allow Digital Announcement Trunk Access in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=33</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>
CM41	Specify the transferred timing when an incoming DID Line/Tie Line call encounters a no answer condition.	<ul> <li>Y=0</li> <li>(1) 01</li> <li>(2) 01-30: 4-120 seconds</li></ul>



**NOTE:** Announcement Service can be used to provide a voice message when an incoming DID line/Tie line call has been terminated to a station and encounters a busy or no answer condition. After the voice message is given, normal call processing continues.

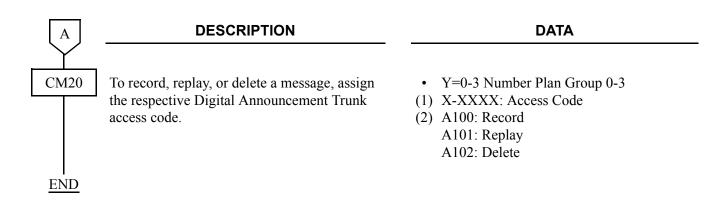
- This application can be programmed on a tenant basis.
- Only one (1) message of up to the following seconds can be recorded on an individual Digital Announcement Trunk Circuit.

Built-in DAT on MP: 120 seconds

4DAT card: 120 seconds

To provide an Internal Recorded Message from a Digital Announcement Trunk (DAT card) in place of Music On Hold:

START	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN.  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM0/1 : EB002-EB031 For PIM2/3 : EB032-EB063 For PIM4/5 : EB064-EB095 For PIM6/7 : EB096-EB127  NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk
CM14	Assign a Digital Announcement Trunk card number to the required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	of the MP card.  (1) XX ZZZ: LEN XX: 00-59: FP No. ZZZ: 000-127: Port No.  (2) EB002-EB127: Digital Announcement Trunk Card No. For FP No. 00: EB002-EB031 For FP No. 01: EB032-EB063 For FP No. 02: EB064-EB095 For FP No. 03: EB096-EB127  NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.
CM48	Define the type of call to be provided with Hold Message.	<ul> <li>Y=0</li> <li>(1) 00: C.O. Line Call</li> <li>01: Tie Line Call</li> <li>02: Station</li> <li>(2) 0500: Hold Message</li> </ul>
CM49	Assign the function of the Digital Announcement Trunk to Hold Message Service.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk No. (EB002-EB127) assigned by CM10/CM14</li> <li>(2) 05XX: Hold Message Service XX : 00-63: Message No.</li> <li>Y=05</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 00-63: Message No. assigned by CM49 Y=00</li> </ul>

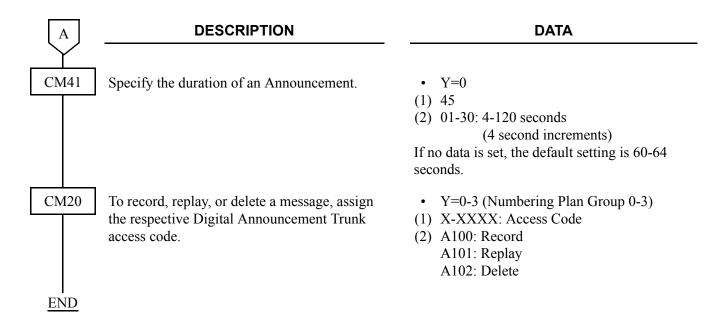


**NOTE:** A voice message in place of Music-On-Hold can be provided when a call has been placed on hold.

- Different messages can be programmed on a tenant basis.
- Different messages can be programmed, depending on the type of line (C.O. line, Tie line or station) on Hold.
- More than one connection can be made to a Digital Announcement Trunk Circuit. Only the first connection can be assured of hearing the message from the beginning.
- Announcement will be repeated until the call is removed from hold.

To provide the Night Announcement by Digital Announcement Trunk (DAT card):

START	DESCRIPTION	DATA
CM10	Assign each Digital Announcement Trunk card number to the required LEN.  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM0/1 : EB002-EB031 For PIM2/3 : EB032-EB063 For PIM4/5 : EB064-EB095 For PIM6/7 : EB096-EB127  NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.
CM14	Assign each Digital Announcement Trunk card number to the required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN XX : 00-59: FP No. ZZZ: 000-127: Port No.</li> <li>(2) EB002-EB127: Digital Announcement Trunk Card No. For FP No. 00 : EB002-EB031 For FP No. 01 : EB032-EB063 For FP No. 02 : EB064-EB095 For FP No. 03 : EB096-EB127</li> <li>NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.</li> </ul>
CM30	Assign the Digital Announcement Trunk number to each incoming trunk.	<ul> <li>Y=03</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 04: Direct-In Termination</li> <li>Y=05</li> <li>(1) 000-255: Trunk No.</li> <li>(2) EB000-EB127: Digital Announcement Trunk No. assigned by CM10/CM14</li> </ul>
CM49	Assign the function of the Digital Announcement Trunk to Night Announcement.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk No. (EB002-EB127)</li> <li>(2) 03000: Night Announcement Service</li> </ul>



**NOTE:** A voice message can be sent to incoming C.O. lines during Night Mode.

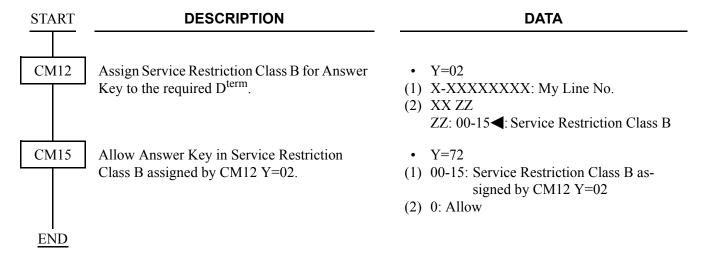
- Different messages can be programmed on each C.O. line.
- The voice message can be programmed for Day/Night.
- More than one connection can be made to a Digital Announcement Trunk Circuit. Only the first connection can be assured of hearing the message from the beginning.
- Announcements may be programmed to be repeated from 4 to 120 seconds in four-second increments.

#### HARDWARE REQUIRED

DAT card or MP card (built-in DAT)

## **ANSWER KEY**

#### **PROGRAMMING**



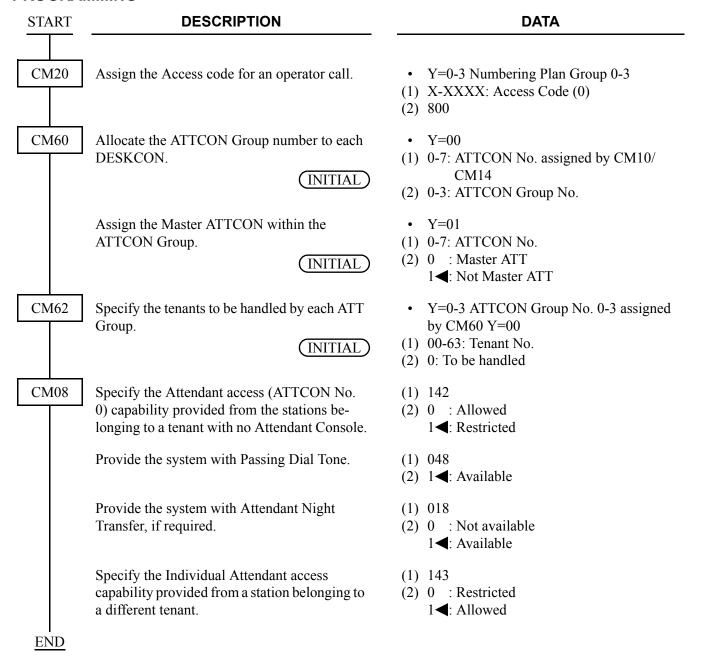
**NOTE:** An ANSWER key is initially assigned on each  $D^{term}$ .

#### HARDWARE REQUIRED

D<sup>term</sup> and DLC card

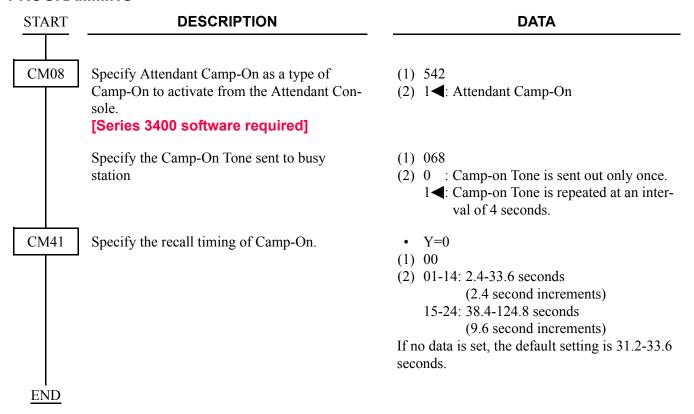
## ATTENDANT ASSISTED CALLING

#### **PROGRAMMING**

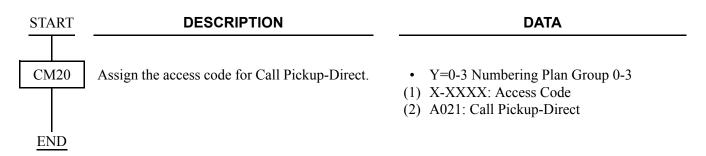


## **ATTENDANT CAMP-ON**

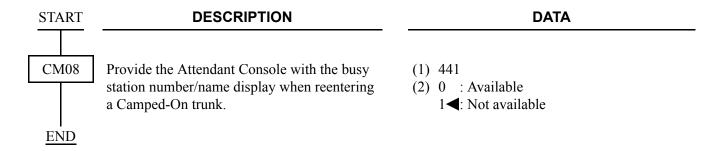
#### **PROGRAMMING**



To reenter a Camped-On trunk from an Attendant before Automatic Recall:



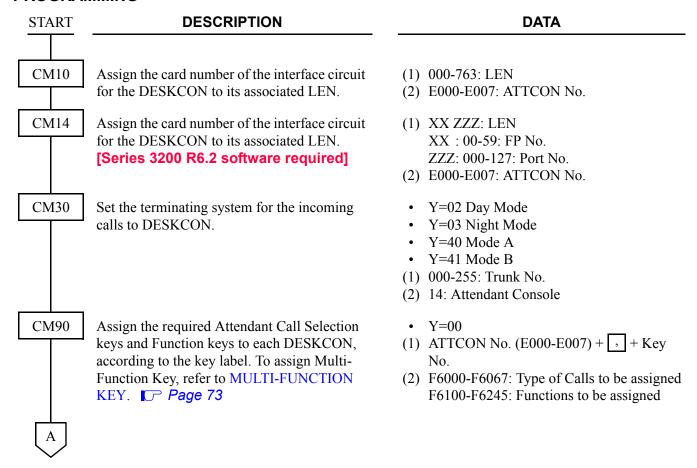
To display the busy station number and name on an Attendant Console when reentering a Camped-On trunk by pressing the loop key:



## **ATTENDANT CONSOLE**

#### **SN716 DESKCON**

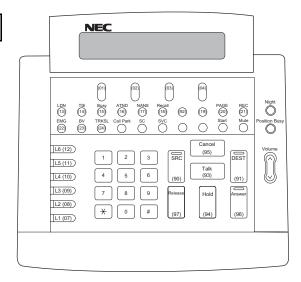
#### **PROGRAMMING**





#### **DESCRIPTION**

#### DATA



Key No.	Data	Description (Key Label)	Default Data
13	F6000	C.O. Incoming 0 (LDN)	NONE
14	F6040	Tie Line Incoming 0 (TIE)	NONE
15	F6064	Call Forwarding-Busy Line (Busy)	NONE
16	F6060	Operator Call (ATND)	F6061 (Recall)
17	F6063	Call Forwarding-No Answer (NANS)	F6060 (Operator call)
18	F6061	Recall (Recall)	F6000 (C.O. Incoming 0)
90	F6200	Source (SRC)	F6200 (Source)
91	F6201	Destination (DEST)	F6201 (Destination)
93	F6203	Talk (Talk)	NONE
94	F6204	Hold (Hold)	F6204 (Hold)
95	F6202	Cancel (Cancel)	F6202 (Cancel)
96		Answer (Answer)	
97		Release (Release)	

**NOTE:** When the DESKCON is used to set hotel features, the Reset key should be assigned to one of the feature keys (i.e key 21) in the Idle state mode.

В

В

#### **DESCRIPTION**

#### **DATA**

CM60

Specify the kind of the Attendant Console.

(INITIAL)

Allocate the ATT Group number to each DESKCON.

(INITIAL)

Specify the Master DESKCON within the ATT Group assigned by CM60 Y=00.

(INITIAL)

When the Master DESKCON is specified by CM60 Y=01, make the NT Switch in effective by the Day/Night Mode Change key.

(INITIAL)

Assign the password for Attendant Console Lockout.

When providing 2nd Ringing feature on the DESKCON, make Off-Hook Ringing effective.

Allow or restrict the system to keep the volume level changed by the volume button on DESKCON, after the call is finished.

• Y=22

(1) 0-7: ATTCON No.

(2) 0 : DESKCON

1**<**: ATTCON

• Y=00

(1) 0-7: ATTCON No.

(2) 0-3: ATT GROUP 0-3

• Y=01

(1) 0-7: ATTCON No.

(2) 0 : Master ATT

1**<**: Not Master ATT

• Y=06

(1) 0-7: ATTCON No.

(2) 0: Effective

• Y=30

(1) 0

(2) X-X...X: Password (Maximum 8 digits)

X : 0-9, A (\*), B (#)

If no data is set, the default setting is NONE. In this case, the password is set to "12345678".

• Y=16

(1) 0-7: ATTCON No.

(2) 0: Effective

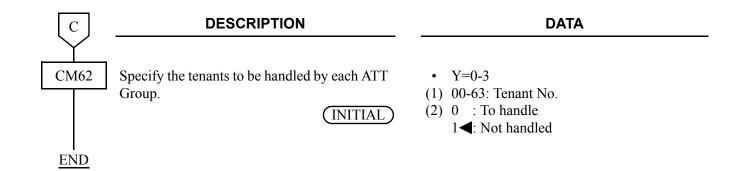
• Y=23

(1) 0-7: ATTCON No.

(2) 0 : Allow

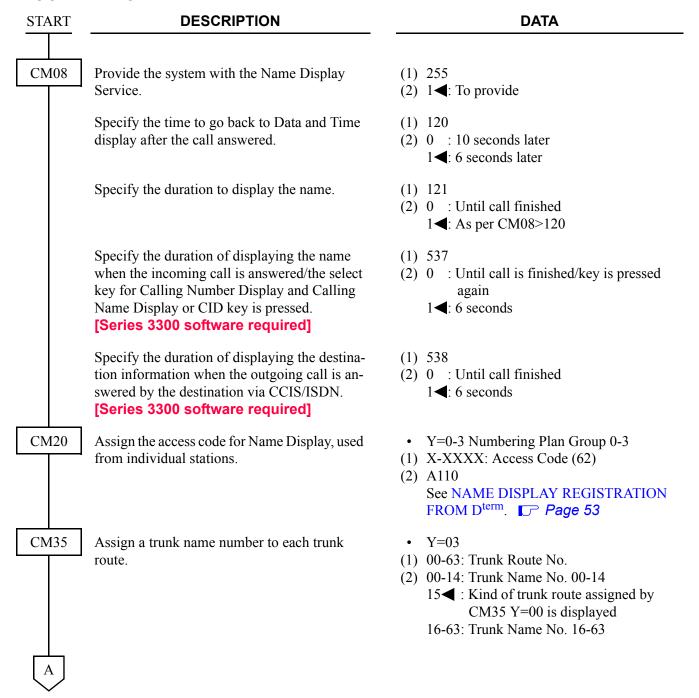
1**◄**: Restricted

С



#### ATTENDANT CALLED/CALLING NAME DISPLAY

#### **PROGRAMMING**



A	

#### **DESCRIPTION**

#### **DATA**

CM77

Assign the desired station user name to each station number by CM77 Y=0 or Y=1.

(2)

Assign the desired trunk name to each trunk route by CM77 Y=2 or Y=3.

• Y=0 By Character Code

- (1) X-XXXXXXXX: Station No.
- (2) Character Code 20-7F (Maximum 32 digits)

See APPENDIX B: Character Code Table.

Page B2

- Y=1 By Character
- (1) X-XXXXXXXX: Station No.
- (2) A-Z, 0-9: Character (Maximum 16 characters)
- Y=2 By Character Code
- (1) 00-14, 16-63: Trunk Name No. assigned by CM35 Y=03
- (2) Character Code 20-7F (Maximum 8 digits) See APPENDIX B: Character Code Table.

  Page B2
- Y=3 By Character
- (1) 00-14, 16-63: Trunk Name No. assigned by CM35 Y=03
- (2) A-Z, 0-9: Character (Maximum 4 characters)

**END** 

## NAME DISPLAY REGISTRATION FROM D<sup>term</sup>

- You can configure the station number from the D<sup>term</sup> to which the station number belongs.
- Register the characters from MAT/CAT to SLT, D<sup>term</sup> without LCD and Trunk.
- The characters are specified by the number of pressing the keys (0-9, \*, #).
- Refer to "Character Table" on next page.

**Example:** To register "A", press 2 key twice.

By pressing same key 11 times, the character returns to the one pressed once.

- To register characters, press Hold key after each character registration.
- To switch between alphabet upper case (A-Z) and alphabet lower case (a-z), press Recall key.
- To delete the data, overwrite by blank.
- The following is the example to register "john":
  - (1) LNR/SPD (DT receiving)
  - (2) Register the access code specified for Name Display (SPDT receiving).
  - (3) 5 5 Hold
  - (4) 6 6 6 Hold
  - (5) 4 4 4 Hold (6) 6 6 6 Hold
  - (7) LNR/SPD

0

h

n

## **Character Table**

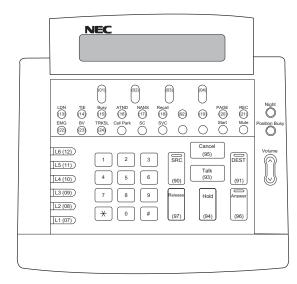
KEY												
NUMBER OF TIMES	0	1	2	3	4	5	6	7	8	9	*	#
1	0	1	2	3	4	5	6	7	8	9	*	#
2		•	A	D	G	J	M	P	T	W	*	#
3		•	В	Е	Н	K	N	Q	U	X	*	#
4		•	С	F	I	L	О	R	V	Y	*	#
5		•						S		Z	*	#
6												
7												
8												-
9												!
10												?

### ATTENDANT CALL SELECTION

### **PROGRAMMING**

CM35 Specify the ATT call Selection key to which incoming calls from each trunk route terminate.

CM90 Assign the ATT Call Selection Keys required according to the key label.



DATA

- Y=15
- (1) 00-15: Trunk Route No.
- (2) ATT Call Selection Key:

00-07: C.O. Incoming Call 0-7

10-17: FX Incoming Call 0-7

20-27: WATS Incoming Call 0-7

30-37: CCSA Incoming Call 0-7

40-47: Tie Line Incoming Call 0-7

- Y=00
- (1) ATTCON No. (E000-E007) + + Key No.
- (2) F60XX

XX: 00-07 (C.O. Incoming Call 0-7)

10-17 (FX Incoming Call 0-7)

20-27 (WATS Incoming Call 0-7)

30-37 (CCSA Incoming Call 0-7)

40-47 (Tie Line Incoming Call 0-7)

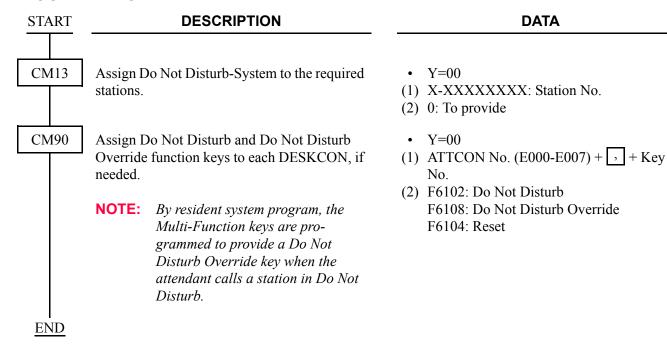
50-53 (Special Operator Call 0-3)

- 54 (Priority Call 0)
- 55 (Priority Call 1)
- 56 (Emergency Call)
- 60 (Operator Call)
- 61 (Recall)
- 62 (Serial Call)
- 63 (Call Forwarding-No Answer)
- 64 (Call Forwarding-Busy Line)
- 65 (Call Forwarding-Intercept)
- 66 (Off Hook Alarm)
- 67 (Interposition Calling/Transfer)

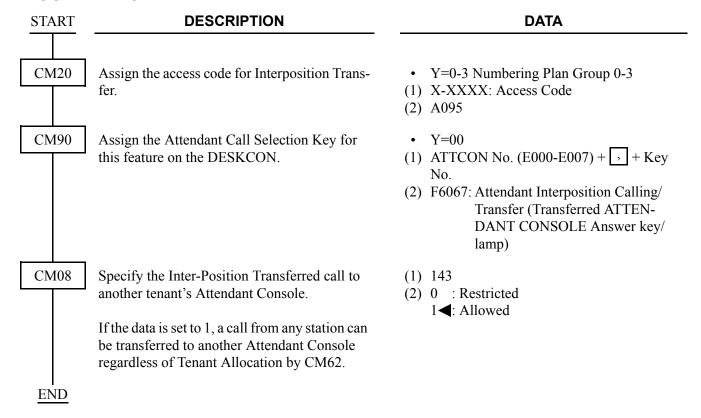
Key No.	Data	Description (Key Label)	Default Data
13	F6000	C.O. Incoming 0 (LDN)	NONE
16	F6060	Operator Call (ATND)	F6061 (Recall)
18	F6061	Recall (Recall)	F6000 (C.O. Incoming 0)
			·

<u>END</u>

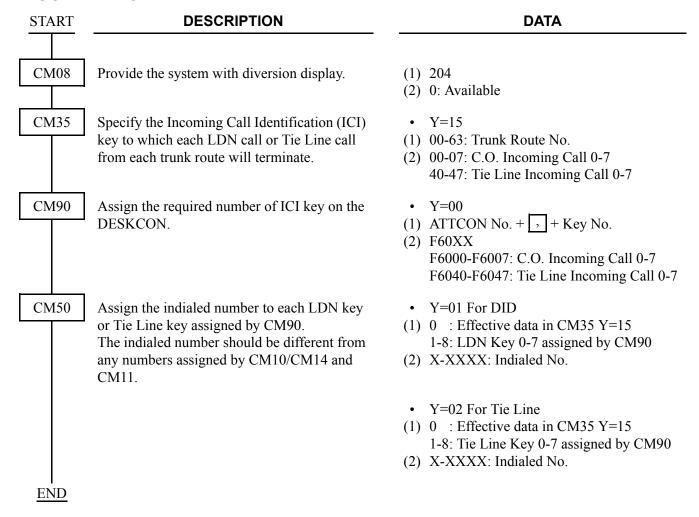
### ATTENDANT DO NOT DISTURB SETUP AND CANCEL



### ATTENDANT INTERPOSITION CALLING/TRANSFER



### ATTENDANT LISTED DIRECTORY NUMBER



To provide the LDN Diversion feature, the following programming is also required.

START	DESCRIPTION	DATA		
CM08 CM58	Provide the system with the LDN Diversion feature.  Assign the data for LDN Diversion to each indialed number assigned by CM50 Y=01/02.  NOTE: A call is diverted to LDN0-7/TIE0-7 keys as specified by CM58 Y=02-07, even if CM50 Y=01/02>1-8 has been set.	<ul> <li>(1) 205</li> <li>(2) 0: Available</li> <li>Y=00 Tenant No. of LDN</li> <li>(1) 00 : Effective data in CM35 Y=15 01-08: LDN Key 0-7 assigned by CM50 Y=01 10 : Effective data in CM35 Y=15 11-18: Tie Line Key 0-7 assigned by CM50 Y=02</li> <li>(2) 00-63: Tenant No.</li> </ul>		
		<ul> <li>Y=01 TAS Group No.</li> <li>(1) Same as CM58 Y=00</li> <li>(2) 00-63: TAS Group No. assigned by CM44&gt;13</li> <li>Y=02 Day Mode Destination of LDN</li> <li>(1) Same as CM58 Y=00</li> <li>(2) 00-07: LDN/TIE key 0-7</li> <li>08 : To TAS</li> <li>09 : To the station/outside party assigned by CM58 Y=08</li> </ul>		
		<ul> <li>Y=03 Night Mode Destination of LDN</li> <li>(1) Same as CM58 Y=00</li> <li>(2) 00-07: LDN/TIE key 0-7 08 : To TAS 09 : To the station/outside party assigned by CM58 Y=09</li> <li>Y=04 Day Mode diversion for busy destination station</li> <li>(1) Same as CM58 Y=00</li> <li>(2) 00: To Attendant Console (BUSY key) 08: To TAS 09: Camped on</li> </ul>		
A				



#### **DESCRIPTION**

#### DATA

- Y=05 Night Mode diversion for busy destination station
- (1) Same as CM58 Y=00
- (2) Same as CM58 Y=04
- Y=06 Day Mode diversion for nonanswering destination station
- (1) Same as CM58 Y=00
- (2) 00: To Attendant Console (NANS key) 08: To TAS
  - Y=07 Night Mode diversion for nonanswering destination station
- (1) Same as CM58 Y=00
- (2) Same as CM58 Y=06
- Y=08 Day Mode station number
- (1) Same as CM58 Y=00
- (2) X-XXXXXXXX: Station No.

CXX : Abbreviated code for

outside party

XX: 00-31 given by

CM71>66

- Y=09 Night Mode station number
- (1) Same as CM58 Y=00
- (2) Same as CM58 Y=08

If a station is designated by CM58 Y=02, 03, assign the station number or abbreviated code for outside party to which the call is to be diverted.

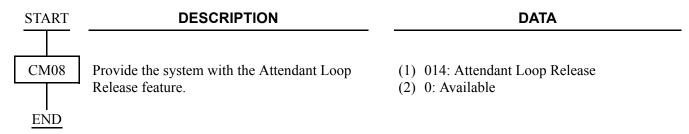
**END** 

#### HARDWARE REQUIRED

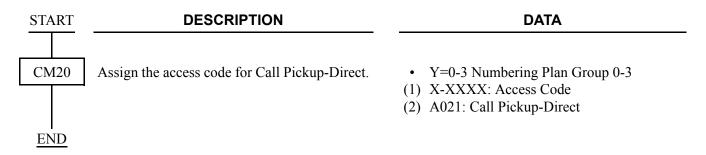
DIT card (DID Trunk)
ODT card (Tie Line Trunk)

# ATTENDANT LOOP RELEASE

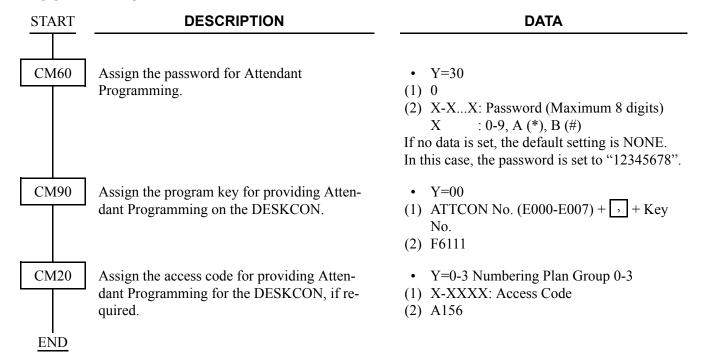
### **PROGRAMMING**



To reenter the call that has been released from a loop before Automatic Recall:



### ATTENDANT PROGRAMMING



# **CALL QUEUING**

# **PROGRAMMING**

Refer to CALL WAITING DISPLAY. Page 65

# **CALL SPLITTING**

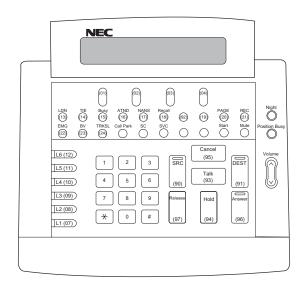
### **PROGRAMMING**

CM90

**START** 

### **DESCRIPTION**

Assign the SRC, DEST, TALK, and CANCEL keys on the DESKCON according to the key label.



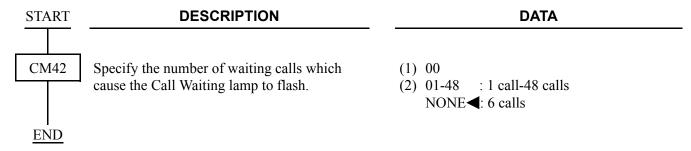
### **DATA**

- Y=00
- (1) ATTCON No. (E000-E007) + , + Key No.
- (2) F6200: SRC F6201: DEST F6202: CANCEL F6203: TALK

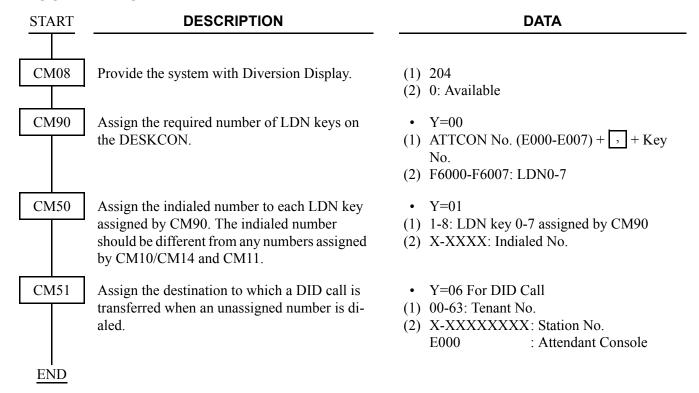
Key No.	Data	Description (Key Label)	Default Data
90	F6200	Source (SRC)	F6200 (Source)
91	F6201	Destination (DEST)	F6201 (Destination)
93	F6203	Talk (Talk)	NONE
95	F6202	Cancel (Cancel)	F6202 (Cancel)

**END** 

# **CALL WAITING DISPLAY**



### **COMMON ROUTE INDIAL**



To provide the LDN Diversion feature, the following programming is also required.

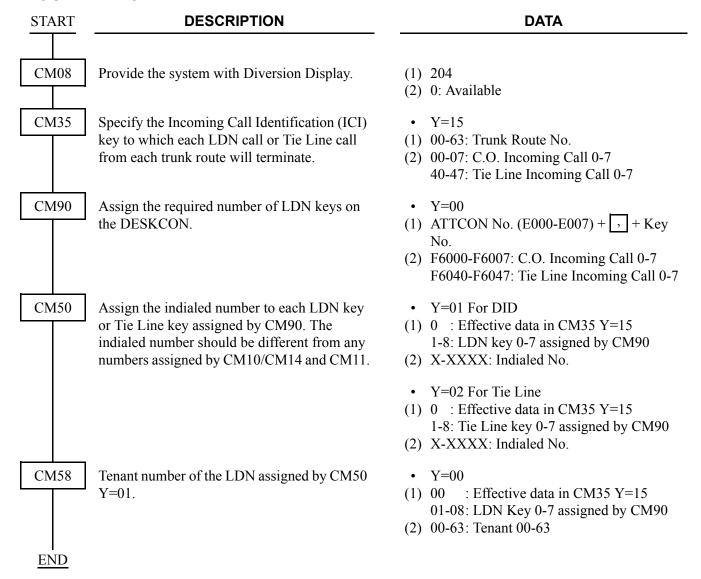
START	DESCRIPTION	DATA		
CM08	Provide the system with the LDN Diversion feature.	(1) 205 (2) 0: Available		
CM58	Assign the data for LDN Diversion to each indialed number assigned by CM50 Y=01.	<ul> <li>Y=00 Tenant No. of LDN</li> <li>(1) 01-08: LDN0-7 assigned by CM50 Y=01</li> <li>(2) 00-63: Tenant No.</li> <li>Y=01 TAS Group No.</li> <li>(1) Same as CM58 Y=00</li> <li>(2) 00-63: TAS Group No.</li> </ul>		
	NOTE: A call is diverted to LDN0-7 keys as specified by CM58 Y=02-07, even if CM50 Y=01>1-8 has been set.	· · · · · · · · · · · · · · · · · · ·		
A		1		

A DESCRIPTION	DATA
CM58	<ul> <li>Y=05 Night Mode diversion for busy destination station</li> <li>(1) Same as CM58 Y=00</li> <li>(2) Same as CM58 Y=04</li> </ul>
	<ul> <li>Y=06 Day Mode diversion for non-answering destination station</li> <li>(1) Same as CM58 Y=00</li> <li>(2) 00: To Attendant Console (NANS key) 08: To TAS</li> </ul>
	<ul> <li>Y=07 Night Mode diversion for non-answering destination station</li> <li>(1) Same as CM58 Y=00</li> <li>(2) Same as CM58 Y=06</li> </ul>
If a station is designated by CM58 Y=02, 02 assign the station number to which the call is be diverted.	
END END	<ul><li>(1) Same as CM58 Y=00</li><li>(2) Same as CM58 Y=08</li></ul>

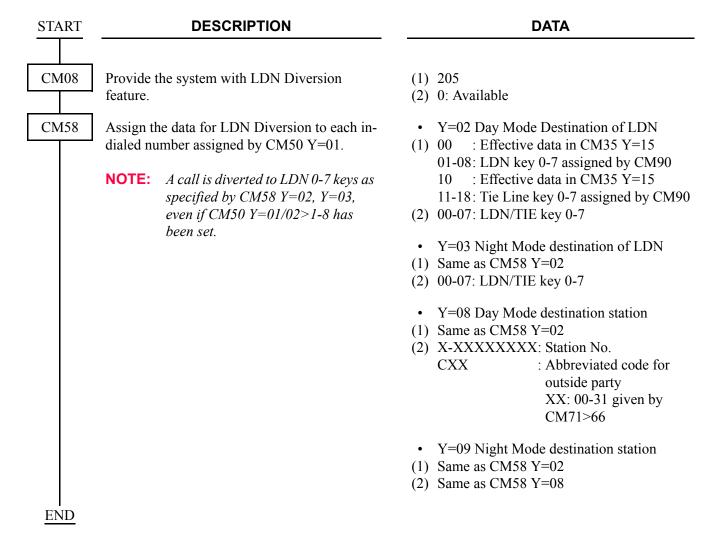
# **HARDWARE REQUIRED**

DIT card (DID Trunk)

# **DIALED NUMBER IDENTIFICATION SERVICE (DNIS)**



To provide the LDN Diversion feature, the following programming is also required.



#### HARDWARE REQUIRED

DIT card (DID Trunk)
ODT card (Tie Line Trunk)

# **INCOMING CALL IDENTIFICATION**

### **PROGRAMMING**

Refer to the following.

SN716 DESKCON Page 47

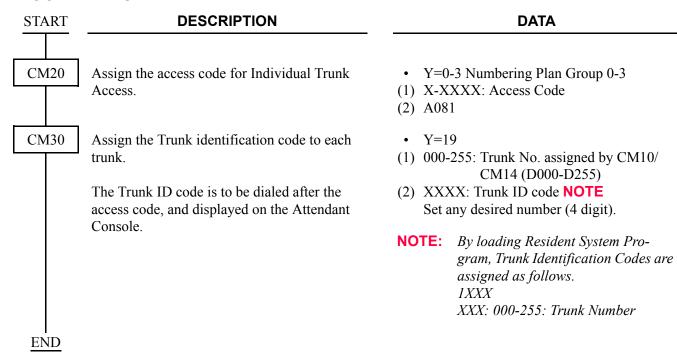
ATTENDANT CALLED/CALLING NAME DISPLAY Page 51

ATTENDANT CALL SELECTION Page 55

ATTENDANT LISTED DIRECTORY NUMBER Page 58

COMMON ROUTE INDIAL Page 66

# **INDIVIDUAL TRUNK ACCESS**



### **MULTI-FUNCTION KEY**

### **PROGRAMMING**

CM90

CM60 Provide each DESKCON Multi-Function key capability.

each DESKCON.

**NOTE 1:** The following data is assigned as initial data or resident data.

Assign the required Multi-Function keys to the

Key No. ATTCON Status No.	01	02	03	04	05	06
00	F6110 MODE	F6111 PROG				
01	F6112 SPB	F6113 LPB	F6106 SHF		F6105 SC	F6203 TALK
02						F6107 BV
03						F6108 DDOV
04	F6100 RC	F6101 MW	F6102 DD	F6109 WW		F6104 RESET

NOTE 2: When setting or canceling a group of stations in Do Not Disturb/Room Cutoff, ATTCON Status number 00 should be used.

**NOTE 3:** For the SN716 DESKCON Multi-Function key, do not assign the MODE key (F6110).

**NOTE 4:** Key No. 05-06 is not available for SN716 DESKCON.

**DATA** 

• Y=17

(1) 0-7: ATTCON No. assigned by CM10/ CM14

(2) 1**<**: Effective

• Y=00

XX: 00-04: ATTCON Status No. 00: Idle State **NOTE 2** 

01: When answering or originating

02: When called station is busy

03: When called station is DND

04: When accessing Hotel feature

Y: 0-7: ATTCON No.

(2) F6100: Room Cutoff

F6101: Message Waiting

F6102: Do Not Disturb

F6104: Reset

F6105: Serial Call Set

F6106: Flash over trunk

F6107: Busy Verification

F6108: Do Not Disturb Override

F6109: Wake Up

F6110: Mode **NOTE 3** 

F6111: Programming

F6112: Out pulse (PB Signal) Short F6113: Out pulse (PB Signal) Long

F6203: Talk

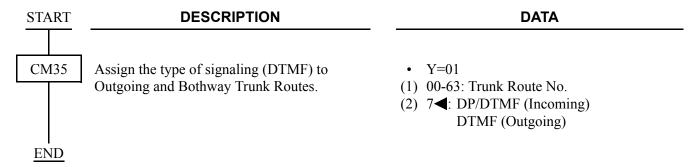
**END** 

# **MULTIPLE CONSOLE OPERATION**

# **PROGRAMMING**

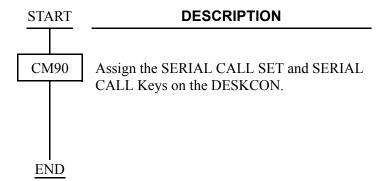
Refer to ATTENDANT CONSOLE (SN716 DESKCON). Page 47

# **PUSHBUTTON CALLING-ATTENDANT ONLY**



# **SERIAL CALL**

### **PROGRAMMING**

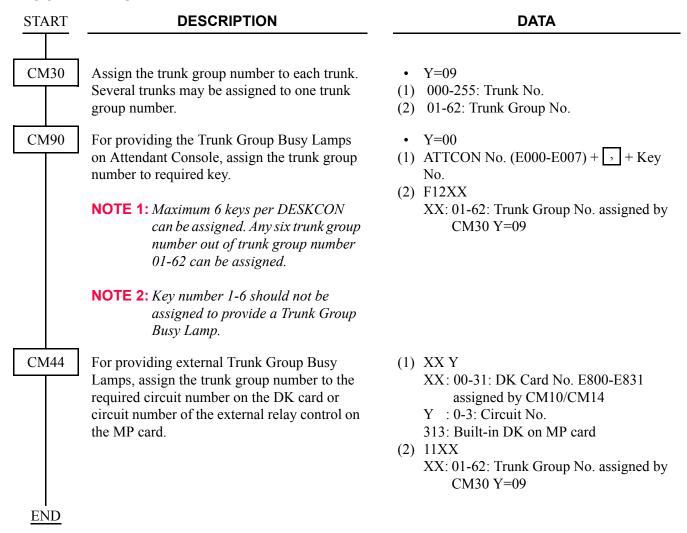


### **DATA**

- Y=00
- (1) ATTCON No. (E000-E007) + , + Key
- (2) F6062: Serial Call Termination F6105: Serial Call Set

### TRUNK GROUP BUSY DISPLAY

### **PROGRAMMING**

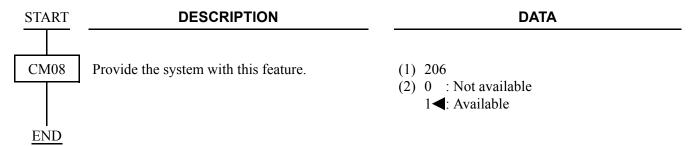


### HARDWARE REQUIRED

To provide the Trunk Group Busy Lamps externally: DK card and lamp indicator provided by customer

# **UNSUPERVISED TRUNK-TO-TRUNK TRANSFER BY ATTENDANT**

### **PROGRAMMING**



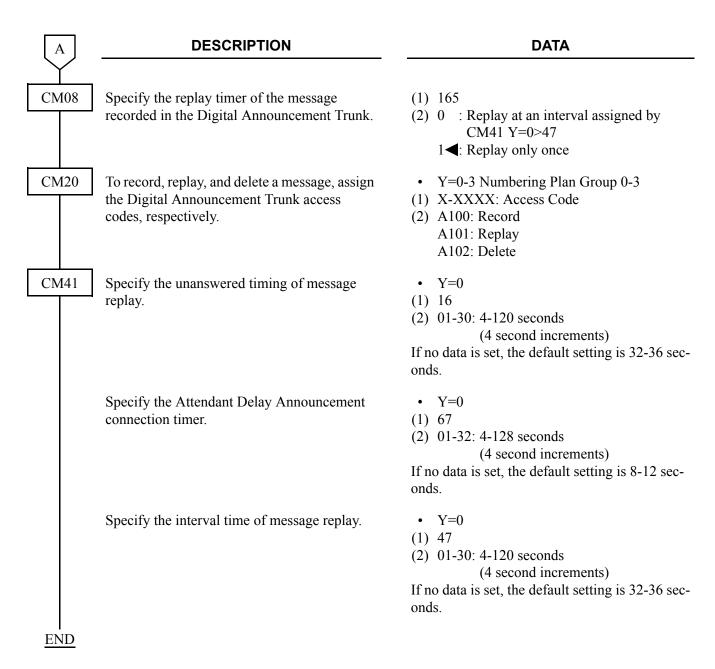
NOTE: The trunk associated with at least one side of the call must be programmed for answer and/or release signals to ensure the trunks do not lock up.

Refer to "TRUNK-TO-TRUNK CONNECTION" Page 716 for data to be assigned to

each trunk.

# ATTENDANT DELAY ANNOUNCEMENT

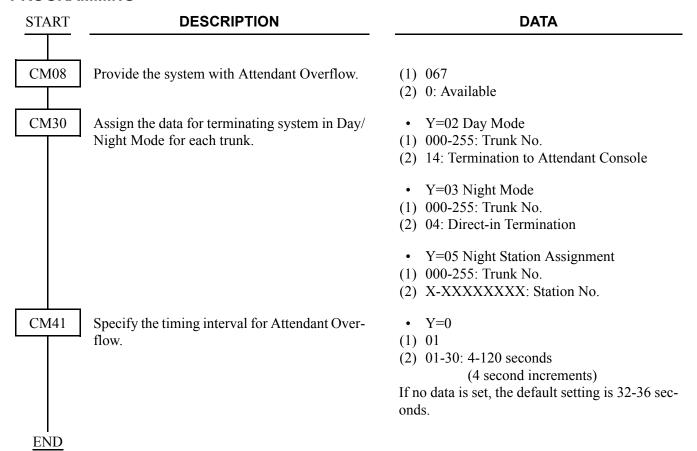
START	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN.  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM0/1 : EB002-EB031 For PIM2/3 : EB032-EB063 For PIM4/5 : EB064-EB095 For PIM6/7 : EB096-EB127  NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.
CM14	Assign a Digital Announcement Trunk card number to the required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN XX : 00-59: FP No. ZZZ: 000-127: Port No.</li> <li>(2) EB002-EB127: Digital Announcement Trunk Card No. For FP No. 00: EB002-EB031 For FP No. 01: EB032-EB063 For FP No. 02: EB064-EB095 For FP No. 03: EB096-EB127</li> <li>NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.</li> </ul>
CM35	Allow the Announcement Service via Digital Announcement Trunk on Attendant Delay Announcement.	<ul><li>Y=74</li><li>(1) 00-63: Trunk Route No.</li><li>(2) 0: Allow</li></ul>
CM49	Assign the function of the Digital Announcement Trunk card.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. assigned by CM10/ CM14 (EB002-EB127)</li> <li>(2) 0F XX: Attendant Delay Announcement XX : 00-63 (Message No.)</li> <li>Y=0A</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 00-63: Message No. assigned by CM49 Y=00</li> </ul>



### HARDWARE REQUIRED

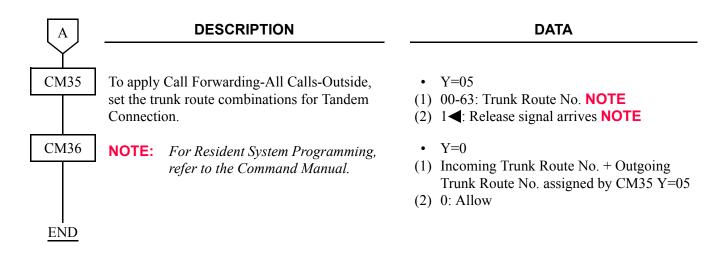
DAT card or MP card (built-in DAT)

# ATTENDANT OVERFLOW



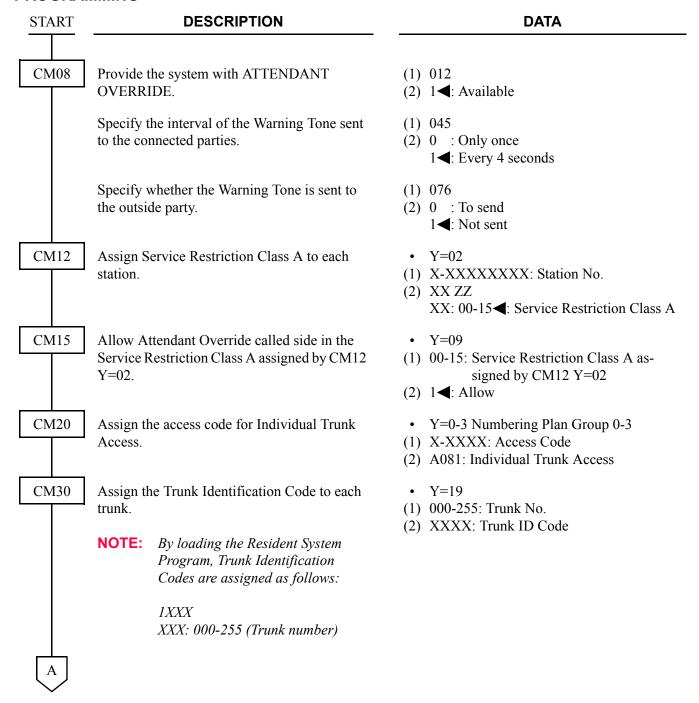
To set a station or an outside party as the Attendant Overflow destination:

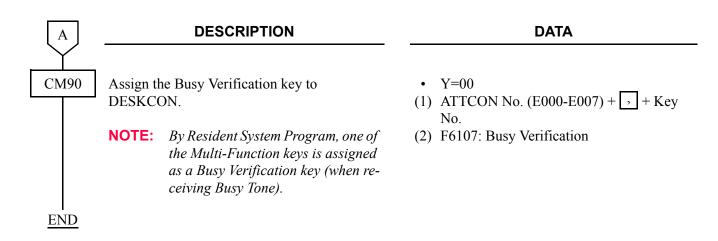
START	DESCRIPTION	DATA
CM35	Provide Call Forwarding-All Calls on Attendant Overflow.	<ul> <li>Y=173</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: Available</li> </ul>
CM51	Assign the destination of Attendant Overflow, to the incoming trunk tenant.  For an outside number, assign the Virtual Line station number.	<ul> <li>Y=31</li> <li>(1) 00-63: Incoming Trunk Tenant No.</li> <li>(2) X-XXXXXXXXX: Station No.</li></ul>
CM11	Assign the Virtual Line station number to the required Virtual LEN.	<ul> <li>(1) 000-255: Virtual LEN [Series 3300 software or before] 0000-1019: Virtual LEN [Series 3400 software or later]</li> <li>(2) X-XXXXXXXXX: Virtual Line Station No.</li> </ul>
CM12	Assign Service Restriction Class A to the Virtual Line station.	<ul> <li>Y=02</li> <li>X-XXXXXXXXX: Virtual Line Station No. assigned by CM11</li> <li>XX ZZ</li> <li>XX: 00-15</li></ul>
CM15	Allow Call Forwarding-All Calls-Outside in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=26</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>
CME6	Set Call Forwarding-All Calls-Outside to the Virtual Line station number assigned by CM11.	<ul> <li>Y=00</li> <li>X-XXXXXXXXX: Virtual Line Station No. assigned by CM11</li> <li>Destination No.: X-XXXX +</li></ul>



**NOTE:** When a station or an outside party is set as the Attendant Overflow destination, the destination has priority over the delay announcement and Night station.

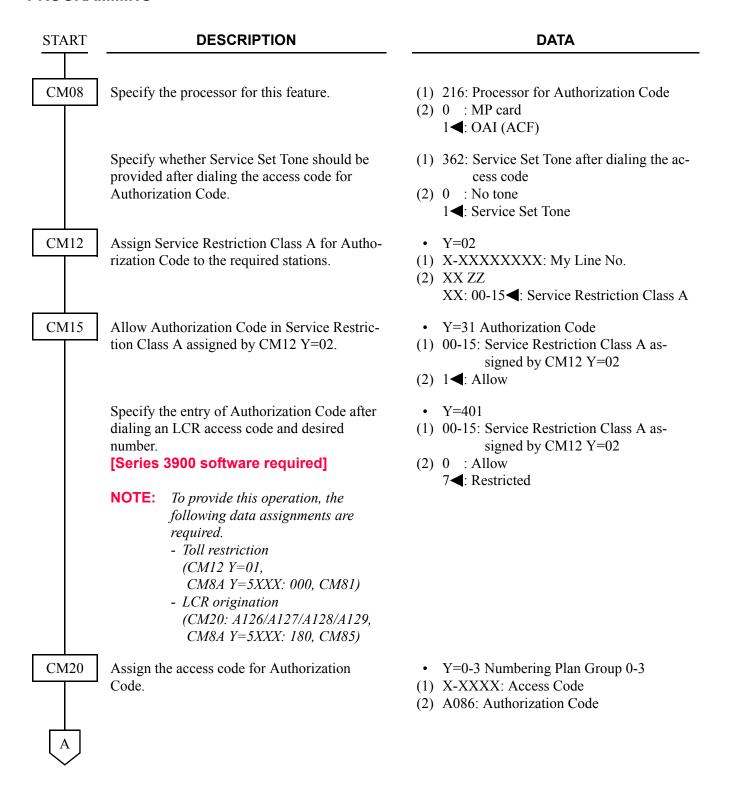
# ATTENDANT OVERRIDE





**NOTE:** This feature cannot be used in conjunction with Attendant Lockout.

# **AUTHORIZATION CODE**



A	DESCRIPTION	DATA
CM42	Specify the maximum number of digits for Authorization Code with MP.	<ul> <li>(1) 11</li> <li>(2) Maximum number of digits</li> <li>01-16 : 1 digit-16 digits</li> <li>NONE ✓: 10 digits</li> </ul>
CM2A	Assign the ID Code Development number for Authorization Code.	<ul> <li>Y=A0</li> <li>(1) 0: Authorization Code</li> <li>(2) 0-9: ID Code Development No. 00-09</li> <li>NOTE: CM2A Y=00-09 is determined by this data.</li> </ul>
	Assign the ID Code for Authorization Code.	<ul> <li>Y=00-09 ID Code Development No. 00-09</li> <li>(1) X-XXXX (Maximum16 digits): ID Code for Authorization Code</li> <li>(2) 0000-2999: ID Code Pattern No.</li> </ul>
	Assign the purpose of ID Code.	<ul> <li>Y=10</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 0 : Validate the ID Code entered from stations and trunks</li> <li>1 : Validate the ID Code entered from stations</li> <li>3◄: Invalidate the ID Code entered from stations and trunks</li> </ul>
В	Assign the desired Trunk Restriction Class for each ID Code Pattern number.	<ul> <li>Y=11</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 1 &lt; : Unrestricted (RCA)</li> <li>2 : Non-Restricted-1 (RCB)</li> <li>3 : Non-Restricted-2 (RCC)</li> <li>4 : Semi-Restricted-1 (RCD)</li> <li>5 : Semi-Restricted-2 (RCE)</li> <li>6 : Restricted-1 (RCF)</li> <li>7 : Restricted-2 (RCG)</li> <li>8 : Fully-Restricted (RCH)</li> </ul>

В	DESCRIPTION	DATA
CM2A	Assign the desired Service Restriction Class A to each ID Code Pattern number. The features available in each class are assigned by CM15.	<ul> <li>Y=12</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 00-15 </li> <li>(3) Service Restriction Class A</li> </ul>
	Assign the desired Service Restriction Class B to each ID Code Pattern number. The features available in each class are assigned by CM15.	<ul> <li>Y=13</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 00-15 </li> <li>: Service Restriction Class B</li> </ul>
	Assign the desired Service Restriction Class C to each ID Code. The features available in each class are assigned by CM15.	<ul> <li>Y=14</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 00-15              ☐: Service Restriction Class C      </li> </ul>
<u>END</u>		

**NOTE 1:** Approximately 3000 Authorization Codes including Forced Account Codes and DISA codes can be defined.

Number of the codes varies with the number of digits assigned to each code. For details, refer to "BUSINESS/HOTEL/DATA FEATURES AND SPECIFICATIONS".

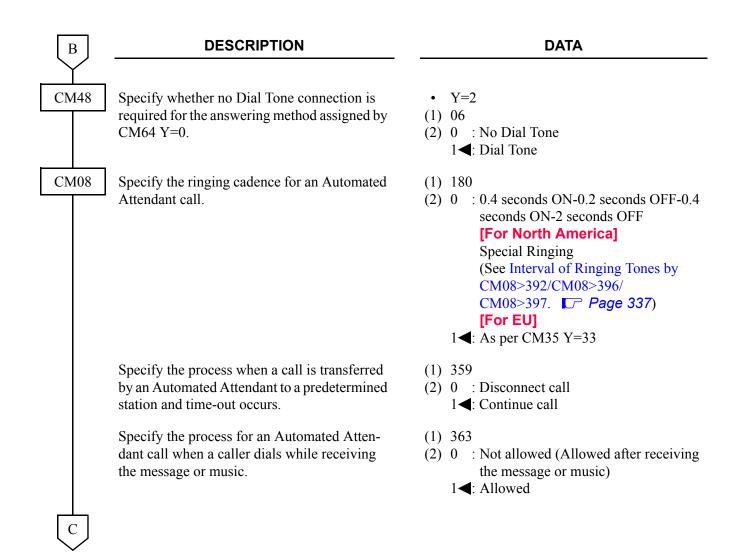
**NOTE 2:** When providing Mask Data for Authorization Codes, assign CMD001>160-175. Refer to the STATION MESSAGE DETAIL RECORDING (SMDR). Page 615

# **AUTOMATED ATTENDANT**

#### **PROGRAMMING**

DESCRIPTION **DATA START** CM30 Assign the data for Automated Attendant to the Y=02 Terminating System in Day Mode required trunks. Y=03 Terminating System in Night Mode • Y=40 Terminating System in Mode A • Y=41 Terminating System in Mode B (1) 000-255: Trunk No. (2) 09: Automated Attendant • Y=30 Handling of busy/not available Automated Attendant destination in Day Mode • Y=31 Handling of busy/not available Automated Attendant destination in Night Mode (1) 000-255: Trunk No. (2) 00 : C.O. line release 01 : Forwarded to TAS indicator 03 : Forwarded to Attendant Console 04 : Forwarded to DIT Station 05 : Music and DT connection for Redial 06 : DT connection for redial 08 : 2nd Answering Message + DT When providing a Night Message connection for redial **NOTE** for Automated Attendant, the 2nd 15**⋖**: C.O. line release Answering Message which is • Y=32 Handling of timed-out Automated assigned by CM49 Y=00 2nd data Attendant call in Day Mode 02XX is used for the Night Message. • Y=37 Handling of timed-out Automated *In that case, the 2nd data 08 of* Attendant call in Night Mode CM30 Y=30, 31 cannot be specified (1) 000-255: Trunk No. for handling of Busy/Not Available (2) 00 : C.O. line release Automated Attendant destination. : Forwarded to TAS indicator 03 : Forwarded to Attendant Console 04 : Forwarded to DIT station 06 : DT connection for redial 15**⋖**: C.O. line release

A	DESCRIPTION	DATA
CM30		<ul> <li>Y=33 Handling of all PBR busy when Y=30, 31 is set to data 08</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 00 : C.O. line release</li> <li>01 : Forwarded to TAS indicator</li> <li>03 : Forwarded to Attendant Console</li> <li>15◄: C.O. line release</li> </ul>
CM45	Assign the PB (DTMF) Receiver for only Automated Attendant, if desired.	<ul> <li>Y=2</li> <li>(1) XX Z: PB Receiver No.</li> <li>XX : 00 (Built-in PBR on MP card)</li> <li>01-15 (8RST Card No. assigned by CM10/CM14, E201-E215)</li> <li>Z : 0-3 (Circuit No.)</li> <li>(2) 0: Only for Automated Attendant</li> </ul>
CM63	Specify whether inter-tenant connection is allowed on an Automated Attendant incoming call.	<ul> <li>Y=2</li> <li>(1) XX ZZ</li> <li>XX: 00-63 (Tenant No. of called station)</li> <li>ZZ: 00-63 (Tenant No. of trunk)</li> <li>(2) 0 : Restricted</li> <li>1◀: Allowed</li> </ul>
CM64	Assign the answering method for the Automated Attendant, to the required tenants.	<ul> <li>Y=0</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 00 : DT Connection</li> <li>01 : Hold Tone on MP card + DT Connection</li> <li>02 : 1st Answering Message + DT Connection</li> <li>03 ✓: DT Connection</li> </ul>
	For providing a Night Message, assign the answering method of Night Mode, to the required tenants.	<ul> <li>Y=2</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 00 : DT Connection</li> <li>01 : Hold Tone on MP card + DT Connection</li> <li>02 : Night Message assigned by CM49 Y=00, 02XX</li> <li>03◀: According to the data set by CM64 Y=0</li> </ul>
В		



C	
	•

### **DESCRIPTION**

### **DATA**

CM41

Specify the time before answering by Automated Attendant.

Specify the time before an Automated Attendant call is redirected because no digits are

received from the calling party.

Specify the timing of unanswered call after forwarding to predetermined station in Automated Attendant.

Specify the time before Dial Tone timeout in Automated Attendant.

• Y=0

(1) 59

(2) 00-08: 0-32 seconds

(4 second increments)

If no data is set, the default setting is 4-8 seconds.

• Y=0

(1) 34

(2) 01-30: 4-120 seconds

(4 second increments)

If no data is set, the default setting is 32-36 seconds.

• Y=0

(1) 39

(2) 01-30: 4-120 seconds

(4 second increments)

If no data is set, the default setting is 32-36 seconds.

• Y=0

(1) 43

(2) 01-14: 1-14 seconds

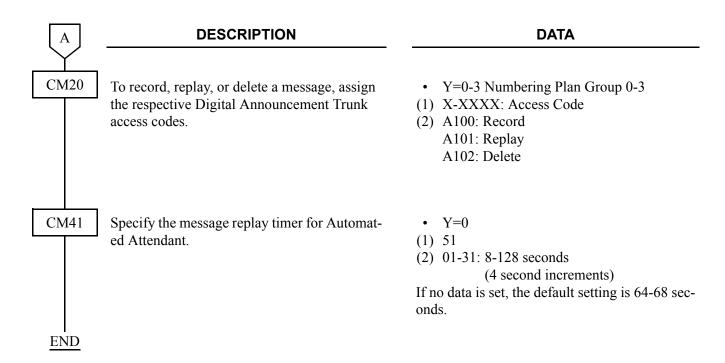
(1 second increments)

If no data is set, the default setting is 14 seconds.

<u>END</u>

When the 1st and/or the 2nd answering message is required: CM30 Y=30, 31>2nd data 08, CM64 Y=0>2nd data 02, or Night Message is required: CM64 Y=2>2nd data 02, do the following programming.

START	DESCRIPTION	DATA
CM10	Assign the Digital Announcement Trunk card number to the required LEN.  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM0/1 : EB002-EB031 For PIM2/3 : EB032-EB063 For PIM4/5 : EB064-EB095 For PIM6/7 : EB096-EB127  NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.
CM14	Assign the Digital Announcement Trunk card number to the required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN XX : 00-59: FP No. ZZZ: 000-127: Port No.</li> <li>(2) EB002-EB127: Digital Announcement Trunk Card No. For FP No. 00: EB002-EB031 For FP No. 01: EB032-EB063 For FP No. 02: EB064-EB095 For FP No. 03: EB096-EB127</li> <li>NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.</li> </ul>
CM49	Assign the function of the Digital Announcement Trunk.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. assigned by CM10/CM14</li> <li>(2) 01XX: 1st Answering Message 02XX: 2nd Answering Message/Night Message</li> <li>XX : 00-63 (Message No.)</li> </ul>
A	Assign the Message number to the required tenants.	<ul> <li>Y=01 For 1st Answering Message</li> <li>Y=02 For 2nd Answering Message/Night Message</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 00-63: Message No. assigned by CM49 Y=00</li> </ul>



### HARDWARE REQUIRED

For providing the first and/or second Answering Message/Night Message DAT card or MP card (built-in DAT)

# **AUTOMATIC CALL DISTRIBUTION (ACD)**

### **PROGRAMMING**

CM17

**START** 

### **DESCRIPTION**

### **DATA**

For each ACD group, assign station numbers, one by one, in the order of hunting.

**NOTE:** Up to 60 stations can be assigned into a single ACD group.

**Example:** For setting station numbers 200, F201, 202 into one ACD group.

1st Operation (1) 200 (2) 2012nd Operation (1) 201 (2)2023rd Operation (1) 202

(2) 200

Assign the Pilot station and Member station.

**NOTE:** Pilot station must be a nonequipped LEN (CM10/CM14) phantom.

Assign the ACD group number.

Specify ACD service for each type of call.

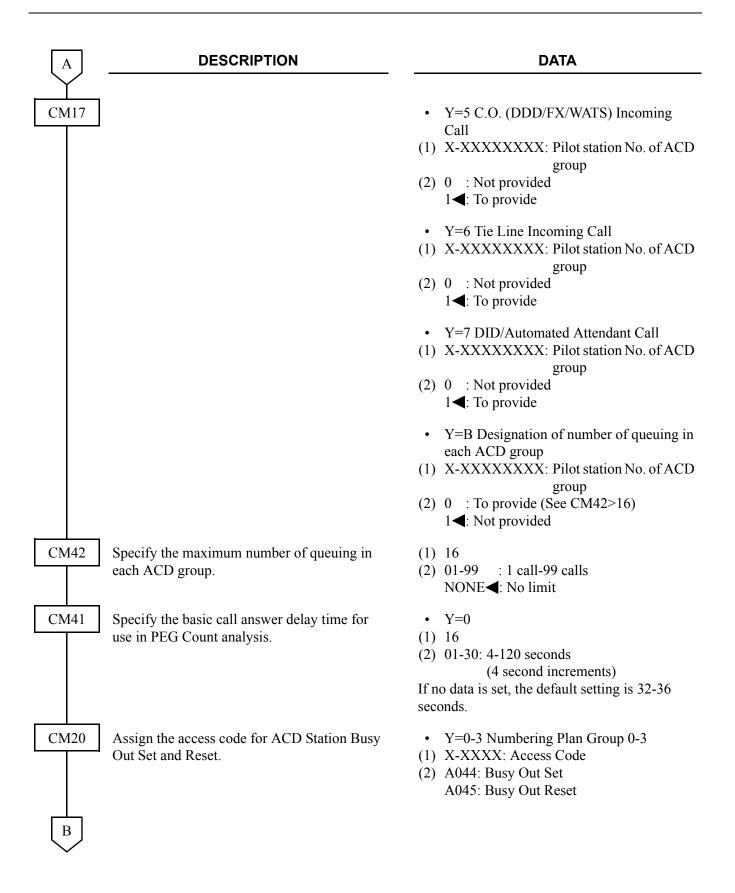
• Y=0

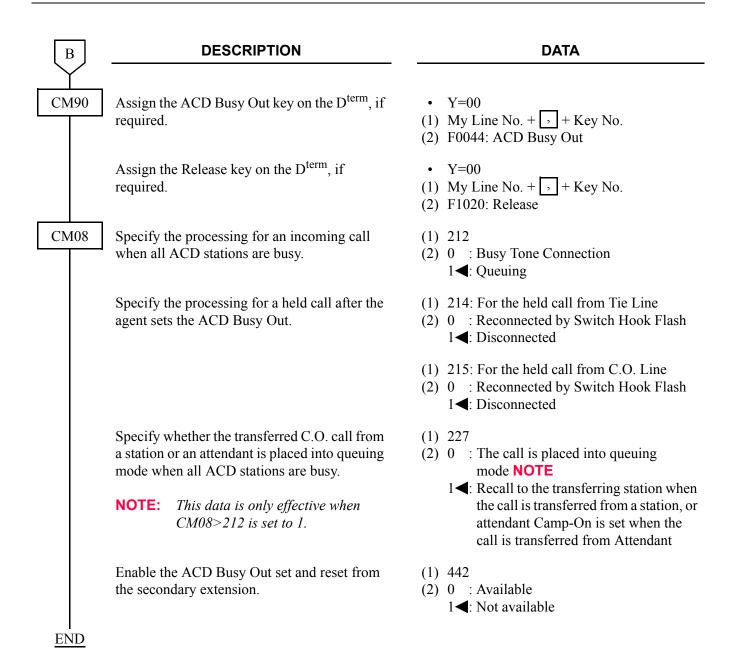
(1) X-XXXXXXXX: Station No.

(2) X-XXXXXXXX: Another station No. to be linked

- Y=1
- (1) X-XXXXXXXX: ACD station No.
- (2) 1 : Pilot station 0**⋖**: Member station
- Y=2
- (1) X-XXXXXXXX: ACD station No.
- (2) 00-15: ACD Group 00-15
- Y=4 Internal Call
- (1) X-XXXXXXXX: Pilot station No. of ACD group
- (2) 0 : Not provided 1**<**: To provide





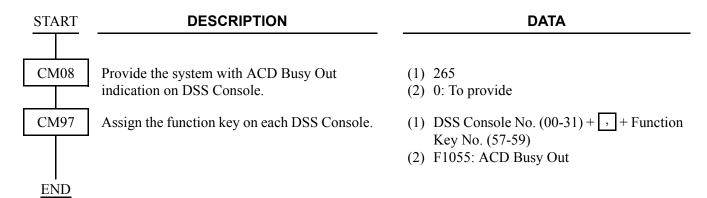


To provide DID Number Conversion for an ACD Group: See DID DIGIT CONVERSION. Page 303

### **BUSY IN/BUSY OUT-ACD**

### **PROGRAMMING**

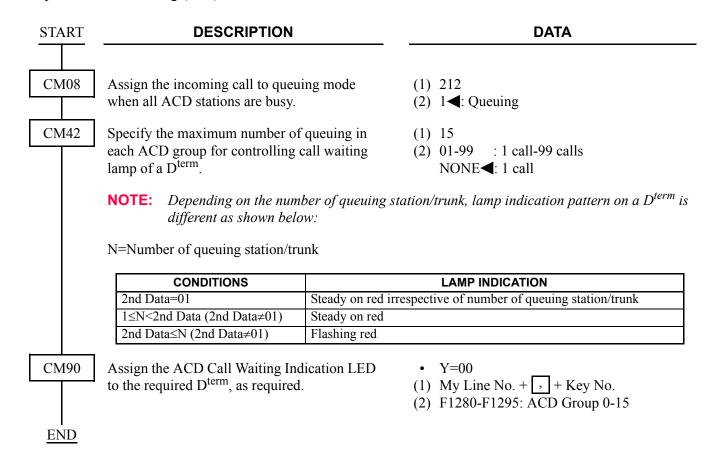
To provide ACD Busy Out indication on DSS Console:



### **CALL WAITING INDICATION-ACD**

### **PROGRAMMING**

To provide Call Waiting (CW) LEDs on the D<sup>term</sup>:



To provide an external Call Waiting Indicator:

START	DESCRIPTION	DATA

CM08

Assign the incoming call to queuing mode when all ACD stations are busy.

(1) 212(2) 1**◄**: Queuing

CM42

Specify the maximum number of queuing in each ACD group for controlling external indicator lamp.

(1) 15

(2) 01-99 : 1 call-99 calls NONE**◄**: 1 call

**NOTE:** Depending on the number of queuing station/trunk, lamp indication pattern on the external indicator is different as shown below:

N=Number of queuing station/trunk

CONDITIONS	LAMP INDICATION
2nd Data=01	Lamp on irrespective of number of queuing station/trunk (For the
	indication pattern, see CM59 in next page.)
N<2nd Data (2nd Data≠01)	Lamp off
2nd Data≤N (2nd Data≠01)	Lamp on (For the indication pattern, see CM59 in next page.)

CM10

Assign the DK card to the required LEN.

NOTE 1: The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.

(1) 000-763: LEN

(2) E800-E831 : DK card No.

For PIM0/1: E800-E807 For PIM2/3: E808-E815

For PIM4/5: E816-E823 For PIM6/7: E824-E831

NOTE 2: Circuit No. 3 of E831 is used for built-in External Equipment Interface on MP card by setting CM44.

CM14

Assign the DK card to the required LEN. [Series 3200 R6.2 software required]

NOTE 1: The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.

(1) XX ZZZ: LEN

XX:00-59: FP No.

ZZZ: 000-127: Port No.

(2) E800-E831 : DK card No.

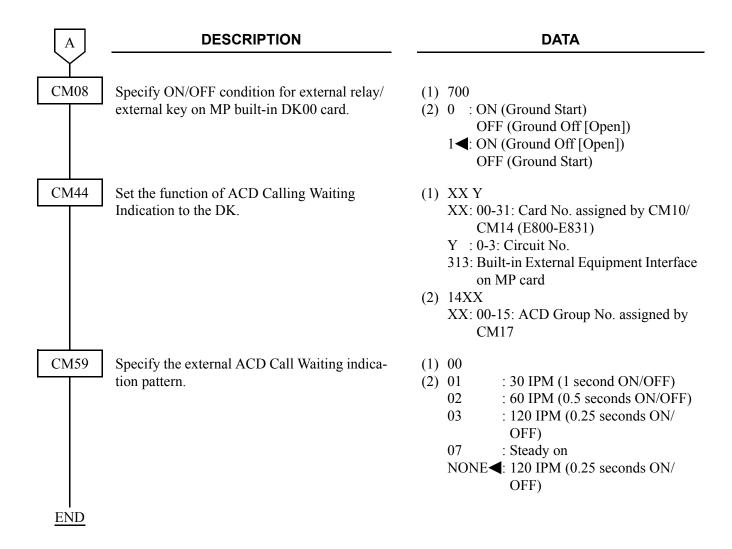
For FP No. 00 : E800-E807

For FP No. 01 : E808-E815

For FP No. 02: E816-E823

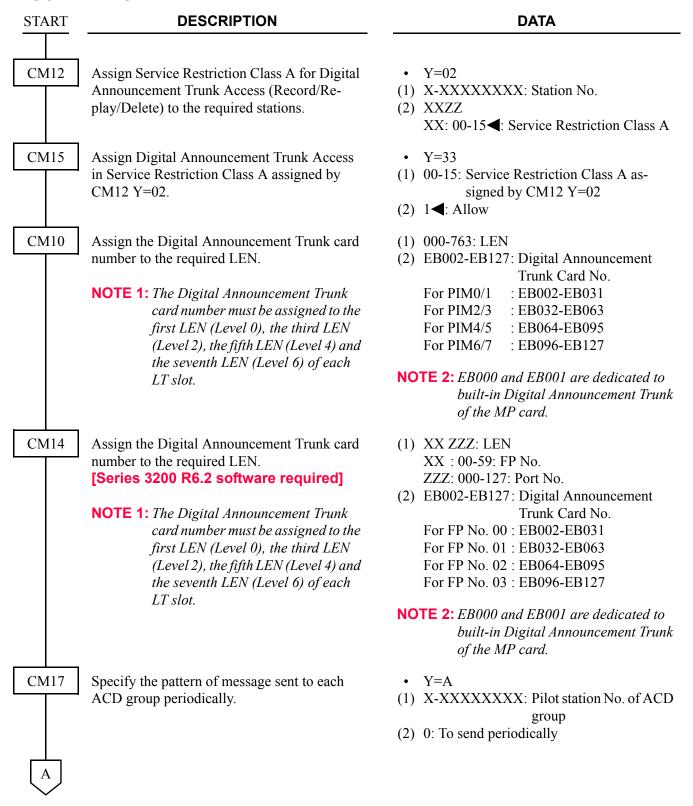
For FP No. 03: E824-E831

NOTE 2: Circuit No. 3 of E831 is used for built-in External Equipment Interface on MP card by setting CM44.



### **DELAY ANNOUNCEMENT-ACD**

### **PROGRAMMING**



A	DESCRIPTION	DATA
CM41	If the data for CM17 Y=A is "0", set the interval time for ACD Delay Announcement.	<ul> <li>Y=0</li> <li>(1) 47</li> <li>(2) 01-30: 4-120 seconds</li></ul>
	Specify the maximum ACD call waiting time before answer or abandonment for ACD PEG Count, and waiting time before ACD Delay Announcement.	<ul> <li>Y=0</li> <li>(1) 16</li> <li>(2) 01-30: 4-120 seconds</li></ul>
CM49	Assign the ACD Delay Announcement function to the required Digital Announcement Trunk.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card (EB002-EB127) No. assigned by CM10/CM14</li> <li>(2) 0B0XX XX: 00-15: ACD group No.</li> </ul>
CM51	When transferring the call to a station or Attendant after the 1st interval time of ACD Delay Announcement, assign the destination.  NOTE: This is a separate feature called "Delay Overflow". ACD Delay Announcement is required in order for this feature to work.	<ul> <li>Y=17</li> <li>(1) 00-63: Tenant No.</li> <li>(2) Destination:     X-XXXXXXXXX: Station No.     E000 : Attendant Console</li> </ul>
CM20	To record, replay and delete a message, assign the Digital Announcement Trunk access code, respectively.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access code</li> <li>(2) A100: Record</li></ul>
CM08 END	Specify a diversion display on a D <sup>term</sup> or Attendant Console when transferring an ACD call.	<ul><li>(1) 357</li><li>(2) 0 : Available</li><li>1◀: Not available</li></ul>

When sending the ACD second delay announcement:

START	DESCRIPTION	DATA
CM08	Provide the system with Busy Tone Connection for processing when all ACD stations are busy.	<ul><li>(1) 212</li><li>(2) 0: Busy Tone Connection</li></ul>
CM10	Assign the Digital Announcement Trunk card number to the required LEN.  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM0/1 : EB002-EB031 For PIM2/3 : EB032-EB063 For PIM4/5 : EB064-EB095 For PIM6/7 : EB096-EB127  NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.
CM14	Assign the Digital Announcement Trunk card number to the required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN</li></ul>
CM17	Specify the pattern of message sent to each ACD group periodically.	<ul> <li>Y=A</li> <li>X-XXXXXXXXX: Pilot station number of ACD group</li> <li>0: To send periodically</li> </ul>

A	DESCRIPTION	DATA
CM41	Set the interval time of ACD Delay Announcement.	<ul> <li>Y=0</li> <li>(1) 47</li> <li>(2) 01-30: 4-120 seconds</li></ul>
	Specify the maximum ACD call waiting time for ACD PEG Count, and waiting time before ACD Delay Announcement.	<ul> <li>Y=0</li> <li>(1) 16</li> <li>(2) 01-30: 4-120 seconds</li></ul>
CM49	Assign the ACD Delay Announcement function and the ACD Second Delay Announcement function to the required Digital Announcement Trunk.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. assigned by CM10/CM14</li> <li>(2) 11XX: ACD Second Delay Announcement XX : 00-15: ACD group No.</li> </ul>
END		

## **HUNT PAST NO ANSWER-ACD**

### **PROGRAMMING**

Refer to CALL FORWARDING-NO ANSWER. Page 142

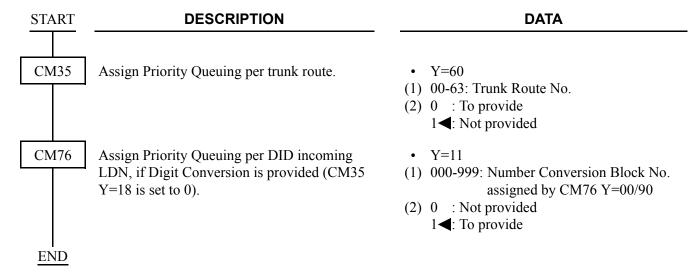
# **IMMEDIATE OVERFLOW-ACD**

### **PROGRAMMING**

Refer to CALL FORWARDING-BUSY LINE. Page 140

### **PRIORITY QUEUING-ACD**

### **PROGRAMMING**



# **QUEUE SIZE CONTROL-ACD**

### **PROGRAMMING**

Refer to AUTOMATIC CALL DISTRIBUTION (ACD). Page 95

### **SILENT MONITOR-ACD**

### **PROGRAMMING**

To monitor an ACD call, with or without warning tone:

**NOTE:** Monitoring telephone conversations may be illegal under certain circumstances and laws. Consult a legal advisor before implementing the monitoring of telephone conversations. Some federal and state laws require a party monitoring a telephone conversation to use beep-tones, to notify all parties to the telephone conversation, and/or obtain consent from all parties to the telephone conversation. Some of these laws provide strict penalties for illegal monitoring of telephone conversations.

START	DESCRIPTION	DATA	
CM08	Specify the warning tone sent to connected	(1) 259	
	stations when monitoring a station-to-station or station-to-trunk call.	(2) 0 : No tone 1◀: One warning tone	
	Specify whether the warning tone is sent to the outside party when monitoring a station-to-trunk call.	<ul> <li>(1) 076</li> <li>(2) 0 : To send</li> <li>1 &lt; : Not sent</li> </ul>	
CM12	Assign Service Restriction Class A for monitoring stations.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15 ✓: Service Restriction Class A</li> </ul>	
CM15	Allow monitoring stations in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=103</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>	
CM12	Assign Service Restriction Class A for monitored stations.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15 ✓: Service Restriction Class A</li> </ul>	
CM15	Allow being monitored in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=104</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>	
A			

A	DESCRIPTION	DATA
CM20	Assign the access code for monitoring, if required.	<ul> <li>Y=0-3 Number Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A033: Monitor</li> </ul>
CM90	Assign a monitoring function key to the D <sup>term</sup> , if required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + + Key No.</li> <li>(2) F0033: Monitoring</li> </ul>
CM08	Specify the action of monitoring station after the hold/hooking key is pressed in the monitored station or the monitored station becomes idle.  [Series 3500 software required]	<ul> <li>(1) 560</li> <li>(2) 0 : Keep monitoring</li> <li>1    : Stop monitoring</li> </ul>
CM48	When setting the second data of CM08>560 to 0 (keep monitoring), set the music for Internal Hold Tone that is sent to monitoring station.  NOTE 1: When PN-CP24-D/PN-CP26-B/PN-CP27-B/PN-CP31-D is used as MP card, the following tone sources are not available: "It's a small world (2nd data 05)", "Let it be (2nd data 07)", and "If you love me (2nd data 09)". "Minuet" will be set instead of those tone sources.  NOTE 2: This data setting is effective only for the legacy terminal. For D <sup>term</sup> IP, this data setting is not effective. D <sup>term</sup> IP uses the tone source in IP Adapter (Minuet).	• Y=3 (1) 01 (2) 00 : Nocturne 01 : Minuet 02 : Fur Elise 03 : The Maiden's Prayer 04 : When the saints go marching in 05 : It's a small world 06 : Spring (by four seasons) 07 : Let it be 08 : Ich bin ein Musikante (German folk song) 09 : If you love me 10 : Amaryllis (French folk song) NONE  Minuet
END	Define the type of call to be provided with Hold Tone on the MP card.	<ul> <li>Y=0</li> <li>(1) 02: Internal Call</li> <li>(2) 1400: Hold Tone Source on MP card</li> </ul>

### HARDWARE REQUIRED

To provide the delay announcement for ACD: DAT card or MP card (built-in DAT)

To provide the external Call Waiting Indicator: DK card or MP card (built-in External Equipment Interface) External Indicator

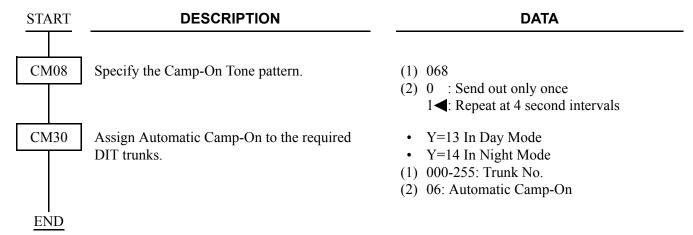
Requirement for External Indicator Control Method: Ground/Battery (Maximum125 mA) Type: Visual and/or Audible type with volume control

# AUTOMATIC CALL DISTRIBUTION (ACD) WITH MANAGEMENT INFORMATION SYSTEM (MIS)

**NOTE:** Additional programming is required for MIS, once ACD has been programmed. Refer to the CallCenterWorX System Manual. If you use the CallCenterWorX, the maximum digit of a station number must be 4 digits.

# **AUTOMATIC CAMP-ON**

### **PROGRAMMING**



# **AUTOMATIC CHANGE TO DAYLIGHT SAVING TIME**

### [Series 3600 software required]

#### **PROGRAMMING**

START CM43

**DESCRIPTION** 

Specify the automatic change time of the system clock from standard time to daylight-saving time (for change pattern 0).

**NOTE:** The change of system clock is executed at 2:00 am (in standard time) of the specified day.

Specify the automatic change time of the system clock from daylight-saving time to standard time (for change pattern 0).

**NOTE:** The change of system clock is executed at 3:00 am (in daylight-saving time) of the specified day.

**DATA** 

- Y=8
- (1) 00
- (2) MM W D

MM: 01-12 (Change Month)

W: 1-4/9 (Change Week)

1-4: First-Fourth Week

9 : Final Week

D: 0-6 (Change Day of the week)

- 0: Sunday
- 1: Monday
- 2: Tuesday
- 3: Wednesday
- 4: Thursday
- 5: Friday
- 6: Saturday

NONE**◄**: Automatic clock change is not provided

- Y=8
- (1) 01
- (2) MM W D

MM: 01-12 (Change Month)

W: 1-4/9 (Change Week)

1-4: First-Fourth Week

9 : Final Week

D: 0-6 (Change Day of the week)

- 0: Sunday
- 1: Monday
- 2: Tuesday
- 3: Wednesday
- 4: Thursday
- 5: Friday
- 6: Saturday

NONE**◄**: Automatic clock change is not provided

A



### **DESCRIPTION**

### **DATA**

CM43

Specify the automatic change time of the system clock from standard time to daylight-saving time (for change pattern 1).

**NOTE:** The change of system clock is exe-

cuted at 2:00 am (in standard time)

of the specified day.

Specify the automatic change time of the system clock from daylight-saving time to standard time (for change pattern 1).

**NOTE:** The change of system clock is executed at 3:00 am (in daylight-saving time) of the specified day.

• Y=8

(1) 04

(2) MM W D

MM: 01-12 (Change Month)

W: 1-4/9 (Change Week)

1-4: First-Fourth Week

9 : Final Week

D: 0-6 (Change Day of the week)

0: Sunday

1: Monday

2: Tuesday

3: Wednesday

4: Thursday

5: Friday

6: Saturday

NONE **◄**: Automatic clock change is not provided

• Y=8

(1) 05

(2) MM W D

MM: 01-12 (Change Month)

W: 1-4/9 (Change Week)

1-4: First-Fourth Week

9 : Final Week

D: 0-6 (Change Day of the week)

0: Sunday

1: Monday

2: Tuesday

3: Wednesday

4: Thursday

5: Friday

6: Saturday

NONE**◄**: Automatic clock change is not provided

В

В	DESCRIPTION	DATA
CM67	Assign the automatic clock change pattern to each location number.	<ul> <li>Y=31</li> <li>(1) 00-63: Location No.</li> <li>(2) 0 : Change Pattern 0 (assigned by CM43 Y=8&gt;00/01)</li> <li>1 : Change Pattern 1 (assigned by CM43 Y=8&gt;04/05)</li> <li>NONE ✓: Automatic clock change is not provided</li> </ul>
	Set the daylight-saving time to each location.	<ul> <li>Y=30</li> <li>(1) 00-63: Location No.</li> </ul>
	NOTE: Usually do not set this command by MAT/CAT. This command is set automatically when automatic system clock change has been executed by CM43 Y=8/CM67 Y=31.  If the system power is off at the time for clock change, set this data.	(2) 0 : To operate with Daylight-Saving Time NONE ✓: To operate with Standard Time
CM08	Specify the system clock used for the SMDR output of outgoing/incoming call.	<ul> <li>(1) 836</li> <li>(2) 0 : System clock of the site that the seized trunk is accommodated (for outgoing call)/System clock of site that the terminated trunk is accommodated (for outgoing call)</li> <li>1 ≤ System clock of Main Site</li> </ul>
	Specify the system clock used for the SMDR output of station to station call.	<ul> <li>(1) 837</li> <li>(2) 0 : System clock of the site that the seized trunk/calling station is accommodated</li> <li>1 ◄: System clock of Main Site</li> </ul>
	Specify the system clock used for the date pattern/time pattern in LCR service.	<ul> <li>(1) 904</li> <li>(2) 0 : System clock of the site that the seized trunk/calling station is accommodated</li> <li>1</li></ul>
<u>END</u>		

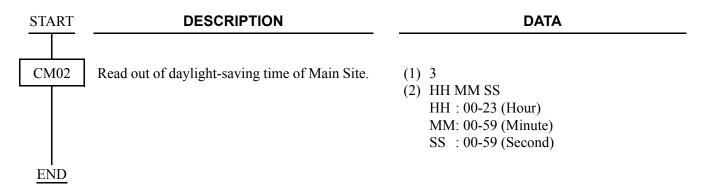
To read the system clock which the automatic clock change was executed (for change pattern 0/change pattern 1):

**DESCRIPTION DATA START** CM43 Read the system clock which the automatic Y=8clock change was executed from standard time (1) 02to daylight-saving time (for change pattern 0). (2) YYYY MM DD YYYY : 2000-2099 (Year) MM : 01-12 (Month) : 01-31 (Date) NONE**◄**: Automatic clock change has not been executed Read the system clock which the automatic Y=8clock change was executed from daylight-(1) 03saving time to standard time (for change pat-(2) YYYY MM DD tern 0). YYYY : 2000-2099 (Year) : 01-12 (Month) MM DD : 01-31 (Date) NONE**◄**: Automatic clock change has not been executed Read the system clock which the automatic Y=8clock change was executed from standard time (1) 06to daylight-saving time (for change pattern 1). (2) YYYY MM DD YYYY : 2000-2099 (Year) : 01-12 (Month) MM : 01-31 (Date) DD NONE**◄**: Automatic clock change has not been executed Read the system clock which the automatic Y=8(1) 07clock change was executed from daylightsaving time to standard time (for change pat-(2) YYYY MM DD tern 1). YYYY : 2000-2099 (Year) MM : 01-12 (Month) : 01-31 (Date) DD NONE **<**: Automatic clock change has not been executed

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**END** 

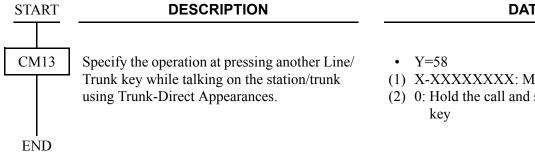
To read out of daylight-saving time of Main Site:



# **AUTOMATIC HOLD**

[Series 3800 software required]

### **PROGRAMMING**

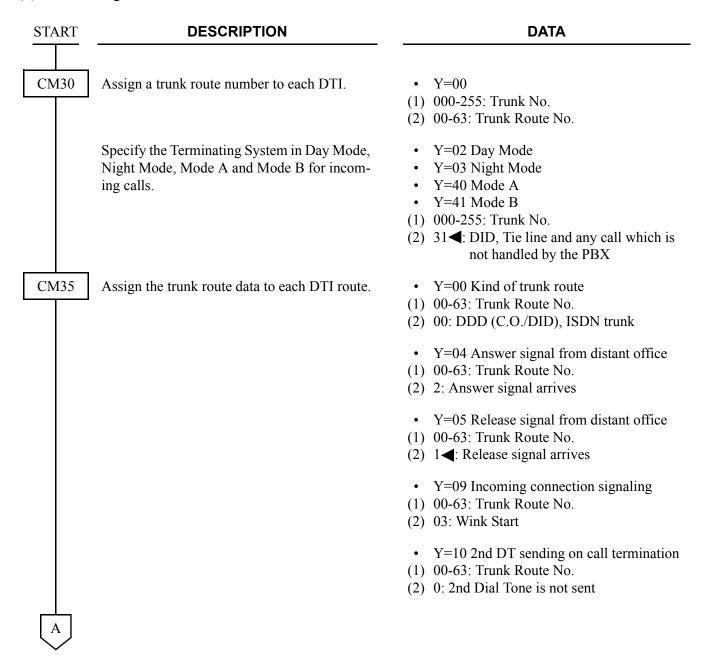


- **DATA**
- (1) X-XXXXXXXX: My Line No.
- (2) 0: Hold the call and seize the Line/Trunk

# **AUTOMATIC NUMBER IDENTIFICATION (ANI)**

### **PROGRAMMING**

(1) DTI Assignment for ANI





### **DESCRIPTION**

### **DATA**

CM35

CONNECTION	PAD DATA OF DTI (dB)			
PATTERNS	DATA =4 (T/R)	DATA =5 (T/R)	DATA =6 (T/R)	DATA =7 (T/R)
Station-DTI	-3/-8	-3/-3	-3/-3	-3/-8
Tone-DTI	0/0	0/0	0/0	0/0
COT/DID/ODT (2W E&M)/IPT- DTI	0/0	0/0	0/0	0/0
ODT (4W E&M)- DTI	+3/-3	0/0	0/0	+3/-3
DTI/BRT/PRT/ CCT/Virtual IPT- DTI	0/–6	0/0	0/-6	0/0

T/R: Transmitter PAD/Receiver PAD

+ : Gain - : Loss

Assign calling number sending method from the network to each trunk route.

• Y=19 DTI Pad

(1) 00-63: Trunk Route No.

(2) 0-3 : Programmable PAD (See CM42)

4-7**◄**: Fixed PAD (See left table)

• Y=20 Sender Start Condition

(1) 00-63: Trunk Route No.

(2) 00: Wink Start

• Y=129 Calling No. Sending Method

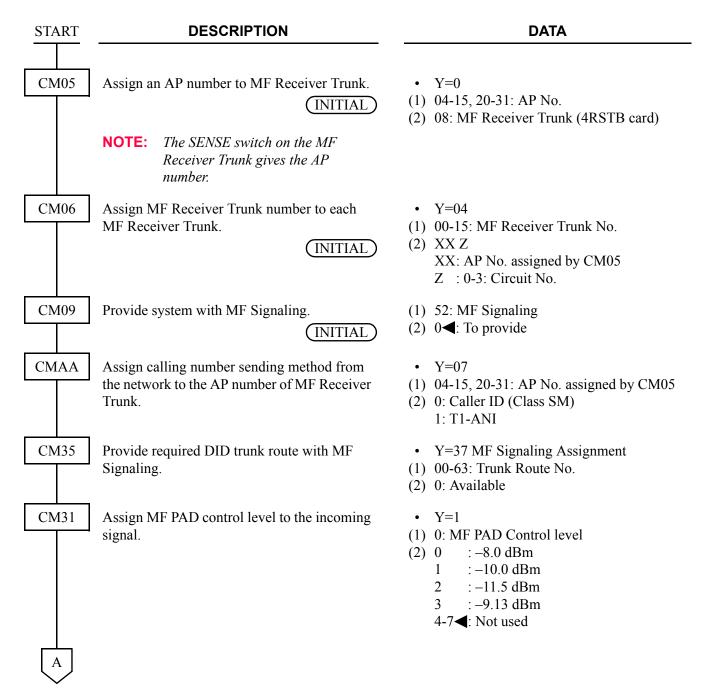
(1) 00-63: Trunk Route No.

(2) 0: Caller ID (Class SM)

1: T1-ANI

**END** 

### (2) MF Signaling Assignment



A	DESCRIPTION	DATA	
CM31	Assign MF Receiver sensitive level.  [INITIAL]	• Y=1 (1) 1: MF Receiver Sensitive level (2) 00-14: -21 dBm35 dBm 15◀: -36 dBm (-1 dBm increments)	
	Assign MF Receiver to each circuit number (0-3) of the MF Receiver Trunk.  INITIAL	<ul> <li>Y=2</li> <li>(1) 0-3: AP No. NOTE</li> <li>(2) 3◀: All circuits assigned as Receiver</li> </ul>	
		NOTE: AP numbers 0-3 correspond to the AP numbers assigned by CM05 (04-15, 20-31):  CM31 Y=2 CM05 Y=0  AP Number 0: AP Number X  AP Number 1: AP Number Y  AP Number 2: AP Number Z  AP Number 3: AP Number W  (X <y<z<w)< td=""></y<z<w)<>	
	Assign supervisory timer of interdigit pause on incoming signal.	<ul> <li>Y=B</li> <li>(1) 05: Supervisory Timer of Interdigit Pause on Incoming Signal</li> <li>(2) NONE &lt; 24 seconds 01-31 : 1-31 seconds</li> </ul>	
CM35 END	Assign Busy/Idle information not to be sent to T1 network.	<ul> <li>Y=48 Busy/Idle Sending to T1 Network</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: Not available</li> </ul>	

### (3) ANI Assignment

CM08

CM31

**START** 

### **DESCRIPTION**

### **DATA**

Assign requiring of ANI Signal from T1 network when an incoming call terminates.

Assign the Signal Pattern received from T1 network.

(INITIAL

- When the Signal Pattern from T1 network is FGD-Format: Assign the data to "NONE".
- When the Signal Pattern from T1 network is ANI-Format: Assign the data to "02". NOTE

Assign the number of digits of Called Number received from T1 network.



Assign the signal kind of Called Number sent from T1 network.

- **NOTE:** When the Signal Pattern from T1 network is FGD-Format: Assign the data to "1".
  - When the Signal Pattern from T1 network is ANI-Format: Assign the data to "0".

Assign the ACK-WINK Signal to be sent to the DTI when the signal kind of Called from T1 network is MF Signal.

- **NOTE:** When the Signal Pattern from T1 network is FGD-Format: Assign the data to "0".
  - When the Signal Pattern from T1 network is ANI-Format: Assign the data to "1".

- (1) 472
- (2) 0: Available
- Y=3
- (1) 00: Signal Pattern from T1 Network
- (2) NONE < : ANI + Called No. 02 · ANI

- Y=1
- (1) 2: Number of Digits of Called No.
- (2) NONE**<**: No data : 1-31 digits 01-31
- Y=A
- (1) 17: Signal Kind of Called No. **NOTE**
- (2) 0 : DP**1<**: DTMF
- Y=A
- (1) 16: Sending of ACK-WINK Signal on Receiving MF Signal **NOTE**
- (2) 0 : To send 1**⋖**: Not sent



### **DESCRIPTION**

### **DATA**

CM31

Assign the ACK-WINK Signal to be sent to the DTI when the signal kind of called number received from T1 network is DP Signal.

- **NOTE:** When the Signal Pattern from T1 network is FGD-Format: Assign the data to "1".
  - When the Signal Pattern from T1 network is ANI-Format: Assign the data to "0".

Assign the number of digits of ANI received from T1 network.

(INITIAL)

Assign the number of digits to be deleted from ANI, if required.

< An example of FGD Format >

Received digits: Key Pulse + XX + 1234567890 + Stop Pulse ANI (10 digits) Information digits (2 digits) • 2 digits deletion • Identification on the terminal: 10 digits (ANI)

• Y=A

(1) 18: Sending of ACK-WINK Signal on Receiving DP Signal **NOTE** 

(2) 0 : To send 1**⋖**: Not sent

- Y=1
- (1) 3: ANI Digits from T1 Network
- (2) NONE**<**: No data 01-31 : 1-31 digits
- Y=A
- (1) 14: Number of Deleting Digits from ANI
- (2) NONE **<**: No digit deletion : No digit deletion 00 01-10

: Leading one digit deletion-Leading 10 digits deletion

CM08

Assign whether ANI is sent to the OAI terminal or not.

Assign whether ANI is sent to the SMDR terminal or not.

(1) 462: Sending ANI to OAI terminal

(2) 0 : To send 1**⋖**: Not sent

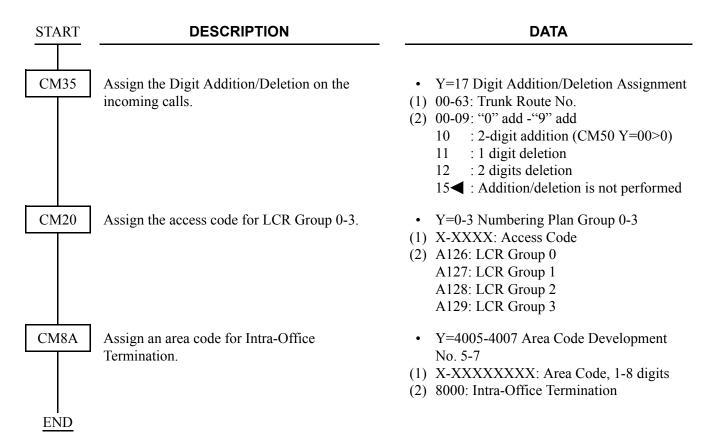
(1) 463: Sending ANI to SMDR terminal

(2) 0 : To send 1**⋖**: Not sent

**END** 

When the signal pattern of the called number sent from T1 network is as shown below, assign the following data, if required.

### Called Number=NPA + NNX + Called Station Number



**NOTE:** *FGD-Format and ANI-Format are:* 

SIGNAL PATTERN	CALLED NUMBER	ANI
FGD-Format	MF Signal	MF Signal
ANI-Format	DP Signal	MF Signal

### HARDWARE REQUIRED

DTI card MFR card

# **AUTOMATIC RECALL**

### **PROGRAMMING**

**DESCRIPTION DATA START** CM41 Specify the timing for AUTOMATIC RE-• Y=0 (1) 00: Attendant Recall If no data is set, the following timing will be (2) 01-14: 2.4-33.6 seconds applied: (2.4 second increments) Attendant Recall : 31.2-33.6 seconds 15-24: 38.4-124.8 seconds Non Exclusive Hold : 60-64 seconds (9.6 second increments) **Exclusive Hold** : 236-240 seconds (1) 05: Non Exclusive Hold Transfer Recall : 24-28 seconds (2) 01-98: 4-392 seconds Attendant Hold Recall: 31.2-33.6 seconds (4 second increments) : 24-32 seconds Camp-On Recall : Recall is not performed (1) 06: Exclusive Hold (2) 01-98: 4-392 seconds (4 second increments) : Recall is not performed (1) 07: Transfer Recall (2) 01-30: 4-120 seconds (4 second increments) (1) 11: Attendant Hold Recall (2) 01-14: 2.4-33.6 seconds (2.4 second increments) 15-24: 38.4-124.8 seconds (9.6 second increments) (1) 26: Camp-On Recall (2) 01-15: 16-128 seconds (8 second increments) **END** 

# **BACKGROUND MUSIC**

## **PROGRAMMING**

START	DESCRIPTION	DATA	
CM10	Assign BGM Interface trunks (COT card/TNT card) to the required LEN.  NOTE: The TNT trunk number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.	(1) 000-763: LEN (2) D000-D255: COT/TNT Trunk No.	
CM14	Assign BGM Interface trunks (COT card/TNT card) to the required LEN.  [Series 3200 R6.2 software required]  NOTE: The TNT trunk number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN</li></ul>	
CM12	Assign Service Restriction Class A to the required D <sup>term</sup> s.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: My Line No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15  ☐: Service Restriction Class A</li> </ul>	
CM15	Allow Background Music on D <sup>term</sup> in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=32</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>	
CM20	Assign the access code for this feature.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access code (66)</li> <li>(2) A039: BGM on D<sup>term</sup></li> </ul>	
CM30	Assign a trunk route number to the BGM Interface trunk (COT card/TNT card).	<ul> <li>Y=00</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 00-63: Trunk Route No.</li> </ul>	
CM35	Assign the BGM interface to each trunk route.	<ul> <li>Y=00</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 05: Interface with BGM Tone Source</li> </ul>	
CM48 END	Assign a BGM program number to each trunk number connected to the BGM source.  INITIAL	<ul> <li>Y=4</li> <li>(1) 00-09: BGM program No. 0-9</li> <li>(2) D000-D255: Trunk No. connected to BGM Source</li> </ul>	

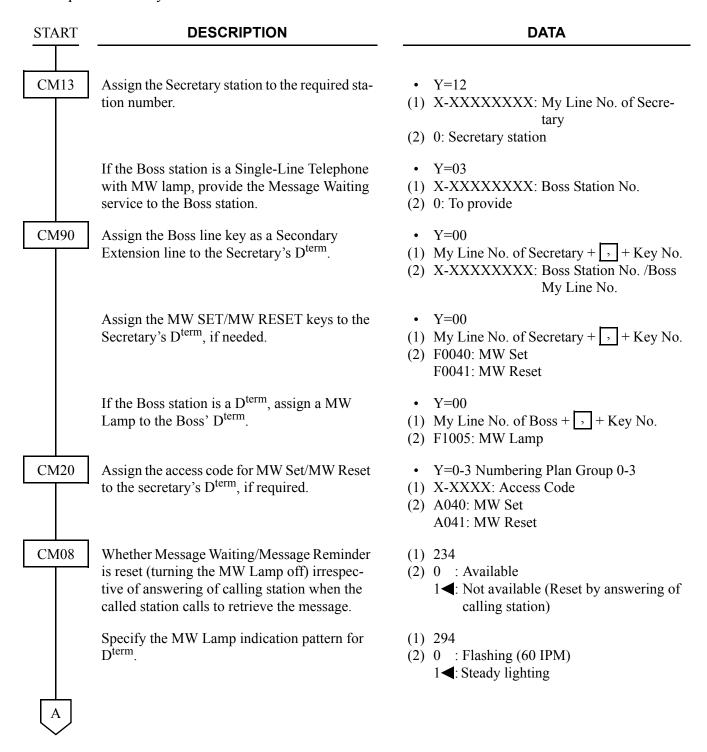
# **HARDWARE REQUIRED**

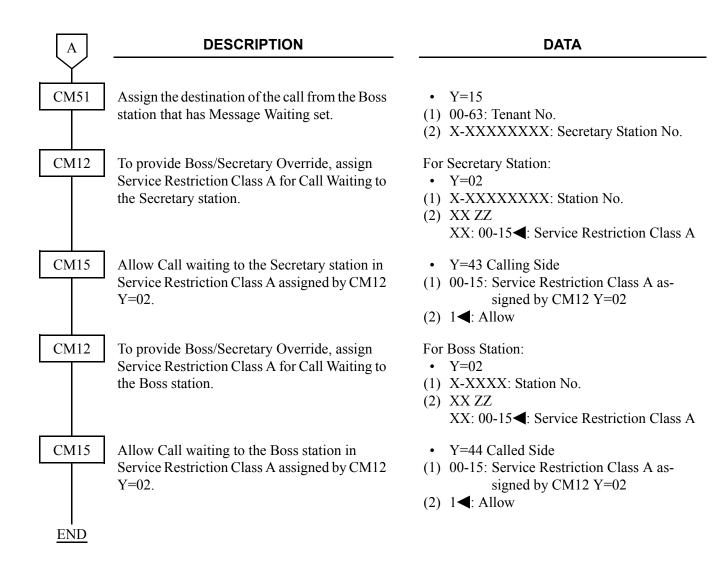
External BGM Source (Up to 10 BGM Sources can be provided) COT card or TNT card

# **BOSS/SECRETARY CALLING**

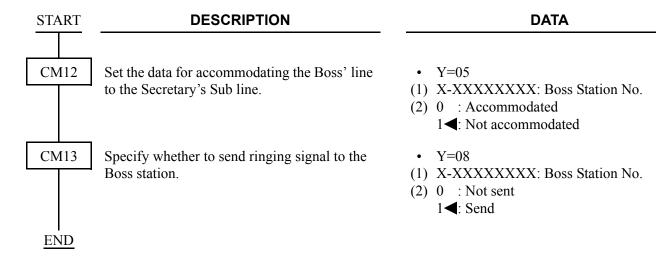
#### **PROGRAMMING**

To set up the Secretary station with the D<sup>term</sup>:





To assign the Boss station as a singleline telephone:



## HARDWARE REQUIRED

 $D^{\text{term}}$  and DLC card

# **BROKER'S CALL**

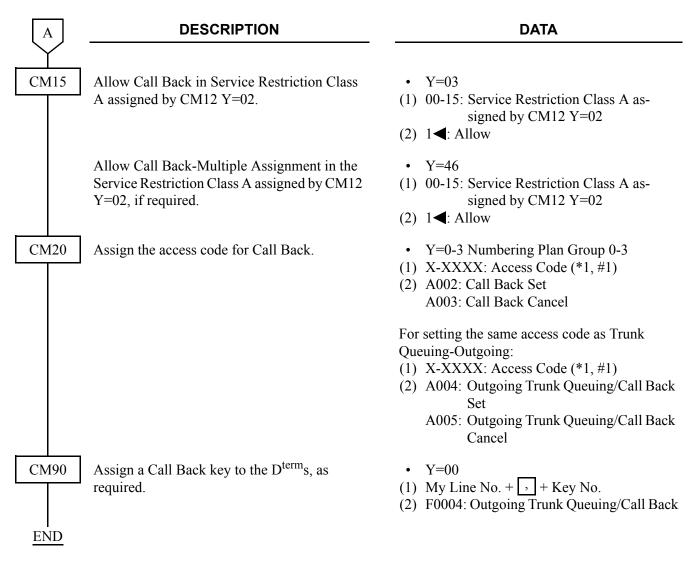
## **PROGRAMMING**

Refer to CALL HOLD. Page 404

# **CALL BACK**

## **PROGRAMMING**

START	DESCRIPTION	DATA
CM08	Provide the system with the Single Digit Feature Access Code while the calling station hears ringback tone/busy tone.	<ol> <li>(1) 156: Ringback Tone</li> <li>(2) 0: Available</li> <li>(1) 208: Busy Tone</li> <li>(2) 0: Available</li> </ol>
	To activate the Single Digit Feature Access Code, set CM08>050, 051, 069 and 148 to "1".	<ul><li>(1) 050: * Button as Switch Hook Flash</li><li>(2) 1◀: Ineffective</li></ul>
		<ul><li>(1) 051: # Button as Switch Hook Flash</li><li>(2) 1◀: Ineffective</li></ul>
		(1) 069: Single Digit Dialing on BT Connection
		(2) 1 <b>⋖</b> : Step Call
		(1) 148: Same Last Digit Redialing on BT Connection
		(2) 1 <b>◄</b> : Ineffective
	NOTE 1: A single digit access code "2" is fixedly	v assigned to this feature.
	<b>NOTE 2:</b> While the calling $D^{term}$ , $DP$ or $DTMF$ t access code "2" is not available.	elephone is holding the other call, the single digit
	NOTE 3: From a DTMF telephone a hooking operaccess code.	eration is required before dialing the single digit
CM12	Assign Service Restriction Class A to the necessary stations.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15 ✓: Service Restriction Class A</li> </ul>
A		



#### HARDWARE REQUIRED

D<sup>term</sup> and DLC card if required

# **CALL FORWARDING**

To set or reset the Call Forwarding service from a MAT/CAT, use the following command.

	<b>C</b>	,
START	DESCRIPTION	DATA
START CME6	Use Y=00-03 for Call Forwarding and Y=04-05 for Split Call Forwarding. To reset the service, assign "CCC" to the second data of each Y No.	• Y=00 Call Forwarding-All Calls • Y=01 Call Forwarding-Busy Line • Y=02 Call Forwarding-No Answer • Y=03 Call Forwarding-Busy Line/No Answer (1) X-XXXXXXXX: Station No. (2) Destination No. <pre> </pre> <pre> <pre> <pre></pre></pre></pre>
END		

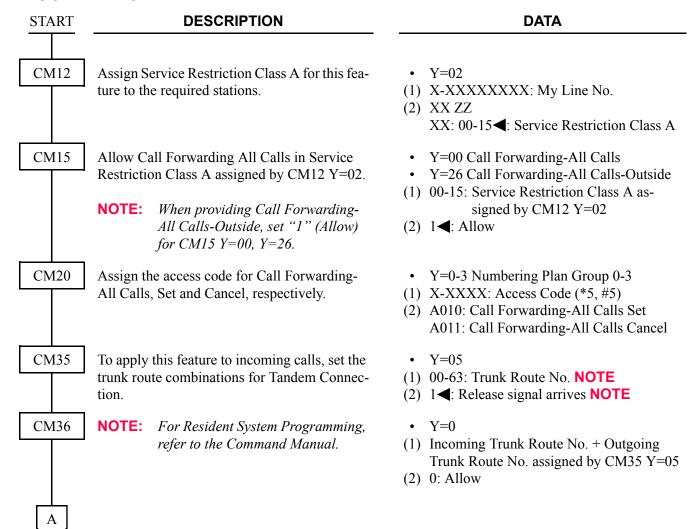
## ATTENDANT CALL FORWARDING SET-UP AND CANCEL

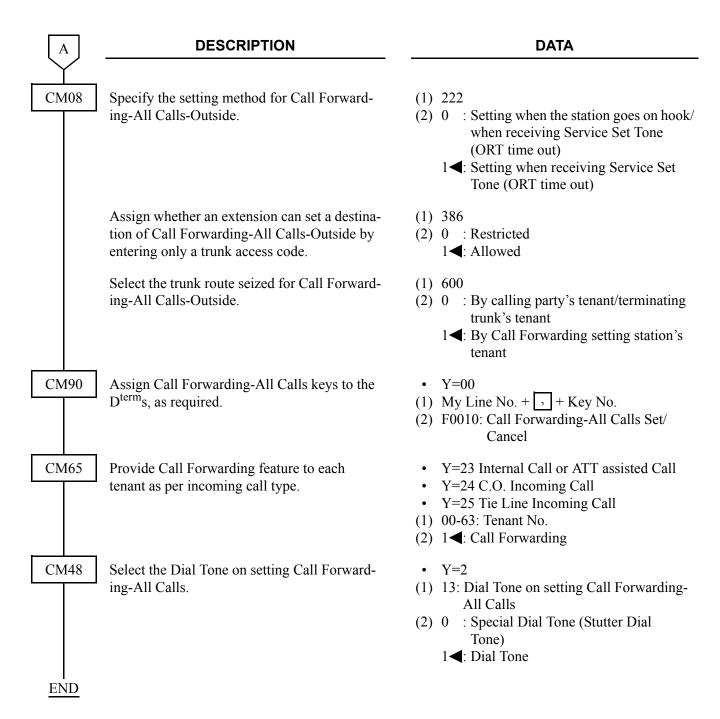
## **PROGRAMMING**

Refer to CALL FORWARDING-ALL CALLS. Page 138
Refer to CALL FORWARDING-BUSY LINE. Page 140
Refer to CALL FORWARDING-NO ANSWER. Page 142

## CALL FORWARDING-ALL CALLS

#### **PROGRAMMING**



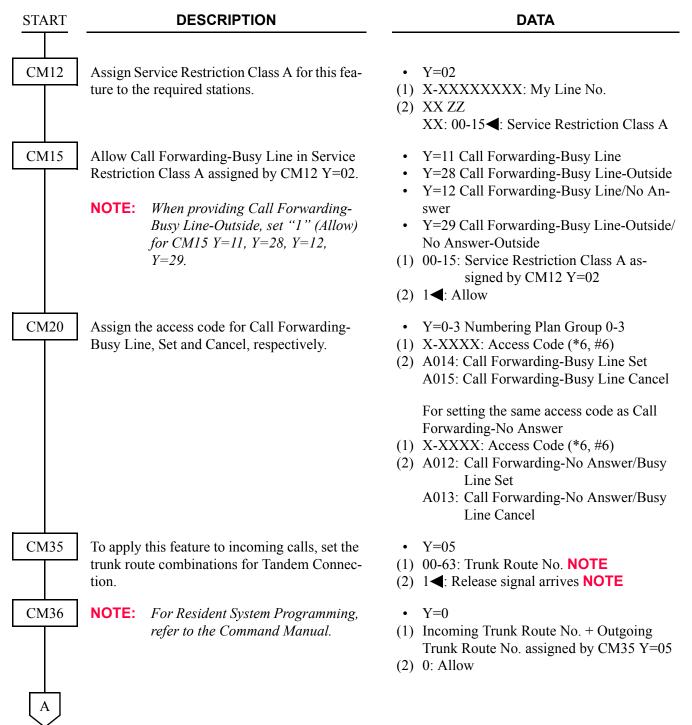


#### HARDWARE REQUIRED

D<sup>term</sup> and DLC card if required

## CALL FORWARDING-BUSY LINE

## **PROGRAMMING**



A	DESCRIPTION	DATA
CM08	Specify the setting method for Call Forwarding-Busy Line-Outside.	<ul> <li>(1) 222</li> <li>(2) 0 : Setting when the station goes on hook/ when receiving Service Set Tone (ORT time out)</li> <li>1 ≤ Setting when receiving Service Set Tone (ORT time out)</li> </ul>
	Allow or restrict the ability to set Call Forwarding-Busy Line for a station with Do Not Disturb set.	<ul> <li>(1) 240</li> <li>(2) 0 : Allowed</li> <li>1</li></ul>
	Assign whether an extension can set a destination of Call Forwarding-Busy Line-Outside by entering only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0 : Restricted</li> <li>1 ◀: Allowed</li> </ul>
	Select the trunk route seized for Call Forwarding-Busy Line-Outside.	<ul> <li>(1) 600</li> <li>(2) 0 : By calling party's tenant/terminating trunk's tenant</li> <li>1 ◀: By Call Forwarding setting station's tenant</li> </ul>
CM90	Assign Call Forwarding-Busy Line keys to the D <sup>term</sup> , as required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F0014: Call Forwarding-Busy Line Set/ Cancel</li> </ul>
		For setting the same key as Call Forward- ing-No Answer  (1) My Line No. + + Key No.  (2) F0012: Call Forwarding-No Answer/Busy Line Set/Cancel
CM65	Provide Call Forwarding feature with each tenant as per incoming call type.	<ul> <li>Y=23 Internal Call or ATT assisted Call</li> <li>Y=24 C.O. Incoming Call</li> <li>Y=25 Tie Line Incoming Call</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 1◀: Call Forwarding</li> </ul>
END		

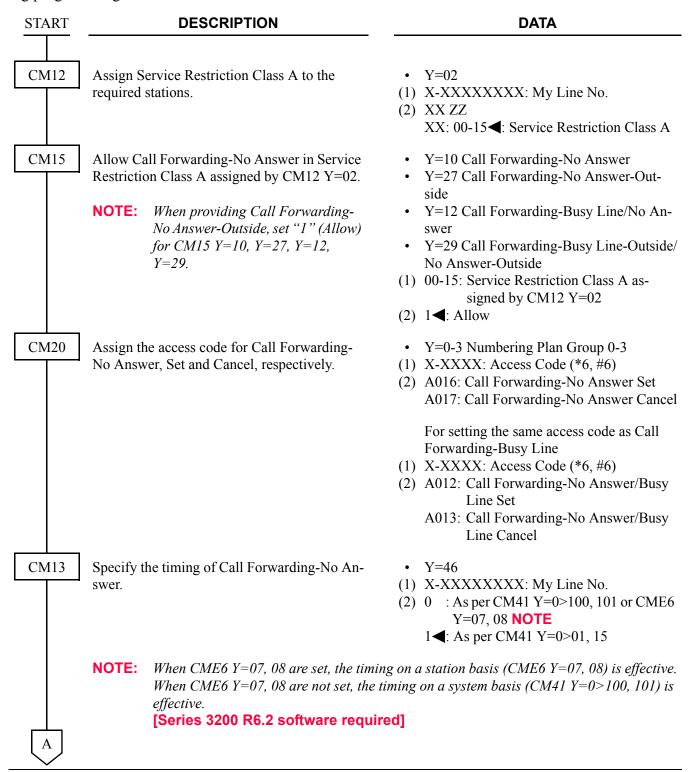
# **HARDWARE REQUIRED**

D<sup>term</sup> and DLC card if required

## CALL FORWARDING-NO ANSWER

#### **PROGRAMMING**

To provide Call Forwarding-No Answer with the timer on a system basis set by MAT/CAT, do the following programming.



$ \overline{ A } $	DESCRIPTION	DATA
CM41	Specify the timing of Call Forwarding-No Answer for a trunk incoming call.	<ul> <li>Y=0</li> <li>(1) 01 : Timing for a trunk incoming call 100: Timing for a trunk incoming call [Series 3100 software required]</li> <li>(2) 01-30: 4-120 seconds  (4 second increments)</li> <li>If no data is set, the default setting is 32-36 seconds.</li> </ul>
	Specify the timing of Call Forwarding-No Answer for an internal call or an assisted call.	<ul> <li>Y=0</li> <li>(1) 15: Timing for an internal call or an assisted call</li> <li>101: Timing for an internal call or an assisted call</li> <li>[Series 3100 software required]</li> <li>(2) 01-30: 4-120 seconds <ul> <li>(4 second increments)</li> </ul> </li> <li>If no data is set, the default setting is 32-36 seconds.</li> </ul>
CM35	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	<ul> <li>Y=05</li> <li>(1) 00-63: Trunk Route No. NOTE</li> <li>(2) 1◀: Release signal arrives NOTE</li> </ul>
CM36	NOTE: For Resident System Programming, refer to the Command Manual.	<ul> <li>Y=0</li> <li>(1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 Y=05</li> <li>(2) 0: Allow</li> </ul>
CM08	Specify the setting method for Call Forwarding-No Answer-Outside.	<ul> <li>(1) 222</li> <li>(2) 0 : Setting when the station goes on hook/ when receiving Service Set Tone (ORT time out)</li> <li>1 ◄: Setting when receiving Service Set Tone (ORT time out)</li> </ul>
В	Assign whether an extension can set a destination of Call Forwarding-No Answer-Outside by entering only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0 : Restricted</li> <li>1 &lt; : Allowed</li> </ul>

В	DESCRIPTION	DATA
CM08	Select the trunk route seized for Call Forwarding-No Answer-Outside.	<ul> <li>(1) 600</li> <li>(2) 0 : By calling party's tenant/terminating trunk's tenant</li> <li>1 ■: By Call Forwarding setting station's tenant</li> </ul>
CM90	Assign Call Forwarding-No Answer keys to the D <sup>term</sup> s, as required.	<ul> <li>Y=00</li> <li>(1) My Line No. + , + Key No.</li> <li>(2) F0016: Call Forwarding-No Answer Set/ Cancel</li> </ul>
		For setting the same key as Call Forwarding-Busy Line  (1) My Line No. + , + Key No.  (2) F0012: Call Forwarding-No Answer/Busy Line Set/Cancel
CM65	Provide Call Forwarding feature with each tenant as per incoming call type.	<ul> <li>Y=23 Internal Call or ATT assisted Call</li> <li>Y=24 C.O. Incoming Call</li> <li>Y=25 Tie Line Incoming Call</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 1◀: Call Forwarding</li> </ul>
CM08	Specify the timing of Call Forwarding-No Answer for a tie line incoming call.  [Series 3200 R6.2 software required]	<ul> <li>(1) 126</li> <li>(2) 0 : As per timing for internal call or an assisted call</li> <li>1 ◀: As per timing for trunk incoming call</li> </ul>
	NOTE: The timing for a tie line incoming call	is set as following data.

**NOTE:** The timing for a tie line incoming call is set as following data. When CM08>126:0 is set:

2ND DATA OF CM13 Y=46	TIMING FOR TIE LINE INCOMING CALL	
0	As per CM41 Y=0>101	
1-	As per CM41 Y=0>15	

*When CM08>126:1* **◄** *is set:* 

2ND DATA OF CM13 Y=46	TIMING FOR TIE LINE INCOMING CALL	
0	As per CM41 Y=0>100	
1	As per CM41 Y=0>01	

**END** 

To provide Call Forwarding-No Answer with the timer on a station basis set by MAT/CAT, do the following programming in addition to the programming for Call Forwarding-No Answer with the timer on a system basis. Page 142

# [Series 3200 R6.2 software required]

START	DESCRIPTION	DATA
CM13	Specify the timing of Call Forwarding-No Answer to as per CM41 Y=0>100, 101 or CME6 Y=07, 08.	<ul> <li>Y=46</li> <li>(1) X-XXXXXXXXX: My Line No.</li> <li>(2) 0: As per CM41 Y=0&gt;100, 101 or CME6 Y=07, 08 NOTE</li> </ul>
		ag on a station basis (CME6 $Y$ =07, 08) is effective. iming on a system basis (CM41 $Y$ =0>100, 101) is
CME6	Specify the timing of Call Forwarding-No Answer for a trunk incoming call.	<ul> <li>Y=07</li> <li>(1) X-XXXXXXXXX: My Line No.</li> <li>(2) 001-120: 4-120 seconds         <ul> <li>(4 second increments)</li> </ul> </li> <li>NONE&lt;</li> <li>: As per CM41 Y=0&gt;100</li> </ul>
	Specify the timing of Call Forwarding-No Answer for an internal call or an assisted call.	<ul> <li>Y=08</li> <li>X-XXXXXXXXX: My Line No.</li> <li>001-120: 4-120 seconds         <ul> <li>(4 second increments)</li> </ul> </li> <li>NONE&lt;</li> <li>As per CM41 Y=0&gt;101</li> </ul>
A		

A
CI 100

## **DESCRIPTION**

## **DATA**

CM08

Specify the timing of Call Forwarding-No Answer for a tie line incoming call.

(1) 126

(2) 0 : As per timing for internal call or an assisted call

1**◄**: As per timing for trunk incoming call

**NOTE:** The timing for a tie line incoming call is set as following data. When CM08>126:0 is set:

2ND DATA OF CM13 Y=46	TIMING ON A STATION BASIS (CME6 Y=08)	TIMING FOR TIE LINE INCOMING CALL
0	Set	As per CME6 Y=08
	Not set	As per CM41 Y=0>101

*When CM08>126:1* **◄** *is set:* 

2ND DATA OF CM13 Y=46	TIMING ON A STATION BASIS (CME6 Y=07)	TIMING FOR TIE LINE INCOMING CALL
0	Set	As per CME6 Y=07
	Not set	As per CM41 Y=0>100

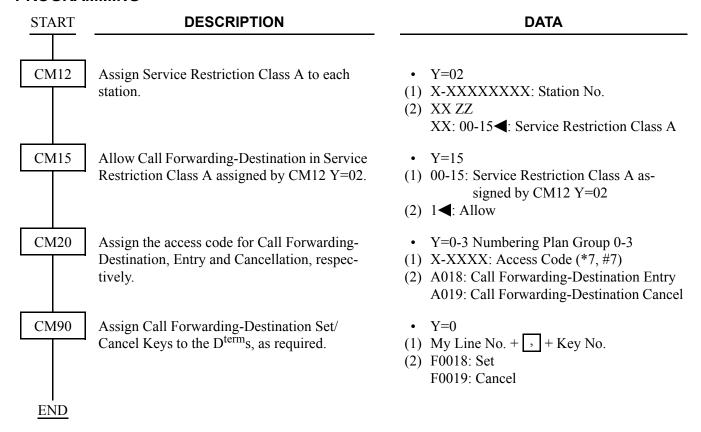
**END** 

## HARDWARE REQUIRED

D<sup>term</sup> and DLC card if required

## **CALL FORWARDING-DESTINATION**

#### **PROGRAMMING**

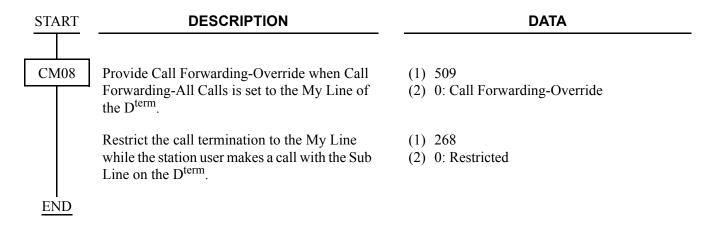


## **CALL FORWARDING-OVERRIDE**

## **PROGRAMMING**

To allow the call forward destination station user to call the station which has set Call Forwarding-All Calls, no programming is required.

To allow the call forward destination station user with D<sup>term</sup> Sub Line to call the station which has set Call Forwarding-All Calls to the My Line of the station, assign the following data.



## HARDWARE REQUIRED

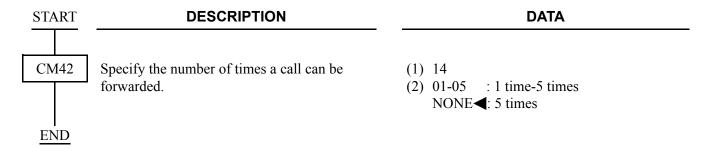
Dterm and DLC card as required

## MULTIPLE CALL FORWARDING-ALL CALLS

## MULTIPLE CALL FORWARDING-BUSY LINE

## **PROGRAMMING**

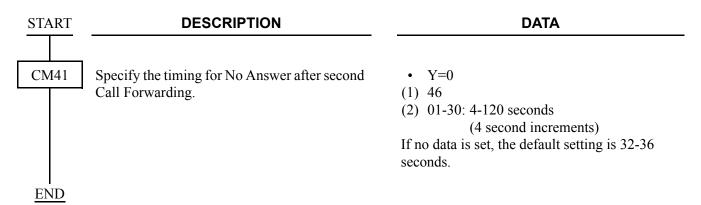
In addition to the programming for Call Forwarding-All Calls/Busy Line, do the following programming.



## **MULTIPLE CALL FORWARDING-NO ANSWER**

## **PROGRAMMING**

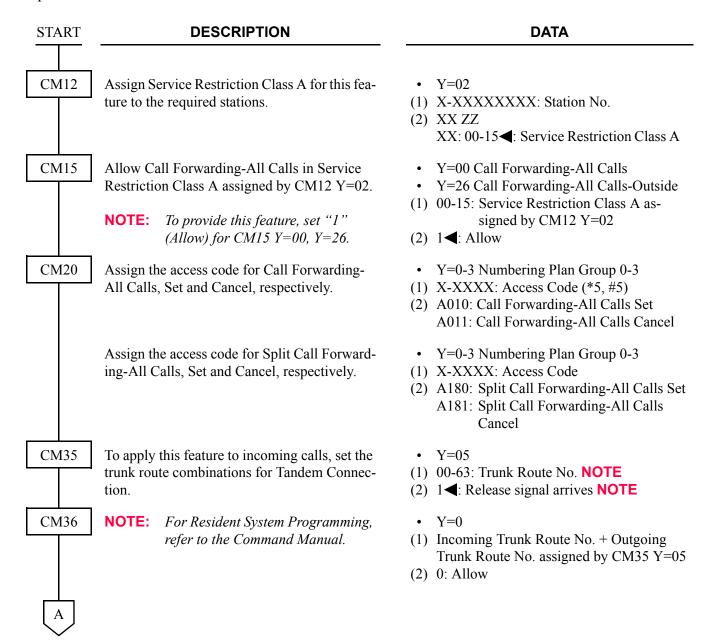
In addition to the programming for Call Forwarding-No Answer, do the following programming.



## SPLIT CALL FORWARDING-ALL CALLS

#### **PROGRAMMING**

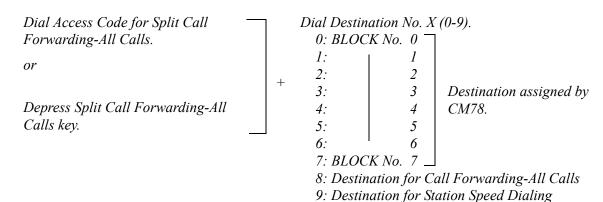
To activate Split Call Forwarding feature, both Call Forwarding and Split Call Forwarding settings are required.



A	DESCRIPTION	DATA
CM08	Specify the setting method for Call Forwarding-All Calls-Outside.	<ul> <li>(1) 222</li> <li>(2) 0 : Setting when the station goes on hook/ when receiving Service Set Tone (ORT time out)</li> <li>1 ◄: Setting when receiving Service Set Tone (ORT time out)</li> </ul>
	Assign whether an extension can set a destination of Split Call Forwarding-All Calls-Outside by entering only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0 : Restricted</li> <li>1 ◄: Allowed</li> </ul>
	Select the trunk route seized for Split Call Forwarding-All Calls-Outside.	<ul> <li>(1) 600</li> <li>(2) 0 : By calling party's tenant/terminating trunk's tenant</li> <li>1 ■: By Call Forwarding setting station's tenant</li> </ul>
	Select the Call Forwarding type when an incoming call terminates via CCIS.	<ul> <li>(1) 608</li> <li>(2) 0 : As per CM65 Y=37/38/39</li> <li>1 ★: As per CM65 Y=23/24/25</li> </ul>
CM90	Assign Call Forwarding-All Calls keys to the D <sup>term</sup> s, as required.	<ul> <li>Y=00</li> <li>(1) My Line No. + , + Key No.</li> <li>(2) F0010: Call Forwarding-All Calls Set/Cancel</li> </ul>
	Assign Split Call Forwarding-All Calls keys to the D <sup>term</sup> s, as required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F0A80: Split Call Forwarding-All Calls Set/Cancel</li> </ul>
В		

В	DESCRIPTION	DATA
CM65	Select the feature available in each tenant when an internal call and a Tie Line/C.O. incoming call are terminated.	<ul> <li>Y=23 Internal Call or ATT assisted Call</li> <li>Y=24 C.O. Incoming Call</li> <li>Y=25 Tie Line Incoming Call</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0 : Split Call Forwarding</li> <li>1 &lt; : Call Forwarding</li> </ul>
	Select the feature available in each tenant when an internal call via CCIS and a Tie Line/C.O. incoming call via CCIS are terminated.  NOTE: CM65 Y=37/38/39 is effective only when CM08>608 2nd data=0.	<ul> <li>Y=37 Internal Call or ATT assisted Call via CCIS</li> <li>Y=38 C.O. Incoming Call via CCIS</li> <li>Y=39 Tie Line Incoming Call via CCIS</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0 : Split Call Forwarding</li> <li>1 ← Call Forwarding</li> </ul>
CM78	Assign the destination of Split Call Forwarding. (See <b>NOTE</b> in next page.)	(1) XX Y XX: 00-63: Tenant No. Y: 0-7: Block No. (2) X-XX + + YY···Y X-XX: Trunk Access Code (1-2 digits) YY···Y: Called No. (Maximum 26 digits) X-XXXXXXXXXXX: Station No. (1-8 digits)
CM48 END	Select the Dial Tone on setting Split Call Forwarding-All Calls.	<ul> <li>Y=2</li> <li>13: Dial Tone on setting Split Call Forwarding-All Calls</li> <li>0 : Special Dial Tone (Stutter Dial Tone)</li> <li>1 ◄: Dial Tone</li> </ul>

**NOTE:** The operating procedure for Split Call Forwarding-All Calls is as follows: CM78 is used to assign the destination forwarded when the destination No. 0-7 is specified.



(BLOCK No. 0)

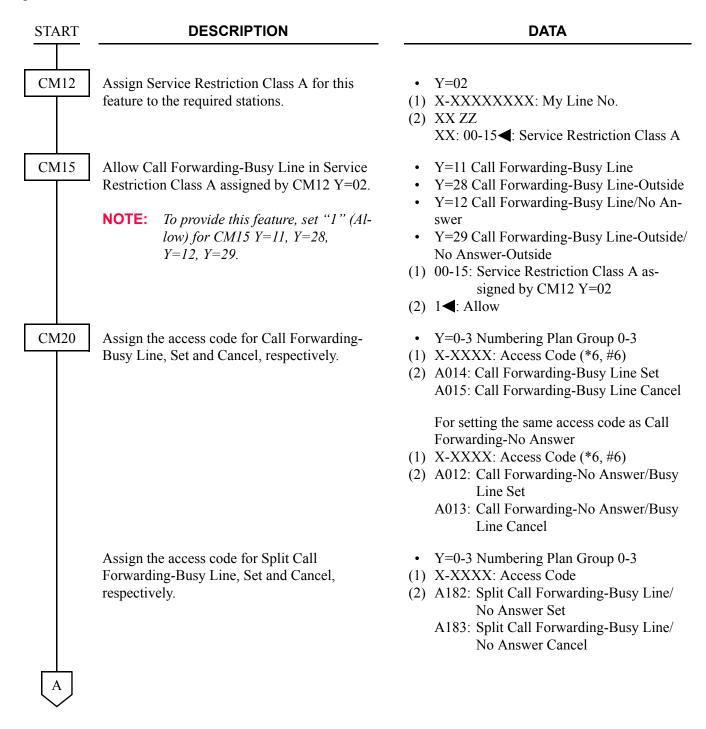
## HARDWARE REQUIRED

D<sup>term</sup> with LCD and DLC card, if required

## SPLIT CALL FORWARDING-BUSY LINE

#### **PROGRAMMING**

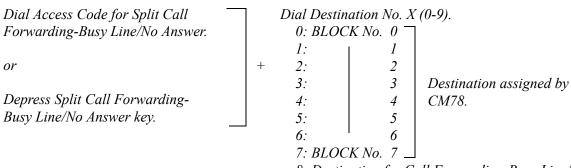
To activate Split Call Forwarding feature, both Call Forwarding and Split Call Forwarding settings are required.



A	DESCRIPTION	DATA
CM35	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	<ul> <li>Y=05</li> <li>(1) 00-63: Trunk Route No. NOTE</li> <li>(2) 1◀: Release signal arrives NOTE</li> </ul>
CM36	<b>NOTE:</b> For Resident System Programming, refer to the Command Manual.	<ul> <li>Y=0</li> <li>(1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 Y=05</li> <li>(2) 0: Allow</li> </ul>
CM08	Specify the setting method for Call Forwarding-Busy Line-Outside.	<ul> <li>(1) 222</li> <li>(2) 0 : Setting when the station goes on hook/ when receiving Service Set Tone (ORT time out)</li> <li>1 ◄: Setting when receiving Service Set Tone (ORT time out)</li> </ul>
	Allow or restrict the ability to set Call Forwarding-Busy Line for a station with Do Not Disturb set.	<ul> <li>(1) 240</li> <li>(2) 0 : Allowed</li> <li>1 ◀: Restricted</li> </ul>
	Assign whether an extension can set a destination of Split Call Forwarding-Busy Line-Outside by entering only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0 : Restricted</li> <li>1 ◀: Allowed</li> </ul>
	Select the trunk route seized for Split Call Forwarding-Busy Line-Outside.	<ul> <li>(1) 600</li> <li>(2) 0 : By calling party's tenant/terminating trunk's tenant</li> <li>1 ◀: By Call Forwarding setting station's tenant</li> </ul>
B	Select the Call Forwarding type when an incoming call terminates via CCIS.	<ul> <li>(1) 608</li> <li>(2) 0 : As per CM65 Y=37/38/39</li> <li>1◀: As per CM65 Y=23/24/25</li> </ul>

В	DESCRIPTION	DATA
CM90	Assign Call Forwarding-Busy Line keys to the D <sup>term</sup> s, as required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F0014: Call Forwarding-Busy Line Set/Cancel</li> </ul>
		For setting the same key as Call Forwarding-No Answer  (1) My Line No. + + Key No.  (2) F0012: Call Forwarding-No Answer/Busy Line Set/Cancel
	Assign Split Call Forwarding-Busy Line keys to the D <sup>term</sup> s, as required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F0A82: Split Call Forwarding-Busy Line/ No Answer Set/Cancel</li> </ul>
CM65	Select the feature available in each tenant when an internal call and a Tie Line/C.O. incoming call are terminated.	<ul> <li>Y=23 Internal Call or ATT assisted Call</li> <li>Y=24 C.O. Incoming Call</li> <li>Y=25 Tie Line Incoming Call</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0 : Split Call Forwarding</li> <li>1 &lt; Call Forwarding</li> </ul>
	Select the feature available in each tenant when an internal call via CCIS and a Tie Line/C.O. incoming call via CCIS are terminated.  NOTE: CM65 Y=37/38/39 is effective only when CM08>608 2nd data=0.	<ul> <li>Y=37 Internal Call or ATT assisted Call via CCIS</li> <li>Y=38 C.O. Incoming Call via CCIS</li> <li>Y=39 Tie Line Incoming Call via CCIS</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0 : Split Call Forwarding</li> <li>1 ←: Call Forwarding</li> </ul>
CM78  END	Assign the destination of Split Call Forwarding. (See <b>NOTE</b> in next page.)	(1) XX Y XX: 00-63: Tenant No. Y: 0-7: Block No. (2) X-XX +
<u> </u>		

**NOTE:** The operating procedure for Split Call Forwarding-Busy Line/No Answer is as follows: CM78 is used to assign the destination forwarded when the destination No. 0-7 is specified.



- 8: Destination for Call Forwarding-Busy Line/ No Answer
- 9: Destination for Station Speed Dialing (BLOCK No. 0)

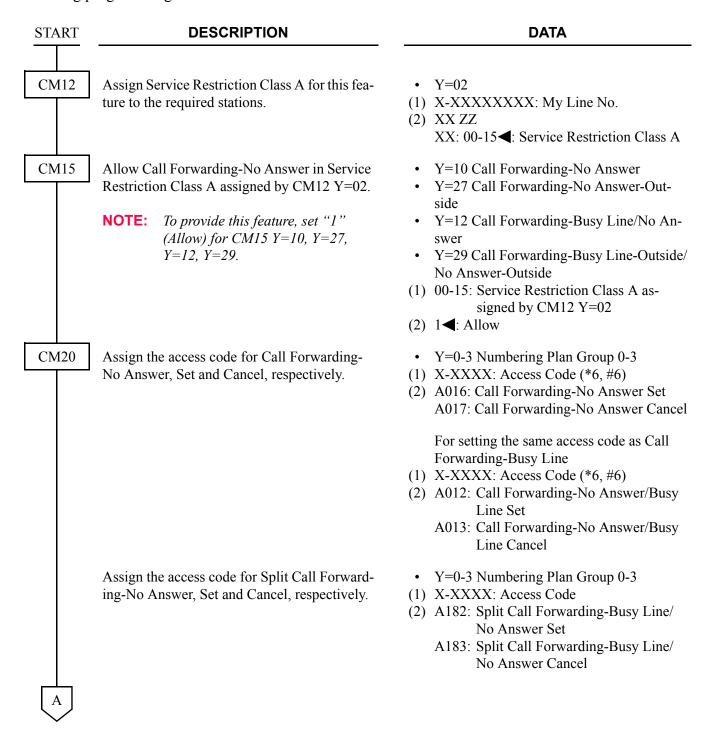
## HARDWARE REQUIRED

D<sup>term</sup> with LCD and DLC card, if required

## SPLIT CALL FORWARDING-NO ANSWER

#### **PROGRAMMING**

To activate Split Call Forwarding feature, both Call Forwarding and Split Call Forwarding settings are required. For Split Call Forwarding-No Answer with the timer on a system basis set by MAT/CAT, do the following programming.



A	DESCRIPTION	DATA
CM13	Specify the timing of Call Forwarding-No Answer.	• Y=46 (1) X-XXXXXXXXX: My Line No. (2) 0 : As per CM41 Y=0>100, 101 or CME6 Y=07, 08 <b>NOTE</b> 1◀: As per CM41 Y=0>01, 15
		ag on a station basis (CME6 Y=07, 08) is effective. iming on a system basis (CM41 Y=0>100, 101) is $ed$
CM41	Specify the timing of Call Forwarding-No Answer for a trunk incoming call.	<ul> <li>Y=0</li> <li>(1) 01 : Timing for a trunk incoming call 100: Timing for a trunk incoming call [Series 3100 software required]</li> <li>(2) 01-30: 4-120 seconds (4 second increments)</li> <li>If no data is set, the default setting is 32-36 seconds.</li> </ul>
	Specify the timing of Call Forwarding-No Answer for an internal call or an assisted call.	<ul> <li>Y=0</li> <li>(1) 15 : Timing for an internal call or an assisted call</li> <li>101: Timing for an internal call or an assisted call</li> <li>[Series 3100 software required]</li> <li>(2) 01-30: 4-120 seconds <ul> <li>(4 second increments)</li> </ul> </li> <li>If no data is set, the default setting is 32-36 seconds.</li> </ul>
CM35	To apply this feature to incoming calls, set the trunk route combinations for Tandem Connection.	<ul> <li>Y=05</li> <li>(1) 00-63: Trunk Route No. NOTE</li> <li>(2) 1 ◀: Release signal arrives NOTE</li> </ul>
CM36	NOTE: For Resident System Programming, refer to the Command Manual.	<ul> <li>Y=0</li> <li>(1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 Y=05</li> <li>(2) 0: Allow</li> </ul>

В	DESCRIPTION	DATA
CM08	Specify the setting method for Call Forwarding-No Answer-Outside.	<ul> <li>(1) 222</li> <li>(2) 0 : Setting when the station goes on hook/ when receiving Service Set Tone (ORT time out)</li> <li>1 ≤ Setting when receiving Service Set Tone (ORT time out)</li> </ul>
	Assign whether an extension can set a destination of Split Call Forwarding-No Answer-Outside by entering only a trunk access code.	<ul> <li>(1) 386</li> <li>(2) 0 : Restricted</li> <li>1 ◄: Allowed</li> </ul>
	Select the trunk route seized for Split Call Forwarding-No Answer-Outside.	<ul> <li>(1) 600</li> <li>(2) 0 : By calling party's tenant/terminating trunk's tenant</li> <li>1 ■: By Call Forwarding setting station's tenant</li> </ul>
	Select the Call Forwarding type when an incoming call terminates via CCIS.	<ul> <li>(1) 608</li> <li>(2) 0 : As per CM65 Y=37/38/39</li> <li>1◀: As per CM65 Y=23/24/25</li> </ul>
CM90	Assign Call Forwarding-No Answer keys to the D <sup>term</sup> s, as required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F0016: Call Forwarding-No Answer Set/Cancel</li> </ul>
		For setting the same key as Call Forwarding-Busy Line.  (1) My Line No. + + Key No.  (2) F0012: Call Forwarding-No Answer/Busy Line Set/Cancel
	Assign Split Call Forwarding-No Answer keys to the D <sup>term</sup> s, as required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F0A82: Split Call Forwarding-Busy Line/ No Answer Set/Cancel</li> </ul>
CM65	Select the feature available in each tenant when an internal call and a Tie Line/C.O. incoming call are terminated.	<ul> <li>Y=23 Internal Call or ATT assisted Call</li> <li>Y=24 C.O. Incoming Call</li> <li>Y=25 Tie Line Incoming Call</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0 : Split Call Forwarding</li> <li>1 &lt; Call Forwarding</li> </ul>
C		



#### **DESCRIPTION**

#### DATA

• Y=37 Internal Call or ATT assisted Call via

Y=38 C.O. Incoming Call via CCIS
Y=39 Tie Line Incoming Call via CCIS

CM65

Select the feature available in each tenant when an internal call via CCIS and a Tie Line/C.O. incoming call via CCIS are terminated.

**NOTE:**  $CM65\ Y=37/38/39$  is effective only

when CM08>608 2nd data=0.

(1) 00-63: Tenant No.

(2) 0 : Split Call Forwarding 1◀: Call Forwarding

CM08

Specify the timing of Call Forwarding-No Answer for a tie line incoming call.

[Series 3200 R6.2 software required]

(1) 126

(2) 0 : As per timing for internal call or an assisted call

1◀: As per timing for trunk incoming call

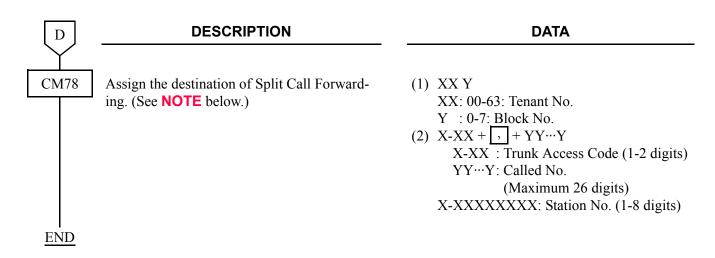
**NOTE:** The timing for a tie line incoming call is set as following data. When CM08>126:0 is set:

2ND DATA OF CM13 Y=46	TIMING FOR TIE LINE INCOMING CALL
0	As per CM41 Y=0>101
14	As per CM41 Y=0>15

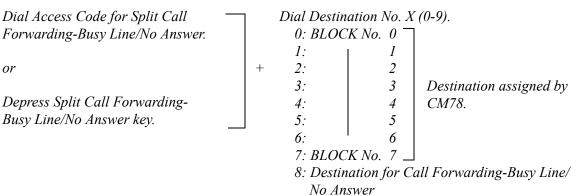
*When CM08>126:1* ◀ *is set:* 

2ND DATA OF CM13 Y=46	TIMING FOR TIE LINE INCOMING CALL
0	As per CM41 Y=0>100
1	As per CM41 Y=0>01





**NOTE:** The operating procedure for Split Call Forwarding-Busy Line/No Answer is as follows: CM78 is used to assign the destination forwarded when the destination No. 0-7 is specified.



For Split Call Forwarding-No Answer with the timer on a station basis set by MAT/CAT, do the following programming in addition to the programming for Split Call Forwarding-No Answer with the timer on a system basis. Page 158

# [Series 3200 R6.2 software required]

START	DESCRIPTION	DATA
CM13	Specify the timing of Call Forwarding-No Answer to as per CM41 Y=0>100, 101 or CME6 Y=07, 08.	<ul> <li>Y=46</li> <li>(1) X-XXXXXXXXX: My Line No.</li> <li>(2) 0: As per CM41 Y=0&gt;100, 101 or CME6 Y=07, 08 NOTE</li> </ul>
		ag on a station basis (CME6 $Y$ =07, 08) is effective. iming on a system basis (CM41 $Y$ =0>100, 101) is
CME6	Specify the timing of Call Forwarding-No Answer for a trunk incoming call.	<ul> <li>Y=07</li> <li>(1) X-XXXXXXXXX: My Line No.</li> <li>(2) 001-120: 4-120 seconds         <ul> <li>(4 second increments)</li> <li>NONE&lt;</li> </ul> </li> <li>: As per CM41 Y=0&gt;100</li> </ul>
	Specify the timing of Call Forwarding-No Answer for an internal call or an assisted call.	<ul> <li>Y=08</li> <li>X-XXXXXXXXX: My Line No.</li> <li>001-120: 4-120 seconds         <ul> <li>(4 second increments)</li> </ul> </li> <li>NONE&lt;</li> <li>As per CM41 Y=0&gt;101</li> </ul>
A		

A	
CN 100	

## **DESCRIPTION**

## DATA

CM08 Specify the

Specify the timing of Call Forwarding-No Answer for a tie line incoming call.

(1) 126

(2) 0 : As per timing for internal call or an assisted call

1◀: As per timing for trunk incoming call

**NOTE:** The timing for a tie line incoming call is set as following data. When CM08>126:0 is set:

2ND DATA OF CM13 Y=46	TIMING ON A STATION BASIS (CME6 Y=08)	TIMING FOR TIE LINE INCOMING CALL
0	Set	As per CME6 Y=08
	Not set	As per CM41 Y=0>101

*When CM08>126:1* **◄** *is set:* 

2ND DATA OF CM13 Y=46	TIMING ON A STATION BASIS (CME6 Y=07)	TIMING FOR TIE LINE INCOMING CALL
0	Set	As per CME6 Y=07
	Not set	As per CM41 Y=0>100

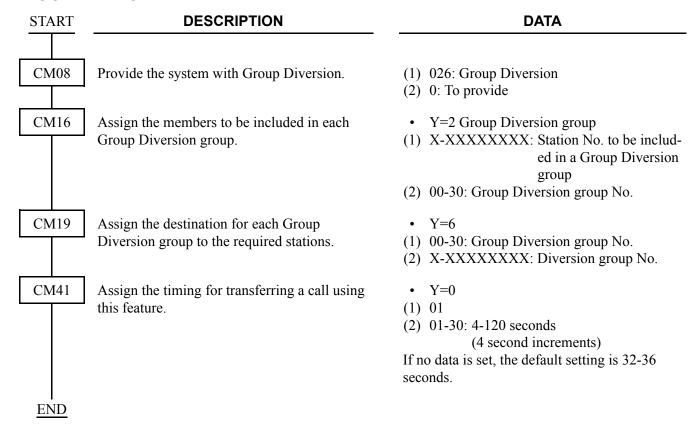
**END** 

## HARDWARE REQUIRED

D<sup>term</sup> with LCD and DLC card, if required

#### **GROUP DIVERSION**

#### **PROGRAMMING**

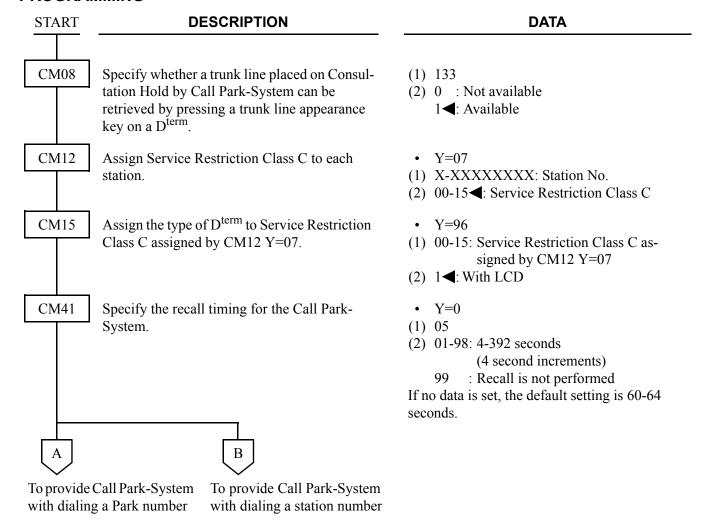


**NOTE:** The number of stations that can be included in a Group Diversion is unlimited.

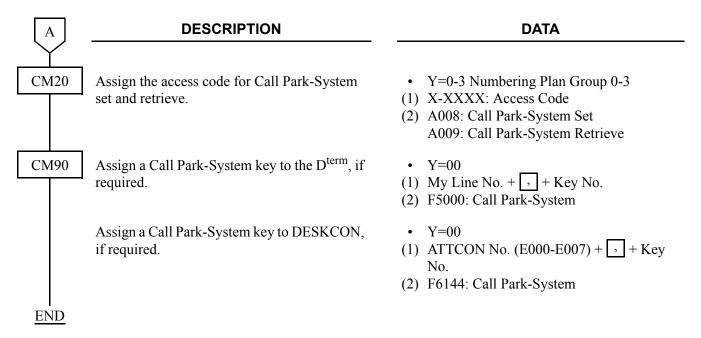
# **CALL PARK**

## **CALL PARK-SYSTEM**

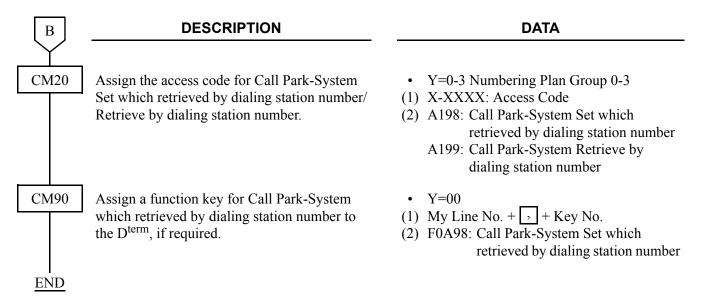
#### **PROGRAMMING**



To provide Call Park-System with dialing a Park number



To provide Call Park-System with dialing a station number

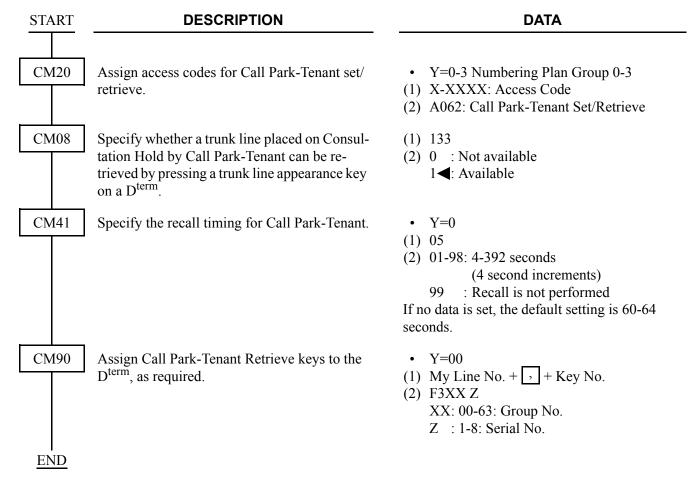


#### HARDWARE REQUIRED

Dterm and DLC card as required

#### **CALL PARK-TENANT**

## **PROGRAMMING**



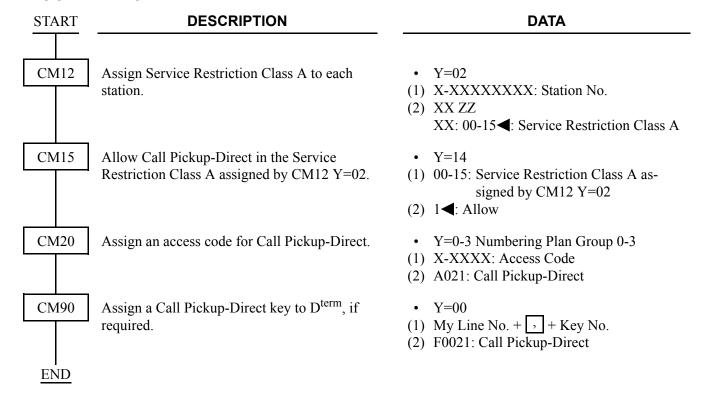
#### HARDWARE REQUIRED

D<sup>term</sup> and DLC card if required

# **CALL PICKUP**

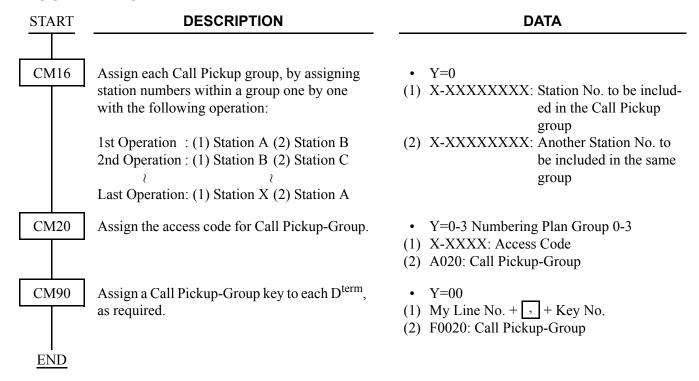
## **CALL PICKUP-DIRECT**

#### **PROGRAMMING**



#### **CALL PICKUP-GROUP**

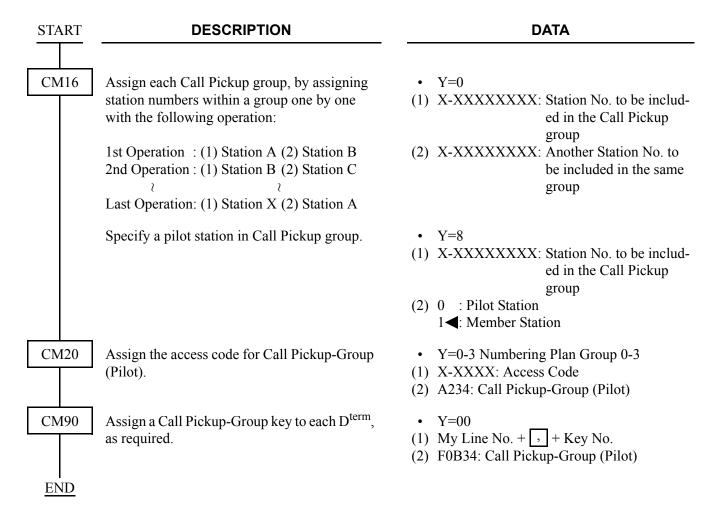
#### **PROGRAMMING**



**NOTE 1:** There is no limit to the amount of Call Pickup groups.

**NOTE 2:** The maximum number of stations within a group is 60. Individual stations can be assigned to only one Call Pickup group.

To permit a station within the Call Pickup group to answer the calls to other lines, in the order from a specified pilot station (ringing search start position):



**NOTE 1:** There is no limit to the amount of Call Pickup groups.

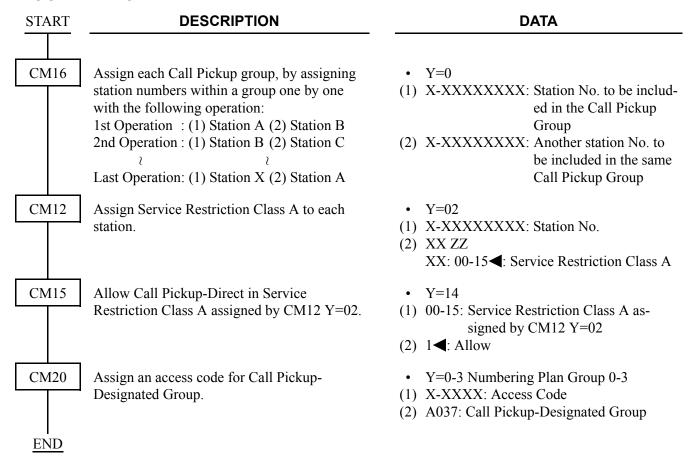
**NOTE 2:** The maximum number of stations within a group is 60. Individual stations can be assigned to only one Call Pickup group.

#### HARDWARE REQUIRED

Dterm and DLC card as required

#### CALL PICKUP-DESIGNATED GROUP

#### **PROGRAMMING**

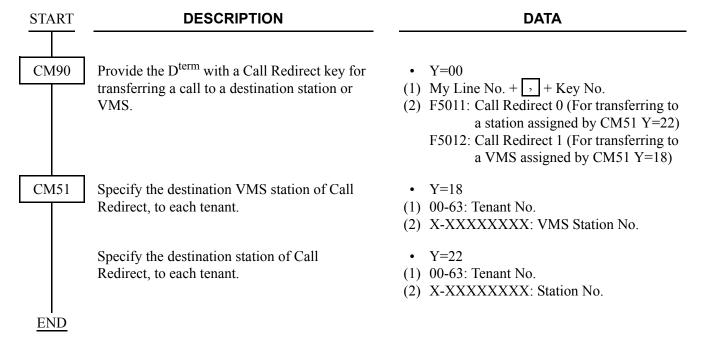


**NOTE 1:** There is no limit to the amount of Call Pickup groups.

**NOTE 2:** The maximum number of stations within a group is 60. Individual station can be assigned to only one Call Pickup Group.

# **CALL REDIRECT**

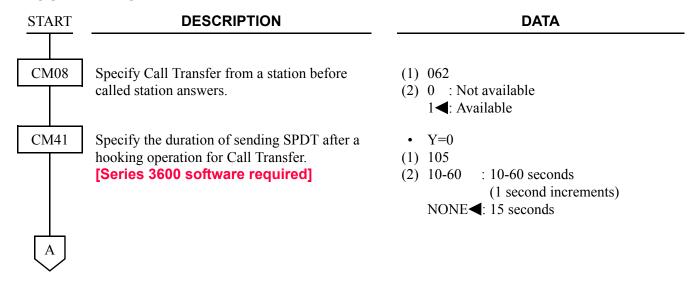
#### **PROGRAMMING**



# **CALL TRANSFER**

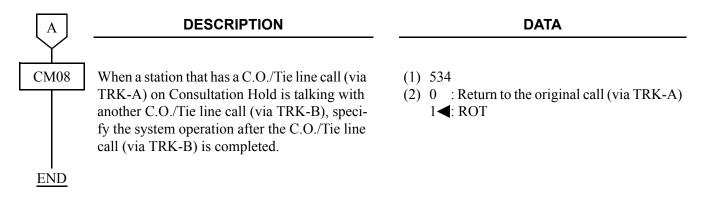
#### **CALL TRANSFER-ALL CALLS**

#### **PROGRAMMING**



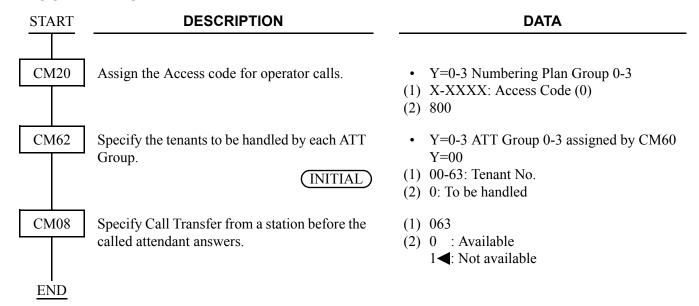
To specify the system operation after the C.O./Tie line call (via TRK-B) is completed, when a station that has a C.O./Tie line call (via TRK-A) on Consultation Hold is talking with another C.O./Tie line call (via TRK-B):

#### [Series 3300 software required]



## **CALL TRANSFER-ATTENDANT**

#### **PROGRAMMING**



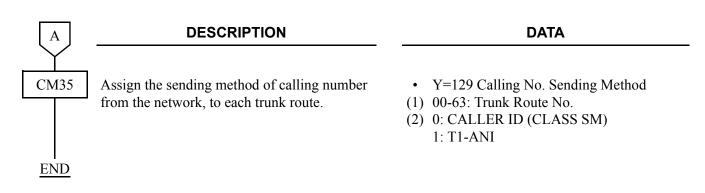
# **CALLER ID CLASS**

## **PROGRAMMING**

(1) Trunk Assignment for CALLER ID CLASS

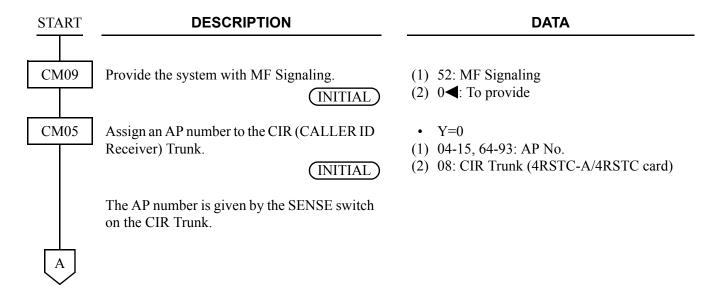
**NOTE:** The following data assignment is required when using PN-4RSTC-A/PN-4RSTC.

START	DESCRIPTION	DATA
CM30	Specify the Terminating System in Day Mode/ Night Mode/Mode A/Mode B for incoming calls.	<ul> <li>Y=02 Day Mode</li> <li>Y=03 Night Mode</li> <li>Y=40 Mode A</li> <li>Y=41 Mode B</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 02 : Trunk-Direct Appearances         03 : Trunk-Direct Appearances + TAS         04 : Direct-In Termination         08 : Dial-in         09 : Automated Attendant         10 : Attendant Console + TAS         11 : Attendant Console + Trunk-Direct             Appearances         12 : Attendant Console + Trunk-Direct             Appearances + TAS         13 : TAS         14 : Attendant Console         16 : DISA         18 : ISDN Indial         31 &lt; : DID, Tie Line and any call which is         not handled by the PBX</li> </ul>
CM35	Assign the type of the trunk route.	<ul> <li>Y=00 Kind of Trunk Route</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 00: DDD (C.O./DID) trunk</li> </ul>
	Provide the trunk route with MF Signaling.	<ul> <li>Y=37 MF Signaling</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: Available</li> </ul>
	Specify the busy/idle status not to be sent to the network.	<ul> <li>Y=48 Busy/Idle Sending</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: Not sent</li> </ul>
A		



## (2) CALLER ID Receiver Assignment

**NOTE:** The following data assignment is required when using PN-4RSTC-A/PN-4RSTC.



**DESCRIPTION DATA** CM05 Assign an Remote Site number that accommo-• Y=8 dates CIR trunk to the AP number assigned by (1) 04-15, 64-93: AP No. CM05 Y=0. (2) XX 99 XX: 01-30: Remote Site No. (INITIAL) XX 9915 **NOTE 2** [Series 3800 software required] XX: 01-30: Remote Site No. **NOTE 3** 99 : AP card No. NONE**⋖**: No data **NOTE 1:** This data should be assigned only when PN-4RSTC-A card is accommodated in Remote site. **NOTE 2:** All the SENSE switch on PN-4RSTC-A card should be assigned to 15 when AP No. 64-93 is assigned for PN-4RSTC-A card accommodated in Remote site. Assign any one number from AP numbers 64-93 with CM05 per PN-4RSTC-A card (same even if the site that accommodates the PN-4RSTC-A cards is different). **NOTE 3:** The Remote site number 01-15 can be assigned when the system is using Series 3200 R6.2 to 3300 software. Specify the type of the mounting card for Re-• Y=6 mote Site to the AP number assigned by CM05 (1) 04-15, 64-93: AP No. (2) 1 : Remote Site Y=0. 3**⋖**: AP card (INITIAL) NOTE: Set the second data to 1 only when the AP number is assigned by CM05 Y=0 which is accommodated in Remote site. CM06 Assign the MF Receiver trunk number to each • Y=04 circuit of the CIR Trunk. (1) 00-15: MF Receiver Trunk No. (2) XX Z (INITIAL) XX: AP No. assigned by CM05 Z: 0-3: Circuit No.

Assign requesting of ANI/CALLER ID Signal

from network when an incoming call

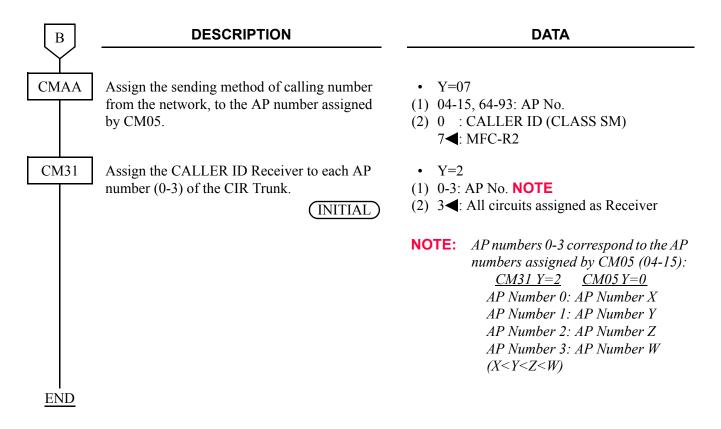
terminates.

CM08

(1) 472: Request for ANI/CALLER ID

Signal

(2) 0: Available

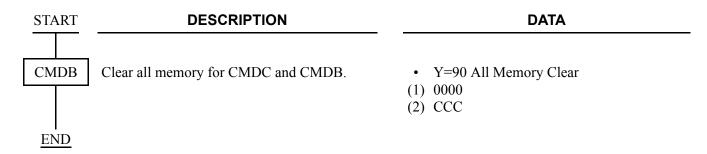


(3) Memory Clear for CIR Trunk (PN-4RSTC)

Clearing all data in memory for calling number development is necessary before assigning the calling number development data by CMDC and CMDB.

**NOTE 1:** The following data assignment is required only when using PN-4RSTC as a CIR Trunk.

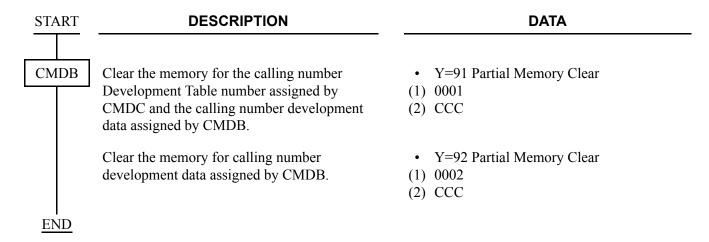
**NOTE 2:** Before memory clear, set the SW1-1 to SW1-4 on the CIR Trunk to all ON (Make-busy) and after memory clear, restore them to OFF.



If required, clear the partial memory using the commands shown below.

**NOTE 1:** The following data assignment is required only when using PN-4RSTC as a CIR Trunk.

**NOTE 2:** Before memory clear, set the SW1-1 to SW1-4 on the CIR Trunk to all ON (Make-busy) and after memory clear, restore them to OFF.



## (4) CALLER ID Development Data Assignment

**NOTE:** The following data assignment is required only when using PN-4RSTC as a CIR Trunk.

START	DESCRIPTION	DATA
CMDC	Assign the Development Table for the calling number sent from the network.	<ul> <li>Y=00-63 Trunk Tenant No.</li> <li>(1) Calling No.</li> <li>(2) 0</li> <li>-1499: Development Table No. 0-1499</li> </ul>
CMDB	Assign whether the Trunk Tenant number is effective for developing the calling number, or not.	<ul> <li>Y=30</li> <li>(1) 0: Trunk Tenant No. Development</li> <li>(2) 0              ∃: Ignore actual Trunk Tenant and use the Development Table for Trunk Tenant 00 (CMDC Y=00)     </li> <li>1 : Execute actual Trunk Tenant and use the Development Table for each Trunk Tenant (CMDC Y=00-63)</li> </ul>
A	By character code, assign the name displayed, if required. A maximum of 14 characters are available for the name display.	<ul> <li>Y=00 Name Assignment</li> <li>(1) 0-1499: Development Table No.</li> <li>(2) Character Code     See APPENDIX B: Character Code Table.     Page B2</li> </ul>



#### **DESCRIPTION**

#### **DATA**

**CMDB** 

Assign the destination station for Day Mode/ Night Mode, if required. A maximum of 12 digits are available.

**NOTE:** If assigning the destination station number as below, the terminating system overrides CM30 Y=02/03 for the selected Development Table.

- \* \* \* \* 0 2: Trunk-Direct Appearances
- \* \* \* \* 0 3: Trunk-Direct Appearances + TAS
- \* \* \* \* 0 4: Direct-in Termination
- \* \* \* \* 0 9: Automated Attendant
- \* \* \* \* 1 0: Attendant Console + TAS
- \* \* \* \* 1 1: Attendant Console + Trunk-Direct Appearances
- \* \* \* \* 1 2: Attendant Console + Trunk-Direct Appearances + TAS
- \* \* \* \* 1 4: Termination to Attendant Console
- \* \* \* \* 1 6: Direct Inward System Access (DISA)
- \* \* \* \* 3 1: DID, Tie Line, and any call which is not handled by the PBX

**NOTE:** The destination station number can also be an LCR access code plus outside telephone number.

Specify the ringing tone for each calling number, if required.

Specify which is displayed on the LCD, when receiving both the calling number and the name from network on incoming call.

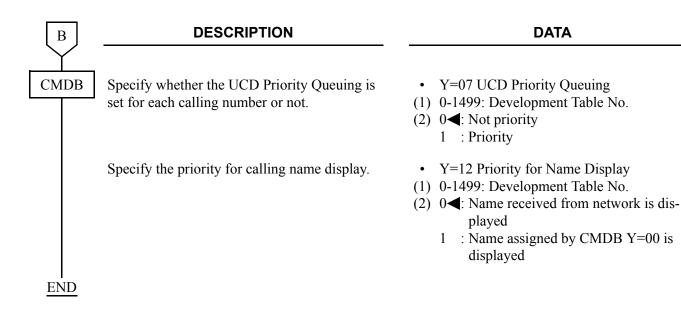
Specify whether the Call Waiting is set for each calling number or not.

- Y=01 Day Mode
- Y=02 Night Mode
- (1) 0-1499: Development Table No.
- (2) Destination Station No. (Maximum 12 digits)

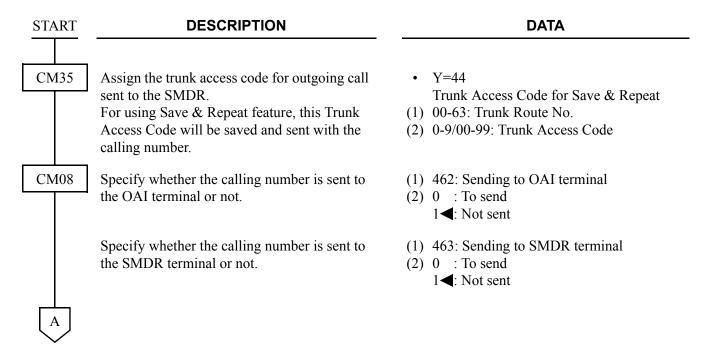
- Y=04 Ringing Tone Assignment
- (1) 0-1499: Development Table No.
- (2) 0**<**: Depends on CM35 Y=33
  - 1 : Not used
  - 2 : Internal Ringing Tone
  - 3 : External Ringing Tone
- Y=05 Calling Number/Name Display
- (1) 0-1499: Development Table No.
- (2) 0**<**: Calling Number Display
  - 1 : Calling Name Display
- Y=06 Call Waiting
- (1) 0-1499: Development Table No.
- (2)  $0 \blacktriangleleft$ : Not available
  - 1 · Available

**NOTE:** This data is effective when the 2nd data of CM35 Y=59 is 1.

В



# (5) Other Relational Data Assignment



A	DESCRIPTION	DATA
CM08	Specify the type of Single Data Message Frame Format.  [Series 3400 R9.1 software required]  CIR INITIAL	<ul> <li>(1) 489: Single Data Message Frame Format</li> <li>(2) 0 : Without Time Parameter</li> <li>1 ✓: With Time Parameter</li> </ul>
	<b>NOTE:</b> This is required when using PN-4RSTC-A.	
CMDB	Specify the type of Single Data Message Frame Format.  NOTE: This is required when using PN-4RSTC.	<ul> <li>Y=30</li> <li>(1) 1: Single Data Message Frame Format</li> <li>(2) 0◀: With Time Parameter</li> <li>1 : Without Time Parameter</li> </ul>
CMD000	Send ANI/Caller ID to SMDR.  NOTE 1: This is required when using AP00 card for SMDR.	<ul> <li>(1) 143: Sending to SMDR terminal</li> <li>(2) 0◀: Not sent</li> <li>1 : To send</li> <li>NOTE 2: When 0 is set, the ANI is not sent to the SMDR, but area code for calling party, area code for called party; authorization code is sent to the SMDR.</li> </ul>
CM90	Provide the D <sup>term</sup> with a select key of Calling Number Display or Calling Name Display.	<ul> <li>Y=00</li> <li>(1) My Line No. + + + Key No.</li> <li>(2) F1099: Select Key of Calling Number Display or Calling Name Display</li> </ul>
END	Provide the DESKCON with a select key of Calling Number Display or Calling Name Display.	<ul> <li>Y=00</li> <li>(1) ATTCON No. (E000-E007) +  + Key No.</li> <li>(2) F6122: Select Key of Calling Number Display or Calling Name Display</li> </ul>

(6) Data Assignment for multiple CIR Trunk (PN-4RSTC)

**NOTE:** The following procedure is required only when using PN-4RSTC as CIR Trunks.

The development data by CMDC and CMDB are assigned toward the first CIR Trunk which has been assigned a minimum AP number. When providing multiple CIR Trunks, save the development data and load them for the other CIR Trunks according to the following steps.

For detail of MAT Load/Save operations, refer to the Maintenance Manual.

STEP1: After assignment of CMDC and CMDB, save the office data by MAT.

At this time, specify the AREA Number including the MEMORY ADDRESS 00900-2FFFF.

STEP2: Set the MB switch to ON (UP) on the first CIR Trunk with minimum AP number X.

AP Number X< Y< Z< W

STEP3: As for the second CIR Trunk, change the AP number Y to X by CM05 and by the SENSE switch.

STEP4: Set the SW1-1 through SW1-4 to ON on the second CIR Trunk.

Clear the memory for CMDC and CMDB by CMDB Y=90.

Set the SW1-1 through SW1-4 to OFF on the second CIR Trunk.

STEP5: Load the office data saved in STEP1 by MAT.

STEP6: As for the second CIR Trunk, restore the AP number X to Y by CM05 and by the SENSE switch.

Jump to STEP17 if no more CIR Trunks are provided.

STEP7: Set the MB switch to ON (UP) on the second CIR Trunk with AP number Y.

STEP8: As for the third CIR Trunk, change the AP number Z to X by CM05 and by the SENSE switch.

STEP9: Set the SW1-1 through SW1-4 to ON on the third CIR Trunk. Clear the memory for CMDC and CMDB by CMDB Y=90. Set the SW1-1 through SW1-4 to OFF on the third CIR Trunk.

STEP10: Load the office data saved in STEP1 by MAT.

STEP11: As for the third CIR Trunk, restore the AP number X to Z by CM05 and by the SENSE switch.

Jump to STEP17 if no more CIR Trunks are provided.

STEP12: Set the MB switch to ON (UP) on the third CIR Trunk with AP number Z.

STEP13: As for the fourth CIR Trunk, change the AP number W to X by CM05 and by the SENSE switch.

STEP14: Set the SW1-1 through SW1-4 to ON on the fourth CIR Trunk.

Clear the memory for CMDC and CMDB by CMDB Y=90.

Set the SW1-1 through SW1-4 to OFF on the fourth CIR Trunk.

STEP15: Load the office data saved in STEP1 by MAT.

STEP16: As for the fourth CIR Trunk, restore the AP number X to W by CM05 and by the SENSE switch.

STEP17: Set the MB switches to OFF (DOWN) on all the CIR Trunks.

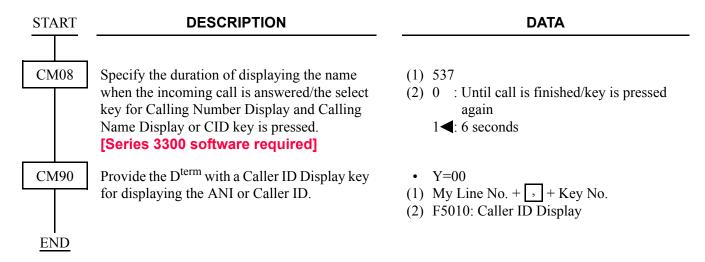
#### HARDWARE REQUIRED

COT card (4COTG/8COTQ) CIR card (4RSTC-A/4RSTC)

# **CALLER ID DISPLAY**

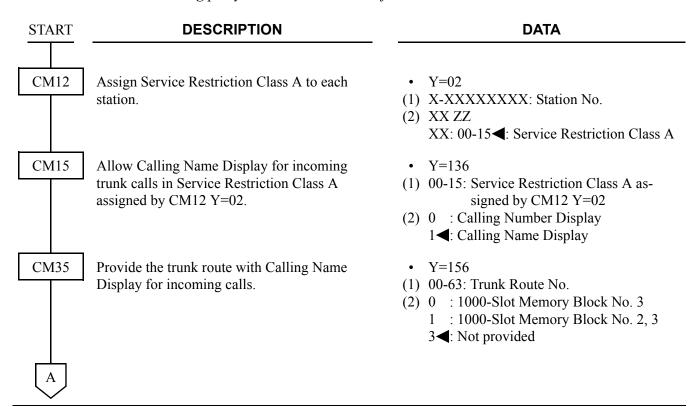
#### **PROGRAMMING**

In addition to Automatic Number Identification (ANI) or Caller ID Class, assign the following data.



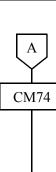
To store the calling party name list in the MP card and display the name on D<sup>term</sup> for incoming trunk calls, do the following programming.

**NOTE:** This programming is effective only when the caller ID (name) is not stored in the CIR card by CMDB or a calling party name is not received from network.



NOTE 1

NOTE 2



#### **DESCRIPTION**

#### TION DATA

Assign the calling party number, which is used for Calling Name search, to the 1000-Slot Memory Block No. 3.

NOTE 1: When this feature is provided, the 1000-Slot Memory Block No. 3 cannot be used for Station Speed Dialing.

**NOTE 2:** The calling party number must be the number received from network, including the area code.

Assign the calling party name to be displayed for the calling party number assigned by CM74 Y=0, to each Memory Slot number, by character codes or characters.

Access Code (Maximum 4 digits) + , + Calling Party No. (Maximum 16 digits)

NONE**⋖**: No data

- Y=1
- (1) 3 YY Z

Y=0

(1) 3 YY Z

(2) Stored No.:

3: 1000-Slot Memory Block No. 3 YY: 10-Slot Memory Block No. 00-99

3 : 1000-Slot Memory Block No. 3

YY: 10-Slot Memory Block No. 00-99

Z: Memory Parcel No. 0-9

Z: Memory Parcel No. 0-9

(2) XX...XX: Calling Party Name Character Code (Maximum 32 digits, 16 characters)

NONE**◀**: No data

See APPENDIX B: Character Code Table.

Page B2

- Y=2
- (1) 3 YY Z

3 : 1000-Slot Memory Block No. 3

YY: 10-Slot Memory Block No. 00-99

Z: Memory Parcel No. 0-9

(2) XX...XX: Calling Party Name Character (Maximum 16 characters)

NONE**⋖**: No data

CM90

Provide the D<sup>term</sup> with a select key of Calling Number Display or Calling Name Display.

Provide the DESKCON with a select key of Calling Number Display or Calling Name Display.

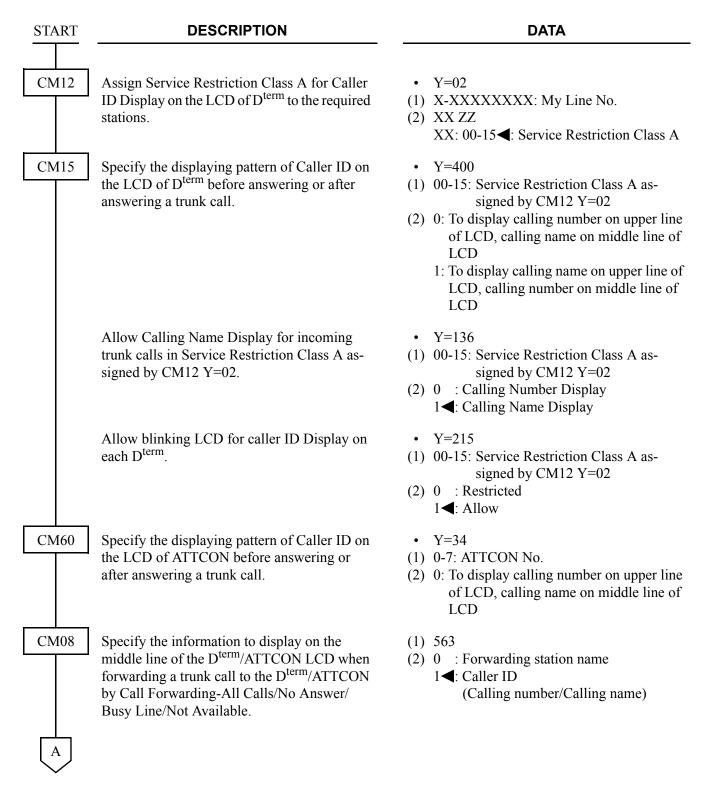
• Y=00

- (1) My Line No. + , + Key No.
- (2) F1099: Select Key of Calling Number Display or Calling Name Display
- Y=00
- (1) ATTCON No. (E000-E077) + + Key No.
- (2) F6122: Select Key of Calling Number
  Display or Calling Name Display

**END** 

To provide Calling Number and Calling Name Display on D<sup>term</sup>/ATTCON LCD simultaneously, do the following programming:

## [Series 3800 software required]





#### **DESCRIPTION**

#### **DATA**

(2) 0 : The first forwarding number via CCIS

1 ◀: The second forwarding number of own

CM08

END

Specify displaying the first forwarding station number via CCIS or the second forwarding station number of own office on LCD of forwarding destination D<sup>term</sup>.

Specify the duration of displaying the name when the incoming call is answered/the select key for Calling Number Display and Calling Name Display or CID key is pressed.

(1) 580

(1) 564

(2) 0 : 6 seconds

office

1◀: Until call is finished/key is pressed again

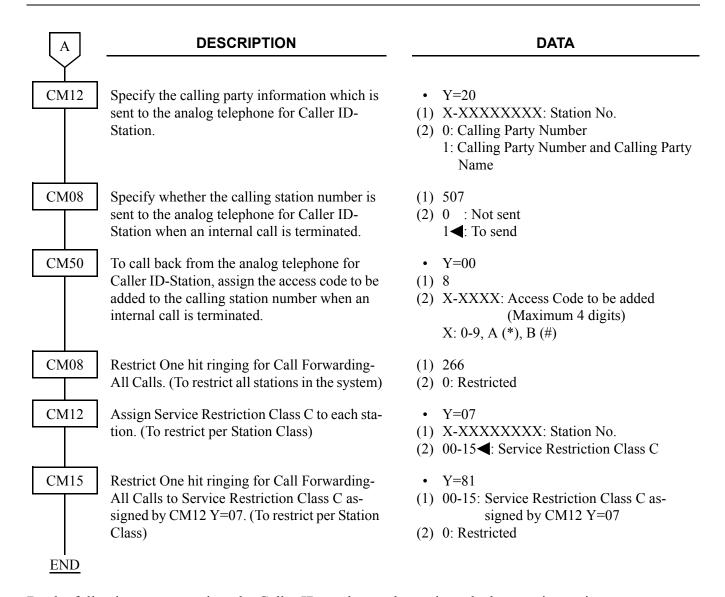
## HARDWARE REQUIRED

D<sup>term</sup> with LCD and DLC card

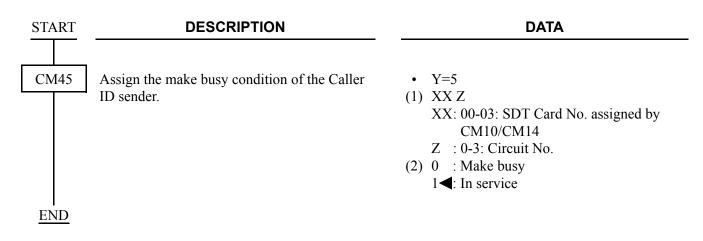
# **CALLER ID-STATION**

# **PROGRAMMING**

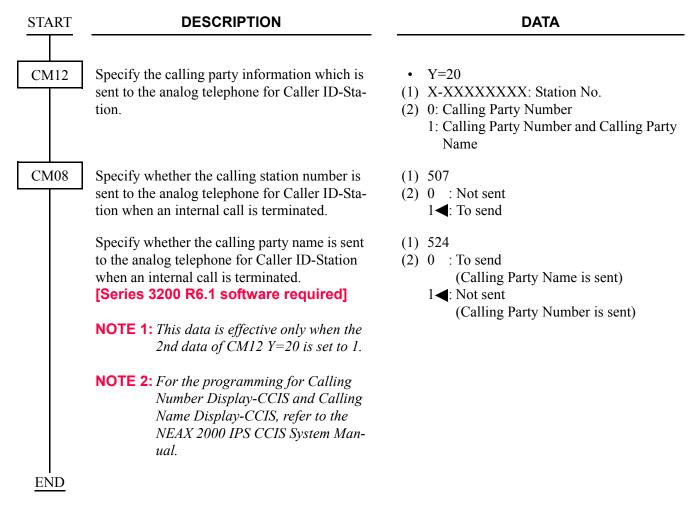
START	DESCRIPTION	DATA
CM10	Assign the Caller ID sender (SDT) card number to the required LEN.  NOTE: The SDT card number must be assigned to the first LEN (Level 0) of each LT slot. Level 1-3 remain "NONE".	(1) 000-763: LEN (2) C200-C203: SDT Card No.
	Assign the station number of an analog telephone for Caller ID-Station to the required LEN.	<ul><li>(1) 000-763: LEN</li><li>(2) X-XXXXXXXXX: Station No.</li></ul>
	NOTE: The station number must be assigned to the first LEN (Level 0), the second LEN (Level 1), the third LEN (Level 2) and the fourth LEN (Level 3) of each LT slot.	
CM14	Assign the Caller ID sender (SDT) card number to the required LEN.  [Series 3200 R6.2 software required]	(1) XX ZZZ: LEN XX : 00-59: FP No. ZZZ: 000-127: Port No. (2) C200-C203: SDT Card No.
	NOTE: The SDT card number must be assigned to the first LEN (Level 0) of each LT slot. Level 1-3 remain "NONE".	
	Assign the station number of an analog telephone for Caller ID-Station to the required LEN.  [Series 3200 R6.2 software required]	<ul> <li>(1) XX ZZZ: LEN</li> <li>XX : 00-59: FP No.</li> <li>ZZZ: 000-127: Port No.</li> <li>(2) X-XXXXXXXXX: Station No.</li> </ul>
	NOTE: The station number must be assigned to the first LEN (Level 0), the second LEN (Level 1), the third LEN (Level 2) and the fourth LEN (Level 3) of each LT slot.	
CM04	Assign the purpose of the Caller ID sender.	• Y=01 (1) 02 (2) 0: Caller ID-Station



By the following programming, the Caller ID sender can be set in make busy or in service status.



By the following programming, the Calling Party Number and the Calling Party Name sent from the network over CCIS can be displayed on the LCD of the analog telephone for Caller ID-Station.



#### HARDWARE REQUIRED

Analog telephone with LCD which supports Caller ID SDT card (PN-4RSTF/PN-4RSTF-A) LLC card (PN-4LLCB)
-48 V Power Supply (PZ-PW122)

# **CALLER ID-STATION (ETSI-FSK)**

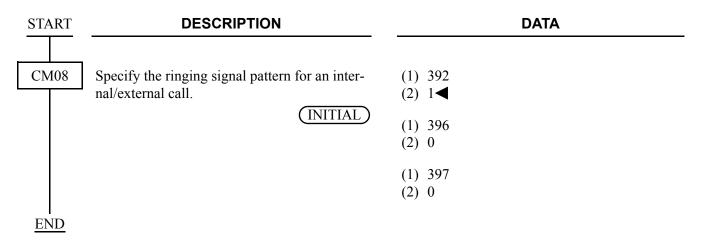
## [For EU]

#### **PROGRAMMING**

To provide this feature for the country with following ringing pattern:

- Internal Ringing: 0.3 seconds ON-0.2 seconds OFF-0.3 seconds ON-4.2 seconds OFF
- External Ringing: 1 second ON-4 seconds OFF

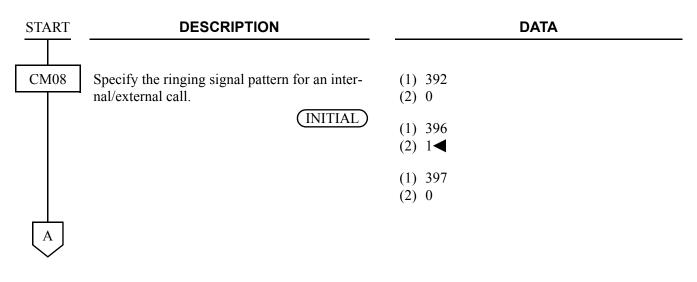
In addition to the programming of CALLER ID-STATION Page 190, do the following programming.

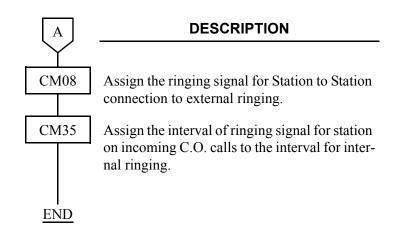


To provide this feature for the country with following ringing pattern:

- Internal Ringing: 1 second ON-4 seconds OFF
- External Ringing: 0.3 seconds ON-0.2 seconds OFF-0.3 seconds ON-4.2 seconds OFF

In addition to the programming of CALLER ID-STATION Page 190, do the following programming.





## **DATA**

- (1) 138
- (2) 0: External Ringing
- Y=33
- (1) 00-63: Trunk Route No.
- (2) 2: Internal Ringing (1 second ON-4 seconds OFF)

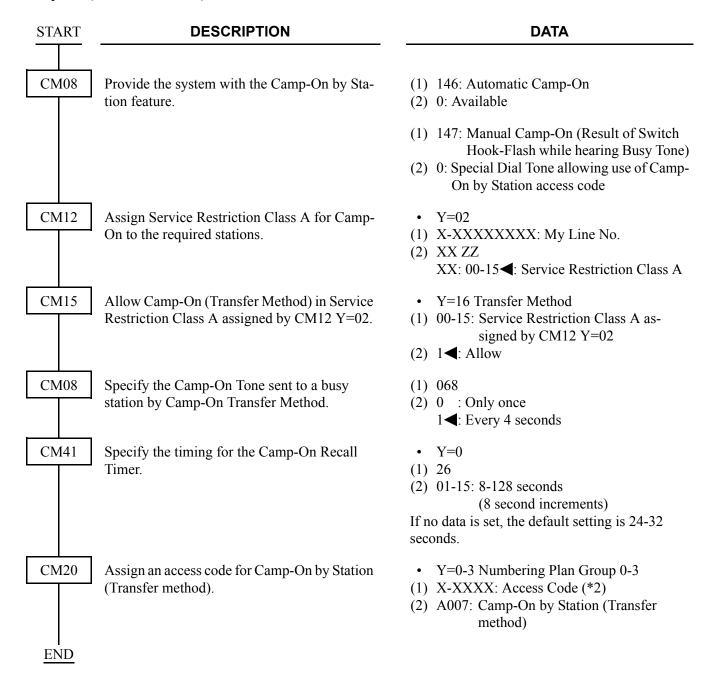
## HARDWARE REQUIRED

Analog telephone with LCD which supports Caller ID SDT card (PN-4RSTH)
LLC card (PN-4LLCB)
-48 V Power Supply (PZ-PW122)

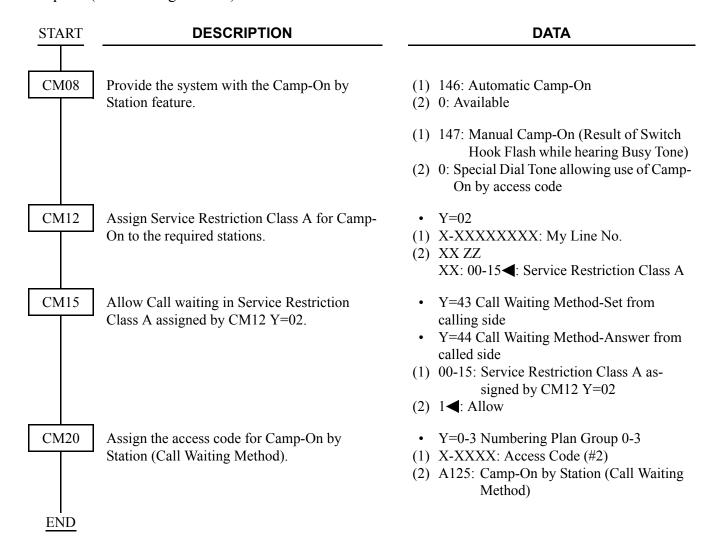
# **CAMP-ON**

#### **PROGRAMMING**

Camp-On (Transfer Method)



## Camp-On (Call Waiting Method)



When using a Single Digit Feature Access Code for Camp-On, add the following system data.

START	DESCRIPTION	DATA
CM08	To activate the Single Digit Feature Access Code, set the data for 050, 051, 069 and 148 to	<ul><li>(1) 050: * Button as Switch Hook Flash</li><li>(2) 1◀: Ineffective</li></ul>
	"1".	<ul><li>(1) 051: # Button as Switch Hook Flash</li><li>(2) 1◀: Ineffective</li></ul>
		(1) 069: Single Digit Dialing on BT Connection
		(2) 1◀: Step Call
		(1) 148: Same Last Digit Redialing on BT Connection
		(2) 1 <b>◄</b> : Ineffective
	Provide the System with the Single Digit	(1) 208
	Feature Access Code on BT Connection.	(2) 0: Available
<u>END</u>		

# **CENTREX COMPATIBILITY**

## **PROGRAMMING**

In addition to the programming of DIRECT OUTWARD DIALING (DOD) Page 322, do the following programming.

START	DESCRIPTION	DATA
CM35	Assign the Centrex Trunk function to the required trunk routes.	<ul> <li>Y=86</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: Centrex Trunk</li> </ul>
	Provide the capability for sending a hookflash signal to the Centrex.	<ul> <li>Y=16</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 1◀: Sending</li> </ul>
CM20	Assign the access code for sending a hookflash signal to the Centrex Line from a PB Single-Line Telephone.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A158</li> </ul>
CM93 END	Assign the Centrex Trunk as a Prime Line to the desired D <sup>term</sup> extension.	<ul><li>(1) X-XXXXXXXXX: My Line No.</li><li>(2) D000-D255: Trunk No.</li></ul>

# **CID CALL BACK**

#### **PROGRAMMING**

START

#### **DESCRIPTION**

**DATA** 

CM08

Specify Message Waiting Lamp indication on the D<sup>term</sup> to which Message Waiting/Message Reminder is set

Specify the time display for Message Waiting/ Message Reminder on D<sup>term</sup> with LCD.

Provide the system with CID Call Back.

Specify whether CID Call Back is provided or not when an incoming call is forwarded, when a station to which a call is terminated is busy, or a station to which a call terminated is set Do Not Disturb.

[Series 3900 software required]

**NOTE:** CID Call Back by this command is available under the following conditions.

- The D<sup>term</sup> station line is set to Call Forwarding-All Calls/Call Forwarding-Busy Line/Call Forwarding-No answer/Call Forwarding-D<sup>term</sup>IP logout when a trunk call is terminated.
- The D<sup>term</sup> station line is set to Do Not Disturb when a trunk call is terminated.
- The D<sup>term</sup> station line received the incoming call is busy when a trunk call is terminated.

(1) 294

(2) 0 : Flashing 60 IPM 1◀: Steady Lighting

(1) 280

(2) 0 : 24-Hour 1**◄**: 12-Hour

(1) 493

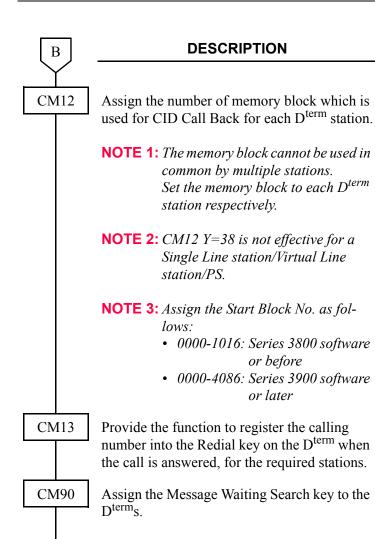
(2) 0: To provide

(1) 588

(2) 0 : To provide 1◀: Not provided



A	DESCRIPTION	DATA
CM08	Specify the operation for calling number automatically storing per station when the number of calling number is over the maximum.  [Series 3900 software required]	<ul> <li>(1) 589</li> <li>(2) 0 : To delete the oldest calling number and store the new calling number</li> <li>1 ◀: Not stored the new calling number</li> </ul>
	<b>NOTE:</b> This command is effective only for automatically storing calling number of trunk calls.	
CM13	Provide each D <sup>term</sup> with Message Waiting.	<ul><li>Y=03</li><li>(1) X-XXXXXXXXX: Station No.</li><li>(2) 0: To provide</li></ul>
CM12	Assign Service Restriction Class A for CID Call Back to the required stations.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15  Service Restriction Class A</li> </ul>
CM15	Allow CID Call Back in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=126</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 0: Allow</li> </ul>
CM35	Provide the trunk route with the CID Call Back.	<ul> <li>Y=150</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: To provide</li> </ul>
	Assign the trunk access code for CID Call Back. This trunk access code will be saved and sent with the calling number.	<ul> <li>Y=44</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0-9/00-99: Trunk Access Code</li> </ul>
CM29	Assign a Numbering Plan Group number to each tenant.	<ul><li>(1) 00-63: Tenant No.</li><li>(2) 710-713: Numbering Plan Group 0-3</li></ul>
CM20	Assign the access code for Message Waiting/ Message Reminder Search/Retrieve/Set/ Cancel.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A146: Message Waiting Search A147: Message Waiting Retrieve A148: Message Reminder Set A149: Message Reminder Cancel</li> </ul>
В		



#### **DATA**

- Y=38
- (1) X-XXXXXXXX: Station No.
- (2) XXXX ZZ

XXXX: 0000-4086: Start Block No.

ZZ : Number of Memory Block for CID

Call Back

01 : 8 blocks 02 : 16 blocks 03 : 24 blocks NONE ■: 4 blocks

- Y=41
- (1) X-XXXXXXXX: Station No.
- (2) 0: To provide
- Y=00
- (1) My Line No. + + Key No.
- (2) F0A46: Message Waiting Search

#### HARDWARE REQUIRED

**END** 

D<sup>term</sup> with LCD and DLC card

# **CID CALL ROUTING**

## **PROGRAMMING**

For DID on ISDN, T1-ANI, MFC incoming calls:

(See SAMPLE DATA PROGRAMMING 1. **▶** Page 207)

START	DESCRIPTION	DATA
CM35	Provide the incoming trunk route with digit conversion.	<ul> <li>Y=18</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: To provide</li> </ul>
	Specify the Development Table for digit conversion.	<ul> <li>Y=170</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : Development Table 1</li> <li>3◀: Development Table 0</li> </ul>
CM76	Assign the Number Conversion Block number for Development Table 0.	<ul> <li>Y=00</li> <li>(1) X-XXXX: DID No. /Called No.</li> <li>(2) 000-999: Number Conversion Block No.</li> <li>NOTE</li> </ul>
	NOTE: When the Number Conversion Block nut	umber is assigned for CID Call Routing, do not use umber for the DID feature.
	Assign the Number Conversion Block number for Development Table 1.	<ul> <li>Y=90</li> <li>(1) X-XXXXXXXXX: DID No. /Called No.</li> <li>(2) 000-999: Number Conversion Block No.</li> <li>NOTE</li> </ul>
	NOTE: When the Number Conversion Block number Conversi	umber is assigned for CID Call Routing, do not use umber for the DID feature.
A		

A	DESCRIPTION	DATA
CM76	Provide the calling number development and specify its Development Pattern for each Number Conversion Block number assigned by CM76 Y=00/90.  NOTE: For non-DID on ISDN, Caller ID calls, this data is not effective and the data setting of CM35 Y=174 is effective.	<ul> <li>Y=26</li> <li>(1) 000-999: Number Conversion Block No. assigned by CM76 Y=00/90</li> <li>(2) 0: To provide         (Using Development Pattern 0)</li> <li>1: To provide         (Using Development Pattern 1)</li> <li>2: To provide         (Using Development Pattern 2)</li> </ul>
CM2A	Assign the Development Block number for each calling party number.	<ul> <li>Y=50 Development Pattern 0 assigned by CM76 Y=26</li> <li>Y=51 Development Pattern 1 assigned by CM76 Y=26</li> <li>Y=52 Development Pattern 2 assigned by CM76 Y=26</li> <li>X-XXXX: Calling Party No. (Maximum 16 digits) X: 0-9</li> <li>000-999: Development Block No. NOTE</li> <li>NOTE: Set the different number from the Number Conversion Block number assigned by CM76 Y=00/90.</li> </ul>
CM65	Select the two kinds of mode change or the four kinds of mode change per each tenant.	<ul> <li>Y=29</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0 : Two kinds of mode (Day Mode, Night Mode)</li> <li>1 ◄: Four kinds of mode (Day Mode, Night Mode, Mode A, Mode B)</li> </ul>
CM76	Assign the station tenant for each calling party number.	<ul> <li>Y=09</li> <li>(1) 000-999: Development Block No. assigned by CM2A Y=50/51/52</li> <li>(2) 00-63: Station Tenant No.</li> </ul>

В

#### **DESCRIPTION**

#### **DATA**

CM76

Assign the data for interpreting the digits received.

**NOTE:** Day/Night Mode, Mode A/B can be specified according to following

conditions.

1st priority:

Specified by tenant number for each calling party number (CM76 Y=09)

2nd priority:

Specified by trunk tenant number

(CM30 Y=01) 3rd priority:

Specified by tenant number for each DID number (CM76 Y=09)

• Y=01 Day Mode

• Y=02 Night Mode

• Y=03 Mode A

Y=04 Mode B

(1) 000-999: Development Block No. assigned by CM2A Y=50/51/52

(2) X-XXXXXXXX: Station No. to be terminated

DXX: Change Terminating System to:

D02: Trunk-Direct Appearances

D03: Trunk-Direct Appearances + TAS

D04: Direct-In Termination

D09: Automated Attendant

D10: Attendant Console + TAS

D11: Attendant Console + Trunk-Direct Appearances

D12: Attendant Console + Trunk-Direct Appearances + TAS

D13: TAS

D14: Attendant Console

D16: DISA

When CM76 Y=01/02/03/04 is set to "D13" (TAS), assign the terminating tenant for Day/ Night Mode, Mode A/B per each calling party

number.

• Y=05 Day Mode

• Y=06 Night Mode

• Y=07 Mode A

Y=08 Mode B

(1) 000-999: Development Block No. assigned by CM2A Y=50/51/52

(2) 00-63: Trunk Tenant No.

NOTE:

When you set the other CM76 data (Y=10, 11, 13-16, 18-25) for the Development Block number assigned by CM2A Y=50/51/52, these settings are also effective for each calling party number.

**END** 

For non-DID on ISDN, Caller ID incoming calls:

(See SAMPLE DATA PROGRAMMING 2. Page 209)

**NOTE 1:** When a Called Party Subaddress is received from ISDN subscriber, CID Call Routing is not effective.

**NOTE 2:** When you activate CID Call Routing for Caller ID trunk, do not assign CMDB Y=01, Y=02.

START	DESCRIPTION	DATA
CM35	Provide the calling number development and specify its Development Pattern for each trunk route number.  NOTE: For DID on ISDN, T1-ANI, MFC calls, this data is not effective and the data setting of CM76 Y=26 is effective.	<ul> <li>Y=174</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: To provide</li></ul>
CM2A	Assign the Development Block number for each calling party number.	<ul> <li>Y=50 Development Pattern 0 assigned by CM35 Y=174</li> <li>Y=51 Development Pattern 1 assigned by CM35 Y=174</li> <li>Y=52 Development Pattern 2 assigned by CM35 Y=174</li> <li>X-XXXX: Calling Party No.  (Maximum 16 digits)  X: 0-9</li> <li>000-999: Development Block No.</li> </ul>
CM65	Select the two kinds of mode change or the four kinds of mode change per each tenant.	<ul> <li>Y=29</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0 : Two kinds of mode (Day Mode, Night Mode)</li> <li>1 ◄: Four kinds of mode (Day Mode, Night Mode, Mode A, Mode B)</li> </ul>
CM76	Assign the station tenant for each calling party number.	<ul> <li>Y=09</li> <li>(1) 000-999: Development Block No. assigned by CM2A Y=50/51/52</li> <li>(2) 00-63: Station Tenant No.</li> </ul>



#### **DATA**

CM76

Assign the data for interpreting the digits received.

**NOTE:** Day/Night Mode, Mode A/B can be specified according to following

conditions.

1st priority:

Specified by tenant number for each calling party number (CM76 Y=09)

2nd priority:

Specified by trunk tenant number

(CM30 Y=01)

• Y=01 Day Mode

• Y=02 Night Mode

• Y=03 Mode A

Y=04 Mode B

(1) 000-999: Development Block No. assigned by CM2A Y=50/51/52

(2) X-XXXXXXXX: Station No. to be terminated

DXX: Change Terminating System to:

D02: Trunk-Direct Appearances

D03: Trunk-Direct Appearances + TAS

D04: Direct-In Termination

D09: Automated Attendant

D10: Attendant Console + TAS

D11: Attendant Console + Trunk-Direct Appearances

D12: Attendant Console + Trunk-Direct Appearances + TAS

D13: TAS

D14: Attendant Console

D16: DISA

When CM76 Y=01/02/03/04 is set to "D13" (TAS), assign the terminating tenant for Day/ Night Mode, Mode A/B per each calling party

number received on DID call.

• Y=05 Day Mode

• Y=06 Night Mode

• Y=07 Mode A

Y=08 Mode B

(1) 000-999: Development Block No. assigned by CM2A Y=50/51/52

(2) 00-63: Trunk Tenant No.

NOTE:

When you set the other CM76 data (Y=10, 11, 13-16, 18-25) for the Development Block number assigned by CM2A Y=50/51/52, these settings are also effective for each calling party number.

**END** 

#### **SAMPLE DATA PROGRAMMING 1**

For DID on ISDN, T1-ANI, MFC incoming calls.

## < Example >

• DID No. : 0123 456-7890

• Trunk Route No. : 00

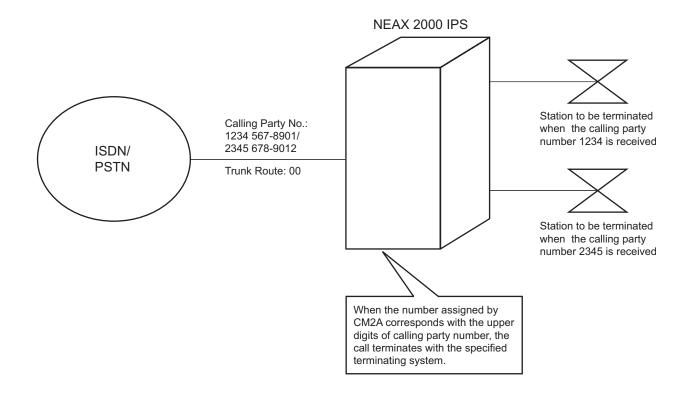
• Calling Party No. : 1234 567-8901

: 2345 678-9012

• Terminating System: TAS (Day Mode) when the number 1234 is received

: Direct-In Termination (Day Mode) when the number 2345 is received

Station Tenant No. : 01Trunk Tenant No. : 01



# < Data Programming >

COMMAND	1st DATA	2nd DATA	REMARKS	
CM30 Y=00	000	00	Assign the trunk route number 00 to the trunk number 000.	
CM30 Y=02	000	18	Set the ISDN Indial for the incoming calls.	
CM35 Y=12	00	3	Assign the number of digits to be received on DID to 4 digits.	
CM35 Y=18	00	0	Provide the trunk route number 00 with digit conversion.	
CM76 Y=00	7890	000	Assign the Number Conversion Block number 000 to the DID number 7890.	
CM76 Y=26	000	0	Provide the calling number development with the Development Pattern 0 to the Number Conversion Block number 000.	
CM2A Y=50	1234	010	Assign the Development Block number 010 for the calling party number 1234.	
CM2A Y=50	2345	011	Assign the Development Block number 011 for the calling party number 2345.	
CM76 Y=01	010	D13	Assign TAS in Day Mode to the Development Block number 010.	
CM76 Y=01	011	D04	Assign Direct-In Termination in Day Mode to the Development Block number 011.	
CM76 Y=09	010	01	Assign the station tenant number 01 to the Development Block number 010.	
CM76 Y=05	010	01	Assign the trunk tenant number 01 to the Development Block number 010.	

#### **SAMPLE DATA PROGRAMMING 2**

For non-DID on ISDN, Caller ID incoming calls.

## < Example >

• Calling Party No. : 1234 567-8901

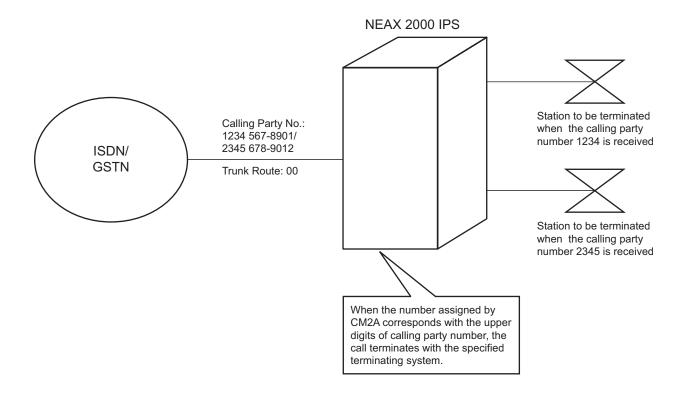
: 2345 678-9012

• Trunk Route No. : 00

• Terminating System: TAS (Day Mode) when the number 1234 is received

: Direct-In Termination (Day Mode) when the number 2345 is received

Station Tenant No. : 01Trunk Tenant No. : 01



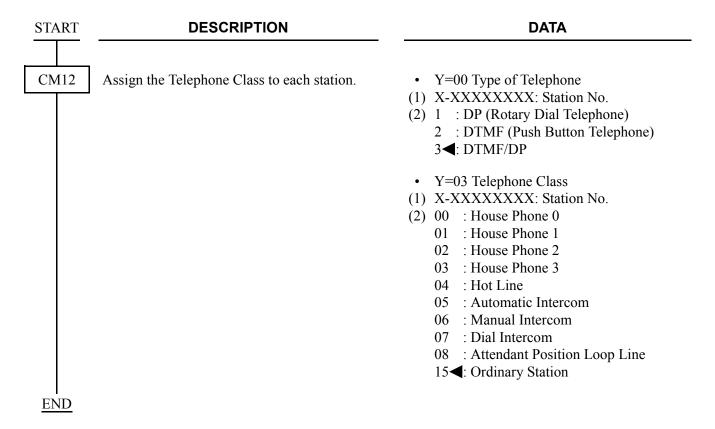
# < Data Programming >

COMMAND	1st DATA	2nd DATA	REMARKS
CM35 Y=174	00	0	Provide the calling number development with the Development Pattern 0 for trunk route number 00.
CM2A Y=50	1234	020	Assign the Development Block number 020 for the calling party number 1234.
CM2A Y=50	2345	021	Assign the Development Block number 021 for the calling party number 2345.
CM76 Y=01	020	D13	Assign TAS in Day Mode to the Development Block number 020.
CM76 Y=01	021	D04	Assign Direct-In Termination in Day Mode to the Development Block number 021.
CM76 Y=09	020	01	Assign the station tenant number 01 to Development Block number 020.
CM76 Y=05	020	01	Assign the trunk tenant number 01 to Development Block number 020.

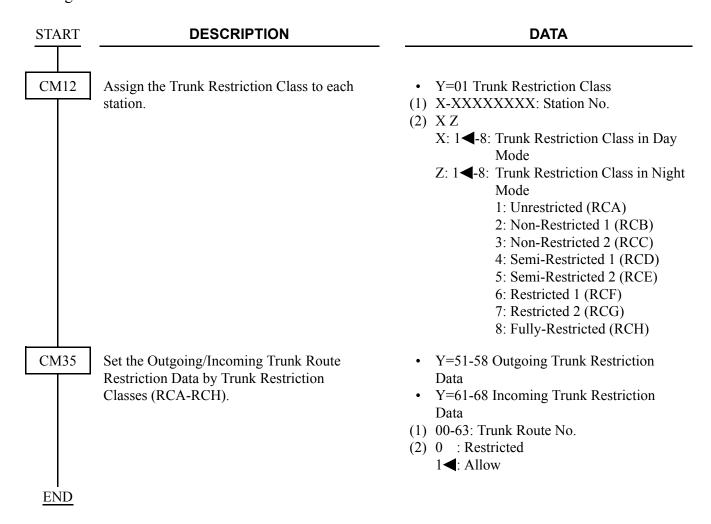
# **CLASS OF SERVICE**

#### **PROGRAMMING**

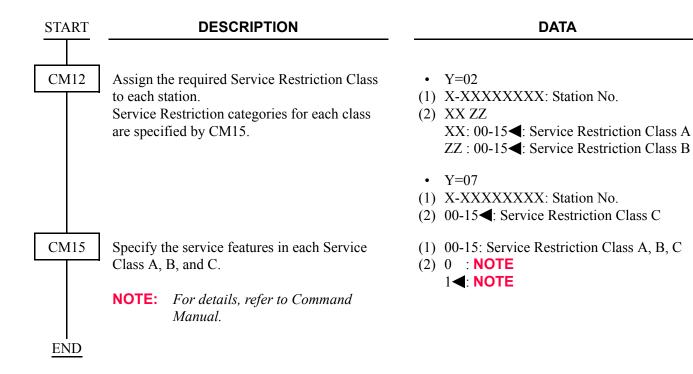
To assign the Telephone Class:



To assign the Trunk Restriction Class:



To assign the Service Restriction Class:



# **CODE RESTRICTION**

## **PROGRAMMING**

START	DESCRIPTION	DATA
CM08	Provide the system with the Tol1 Restriction feature for an outgoing call by System Speed Dialing/Station Speed Dialing, if desired.	<ul> <li>(1) 035: Station Speed Dialing</li> <li>(2) 0 : Not provided</li> <li>1 ▼: To provide</li> <li>(1) 044: System Speed Dialing</li> </ul>
	Provide the system with Toll Diversion or Toll Denial.	<ul> <li>(2) 0 : Not provided 1</li></ul>
CM12	Assign a Trunk Restriction Class to each station.	<ul> <li>Y=01</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) X Z: Trunk Restriction Class X: 1-8: In Day Mode Z: 1-8: In Night Mode</li> <li>1 ✓ : Unrestricted (RCA)</li> <li>2 : Non-Restricted 1 (RCB)</li> <li>3 : Non-Restricted 2 (RCC)</li> <li>4 : Semi-Restricted 1 (RCD)</li> <li>5 : Semi-Restricted 2 (RCE)</li> <li>6 : Restricted 1 (RCF)</li> <li>7 : Restricted 2 (RCG)</li> <li>8 : Fully-Restricted (RCH)</li> </ul>
CM35	Assign the data for Dial Pulse sending to the Route number assigned.	<ul> <li>Y=08 Dial Pulse Sending</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 3◀: To send</li> </ul>
	Provide the Toll Restriction feature to the required trunk routes.	<ul> <li>Y=11</li> <li>(1) 00-63: Trunk Route No. (00)</li> <li>(2) 0: To provide</li> </ul>
	Specify outgoing route access capability for each restriction class.	<ul> <li>Y=51-58</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : Restricted</li> <li>1◄: Allow</li> </ul>
A		

# A

#### **DESCRIPTION**

#### **DATA**

CM35

Assign the Area Code Development Pattern number for Toll Restriction and Maximum Digit Analysis to each trunk route. • Y=76

(1) 00-63: Trunk Route No.

(2) 00-04: Area Code Development Pattern No. 0-4

CM81

Assign the Toll Restriction Patterns with eight kinds of Trunk Restriction Classes assigned by CM12 Y=01. Toll Restriction Pattern 00-15 are preassigned as shown below. If a new Restriction Pattern is required, change the data for Restriction Patterns 01-13 (00, 14 and 15 are fixed).

• Y=01-13 Toll Restriction Pattern No. 01-13

(1) 1-8: Trunk Restriction Class

(2) 0: Restricted

3: Allowed

									•	Y							
	TRUNK	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00
KE	STRICTION CLASS	TO	LL RE	STRI	СТІОІ	N PAT	TERN	NUN	IBER	ON E	ACH	TRUN	IK RE	STRI	СТІОІ	N CLA	ASS
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00
1	RCA	3	0	3	3	3	0	0	0	3	3	3	3	3	0	3	0
2	RCB	3	0	3	3	0	0	0	0	3	3	0	0	0	0	3	0
3	RCC	3	0	3	0	0	0	0	0	3	0	0	0	0	0	3	0
4	RCD	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
5	RCE	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
6	RCF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
7	RCG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8	RCH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0

0: Restricted

3: Allowed

CM85

Specify the maximum number of digits to be dialed during an outgoing call. The maximum number of digits, including the area codes, should be assigned to each area code.

- Y=0-4 Area Code Development Pattern No. 0-4 assigned by CM35 Y=76
- (1) X-X...X: Area Code dialed, Maximum 8 digits

(2) 01-24**◄**: 1 digit-24 digits 25-79 : 25-79 digits





#### **DATA**

CM8A

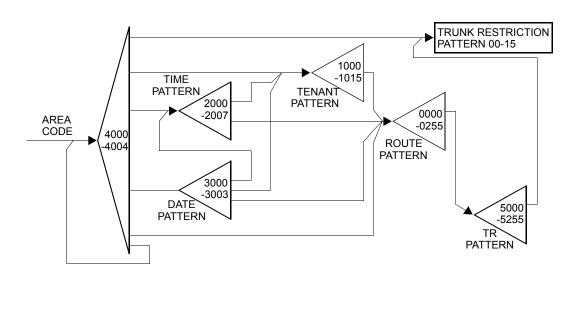
Assign the area code to be restricted and the Trunk Restriction Pattern number assigned by CM81 to the Area Code Development Pattern number assigned by CM35 Y=76. For example, to provide the Trunk Restriction Class "RCB, RCC, RCD, and RCE" with the Toll Restriction for Area Code "00":

- Area Code=00
- Trunk Restriction Pattern=05
   (See Toll Restriction Pattern Table on CM81.)

If the Toll Restriction Pattern for the same area code is changed according to the Tenant, Date, and Time, assign the required patterns (Tenant, Date, and Time) to the area code.

- Y=4000-4004 Area Code Development No. 0-4
- (1) Area Code (Maximum 8 digits)
- (2) B000-B015: Trunk Restriction Pattern 00-15

NOTE: For details of Resident System Program, refer to the Command Manual.



C
CM8A

#### **DATA**

Y=4000-4004 Area Code Development

To add a Tenant Pattern:

STEP1: Assign the area code to be restricted and a Tenant Pattern number to the Area Code Development Pattern number assigned by CM35 Y=76.

(1) Area Code (Maximum 8 digits) (2) 1000-1015: Tenant Pattern No. 00-15

Pattern No. 0-4

STEP2: Assign a Tenant number and the Route Pattern number to the

• Y=1000-1015 Tenant Pattern No. 00-15

Tenant Pattern number assigned by Step1.

(1) 00-63: Tenant No. 00-63 (2) 0000-0255: Route Pattern No. 000-255

STEP3: Assign a TR Pattern number to the Route Pattern number assigned by Step 2.

• Y=0000-0255 Route Pattern No. 000-255

(1) 1(2) XXX 00

STEP4: Assign a Trunk Restriction Pattern number assigned by CM81 to the TR Pattern number assigned by

XXX: 000-255: TR Pattern No.

Step 3.

Y=5000-5255 TR Pattern No.

(1) 000

(2) 00-15**◄**: Trunk Restriction Pattern No. 00-15

To add a Time and Date Pattern:

STEP1: Assign the area code to be restricted and a Date Pattern number to

the Area Code Development Pattern number assigned by CM35 Y = 76.

• Y=4000-4004 (1) Area Code (Maximum 8 digits)

(2) 3000-3003: Date Pattern No. 0-3

STEP2: Assign a date and Time Pattern No. 0-7 to the Date Pattern number

assigned by Step 1.

• Y=3000-3003 Date Pattern No. 0-3

(1) 0-6 (Date)

0: Sunday

1: Monday

2: Tuesday

3: Wednesday

4: Thursday

5: Friday

6: Saturday

(2) 2000-2007: Time Pattern No. 0-7

Set the data for all dates, one by one, for which Toll Restriction is to be applied.

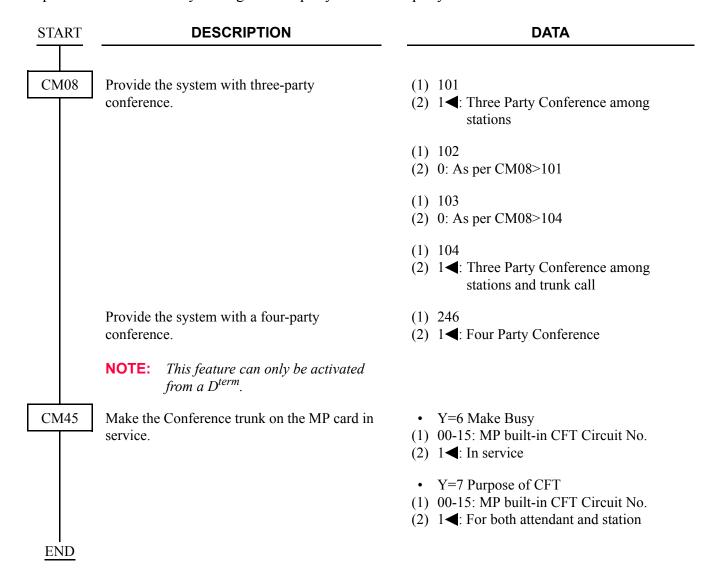


D	DESCRIPTION	DATA
CM8A STEP3:	Restriction and Route Pattern number to the Time Pattern number assigned by above Step 2. Set the Starting Time as shown below.	<ul> <li>Y=2000-2007 Time Pattern No. 0-7</li> <li>(1) HHMM (Time to Change)     HH: 00-23: Hours     MM: 00/30: Minutes</li> <li>(2) 0000-0255: Route Pattern No. 000-255     If Tenant Pattern is required, set 1000-1015     (Tenant Pattern No. 00-15).</li> </ul>
STEP4:	to stop it (or change it back).  Assign the TR Pattern number to the Route Pattern number assigned by Step 3.	<ul> <li>Y=0000-0255 Route Pattern No. 000-255</li> <li>(1) 1</li> <li>(2) XXX 00</li> </ul>
STEP5:	Assign the Trunk Restriction Pattern number assigned by CM81 to the TR Pattern number assigned by Step 4.	XXX: 000-255: TR Pattern No.  • Y=5000-5255 TR Pattern No. 000-255 (1) 000 (2) 00-15◀: Trunk Restriction Pattern No. 00-15
I <u>END</u>		

# **CONFERENCE (THREE/FOUR PARTY)**

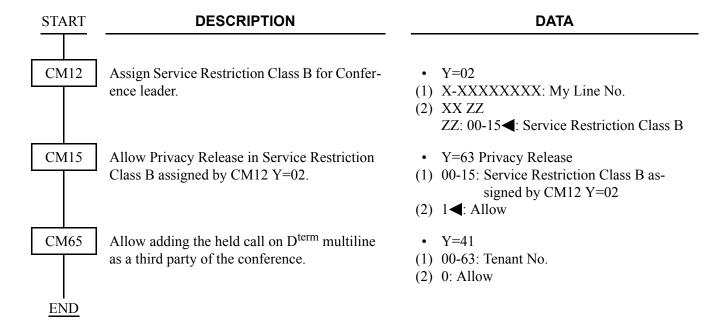
#### **PROGRAMMING**

To provide a conference by calling another party as the third party of the conference:



To provide a conference by adding a held call as the third party of the conference:

# [Series 3100 software required]

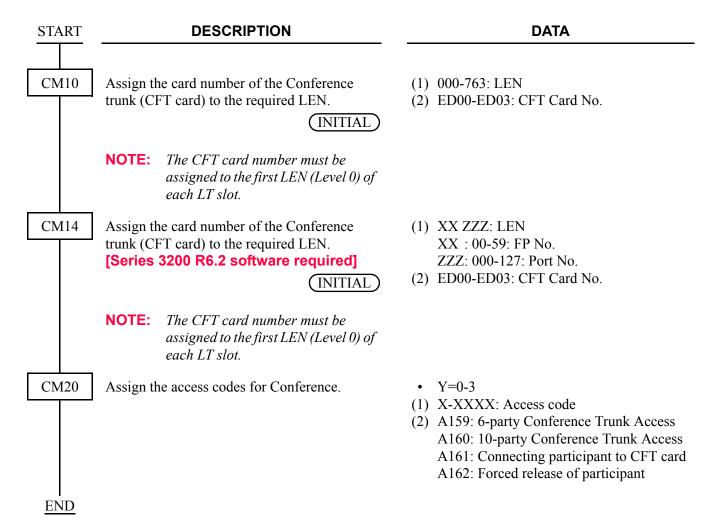


# **CONFERENCE (SIX/TEN PARTY)**

This feature is not available because the conference card (CFTB) is not available any more.

#### **PROGRAMMING**

To use this feature by dialing the feature access code:



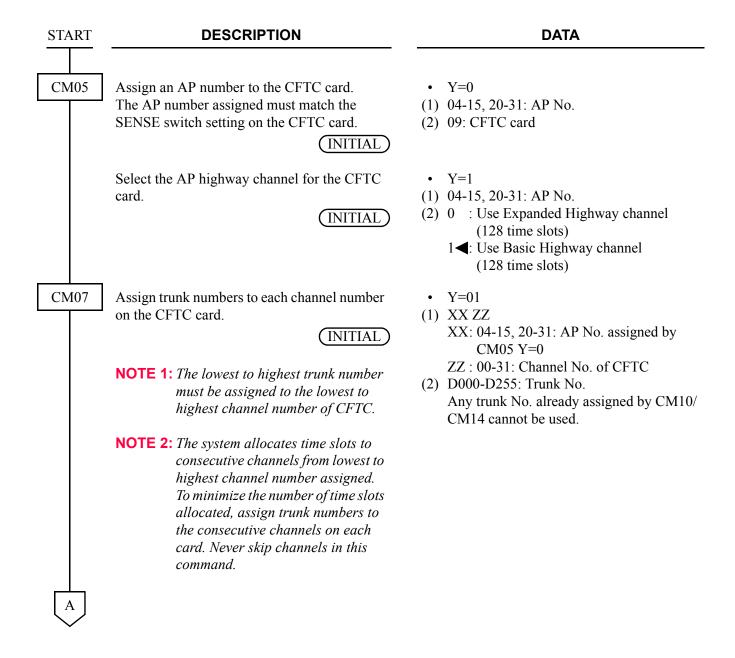
To use this feature by using the feature keys assigned on the  $\mathbf{D}^{\text{term}}$ :

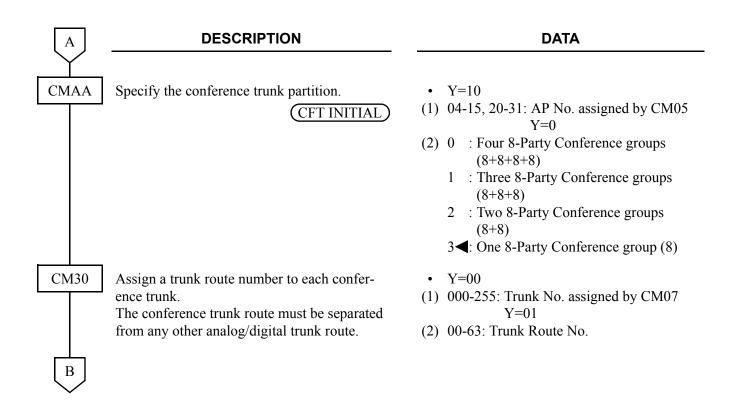
START	DESCRIPTION	DATA
CM90	Assign the feature key for Six/Ten-Party Conference, on the D <sup>term</sup> of the Conference leader.	<ul> <li>Y=00</li> <li>(1) My Line No. + + + Key No.</li> <li>(2) F0A85: 6-party conference F0A86: 10-party conference</li> </ul>
	Assign maximum of 6 or 10 Multiple Line keys on the D <sup>term</sup> of the Conference leader.	<ul> <li>Y=00</li> <li>(1) My Line No. + + + Key No.</li> <li>(2) X-XXXXXXXXXX Multiple Line No.</li> </ul>
CM12	Specify the Multiple Line number set by CM90 to be accommodated to D <sup>term</sup> .	<ul> <li>Y=05</li> <li>(1) X-XXXXXXXXX Multiple Line No.</li> <li>(2) 0: Accommodated</li> </ul>
CM10	Assign the card number of the Conference trunk (CFT card) to the required LEN.  INITIAL	<ul><li>(1) 000-763: LEN</li><li>(2) ED00-ED03: CFT Card No.</li></ul>
	NOTE: The CFT card number must be assigned to the first LEN (Level 0) of each LT slot.	
CM14	Assign the card number of the Conference trunk (CFT card) to the required LEN.  [Series 3200 R6.2 software required]  [INITIAL]	<ul> <li>(1) XX ZZZ: LEN</li></ul>
EMD	NOTE: The CFT card number must be assigned to the first LEN (Level 0) of each LT slot.	
END		

# **CONFERENCE (EIGHT PARTY)**

## [Series 3800 software required]

#### **PROGRAMMING**





В
---

#### **DATA**

CM35

Assign the trunk route data to the route number assigned by CM30 Y=00.

- Y=00 Kind of Trunk Route
- (1) 00-63: Trunk No.
- (2) 04: Tie line trunk
- Y=01 Dialing signal type
- (1) 00-63: Trunk Route No.
- (2) 2: DP 10PPS
- Y=05 Release signal from distant office
- (1) 00-63: Trunk Route No.
- (2) 1**◄**: Release signal arrives
- Y=09 Incoming connection signaling
- (1) 00-63: Trunk Route No.
- (2) 06: 2nd DT/Timing Start-Tie line
- Y=04 Answer signal from distant office
- (1) 00-63: Trunk Route No.
- (2) 2: Answer signal arrives (Tie Line)
- Y=159 8/32-Party Conference trunk
- (1) 00-63: Trunk Route No.
- (2) 0: To provide
- Y=14 SMDR for outgoing call
- (1) 00-63: Trunk Route No.
- (2) 0: Not provided
- Y=19 PAD control of CFTC
- (1) 00-63: Trunk Route No.
- (2) 0-3 : Programmable PAD (See CM42)
  - 4-7**<**: Not used

**NOTE:** Be sure to set the PAD for the conference trunk by CM42, for outside participants.





## **DATA**

CM42

To use the programmable PAD (CM35 Y=19, 2nd Data=0-3), assign the PAD data by CM42.

(1) 50-65: See the table below.(2) 00-15: See the table below.

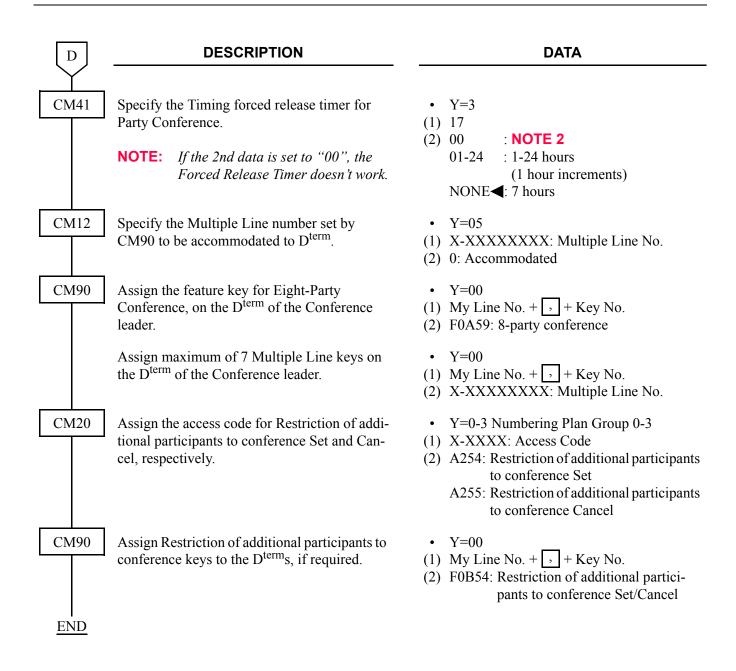
PATTERNS	PAD DATA PATTERNS				CONNECTING
1ST DATA	CM35 Y=19 2ND DATA=0	CM35 Y=19 2ND DATA=1	CM35 Y=19 2ND DATA=2	CM35 Y=19 2ND DATA=3	PATTERNS (A TRUNK-B TRUNK)
	50	54	58	62	STA/TONE-CFTC
50	51	55	59	63	COT/DID/IPT-CFTC
}	52	56	60	64	ODT (4W E&M)-CFTC
65	53	57	61	65	DTI/BRT/PRT/CCT/Virtual IPT/CFTC-CFTC

	PATTERNS			
2ND DATA		PAD DATA OF CFTC (T/R) [dB]		
	00	0/0		
	01	0/0		
	02	-8/0		
	03	+4/0		
	04	0/–3		
	05	0/–3		
	06	-8/-3		
00	07	+4/-3		
≀ 15	08	0/–6		
10	09	0/–6		
	10	-8/-6		
	11	+4/-6		
	12	0/–9		
	13	0/–9		
	14	-8/-9		
	15	+4/-9		

T/R: Transmitter PAD/Receiver PAD

+ : Gain - : Loss





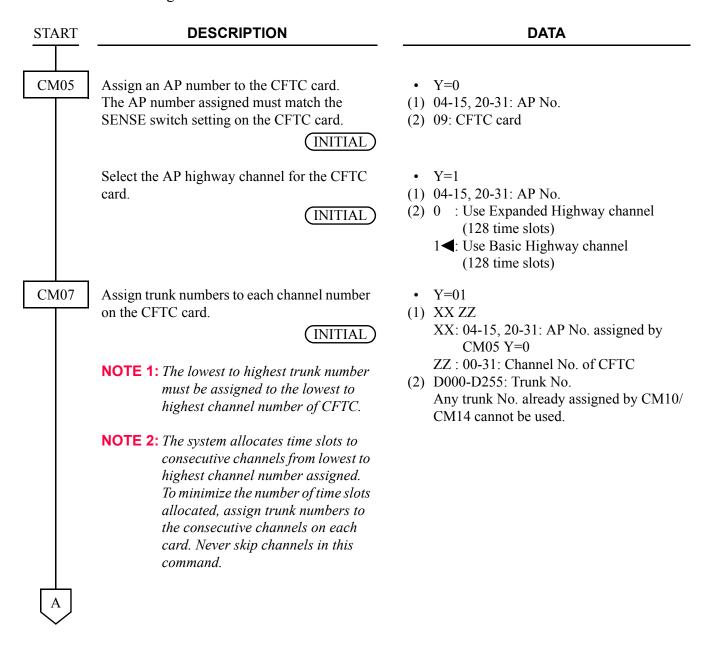
# **CONFERENCE (32-PARTY)**

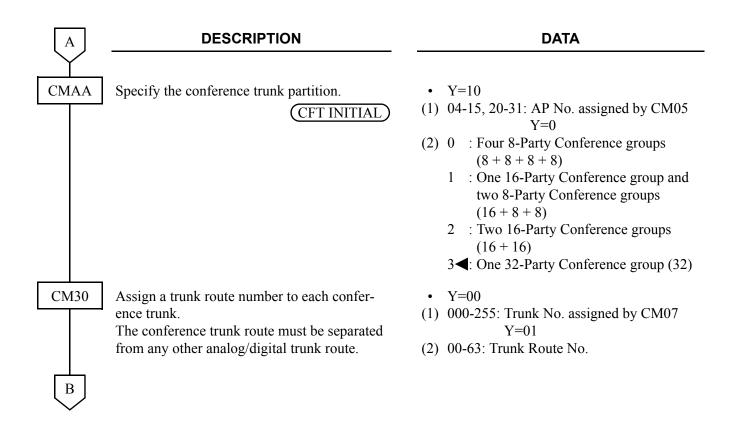
#### **PROGRAMMING**

Conference (32-Party) allows a station user or an outside party to establish a conference by Group Call or to attend a conference by Meet-Me Conference.

To provide Group Call or Meet-Me Conference, do the Conference Trunk Assignment at first.

Conference Trunk Assignment:





В	

#### **DATA**

CM35

Assign the trunk route data to the route number assigned by CM30 Y=00.

- Y=00 Kind of Trunk Route
- (1) 00-63: Trunk No.
- (2) 04: Tie line trunk
- Y=01 Dialing signal type
- (1) 00-63: Trunk Route No.
- (2) 2: DP 10PPS
- Y=05 Release signal from distant office
- (1) 00-63: Trunk Route No.
- (2) 1**◄**: Release signal arrives
- Y=09 Incoming connection signaling
- (1) 00-63: Trunk Route No.
- (2) 06: 2nd DT/Timing Start-Tie line
- Y=04 Answer signal from distant office
- (1) 00-63: Trunk Route No.
- (2) 2: Answer signal arrives (Tie Line)
- Y=159 8/32-Party Conference trunk
- (1) 00-63: Trunk Route No.
- (2) 0: To provide
- Y=14 SMDR for outgoing call
- (1) 00-63: Trunk Route No.
- (2) 0: Not provided
- Y=19 PAD control of CFTC
- (1) 00-63: Trunk Route No.
- (2) 0-3 : Programmable PAD (See CM42)
  - 4-7**<**: Not used

**NOTE:** Be sure to set the PAD for the conference trunk by CM42, for outside participants.





#### **DATA**

CM42

To use the programmable PAD (CM35 Y=19, 2nd Data=0-3), assign the PAD data by CM42.

(1) 50-65: See the table below.(2) 00-15: See the table below.

PATTERNS	PAD DATA PATTERNS			CONNECTING	
1ST DATA	CM35 Y=19 2ND DATA=0	CM35 Y=19 2ND DATA=1	CM35 Y=19 2ND DATA=2	CM35 Y=19 2ND DATA=3	PATTERNS (A TRUNK-B TRUNK)
	50	54	58	62	STA/TONE-CFTC
50	51	55	59	63	COT/DID/IPT-CFTC
}	52	56	60	64	ODT (4W E&M)-CFTC
65	53	57	61	65	DTI/BRT/PRT/CCT/Virtual IPT/CFTC-CFTC

	PATTERNS			
2ND DATA		PAD DATA OF CFTC (T/R) [dB]		
	00	0/0		
	01	-4 (0)/0		
	02	-8/0		
	03	+4/0		
	04	0/–3		
	05	-4 (0)/-3		
	06	-8/-3		
00	07	+4/-3		
≀ 15	08	0/–6		
10	09	-4 (0)/-6		
	10	-8/-6		
	11	+4/-6		
	12	0/–9		
	13	-4 (0)/-9		
	14	-8/-9		
	15	+4/–9		

T/R: Transmitter PAD/Receiver PAD

+ : Gain - : Loss

**NOTE:** When using CFTC-A card, the PAD data is set to 0 dB if the second data is set to 01, 05, 09, and 13.





#### **DATA**

CM41

Specify the Timing forced release timer for Party Conference.

[Series 3800 software required]

**NOTE 1:** This command is effective only when PN-CFTC-A card is used.

**NOTE 2:** If the 2nd data is set to "00", the Forced Release Timer doesn't work.

• Y=3

(1) 17

(2) 00 : **NOTE 2** 01-24 : 1-24 hours

(1 hour increments)

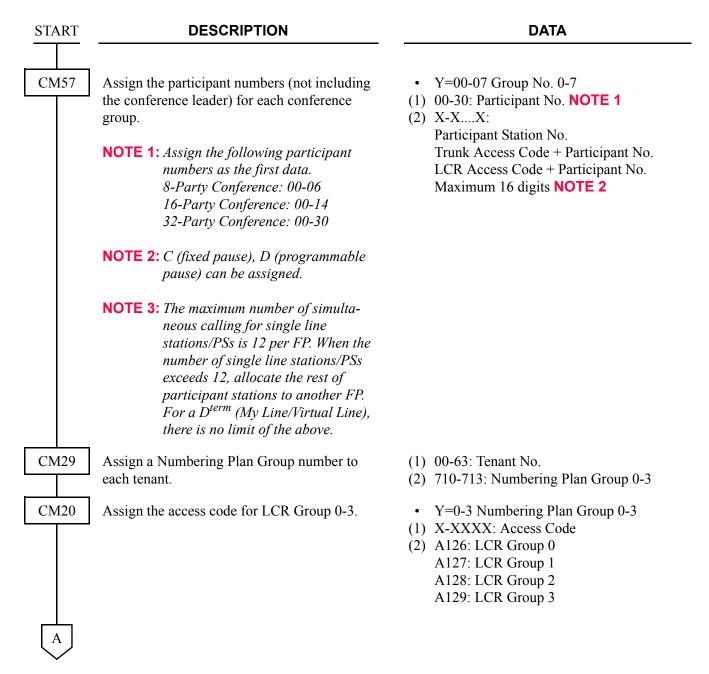
NONE**◀**: 7 hours

**END** 

#### **GROUP CALL**

Group Call includes three kinds of conference: Group Call-Automatic Conference, Group Call-Broadcasting, and Group Call-Two Way Calling.

Do the following programming in addition to the Conference Trunk Assignment ( Page 228).





#### **DATA**

CM8A

Assign an Area Code Development Pattern number to each LCR Group.

Assign a Route Pattern number to each area code (Conference Access Code) for the Area Code Development Pattern number assigned by CM8A Y=A000.

Specify the order of LCR selection for the Route Pattern number assigned by CM8A Y=4000-4007.

Delete all digits of the area code (Conference Access Code) assigned by CM8A Y=4000-4007.

• Y=A000

- (1) 0-3: LCR Group 0-3
- (2) 4000-4007: Area Code Development Pattern No. 0-7
- Y=4000-4007 Area Code Development Pattern No. 0-7
- (1) X...X: Area Code (Conference Access Code), Maximum 8 digits
- (2) 0000-0255: Route Pattern No. 000-255
- Y=0000-0255 Route Pattern No. 000-255
- (1) 1-4: Order of LCR Selection

1: 1st

2: 2nd

3: 3rd

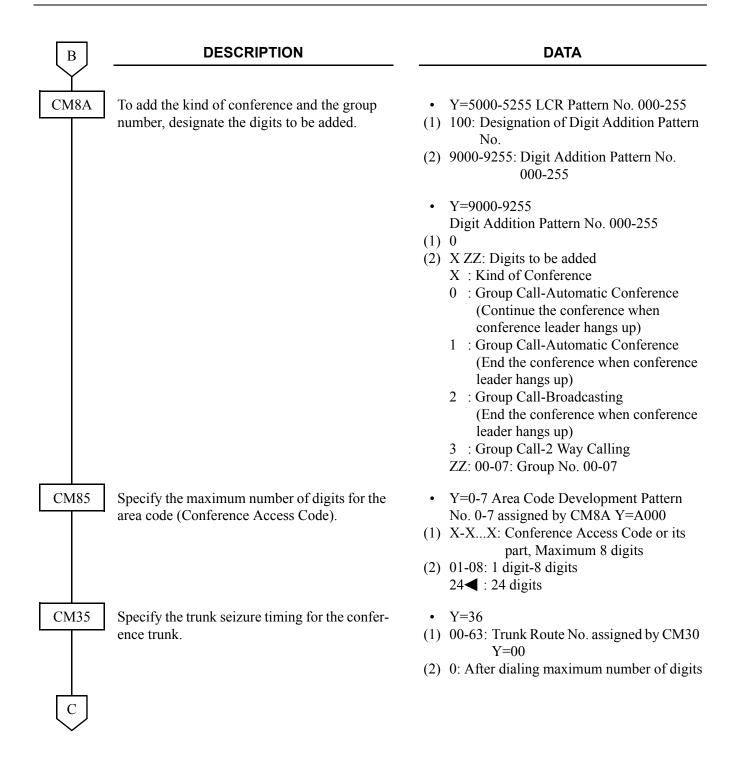
4: 4th

(2) XXX ZZ

XXX: 000-255: LCR Pattern No. 000-255
ZZ : 00-63: Trunk Route No. 00-63 assigned by CM30 Y=00

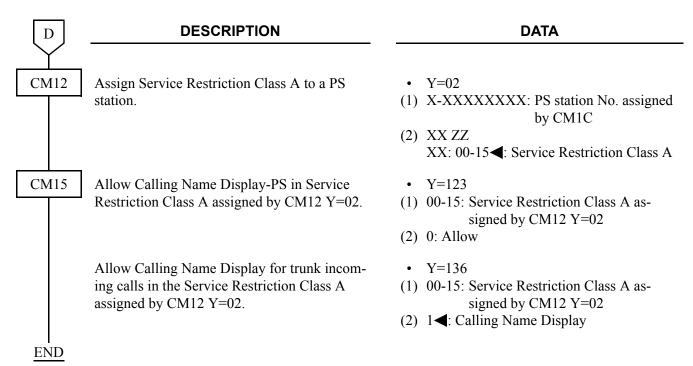
- Y=5000-5255 LCR Pattern No. 000-255
- (1) 152: All digits of Conference Access Code to be deleted
- (2) 0: To delete

В



С	DESCRIPTION	DATA
CM36	For an outside participant, allow tandem connection between the conference trunk route and the outgoing trunk route to the participant.	<ul> <li>Y=0</li> <li>(1) 0000-6363: Conference Trunk Route No. assigned by CM30 Y=00 + Outgoing Trunk Route No.</li> <li>(2) 0: Allow</li> </ul>
	For an outside conference leader, allow tandem connection between the incoming trunk route from the conference leader and the conference trunk route.	<ul> <li>Y=0</li> <li>(1) 0000-6363: Incoming Trunk Route No. + Conference Trunk Route No. assigned by CM30 Y=00</li> <li>(2) 0: Allow</li> </ul>
CM41	Specify the detect timing of participant's no answer. The ringing will stop at this timing.	<ul> <li>Y=3</li> <li>(1) 16</li> <li>(2) 00 : No stop ringing 01-14: 1-14 minutes <ul> <li>(1 minute increments)</li> </ul> If no data is set, the default setting is 30 seconds.</li> </ul>
CM35	Assign a trunk name number for the conference trunk route not to display the kind of trunk route assigned by CM35 Y=00 on a D <sup>term</sup> .  "CNF GROUPxx" will be displayed on a D <sup>term</sup> of participant.	<ul> <li>Y=03</li> <li>(1) 00-63: Trunk Roue No.</li> <li>(2) 00-14: Trunk Name No.</li> <li>16-63: Trunk Name No.</li> </ul>
CM77	Assign the trunk name to "20" (space).	<ul> <li>Y=2 By Character Code</li> <li>(1) 00-14, 16-63: Trunk Name No. assigned by CM35 Y=03</li> <li>(2) 20: Space</li> </ul>
D		

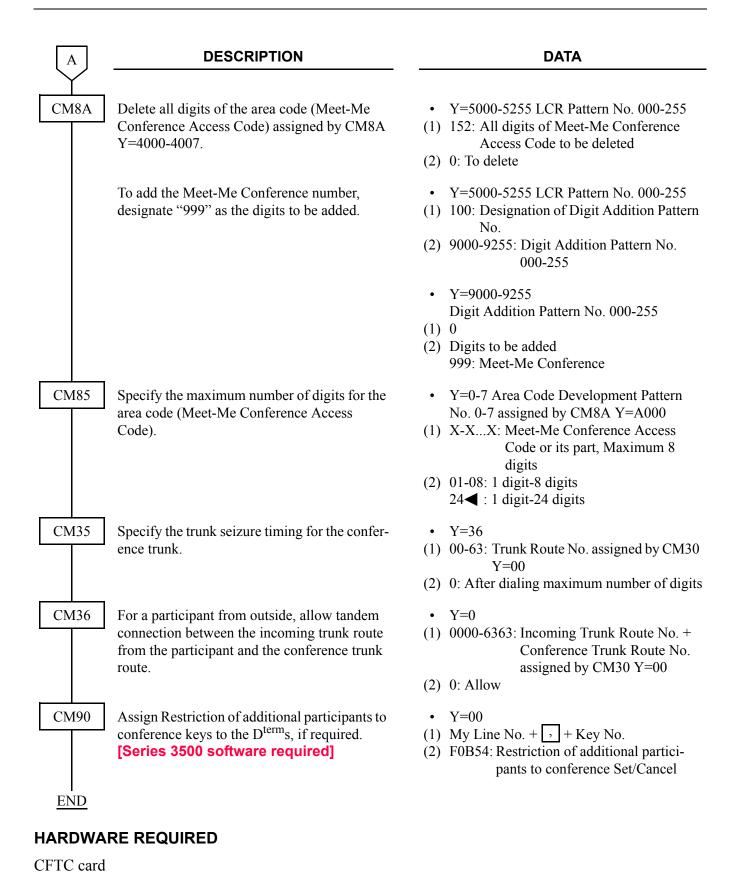
To display "CNF GROUPxx" on a PS:



# **MEET-ME CONFERENCE**

To attend a conference by accessing from any station or trunk to the conference trunk, do the following programming in addition to the Conference Trunk Assignment ( Page 228).

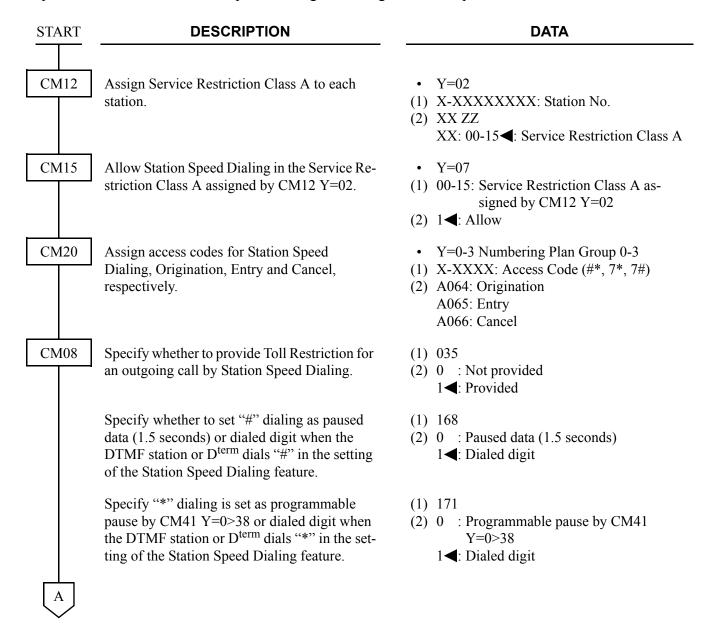
START	DESCRIPTION	DATA
CM08	Specify whether Service Set Tone is sent to participants when a new participant attends the conference.  [Series 3500 software required]	<ul> <li>(1) 728</li> <li>(2) 0 : Not sent</li> <li>1 &lt; : To send</li> </ul>
CM29	Assign a Numbering Plan Group number to each tenant.	<ol> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 710-713: Numbering Plan Group 0-3</li> </ol>
CM20	Assign the access code for LCR Group 0-3.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A126: LCR Group 0         A127: LCR Group 1         A128: LCR Group 2         A129: LCR Group 3     </li> </ul>
	Assign the access code for Restriction of additional participants to conference Set and Cancel, respectively.  [Series 3500 software required]	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>X-XXXX: Access Code</li> <li>A254: Restriction of additional participants to conference Set</li> <li>A255: Restriction of additional participants to conference Cancel</li> </ul>
CM8A	Assign an Area Code Development Pattern number to each LCR Group.	<ul> <li>Y=A000</li> <li>(1) 0-3: LCR Group 0-3</li> <li>(2) 4000-4007: Area Code Development Pattern No. 0-7</li> </ul>
	Assign a Route Pattern number to each area code (Meet-Me Conference Access Code) for the Area Code Development Pattern number assigned by CM8A Y=A000.	<ul> <li>Y=4000-4007 Area Code Development Pattern No. 0-7</li> <li>(1) XX: Area Code (Meet-Me Conference Access Code), Maximum 8 digits</li> <li>(2) 0000-0255: Route Pattern No. 000-255</li> </ul>
	Specify the order of LCR selection for the Route Pattern number assigned by CM8A Y=4000-4007.	<ul> <li>Y=0000-0255 Route Pattern No. 000-255</li> <li>(1) 1-4: Order of LCR Selection <ol> <li>1: 1st</li> <li>2: 2nd</li> <li>3: 3rd</li> <li>4: 4th</li> </ol> </li> <li>(2) XXX ZZ XXX: 000-255: LCR Pattern No. 000-255 ZZ : 00-63: Trunk Route No. 00-63 as- </li> </ul>
A		signed by CM30 Y=00



# **CONSECUTIVE SPEED DIALING**

### **PROGRAMMING**

To provide Consecutive Station Speed Dialing from Single Line Telephone or D<sup>term</sup>:



A
CM73

### DATA

Allocate the memory area for Station Speed Dialing to each station when using Consecutive Speed Dialing. (1) X-XXXXXXXX: Station No.

(2) W XX Y ZZ

W: 0-9: 1000-Slot Memory Block No. **NOTE** 

XX: 00-99: Memory Start Block No. (10-Slot Memory Block)

Y: Facility for programming the dialed number from the Station 0/1: Effective/Ineffective

ZZ: 01-10: Number of 10-Slot Memory Blocks

**NOTE:** 1000-Slot Memory Block number 4-9 (6000 Memory Parcels) cannot be used for Speed Dialing with Station Speed Dialing keys provided by CM90: F11XX on a D<sup>term</sup>, and cannot also be used for System Speed Dialing.

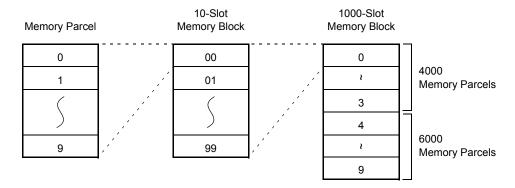
В



**DATA** 

CM73

The memory area for storing one called number of Station Speed Dialing is called a "Memory Parcel". An assembly of 10 Memory Parcels is called a "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks are called a "1000-Slot Memory Block".



**Example:** If the stored number intended is 10 for Station Number 300, 20 for Station Number 301, and 30 for Station Number 302, the memory areas assignment is as follows.

	1000-Slot Memory	Memory Start Block No.	Number of 10-Slot
Station No.	Block No.	(10-Slot Memory Block)	Memory Block
(1st Data)	(2nd Data: W)	(2nd Data: XX)	(2nd Data: ZZ)
300	0	00	01
301	0	01	02
302	0	03	03
303	0	06	01



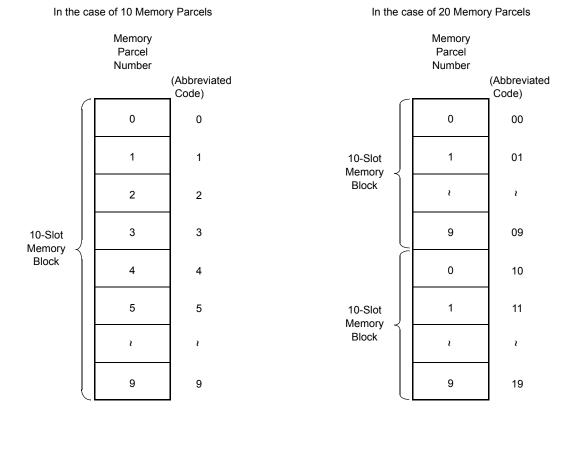


### **DATA**

CM73

The abbreviated codes for this feature are automatically determined by assigning this command, on a station basis.

If the number of Memory Parcels per station does not exceed 10, then Abbreviated Code=0-9. If the number of Memory Parcels per station exceeds 11, then Abbreviated Code=00-99. The following figure shows the relation between Abbreviated Codes and Memory Parcels.



D

### **DESCRIPTION**

### **DATA**

CM74

Assign the number to be dialed to each Memory Slot number, if required. The numbers to be called are usually set from individual stations by their station users.

Assign the Station Name to be displayed to each Memory Slot number, by character codes or character.

• Y=0

(1) X YY Z

X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No. Z: 0-9: Memory Parcel No.

(2) Stored No.:

Outgoing Call Access Code (Maximum 4 digits) + + Stored No. (Maximum 26 digits)

To set a pause into the Stored No., enter "C" (Fixed Pause=1.5 seconds) or "D" (Programmable Pause specified by CM41 Y=0>38) after desired digits. NONE ◀: No data

• Y=1

(1) X YY Z

X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No.

Z: 0-9: Memory Parcel No.

(2) XX...XX: Station Name Character Code (Maximum 32 digits, 16 characters)

• Y=2

(1) X YY Z

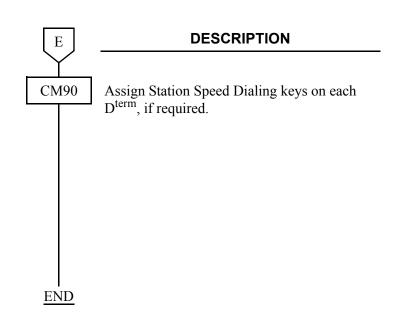
X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No.

Z: 0-9: Memory Parcel No.

(2) XX...XX: Station Name Character (Maximum 16 characters)

NONE**<**: No data

Е



**DATA** 

- Y=00
- (1) My Line No. + , + Key No.
- (2) F11XX

XX: 00-99: Station Speed Dialing 00-99

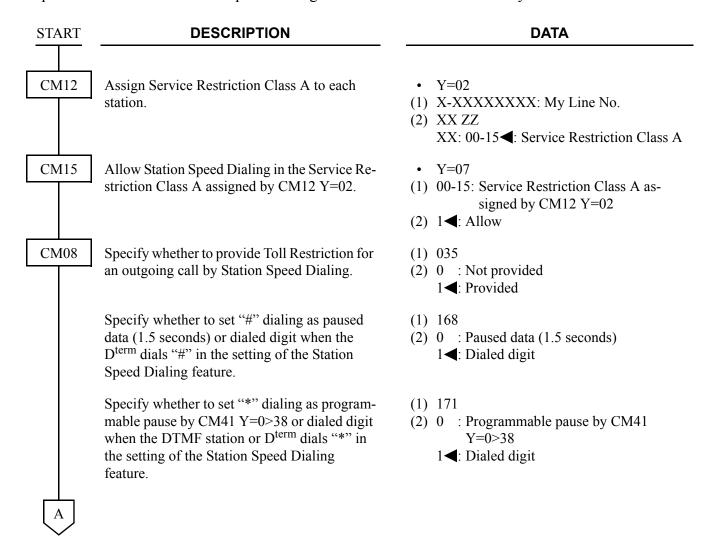
**NOTE:** The initial setting of key layout is for 16 Line/Trunk/Feature keys

(Key No. 01-16).

When using Key No. 17-24, data setting of CM12 Y=24, 2nd

*data*=0 *is required.* 

To provide Consecutive Station Speed Dialing from D<sup>term</sup> with One Touch keys:



### DATA

CM94

Allocate the memory area for Station Speed Dialing to each station when using Consecutive Speed Dialing for One Touch Keys. (1) X-XXXXXXXX: My Line No.

(2) W XX 0 ZZ

W: 0-9: 1000-Slot Memory Block No. XX: 00-99: 10-Slot Memory Start Block No.

ZZ : 01-10: Number of 10-Slot Memory Blocks

**NOTE 1:** If the station number is assigned to One Touch keys using 1000-Slot Memory Block number 4-9 (6000 Memory Parcels), the lamp does not show the busy state.

**NOTE 2:** When Consecutive Speed Dialing is provided using the One Touch Keys, the same memory area must be assigned on CM73 and CM94.

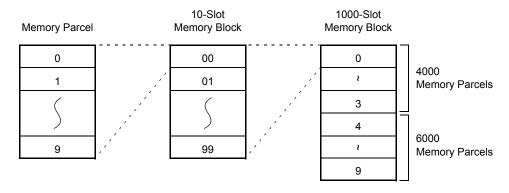
В



**DATA** 

CM94

The memory area for storing one called number of Station Speed Dialing is called a "Memory Parcel". An assembly of 10 Memory Parcels is called a "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks are called a "1000-Slot Memory Block".



**Example:** If the stored number intended is 10 for Station Number 300, 20 for Station Number 301, and 30 for Station Number 302, the memory areas assignment is as follows.

Caration No	1000-Slot Memory	Memory Start Block No.	Number of 10-Slot
Station No.	Block No.	(10-Slot Memory Block)	Memory Block
(1st Data)	(2nd Data: W)	(2nd Data: XX)	(2nd Data: ZZ)
300	0	00	01
301	0	01	02
302	0	03	03
303	0	06	01

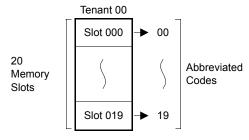
**END** 

To provide Consecutive System Speed Dialing:

# **DESCRIPTION START** CM12 Assign Service Restriction Class A to each station CM15 Allow System Speed Dialing in the Service Restriction Class A assigned by CM12 Y=02. CM20 Assign the access code for System Speed Dialing. CM71 Assign the memory area for the System Speed Dialing. 300 memory slots are available per system. The number of slots available for each Tenant is also 300.

Abbreviated Call Codes required for accessing this feature are automatically given to each Tenant as shown below.

# **Example:**



The number of digits for Abbreviated Code is automatically determined as shown below:

- Less than 100 memory slots per Tenant: 2 digits (00-99)
- More than 100 memory slots per Tenant: 3 digits (000-299)

### **DATA**

- Y = 02
- (1) X-XXXXXXXX: Station No.
- (2) XX ZZ

XX: 00-15**◄**: Service Restriction Class A

- Y=06 System Speed Dialing
- (1) 00-15: Service Restriction Class A assigned by CM12 Y=02
- (2) 1**<**: Allow
- Y=0-3 Numbering Plan Group 0-3
- (1) X-XXXX: Access Code (##)
- (2) A067: System Speed Dialing
- (1) 00-63: For stations within Tenant 00-63 · For Attendant Console
- (2) XXX YYY

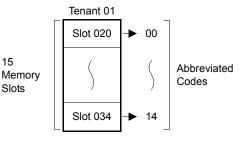
15

Slots

XXX: 000-299: First Memory Slot No. in Block

YYY: 001-300: Number of Slots to be allocated in Block

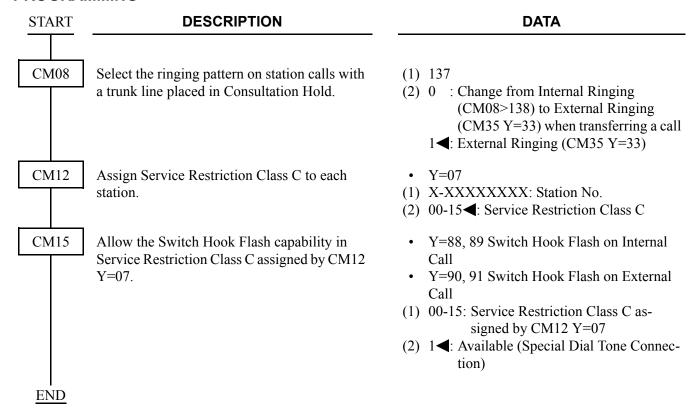
For example, to provide 20 memory slots starting at Slot 60: Data=060020



A	DESCRIPTION	DATA
CM72	Set a stored number to each Memory Slot number allocated by CM71, as needed.	<ul> <li>Y=0</li> <li>(1) 000-299: Memory Slot No.</li> <li>(2) Stored No.:     Outgoing Access Code (Maximum 4 digits)     +</li></ul>
	Assign the name for display, to the Memory Slot number allocated by CM71, by character codes or character.	<ul> <li>Y=1</li> <li>(1) 000-299: Memory Slot No.</li> <li>(2) XXXX: Station Name Character Code         (Maximum 32 digits, 16 characters)         NONE ★: No data         See APPENDIX B: Character Code Table.         Page B2</li> </ul>
		<ul> <li>Y=2</li> <li>(1) 000-299: Memory Slot No.</li> <li>(2) XXXX: Station Name Character (Maximum 16 characters) NONE ✓: No data</li> </ul>
CM08	Specify the System Speed Dialing security. (Stored number displays on D <sup>term</sup> for an outgoing call by System Speed Dialing.)	<ul> <li>(1) 043</li> <li>(2) 0 : Not displayed</li> <li>1 ■: Display</li> </ul>
	Specify Toll Restriction for an outgoing call by System Speed Dialing.	<ul> <li>(1) 044</li> <li>(2) 0 : Not provided</li> <li>1 &lt; : Provided</li> </ul>
END		

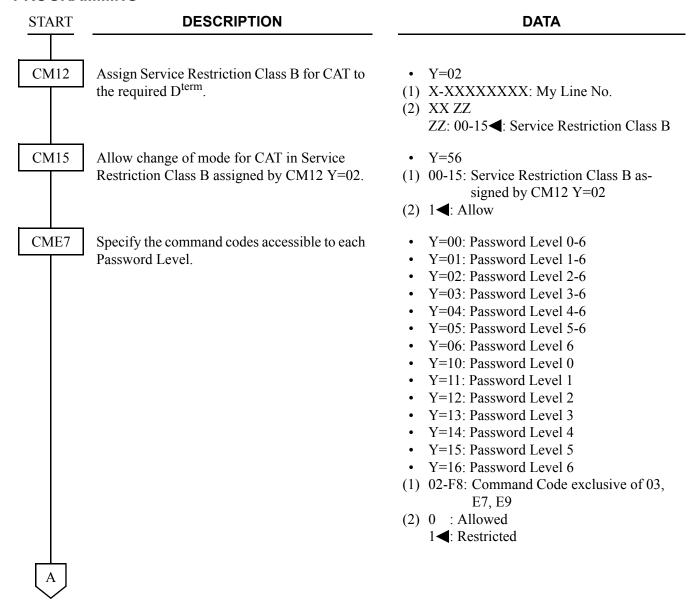
# **CONSULTATION HOLD**

### **PROGRAMMING**



# **CUSTOMER ADMINISTRATION TERMINAL (CAT)**

### **PROGRAMMING**



A
CMEO

#### **DATA**

CME9

Assign the setting/changing of the password to be allowed.

Assign a password to each Password Level.

(1) 8

(2) 0**<**: Allowed 1 : Restricted

(1) 0-7: Password Level 0-7

(2) X-X...X: Maximum 8 digits Password CCC : Password clear

A password for Password Level 7 should be assigned in advance because of providing the password service by Function No. 9 of CME9. The following passwords are not available. "CCCCCCCC" "FFFFFFF"

The setting/changing of the password is available only when the second data of CME9>8 is set to "0 (Allowed)".

If CME9>8 is set to "1 (Restricted)", "DATA ERROR" is displayed when you set/change the password.

Provide the system with Password Feature. After setting this data, access to system programming will be available with password entry only. (1) 9

(2) 0: Provided

**END** 

**NOTE 1:** If the system data all clear is required before programming from a CAT, perform the following operations:

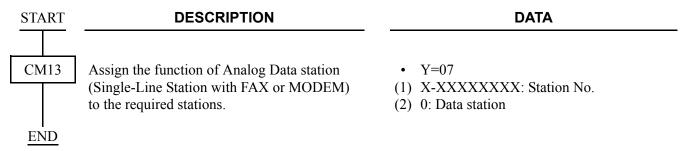
- 1. Plug the DLC card into LT00 Slot of PIM0.
- 2. Connect the CAT to LEN000 at the MDF.
- 3. Set SW3 on the MP card to "B".
- 4. Press SW1 (RESET Switch) on the MP card (System Data All Clear).
- 5. Set SW3 to "0" and press SW1.
- 6. Set the  $D^{term}$  to CAT mode (Station number 300 is automatically assigned to the  $D^{term}$ ).

**NOTE 2:** If Password Service is activated, enter the predetermined password (assigned by CME9>0-7) by CM03 before programming from a CAT.

- "OK" will be displayed, if accepted.
- "DATA ERROR" will be displayed if the password is incorrect.

# **DATA LINE SECURITY**

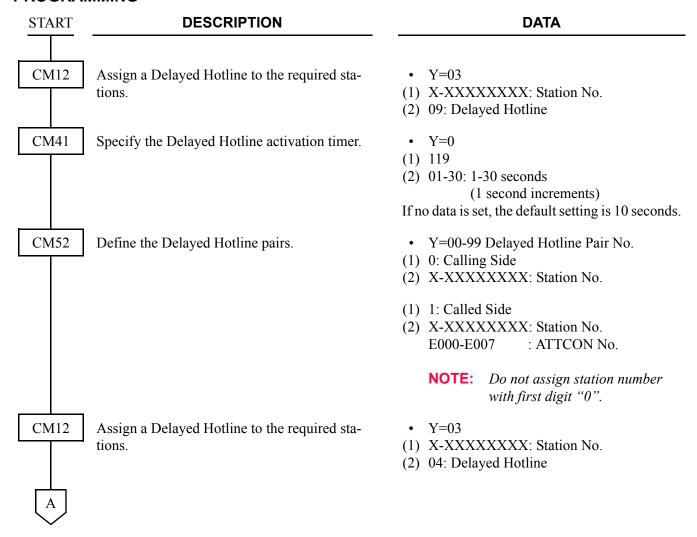
# **PROGRAMMING**



# **DELAYED HOTLINE**

[Series 3700 R12.2 software required]

### **PROGRAMMING**



**DESCRIPTION** CM71 Allocate the memory area for the Delayed Hot-(2) XXX YYY line-Outside call. For example, to assign the 10 Delayed Hotline-Outside calls into No. 100 through No. 109 Memory Slots, 2nd data is in blocks "100010". Abbreviated Codes are automatically assigned as shown below: **Abbreviated Code** Memory Slot 100 00 Memory Slot 109 09 CM72 Set the outside party's number to each Memory Y=0Slot number its) NONE**⋖**: No data • Y=1 ters) NONE**⋖**: No data Page B2 • Y=2 NONE**⋖**: No data **END** 

### **DATA**

(1) 65: For Delayed Hotline-Outside

XXX: 000-299: Starting Memory Slot No.

YYY: 001-100: Number of Memory Slots to be assigned in blocks

(1) 000-299: Memory Slot No.

(2) XXXX + , + YY...Y: Outside Party's No.

XXXX : Access Code (Maximum 4 dig-

: Separator Mark

YY...Y : Outside Party's No. (Maximum 26 digits)

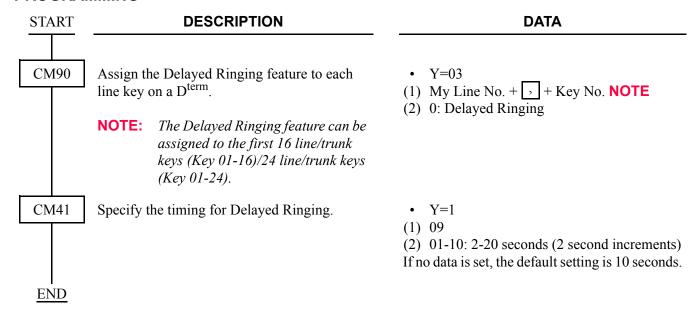
- (1) 000-299: Memory Slot No.
- (2) XXX...X: Station Name Character Code (Maximum 32 digits: 16 charac-

See APPENDIX B: Character Code Table.

- (1) 000-299: Memory Slot No.
- (2) XXX...X: Station Name Character by MAT/CAT (Maximum 16 characters)

# **DELAYED RINGING**

### **PROGRAMMING**



# **DIAGNOSTICS**

# **PROGRAMMING**

Refer to the Maintenance Manual.

# **DIAL BY NAME**

#### **PROGRAMMING**

(1) Assignment for Soft Key

CM12

**START** 

#### **DESCRIPTION**

Specify that the Soft Key feature is available to each D<sup>term</sup>

Assign Soft Key Pattern number to each D<sup>term</sup>.

CM9A

Assign the Dial By Name function to each Soft Key on idle status of the D<sup>term</sup>.

The LCD shows a maximum of 4 Soft Keys at once. If assigning more than 4 Soft Keys on one status, it is necessary to assign Scroll key at every 4 keys (on 1st through 4th display).

**NOTE 1:** Scroll key must be assigned as a key for each active display.

**NOTE 2:** Help key is only available in Pattern No. 3.

NOTE 3: For the Pattern No. 3, the initial Soft Key data for Dial By Name are assigned as follows:

CM9A Y=03						
1st Data	2nd Data					
0001	F5014					
0002	F5015					

**NOTE 4:** Pattern No. 3 is fixed.

**NOTE 5:** *Dial By Name is available only when the D<sup>term</sup> is in idle state.* 

### **DATA**

- Y=22
- (1) X-XXXXXXXX: My Line No.
- (2)  $0 \blacktriangleleft$ : Available
- Y=23
- (1) X-XXXXXXXX: My Line No.
- (2) 0 : Pattern No. 0 1 : Pattern No. 1 2 : Pattern No. 2 3◀: Pattern No. 3
- Y=00-03 Soft Key Pattern No. 0-3 assigned by CM12 Y=23
- (1) 00 bb

00: Status No. (Idle state) **NOTE 5** 

bb: 00-15: Soft Key No.

00-03: Indicated on 1st display

04-07: Indicated on 2nd display

08-11: Indicated on 3rd display

12-15: Indicated on 4th display

(2) F5002 : Scroll key to change Soft Key Indication

F5014 : Dial By Name for System Speed Dialing (300-Slot Memory)

F5015 : Dial By Name for Station Speed Dialing

F5016 : Dial By Name for System Speed Dialing (1000-Slot Memory Block No. 0)

F5017 : Dial By Name for System Speed Dialing (1000-Slot Memory Block No. 1)

F5018 : Dial By Name for System Speed Dialing (1000-Slot Memory Block No. 2)

F5019 : Dial By Name for System Speed Dialing (1000-Slot Memory Block No. 3)

NONE**⋖**: No data



### **DATA**

CM9A

Assign the Characters indicated on each status of the D<sup>term</sup>, corresponding to the Soft Key function assigned by CM9A Y=00-03. For the Pattern No. 3, the initial Soft Key data for Dial By Name are assigned as follows:

CM9A Y=13						
1st Data	2nd Data					
0001	SYS.					
0002	STA.					

• Y=10-13 Soft Key Pattern No. 0-3 assigned by CM12 Y=23

(1) Same as CM9A Y=00-03

(2) XX...XX: Soft Key name indicated on LCD

(Maximum 12 characters)

NONE**⋖**: No data

See APPENDIX B: Character Code Table.

CM08

Specify whether the system sends SPDT when entering the name/number.

[Series 3100 software required]

Specify the number of character kinds that can be used for the name registration when pressing dial 0 on  $D^{\text{term}}$ .

[Series 3500 software required]

(1) 519

(2) 0 : Not sent

1**<**: To send

(1) 559

(2) 0 : 32 characters (See the table below)

1◀: 10 characters (See the table below)

Input Mode	Second		Number of Dial 0 pressing														
	data of CM08> 559	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
		17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Alphabet	0	!	"	#	\$	%	&	'	(	)	*	+	,	-		/	:
		,	<	=	>	?	<u>@</u>	[	¥	]	^	_	'	{		}	(space)
	1	(space)	-	_	'	&	<u>@</u>		,	:	,						

**END** 

- (2) Assignment for the Memory Allocation and the Station Name
  - When using Dial By Name for System Speed Dialing:

#### **START DESCRIPTION DATA** CM71 Assign the memory block for System Speed (1) 00-63: For stations within the Tenant 00-63 (2) XXX YYY Dialing. 300 memory slots are available per system. The number of slots available for each XXX: 000-299: Starting Memory Slot Tenant is also 300. No. in Block YYY: 001-300: Number of Slots to be Abbreviated Call Codes required for accessing assigned in Block this feature are automatically given to each For example, to provide 20 memory slots starting at Slot 60: Data: 060020 Tenant as shown in the following example. Tenant 00 Tenant 01 Slot 000 Slot 020 00 20 15 Abbreviated Abbreviated Memory Memory Codes Codes Slots Slots Slot 019 Slot 034

A	DESCRIPTION	DATA
CM72	Assign the number to be called to the Memory Slot number allocated by CM71.	• Y=0 (1) 000-299: Memory Slot No. (2) Stored No.: Outgoing Access Code (Maximum 4 digits) +
	Assign the name for display, to the Memory Slot number allocated by CM71, by character codes or character.	<ul> <li>Y=1</li> <li>(1) 000-299: Memory Slot No.</li> <li>(2) XXXX: Station Name Character Code         (Maximum 32 digits, 16 characters)</li> <li>NONE ■: No data</li> <li>See APPENDIX B: Character Code Table.</li> <li>Page B2</li> </ul>
		<ul> <li>Y=2</li> <li>(1) 000-299: Memory Slot No.</li> <li>(2) XXXX: Station Name Character by MAT/CAT (Maximum 16 characters)</li> </ul>

END

NONE**⋖**: No data

• When using Dial By Name for Station Speed Dialing, D<sup>term</sup> One Touch Keys, and System Speed Dialing (1000-Slot Memory):

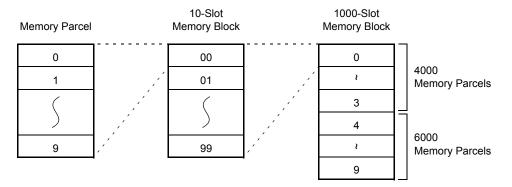
START	DESCRIPTION		DATA	
CM73	Dialing t	the memory area for Station Speed to each station when using Dial By r Station Speed Dialing.	<ul> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) W XX Y ZZ</li> <li>W : 0-9: 1000-Slot Memory Block No. NOTE</li> <li>XX: 00-99: Memory Start Block No. (10-Slot Memory Block)</li> <li>Y : Facility for programming the dialed number from the Station 0/1: Effective/Ineffective</li> <li>ZZ: 01-10: Number of 10-Slot Memory Blocks</li> </ul>	
A	aling with Station Speed Dialing key also be used for System Speed Dialin		(6000 Memory Parcels) cannot be used for Speed Diprovided by CM90: F11XX on a D <sup>term</sup> , and cannot g.	



**DATA** 

CM73

The memory area for storing one called number of Station Speed Dialing is called a "Memory Parcel". An assembly of 10 Memory Parcels is called a "10-Slot Memory Block", and one hundred 10-Slot Memory Blocks are called a "1000-Slot Memory Block".



**Example:** If the stored number intended is 10 for Station Number 300, 20 for Station Number 301, and 30 for Station Number 302, the memory areas assignment is as follows.

	1000-Slot Memory	Memory Start Block No.	Number of 10-Slot
Station No.	Block No.	(10-Slot Memory Block)	Memory Block
(1st Data)	(2nd Data: W)	(2nd Data: XX)	(2nd Data: ZZ)
300	0	00	01
301	0	01	02
302	0	03	03
303	0	06	01



В	DESCRIPTION	DATA			
CM94	Allocate the memory area for Station Speed Dialing to each station when using Dial By Name for D <sup>term</sup> One Touch Keys. The same memory area must be assigned on CM73 and CM94.	<ul> <li>(1) X-XXXXXXXXX: My Line No.</li> <li>(2) W XX 0 ZZ  W: 0-9: 1000-Slot Memory Block No.  XX: 00-99: 10-Slot Memory Start Block  No.  ZZ: 01-10: Number of 10-Slot Memory  Blocks</li> </ul>			
	NOTE 1: When Dial By Name is provided using the One Touch Keys, the same memory area must be specified by CM73 and CM94.				
	NOTE 2: If the station number is assigned to One Touch Keys using 1000-Slot Memory Block number 4-9, the lamp does not show the busy state.				
CM08	Specify the memory area to be used for System Speed Dialing when using Dial By Name for System Speed Dialing (1000-Slot Memory).	<ul> <li>(1) 112: 1000-Slot Memory Block No. 0</li> <li>(2) 0 : Available 1 ✓: Not available</li> </ul>			
		<ul> <li>(1) 111: 1000-Slot Memory Block No. 1</li> <li>(2) 0 : Available</li> <li>1◄: Not available</li> </ul>			
		<ul> <li>(1) 176: 1000-Slot Memory Block No. 2</li> <li>(2) 0 : Available</li> <li>1 ✓: Not available</li> </ul>			
		<ul> <li>(1) 110: 1000-Slot Memory Block No. 3</li> <li>(2) 0 : Available</li> <li>1 ≤: Not available</li> </ul>			
C					



### **DATA**

CM74

Assign the number to be dialed to each Memory Slot number, if required. The numbers to be called are usually set from individual stations by their station users.

Assign the station name to be displayed to each Memory Slot number, by character codes or character.

• Y=0

(1) X YY Z

X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No. Z: 0-9: Memory Parcel No.

(2) Stored No.:

Outgoing Access Code (Maximum 4 digits) + + + Called Party No. (Maximum 26 digits)

To set a pause into the Stored No., enter "C" (Fixed Pause=1.5 seconds) or "D" (Programmable Pause specified by CM41 Y=0>38) after desired digits.

NONE**⋖**: No data

- Y=1
- (1) X YY Z

X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No. Z: 0-9: Memory Parcel No.

(2) XX...XX: Station Name Character Code (Maximum 32 digits, 16 characters)

NONE**⋖**: No data

See APPENDIX B: Character Code Table.

Page B2

- Y=2
- (1) X YY Z

X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No.

Z: 0-9: Memory Parcel No.

(2) XX...XX: Station Name Character by MAT/CAT (Maximum 16 characters)

NONE**⋖**: No data

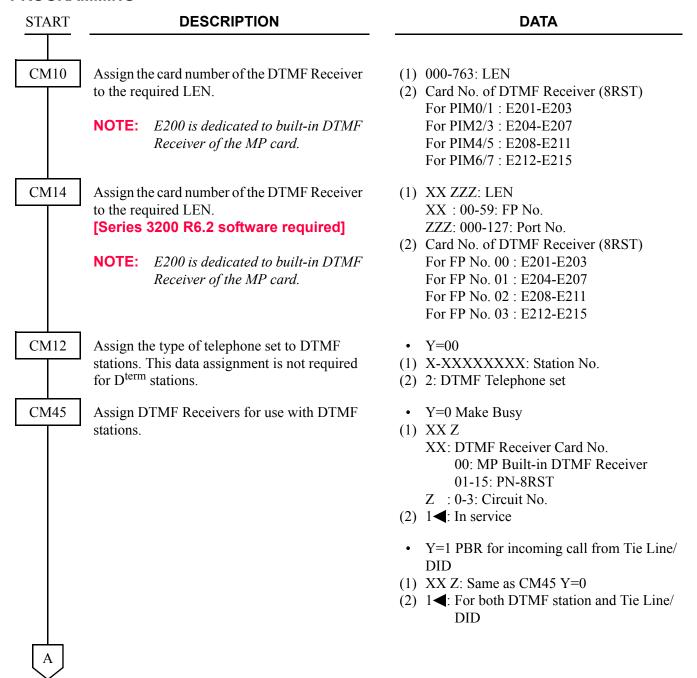
**END** 

# HARDWARE REQUIRED

D<sup>term</sup> with LCD and Soft Key, and DLC card

# **DIAL CONVERSION**

#### **PROGRAMMING**



### **DATA**

CM35

For a DP trunk, assign the type of signaling for Outgoing and Bothway trunk routes to DP.

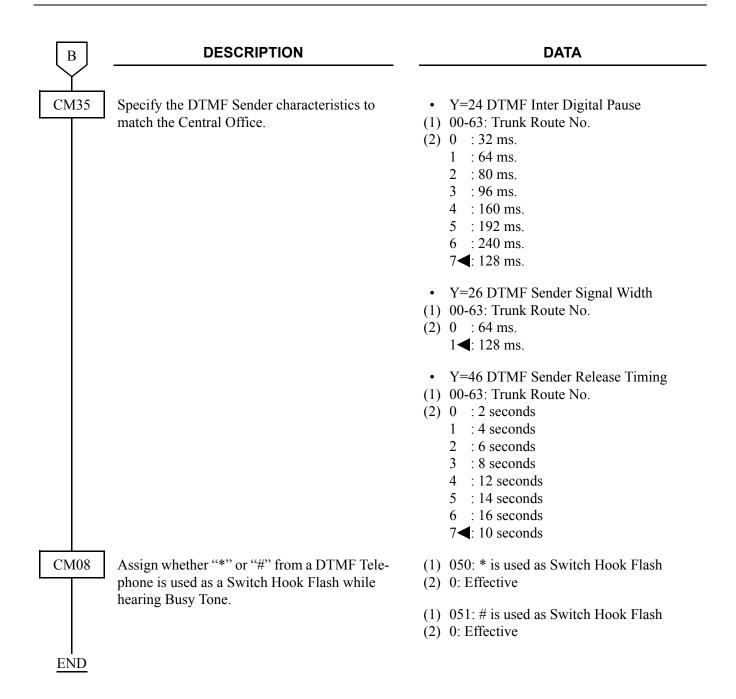
Specify the DP Sender characteristics to match the Central Office.

- Y = 01
- (1) 00-63: Trunk Route No.
- <Incoming> <Outgoing> (2) DP 2: DP
- Y=23 DP Sender Inter Digital Pause
- (1) 00-63: Trunk Route No.
- (2) 0 : 300 ms.
  - 1 : 400 ms.
  - 2 : 500 ms.
  - 3 : 600 ms.
  - 4 : 700 ms.
  - 5 : 900 ms.
  - 6 : 1100 ms.
  - 7**<**: 800 ms.
- Y=25 DP Sender Make Ratio
- (1) 00-63: Trunk Route No.
- (2) 0 : 39 %
  - **1<**: 33 %
- Y=45 DP Sender Release Timing
- (1) 00-63: Trunk Route No.
- (2) 0 : 2 seconds
  - 1:4 seconds
  - 2:6 seconds
  - 3 : 8 seconds
  - 4:12 seconds
  - 5 : 14 seconds
  - 6:16 seconds
  - 7**<**: 10 seconds

For a DTMF trunk, assign the type of signaling for Outgoing and Bothway trunk routes to DTMF.

- Y = 0.1
- (1) 00-63: Trunk Route No.
- <Incoming> <Outgoing> (2) **DTMF**

7**<**: DTMF/DP



## HARDWARE REQUIRED

DTMF Receiver (8RST card)  $\times$  n

n: Depends on the number of DTMF stations and the traffic condition of the system.

# **DIRECT DIGITAL INTERFACE**

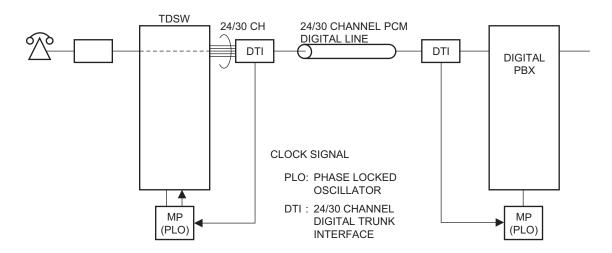
# **SYSTEM OUTLINE**

The PBX is equipped with Direct Digital Interface which can be interfaced with a Tie Line or Public Network of

- 24-channel PCM Digital Line (1.544 MHz)
- 30-channel PCM Digital Line (2.048 MHz)

To add a Direct Digital Interface to the system, it is necessary to install a DTI (Digital Trunk Interface) card. Figure below shows the system outline of the Direct Digital Interface of the PBX.

# **System Outline of Direct Digital Interface**



### DTI

The Digital Trunk Interface (DTI) interfaces the PBX directly to a 24/30-channel PCM transmission line. The DTI has the following functions.

#### For 24DTI:

- Unipolar/Bipolar Conversion (AMI Format)
- Signaling Insertion/Extraction
- Alarm Detection/Insertion
- Digital PAD on Voice Signal Transmission
- Loopback Test (Local/Remote Loopback)
- Cyclic Redundancy Checking (based on ITU-T Rec. G704)

## For 30DTI:

- Unipolar/Bipolar Conversion (HDB3 Format)
- Signaling Insertion/Extraction
- Alarm Detection/Insertion
- Digital PAD on Voice Signal Transmission
- Loopback Test (Local/Remote Loopback)
- Cyclic Redundancy Checking (based on ITU-T Rec. G704)
- Channel Associated Signaling (based on ITU-T Rec. Q421 Digital R2 Signaling Code)

For connection of a 24DTI and transmission line, twisted-pair cables can be used. For connection of a 30DTI and transmission line, either coaxial cable or twisted pair cable can be used.

### **PLO**

The PLO (Phase Locked Oscillator) equipped on the MP card is responsible to synchronize the system to the digital network clock.

When the PBX is a clock receiver office, the PLO generates the clock signals according to the source clock received from the source office within the network. The source clock signals are extracted at DTI cards and supplied to the PLO. Two clock routes are available; one is the route 0 from the source office, and the other is a standby route 1 from a sub-source office. When no clock signals arrive from either route 0 or route 1 due to a transmission line failure, the PLO keeps generating the clock signals at the frequency of the last source clock. The PLO can receive different frequency of source clocks from route 0 and route 1.

Figure below shows an example of clock supply route when the system is a receiver office.

### SOURCE OFFICE SUB-SOURCE OFFICE RECEIVER OFFICE **TDSW TDSW TDSW** DTI DTI DTI DTI0 DTI DTI DTI1 SOURCE CLOCK PLO PBX RECEIVER OFFICE TDSW DTI DTI DTI →: DIRECTION OF CLOCK SIGNAL SUPPLY

## **Clock Supply Route**

**NOTE:** *DTI0* and *DTI1* must be mounted in *PIM0*.

## **SYSTEM CAPACITY**

## **System Capacity for Direct Digital Interface**

DESCRIPTION	CAPACITY		
DESCRIPTION	24DTI	30DTI	
DTI Card	8	8	
DTI Trunk	192	248	
DTI Trunk Route	64	64	
Ports per DTI Card	24	31	

## **HARDWARE REQUIRED**

DTI card MP (Internal PLO) card

## TIME SLOT ALLOCATION

On each DTI card, the system recognizes the lowest and highest channel numbers to which trunk numbers have been assigned, and allocates time slots to all the channels between them. If trunk numbers are not assigned to consecutive channels, the system allocates time slots to channels not assigned.

For example, as shown below, even when Channel 1 through Channel 10 have been assigned by the system data programming (CM07 Y=01) except for Channel 5, the system allocates a total of 10 time slots for all ten channels. Therefore, to avoid unnecessary allocation of time slots, it is recommended that consecutive channels be assigned on each DTI card.

## 10 DXXX HIGHEST CHANNEL DXXX 10 TIME SLOTS ARE ALLOCATED EVEN WHEN CH5 IS NOT ASSIGNED. 6 DXXX 5 NONE DXXX 4 1 DXXX LOWEST CHANNEL CH<sub>0</sub> NONE

**Time Slot Allocation for DTI** 

## **DTI SPECIFICATIONS**

## **Transmission Characteristics**

## **Transmission Characteristics**

	CHARACTERISTICS	24-CHANNEL	30-CHANNEL
(1)	Output		
	<ul> <li>Line Rate</li> </ul>	1.544 Mbps ±50 ppm	2.048 Mbps ±50 ppm
	<ul> <li>Line Code</li> </ul>	AMI with ZCS/B8ZS*	HDB3 (High Density Bipolar 3)
	<ul> <li>Line Impedance</li> </ul>	100 Ω	75 Ω
			(Coaxial Cable)
			120 Ω
			(Twisted-Pair Cable)
	<ul> <li>Pulse Amplitude</li> </ul>	3 volts $\pm 0.6$ volts	2.37 volts nominal
	(Base to Peak)		(Coaxial Cable)
			3 volts nominal
			(Twisted-Pair Cable)
	<ul> <li>Pulse Width</li> </ul>	324 ns ±30 ns	244 ns nominal
(2)	Input		
	<ul> <li>Line Rate</li> </ul>	$1.544 \text{ Mbps} \pm 200 \text{ bps} (130 \text{ ppm})$	2.048 Mbps ±50 ppm
	<ul> <li>Pulse Amplitude</li> </ul>	1.5 volts-3 volts	1.5 volts-2.7 volts
	(Base to Peak)		(Coaxial Cable)
			1.5 volts-3.3 volts
			(Twisted-Pair Cable)
	• Frame	100011011100	
	Synchronization		
	Pattern		
	<ul> <li>Input Jitter</li> </ul>	ITU-T Fig. 1/G743	ITU-T Fig. 1/G743
	<ul> <li>Wander</li> </ul>	+138UI, -193UI or	ITU-T G823
		–138UI, +193UI	
	<ul> <li>Cable Length from</li> </ul>	Maximum 200 m (655 ft.)	Maximum 400 m (1310 ft.)
	PBX to CSU	[with 0.6 \( \phi \) (22 ABAM) twisted-pair cable]	(with 0.6 φ twisted-pair cable)

\* AMI : Alternate Mark Inversion ZCS : Zero Code Suppression

B8ZS: Bipolar Eight Zero Substitution

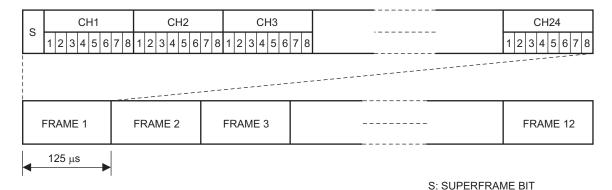
## Frame Configuration of 24DTI

According to the AT&T Specifications for 24-channel transmission, there are two types of frame configurations: 12-Multi Frame (D4) and 24-Multi Frame (ESF).

## 1. 12-Multi Frame

This configuration has 12-Multi Frames, and each Multi frame has a 24-channel PCM signal (8 bits/channel) and a S bit (Super Frame Bit). Figure below shows the frame configuration, and Table in next page shows frame bit assignment.

## **DTI Frame Configuration (12-Multi Frame)**



## 12-Multi Frame Bit Assignment

FDAME	S BIT		BIT No. OF EACH CHANNEL (CH1-CH24)		CICNAL
FRAME No.	TERMINAL SYNCHRONIZATION (FT)	SIGNAL SYNCHRONIZATION (FS)	INFORMATION SIGNAL BIT	CONTROL SIGNAL BIT	SIGNAL CHANNEL
1	1		1-8		
2		0	1-8		
3	0		1-8		
4		0	1-8		
5	1		1-8		
6		1	1-7	8	A
7	0		1-8		
8		1	1-8		
9	1		1-8		
10		1	1-8		
11	0		1-8		
12		0	1-7	8	В

<sup>\*</sup> The S-bit is the first bit in each frame.

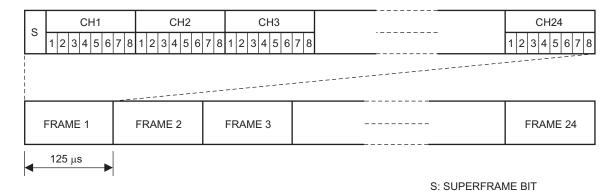
<sup>\*</sup> Frames are repeated in the order shown above.

<sup>\*</sup> Frames 6 and 12 become signal frames.

## 2. 24-Multi Frame

This configuration has 24-Multi Frames and each Multi frame has a 24-Channel PCM signal (8 bits/channel) and a S bit (Super Frame Bit). Figure below shows the frame configuration, and Table in next page shows frame bit assignment.

## **DTI Frame Configuration (24-Multi Frame)**



## 24-Multi Frame Bit Assignment

FRAME	S BIT			BIT No. OF EACH CHANNEL (CH1-CH24)		SIGNAL
No.	FRAME SYNCHRONIZATION	4 Kbps DATA LINK	CRC	INFORMATION SIGNAL BIT	CONTROL SIGNAL BIT	CHANNEL
1		m		1-8		
2			CB1	1-8		
3		m		1-8		
4	0			1-8		
5		m		1-8		
6			CB2	1-7	8	A
7		m		1-8		
8	0			1-8		
9		m		1-8		
10			CB3	1-8		
11		m		1-8		
12	1			1-7	8	В
13		m		1-8		
14			CB4	1-8		
15		m		1-8		
16	0			1-8		
17		m		1-8		
18			CB5	1-7	8	С
19		m		1-8		
20	1			1-8		
21		m		1-8		
22			CB6	1-8		
23		m		1-8		
24	1			1-7	8	D

<sup>\*</sup> The S-bit is the first bit in each frame.

<sup>\*</sup> Frames are repeated in the order shown above.

<sup>\*</sup> Frames 6, 12, 18 and 24 become signal frames.

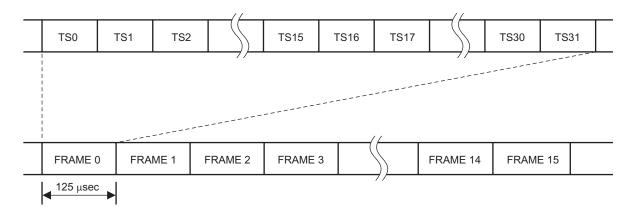
<sup>\* &</sup>quot;m" in the "4 Kbps Data Link" column means that the frame is usually assigned to 1.

## Frame Configuration of 30DTI

Based on 30-channel transmission method of ITU-T Specification, the frame configuration consists of 16-multi frame, each frame having 31 time slots.

Figure below shows the frame configuration, and Table in next page shows the details of time slot assignment.

## **Frame Configuration of 30DTI**



# **Time Slot Assignment of 30DTI**

TIME SLOT No.	EVEN No. FRAME	ODD No. FRAME
TS0	Frame Alignment Signal (FAS)    b_0	b0 1 2 3 4 5 6 b7  X 1 X 1 1 1 1 1 1  REMOTE ALARM  CRC BIT 0: NORMAL 1: FRAME LOSS
TS1-TS15	Voice Channel CH1-CH15	
TS16	OF CH1 OF CH2    b_0	REMOTE MULTI ALARM 0: NORMAL 1: MULTI FRAME LOSS  6 b7 0 0 1  LING DATA 16 SIGNALING DATA OF EACH VOICE CHANNEL
TS17-TS31	Voice Channel CH17-CH31	

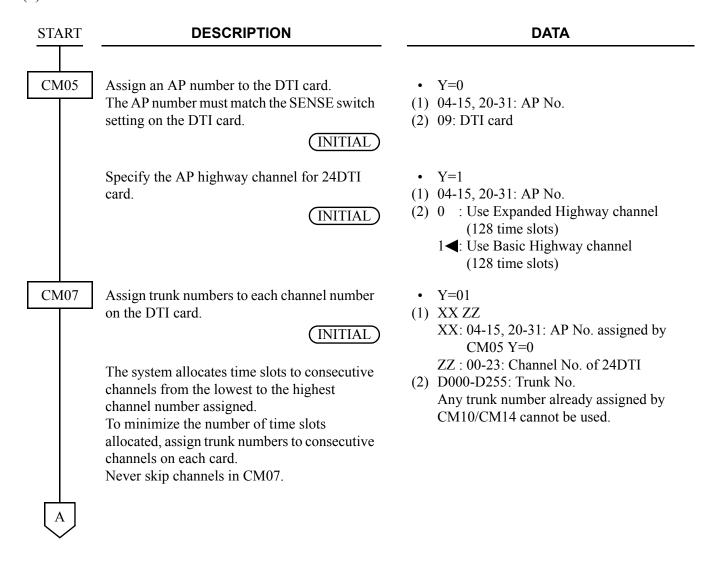
### **PROGRAMMING**

## **24DTI Assignment**

**NOTE:** When using PN-24PRTA card and PN-DTA card, the following switch setting is required to set T1 interface.

- For PN-24PRTA card, set the SW1-1 switch on the PN-24PRTA card to ON.
- For PN-DTA card, set the SW3-1 switch and SW3-2 switch on the PN-DTA card as follows. SW3-1: ON (T1 mode), SW3-2: OFF (DTI mode)

#### (1) Tie Line Interface





**DATA** 

Assign the necessary functions to the DTI card.

(DTI INITIAL

After entering the data, set the MB switch on the DTI card to UP, and then to DOWN, for DTI initialization.

**NOTE:** The following table shows the relationship between CMAA Y=01 and CMAA Y=02.

CMAA Y=01 (FRAME CONFIGURATION)	CMAA Y=02 (ZERO CODE SUPPRES- SION)	SIGNALING
24-Multi Frame [1]		B8ZS
12-Multi Frame [0]	Not available [1]	Transparent
	Available [0]	В7

[]: Indicates 2nd data

Select the card for DTI T1 interface.

(INITIAL)

CM30

Assign a trunk route number for tie line interface to each DTI.

**NOTE:** The DTI route must be separated from any analog trunk route.

CM35

Assign trunk route data to each DTI route.

- Y=00 Data Mode
- (1) 04-15, 20-31: AP No. assigned by CM05 Y=0
- (2) 0: Based on AT&T Specifications
- Y=01 Frame Configuration
- (1) 04-15, 20-31: AP No. assigned by CM05 Y=0
- (2) 0 : 12-Multi Frame (D4) 1◀: 24-Multi Frame (ESF)
- Y=02 Zero Code Suppression
- (1) 04-15, 20-31: AP No. assigned by CM05 Y=0
- (2) 0 : Available (Non Transparent) 1◀: Not available (Transparent)
  - Y=03
- (1) 04-15, 20-31: AP No. assigned by CM05 Y=0
- (2) 7**◄**: Associated Channel Interoffice Signaling
- Y=14
- (1) 04-15, 20-31: AP No. assigned by CM05 Y=0
- (2) 0 : PN-24PRTA/PN-DTA 1◀: PN-24DTA-C
- Y=00
- (1) 000-255: Trunk No. assigned by CM07 Y=01
- (2) 00-63: Trunk Route No.
- Y=00 Kind of Trunk Route
- (1) 00-63: Trunk Route No.
- (2) 04: Tie line trunk



### **DATA**

- Y=01 Dialing signal type
- (1) 00-63: Trunk Route No.
- (2) 7◀: DP/DTMF (Incoming) DTMF (Outgoing)
- Y=04 Answer signal from distant office
- (1) 00-63: Trunk Route No.
- (2) 2: Answer signal arrives
- Y=05 Release signal from distant office
- (1) 00-63: Trunk Route No.
- (2) 1**◄**: Release signal arrives
- Y=09 Incoming connection signaling
- (1) 00-63: Trunk Route No.
- (2) 03: Wink Start
  - 04: Delay Dial
  - 05: Immediate Start
  - 06: 2nd DT/Timing Start-Tie line
- Y=19 DTI PAD
- (1) 00-63: Trunk Route No.
- (2) 0-3 : Programmable PAD (See CM42)
  - 4-7**<**: Fixed PAD (See left table)
- Y=20 Sender start condition
- (1) 00-63: Trunk Route No.
- (2) 00 : Wink Start
  - 01 : Delay Dial
  - 02 : Ground Start 15◀: Timing Start

T/R: Transmitter PAD/Receiver PAD

CM35 Y=19 DTI PAD

CONNECTION

**PATTERNS** 

Station-DTI

COT/DID/ODT

(2W E&M)/IPT-

ODT (4W E&M)-

DTI/BRT/PRT/ CCT/Virtual IPT-

Tone-DTI

DTI

DTI

DTI

PAD DATA OF DTI [dB]

DAT

A=6

(T/R)

-3/-3

0/0

0/0

0/0

0/-6

DAT

A=7

(T/R)

-3/-8

0/0

0/0

+3/-3

0/0

DAT

A=5

(T/R)

-3/-3

0/0

0/0

0/0

0/0

DAT

A=4

(T/R)

-3/-8

0/0

0/0

+3/-3

0/-6

+ : Gain - : Loss





## DATA

To use the programmable PAD (CM35 Y=19, 2nd Data=0-3), assign the PAD data by CM42.

(1) 50-65: See the table below.(2) 00-15: See the table below.

PATTERNS	PAD DATA PATTERNS				
1ST DATA	CM35 Y=19 2ND DATA=0	CM35 Y=19 2ND DATA=1	CM35 Y=19 2ND DATA=2	CM35 Y=19 2ND DATA=3	CONNECTING PATTERNS
	50	54	58	62	STA/TONE-DTI
50	51	55	59	63	COT/DID/IPT-DTI
₹	52	56	60	64	ODT (4W E&M)-DTI
65	53	57	61	65	DTI/BRT/PRT/CCT/Virtual IPT/CFTC-DTI

	PATTERNS	PAD DATA OF DTI (T/R) [dB]	REMARKS
2ND DATA		TAB BAIA OF BIT (IM) [GB]	KEMAKKO
	00	0/0	
	01	-2/-2	
	02	-3/-3	
	03	0/–6	
00	04	-3/-8	
\ 1.5	05	+3/-3	
15	06	-6/-6	
	07	-8/-8	
	08	7	
	?	Not Used	
	15	_	

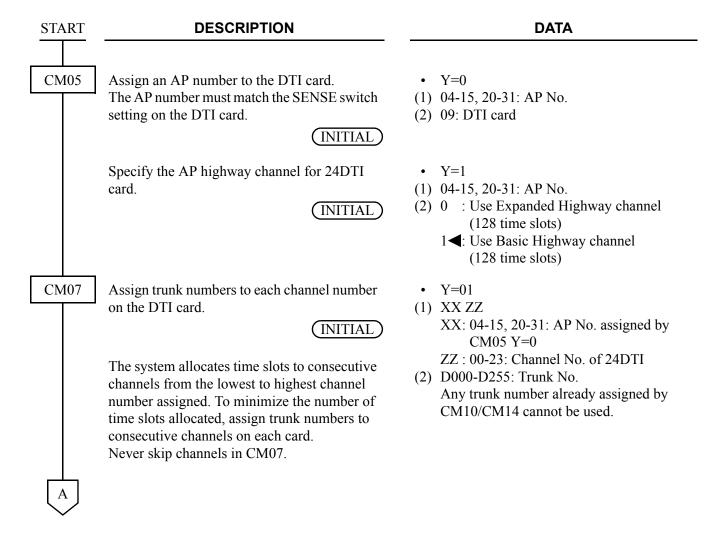
T/R: Transmitter PAD/Receiver PAD

+ : Gain - : Loss



D	DESCRIPTION	DATA
CM41 Specify	the various timing, if required.	<ul> <li>Y=3</li> <li>(1) 00: Release Signal Detect Timing</li> <li>(2) 01-15: 64-960 ms. (64 ms. increments)</li> <li>If no data is set, the default setting is 128 ms.</li> </ul>
		<ul> <li>Y=3</li> <li>(1) 01: Answer Signal Detect Timing</li> <li>(2) 01-15: 32-480 ms. (32 ms. increments)</li> <li>If no data is set, the default setting is 128 ms.</li> </ul>
		<ul> <li>Y=3</li> <li>(1) 02: Wink Signal width</li> <li>(2) 01-15: 64-512 ms. (32 ms. increments)</li> <li>If no data is set, the default setting is 32 ms.</li> </ul>
		<ul> <li>Y=3</li> <li>(1) 03: Wink/Delay Detection Timeout</li> <li>(2) 01-15: 1-15 seconds (1 second increments)</li> <li>If no data is set, the default setting is 7 seconds.</li> </ul>
CM20 Assign a	The Least Cost Routing or Route Advance feature is available for call origination via the DTI. Refer to the following feature pro- gramming. LEAST COST ROUTING-3/6 DIGIT Page 425 ROUTE ADVANCE Page 599	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) 100-163: Trunk Route 00-63</li> </ul>
END		

### (2) C.O. Line Interface





**DATA** 

CMAA

Assign the necessary functions to the DTI card.

DTI INITIAL

After entering the data, set the MB switch on the DTI card to UP, and then to DOWN, for DTI initialization.

**NOTE:** The following table shows the relationship between CMAA Y=01 and CMAA Y=02.

CMAA Y=01 (FRAME CONFIGURATION)	CMAA Y=02 (ZERO CODE SUPPRES- SION)	SIGNALING
24-Multi Frame [1]		B8ZS
12-Multi Frame [0]	Not available [1]	Transparent
	Available [0]	В7

[]: Indicates 2nd data

Select the card for DTI T1 interface.

(INITIAL)

• Y=00 Data Mode

(1) 04-15, 20-31: AP No. assigned by CM05 Y=0

(2) 0: Based on AT&T Specifications

• Y=01 Frame Configuration

(1) 04-15, 20-31: AP No. assigned by CM05 Y=0

(2) 0 : 12-Multi Frame (D4) 1◀: 24-Multi Frame (ESF)

• Y=02 Zero Code Suppression

(1) 04-15, 20-31: AP No. assigned by CM05 Y=0

(2) 0 : Available (Non Transparent) 1◀: Not available (Transparent)

Y=03

(1) 04-15, 20-31: AP No. assigned by CM05 Y=0

(2) 7**◄**: Associated Channel Interoffice Signaling

• Y=14

(1) 04-15, 20-31: AP No. assigned by CM05 Y=0

(2) 0 : PN-24PRTA/PN-DTA 1◀: PN-24DTA-C

В



#### **DATA**

CM30

Assign a trunk route number for C.O. line Interface to each DTI.

**NOTE:** The DTI route must be different than any analog trunk route.

Specify the terminating system in Day Mode or Night Mode, Mode A, or Mode B for incoming C.O. calls.

• Y=00

(1) 000-255: Trunk No. assigned by CM07 Y=01

(2) 00-63: Trunk Route No.

• Y=02 Day Mode

• Y=03 Night Mode

• Y=40 Mode A

• Y=41 Mode B

(1) 000-255: Trunk No. assigned by CM07 Y=01

(2) 02 : Trunk-Direct Appearances

03 : Trunk-Direct Appearances + TAS

04 : Direct-In Termination

08 : Dial-in

09 : Automated Attendant

10 : Attendant Console + TAS

11 : Attendant Console + Trunk-Direct Appearances

12 : Attendant Console + Trunk-Direct Appearances + TAS

13 : TAS

14 : Attendant Console

16 : DISA

18 : ISDN Indial

31**◄**: DID, Tie Line and any call which is not handled by PBX

C

C	

#### **DATA**

CM35

Assign trunk route data to each DTI route.

- Y=00 Kind of Trunk Route
- (1) 00-63: Trunk Route No.
- (2) 00: DDD (C.O./DID) trunk
  - 01: FX trunk
  - 02: WATS trunk
  - 03: CCSA trunk
  - 04: Tie line trunk
- Y=01 Dialing signal type
- (1) 00-63: Trunk Route No.

	Incoming	<u>Outgoing</u>
2 :	DP	DP
4 :	DTMF	DTMF
<b>7&lt;</b> :	DP/DTMF	DTMF

• Y=04

(2)

Answer signal from distant office

- (1) 00-63: Trunk Route No.
- (2) 2 : Answer signal arrives
  - 7**◄**: Answer signal does not arrive
- Y=05

Release signal from distant office

- (1) 00-63: Trunk Route No.
- (2) 0 : Release signal does not arrive (Loop Start C.O. line without Release signal)
  - 1◀: Release signal arrives (Ground Start/ Loop Start with Release signal)
- Y=09 Incoming connection signaling
- (1) 00-63: Trunk Route No.
- (2) 01 : Ring Down (Ground Start C.O. line)
  - 15◀: Ring Down (Loop Start C.O. line)
- Y=20 Sender start condition
- (1) 00-63: Trunk Route No.
- (2) 02 : Ground Start
  - 15**◀**: Timing Start (Loop Start)

D

	D
CI	<u>Г</u> М41
Cı	V1-T1
	E

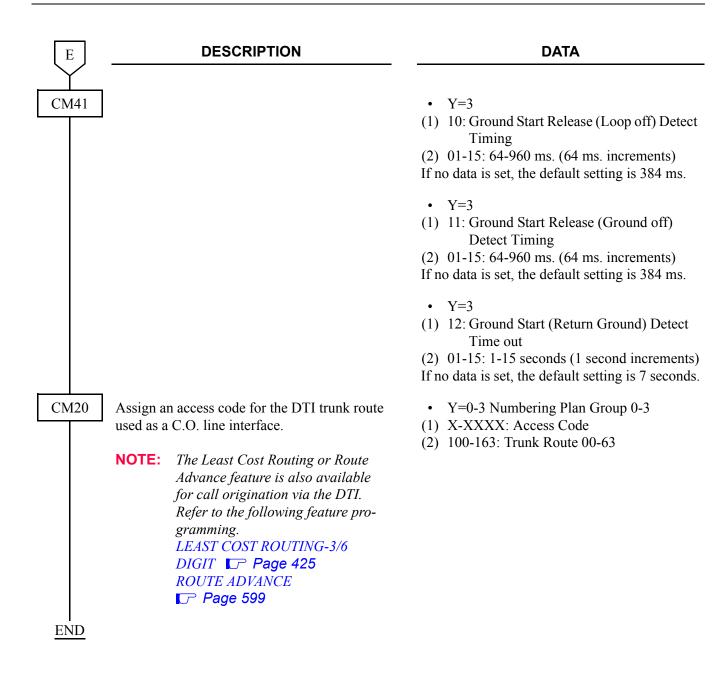
required.

#### **DESCRIPTION**

Specify the various timing for the DTI trunk, if

#### **DATA**

- Y=3
- (1) 04: Ringing Signal Detect Timing
- (2) 01-15: 32-480 ms. (32 ms. increments) If no data is set, the default setting is 192 ms.
- Y=3
- (1) 05: Release Signal Detect Timing
- (2) 01-15: 64-960 ms. (64 ms. increments) If no data is set, the default setting is 512 ms.
- Y=3
- (1) 06: Answer Signal Detect Timing
- (2) 01-15: 64-960 ms. (64 ms. increments) If no data is set, the default setting is 576 ms.
- Y=3
- (1) 07: Ringing Signal Detect Time out
- (2) 01-15: 512-7680 ms. (512 ms. increments) If no data is set, the default setting is 7,168 ms.
- Y=3
- (1) 08: Guard Timing of DTI release
- (2) 01-15: 128-1920 ms. (128 ms. increments) If no data is set, the default setting is 512 ms.
- Y=3
- (1) 09: Hooking Signal sending timing
- (2) 01-15: 64-960 ms. (64 ms. increments) If no data is set, the default setting is 640 ms.



## **30DTI Assignment**

**NOTE:** When using the PN-DTA card, the following switch setting is required to set E1 interface. SW3-1: OFF (E1 mode), SW3-2: OFF (DTI mode)

START	DESCRIPTION	DATA
CM05	Assign an AP number to the DTI card. The AP number assigned must match the SENSE switch setting on the DTI card.  INITIAL	• Y=0 (1) 04-15, 20-31: AP No. (2) 09: DTI card
	Specify the AP highway channel for 30DTI card.  (INITIAL)	<ul> <li>Y=1</li> <li>(1) 04-15, 20-31: AP No.</li> <li>(2) 0 : Use Expanded Highway channel (128 time slots)</li> <li>1 ✓: Use Basic Highway channel (128 time slots)</li> </ul>
CM07	Assign trunk number to each channel number on the DTI card. Channel 0 and 16 cannot be assigned.  INITIAL	<ul> <li>Y=01</li> <li>(1) XX ZZ</li> <li>XX: 04-15, 20-31: AP No. assigned by CM05 Y=0</li> <li>ZZ: 01-15, 17-31: Channel No. of 30DTI</li> <li>(2) P000 P355: Truck No.</li> </ul>
	NOTE: The system allocates time slots to consecutive channels from lowest to the highest channel number assigned.  To minimize the number of time slots allocated, assign trunk numbers to consecutive channels on each card. Never skip channels in CM07.	(2) D000-D255: Trunk No. Any trunk number already assigned by CM10/CM14 cannot be used.
CM30	Assign a trunk route number to each DTI.  NOTE: DTI route must be separated from any analog trunk route.	<ul> <li>Y=00</li> <li>(1) 000-255: Trunk No. assigned by CM07</li></ul>
A		



### **DATA**

CM35

Assign the trunk route data to each DTI route.

#### CM35 Y=19 DTI PAD

	PAD DATA OF DTI [dB]			
CONNECTION PATTERNS	DAT A=4 (T/R)	DAT A=5 (T/R)	DAT A=6 (T/R)	DAT A=7 (T/R)
Station-DTI	-3/-8	-3/-3	-3/-3	-3/-8
Tone-DTI	0/0	0/0	0/0	0/0
COT/DID/ODT (2W E&M)/IPT- DTI	0/0	0/0	0/0	0/0
ODT (4W E&M)- DTI	+3/-3	0/0	0/0	+3/-3
DTI/BRT/PRT/ CCT/Virtual IPT- DTI	0/-6	0/0	0/-6	0/0

T/R: Transmitter PAD/Receiver PAD

+ : Gain - : Loss • Y=00 Kind of Trunk Route

(1) 00-63: Trunk Route No.

(2) 04: Tie line trunk

• Y=01 Dialing signal type

(1) 00-63: Trunk Route No.

(2) 7**◄**: DP/DTMF (Incoming) DTMF (Outgoing)

• Y=04

Answer signal from distant office

(1) 00-63: Trunk Route No.

(2) 2: Answer signal arrives

• Y=05 Release signal from distant office

(1) 00-63: Trunk Route No.

(2) 1**◄**: Release signal arrives

• Y=09 Incoming connection signaling

(1) 00-63: Trunk Route No.

(2) 03: Wink Start

04: Delay Dial

05: Immediate Start

06: 2nd DT/Timing Start-Tie line

• Y=19 DTI PAD

(1) 00-63: Trunk Route No.

(2) 0-3 : Programmable PAD (See CM42)

4-7**<**: Fixed PAD (See left table)

• Y=20 Sender start condition

(1) 00-63: Trunk Route No.

(2) 00 : Wink Start

01 : Delay Dial

02 : Ground Start

15**⋖**: Timing Start

 Y=89 Cyclic Redundancy Checking for DTI trunk

(1) 00-63: Trunk Route No.

(2) 0: To provide

В



## DATA

CM42 T

To use the programmable PAD (CM35 Y=19, 2nd Data=0-3), assign the PAD data by CM42.

(1) 50-65: See the table below.(2) 00-15: See the table below.

PATTERNS	PAD DATA PATTERNS				
1ST DATA	CM35 Y=19 2ND DATA=0	CM35 Y=19 2ND DATA=1	CM35 Y=19 2ND DATA=2	CM35 Y=19 2ND DATA=3	CONNECTING PATTERNS
	50	54	58	62	STA/TONE-DTI
50	51	55	59	63	COT/DID/IPT-DTI
}	52	56	60	64	ODT (4W E&M)-DTI
65	53	57	61	65	DTI/BRT/PRT/CCT/Virtual IPT/CFTC-DTI

2ND DATA	PATTERNS	PAD DATA OF DTI (T/R) [dB]	REMARKS
	00	0/0	
	01	-2/-2	
	02	-3/-3	
00 ≀ 15	03	0/–6	
	04	-3/-8	
	05	+3/-3	
	06	-6/-6	
	07	-8/-8	
	08	7	
	}	Not Used	
	15	_	

T/R: Transmitter PAD/Receiver PAD

+ : Gain - : Loss

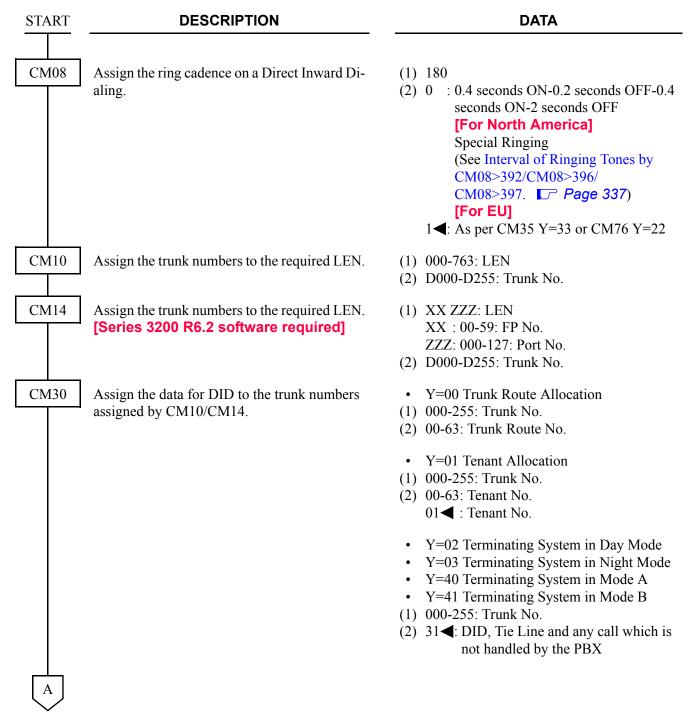


	DESCRIPTION	DATA
CM41	Specify the various timing parameters, if required.	<ul> <li>Y=3</li> <li>(1) 00: Release Signal Detect Timing</li> <li>(2) 01-15: 64-960 ms. (64 ms. increments)</li> <li>If no data is set, the default setting is 128 ms.</li> </ul>
		<ul> <li>Y=3</li> <li>(1) 01: Answer Signal Detect Timing</li> <li>(2) 01-15: 32-480 ms. (32 ms. increments)</li> <li>If no data is set, the default setting is 128 ms.</li> </ul>
		<ul> <li>Y=3</li> <li>(1) 02: Wink Signal width</li> <li>(2) 01-15: 64-512 ms. (32 ms. increments)</li> <li>If no data is set, the default setting is 32 ms.</li> </ul>
		<ul> <li>Y=3</li> <li>(1) 03: Wink/Delay Detection Timeout</li> <li>(2) 01-15: 1-15 seconds (1 second increments)</li> <li>If no data is set, the default setting is 7 seconds.</li> </ul>
CM20	Assign an access code for the DTI trunk route.  NOTE: The Least Cost Routing or Route Advance feature is also available for call origination via the DTI. Refer to the following feature programming.  LEAST COST ROUTING-3/6 DIGIT Page 425 ROUTE ADVANCE Page 599	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) 100-163: Trunk Route 00-63</li> </ul>

**END** 

# **DIRECT INWARD DIALING (DID)**

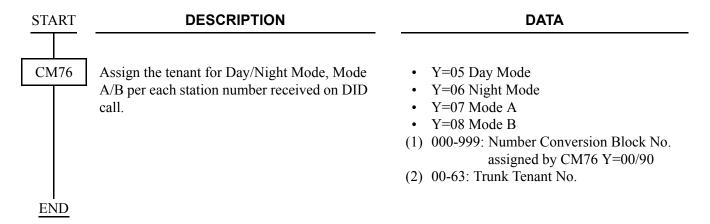
### **PROGRAMMING**



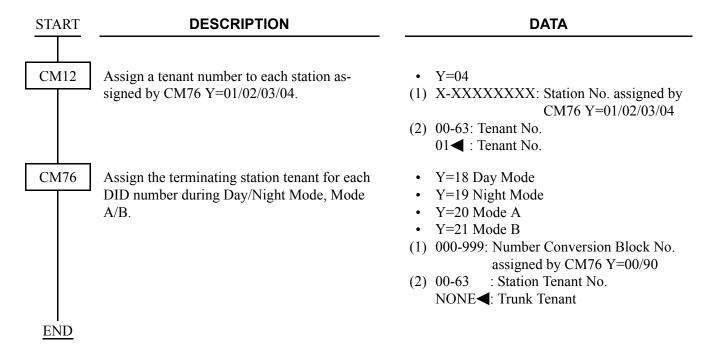
A	DESCRIPTION	DATA
CM35	Assign the data for DID to the trunk routes assigned by CM30 Y=00.	<ul> <li>Y=00 Kind of Trunk Route</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 00: DID trunk</li> <li>Y=02 Call direction</li> </ul>
		<ul><li>(1) 00-63: Trunk Route No.</li><li>(2) 1: Incoming trunk</li></ul>
		<ul> <li>Y=05 Release Signal from distant office</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 1◀: Release Signal arrives</li> </ul>
		<ul> <li>Y=09 Incoming connection signaling</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 06: 2nd DT/Timing Start-Tie Line</li> </ul>
	NOTE: When 2nd data is set to "1", the Trunk ID number assigned by CM30 Y=19 is displayed.	<ul> <li>Y=75 DID incoming LDN display on D<sup>term</sup>/DESKCON</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : Available 1 ✓: Not available NOTE</li> </ul>

В	DESCRIPTION	DATA
CM45	Provide dedicated DTMF Receivers for DID calls, if required.	<ul> <li>Y=1</li> <li>(1) XX Z: DTMF Receiver No.         XX : 00: Built-in PBR on MP card</li></ul>
CM49	Assign the function of each Digital Announcement Trunk, if needed	Y=00     (1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. (EB002-EB127) assigned by CM10/CM14     (2) 0D00: Announcement Service when the called station does not answer the DID/Tie Line call 0E00: Announcement Service when the DID/Tie Line call terminates to the busy station
CM51	Assign the destination of DID call transferred when the station is busy/unassigned/no answer.  NOTE: When Announcement Service is provided for No Answer (CM51 Y=00) or Busy (CM51 Y=03), see  ANNOUNCEMENT SERVICE.  Page 32  When Announcement Service is provided for unassigned (CM51 Y=06), see INTERCEPT  ANNOUNCEMENT.  Page 412	<ul> <li>Y=00 No Answer</li> <li>Y=03 Busy</li> <li>Y=06 Unassigned</li> <li>(1) 00-63: Tenant No.</li> <li>(2) Destination:</li></ul>
<u>END</u>		

To assign the destination tenant for Day/Night Mode and Mode A/B, when DID call terminates (When CM76 Y=01/02/03/04 is set to "D13" (TAS)):



To assign the destination tenant for Day/Night Mode and Mode A/B, when DID call terminates (When CM76 Y=01/02/03/04 is set to "station number to be terminated"):

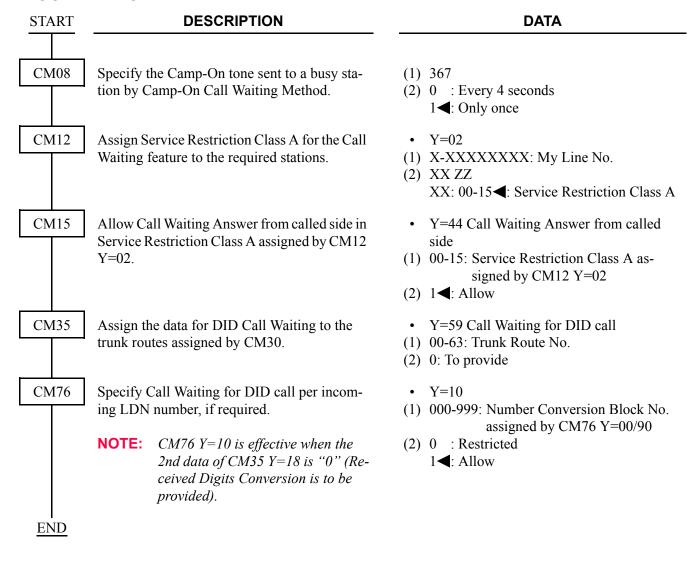


## **HARDWARE REQUIRED**

4DIT card (DID Trunk)

### **DID CALL WAITING**

#### **PROGRAMMING**

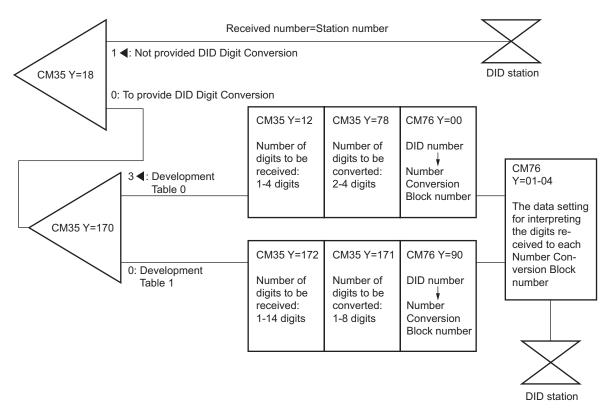


### **DID DIGIT CONVERSION**

#### PROGRMMING SUMMARY FOR DID DIGIT CONVERSION

- (1) Specify whether the DID Digit Conversion is provided for each trunk route by CM35 Y=18.
- (2) To provide the DID Digit Conversion, set the following data.
- STEP1: Specify the Development Table for DID Digit Conversion to each trunk route by CM35 Y=170.
- STEP2: Assign the number of digits to be received on DID and the number of digits to be converted on DID to each trunk route/each Development Table by CM35 Y=12, 78/CM35 Y=171, 172.
- STEP3: Set the Number Conversion Block number for each Development Table by CM76 Y=00, 90.
- STEP4: Assign the data for interpreting the received digits to each Number Conversion Block number by CM76 Y=01-04.

## **DID Digit Conversion Programming Procedure**



#### **PROGRAMMING**

START

## **DESCRIPTION**

#### **DATA**

CM35

Provide DID Digit Conversion to the trunk route number assigned by CM30 Y=00.

Specify the Development Table for DID Digit Conversion.

NOTE: When using the Development Table 1, see SAMPLE DATA
PROGRAMMING. Page 307

Specify the number of digits to be received on DID for Development Table 0.

Specify the number of digits to be converted on DID for Development Table 0.

• Y=18

(1) 00-63: Trunk Route No.

(2) 0: To provide

• Y=170

(1) 00-63: Trunk Route No.

(2) 0 : Development Table 1 3 ◀: Development Table 0

• Y=12

(1) 00-63: Trunk Route No.

(2) Number of digits

0 : 1 digit 1 : 2 digits

2 : 3 digits

**3<**: 4 digits

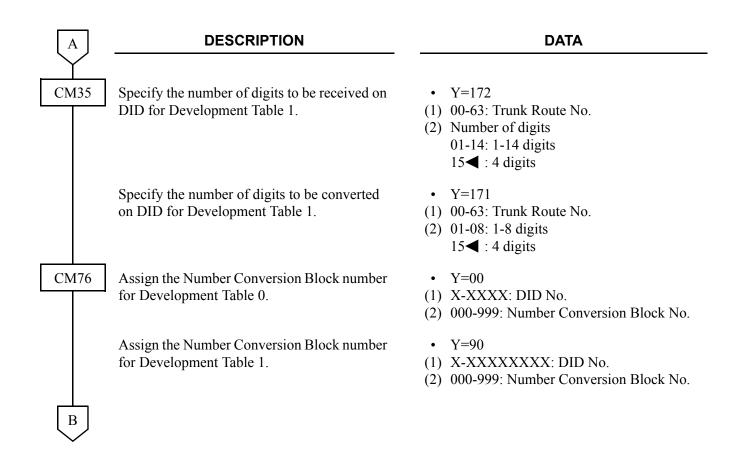
• Y=78

(1) 00-63: Trunk Route No.

(2) 0 : Leading 2-4 digits

1◀: All digits of DID number are converted by CM76

A



В	DESCRIPTION	DATA
CM76	Assign the data for interpreting the digits received.	• Y=01 Day Mode • Y=02 Night Mode • Y=03 Mode A • Y=04 Mode B (1) 000-999: Number Conversion Block No. assigned by CM76 Y=00/90 (2) X-XXXXXXXXX: Station No. to be terminated DXX: Change Terminating System to: D02: Trunk-Direct Appearances D03: Trunk-Direct Appearances + TAS D04: Direct-In Termination D09: Automated Attendant D10: Attendant Console + TAS D11: Attendant Console + Trunk-Direct Appearances D12: Attendant Console + Trunk-Direct Appearances D13: TAS D14: Attendant Console D16: DISA
<u>END</u>		

### SAMPLE DATA PROGRAMMING

## < Example >

• The PBX provides DID lines of multiple telecommunication companies (company A, company B), and when the PBX receives the calls that have the same lower 4 digits of DID number from each telecommunication company, the calls are terminated to each station which have been specified.

• DID No. : X XXX 084-1234 (DID number of company A)

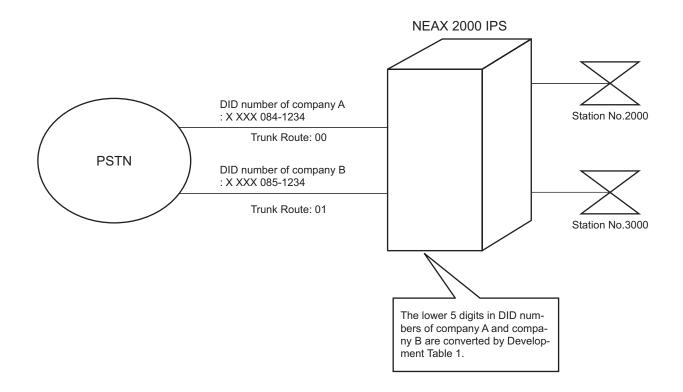
: X XXX 085-1234 (DID number of company B)

• Trunk Route No.: 00 (for DID line of company A)

: 01 (for DID line of company B)

• Station No. : 2000 (for DID line of company A)

: 3000 (for DID line of company B)

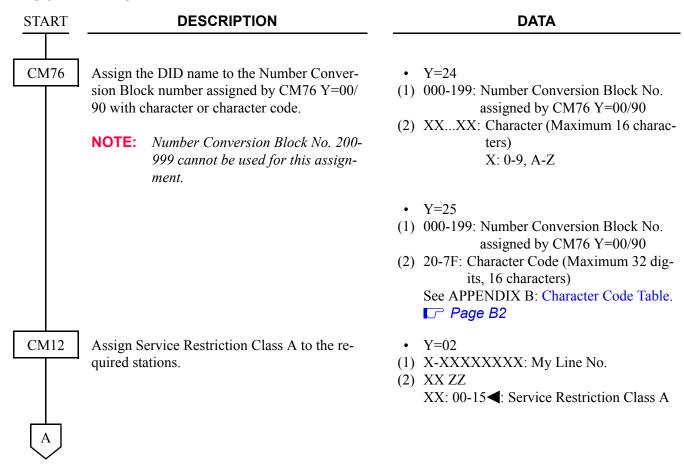


## < Data Programming >

COMMAND	1st DATA	2nd DATA	REMARKS
CM35 Y=18	00	0	Provide DID Digit Conversion to the trunk route number 00.
CM35 Y=18	01	0	Provide DID Digit Conversion to the trunk route number 01.
CM35 Y=170	00	0	Specify the Development Table 1 for DID digit conversion to the trunk route number 00.
CM35 Y=170	01	0	Specify the Development Table 1 for DID digit conversion to the trunk route number 01.
CM35 Y=172	00	07	Specify the number of digits to be received on DID for Development Table 1 as 7 digits to trunk route number 00.
CM35 Y=172	01	07	Specify the number of digits to be received on DID for Development Table 1 as 7 digits to trunk route number 01.
CM35 Y=171	00	05	Specify the number of digits to be converted on DID for Development Table1 as 5 digits to trunk route number 00.
CM35 Y=171	01	05	Specify the number of digits to be converted on DID for Development Table1 as 5 digits to trunk route number 01.
CM76 Y=90	41234	000	Assign the Number Conversion Block number 000 to the DID number 41234.
CM76 Y=90	51234	001	Assign the Number Conversion Block number 001 to the DID number 51234.
CM76 Y=01	000	2000	Assign the station number 2000 to the Number Conversion Block number 000.
CM76 Y=01	001	3000	Assign the station number 3000 to the Number Conversion Block number 001.

## **DID NAME DISPLAY**

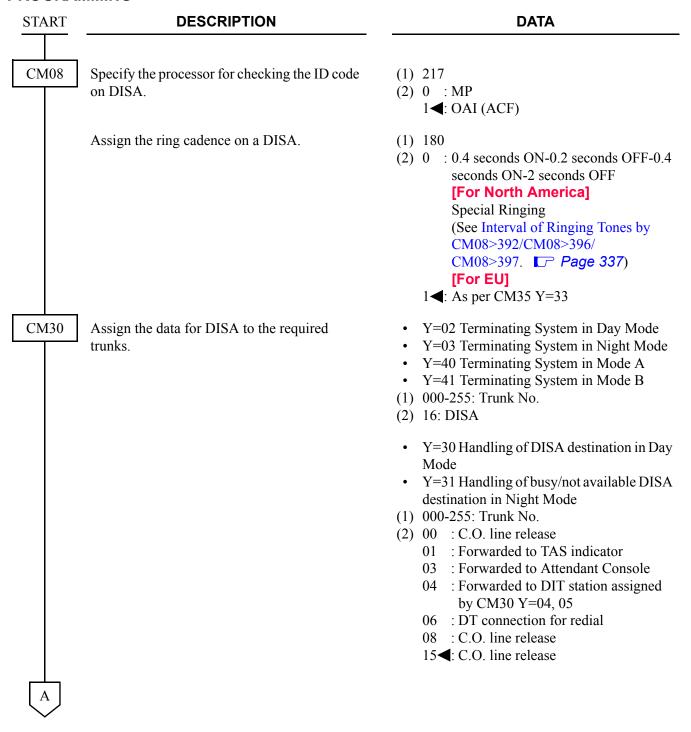
## **PROGRAMMING**



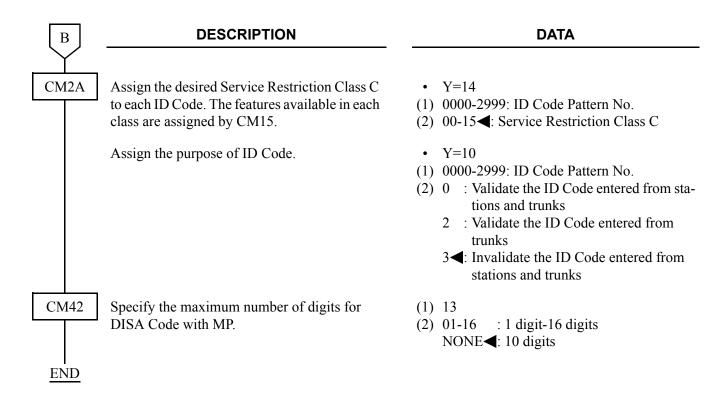
A	DESCRIPTION	DATA
CM15	Allow Calling Name Display-PS in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=123</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 0: Allow</li> </ul>
	Provide Calling Name Display for trunk incoming calls in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=136</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Calling Name Display</li> </ul>
CM90	Provide the D <sup>term</sup> with a select key of Calling Number Display or Calling Name Display, if required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F1099: Select Key of Calling Number Display or Calling Name Display</li> </ul>
	Provide the DESKCON with a select key of Calling Number Display or Calling Name Display, if required.	<ul> <li>Y=00</li> <li>(1) ATTCON No. (E000-E007) +  + Key No.</li> <li>(2) F6122: Select Key of Calling Number Display or Calling Name Display</li> </ul>
	Provide the D <sup>term</sup> with a Caller ID Display key for displaying the Caller ID, if required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F5010: Caller ID Display</li> </ul>
<u>END</u>		

## **DIRECT INWARD SYSTEM ACCESS (DISA)**

### **PROGRAMMING**



A	DESCRIPTION	DATA
CM76	When providing DISA to the DID calls, assign the data for converting the received digits to DISA. See DID DIGIT CONVERSION.  Page 303	<ul> <li>Y=01 Day Mode</li> <li>Y=02 Night Mode</li> <li>Y=03 Mode A</li> <li>Y=04 Mode B</li> <li>(1) 000-999: Number Conversion Block No. assigned by CM76 Y=00/90</li> <li>(2) D16: DISA</li> </ul>
CM2A	Assign the ID Code Development number for DISA.	• Y=A0 (1) 2 (2) 0-9: ID Code Development No. 00-09
		<b>NOTE:</b> $CM2A Y=00-09$ is determined by this data.
	Assign the ID Code for DISA.	<ul> <li>Y=00-09 ID Code Development No. 00-09</li> <li>(1) X-XXXX (Maximum 16 digits): ID Code for DISA</li> <li>(2) 0000-2999: ID Code Pattern No.</li> </ul>
	Assign the desired Trunk Restriction Class for each ID Code Pattern number.	<ul> <li>Y=11</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 1 ✓: Unrestricted (RCA)</li> <li>2 : Non-Restricted-1 (RCB)</li> <li>3 : Non-Restricted-2 (RCC)</li> <li>4 : Semi-Restricted-1 (RCD)</li> <li>5 : Semi-Restricted-2 (RCE)</li> <li>6 : Restricted-1 (RCF)</li> <li>7 : Restricted-2 (RCG)</li> <li>8 : Fully-Restricted (RCH)</li> </ul>
	Assign the desired Service Restriction Class A to each ID Code Pattern number. The features available in each class are assigned by CM15.	<ul> <li>Y=12</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 00-15 </li> <li>(3) Service Restriction Class A</li> </ul>
	Assign the desired Service Restriction Class B to each ID Code Pattern number. The features available in each class are assigned by CM15.	<ul> <li>Y=13</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 00-15  &lt; : Service Restriction Class B</li> </ul>



**NOTE:** Approximately 3000 DISA codes including Authorization Codes and Forced Account Codes can be defined.

Number of the codes varies with the number of digits assigned to each code. For details, refer to "BUSINESS/HOTEL/DATA FEATURES AND SPECIFICATIONS".

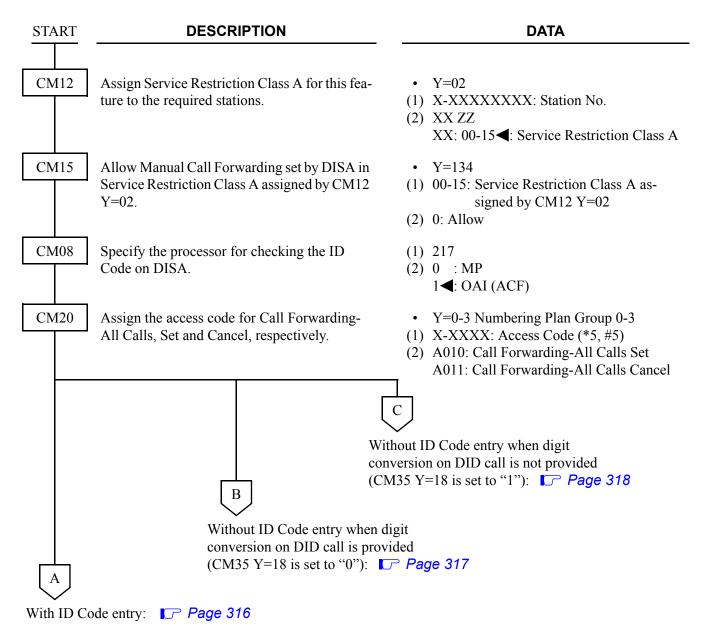
To access the Digital Announcement Trunk (DAT card) via DISA, add the following programming.

START	DESCRIPTION	DATA
CM10	Assign a Digital Announcement Trunk card number to the required LEN.  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM0/1 : EB002-EB031 For PIM2/3 : EB032-EB063 For PIM4/5 : EB064-EB095 For PIM6/7 : EB096-EB127  NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.
CM14	Assign a Digital Announcement Trunk card number to the required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN XX : 00-59: FP No. ZZZ: 000-127: Port No.</li> <li>(2) EB002-EB127: Digital Announcement Trunk Card No. For FP No. 00 : EB002-EB031 For FP No. 01 : EB032-EB063 For FP No. 02 : EB064-EB095 For FP No. 03 : EB096-EB127</li> <li>NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of the MP card.</li> </ul>
CM2A	Assign Service Restriction Class A for Digital Announcement Trunk access to the required ID Code Pattern number.	<ul> <li>Y=12</li> <li>(1) 0000-2999: ID Code Pattern No. assigned by CM2A Y=00-09</li> <li>(2) 00-15         (2) Service Restriction Class A     </li> </ul>
CM15	Allow Digital Announcement Trunk access in Service Restriction Class A assigned by CM2A Y=12.	<ul> <li>Y=33</li> <li>(1) 00-15: Service Restriction Class A assigned by CM2A Y=12</li> <li>(2) 1◀: Allow</li> </ul>
CM20 END	To record and replay a message from an outside user, assign the Digital Announcement Trunk access code, respectively.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A100: Record A101: Replay</li> </ul>

## **CALL FORWARDING SET BY DISA**

## **PROGRAMMING**

In addition to the DISA programming, do the following programming.





### **DESCRIPTION**

### DATA

CM2A

Assign the ID Code Development number for DISA.

Assign the ID Code for DISA.

Assign the purpose of ID Code.

Assign Service Restriction Class A assigned by CM15 Y=134 to the ID Code Pattern number.

Specify the setting station of Manual Call Forwarding set by DISA, if required. If the station number is set by this command, Call Forward setting is not available for the other stations.

• Y=A0

- (1) 2: DISA Code
- (2) 0-9: ID Code Development No. 00-09
- Y=00-09 ID Code Development No. 00-09
- (1) X-XX...XX: ID Code for DISA (Maximum 16 digits)
- (2) 0000-2999: ID Code Pattern No.
- Y=10
- (1) 0000-2999: ID Code Pattern No.
- (2) 2: Validate the ID Code entered from trunks
- Y=12
- (1) 0000-2999: ID Code Pattern No.
- (2) 00-15**◄**: Service Restriction Class A
- Y=16
- (1) 0000-2999: ID Code Pattern No.
- (2) X-XXXXXXXXX: Station No. NONE◀ : All stations

**END** 

To abbreviate the ID Code entry when digit conversion on DID call is provided (CM35 Y=18 is set to "0"):

END

В	DESCRIPTION	DATA	
$\mathbf{Y}$			
CM35	Set the trunk route to use the calling party number as the ID Code for DISA.	<ul> <li>Y=155</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: Available</li> </ul>	
CM2A	Assign the ID Code Development number, for Call Forwarding set by DISA.	<ul> <li>Y=A0</li> <li>(1) 3: Automatic service setting by DISA</li> <li>(2) 0-9: ID Code Development No. 00-09</li> </ul>	
	Assign the calling party number as the ID Code for DISA.	<ul> <li>Y=00-09 ID Code Development No. 00-09</li> <li>(1) X-XXXX: Calling Party No. (Maximum 16 digits)</li> <li>(2) 0000-2999: ID Code Pattern No.</li> </ul>	
	Assign the purpose of ID Code.	<ul> <li>Y=10</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 2: Validate the ID Code entered from trunks</li> </ul>	
	Assign Service Restriction Class A assigned by CM15 Y=134 to the ID Code Pattern number.	<ul> <li>Y=12</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 00-15     </li> <li>(3) Service Restriction Class A</li> </ul>	
	Set the calling party number to be used as the ID Code for DISA.	<ul> <li>Y=15</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 0: Available</li> </ul>	
	Specify the setting station of Manual Call Forwarding set by DISA, if required.  If the station number is set by this command, Call Forward setting is not available for the other stations.	<ul> <li>Y=16</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) X-XXXXXXXXXX: Station No.</li> <li>NONE &lt; : All stations</li> </ul>	

To abbreviate the ID Code entry when digit conversion on DID call is not provided (CM35 Y=18 is set to "1"):

C	DESCRIPTION	DATA	
CM76	Assign the Number Conversion Block number to the DID number.	<ul> <li>Y=00</li> <li>(1) X-XXXX: DID No.</li> <li>(2) 000-999: Number Conversion Block No. 000-999</li> </ul>	
	Specify the terminating system as DISA.	<ul> <li>Y=01 Day Mode</li> <li>Y=02 Night Mode</li> <li>Y=03 Mode A</li> <li>Y=04 Mode B</li> <li>(1) 000-999: Number Conversion Block No. assigned by CM76 Y=00</li> <li>(2) D16: DISA</li> </ul>	
	Set the calling party number to be used as the ID Code for DISA when the DID number assigned by CM76 Y=00 is sent.	<ul> <li>Y=14</li> <li>(1) 000-999: Number Conversion Block No. assigned by CM76 Y=00</li> <li>(2) 0: Available</li> </ul>	
	Allow the service setting by DISA without dialing the ID Code.	<ul> <li>Y=15</li> <li>(1) 000-999: Number Conversion Block No. assigned by CM76 Y=00</li> <li>(2) 15◀: Service setting without dialing the ID Code</li> </ul>	
CM2A	Assign the ID Code Development number, for Call Forwarding set by DISA.	<ul> <li>Y=A0</li> <li>(1) 3: Automatic service setting by DISA</li> <li>(2) 0-9: ID Code Development No. 00-09</li> </ul>	
	Assign the calling party number as the ID Code for DISA.	<ul> <li>Y=00-09 ID Code Development No. 00-09</li> <li>(1) X-XXXX: Calling Party No. (Maximum 16 digits)</li> <li>(2) 0000-2999: ID Code Pattern No.</li> </ul>	
D			



## **DESCRIPTION**

### **DATA**

CM2A

Assign the purpose of ID Code.

Assign Service Restriction Class A assigned by CM15 Y=134 to the ID Code Pattern number.

Set the calling party number to be used as the ID Code for DISA.

Specify the setting station of Manual Call Forwarding set by DISA, if required. If the station number is set by this command, Call Forward setting is not available for the other stations.

• Y=10

- (1) 0000-2999: ID Code Pattern No.
- (2) 2: Validate the ID Code entered from trunks
- Y=12
- (1) 0000-2999: ID Code Pattern No.
- (2) 00-15◀: Service Restriction Class A
- Y=15
- (1) 0000-2999: ID Code Pattern No.
- (2) 0: Available
- Y=16
- (1) 0000-2999: ID Code Pattern No.
- (2) X-XXXXXXXX: Station No. NONE 

  ∴ All stations

**END** 

## **HARDWARE REQUIRED**

DAT card if required

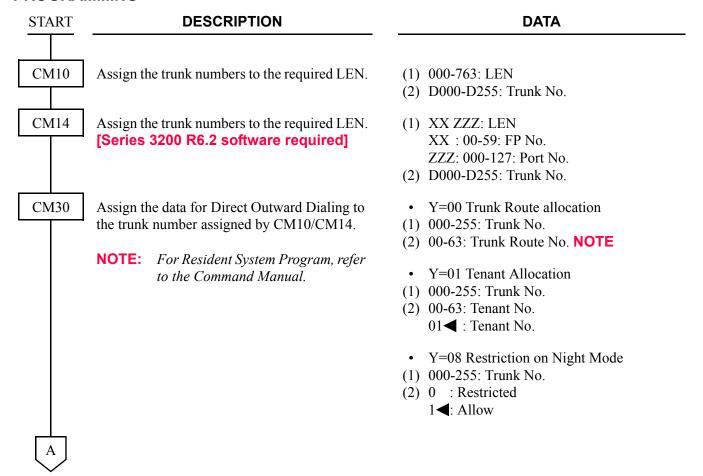
# **DIRECT INWARD TERMINATION (DIT)**

## **PROGRAMMING**

START	DESCRIPTION	DATA	
CM30	Assign the data for terminating system in Day Mode/Night Mode/Mode A/Mode B, to each Loop/Ground Start trunk, respectively.	<ul> <li>Y=02 Day Mode/03 Night Mode/ 40 Mode A/41 Mode B</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 04: Direct-In Termination</li> </ul>	
	Assign the station number to be terminated by DIT in Day Mode/Night Mode/Mode A/Mode B respectively.	<ul> <li>Y=04 Day Mode/05 Night Mode/ 42 Mode A/43 Mode B</li> <li>(1) 000-255: Trunk No.</li> <li>(2) X-XXXXXXXXXX Station No.</li> </ul>	
	Assign the destination to be rerouted when the DIT station is busy/not available in Day Mode and Night Mode respectively.	<ul> <li>Y=13 Day Mode/14 Night Mode</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 01 : TAS BUZZER</li> <li>04 : Attendant Console</li> <li>06 : Automatic Camp-On</li> <li>15◀: Waiting until the DIT station becomes idle</li> </ul>	
	Assign the transfer destination for an unanswered DIT call in Day Mode and Night Mode, respectively.	<ul> <li>Y=15 Day Mode/16 Night Mode</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 01 : Attendant Console</li> <li>03 : TAS</li> <li>15◀: To be continued DIT</li> </ul>	
CM41	Specify the timing for an unanswered call to a DIT destination.	<ul> <li>Y=0</li> <li>(1) 01</li> <li>(2) 01-30: 4-120 seconds</li></ul>	
CM08	Assign the ring cadence on a DIT call.	(1) 179 (2) 0 : As per CM35 Y=33 1	

## **DIRECT OUTWARD DIALING (DOD)**

### **PROGRAMMING**





### **DESCRIPTION**

### **DATA**

CM35

Assign the data for Direct Outward Dialing to the Route number assigned by CM30 Y=00.

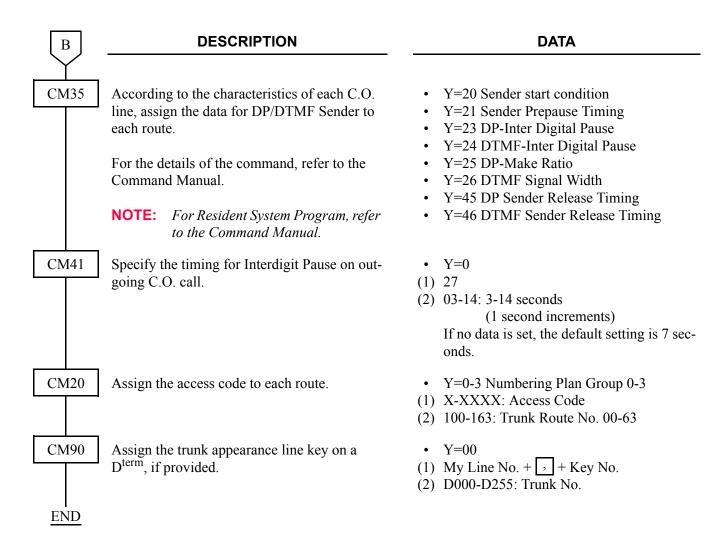
**NOTE:** For Resident System Program, refer to the Command Manual.

- Y=00 Kind of Route
- (1) 00-63: Trunk Route No.
- (2) 00: DDD
  - 01: FX
  - 02: WATS
  - 03: CCSA
- Y=01 Type of Signal
- (1) 00-63: Trunk Route No.
- (2) 2 : DP
  - 4 : DTMF
  - 7**<**: DTMF
- Y=02 OG/IC
- (1) 00-63: Trunk Route No.
- (2) 2 : Outgoing
  - 3**⋖**: Bothway
- Y=04 Answer Signal Condition
- (1) 00-63: Trunk Route No.
- (2) 1 : Answer Signal by Polarity Reversal
  - 7**<**: No Answer Signal

In case of no Answer Signal, system recognizes the answer in timing set by CM41 Y=0>03.

- Y=05 Release Signal Condition
- (1) 00-63: Trunk Route No.
- (2) 0 : No Release Signal from C.O.
  - 1**◄**: Release Signal from C.O.
- Y=08 Dial Pulse Sending
- (1) 00-63: Trunk Route No.
- (2) 3**◄**: To be sent
- Y=09 Incoming Connection Signalling
- (1) 00-63: Trunk Route No.
- (2) 01 : Ring Down (Ground Start)
  - 15**◄**: Ring Down (Loop Start)

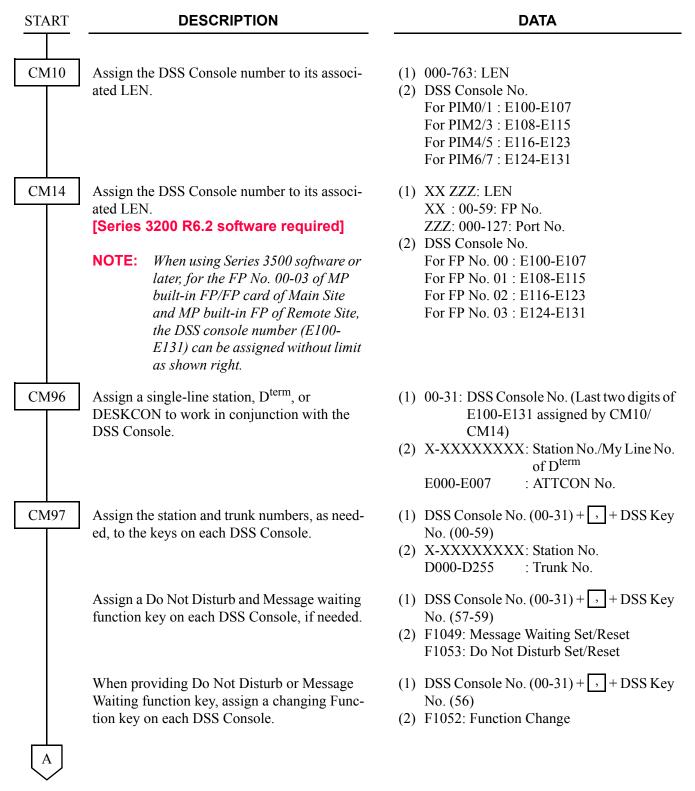
В

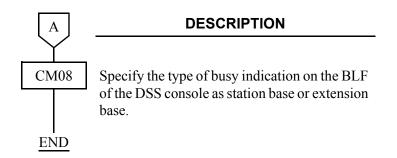


**NOTE:** For the Trunk Restriction Class, refer to CLASS OF SERVICE. Page 211

## DIRECT STATION SELECTION/BUSY LAMP FIELD (DSS/BLF) CONSOLE

### **PROGRAMMING**





## **DATA**

- (1) 269
- (2) 0 : Station base 1 ◀: Extension base

## HARDWARE REQUIRED

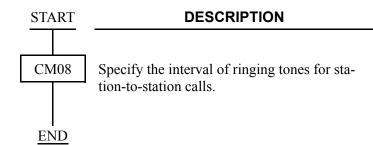
DSS Console DLC card

## **DISTINCTIVE RINGING**

### **PROGRAMMING**

## [For North America]

(1) For Station-to-Station calls

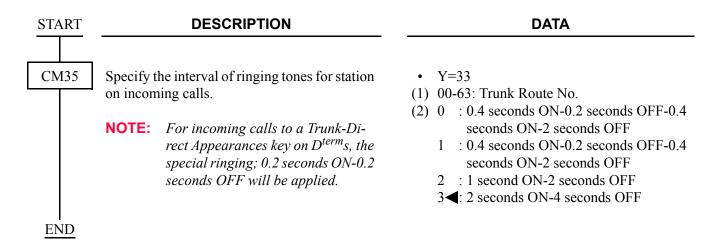


DATA

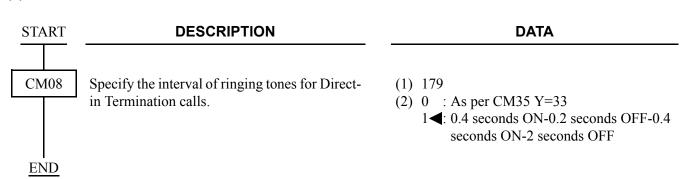
(2) 0 : 2 seconds ON-4 seconds OFF 1 ≤ : 1 second ON-2 seconds OFF

(1) 138

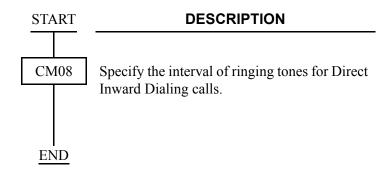
(2) For C.O./Tie line calls (except for Direct-in Termination/Direct Inward Dialing/DISA/CCIS calls)



(3) For Direct-in Termination calls



- (4) For Direct Inward Dialing calls
  - To distinguish by the trunk route



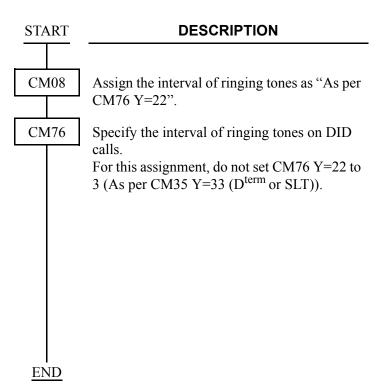
DATA

(1) 180

(2) 0 : 0.4 seconds ON-0.2 seconds OFF-0.4 seconds ON-2 seconds OFF

1**◄**: As per CM35 Y=33

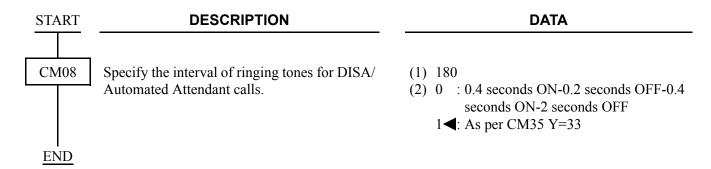
• To distinguish by the terminating DID number



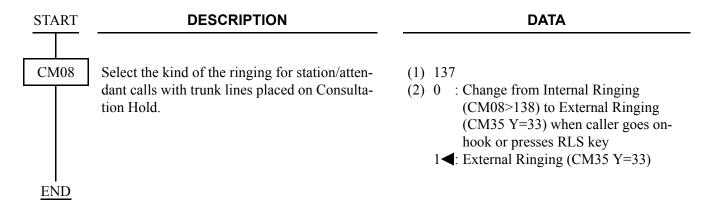
**DATA** 

- (1) 180
- (2) 1**<**: As per CM76 Y=22
- Y=22
- (1) 000-999: Number Conversion Block No. assigned by CM76 Y=00/90
- (2) 0: 0.5 seconds ON-0.5 seconds OFF (D<sup>term</sup>)
  - 1.0 second ON-2.0 seconds OFF (SLT)
  - 1: 0.5 seconds ON-0.5 seconds OFF-
    - 0.5 seconds ON-1.5 seconds OFF ( $D^{term}$ )
    - 0.4 seconds ON-0.2 seconds OFF-
    - 0.4 seconds ON-2.0 seconds OFF (SLT)
  - 2: 1.0 second ON-2.0 seconds OFF (D<sup>term</sup> or SLT)

## (5) For DISA/Automated Attendant calls

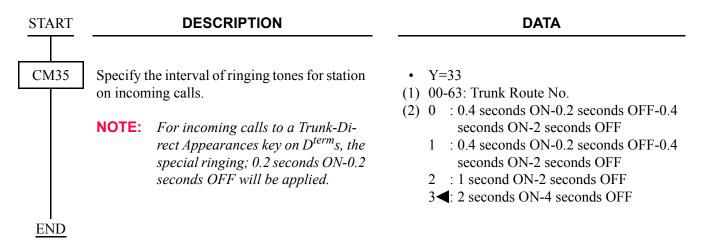


(6) For C.O. calls transferred to another station from a station/Attendant Console

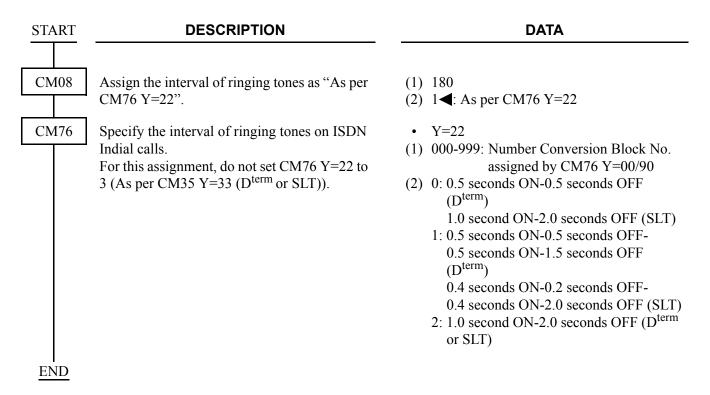


### (7) For ISDN Indial calls

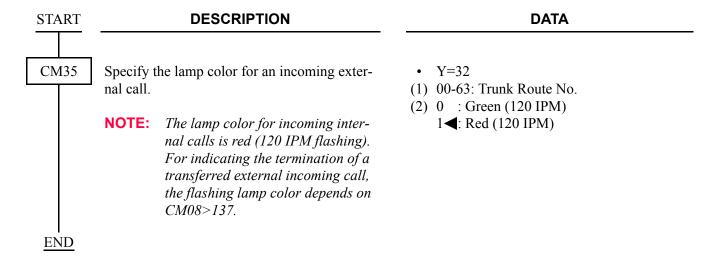
• To distinguish by the trunk route



• To distinguish by the terminating ISDN Indial number



To provide a distinctive lamp indication for D<sup>term</sup>s during a call termination, do the following programming:



To provide the distinctive ringing patterns to D<sup>term</sup>s in behind PBX, in order to distinguish between an internal call from the main PBX and an external incoming call:

START	DESCRIPTION	DATA	
CM08	Specify the interval of ringing tones for station-to-station calls.	<ul> <li>(1) 138</li> <li>(2) 0 : 2 seconds ON-4 seconds OFF</li> <li>1 ≤ : 1 second ON-2 seconds OFF</li> </ul>	
	Specify the interval of ringing tones until detecting a ringing frequency from the main PBX (Centrex). Ringing is sent from D <sup>term</sup> until detection of the ringing frequency.	<ul> <li>(1) 380</li> <li>(2) 0 : As per CM08&gt;381</li> <li>1 &lt; : As per CM35 Y=33</li> </ul>	
		<ul> <li>(1) 381</li> <li>(2) 0 : No Ringer</li> <li>1 &lt; : Ringing Tone (0.5 seconds) is sent once</li> </ul>	
	Specify the lamp indication of D <sup>term</sup> until detecting the kind of incoming call from the main PBX (Centrex).  The lamp is lit until detection of the ringing frequency.	<ul> <li>(1) 382</li> <li>(2) 0 : Red Steady Light</li> <li>1 ≤ : 120 IPM Flash (As per CM35 Y=32)</li> </ul>	
	Specify the ringing distinction by detecting the ringing signal from the main PBX (Centrex).	<ul> <li>(1) 366</li> <li>(2) 0 : Longer Ringing than CM41</li></ul>	
	NOTE 1: When the ringer is for an internal call D <sup>term</sup> lamp color: Change to red D <sup>term</sup> tone ringer: CM35 Y=34, 164, C		
	<b>NOTE 2:</b> When the ringer is for an external call, interval of ringing signal: CM35 $Y=33$ $D^{term}$ lamp color: CM35 $Y=32$ $D^{term}$ tone ringer: CM35 $Y=34$ , 164, CM65 $Y=40$		
A			





### **DESCRIPTION**

### **DATA**

CM35

Specify the lamp color for an incoming external call.

**NOTE 1:** The lamp color for incoming internal calls is red (120 IPM flashing).

NOTE 2: For indicating the termination of a transferred external incoming call, the flashing lamp color depends on CM08>137.

Specify the interval of ringing tones to a D<sup>term</sup> on an incoming call.

**NOTE:** For incoming calls to Trunk Line Appearance Key on D<sup>term</sup>, the special ringing; 0.2 seconds ON-0.2 seconds OFF will be applied.

Specify the Ringer Tone Pattern of the D<sup>term</sup> to each trunk route.

• Y=32

(1) 00-63: Trunk Route No.
(2) 0 : Green (120 IPM)
1 ◀: Red (120 IPM)

- Y=33
- (1) 00-63: Trunk Route No.
- (2) 0 : 0.4 seconds ON-0.2 seconds OFF-0.4 seconds ON-2 seconds OFF
  - 1 : 0.4 seconds ON-0.2 seconds OFF-0.4 seconds ON-2 seconds OFF
  - 2 : 1 second ON-2 seconds OFF
  - 3◀: 2 seconds ON-4 seconds OFF
- Y=34, 164
- (1) 00-63: Trunk Route No.
- (2) See the table below.

[Series 3200 R6.1 software required]

Y=34	Y=164: 0	Y=164: 1 <b>◀</b>
0	Ringer Tone Pattern 3	Ringer Tone Pattern 0
1	Ringer Tone Pattern 6	Ringer Tone Pattern 1
2	Ringer Tone Pattern 5	Ringer Tone Pattern 2
3◀	Ringer Tone Pattern 4	Ringer Tone Pattern 7





## **DESCRIPTION**

## DATA

CM65

Specify the ring frequency of the D<sup>term</sup>.

[Series 3200 R6.1 software required]

- Y=40
- (1) 00-63: Tenant No. assigned by CM30 Y=01/CM12 Y=04
- (2) See the table below.

Dinger Tone		Y=40: 1 <b>◀</b>		
Ringer Tone Pattern No.	Y=40: 0	Electra Terminal/ D <sup>term</sup> Series III	Elite Terminal/D <sup>term</sup> Series E/ D <sup>term</sup> Series i	
0	Door Phone Ringer Tone	1024 + 1285 [Hz]/ 16 [Hz] Modulating Signal	1100 + 1400 [Hz]/ 16 [Hz] Modulating Signal	
1	Ringer Tone 1	480 + 606 [Hz]/ 8 [Hz] Modulating Signal	520 + 660 [Hz]/ 8 [Hz] Modulating Signal	
2	Ringer Tone 2	600 + 700 [Hz]/ 16 [Hz] Modulating Signal	660 + 760 [Hz]/ 16 [Hz] Modulating Signal	
3	Ringer Tone 3	1024 [Hz] Envelop	1100 [Hz] Envelop	
4	Ringer Tone 4	500 [Hz]	540 [Hz]	
5	Ringer Tone 5	1024 [Hz]	1100 [Hz]	
6	Not used	1285 + 1024 [Hz]	1400 + 1100 [Hz]	
7	Not used	480 + 606 [Hz]/ 16 [Hz] Modulating Signal	520 + 660 [Hz]/ 16 [Hz] Modulating Signal	

**NOTE:** This data is effective only for  $D^{term}$  Series i.

When using Electra Terminal/D<sup>term</sup> Series III/Elite Terminal/D<sup>term</sup> Series E, using D<sup>term</sup> Series i with Series 3100 software or before, or when accommodating D<sup>term</sup> Series i in TDM based Remote PIM, the second data is fixed to 1.



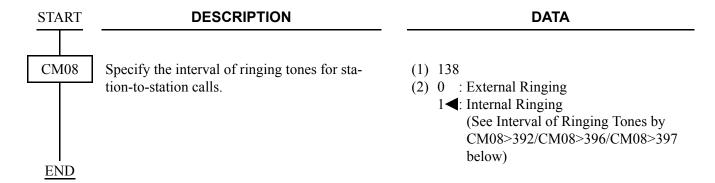
$\begin{bmatrix} C \end{bmatrix}$	DESCRIPTION	DATA	
CM35	Provide the distinctive ringing patterns to a D <sup>term</sup> in behind PBX.	<ul> <li>Y=87</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : To provide 1 ✓: Not provided</li> </ul>	
CM30	Specify the terminating system for incoming C.O. calls.	<ul> <li>Y=02 in Day Mode</li> <li>Y=03 in Night Mode</li> <li>Y=40 in Mode A</li> <li>Y=41 in Mode B</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 02: Trunk-Direct Appearances</li> <li>03: Trunk-Direct Appearances + TAS</li> </ul>	
	Provide the Trunk-Direct Appearances on D <sup>term</sup> .	<ul> <li>Y=18</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 0 : To provide 1 ✓: Not provided</li> </ul>	
CM41	Assign the ringing detect timer for incoming trunk calls.	<ul> <li>Y=2</li> <li>(1) 00</li> <li>(2) 06-10: 192-320 ms.</li></ul>	
	Assign the main PBX (Centrex) ringing distinction timer. <b>NOTE 1</b> on next page	<ul> <li>Y=2</li> <li>(1) 40</li> <li>(2) 01-15: 128-1920 ms.</li></ul>	
	Assign the immediate ringing guard timer from the main PBX (Centrex).  NOTE 1, NOTE 2 on next page	<ul> <li>Y=2</li> <li>(1) 41</li> <li>(2) 00-90: 0-12672 ms.</li></ul>	
D			

**DESCRIPTION DATA** D **NOTE 1:•** When immediate ringing is sent from the main PBX (Centrex), CM41 Y=2>40 plus CM41 CM41 Y=2>41 must be assigned as longer time than the time assigned by CM41 Y=2>00.• When immediate ringing is not sent from the main PBX (Centrex), CM41 Y=2>40 must be assigned as longer time than the time assigned by CM41 Y=2>00. Check the main PBX (Centrex) ringer cycle and set as shown below: Main PBX Ringing A seconds (Station termination) B seconds Main PBX Ringing (C.O. termination) B seconds<"CM41 Y=2>40 setting time">A seconds When the gap between the main PBX station terminating ringer and C.O. line terminating ringer is under 200 ms., distinction may be incomplete. **NOTE 2:** When Immediate Ringing is not provided on main PBX, be sure to set CM41 Y=2>41 as 00. CM90 Assign the Trunk Line Appearance key to a Y = 00(1) My Line No. + , + Key No. (2) D000-D255: Trunk No. Provide the tone ringer on call termination. Y = 01(1) My Line No. + + Key No. NOTE: When CM30 Y=02/03/40/41 2nd (2) 0 : Disabled 1**⋖**: Enabled data is 03, this setting is required.

**END** 

## [For EU]

(1) For Station-to-Station calls

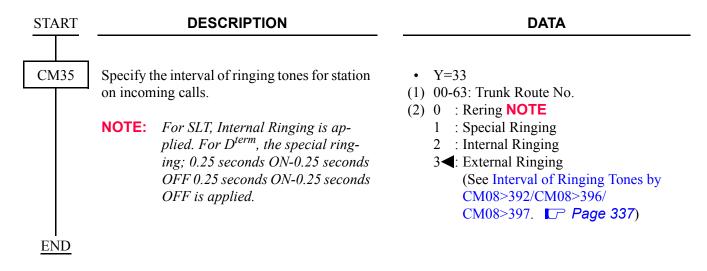


## Interval of Ringing Tones by CM08>392/CM08>396/CM08>397

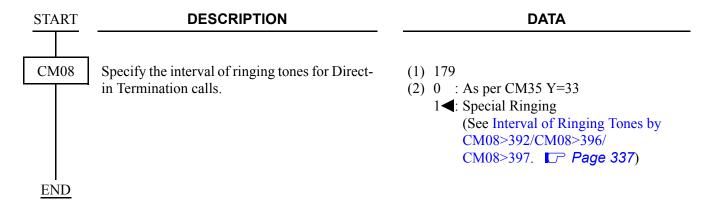
**◄**: Initial Data

COMMAND		SETTING DATA		
CM08>392 INITIAL		0	1	
CM08>396 INITIAL		1-	0	
CM08>397 (INITIAL)		0	0	
Internal	SLT	1sON-4sOFF	0.3sON-0.2sOFF-0.3sON-4.2sOFF	
Ringing	D <sup>term</sup>	1sON-4sOFF	0.25sON-0.25sOFF-0.25sON- 4.25sOFF	
External	SLT	0.3sON-0.2sOFF-0.3sON-4.2sOFF	1sON-4sOFF	
Ringing	D <sup>term</sup>	0.25sON-0.25sOFF-0.25sON- 4.25sOFF	1sON-4sOFF	
Special Ringing	SLT	0.2sON-0.2sOFF-0.2sON-0.2sOFF- 0.2sON-4sOFF	0.2sON-0.2sOFF-0.2sON-0.2sOFF- 0.2sON-4sOFF	
	D <sup>term</sup>	0.25sON-0.125sOFF-0.25sON- 0.125sOFF-0.25sON-2sOFF	0.25sON-0.125sOFF-0.25sON- 0.125sOFF-0.25sON-2sOFF	

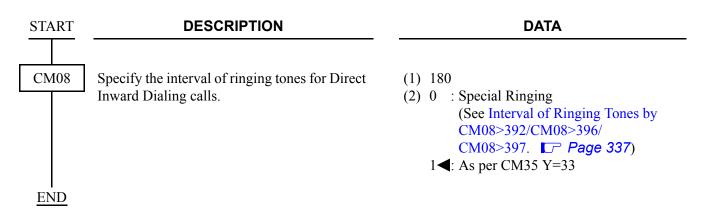
(2) For C.O./Tie line calls (except for Direct-in Termination/Direct Inward Dialing/DISA/CCIS calls)



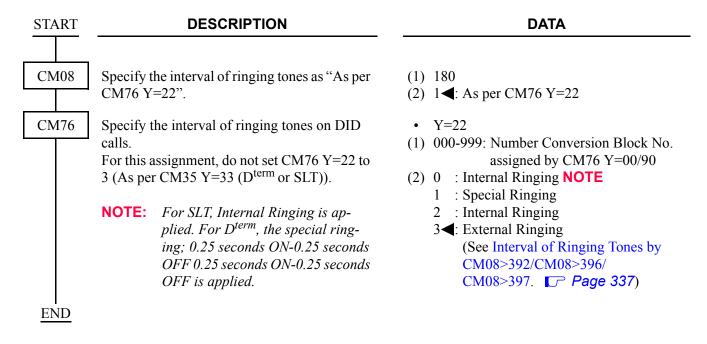
(3) For Direct-in Termination calls



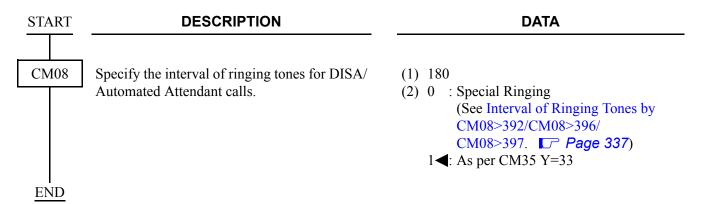
- (4) For Direct Inward Dialing calls
  - To distinguish by the trunk route



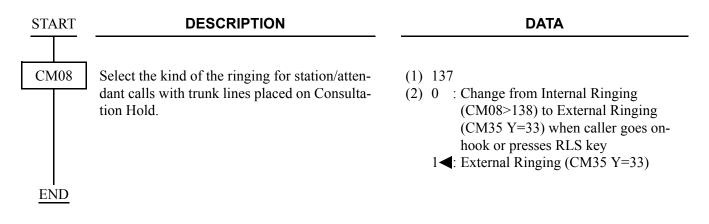
• To distinguish by the terminating DID number



(5) For DISA/Automated Attendant calls

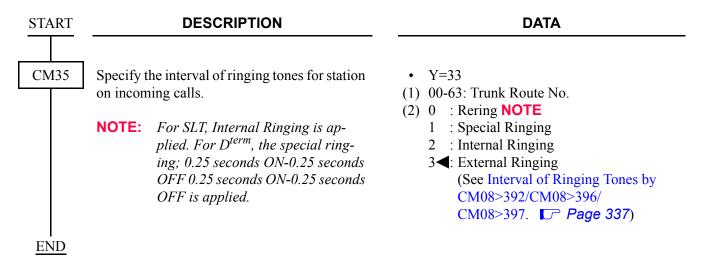


(6) For C.O. calls transferred to another station from a station/Attendant Console



## (7) For ISDN Indial calls

• To distinguish by the trunk route



• To distinguish by the terminating ISDN Indial number

START		DESCRIPTION		DATA
CM08	Specify the interval of ringing tones as "As per CM76 Y=22".		(1)	180
			(2)	1 <b>◄</b> : As per CM76 Y=22
CM76	Indial ca For this a 3 (As pe	the interval of ringing tones on ISDN lls. assignment, do not set CM76 Y=22 to r CM35 Y=33 (D <sup>term</sup> or SLT)).  For SLT, Internal Ringing is applied. For D <sup>term</sup> , the special ringing; 0.25 seconds ON-0.25 seconds OFF 0.25 seconds ON-0.25 seconds OFF is applied.		assigned by CM76 Y=00/90
END				

To provide the distinctive ringing patterns to  $D^{term}s$  in behind PBX, in order to distinguish between an internal call from the main PBX and an external incoming call:

START	DESCRIPTION	DATA				
CM08	Specify the interval of ringing tones for station-to-station calls.	<ul> <li>(1) 138</li> <li>(2) 0 : External Ringing</li> <li>1 ■: Internal Ringing</li> <li>(See Interval of Ringing Tones by CM08&gt;392/CM08&gt;396/CM08&gt;397.</li> <li>CM08&gt;397.</li> <li>Page 337)</li> </ul>				
	Specify the interval of ringing tones until detecting a ringing frequency from the main PBX (Centrex). Ringing is sent from D <sup>term</sup> until detection of the ringing frequency.	<ul> <li>(1) 380</li> <li>(2) 0 : As per CM08&gt;381</li> <li>1</li></ul>				
		<ul> <li>(1) 381</li> <li>(2) 0 : No Ringer</li> <li>1</li></ul>				
	Specify the lamp indication of D <sup>term</sup> until detecting the kind of incoming call from the main PBX (Centrex).  The lamp is lit until detection of the ringing frequency.	<ul> <li>(1) 382</li> <li>(2) 0 : Red Steady Light</li> <li>1 ≤ : 120 IPM Flash (As per CM35 Y=32)</li> </ul>				
	Specify the ringing distinction by detecting the ringing signal from the main PBX (Centrex).	<ul> <li>(1) 366</li> <li>(2) 0 : Longer Ringing than CM41</li></ul>				
	NOTE 1: When the ringer is for an internal call, interval of ringing signal: CM08>138 $D^{term}$ lamp color: Change to red $D^{term}$ tone ringer: CM35 Y=34, 164, CM65 Y=40					
A	NOTE 2: When the ringer is for an external call, interval of ringing signal: CM35 Y=33 $D^{term}$ lamp color: CM35 Y=32 $D^{term}$ tone ringer: CM35 Y=34, 164, CM65 Y=40					



### **DESCRIPTION**

### **DATA**

CM35

Specify the lamp color for an incoming external call.

**NOTE 1:** The lamp color for incoming internal calls is red (120 IPM flashing).

NOTE 2: For indicating the termination of a transferred external incoming call, the flashing lamp color depends on CM08>137.

Specify the interval of ringing tones to a D<sup>term</sup> on an incoming call.

**NOTE:** For SLT, Internal Ringing is applied. For  $D^{term}$ , the special ringing; 0.25 seconds ON-0.25 seconds OFF 0.25 seconds ON-0.25 seconds OFF is applied.

Specify the Ringer Tone Pattern of the D<sup>term</sup> to each trunk route.

• Y=32

(1) 00-63: Trunk Route No.(2) 0 : Green (120 IPM)

1**<**: Red (120 IPM)

- Y=33
- (1) 00-63: Trunk Route No.
- (2) 0 : Rering **NOTE**1 : Special Ringing
  2 : Internal Ringing

3◀: External Ringing (See Interval of Ringing Tones by CM08>392/CM08>396/

CM08>397. Page 337)

- Y=34, 164
- (1) 00-63: Trunk Route No.
- (2) See the table below.

[Series 3200 R6.1 software required]

Y=34	Y=164: 0	Y=164: 1 <b>⋖</b>
0	Ringer Tone Pattern 3	Ringer Tone Pattern 0
1	Ringer Tone Pattern 6	Ringer Tone Pattern 1
2	Ringer Tone Pattern 5	Ringer Tone Pattern 2
3◀	Ringer Tone Pattern 4	Ringer Tone Pattern 7





# **DATA**

CM65

Specify the ring frequency of the D<sup>term</sup>.

[Series 3200 R6.1 software required]

- Y=40
- (1) 00-63: Tenant No. assigned by CM30 Y=01/CM12 Y=04
- (2) See the table below.

Dinger Tene		Y=40: 1 <b>⋖</b>			
Ringer Tone Pattern No.	Y=40: 0	Electra Terminal/ D <sup>term</sup> Series III	Elite Terminal/D <sup>term</sup> Series E/ D <sup>term</sup> Series i		
0	Door Phone Ringer Tone	1024 + 1285 [Hz]/ 16 [Hz] Modulating Signal	1100 + 1400 [Hz]/ 16 [Hz] Modulating Signal		
1	Ringer Tone 1	480 + 606 [Hz]/ 8 [Hz] Modulating Signal	520 + 660 [Hz]/ 8 [Hz] Modulating Signal		
2	Ringer Tone 2	600 + 700 [Hz]/ 16 [Hz] Modulating Signal	660 + 760 [Hz]/ 16 [Hz] Modulating Signal		
3	Ringer Tone 3	1024 [Hz] Envelop	1100 [Hz] Envelop		
4	Ringer Tone 4	500 [Hz]	540 [Hz]		
5	Ringer Tone 5	1024 [Hz]	1100 [Hz]		
6	Not used	1285 + 1024 [Hz]	1400 + 1100 [Hz]		
7	Not used	480 + 606 [Hz]/ 16 [Hz] Modulating Signal	520 + 660 [Hz]/ 16 [Hz] Modulating Signal		

**NOTE:** This data is effective only for  $D^{term}$  Series i.

When using Electra Terminal/D<sup>term</sup> Series III/Elite Terminal/D<sup>term</sup> Series E, using D<sup>term</sup> Series i with Series 3100 software or before, or when accommodating D<sup>term</sup> Series i in TDM based Remote PIM, the second data is fixed to 1.



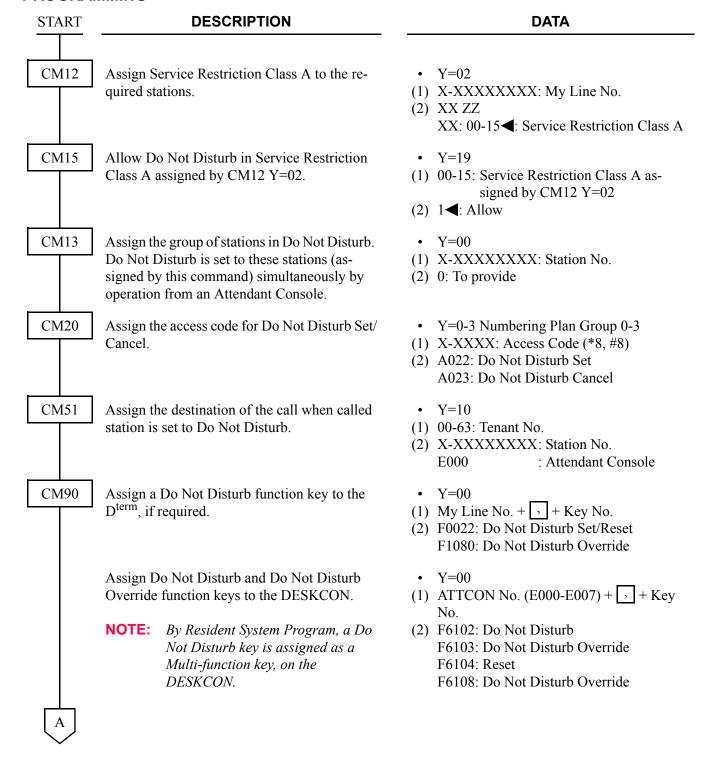
$\begin{bmatrix} C \end{bmatrix}$	DESCRIPTION	DATA
CM35	Provide the distinctive ringing patterns to a D <sup>term</sup> in behind PBX.	<ul> <li>Y=87</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : To provide 1 ✓: Not provided</li> </ul>
CM30	Specify the terminating system for incoming C.O. calls.	<ul> <li>Y=02 in Day Mode</li> <li>Y=03 in Night Mode</li> <li>Y=40 in Mode A</li> <li>Y=41 in Mode B</li> <li>000-255: Trunk No.</li> <li>02: Trunk-Direct Appearances</li> <li>03: Trunk-Direct Appearances + TAS</li> </ul>
	Provide the Trunk-Direct Appearances on D <sup>term</sup> .	<ul> <li>Y=18</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 0 : To provide 1 ✓: Not provided</li> </ul>
CM41	Assign the ringing detect timer for incoming trunk calls.	<ul> <li>Y=2</li> <li>(1) 00</li> <li>(2) 06-10: 192-320 ms.</li></ul>
	Assign the main PBX (Centrex) ringing distinction timer. <b>NOTE 1</b> on next page	<ul> <li>Y=2</li> <li>(1) 40</li> <li>(2) 01-15: 128-1920 ms.</li></ul>
	Assign the immediate ringing guard timer from the main PBX (Centrex).  NOTE 1, NOTE 2 on next page	<ul> <li>Y=2</li> <li>(1) 41</li> <li>(2) 00-90: 0-12672 ms.</li></ul>
D		

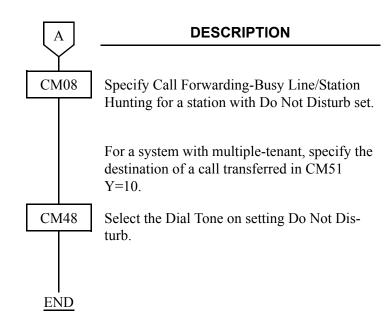
**DESCRIPTION DATA** D **NOTE 1:•** When immediate ringing is sent from the main PBX (Centrex), CM41 Y=2>40 plus CM41 CM41 Y=2>41 must be assigned as longer time than the time assigned by CM41 Y=2>00.• When immediate ringing is not sent from the main PBX (Centrex), CM41 Y=2>40 must be assigned as longer time than the time assigned by CM41 Y=2>00. Check the main PBX (Centrex) ringer cycle and set as shown below: Main PBX Ringing A seconds (Station termination) B seconds Main PBX Ringing (C.O. termination) B seconds<"CM41 Y=2>40 setting time">A seconds When the gap between the main PBX station terminating ringer and C.O. line terminating ringer is under 200 ms., distinction may be incomplete. **NOTE 2:** When Immediate Ringing is not provided on main PBX, be sure to set CM41 Y=2>41 as 00. CM90 Assign the Trunk Line Appearance key to a Y = 0.0Dterm (1) My Line No. + , + Key No. (2) D000-D255: Trunk No. Provide the tone ringer on call termination. Y = 0.1(1) My Line No. + , + Key No. (2) 0 : Disabled NOTE: When CM30 Y=02/03/40/41 2nd 1**<**: Enabled data is 03, this setting is required.

**END** 

# DO NOT DISTURB

### **PROGRAMMING**

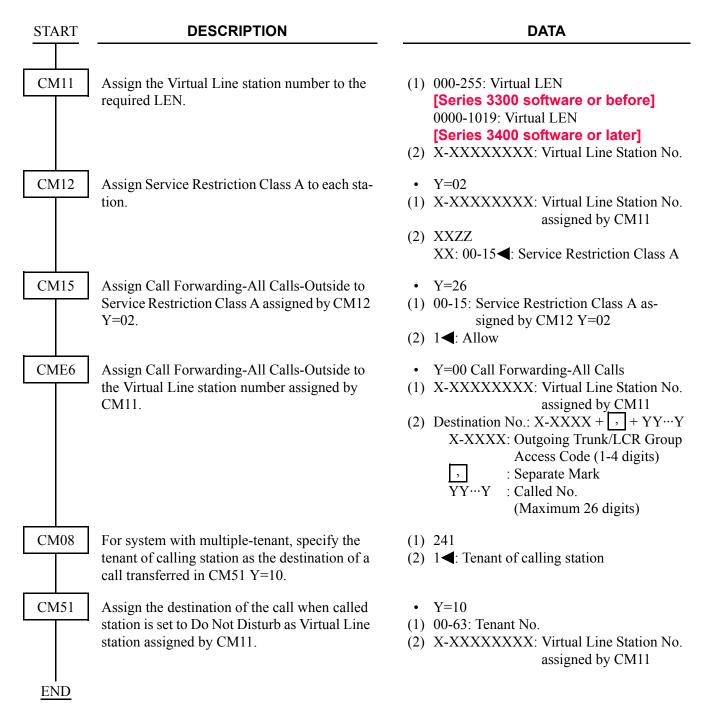




**DATA** 

- (1) 240
- (2) 0 : Available 1◀: Not available
- (1) 241
- (2) 0 : Tenant of called station 1◀: Tenant of calling station
- Y=2
- (1) 14: Dial Tone on setting Do Not Disturb
- (2) 0 : Special Dial Tone (Stutter Dial Tone)
  - 1**⋖**: Dial Tone

To set an outside party as a destination of transferred call:



To provide Do Not Disturb group set/cancel at specified timing in advance:

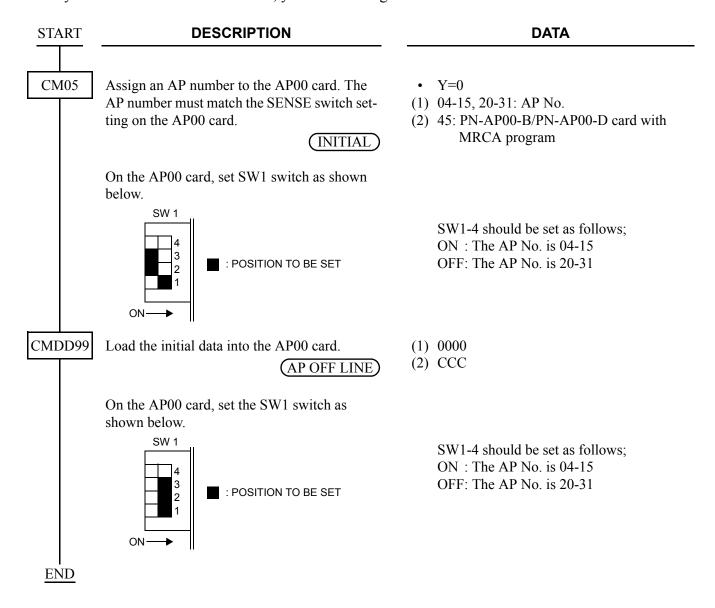
# [Series 3300 software required]

AP Initialization (PN-AP00-B/PN-AP00-D with MRCA program)

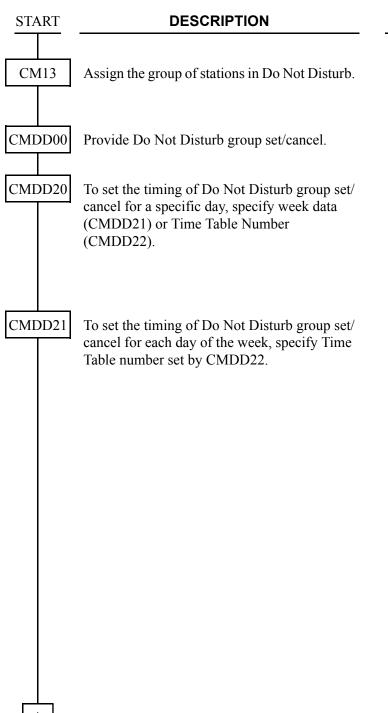
This section explains the data assignment to make the AP active.

You can skip the data assignment explained on this section, if one of the following AP related features has been activated; Station Message Detail Recording (SMDR) with NEAX 2400 IMS Format, Message Center Interface (MCI) or Do Not Disturb group set/cancel at specified timing in advance. You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.

When you install the AP00 at first time, you should assign the data shown below.



To provide timer for Do Not Disturb group set/cancel:



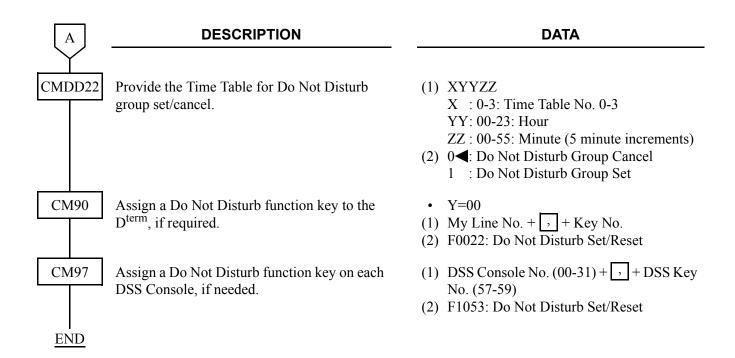
# **DATA**

- Y=00
- (1) X-XXXXXXXX: Station No.
- (2) 0: To provide
- (1) 20: Do Not Disturb Group Set/Cancel
- (2) 1: To provide
- (1) XXYY

XX: 01-12: Month YY: 01-31: Date

- (2) 0**<**: As for week data of CMDD21
  - 1 : As for Time Table No. 1 of CMDD222 : As for Time Table No. 2 of CMDD22
  - 3 : As for Time Table No. 3 of CMDD22
- (1) 1: Sunday
  - 2: Monday
  - 3: Tuesday
  - 4: Wednesday
  - 5: Thursday
  - 6: Friday
  - 7: Saturday
- (2) 0-3: Time Table No. 0-3 of CMDD22 Initial data of CMDD21>1-7 is as follows.

1ST DATA	MEANING	2ND DATA	MEANING
1	Sunday	1	Time Table No. 1
2	Monday	0	Time Table No. 0
3	Tuesday	0	Time Table No. 0
4	Wednesday	0	Time Table No. 0
5	Thursday	0	Time Table No. 0
6	Friday	0	Time Table No. 0
7	Saturday	1	Time Table No. 1

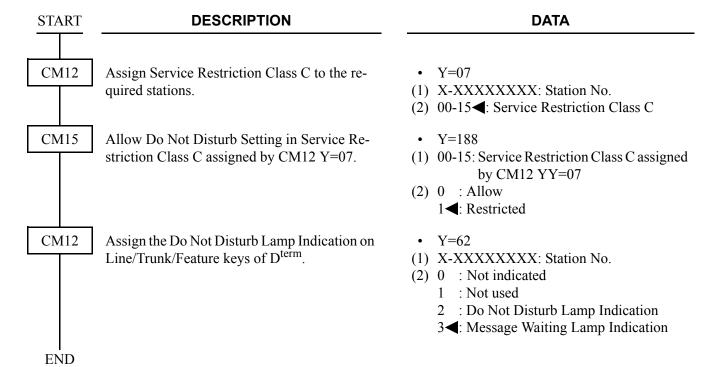


To set the Do Not Disturb feature to the stations of SLT/sub line of  $D^{term}$ /Virtual line stations that are accommodated to the  $D^{term}$  multiline as the sub line, and to display the Do Not Disturb Set/Reset status of the stations on the lamp of  $D^{term}$ :

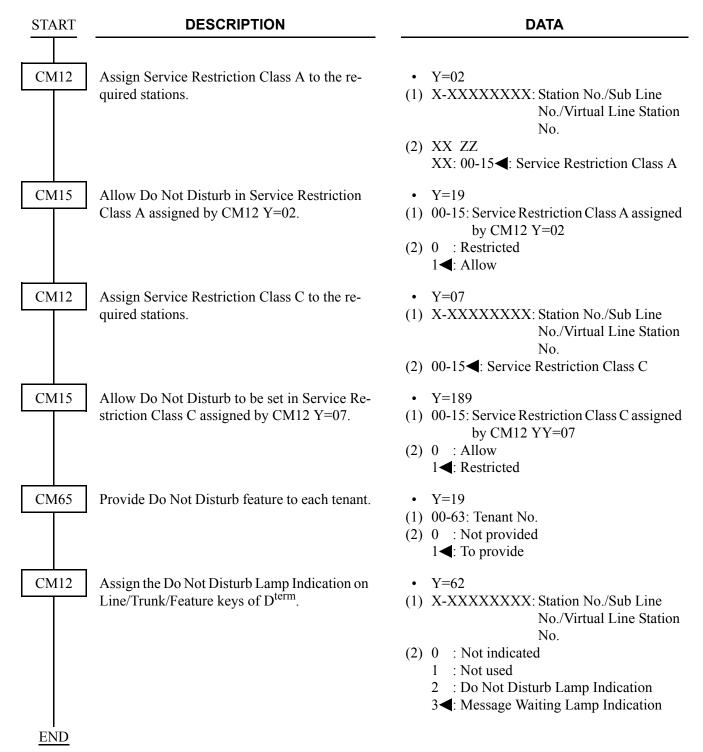
# [Series 3500 software required]

**NOTE:** To make available this feature, do the programming both of the setting side ( $D^{term}$ ) and the set side (stations of SLT, sub line of  $D^{term}$  or virtual line stations).

• For Setting Side (D<sup>term</sup>)



• For Set Side (stations of SLT, sub line of D<sup>term</sup> or virtual line stations)

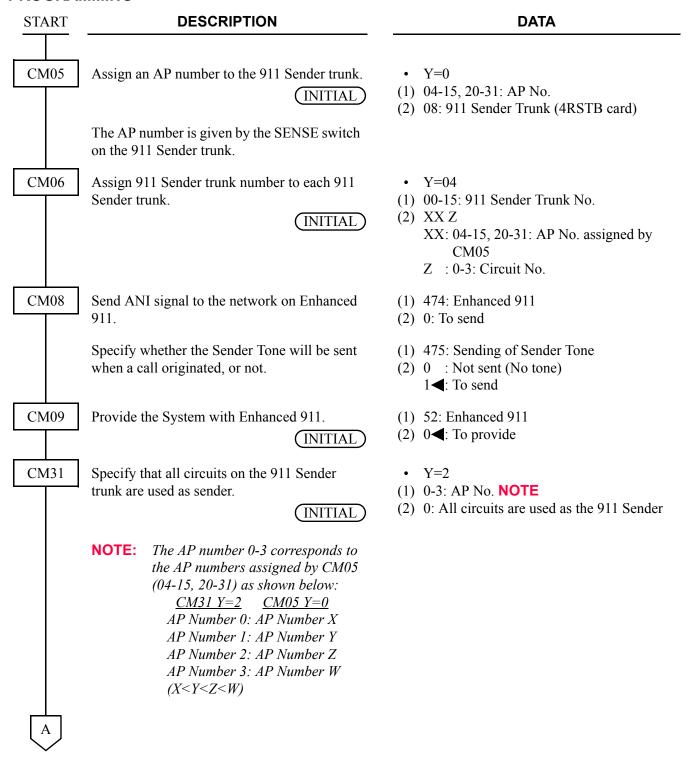


### HARDWARE REQUIRED

To provide Do Not Disturb group set/cancel at specified timing in advance: AP00-B/AP00-D card with MRCA program

# **ENHANCED 911**

### **PROGRAMMING**



A
CMAA
CM35

### **DATA**

Specify the sending method of calling number to the 911 Sender trunk.

Set the trunk route that no answer signal arrives from the distant office for outgoing con-

nection.

Specify incoming connection signaling.

NOTE: DTI card must be set to Wink Start.
ODT card and COT card must be set
to Ring Down. Enhanced 911 will
not function if ODT card is set to

Wink Start.

Provide SMDR/Centralized Billing for outgoing call.

Specify sender start condition.

**NOTE:** Digital and Analog Tie Lines are set to Wink Start. Analog Loop Start

Lines are set to Timing Start.

Specify the trunk seizure pattern.

Provide the trunk route with Enhanced 911.

Specify the sending method of calling number to the network.

Assign the Area Code Development Pattern number for maximum digit analysis.

• Y=07 Sending method of calling number

(1) 04-15, 20-31: AP No. assigned by CM05

(2) 3: Enhanced 911

• Y=04 Answer Signal from distant office

(1) 00-63: Trunk Route No.

(2) 3: No Answer signal (Polarity Reversal is ignored)

• Y=09 Incoming connection signaling

(1) 00-63: Trunk Route No.

(2) 03 : Wink Start

15**⋖**: Ring Down

• Y=14 SMDR for outgoing call

(1) 00-63: Trunk Route No.

(2)  $1 \blacktriangleleft$ : To provide

• Y=20 Sender start condition

(1) 00-63: Trunk Route No.

(2) 00 : Wink Start

15**⋖**: Timing Start

• Y=36 Trunk seizure pattern

(1) 00-63: Trunk Route No.

(2) 0: After dialing maximum number of digits

Y=38 Enhanced 911

(1) 00-63: Trunk Route No.

(2) 0: Available

• Y=129 Sending method of calling number

(1) 00-63: Trunk Route No.

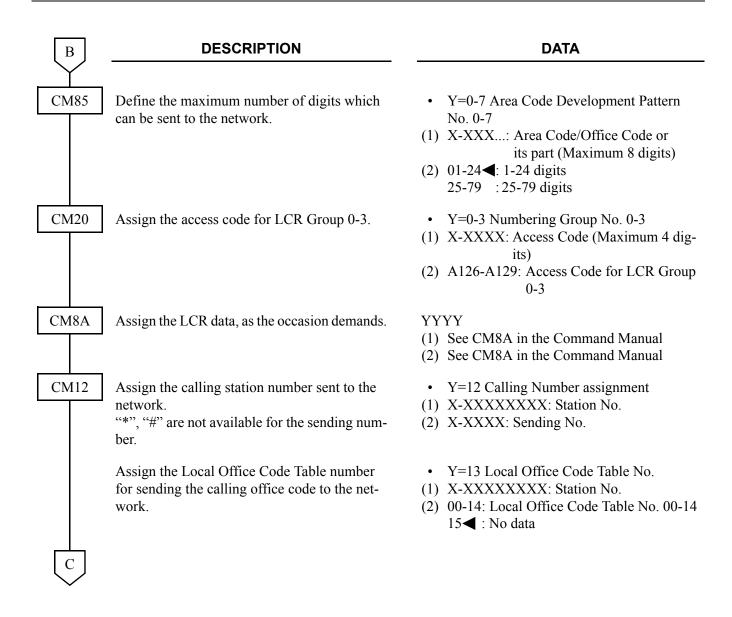
(2) 3: Enhanced 911

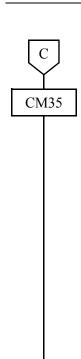
• Y=76 Area Code Development Pattern

(1) 00-63: Trunk Route No.

(2) 00-07: Area Code Development Pattern No. 0-7

В





# DATA

Assign the Local Office Code Table number used for tandem connection.

NOTE: This command is not used for the NEAX 2000 IPS containing the MF Sender for Enhanced 911. This command is used for an incoming CCIS voice route or incoming Tie Line route. The selected table number must be different from the tables selected by CM12 Y=13. The table se-

route. The selected table number must be different from the tables selected by CM12 Y=13. The table selected for the incoming CCIS/Tie route must contain the main telephone number (area code, office code, and last four digits) of the distant PBX.

 Y=03 Local Office Code Table No. on tandem connection

(1) 00-63: Trunk Route No.

(2) 00-14: Local Office Code Table No. 00-14

15**<** ∶ Not sent

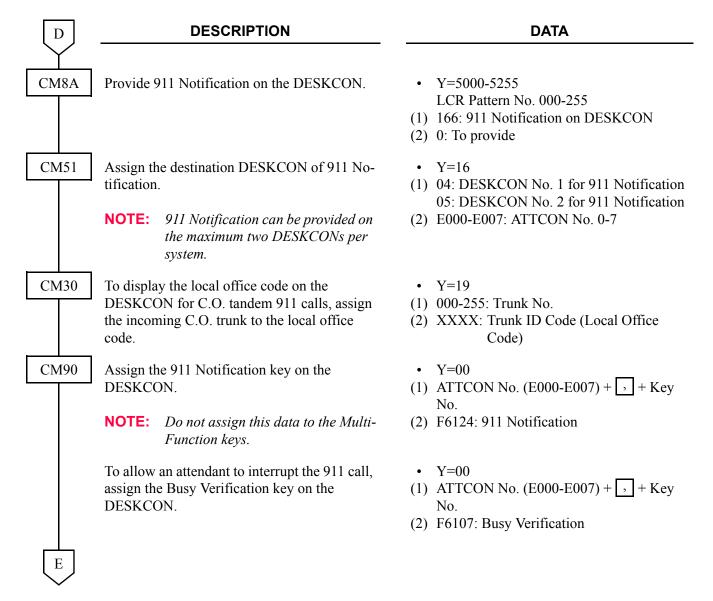
CM50

Assign the Local Office Code sent to the network.

"\*", "#" is not available for the sending number.

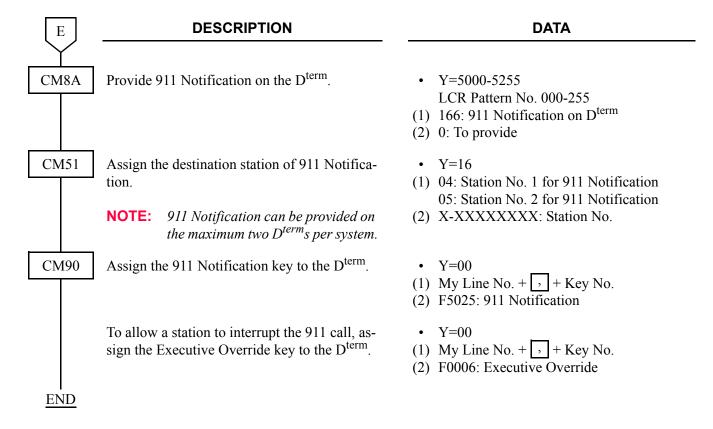
- Y=05 Local Office Code assignment
- (1) 00-14: Local Office Code Table No. 00-14
- (2) X-XXX...: Sending No. (Maximum 12 digits)

# To provide 911 Notification on DESKCON:



To provide 911 Notification on D<sup>term</sup>:

# [Series 3300 software required]

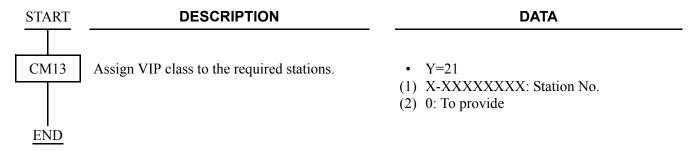


# HARDWARE REQUIRED

MFR card (4RSTB)

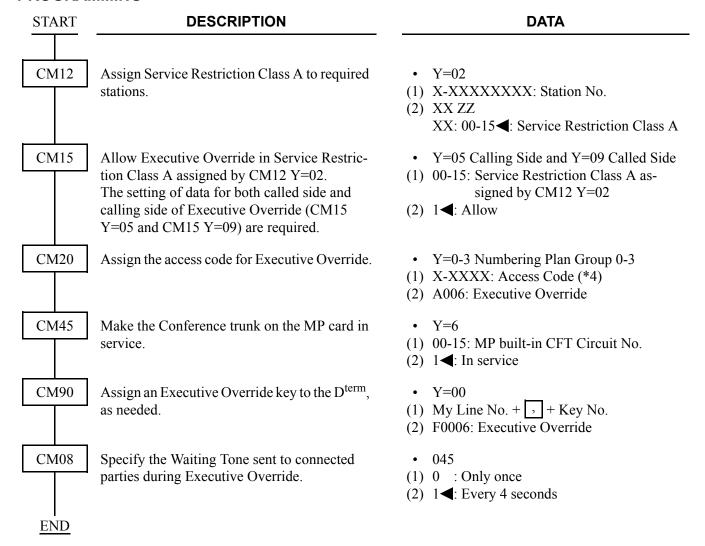
# **EXECUTIVE CALLING**

# **PROGRAMMING**



# **EXECUTIVE OVERRIDE**

### **PROGRAMMING**

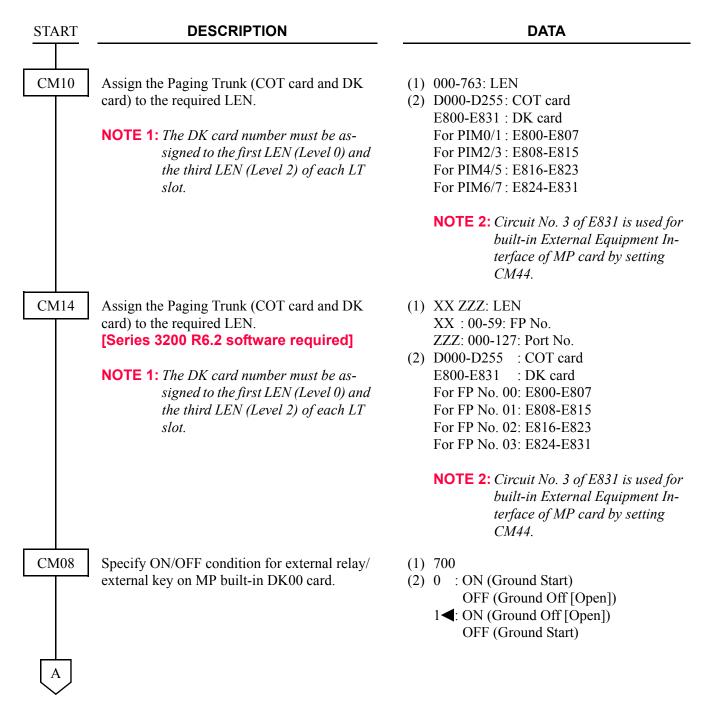


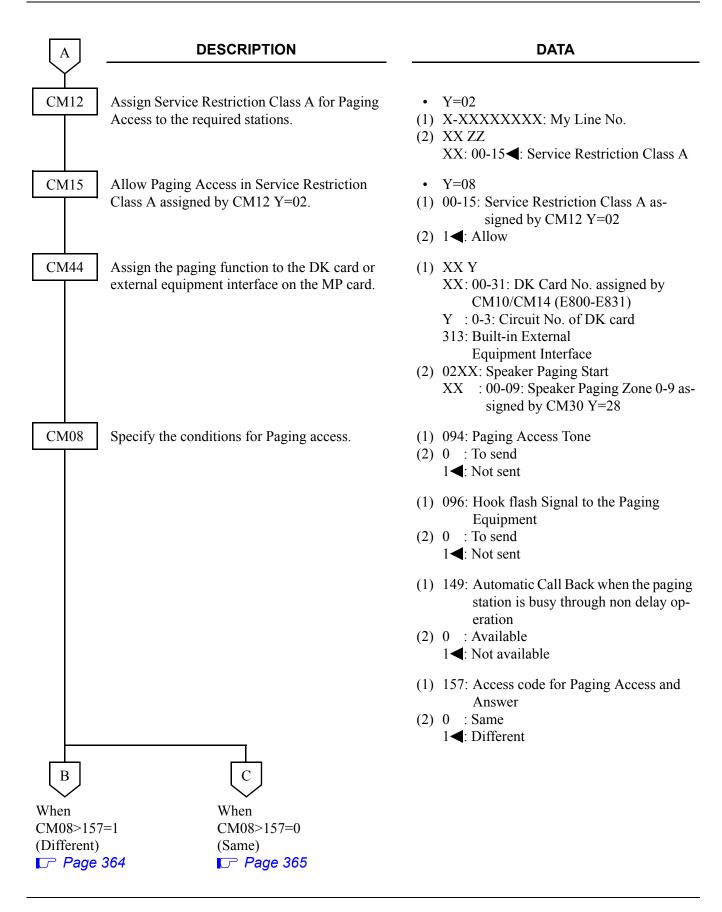
# **EXTERNAL PAGING WITH MEET-ME**

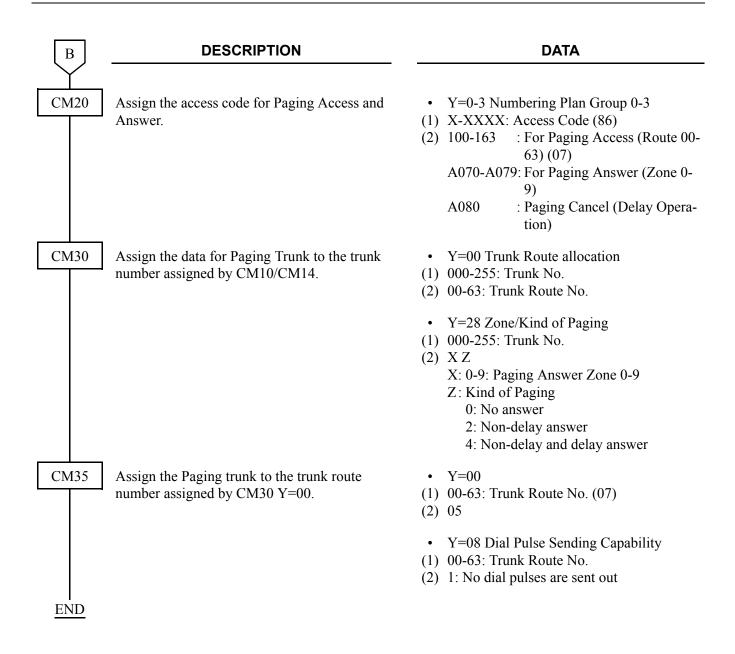
# **PROGRAMMING**

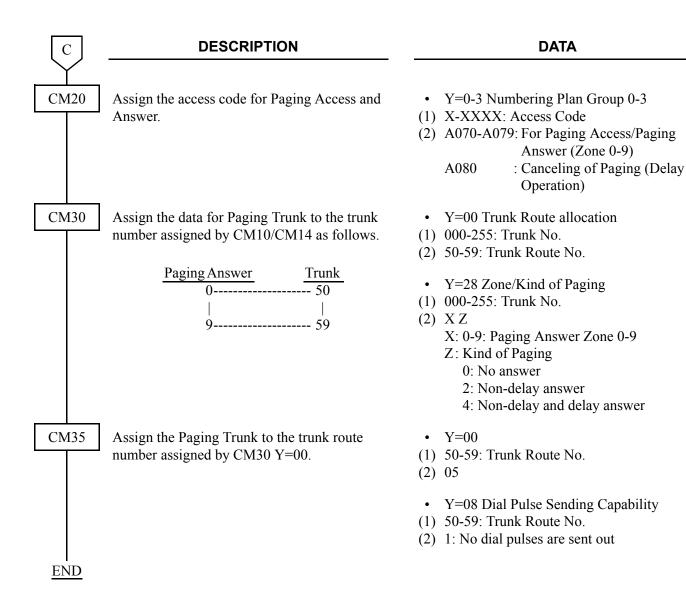
(1) To provide External Paging from stations

When one Paging trunk is connected with one AMP relay circuit.





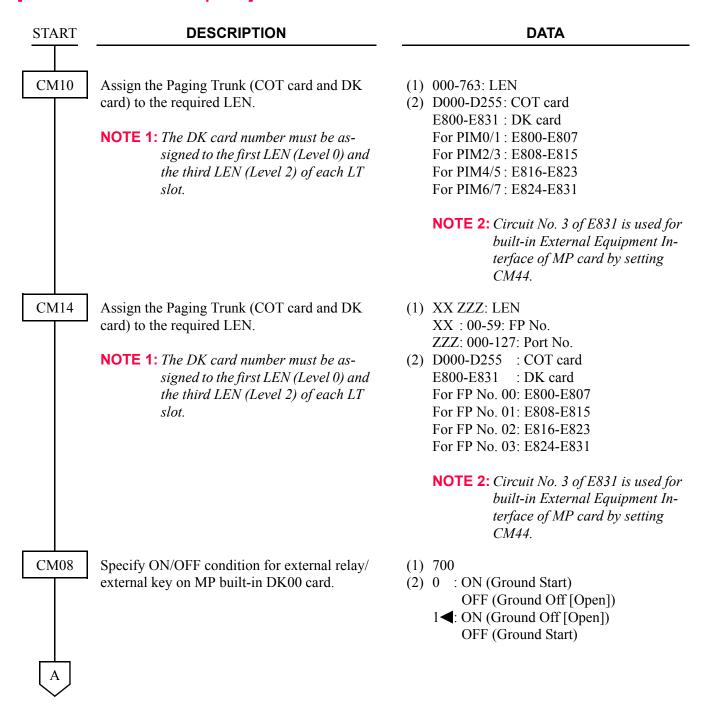




When one Paging trunk is connected with multiple AMP relay circuits or one Paging trunk is connected with two AMP relay circuits simultaneously.

# [Other than EU]

# [Series 3900 software required]



# CM12 Assign Service Restriction Class A for Paging Access to the required stations. CM15 Allow Paging Access in Service Restriction Class A assigned by CM12 Y=02. CM08 Specify the method of the starting AMP relay circuit. NOTE 1: Set the second data to 0 when one

NOTE 1: Set the second data to 0 when one Paging trunk is connected with multiple AMP relay circuits or with two

AMP relay circuits simultaneously.

**NOTE 2:** Set the second data to 1 when one Paging trunk is connected with one AMP relay circuit.

Specify the method of starting AMP relay circuit connection.

**NOTE 1:** This command is effective only when the second data of CM08>734 is set to 0.

NOTE 2: Set the second data to 0 when one Paging trunk is connected with two AMP relay circuits simultaneously.

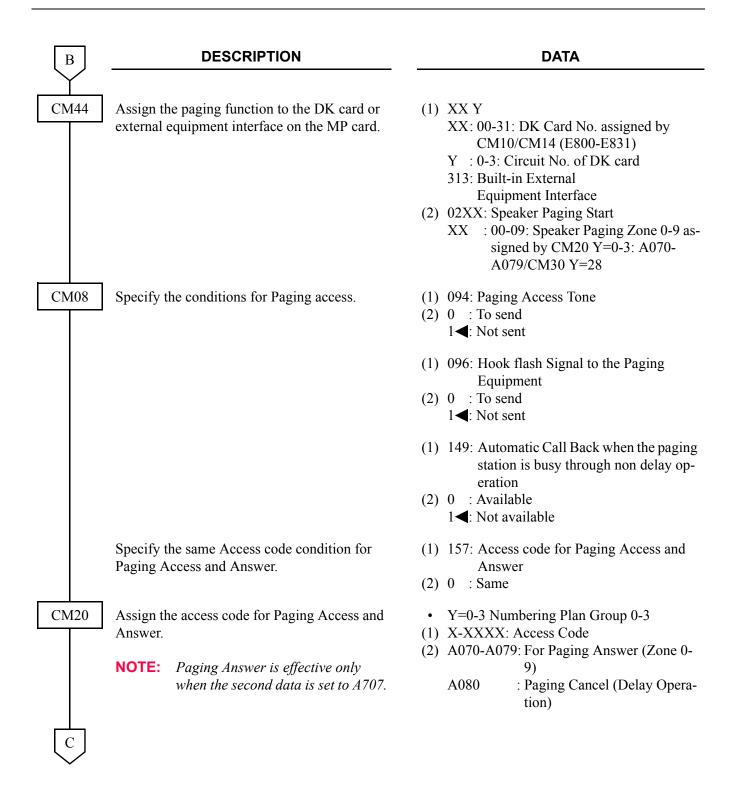
NOTE 3: Set the second data to 1 when one Paging trunk is connected with multiple AMP relay circuits or with one AMP relay circuit.

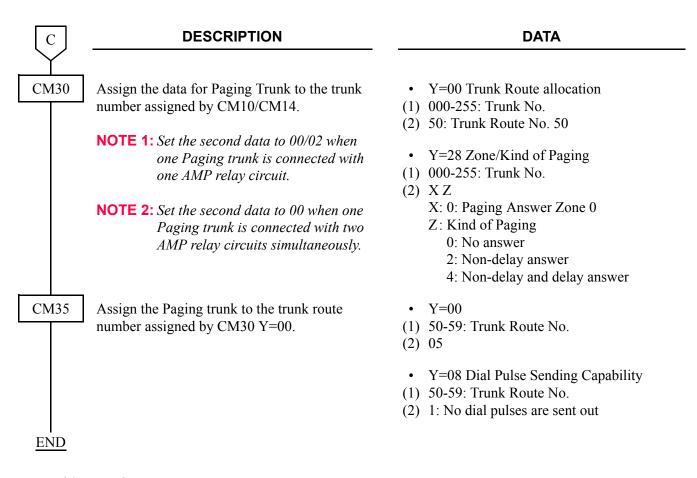
### **DATA**

- Y=02
- (1) X-XXXXXXXX: My Line No.
- (2) XX ZZ XX: 00-15◀: Service Restriction Class A
- Y=08
- (1) 00-15: Service Restriction Class A assigned by CM12 Y=02
- (2) 1**<**: Allow
- (1) 734
- (2) 0 : To specify by Access Code 1◀: To specify per trunk

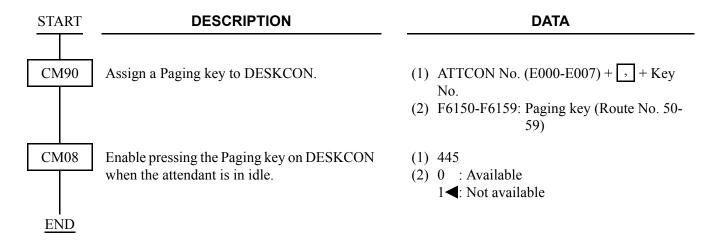
- (1) 735
- (2) 0 : To connect with two AMP relay circuits
  - 1◀: To connect with one AMP relay circuit

В



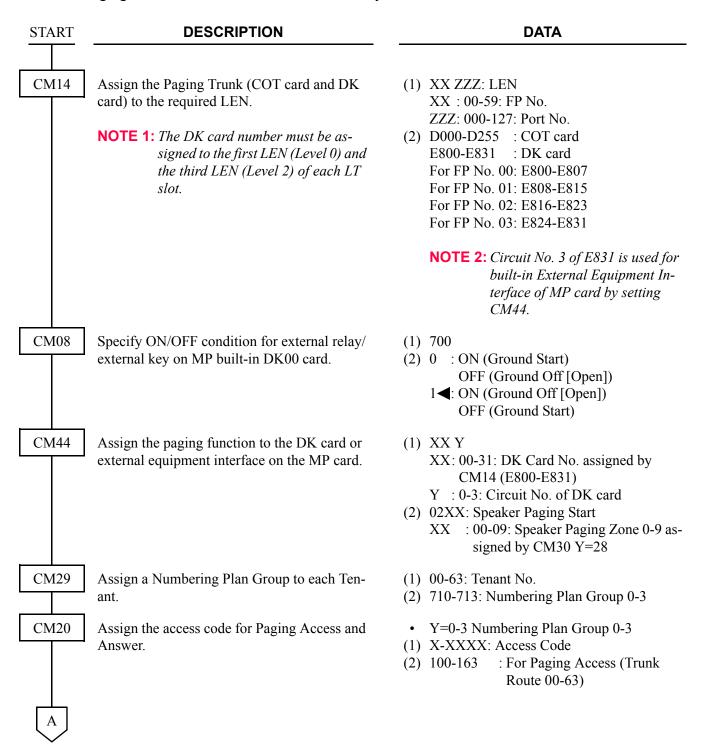


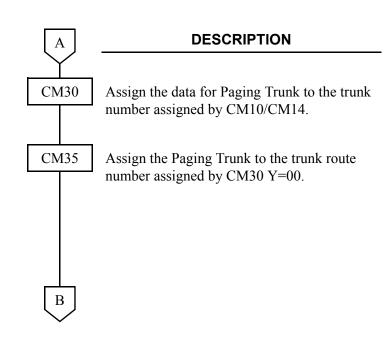
To provide a Paging Key to DESKCON:



# (2) To provide External Paging from Tie Line [Series 3700 R12.2 software required]

When one Paging trunk is connected with one AMP relay circuit.





# **DATA**

- Y=00 Trunk Route allocation
- (1) 000-255: Trunk No.
- (2) 00-63: Trunk Route No.
- Y=00
- (1) 00-63: Trunk Route No.
- (2) 05
- Y=08 Dial Pulse Sending Capability
- (1) 00-63: Trunk Route No.
- (2) 1: No dial pulses are sent out



# **DATA**

CM35

Assign the PAD control pattern to the paging trunk route and Tie Line.

• Y=19

(1) 00-63: Trunk Route No.

(2) 0-3 : Programmable PAD (See CM42) 4-7◀: Fixed PAD (See the following Table)

CONNECTION PATTERNS	PAD DATA OF B TRUNK				
(A-B)	DATA=4 (T/R)	DATA=5 (T/R)	DATA=6 (T/R)	DATA=7 (T/R)	
Station-ODT/IDT (4W E&M)	8/16 (0/16)	4/4 (-4/4)	8/0 (0/8)	8/12 (0/12)	
Tone-ODT/IDT (4W E&M)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	
COT/DID/ODT (2W E&M)/IPT- ODT/IDT (4W E&M)	8/0 (0/0)	4/4 (-4/4)	8/0 (0/0)	4/4 (-4/4)	
ODT/IDT (4W E&M)-ODT/IDT (4W E&M)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	
DTI/BRT/PRT/CCT/Virtual IPT- ODT /IDT(4W E&M)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	
Station-COT/LDT/ODT (2W E&M)	0/0	0/0	3/3	0/0	
Tone-COT/LDT/ODT (2W E&M)	0/0	0/0	0/0	0/0	
COT/DID/ODT (2W E&M)/IPT- COT/LDT/ODT (2W E&M)	0/0	0/0	0/0	0/0	
ODT/IDT (4W E&M)-COT/LDT/ ODT (2W E&M)	0/0	0/0	0/0	0/0	
DTI/BRT/PRT/CCT/Virtual IPT- COT/LDT/ODT (2W E&M)	0/0	0/0	0/0	0/0	
Station-DTI	12/12	0/8	4/12	0/12	
Tone-DTI	0/0	0/0	0/0	0/0	
COT/DID/IPT-DTI	0/0	0/0	0/0	0/0	
ODT/IDT-DTI	0/0	0/0	0/0	0/0	
DTI/BRT/PRT/CCT/Virtual IPT-DTI	0/0	0/0	0/0	0/0	

T/R: Transmit/Receive

+ : Gain - : Loss





# **DATA**

CM42

When using the programmable PAD (CM35 Y=19, 2nd data=0-3), assign the PAD data.

- (1) 50-65 (See the following Table)(2) 00-15 (See the following Table)

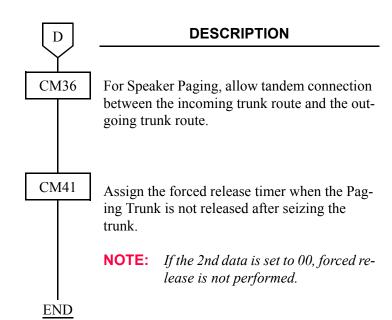
PATTERN		CONNECTING				
1ST DATA (1)	CM35 Y=19 2ND DATA=0	CM35 Y=19 2ND DATA=1	CM35 Y=19 2ND DATA=2	CM35 Y=19 2ND DATA=3	PATTERNS (A TRUNK- B TRUNK)	
	50	54	58	62	Station -COT/LDT/ODT/IDT	
	51	55	59	63	Tone -COT/LDT/ODT/IDT	
	52	56	60	64	COT/LDT/IPT -COT/LDT/ODT/IDT	
50 ≀ 65	53	57	61	65	DTI/BRT/PRT/CCT/ Virtual IPT -COT/LDT/ODT/IDT	
	50	54	58	62	Station/Tone-DTI	
	51	55	59	63	COT/LDT/IPT-DTI	
	52	56	60	64	ODT/IDT-DTI	
	53	57	61	65	DTI/BRT/PRT/CCT/ Virtual IPT-DTI	

PATTERNS 2ND DATA (2)		PAD DATA OF B TRUNK (T/R) [dB]					
		COT/LDT	ODT (4W E&M)	ODT (2W E&M)	IDT	DTI	
	00	0/0	8/0	0/0	0/0	0/0	
	01	0/0	8/16	0/0	0/16	0/16	
	02	0/0	4/4	0/0	-4/4	4/4	
	03	3/3	8/8	3/3	0/8	0/8	
	04	0/0	8/12	0/0	0/12	0/12	
00	05	6/6	0/0	6/6	-8/0	8/8	
≀ 15	06	0/-5	12/12	0/0	4/12	4/12	
13	07	-3/-3	12/4	0/0	4/4	12/12	
	08	Not Used	Not Used	Not Used	Not Used	2/12	
	09	Not Used	Not Used	Not Used	Not Used	4/12	
	10 ≀ 15	Not Used					

T/R: Transmit/Receive

- : Loss





# **DATA**

- Y=0
- (1) XX ZZ

XX: 00-63: Incoming Trunk Route ZZ: 00-63: Outgoing Trunk Route

- (2) 0: Allow
- Y=0
- (1) 120
- (2) 00-99: 0-396 seconds (4 second increments)

If no data is set, the default setting is 180 seconds.

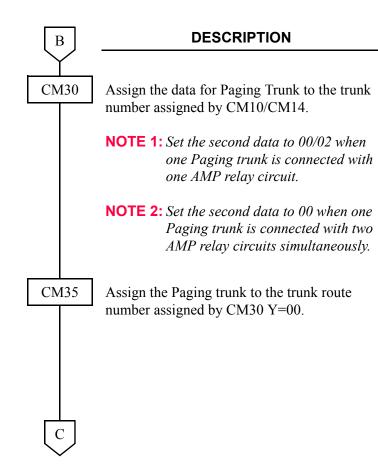
When one Paging trunk is connected with multiple AMP relay circuits or one Paging trunk is connected with two AMP relay circuits simultaneously.

# [Other than EU]

# [Series 3900 software required]

**DESCRIPTION DATA START** CM14 Assign the Paging Trunk (COT card and DK (1) XX ZZZ: LEN card) to the required LEN. XX: 00-59: FP No. ZZZ: 000-127: Port No. **NOTE 1:** The DK card number must be as-(2) D000-D255 : COT card signed to the first LEN (Level 0) and E800-E831 : DK card the third LEN (Level 2) of each LT For FP No. 00: E800-E807 For FP No. 01: E808-E815 slot. For FP No. 02: E816-E823 For FP No. 03: E824-E831 **NOTE 2:** Circuit No. 3 of E831 is used for built-in External Equipment Interface of MP card by setting CM44. CM08 Specify ON/OFF condition for external relay/ (1) 700 external key on MP built-in DK00 card. (2) 0 : ON (Ground Start) OFF (Ground Off [Open]) 1◀: ON (Ground Off [Open]) OFF (Ground Start) Specify the method of the starting AMP relay (1) 734 circuit. (2) 0 : To specify by Access Code 1**◄**: To specify per trunk **NOTE 1:** *Set the second data to 0 when one* Paging trunk is connected with multiple AMP relay circuits or with two AMP relay circuits simultaneously. **NOTE 2:** *Set the second data to 1 when one* Paging trunk is connected with one AMP relay circuit.

A	DESCRIPTION	DATA
CM08	Specify the method of starting AMP relay circuit connection.  NOTE 1: This command is effective only when the second data of CM08>734 is set to 0.	<ul> <li>(1) 735</li> <li>(2) 0 : To connect with two AMP relay circuits</li> <li>1  </li> <li>: To connect with one AMP relay circuit</li> </ul>
	NOTE 2: Set the second data to 0 when one Paging trunk is connected with two AMP relay circuits simultaneously.	
	NOTE 3: Set the second data to 1 when one Paging trunk is connected with multiple AMP relay circuits or with one AMP relay circuit.	
CM44	Assign the paging function to the DK card or external equipment interface on the MP card.	<ul> <li>(1) XX Y</li> <li>XX: 00-31: DK Card No. assigned by CM10/CM14 (E800-E831)</li> <li>Y: 0-3: Circuit No. of DK card</li> <li>313: Built-in External Equipment Interface</li> <li>(2) 02XX: Speaker Paging Start</li> <li>XX: 00-09: Speaker Paging Zone 0-9 assigned by CM20 Y=0-3: A070-A079/CM30 Y=28</li> </ul>
CM08	Specify the same Access code condition for Paging Access and Answer.	<ul><li>(1) 157: Access code for Paging Access and Answer</li><li>(2) 0: Same</li></ul>
CM29	Assign a Numbering Plan Group to each Tenant.	<ul><li>(1) 00-63: Tenant No.</li><li>(2) 710-713: Numbering Plan Group 0-3</li></ul>
CM20	Assign the access code for Paging Access and Answer.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A070-A079: For Paging Answer (Zone 0-9)</li> </ul>
В		



### **DATA**

- Y=00 Trunk Route allocation
- (1) 000-255: Trunk No.
- (2) 50: Trunk Route No. 50
- Y=28 Zone/Kind of Paging
- (1) 000-255: Trunk No.
- (2) XZ
  - X: 0: Paging Answer Zone 0
  - Z: Kind of Paging
    - 0: No answer
    - 2: Non-delay answer
- Y=00
- (1) 00-63: Trunk Route No.
- (2) 05
- Y=08 Dial Pulse Sending Capability
- (1) 00-63: Trunk Route No.
- (2) 1: No dial pulses are sent out



# **DATA**

CM35

Assign the PAD control pattern to the paging trunk route and Tie Line.

• Y=19

(1) 00-63: Trunk Route No.

(2) 0-3 : Programmable PAD (See CM42) 4-7◀: Fixed PAD (See the following Table)

CONNECTION PATTERNS	PAD DATA OF B TRUNK				
(A-B)	DATA=4 (T/R)	DATA=5 (T/R)	DATA=6 (T/R)	DATA=7 (T/R)	
Station-ODT/IDT (4W E&M)	8/16 (0/16)	4/4 (-4/4)	8/0 (0/8)	8/12 (0/12)	
Tone-ODT/IDT (4W E&M)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	
COT/DID/ODT (2W E&M)/IPT- ODT/IDT (4W E&M)	8/0 (0/0)	4/4 (-4/4)	8/0 (0/0)	4/4 (-4/4)	
ODT/IDT (4W E&M)-ODT/IDT (4W E&M)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	
DTI/BRT/PRT/CCT/Virtual IPT- ODT /IDT (4W E&M)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	8/0 (0/0)	
Station-COT/LDT/ODT (2W E&M)	0/0	0/0	3/3	0/0	
Tone-COT/LDT/ODT (2W E&M)	0/0	0/0	0/0	0/0	
COT/DID/ODT (2W E&M)/IPT- COT/LDT/ODT (2W E&M)	0/0	0/0	0/0	0/0	
ODT/IDT (4W E&M)-COT/LDT/ ODT (2W E&M)	0/0	0/0	0/0	0/0	
DTI/BRT/PRT/CCT/Virtual IPT- COT/LDT/ODT (2W E&M)	0/0	0/0	0/0	0/0	
Station-DTI	12/12	0/8	4/12	0/12	
Tone-DTI	0/0	0/0	0/0	0/0	
COT/DID/IPT-DTI	0/0	0/0	0/0	0/0	
ODT/IDT-DTI	0/0	0/0	0/0	0/0	
DTI/BRT/PRT/CCT/Virtual IPT-DTI	0/0	0/0	0/0	0/0	

T/R: Transmit/Receive

+ : Gain





### **DATA**

CM42

When using the programmable PAD (CM35 Y=19, 2nd data=0-3), assign the PAD data.

- (1) 50-65 (See the following Table)(2) 00-15 (See the following Table)

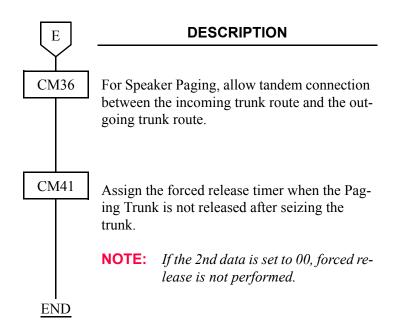
PATTERN	PAD DATA PATTERNS			CONNECTING	
1ST DATA (1)	CM35 Y=19 2ND DATA=0	CM35 Y=19 2ND DATA=1	CM35 Y=19 2ND DATA=2	CM35 Y=19 2ND DATA=3	PATTERNS (A TRUNK- B TRUNK)
	50	54	58	62	Station -COT/LDT/ODT/IDT
	51	55	59	63	Tone -COT/LDT/ODT/IDT
	52	56	60	64	COT/LDT/IPT -COT/LDT/ODT/IDT
50	53	57	61	65	DTI/BRT/PRT/CCT/ Virtual IPT -COT/LDT/ODT/IDT
	50	54	58	62	Station/Tone-DTI
	51	55	59	63	COT/LDT/IPT-DTI
	52	56	60	64	ODT/IDT-DTI
	53	57	61	65	DTI/BRT/PRT/CCT/ Virtual IPT-DTI

	PATTERNS		PAD DATA	A OF B TRUNK	(T/R) [dB]	
2ND DATA (2)		COT/LDT	ODT (4W E&M)	ODT (2W E&M)	IDT	DTI
	00	0/0	8/0	0/0	0/0	0/0
	01	0/0	8/16	0/0	0/16	0/16
	02	0/0	4/4	0/0	-4/4	4/4
00 ₹ 15	03	3/3	8/8	3/3	0/8	0/8
	04	0/0	8/12	0/0	0/12	0/12
	05	6/6	0/0	6/6	-8/0	8/8
	06	0/-5	12/12	0/0	4/12	4/12
13	07	-3/-3	12/4	0/0	4/4	12/12
	08	Not Used	Not Used	Not Used	Not Used	2/12
	09	Not Used	Not Used	Not Used	Not Used	4/12
	10 ≀ 15	Not Used				

T/R: Transmit/Receive

- : Loss





### **DATA**

- Y=0
- (1) XX ZZ

XX: 00-63: Incoming Trunk Route ZZ: 00-63: Outgoing Trunk Route

- (2) 0: Allow
- Y=0
- (1) 120
- (2) 00-99: 0-396 seconds (4 second increments)

If no data is set, the default setting is 180 seconds.

### HARDWARE REQUIRED

Paging Trunk (COT card)
DK card or MP card (built-in DK)
Paging Equipment provided locally

# **FAX ARRIVAL INDICATOR**

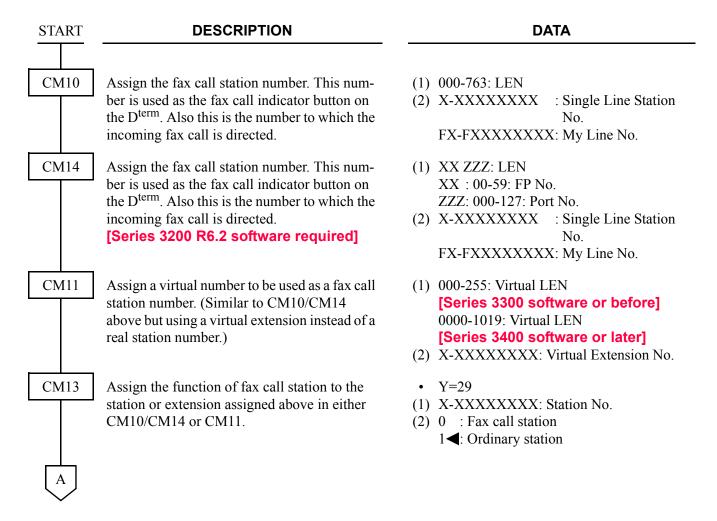
### **PROGRAMMING**

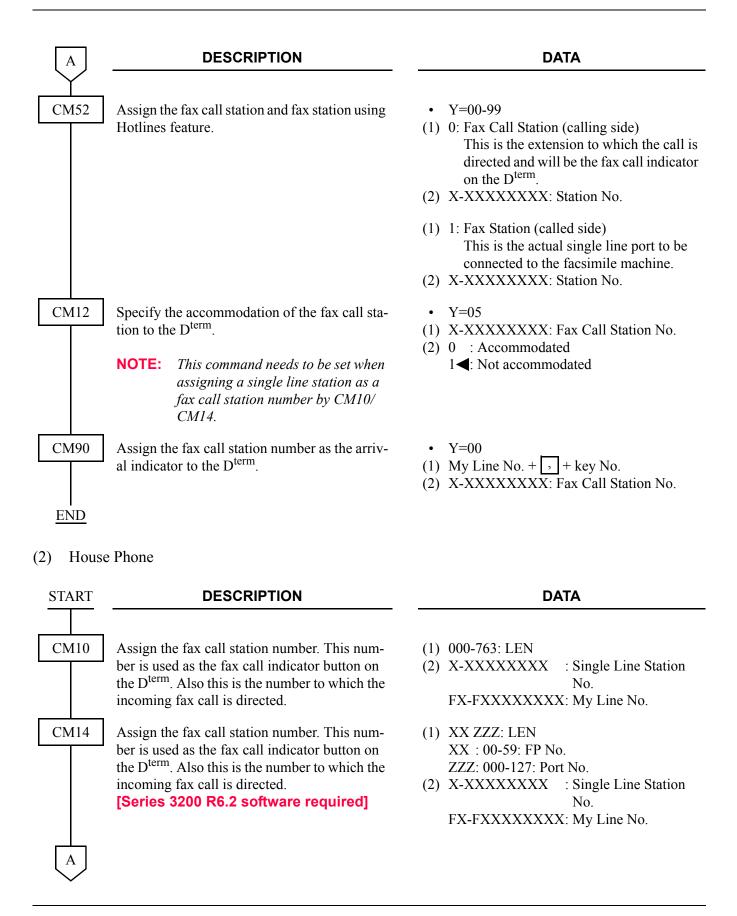
Hotlines or House Phone feature assignment is used to implement this feature.

The number of facsimile station numbers and facsimile call station numbers that can be assigned varies with each of the following cases.

- When Hotlines-Inside/Outside are used, a maximum of 100 facsimile stations can be assigned. In addition, a maximum of 100 facsimile call stations can be assigned.
- When House Phone groups are used, a maximum of four facsimile stations can be assigned. In addition, there is no limit to the number of facsimile call stations that can be assigned to each facsimile station.

### (1) Hotlines





A	DESCRIPTION	DATA
CM11	Assign a virtual number to be used as a fax call station number. (Similar to CM10/CM14 above but using a virtual extension instead of a real station number.)	<ul> <li>(1) 000-255: Virtual LEN [Series 3300 software or before] 0000-1019: Virtual LEN [Series 3400 software or later]</li> <li>(2) X-XXXXXXXXX: Virtual Extension No.</li> </ul>
CM13	Assign the function of fax call station to the station or extension assigned above in either CM10/CM14 or CM11.	<ul> <li>Y=29</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) 0 : Fax call station</li> <li>1◄: Ordinary station</li> </ul>
CM12	Assign the fax call station numbers to a House Phone group.	<ul> <li>Y=03</li> <li>(1) X-XXXXXXXXX: Fax Call Station No.</li> <li>(2) 00-03: Fax Call Group No.</li> </ul>
	Specify the accommodation of the fax call station to the D <sup>term</sup> .  NOTE: This command needs to be set when assigning a single line station as a	<ul> <li>Y=05</li> <li>(1) X-XXXXXXXXX: Fax Call Station No.</li> <li>(2) 0 : Accommodated 1 ≤: Not accommodated</li> </ul>
	fax call station number by CM10/ CM14.	
CM51	Assign fax station using House Phone feature.	<ul> <li>Y=14</li> <li>(1) 00-03: Fax Station (This is the actual single line port to be connected to the facsimile machine.)</li> </ul>
CM90 END	Assign the fax call station number as the arrival indicator to the D <sup>term</sup> .	<ul> <li>(2) X-XXXXXXXXX: Station No.</li> <li>Y=00</li> <li>(1) My Line No. + + key No.</li> <li>(2) X-XXXXXXXXX: Fax Call Station No.</li> </ul>

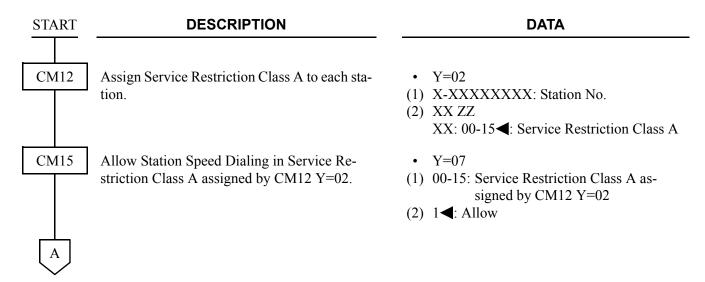
# FLEXIBLE LINE KEY ASSIGNMENT

### **PROGRAMMING**

For the applicable feature programming on Flexible Line Key, refer to each feature:

- DO NOT DISTURB **□ Page 346**
- HOTLINE-INSIDE/OUTSIDE Page 407
- INTERCOM **□** Page 414
- PROPRIETARY MULTILINE TERMINAL Page 566
- SAVE AND REPEAT Page 600
- STATION SPEED DIALING Page 665
- TRUNK-DIRECT APPEARANCES Page 709

To indicate the busy/idle status of the extensions accommodated to the Flexible Line Keys on the Series E Terminal without the One Touch Speed Dial Keys, assign the following data. Station Speed Dialing memory and One Touch Key memory assignment are used to implement this feature.





### **DATA**

CM73

Allocate the memory area for Station Speed Dialing to each station.

The same memory area must be assigned on CM73 and CM94.

The memory area for storing one called number of Station Speed Dialing is called a "Memory Parcel". An assembly of 10 Memory Parcels is called a "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks are called a "1000-Slot Memory Block".

(1) X-XXXXXXXX: My Line No.

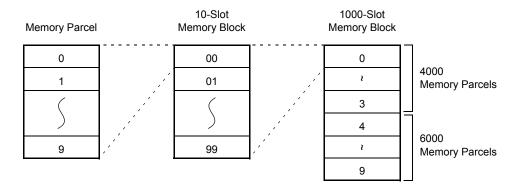
(2) W XX Y ZZ

W: 0-3: 1000- Slot Memory Block No. **NOTE** 

XX: 00-99: Memory Start Block No. (10-Slot Memory Block)

Y: Facility for programming the dialed number from the station 0/1: Effective/Ineffective

ZZ: 01-10: Number of 10-Slot Memory Blocks



**NOTE:** 1000-Slot Memory Block number 4-9 (6000 Memory Parcels) cannot be used to provide BLF function on D<sup>term</sup> line key.

**Example:** If the stored number intended is 10 for Station Number 300, 20 for Station Number 301, and 30 for Station Number 302, the memory areas assignment is as follows.

	1000-Slot Memory	Memory Start Block No.	Number of 10-Slot
Station No.	Block No.	(10-Slot Memory Block)	Memory Block
(1st Data)	(2nd Data: W)	(2nd Data: XX)	(2nd Data: ZZ)
300	0	00	01
301	0	01	02
302	0	03	03
303	0	06	01



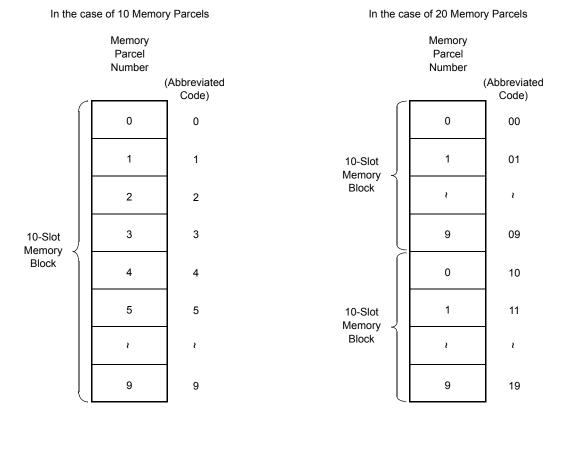


### DATA

CM73

The abbreviated codes for this feature are automatically determined by assigning this command, on a station basis.

If the number of Memory Parcels per station does not exceed 10, then Abbreviated Code=0-9. If the number of Memory Parcels per station exceeds 11, then Abbreviated Code=00-99. The following figure shows the relation between Abbreviated Codes and Memory Parcels.





### DATA

CM94

Allocate the memory area for Station Speed Dialing to each station.

The same memory area must be assigned on CM73 and CM94, to provide BLF function on D<sup>term</sup> line key.

(1) X-XXXXXXXX: My Line No.

(2) X YY 0 ZZ

X: 0-3: 1000-Slot Memory Block No. **NOTE** 

YY: 00-99: 10-Slot Memory Start Block

ZZ: 01-10: Number of 10-Slot Memory Blocks

**NOTE:** 1000-Slot Memory Block number 4-9 (6000 Memory Parcels) cannot be used to provide BLF function on D<sup>term</sup> line key.

CM90

Assign Station Speed Dialing keys on each D<sup>term</sup>.

For the key number and the last two digits of the second data, assign the same number as follows.

1st Data	2nd Data
XXXXXXXX, 01	F1101
XXXXXXXX, 02	F1102
XXXXXXXX, 03	F1103
:	:
XXXXXXXXX, 16	F1116

• Y=00

(1) My Line No. + , + Key No.

(2) F11XX

XX: 00-99: Station Speed Dialing 00-99

NOTE 1: The initial setting of key layout is for 16 Line/Trunk/Feature Keys (Key No. 01-16).

When using key No. 17-24, data setting of CM12 Y=24, 2nd data=0 is required.

**NOTE 2:** A station user should set the required extension number to the line key on  $D^{term}$ .

CM08

**END** 

Specify the type of busy indication on the BLF of the D<sup>term</sup> line key as station base or extension base.

(1) 269

(2) 0 : Station base

1**◄**: Extension base

# **FLEXIBLE NUMBERING PLAN**

START	DESCRIPTION	DATA
CM29	Assign a Numbering Plan Group to each Tenant.	<ul><li>(1) 00-63: Tenant No.</li><li>(2) 710-713: Numbering Plan Group 0-3</li></ul>
CM20	Specify the number of digits for station numbers.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X: 1st digit of Station No.</li> <li>(2) 801: 1 digit</li> </ul>
	Example: For setting Station No. "2XXX" (1) 2 (2) 804	802: 2 digits 803: 3 digits 804: 4 digits 805: 5 digits
	NOTE: When the following features are used with PN-AP00-B with AP00 program, do not assign 5 or more digit station number.  • SMDR/PMS • Front Desk Terminal (D <sup>term</sup> )	806: 6 digits 807: 7 digits 808: 8 digits
CM10	Assign station numbers to the required LEN according to the Numbering Plan specified by CM20. For feature and trunk access codes, refer to the programming of individual features.	<ul><li>(1) 000-763: LEN</li><li>(2) X-XXXXXXXXX: Station No.</li></ul>
CM14	Assign station numbers to the required LEN according to the Numbering Plan specified by CM20. For feature and trunk access codes, refer to the programming of individual features. [Series 3200 R6.2 software required]	<ul> <li>(1) XX ZZZ: LEN     XX : 00-59: FP No.     ZZZ: 000-127: Port No.</li> <li>(2) X-XXXXXXXXX: Station No.</li> </ul>
END		

To provide Single-Digit Feature Access Code:

START	DESCRIPTION	DATA
CM08	To activate this feature, set the data for 050, 051, 069 and 148 to "1".	<ul><li>(1) 050: * Button as Switch Hook Flash.</li><li>(2) 1◀: Ineffective</li></ul>
		<ul><li>(1) 051: * Button as Switch Hook Flash.</li><li>(2) 1◀: Ineffective</li></ul>
		<ul><li>(1) 069: Single-Digit Dialing on BT Connection</li><li>(2) 1◀: Step Call</li></ul>
		(1) 148: Same Last-Digit Redialing on BT Connection
		(2) 1 <b>◄</b> : Ineffective
	Provide the System with the Single-Digit Feature Access Code on RBT (or Voice Call Connection).	<ul><li>(1) 156</li><li>(2) 0: Available</li></ul>
	Provide the System with the Single-Digit Feature Access Code on BT Connection.	<ul><li>(1) 208</li><li>(2) 0: Available</li></ul>
END		

# FLEXIBLE RINGING ASSIGNMENT

### **PROGRAMMING**

CM08 Specify the method of tone ringer selection.

CM12 Assign Service Restriction Class C for the ring tone for D<sup>term</sup>s on internal calls to required stations.

CM15 Specify the Ringer Tone Pattern of the D<sup>term</sup> for terminating calls from a station.

DATA

- (1) 390
- (2) 1◀: As per CM15 Y=83, 84, 93, CM35 Y=34, 164, CM65 Y=40
- Y=07
- (1) X-XXXXXXXX: Station No.
- (2) 00-15◀: Service Restriction Class C
- Y=83, 84, 93
- (1) 00-15: Service Restriction Class C assigned by CM12 Y=07
- (2) See the table below.

[Series 3200 R6.1 software required]

Y=83	Y=84	Y=93: 0	Y=93: 1 <b>⋖</b>
0	0	Ringer Tone Pattern 3	Ringer Tone Pattern 7
0	1◀	Ringer Tone Pattern 6	Ringer Tone Pattern 1
1◀	0	Ringer Tone Pattern 5	Ringer Tone Pattern 0
1◀	1-	Ringer Tone Pattern 4	Ringer Tone Pattern 2

CM35

Specify the Ringer Tone Pattern of the D<sup>term</sup> to each trunk route.

- Y=34, 164
- (1) 00-63: Trunk Route No.
- (2) See the table below.

[Series 3200 R6.1 software required]

Y=34	Y=164: 0	Y=164: 1 <b>⋖</b>
0	Ringer Tone Pattern 3	Ringer Tone Pattern 0
1	Ringer Tone Pattern 6	Ringer Tone Pattern 1
2	Ringer Tone Pattern 5	Ringer Tone Pattern 2
3◀	Ringer Tone Pattern 4	Ringer Tone Pattern 7





### DATA

CM65

Specify the ring frequency of the D<sup>term</sup>.

[Series 3200 R6.1 software required]

- Y=40
- (1) 00-63: Tenant No. assigned by CM30 Y=01/CM12 Y=04
- (2) See the table below.

Dinner Tene		Y=40: 1◀	
Ringer Tone Pattern No.	Y=40: 0	Electra Terminal/ D <sup>term</sup> Series III	Elite Terminal/D <sup>term</sup> Series E/ D <sup>term</sup> Series i
0	Door Phone Ringer Tone	1024 + 1285 [Hz]/ 16 [Hz] Modulating Signal	1100 + 1400 [Hz]/ 16 [Hz] Modulating Signal
1	Ringer Tone 1	480 + 606 [Hz]/ 8 [Hz] Modulating Signal	520 + 660 [Hz]/ 8 [Hz] Modulating Signal
2	Ringer Tone 2	600 + 700 [Hz]/ 16 [Hz] Modulating Signal	660 + 760 [Hz]/ 16 [Hz] Modulating Signal
3	Ringer Tone 3	1024 [Hz] Envelop	1100 [Hz] Envelop
4	Ringer Tone 4	500 [Hz]	540 [Hz]
5	Ringer Tone 5	1024 [Hz]	1100 [Hz]
6	Not used	1285 + 1024 [Hz]	1400 + 1100 [Hz]
7	Not used	480 + 606 [Hz]/ 16 [Hz] Modulating Signal	520 + 660 [Hz]/ 16 [Hz] Modulating Signal

**NOTE:** This data is effective only for  $D^{term}$  Series i.

When using Electra Terminal/D<sup>term</sup> Series III/Elite Terminal/D<sup>term</sup> Series E, using D<sup>term</sup> Series i with Series 3100 software or before, or when accommodating D<sup>term</sup> Series i in TDM based Remote PIM, the second data is fixed to 1.

CM90

Disable the ringing on each line/extension key of a D<sup>term</sup>, if required.

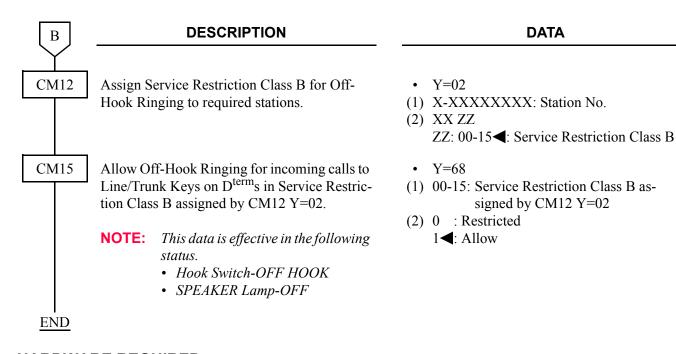
Refer to DELAYED RINGING, when providing Delayed Ringing to each line/extension key. Page 257

• Y=01 Day Mode

(1) My Line No. + + Key No.

(2) 0: Disabled



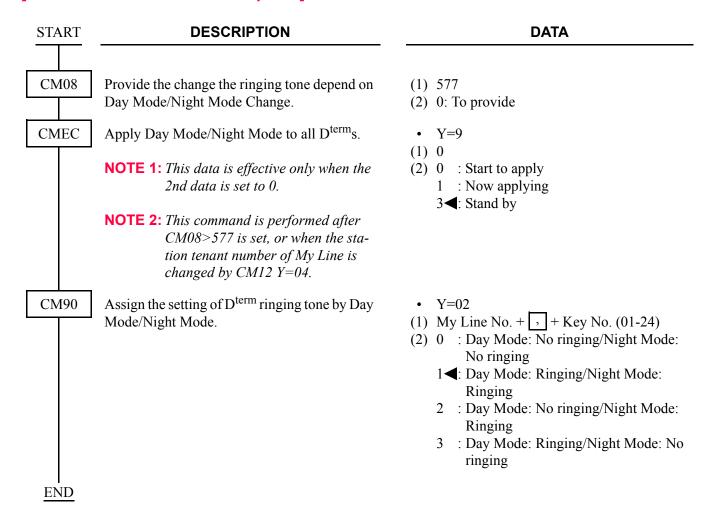


### HARDWARE REQUIRED

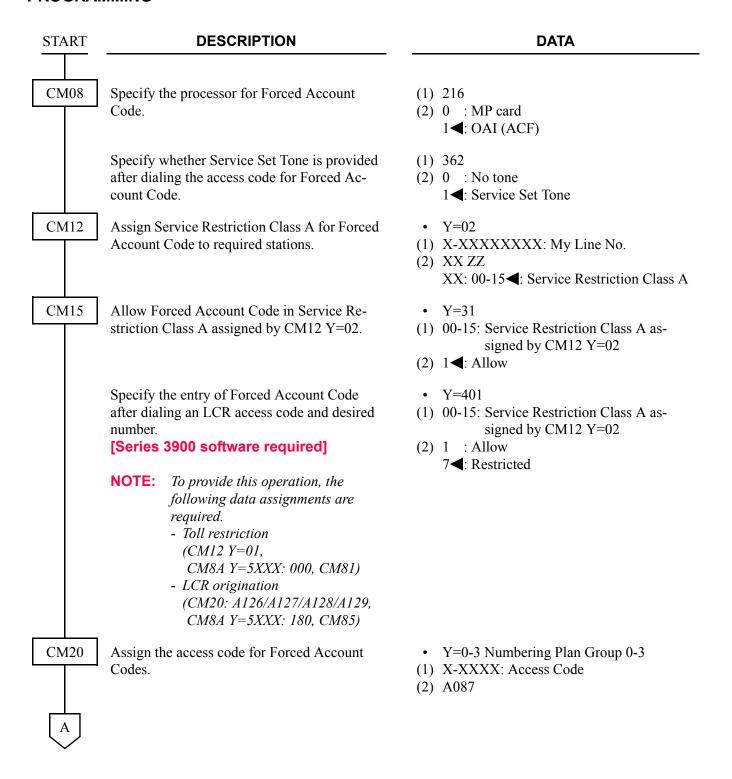
D<sup>term</sup> and DLC card

To set the ringing tone setting by Day Mode/Night Mode, do the following programming.

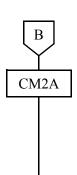
### [Series 3700 R12.2 software required]



# FORCED ACCOUNT CODE



A	DESCRIPTION	DATA
CM42	Specify the maximum number of digits for Forced Account Code with MP.	<ul> <li>(1) 12</li> <li>(2) 01-16 : 1 digit-16 digits</li> <li>NONE : 10 digits</li> </ul>
CM2A	Assign the ID Code Development number for Forced Account Code.	<ul> <li>Y=A0</li> <li>(1) 1</li> <li>(2) 0-9: ID Code Development No. 00-09</li> </ul>
	Assign the ID Code for Forced Account Code.	<ul> <li>Y=00-09 ID Code Development No. 00-09</li> <li>(1) X-XXXX (Maximum 16 digits): ID Code for Forced Account Code</li> <li>(2) 0000-2999: ID Code Pattern No.</li> </ul>
	Assign the purpose of ID Code.	<ul> <li>Y=10</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 0 : Validate the ID Code entered from stations and trunks</li> <li>1 : Validate the ID Code entered from stations</li> <li>3 ◄: Invalidate the ID Code entered from stations and trunks</li> </ul>
B	Assign the desired Trunk Restriction Class for each ID Code Pattern number.	<ul> <li>Y=11</li> <li>(1) 0000-2999: ID Code Pattern No.</li> <li>(2) 1◀: Unrestricted (RCA)</li> <li>2 : Non-Restricted-1 (RCB)</li> <li>3 : Non-Restricted-2 (RCC)</li> <li>4 : Semi-Restricted-1 (RCD)</li> <li>5 : Semi-Restricted-2 (RCE)</li> <li>6 : Restricted-1 (RCF)</li> <li>7 : Restricted-2 (RCG)</li> <li>8 : Fully-Restricted (RCH)</li> </ul>
В		7 : Restricted-2 (RCG)



## DATA

s A res

Assign the desired Service Restriction Class A to each ID Code Pattern number. The features available in each class are assigned by CM15.

Assign the desired Service Restriction Class B to each ID Code Pattern number. The features available in each class are assigned by CM15.

Assign the desired Service Restriction Class C to each ID Code. The features available in each class are assigned by CM15.

- Y=12
- (1) 0000-2999: ID Code Pattern No.
- (2) 00-15**◄**: Service Restriction Class A
- Y=13
- (1) 0000-2999: ID Code Pattern No.
- (2) 00-15**◄**: Service Restriction Class B
- Y=14
- (1) 0000-2999: ID Code Pattern No.
- (2) 00-15◀: Service Restriction Class C

NOTE:

**END** 

Approximately 3000 Forced Account Codes including Authorization Codes and DISA codes can be defined.

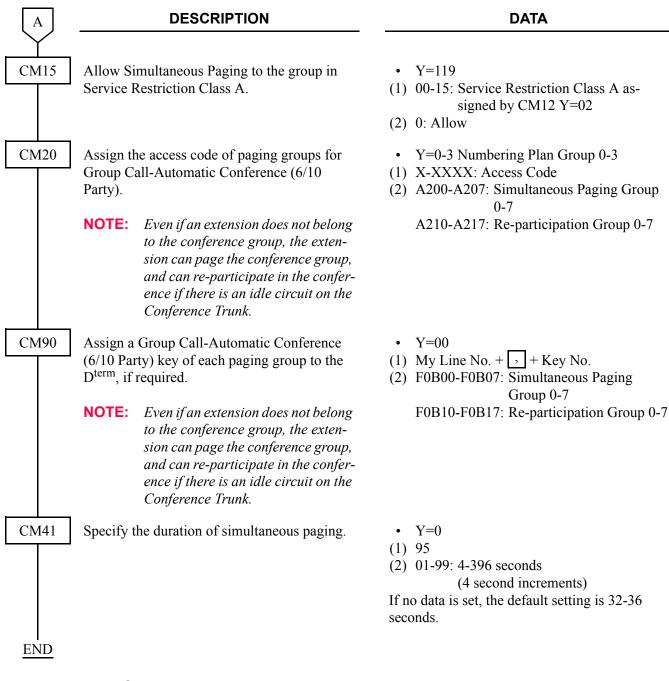
Number of the codes varies with the number of digits assigned to each code. For details, refer to "BUSINESS/HOTEL/DATA FEATURES AND SPECIFICATIONS".

# **GROUP CALL**

# **AUTOMATIC CONFERENCE (6/10 PARTY)**

This feature is not available because the conference card (CFTB) is not available any more.

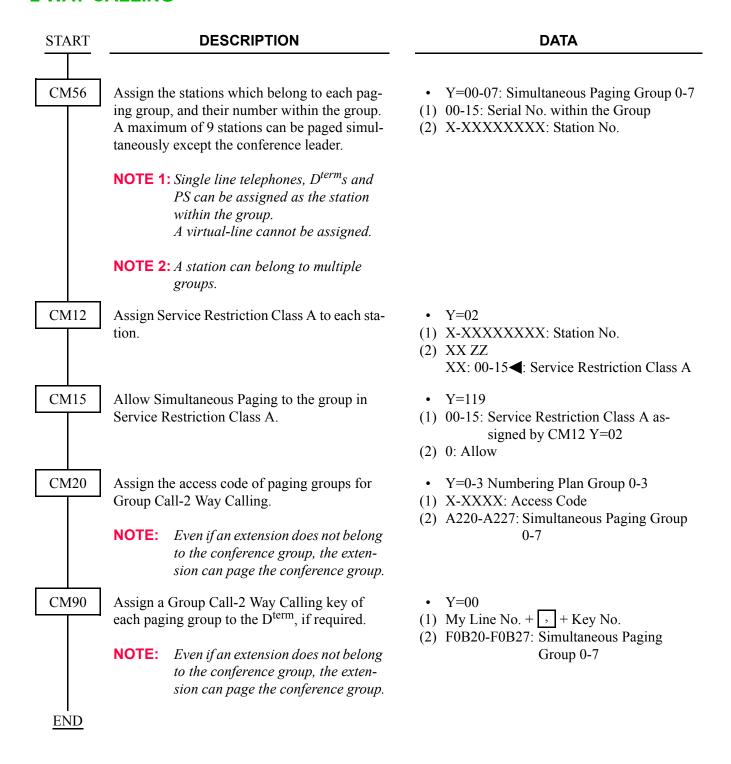
START	DESCRIPTION	DATA
CM10	Assign the card number of the Conference trunk (CFT card) to the required LEN.  INITIAL	<ul><li>(1) 000-763: LEN</li><li>(2) ED00-ED03: CFT Card No.</li></ul>
	<b>NOTE:</b> The CFT card number must be assigned to the first LEN (Level 0) of each LT slot.	
CM14	Assign the card number of the Conference trunk (CFT card) to the required LEN.  [Series 3200 R6.2 software required]  INITIAL	<ul> <li>(1) XX ZZZ: LEN</li></ul>
	<b>NOTE:</b> The CFT card number must be assigned to the first LEN (Level 0) of each LT slot.	
CM56	Assign the stations which belongs to each paging group, and their number within the group. A maximum of 9 stations can be paged simultaneously except the conference leader.	<ul> <li>Y=00-07 Simultaneous Paging Group 0-7</li> <li>(1) 00-15: Serial No. within the Group</li> <li>(2) X-XXXXXXXXX Station No.</li> </ul>
	NOTE 1: Single line telephones, D <sup>term</sup> s and PS can be assigned as the station within the group.  A virtual-line cannot be assigned.	
	<b>NOTE 2:</b> A station can belong to multiple groups.	
CM12	Assign Service Restriction Class A to each station.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15 ◀: Service Restriction Class A</li> </ul>
A		



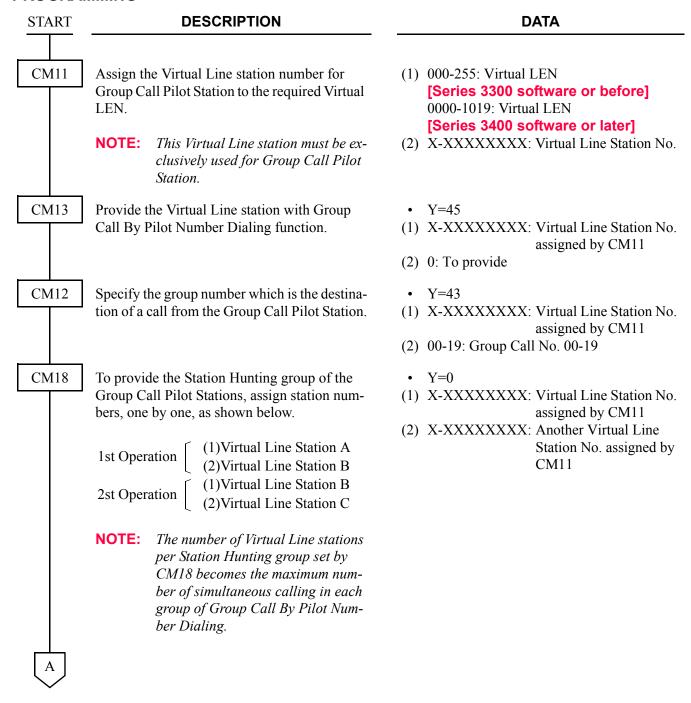
### HARDWARE REQUIRED

CFT trunk

### 2 WAY CALLING



# **GROUP CALL BY PILOT NUMBER DIALING**





### **DATA**

CM18

Assign the Pilot Station to required station number within the Station Hunting group. For the member stations, set the data to "0".

**NOTE:** The maximum number of stations

that can be included on one Station Hunting group is 32 including the

Pilot Station.

CM57

Assign the station numbers which are to be included in the Group Call group, and their serial numbers in the group.

• Y=1

(1) X-XXXXXXXX: Virtual Line Station No. assigned by CM11

For PS/WLAN station: Virtual Station

No./WLAN Virtual Station No. assigned by CM14

(2) 0**<**: Member Station 1 : Pilot Station

Y=10-29 Group Call No. 00-19

(1) 00-31: Serial No. within the Group

(2) X-XXXXXXXX: Station No. assigned by CM10/CM14

For PS/WLAN station: Virtual Station

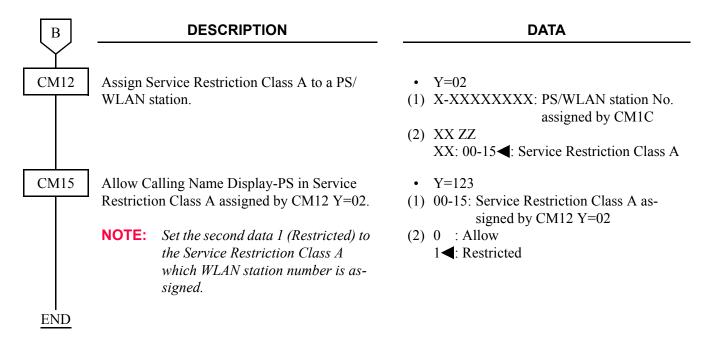
No./WLAN Virtual Station No. assigned by CM14

**NOTE 1:** The maximum number of Group Call stations per group is as follows: Single line station/D<sup>term</sup> (My Line/Virtual Line): 32 stations PS/WLAN station: 8 stations (except the PS in roaming state)

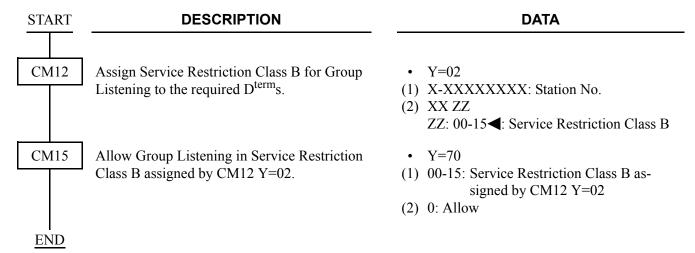
**NOTE 2:** The maximum number of simultaneous calling for single line stations/PSs/WLAN stations is 12 per FP. When the number of single line stations/PSs/WLAN stations exceeds 12, allocate the rest of stations to another FP. For a  $D^{term}$  (My Line/Virtual Line), there is no limit as the above.

В

To provide Calling Name Display to a PS/WLAN station:

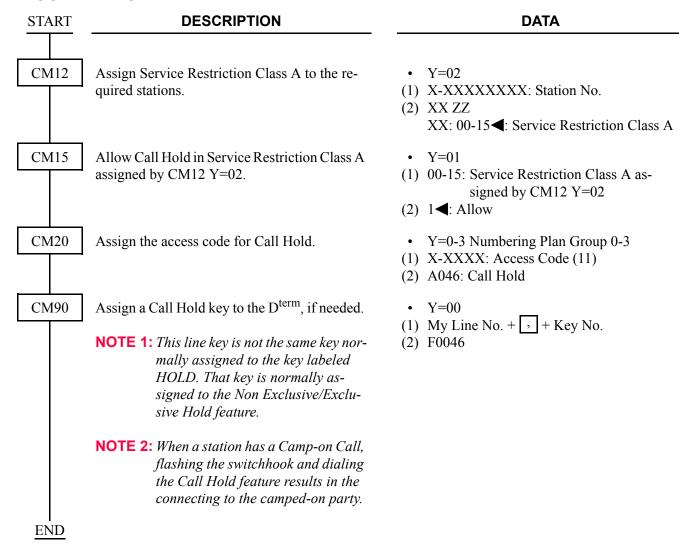


# **GROUP LISTENING**



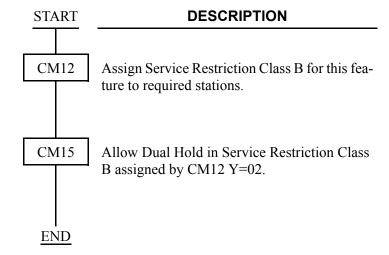
# **HOLD**

### **CALL HOLD**



## **DUAL HOLD**

### **PROGRAMMING**



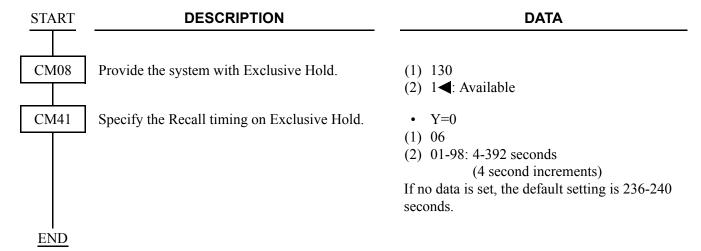
### **DATA**

- Y=02
- (1) X-XXXXXXXX: Station No.
- (2) XX ZZ

ZZ: 00-15◀: Service Restriction Class B

- Y=64
- (1) 00-15: Service Restriction Class B assigned by CM12 Y=02
- (2) 1**<**: Allow

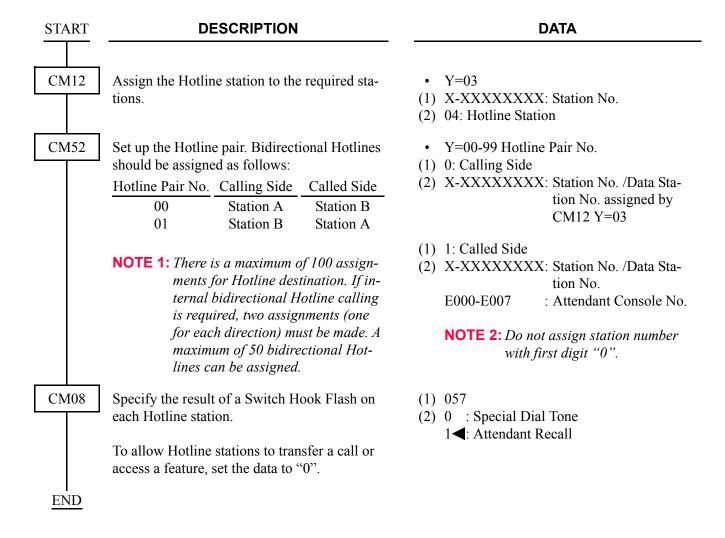
# **EXCLUSIVE HOLD**



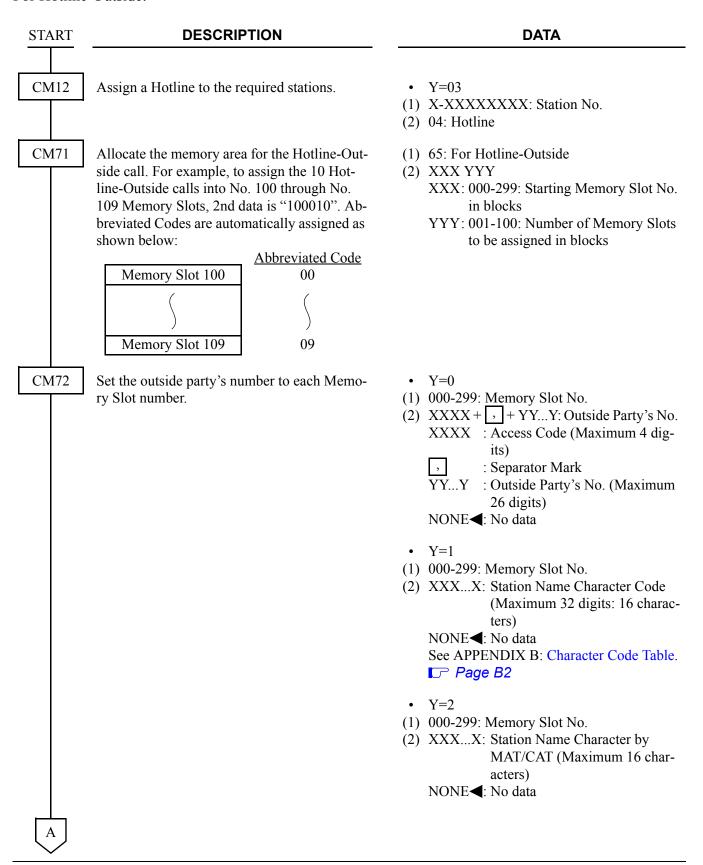
# HOTLINE-INSIDE/OUTSIDE

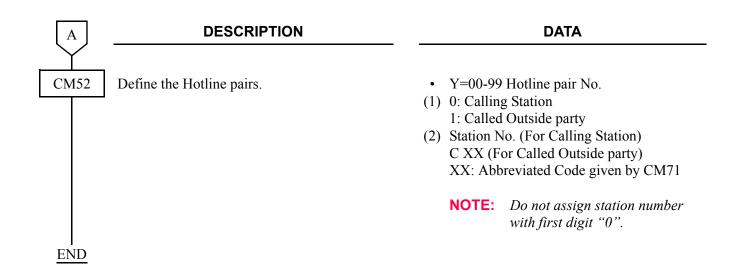
### **PROGRAMMING**

For internal Hotline:

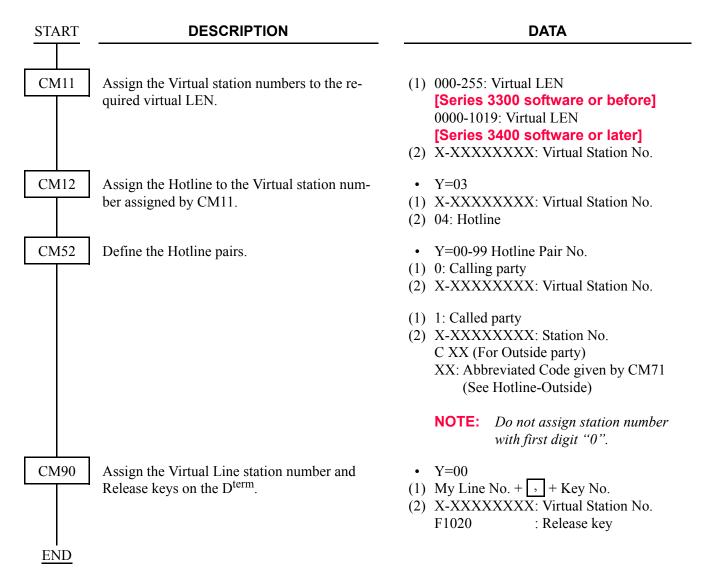


### For Hotline-Outside:

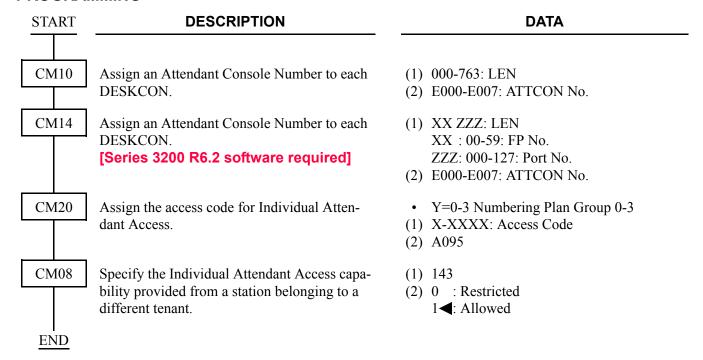




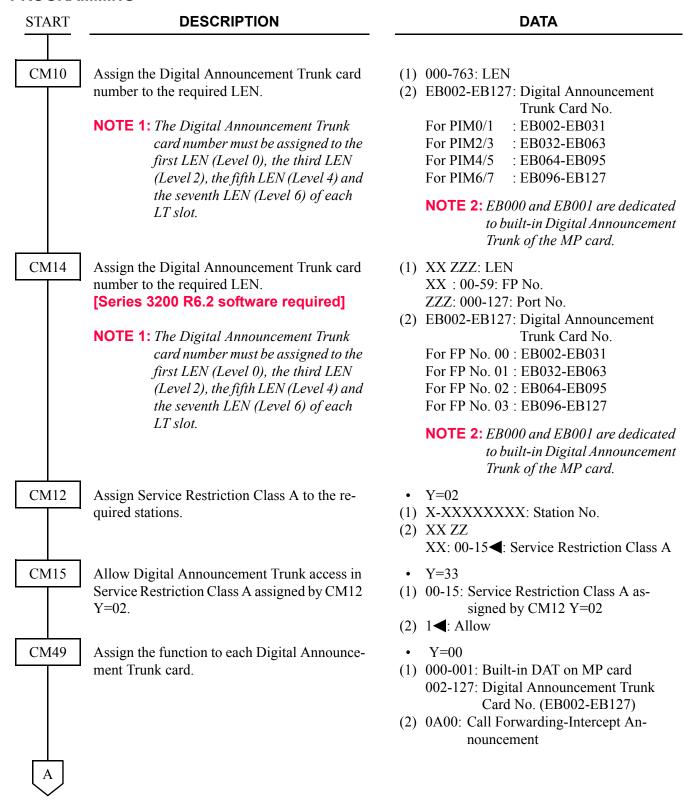
### For Brokerage Hotline:

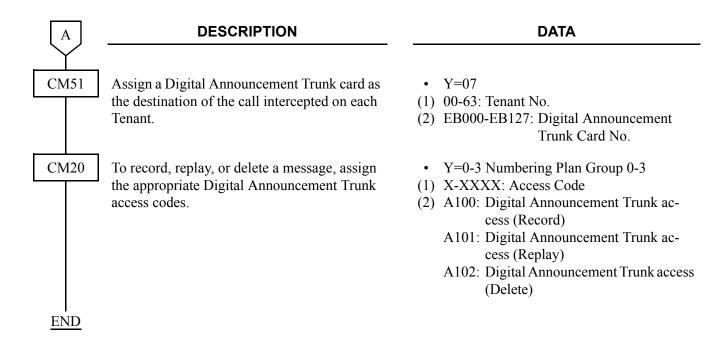


# INDIVIDUAL ATTENDANT ACCESS



## INTERCEPT ANNOUNCEMENT





**NOTE:** Only one common message can be provided for the different intercept conditions.

### HARDWARE REQUIRED

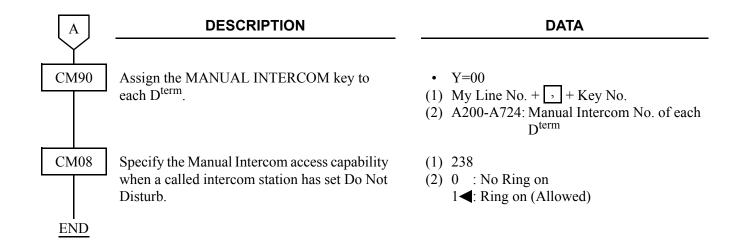
DAT card or MP card (built-in DAT)

# **INTERCOM**

### MANUAL INTERCOM

### **PROGRAMMING**

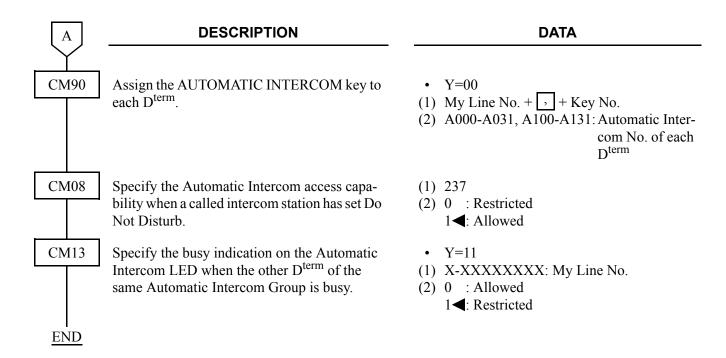
**DESCRIPTION DATA START** CM11 Assign a Manual Intercom number to the Vir-(1) 000-255: Virtual LEN tual LEN. The last two digits of each Manual [Series 3300 software or before] Intercom number represent the Manual Inter-0000-1019: Virtual LEN [Series 3400 software or later] com Group number. (2) A200-A224 NOTE: A Manual Intercom group can con-A300-A324 sist of two to six  $D^{term}$ s.  $\hat{A}$  maximum A400-A424 of 25 Manual Intercom groups can A500-A524 be assigned per system. A600-A624 A700-A724 (Manual Intercom Number) GROUP No. INTERCOM No. 00 A200, A300, A400, A500, A600, A700 AXYY 01 A201, A301, A401, A501, A601, A701 γ X: 2-7: Serial No. in a Group 24 A224, A324, A424, A524, A624, A724 YY: Manual Intercom Group No. CM12 Y = 0.3Assign the Manual Intercom station. (1) A200-A724: Manual Intercom No. assigned by CM11 (2) 06: Manual Intercom Assign the My Line No. of each D<sup>term</sup> to each CM56 Y = 11Manual Intercom number. (1) A200-A724: Manual Intercom No. assigned by CM11 (2) X-XXXXXXXX: My Line No.



### **AUTOMATIC INTERCOM**

## **PROGRAMMING**

**START DESCRIPTION DATA** CM11 Assign an Automatic Intercom number to the (1) 000-255: Virtual LEN Virtual LEN. The Automatic Intercom stations [Series 3300 software or before] are paired as shown below. 0000-1019: Virtual LEN [Series 3400 software or later] (2) A000-A031 GROUP No. INTERCOM No. 00 A000, A100 A100-A131 (Automatic Intercom Number) A001, A101 01 γ AXYY 31 A031, A131 X : 0/1 to be made one pair. YY: 00-31: Automatic Intercom Group No. The maximum number of Automatic Intercom paired stations per system CM12 Assign each Automatic Intercom station. • Y=03 (1) A000-A031, A100-A131: Automatic Intercom No. assigned by CM11 (2) 05: Automatic Intercom CM56 Assign the My Line number to each Automatic Y = 10Intercom number. (1) A000-A031, A100-A131: Automatic Intercom No. assigned by CM11 (2) X-XXXXXXXXX: My Line No.

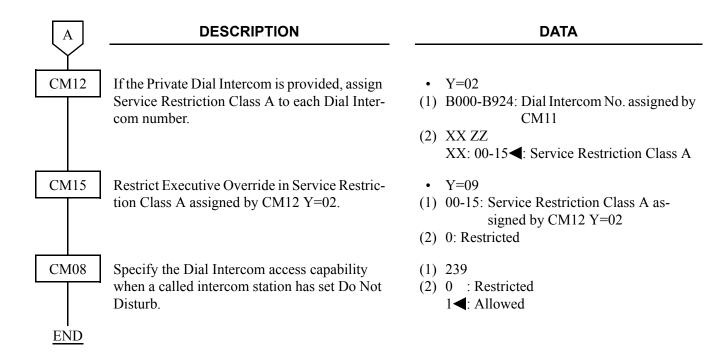


**NOTE:** To activate the Voice Announcement call, refer to INTERNAL TONE/VOICE SIGNALING. Page 420

#### DIAL INTERCOM

#### **PROGRAMMING**

**START DESCRIPTION DATA** (1) 000-255: Virtual LEN CM11 Assign a Dial Intercom number to the Virtual LEN. The last two digits of each Dial Intercom [Series 3300 software or before] number represent the Dial Intercom Group 0000-1019: Virtual LEN [Series 3400 software or later] number. The first digit is the intercom code (0-9) as-(2) B000-B024 signed to the associated virtual extension. B100-B124 B200-B224 GROUP No. INTERCOM No. B300-B324 B400-B424 B000, B100, B200 — B900 00 B500-B524 01 B001, B101, B201 — B901 B600-B624 γ B700-B724 24 B024, B124, B224 — B924 B800-B824 B900-B924 NOTE: A maximum of 25 Dial Intercom (Dial Intercom Number) groups are available per system. A maximum of ten D<sup>term</sup>s can belong **BXYY** to a Dial Intercom group. X: 0-9: Intercom Code YY: 00-24: Dial Intercom Group No. CM12 Assign the Dial Intercom station. • Y=03 (1) B000-B924: Dial Intercom No. assigned by CM11 (2) 07: Dial Intercom CM56 Assign the My Line number to each Dial Inter-• Y=12 com number. (1) B000-B924: Dial Intercom No. (2) X-XXXXXXXXX My Line No. CM90 Assign the DIAL INTERCOM key to each Y = 0.0Dterm (1) My Line No. + , + key No. (2) Dial Intercom No. of each D<sup>term</sup>

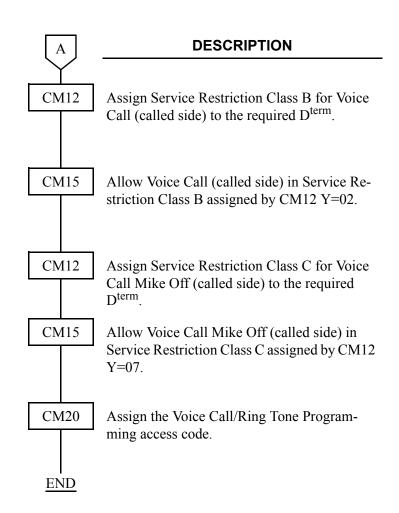


**NOTE:** To activate the Voice Announcement call, refer to INTERNAL TONE/VOICE SIGNALING. Page 420

# **INTERNAL TONE/VOICE SIGNALING**

# **PROGRAMMING**

START	DESCRIPTION	DATA
CM08	To activate the Single-Digit Feature Access Code feature, set the data for 050, 051, 069,	<ul><li>(1) 050: * Button as Switch Hook Flash.</li><li>(2) 1◀: Ineffective</li></ul>
	148 and 543 to "1".	<ul><li>(1) 051: # Button as Switch Hook Flash.</li><li>(2) 1◀: Ineffective</li></ul>
		<ul><li>(1) 069: Single Digit Dialing on BT Connection</li><li>(2) 1◀: Step Call</li></ul>
		<ul> <li>(1) 148: Same Last Digit Redialing on BT Connection</li> <li>(2) 1◀: Ineffective</li> </ul>
		<ul><li>(1) 543: Step Call</li><li>(2) 1◀: Allow</li></ul>
	Provide the system with the Single-Digit Feature Access Code on RBT or Voice Call connection.	<ul><li>(1) 156</li><li>(2) 0: Available</li></ul>
	Specify if Voice Call is provided when calling a D <sup>term</sup> is set to Voice First from a Single-Line Telephone or a D <sup>term</sup> without an LCD.	<ul> <li>(1) 270</li> <li>(2) 0 : Not provided (Busy Tone)</li> <li>1 ◀: To provide</li> </ul>
	Provide the system with the Single-Digit Feature Access Code on BT connection.	<ul><li>(1) 208</li><li>(2) 0: Available</li></ul>
	Specify whether the access codes of Single-Digit Feature Access Code feature are fixed or not.  [Series 3600 software required]	<ul> <li>(1) 570</li> <li>(2) 0 : Programmable Access Code</li> <li>1 ◄: Fixed Access Code</li> </ul>
CM20	When using programmable access code (CM08>570 is set to 0), assign the Single-Digit Feature Access Code for the RBT connection.  [Series 3600 software required]	<ul> <li>Y=5</li> <li>(1) X: Access code (0-9, A (*), B (#))</li> <li>(2) 1 : Internal Tone/Voice Signaling NONE ✓: Single-Digit Feature Access Code is not available</li> </ul>
A		



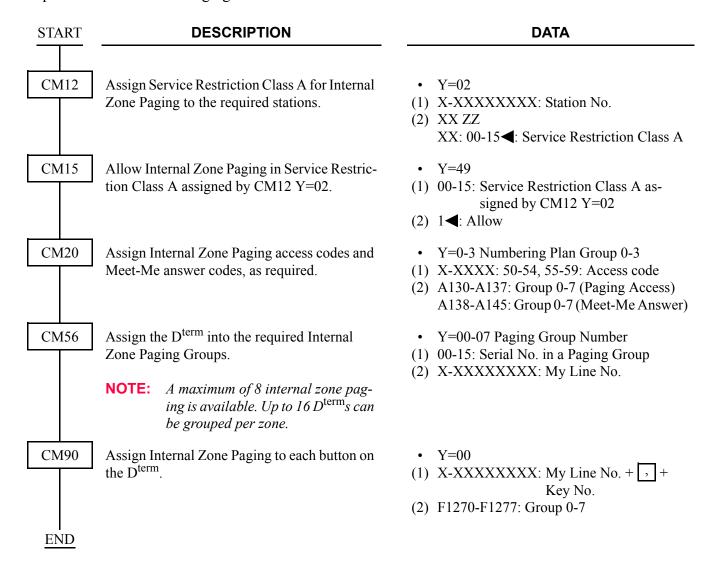
#### **DATA**

- Y=02
- (1) X-XXXXXXXX: My Line No.
- (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
- Y=67
- (1) 00-15: Service Restriction Class B assigned by CM12 Y=02
- (2) 1**<**: Allow
- Y=07
- (1) X-XXXXXXXX: My Line No.
- (2) 00-15**◄**: Service Restriction Class C
  - Y=99
- (1) 00-15: Service Restriction Class C assigned by CM12 Y=07
- (2) 0: Available
- Y=0-3 Numbering Plan Group 0-3
- (1) X-XXXX: Access Code
- (2) A163: Voice Call/Ring Tone Programming

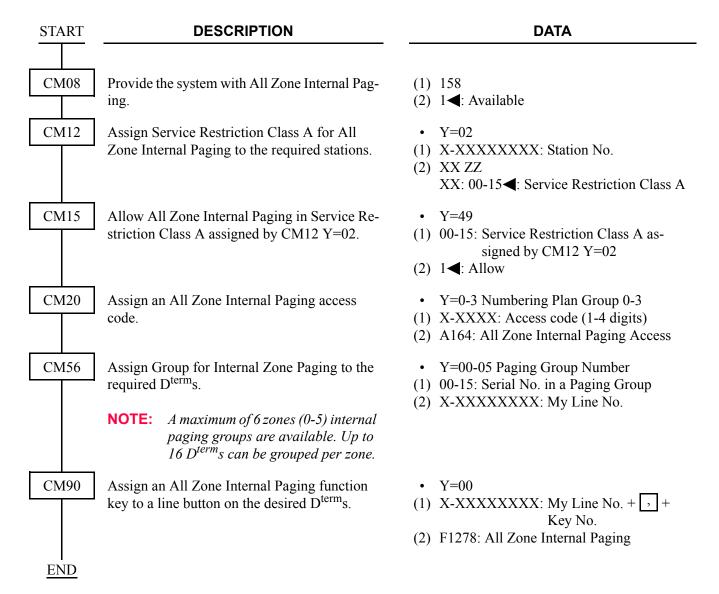
# INTERNAL ZONE PAGING WITH MEET-ME

#### **PROGRAMMING**

To provide Internal Zone Paging with Meet-Me:

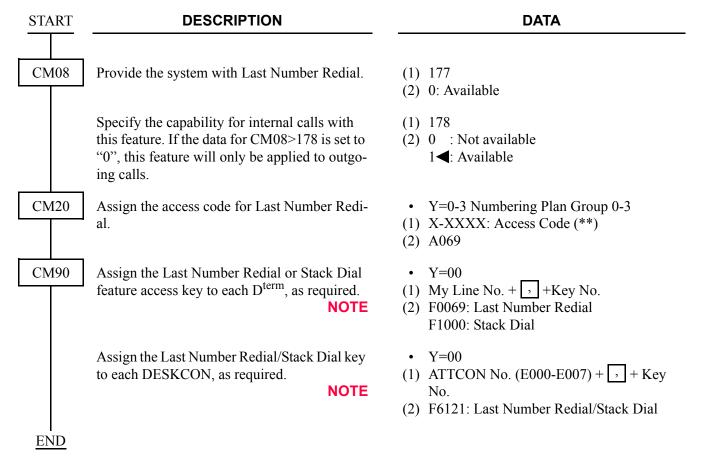


# To provide All Zone Internal Paging:



# LAST NUMBER REDIAL

#### **PROGRAMMING**



**NOTE:** Refer to the STACK DIAL for details on programming Stack Dial. Page 610

# **LEAST COST ROUTING-3/6 DIGIT**

### **PROGRAMMING**

CM20 Assign the access code for LCR Group 0-2.

CM81 Assign the Toll Restriction Patterns with eigh

Assign the Toll Restriction Patterns with eight kinds of Trunk Restriction Classes assigned by CM12 Y=01.

Toll Restriction Pattern 00-15 are preassigned as shown below.

If a new Restriction Pattern is required, change the data for Restriction Pattern 01-13 (00, 14 and 15 are fixed). **DATA** 

• Y=0-3 Number Plan Group 0-3

(1) X-XXXX: Access Code

(2) A126: LCR Group 0 A127: LCR Group 1 A128: LCR Group 2

• Y=01-13 Toll Restriction Pattern No. 01-13

(1) 1-8: Trunk Restriction Class

(2) 0: Restricted 3: Allowed

									`	′							
	TRUNK	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00
	STRICTION CLASS	TOI	LL RE	STRI	СТІОІ	N PAT	TERN	NUN	IBER	ON E	ACH	TRUN	NK RE	STRI	СТІОІ	N CLA	ASS
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00
1	RCA	3	0	3	3	3	0	0	0	3	3	3	3	3	0	3	0
2	RCB	3	0	3	3	0	0	0	0	3	3	0	0	0	0	3	0
3	RCC	3	0	3	0	0	0	0	0	3	0	0	0	0	0	3	0
4	RCD	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
5	RCE	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
6	RCF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
7	RCG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8	RCH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0

0: Restricted

3: Allowed





#### **DESCRIPTION**

#### **DATA**

CM8A

Assign an Area Code Development Pattern number to each LCR Group.

Assign a Route Pattern number to each area code for the Area Code Development Pattern number assigned by CM8A Y=A000.

Specify the order of LCR selection for the Route Pattern number assigned by CM8A Y=4005-4007.

For area code deletion, designate the digits to be deleted.

To delete all digits of the area code.

To delete the designated digit of an area code assigned by CM8A Y=4005-4007.

• Y=A000

(1) 0-2: LCR Group 0-2

(2) 4005-4007: Area Code Development Pattern No. 5-7

• Y=4005-4007 Area Code Development Pattern No. 5-7

(1) X...X: Area Code, Maximum 8 digits

(2) 0000-0255: Route Pattern No. 000-255

• Y=0000-0255

Route Pattern No. 000-255

(1) 1-4: Order of LCR Selection

1: 1st

2: 2nd

3: 3rd

4: 4th

(2) XXX ZZ

XXX: 000-255: LCR Pattern No. 000-255 ZZ : 00-63: Trunk Route No. 00-63

• Y=5000-5255

LCR Pattern No. 000-255

(1) 152: Deletion of all digits of the area code assigned by CM8A Y=4005-4007

(2) 0: To delete

• Y=5000-5255

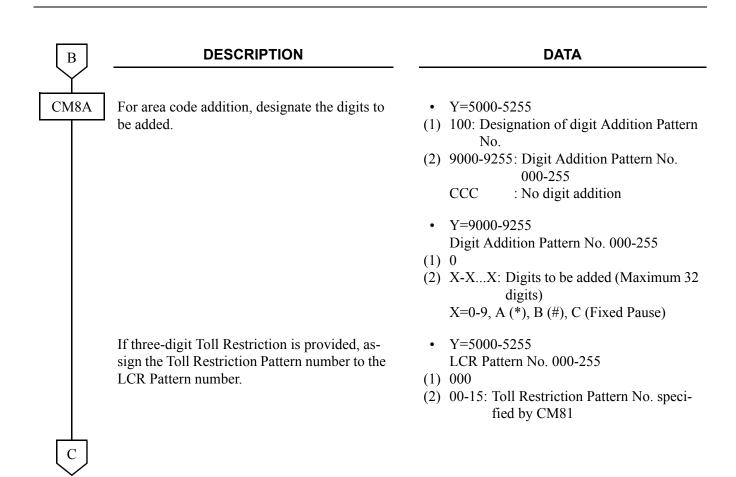
(1) 153: Designation of digit to be deleted for area code assigned by CM8A Y=4005-4007

(2) 00 : No digit deletion

01-10: First digit deleted -First 10 digits deleted

CCC: No digit deletion

В



C

#### **DESCRIPTION**

#### **DATA**

CM8A

If six-digit Toll Restriction is provided, assign the following data to the LCR Pattern number and set up the six-digit Toll Restriction Pattern Tables.

(1) Specify the Trunk Restriction Classes to which 6-digit Toll Restriction applies.

Area Office
Code Code

RCA: No restrictions (three-digit TR) RCB: 412-211 is allowed (six-digit TR) RCC: 412-211 is allowed (six-digit TR) RCD: 412 is restricted (three-digit TR) RCE: 412 is restricted (three-digit TR)

	CM8A	
Y	TRUNK RESTRICTION CLASS	DATA
5000	021	1
	022	0
	023	0
	024	1
	025	1

- (2) Assign the six-digit Toll Restriction Pattern number to the LCR Pattern number.
- (3) Assign the Office code (three-digits) and the availability to access the office code to the six-digit Toll Restriction Pattern number assigned by (2).

• Y=5000-5255

025

LCR Pattern No. 000-255

(1) 021-028: Trunk Restriction Class assigned by CM12 Y=01

021 : Unrestricted (RCA)
022 : Non-Restricted 1 (RCB)
023 : Non-Restricted 2 (RCC)
024 : Semi-Restricted 1 (RCD)

026 : Restricted 1 (RCF) 027 : Restricted 2 (RCG) 028 : Fully-Restricted 2 (RCH)

(2) 0 : 6-digit Toll Restriction Pattern

1◀: 3-digit Toll Restriction Pattern as per CM8A Y=5000-5255>000

: Semi-Restricted 2 (RCE)

- Y=5000-5255
- (1) 020
- (2) 8000-8049: 6-digit Toll Restriction Pattern No. 00-49
- Y=8000-8049
   6-digit Toll Restriction Pattern No. 00-49
- (1) XXX: 3-digits of Office Code
- (2) 0 : Restricted 1◀: Allowed



D	DESCRIPTION	DATA
CM8A	If the prefix is to be added, assign the following data to the LCR Pattern number.  (1) Assign the 6-digit Prefix Pattern number to the LCR Pattern number.	<ul> <li>Y=5000-5255     LCR Pattern No. 000-255</li> <li>(1) 150</li> <li>(2) 8050-8099: 6-digit Prefix Pattern No. 00-49     CCC : No Prefix</li> </ul>
	(2) Assign the office code (three-digits) requiring the Prefix to the six-digit Prefix Pattern number.	<ul> <li>Y=8000-8049</li> <li>(1) XXX: 3-digit of Office Code</li> <li>(2) 1          ∴ Allowed     </li> </ul>
CM85	Specify the maximum number of digits to be dialed by calling party.  The maximum number of digits including the area codes should be assigned to each area code.	<ul> <li>Y=5-7 Area Code Development Pattern No. 5-7 assigned by CM8A Y=A000</li> <li>(1) X-XX: Area Code dialed, Maximum 8 digits</li> <li>(2) 01-24 ✓: 1 digit-24 digits 25-79 : 25 digits-79 digits</li> </ul>
CM35	Provide the Toll Restriction feature to the required trunk routes.	<ul> <li>Y=11</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: To provide</li> </ul>
	Specify route access capability for each restriction class.	<ul> <li>Y=51-58</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : Restricted</li> <li>1◀: Allow</li> </ul>
	Assign the Area Code Development Pattern number for Toll Restriction and Maximum Digit Analysis to each trunk route.	<ul> <li>Y=76</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 05-07: Area Code Development Pattern No. 5-7</li> </ul>
END		

To provide LCR with Time of Day Routing, add the following system data programming.

### **DESCRIPTION DATA START** CM8A Assign the Date Pattern number to each area Y=4005-4007 Area Code Development code for the Area Code Development Pattern Pattern No. 5-7 number assigned by CM8A Y=A000. (1) X-X...X: Area Code Maximum 8 digits (2) 3000-3003: Date Pattern No. 0-3 Assign the Time Pattern number to each day of • Y=3000-3003 Date Pattern No. 0-3 the week for the Date Pattern number assigned (1) 0: SUN by CM8A Y=4005-4007. 1: MON 2: TUE 3: WED 4: THU 5: FRI 6: SAT (2) 2000-2007: Time Pattern No. 0-7



### **DESCRIPTION**

#### **DATA**

CM8A

Assign the Route Pattern number to the required time of day for the Time Pattern number assigned by CM8A Y=3000-3003. To define the following Time Pattern:

- Y=2000-2007 Time Pattern No. 0-7
- (1) HH MM (Time) HH: 00-23: Hours MM: 00/30: Minutes
- (2) 0000-0255: Route Pattern No. 000-255 If Tenant Pattern is required, set 1000-1015 (Tenant Pattern No. 00-15).

Y	TIME (1)	ROUTE PATTERN (2)
2000 (Time Pattern No. 0)	0000 0030 0100 0130 0200 0:00 a.m8:00 a.m.	0000 (Route Pattern No. 000)
	2000 2030 8:00 p.m0:00 a.m.	
2000 (Time Pattern No. 0)	0800 0830 8:00 a.m8:00 p.m.	0001 (Route Pattern No. 001)

If the Tenant Pattern number is assigned by CM8A Y=2000-2007, assign the Route Pattern number to the required Tenant number for the Tenant Pattern number.

- Y=1000-1015 Tenant Pattern No. 00-15
- (1) 00-63: Tenant No.
- (2) 0000-0255: Route Pattern No. 000-255

<u>END</u>

To provide C.O. operator call with LCR, assign the following system data.

#### **DESCRIPTION START** CM20 Assign the access code for LCR Group 0. • Y=0-3 Number Plan Group 0-3

(1) X-XXXX: Access Code

(2) A126: LCR Group

Assign the Toll Restriction Patterns with eight kinds of Trunk Restriction Classes assigned by CM12 Y=01. Toll Restriction Pattern 00-15 is already programmed as shown below. If a new Restriction Pattern is required, change the data of the Restriction Pattern 01-13 (00, 14 and 15

Y=01-13 Toll Restriction Pattern No. 01-13

**DATA** 

(1) 1-8: Trunk Restriction Class

(2) 0: Restricted 3: Allowed

									,	Y							
	TRUNK	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00
RE	STRICTION CLASS	то	LL RE	STRI	СТІОІ	N PAT	TERN	NUN	IBER	ON E	АСН	TRUN	NK RE	STRI	СТІОІ	N CLA	ASS
		01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	00
1	RCA	3	0	3	3	3	0	0	0	3	3	3	3	3	0	3	0
2	RCB	3	0	3	3	0	0	0	0	3	3	0	0	0	0	3	0
3	RCC	3	0	3	0	0	0	0	0	3	0	0	0	0	0	3	0
4	RCD	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
5	RCE	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
6	RCF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
7	RCG	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
8	RCH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0

0: Restricted

3: Allowed

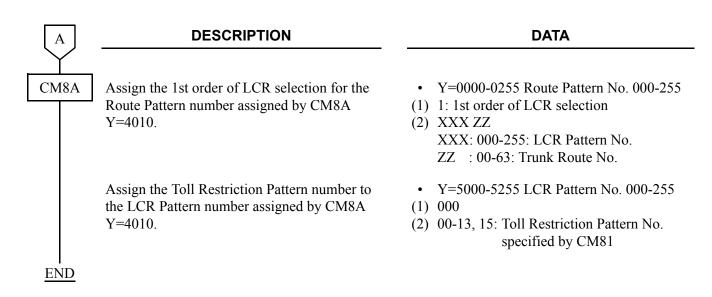
are fixed).

CM8A

CM81

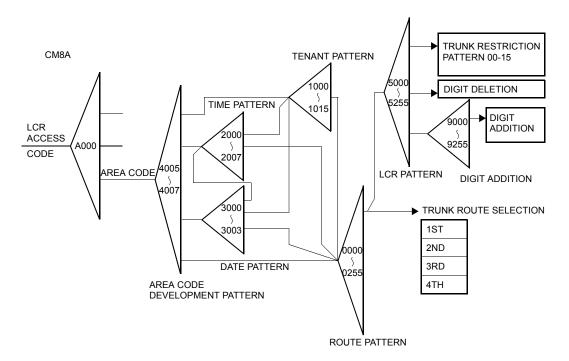
Assign the Route Pattern number to each area code for the Area Code Development Pattern number assigned by CM8A Y=A000.

- Y=4010 Area Code for C.O. Operator
- (1) X-XXX: Area Code for C.O. Operator This data is only effective for an access code assigned to CM20>A126.
- (2) 000-063: Route Pattern No. 00-63

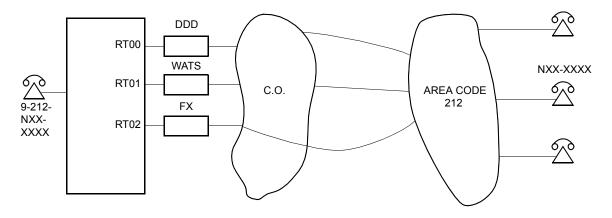


**NOTE:** See Examples in the following pages.

# **LCR Development Sequence**



# Example 1:



# Conditions:

(1) Order of LCR Selection:

1st... Route 02 (FX)

2nd...Route 01 (WATS)

3rd... Route 00 (DDD)

(2) Dialed Number:

9-212-NXX-XXXX

9 : Access Code212 : Area CodeNXX : Office Code

XXXX: Telephone Number

# (3) Toll Restriction Pattern:

-: Allowed ×: Restricted

ROUTE	RCA	RCB	RCC	RCD	RCE
00	_	_	_	_	_
01	_	_	_	×	×
02	_	_	×	×	×

# Programming for **Example 1**:

STEP1: Assign "9" to the access code of LCR Group 0 in Numbering Plan Group 0.

STEP2: Assign Area Code Development Pattern No. 5 to LCR Group 0.

$$\overline{ST}$$
 + 8AA000 +  $\overline{DE}$  + 0 +  $\overline{DE}$  + 4005 +  $\overline{EXE}$ 

STEP3: Assign Route Pattern No. 00 to area code (212) for Area code Development Pattern No. 5.

STEP4: In Route Pattern No. 00, specify the order of LCR selection as shown below.

1st: Route 02 (FX)

2nd: Route 01 (WATS)

3rd: Route 00 (DDD)

STEP5: In LCR Pattern No. 000 (for FX), delete the area code dialed.

STEP6: Assign the Toll Restriction Pattern to each Route (LCR Pattern No.).

For LCR Pattern No. 000 (Route 02):

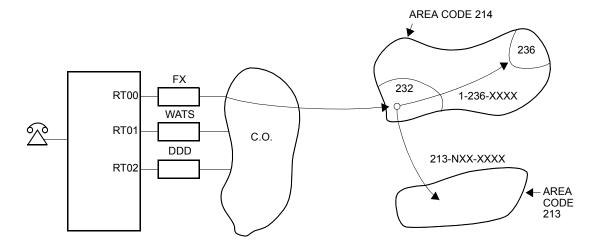
Toll Restriction Pattern No. specified by CM81

For LCR Pattern No. 001 (Route 01):

For LCR Pattern No. 002 (Route 00):

STEP7: Assign the maximum number of digits dialed.

# Example 2:



# Conditions:

(1) Order of LCR Selection:

1st... Route 02 (FX)

2nd...Route 01 (WATS)

3rd... Route 00 (DDD)

(2) Dialed Number:

• 9-214-232/236-XXXX

**NOTE:** 236 is a Toll Office.

• 9-213-NXX-XXXX

(3) Toll Restriction Pattern:

-: Allowed ×: Restricted

ROUTE	RCA	RCB	RCC	RCD	RCE
00	-	_	1	-	_
01	-	_	NOTE	×	×
02	Ι	NOTE	×	×	×

**NOTE:** Area Code 213 is restricted.

# Programming for **Example 2**:

$$\overline{ST}$$
 + 8AA000 +  $\overline{DE}$  + 0 +  $\overline{DE}$  + 4005 +  $\overline{EXE}$ 

STEP4: Specify the order of LCR selection to each Route Pattern.

For Route Pattern 00:

1st: Route 00 (FX)

2nd: Route 01 (WATS)

3rd: Route 02 (DDD)

For Route Pattern 01:

1st: Route 00 (FX)

2nd: Route 01 (WATS)

3rd: Route 02 (DDD)

TOLL RESTRICTION -

-: Allowed ×: Restricted

AREA CODE	ROUTE PATTERN No.	ORDER OF LCR	ROUTE	LCR PATTERN No.	RCA	RCB	RCC	RCD	RCE
		1st	00	000	-	_	_	-	-
214	00	2nd	01	001	_	_	_	×	×
		3rd	02	002	_	_	×	×	×
		1st	00	003	_	_	_	_	_
213	01	2nd	01	004	_	_	×	×	×
		3rd	02	005	_	×	×	×	×

STEP5: In LCR Pattern Nos. 000 and 003, delete the area code dialed.

$$\boxed{\text{ST}} + \underline{8A5000} + \boxed{\text{DE}} + \underline{151} + \boxed{\text{DE}} + \underline{0} + \boxed{\text{EXE}}$$

LCR Pattern No. 000 L To be deleted

$$\boxed{\text{ST}} + 8 \underline{\text{A5003}} + \boxed{\text{DE}} + 151 + \boxed{\text{DE}} + \underline{0} + \boxed{\text{EXE}}$$

−LCR Pattern No. 003 LTo be delete

STEP6: Assign the Toll Restriction Pattern to each LCR Pattern No.

For LCR Pattern No. 000:

$$\overline{\text{ST}}$$
 +  $\underline{8A5000}$  +  $\overline{\text{DE}}$  +  $\underline{000}$  +  $\overline{\text{DE}}$  +  $\underline{0}1$  +  $\overline{\text{EXE}}$ 

LCR Pattern No. 000

Toll Restriction Pattern No. specified by CM81

For LCR Pattern No. 001:

For LCR Pattern No. 002:

For LCR Pattern No. 003:

For LCR Pattern No. 004:

For LCR Pattern No. 005:

STEP7: In LCR Pattern No. 000, designate the prefix "1", in addition to the office code 236, by the six-digit Prefix Pattern.

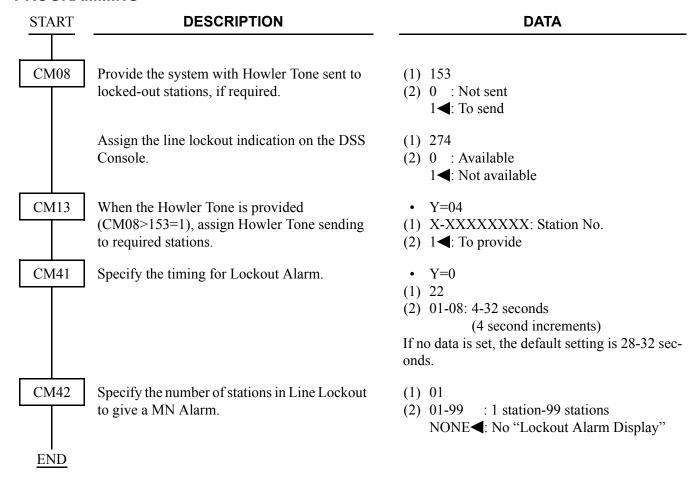
• Designation of 6-digit Prefix Pattern No.

• Designation of office code requiring Prefix Pattern.

STEP8: Assign the maximum number of digits dialed.

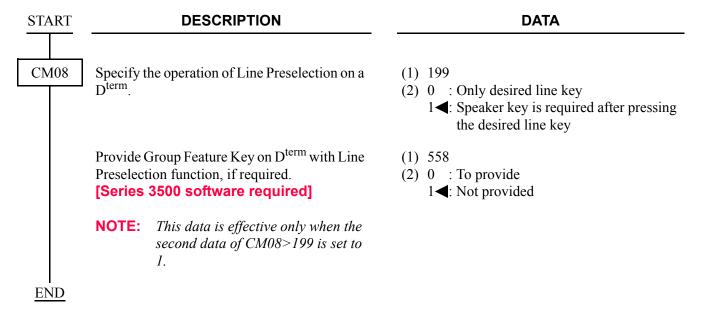
# LINE LOCKOUT

### **PROGRAMMING**



# LINE PRESELECTION

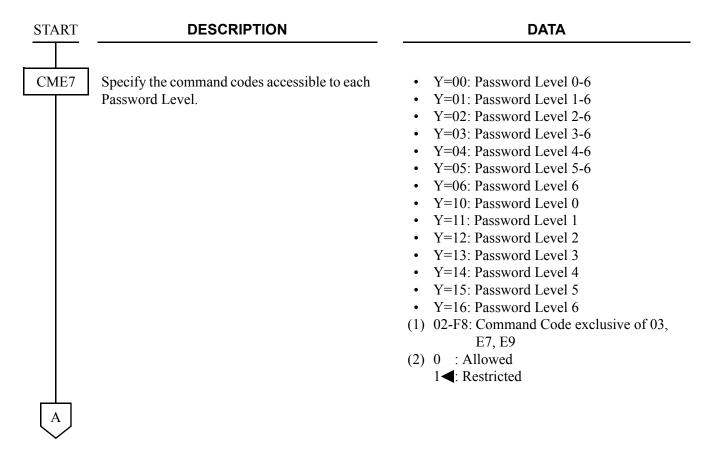
### **PROGRAMMING**



# **MAINTENANCE ADMINISTRATION TERMINAL (MAT)**

### **PROGRAMMING**

To provide password service for the MAT:



A	DESCRIPTION	DATA
СМЕ9	Assign the setting/changing of the password to be allowed.	(1) 8 (2) 0 <b>◄</b> : Allowed 1 : Restricted
	Assign a password to each Password Level.	<ul><li>(1) 0-7: Password Level 0-7</li><li>(2) X-XX: Maximum 8 digits Password CCC : Password clear</li></ul>
		A password for Password Level 7 should be assigned in advance because of providing the password service by Function No. 9 of CME9. The following passwords are not available. "CCCCCCCC" "FFFFFFF"
		The setting/changing of the password is available only when the second data of CME9>8 is set to "0 (Allowed)". If CME9>8 is set to "1 (Restricted)", "DATA ERROR" is displayed when you set/change the password.
	Provide the system with Password Feature. After setting this data, access to system programming is only available with password entry.	(1) 9 (2) 0: Provided

NOTE:

**END** 

If the Password Service is provided, enter the predetermined password (assigned by CME9>0-7) by CM03 before programming from the MAT.

- "OK" will be displayed, if accepted.
- "DATA ERROR" will be displayed if the password is incorrect.

# **HARDWARE REQUIRED**

Refer to "MATWorX Installation Guide".

# **FAULT MESSAGE**

## **PROGRAMMING**

Refer to "Maintenance Manual".

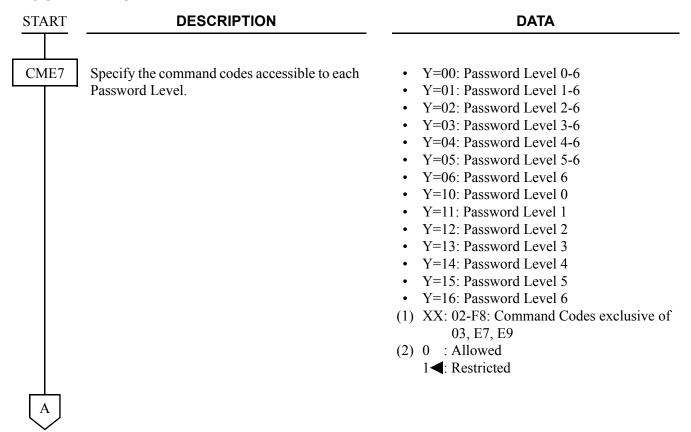
### **FAULT REPORT SCHEDULING**

#### **PROGRAMMING**

Refer to "Maintenance Manual".

# **PASSWORDS**

#### **PROGRAMMING**



A
CMF9

#### **DESCRIPTION**

### **DATA**

CME9 As

Assign the setting/changing of the password to be allowed.

Assign a password to each Password Level.

(1) 8

(2) 0**<**: Allowed 1 : Restricted

(1) 0-7: Password Level 0-7

(2) X-X...X: Maximum 8 digits Password

CCC : Password clear

A password for Password Level 7 should be assigned in advance because of providing the password service by Function No. 9 of CME9. The following passwords are not available. "CCCCCCCC"

"FFFFFFF"

The setting/changing of the password is available only when the second data of CME9>8 is set to "0 (Allowed)".

If CME9>8 is set to "1 (Restricted)", "DATA ERROR" is displayed when you set/change the password.

Provide the system with Password feature. After setting this data, access to system programming will be available with password entry.

(1) 9

(2) 0: Provided

**END** 

### **PEG COUNT**

#### **PROGRAMMING**

Refer to "Command Manual". (CMB0, CMB3)

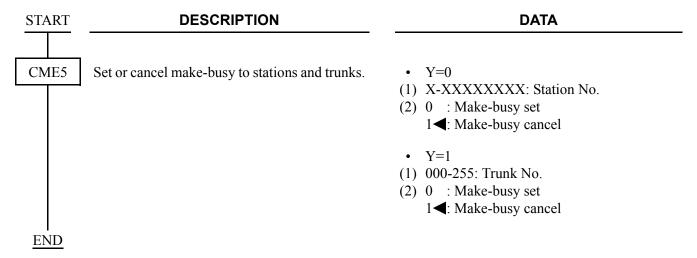
# **REMOTE MAINTENANCE**

## **PROGRAMMING**

Refer to "Maintenance Manual".

### REMOVE AND RESTORE SERVICE

#### **PROGRAMMING**



# STATION LINE STATUS DISPLAY

## **PROGRAMMING**

Refer to "Maintenance Manual".

# STATION/TRUNK STATUS

#### **PROGRAMMING**

Refer to "Maintenance Manual".

# **MESSAGE CENTER INTERFACE (MCI)**

# SYSTEM OUTLINE

The Message Center Interface (MCI) provides an interface with a customer supplied Voice Mail System (VMS) which can send Message Waiting lamp control data to the PBX.

The MCI can provide the following operations.

- Incoming call information is sent to the VMS when a call terminates to the VMS.
- Control of Message Waiting lamps is based on information sent from the VMS.

The MCI interface is a half duplex EIA-RS232C asynchronous data link that operates under a specific message protocol and format.

The PBX can provide two kinds of MCI. One is the RS-232C interface on the MP card, and the other is the RS-232C interface on the AP00 card.

The system outline of the MCI is shown below.

#### (1) MCI with MP

The Main Processor (MP) is required to make a data link with a customer supplied VMS and the analog line circuit (LC) to interface with the VMS.

#### • MP card:

The MP stores call information for stations, and provides the RS-232C ports for a VMS. The MP keeps supervising the status of the VMS. If the VMS is not ready for information receiving (Busy Status), the MP temporarily stores the call information into its internal memory. The MP stores call information of a maximum of 15 calls.

#### · LC card:

The LC is used for the VMS stations. The UCD or Station Hunting feature is usually provided with the VMS stations.

### (2) MCI with AP00

The Application Processor (AP00) is required to make a data link with a customer supplied VMS and the analog line circuit (LC) to interface with the VMS.

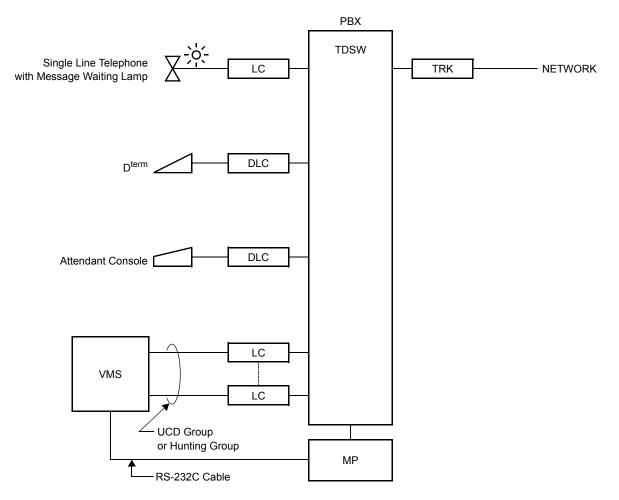
### • AP00 card:

The AP00 stores call information for stations, and provides the RS-232C ports for a VMS. The AP00 keeps supervising the status of the VMS. If the VMS is not ready for information receiving (Busy Status), the AP00 temporarily stores the call information into its internal memory. The AP00 stores call information of a maximum of 16 calls.

#### • LC card:

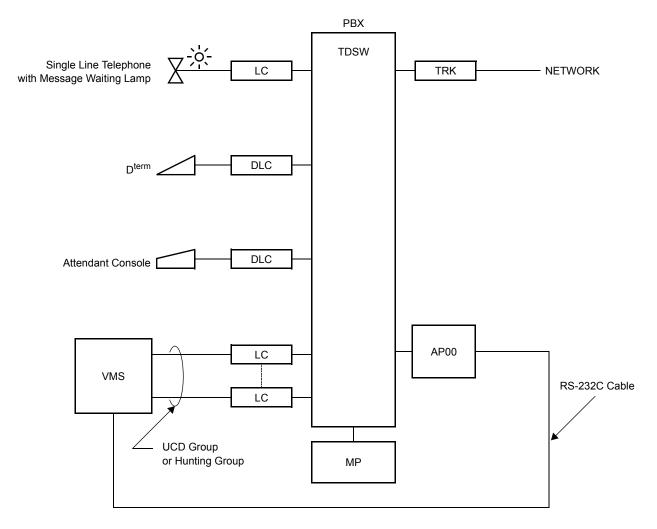
The LC is used for the VMS stations. The UCD or Station Hunting feature is usually provided with the VMS stations.

# System Outline of MCI with MP



DLC : Digital Line Circuit Card
LC : Analog Line Circuit Card
MP : Main Processor Card
TRK : COT, DTI, PRT, BRT Card
VMS : Voice Mail System
TDSW: Time Division Switch

# **System Outline of MCI with AP00**



AP00 : MCI I/O Port Card
DLC : Digital Line Circuit Card
LC : Analog Line Circuit Card
MP : Main Processor Card
TRK : COT, DTI, PRT, BRT Card
VMS : Voice Mail System
TDSW: Time Division Switch

## **HARDWARE REQUIRED**

## (1) MCI with MP

MP card

LC card (for VMS station)

Single Line Telephone with MW lamp

8LC or 4LCD card

RS RVS-4S CA-A/RS RVS-15S CA-A or RS NORM-4S CA-A

Voice Mail System

## (2) MCI with AP00

AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program

LC card (for VMS station)

Single Line Telephone with MW lamp

8LC or 4LCD card

RS RVS-4S CA-A/RS RVS-15S CA-A or RS NORM-4S CA-A

Voice Mail System

#### SYSTEM OPERATION

As shown below, a direct call or a forwarded call from a station/trunk/Attendant terminates to the VMS station in UCD group or Hunting group.

When the call is terminated to the VMS, the MP or the AP00 sends a call connection status information to the VMS through the MCI. If the ANI information is sent from the network, the ANI information can be added to the call connection status information by the system data programming (this feature is not available when the call is received from the CCIS trunk to the VMS). When the station/trunk/Attendant leaves a message in the VMS, the VMS sends a Message Waiting lamp ON data for the appropriate station through the PBX. After the station retrieves the messages, the VMS sends a Message Waiting lamp OFF data for the appropriate station through the PBX.

## PBX **TDSW** Single Line LC TRK **NETWORK** Telephone D<sup>term</sup> DLC (2) (Call Forwarding Set) (1)LC **VMS** LC **UCD** Group Message Waiting or Hunting Group lamp on/off data MP

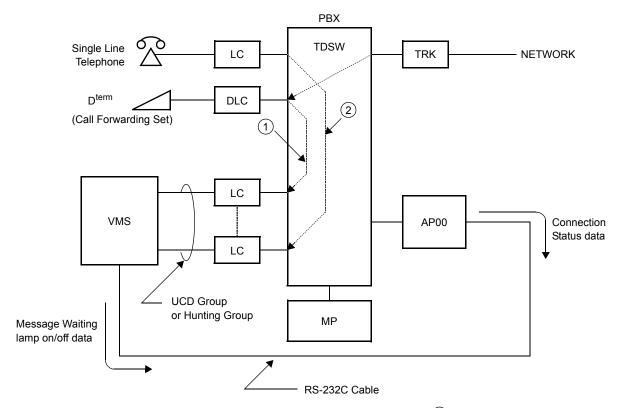
Connection Status data

RS-232C Cable

# MCI System Operation (MCI with MP)

- 1): Forwarded Call from a trunk
- 2 : Direct Call from a station

# MCI System Operation (MCI with AP00)



1 : Forwarded Call from a trunk

2 : Direct Call from a station

The connecting patterns to the VMS are as shown in the following pages.

STA : Station ATT : Attendant TRK: Trunk

CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
STA. A	STA. B	STA. A calls STA. B set Forwarding-All Calls/Busy Line/No Answer to the VMS.	STA. A STA. B CF
STA. A	_	STA.A calls the VMS directly.	STA. A X
STA. A	STA. B	After terminating a call from STA. A to the VMS and transferring the call to STA. B, STA. A recalls the VMS.	STA. A Recall STA. B Transfer  VMS

STA : Station ATT : Attendant TRK: Trunk

CALLING	CALLED	CONDITION OF CALL	IRK: Irunk
PARTY	PARTY	TERMINATION TO VMS	CONNECTING PATTERNS
ATT	STA. B	ATT calls STA. B set Call Forwarding-All Calls/Busy Line/No Answer to the VMS.	STA. B CF
ATT	_	ATT calls the VMS directly.	ATT VMS
STA. A	STA. B	After holding a call from STA. C, STA. A calls STA. B set Call Forwarding-All Calls/ Busy Line/No Answer to the VMS.	STA. A STA. C STA. B CF

STA: Station ATT: Attendant TRK: Trunk

CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
STA. A	STA. C	After holding a call from STA. C, STA. A calls the VMS directly.	STA. A STA. C
STA. A	STA. B	After holding a call from TRK, STA. A calls STA. B set Call Forwarding-All Call/Busy Line/No Answer to the VMS.	STA. A TRK  STA. B CF
STA. A	TRK	After holding a call from TRK, STA. A calls the VMS directly.	STA. A TRK

STA : Station ATT : Attendant TRK: Trunk

CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
TRK	STA. B	A TRK party calls STA. B set Call Forwarding-All Calls/ Busy Line/No Answer to the VMS.	STA. B CF
TRK	_	A TRK party calls the VMS directly.	TRK VMS
TRK	STA. B	After terminating a call from TRK to the VMS and transferring the call to STA. B, TRK recalls to the VMS.	STA. B Recall  Transfer  VMS

STA: Station ATT: Attendant TRK: Trunk

	1	T	IRN: ITUIIK
CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
STA. C	STA. B	In CCIS application, STA. C calls STA. B set Call Forwarding-All Calls/Busy Line/No Answer to the VMS.	STA. B  CF  CF  VMS  CR  CR  CR  CR  CR  CR  CR  CR  CR  C
STA. C	STA. D	In CCIS application, STA. C calls STA. D set Call Forwarding-All Calls/Busy Line/No Answer to STA. B. (The call is forwarded to the VMS by the Multiple Call Forwarding).	STA. B  CF  CF  CF  CF  CF  CF  CRIC TRK  CCIS TRK  STA. C  STA. D
STA. C	_	In CCIS application, STA. C calls the VMS directly.	TRK CCIS TRK STA. C

STA : Station ATT : Attendant TRK: Trunk

Г		T	IRK: Irunk
CALLING PARTY	CALLED PARTY	CONDITION OF CALL TERMINATION TO VMS	CONNECTING PATTERNS
STA. C	STA. B	In CCIS application, after holding a call from STA. D, STA. C calls STA.B set Call Forwarding-All Calls/Busy Line/No Answer to the VMS.	STA. B  CF  CF  TRK  CCIS TRK  STA. C  STA. D
TRK1	_	In CCIS application, a TRK1 party dials the VMS directly.	TRK3 CCIS TRK2 TRK1
TRK1	STA. D	In CCIS application, a TRK1 party calls STA. D set Call Forwarding-All Calls/Busy Line/No Answer to STA. B. (The call is forwarded to the VMS by the Multiple Call Forwarding).	TRK3 CCIS TRK2 TRK1  CF  VMS

When the PBX receives Message Waiting lamp control data from the VMS, the Message Waiting lamps of the called stations turn on or off. When the same Message Waiting lamp control data produces on  $D^{term}$ , the call indicator lamp on the  $D^{term}$  turns on and the "MSG" is displayed on the  $D^{term}$  as follows:

MSG 9:21 AM WED 8

## **PROGRAMMING**

#### **Precaution**

Before programming the system data for MCI, confirm that the system is under the following status.

- The system is under On-Line mode ("RUN" lamp is flashing on the MP card).
- The AP00 card is mounted in the correct location (for MCI with AP00).
- All the system data pertaining to the station, trunks, and service features are already programmed.

## **Station Number Data Loading**

The AP00 stores the station number data loaded from the MP. When station numbers have been added, deleted or changed by CM10, the station number data must be reloaded to the AP00 by the following procedure.

- (1) Flip the MB switch of the AP00 to UP position.
- (2) Return the MB switch to DOWN position.
- (3) The "\*\*\* AP00 START \*\*\*\*" message is printed if a printer is provided.
- (4) The "SORT COMPLETE" message is printed when the station number has been sent to the AP00.

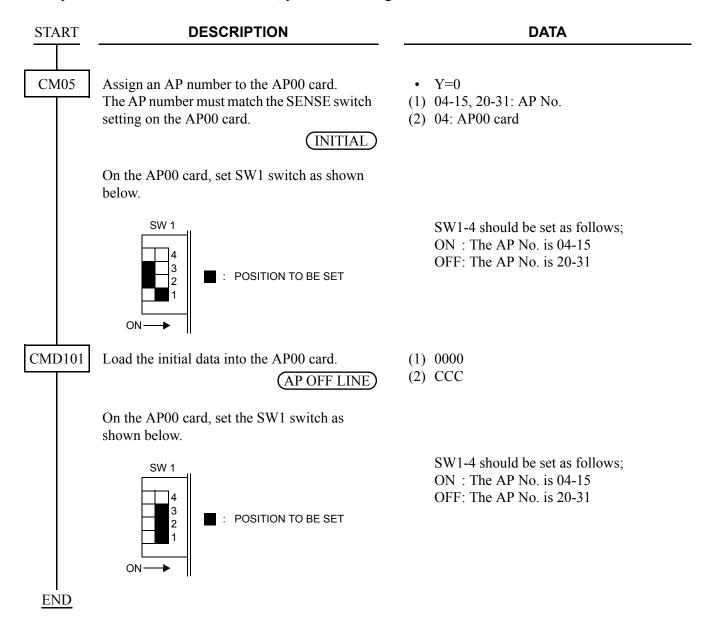
# AP Initialization (PN-AP00-B with AP00 program)

**NOTE:** For MCI with MP, this programming is not required.

This section explains the data assignment to make the AP active.

You can skip the data assignment explained on this section, if one of the following AP related features has been activated; Station Message Detail Recording (SMDR), Message Center Interface (MCI), Property Management System (PMS), or Hotel printer. You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.

When you install the AP00 the first time, you should assign the data shown below.



# AP Initialization (PN-AP00-B/PN-AP00-D with MRCA program)

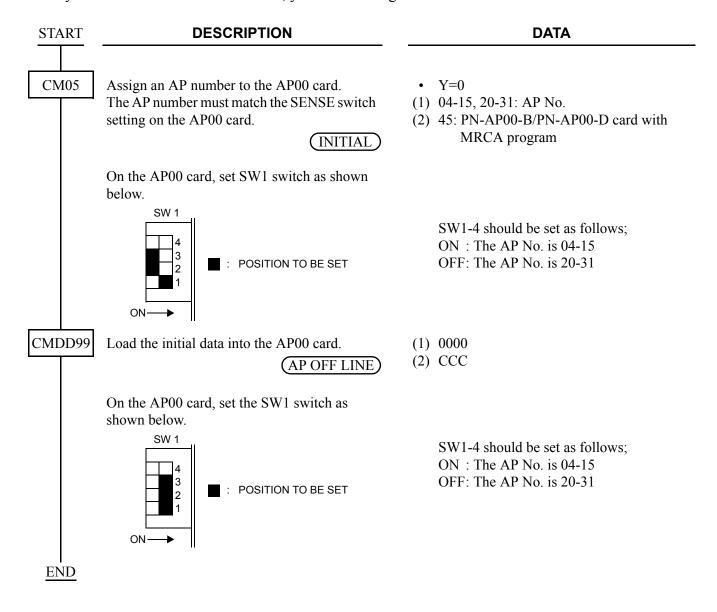
[Series 3300 software required]

**NOTE:** For MCI with MP, this programming is not required.

This section explains the data assignment to make the AP active.

You can skip the data assignment explained on this section, if one of the following AP related features has been activated; Station Message Detail Recording (SMDR) with NEAX 2400 IMS Format, Message Center Interface (MCI) or Do Not Disturb group set/cancel at specified timing in advance. You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.

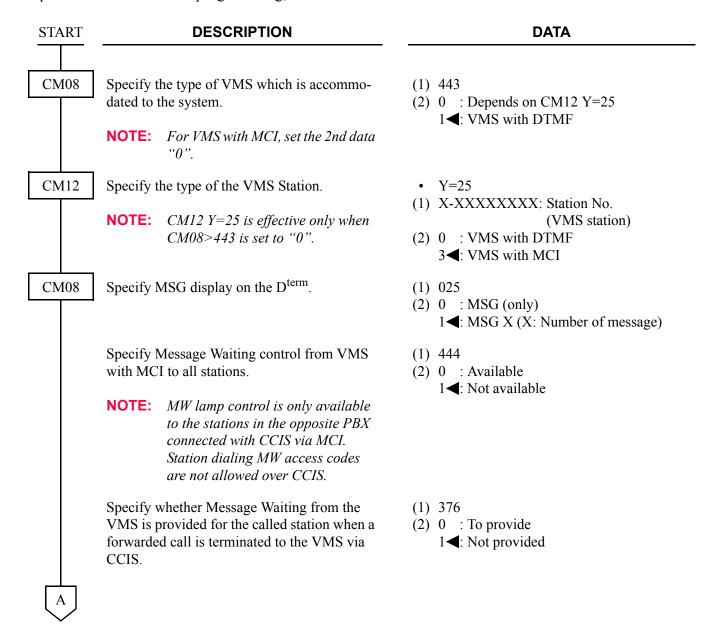
When you install the AP00 the first time, you should assign the data shown below.

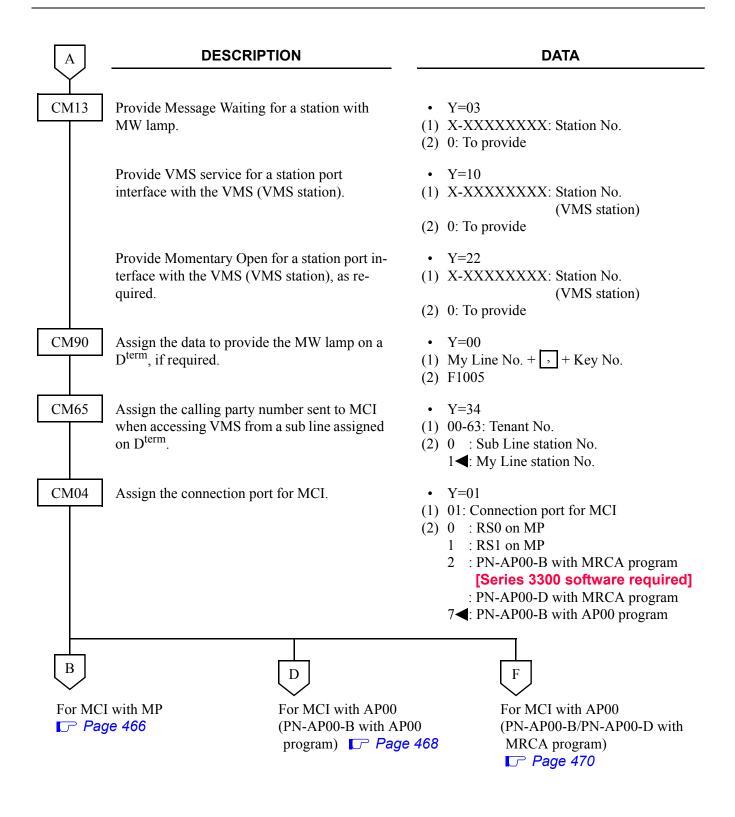


# **MCI Programming**

After AP Initialization, do the following programming.

Call Forwarding to the VMS stations, and UCD Group/Station Hunting Group set to the VMS stations are required. For these feature programming, refer to each feature in this manual.





#### • For MCI with MP

 $\boxed{B}$ 

#### **DESCRIPTION**

#### **DATA**

CM08

Assign the number of digits for station number in MCI message format sent to the VMS from the MP RS-232C port.

CM40

Assign the function of RS-232C ports.

NOTE: When a port is used for MCI exclusively, assign the 2nd data=10.
When a port is used for both MCI and Built-in SMDR, assign the 2nd data=11.

Assign the attribute data, depending on the VMS.

(1) 708

(2) 0 : 6 digits 1 **◄**: 8 digits

• Y=00

(1) 0: Port 0 1: Port 1

(2) 10: MCI **NOTE** 

11: MCI and Built-in SMDR NOTE

• Y=01-06, 08

(1) See the following table.

(2) See the following table.

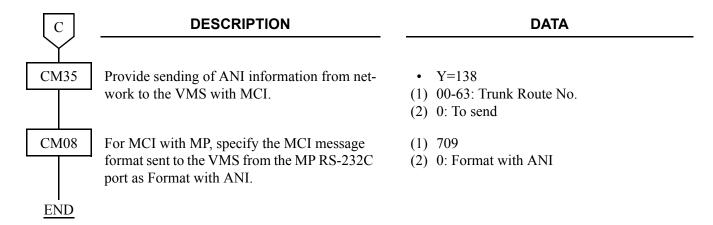
**◀**: Initial Data

	Υ		1st DATA		nd DATA
No.	MEANING	DATA	PORT LOCATION No.	DATA	MEANING
01	Data length	0 1	Port 0 Port 1	0 1 <b>⋖</b>	7 bit 8 bit
02	Parity check	0	Port 0 Port 1	0 1 <b>⋖</b>	Effective Ineffective
03	Kind of parity	0	Port 0 Port 1	0 1 <b>⋖</b>	Even parity Odd parity
04	Stop bit	0	Port 0 Port 1	0 1 <b>⋖</b>	1-Stop bit 2-Stop bit
05	DTR signal sent to terminal	0	Port 0 Port 1	0 1 <b>⋖</b>	Low High
06	RTS signal sent to terminal	0 1	Port 0 Port 1	0 1 <b>⋖</b>	Low High
08	Data speed	0 1	Port 0 Port 1	1 2 3 4 5 NONE◀	1200 bps 2400 bps 4800 bps 9600 bps 19200 bps 9600 bps

**NOTE:** The data should be assigned depending on the attribute of the VMS.



To add Automatic Number Identification (ANI) information to the MCI message format when the ANI information is sent from the network, do the following programming.



## • For MCI with AP00 (PN-AP00-B with AP00 program)

D

#### **DESCRIPTION**

**DATA** 

CMD000

Specify whether the text (Message Waiting control text sending is available) is sent to the VMS when the AP00 card is reset.

Specify the number of digits for station number in the message format to communicate with the VMS.

(1) 136

(2) 0**<**: To send 1 : Not sent

(1) 137

(2) 0**<**: 6 digits 1 : 8 digits

CMD001

Assign the attribute data, depending on the port (Port 0-3) connected to the VMS.

(1) See the following table.

(2) See the following table.

#### (AP00 INITIAL)

FIRST DATA (1)		)		SECOND		
	PORT			MEANING	SECOND DATA (2)	MEANING
0	1	2	3		, ,	
20	24	28	32	Data speed	2/3/4/5	1200/2400/4800/9600
					NOTE 1	bps NOTE 2
21	25	29	33	Stop bit length	0 < 1/2	1/1.5/2 bits <b>NOTE 2</b>
22	26	30	34	Data length	0 1	7/8 bits <b>NOTE 2</b>
23	27	31	35	Parity	0 1/2	None Parity/Even Par-
						ity/Odd Parity NOTE 2
80	100	120	140	Equipment Type	24	MCI
81	101	121	141	Priority for data processing	0◀	1st Priority
85	105	125	145	Station Address (SA)	48	0
86	106	126	146	Unit Address (UA)	33	!
89	109	129	149	Timer for detecting the end of block	5	512 ms.
98	118	138	158	Guard timer between texts	0	0-128 ms.
					1	128-256 ms.
					2	256-384 ms.
					3	384-512 ms.
					4	512-640 ms.
						NOTE 3

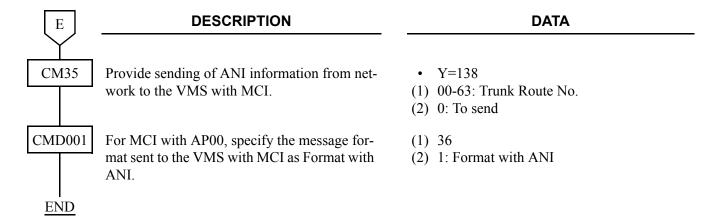
**NOTE 1:** For the Port 1 and Port 3, data speed 9600 bps cannot be set.

**NOTE 2:** This data should be assigned depending on the attribute of the VMS.

**NOTE 3:** To send the text to the VMS successively, assign the guard timer.

Е

To add Automatic Number Identification (ANI) information to the MCI message format when the ANI information is sent from the network, do the following programming.



For MCI with AP00 (PN-AP00-B/PN-AP00-D with MRCA program)
 [Series 3300 software required]

# F

#### DESCRIPTION

#### **DATA**

CMDD01

Set interface condition for PN-AP00-B/PN-AP00-D with MRCA program RS port.

(AP00 INITIAL)

When you set CMDD01, the following initial data is set to specified port as the interface condition.

- Data Speed: 9600 bpsStop Bit Length: 2 bitsData Length: 7 bitsParity: No Parity
- Station Address (SA): 0
  Unit Address (UA): !
- Send the text to the VMS when the AP00 card is reset.
- 6-digit station number in the message format to communicate with the VMS/Format without ANI
- Timer for detecting the end of block: 1 second
- Guard timer between text: 512-640 ms.

(1) 100 (Port 0)

(2) 10: MCI

101 (Port 1) 102 (Port 2)

103 (Port 3)

CMDD10

To change the interface condition of each port set by CMDD01, assign the attribute data, according to the VMS.

(AP00 INITIAL)

(1) X01: Data Speed for Port 0-3

X: 0-3: Port 0-3

(2) 1 : 300 bps

2 : 1200 bps 3 : 2400 bps

4 : 4800 bps

5**⋖**: 9600 bps

6 : 19200 bps

(1) X02: Stop Bit Length for Port 0-3

X: 0-3: Port 0-3

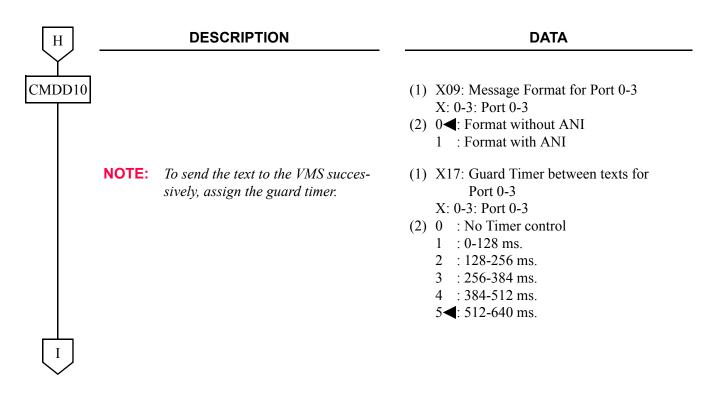
(2) 0 : 1 bit

1 : 1.5 bits

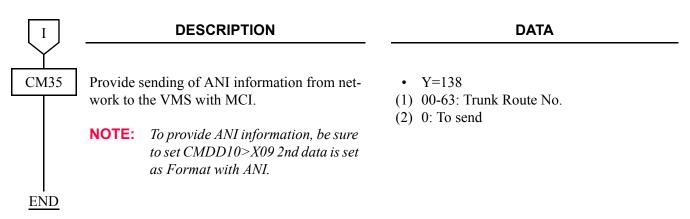
2**<**: 2 bits

G

G	DESCRIPTION	DATA
CMDD10		<ul> <li>(1) X03: Data Length for Port 0-3</li> <li>X: 0-3: Port 0-3</li> <li>(2) 0◀: 7 bits</li> <li>1 : 8 bits</li> </ul>
		<ul> <li>(1) X04: Parity for Port 0-3         X: 0-3: Port 0-3</li> <li>(2) 0◀: No Parity         1 : Even Parity         2 : Odd Parity</li> </ul>
		<ul> <li>(1) X05: Station Address (SA) for Port 0-3</li> <li>X: 0-3: Port 0-3</li> <li>(2) 48</li></ul>
		<ul> <li>(1) X06: Unit Address (UA) for Port 0-3</li></ul>
		<ul> <li>(1) X07: Sending the text (Message Waiting control text sending is available) to the VMS when the AP00 card is reset X: 0-3: Port 0-3</li> <li>(2) 0◀: To send</li> <li>1 : Not sent</li> </ul>
		<ul> <li>(1) X08: Number of digits for station number in the message format to communicate with the VMS</li> <li>X: 0-3: Port 0-3</li> <li>(2) 0◀: 6 digit</li> <li>1 : 8 digit</li> </ul>
H		i . o digit



To add Automatic Number Identification (ANI) information to the MCI message format when the ANI information is sent from the network, do the following programming.

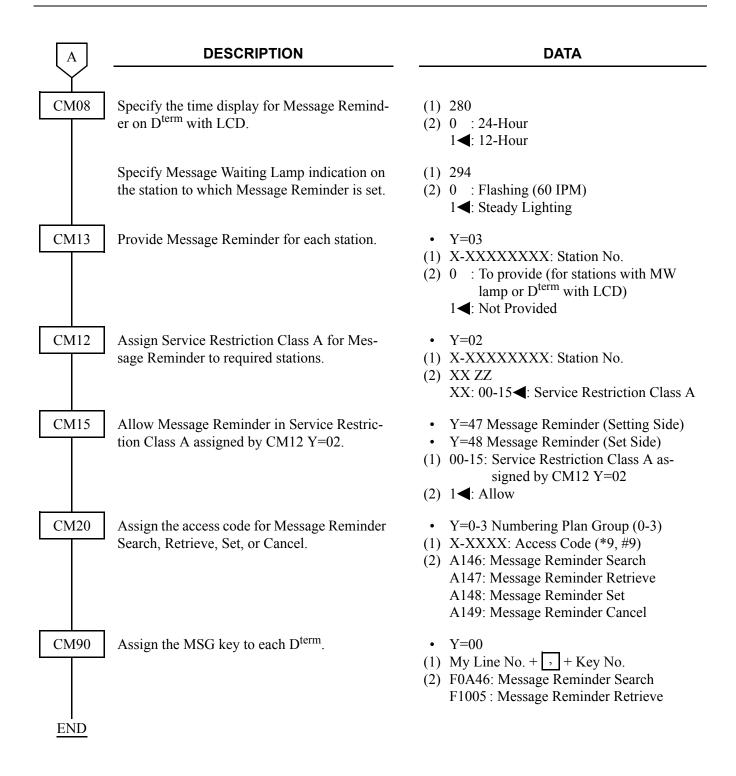


# **MESSAGE REMINDER**

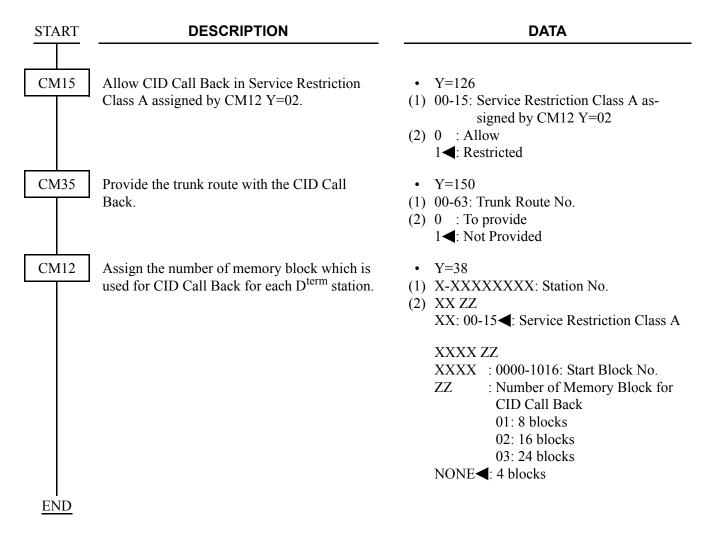
# **PROGRAMMING**

To provide Message Reminder service for each station:

START	DESCRIPTION	DATA		
CM08	Select MSG Display on D <sup>term</sup> .	<ul> <li>(1) 025</li> <li>(2) 0 : MSG (only)</li> <li>1 ≤ : MSGX (X: No. of messages)</li> </ul>		
	To activate Single-Digit Feature Access Code (1, 2, 3 and 6) feature, set the data for 050, 051, 069 and 148 to "1".	<ul><li>(1) 050: * Button as Switch Hook-Flash</li><li>(2) 1◀: Ineffective</li></ul>		
	NOTE: A single digit access code "6" is fix-	<ul><li>(1) 051: # Button as Switch Hook Flash</li><li>(2) 1◀: Ineffective</li></ul>		
	edly assigned to set Message Re- minder.	(1) 069: Single-Digit Dialing on BT Connection		
		(2) 1 <b>◄</b> : Step Call		
		(1) 148: Same Last Digit Redialing on BT Connection		
		(2) 1 <b>◄</b> : Ineffective		
	Provide the system with Single-Digit Feature Access Code on RBT or Voice Call Connection.	<ul><li>(1) 156</li><li>(2) 0: Available</li></ul>		
	Provide the system with Single-Digit Feature Access Code on busy Connection.	<ul><li>(1) 208</li><li>(2) 0: Available</li></ul>		
	Provide the system with the automatic cancel of Message Reminder while the called station rings.	<ul> <li>(1) 234</li> <li>(2) 0 : Available</li> <li>1 ◀: Not available</li> </ul>		
	Specify the Automatic Cancel of Message Reminder when the desired station answers.	<ul> <li>(1) 235</li> <li>(2) 0 : Available</li> <li>1 ◀: Not available</li> </ul>		
	Specify the sending of Special Dial Tone for Attendant Console or station when dialing a feature access code.	<ul> <li>(1) 236</li> <li>(2) 0 : Tone is not sent</li> <li>1 ◀: Tone is sent</li> </ul>		
A				

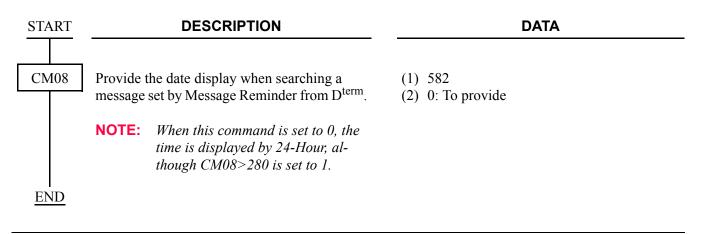


To provide CID Call Back, add the following programming:



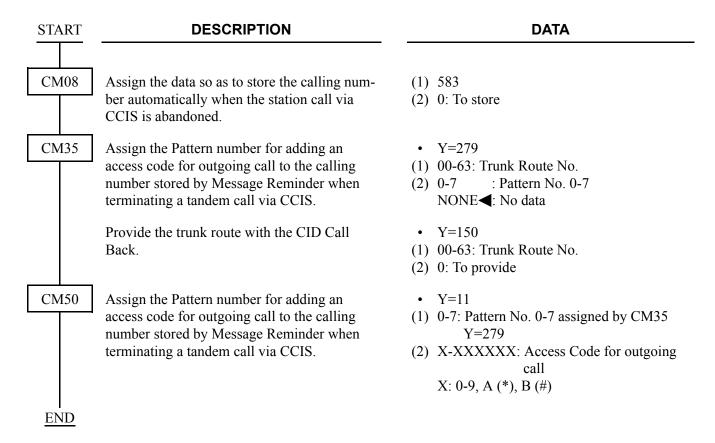
To display the date when searching a message set by Message Reminder from D<sup>term</sup>, do the following programming:

# [Series 3800 software required]



To store the calling number automatically when the station call via CCIS is abandoned, do the following programming:

#### [Series 3800 software required]



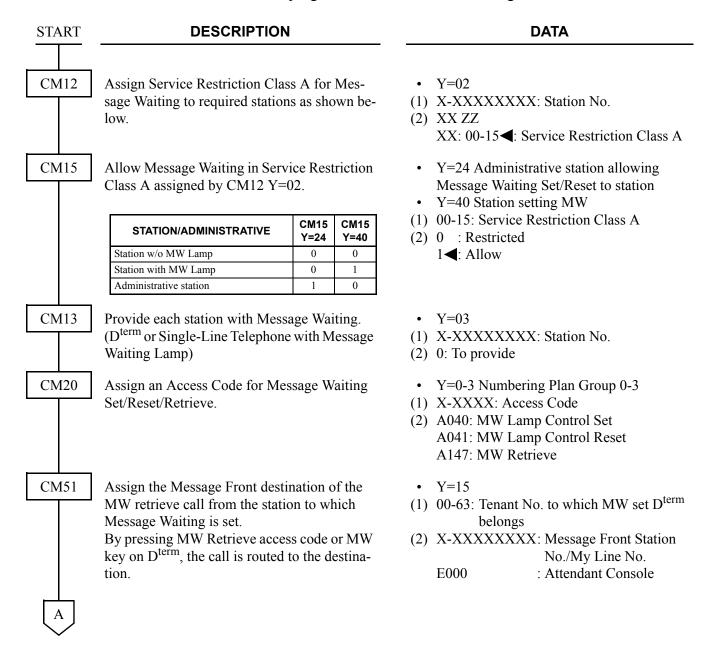
#### HARDWARE REQUIRED

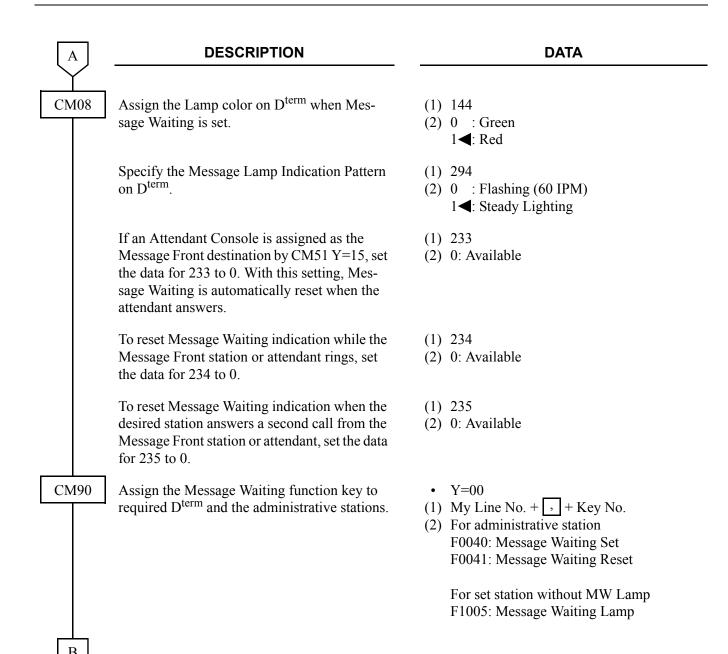
Single-Line Telephone with MW Lamp 8LC or 4LCD card

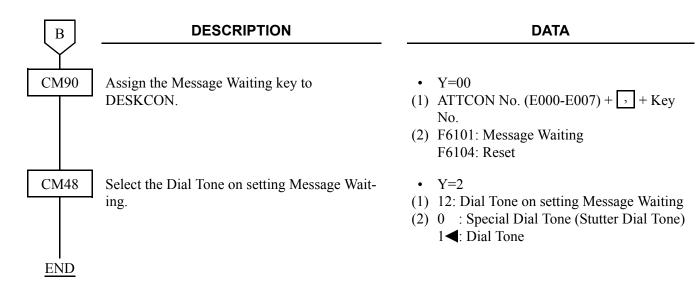
# **MESSAGE WAITING**

#### **PROGRAMMING**

Refer to the DSS/BLF Console feature to program the DSS/BLF as a Message Front Station.







## HARDWARE REQUIRED

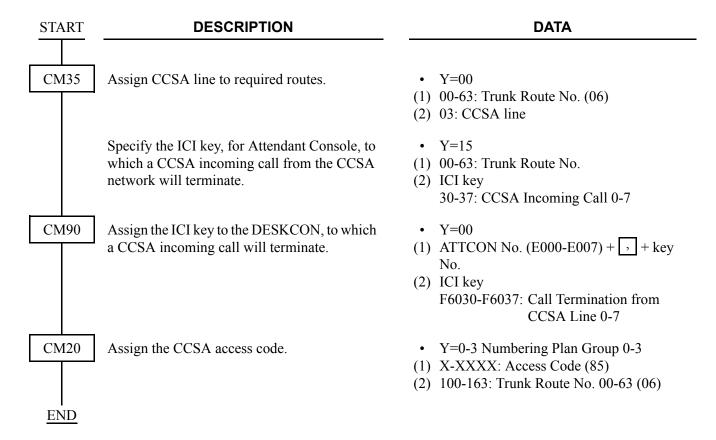
Single-Line Telephone with the MW Lamp 8LC or 4LCD card D<sup>term</sup> and DLC card, if required.

# **MISCELLANEOUS TRUNK ACCESS**

## **CCSA ACCESS**

#### **PROGRAMMING**

In addition to the programming of Tie Lines, assign CCSA line to the required routes, as shown below.

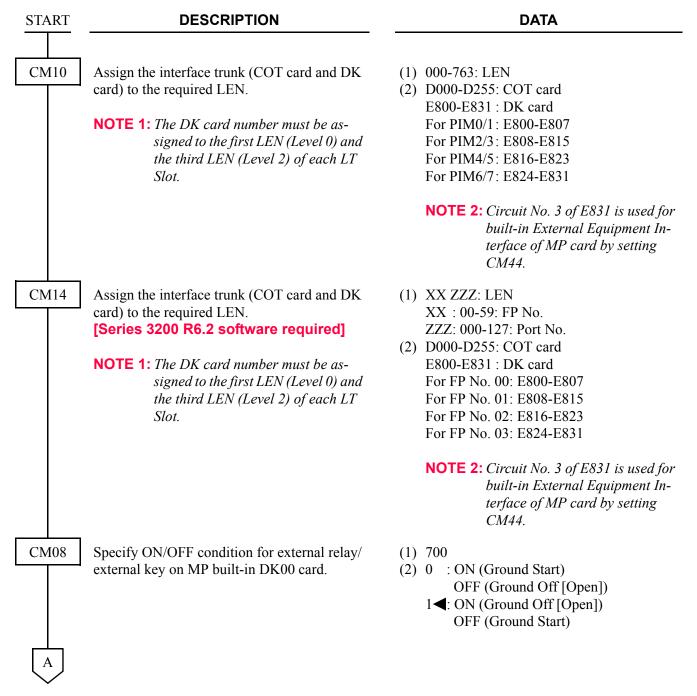


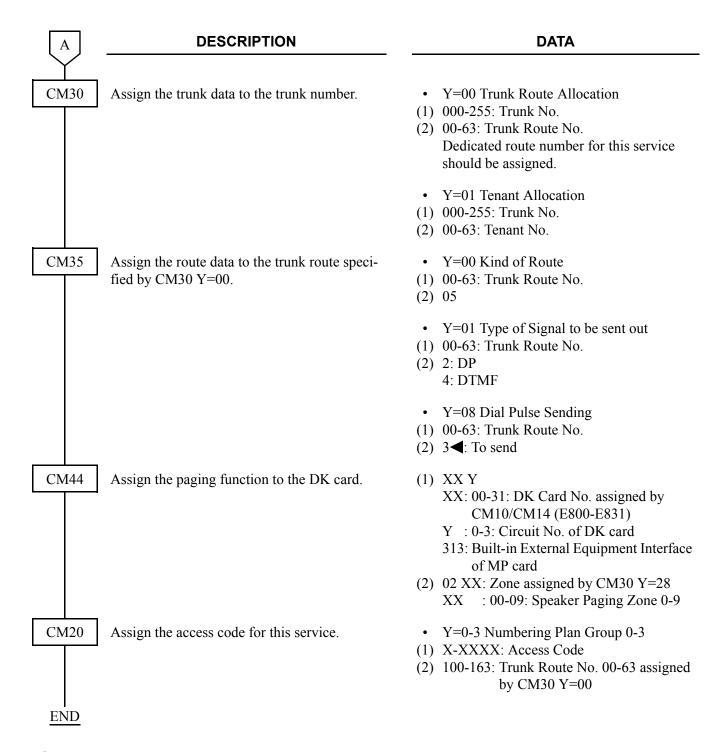
#### HARDWARE REQUIRED

ODT card

# **CODE CALLING EQUIPMENT ACCESS**

#### **PROGRAMMING**



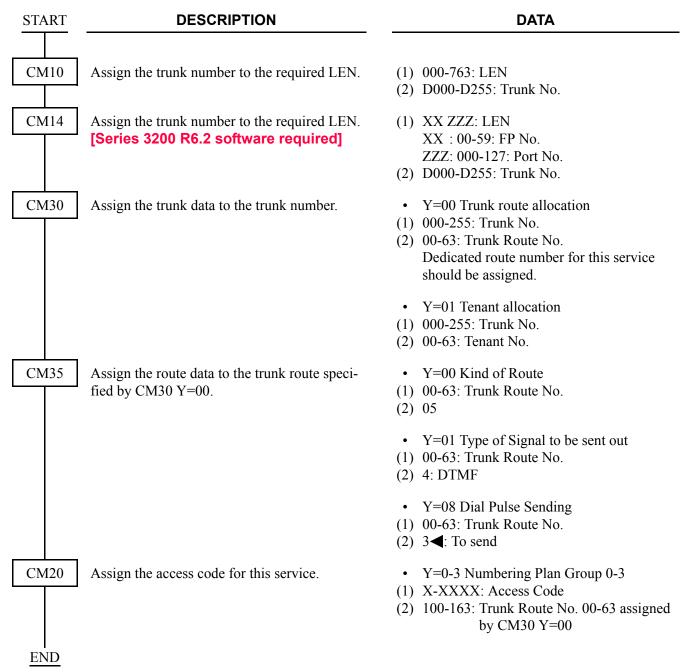


NOTE: For assigning the Class of Service for this feature, refer to CLASS OF SERVICE.

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#### **DICTATION EQUIPMENT ACCESS**

#### **PROGRAMMING**



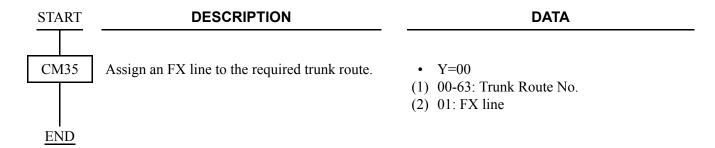
**NOTE:** For assigning the Class of Service for this feature, refer to CLASS OF SERVICE.

▶ Page 211

# FOREIGN EXCHANGE (FX) ACCESS

#### **PROGRAMMING**

In addition to the programming of Direct Outward Dialing, assign an FX line to the required trunk routes as shown below:

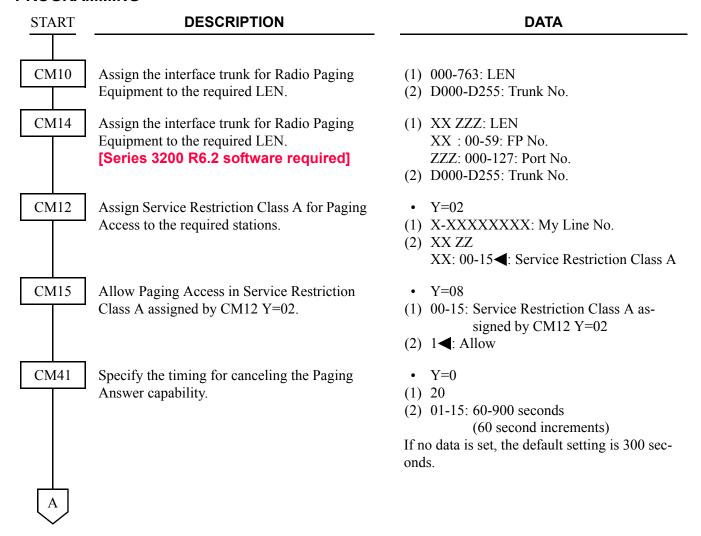


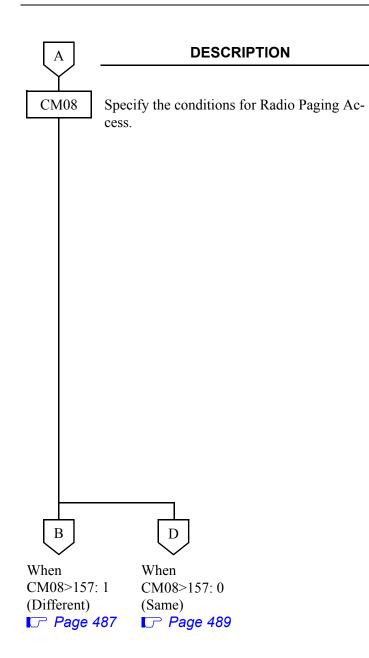
**NOTE:** For assigning the Class of Service for this feature, refer to CLASS OF SERVICE.

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## **RADIO PAGING EQUIPMENT ACCESS**

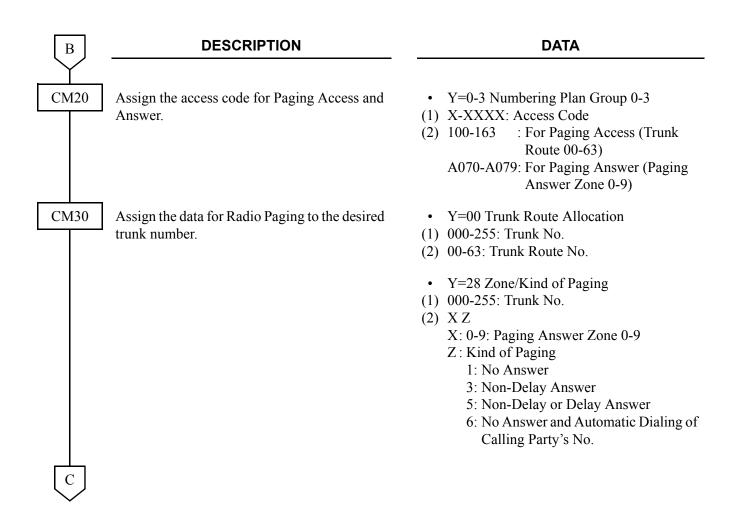
#### **PROGRAMMING**

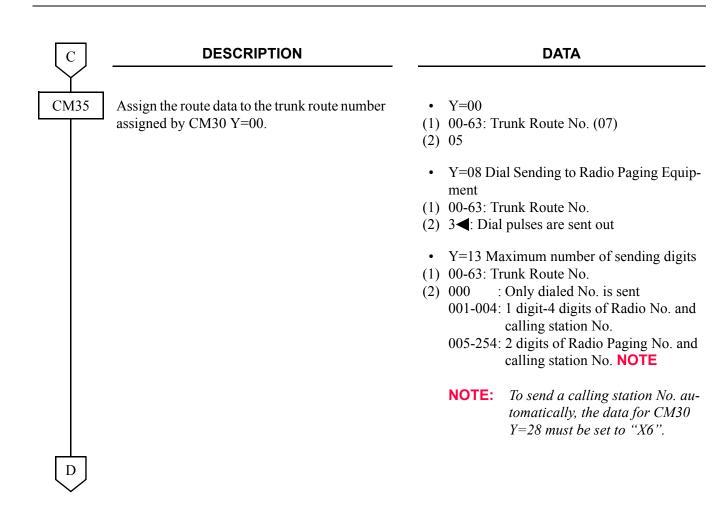


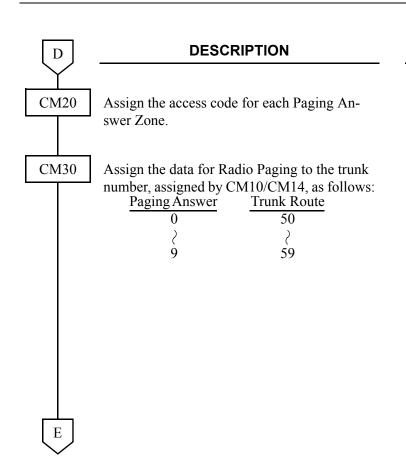


#### **DATA**

- (1) 094: Paging Access Tone
- (2) 0: To send
- (1) 095: Hooking Signal to Radio Paging Equipment
- (2) 0 : To send
  - 1**⋖**: Not sent
- (1) 149: Automatic Call Back when paging station is busy through non-delay operation
- (2) 0 : Available
  - 1**◄**: Not available
- (1) 157: Access Code for Paging Access and Answer
- (2) 0 : Same
  - 1**⋖**: Different
- (1) 162: Multiple Radio Paging Access after accessing a radio paging trunk with delay type Radio Paging
- (2) 0 : Not available
  - 1**⋖**: Available

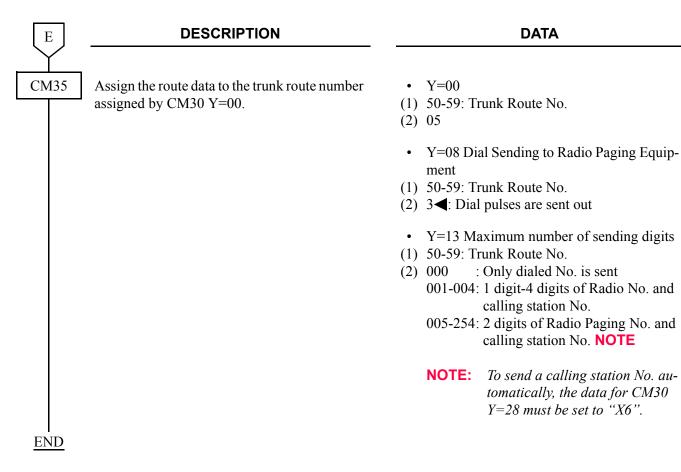






### **DATA**

- Y=0-3 Numbering Plan Group 0-3
- (1) X-XXXX: Access Code
- (2) A070-A079: Paging Answer Zone 0-9
- Y=00 Trunk Route Allocation
- (1) 000-255: Trunk No.
- (2) 50-59: Trunk Route No.
- Y=28 Zone/Kind of Paging
- (1) 000-255: Trunk No.
- (2) XZ
  - X: 0-9: Paging Answer Zone 0-9
  - Z: Type of Paging
    - 1: No Answer
    - 3: Non-Delay
    - 5: Non-Delay or Delay Answer
    - 6: No Answer and Automatic Dialing of Calling Party's No.



#### HARDWARE REQUIRED

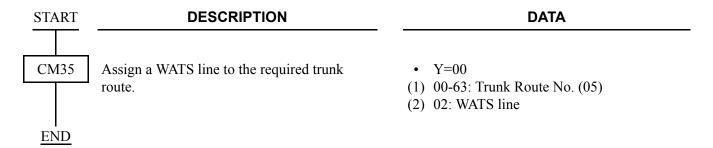
COT card

Radio Paging Equipment provided locally

# WIDE AREA TELEPHONE SERVICE (WATS) ACCESS

### **PROGRAMMING**

In addition to the programming of Direct Outward Dialing, assign an WATS line to the required trunk route, as shown below:



**NOTE:** For assigning the Class of Service for this feature, refer to CLASS OF SERVICE.

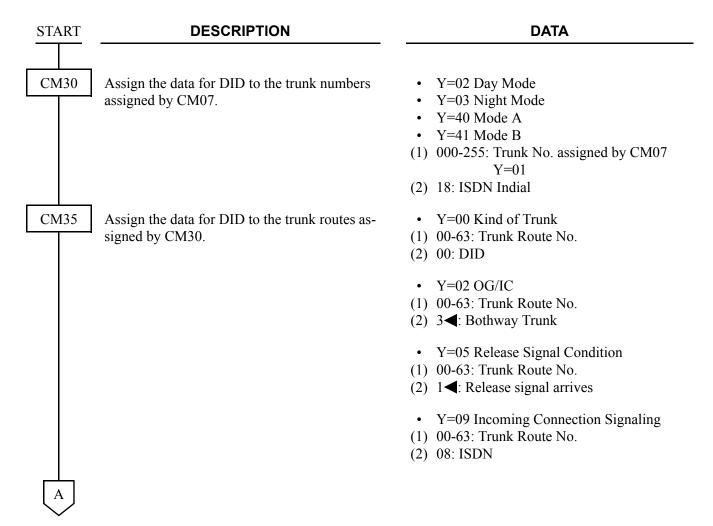
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# **MOBILITY ACCESS**

[Series 3700 R12.1 software required]

#### **PROGRAMMING**

In addition to the ISDN-BRI/ISDN-PRI programming, do the following programming. As for the ISDN-BRI/ISDN-PRI programming, refer to the ISDN System Manual.



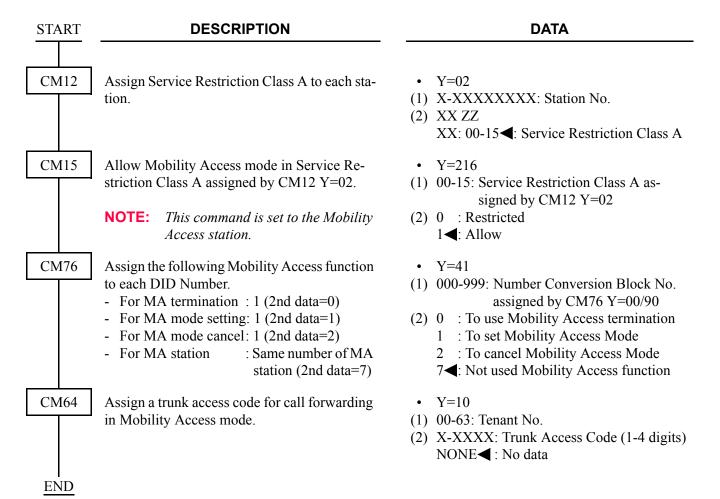
A	DESCRIPTION	DATA
CM35	Assign the data for DID Digit Conversion to the trunk routes assigned by CM30.	<ul> <li>Y=18 Digit Conversion on DID call</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: To provide</li> </ul>
		<ul> <li>Y=170 Development Table</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : Development Table 1</li> <li>3◄: Development Table 0</li> </ul>
		<ul> <li>Y=12 Number of digits to be received</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : 1 digit</li> <li>1 : 2 digits</li> <li>2 : 3 digits</li> <li>3 ★: 4 digits</li> </ul>
		<ul> <li>Y=78 Number of digits to be converted for Development Table 0</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : Leading 2-4 digits</li> <li>1 ◄: All digits of DID are converted by CM76</li> </ul>
		<ul> <li>Y=171 Number of digits to be converted for Development Table 1</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 01-08: 1-8 digits 15◀: 4 digits</li> </ul>
CM76	Assign the Number Conversion Block number for Development Table 0.	<ul> <li>Y=00</li> <li>(1) X-XXXX: DID No.</li> <li>(2) 000-999: Number Conversion Block No.</li> </ul>
	Assign the Number Conversion Block number for Development Table 1.	<ul> <li>Y=90</li> <li>(1) X-XXXXXXXXX: DID No.</li> <li>(2) 000-999: Number Conversion Block No.</li> </ul>
В		

В	DESCRIPTION	DATA
CM76	Assign the data for interpreting the digits received.	<ul> <li>Y=01 Day Mode</li> <li>Y=02 Night Mode</li> <li>Y=03 Mode A</li> <li>Y=04 Mode B</li> <li>(1) 000-999: Number Conversion Block No. assigned by CM76 Y=00/90</li> <li>(2) NONE : No data</li> </ul>
CM36	For a mobile phone of Mobility Access, allow tandem connection between the incoming trunk route and the outgoing trunk route.	<ul> <li>Y=0</li> <li>(1) XX ZZ</li> <li>XX: 00-63: Incoming Trunk Route</li> <li>ZZ: 00-63: Outgoing Trunk Route</li> <li>(2) 0: Allow</li> </ul>
CM08	Specify the destination of DID call transfer to an attendant by CM51 Y=00/03/06 in system.	<ul><li>(1) 241</li><li>(2) 0: Tenant of called station</li></ul>
CM51	Assign the destination of DID call transferred when the station is busy/unassigned/no answer.  NOTE: The 1st data is set to the tenant No. of called station.	<ul> <li>Y=00 No Answer</li> <li>Y=03 Busy</li> <li>Y=06 Unassigned</li> <li>(1) 00-63: Tenant No.</li> <li>(2) Destination:     X-XXXXXXXXX: Station No.     E000: Attendant Console</li> </ul>
CM35	Provide release of ISDN trunk when receiving the ISDN DISCONNECT message with Progress Description=08 from ISDN (effective for an outgoing call to ISDN).  Provide release of ISDN trunk when receiving the ISDN DISCONNECT message with Progress Description=08 from ISDN (effective for an incoming call to ISDN).	<ul> <li>Y=158</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: To provide</li> <li>Y=208</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 1: To provide</li> </ul>
C		

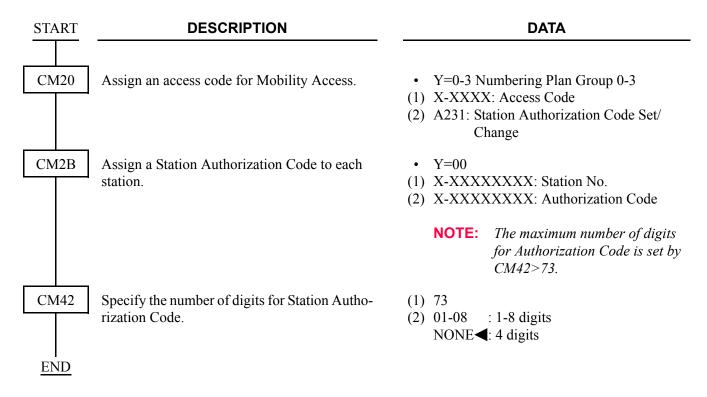
DESCRIPTION	DATA	
Provide release of ISDN trunk when receiving the ISDN DISCONNECT message with Progress Description=08 from ISDN because the called party is busy in tandem connection (ISDN to ISDN). <b>NOTE</b>	<ul> <li>Y=233</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: To provide</li> </ul>	
Provide relay of the ALERT message to the calling party in tandem connection (ISDN to ISDN). <b>NOTE</b>	<ul> <li>Y=266</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: To provide</li> </ul>	
	Provide release of ISDN trunk when receiving the ISDN DISCONNECT message with Progress Description=08 from ISDN because the called party is busy in tandem connection (ISDN to ISDN). <b>NOTE</b> Provide relay of the ALERT message to the calling party in tandem connection (ISDN to	Provide release of ISDN trunk when receiving the ISDN DISCONNECT message with Progress Description=08 from ISDN because the called party is busy in tandem connection (ISDN to ISDN). NOTE  Provide relay of the ALERT message to the calling party in tandem connection (ISDN to ISDN) to (1) 00-63: Trunk Route No.

**NOTE:** Set CM35 Y=233/266 2nd data=0 to both the incoming trunk route and the outgoing trunk route of Mobility Access.

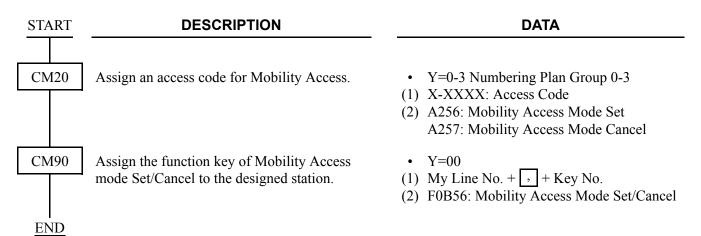
To provide Mobility Access (MA), do the following programming.



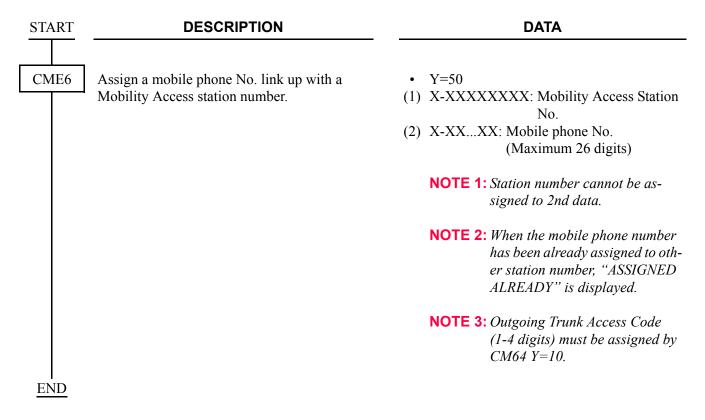
• To set or cancel Mobility Access mode from a mobile phone:



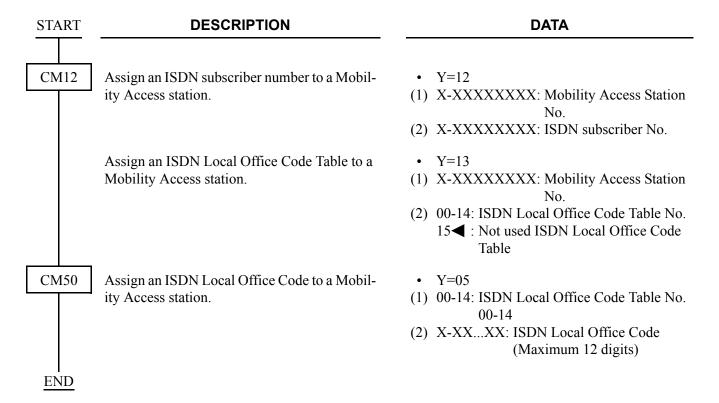
• To set or cancel Mobility Access mode from a station:



• To set or cancel Mobility Access mode from MAT:

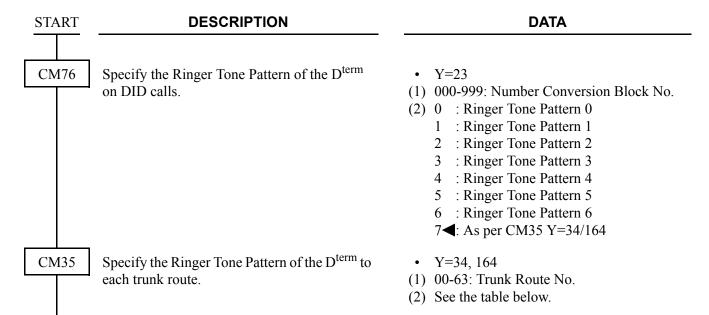


• To assign a calling party number (DID number) of Mobility Access station displayed on the mobile phone:



**NOTE:** A calling party number displayed on Mobility Access station is the following: ISDN subscriber number assigned by CM12 Y=12 + ISDN Local Office Code assigned by CM50 Y=05.

• To specify a D<sup>term</sup> ringer tone pattern of Mobility Access call, do the following programming.



Y=34	Y=164: 0	Y=164: 1 <b>◀</b>
0	Ringer Tone Pattern 3	Ringer Tone Pattern 0
1	Ringer Tone Pattern 6	Ringer Tone Pattern 1
2	Ringer Tone Pattern 5	Ringer Tone Pattern 2
3◀	Ringer Tone Pattern 4	Ringer Tone Pattern 7





## **DESCRIPTION**

## **DATA**

CM65

Specify the ring frequency of the  $D^{\text{term}}$ .

• Y=40

(1) 00-63: Tenant No.

(2) See the table below.

Dinner Tene		Y=40: 1◀			
Ringer Tone Pattern No.	Y=40: 0	Electra Terminal/ D <sup>term</sup> Series III	Elite Terminal/D <sup>term</sup> Series E/ D <sup>term</sup> Series i		
0	Door Phone 1024 + 1285 [Hz]/ Ringer Tone 16 [Hz] Modulating Signal		1100 + 1400 [Hz]/ 16 [Hz] Modulating Signal		
1	Ringer Tone 1	480 + 606 [Hz]/ 8 [Hz] Modulating Signal	520 + 660 [Hz]/ 8 [Hz] Modulating Signal		
2	Ringer Tone 2	600 + 700 [Hz]/ 16 [Hz] Modulating Signal	660 + 760 [Hz]/ 16 [Hz] Modulating Signal		
3	Ringer Tone 3 1024 [Hz] Envelop		1100 [Hz] Envelop		
4	Ringer Tone 4	500 [Hz]	540 [Hz]		
5	Ringer Tone 5	1024 [Hz]	1100 [Hz]		
6	Not used	1285 + 1024 [Hz]	1400 + 1100 [Hz]		
7	Not used	480 + 606 [Hz]/ 16 [Hz] Modulating Signal	520 + 660 [Hz]/ 16 [Hz] Modulating Signal		

NOTE:

This data is effective only for  $D^{term}$ 

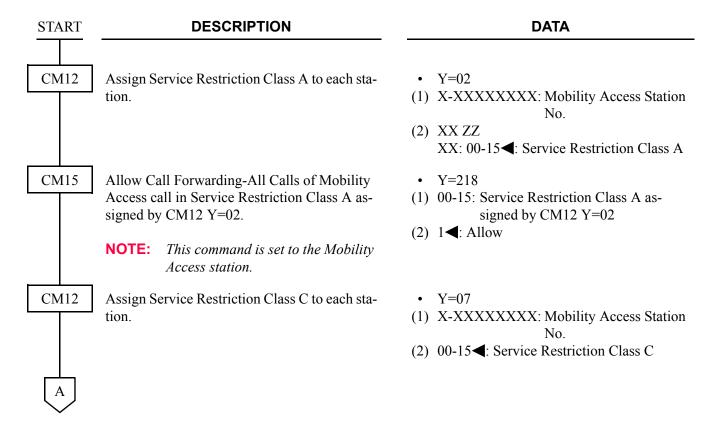
Series i.

When using Electra Terminal/D<sup>term</sup> Series III/Elite Terminal/D<sup>term</sup> Series E, using D<sup>term</sup> Series i with Series 3100 software or before, or when accommodating D<sup>term</sup> Series i in TDM based Remote PIM, the second data is fixed to 1.

**END** 

To set Call Forwarding-All Calls of Mobility Access call from a mobile phone, do the following programming.

# [Series 3700 R12.2 software required]





#### **DESCRIPTION**

#### **DATA**

CM15

Assign the priority for Call Forwarding-All Calls of Mobility Access call.

**NOTE:** *Set the 2nd data to "0" to Mobility* Access station number for Call Forwarding-All Calls of Mobility Access call.

Y = 484

(1) 00-15**◄**: Service Restriction Class C assigned by CM12 Y=07

(2) 0 : See the table below. 3**⋖**: See the table below.

PRIORITY	2ND DATA=0	2ND DATA=3◀
HIGH	Restriction of Inter-tenant Connection	Restriction of Inter-tenant Connection
	Call Forwarding-All Calls/Split Call Forwarding-All Calls	Call Forwarding-All Calls of Mobility Access
	Call Forwarding-All Calls of Mobility Access	Alternative ISDN Connection when Remote PIM in survival mode (CID Call Routing per each station)
in survival mode (CID Call Routing per each station)  Alternative ISDN Connection when Remote PIM in survival mode (CID Call Routing per each tenant)  Call Forwarding-Logout (D <sup>term</sup> IP)		Alternative ISDN Connection when Remote PIM in survival mode (CID Call Routing per each tenant)
		Call Forwarding-Logout (D <sup>term</sup> IP)
		Call Forwarding-All Calls/Split Call Forwarding-All Calls
	UCD (Uniform Call Distribution)	UCD (Uniform Call Distribution)
	Do Not Disturb	Do Not Disturb
<b>\</b>	Station Hunting	Station Hunting
<b>▼</b> LOW	Call Forwarding-Busy Line/Split Call Forwarding-Busy Line	Call Forwarding-Busy Line/Split Call Forwarding-Busy Line

CM20

**END** 

Assign the access code for Call Forwarding-All Calls, Set and Cancel, respectively.

• Y=0-3 Numbering Plan Group 0-3

(1) X-XXXX: Access Code (\*5, #5)

(2) A010: Call Forwarding-All Calls Set A011: Call Forwarding-All Calls Cancel

CM90 Assign Call Forwarding-All Calls keys to the D<sup>term</sup>s, as required.

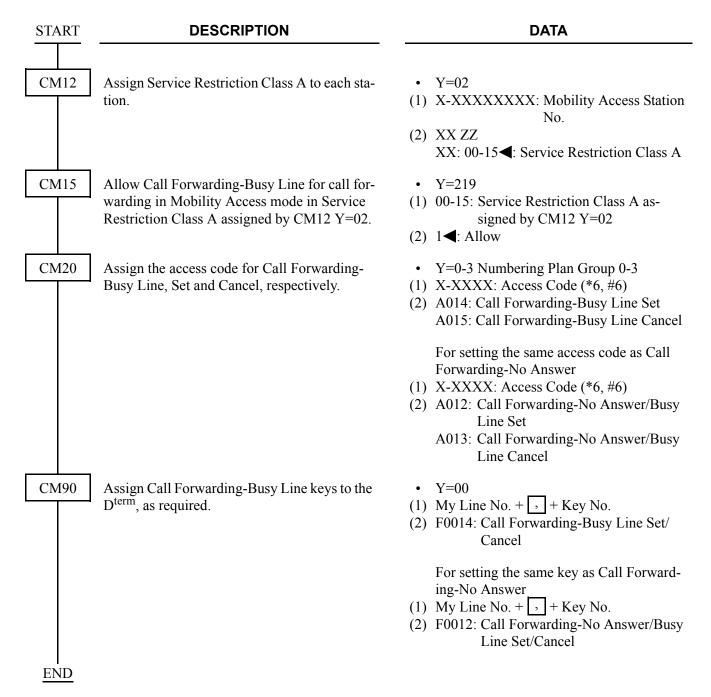
Y = 00

(1) My Line No. + , + Key No.

(2) F0010: Call Forwarding-All Calls Set/ Cancel

To set Call Forwarding-Busy Line for call forwarding in Mobility Access mode, do the following programming.

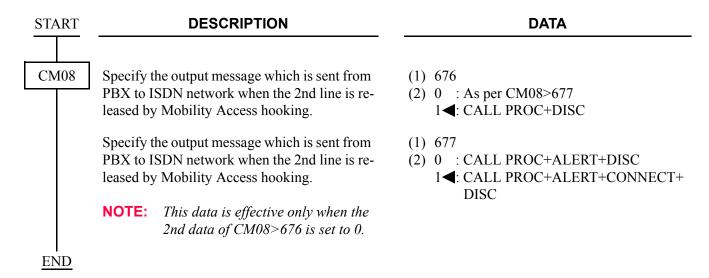
# [Series 3700 R12.2 software required]



To provide Mobility Access hooking, do the following programming.

# [For EU]

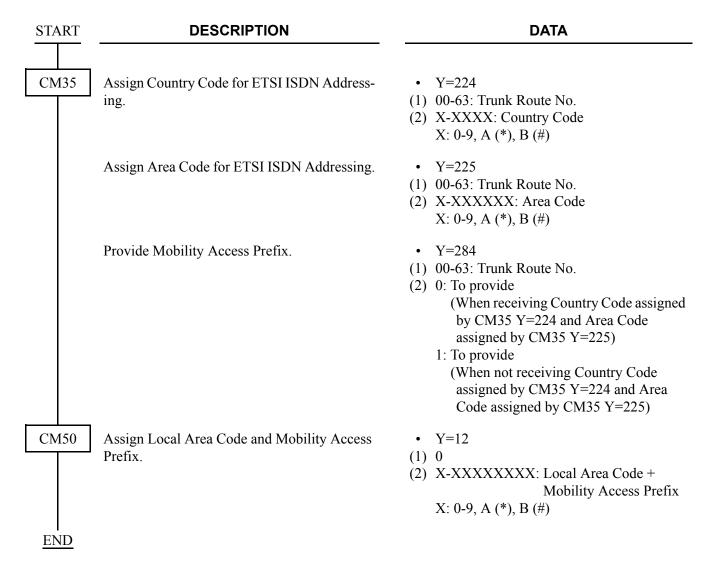
# [Series 3700 R12.2 software required]



To provide Mobility Access Prefix, do the following programming.

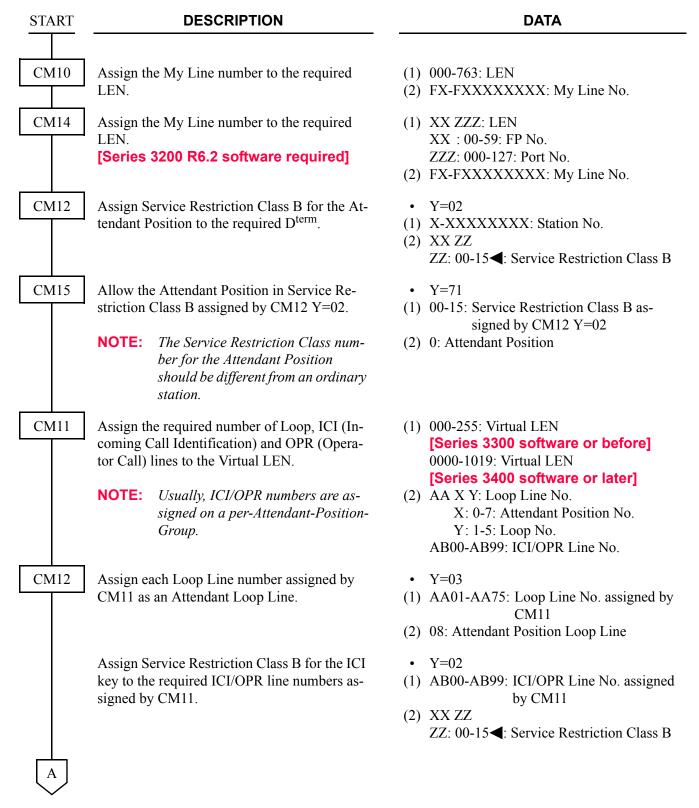
## [For EU]

# [Series 3900 software required]

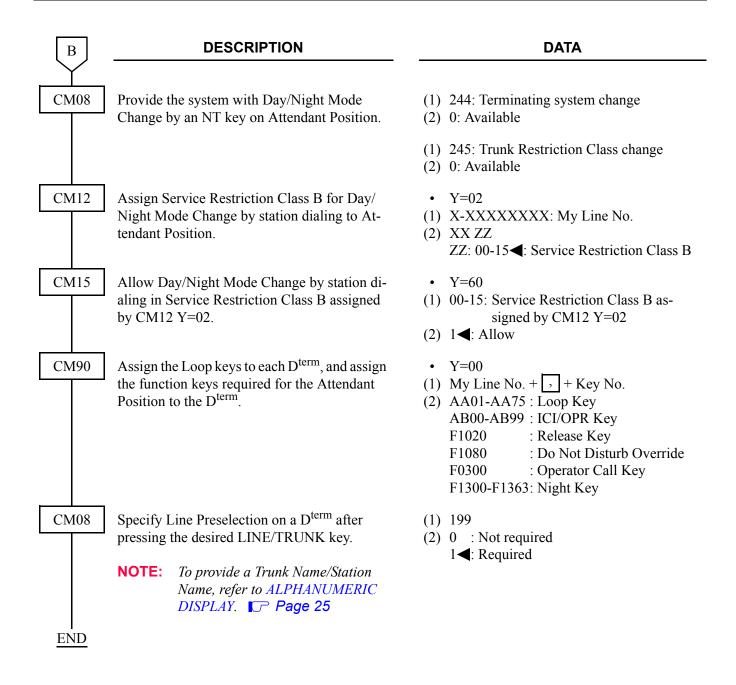


# **MULTILINE TERMINAL ATTENDANT POSITION**

#### **PROGRAMMING**



A	DESCRIPTION	DATA
CM15	Allow the ICI/OPE key in Service Restriction Class B assigned by CM12 Y=02.  NOTE: The Service Restriction Class number for the Attendant Position should be different from an ordinary	<ul> <li>Y=73</li> <li>(1) 00-15: Service Restriction Class B assigned by CM12 Y=02</li> <li>(2) 0: ICI/OPE key</li> </ul>
CM12	station.  Assign a Hotline station to each ICI/OPR line number. With this assignment, each ICI/OPR line is restricted from call origination.	<ul> <li>Y=03</li> <li>(1) AB00-AB99: ICI/OPR No.</li> <li>(2) 04: Hotline</li> </ul>
CM17	Assign a UCD station to each ICI/OPR line number. With this assignment, ICI/OPR lines are provided the call-queuing facility individually.	<ul> <li>Y=1</li> <li>(1) AB00-AB99: ICI/OPR Line No.</li> <li>(2) 1: Pilot station</li> <li>Y=2</li> <li>(1) AB00-AB09: ICI/OPR Line No.</li> <li>(2) 00-15: UCD Group No.</li> </ul>
		NOTE: Individual UCD Group number must be assigned to each ICI/OPR Line number.
CM20	Assign the access code for Priority Call 0 used for Attendant Position access.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Attendant Position Access Code</li> <li>(2) A088</li> </ul>
CM51	Assign the destination of Priority Call 0 to each OPR line.	<ul> <li>Y=12</li> <li>(1) 00-63: Tenant No.</li> <li>(2) AB00-AB99: OPR Line No.</li> </ul>
CM08	Destination of Priority Call 0.	<ul><li>(1) 250</li><li>(2) 0: Same station as Off Hook Alarm</li></ul>
CM30	On the required trunks, assign the destination of DIT to each ICI line.	<ul> <li>Y=02</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 04: Direct-in Termination</li> <li>Y=04</li> </ul>
В		<ul><li>(1) 000-255: Trunk No.</li><li>(2) AB00-AB99: ICI Line No.</li></ul>

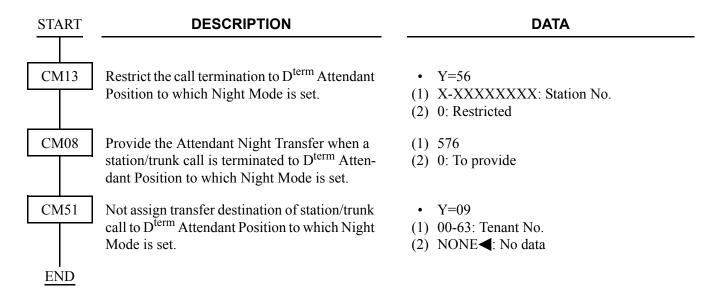


To use a DSS Console with the D<sup>term</sup> Attendant Position, add the following programming.

START	DESCRIPTION	DATA
CM10	Assign the DSS Console number to the required LEN.	(1) 000-763: LEN (2) E100-E131: DSS Console No. For PIM0/1: E100-E107 For PIM2/3: E108-E115 For PIM4/5: E116-E123 For PIM6/7: E124-E131
CM14	Assign the DSS Console number to the required LEN.  [Series 3200 R6.2 software required]  NOTE: When using Series 3500 software or later, for the FP No. 00-03 of MP built-in FP/FP card of Main Site and MP built-in FP of Remote Site, the DSS console number (E100-E131) can be assigned without limit as shown right.	<ul> <li>(1) XX ZZZ: LEN</li></ul>
CM96	Assign the My Line number of the Attendant Position associated with each DSS Console.	<ul> <li>(1) 00-31: DSS Console No. assigned by CM10/CM14 (E100-E131)</li> <li>(2) X-XXXXXXXXX My Line No. of Attendant Position</li> </ul>
CM97	Assign station numbers to the DSS keys. Assign the MW, DND, NT keys as function keys.	<ul> <li>(1) For DSS key:     DSS Console No. (00-31) +</li></ul>
<u>END</u>		

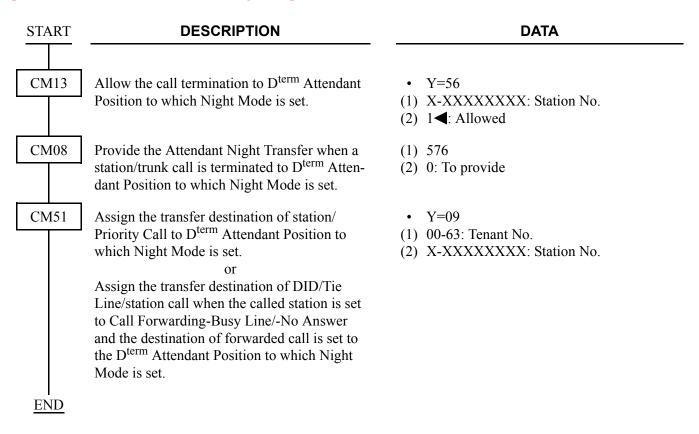
To restrict the call termination to D<sup>term</sup> Attendant Position to which Night Mode is set:

## [Series 3700 R12.1 software required]

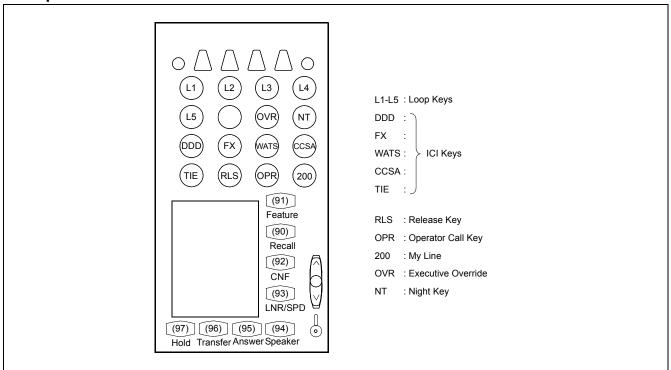


To provide the Attendant Night Transfer when a station/trunk call is terminated to D<sup>term</sup> Attendant Position to which Night Mode is set:

## [Series 3700 R12.1 software required]



### **Example:**



#### Conditions

(1) Operator Access Code: 0

(2) My Line No.: 200

(3) ICI/Function Keys

- DDD Line: TRUNK 000-004 (ICI Line No.=AB20)

- FX Line : TRUNK 005 (ICI Line No.=AB21)

- WATS Line: TRUNK 006 (ICI Line No.=AB22)

- CCSA Line: TRUNK 007 (ICI Line No.=AB23)

- TIE Line : TRUNK 008-010 (ICI Line No.=AB24)

- OPR Line : Operator Call from Stations (OPR Line No.=AB10)

- OVR Key : Executive Override

- NT Key : Night Key

(4) Number of Loop: 5 (Loop Line No.=AA01-AA05)

(5) Tenant No.: 00

(6) Numbering Plan Group: 0

(7) Type of D<sup>term</sup>: DTP-16D-1

Programming for Example:

Programming for Example:				
COMMAND CODE	<b>1ST DATA</b>	<b>2ND DATA</b>	REMARKS	
11	000	AA01		
	001	AA02		
	002	AA03	Loop Line Number	
,	003	AA04		
	004	AA05		
	005	AD10	ODD I. M. I	
	005	AB10	OPR Line Number	
	006 007	AB20	DDD T	
)	007	AB21 AB22	FX WATS ICI Line Number	
•	008	AB23	WATS ICI Line Number CCSA	
	010	AB23 AB24	TIE _	
	010	AD24	HE _	
12-02	200	1500	Service Class for Attendant Position	
/	AB10	1501		
	AB20	1501		
\	AB21	1501	Service Class for ICI Line	
	AB22	1501	Service Class for ICI Line	
	AB23	1501		
/	AB24	1501		
12-03	AA01	08 7		
12 03	AA02	08		
	AA03	08	Service Class for Loop Line	
	AA04	08	Service Class for Ecop Elife	
	AA05	08		
		_		
	AB10	04		
	AB20	04		
	AB21	04		
)	AB22	04	Hotline Assignment	
/	AB23	04		
	AB24	04		
	200	15		
15-071	00	0	Attendant Position Class	
15-073	01	0	ICI/OPR Key Class	
17-1	AB10	1 7		
/	AB20	1		
(	AB21	1	Assign UCD Pilot Station to the ICI/OPR	
	AB22	1	Line Numbers	
	AB23	1		
)	AB24	1		
/		_		

17-2	COMMAND CODE	1ST DATA	2ND DATA	<b>\</b>	REMARKS
AB21	17-2	AB10	00	7	
AB22 AB23 AB23 AB24 O5  20-0 0 A088 Operator Access Code  51-12 00 AB10 Operator Call Termination to OPR Line  08 250 0 ODI  001 04 O02 O4 O04 O04 O06 O4 O06 O4 O06 O4 O06 O4 O06 O4 O06 O4 O07 O08		AB20	01		
AB23 AB24 AB24 AB24 AB24 AB24 AB24 AB24 AB20  Operator Access Code  51-12  O0 AB10 Operator Call Termination to OPR Line  O8  250 O  O01 O02 O04 O03 O04 O04 O05 O04 O06 O04 O07 AB20 O08 AB20 O00 AB20 O01 AB20 O03 AB20 O04 AB20 O05 AB21 O06 AB22  O06 AB21 O06 AB22  O07 AB20 O08 AB20 O08 AB20 O09 AB20 O09 AB20 O09 AB20 O09 AB20 O08 AB21 O06 AB22  O07 AA01 COOP Key  OVR Key NT Key NT Key DDD Key FX Key WATS Key CCSA Key TIE Key RI.S Key CCSA Key TIE Key RI.S Key OOPR Key My Line Key My Line Key My Line Key  OR  OR  OR  OR  OR  OR  OR  OR  OR  O		AB21	02		Assign UCD Group to the ICI/OPR Line
AB24	\	AB22	03		Numbers
20-0 0 A088 Operator Access Code  51-12 00 AB10  08 250 0 Operator Call Termination to OPR Line  30-02 000 04 001 04 002 04 003 04 006 04 006 04  30-04 000 AB20 001 AB20 002 AB20 003 AB20 003 AB20 005 AB21 006 AB22  90-00 200,01 AA01 200,02 AA02 200,03 AA03 200,04 AA04 200,05 AA05  (  200,07 F0006 200,08 F1300 200,09 AB20 200,10 AB21 200,11 AB21 200,11 AB22 200,12 AB23 200,13 AB24 200,14 F1020 200,15 AB10 200,15 AB10 200,15 AB10 200,15 AB10 200,16 200 PR Key My Line Key  My Line Key  Definition of NT lent function		AB23	04		
S1-12	)	AB24	05		
Operator Call Termination to OPR Line  30-02	20-0	0	A088		Operator Access Code
08	51-12	00	AB10	٦	On another Call Termination to ODD Line
O01	08	250	0		Operator Call Termination to OPK Line
002	30-02	000	04	7	
003	,	001	04		
004	(	002	04		
005		003	04		DIT
006		004	04		
30-04		005	04		
O01	)	006	04		
O02	30-04	000	AB20	¬	
O03	,	001	AB20		
004	(	002	AB20		
004		003	AB20		Incoming Call Termination to ICI Line
90-00  200,01 200,02 200,03 AA02 200,04 AA04 200,05 AA05   COVR Key NT Key DDD Key PX Key DDD Key FX Key WATS Key CCSA Key TIE Key 200,12 AB21 200,13 AB24 200,14 F1020 200,15 AB10 200,16 AB10 COP Key  DVR Key NT Key DDD Key FX Key WATS Key CCSA Key TIE Key RLS Key OPR Key My Line Key  OPR Key My Line Key	\	004	AB20		•
90-00  200,01 200,02 AA02 200,03 AA03 200,04 AA04 200,05 AA05    OVR Key NT Key DDD Key FX Key WATS Key CCSA Key TIE Key 200,13 AB24 200,14 F1020 200,15 AB10 200,16 AB10 AB21 DOP Key  AA05  DOP Key  AA05  DOP Key  AA05  AA05  AA05  DOP Key AA05  AA05  AA05  DOP Key AA05  AA05  DOP Key AA05  AA05  AA05  DOP Key AA05  AA05  AA06  AA06  AA06  AA07  DOP Key AA06  AA06  AA06  AA06  AA06  AA07  DOP Key AA06  AA	\	005	AB21		
200,02 200,03 AA03 200,04 AA04 200,05 AA05   COVR Key NT Key DDD Key ST Key DDD Key FX Key COSA Key WATS Key COSA Key TIE Key 200,12 AB23 COSA Key TIE Key 200,13 AB24 TIE Key RLS Key OPR Key My Line Key  OS  COVR Key NT Key DDP Key FX Key COSA Key TIE Key RLS Key OPR Key My Line Key	)	006	AB22		
200,03 200,04 AA04 200,05 AA05   OVR Key NT Key DDD Key  200,09 AB20 DDD Key FX Key WATS Key CCSA Key 200,12 AB23 CCSA Key 200,13 AB24 200,14 F1020 AB20 DR Key RLS Key OPR Key My Line Key  DR My Line Key  OR  OR  OR  OR  OR  OR  OR  OR  OR  O	90-00	200,01	AA01	7	
200,04 200,05 AA05    OVR Key NT Key DDD Key FX Key 200,10 AB21 FX Key 200,11 AB22 VWATS Key 200,12 AB23 CCSA Key 200,13 AB24 TIE Key 200,14 F1020 RLS Key 200,15 AB10 DOPR Key My Line Key  OR   OR  OR  OR  OR  OR  OR  OR  OR		200,02	AA02		
200,05  AA05  COVR Key  DOVR Key  NT Key  DDD Key  DDD Key  FX Key  WATS Key  CCSA Key  TIE Key  200,12  AB24  CCSA Key  TIE Key  RLS Key  OPR Key  My Line Key  DOVR Key  NT Key  DDD Key  FX Key  WATS Key  CCSA Key  TIE Key  RLS Key  OPR Key  My Line Key  DEfinition of NT key function		200,03	AA03		LOOP Key
200,05  AA05  COVR Key  DOVR Key  NT Key  DDD Key  DDD Key  FX Key  WATS Key  CCSA Key  TIE Key  200,12  AB24  CCSA Key  TIE Key  RLS Key  OPR Key  My Line Key  DOVR Key  NT Key  DDD Key  FX Key  WATS Key  CCSA Key  TIE Key  RLS Key  OPR Key  My Line Key  DEfinition of NT key function		200,04	AA04		•
200,08 F1300 NT Key 200,09 AB20 DDD Key 200,10 AB21 FX Key 200,11 AB22 WATS Key 200,12 AB23 CCSA Key 200,13 AB24 TIE Key 200,14 F1020 RLS Key 200,15 AB10 OPR Key 200,16 200 Definition of NT key function			AA05		
200,08 F1300 NT Key 200,09 AB20 DDD Key 200,10 AB21 FX Key 200,11 AB22 WATS Key 200,12 AB23 CCSA Key 200,13 AB24 TIE Key 200,14 F1020 RLS Key 200,15 AB10 OPR Key 200,16 200 Definition of NT key function	/	200,07	F0006	7	OVR Key
200,09 200,10 AB21 FX Key 200,11 AB22 WATS Key 200,12 AB23 CCSA Key 200,13 AB24 TIE Key RLS Key 200,15 AB10 OPR Key My Line Key  08  244  0  Definition of NT key function					
200,10 200,11 AB21 WATS Key WATS Key CCSA Key TIE Key 200,13 AB24 TIE Key RLS Key OPR Key My Line Key  08  244  0  Definition of NT key function	\	200,09	AB20		
200,11 AB22 WATS Key 200,12 AB23 CCSA Key 200,13 AB24 TIE Key 200,14 F1020 RLS Key 200,15 AB10 OPR Key 200,16 200 Definition of NT key function	\	200,10	AB21		
200,12 AB23 CCSA Key 200,13 AB24 TIE Key 200,14 F1020 RLS Key 200,15 AB10 OPR Key 200,16 200 My Line Key  08 244 0 Definition of NT key function		·			
200,13 200,14 F1020 RLS Key 200,15 AB10 200,16 200 OPR Key My Line Key  08  244  0  Definition of NT key function	/		AB23		· · · · · · · · · · · · · · · · · · ·
200,14 F1020 RLS Key 200,15 AB10 OPR Key 200,16 200 My Line Key  08 244 0 Definition of NT key function					· · · · · · · · · · · · · · · · · · ·
200,15 AB10 OPR Key 200,16 200 My Line Key  08 244 0 Definition of NT key function					
200,16 200 ☐ My Line Key  08 244 0 ☐ Definition of NT key function					
				┙	
	08	244	0	7	Definition of NT leave for stiger
	08	245	0		Definition of INT key function

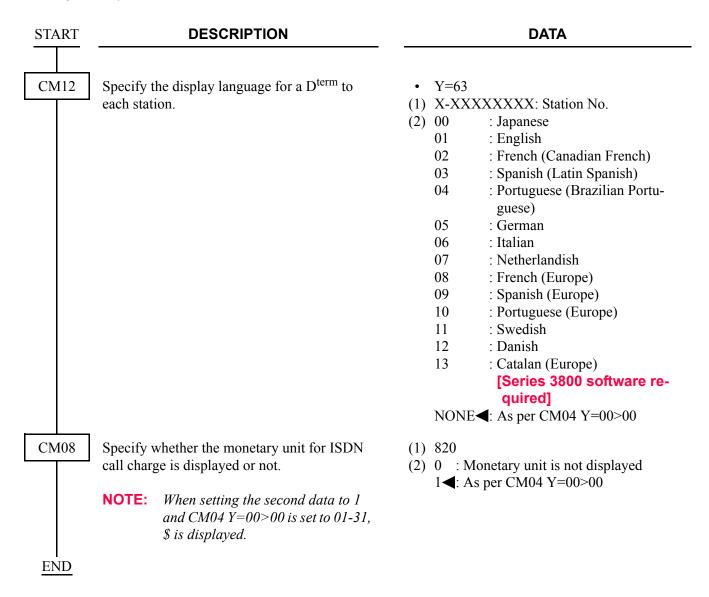
# **MULTIPLE LANGUAGE DISPLAY**

### **PROGRAMMING**

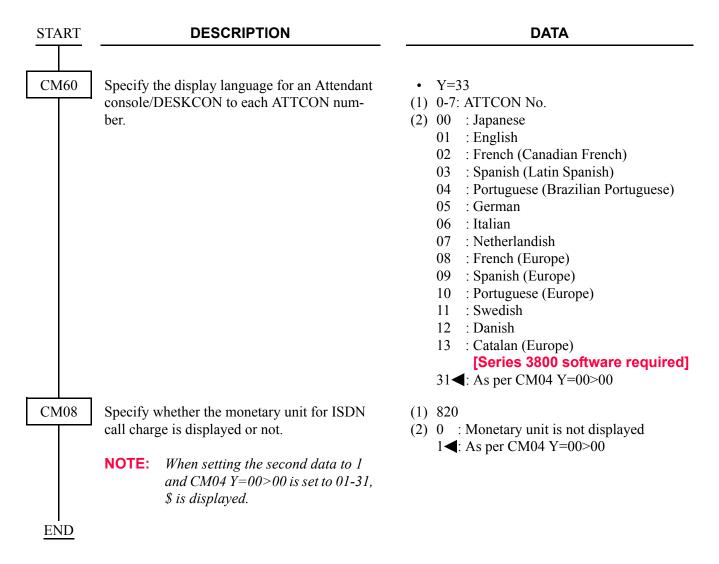
To specify the display language for each station, do the following programming:

[Series 3600 software required]

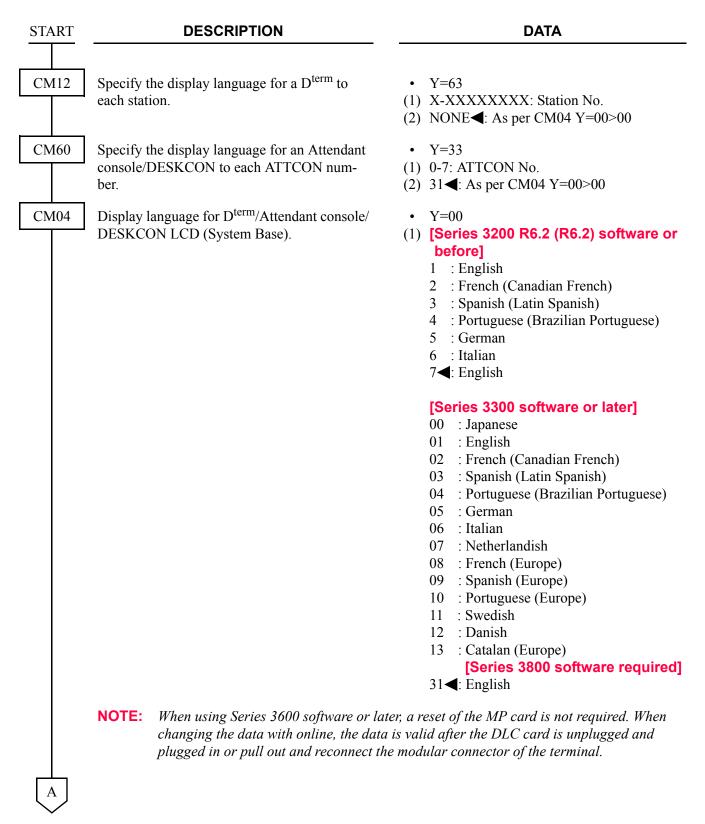
• For D<sup>term</sup>:

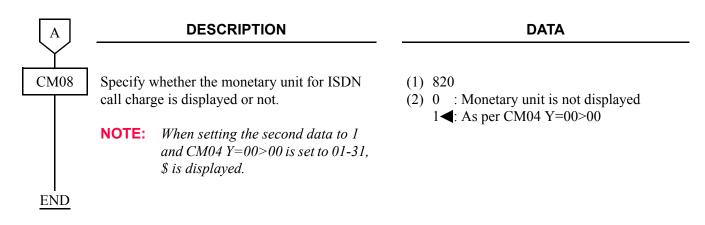


### • For Attendant console/DESKCON:



To specify the display language for each system, do the following programming:





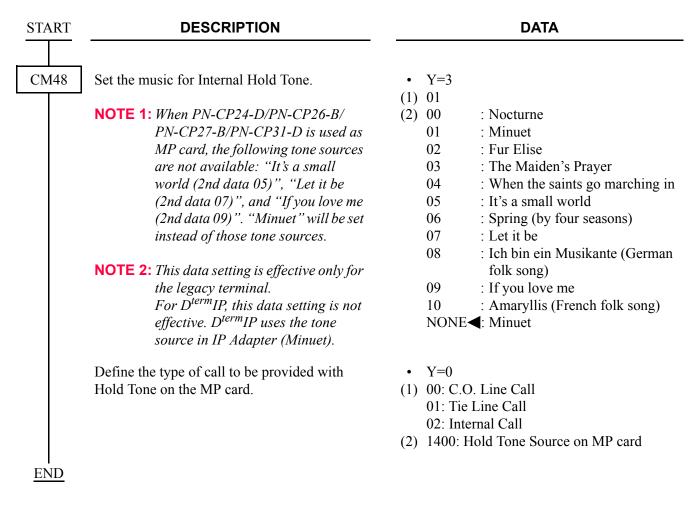
## HARDWARE REQUIRED

- D<sup>term</sup> with LCD and DLC card
- Attendant console/DESKCON with LCD and DLC card

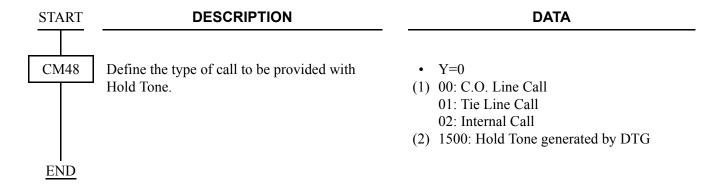
# **MUSIC ON HOLD**

#### **PROGRAMMING**

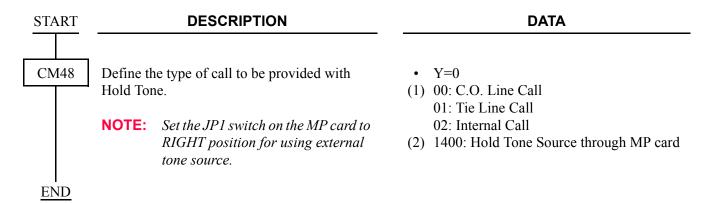
To provide Hold Tone Source on the MP card:



To provide Internal Hold Tone generated by DTG:

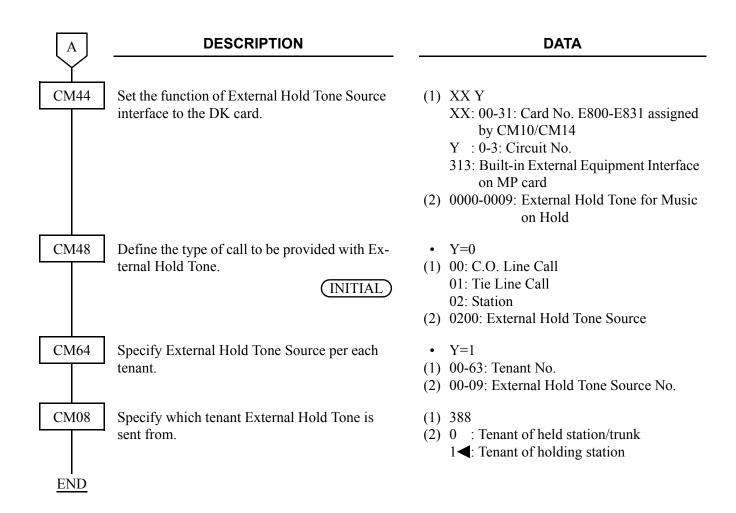


To provide External Hold Tone Source through Pin JACK on the MP card:



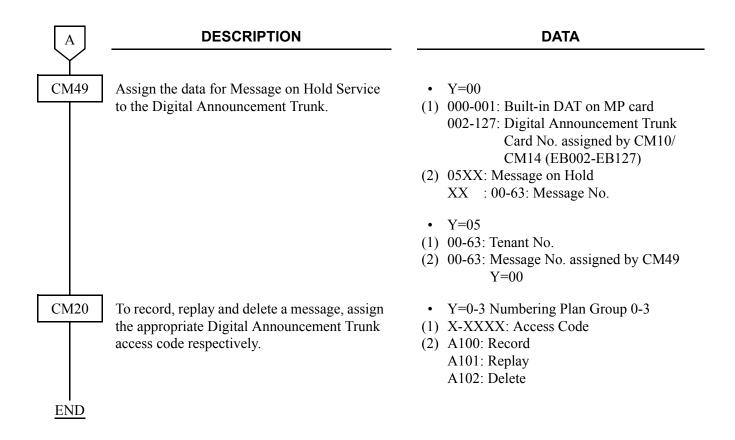
To provide External Hold Tone Source through the COT and DK card:

START	DESCRIPTION	DATA
CM10	Assign the COT and DK for interface with External Hold Tone Source to required LEN.  NOTE 1: The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.	(1) 000-763: LEN (2) DA00-DA09: COT Card No. <b>NOTE 2</b> E800-E831 : DK Card No. For PIM0/1 : E800-E807 For PIM2/3 : E808-E815 For PIM4/5 : E816-E823 For PIM6/7 : E824-E831
	NOTE 2: The COT card number must be assigned for each tenant. One External Hold Tone Source can be provided per tenant.	NOTE 3: Circuit No. 3 of E831 is used for built-in External Equipment Interface on MP card by setting CM44.
CM14	Assign the COT and DK for interface with External Hold Tone Source to required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN</li></ul>
	NOTE 2: The COT card number must be assigned for each tenant. One External Hold Tone Source can be provided per tenant.	For FP No. 03: E824-E831  NOTE 3: Circuit No. 3 of E831 is used for built-in External Equipment Interface on MP card by setting CM44.
CM08	Specify ON/OFF condition for external relay/external key on MP built-in DK00 card.	<ul> <li>(1) 700</li> <li>(2) 0 : ON (Ground Start)</li></ul>

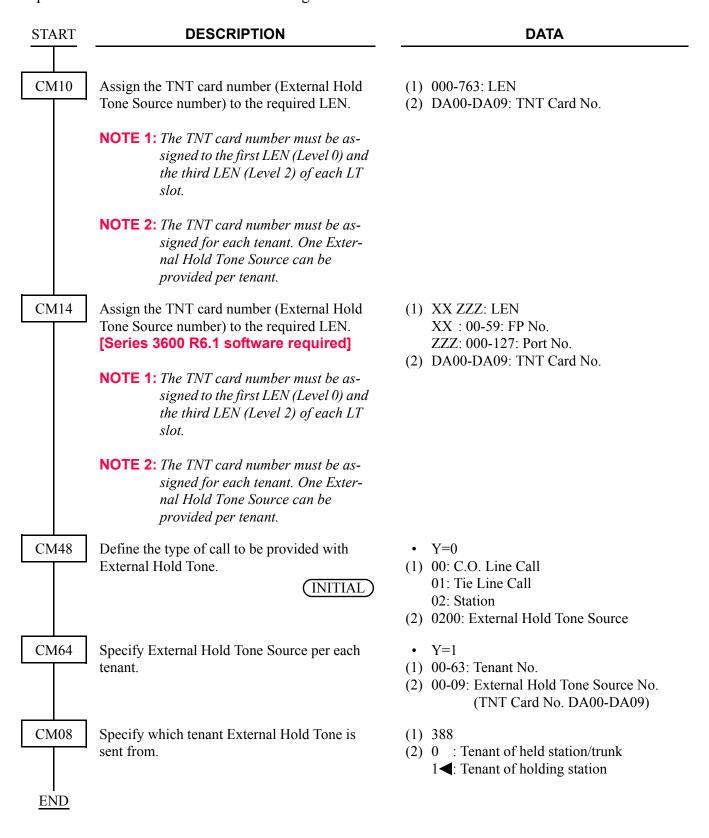


To provide the Message on Hold by the Digital Announcement Trunk (DAT):

START	DESCRIPTION	DATA
CM10	Assign the Digital Announcement Trunk card number to the required LEN.  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	(1) 000-763: LEN (2) EB002-EB127: Digital Announcement Trunk Card No. For PIM0/1 : EB002-EB031 For PIM2/3 : EB032-EB063 For PIM4/5 : EB064-EB095 For PIM6/7 : EB096-EB127  NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of MP card.
CM14	Assign the Digital Announcement Trunk card number to the required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The Digital Announcement Trunk card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN XX : 00-59: FP No. ZZZ: 000-127: Port No.</li> <li>(2) EB002-EB127: Digital Announcement Trunk Card No. For FP No. 00 : EB002-EB031 For FP No. 01 : EB032-EB063 For FP No. 02 : EB064-EB095 For FP No. 03 : EB096-EB127</li> <li>NOTE 2: EB000 and EB001 are dedicated to built-in Digital Announcement Trunk of MP card.</li> </ul>
CM12	Assign Service Restriction Class A to required stations.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15◀: Service Restriction Class A</li> </ul>
CM15	Allow Digital Announcement Trunk access (Record/Replay/Delete) in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=33</li> <li>(1) XX: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>
CM48	Define the type of call to be provided with Hold Message.	<ul> <li>Y=0</li> <li>(1) 00: C.O. Line Call</li> <li>01: Tie Line Call</li> <li>02: Internal Call</li> <li>(2) 0500: Hold Message</li> </ul>



To provide External Hold Tone Source through TNT card:



## HARDWARE REQUIRED

To provide External Hold Tone Source through the COT and DK card:

COT card

DK card or MP card (built-in External Equipment Interface)

External Hold Tone Source provided locally

To provide Message on Hold by Digital Announcement Trunk:

DAT card or MP card (built-in DAT)

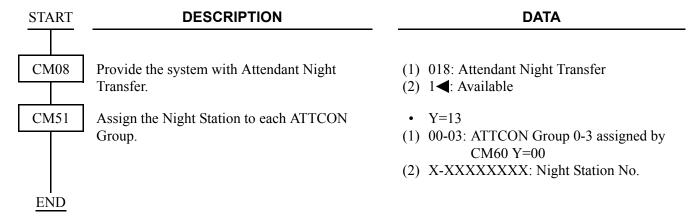
To provide the External Hold Tone Source through the TNT card:

- TNT card or through Pin Jack on MP card
- External Tone Source provided locally

# **NIGHT SERVICE**

# ATTENDANT NIGHT TRANSFER

## **PROGRAMMING**



# **CALL REROUTING**

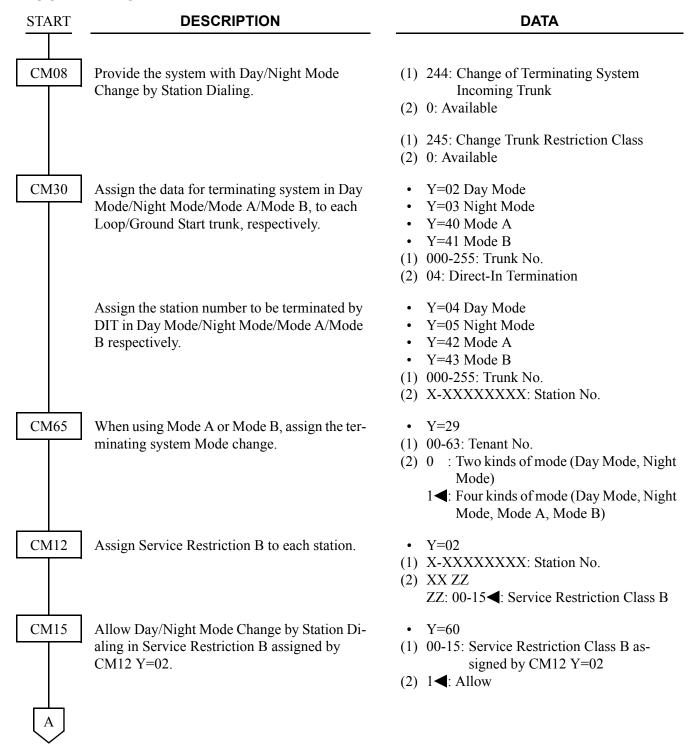
## **PROGRAMMING**

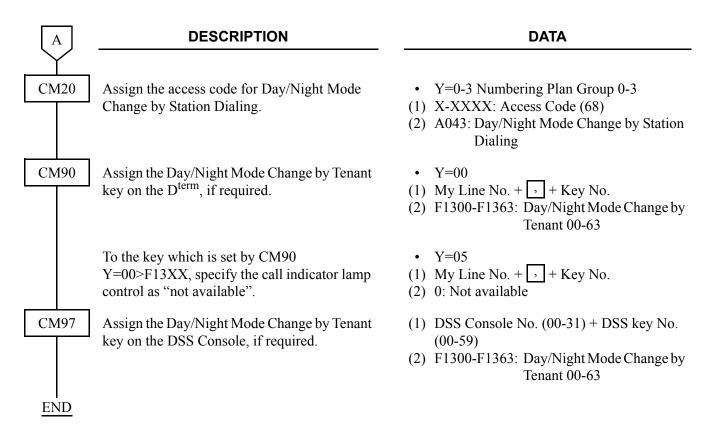
Refer to the following.

DIRECT INWARD DIALING (DID) Page 297
DIRECT INWARD TERMINATION (DIT) Page 321
NIGHT CONNECTION-FLEXIBLE Page 538
TRUNK ANSWER ANY STATION (TAS) Page 543
TIE LINES Page 688

## DAY/NIGHT MODE CHANGE BY STATION DIALING

## **PROGRAMMING**



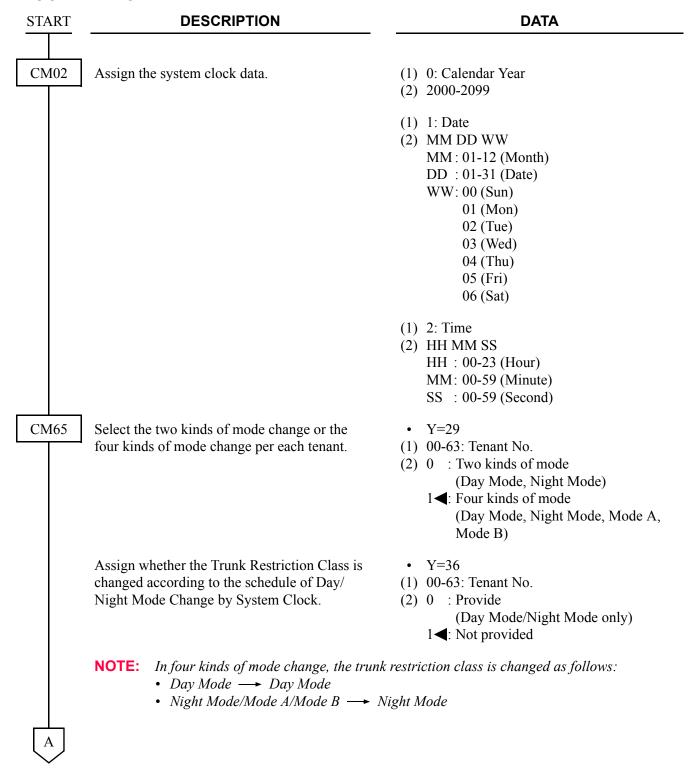


**NOTE:** The following trunk data (CM30) can be changed by this feature (depending upon programming).

Day(Y)	Night (Y)	Mode A (Y)	$Mode\ B\ (Y)$
02	<u>03</u>	40	<b>4</b> 1
04 ◀──	<b>→</b> 05	<i>42</i> <b>←</b>	<b>→</b> 43
13	<b>→</b> 14		
15 ◀─	<b>→</b> 16		
30 ◀─	→ 31		

## DAY/NIGHT MODE CHANGE BY SYSTEM CLOCK

## **PROGRAMMING**





## **DESCRIPTION**

## **DATA**

CM4A

Assign the Default Pattern number to each tenant to simplify the schedule assignment, if required.

See "Default Pattern of Time Schedule".

Page 535

OFF LINE

**NOTE 1:** When CM4A Y=90 is assigned, previously assigned system data is overwritten.

**NOTE 2:** The schedule of each Default Pattern can be changed after the Default Pattern has been assigned.

Assign the calendar number to each tenant number.

Assign the week schedule number to the date to change schedule, in each calendar number assigned by CM4A Y=00.

• Y=90

(1) 00-63: Tenant No.

(2) 00: Default Pattern No. 0 01: Default Pattern No. 1

02: Default Pattern No. 2

03: Default Pattern No. 3

• Y=00

(1) 00-63: Tenant No.

(2) 00-03: Calendar No. 1-4

• Y=01 Calendar No. 1

• Y=02 Calendar No. 2

• Y=03 Calendar No. 3

Y=04 Calendar No. 4

(1) XX ZZ: Date

XX: 01-12: Month

ZZ: 01-31: Date

(2) 10 : Week Schedule No. 0

11 : Week Schedule No. 1 12 : Week Schedule No. 2 13 : Week Schedule No. 3

NONE**◀**: Week Schedule No. 0

В

В

## **DESCRIPTION**

## **DATA**

CM4A

If you want to assign the exceptional schedule for a date, assign the time schedule number to the date, in each calendar number assigned by CM4A Y=00.

Assign the time schedule number to each day in the week schedule assigned by CM4A Y=01-04.

- Y=01 Calendar No. 1
- Y=02 Calendar No. 2
- Y=03 Calendar No. 3
- Y=04 Calendar No. 4
- (1) XX ZZ: Date

XX: 01-12: Month

ZZ: 01-31: Date

- (2) 20 : Time Schedule No. 0
  - 21 : Time Schedule No. 1
  - 22 : Time Schedule No. 2
  - 23 : Time Schedule No. 3
  - : Time Schedule No. 4
  - 25 : Time Schedule No. 526 : Time Schedule No. 6
  - 27 : Time Schedule No. 7
  - NONE**◀**: Week Schedule No. 0
- Y=10 Week Schedule No. 0
- Y=11 Week Schedule No. 1
- Y=12 Week Schedule No. 2
- Y=13 Week Schedule No. 3
- (1) 0: Sunday
  - 1: Monday
  - 2: Tuesday
  - 3: Wednesday
  - 4: Thursday
  - 5: Friday
  - 6: Saturday
- (2) 20 : Time Schedule No. 0
  - 21 : Time Schedule No. 1
  - 22 : Time Schedule No. 2
  - 23 : Time Schedule No. 3
  - : Time Schedule No. 4
  - 25 : Time Schedule No. 5
  - 26 : Time Schedule No. 6
  - 27 : Time Schedule No. 7
  - NONE**◀**: Time Schedule No. 0

C



## **DESCRIPTION**

## **DATA**

CM4A

Assign the time and its mode for the time schedule assigned by CM4A Y=10-13 or Y=01-04.

NOTE 1: Only "0" or "5" is available for the last digit number of minute at the 1st data of CM4A Y=20-27.

When the following last digit number is assigned, the number is cor-

rected and set as follows:
assigned number corrected to

**NOTE 2:** Actually, the mode is changed after 4-8 seconds of the assigned time.

CM61

**END** 

To cancel the Day/Night Mode Change by System Clock temporarily, assign the external key as the cancel key. • Y=20 (Time Schedule No. 0)

• Y=21 (Time Schedule No. 1)

• Y=22 (Time Schedule No. 2)

• Y=23 (Time Schedule No. 3)

• Y=24 (Time Schedule No. 4)

• Y=25 (Time Schedule No. 5)

• Y=26 (Time Schedule No. 6)

• Y=27 (Time Schedule No. 7)

(1) XX ZZ: Time

XX: 00-23: Hour

ZZ: 00-55: Minute **NOTE 1, NOTE 2** 

(2) 00 : Day Mode 01 : Night Mode 02 : Mode A 03 : Mode B

NONE**⋖**: Day Mode

• Y=30

(1) XX Z

XX: 00-31: DK Card No. assigned by CM10/CM14 (E900-E963)

Z: 0-3: Circuit No.

633: MP Built-in External Key Interface

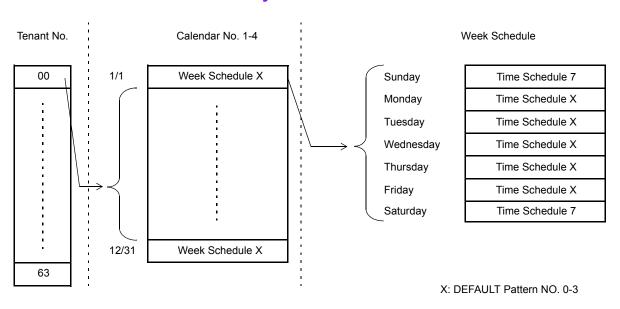
(2) 01: Day/Night Mode Change by System Clock Cancel Key

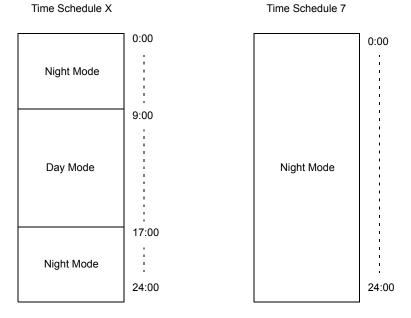
## ■ Default Pattern of Time Schedule

By assigning CM4A Y=90; Default Pattern No. 0-3, you can simplify the schedule assignment for each tenant. The schedule of each Default Pattern can be changed after the Default Pattern has been assigned.

The following shows the summary of the Default Pattern and the schedule set by each Default Pattern.

# **Summary of Default Pattern**





Continued on next page

# **Default Pattern of Time Schedule (CM4A Y=90)**

• Default Pattern No. 0 (CM4A Y=90 2nd data: 00)

CM4A Y No.	1ST	2ND	MEANING OF SETTING
00	00-63	00	Calendar No. 1 is used for the tenant
01	0101-1231	10	Week schedule No. 0 is used for all date
10	1-5	20	Time schedule No. 0 is used for Monday through Friday
10	0, 6	27	Time schedule No. 7 is used for Saturday and Sunday
20	0000-0855	01	0:00-9:00 is Night Mode for time schedule No. 0
20	0900-1655	00	9:00-17:00 is Day Mode for time schedule No. 0
20	1700-2355	01	17:00-24:00 is Night Mode for time schedule No. 0
27	0000-2355	01	0:00-24:00 is Night Mode for time schedule No. 7

• Default Pattern No. 1 (CM4A Y=90 2nd data: 01)

CM4A Y No.	1ST	2ND	MEANING OF SETTING
00	00-63	01	Calendar No. 2 is used for the tenant
02	0101-1231	11	Week schedule No. 1 is used for all date
11	1-5	21	Time schedule No. 1 is used for Monday through Friday
11	0, 6	27	Time schedule No. 7 is used for Saturday and Sunday
21	0000-0855	01	0:00-9:00 is Night Mode for time schedule No. 1
21	0900-1655	00	9:00-17:00 is Day Mode for time schedule No. 1
21	1700-2355	01	17:00-24:00 is Night Mode for time schedule No. 1
27	0000-2355	01	0:00-24:00 is Night Mode for time schedule No. 7

# **Default Pattern of Time Schedule (CM4A Y=90)**

• Default Pattern No. 2 (CM4A Y=90 2nd data: 02)

CM4A Y No.	1ST	2ND	MEANING OF SETTING
00	00-63	02	Calendar No. 3 is used for the tenant
03	0101-1231	12	Week schedule No. 2 is used for all date
12	1-5	22	Time schedule No. 2 is used for Monday through Friday
12	0, 6	27	Time schedule No. 7 is used for Saturday and Sunday
22	0000-0855	01	0:00-9:00 is Night Mode for time schedule No. 2
22	0900-1655	00	9:00-17:00 is Day Mode for time schedule No. 2
22	1700-2355	01	17:00-24:00 is Night Mode for time schedule No. 2
27	0000-2355	01	0:00-24:00 is Night Mode for time schedule No. 7

• Default Pattern No. 3 (CM4A Y=90 2nd data: 03)

CM4A Y No.	1ST	2ND	MEANING OF SETTING
00	00-63	03	Calendar No. 4 is used for the tenant
04	0101-1231	13	Week schedule No. 3 is used for all date
13	1-5	23	Time schedule No. 3 is used for Monday through Friday
13	0, 6	27	Time schedule No. 7 is used for Saturday and Sunday
23	0000-0855	01	0:00-9:00 is Night Mode for time schedule No. 3
23	0900-1655	00	9:00-17:00 is Day Mode for time schedule No. 3
23	1700-2355	01	17:00-24:00 is Night Mode for time schedule No. 3
27	0000-2355	01	0:00-24:00 is Night Mode for time schedule No. 7

# **NIGHT CONNECTION-FIXED**

# **NIGHT CONNECTION-FLEXIBLE**

# **PROGRAMMING**

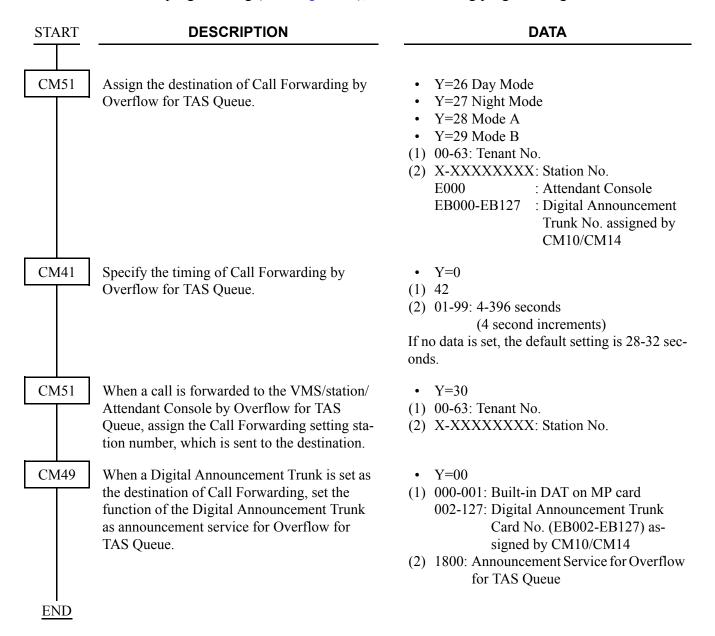
To Provide Night Connection Stations:

START	DESCRIPTION	DATA
CM30	Assign a Night Connection Station to each incoming trunk.	<ul> <li>Y=03</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 04: Direct-In Termination</li> </ul>
		<ul> <li>Y=05</li> <li>(1) 000-255: Trunk No.</li> <li>(2) X-XXXXXXXXXXX Night Connection Station No.</li> </ul>
	Assign the destination to which a call is forwarded when the Night Connection Station is busy/no answer.	<ul> <li>Y=14 When Night Connection Station is busy</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 01 : To TAS <ul> <li>04 : To Attendant Console</li> <li>06 : Automatic Camp-On</li> <li>15</li> <li>∴ Keep the call ringing until the station becomes idle</li> </ul> </li> </ul>
		<ul> <li>Y=16 When Night Connection Station is no answer</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 01 : To Attendant Console</li> <li>03 : To TAS</li> <li>15◀: Keep the call ringing until the station answers</li> </ul>
CM41	Specify the timing for a call forwarding when the Connection Station is no answer.	• Y=0 (1) 01 (2) 01-30: 4-120 seconds
END	NOTE: This timing is also applied to Call Forwarding-No Answer, Attendant Overflow, and Group Diversion.	(4 second increments)  If no data is set, the default setting is 32-36 seconds.

## **OVERFLOW FOR TAS QUEUE**

## **PROGRAMMING**

In addition to the TAS programming (Page 543), do the following programming.



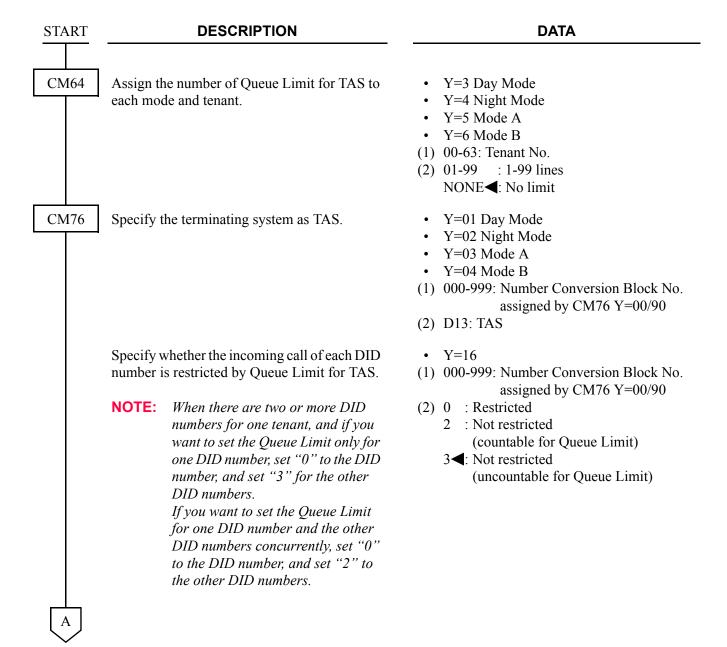
#### HARDWARE REQUIRED

When a DAT is used as the destination of Call Forwarding: DAT card or MP card (built-in DAT)

## **QUEUE LIMIT FOR TAS**

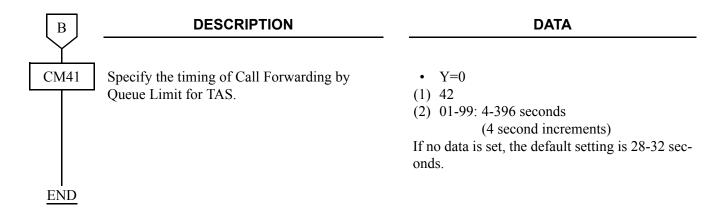
## **PROGRAMMING**

In addition to the TAS programming (Page 543), do the following programming.



- 540 -

A	DESCRIPTION	DATA
CM51	Assign the destination of Call Forwarding by Queue Limit for TAS.	<ul> <li>Y=26 Day Mode</li> <li>Y=27 Night Mode</li> <li>Y=28 Mode A</li> <li>Y=29 Mode B</li> <li>(1) 00-63: Trunk No.</li> <li>(2) X-XXXXXXXXX: Station No. E000 : Attendant Console EB000-EB127 : Digital Announcement Trunk No. assigned by CM10/CM14</li> </ul>
	When a call is forwarded to the VMS/station/DAT/Attendant Console by Queue Limit for TAS, assign the Call Forwarding setting station number, which is sent to the destination.	<ul> <li>Y=30</li> <li>(1) 00-63: Tenant No.</li> <li>(2) X-XXXXXXXXXX Station No.</li> </ul>
CM49	When a Digital Announcement Trunk is set as the destination of Call Forwarding, set the function of the Digital Announcement Trunk as announcement service for Queue Limit for TAS.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. (EB002-EB127) assigned by CM10/CM14</li> <li>(2) 1800: Announcement Service for Queue Limit for TAS</li> </ul>
CM08	Provide the system with reset of the Queue Limit counter for TAS per tenant.  The system will reset the counter when the following operation has not occurred for about one hour.  Increase/decrease of counter  Incoming calls restricted by Queue Limit  Call Forwarding to a station/Attendant/ DAT by Queue Limit	<ul><li>(1) 602</li><li>(2) 1</li><li>(3) 1</li><li>(4) 1</li><li>(5) 1</li><li>(6) 2</li><li>(7) 1</li><li>(8) 1</li><li>(9) 1</li><li>(1) 1</li><li>(1) 1</li><li>(2) 1</li><li>(3) 1</li><li>(4) 1</li><li>(4) 1</li><li>(5) 1</li><li>(6) 1</li><li>(7) 1</li><li>(8) 1</li><li>(9) 2</li><li>(9) 2</li><li>(9) 2</li><li>(9) 2</li><li>(9) 3</li><li>(9) 3</li><li>(9) 4</li><li>(9) 4</li></ul>
В		

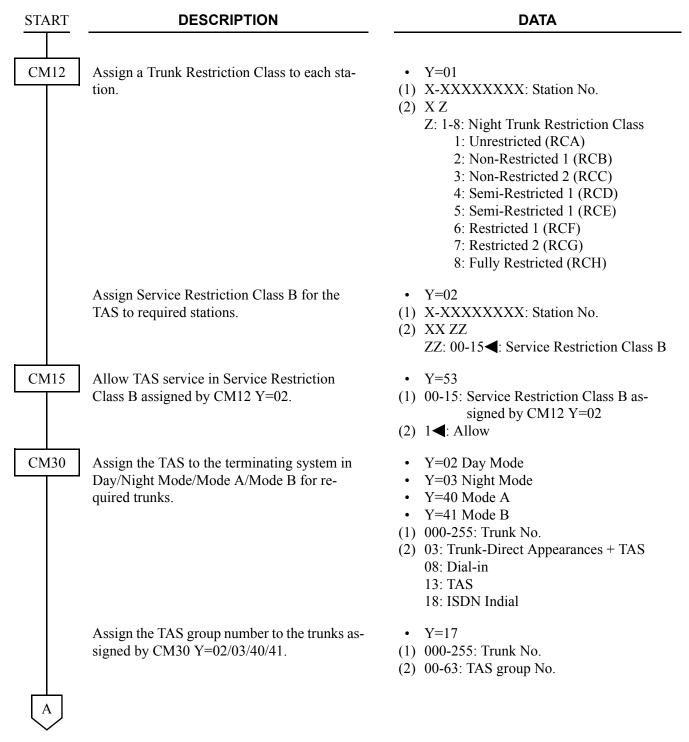


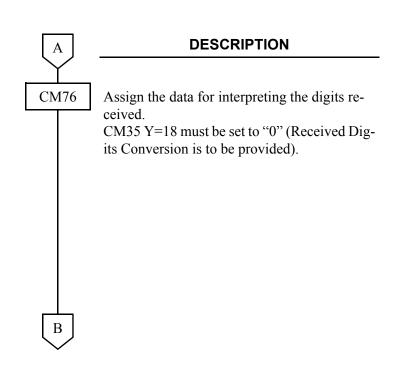
## HARDWARE REQUIRED

When a DAT is used as the destination of Call Forwarding: DAT card or MP card (built-in DAT)

# TRUNK ANSWER ANY STATION (TAS)

## **PROGRAMMING**



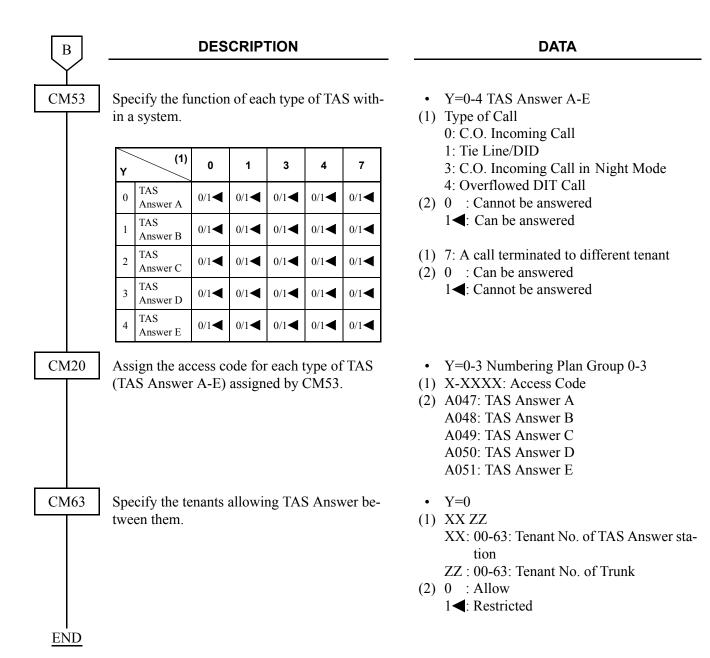


## DATA

- Y=01 Day Mode
- Y=02 Night Mode
- Y=03 Mode A
- Y=04 Mode B
- (1) 000-999: Number Conversion Block No. assigned by CM76 Y=00/90
- (2) X-XXXXXXXX: Station No. to be terminated

DXX: Change Terminating System to: D03: Trunk-Direct Appearances + TAS

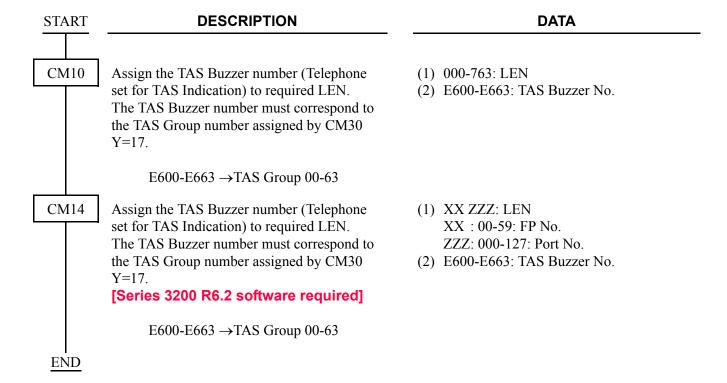
D13: TAS



To provide the External TAS Indicator via DK card:

START	DESCRIPTION	DATA		
CM10	Assign the card number of DK to required LEN.  NOTE: The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.	(1) 000-763: LEN (2) E800-E831 : DK Card No. For PIM0/1 : E800-E807 For PIM2/3 : E808-E815 For PIM4/5 : E816-E823 For PIM6/7 : E824-E831		
CM14	Assign the card number of DK to required LEN.  [Series 3200 R6.2 software required]  NOTE: The DK card number must be assigned to the first LEN (Level 0) and the third LEN (Level 2) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN</li></ul>		
CM08	Specify ON/OFF condition for external relay/external key on MP built-in DK00 card.	<ul> <li>(1) 700</li> <li>(2) 0 : ON (Ground Start)</li></ul>		
CM44	Assign the TAS Group number assigned by CM30 Y=17 to circuit number of DK card.  NOTE: MP built-in External Equipment Interface is not available for External TAS Indicator connection.	<ul> <li>(1) XX Y         XX: 00-31: DK Card No. assigned by</li></ul>		
CM59 END	Specify the indication pattern on External TAS Indicator.	(1) 00 (2) 01 : 30 IPM (1 second ON/OFF) 02 : 60 IPM (0.5 seconds ON/OFF) 03 : 120 IPM (0.25 seconds ON/OFF) 07 : Steady on NONE ✓: 120 IPM (0.25 seconds ON/OFF)		

To provide the telephone set for TAS Indication:



## HARDWARE REQUIRED

To provide the External TAS Indicator:

- DK card
- Indicator

Requirement for External Indicator

Control Method: Ground/Battery (-24 V) (Maximum 125 mA)

Type : Visual and/or Audible type with volume control

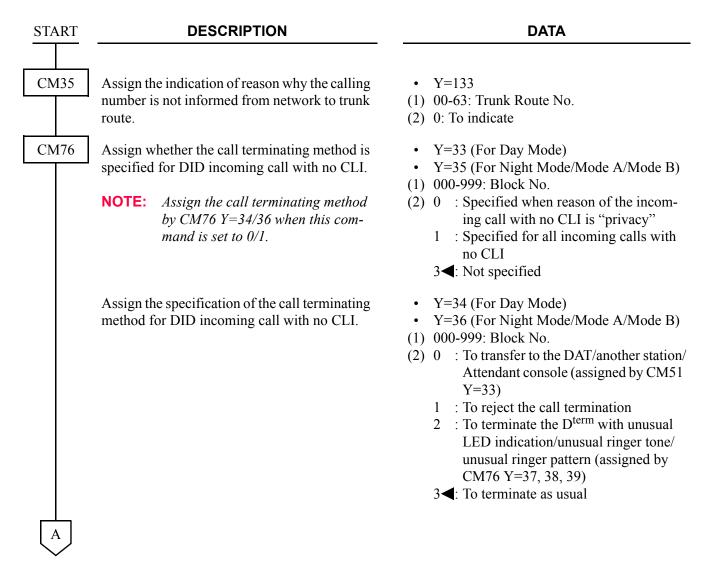
To provide the telephone set for TAS Indication:

- LC card
- Conventional telephone sets

# NO CID CALL ROUTING

# [Series 3600 software required]

• For Direct Inward Dialing calls



A	DESCRIPTION	DATA
CM51	Assign the destination of call forwarding when the calling number is not informed from network.	<ul> <li>Y=33</li> <li>(1) 00-63: Tenant No.</li> <li>(2) X-XXXXXXXXXX Station No. E000: Attendant</li> </ul>
	<b>NOTE 1:</b> This command needs to be set when $CM76 Y=34/36$ is set to 0.	EB000-EB127: Digital Announcement Trunk No. assigned by CM10/CM14
	NOTE 2: Assign the function of Digital Announcement Trunk by CM49 Y=00 when this command is set to Digital Announcement Trunk No.	NONE <b>◀</b> : No data
CM49	Specify the function of Digital Announcement Trunk.	<ul> <li>Y=00</li> <li>(1) 000-127: Digital Announcement Trunk No. assigned by CM51 Y=33</li> </ul>
	NOTE: This command is effective only when CM51 Y=33 is set to Digital Announcement Trunk No.	(2) 2200 : Announcement Service for no Caller-ID  NONE  NONE  NO data
CM41	Specify the duration of an Announcement for no Caller-ID.	<ul> <li>Y=0</li> <li>(1) 45: Announcement Service Timer</li> <li>(2) 01-99 : [0-4 seconds]-[392-396</li> </ul>
	NOTE: If the destination of call forwarding is assigned for Digital Announcement Trunk by CM51 Y=33, when time out occurs the trunk is released.	seconds] (4 seconds increments) NONE <b>◄</b> : 16: 60-64 seconds
CM76	Specify a distinctive LED indication on D <sup>term</sup> for DID incoming call with no CLI.	• Y=37 (1) 000-999: Block No. (2) 0 : Green (120 IPM) 1◀: Red (120 IPM)
	NOTE: This command is effective on the follow • CM35 Y=32 is set to 1. • CM76 Y=34, 36 are set to 0 or 2, and	
В		



## **DESCRIPTION**

## **DATA**

CM76

Specify the interval of ringing tone for DID incoming call with no CLI.

**NOTE 1:** Assign this command when the terminal destination is SLT or D<sup>term</sup>.

**NOTE 2:** This command is effective when CM76 Y=34, 36 is set to 0 or 2.

Specify a D<sup>term</sup> Ringer Tone Pattern for DID incoming call with no CLI.

NOTE 1: This command is effective when CM76 YY=34, 36 is set to 0 or 2, and D<sup>term</sup> receives the incoming call

**NOTE 2:** For details of the Ringer Tone Pattern, see CM65 Y=40.

Specify a kind of call termination indicator key/lamp on Attendant console for DID incoming call with no CLI.

NOTE: The command is effective when CM76 Y=34, 36 is set to 0, and the destination of call forwarding is Attendant console.

• Y=38

(1) 000-999: Block No.

(2) 0 : 0.5 seconds ON-0.5 seconds OFF (D<sup>term</sup>)

1 second ON-2 seconds OFF (SLT)

1 : 0.5 seconds ON-0.5 seconds OFF - 0.5 seconds ON-1.5 seconds OFF (D<sup>term</sup>)

0.4 seconds ON-0.2 seconds OFF - 0.4 seconds ON-2 seconds OFF (SLT)

2 : 1 second ON-2 seconds OFF (D<sup>term</sup> or SLT)

3◀: As per CM76 Y=22 [For North America]

• Y=39

(1) 000-999: Block No.

(2) 0 : Ringer Tone Pattern 0

1 : Ringer Tone Pattern 1

2 : Ringer Tone Pattern 2

3 : Ringer Tone Pattern 3

4 : Ringer Tone Pattern 4

5 : Ringer Tone Pattern 5

6 : Ringer Tone Pattern 6

7**<**: As per CM76 Y=23

• Y=40

(1) 000-999: Block No.

(2) 0 : C.O. Incoming Call 0

1 : C.O. Incoming Call 1

2 : C.O. Incoming Call 2

3 : C.O. Incoming Call 3

4 : C.O. Incoming Call 4

5 : C.O. Incoming Call 5

6 : C.O. Incoming Call 6

7**<**: As per CM35 YY=15

**END** 

## • For Ring Down calls

# START

## **DESCRIPTION**

## **DATA**

CM35

Assign the indication of reason why the calling number is not informed from network to trunk route.

Assign whether the call terminating method is specified for incoming call with no CLI.

**NOTE:** Assign the call terminating method by CM35 Y=255/257 when this command is set to 0/1.

Assign the specification of the call terminating method for incoming call with no CLI.

- Y=133
- (1) 00-63: Trunk Route No.
- (2) 0: To indicate
- Y=254 (For Day Mode)
- Y=256 (For Night Mode/Mode A/Mode B)
- (1) 00-63: Trunk Route No.
- (2) 0 : Specified when reason of the incoming call with no CLI is "privacy"
  - 1 : Specified for all incoming call with no CLI
  - 3**◄**: Not specified
- Y=255 (For Day Mode)
- Y=257 (For Night Mode/Mode A/Mode B)
- (1) 00-63: Trunk Route No.
- (2) 0 : To transfer to the DAT/another station/ Attendant console (assigned by CM51 Y=33)
  - 1 : To reject the call termination
  - 2 : To terminate the D<sup>term</sup> with unusual LED indication (assigned by CM35 Y=258)
  - 3**◄**: To terminate as usual

A

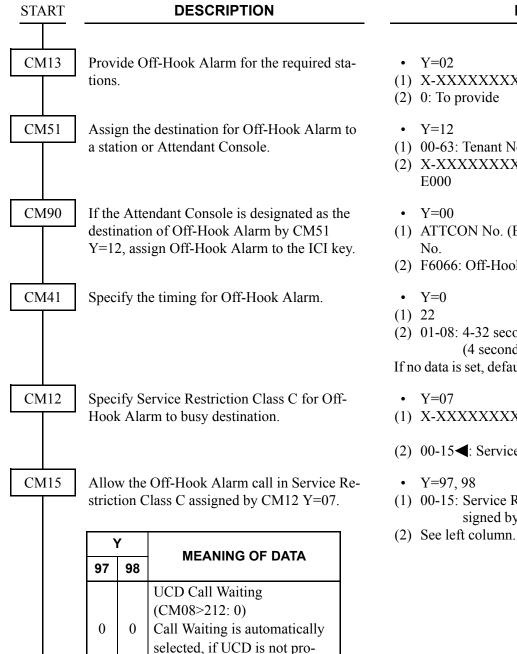
A	DESCRIPTION	DATA
CM51	Assign the destination of call forwarding when the calling number is not informed from network.  NOTE 1: This command needs to be set when CM35 Y=255/257 is set to 0.	<ul> <li>Y=33</li> <li>(1) 00-63: Tenant No.</li> <li>(2) X-XXXXXXXXX: Station No. E000: Attendant EB000-EB127: Digital Announcement Trunk No. assigned by CM10/CM14</li> </ul>
	NOTE 2: Assign the function of Digital Announcement Trunk by CM49 Y=00 when this command is set to Digital Announcement Trunk No.	NONE <b>∢</b> : No data
CM49	Specify the function of Digital Announcement Trunk.	<ul> <li>Y=00</li> <li>(1) 000-127: Digital Announcement Trunk No. assigned by CM51 Y=33</li> </ul>
	NOTE: This command is effective only when CM51 Y=33 is set to Digital Announcement Trunk No.	(2) 2200 : Announcement Service for no Caller-ID  NONE  NONE  NO data
CM41	Specify the duration of an Announcement for no Caller-ID.	<ul> <li>Y=0</li> <li>(1) 45: Announcement Service Timer</li> <li>(2) 01-99 : [0-4 seconds]-[392-396</li> </ul>
	NOTE: If the destination of call forwarding is assigned for Digital Announcement Trunk by CM51 Y=33, when time out occurs the trunk is released.	seconds] (4 seconds increments)  NONE <b>◄</b> : 16: 60-64 seconds
CM35	Specify a distinctive LED indication on D <sup>term</sup> for incoming call with no CLI.	• Y=258 (1) 0 : Green (120 IPM) (2) 1◀: Red (120 IPM)
	NOTE: This command is effective on the follow • CM35 Y=32 is set to 1. • CM35 Y=255, 257 are set to 0 or 2,	
END		

# **HARDWARE REQUIRED**

D<sup>term</sup> with LCD and DLC card

# **OFF-HOOK ALARM**

#### **PROGRAMMING**



vided in the system.

Call Waiting

Hunting

UCD (CM08>212: 1)

DAT	ΓΑ
-----	----

- (1) X-XXXXXXXX: Station No.
- (2) 0: To provide
- (1) 00-63: Tenant No.
- (2) X-XXXXXXXX: Station No. : Attendant Console
- (1) ATTCON No.  $(E000-E007) + \sqrt{\phantom{0}} + \text{Key}$
- (2) F6066: Off-Hook Alarm
- (2) 01-08: 4-32 seconds (4 second increments)

If no data is set, default setting is 28-32 seconds.

- (1) X-XXXXXXXX: Station No. of destination
- (2) 00-15◀: Service Restriction Class C
- (1) 00-15: Service Restriction Class C assigned by CM12 Y=07

0

1

1

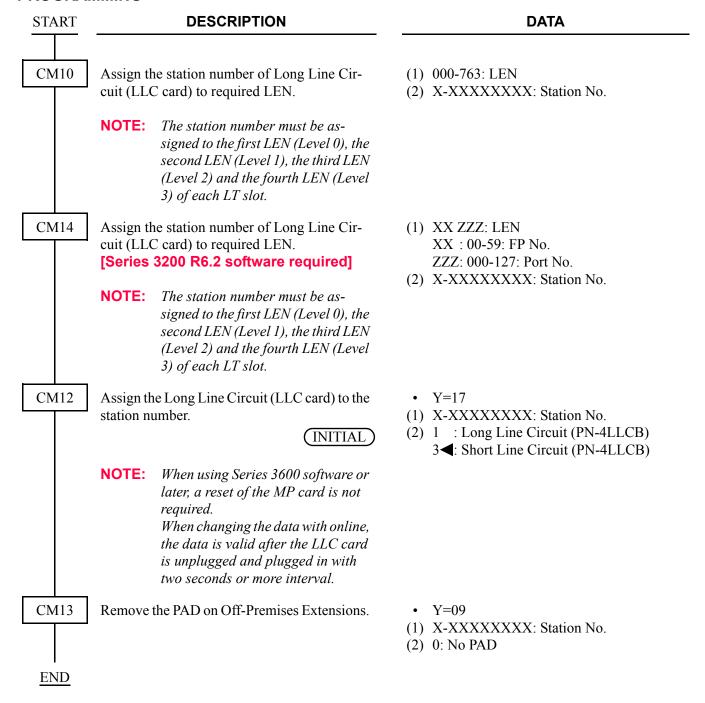
1

0

1

# **OFF-PREMISES EXTENSIONS**

#### **PROGRAMMING**



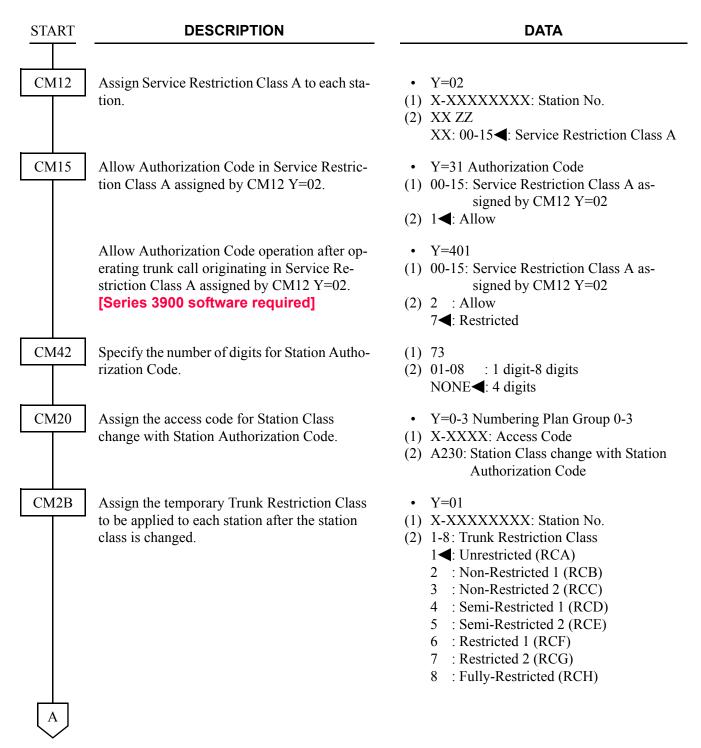
## HARDWARE REQUIRED

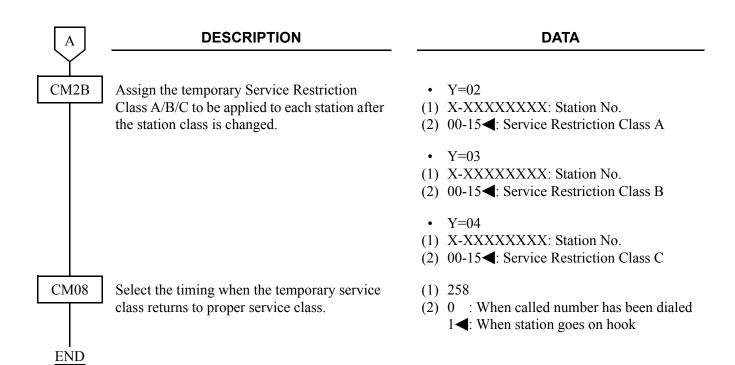
LLC card -48 V Power Supply (PZ-PW122)

# **PAD LOCK**

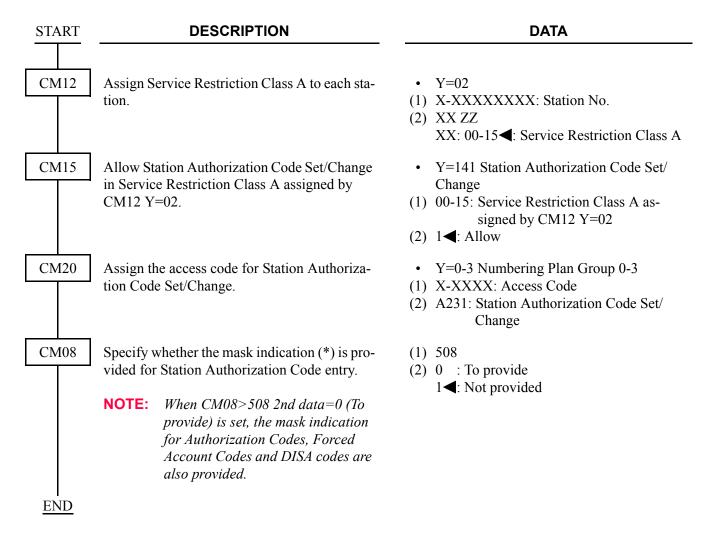
#### **PROGRAMMING**

(1) To change the Station Class with Station Authorization Code



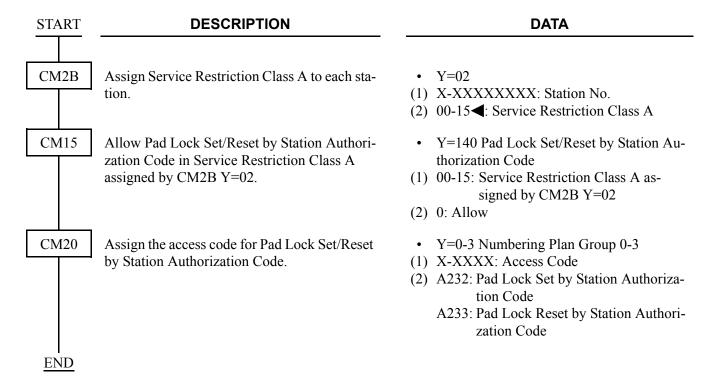


## (2) To set/change Station Authorization Code from each station

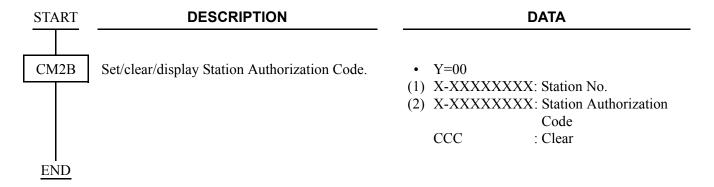


**NOTE:** *One Station Authorization Code can be assigned per station.* 

## (3) To provide Pad Lock Set/Reset from the station

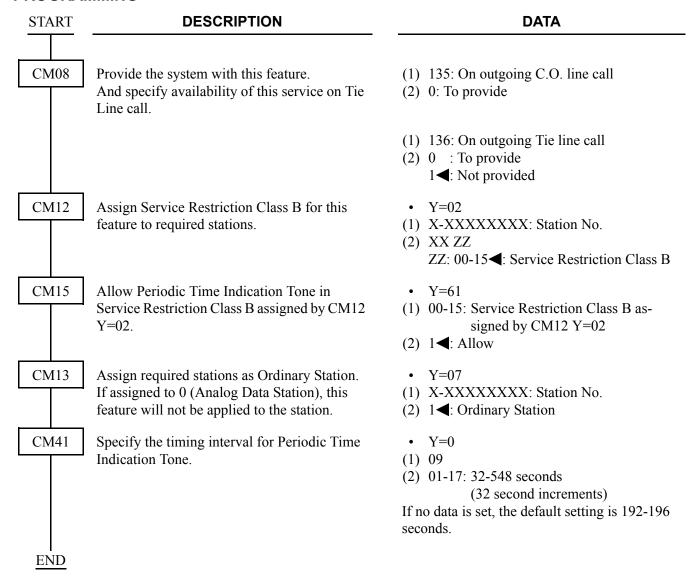


## (4) To set/clear/display Station Authorization Code on the MAT



# PERIODIC TIME INDICATION TONE

#### **PROGRAMMING**

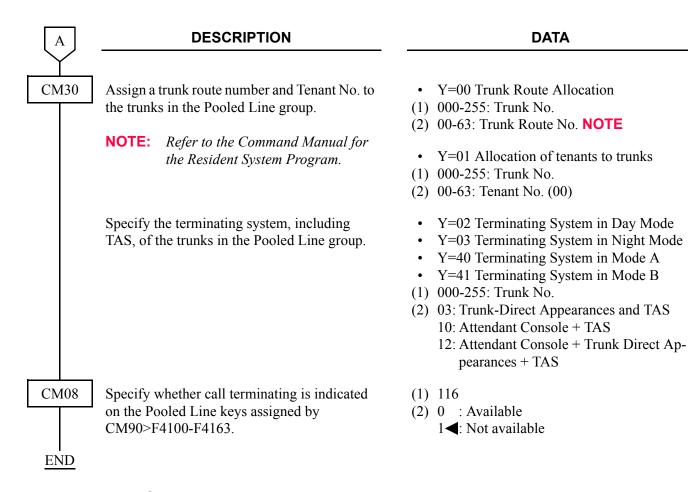


# **POOLED LINE ACCESS**

#### **PROGRAMMING**

**DESCRIPTION DATA START** CM11 Assign the Pooled Lines (Virtual Line station (1) 000-255: Virtual LEN number) to the required Virtual LEN. [Series 3300 software or before] 0000-1019: Virtual LEN [Series 3400 software or later] (2) X-XXXXXXXX: Virtual Line Station No. The Virtual LENs have no relation with the physical LEN used in CM10/CM14. Therefore, any Virtual LENs can be assigned to each Virtual Line station number. However, the Virtual Line station number should be different from the Single Line number assigned by CM10/CM14. Assign the Pooled Line keys to each D<sup>term</sup>. CM90 (1) My Line No. + , + Key No. Pooled Lines 00-63 can answer a call terminated to tenants 00-63 respectively, and can orig-(2) F4100-F4163: Pooled Line 00-63 inate a call using trunk routes 00-63 respectively.

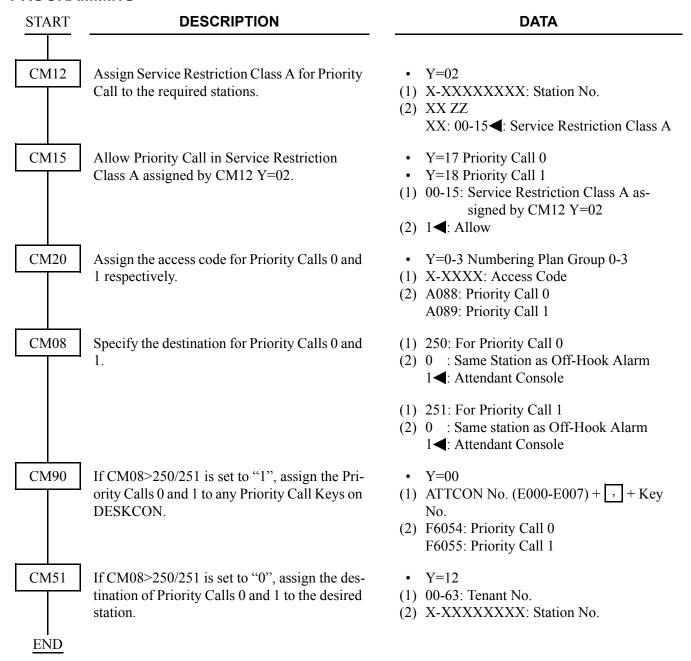
Pooled Line	Origination	Termination
00	Trunk Route 00	Tenant 00
01	01	01
}	?	}
63	Trunk Route 63	Tenant 63



#### HARDWARE REQUIRED

## **PRIORITY CALL**

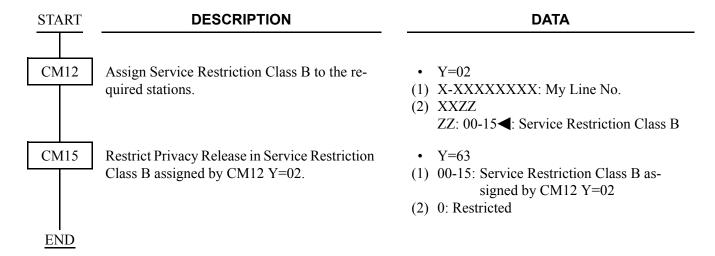
#### **PROGRAMMING**



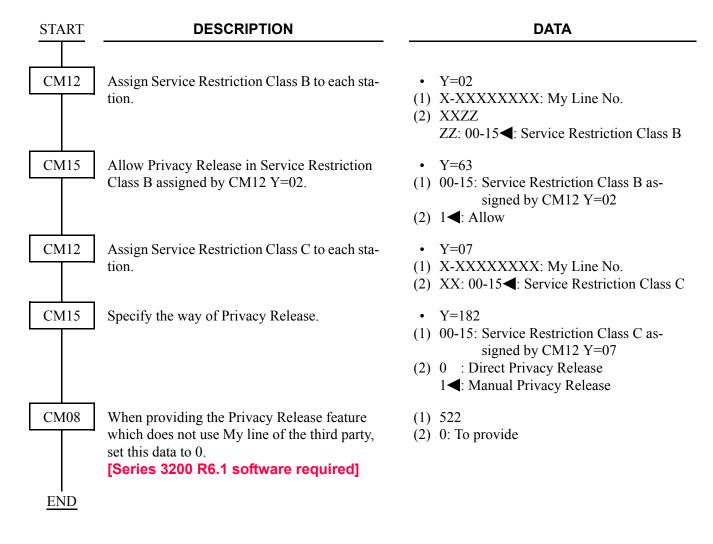
# **PRIVACY**

#### **PROGRAMMING**

To provide the Privacy feature for each station:



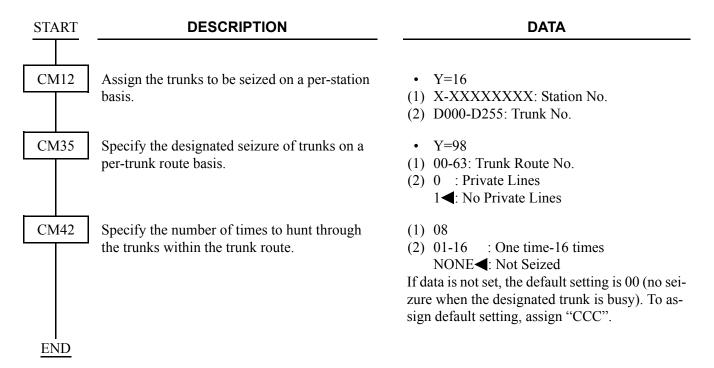
To provide the Privacy Release feature for each station:



## **PRIVATE LINES**

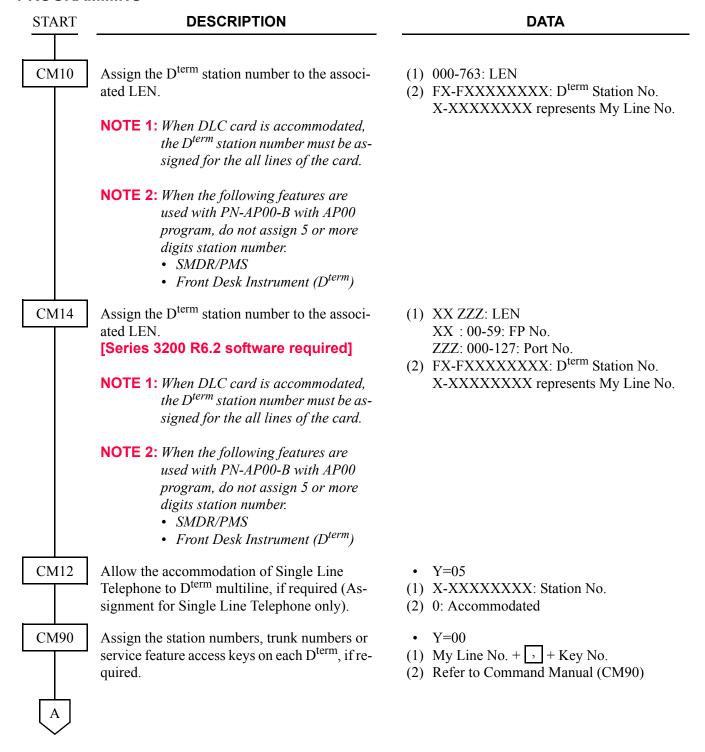
#### **PROGRAMMING**

When providing Private Lines for a single line or D<sup>term</sup>, do the following Trunk-Direct Appearances programming.

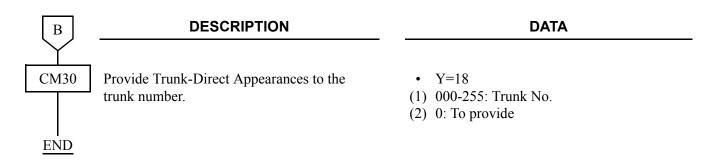


## PROPRIETARY MULTILINE TERMINAL

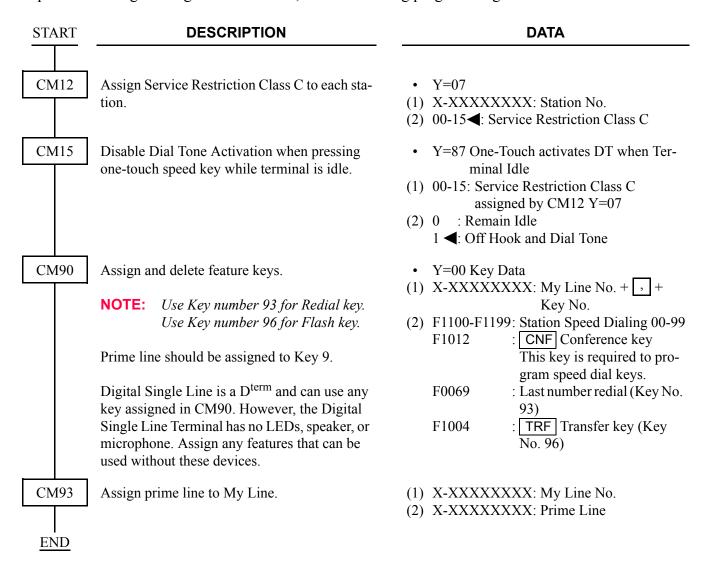
#### **PROGRAMMING**



A	DESCRIPTION	DATA
CM12	Specify the TAPI ADAPTER mode of D <sup>term</sup> .  [Series 3200 R6.1 software required]  NOTE 1: When using D <sup>term</sup> 65 TAPI  ADAPTER on D <sup>term</sup> 75, set "0".  NOTE 2: When the TAPI ADAPTER is not	<ul> <li>Y=17</li> <li>(1) X-XXXXXXXXX: My Line No.</li> <li>(2) 0 : D<sup>term</sup> 65 TAPI ADAPTER on D<sup>term</sup> 75         (D<sup>term</sup> Series E)</li> <li>3◀: Not used</li> </ul>
	used, set "3".  NOTE 3: For PN-2DLC/4DLC cards, this data must be assigned to the first LEN (Level 0) of each card. For 8DLC cards, this data must be assigned to the first LEN (Level 0) and the fifth LEN (Level 4) of each card.	
	Specify the kind of D <sup>term</sup> .  NOTE: After the 2nd data of CM12 Y=24 is changed, pull out and reconnect the modular connector of the D <sup>term</sup> .	<ul> <li>Y=24</li> <li>(1) X-XXXXXXXXX: My Line No.</li> <li>(2) 0 : 24 Line/Trunk/Feature keys + 8/12</li></ul>
CM90	Specify whether call termination on each line key is indicated on the Call Indicator Lamp or not.	<ul> <li>Y=05</li> <li>(1) My Line No. + , + Key No.</li> <li>(2) 0 : Not indicated</li> <li>1 &lt; : To indicate</li> </ul>
CM08	Assign the Outgoing Call Preset/Answer Preset functions to D <sup>term</sup> , if required.	<ul> <li>(1) 145</li> <li>(2) 0 : Available</li> <li>1 ◀: Not available</li> </ul>
	Specify whether the answer key rings on TAS and Pooled Line or not.	<ul> <li>(1) 116</li> <li>(2) 0 : Available</li> <li>1 ◀: Not available</li> </ul>
CM41	Specify the Delayed Ringing timing.	<ul> <li>Y=1</li> <li>(1) 09</li> <li>(2) 01-10: 2-20 seconds</li></ul>



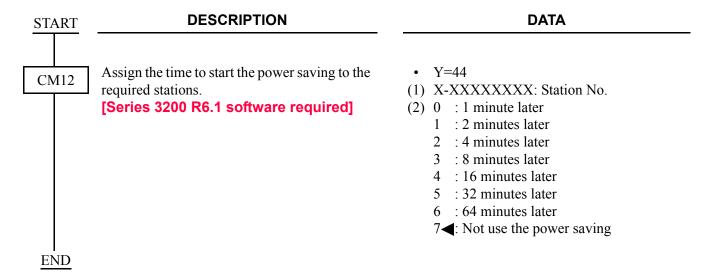
To provide the Digital Single Line on D<sup>term</sup>, do the following programming.



If the D<sup>term</sup> Series i is not used for a certain time, the luminosity of a lamp on the D<sup>term</sup> can be lower automatically for the power saving.

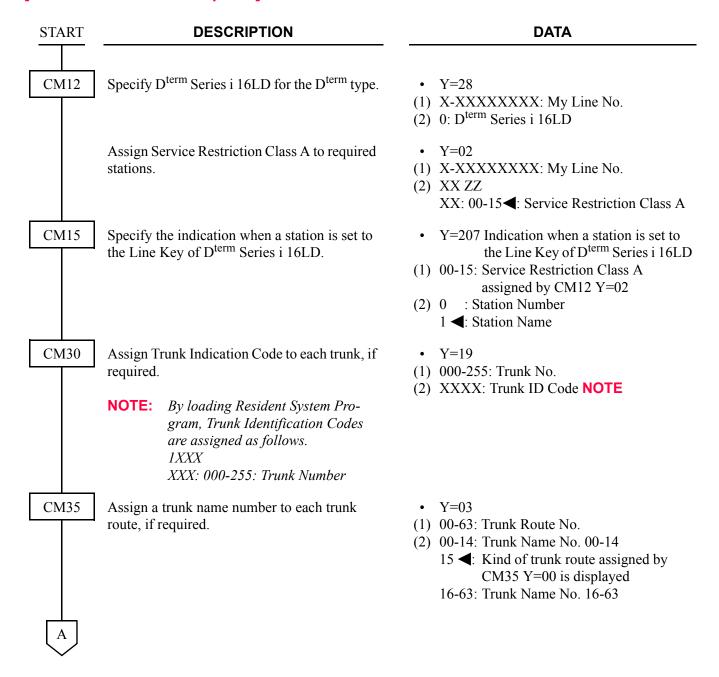
To provide the power saving for the D<sup>term</sup> Series i, do the following programming.

**NOTE:** This data is effective only for the  $D^{term}$  Series i. For  $D^{term}IP$ , this data is not effective.



To provide D<sup>term</sup> Series i 16LD/16LD-R ADM, do the following programming.

#### [Series 3300 software required]



A	DESCRIPTION	DATA
CM35	Specify the indication when a trunk is set to the Line Key of D <sup>term</sup> Series i 16LD.	<ul> <li>Y=201</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : Trunk Route Name (4 characters)</li> <li>1 : Trunk Route Name (4 characters) +</li></ul>
CM74	Assign the stored number to each Memory Slot number, if required.	<ul> <li>Y=0</li> <li>(1) X YY Z</li> <li>X : 0-3: 1000-Slot Memory Block No.</li> <li>YY: 00-99: 10-Slot Memory Block No.</li> <li>Z : 0-9: Memory Parcel No.</li> <li>(2) Stored No.: Outgoing Call Access Code (Maximum 4 digits) +</li></ul>
	Assign the station name to be displayed to each Memory Slot number, by character codes or character, if required.	<ul> <li>Y=1</li> <li>(1) X YY Z</li> <li>X : 0-3: 1000-Slot Memory Block No.</li> <li>YY: 00-99: 10-Slot Memory Block No.</li> <li>Z : 0-9: Memory Parcel No.</li> <li>(2) XXXX: Station Name Character Code 20-7F (Maximum 32 digits, 16 characters)</li> <li>NONE &lt; : No data</li> <li>See APPENDIX B: Character Code Table.</li> <li>Page B2</li> </ul>
		<ul> <li>Y=2</li> <li>(1) X YY Z</li> <li>X : 0-3: 1000-Slot Memory Block No.</li> <li>YY: 00-99: 10-Slot Memory Block No.</li> <li>Z : 0-9: Memory Parcel No.</li> <li>(2) XXXX: Station Name Character (Maximum 16 characters)</li> <li>NONE&lt;</li> <li>: No data</li> </ul>
В		

В	DESCRIPTION	DATA
CM77	Enter the desired station user's name to each station number by CM77 Y=0 or CM77 Y=1, if required.	<ul> <li>Y=0 By Character Code</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) Character Code 20-7F (Maximum 32 digits)</li> <li>See APPENDIX B: Character Code Table.</li> <li>Page B2</li> </ul>
		<ul> <li>Y=1 By Character</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) A-Z, 0-9: Character (Maximum 16 characters)</li> </ul>
	Assign the desired trunk name to each trunk route by CM77 Y=2 or CM77 Y=3, if required.	<ul> <li>Y=2 By Character Code</li> <li>(1) 00-14, 16-63: Trunk Name No. assigned by CM35 Y=03</li> <li>(2) Character Code 20-7F (Maximum 8 digits) See APPENDIX B: Character Code Table.</li> <li>Page B2</li> </ul>
		<ul> <li>Y=3 By Character</li> <li>(1) 00-14, 16-63: Trunk Name No. assigned by CM35 Y=03</li> <li>(2) A-Z, 0-9: Character (Maximum 4 characters)</li> </ul>
CM90	Assign the station numbers, trunk numbers or service feature access keys on each $D^{\text{term}}$ , if required.	• Y=00 (1) My Line No. + + Key No. (2) Refer to Command Manual (CM90)



#### **DESCRIPTION**

#### **DATA**

CM94

When connecting D16 (LD)-R ADM to D<sup>term</sup> Series i 16LD and using it as One Touch keys/ Directories, allocate the memory area for D<sup>term</sup> One Touch keys to each station.

(1) X-XXXXXXXX: My Line No.

(2) W XX 0 ZZ

W: 0-9: 1000-Slot Memory Block No. XX: 00-99: 10-Slot Memory Start Block No.

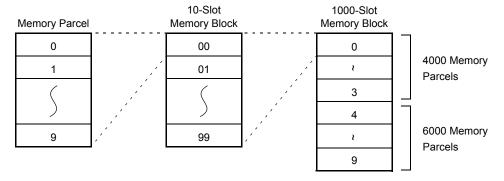
ZZ: 01/02: Number of 10-Slot Memory Blocks (10 memories/20 memories)

NONE**⋖**: No data

**NOTE 1:** To provide the D16 (LD)-R ADM with D<sup>term</sup> Series i 16LD, Series 3500 software is required.

**NOTE 2:** Station Speed Dialing and  $D^{term}$  One Touch keys uses the common memory area. Be sure to allocate the different memory area by CM94 from the memory area set by CM73.

**NOTE 3:** If the station number is assigned to One Touch keys using 1000-Slot Memory Block number 4-9, the lamp does not show the busy state.



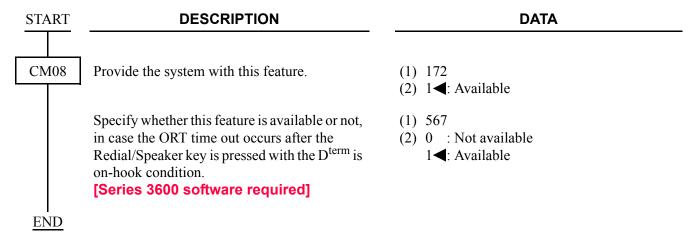


Provide to send the indication data to Line Key LCD of D<sup>term</sup> Series i 16LD.

- Y=29
- (1) X-XXXXXXXX: My Line No.
- (2) 0: To send indication data

#### **AUTOMATIC IDLE RETURN**

#### **PROGRAMMING**



#### HARDWARE REQUIRED

## **CALLING NAME AND NUMBER DISPLAY**

## **PROGRAMMING**

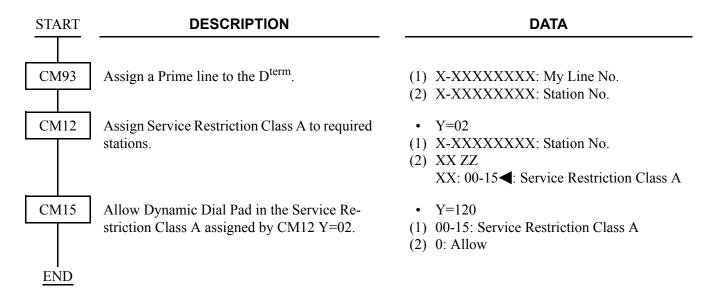
Refer to ALPHANUMERIC DISPLAY. Page 25

## **HARDWARE REQUIRED**

#### **DYNAMIC DIAL PAD**

#### **PROGRAMMING**

Do the following programming to make an outgoing call. Press any key on the dial pad of a D<sup>term</sup>, without pressing a Speaker key or going off hook.



#### **GROUP FEATURE KEY**

[Series 3500 software required]

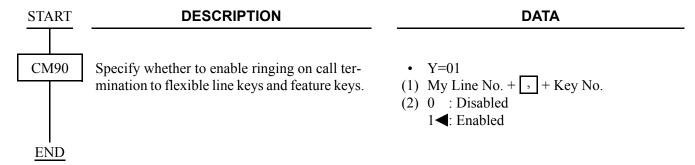
#### **PROGRAMMING**

To provide the Group Feature Key for the sub line of D<sup>term</sup>, do the following programming.

**DESCRIPTION DATA START** CM90 Provide Group Feature Key for the sub line of Y = 06D<sup>term</sup>, when the D<sup>term</sup> belongs to the group of (1) Sub Line No. + , + Key No. stations and accommodates the station num-(2) 0 : To provide ber/My line number of group members to the 1**<**: Not provided D<sup>term</sup> multiline as the sub line. **NOTE:** *Do not set the second data 0 to the My line number of*  $D^{term}s$ . CM08 Specify the operation of Group Feature Key on (1) 557 D<sup>term</sup> when an incoming call/holding call can-(2) 0 : Group Feature Key is unavailable not be seized with My line because it is used by 1**<**: Group Feature Key is available by the other D<sup>term</sup> on multiline. seizing Sub line Specify whether the service which is set to a (1) 585 (2) 0 : Effective group member station is effective when the group members are called by Group Feature 1**<**: Ineffective [Series 3800 software required] NOTE: When the second data of CM08>585 is set to 0, the following services are effective. Call Forwarding-All Calls/Split Call Forwarding-All Calls/Call Forwarding-All Calls of Mobility Access/Do Not Disturb/Transfer the call to station set Do Not Disturb (CM51 Y=10)/Call Forwarding-Logout **END** 

## **MULTIPLE LINE OPERATION**

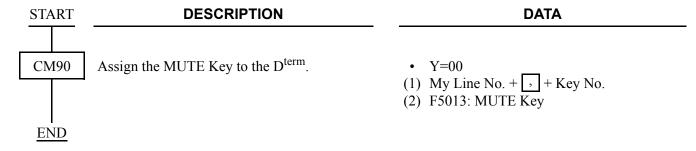
#### **PROGRAMMING**



#### HARDWARE REQUIRED

#### **MUTE KEY**

## **PROGRAMMING**



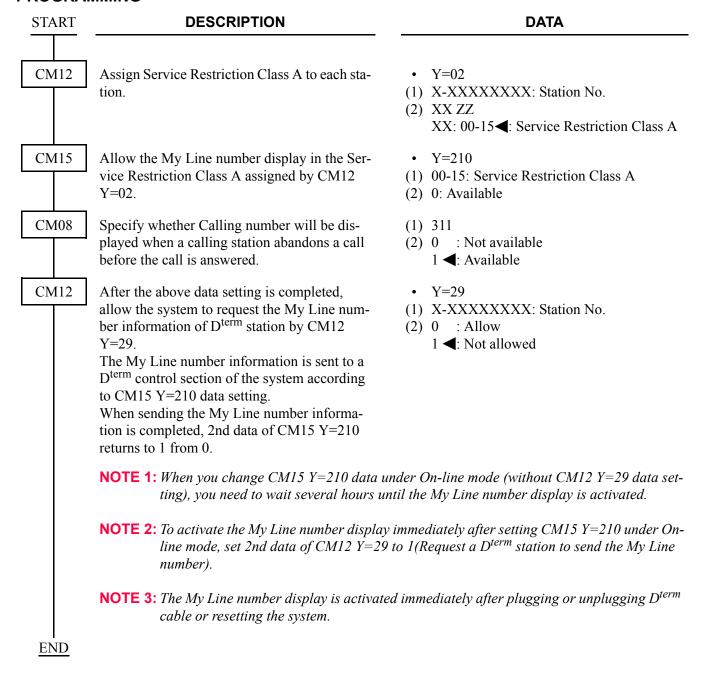
#### HARDWARE REQUIRED

D<sup>term</sup> Series E and DLC card

#### MY LINE NUMBER DISPLAY

#### [Series 3400 software required]

#### **PROGRAMMING**

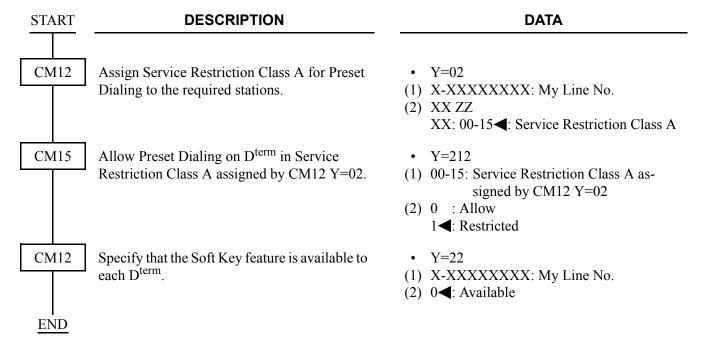


#### HARDWARE REQUIRED

#### PRESET DIALING

#### [Series 3600 software required]

#### **PROGRAMMING**

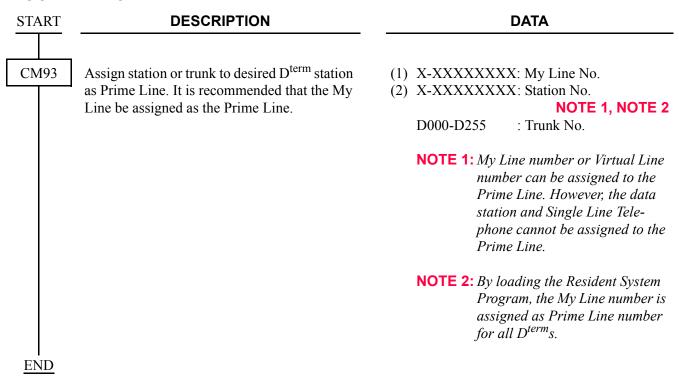


#### HARDWARE REQUIRED

D<sup>term</sup> with LCD and DLC card

#### PRIME LINE PICKUP

#### **PROGRAMMING**



#### HARDWARE REQUIRED

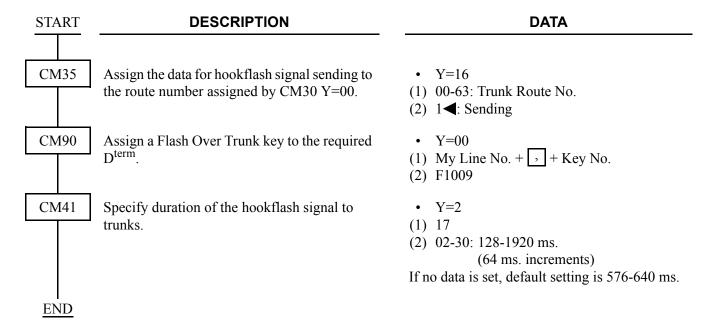
#### **RECALL KEY**

#### **PROGRAMMING**

For internal call:

RECALL Key is initially assigned to all D<sup>term</sup>s.

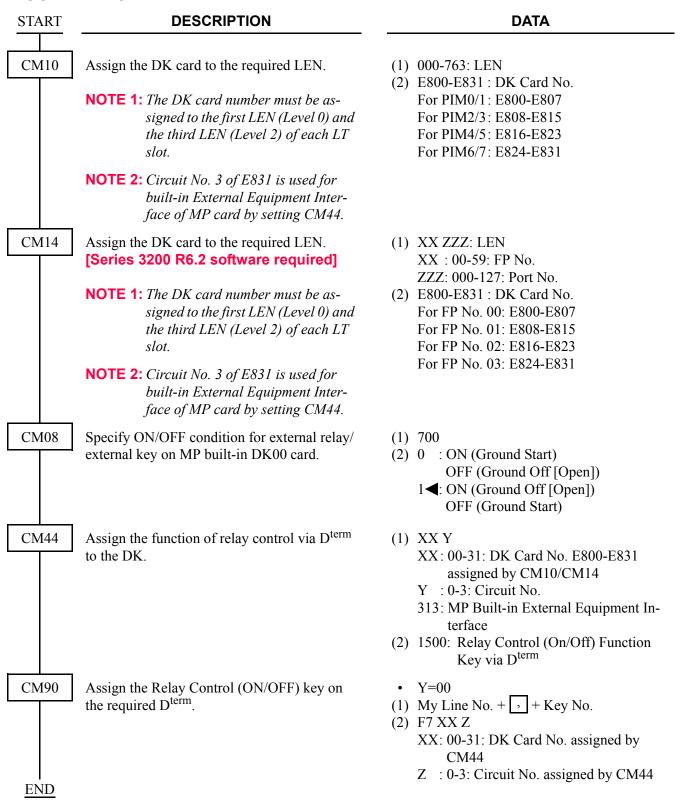
For outside call:



#### HARDWARE REQUIRED

#### **RELAY CONTROL FUNCTION KEY**

#### **PROGRAMMING**



## **HARDWARE REQUIRED**

DK card or MP card (built-in DK)
External equipment provided locally
Dterm and DLC card

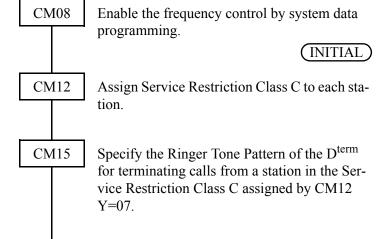
#### RING FREQUENCY CONTROL

#### **PROGRAMMING**

**START** 

To control the ring frequency by system data programming:

**DESCRIPTION** 



**DATA** 

- (1) 390
- (2) 1◀: As per CM15 Y=83, 84, 93, CM35 Y=34, 164, CM65 Y=40
- Y=07
- (1) X-XXXXXXXX: Station No.
- (2) 00-15**◄**: Service Restriction Class C
- Y=83, 84, 93
- (1) 00-15: Service Restriction Class C assigned by CM12 Y=07
- (2) See the table below.

[Series 3200 R6.1 software required]

Y=83	Y=84	Y=93: 0	Y=93: 1 <b>⋖</b>
0	0	Ringer Tone Pattern 3	Ringer Tone Pattern 7
0	1◀	Ringer Tone Pattern 6	Ringer Tone Pattern 1
1	0	Ringer Tone Pattern 5	Ringer Tone Pattern 0
1	1	Ringer Tone Pattern 4	Ringer Tone Pattern 2

CM35

Specify the Ringer Tone Pattern of the D<sup>term</sup> to each trunk route.

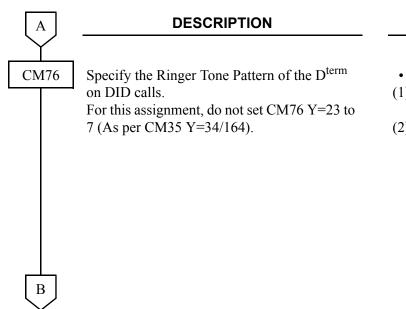
- Y=34, 164
- (1) 00-63: Trunk Route No.
- (2) See the table below.

[Series 3200 R6.1 software required]

Y=34	Y=164: 0	Y=164: 1 <b>⋖</b>
0	Ringer Tone Pattern 3	Ringer Tone Pattern 0
1	Ringer Tone Pattern 6	Ringer Tone Pattern 1
2	Ringer Tone Pattern 5	Ringer Tone Pattern 2
3◀	Ringer Tone Pattern 4	Ringer Tone Pattern 7



To specify the ringer tone pattern of the D<sup>term</sup> to each DID number:



#### **DATA**

- Y=23
- (1) 000-999: Number Conversion Block No. assigned by CM76 Y=00/90
- (2) 0: Ringer Tone Pattern 0
  - 1: Ringer Tone Pattern 1
  - 2: Ringer Tone Pattern 2
  - 3: Ringer Tone Pattern 3
  - 4: Ringer Tone Pattern 4
  - 5: Ringer Tone Pattern 5
  - 6: Ringer Tone Pattern 6

[Series 3200 R6.1 software required]

To set the ring frequency of the D<sup>term</sup>:



#### **DESCRIPTION**

DATA

CM65

Specify the ring frequency of the D<sup>term</sup>. [Series 3200 R6.1 software required]

- Y=40
- (1) 00-63: Tenant No.
- (2) See the table below.

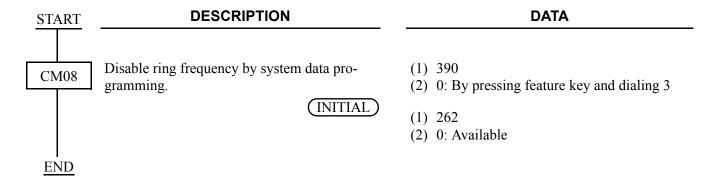
Dinger Tone		Y=40: 1◀	
Ringer Tone Pattern No.	Y=40: 0	Electra Terminal/ D <sup>term</sup> Series III	Elite Terminal/D <sup>term</sup> Series E/ D <sup>term</sup> Series i
0	Door Phone Ringer Tone	1024 + 1285 [Hz]/ 16 [Hz] Modulating Signal	1100 + 1400 [Hz]/ 16 [Hz] Modulating Signal
1	Ringer Tone 1	480 + 606 [Hz]/ 8 [Hz] Modulating Signal	520 + 660 [Hz]/ 8 [Hz] Modulating Signal
2	Ringer Tone 2	600 + 700 [Hz]/ 16 [Hz] Modulating Signal	660 + 760 [Hz]/ 16 [Hz] Modulating Signal
3	Ringer Tone 3	1024 [Hz] Envelop	1100 [Hz] Envelop
4	Ringer Tone 4	500 [Hz]	540 [Hz]
5	Ringer Tone 5	1024 [Hz]	1100 [Hz]
6	Not used	1285 + 1024 [Hz]	1400 + 1100 [Hz]
7	Not used	480 + 606 [Hz]/ 16 [Hz] Modulating Signal	520 + 660 [Hz]/ 16 [Hz] Modulating Signal

**NOTE:** This data is effective only for  $D^{term}$  Series i.

When using Electra Terminal/D<sup>term</sup> Series III/Elite Terminal/D<sup>term</sup> Series E, using D<sup>term</sup> Series i with Series 3100 software or before, or when accommodating D<sup>term</sup> Series i in TDM based Remote PIM, the second data is fixed to 1.

**END** 

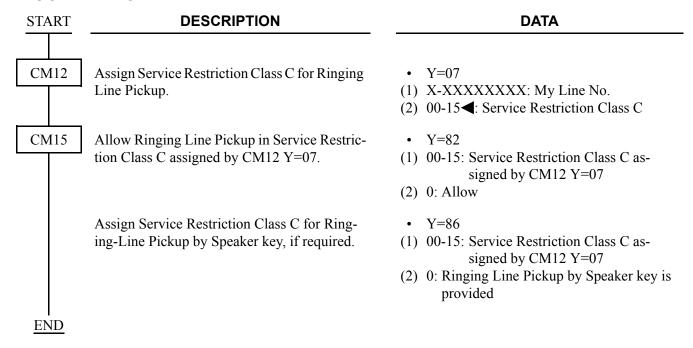
To control the ring frequency at the D<sup>term</sup>:



#### HARDWARE REQUIRED

#### **RINGING LINE PICKUP**

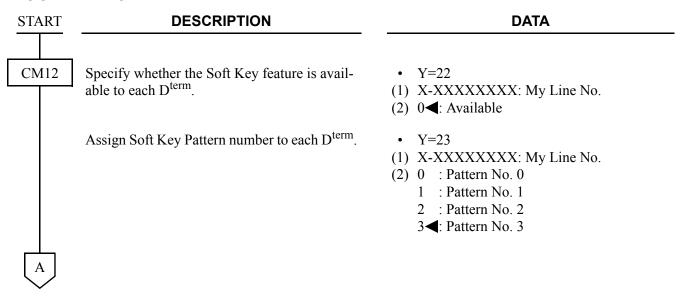
#### **PROGRAMMING**



#### HARDWARE REQUIRED

#### **SOFT KEY**

#### **PROGRAMMING**





#### **DESCRIPTION**

#### **DATA**

CM9A

Assign the function of each Soft Key on each status of the D<sup>term</sup>.

To the 2nd data of this command, the 2nd data (F0XXX, F1XXX, F50XX) of CM90 should be assigned except for Scroll key data (F5002).

The LCD shows a maximum of 4 Soft Keys at once. If assigning more than 4 Soft Keys on one status, it is necessary to assign Scroll key at every 4 keys (on 1st through 4th display).

**NOTE 1:** Scroll key must be assigned as a key for each active display.

**NOTE 2:** Help key is only available in Pattern No. 3.

NOTE 3: For the Pattern No. 3, the initial Soft Key data for NEAXMail AD-8/IM-16 live recording is assigned. See the following section.

**NOTE 4:** Pattern No. 3 is fixed.

NOTE 5: For Dial By Name assignment, refer to DIAL BY NAME.

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 Y=00-03 Soft Key Pattern No. 0-3 assigned by CM12 Y=23

(1) aa bb

aa: 00-15: Status No.

00: Idle State

01: During dialing (Holding no call)

02: During dialing (Holding station/trunk)

03: During calling (Holding no call)

04: During calling (Holding station/trunk)

05: Being called

06: When called party is busy (Holding no call)

07: When called party is busy (Holding station/trunk)

08: When called party sets DND

09: Trunk Busy

10: During Speaking (Holding no call)

11: During Speaking (Holding station/trunk)

12: During live recording/after live recording to NEAXMail AD-8/IM-16

NOTE 3

13-15: Not used

bb: Soft Key No. 00-15

00-03: Indicated on 1st display

04-07: Indicated on 2nd display

08-11: Indicated on 3rd display

12-15: Indicated on 4th display

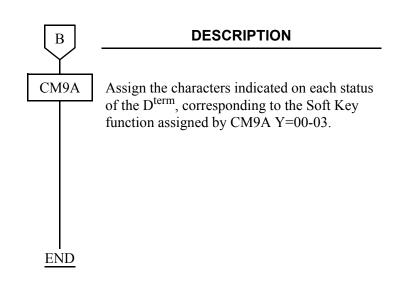
(2) F5002 : Scroll key to change Soft Key Indication

XXXXX: Setting of each function

(Same as "F0XXX, F1XXX,

F50XX" of CM90)

NONE**<**: No data



#### **DATA**

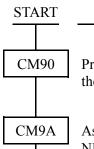
- Y=10-13 Soft Key Pattern No. 0-3 assigned by CM12 Y=23
- (1) Same as Y=00-03
- (2) XX...XX: Soft Key name indicated on LCD (Maximum 12 characters)

NONE**⋖**: No data

See APPENDIX B: Character Code Table.

Page B2

To provide the Soft Keys for NEAXMail AD-8/IM-16 live recording, assign the following data.



#### **DESCRIPTION**

Provide the Record key on the feature key of the  $D^{\text{term}}$ .

Assign the function of each Soft Key for NEAXMail AD-8/IM-16 live recording.

NOTE: For the Pattern No. 3, the initial Soft Key data for NEAXMail AD-8/IM-16 live recording is assigned as follows.

CM9A Y=03		CM9A
1st Data	2nd Data	Y=13 Indication
1200	F1096 (Address)	Addrs
1201	F1092 (Pause)	Pause
1202	F1094 (End)	End
1203	F5002 (Scroll)	>>>>
1204	F1093 (Re-record)	ReRec
1205	F1095 (Erase)	Erase
1206	F1017 (MIC)	MIC
1207	F5002 (Scroll)	>>>>
1208	F1097 (Urgent Page)	Urgnt
1209	NONE	
1210	NONE	
1211	F5002 (Scroll)	>>>>

#### **DATA**

- Y=00
- (1) My Line No. + , + Key No.
- (2) F1091: Record
- Y=00-03 Soft Key Pattern No. 0-3 assigned by CM12 Y=23
- (1) 12 bb

bb: 00-15: Soft Key No.

00-03: Indicated on 1st display 04-07: Indicated on 2nd display 08-11: Indicated on 3rd display 12-15: Indicated on 4th display

(2) F1092 : Pause

F1093 : Re-record F1094 : End F1095 : Erase F1096 : Address F1097 : Urgent Page NONE◀: No data

- Y=10-13 Soft Key Pattern No. 0-3 assigned by CM12 Y=23
- (1) Same as Y=00-03
- (2) XX...XX: Soft Key name indicated on LCD

(Maximum 12 characters)

NONE**⋖**: No data

See APPENDIX B: Character Code Table.

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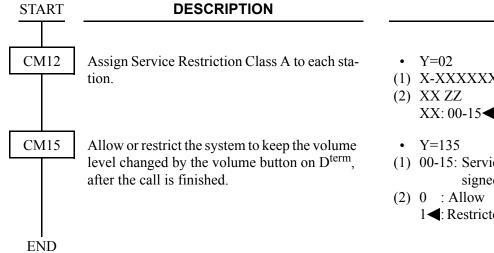
# END

#### HARDWARE REQUIRED

Dterm with Soft Keys and DLC card

#### **VOLUME CONTROL**

#### **PROGRAMMING**



#### HARDWARE REQUIRED

D<sup>term</sup> and DLC card

#### **DATA**

(1) X-XXXXXXXX: My Line No.

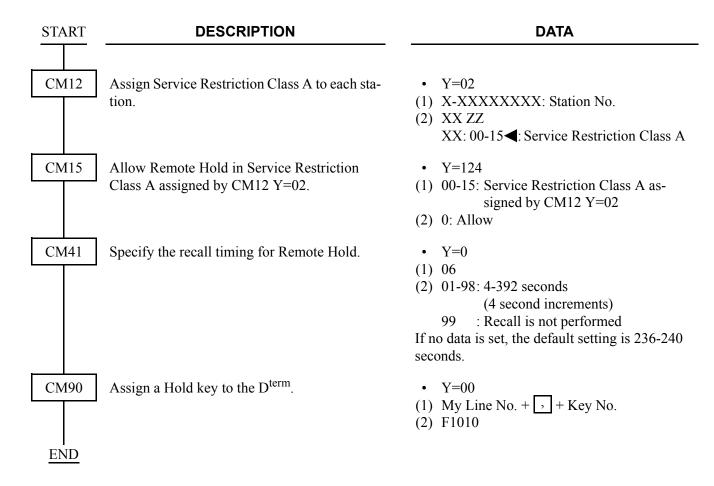
XX: 00-15◀: Service Restriction Class A

- (1) 00-15: Service Restriction Class A assigned by CM12 Y=02
- 1**⋖**: Restricted

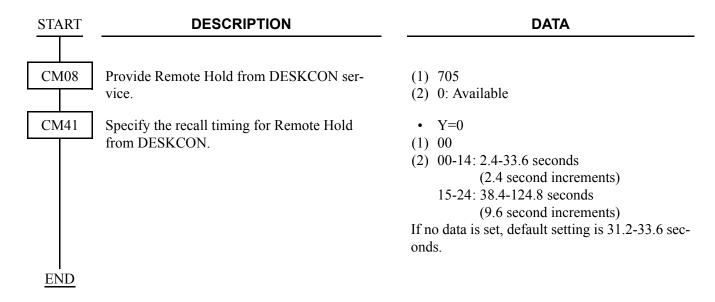
# **REMOTE HOLD**

#### **PROGRAMMING**

Remote Hold from a D<sup>term</sup>:

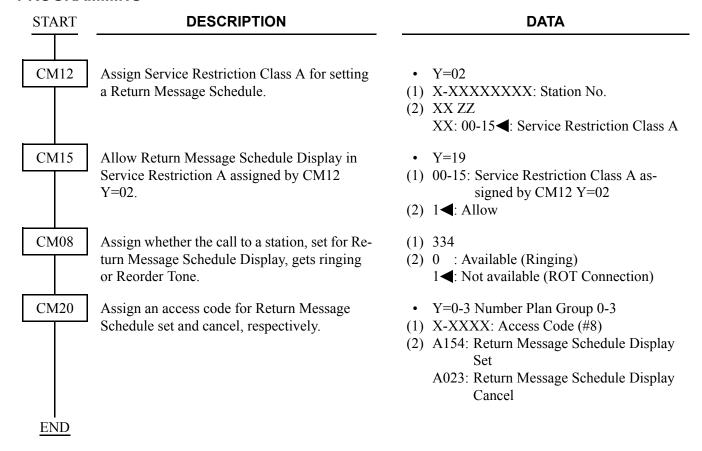


## Remote Hold from a DESKCON:



# RETURN MESSAGE SCHEDULE DISPLAY

#### **PROGRAMMING**

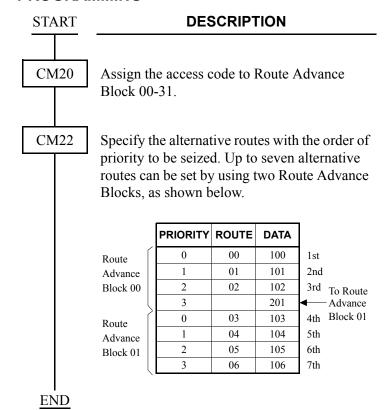


#### HARDWARE REQUIRED

D<sup>term</sup> with LCD and DLC card

# **ROUTE ADVANCE**

#### **PROGRAMMING**



#### **DATA**

- Y=0-3 Numbering Plan Group 0-3
- (1) X-XXXX: Route Advance Access Code
- (2) 200-231: Route Advance Block 00-31
- Y=00-31 Route Advance Block assigned by CM20>200-231
- (1) 0-3: Order of Priority

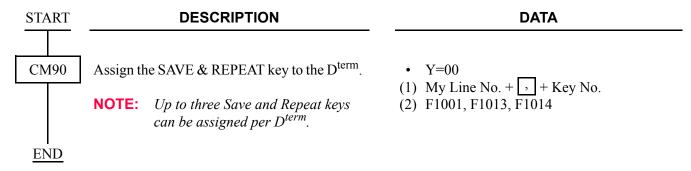
0 : 1st 1 : 2nd 2 : 3rd 3 : 4th

(2) 100-163: Trunk Route 00-63

200-231: Route Advance Block 00-31

# **SAVE AND REPEAT**

### **PROGRAMMING**

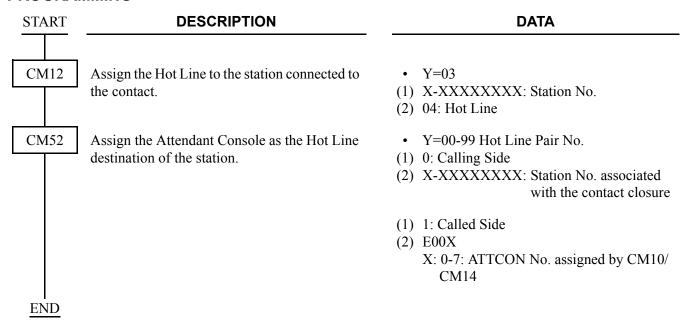


#### HARDWARE REQUIRED

D<sup>term</sup> and DLC card

# **SECURITY ALARM**

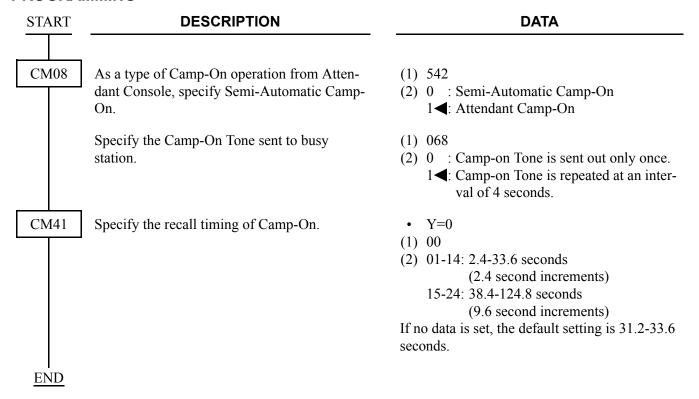
#### **PROGRAMMING**



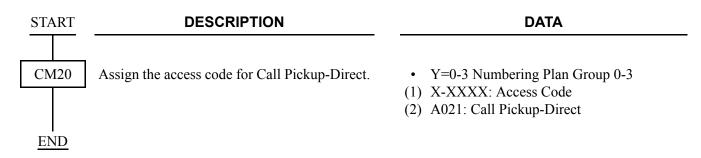
# **SEMI-AUTOMATIC CAMP-ON**

### [Series 3400 software required]

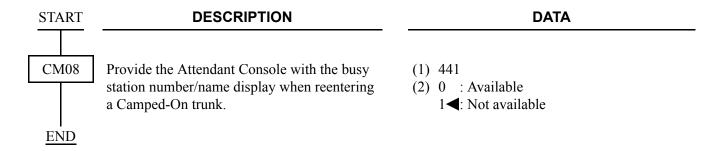
#### **PROGRAMMING**



To reenter a Camped-On trunk from an Attendant before Automatic Recall:

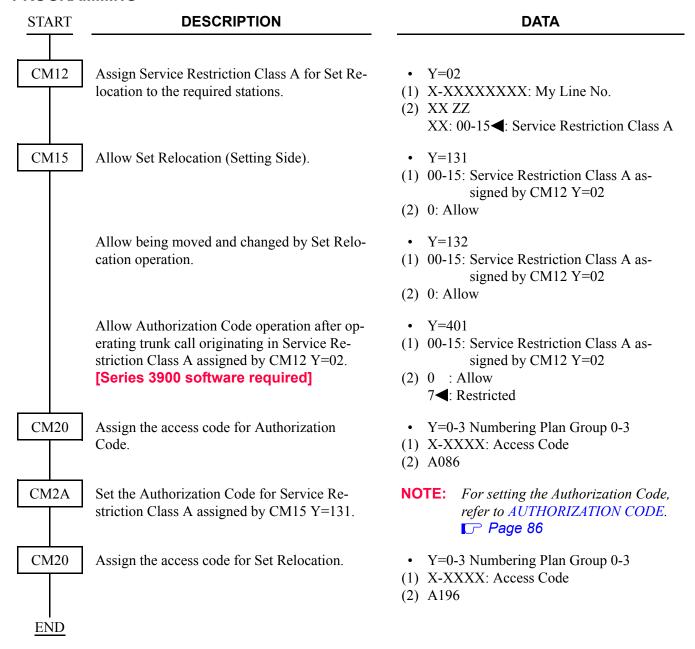


To display the busy station number and name on an Attendant Console when reentering a Camped-On trunk by pressing the loop key:



# **SET RELOCATION**

#### **PROGRAMMING**



# **SHORT MESSAGE SERVICE (SMS)**

## [For EU]

#### **PROGRAMMING**

To restrict a toll call, do the programming of CODE RESTRICTION. Page 214

And to provide the caller ID-station, do the programming of CALLER ID-STATION (ETSI-FSK).

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#### HARDWARE REQUIRED

Analog telephone with LCD which supports Caller ID SDT card (PN-4RSTH)
LLC card (PN-4LLCB)
-48 V Power Supply (PZ-PW122)
Short Message Service Center (SM-SC)

# SINGLE DIGIT FEATURE ACCESS CODE

#### **PROGRAMMING**

START	DESCRIPTION	DATA		
CM08	To activate the Single-Digit Feature Access Code feature, set the data for 050, 051, 069, 148 and 543 to "1".	<ul> <li>(1) 050: * Button as Switch Hook Flash.</li> <li>(2) 1◀: Ineffective</li> </ul>		
	148 and 343 to 1.	<ul><li>(1) 051: # Button as Switch Hook Flash.</li><li>(2) 1◀: Ineffective</li></ul>		
		<ul><li>(1) 069: Single Digit Dialing on BT Connection</li><li>(2) 1◀: Step Call</li></ul>		
		(1) 148: Same Last Digit Redialing on BT Connection		
		(2) 1 <b>◄</b> : Ineffective		
		<ul><li>(1) 543: Step Call</li><li>(2) 1◀: Allow</li></ul>		
	Provide the system with the Single-Digit Feature Access Code on RBT or Voice Call connection.	(1) 156 (2) 0: Available		
	Provide the system with the Single-Digit Feature Access Code on BT connection.	<ul><li>(1) 208</li><li>(2) 0: Available</li></ul>		
	Specify whether the access codes of Single- Digit Feature Access Code feature are fixed or not.  [Series 3600 software required]	<ul> <li>(1) 570</li> <li>(2) 0 : Programmable Access Code</li> <li>1 ◄: Fixed Access Code</li> </ul>		



#### **DESCRIPTION**

#### DATA

CM20

When using programmable access code (CM08>570 is set to 0), assign the Single-Digit Feature Access Code for the BT connection.

[Series 3600 software required]

When using programmable access code (CM08>570 is set to 0), assign the Single-Digit Feature Access Code for the RBT connection.

[Series 3600 software required]

• Y=4

(1) X: Access code (0-9, A (\*), B (#))

(2) 2 : Call Back/Trunk Queuing-

Outgoing

3 : Executive Override

4 : Camp-On 5 : Call Waiting

6 : Message Reminder Set

7 : Step Call

8 : Message Waiting Record9 : Voice Mail Transfer

NONE**◄**: Single-Digit Feature Access

Code is not available

• Y=5

(1) X: Access code (0-9, A (\*), B (#))

(2) 1 : Internal Tone/Voice Signaling

2 : Call Back/Trunk Queuing-

Outgoing

6 : Message Reminder Set 8 : Message Waiting Record

9 : Voice Mail Transfer

NONE**◀**: Single-Digit Feature Access

Code is not available

**END** 

When CM08>570 is set to 1, the associated access codes become as shown below, and these access codes cannot be changed.

#### On Busy Tone Connection

- 1. None
- Call Back/Trunk Queuing-Outgoing NOTE 1, 2
- 3. Executive Override NOTE 1, 2
- 4. Camp-On
- 5. Call Waiting
- 6. Message Reminder/Message Waiting Set
- 7. Step Call (7 + Last one digit) **NOTE 3**
- 8. Message Waiting Record
- 9. None

### On Ring Back Tone Connection

- 1. Internal Tone/Voice Signaling NOTE 4
- 2. Call Back-Don't Answer NOTE 1, 2, 4
- 3. None
- 4. None
- 5. None
- 6. Message Reminder/Message Waiting Set **NOTE 4**
- 7. None
- 8. Message Waiting Record **NOTE 4**
- 9 None

**NOTE 1:** This feature cannot be set from Attendant Console.

**NOTE 2:** This feature cannot be set from a station having a held call.

**NOTE 3:** This feature can be set only from a station having a held incoming call.

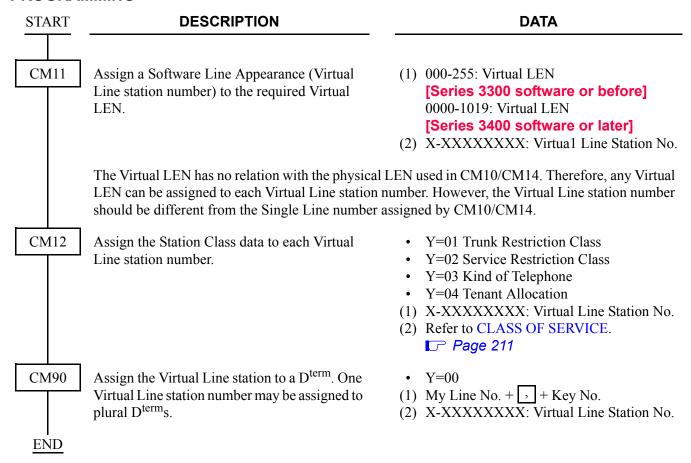
**NOTE 4:** From a DTMF telephone, a hooking operation is required before dialing the single digit access code.

This feature is mutually exclusive with Step Call.

However, 2 digit dialing Step Call can be provided by using this feature.

# **SOFTWARE LINE APPEARANCE (VIRTUAL EXTENSIONS)**

#### **PROGRAMMING**

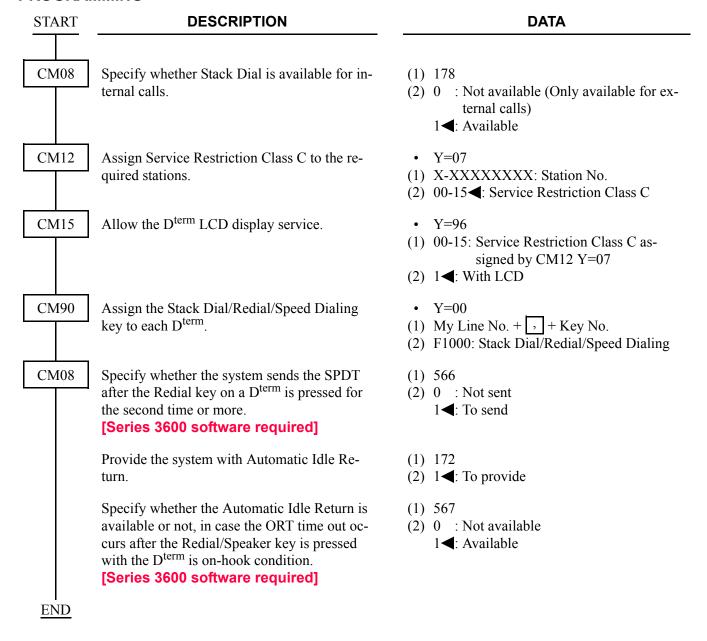


#### HARDWARE REQUIRED

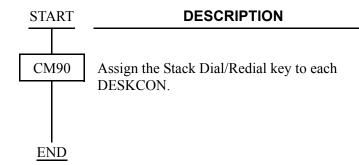
D<sup>term</sup> and DLC card

# **STACK DIAL**

#### **PROGRAMMING**



To provide DESKCON with this feature:



## **HARDWARE REQUIRED**

D<sup>term</sup> with LCD and DLC card DESKCON and DLC card

#### **DATA**

- Y=00
- (1) ATTCON No. (E000-E007) + , + Key No
- (2) F6121: Stack Dial/Last Number Redial

# **STATION HUNTING**

#### STATION HUNTING-CIRCULAR

#### **PROGRAMMING**

CM18

**START** 

#### **DESCRIPTION**

**DATA** 

To set up each Station Hunting group, assign station numbers, one by one, in order of the Hunting as shown below.

**Example:** For setting station number 200, 201, 202 into one Hunting group.

1st Operation (1) 200 (2) 201 2nd Operation (1) 201 (2) 202 3rd Operation (1) 202 (2) 200 (2) 200 (2) 200 (2) 200 • Y=0

(1) X-XXXXXXXX: Station No. to be included in Station Hunting
Group

(2) X-XXXXXXXX: Another Station No. to be linked

Specify the Hunting capability of each station. To continue the hunt in the original direction, if the station is busy, set to "1"; to reverse the direction (last station only), set to "5".

NOTE 1: The maximum number of stations per hunt group is 60. And there is no limit to the number of Circular Hunt groups within the system.

**NOTE 2:** Each station can belong to only one hunt group.

**NOTE 3:** The Attendant Console cannot be member of a hunt group.

Allow or restrict the ability to set Station Hunting-Circular for a station with Do Not Disturb set.

• Y=1

(1) X-XXXXXXXX: Station No.

(2) 1: If busy, hunt in original direction

5: If busy, hunt in reverse direction

CM08

**END** 

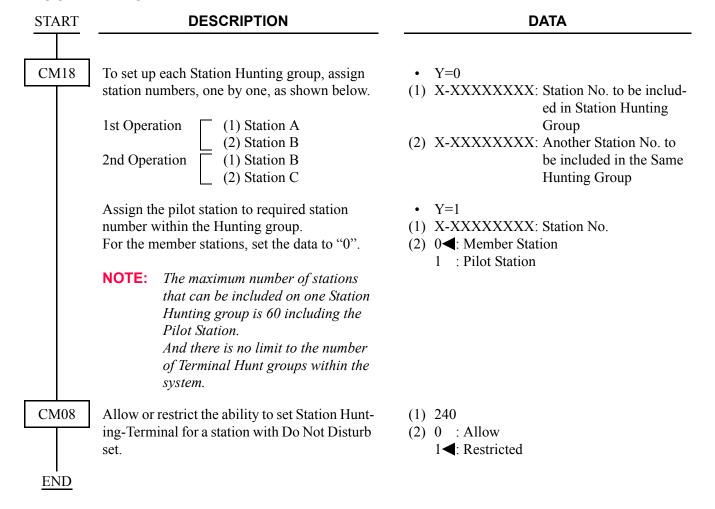
(1) 240

(2) 0 : Allow

1**<**: Restricted

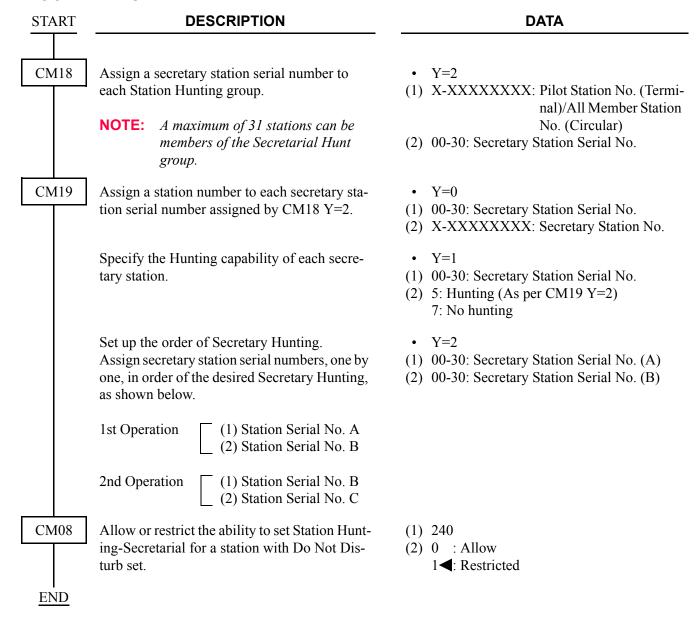
#### STATION HUNTING-TERMINAL

#### **PROGRAMMING**



#### STATION HUNTING-SECRETARIAL

#### **PROGRAMMING**



# STATION MESSAGE DETAIL RECORDING (SMDR)

#### **SYSTEM OUTLINE**

The Station Message Detail Recording (SMDR) feature allows the system to send a raw data of the trunk outgoing/incoming call information. The SMDR data can be received by a personal computer (PC) which runs an RS-232C or a LAN terminal emulation software. (referred to the rest of this manual as simply "SMDR terminal")

The PBX provides two kinds of SMDR. One is the Main Processor (MP) built-in SMDR, and the another is the SMDR with Application Processor (AP00).

Call information is sent out from the MP or AP00 to the SMDR terminal when each call is completed. If the SMDR terminal is not connected to the system or if the SMDR terminal is not ready for receiving information, the call information is temporarily stored in the MP or AP00. As soon as the SMDR terminal becomes ready to receive information, the call information temporarily stored in the MP or AP00 is sent out to the SMDR terminal.

#### (1) MP Built-in SMDR on RS-232C

The system outline of the Built-in SMDR is shown below. The Built-in SMDR on RS-232C consists of the MP and the external SMDR terminal.

#### • MP card:

The MP stores various kinds of information on an event basis. When a call is completed, the MP sends out the call information pertaining to that specific call to the SMDR terminal.

Two RS-232C ports can be used for the SMDR terminal interface.

The MP keeps supervising the status of the SMDR terminal. If the SMDR terminal is not ready to receive information (Busy Status), the MP temporarily stores the call information into its internal memory.

When the number of the call records stored in the MP reaches the maximum, new call records will be lost.

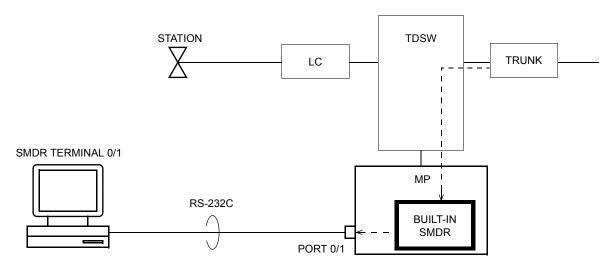
The call record memory will be cleared by MP reset.

#### • SMDR Terminal:

An Asynchronous Personal Computer is used as the SMDR terminal for receiving and processing the call information via RS-232C.

The maximum number of SMDR terminal is two, which includes the number of Message Center Interface (MCI).

# System Outline of MP Built-in SMDR on RS-232C



MP: MAIN PROCESSOR

#### (2) MP Built-in SMDR on IP

The system outline of the Built-in SMDR is shown below. The Built-in SMDR on IP consists of the MP and the external SMDR terminal.

#### • MP card:

The MP stores various kinds of information on an event basis. When a call is completed, the MP sends out the call information pertaining to that specific call to the SMDR terminal.

One LAN port can be used for the SMDR terminal interface.

The MP keeps supervising the status of the SMDR terminal. If the SMDR terminal is not ready to receive information (Busy Status), the MP temporarily stores the call information into its internal memory.

When the number of the call records stored in the MP reaches the maximum, new call records will be lost

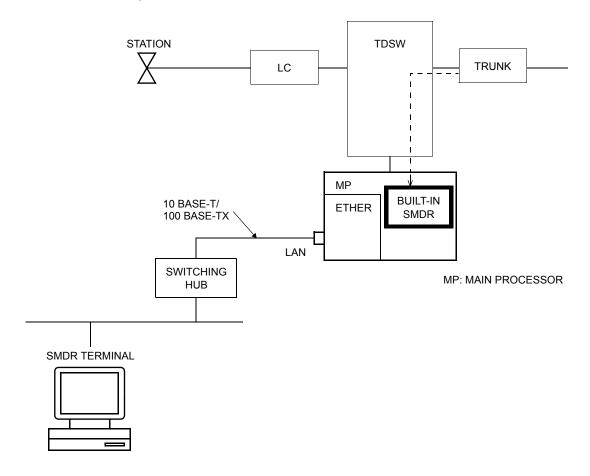
The call record memory will be cleared by MP reset.

#### • SMDR Terminal:

A Personal Computer with LAN port is used as the SMDR terminal for receiving and processing the call information via LAN.

Only one SMDR terminal is available.

# System Outline of MP Built-in SMDR on IP



#### (3) SMDR with AP00

The System outline of the SMDR with AP00 is shown below.

The SMDR consists of the AP00 and the external SMDR terminal.

#### • AP (AP00):

The AP stores various kinds of information which arrives from the MP on an event basis. When a call is completed, the AP sends out the call information pertaining to that specific call to the SMDR terminal.

Four of the AP (RS-232C) ports can be used for the SMDR terminal interface. The AP ports perform as DTE.

The system can accommodate a maximum of one AP00 card.

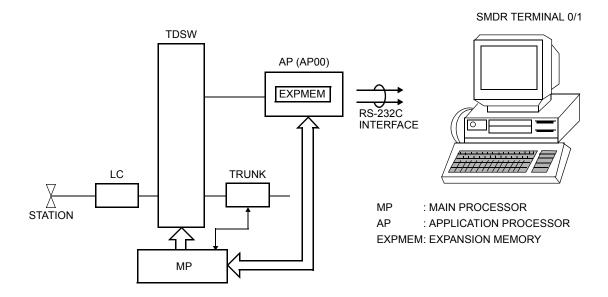
#### SMDR Terminal:

Asynchronous PC is used as the SMDR terminal for receiving and processing the call information via RS-232C.

The maximum number of SMDR terminal is two, which includes the number of Property Management System (PMS) terminal.

**NOTE:** For AP00 card (PN-AP00-B/PN-AP00-D with MRCA program), PMS terminal is not available.

## **System Outline of SMDR with AP00**



#### **SYSTEM CAPACITY**

(1) MP Built-in SMDR on RS-232C

• The maximum of trunk calls simultaneously: 255 trunk calls

• The maximum of call record: 1024 call record

(2) MP Built-in SMDR on IP

• The maximum of trunk calls simultaneously: 255 trunk calls

• The maximum of call record: 1024 call record

(3) SMDR with AP00

Buffer Memory Capacity within AP00 card can store the following number of call information temporarily.

• PN-AP00-B with AP00 program

Amount of Call Records number of CMD003 1st data 23, 24, 25, 26, 28, 29, 30								
No EXPMEM on AP00 is provided		EXPMEM on AP00 is provided						
When CMD001>179  is set to 0  (Local Office of Centralized Billing- CCIS/Stand-alone)	When CMD001>179  is set to 1  (Center Office of Centralized Billing- CCIS)	When CMD001>179 is set to 0 (Local Office of Centralized Billing- CCIS/Stand-alone)	When CMD001>179 is set to 1 (Center Office of Centralized Billing- CCIS)					
1600	800	27000: When CMD003>28 is set to 0 (Call Record for CIS is not provided) 26000: When CMD003>28 is set to other than 0 (Call Record for CIS is provided)						

• PN-AP00-B/PN-AP00-D with MRCA program

Amount of Call Records number of CMDD02 1st data 0, 1, 2									
	on PN-AP00-B ovided	EXPMEM on PN-AP00-B/PN-AP00-D is provided							
CMDD00>3 is set to 0	CMDD00>3 is set to 1	CMDD00>3 is set to 0	CMDD00>3 is set to 1						
(Local Office of	(Center Office of	(Local Office of	(Center Office of						
Centralized Billing-	Centralized Billing-	Centralized Billing-	Centralized Billing-						
CCIS/Stand-alone)	CCIS)	CCIS/Stand-alone)	CCIS)						
2620	1310	23580	22270						

### **COMBINATION OF SMDR SERVICE**

By system data programming, the same call record can be output to multiple SMDR terminals simultaneously. Following table shows the combination pattern of call record output available at the same time regardless of the type of Message Format.

### **Combination of SMDR Service**

x: Available

-: Not available

SMDR TYPE	PATTERN A	PATTERN B	PATTERN C	PATTERN D	PATTERN E
SMDR with AP00	_	_	_	_	×
(PN-AP00-B with					
AP00 program)					
MP built-in SMDR	×	×	_	_	_
on RS-232C					
MP built-in SMDR	_	_	×	×	_
on IP					
SMDR with AP00	_	×	_	×	_
(PN-AP00-B/					
PN-AP00-D with					
MRCA program)					

### **HARDWARE REQUIRED**

(1) MP Built-in SMDR on RS-232C

MP card

RS RVS-4SCA-C/RS RVS-15S CA-A or RS NORM-4S CA-A

SMDR terminal

(2) MP Built-in SMDR on IP

MP card

SMDR terminal

(3) SMDR with AP00

AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program

EXPMEM card (PZ-M537) on AP00-B card if required

RS RVS-4SCA-C/RS RVS-15S CA-A or RS NORM-4S CA-A

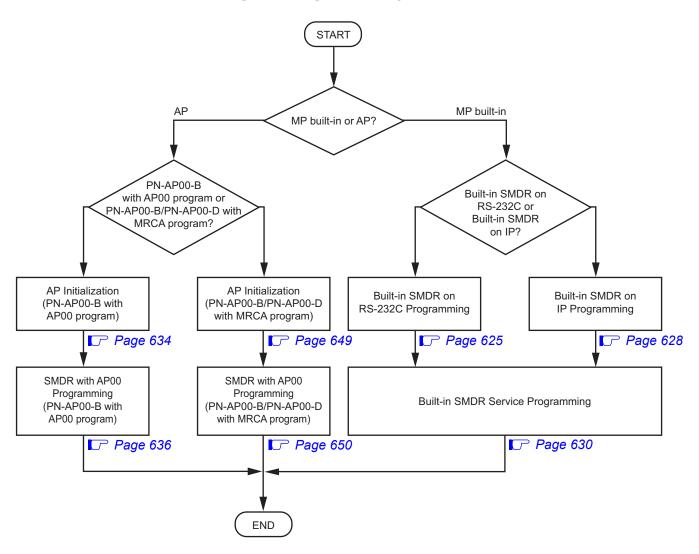
SMDR terminal

**NOTE:** For SMDR with NEAX 1400 Format, only AP00-B card (PN-AP00-B with AP00 program)

is available.

#### **PROGRAMMING SUMMARY**

# **Programming Summary for SMDR**



#### **PROGRAMMING**

#### **Precaution**

Before programming the system data for SMDR, confirm that the system is under the following status.

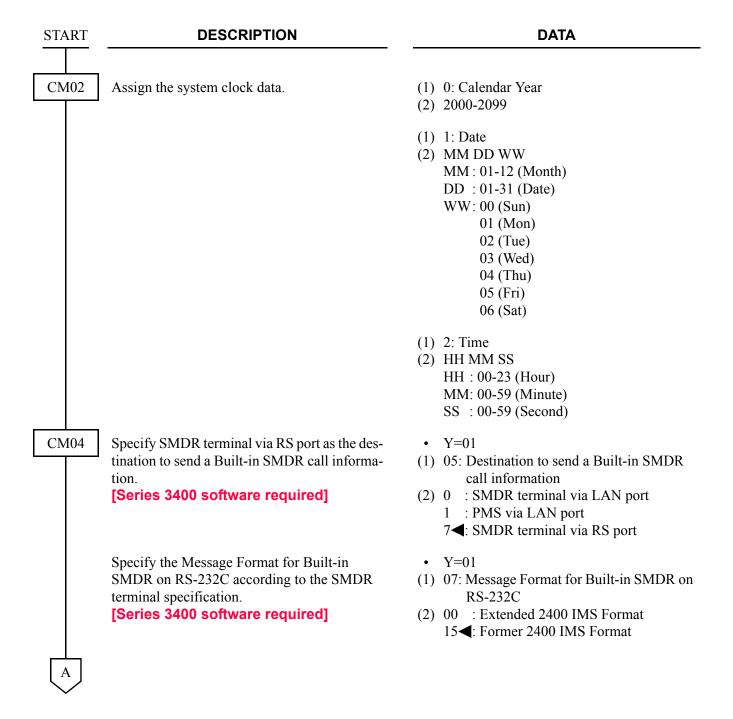
- The system is under On-Line mode. ("RUN" lamp is flashing on the MP card.)
- The AP00 card is mounted in the correct location. (for SMDR with AP00)
- All the system data pertaining to the station, trunks, and service features are already programmed.

## **Station Number Data Loading**

The AP00 stores the station number data loaded from the MP. When station numbers have been added, deleted or changed by CM10/CM14, the station number data must be reloaded to the AP00 by the following procedure.

- (1) Flip the MB switch of the AP to UP position.
- (2) Return the MB switch to DOWN position.
- (3) The "\*\*\* AP00 START \*\*\*\*" message is printed if a printer is provided.
- (4) The "SORT COMPLETE" message is printed when the station number has been sent to the AP.

### **Built-in SMDR on RS-232C Programming**





#### **DESCRIPTION**

#### **DATA**

CM40

Specify the function for the RS ports.

**NOTE:** When a port is used for Built-in SMDR, assign the 2nd data=14.

When a port is used for both MCI and Built-in SMDR, assign the 2nd

data=11.

Assign the attribute data for RS ports according to the SMDR terminal specifications.

• Y=00 Function

(1) 0: Port 0

1: Port 1

(2) 11: MCI and Built-in SMDR

14: Built-in SMDR

• Y=01 Data length

(1) 0: Port 0

1: Port 1

(2) 0 : 7 bits

1**◄**: 8 bits

• Y=02 Parity check

(1) 0: Port 0

1: Port 1

(2) 0 : Effective

1**◄**: Ineffective

• Y=03 Kind of parity

(1) 0: Port 0

1: Port 1

(2) 0 : Even parity

1**◄**: Odd parity

• Y=04 Stop bit

(1) 0: Port 0

1: Port 1

(2) 0 : One-stop bit

1**◄**: Two-stop bits

• Y=05 DTR signal

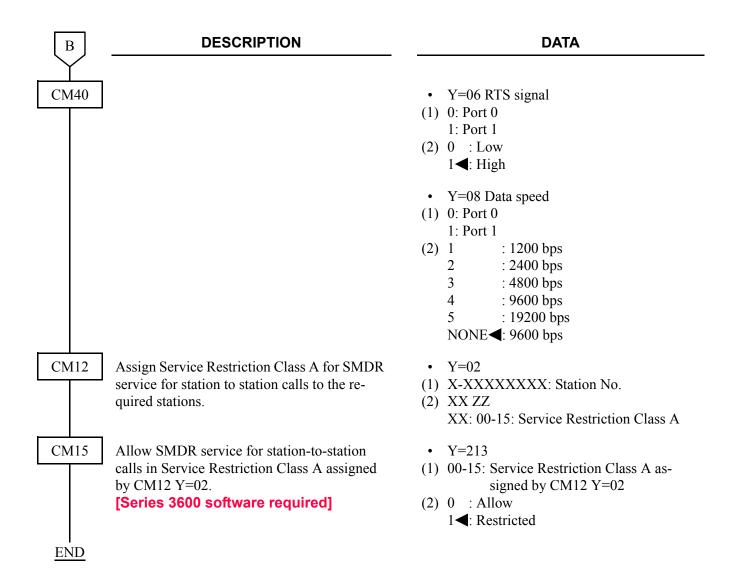
(1) 0: Port 0

1: Port 1

(2) 0 : Low

1**⋖**: High

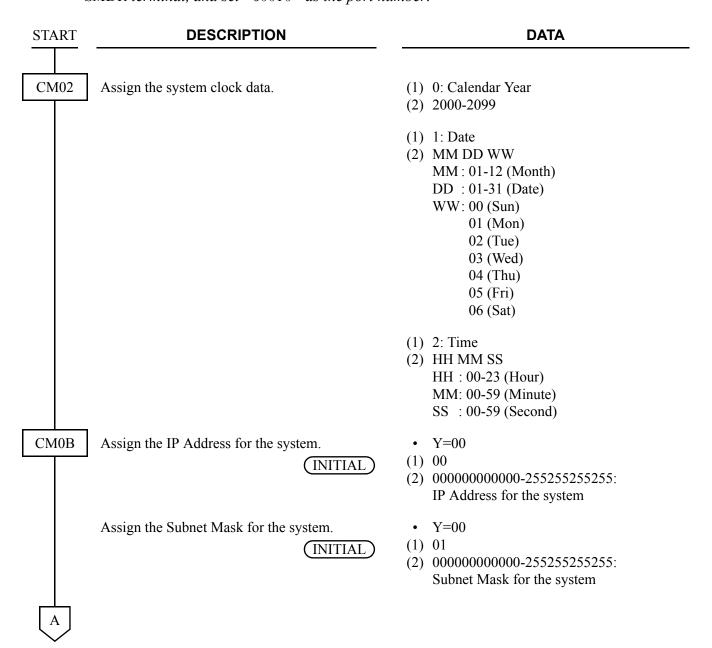
В

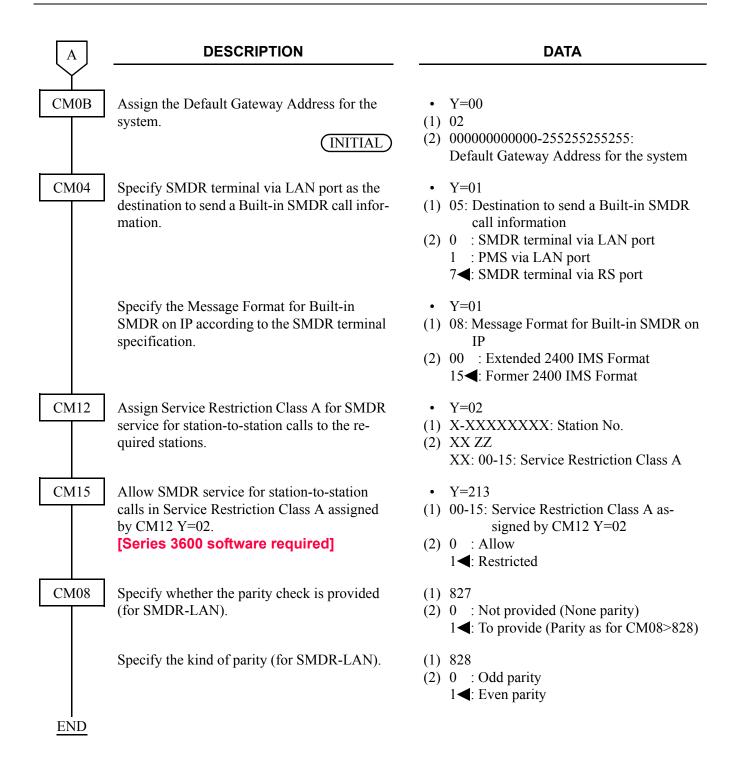


### **Built-in SMDR on IP Programming**

### [Series 3400 software required]

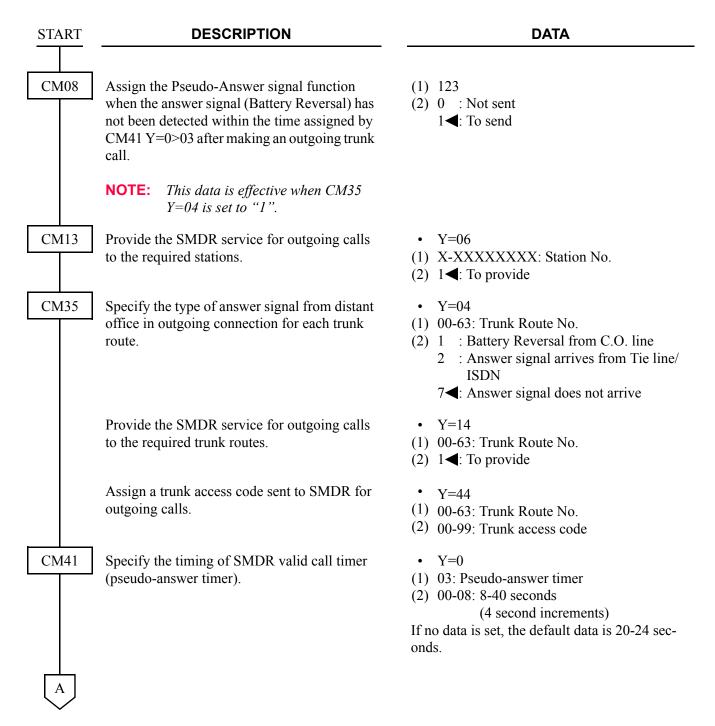
**NOTE:** The MP card (or the MP card in a Main Site when Remote PIM over IP feature is provided) communicates with the SMDR terminal. For the settings in the SMDR terminal side, set IP address assigned by CM0B Y=00 (or CM0B Y=02 when VLAN is provided) as a destination of the SMDR terminal, and set "60010" as the port number.





### **Built-in SMDR Service Programming**

To provide an SMDR service, do the following programming in addition to the programming for the Built-in SMDR on RS-232C or Built-in SMDR on IP.





### DATA

CM08

Specify the method of charging a transferred call.

The following table shows the station to which call charging is to be made in the case of various transfer patterns.

- (1) 424: Charging method
- (2) 0 : Charging to transferring station or destination station
  - 1◀: Split charging to both transferring station and transfer destination station
- (1) 425: Charging destination
- (2) 0 : Charging to transferring station
  - 1**◄**: Charging to transfer destination station

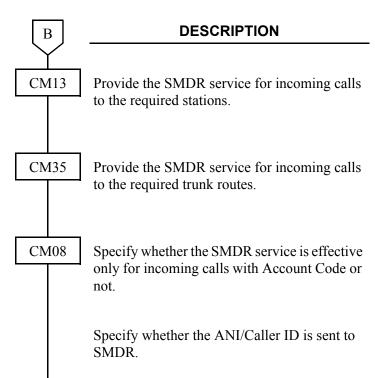
TRANSFER PATTERN		CM08>424=1	CM08>424=0	CM08>424=0
FROM	то		CM08>425=1	CM08>425=0
STA A	STA B	Split charging to STA A and STA B	STA B	STA A
STA	ATT	STA	STA	STA
ATT	STA	STA	STA	STA
ATT A	ATT B	Split charging to ATT A and ATT B	ATT B	ATT A

STA: Station

ATT: Attendant Console

В

For Incoming Call Record, do the following programming.

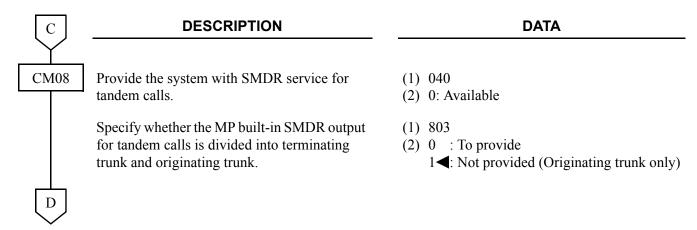


- NOTE 1: When providing incoming calls with ANI, assign this data in addition to the programming for AUTOMATIC NUMBER IDENTIFICATION (ANI). Page 120
- NOTE 2: When this data is assigned to 1, SMDR service for incoming calls is not provided even if CM13 Y=05 is 0 (To provide).

#### **DATA**

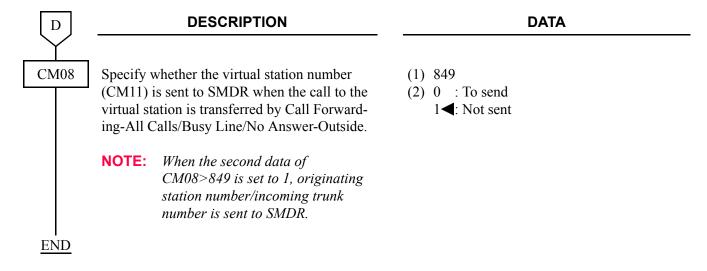
- Y=05
- (1) X-XXXXXXXX: Station No.
- (2) 0 : To provide 1◀: Not provided
- Y=49
- (1) 00-63: Trunk Route No.
- (2) 0 : To provide 1◀: Not provided
- (1) 426: SMDR for incoming call
- (2) 0 : Effective for all incoming calls
  - 1◀: Effective only for incoming calls with Account Code
- (1) 463: ANI/Caller ID to SMDR
- (2) 0 : To send 1 **◄**: Not sent

To provide SMDR for tandem calls, do the following programming.



To provide SMDR for Call Forwarding-All Calls/Busy Line/No Answer-Outside calls from virtual station number, do the following programming.

## [Series 3800 software required]

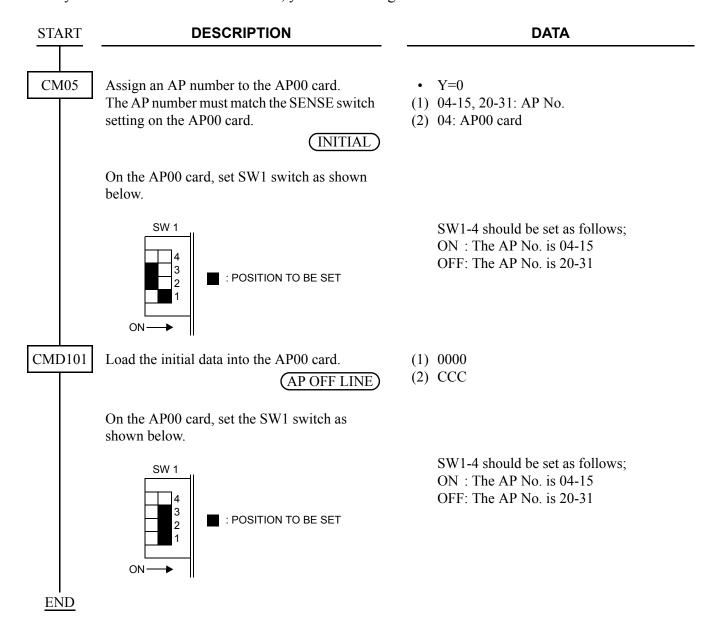


### AP Initialization (PN-AP00-B with AP00 program)

This section explains the data assignment to make the AP active.

You can skip the data assignment explained in this section, if one of the following AP related features has been activated; Station Message Detail Recording (SMDR), Message Center Interface (MCI), Property Management System (PMS), or Hotel printer. You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.

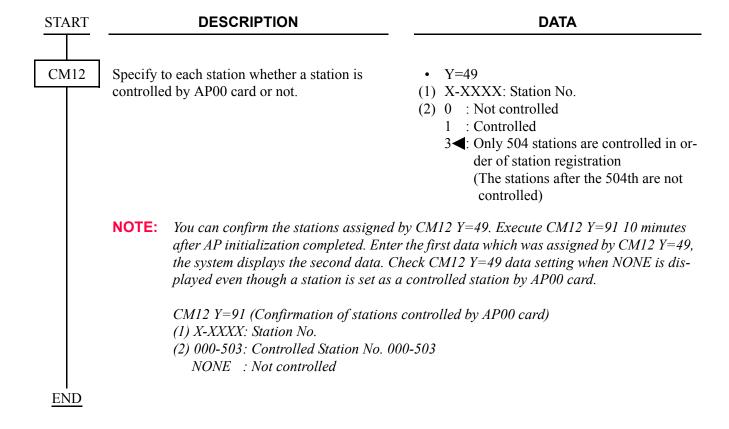
When you install the AP00 the first time, you should assign the data shown below.



#### **AP Controlled Stations**

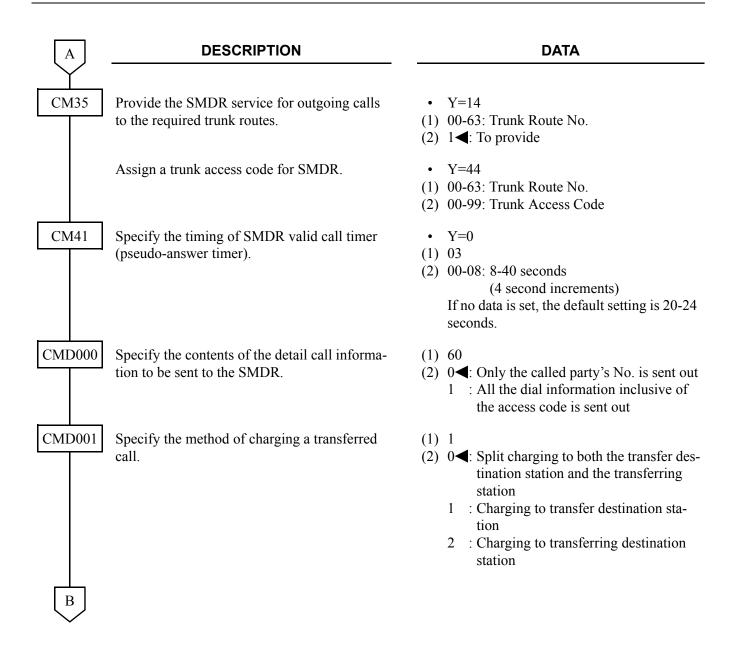
### [Series 3400 software required]

SMDR service using the AP00 card (PN-AP00-B with AP00 program), a maximum of 504 stations can be controlled by the AP00 card. When 505 or more stations are accommodated in a system, you have to specify to each station whether a station is controlled by AP00 card or not.



# SMDR with AP00 Programming (PN-AP00-B with AP00 program)

START	DESCRIPTION	DATA
CM02	Assign the system clock data.	<ul><li>(1) 0: Calendar Year</li><li>(2) 2000-2099</li></ul>
		(1) 1: Date (2) MM DD WW MM: 01-12 (Month) DD: 01-31 (Date) WW: 00 (Sun) 01 (Mon) 02 (Tue) 03 (Wed) 04 (Thu) 05 (Fri) 06 (Sat)
		(1) 2: Time (2) HH MM SS HH: 00-23 (Hour) MM: 00-59 (Minute) SS: 00-59 (Second)
CM08	Assign the Pseudo-Answer signal function when the answer signal (Battery Reversal) has not been detected within the time assigned by CM41 Y=0>03 after making an outgoing trunk call.	<ul> <li>(1) 123</li> <li>(2) 0 : Not sent</li> <li>1 &lt; : To send</li> </ul>
	<b>NOTE:</b> This data is effective when CM35 $Y=04$ is set to "1".	
CM13	Provide the SMDR service for outgoing calls to the required stations.	<ul> <li>Y=06</li> <li>(1) X-XXXX: Station No.</li> <li>(2) 1◀: To provide</li> </ul>
CM35	Specify the type of answer signal from distant office in outgoing connection for each trunk route.	<ul> <li>Y=04</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 1 : Battery Reversal from C.O. line</li> <li>2 : Answer signal arrives from Tie line/ ISDN</li> <li>7◄: Answer signal does not arrive</li> </ul>
A		





### **DATA**

CMD001

Assign the attribute data, depending on the port (Port 0-3) connected to the SMDR terminal.

- (1) See the following table.
- (2) See the following table.

### AP00 INITIAL

• For SMDR (NEAX 2400 IMS Format):

	FIRST DATA (1)				SECOND	
PORT 0	PORT 1	PORT 2	PORT 3	MEANING	DATA (2)	MEANING
20	24	28	32	Data Speed	2/3/4/5	1200 bps/2400 bps/4800 bps/ 9600 bps <b>NOTE</b>
21	25	29	33	Stop Bit Length	0/1/2	1 bit/1.5 bits/2 bits
22	26	30	34	Data Length	0/1	7 bits/8 bits
23	27	31	35	Parity	0/1/2	None Parity/Even Parity/Odd Parity
80	100	120	140	Function	4/5	Computer 0/Computer 1
81	101	121	141	Priority for Data Processing	0	1st
82	102	122	142	Message Format	3	NEAX 2400 IMS Format
84	104	124	144	Protocol	1	Free Wheel
85	105	125	145	Station Address (SA)	48	0
86	106	126	146	Unit Address (UA)	33	!

**NOTE:** For the Port 1 and Port 3, data speed 9600 bps cannot be set.





#### **DATA**

CMD001

Specify the maximum accumulation rate of billing memory for external alarm output when the rate exceeds assigned value.

(1) 229

(2) 0**<** : 80% 50-99: 50-99%

**NOTE 1:** *The condition for external alarm is as follows;* 

- (a) The accumulation rate for the following limit value approaches the value set by CMD001>229 in advance.
- (b) The accumulation rate for the following limit value approaches full.
- (c) The accumulation rate for the following limit value is less than the assignable range set by CMD001>229 or is cleared the stored billing memory.

[Limit Value]

- Limit value of remaining Call Record memory set by CMD003>24/29

**NOTE 2:** ON/OFF control for external relay on DK00 card and fault information display can be performed with the condition for external alarm as above.

For case (a): External relay ON/OFF set by CMD000>126 Fault information display set by CMEA Y=2>28

For case (b): External relay ON/fault information display set by CMEA Y=2>28 For case (c): External relay OFF/fault information display set by CMEA Y=2>38

D



**DATA** 

CMD001

• For SMDR (NEAX 1400 IMS Format):

	FIRST DATA (1)				SECOND	
PORT 0	PORT 1	PORT 2	PORT 3	MEANING	DATA (2)	MEANING
20	24	28	32	Data Speed	2/3/4/5	1200 bps/2400 bps/4800 bps/ 9600 bps <b>NOTE</b>
21	25	29	33	Stop Bit Length	0/1/2	1 bit/1.5 bits/2 bits
22	26	30	34	Data Length	0/1	7 bits/8 bits
23	27	31	35	Parity	0/1/2	None Parity/Even Parity/Odd Parity
80	100	120	140	Function	4/5	Computer 0/Computer 1
81	101	121	141	Priority for Data Processing	0	1st
82	102	122	142	Message Format	4	NEAX 1400 IMS Format
84	104	124	144	Protocol	1	Free Wheel

**NOTE:** For the Port 1 and Port 3, data speed 9600 bps cannot be set.

If the masking of Authorization Codes sent to the SMDR terminal is required, assign the desired value to be added to the Authorization Code dialed.

### For example:

To mask the Authorization Code "1234" by adding "5" to all digits:

$$(1)\ 160$$
 (2) 5 1st digit

$$(1)\ 161 \ (2)\ 5$$
 2nd digi

$$(1)\ 163$$
  $(2)\ 5$  4th digit

With this assignment, "6789" is sent to SMDR Terminal.

(1) 160-175: Designation of digit to be masked: 1st digit-16th digit

(2)  $0 \blacktriangleleft$  : No masking

1-11: Value to be added to the designated digit of Authorization Code

12 : Masking with "X"



#### **DATA**

CMD003

Assign maximum number of Call Record sent to SMDR which is set to "4" by CMD001>80/100/120/140.

Assign maximum number of Call Record sent to SMDR which is set to "5" by CMD001>80/100/120/140.

(1) 29

(2) 0**<** : Not record 1-27000: 1 call-27000 calls

(1) 24

(2) 0**<** : Not record 1-27000: 1 call-27000 calls

NOTE 1: When the data is set to 1-27000, external alarm of memory overflow is available if CM44 2nd data=3001 (for CMD003>29)/CM44 2nd data=3002 (for CMD003>24) or CMEA Y=2>28, 38 is assigned.

**NOTE 2:** The amount of call record number set by CMD003>23, 24, 25, 26, 28, 29, 30 must not exceed the following number.

Amount of Call Records number of CMD003 1st data 23, 24, 25, 26, 28, 29, 30				
No EXPMEM on A	No EXPMEM on AP00 is provided		EXPMEM on AP00 is provided	
When CMD001>179 is set to 0 (Local Office of Centralized Billing- CCIS/Stand-alone)	When CMD001>179 is set to 1 (Center Office of Centralized Billing- CCIS)	When CMD001>179 is set to 0 (Local Office of Centralized Billing- CCIS/Stand-alone)	When CMD001>179 is set to 1 (Center Office of Centralized Billing- CCIS)	
1600	800	27000: When CMD003>28 is set to 0 (Call Record for CIS is not provided) 26000: When CMD003>28 is set to other than 0 (Call Record for CIS is provided)		

Maximum number of each 1st data of CMD003 is as follows:

1ST DATA	No EXPMEM on AP00 is provided	EXPMEM on AP00 is provided
23, 30	1000	1000
24, 25, 26, 29	1600	27000
28	1020	12000

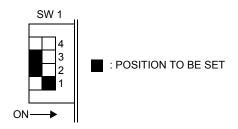
NOTE 3: CMD003>23, 24, 25, 26, 28, 29, 30 are effective after executing CMD102. Before executing CMD102, be sure to print out all of the stored call records. CMD102 deletes all of the stored call records.





#### **DATA**

On the AP00 card, set SW1 switch as shown below.



SW1-4 should be set as follows;

ON: The AP No. is 04-15 OFF: The AP No. is 20-31

Clear the billing memory.

(AP OFF LINE)

(1) 0000

(2) CCC

NOTE: Before executing CMD102, be sure

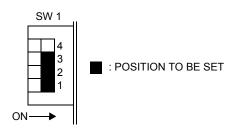
to save/print out all of the stored call

records.

CMD102 deletes all of the stored

records.

On the AP00 card, set the SW1 switch as shown below.



SW1-4 should be set as follows;

ON: The AP No. is 04-15 OFF: The AP No. is 20-31

The buffering method when the number of the stored SMDR information has reached the predetermined value.

(1) 41

(2) 0**<**: No new data is stored

1 : New data is stored by deleting the oldest data

CM44

The external alarm driver function for the SMDR buffer overflow.

(1) XXY

XX: 00-31: DK Card No. assigned by CM10/CM14 (E800-E831)

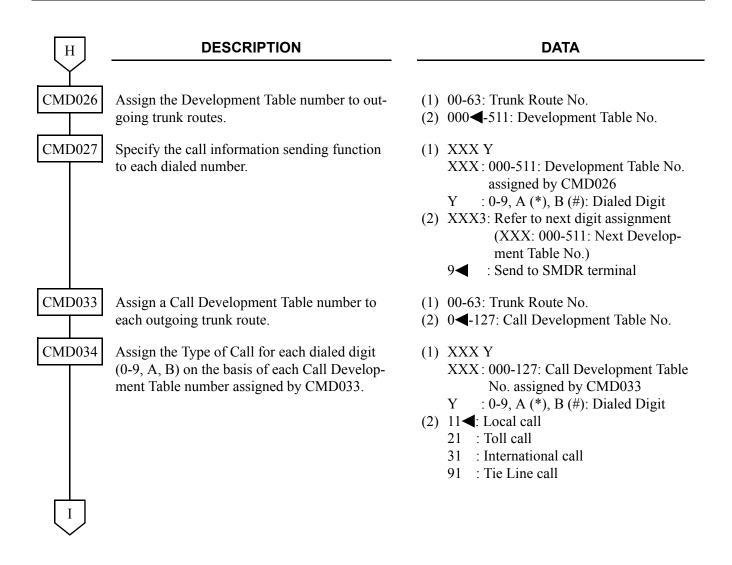
Y: 0-3: Circuit No.

(2) 3001: When CMD001>80/100/120/140 is

set to "4"

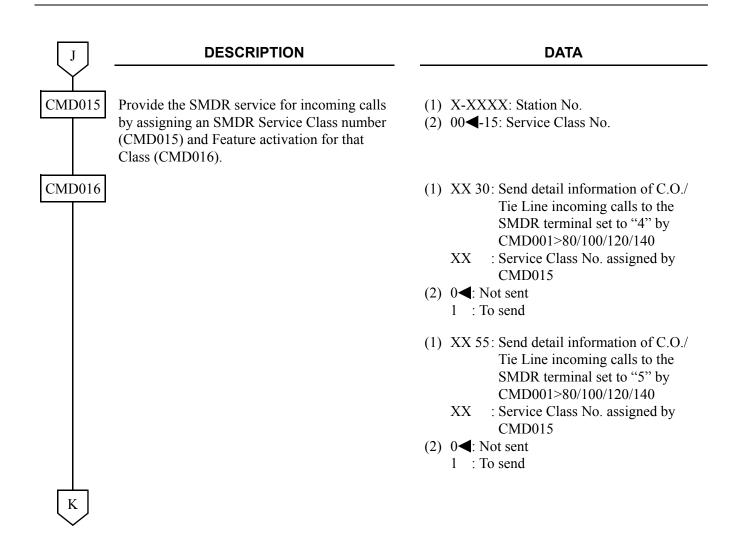
3002: When CMD001>80/100/120/140 is set to "5"

G	DESCRIPTION	DATA
CMD012	When sending the tenant information (00-63) to the SMDR terminal, assign a Group number to each station or Attendant Console.	(1) X-XXXX: Station No. (2) 000-063: Group No.
		(1) 00-07: ATTCON No. 0-7 (2) 000-063: Group No.
CMD015	Assign the Charging Station Class number to each station number.	<ul><li>(1) X-XXXX: Station No.</li><li>(2) 00◀-15: Station Class No.</li></ul>
CMD016	Specify the direction for sending detail information on C.O. outgoing calls.	(1) XX 16: Send detail information of C.O. outgoing calls to the PMS/SMDR terminal set to "4" by CMD001>80/100/120/140 XX : Service Class No. assigned by CMD015
		(2) 0 <b>&lt;</b> : Not sent 1 : To send
		(1) XX 17: Send detail information of C.O. outgoing calls to the SMDR terminal set to "5" by CMD001>80/100/120/140  XX : Service Class No. assigned by CMD015
		(2) 0 <b>&lt;</b> : Not sent 1 : To send
	Specify SMDR service for Tie Line calls, if needed.	(1) XX 21: Send detail information of Tie Line outgoing calls to the SMDR terminal set to "4" by CMD001>80/100/120/140
		XX : Service Class No. assigned by CMD015
		(2) 0 <b>&lt;</b> : Not sent 1 : To send
		(1) XX 22: Send detail information of Tie Line outgoing calls to the SMDR terminal set to "5" by CMD001>80/100/120/140
		XX : Service Class No. assigned by CMD015
		(2) 0 <b>◄</b> : Not sent 1 : To send
Н		



To provide SMDR for incoming calls, do the following programming:

I	DESCRIPTION	DATA		
CM13	Provide SMDR service for incoming calls to the required stations.	<ul> <li>Y=05</li> <li>(1) X-XXXX: Station No.</li> <li>(2) 0 : To provide 1 ✓: Not provided</li> </ul>		
CM35	Provide SMDR service for incoming calls to the required trunk routes.	<ul> <li>Y=49</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0◀: To provide</li> </ul>		
CMD000	Specify SMDR service for incoming calls with (or regardless of) Account Code entry.	<ul> <li>(1) 70</li> <li>(2) 0◀: Effective for incoming calls with Account Codes only</li> <li>1 : Effective for all incoming calls</li> </ul>		
	Send ANI/Caller ID to SMDR.  NOTE: This is required when using AP00 card for SMDR.	<ul> <li>(1) 143: Sending to SMDR terminal</li> <li>(2) 0   : Not sent  1 : To send</li> <li>NOTE: When 0 is set, the ANI is not sent to the SMDR, but area code for calling party, area code for called party; authorization code is sent to the SMDR.</li> </ul>		
CM08	Specify whether the ANI/Caller ID is sent to SMDR.  NOTE 1: When providing incoming calls with ANI, assign this data in addition to the programming for AUTOMATIC NUMBER IDENTIFICATION (ANI). Page 120  NOTE 2: When this data is assigned to 1, SMDR service for incoming calls is not provided even if CM13 Y=05 is 0 (To provide).	<ul> <li>(1) 463: ANI/Caller ID to SMDR</li> <li>(2) 0 : To send</li> <li>1 ✓ : Not sent</li> </ul>		
1				



To provide SMDR for tandem calls, do the following programming:

K	DESCRIPTION	DATA
CM08	Provide the system with SMDR service for tandem calls.	<ul><li>(1) 040</li><li>(2) 0: Available</li></ul>
CMD000	Specify the direction for sending detail information on tandem calls.	<ul> <li>(1) 77: Send detail information of tandem calls to the SMDR terminal set to "4" by CMD001&gt;80/100/120/140</li> <li>78: Send detail information of tandem calls to the SMDR terminal set to "5" by CMD001&gt;80/100/120/140</li> <li>(2) 0◄: Not sent 1 : To send</li> </ul>
EMD	Specify the contents for tandem call information.	<ul> <li>(1) 79</li> <li>(2) 0</li> <li>(2) Ostion outgoing call information</li> <li>1 : Both outgoing and incoming call information</li> </ul>
END		

To provide SMDR with AP00 for 5-digit station number, do the following programming:

**NOTE 1:** Only for the NEAX 2400 IMS format, the following programming is available.

**NOTE 2:** Be sure to assign different numbers to the last 4 digits for each 5-digit station number.

		DATA
CMD000	Specify the storing of 5-digit station number in station database of AP00.	<ul><li>(1) 252</li><li>(2) 1: Store last 4 digits of 5-digit station number</li></ul>
	Add the fixed first digit to the last 4 digits of 5-digit station number on SMDR output.	(1) 71 (2) 1: To add
CMD001	Specify the first digit number to be added to 5-digit station number.	(1) 189 (2) 0-9, A (*), B (#): Digit to be added

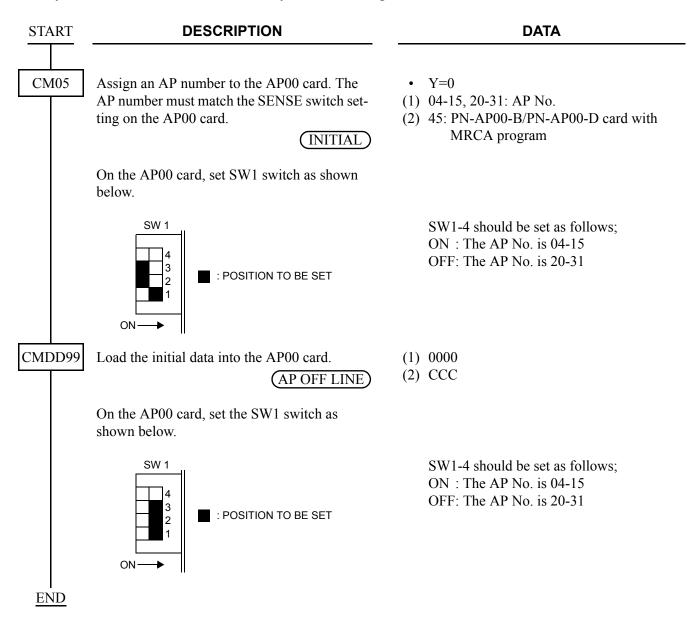
### AP Initialization (PN-AP00-B/PN-AP00-D with MRCA program)

### [Series 3300 software required]

This section explains the data assignment to make the AP active.

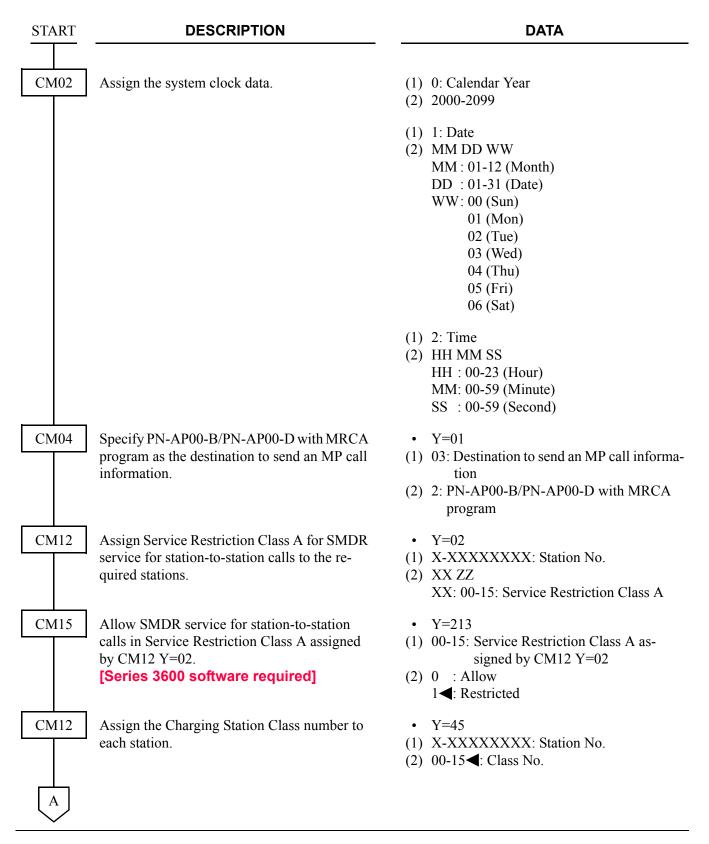
You can skip the data assignment explained on this section, if one of the following AP related features has been activated; Station Message Detail Recording (SMDR) with NEAX 2400 IMS Format, Message Center Interface (MCI) or Do Not Disturb group set/cancel at specified timing in advance. You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.

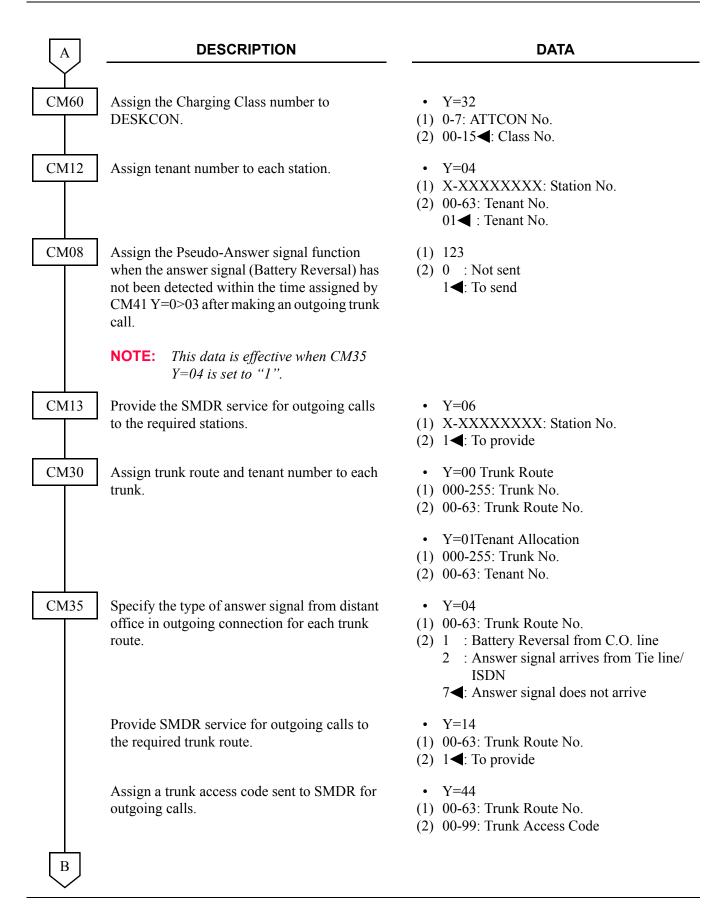
When you install the AP00 the first time, you should assign the data shown below.



### SMDR with AP00 Programming (PN-AP00-B/PN-AP00-D with MRCA program)

### [Series 3300 software required]







#### **DATA**

CM08

Specify the method of charging a transferred call.

The following table shows the station to which call charging is to be made in the case of various transfer patterns.

(1) 424: Charging method

(2) 0 : Charging to transferring station or destination station

1◀: Split charging to both transferring station and transfer destination station

(1) 425: Charging destination

(2) 0 : Charging to transferring station

1**◄**: Charging to transfer destination station

TRANSFER PATTERN		CM08>424=1	CM08>424=0	CM08>424=0
FROM	то		CM08>425=1	CM08>425=0
STA A	STA B	Split charging to STA A and STA B	STA B	STA A
STA	ATT	STA	STA	STA
ATT	STA	STA	STA	STA
ATT A	ATT B	Split charging to ATT A and ATT B	ATT B	ATT A

STA: Station

ATT: Attendant Console





#### DATA

CMDD01

Set interface condition for PN-AP00-B/PN-AP00-D with MRCA program RS port.

AP00 INITIAL

When you set CMDD01, the following initial data is set to each port as the interface condition.

- Equipment Type: SMDR terminal 0 NOTE
- Data Speed: 1200 bpsStop Bit Length: 2 bits
- Data Length: 8 bits
- Parity: No Parity
- Station Address (SA): 0
- Unit Address (UA): !
- Message Format: Former NEAX 2400 IMS Format

**NOTE:** When you set interface condition to two ports, change one of those ports of equipment type to SMDR terminal 1 by CMDD10>X00.

(1) 100 (Port 0) 101 (Port 1) 102 (Port 2) 103 (Port 3)

(2) 3: SMDR with NEAX 2400 IMS Format

D

D	
Y	

#### **DATA**

CMDD10 To change the interface condition of each port set by CMDD01, assign the attribute data, according to the SMDR terminal specifications.

AP00 INITIAL

(1) X00: Equipment Type Connected to Port 0-3

X: 0-3: Port 0-3

(2) 1**<**: SMDR terminal 0

2 : SMDR terminal 1

(1) X01: Data Speed for Port 0-3

X: 0-3: Port 0-3

(2) 1 : 300 bps

2**<**: 1200 bps

3 : 2400 bps

4 : 4800 bps

5 : 9600 bps

6: 19200 bps

(1) X02: Stop Bit Length for Port 0-3

X: 0-3: Port 0-3

(2) 0 : 1 bit

1 : 1.5 bits

2**<**: 2 bits

(1) X03: Data Length for Port 0-3

X: 0-3: Port 0-3

(2) 0 : 7 bits

1**⋖**: 8 bits

(1) X04: Parity for Port 0-3

X: 0-3: Port 0-3

(2) 0**<**: No Parity

1 : Even Parity

2 : Odd Parity

(1) X05: Station Address (SA) for Port 0-3

X: 0-3: Port 0-3

(2) 48**◀**: 0

(1) X06: Unit Address (UA) for Port 0-3

X: 0-3: Port 0-3

(2) 32 : Space (No information)

33**⋖**:!

(1) X10: Message Format for Port 0-3

X: 0-3: Port 0-3

(2) 0**<**: Former NEAX 2400 IMS Format

1 : Extended NEAX 2400 IMS Format

Е



#### **DATA**

CMDD02

Assign maximum number of Call Record sent to SMDR terminal 0.

(1) 0

(2) 0◀ : Not record 1-23580: 1 call-23580 calls

Assign maximum number of Call Record sent to SMDR terminal 1.

(1) 1

(2) 0**<** ∶ Not record

1-23580: 1 call-23580 calls

NOTE 1: When the data is set to 1-23580, external alarm of memory overflow is available if CM44 2nd data=3001 (for CMDD02>0)/CM44 2nd data=3002 (for CMDD02>1) or CMEA Y=2>28, 38 is assigned.

**NOTE 2:** The amount of call record number set by CMDD02>0, 1, 2 must not exceed the following number.

Amount of Call Records number of CMDD02 1st data 0, 1, 2					
No EXPMEM on AP00 is provided		EXPMEM on AP00 is provided			
CMDD00>3 is set to 0 (Local Office of Centralized Billing- CCIS/Stand-alone)	CMDD00>3 is set to 1 (Center Office of Centralized Billing- CCIS)	CMDD00>3 is set to 0 (Local Office of Centralized Billing- CCIS/Stand-alone)	CMDD00>3 is set to 1 (Center Office of Centralized Billing- CCIS)		
2620	1310	23580	22270		

**NOTE 3:** CMDD02>0, 1, 2 are effective after executing CMDD98. Before executing CMDD98, be sure to print out all of the stored call records. CMDD98 deletes all of the stored call records.

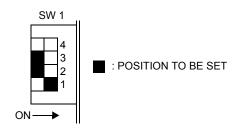




### **DATA**

CMDD98

On the AP00 card, set SW1 switch as shown below.



SW1-4 should be set as follows;

ON: The AP No. is 04-15 OFF: The AP No. is 20-31

Clear the billing memory.

(AP OFF LINE)

(1) 0000

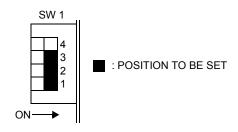
(2) CCC

NOTE:

Before executing CMDD98, be sure to save/print out all of the stored call records.

CMDD98 deletes all of the stored records.

On the AP00 card, set the SW1 switch as shown below.



SW1-4 should be set as follows;

ON: The AP No. is 04-15 OFF: The AP No. is 20-31





### **DATA**

CMDD01

Specify maximum accumulation rate of billing memory for external alarm output when the rate exceeds assigned value.

(1) 229

(2) 50-99: 50%-99%

80◀:80%

**NOTE 1:** *The condition for external alarm is as follows;* 

- (a) The accumulation rate for the following limit value approaches the value set by CMDD01>229 in advance.
- (b) The accumulation rate for the following limit value approaches full.
- (c) The accumulation rate for the following limit value is less than the assignable range set by CMDD01>229 or is cleared the stored billing memory.

[Limit Value]

- Limit value of remaining Call Record memory set by CMDD02>0/1/2

**NOTE 2:** ON/OFF control for external relay on DK00 card and fault information display can be performed with the condition for external alarm as above.

For case (a): External relay ON/OFF set by CMDD00>126 Fault information display set by CMEA Y=2>28

For case (b): External relay ON/fault information display set by CMEA Y=2>28

For case (c): External relay OFF/fault information display set by CMEA Y=2>38

CMDD04

Specify the direction for sending detail information on C.O./Tie Line outgoing calls.

- (1) XX 00: Send detail information of C.O./
  Tie Line outgoing calls to SMDR terminal 0
  - XX: Service Class No. assigned by CM12 Y=45/CM60 Y=32
- (2) 0**<**: Not sent 1 : To send
- (1) XX 02: Send detail information of C.O./
  Tie Line outgoing calls to SMDR terminal 1
  - XX: Service Class No. assigned by CM12 Y=45/CM60 Y=32
- (2) 0**<**: Not sent 1 : To send

Н



#### **DATA**

CMDD04

Specify the direction for sending detail information on outgoing calls excluding C.O./Tie Line outgoing calls.

[Series 3500 software required]

Specify the direction for sending detail information on station-to-station calls.

[Series 3600 software required]

(1) XX 01: Send detail information of outgoing calls excluding C.O./Tie Line outgoing calls to SMDR terminal 0

XX : Service Class No. assigned by CM12 Y=45/CM60 Y=32

(2) 0**<**: Not sent 1 : To send

(1) XX 03: Send detail information of outgoing calls excluding C.O./Tie Line outgoing calls to SMDR terminal 1

XX : Service Class No. assigned by CM12 Y=45/CM60 Y=32

(2) 0**<**: Not sent 1 : To send

(1) XX 12: Send detail information of stationto-station calls to SMDR terminal 0

XX : Service Class No. assigned by CM12 Y=45

(2) 0**<**: Not sent 1 : To send

(1) XX 13: Send detail information of stationto-station calls to SMDR terminal 1

XX : Service Class No. assigned by CM12 Y=45

(2) 0**<**: Not sent 1 : To send

I



value.

value.

#### **DESCRIPTION**

For SMDR terminal 0, specify the buffering

method when the number of the stored SMDR

information has reached to the predetermined

For SMDR terminal 1, specify the buffering

method when the number of the stored SMDR

information has reached to the predetermined

#### PTION

**DATA** 

(1) 4

(2) 0**<**: New data is stored by deleting the oldest data

1 : No new data is stored

(1) 5

(2) 0**<**: New data is stored by deleting the oldest data

1 : No new data is stored

(1) 14

(2) 0**◄**: Metering Pulse

1 : Charging Rate

(1) 126

(2) 0◀: Relay ON/OFF (every 0.5 seconds)

: Relay ON

(1) 161

(2) 0**<**: Not added

1 : To add

(1) 55

(2) 0000-9999: Area Code for Calling Party

(1) 56

(2) 0000-9999: Area Code for Billing Office

Specify whether the information sent to the SMDR is metering pulse or charging rate. [Series 3500 software required]

Specify control of External alarm relay (DK) when the accumulation rate of billing memory exceeds the value set by CMDD01>229.

Specify whether the access code is added in Call Record.

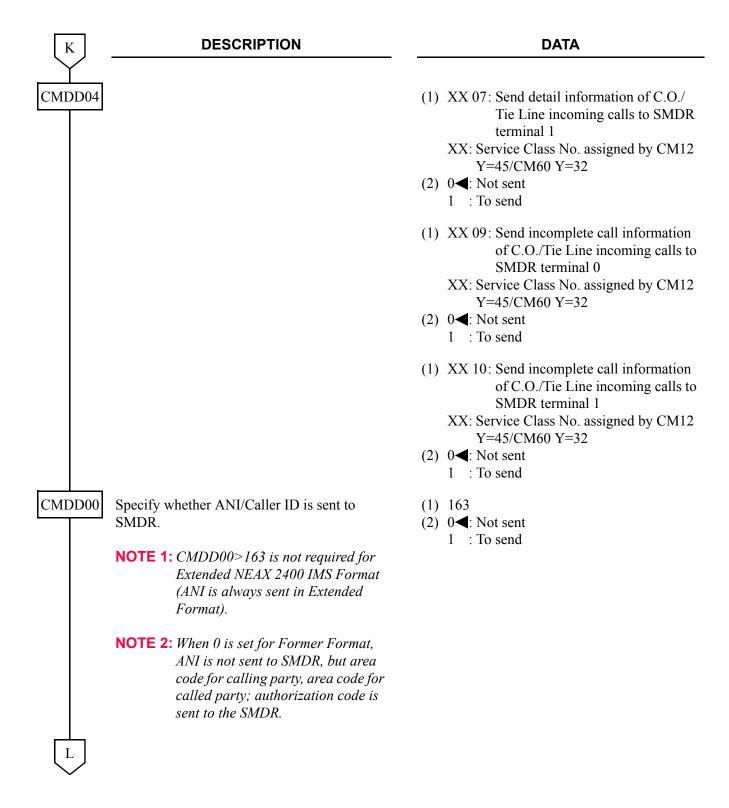
CMDD03

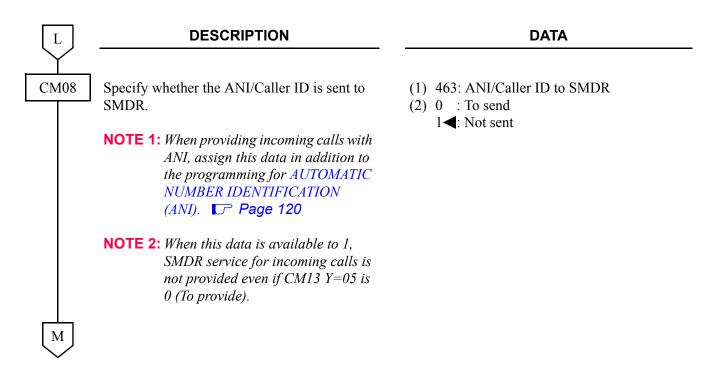
Assign the area code for the calling party for Call Record.

Assign the area code for the billing office for Call Record.

To provide SMDR for incoming calls, do the following programming:

J	DESCRIPTION	DATA
CM13	Provide SMDR service for incoming calls to the required stations.	<ul><li>Y=05</li><li>(1) X-XXXXXXXXX Station No.</li><li>(2) 0: To provide</li></ul>
CM35	Provide SMDR service for incoming calls to the required trunk routes.	<ul><li>Y=49</li><li>(1) 00-63: Trunk Route No.</li><li>(2) 0: To provide</li></ul>
	Provide SMDR output for abandoned incoming calls to the required trunk routes.  [Series 3500 software required]	<ul> <li>Y=205</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0: To provide</li> </ul>
CM08	Specify whether the SMDR service is effective only for incoming calls with Account Code or not.	<ul> <li>(1) 426: SMDR for incoming call</li> <li>(2) 0 : Effective for all incoming calls</li> <li>1 ◄: Effective only for incoming calls with Account Code</li> </ul>
CM12	Assign the Charging Station Class number to each station.	<ul> <li>Y=45</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) 00-15◀: Station Class No.</li> </ul>
CM60	Assign the Charging Class number to DESKCON.	• Y=32 (1) 0-7: ATTCON No. (2) 00-15◀: Class No.
CMDD04	To provide SMDR for incoming calls, do the following programming.	<ul> <li>(1) XX 06: Send detail information of C.O./ Tie Line incoming calls to SMDR terminal 0</li> <li>XX: Service Class No. assigned by CM12 Y=45/CM60 Y=32</li> <li>(2) 0◄: Not sent 1 : To send</li> </ul>





To provide SMDR for tandem calls, do the following programming:

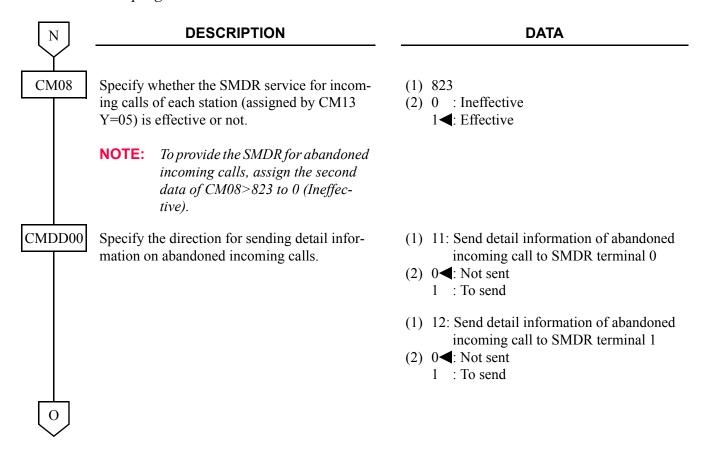
M	DESCRIPTION	DATA
CM08	Provide the system with SMDR service for tandem calls.	(1) 040 (2) 0: Available
CMDD00	Specify the direction for sending detail information on tandem calls.	<ul> <li>(1) 0: Send detail information of tandem call to SMDR terminal 0</li> <li>(2) 0 ◀: Not sent <ol> <li>: To send</li> </ol> </li> <li>(1) 1: Send detail information of tandem call to SMDR terminal 1</li> <li>(2) 0 ◀: Not sent <ol> <li>: To send</li> </ol> </li> </ul>
N	Specify whether account code is sent in the Authorization Code Area of Call Record.	(1) 160 (2) 0 <b>◄</b> : Not sent 1 : To send

To provide SMDR for abandoned incoming calls, do the following programming:

### [Series 3500 software required]

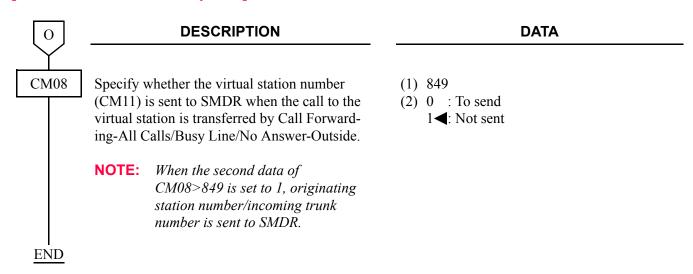
**NOTE:** To provide SMDR output of abandoned incoming call, the following conditions are required.

- SMDR format: Extended NEAX2400 IMS format (CMDD10>X10: 1)
- MP program : Series 3500 software or later
- AP00 program: AP00B MRC-E or later



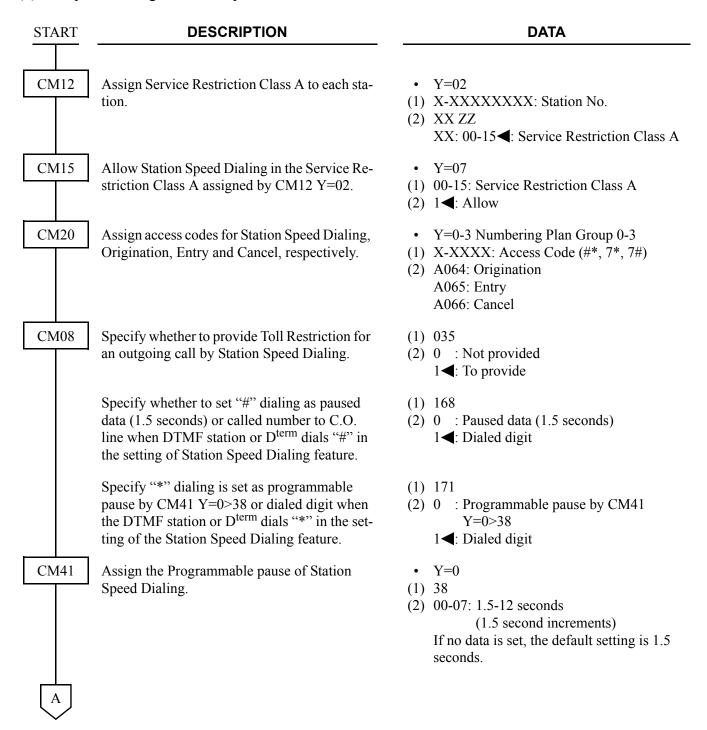
To provide SMDR for Call Forwarding-All Calls/Busy Line/No Answer-Outside calls from virtual station number, do the following programming:

### [Series 3800 software required]



# STATION SPEED DIALING

(1) To provide Single Line Telephone or D<sup>term</sup>:



A	DESCRIPTION	DATA	
CM73	Allocate the memory area for Station Speed Dialing to each station.	<ul> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) W XX Y ZZ W: 0-9: 1000-Slot Memory Block No. XX: 00-99: Memory Start Block No. (10-Slot Memory Block)</li> <li>Y: Facility for programming the dialed number from the Station 0/1: Effective/Ineffective</li> <li>ZZ: 01-10: Number of 10-Slot Memory Blocks</li> </ul>	
В		0-Slot Memory Block number 4-9 (6000 Memory Parcels) cannot be used for Speed Digwith Station Speed Dialing keys provided by CM90: F11XX on a D <sup>term</sup> , and cannot be used for System Speed Dialing.	



**DATA** 

CM73

The memory area for storing one called number of Station Speed Dialing is called a "Memory Parcel". An assembly of 10 Memory Parcels is called a "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks are called a "1000-Slot Memory Block".

Memory Parcel		10-Slot Memory Block		1000-Slot Memory Block		
0		00		0		
1	, '	01	, , ,			4000 Memory Parcels
	, , ,	(	, , ,	3		
	, , ,	)	,,,	4	-	
9	,'	99	,'			6000 Memory Parcels
	-		-	9		

**Example:** If the stored number intended is 10 for Station Number 300, 20 for Station Number 301, and 30 for Station Number 302, the memory areas assignment is as follows.

	1000-Slot Memory	Memory Start Block No.	Number of 10-Slot
Station No.	Block No.	(10-Slot Memory Block)	Memory Block
(1st Data)	(2nd Data: W)	(2nd Data: XX)	(2nd Data: ZZ)
300	0	00	01
301	0	01	02
302	0	03	03
303	0	06	01





In the case of 10 Memory Parcels

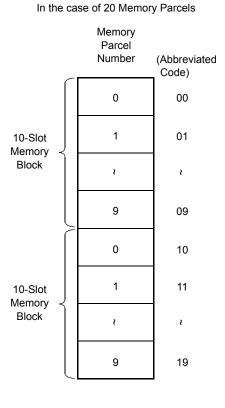
## **DATA**

CM73

The abbreviated codes for this feature are automatically determined by assigning this command, on a station basis.

If the number of Memory Parcels per station does not exceed 10, then Abbreviated Code=0-9. If the number of Memory Parcels per station exceeds 11, then Abbreviated Code=00-99. The following figure shows the relation between Abbreviated Codes and Memory Parcels.

	Memory Parcel Number	(Abbreviated Code)
	0	0
	1	1
	2	2
10-Slot Memory	3	3
Block	4	4
	5	5
	ı	ł
	9	9





#### **DATA**

CM74

Assign the number to be dialed to each Memory Slot number, if required. The numbers to be called are usually set from individual stations by their station users.

Assign the station name to be displayed to each Memory Slot number, by character codes or character.

• Y=0

(1) X YY Z

X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No. Z: 0-9: Memory Parcel No.

(2) Stored No.:

Outgoing Call Access Code (Maximum 4 digits) + + Called Party's No. (Maximum 26 digits)

To set a pause into the Stored No., enter "C" (Fixed Pause=1.5 seconds) or "D" (Programmable Pause specified by CM41 Y=0>38) after desired digits.

NONE**⋖**: No data

- Y=1
- (1) X YY Z

X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No.

Z: 0-9: Memory Parcel No.

(2) XX...XX: Station Name Character Code (Maximum 32 digits, 16 characters)

NONE**⋖**: No data

See APPENDIX B: Character Code Table.

Page B2

- Y=2
- (1) X YY Z

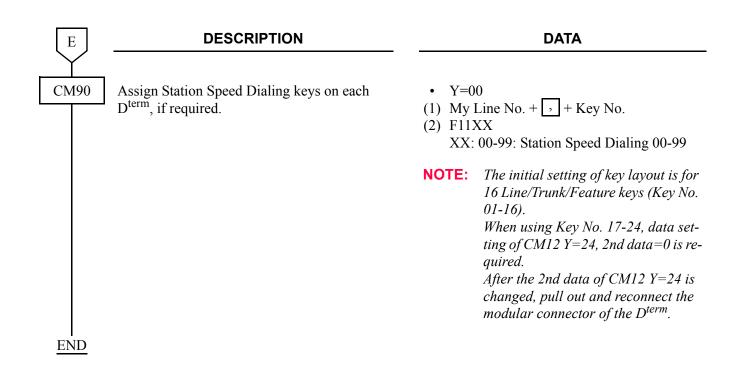
X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No.

Z: 0-9: Memory Parcel No.

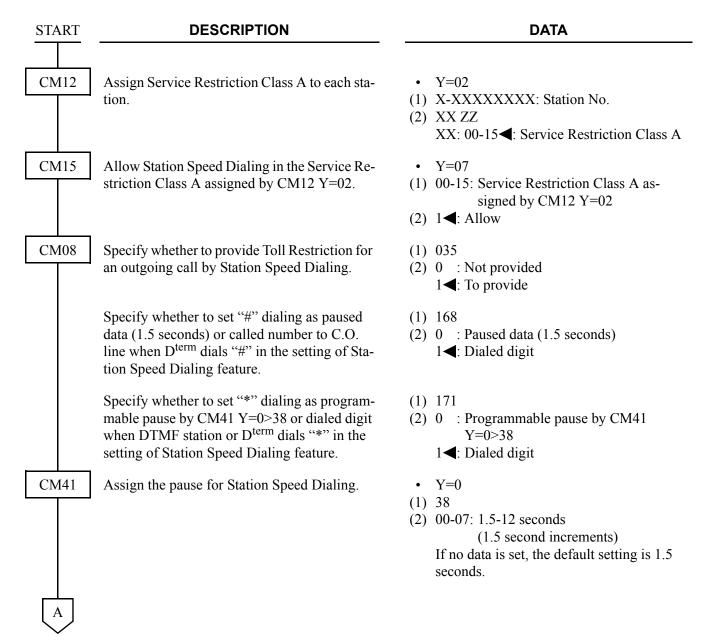
(2) XX...XX: Station Name Character (Maximum 16 characters)

NONE**<**: No data

Е



# (2) To provide D<sup>term</sup> with One Touch keys:





#### **DATA**

CM94

Allocate the memory area for Station Speed Dialing by D<sup>term</sup> One Touch keys to each station.

The memory block for storing one called number of Station Speed Dialing is called a "Memory Parcel".

An assembly of 10 Memory Parcels is called a "10-Slot Memory Block," and one hundred 10-Slot Memory Blocks are called a "1000-Slot Memory Block".

(1) X-XXXXXXXX: My Line No.

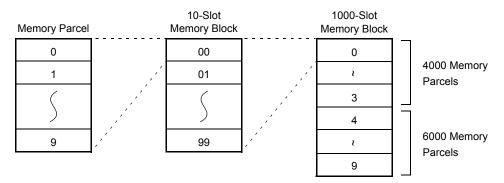
(2) W XX 0 ZZ

W: 0-9: 1000-Slot Memory Block No. XX: 00-99: 10-Slot Memory Start Block No.

ZZ: 01/02: Number of 10-Slot Memory Blocks (10 memories/20 memories)

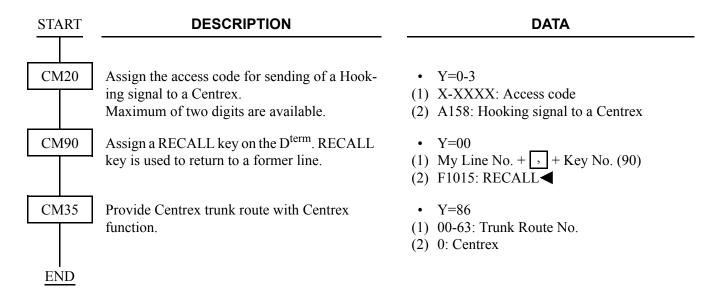
**NOTE 1:** Station Speed Dialing by dial access and by  $D^{term}$  One Touch keys uses the common memory area. Be sure to allocate the different memory area by CM94 from the memory area set by CM73.

**NOTE 2:** If the station is assigned to One Touch keys using 1000-Slot Memory Block number 4-9, the lamp does not show the busy state.

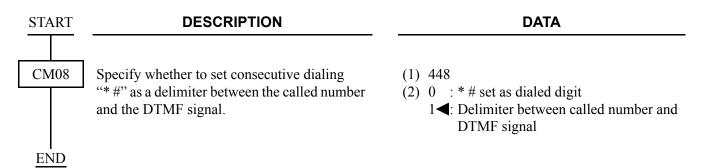


END

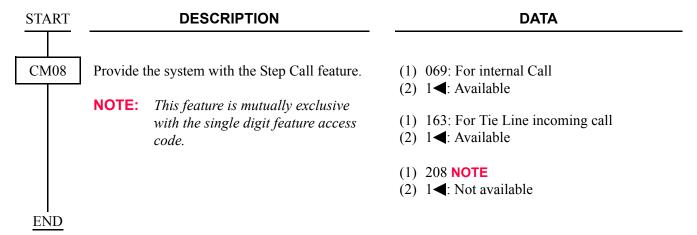
(3) To provide the One Touch key to send "Hooking Signal + Called Number" to a Centrex, set the following data in addition to the programming (2).



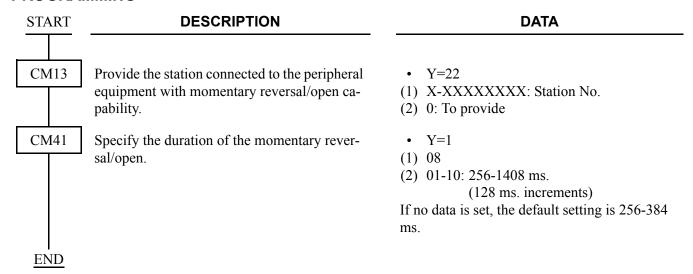
(4) To provide the One Touch key to send "Called Number + DTMF Signal" for such as VMS operation, set the following data in addition to the programming (2), when the called number includes a trunk access code. If the called number includes no trunk access code, this data is not required.



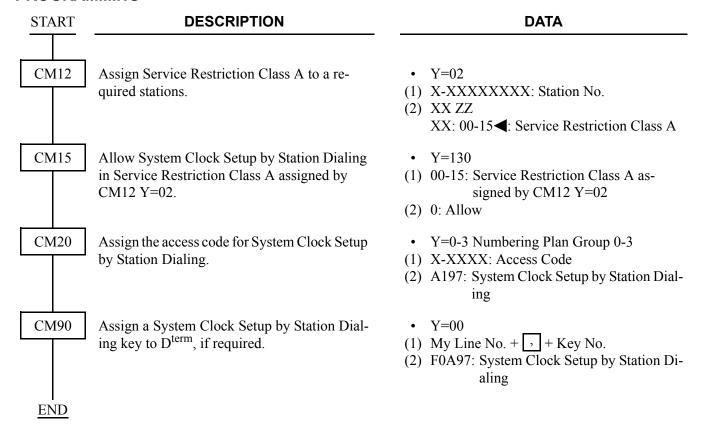
# **STEP CALL**



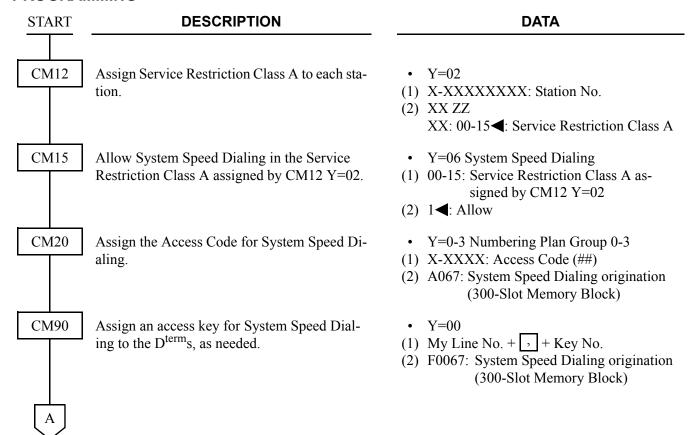
# SUPERVISORY CONTROL OF PERIPHERAL EQUIPMENT



# SYSTEM CLOCK SETUP BY STATION DIALING



# SYSTEM SPEED DIALING





#### **DATA**

CM71

Allocate the memory block for System Speed Dialing. 300 memory slots are available per system. The number of slots available for each Tenant is also 300. Note that the memory blocks for Hot Line-Outside and Route Advance (from Tie Line to C.O. Line) are included in 300 memory slots.

Abbreviated Codes for this feature are automatically determined by assigning this command, on each Tenant as shown in the following example.

(1) 00-63: For stations in Tenant 00-63

: For Attendant Console

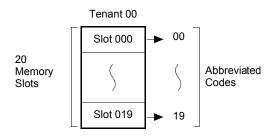
(2) XXX YYY NOTE

XXX: 000-299: First Memory Slot No. in Block

YYY: 001-300: Number of Slots to be allocated in Block

For example, to provide 20 memory slots

starting at Slot 60: Data: 060020



Tenant 01 00 Slot 020 Abbreviated Memory Slots Codes **Slot 034** 

NOTE: The Resident System Program allocates 100 memory slots to Tenant 01.

CM72

Assign the station number to be called to the Memory Slot number allocated by CM71.

Y=0

15

- (1) 000-299: Memory Slot No.
- (2) Stored No.:

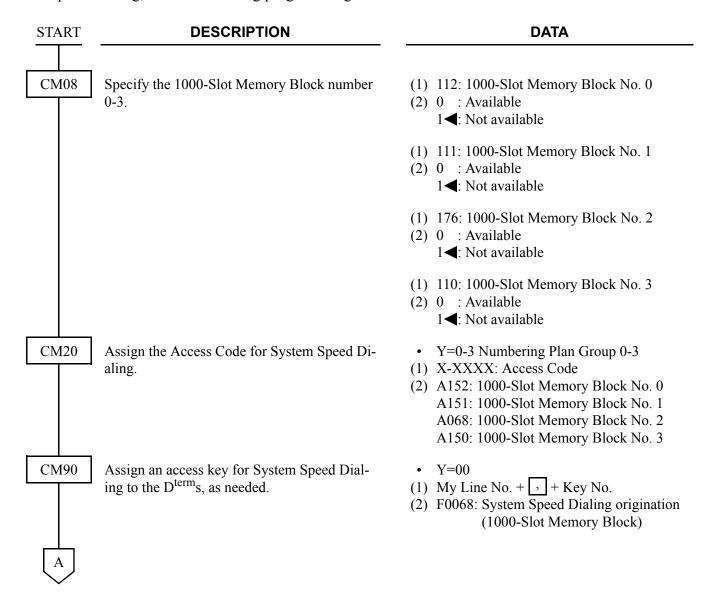
Outgoing Access Code (Maximum 4 digits) + , + Called Party's No. (Maximum 26 digits)

To set a pause into the Stored No., enter "C" (Fixed pause=1.5 seconds) or "D" (Programmable pause specified by CM41 Y=0>38) after desired digits (more than 2 digits).

NONE**⋖**: No data

В	DESCRIPTION	DATA
CM72	Assign the station name for display, to the Memory Slot number allocated by CM71, by character codes or character.	<ul> <li>Y=1</li> <li>(1) 000-299: Memory Slot No.</li> <li>(2) XXXX: Station Name Character Code         (Maximum 32 digits, 16 characters)</li> <li>NONE : No data</li> <li>See APPENDIX B: Character Code Table.</li> <li>Page B2</li> </ul>
		<ul> <li>Y=2</li> <li>(1) 000-299: Memory Slot No.</li> <li>(2) XXXX: Station Name Character (Maximum 16 characters) NONE</li> <li>∴ No data</li> </ul>
CM08	Specify System Speed Dialing security. (Stored number displays on D <sup>term</sup> for an outgoing call by System Speed Dialing.)	<ul> <li>(1) 043</li> <li>(2) 0 : Not displayed</li> <li>1 ◀: To display</li> </ul>
	Specify Toll Restriction for an outgoing call by System Speed Dialing, if required.	<ul> <li>(1) 044</li> <li>(2) 0 : Not provided</li> <li>1 &lt; : To provide</li> </ul>
END		

To use the 1000-Slot Memory Block number (0-3) for Station Speed Dialing as the Memory Block for System Speed Dialing, add the following programming.





#### **DATA**

CM74

Assign the stored number to each Memory Slot number.

Assign the station name to be displayed to each Memory Slot number, by character codes or character.

• Y=0

(1) X YY Z

X: 0-3: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No.

Z: 0-9: Memory Parcel No.

(2) Stored No.:

Outgoing Call Access Code (Maximum 4 digits) + + Called Party's No. (Maximum 26 digits)

To set a pause into the stored No., enter "C" (Fixed Pause=1.5 seconds) or "D" (Programmable Pause specified by CM41 Y=0>38) after desired digits.

NONE**⋖**: No data

• Y=1

(1) X YY Z

X: 0-3: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No.

Z: 0-9: Memory Parcel No.

(2) XX...XX: Station Name Character Code (Maximum 32 digits, 16 characters)

NONE**⋖**: No data

See APPENDIX B: Character Code Table.

Page B2

• Y=2

(1) X YY Z

X: 0-3: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No.

Z: 0-9: Memory Parcel No.

(2) XX...XX: Station Name Character (Maximum 16 characters)

NONE**⋖**: No data

**END** 

To provide System Speed Dialing with 4-digits/1-8-digits abbreviated code, do the following programming.

# [Series 3300 software required]

**NOTE:** The system speed dialing with 1-8-digits abbreviated code is available for Series 3600 software or later.

START	DESCRIPTION	DATA
CM12	Assign Service Restriction Class A to each station.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15</li></ul>
CM15	Allow System Speed Dialing in the Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=06 System Speed Dialing</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>
CM42	Specify the number of digits for the abbreviated code of System Speed Dialing origination.  [Series 3600 software required]	<ul><li>(1) 77</li><li>(2) 01-08 : 1-8 digits</li><li>NONE &lt; : 4 digits</li></ul>
CM20	Assign the Access Code for System Speed Dialing.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code (##)</li> <li>(2) A243: System Speed Dialing origination (4-digits/1-8-digits Abbreviated Code: depends on CM42&gt;77)</li> </ul>
CM90 A	Assign an access key for System Speed Dialing to the D <sup>term</sup> s, as needed.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F0B43: System Speed Dialing origination (4-digits Abbreviated Code)</li> </ul>



#### **DATA**

CM74

Assign the stored number to each Memory Slot number.

Assign the station name to be displayed to each Memory Slot number, by character codes or character.

• Y=0

(1) X YY Z

X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No. Z: 0-9: Memory Parcel No.

(2) Stored No.:

Outgoing Call Access Code (Maximum 4 digits) + + Called Party's No. (Maximum 26 digits)

To set a pause into the stored No., enter "C" (Fixed Pause=1.5 seconds) or "D" (Programmable Pause specified by CM41 Y=0>38) after desired digits.

NONE**⋖**: No data

- Y=1
- (1) X YY Z

X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No.

Z: 0-9: Memory Parcel No.

(2) XX...XX: Station Name Character Code (Maximum 32 digits, 16 characters)

NONE**⋖**: No data

See APPENDIX B: Character Code Table.

Page B2

- Y=2
- (1) X YY Z

X: 0-9: 1000-Slot Memory Block No. YY: 00-99: 10-Slot Memory Block No.

Z: 0-9: Memory Parcel No.

(2) XX...XX: Station Name Character (Maximum 16 characters)

NONE**<**: No data

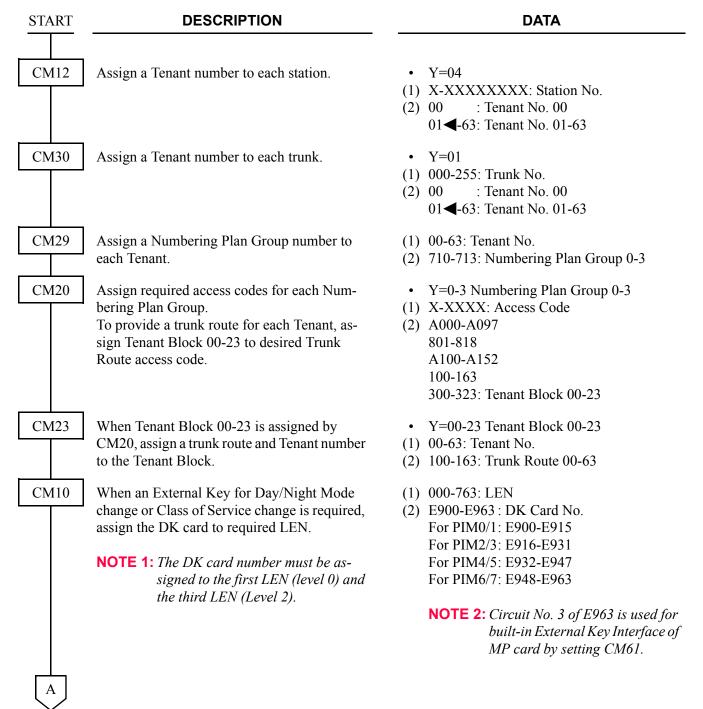
В

I	3	DESCRIPTION	DATA
CM	174	Assign the abbreviated code to each Memory Slot number that is assigned the stored number by CM74 Y=0.	<ul> <li>Y=5</li> <li>(1) X-XXXXXXXXX: Abbreviated Code X: 0-9</li> <li>(2) X YY Z</li></ul>
		NOTE 1: 4-digit (Fixed) abbreviated code is used I-8-digit abbreviated code is used for S	
			Do not assign the same Memory Slot number of breviated code (set by $CM74 Y=0$ ) as Memory Slot
		NOTE 3: Set the same number of digits as the dig the second data.	rits of abbreviated code assigned by CM42>77 to
		NOTE 4: When setting the number of digits for ab abbreviated code that can be registered.  • 5-digit abbreviated code: 500  • 6-digit abbreviated code: 333  • 7-digit abbreviated code: 250  • 8-digit abbreviated code: 200	·
CM	108	Specify System Speed Dialing security. (Stored number displays on D <sup>term</sup> for an outgoing call by System Speed Dialing.)	<ul> <li>(1) 043</li> <li>(2) 0 : Not displayed</li> <li>1 ▼: To display</li> </ul>
		Specify Toll Restriction for an outgoing call by System Speed Dialing, if required.	(1) 044 (2) 0 : Not provided

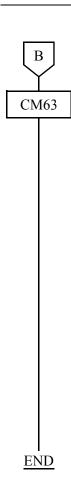
**END** 

(2) 0 : Not provided 1**◄**: To provide

# **TENANT SERVICE**



A	DESCRIPTION	DATA
CM14	When an External Key for Day/Night Mode change or Class of Service change is required, assign the DK card to required LEN.  [Series 3200 R6.2 software required]  NOTE 1: The DK card number must be assigned to the first LEN (level 0) and the third LEN (Level 2).	<ol> <li>(1) XX ZZZ: LEN         XX : 00-59: FP No.         ZZZ: 000-127: Port No.</li> <li>(2) E900-E963: DK Card No.         For FP No. 00: E900-E915         For FP No. 01: E916-E931         For FP No. 02: E932-E947         For FP No. 03: E948-E963</li> </ol>
		NOTE 2: Circuit No. 3 of E963 is used for built-in External Key Interface of MP card by setting CM61.
CM08	Specify ON/OFF condition for external relay/external key on MP built-in DK00 card.	<ul> <li>(1) 700</li> <li>(2) 0 : ON (Ground Start)</li></ul>
CM61	To provide external keys for Day/Night Mode change or Class of Service change, assign a Tenant number to the DK card.	<ul> <li>Y=00</li> <li>(1) XX Z</li> <li>XX: 00-31: DK Card No. assigned by CM10/CM14 (E900-E963)</li> <li>Z: 0-3: Circuit No.</li> <li>633: MP Built-in External Key Interface</li> <li>(2) 00-63: Tenant No.</li> </ul>
CM62	Specify the Tenants to be handled by each ATTCON Group.  INITIAL	<ul> <li>Y=0-3 ATT Group 0-3 assigned by CM60 Y=00</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0 : To handle 1 ◀: Not handled</li> </ul>



Specify whether Inter-Tenant connection is available for station to station calling, Incoming Call Termination and TAS answer.

#### **DATA**

- Y=0 TAS Answer
- (1) XX ZZ

XX: Tenant No. of TAS Answer Station

ZZ: Tenant No. of Trunk

- (2) 0 : Allow
  - 1**◄**: Restricted
- Y=1 Station-to-Station Calling
- (1) XX ZZ

XX: Tenant No. of Calling Station

ZZ: Tenant No. of Called Station

- (2) 0 : Restricted
  - 1**⋖**: Allow
- Y=2 Incoming Call Termination
- (1) XX ZZ

XX: Tenant No. of Called Station

ZZ: Tenant No. of Trunk

(2) 0 : Restricted

1**⋖**: Allow

# **TIE LINES**

START	DESCRIPTION	DATA
CM10	Assign a trunk number for the ODT card to the required LEN.  NOTE: The trunk number must be assigned to the first LEN (Level 0) and the second LEN (Level 1) of each LT slot.	(1) 000-763: LEN (2) D000-D255: Trunk No.
CM14	Assign a trunk number for the ODT card to the required LEN.  [Series 3200 R6.2 software required]  NOTE: The trunk number must be assigned to the first LEN (Level 0) and the second LEN (Level 1) of each LT slot.	<ul> <li>(1) XX ZZZ: LEN</li></ul>
CM20	Assign a trunk route access code to each Tie Line trunk route.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code (81/82)</li> <li>(2) 100-163: Trunk Route 00-63 (01/02)</li> </ul>
CM30	Assign a trunk route and tenant number to each trunk.	<ul> <li>Y=00</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 00-63: Trunk Route No. (01/02)</li> <li>Y=01</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 00-63: Tenant No. (00/00)</li> </ul>
CM35	Assign trunk route data to the trunk route number assigned by CM30 Y=00.  NOTE 1: All circuits in one ODT card must be set to same type interface (2-wire or 4-wire).  NOTE 2: For Type II signaling by 4ODT card, set JP1-4 switch to DOWN.	<ul> <li>Y=105 2-wire E&amp;M/4-wire E&amp;M Trunk</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : 2-wire E&amp;M Trunk</li> <li>1◀: 4-wire E&amp;M Trunk</li> <li>Y=104 Polarity of E&amp;M Trunk</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 1 : E wire (Open), M wire (Open), Signaling (Type V)</li> <li>2 : E wire (Ground), M wire (Battery), Signaling (Type I)</li> <li>3◀: E wire (Ground), M wire (Ground), Signaling (Type V/Type II) NOTE 2</li> <li>[Series 3300 software required]</li> </ul>
CM30	Assign a trunk route access code to each Tie Line trunk route.  Assign a trunk route and tenant number to each trunk.  Assign trunk route data to the trunk route number assigned by CM30 Y=00.  NOTE 1: All circuits in one ODT card must be set to same type interface (2-wire or 4-wire).  NOTE 2: For Type II signaling by 4ODT	<ul> <li>(1) X-XXXX: Access Code (81/82)</li> <li>(2) 100-163: Trunk Route 00-63 (01/02)</li> <li>• Y=00</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 00-63: Trunk Route No. (01/02)</li> <li>• Y=01</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 00-63: Tenant No. (00/00)</li> <li>• Y=105 2-wire E&amp;M/4-wire E&amp;M Trunk</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : 2-wire E&amp;M Trunk</li> <li>1 &lt; 4-wire E&amp;M Trunk</li> <li>• Y=104 Polarity of E&amp;M Trunk</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 1 : E wire (Open), M wire (Open), Sing (Type V)</li> <li>2 : E wire (Ground), M wire (Batter Signaling (Type I)</li> <li>3 &lt; E wire (Ground), M wire (Ground)</li> <li>Signaling (Type V/Type II) NO</li> </ul>



#### **DATA**

CM35

When you use the ODT card for 2-wire E&M trunk, set CM35 Y=100 to 14/15.

(INITIAL)

NOTE:

When using Series 3600 software or later, a reset of the MP card is not required after this command is set/changed.

When changing the data with online, the data is valid after the trunk card is unplugged and plugged in.

Assign trunk route data to the trunk route number assigned by CM30 Y=00.

- Y=100 Terminating and Balanced Network Impedance
- (1) 00-63: Trunk Route No.
- (2) 14: 2-wire E&M Trunk (for regular) 15: 2-wire E&M Trunk (for long line) NONE◀: For regular

- Y=00 Kind of Trunk Route
- (1) 00-63: Trunk Route No. (01/02)
- (2) 04: Tie Line
- Y=01
- (1) 00-63: Trunk Route No. (01/02)

< Incoming > < Outgoing >

(2) 2 : DP-10PPS DP-10PPS

4 : DTMF 7◀: DTMF/DP DTMF

- Y=02 IC/OG
- (1) 00-63: Trunk Route No. (01/02)
- (2) 1 : Incoming trunk
  - 2 : Outgoing trunk
  - 3**⋖**: Bothway trunk
- Y=04 Answer Signal from distant office
- (1) 00-63: Trunk Route No. (01/02)
- (2) 2 : Arrive
  - 7**<**: Not arrive
- Y=05 Release Signal from distant office
- (1) 00-63: Trunk Route No. (01/02)
- (2) 1**<**: Arrive
- Y=08 Sending of Dial Pulse
- (1) 00-63: Trunk Route No. (01/02)
- (2) 3**⋖**: Send

В



Assign the appropriate data for the characteris-

tic of the distant PBX.

#### **DATA**

- Y=09 Incoming Connection Signaling
- (1) 00-63: Trunk Route No. (01/02)
- (2) 03: Wink Start
  - 04: Delay Dial
  - 05: Immediate Start
  - 06: 2nd Dial Tone/Timing Start
- Y=10 2nd DT sending on call termination
- (1) 00-63: Trunk Route No. (01/02)
- (2) 0 : No Tone
  - 1**<**: 2nd Dial Tone
- Y=13 Maximum Number of Sending Digits
- (1) 00-63: Trunk Route No.
- (2) 001-254: 1-254 digits

If no data is set, sender is released when time out occurs or the called station answers.

- Y=20 Sender start condition
- (1) 00-63: Trunk Route No. (01/02)
- (2) 00 :Wink Start
  - 01 :Delay Dial
  - 15**◀**: Timing Start (Prepause per CM35 Y=21)

The above data should be set to each route according to the data for CM35 Y=09, as shown below.

Data for		Data for
CM35 Y=09		CM35 Y=20
03	$\rightarrow$	00
04	$\rightarrow$	01
05	$\rightarrow$	15
06	$\rightarrow$	15

- Y=21 Sender Prepause Timing
- (1) 00-63: Trunk Route No.

(2)	00: 0 second	08	: 6.0 seconds
	01: 0.5 seconds	09	: 7.0 seconds
	02: 1.0 second	10	: 8.0 seconds
	03: 1.5 seconds	11	: 9.0 seconds
	04: 2.0 seconds	12	: 10.0 seconds
	05: 2.5 seconds	13	: 11.0 seconds
	06: 4.0 seconds	14	: 12.0 seconds
	07: 5.0 seconds	15	: 3.0 seconds



C	

#### **DATA**

CM35

When CM35 Y=01 is 2, assign the data for the DP Sender Characteristics.

When CM35 Y=01 is 4, assign data for the

DTMF Sender Characteristics.

- Y=23 DP Sender Inter Digital Pause
- (1) 00-63: Trunk Route No.
- (2) 0 : 300 ms.
  - 1 : 400 ms.
  - 2 : 500 ms.
  - 3 : 600 ms.
  - 4 : 700 ms.
  - 5 : 900 ms.
  - 6 : 1100 ms.
  - 7**<**: 800 ms.
- Y=25 DP Sender Make Ratio
- (1) 00-63: Trunk Route No.
- (2) 0 : 39 % Make Ratio
  - 1**<**: 33 % Make Ratio
- Y=45 DP Sender Release Timing
- (1) 00-63: Trunk Route No.
- (2) 0 : 2 seconds
  - 1:4 seconds
  - 2:6 seconds
  - 3:8 seconds
  - 4:12 seconds
  - 5: 14 seconds
  - 6:16 seconds
  - 7**<**: 10 seconds
- Y=24 DTMF Sender Inter Digital Pause
  - (1) 00-63: Trunk Route No.
  - (2) 0 : 32 ms.
    - 1 : 64 ms.
    - 2 : 80 ms.
    - 3 : 96 ms.
    - 4 : 160 ms.
    - 5 : 192 ms.
    - 6 : 240 ms.

    - 7**<**: 128 ms.
  - Y=26 DTMF Sender Signal Width
  - (1) 00-63: Trunk Route No.
  - (2) 0 : 64 ms.
    - 1**<**: 128 ms.



#### **DATA**

- Y=46 DTMF Sender Release Timing
- (1) 00-63: Trunk Route No.
- (2) 0 : 2 seconds
  - 1 : 4 seconds
  - 2 : 6 seconds
  - 3:8 seconds
  - 4 : 12 seconds
  - 5: 14 seconds
  - 6:16 seconds
  - 7**<**: 10 seconds

Specify the desired Station Ringing Cadence.

Specify the Ringer Tone Pattern of the D<sup>term</sup> to

each trunk route.

- Y=33 Ringing Cadence
- (1) 00-63: Trunk Route No.
- (2) 2 : 1 second ON-2 seconds OFF
  - 3◀: 2 seconds ON-4 seconds OFF

To make this data assignment effective enter the data "1" for CM08>180.

- Y=34, 164 Ringer Tone Pattern
- (1) 00-63: Trunk Route No.
- (2) See the table below.

[Series 3200 R6.1 software required]

Y=34	Y=164: 0	Y=164: 1 <b>⋖</b>
0	Ringer Tone Pattern 3	Ringer Tone Pattern 0
1	Ringer Tone Pattern 6	Ringer Tone Pattern 1
2	Ringer Tone Pattern 5	Ringer Tone Pattern 2
3◀	Ringer Tone Pattern 4	Ringer Tone Pattern 7





## **DATA**

CM65

Specify the ring frequency of the D<sup>term</sup>.

[Series 3200 R6.1 software required]

- Y=40
- (1) 00-63: Tenant No. assigned by CM30 Y=01/CM12 Y=04
- (2) See the table below.

Dinger Tene	Y=40: 0	Y=40: 1◀		
Ringer Tone Pattern No.		Electra Terminal/ D <sup>term</sup> Series III	Elite Terminal/D <sup>term</sup> Series E/ D <sup>term</sup> Series i	
0	Door Phone Ringer Tone	1024 + 1285 [Hz]/ 16 [Hz] Modulating Signal	1100 + 1400 [Hz]/ 16 [Hz] Modulating Signal	
1	Ringer Tone 1	480 + 606 [Hz]/ 8 [Hz] Modulating Signal	520 + 660 [Hz]/ 8 [Hz] Modulating Signal	
2	Ringer Tone 2	600 + 700 [Hz]/ 16 [Hz] Modulating Signal	660 + 760 [Hz]/ 16 [Hz] Modulating Signal	
3	Ringer Tone 3	1024 [Hz] Envelop	1100 [Hz] Envelop	
4	Ringer Tone 4	500 [Hz]	540 [Hz]	
5	Ringer Tone 5	1024 [Hz]	1100 [Hz]	
6	Not used	1285 + 1024 [Hz]	1400 + 1100 [Hz]	
7	Not used	480 + 606 [Hz]/ 16 [Hz] Modulating Signal	520 + 660 [Hz]/ 16 [Hz] Modulating Signal	

**NOTE:** This data is effective only for  $D^{term}$  Series i.

When using Electra Terminal/D<sup>term</sup> Series III/Elite Terminal/D<sup>term</sup> Series E, using D<sup>term</sup> Series i with Series 3100 software or before, or when accommodating D<sup>term</sup> Series i in TDM based Remote PIM, the second data is fixed to 1.





# **DATA**

CM35

Specify the value of the Tie Line Pad of ODT card.

• Y=19

(1) 00-63: Trunk Route No.

(2) 0-3 : Programmable PAD (See CM42) 4-7◀: Fixed PAD (See the following Table)

CONNECTION PATTERNS	PAD DATA OF B TRUNK			
(A-B)	DATA=4 (T/R)	DATA=5 (T/R)	DATA=6 (T/R)	DATA=7 (T/R)
Station-ODT (4W E&M)			-3/-3	-3/-3
Tone-ODT (4W E&M)			0/0	0/0
COT/DID/ODT (2W E&M)/IPT- ODT (4W E&M)			-2/-2	0/0
ODT (4W E&M)-ODT (4W E&M)			0/0	0/0
DTI/BRT/PRT/CCT/Virtual IPT- ODT (4W E&M)			0/0	0/0
Station-ODT (2W E&M)			-3/-3	0/0
Tone-ODT (2W E&M)			0/0	0/0
COT/DID/ODT (2W E&M)/IPT- ODT (2W E&M)			0/0	0/0
ODT (4W E&M)-ODT (2W E&M)			0/0	0/0
DTI/BRT/PRT/CCT/Virtual IPT- ODT (2W E&M)			0/0	0/0

T/R: Transmit/Receive

+ : Gain - : Loss





## **DATA**

CM42

When using the programmable PAD (CM35 Y=19, 2nd data=0-3), assign the PAD data.

- (1) 50-65 (See the following Table)(2) 00-15 (See the following Table)

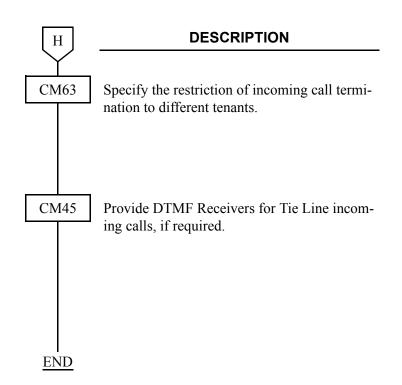
PATTERN	PAD DATA PATTERNS				CONNECTING	
1ST DATA (1)	CM35 Y=19 2ND DATA=0	CM35 Y=19 2ND DATA=1	CM35 Y=19 2ND DATA=2	CM35 Y=19 2ND DATA=3	PATTERNS (A TRUNK- B TRUNK)	
	50	54	58	62	STA-ODT	
	51	55	59	63	TONE-ODT	
50 }	52	56	60	64	COT/DID/ODT (2W E&M)/IPT-ODT	
65	53	57	61	65	ODT (4W E&M)/DTI/ BRT/PRT/CCT/Virtual IPT-ODT	

	PATTERNS	PAD DATA OF B TRUNK (T/R) [dB]		
2ND DATA (2)		4W E&M	2W E&M	REMARKS
	00	0/0	0/0	
	01	0/0	0/0	
	02	0/0	0/0	
	03	-2/-2	-3/-3	
00	04	-3/-3	0/0	
≀ 15	05	-12/-11	-6/-6	
	06	-16/-11	0/0	
	07	-6/-6	0/0	
	08	Not Used		

T/R: Transmit/Receive

+ : Gain - : Loss





## **DATA**

- Y=2
- (1) XX ZZ

XX: Tenant No. of called station

ZZ: Tenant No. of Trunk Route

(2) 0 : Restricted

1**⋖**: Allowed

- Y=1
- (1) XX Z: DTMF Receiver No.

XX: 00 (Built-in PBR on MP card) 01-15 (8RST Card No. assigned by CM10/CM14, E201-E215)

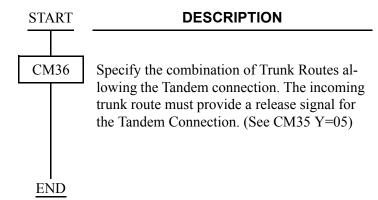
Z: 0-3: Circuit No.

(2) 0 : Only for Tie Line

1**◄**: For both station and Tie Line

# TIE LINE TANDEM SWITCHING

## **PROGRAMMING**



#### **DATA**

- Y=0
- (1) XX ZZ

XX: 00-63: Incoming Trunk Route ZZ: 00-63: Outgoing Trunk Route

(2) 0 : Allow 1 ✓: Restricted

## HARDWARE REQUIRED

ODT card

# **TIMED FORCED RELEASE**

[Series 3500 software required]

START	DESCRIPTION	DATA
CM35	Provide the outgoing trunk route with forced release in designated time.	<ul> <li>Y=247</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : To provide 1 ✓: Not provided</li> </ul>
	Provide the incoming trunk route with forced release in designated time.	<ul> <li>Y=248</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0 : To provide 1   ■: Not provided</li> </ul>
CM41	Specify the warning SST sending timer for forced release, Timer A, B and C respectively.  NOTE: Set the time from the start of communications to the warning SST is sent.  Forced release is executed at 16 seconds later from the warning SST is sent.	<ul> <li>Y=0</li> <li>114: Timer A</li> <li>115: Timer B</li> <li>116: Timer C</li> <li>01-99: 64-6336 seconds         <ul> <li>(64 second increments)</li> </ul> </li> <li>NONE&lt;</li> <li>No data</li> </ul>
CM12	Specify the warning SST sending timer for forced release to the required stations.  NOTE: This data is effective when the forced release is provided to the destination trunk route (CM35 Y=247 and CM35 Y=248 is set to 0).	<ul> <li>Y=61</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) 0 : Depends on Timer A</li> <li>1 : Depends on Timer B</li> <li>2 : Depends on Timer C</li> <li>3◄: Forced Release is not provided</li> </ul>
A		



**END** 

#### **DESCRIPTION**

#### **DATA**

Specify the warning SST sending timer for forced release to the incoming trunk route of tandem connection.

NOTE: This data is effective when the forced release is provided to the out-

going trunk route of tandem connec-

tion (CM35 Y=247 is set to 0).

Specify whether the operation of hooking/call holding after a station receives the warning SST is restricted, or not.

Specify whether the shift from the communication between station and Trunk to Conference (Three/Four Party) while the timer for forced release is in progress is restricted, or not.

Y = 249

(1) 00-63: Trunk Route No.

(2) 0 : Depends on Timer A

1 : Depends on Timer B

2 : Depends on Timer C

3**◄**: Forced Release is not provided

(1) 664

(2) 0 : Allow

1**<**: Restricted

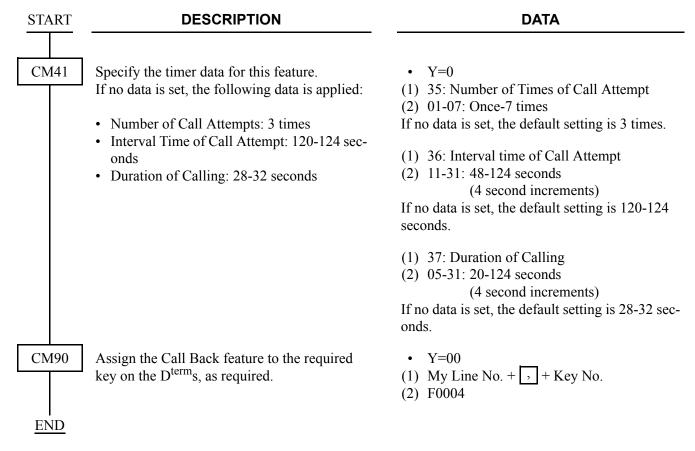
(1) 665

(2) 0 : Allow

1**⋖**: Restricted

# **TIMED QUEUE**

#### **PROGRAMMING**



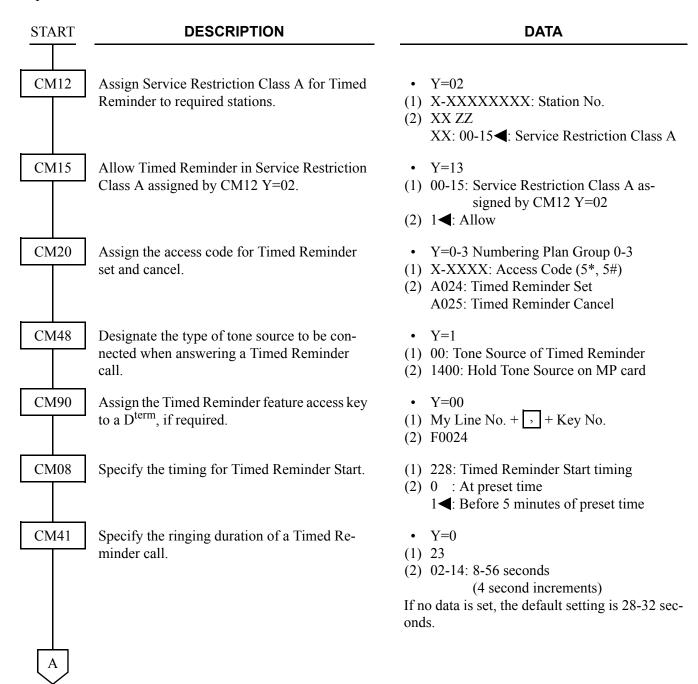
#### HARDWARE REQUIRED

D<sup>term</sup> and DLC card

# **TIMED REMINDER**

#### **PROGRAMMING**

To provide the internal Music Source on the MP card:





## **DATA**

CM42

Specify the number of Timed Reminder attempts before abandonment.

Specify the maximum number of Timed Reminder calls that can be set at the same time.

**NOTE:** This command is effective up to Series 3400 software.

(1) 03

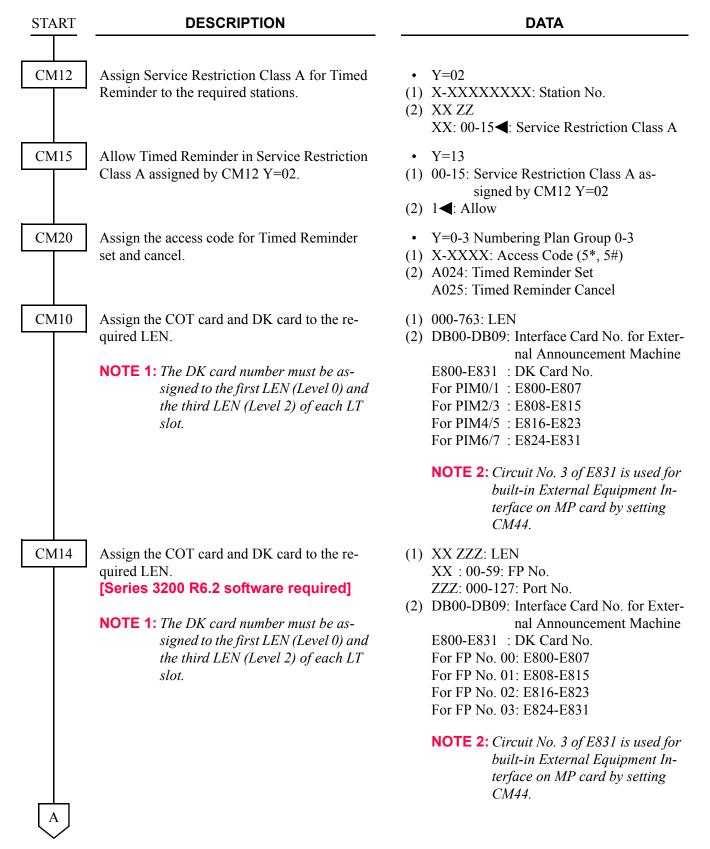
(2) 01-05 : 1 call-5 calls NONE**◄**: 5 calls

(1) 04

(2) 01-32 : 1 station-32 stations NONE **◄**: 10 stations

END

To provide an External Announcement Machine via COT card:



A	DESCRIPTION	DATA
CM08	Specify ON/OFF condition for external relay/external key on MP built-in DK00 card.	<ul> <li>(1) 700</li> <li>(2) 0 : ON (Ground Start)</li></ul>
CM44	Assign the External Announcement Machine start function to the DK card.	<ul> <li>(1) XX Y</li> <li>XX: 00-31: DK Card No. assigned by CM10/CM14 (E800-E831)</li> <li>Y: 0-3: Circuit No.</li> <li>313: MP built-in External Equipment Interface</li> <li>(2) 0100: External Announcement Machine for Timed Reminder Calling</li> </ul>
CM90	Assign the Timed Reminder feature access key to the D <sup>term</sup> s, if required.	• Y=00 (1) My Line No. + + + Key No. (2) F0024
CM08	Specify the timing for Timed Reminder start.	<ul> <li>(1) 228: Timed Reminder start timing</li> <li>(2) 0 : At preset time</li> <li>1 ◄: Before 5 minutes of preset time</li> </ul>
CM41	Specify the ringing duration of a Timed Reminder call.	<ul> <li>Y=0</li> <li>(1) 23</li> <li>(2) 02-14: 8-56 seconds</li></ul>
В	Specify the duration of a Timed Reminder call.	<ul> <li>Y=0</li> <li>(1) 52</li> <li>(2) 01-99: 4-396 seconds</li></ul>



#### **DESCRIPTION**

#### **DATA**

CM42

Specify the number of Timed Reminder call attempts before abandonment.

Specify the maximum number of Timed Reminder calls that can be set at the same time.

**NOTE:** This command is effective up to Series 3400 software.

(1) 03

(2) 01-05 : 1 call-5 calls NONE**◄**: 5 calls

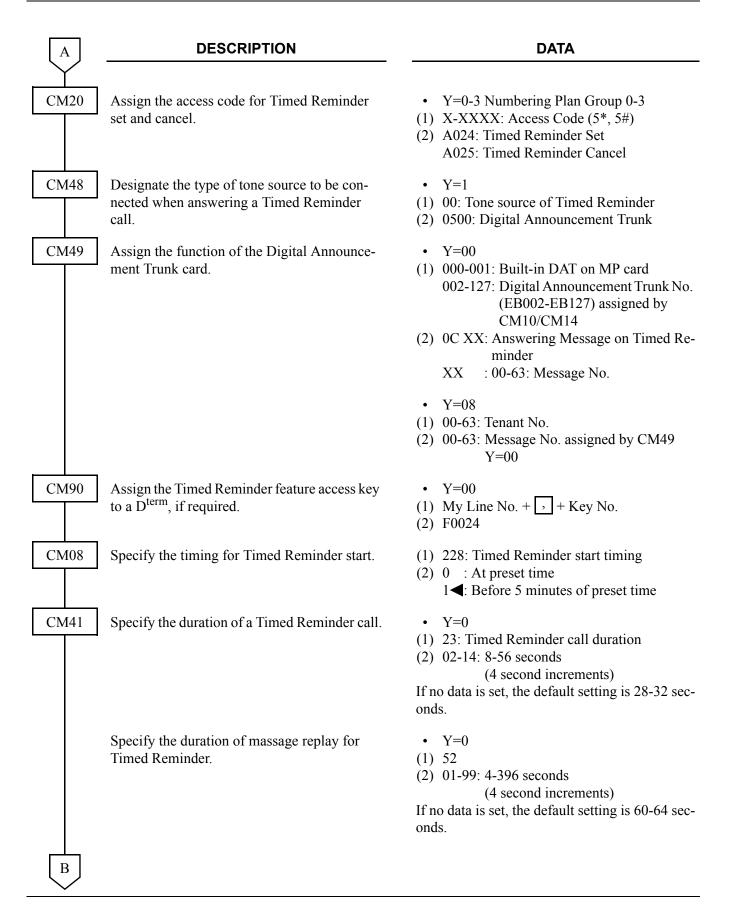
(1) 04

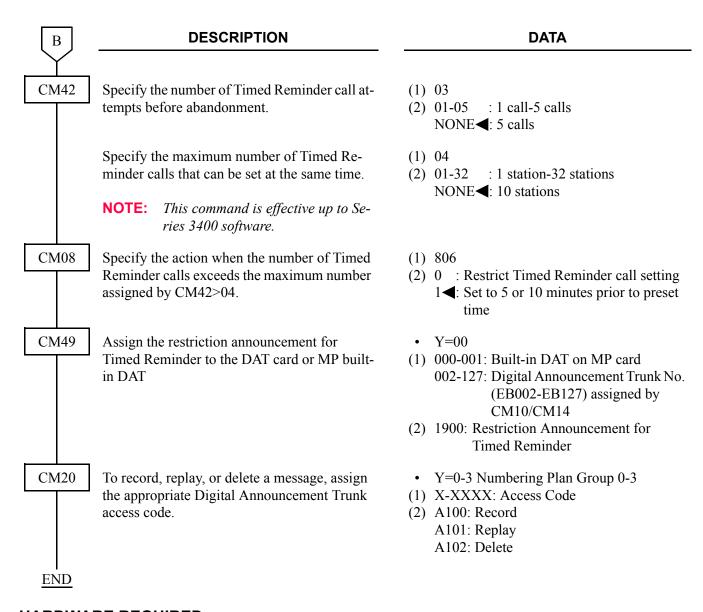
(2) 01-32 : 1 station-32 stations NONE**◄**: 10 stations

<u>END</u>

To provide the internal announcement source by Digital Announcement Trunk (DAT card):

**DESCRIPTION DATA START** CM10 Assign a Digital Announcement Trunk card (1) 000-763: LEN number to the required LEN. (2) EB002-EB127: Digital Announcement To provide the restriction announcement for Trunk Card No. Timed Reminder call setting, assign the fol-For PIM0/1 : EB002-EB031 lowing DAT respectively. For PIM2/3 · EB032-EB063 • DAT for Timed Reminder message For PIM4/5 : EB064-EB095 • DAT for restriction announcement For PIM6/7 : EB096-EB127 **NOTE 1:** The Digital Announcement Trunk **NOTE 2:** *EB000* and *EB001* are dedicated card number must be assigned to the to built-in Digital Announcement Trunk of the MP card. first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot. CM14 Assign a Digital Announcement Trunk card (1) XX ZZZ: LEN number to the required LEN. XX: 00-59: FP No. To provide the restriction announcement for ZZZ: 000-127: Port No. Timed Reminder call setting, assign the fol-(2) EB002-EB127: Digital Announcement lowing DAT respectively. Trunk Card No. • DAT for Timed Reminder message For FP No. 00: EB002-EB031 • DAT for restriction announcement For FP No. 01: EB032-EB063 [Series 3200 R6.2 software required] For FP No. 02 : EB064-EB095 For FP No. 03: EB096-EB127 **NOTE 1:** The Digital Announcement Trunk card number must be assigned to the **NOTE 2:** *EB000* and *EB001* are dedicated first LEN (Level 0), the third LEN to built-in Digital Announcement (Level 2), the fifth LEN (Level 4) and Trunk of the MP card. the seventh LEN (Level 6) of each LT slot. CM12 Assign Service Restriction Class A for Timed • Y=02 Reminder set and cancel. (1) X-XXXXXXXX: My Line No. (2) XX ZZ XX: 00-15◀: Service Restriction Class A CM15 Allow Timed Reminder in Service Restriction Y = 13Class A assigned by CM12 Y=02. (1) 00-15: Service Restriction Class A assigned by CM12 Y=02 (2) 1**<**: Allow





#### HARDWARE REQUIRED

To provide the Internal Music Source: MP card

To provide the External Announcement Machine:

COT card

DK card or MP card (built-in DK)

External Announcement Machine provided locally

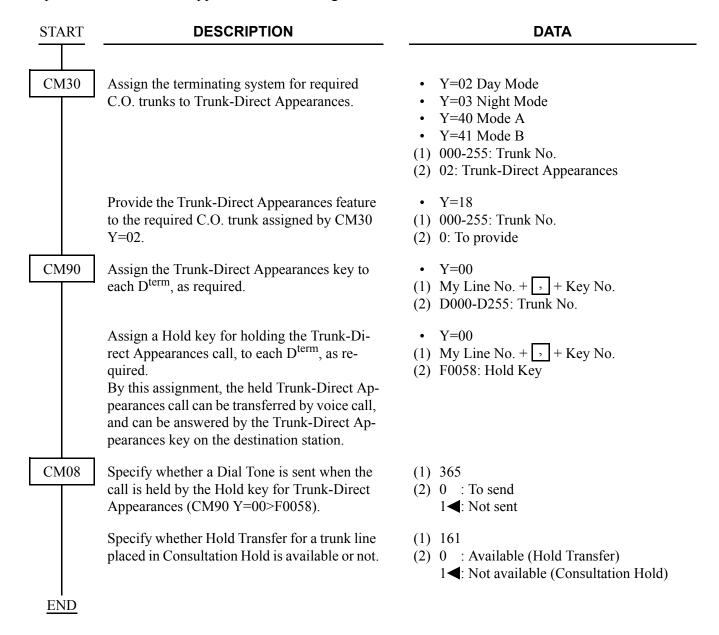
To provide the internal digital announcement source:

DAT card or MP card (built-in DAT)

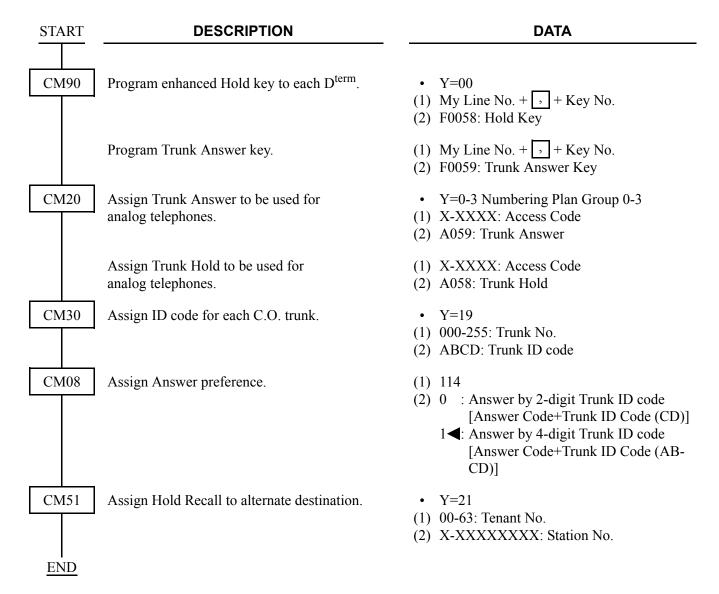
# TRUNK-DIRECT APPEARANCES

#### **PROGRAMMING**

To provide Trunk-Direct Appearances on Analog trunk:



To provide enhanced Trunk-Direct Appearances on Analog trunk:



**NOTE:** If the incoming call is routed via the Internal Automated Attendant feature (DAT card), the tenant number programmed in CM49 Y=01 must match the tenant number programmed in CM20 Y=01 for the incoming trunk.

The table below shows the availability of the HOLD key (CM90 Y=00>F0058) on each condition.

Trunk-Direct Appearances (CM30 Y=18)	Trunk ID Code Assignment (CM30 Y=19)	Kind of Trunks	Trunk ID Code Display	Availability of HOLD Key (CM90 Y=00>F0058)
0 (Provide)	-	_	-	Available
1 (Not provided)	Not assigned	_	_	Not available
	Assign	CCIS trunk	_	Not available
		ISDN trunk	CM35 Y=146 is set to 0. (Trunk ID Code is displayed.)	Available
			CM35Y=146 is set to 1. (Calling/called sub-address is displayed)	Not available
		Other trunks	CM35 Y=75 is set to 0. (DID incoming LDN is displayed.)	Not available
			CM35 Y=75 is set to 1. (Trunk ID Code is displayed.)	Available

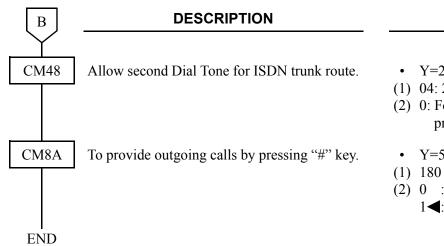
To provide Trunk-Direct Appearances on ISDN BRI trunk:

# [Series 3800 software required]

**NOTE:** ISDN Trunk Connection is required before setting following programming. Refer to "ISDN System Manual".

START	DESCRIPTION	DATA
CM30	Assign the terminating system for required C.O. trunks to Trunk-Direct Appearances.	<ul> <li>Y=02 Day Mode</li> <li>Y=03 Night Mode</li> <li>Y=40 Mode A</li> <li>Y=41 Mode B</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 02 : Trunk-Direct Appearances              03 : Trunk-Direct Appearances+TAS             06 : Direct-In Termination+Trunk-Direct</li></ul>
	Provide the Trunk-Direct Appearances feature to the required C.O. trunk assigned by CM30 Y=02.	<ul> <li>Y=18</li> <li>(1) 000-255: Trunk No.</li> <li>(2) 0: To provide</li> </ul>
CM76	Assign the Number Conversion Block number for Development Table 0.	<ul> <li>Y=00</li> <li>(1) X-XXXX: DID No.</li> <li>(2) 000-999 : Number Conversion Block No. NONE&lt;</li> <li>No data</li> </ul>
	Assign the Number Conversion Block number for Development Table 1.	<ul> <li>Y=90</li> <li>(1) X-XXXXXXXXX: DID No.</li> <li>(2) 000-999 : Number Conversion Block No. NONE : No data</li> </ul>
A		

A	DESCRIPTION	DATA
CM76	Assign the data for interpreting the digits received.	<ul> <li>Y=01 Day Mode</li> <li>Y=02 Night Mode</li> <li>Y=03 Mode A</li> <li>Y=04 Mode B</li> <li>(1) 000-999: Number Conversion Block No. assigned by CM76 Y=00/90</li> <li>(2) X-XXXXXXXXX: Station No. to be terminated</li> <li>DXX: Change Terminating System to: D02: Trunk-Direct Appearances D03: Trunk-Direct Appearances+ TAS</li> <li>D06: Direct-In Termination+ Trunk-Direct Appearances</li> </ul>
CM90	Assign a Trunk-Direct Appearances key to each D <sup>term</sup> , as required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + + Key No.</li> <li>(2) D000-D255: Trunk No.</li> </ul>
CM35	Assign a trunk access code sent to SMDR for outgoing call.  NOTE: This command is effective when CM35 Y=189 is not assigned.	<ul> <li>Y=44</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 00-99: Trunk Access Code</li> </ul>
	Assign a trunk access code for Trunk-Direct Appearances Multiline Operation.	<ul> <li>Y=189</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) X-XX: Trunk Access Code X=0-9, A (*), B (#)</li> </ul>
CM41	Specify the Timing Start when making ISDN call from a Single Line Telephone (PB/DP), D <sup>term</sup> or Attendant Console.	<ul> <li>Y=0</li> <li>(1) 50</li> <li>(2) 03-14: 3-14 seconds (1 second increment) If no data is set, the default setting is 10 seconds. </li> </ul>
В	Specify the ORT timer when sending LCR.  NOTE: Second data 02 is available for Series 3600 or later.	• Y=0 (1) 111 (2) 02-15: 2-15 seconds (1 second increment) If no data is set, the default setting is 7 seconds.



#### **DATA**

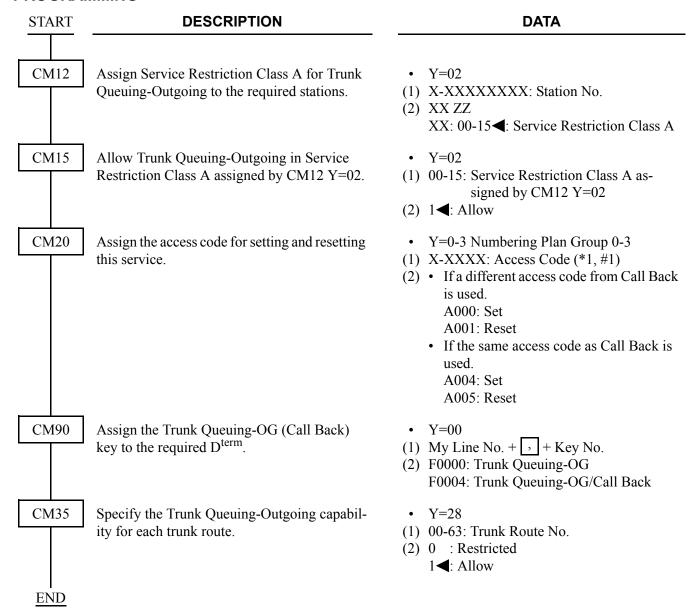
- Y=2
- (1) 04: 2nd DT on ISDN trunks
- (2) 0: For ISDN trunk route, 2nd Dial Tone is provided.
- Y=5000-5255 LCR Pattern No. 000-255
- (2) 0 : To provide 1**◄**: Not provided

#### HARDWARE REQUIRED

D<sup>term</sup>, DLC card, and COT card

# TRUNK QUEUING-OUTGOING

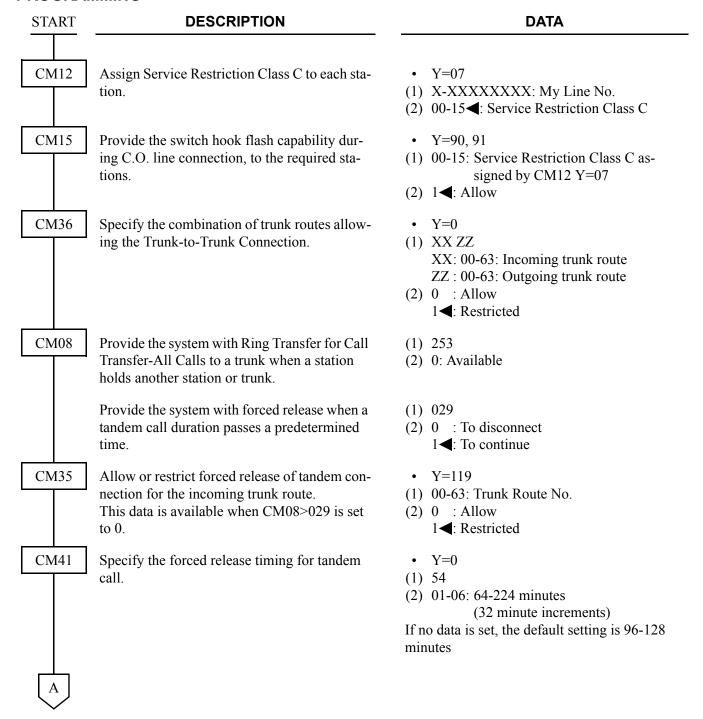
#### **PROGRAMMING**

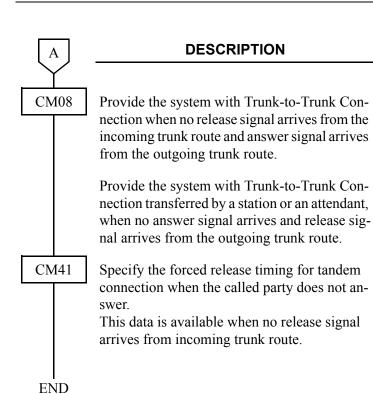


**NOTE:** To provide Trunk Queuing-Outgoing in conjunction with Least Cost Routing-3/6 Digit, you must set Route Pattern No. 000-126 (CM8A Y=0000-0126). Route Pattern No. 127-255 cannot be used for Trunk Queuing-Outgoing with Least Cost Routing-3/6 Digit.

## TRUNK-TO-TRUNK CONNECTION

#### **PROGRAMMING**





**DATA** 

- (1) 324
- (2) 0 : Available 1◀: Not available
- (1) 028
- (2) 0 : Available 1 ◀: Not available
- Y=0
- (1) 55
- (2) 01-13: 12-60 seconds (4 second increments)

If no data is set, the default setting is 20-24 seconds.

To provide the AMP trunk for Trunk-to-Trunk Connection:

START	DESCRIPTION	DATA
CM10	Assign the card number of the AMP trunk (AMP card).  NOTE: The AMP card number must be assigned to both of the first LEN (Level 0) and the third LEN (Level 2) of each slot.	(1) 000-763: LEN (2) Card No. of AMP trunk For PIM0/1: C100-C115 For PIM2/3: C116-C131 For PIM4/5: C132-C147 For PIM6/7: C148-C163
CM14	Assign the card number of the AMP trunk (AMP card).  [Series 3200 R6.2 software required]	(1) XX ZZZ: LEN XX : 00-59: FP No. ZZZ: 000-127: Port No.
	NOTE: The AMP card number must be assigned to both of the first LEN (Level 0) and the third LEN (Level 2) of each slot.	(2) Card No. of AMP trunk For FP No. 00: C100-C115 For FP No. 01: C116-C131 For FP No. 02: C132-C147 For FP No. 03: C148-C163
CM38	Assign the AMP patterns to each combination of the trunk routes.	<ul> <li>Y=00</li> <li>(1) XX ZZ</li></ul>
A	Assign the gain value of each AMP pattern.	<ul> <li>Y=01</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) X Z</li> <li>X: AGC (Automatic Gain Control)</li> <li>0 : 0 dBr</li> <li>1 : +4 dBr</li> <li>2 : -4 dBr</li> <li>3 ◄: Through (assigned by Fixed Gain)</li> <li>Z: Fixed Gain</li> <li>0 : 12 dB</li> <li>1 : 8 dB</li> <li>2 : 4 dB</li> <li>3 ◄: 0 dB</li> </ul>

A	DESCRIPTION	DATA
CM38	Assign the Echo Canceller function to each AMP pattern.	<ul> <li>Y=02</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) 0 : Through 1 ★: Normal</li> </ul>
	Assign the Gain Controller of Echo Canceller to each AMP pattern.	<ul> <li>Y=03</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) 0 : ON 1 &lt; : OFF</li> </ul>
	Select the mode of Tone Disabler on each AMP pattern.	• Y=04 (1) 00-14: AMP pattern No. 00-14 (2) 0 : G164 1◀: G165
	Specify the detect timing of Tone Disabler on each AMP pattern.	<ul> <li>Y=05</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) 0 : 0 second 1 ≤ 2 seconds</li> </ul>
	Specify the channels connected to each AMP pattern.	<ul> <li>Y=06</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) 0 : Incoming Route: Tie Line Outgoing Route: C.O. Line</li> <li>1◄: Incoming Route: C.O. Line Outgoing Route: Tie Line</li> </ul>
	Specify the timing of AMP trunk connection on each AMP pattern.	<ul> <li>Y=07</li> <li>(1) 00-14: AMP pattern No. 00-14</li> <li>(2) 0 : When dialing is finished 1 &lt; : When answering</li> </ul>

**END** 

# **UNIFORM CALL DISTRIBUTION (UCD)**

#### **PROGRAMMING**

**DESCRIPTION DATA START** CM17 For each UCD group, assign station numbers, • Y=0 one by one, in the order of hunting. (1) X-XXXXXXXX: Station No. (2) X-XXXXXXXX: Another station No. to **NOTE:** Up to 60 stations can be assigned be linked into a single UCD group. **Example:** For setting station numbers 200, 201, 202 into one UCD group. 1st Operation (1) 200 (2) 2012nd Operation (1) 201 (2)2023rd Operation (1) 202 (2)200Assign the Pilot station and Member station. • Y=1 (1) X-XXXXXXXX: UCD Station No. (2)  $0 \blacktriangleleft$ : Member station 1 · Pilot station Assign the UCD group number. (1) X-XXXXXXXX: UCD Station No. (2) 00-15: UCD Group 00-15 Specify the UCD service for each type of call. • Y=4 Internal Call (1) X-XXXXXXXX: Pilot Station No. of UCD group (2) 0 : Not provided 1**◄**: To provide Y=5 C.O. (DDD/FX/WATS) Incoming (1) X-XXXXXXXX: Pilot Station No. of UCD group (2) 0 : Not provided 1**⋖**: To provide

A	DESCRIPTION	DATA
CM17		<ul> <li>Y=6 Tie Line incoming call</li> <li>(1) X-XXXXXXXXX: Pilot Station No. of UCD group</li> <li>(2) 0 : Not provided 1 ▼: To provide</li> </ul>
		<ul> <li>Y=7 DID/Automated Attendant Call</li> <li>X-XXXXXXXXX: Pilot Station No. of UCD group</li> <li>0 : Not provided</li> <li>1 &lt; : To provide</li> </ul>
		<ul> <li>Y=B Designation of number of queuing in each UCD group</li> <li>X-XXXXXXXXX: Pilot Station No. of UCD group</li> <li>0 : To provide (See CM42&gt;16) 1 ✓: Not provided (No limit)</li> </ul>
CM42	Specify the maximum number of queuing in each UCD group.	<ul><li>(1) 16</li><li>(2) 01-99 : 1 call-99 calls</li><li>NONE : No limit</li></ul>
CM41	Specify the call waiting time before answer or abandonment for PEG Count analysis.	<ul> <li>Y=0</li> <li>(1) 16</li> <li>(2) 01-30: 4-120 seconds</li></ul>
CM20	Assign the access code for UCD station Busy Out Set and Reset.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A044: Busy Out Set A045: Busy Out Reset</li> </ul>
CM90	Assign the UCD Busy Out key on the D <sup>term</sup> , if required.	<ul> <li>Y=00</li> <li>(1) My Line No. + + + Key No.</li> <li>(2) F0044: UCD Busy Out</li> </ul>
	Assign the Release key on the D <sup>term</sup> , if required.	• Y=00 (1) My Line No. + , + Key No. (2) F1020: Release
В		

E	3

#### **DESCRIPTION**

#### DATA

CM08

Specify the processing for an incoming call when all UCD stations are busy.

Specify the processing for a held call after setting the UCD Busy Out.

Specify that the transferred C.O. call from a station or an attendant is placed into queuing mode when all UCD stations are busy.

**NOTE:** This data is only effective when CM08>212 is set to 1.

Enable the UCD Busy Out set and reset from the secondary extension.

(1) 212

(2) 0 : Busy Tone Connection

1**⋖**: Queuing

(1) 214: For the held call from Tie Line

(2) 0 : Reconnected by Switch Hook Flash

1**◄**: Disconnected

(1) 215: For the held call from C.O. Line

(2) 0 : Reconnected by Switch Hook Flash

1**◄**: Disconnected

(1) 227

(2) 0 : The call is placed into queuing mode

NOTE

1 ■: Recall to the transferring station when the call is transferred from station, or Attendant Camp-On is set when the call is transferred from Attendant

(1) 442

(2) 0 : Available

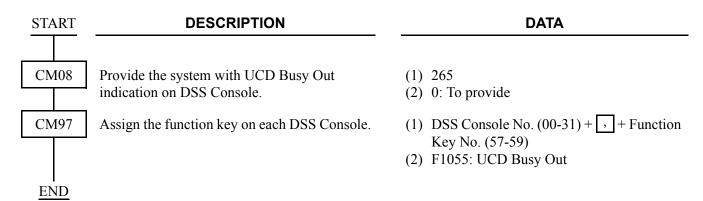
1**◄**: Not available

**END** 

## **BUSY IN/BUSY OUT-UCD**

## **PROGRAMMING**

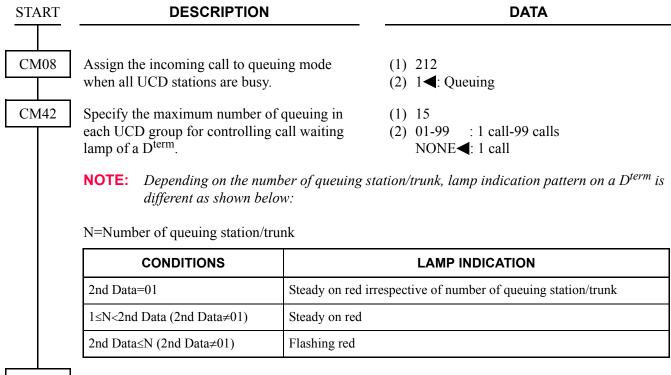
To provide UCD Busy Out indication on DSS Console:



#### **CALL WAITING INDICATION-UCD**

To provide the LEDs on the D<sup>term</sup> for UCD Call Waiting Indication:

#### **PROGRAMMING**



CM90 END

Assign the Call Waiting Indication LED to the required  $D^{\text{term}}$ .

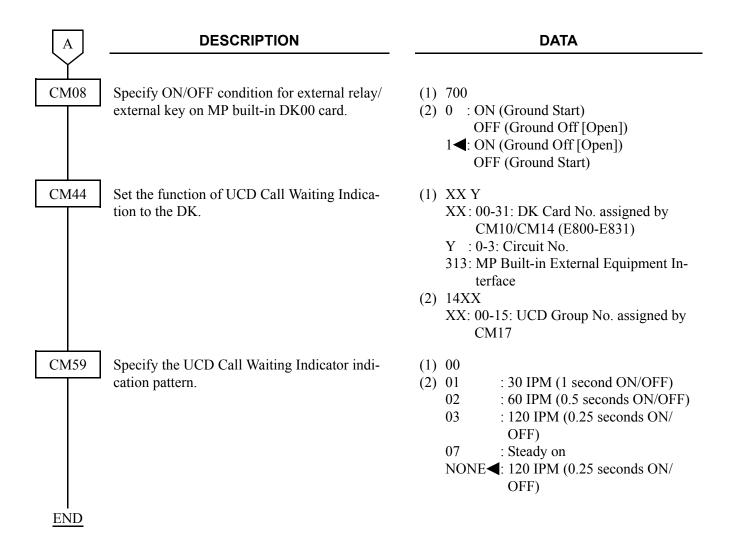
- Y=00
- (1) My Line No. + + Key No.
- (2) F1280-F1295: UCD Group 0-15

To provide an external indicator for UCD Call Waiting:

STA	RT DESCRIPTION	<u> </u>	DATA
CM CM	when all UCD stations are busy	7.	<ul> <li>(1) 212</li> <li>(2) 1◀: Queuing</li> <li>(1) 15</li> </ul>
CIVI	each UCD group for controlling cator.		(1) 13 (2) 01-99 : 1 call-99 calls NONE <b>◄</b> : 1 call
	NOTE: Depending on the nur indicator is different		ntion/trunk, lamp indication pattern on the external
	N=Number of queuing station/t	runk	
	CONDITIONS		LAMP INDICATION
	2nd Data=01		ective of number of queuing station/trunk (For the indiec CM59 in next page.)
	N<2nd Data (2nd Data≠01)	Lamp off	
	2nd Data≤N (2nd Data≠01)	Lamp on (For th	ne indication pattern, see CM59 in next page.)
СМ	Assign the DK card to the requirements of the first LEI the third LEN (Level slot.	· must be as- N (Level 0) and	(1) 000-763: LEN (2) E800-E831: DK Card No. For PIM0/1: E800-E807 For PIM2/3: E808-E815 For PIM4/5: E816-E823 For PIM6/7: E824-E831
			NOTE 2: Circuit No. 3 of E831 is used for built-in External Equipment Interface on MP card by setting CM44.
CM	Assign the DK card to the requirement [Series 3200 R6.2 software]		(1) XX ZZZ: LEN XX : 00-59: FP No. ZZZ: 000-127: Port No.
	<b>NOTE 1:</b> The DK card number signed to the first LEI the third LEN (Level slot.	V (Level 0) and	(2) E800-E831: DK Card No. For FP No. 00: E800-E807 For FP No. 01: E808-E815 For FP No. 02: E816-E823 For FP No. 03: E824-E831

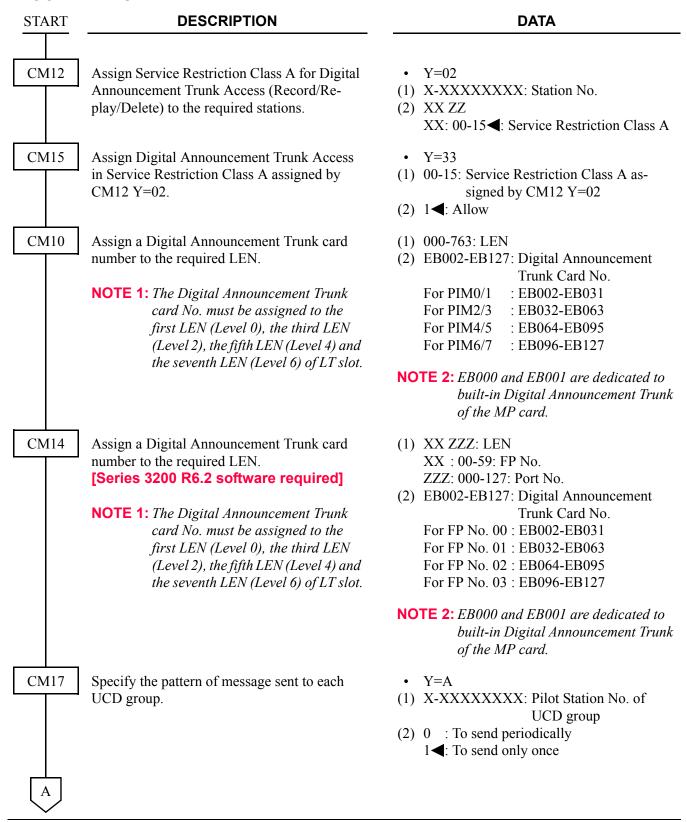
NOTE 2: Circuit No. 3 of E831 is used for

built-in External Equipment Interface on MP card by setting CM44.

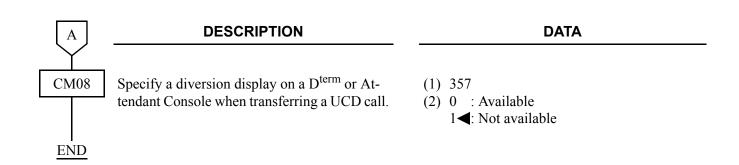


#### **DELAY ANNOUNCEMENT-UCD**

#### **PROGRAMMING**

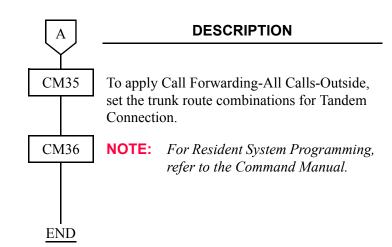


lacksquare	DESCRIPTION	DATA
CM41	If the data for CM17 Y=A is "0", set the interval time for UCD Delay Announcement.	<ul> <li>Y=0</li> <li>(1) 47</li> <li>(2) 01-30: 4-120 seconds</li></ul>
	Specify the UCD Delay Announcement connection timer.	<ul> <li>Y=0</li> <li>(1) 67</li> <li>(2) 01-32: 4-128 seconds</li></ul>
	Specify the maximum UCD call waiting time before answer or abandonment for UCD PEG Count, and waiting time before UCD Delay Announcement.	<ul> <li>Y=0</li> <li>(1) 16</li> <li>(2) 01-30: 4-120 seconds</li></ul>
CM49	Assign the UCD Delay Announcement function to the required Digital Announcement Trunk.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. (EB002-EB127) assigned by CM10/CM14</li> <li>(2) 0B0XX: UCD Delay Announcement 11XX: UCD Second Delay Announcement xxx: 00-15: UCD group No.</li> </ul>
CM20	To record, replay and delete a message, assign the Digital Announcement Trunk access code, respectively.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access code</li> <li>(2) A100: Record</li></ul>
CM51	When transferring the call to a station or Attendant after the 1st interval time of UCD Delay Announcement, assign the destination.	<ul> <li>Y=17</li> <li>(1) 00-63: Tenant No.</li> <li>(2) Destination:     X-XXXXXXXXX: Station No.     E000 : Attendant Console</li> </ul>



To set an outside party as the UCD overflow destination after the delay announcement:

START	DESCRIPTION	DATA
CM17	Specify the pattern of message sent to each UCD group to send periodically.	<ul> <li>Y=A</li> <li>(1) X-XXXXXXXXXX: Pilot Station No. of UCD group</li> <li>(2) 0: To send periodically</li> </ul>
CM51	When transferring the call to an outside party after the 1st interval time of UCD Delay Announcement, assign the destination.	<ul> <li>Y=17</li> <li>(1) 00-63: Tenant No.</li> <li>(2) Destination:     X-XXXXXXXXX: Virtual Line Station No.     assigned by CM11</li> </ul>
CM11	Assign the Virtual Line station number to the required Virtual LEN.	<ul> <li>(1) 000-255: Virtual LEN [Series 3300 software or before] 0000-1019: Virtual LEN [Series 3400 software or later]</li> <li>(2) X-XXXXXXXXXX: Virtual Line Station No.</li> </ul>
CM12	Assign Service Restriction Class A to the Virtual Line station.	<ul> <li>Y=02</li> <li>X-XXXXXXXXX: Virtual Line Station No. assigned by CM11</li> <li>XXZZ</li> <li>XX: 00-15&lt;: Service Restriction Class A</li> </ul>
CM15	Allow Call Forwarding-All Calls-Outside in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=26</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>
CME6	Set Call Forwarding-All Calls-Outside to the Virtual Line station number assigned by CM11.	• Y=00 (1) X-XXXXXXXXX: Virtual Line Station No. assigned by CM11 (2) Destination No.: X-XXXX +



#### DATA

- Y=05
- (1) 00-63: Trunk Route No. NOTE
- (2) 1**<**: Release signal arrives **NOTE**
- Y=0
- (1) Incoming Trunk Route No. + Outgoing Trunk Route No. assigned by CM35 Y=05
- (2) 0: Allow

### **HUNT PAST NO ANSWER-UCD**

#### **PROGRAMMING**

Refer to CALL FORWARDING-NO ANSWER. Page 142

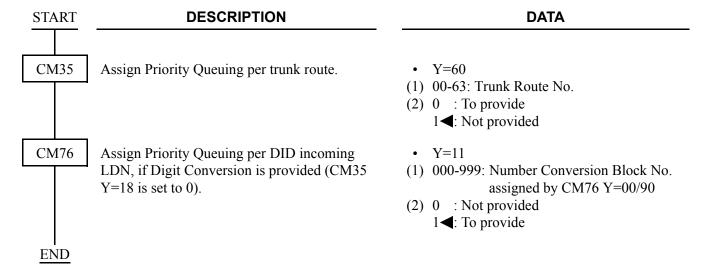
#### **IMMEDIATE OVERFLOW-UCD**

#### **PROGRAMMING**

Refer to CALL FORWARDING-BUSY LINE. Page 140

## **PRIORITY QUEUING-UCD**

#### **PROGRAMMING**



#### **QUEUE SIZE CONTROL-UCD**

#### **PROGRAMMING**

Refer to UNIFORM CALL DISTRIBUTION (UCD). Page 720

#### **SILENT MONITOR-UCD**

#### **PROGRAMMING**

To monitor a UCD call, with or without a warning tone:

**NOTE:** Monitoring telephone conversations may be illegal under certain circumstances and laws. Consult a legal advisor before implementing the monitoring of telephone conversations. Some federal and state laws require a party monitoring a telephone conversation to use beep-tones, to notify all parties to the telephone conversation, and/or obtain consent from all parties to the telephone conversation. Some of these laws provide strict penalties for illegal monitoring of telephone conversations.

START	DESCRIPTION	DATA
CM08	Specify the warning tone sent to connected stations when monitoring a station-to-station or station-to-trunk call.	<ul> <li>(1) 259</li> <li>(2) 0 : No tone</li> <li>1</li></ul>
	Specify whether the warning tone is sent to the outside party when monitoring a station-to-trunk call.	<ul> <li>(1) 076</li> <li>(2) 0 : To send</li> <li>1 ✓: Not sent</li> </ul>
CM12	Assign Service Restriction Class A for monitoring stations.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15◀: Service Restriction Class A</li> </ul>
CM15	Allow monitoring stations in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=103</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>
CM12	Assign Service Restriction Class A for monitored stations.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15◀: Service Restriction Class A</li> </ul>
CM15	Allow being monitored in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=104</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>

A	DESCRIPTION	DATA	
CM20	Assign the access code for monitor, if required.	<ul> <li>Y=0-3 Number Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A033: Monitor</li> </ul>	
CM90	Assign a monitoring function key to the required D <sup>term</sup> s.	<ul> <li>Y=00</li> <li>(1) My Line No. + + + Key No.</li> <li>(2) F0033: Monitoring</li> </ul>	
CM08	Specify the action of monitoring station after the hold/hooking key is pressed in the monitored station or the monitored station becomes idle.  [Series 3500 software required]	<ul> <li>(1) 560</li> <li>(2) 0 : Keep monitoring</li> <li>1    : Stop monitoring</li> </ul>	
CM48	When setting the second data of CM08>560 to 0 (keep monitoring), set the music for Internal Hold Tone that is sent to monitoring station.  NOTE 1: When PN-CP24-D/PN-CP26-B/PN-CP27-B/PN-CP31-D is used as MP card, the following tone sources are not available: "It's a small world (2nd data 05)", "Let it be (2nd data 07)", and "If you love me (2nd data 09)". "Minuet" will be set instead of those tone sources.  NOTE 2: This data setting is effective only for the legacy terminal. For D <sup>term</sup> IP, this data setting is not effective. D <sup>term</sup> IP uses the tone source in IP Adapter (Minuet).	• Y=3 (1) 01 (2) 00 : Nocturne 01 : Minuet 02 : Fur Elise 03 : The Maiden's Prayer 04 : When the saints go marching in 05 : It's a small world 06 : Spring (by four seasons) 07 : Let it be 08 : Ich bin ein Musikante (German folk song) 09 : If you love me 10 : Amaryllis (French folk song) NONE  Minuet	
END	Define the type of call to be provided with Hold Tone on the MP card.	<ul> <li>Y=0</li> <li>(1) 02: Internal Call</li> <li>(2) 1400: Hold Tone Source on MP card</li> </ul>	

#### HARDWARE REQUIRED

To provide the delay announcement for UCD: DAT card or MP card (built-in DAT)

To provide the LEDs on the D<sup>term</sup>: D<sup>term</sup> and DLC card

To provide the external Call Waiting Indicator: DK card or MP (built-in External Equipment Interface) External Indicator provided by the customer

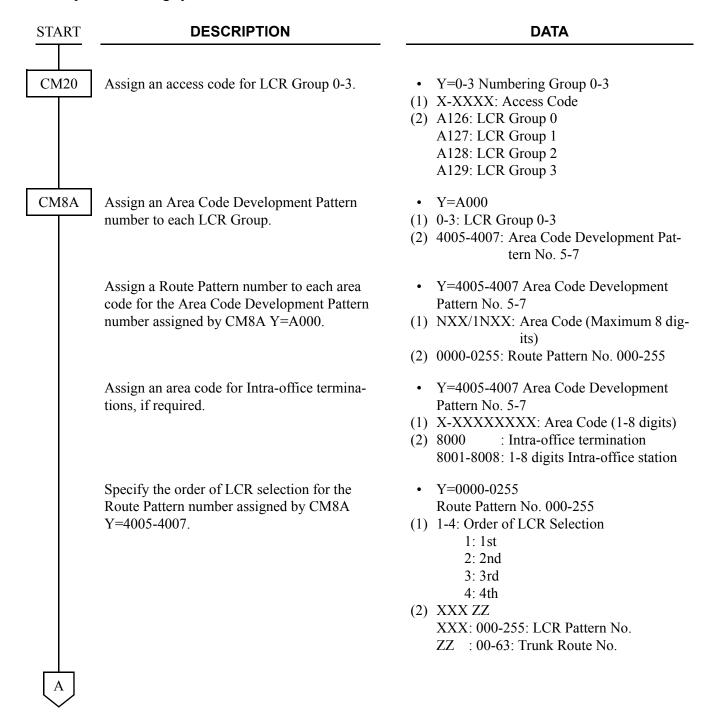
Requirement for External Indicator:

Control Method: Ground/Battery (Maximum 125 mA) Type: Visual and/or Audible type with volume control

# **UNIFORM NUMBERING PLAN (UNP)-VOICE AND DATA**

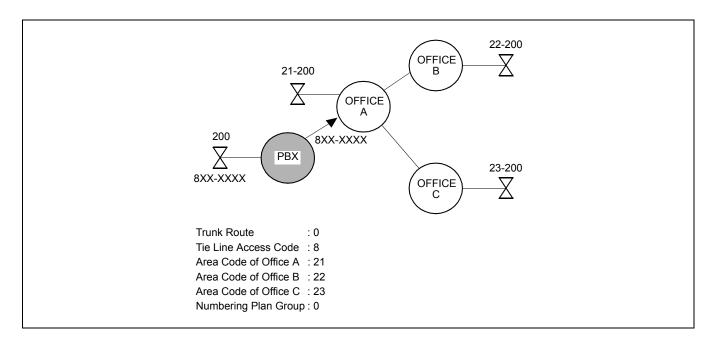
#### **PROGRAMMING**

For an open numbering system:



A	DESCRIPTION	DATA
CM8A	Assign the digits to be deleted from the calls to distant offices. To delete all digits of an area code:	<ul> <li>Y=5000-5255 LCR Pattern No. 000-255</li> <li>(1) 151: Deletion of all digits of area code (NXX, 1NXX) assigned by CM8A Y=4000-4007</li> <li>(2) 0: To delete</li> </ul>
	To delete the designated digit of an area code:	<ul> <li>Y=5000-5255</li> <li>(1) 153: Designation of digit to be deleted</li> <li>(2) 00 : No digits deleted</li> <li>01-10: First digit deleted-First 10 digits deleted</li> <li>CCC : No digits deleted</li> </ul>
	Assign the digits to be added to the digits sent to the distant office.	<ul> <li>Y=5000-5255</li> <li>(1) 100: Designation of Digit Addition Pattern No. No.</li> <li>(2) 9000-9255: Digit Addition Pattern No. 000-255 CCC : No digits added</li> <li>Y=9000-9255 Digit Addition Pattern No. 000-255</li> <li>(1) 0: Entry of digit code to be added</li> <li>(2) X-XX: Digits to be added (Maximum 32 digits)</li> <li>X=0-9, A (*), B (#), C (Fixed Pause), D (Programmable Pause)</li> </ul>
CM35	Assign the digits to be added to the required trunk routes when adding digits to those received from a distant office.	<ul> <li>Y=17</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 00-09: Add "0"-Add "9"</li> <li>10 : Add 2 digits per CM50 Y=00&gt;0</li> </ul>
	Assign the data for digit deletion to the required trunk routes for deleting the first one or two digits received from a distant office.	<ul> <li>Y=17</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 11: Delete first digit 12: Delete first 2 digits</li> </ul>
CM50 END	If two digits are to be added (CM35 Y=17, 2nd data=10), assign the digits to be added.	<ul> <li>Y=00</li> <li>(1) 0</li> <li>(2) XX: Digits to be added</li> </ul>

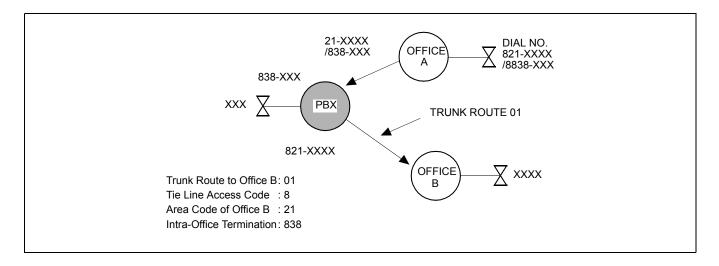
**Example 1:** When the PBX is an end office in a network employing an Open Numbering System, office A requires all the digits dialed on an incoming call from the PBX.



## Programming for **Example 1:**

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
20 Y=0	8	A126	Assignment of Access Code 8 of LCR Group 0.
8A Y=A000	0	4005	Assignment of Area Code Development Pattern No. 5.
8A Y=4005	21	0000	Assignment of Route Pattern
8A Y=4005	22	0000	No. 00 to Area Codes 21, 22, and 23.
8A Y=4005	23	0000	
8A Y=0000	1	00000	Assignment of the order of LCR selection (1st) for Route Pattern No. assigned by Y=4005.
8A Y=5000	100	9000	Assignment of Digit Addition Pattern No. 000.
8A Y=9000	0	8	Assignment of the digital code to be added for each area code.

**Example 2:** When the PBX is a Tandem Office in the network.



## Programming for **Example 2**:

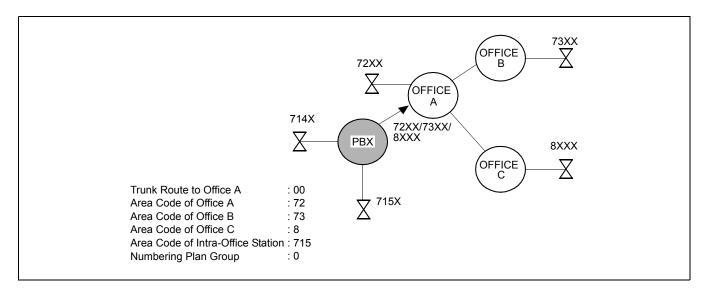
COMMAND CODE	1ST DATA	2ND DATA	REMARKS
20 Y=0	8	A126	Assignment of Access Code 8 of LCR Group 0.
8A Y=A000	0	4005	Assignment of Area Code Development Pattern No. 5.
8A Y=4005	21	0001	Assignment of Route Pattern No. 001 to Area Code 21 of office B.
8A Y=4005	838	8000	Assignment of Intra-Office Termination to the office code 838.
8A Y=0000	1	00001	Assignment of the order of LCR selection (1st) for Route Pattern No. assigned by Y=4005.

# • For Closed Numbering System

START	DESCRIPTION	DATA
CM20	Assign an access code for LCR Group 3.	<ul> <li>Y=0-3 Numbering Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A129: LCR Group 3</li> </ul>
CM8A	Assign an Area Code Development Pattern number to LCR Group 3.	<ul> <li>Y=A000</li> <li>(1) 3: LCR Group 3</li> <li>(2) 4005-4007: Area Code Development Pattern No. 5-7</li> </ul>
	Assign a Route Pattern number to each area code for the Area Code Development Pattern number assigned by CM8A Y=A000.	<ul> <li>Y=4005-4007 Area Code Development Pattern No. 5-7</li> <li>(1) NXX/1NXX: Area Code, Maximum 8 digits</li> <li>(2) 0000-0255: Route Pattern No. 000-255</li> </ul>
	Assign an area code (station number) for Intra-Office Terminations, if required.	<ul> <li>Y=4005-4007 Area Code Development Pattern No. 5-7</li> <li>(1) X-XXXXXXXXX: Area Code (Maximum 8 digits)</li> <li>(2) 8001-8008: 1-8 digits Intra-office station</li> </ul>
	Specify the order of LCR selection for the Route Pattern number assigned by CM8A Y=4005-4007.	<ul> <li>Y=0000-0255 Route Pattern No. 000-255</li> <li>(1) 1-4: Order of LCR Selection <ul> <li>1: 1st</li> <li>2: 2nd</li> <li>3: 3rd</li> <li>4: 4th</li> </ul> </li> <li>(2) XXX ZZ <ul> <li>XXX ZZ</li> <li>XXX: 000-255: LCR Pattern No.</li> <li>ZZ : 00-63: Trunk Route No.</li> </ul> </li> </ul>
A	Assign the digits to be deleted when deleting digits of an area code sent to a distant office. To delete all digits of an area code:	<ul> <li>Y=5000-5255 LCR Pattern No. 000-255</li> <li>(1) 151: Deletion of all digits of area code (NXX, 1NXX) assigned by CM8A Y=4005-4007</li> <li>(2) 0: To delete</li> </ul>

A	DESCRIPTION	DATA
CM8A	To delete the designated digits of an area code:	<ul> <li>Y=5000-5255</li> <li>(1) 153: Designation of digit to be deleted</li> <li>(2) 00 : No digits deleted</li> <li>01-10: First digit deleted-First 10 digits deleted</li> <li>CCC : No digits deleted</li> </ul>
	Assign the digits to be added when adding digits to those sent to a distant office.	<ul> <li>Y=5000-5255</li> <li>(1) 100: Designation of digit Addition Pattern No. No.</li> <li>(2) 9000-9255: Digit Addition Pattern No. 000-255 CCC : No digits added</li> <li>Y=9000-9255 Digit Addition Pattern No.</li> </ul>
		000-255 (1) 0 (2) X-XX: Digits to be added (Maximum 32 digits) X=0-9, A (*), B (#), C (Fixed Pause), D (Programmable Pause)
CM35	Assign the digit to be added to the required trunk routes when adding digits to those received from a distant office.	<ul> <li>Y=17</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 00-09: Add "0"-Add "9"</li> <li>10 : Add 2 digits per CM50 Y=00&gt;0</li> </ul>
	Assign the data for digit deletion to required trunk routes for deleting the first one or two digits received from a distant office.	<ul> <li>Y=17</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 11: Delete first digit</li> <li>12: Delete first 2 digits</li> </ul>
CM50 END	If two digit addition is required (CM35 Y=17, 2nd data=10), assign the digits to be added.	<ul> <li>Y=00</li> <li>(1) 0</li> <li>(2) XX: Digits to be added</li> </ul>

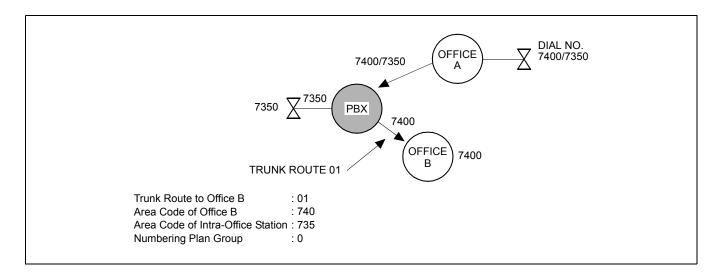
**Example 1:** When the PBX is an end office in a network employing a Closed Numbering System.



## Programming for **Example 1:**

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
20 Y=0	7	A129	Assignment of Access Code (7, 8) to LCR Group
20 Y=0	8	A129	3.
8A Y=A000	0	4005	Assignment of Area Code Development Pattern
			No. 5.
8A Y=4005	72	0000	Assignment of Route Pattern No. 000 to Area
8A Y=4005	73	0000	Code (72, 73, 8).
8A Y=4005	8	0000	
8A Y=4005	715	8004	Assignment of the 4-digit Intra-Office Station to
			the Area Code 715.
8A Y=0000	1	00000	Assignment of the order of LCR selection (1st)
			for Route Pattern No. assigned by CM8A
			Y=4005.

**Example 2:** When the PBX is a Tandem Office in the network.

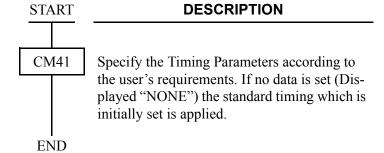


## Programming for **Example 2:**

COMMAND CODE	1ST DATA	2ND DATA	REMARKS
20 Y=0	7	A129	Assignment of Access Code 7 of LCR Group 3.
8A Y=A000	3	4005	Assignment of Area Code Development Pattern No. 5.
8A Y=4005	740	0001	Assignment of Route Pattern No. 001 to Area Code 740 of Office B.
8A Y=4005	735	8004	Assignment of the 4-digit Intra-Office Station to the Area Code 735.
8A Y=0000	1	00001	Assignment of the order of LCR selection (1st) for Route Pattern No. assigned by CM8A Y=4005.

# **VARIABLE TIMING PARAMETERS**

### **PROGRAMMING**

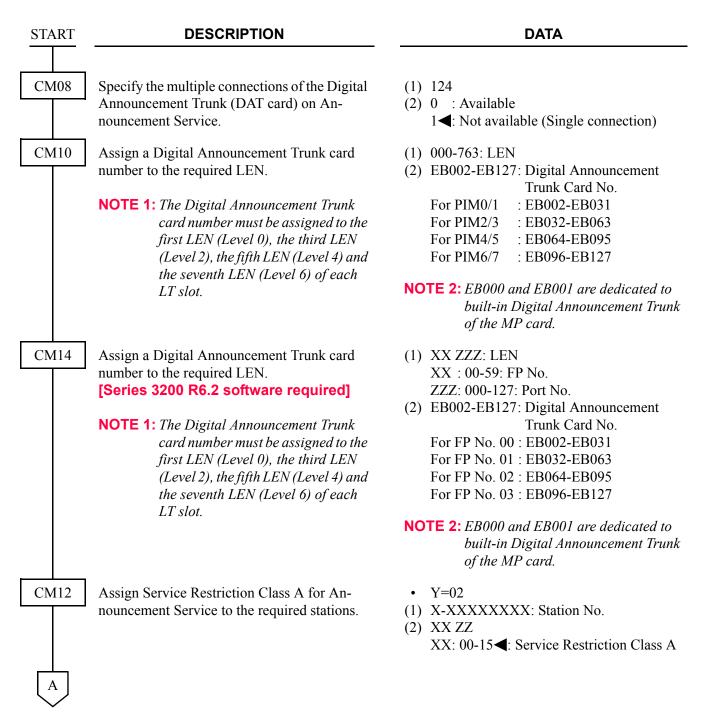


- DATA
- Y=0-3
- (1) XX: See the Command Manual.
- (2) XX: See the Command Manual.

## **VOICE GUIDE**

#### **PROGRAMMING**

To provide the message that is sent when a station goes off hook while Message Waiting/Call Forwarding-All Calls/Do Not Disturb service is set to the station:



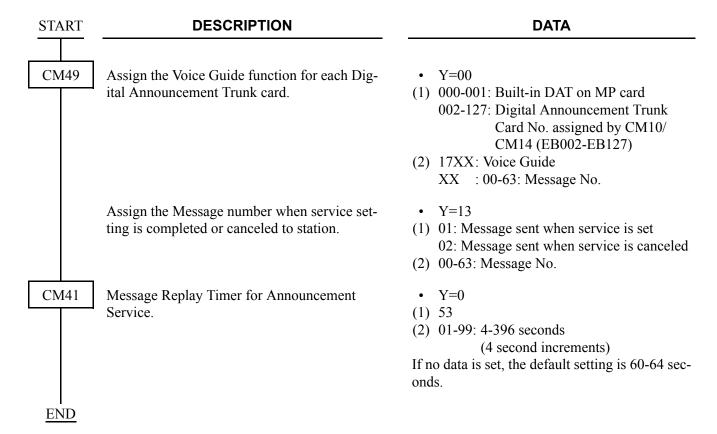
A	DESCRIPTION	DATA
CM15	Allow Announcement Service in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=34 Group 0</li> <li>Y=35 Group 1</li> <li>Y=36 Group 2</li> <li>Y=37 Group 3</li> <li>Y=38 Group 4</li> <li>Y=39 Recording for Announcement Service (Group 0-4)</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>
CM20	Assign access codes for Announcement Service.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A103: Record (Group 0-4)</li></ul>
CM48	Specify the dial tone, which is sent when a station goes off hook while the service is set for the station, as Special Dial Tone.	<ul> <li>Y=2</li> <li>(1) 12: Dial Tone on setting Message Waiting</li> <li>13: Dial Tone on setting Call Forwarding-All Calls</li> <li>14: Dial Tone on setting Do Not Disturb</li> <li>(2) 0: Special Dial Tone</li> </ul>
CM15	Allow Voice Guide set by CM48 Y=2>12, 13, 14 in Service Restriction Class A assigned by CM12.	<ul> <li>Y=116</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12</li> <li>(2) 1◀: Allow</li> </ul>
CM49	Assign the Voice Guide function for each Digital Announcement Trunk card.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. assigned by CM10/CM14 (EB002-EB127)</li> <li>(2) 17XX: Voice Guide</li> </ul>
	Assign the Message sent when the station goes off hook.	<ul> <li>XX : 00-63: Message No.</li> <li>Y=13</li> <li>(1) 00: Message sent when Message Waiting is set</li> <li>03: Message sent when Call Forwarding-All Calls/Do Not Disturb is set</li> <li>(2) 00-63: Message No.</li> </ul>
END		· · ·

**NOTE 1:** While both Message Waiting and Call Forwarding-All Calls/Do Not Disturb Service are set to the station, the message assigned by CM49 Y=13>00 is sent.

**NOTE 2:** While Message Reminder (from station/attendant) Service is set to the station, the message assigned by CM49 Y=13>00 is sent.

**NOTE 3:** While Split Call Forwarding-All Calls Service is set to the station, the message assigned by  $CM49 \ Y=13>03$  is sent.

To provide the Message which is sent when the service feature setting to the station is completed or canceled:



#### HARDWARE REQUIRED

DAT card or MP card (Built-in DAT)

# **VOICE MAIL INTEGRATION**

#### **PROGRAMMING**

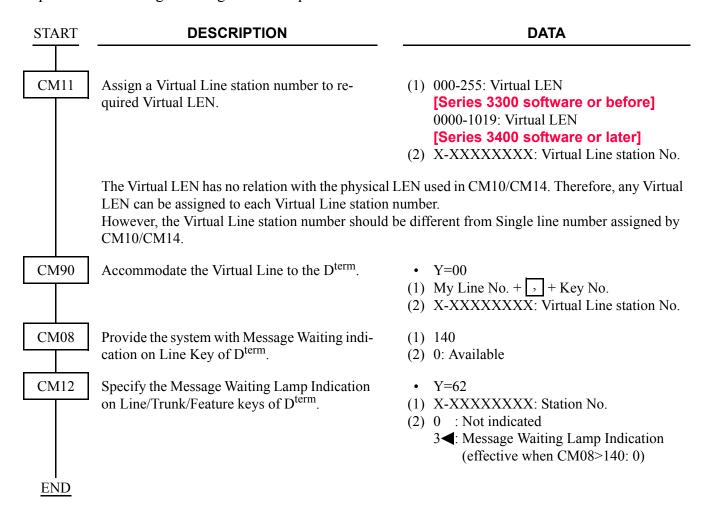
In addition to the programming of CALL FORWARDING-ALL CALLS/BUSY LINE/NO ANSWER, do the following programming.

START	DESCRIPTION	DATA
CM08	Specify whether Ringing Transfer to an Attendant via VMS is available.	<ul> <li>(1) 063</li> <li>(2) 0 : Available</li> <li>1 ◀: Not available</li> </ul>
	Specify the sending of the Mail Box number to the VMS when the VMS is recalled after transferring a call to an unanswered station.	<ul> <li>(1) 333</li> <li>(2) 0 : To send</li> <li>1 ■: Not sent</li> </ul>
CM13	Provide Message Waiting service for a station with MW lamp.	<ul><li>Y=03</li><li>(1) X-XXXXXXXXX: Station No.</li><li>(2) 0: To provide</li></ul>
	Provide VMS service for a station port interfaced with the VMS (VMS station).	<ul><li>Y=10</li><li>(1) X-XXXXXXXXX: Station No.</li><li>(2) 0: To provide</li></ul>
	Provide Message Waiting service for a VMS station port.	<ul><li>Y=13</li><li>(1) X-XXXXXXXXXX Station No.</li><li>(2) 0: To provide</li></ul>
CM12	Assign Service Restriction Class A for Message Waiting to a station with a MW lamp and a VMS station port.	<ul> <li>Y=02</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15◄: Service Restriction Class A</li> </ul>
CM15	Allow Message Waiting in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=24 Station with MW lamp</li> <li>Y=40 VMS Station</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1◀: Allow</li> </ul>

A	DESCRIPTION	DATA
CM20	Assign the access code for MW lamp set/reset from a VMS station port.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access code</li> <li>(2) A040: Set A041: Reset</li> </ul>
	Assign the access code to retrieve a message from the VMS and search Message Reminder/ Message Waiting.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access code</li> <li>(2) A146: Search A147: Retrieve</li> </ul>
CM50	Assign the access code to be sent out to a VMS after/before a Mail Box number, if required.  NOTE 1: "C" or "D" should not be assigned as the first digit of an access code, to insert prepause timing. Prepause timing is assigned by CM41  Y=0>44.  NOTE 2: If "C" is inserted in the access code, it can be used as a pause (1.5 seconds). To provide a programmable pause, insert "D" instead of "C" (Programmable Pause: CM41  Y=0>38).  Specify the prepause timing, DTMF signal width, and Inter-digital pause for VMS.	<ul> <li>Y=00</li> <li>(1) 3: Access Code to be sent out before a Mail Box No. NOTE 1</li> <li>4: Access Code to be sent out after a Mail Box No.</li> <li>(2) XX-XXXX: Access code to be sent out to a VMS</li> <li>X: 0-9, A (*), B (#), C/D (Pause) NOTE 2</li> <li>NONE ▼: Not sent out</li> <li>Y=0</li> <li>(1) 44: Prepause Timing</li> <li>(2) 00-12, 13: 0-12, 0.5 seconds</li> </ul>
	Specify the DTMF signal width for VMS.	If no data is set, the default setting is 1 second.  • Y=0 (1) 48 (2) 01: 64 ms. 02: 128 ms. If no data is set, the default setting is 128 ms.
В	Specify the DTMF inter-digital pause for VMS.	• Y=0 (1) 49 (2) 01: 32 ms. 05: 120 ms 02: 64 ms. 06: 160 ms. 03: 80 ms. 07: 200 ms. 04: 100 ms. 08: 240 ms. If no data is set, the default setting is 160 ms.

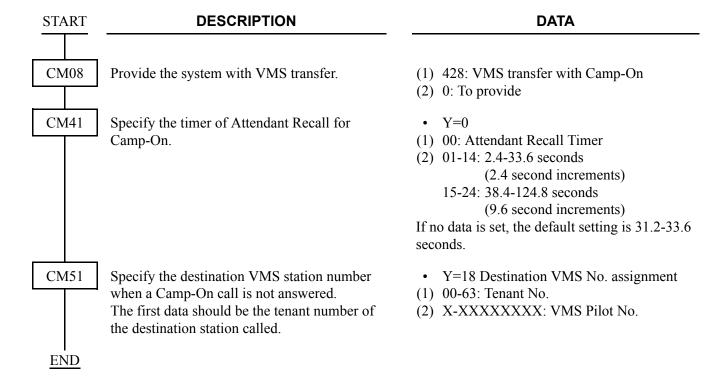
В	DESCRIPTION	DATA
CM77	Assign VMS display, if required.	<ul> <li>Y=0 By Character Code</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) 564D53: VMS character code</li> </ul>
		<ul> <li>Y=1 By Character</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) VMS (Character)</li> </ul>
CM51	Assign the VMS station as the destination of a call from a station which is set Message.	<ul> <li>Y=15</li> <li>(1) 00-63: Tenant No.</li> <li>(2) X-XXXXXXXXXX VMS Station No.</li> </ul>
CM90	Assign the MW lamp on a D <sup>term</sup> , if required.	• Y=00 (1) My Line No. + + Key No. (2) F1005
	To access the VMS from DESKCON, assign Out Pulse (DTMF signal) -short/long key.	<ul> <li>Y=00</li> <li>(1) ATTCON No. (E000-E007) +  + Key No.</li> <li>(2) F6112: Out Pulse (DTMF signal)-short F6113: Out Pulse (DTMF signal)-long</li> </ul>
CM41	When Out Pulse (DTMF signal)-long is designated by CM90, assign the DTMF signal width.	<ul> <li>Y=0</li> <li>(1) 14: DTMF signal width</li> <li>(2) 01-50: 64-3200 ms.</li> <li>(64 ms. increments)</li> </ul>
	NOTE: When Out Pulse (DTMF signal)-short is designated by CM90, DTMF signal width is set to 128 ms. (Fixed).	If no data is set, default setting is 512 ms.
	To allow Voice Mail Private Password:	
CM65	Assign Password Privacy for the Tenant number of the VMS ports.	<ul> <li>Y=30</li> <li>(1) 00-63: Tenant No. of VMS ports</li> <li>(2) 0 : Allow</li> </ul>
	<b>NOTE:</b> This is effective for ports assigned as VMS ports in CM13 Y=10.	1◀: Not allowed
I <u>END</u>		

To provide the Message Waiting Indication per line when a D<sup>term</sup> accommodates multiline:



## **VOICE MAIL TRANSFER**

To transfer a call from an Attendant to a VMS, if Camp-On is set to the transferred destination, and that is not answered by predetermined timing:



To transfer a call from an Attendant or a station to a VMS by dialing of a Single Digit Feature Access Code "9" or by pushing a function key, while hearing RBT or BT from the destination station:

START	DESCRIPTION	DATA
CM08	Specify whether dialing of the Single Digit Feature Access Code is available or not while hearing RBT.	<ul> <li>(1) 156: Single Digit Feature Access Code while hearing RBT</li> <li>(2) 0 : Available 1 ✓: Not available</li> </ul>
	Specify whether dialing of the Single Digit Feature Access Code is available or not while hearing BT.	<ul> <li>(1) 208: Single Digit Feature Access Code while hearing BT</li> <li>(2) 0 : Available 1   ■: Not available</li> </ul>
CM51	Specify the destination VMS station number by transferring with Single Digit Feature Access Code or a function key.  The first data should be the tenant number of the destination station called.	<ul> <li>Y=18 Destination VMS No. assignment</li> <li>(1) 00-63: Tenant No.</li> <li>(2) X-XXXXXXXXXX: VMS Pilot No.</li> </ul>
CM90	To the DESKCON or the D <sup>term</sup> , assign a function key to transfer a call to a VMS while hearing RBT or BT, if required.	<ul> <li>Y=00</li> <li>(1) ATTCON No. (E000-E007) +  + Key No.</li> <li>(2) F6123: Transferring to VMS</li> <li>(1) My Line No. +  + Key No.</li> <li>(2) F5001: Transferring to VMS</li> </ul>

To provide a D<sup>term</sup> with One Touch keys to send Called Number + DTMF Signal after the called party answered, for VMS operations (such as "VMS Extension number + Mail Box number or Password"), refer to the programming (2), (4) in the "STATION SPEED DIALING". Page 671, Page 673

#### HARDWARE REQUIRED

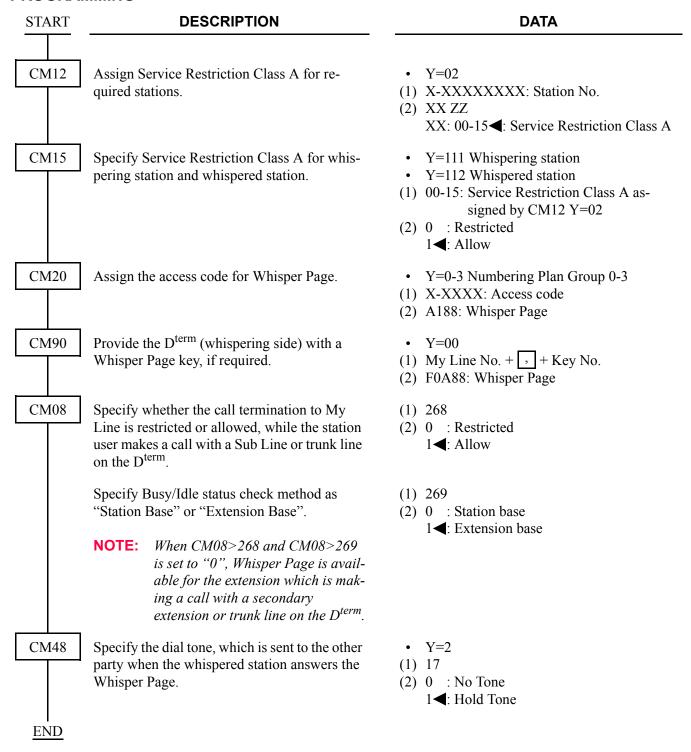
For interfacing to a VMS with Analog Dialogic Board: LC card For interfacing to a VMS with Digital Dialogic Board: DLC card

For providing the Single-Line Telephone with a Message Waiting Lamp: 4LCD/8LC card

For providing the D<sup>term</sup>: DLC card

## WHISPER PAGE

#### **PROGRAMMING**



# **CHAPTER 2**

# **HOTEL FEATURES**

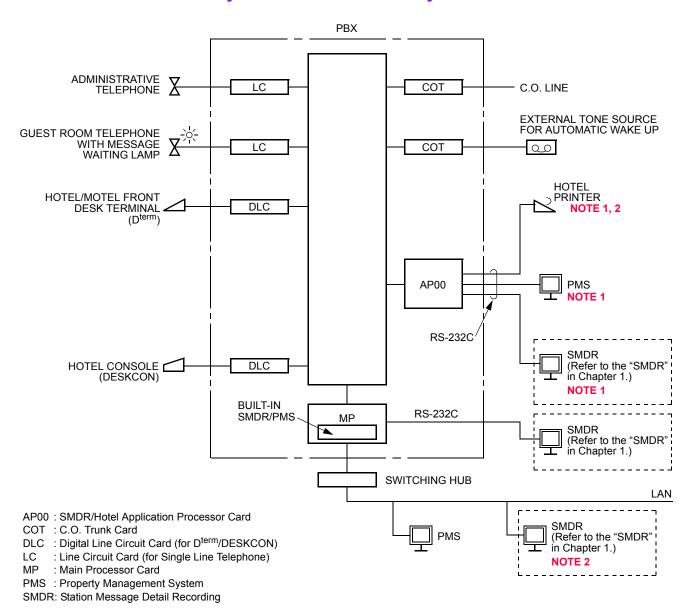
This chapter explains the system outline, system capacity, system specifications, system programming and hardware requirements for the Hotel System.

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## **HOTEL SYSTEM OUTLINE**

The figure below shows the system outline of hotel system.

## **System Outline of Hotel System**



**NOTE 1:** PMS, SMDR 1400 IMS Format and Hotel Printer are not available for AP00-B/AP00-D card with MRCA program.

**NOTE 2:** SMDR 1400 IMS Format and Hotel Printer are not available for Built-in SMDR/Built-in PMS.

### **Application Processor/Main Processor**

• PMS with AP00 on RS-232C

The Application Processor (AP) manages guest or administration room status and stores call information on each guest or administrative station. The AP also provides RS-232C interface ports for a Property Management System (PMS) terminal, a Station Message Detail Recording (SMDR) terminal and a Hotel Printer.

• MP built-in PMS on IP

## [Series 3400 software required]

The Main Processor (MP) manages guest or administration room status and stores call information on each guest or administrative station. The MP also provides a LAN interface port for a Property Management System (PMS) terminal or a Station Message Detail Recording (SMDR) terminal.

### **Hotel Console**

The DESKCON is programmed as a Hotel Console. The Hotel Console can access Room Cutoff (individual and group), Automatic Wake Up, Message Waiting, or Do Not Disturb (individual and group) with the function keys; in addition to the attendant features and functions.

#### **Hotel/Motel Front Desk Terminal**

The D<sup>term</sup> can be programmed to function as a Hotel/Motel Front Desk Terminal. This allows setting and canceling of the following hotel features:

- Automatic Wake Up
- Check In/Check Out NOTE
- · Do Not Disturb
- Do Not Disturb-Override
- Message Waiting
- Room Cutoff
- Room Status NOTE
- Hotel/Motel Toll Restriction Change-Guest Station

**NOTE:** When MP built-in PMS on IP is provided, you can set and cancel these hotel features only from PMS.

- · Check In/Check Out
- Room Status

## **Property Management System (PMS)**

The PBX provides a data link interface to the customer supplied Property Management System (PMS) accommodating hotel management features. The PMS can be any computer connected to the PBX via a RS-232C interface or a LAN interface. It communicates with the PBX using the specified protocols.

The data link interface allows the PMS to accommodate both front- and back-office hotel management features, by providing a means of communication between the PMS and the PBX for features such as Check In/Check Out, Message Waiting, Station Message Detail data, and control functions such as Do Not Disturb and Room Cutoff.

The PMS can communicate with the PBX to obtain the following information:

#### (1) Maid Status

This information can be entered from either a guest room telephone or Front Desk Terminal, and will automatically be transmitted to the PMS for data update.

## (2) Message Waiting Lamp Status Change

This information can be entered from the Attendant Console or Front Desk Terminal. It is then automatically transmitted to the PMS for data update. If the automatic MW lamp off feature is activated, MW data is cleared and status is sent to PMS.

#### (3) Station Message Detail Data

This information is transmitted to the PMS after completion of each local and toll call.

### (4) Wake Up Service

This information can be entered from the Attendant Console, Front Desk Terminal or guest room station, and will be automatically transmitted to the PMS for data update.

#### (5) Do Not Disturb/Room Cutoff

This information can be entered from the Attendant Console or Front Desk Terminal, and will be transmitted to the PMS by request from the PMS.

#### (6) Check In/Check Out

When PMS with AP00 on RS-232C is provided, this information can be entered from the Attendant Console or Front Desk Terminal, and will be automatically transmitted to the PMS for status update.

**NOTE:** When MP built-in PMS on IP is provided, this information can be entered only from the PMS and will be transmitted to the PBX for status update.

- (7) Room data image messages indicating requests for data base updates and data base images.
- (8) Room change, room swap and room copy for data update.

**NOTE:** Room copy is available only when MP built-in PMS on IP is provided.

- (9) Room occupancy change and room data change for data update.
- (10) Routine activity checks between the PMS and the PBX.
- (11) Hotel/Motel DID Number Allocation to Guest Station Hotel/Motel DID Number Allocation to Guest Station is set/canceled from PMS. This information is sent to PMS when the DID number is set/canceled.

**NOTE:** Hotel/Motel DID Number Allocation to Guest Station is available only when MP built-in PMS on IP is provided.

The PMS can send the following information to the PBX.

- (1) Maid status
- (2) MW lamp status changes
- (3) Telephone restriction status changes
- (4) Check In/Out messages
- (5) Room data image inquiry
- (6) Wake Up status changes
- (7) Room change, room swap and room copy **NOTE**
- (8) Room occupancy and room data change
- (9) Status inquiry for routine activity checks
- (10) Guest Name and Guest Room Information to be displayed on Administrative Station, Front Desk Terminal and Hotel Console **NOTE**
- (11) Hotel/Motel DID Number Allocation to Guest Station NOTE

**NOTE:** Room copy, Guest Room Information display and DID Number Allocation to Guest station are available only when MP built-in PMS on IP is provided.

## Station Message Detail Recording (SMDR)

The Station Message Detail Recording (SMDR) sends out the outgoing/incoming C.O. call information to an external SMDR terminal (Personal Computer). The SMDR is usually used in conjunction with the PMS and used for the following purposes.

- Management of guest/administrative station call
   The PMS does not manage the guest/administrative station call.
- Backup of guest/administrative station call for a PMS failure
- Management of either guest or administrative station call
   For example, the SMDR manages an administrative station call, and the PMS manages a guest station call

#### **Hotel Printer**

When PMS with AP00 on RS-232C is provided, the various system messages and the guest room status can be obtained through a locally provided Hotel Printer. The following information is automatically printed out as a system message:

- Wake Up attempts whether successful or not.
- Remaining messages for the station which is set to Check Out.
- Codes and quantities of the goods requested from a guest room by Direct Data Entry.

If the print out function key is provided on the Front Desk Terminal, the status of the following features are printed out when the feature is set or reset and Room Status print out is activated:

- Automatic Wake Up
- · Check In/Check Out
- · Do Not Disturb
- Message Waiting
- Room Cutoff
- Room Status-individual guest station/all guest stations

# **HOTEL SYSTEM CAPACITY**

ITEM	CAPACITY
Guest/Administrative Station	512 [Series 3300 software or before] 1020 [Series 3400 software or later]
Front Desk Terminal	8
Hotel Console	8
Hotel Printer	2
I/O port for PMS/SMDR/Hotel Printer	2
I/O port for SMDR/PMS via LAN	1
I/O port for Hotel Printer	2

# **HOTEL SYSTEM SPECIFICATIONS**

• PMS/SMDR Interface via RS-232C/Hotel Printer Interface

ITEM	SPECIFICATIONS			
ITEM	PMS/SMDR INTERFACE	HOTEL PRINTER INTERFACE		
Physical Interface	RS-232C	RS-232C		
Synchronization	Asynchronous	Asynchronous		
Protocol	IMS Procedure	-		
Transmission Speed	1200/2400/4800/9600 bps (for PN-AP00-B with AP00 program) NOTE 300/1200/2400/4800/9600/19200 bps (for PN-AP00-B/PN-AP00-D with MRCA program)	1200/2400/4800 bps		
I/O port	No. 0-3 port of AP00-B/AP00-D card	No. 0/3 port of AP00-B/AP00-D card		

**NOTE:** For the port 1 and port 3 of AP00-B card with AP00 program, data speed cannot be set to 9600 bps.

## • PMS/SMDR Interface via LAN

ITEM	SPECIFICATIONS		
Physical layer	Ethernet		
Connection layer	The Ethernet packet format complies with the DIX standard.		
TCP/IP protocol	ARP, IP, ICMP, UDP, TCP		
Socket interface	Complies with 4.3 BSD socket interface		
Transport protocol	TCP stream type protocol		
Application port number	SMDR: 60010 (fixed)		
	PMS : 60050 (fixed)		
Number of connection	1		
Client/Server	Client: SMDR/PMS terminal		
	Server: PBX		
Transmission code	7-bit ASCII code		
Quasi-normal restriction condition	1. When connection is closed		
	2. Status monitoring text		

**NOTE:** The MP card in Main site communicates with the SMDR/PMS terminal. Therefore, in the communication settings in SMDR/PMS terminal side, set the IP address to be connected to the address specified by office data (CM0B Y=00>00 or CM0B Y=02>03), and application port number shown in the above table.

# **HOTEL FEATURE LIST**

## **Hotel Feature List**

x: Applicable -: Not applicable

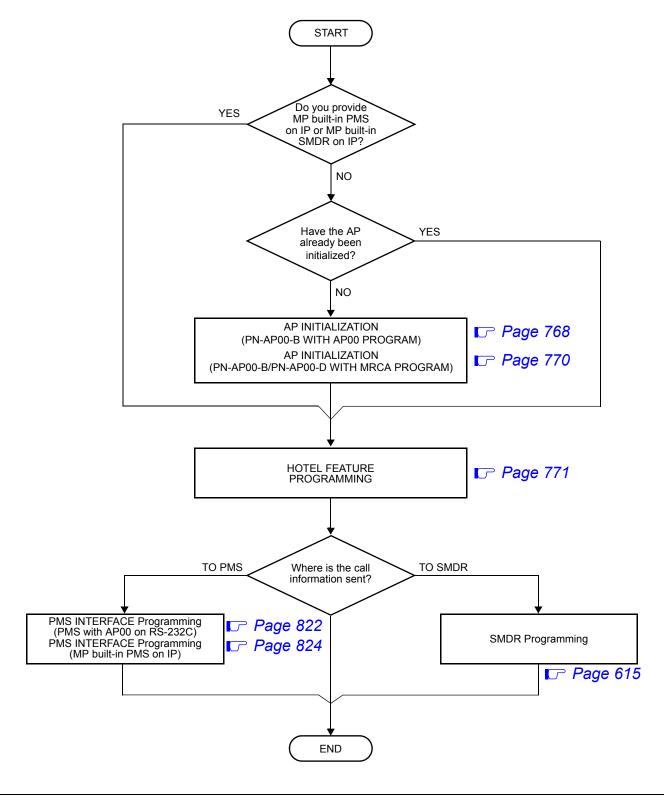
	APPLICATION				
FEATURE NAME	GUEST	ADMINISTRATIVE	FRONT DESK TERMINAL	HOTEL CONSOLE	PMS
Automatic Wake Up	×	×	×	×	×
Check In/Check Out NOTE 1	_	_	×	_	×
Direct Data Entry	×	_	_	_	×
Do Not Disturb-Hotel/Motel	×	×	×	×	×
Do Not Disturb-System <b>NOTE 2</b>	_	_	×	×	_
Hotel/Motel Attendant Console	_	_	_	×	_
Hotel/Motel DID Number Allocation to Guest Station [Series 3900 software required]	×	_	_	ı	×
Hotel/Motel Front Desk Instrument	-	_	×	-	_
Hotel/Motel Toll Restriction Change-Guest Station [Series 3900 software required]	×	_	×	×	_
House Phone	×	×	×	×	_
Maid Status	×	×	×	_	×
Message Registration	_	_	×	_	×
Message Waiting NOTE 2	_	×	×	×	×
Property Management System Interface	_	_	_	-	_
Room Cutoff NOTE 2	_	_	×	×	×
Room Status NOTE 2	_	_	×	×	_
Single Digit Dialing	×	×	×	×	_

- NOTE 1: For MP built-in PMS on IP, only PMS can set/cancel this feature to a guest station.

  For PMS with AP00 on RS-232C, Front Desk Terminal, Hotel Console or administrative station can set/cancel this feature to a guest station.
- **NOTE 2:** Front Desk Terminal, Hotel Console or administrative station can set/cancel this feature to a guest station.

## HOTEL SYSTEM PROGRAMMING SUMMARY

## **Programming Summary for Hotel System**



## **HOTEL SYSTEM PROGRAMMING**

#### **PRECAUTION**

Before programming the system data for the Hotel feature, confirm that the system is under the following status.

- The system is under On-Line mode. ("RUN" lamp is flashing on the MP card.)
- The AP00 card is mounted in the correct location. (for SMDR with AP00, PMS with AP00, or Hotel Printer)
- All the system data pertaining to the station, trunks, and service features have already been programmed.

#### STATION NUMBER DATA LOADING

The AP00 stores the station number data loaded from the MP. When station numbers have been added, deleted or changed by CM10/CM14, the station number data must be reloaded to the AP00 by the following procedure.

- (1) Flip the MB switch of the AP00 to UP position.
- (2) Return the MB switch to DOWN position.
- (3) The "\*\*\* AP00 START \*\*\*\*" message is printed if a printer provided.
- (4) The "SORT COMPLETE" message is printed when the station number has been sent to the AP00.

#### **DIGITS OF STATION NUMBER**

The maximum digits of the station number is remitted according to the interface between the system and the PMS as follows.

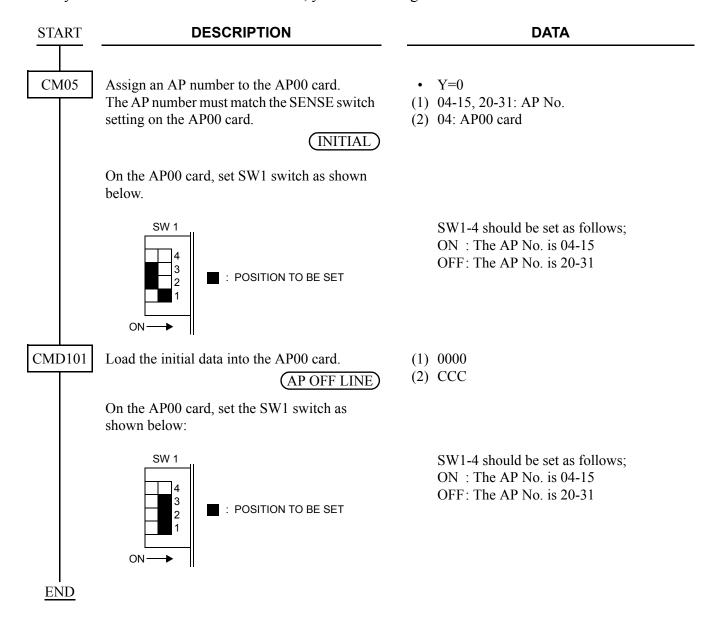
- PMS with AP00 on RS-232C: maximum 4 digits
- MP built-in PMS on IP: maximum 6 digits [Series 3400 software is required]

# AP INITIALIZATION (PN-AP00-B WITH AP00 PROGRAM)

This section explains the data assignment to make the AP active.

You can skip the data assignment explained on this section, if one of the following AP related features has been activated; Station Message Detail Recording (SMDR), Message Center Interface (MCI), Property Management System (PMS), or Hotel Printer. You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.

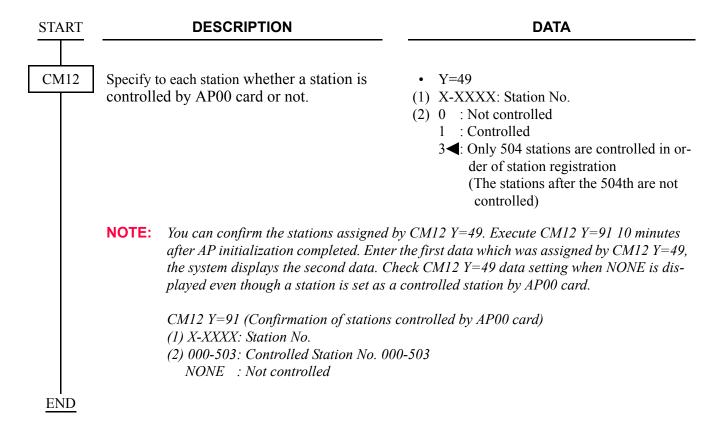
When you install the AP00 for the first time, you should assign the data shown below.



#### **AP CONTROLLED STATIONS**

#### [Series 3400 software required]

In Billing/Hotel features using the AP00 card (PN-AP00-B with AP00 program), a maximum of 504 stations can be controlled by the AP00 card. When 505 or more stations are accommodated in a system, you have to specify to each station whether a station is controlled by AP00 card or not.



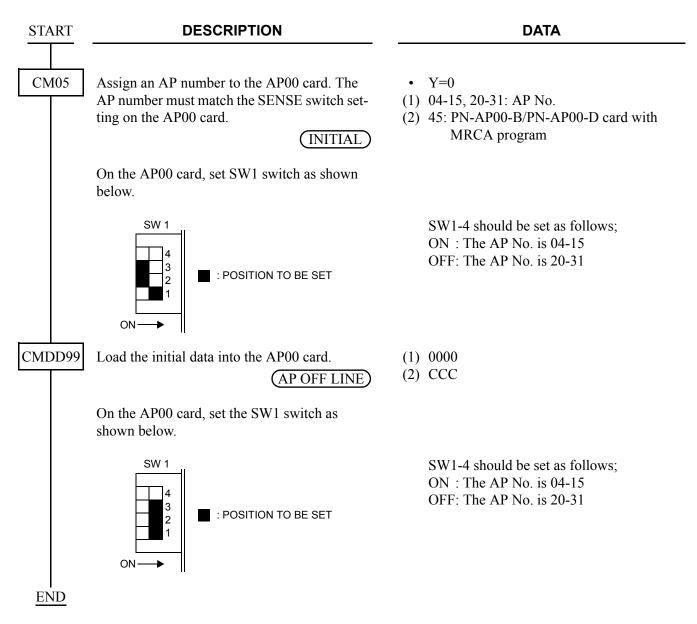
## AP INITIALIZATION (PN-AP00-B/PN-AP00-D WITH MRCA PROGRAM)

## [Series 3300 software required]

This section explains the data assignment to make the AP active.

You can skip the data assignment explained on this section, if one of the following AP related features has been activated; Station Message Detail Recording (SMDR) with NEAX 2400 IMS Format, Message Center Interface (MCI) or Do Not Disturb group set/cancel at specified timing in advance. You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.

When you install the AP00 the first time, you should assign the data shown below.



#### **HOTEL FEATURE PROGRAMMING**

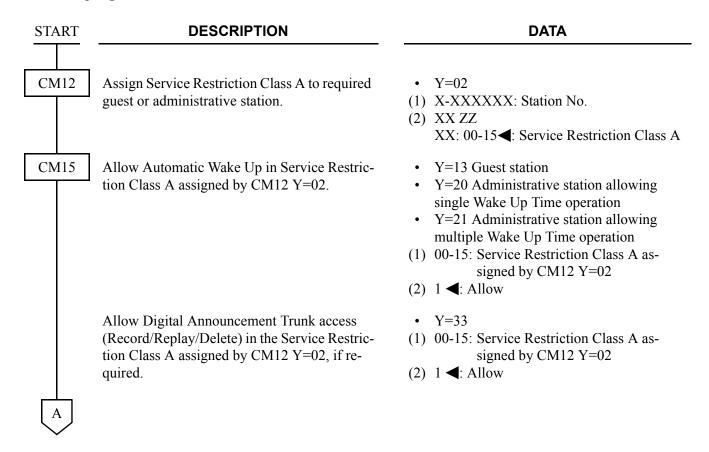
- AUTOMATIC WAKE UP Page 772
- CHECK IN/CHECK OUT **□** Page 780
- DIRECT DATA ENTRY Page 786
- DO NOT DISTURB-HOTEL/MOTEL
   □ Page 788
- HOTEL/MOTEL ATTENDANT CONSOLE **I** Page 798
- HOTEL/MOTEL DID NUMBER ALLOCATION TO GUEST STATION **□** Page 799
- HOTEL/MOTEL TOLL RESTRICTION CHANGE-GUEST STATION **□** Page 807
- HOUSE PHONE Page 809
- MAID STATUS **□ Page 810**
- MESSAGE REGISTRATION **I** Page 815
- MESSAGE WAITING Page 818
- PROPERTY MANAGEMENT SYSTEM INTERFACE Page 821
- ROOM CUTOFF Page 832
- ROOM STATUS Page 837
- SINGLE DIGIT DIALING Page 838

#### **AUTOMATIC WAKE UP**

#### **PROGRAMMING**

To provide Automatic Wake Up from a guest station or administrative station, or Front Desk Terminal, or PMS:

**NOTE:** PMS with AP00 on RS-232C is not available when using PN-AP00-B/PN-AP00-D with MRCA program.



A	DESCRIPTION	DATA
CM20	Assign the access code for Wake Up call set or reset.  NOTE: This data assignment is not required when Wake Up is set by PMS.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>X-XXXX: Access Code</li> <li>A024: Wake Up set from guest         A025: Wake Up cancel from guest         A027: Wake Up set from administrative         station with Single Wake Up Time         operation NOTE     </li> <li>A028: Wake Up set from administrative         station with Multiple Wake Up Time         operation NOTE</li> </ul>
	When providing the DAT as the internal announcement source, assign the access code to record, replay, and delete a message, respectively.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A100: Record</li></ul>
CM48	Designate the type of tone source for Wake Up call.  NOTE: When the second data is set to "External Tone Source", system reset is required.	<ul> <li>Y=1</li> <li>(1) 00: Tone Source of Wake Up Call</li> <li>(2) XX 00 XX: 00: No Tone 02: External Tone Source  INITIAL  05: Digital Announcement Trunk 14: Hold Tone Source on MP card 15: Internal Tone Generator</li> </ul>
CM10	When an External Announcement Machine is required, assign the COT card and DK card to required LEN.  NOTE 1: The DK card number must be assigned to the first LEN (level 0) and the third LEN (Level 2).	<ul> <li>(1) 000-763: LEN</li> <li>(2) DB00-DB09: Interface card No. for External Announcement Machine E800-E831: DK Card For PIM0/1: E800-E807 For PIM2/3: E808-E815 For PIM4/5: E816-E823 For PIM6/7: E824-E831</li> <li>NOTE 2: Circuit No. 3 of E831 is used for built-in External Equipment Interface of MP card by setting CM44.</li> </ul>

В CM14 CM08 CM10

#### **DESCRIPTION**

#### **DATA**

(2) DB00-DB09: Interface card No. for Exter-

nal Announcement Machine

When an External Announcement Machine is required, assign the COT card and DK card to required LEN.

[Series 3200 R6.2 software required]

**NOTE 1:** The DK card number must be assigned to the first LEN (level 0) and the third LEN (Level 2).

> For FP No. 02: E816-E823 For FP No. 03: E824-E831 **NOTE 2:** Circuit No. 3 of E831 is used for

built-in External Equipment Interface of MP card by setting CM44.

(1) 700

(2) 0 : ON (Ground Start) OFF (Ground Off [Open])

> 1◀: ON (Ground Off [Open]) OFF (Ground Start)

(1) 000-763: LEN

(1) XX ZZZ: LEN

XX: 00-59: FP No.

ZZZ: 000-127: Port No.

E800-E831: DK Card

For FP No. 00: E800-E807

For FP No. 01: E808-E815

(2) EB002-EB127:

Digital Announcement Trunk Card No.

For PIM0/1: EB002-EB031 For PIM2/3: EB032-EB063 For PIM4/5: EB064-EB095 For PIM6/7: EB096-EB127

**NOTE 2:** EB000 and EB001 are dedicated to built-in DAT of MP card.

Specify ON/OFF condition for external relay/ external key on MP built-in DK00 card.

When the DAT is required, assign the DAT to the required LEN.

To provide the restriction announcement for Wake Up call setting, assign the following DAT respectively.

- DAT for Wake Up message
- DAT for restriction announcement

**NOTE 1:** The DAT card number must be assigned to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Level 6) of each LT slot.

С	DESCRIPTION	DA
CM14	When the DAT is required, assign the DAT to the required LEN.  To provide the restriction announcement for Wake Up call setting, assign the following DAT respectively.  • DAT for Wake Up message  • DAT for restriction announcement [Series 3200 R6.2 software required]  NOTE 1: The DAT card number must be as-	<ul> <li>(1) XX ZZZ: LEN     XX : 00-59: FP No     ZZZ: 000-127: Port</li> <li>(2) EB002-EB127:     Digital Announcem     For FP No. 00: EB0     For FP No. 01: EB0     For FP No. 02: EB0     For FP No. 03: EB0</li> </ul>
	signed to the first LEN (Level 0), the third LEN (Level 2), the fifth LEN (Level 4) and the seventh LEN (Lev- el 6) of each LT slot.	NOTE 2: EB000 ar to built-ii
CM44	When an External Announcement Machine is required, assign the function for Wake Up to the DK card or MP built-in DK.	(1) XX Y
CM08	Specify the sending Wake Up message to Hotel Printer and PMS, when setting Wake Up feature from guest station.	for Wake Up (1) 200 (2) 0: Available
	Specify the timing for Wake Up call start.	(1) 228: Wake Up Call

0.

rt No.

ment Trunk Card No.

3002-EB031 8032-EB063 8064-EB095

8096-EB127

and EB001 are dedicated in DAT of MP card.

ard No. assigned by (E800-E831)

No.

External Equipment Inter-

- nouncement Machine p Call
- ll Start Timing
- (2) 0 : At preset time
  - 1**◄**: 5 minutes prior to preset time

D	DESCRIPTION	DATA
$\perp$		
CM08	Specify the condition for printing the Wake Up call information if Hotel Printer is provided.	<ul> <li>(1) 282: "RING ON OK" when call starts 283: "STATION BUSY" when station is busy 284: "CONNECTION BLOCK" when call is unsuccessful 286: "STATION ANSWER" when station answers 287: "STATION NO ANSWER" when station does not answer</li> <li>(2) 0 : Not printed 1 ◄: To print</li> </ul>
	Specify whether Automatic Wake Up record is printed out on Hotel Printer, and the report is sent to PMS when setting or resetting Automatic Wake Up.	<ul> <li>(1) 267</li> <li>(2) 0 : Available</li> <li>1 ◀: Not available</li> </ul>
CM90	Assign the function keys for Automatic Wake Up to the D <sup>term</sup> of guest room station or administrative station, if provided.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F0024: Automatic Wake Up set/reset from guest station</li> </ul>
	NOTE: This data assignment is not required when Wake Up is set by PMS.	F0027: Automatic Wake Up set/reset from administrative station with Single Wake Up Time operation. NOTE F0028: Automatic Wake Up set/reset from administrative station with Multiple Wake Up Time operation. NOTE
	Assign the function keys for Automatic Wake Up to the Front Desk Terminal.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F1067: Automatic Wake Up NOTE</li> </ul>
	<b>NOTE:</b> This data assignment is not required when Wake Up is set by PMS.	F1074: Set F1075: Reset F1077: Release
E		

E	DESCRIPTION	DATA
CM49	When providing DAT, assign the answering message for Wake Up to the DAT card or MP built-in DAT.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk Card No. assigned by CM10/CM14</li> <li>(2) 0C XX: Answering message on Automatic Wake Up XX : 00-63: Message No.</li> </ul>
		<ul> <li>Y=08</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 00-63: Message No. assigned by CM49</li> <li>Y=00</li> </ul>
CM41	Specify the duration of Wake Up call.	<ul> <li>Y=0</li> <li>(1) 23</li> <li>(2) 02-14: 8-56 seconds</li></ul>
	When providing the DAT, specify the duration of message replay timer for Automatic Wake Up.	<ul> <li>Y=0</li> <li>(1) 52</li> <li>(2) 01-99: 0-396 seconds</li></ul>
CM42	Specify the number of Wake Up call attempts before abandonment.	<ul><li>(1) 03</li><li>(2) 01-05 : 1 call-5 calls</li><li>NONE <b>◄</b>: 5 calls</li></ul>
	Specify the maximum number of Wake Up calls can be set at the same time.  NOTE: This command is effective up to Series 3400 software.	<ul> <li>(1) 04</li> <li>(2) 01-32 : 1 station-32 stations</li> <li>NONE</li></ul>
F		

F	DESCRIPTION	DATA
CM08	Specify the action when the number of Wake Up calls exceeds the maximum number assigned by CM42>04.	<ul> <li>(1) 806</li> <li>(2) 0 : Restrict Wake Up call setting</li> <li>1 ≤ : Set to 5 or 10 minutes prior to preset time</li> </ul>
CM49	Assign the restriction announcement for Wake Up call to the DAT card or MP built-in DAT.	<ul> <li>Y=00</li> <li>(1) 000-001: Built-in DAT on MP card 002-127: Digital Announcement Trunk No. (EB002-EB127) assigned by CM10/CM14</li> <li>(2) 1900: Restriction Announcement for Wake Up call</li> </ul>
CMD000	Send Wake Up message to PMS when setting Wake Up feature, if PMS with AP00 on RS-232C is provided.	(1) 134 (2) 1: To send
	Specify the sending of result of Wake Up message when performing Wake Up feature.	(1) 135 (2) 1: To send
	Specify whether the printing of Wake Up set/cancel from Front Desk Terminal is available or not.	<ul> <li>(1) 156</li> <li>(2) 0◀: Available</li> <li>1 : Not available</li> </ul>
	NOTE: This data is effective when Wake Up is set/canceled to individual station from Front Desk Terminal.	
CMD015	Assign the Service Class number for CMD016 to required stations, if PMS with AP00 on RS-232C is provided.	<ul> <li>(1) X-XXXX: Guest/Administrative station         No.</li> <li>(2) 00◀-15: Service Class No.</li> </ul>
CMD016	Send Room Status Code which includes Wake Up record, to PMS, if PMS with AP00 on RS-232C is provided.	<ul> <li>(1) XX 05: Room Status Code sending to PMS XX : Service Class No. assigned by CMD015</li> <li>(2) 1: To send</li> </ul>
END		

To provide printing the set/cancel/execution record of Automatic Wake Up, refer to the programming in "PROPERTY MANAGEMENT SYSTEM INTERFACE". Page 828

[Series 3600 software required]

#### HARDWARE REQUIRED

To provide Hotel Printer or Front Desk Terminal or PMS:
AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program
Printer (Customer provided) and RS PRT-15S CA/RS PRT-15S CA-C/RS NORM-4S CA
Front Desk Terminal
PMS

RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA (for PMS with AP00 on RS-232C)

To provide the external announcement machine:

COT card

DK card or MP card (built-in DK)

Announcement Machine (Customer provided)

To provide the internal digital announcement source:

DAT card or MP card (built-in DAT)

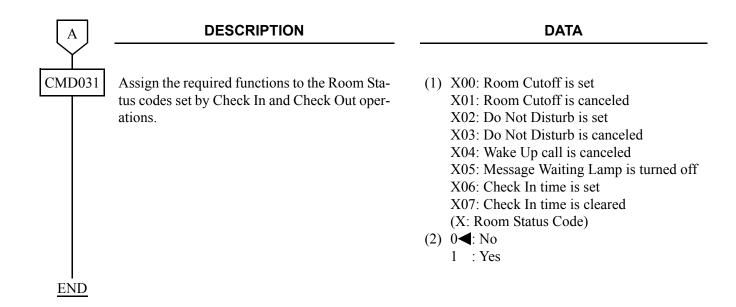
# **CHECK IN/CHECK OUT**

## **PROGRAMMING**

• When using PN-AP00-B with AP00 program

To provide Check In/Check Out from a Front Desk Terminal or PMS with AP00 on RS-232C:

START	DESCRIPTION	DATA
CMD000	Provide the print out function of Check In time when the Check In is set from Front Desk Terminal.	<ul><li>(1) 11</li><li>(2) 1: Available</li></ul>
CMD015	Assign the Service Class number to guest stations.	<ul><li>(1) X-XXXX: Guest Room station No.</li><li>(2) 00◀-15: Service Class No.</li></ul>
CMD016	Allow Room Status operation set from Front Desk Terminal.	<ul> <li>(1) XX 06     XX: 00-15: Service Class No. assigned by CMD015</li> <li>(2) 1: Yes</li> </ul>
		(2) 1. 168
CMD000	Send Check Out Complete message to PMS when PBX receives Check Out message from PMS.	<ul><li>(1) 87</li><li>(2) 1: To send</li></ul>
	Send the message to PMS if a checked out station is originating a C.O. call.	(1) 88 (2) 1: To send
CMD001	Assign a Room Status Code set by Check In operation.	<ul><li>(1) 12</li><li>(2) 1-8: Room Status Code</li></ul>
	Assign a Room Status Code set by Check Out operation.	<ul><li>(1) 13</li><li>(2) 1-8: Room Status Code</li></ul>
A		



• When using PN-AP00-B/PN-AP00-D with MRCA program [Series 3900 software required]

To provide Check In/Check Out from a Front Desk Terminal:

START	DESCRIPTION	DATA
CM13	Specify the kind of station.	<ul> <li>Y=51</li> <li>(1) X-XXXXXX: Station No.</li> <li>(2) 0 : Administrative Station</li> <li>1 ←: Guest Station</li> </ul>
CM12	Assign Service Restriction Class A to required guest station.	<ul> <li>Y=02</li> <li>(1) X-XXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15◀: Service Restriction Class A</li> </ul>
CM15	Allow Room Status Code setting (Room Cutoff/Do Not Disturb/Message Waiting/Wake Up Call/Trunk Restriction class change) in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=222</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1: Allow</li> </ul>
CM12	Assign the Charging Station Service Class number to each station.	<ul> <li>Y=45</li> <li>(1) X-XXXXXXXXX: Station No.</li> <li>(2) 00-15◀: Service Class No.</li> </ul>
CMDD04	Execute the operation set by CMDD31 is executed simultaneously when Room Status Code is set/changed.	<ul> <li>(1) XX 18         XX: Service Class No. assigned by CM12         Y=45     </li> <li>(2) 1: To execute</li> </ul>
A		

A	DESCRIPTION	
CMDD01	Assign Room Status Code set by Check In operation.	(1) 12 (2) 0 <b>∢</b> : No 1-8: Ro
	Assign Room Status Code set by Check Out operation.	(1) 13 (2) 0 <b>∢</b> : No 1-8: Ro
	Specify call charge printout method when Room Status Code matches the Room Status Code for Check Out set by DD01>13.	(1) 15 (2) 0 <b>◀</b> : No 1 : Int 2 : Au
CMDD31	Assign the each function to the Room Status Code assigned by CMDD01>12 and 13.	(1) X 00: R X : 1- (2) 0 <b>◄</b> : No 1 : Set 2 : Re
		(1) X 01: D X : 1- (2) 0◀: No 1 : Set 2 : Re
		(1) X 02: A X : 1- (2) 0◀: No 1 : Re
		(1) X 03: M X : 1- (2) 0◀: No

## **DATA**

ot used

oom Status Code 1-8

ot used

oom Status Code 1-8

ot available

terim Printout per station udit Printout per station

Room Cutoff is set

-8: Room Status Code

ot available

et eset

Oo Not Disturb is set

-8: Room Status Code

ot available

eset

Automatic Wake Up is set

-8: Room Status Code

ot available

eset

Message Waiting is set

-8: Room Status Code

ot available

1 : Set 2 : Reset

B	DESCRIPTION	DATA
CMDD31		<ul> <li>(1) X 04: Check In time delete</li> <li>X : 1-8: Room Status Code</li> <li>(2) 0◀: Not deleted</li> <li>1 : To delete</li> </ul>
		(1) X 05: Maid Identification number set/ change X : 1-8: Room Status Code
		(2) 0◀: Not available 1 : Available
		<ul> <li>(1) X 06: Hotel/Motel Toll Restriction</li></ul>
		(1) X 07: Check Out lamp control on DSS Console
END		X : 1-8: Room Status Code  (2) 0  : Not controlled  1 : Lamp OFF  2 : Flash (slowly)  3 : Flash (120IPM)  4 : Lamp ON
LIVD		

To provide printing of Check In/Check In cancel, Check Out/Check Out cancel, refer to the programming in "PROPERTY MANAGEMENT SYSTEM INTERFACE". Page 828

[Series 3600 software required]

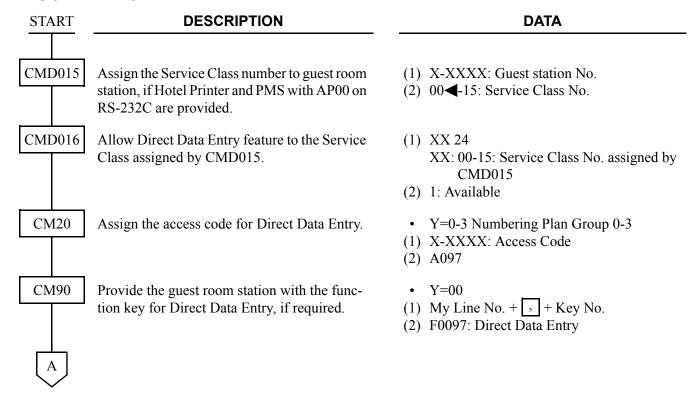
### HARDWARE REQUIRED

AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program Front Desk Terminal or PMS

RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA (for PMS with AP00 on RS-232C)

### **DIRECT DATA ENTRY**

## **PROGRAMMING**





#### **DESCRIPTION**

#### **DATA**

Designate the output unit for Direct Data Entry, if Hotel Printer and PMS with AP00 on RS-232C are provided.

Designate the printout format of Direct Data Entry, if Hotel Printer and PMS with AP00 on RS-232C are provided.

(1) 252

(2) 0**<**: PMS

1 : Hotel Printer

2 : PMS and Hotel Printer

(1) 253

(2) 0**<**: Printout Format 1 1 : Printout Format 2

(See the examples below)

Printout format 1 (2nd data: 0)

2002	11/01	17:20	FRI
NO.	2	20	
CODE	1		1
CODE	2		2
CODE	3		2
CODE	4		1

Printout format 2 (2nd data: 1)

11/01	17:20	FRI
22	0	
		1
TITY		2
		2
TITY		1
		220 TITY

**END** 

### HARDWARE REQUIRED

AP00-B card with AP00 program (for PMS with AP00 on RS-232C)
Printer (Customer provided) and RS PRT-15S CA/RS PRT-15S CA-C/RS NORM-4S CA PMS

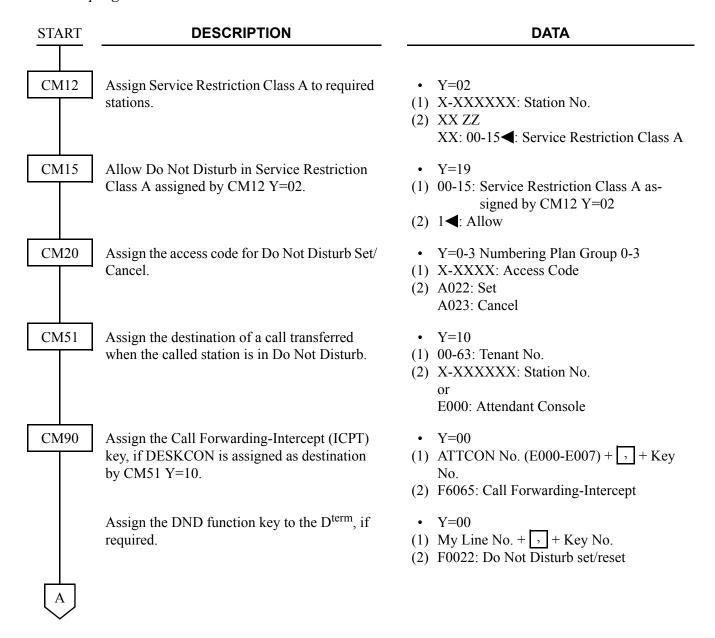
RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA (for PMS with AP00 on RS-232C)

## DO NOT DISTURB-HOTEL/MOTEL

#### **PROGRAMMING**

To provide Do Not Disturb from a guest station or administrative station, or Front Desk Terminal, or PMS:

**NOTE:** PMS with AP00 on RS-232C is not available when using PN-AP00-B/PN-AP00-D with MRCA program.



lacksquare	DESCRIPTION	DATA
CM90	Assign the DND function keys to the Front Desk Terminal, if provided.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F1064: Do Not Disturb F1074: Set F1075: Reset F1077: Release F1080: Do Not Disturb Override</li> </ul>
	Assign the DND function keys to the Hotel Console, if provided.	<ul> <li>Y=00</li> <li>(1) ATTCON No. (E000-E007) +  + Key No.</li> <li>(2) F6102: Do Not Disturb F6103: Do Not Disturb Override F6104: Reset</li> </ul>
CM08	Specify the sending Do Not Disturb message to Hotel Printer and PMS when setting Do Not Disturb from guest station.	<ul><li>(1) 201</li><li>(2) 0: Available</li></ul>
	Specify Call Forwarding-Busy Line/Station Hunting for a station set to Do Not Disturb.	<ul> <li>(1) 240</li> <li>(2) 0 : Available</li> <li>1 ◀: Not available</li> </ul>
	For a system with multiple-tenant, specify the destination of a call transferred in CM51, Y=10 for the tenant of calling or called station.	<ul> <li>(1) 241</li> <li>(2) 0 : Tenant of called station</li> <li>1   ■: Tenant of calling station</li> </ul>
	Specify whether Do Not Disturb record is printed out on Hotel Printer, and the report is sent to PMS when setting or resetting Do Not Disturb.	<ul> <li>(1) 267</li> <li>(2) 0 : Available</li> <li>1 ◄: Not available</li> </ul>
CM48	Select the Dial Tone on setting Do Not Disturb.	<ul> <li>Y=2</li> <li>(1) 14: Dial Tone on setting Do Not Disturb</li> <li>(2) 0 : Special Tone</li> <li>1 ✓: Dial Tone</li> </ul>
В		

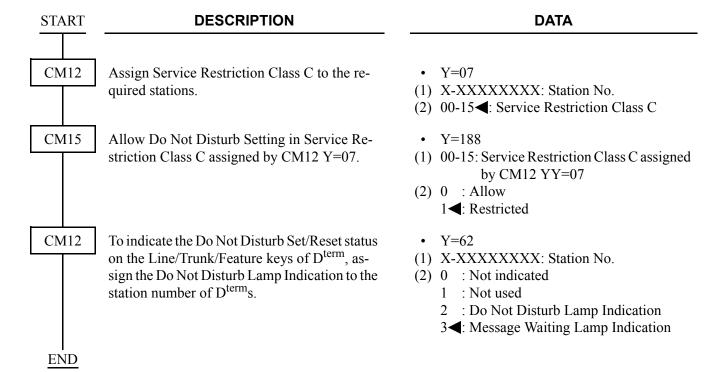
В	DESCRIPTION	DATA
CMD000	Send Controlled Restriction message to PMS when setting Do Not Disturb, if PMS with AP00 on RS-232C is provided.	(1) 114 (2) 1: To send
	Specify whether the printing of Do Not Disturb for individual station set/cancel from Front Desk Terminal is available or not.	<ul> <li>(1) 152</li> <li>(2) 0◀: Available</li> <li>1 : Not available</li> </ul>
	NOTE: This data is effective when Do Not Disturb is set/canceled to individual station from Front Desk Terminal.	
CMD015	Assign the Service Class number for CMD016 to required stations, if PMS with AP00 on RS-232C is provided.	<ul><li>(1) X-XXXX: Station No.</li><li>(2) 0◀-15: Service Class No.</li></ul>
CMD016	Send Room Status Code which includes Do Not Disturb record, to PMS, if PMS with AP00 on RS-232C is provided.	<ul> <li>(1) XX 05: Room Status Code sending to PMS XX : Service Class No. assigned by CMD015.</li> <li>(2) 1: To send</li> </ul>
I END		

To set the Do Not Disturb feature to the stations of SLT/sub line of  $D^{term}$ /Virtual line stations that are accommodated to the  $D^{term}$  multiline as the sub line, and to display the Do Not Disturb Set/Reset status of the stations on the lamp of  $D^{term}$ :

## [Series 3500 software required]

**NOTE:** To make available this feature, do the programming both of the setting side ( $D^{term}$ ) and the set side (stations of SLT, sub line of  $D^{term}$  or virtual line stations).

• For Setting Side (D<sup>term</sup>)



• For Set Side (stations of SLT, sub line of D<sup>term</sup> or virtual line stations)

START	DESCRIPTION	DATA		
CM12	Assign Service Restriction Class A to the required stations.	<ul> <li>Y=02</li> <li>X-XXXXXXXXXX: Station No./Sub Line No./Virtual Line Station No.</li> <li>XX ZZ XX: 00-15 : Service Restriction Class A</li> </ul>		
CM15	Allow Do Not Disturb in Service Restriction Class A assigned by CM12 Y=02.	<ul> <li>Y=19</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 0 : Restricted 1 ✓: Allow</li> </ul>		
CM12	Assign Service Restriction Class C to the required stations.	<ul> <li>Y=07</li> <li>X-XXXXXXXXX: Station No./Sub Line No./Virtual Line Station No.</li> <li>00-15◀: Service Restriction Class C</li> </ul>		
CM15	Allow Do Not Disturb to be set in Service Restriction Class C assigned by CM12 Y=07.	<ul> <li>Y=189</li> <li>(1) 00-15: Service Restriction Class C assigned by CM12 YY=07</li> <li>(2) 0 : Allow 1 ←: Restricted</li> </ul>		
CM65	Provide Do Not Disturb feature to each tenant.	<ul> <li>Y=19</li> <li>(1) 00-63: Tenant No.</li> <li>(2) 0 : Not provided</li> <li>1 &lt; : To provide</li> </ul>		
CM12	Specify the Do Not Disturb Lamp Indication on Line/Trunk/Feature keys of D <sup>term</sup> .	<ul> <li>Y=62</li> <li>X-XXXXXXXXX: Station No./Sub Line No./Virtual Line Station No.</li> <li>0 : Not indicated         <ol> <li>Not used</li> <li>Do Not Disturb Lamp Indication</li> </ol> </li> <li>Message Waiting Lamp Indication</li> </ul>		
END				

## **HARDWARE REQUIRED**

To provide Front Desk Terminal or PMS: AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program Front Desk Terminal or PMS

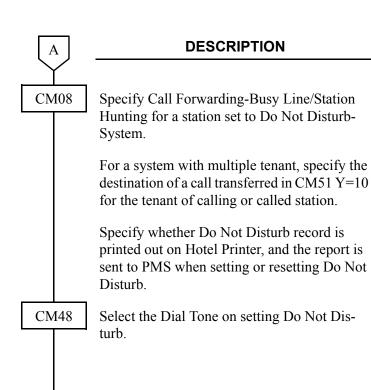
RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA (for PMS with AP00 on RS-232C)

# **DO NOT DISTURB-SYSTEM**

## **PROGRAMMING**

To provide Do Not Disturb-System from a Front Desk Terminal:

START	DESCRIPTION	DATA		
CM13	Assign Do Not Disturb-System to required stations.  Do Not Disturb is set to the stations assigned by this command simultaneously from the Front Desk Terminal or Attendant Console.	<ul><li>Y=00</li><li>(1) X-XXXXXX: Station No.</li><li>(2) 0: To provide</li></ul>		
CM51	Assign the destination of a call transferred when the called station is in Do Not Disturb mode.	<ul> <li>Y=10</li> <li>(1) 00-63: Tenant No.</li> <li>(2) X-XXXXXXX: Station No. or E000: Attendant Console</li> </ul>		
CM90	Assign the Call Forwarding-Intercept (ICPT) key, if the DESKCON is assigned as destination by CM51 Y=10.	<ul> <li>Y=00</li> <li>ATTCON No. (E000-E007) + , + Key No.</li> <li>F6065: Call Forwarding-Intercept</li> </ul>		
	Assign the DND function keys to the Front Desk Terminal, if provided.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F1064: Do Not Disturb F1072: Group F1074: Set F1075: Reset F1077: Release F1080: Do Not Disturb Override</li> </ul>		
A	Assign the DND function keys to the Hotel Console, if provided.	<ul> <li>Y=00</li> <li>(1) ATTCON No. (E000-E007) +  + Key No.</li> <li>(2) F6102: Do Not Disturb F6103: Do Not Disturb Override F6104: Reset</li> </ul>		

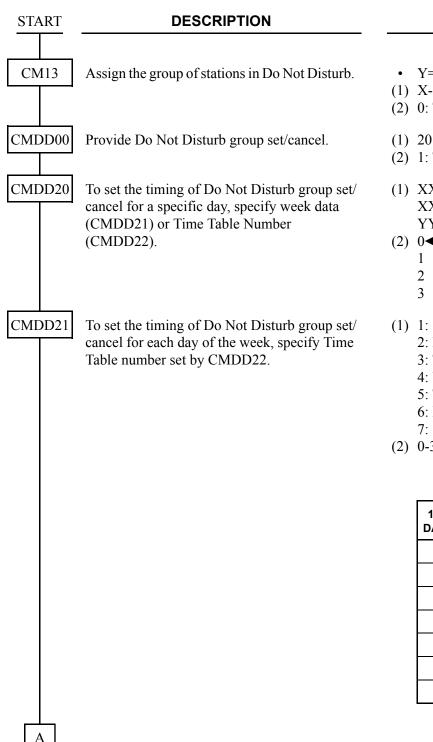


**END** 

**DATA** 

- (1) 240
- (2) 0 : Available 1◀: Not available
- (1) 241
- (2) 0 : Tenant of called station 1 ◀: Tenant of calling station
- (1) 267
- (2) 0 : Available 1◀: Not available
- Y=2
- (1) 14: Dial Tone on setting Do Not Disturb
- (2) 0 : Special Tone 1◀: Dial Tone

To provide Do Not Disturb group set/cancel at specified timing in advance:



**DATA** 

- Y = 00
- (1) X-XXXX: Station No.
- (2) 0: To provide
- (1) 20: Do Not Disturb Group Set/Cancel
- (2) 1: To provide
- (1) XXYY

XX: 01-12: Month

YY: 01-31: Date

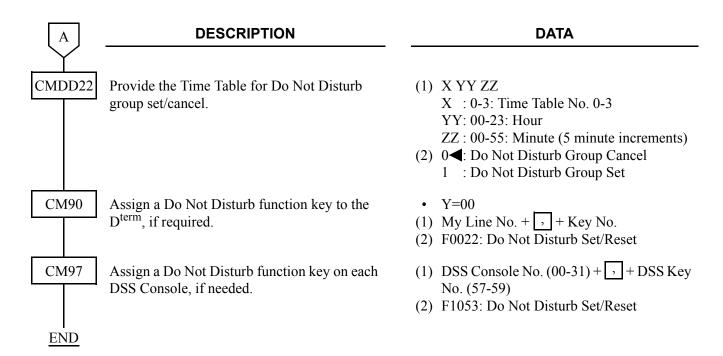
(2) 0**<**: As for week data of CMDD21

1 : As for Time Table No. 1 of CMDD22 2 : As for Time Table No. 2 of CMDD22

3 : As for Time Table No. 3 of CMDD22

- (1) 1: Sunday
  - 2: Monday
  - 3: Tuesday
  - 4: Wednesday
  - 5: Thursday
  - 6: Friday
  - 7: Saturday
- (2) 0-3: Time Table No. 0-3 of CMDD22 Initial data of CMDD21>1-7 is as follows.

1ST DATA	MEANING	2ND DATA	MEANING
1	Sunday	1	Time Table No. 1
2	Monday	0	Time Table No. 0
3	Tuesday	0	Time Table No. 0
4	Wednesday	0	Time Table No. 0
5	Thursday	0	Time Table No. 0
6	Friday	0	Time Table No. 0
7	Saturday	1	Time Table No. 1



#### HARDWARE REQUIRED

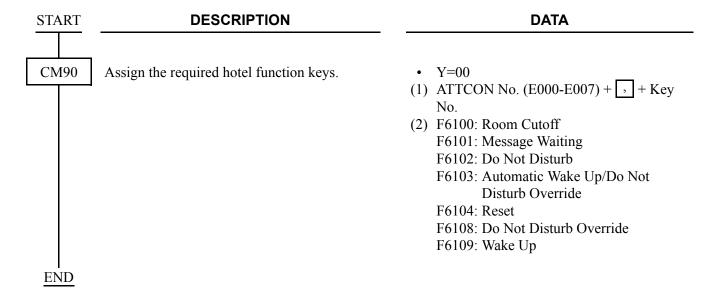
To provide Do Not Disturb group set/cancel at specified timing in advance: AP00-B/AP00-D card with MRCA program (for PMS with AP00 on RS-232C)

## HOTEL/MOTEL ATTENDANT CONSOLE

#### **PROGRAMMING**

In addition to programming the DESKCON as described in CHAPTER 1, assign the Hotel function keys to the Console.

For DESKCON, refer to SN716 DESKCON. Page 47
For Multi-function key, refer to MULTI-FUNCTION KEY. Page 73



For printing the set/cancel/execution record of hotel features such as Automatic Wake Up/Do Not Disturb/Room Cutoff/Message Waiting from the Console, refer to the programming in "PROPERTY MANAGEMENT SYSTEM INTERFACE". Page 828.

[Series 3600 software required]

# HOTEL/MOTEL DID NUMBER ALLOCATION TO GUEST STATION

# [Series 3400 software required]

## **PROGRAMMING**

START	DESCRIPTION	DATA		
CM08	Specify the DID Development Table for guest	(1) 824		
	station.	(2) 0 : Development Table 1 for DID No. assigned by CM76 Y=90		
	<b>NOTE:</b> Set the second data the same as the DID Development Table number assigned by CM35 $Y=170$ .	1◀: Development Table 0 for DID No. assigned by CM76 Y=00		
CM76	Assign the Number Conversion Block number	• Y=00		
	for Development Table 0.	(1) X-XXXX: DID No.		
		(2) 000-999: Number Conversion Block No.		
	Assign the Number Conversion Block number	• Y=90		
	for Development Table 1.	(1) X-XXXXXXXX: DID No.		
		(2) 000-999: Number Conversion Block No.		
	Allow Hotel/Motel DID number allocation to	• Y=32		
	guest station.	(1) 000-999: Number Conversion Block No. assigned by CM76 Y=00/90		
		(2) 0: Available		
	Assign the data for interpreting the digits re-	• Y=01 Day Mode		
	ceived.	• Y=02 Night Mode		
		• Y=03 Mode A		
	NOTE: This programming is effective when	• Y=04 Mode B		
	the destination station number from <i>PMS</i> is not set.	(1) 000-999: Number Conversion Block No. assigned by CM76 Y=00/90		
		(2) X-XXXXXXXX: DID station No.		
		D04: Direct-In Termination		
<u>END</u>				

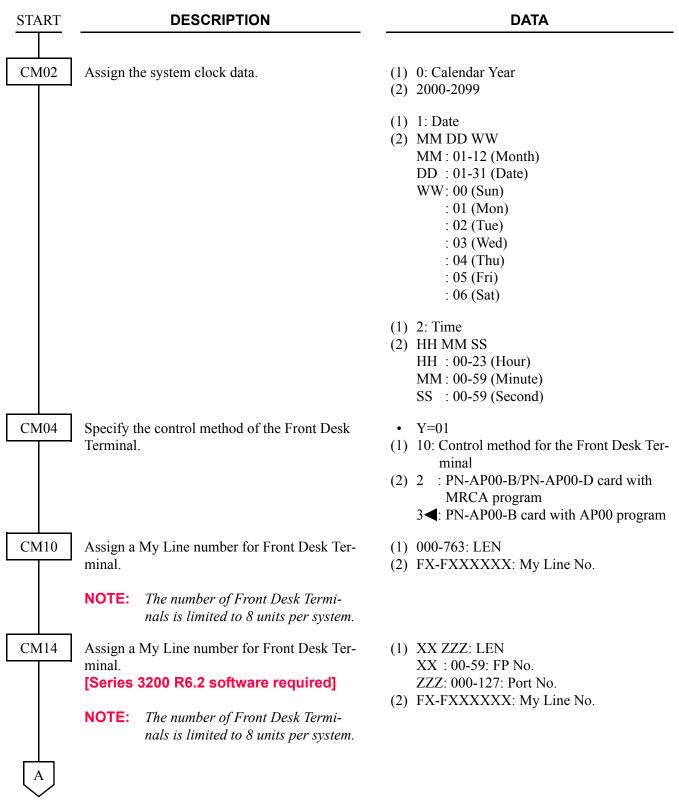
## **HARDWARE REQUIRED**

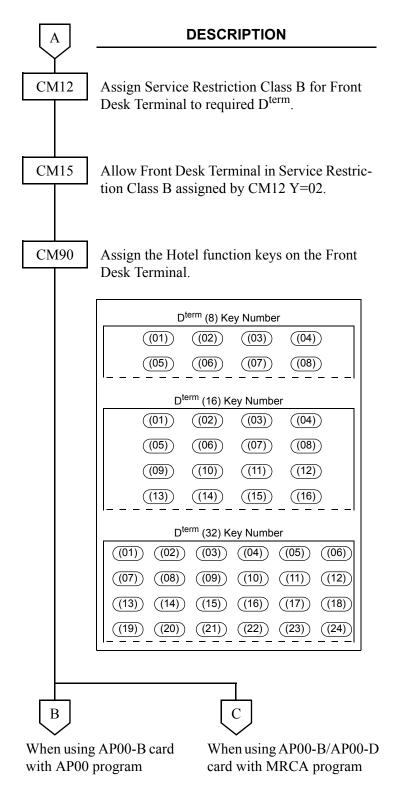
**PMS** 

AP00-B/AP00-D card with MRCA program (for MP built-in PMS on IP)

### HOTEL/MOTEL FRONT DESK INSTRUMENT

## **PROGRAMMING**

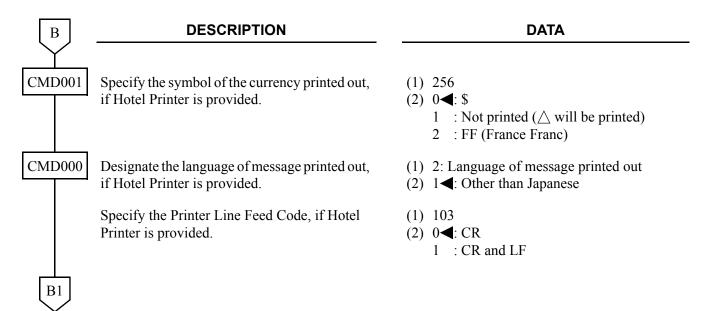




#### **DATA**

- Y=02
- (1) X-XXXXXX: My Line No.
- (2) XX ZZ ZZ: 00-15◀: Service Restriction Class B
- Y=62
- (1) 00-15**◄**: Service Restriction Class B assigned by CM12 Y=02
- (2) 1**<**: Allow
- Y=00
- (1) My Line No. + + Key No.
- (2) F1064: Do Not Disturb
  - F1065: Room Cutoff
  - F1066: Message Waiting
  - F1067: Automatic Wake Up
  - F1068: Check In
  - F1069: Room Status
  - F1071: Print Out
  - F1072: Group
  - F1074: Set
  - F1075: Reset
  - F1076: Cancel
  - F1077: Release
  - F1080: Do Not Disturb Override

• When using AP00-B card with AP00 program





## **DESCRIPTION**

## **DATA**

Assign the attribute data, depending on the port (Port 1/3) connected to the printer, if Hotel Printer is provided.

(1) See the following table.

(2) See the following table.

## AP00 INITIAL

1ST DATA (1)				2ND		
PORT 0	PORT 1	PORT 2	PORT 3	MEANING	DATA (2)	MEANING
	24		32	Data speed	2/3/4	1200/2400/4800 bps
	25		33	Stop bit length	2	2 bits
	26		34	Data length	0	7 bits
	27		35	Parity	1	Even Parity
	100		140	Function	16/17	Hotel Printer 0/ Hotel Printer 1
	101		141	Priority for data processing	1	2nd
	102		142	Number of characters per line to be printed out	2	80 characters
	103		143	Number of lines per page	0-88	0: No page 1: No. of lines including space within a page (Depends on size of printer paper used)
	104		144	Number of lines per page to be printed out	0-88	0: No page  1: No. of lines to be printed out within a page

B2



## **DESCRIPTION**

### DATA

CMD035

Assign the Hotel Printer to each Front Desk Terminal, if Hotel Printer is provided.

By system reset (press SW1 on the MP card), station number information is transferred from the MP to the AP. When the transfer is completed, message "SORT COMPLETE" is printed out on the Hotel printer.

"SORT COMPLETE" printout takes about 4 minutes.

(1) X-XXXX: My Line No. of Front Desk Terminal

(2) 0**<**: Hotel Printer 0 1 : Hotel Printer 1

**END** 

• When using AP00-B/AP00-D card with MRCA program

C	DESCRIPTION	DATA			
CMDD01	Set interface condition for PN-AP00-B/PN-AP00-D with MRCA program RS port.  AP00 INITIAL	<ul> <li>(1) 101 (Port 1)     103 (Port 3)</li> <li>(2) 00</li></ul>			
	<b>NOTE:</b> When setting the second data to 12, the initial data of CMDD10>X00, X01, X02, X03, X0 X05 is set automatically.				
CMDD10	To change the interface condition of each port set by CMDD01.  AP00 INITIAL	<ol> <li>(1) X00: Equipment Type Connected to Port 1,         3         X : 1, 3: Port 1, 3</li> <li>(2) 6◄: External Printer 0</li> <li>(1) X01: Data Speed for Port 1, 3         X : 1, 3: Port 1, 3</li> <li>(2) 1 : 300 bps         2◄: 1200 bps</li> </ol>			
		3 : 2400 bps 4 : 4800 bps 5 : 9600 bps			
		<ul> <li>(1) X02: Stop Bit Length for Port 1, 3</li> <li>X : 1, 3: Port 1, 3</li> <li>(2) 0 : 1 bit</li> <li>1 : 1.5 bits</li> <li>2 d: 2 bits</li> </ul>			
		<ul> <li>(1) X03: Data Length for Port 1, 3</li> <li>X : 1, 3: Port 1, 3</li> <li>(2) 0 : 7 bits</li> <li>1 ≤ 8 bits</li> </ul>			
		<ul> <li>(1) X04: Parity for Port 1, 3</li> <li>X : 1, 3: Port 1, 3</li> <li>(2) 0 : No Parity</li> <li>1 : Even Parity</li> <li>2 : Odd Parity</li> </ul>			
		<ul> <li>(1) X05: Printer Digit Number for Port 1, 3         X : 1, 3: Port 1, 3</li> <li>(2) 0</li></ul>			
END					

For printing the set/cancel/execution record of hotel features such as Automatic Wake Up/Do Not Disturb/Room Cutoff/Message Waiting from Front Desk Terminals, refer to the programming in "PROPERTY MANAGEMENT SYSTEM INTERFACE" Page 828

[Series 3600 software required]

### HARDWARE REQUIRED

AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program Front Desk Terminal
Printer and RS PRT-15S CA/RS PRT-15S CA-C/RS NORM-4S CA

# HOTEL/MOTEL TOLL RESTRICTION CHANGE-GUEST STATION

## [Series 3900 software required]

## **PROGRAMMING**

START	DESCRIPTION	DATA		
CM13	Specify the kind of station.	<ul> <li>Y=51</li> <li>(1) X-XXXXXX: Station No.</li> <li>(2) 0 : Administrative Station</li> <li>1 ←: Guest Station</li> </ul>		
CM12	Assign Service Restriction Class A to required guest station.	<ul> <li>Y=02</li> <li>(1) X-XXXXXX: Station No.</li> <li>(2) XX ZZ</li> <li>XX: 00-15   : Service Restriction Class A</li> </ul>		
CM15	Allow Room Status Code setting (Room Cutoff, Trunk Restriction class change).	<ul> <li>Y=222</li> <li>(1) 00-15: Service Restriction Class A assigned by CM12 Y=02</li> <li>(2) 1: Allow</li> </ul>		
CM12	Assign the Charging Station Service Class number to each station.	<ul> <li>Y=45</li> <li>(1) X-XXXXXXXXXX: Station No.</li> <li>(2) 00-15◀: Service Class No.</li> </ul>		
CMDD04	Execute the operation set by CMDD31 is executed simultaneously when Room Status Code is set/changed.	<ul> <li>(1) XX 18         XX: Service Class No. assigned by CM12         Y=45     </li> <li>(2) 1: To execute</li> </ul>		
CMDD01	Assign Room Status Code set by Check In operation.	<ul> <li>(1) 12</li> <li>(2) 0  ∴ Not used</li> <li>1-8: Room Status Code 1-8</li> </ul>		
A	Assign Room Status Code set by Check Out operation.	<ul> <li>(1) 13</li> <li>(2) 0◀: Not used</li> <li>1-8: Room Status Code 1-8</li> </ul>		
CMDD01	Assign the Charging Station Service Class number to each station.  Execute the operation set by CMDD31 is executed simultaneously when Room Status Code is set/changed.  Assign Room Status Code set by Check In operation.  Assign Room Status Code set by Check Out	signed by CM12 Y=02  (2) 1: Allow  • Y=45  (1) X-XXXXXXXXX: Station No.  (2) 00-15 ◀: Service Class No.  (1) XX 18  XX: Service Class No. assigned by CM12  Y=45  (2) 1: To execute  (1) 12  (2) 0 ◀: Not used  1-8: Room Status Code 1-8  (1) 13  (2) 0 ◄: Not used		

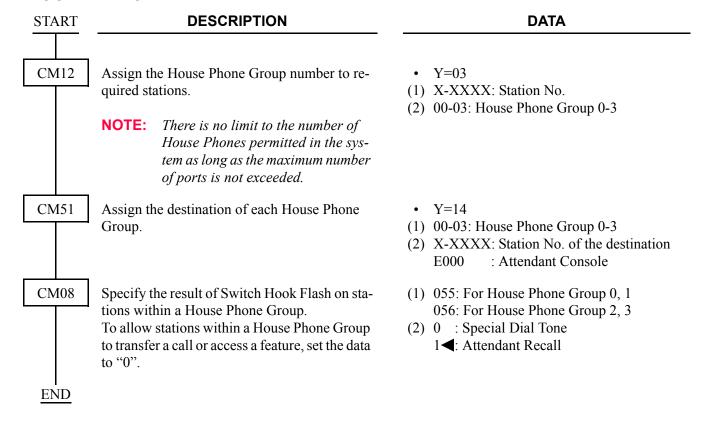
A	DESCRIPTION	DATA
CMDD31	Assign the each function to the Room Status Code assigned by CMDD01>12 and 13.	<ul> <li>(1) X 00: Room Cutoff is set X : 1-8: Room Status Code</li> <li>(2) 0◀: Not available 1 : Set 2 : Reset</li> <li>(1) X 06: Hotel/Motel Toll Restriction Change-Guest Station X : 1-8: Room Status Code</li> <li>(2) 0◀: Not available 1 : Unrestricted (RCA) 2 : Non-Restricted 1 (RCB) 3 : Non-Restricted 2 (RCC) 4 : Semi-Restricted 1 (RCD) 5 : Semi-Restricted 2 (RCE) 6 : Restricted 1 (RCF) 7 : Restricted 2 (RCG) 8 : Fully-Restricted (RCH) 9 : Restriction reset (As per CM12 Y=01)</li> <li>(1) X 07: Check Out lamp control on DSS</li> </ul>
		Console X: 1-8: Room Status Code (2) 0◀: Not controlled 1: Lamp OFF 2: Flash (slowly) 3: Flash (120IPM) 4: Lamp ON
END		

## **HARDWARE REQUIRED**

AP00-B/AP00-D card with MRCA program Front Desk Terminal

### **HOUSE PHONE**

## **PROGRAMMING**

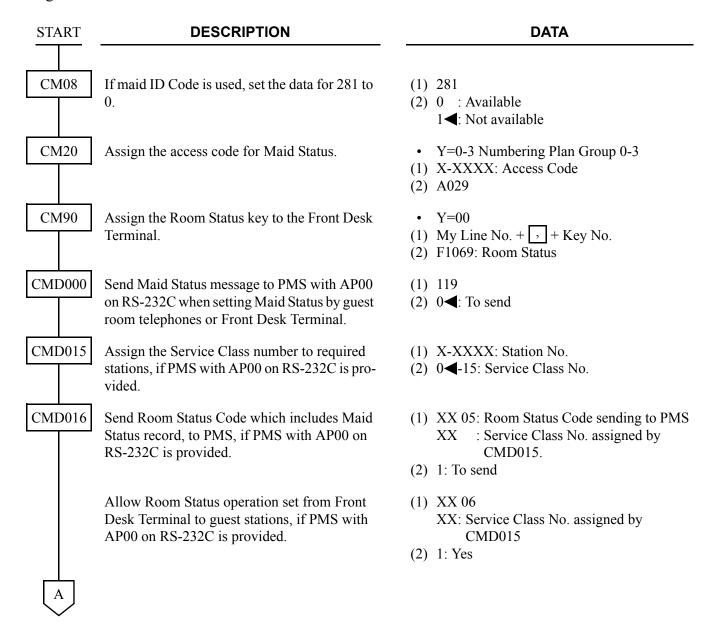


### **MAID STATUS**

#### **PROGRAMMING**

• When using PN-AP00-B with AP00 program

In addition to the programming of "HOTEL/MOTEL FRONT DESK INSTRUMENT" Page 800 or "PROPERTY MANAGEMENT SYSTEM INTERFACE" Page 821, do the following programming:





#### **DESCRIPTION**

#### **DATA**

CMD031

Define the functions of each Room Status Code.

For example, to provide the following Room Status Code, set the functions to each Room Status Code according to the table below.

Room Status Code		Room Status
1	:	Check In ( <b>NOTE</b> )
2	:	Check Out ( <b>NOTE</b> )
3	:	Under Cleaning
4	:	Cleaning Finished
5	:	Check Finished
6	:	Out of Service
7	:	_
8	:	_

NOTE: The Room Status Code for Check In and Check Out are to be assigned by CMD001>12 and CMD001>13.

ROOM	FUNCTION No.										
STATUS CODE	00	01	02	03	04	05	06	07	08	30	31
1		1		1	1	1	1				
2	1			1	1			1			
3	1		1					1			1
4	1		1			1		1			1
5		1		1		1		1			1
6	1				1	1		1			1
7											
8											

(1) X YY

X: 1-8: Room Status Code

YY: Functions

00: Room Cutoff Set

01: Room Cutoff Reset

02: Do Not Disturb Set

03: Do Not Disturb Reset

04: Wake Up Call Reset

05: Message Waiting Reset

06: Check In Time Registration

07: Check In Time Clear

08: Restriction for Toll Call and International Call set

30: Send Room Status to PMS

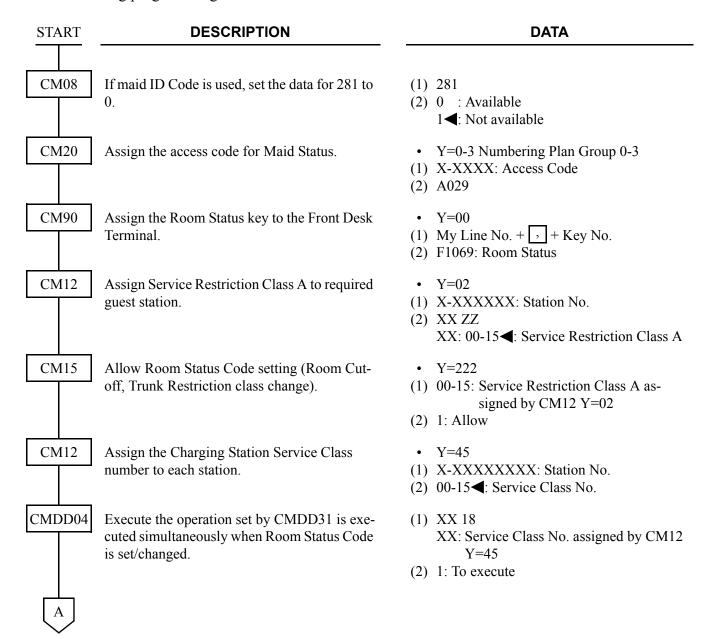
31: Dialing from Guest Room is allowed

(2) 0**<**: No 1 : Yes

**END** 

 When using PN-AP00-B/PN-AP00-D with MRCA program [Series 3900 software required]

In addition to the programming of "HOTEL/MOTEL FRONT DESK INSTRUMENT" Page 800, do the following programming:



A
CMDD0
CMDD3

#### **DESCRIPTION**

#### **DATA**

Assign Room Status Code set by Check In operation.

Assign Room Status Code set by Check Out operation.

Assign Room Status Code when pressing Call Recording Function Button.

Specify Call charge printout method when Room Status Code matches the Room Status Code for Check Out set by DD01>13.

Assign the each function to the Room Status Code assigned by CMDD01>12 and 13.

(1) 12

(2) 0**<**: Not used

1-8: Room Status Code 1-8

(1) 13

(2) 0**<**: Not used

1-8: Room Status Code 1-8

(1) 14

(2) 0**<**: Not used

1-8: Room Status Code 1-8

(1) 15

(2) 0**<**: Not available

1 : Interim Printout per station 2 : Audit Printout per station

(1) X 00: Room Cutoff is set

X: 1-8: Room Status Code

(2) 0**<**: Not available

1 : Set 2 : Reset

(1) X 01: Do Not Disturb is set

X: 1-8: Room Status Code

(2) 0**<**: Not available

1 : Set 2 : Reset

(1) X 02: Automatic Wake Up is set

X: 1-8: Room Status Code

(2)  $0 \blacktriangleleft$ : Not available

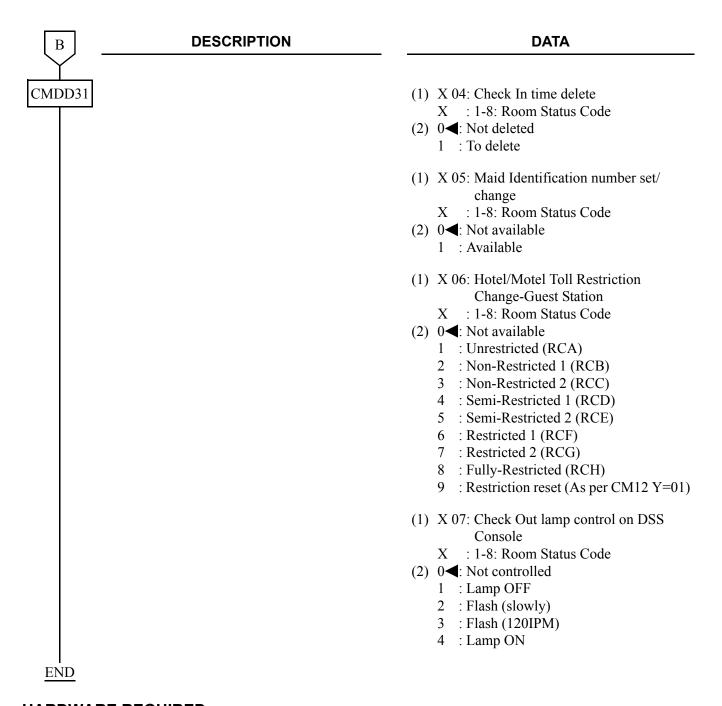
1 : Reset

(1) X 03: Message Waiting is set

X: 1-8: Room Status Code

(2) 0**<**: Not available

1 : Set 2 : Reset



## HARDWARE REQUIRED

AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program Front Desk Terminal or

**PMS** 

RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA (for PMS with AP00 on RS-232C)

# **MESSAGE REGISTRATION**

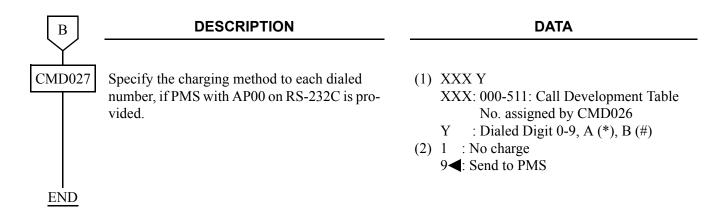
# **PROGRAMMING**

The SMDR is used to provide Message Registration information to a call accounting system. Refer to STATION MESSAGE DETAIL RECORDING (SMDR) Page 615

To provide Message Registration on PMS:

START	DESCRIPTION	DATA
CM04	Specify PN-AP00-B/PN-AP00-D with MRCA program as the destination to send an MP call information, if PMS with AP00 on RS-232C (PN-AP00-B/PN-AP00-D with MRCA program) is provided.	<ul> <li>Y=01</li> <li>(1) 03: Destination to send an MP call information</li> <li>(2) 2: PN-AP00-B/PN-AP00-D with MRCA program</li> </ul>
	Specify PN-AP00-B with AP00 program as the destination to send an MP call information, if PMS with AP00 on RS-232C (PN-AP00-B with AP00 program) is provided.	<ul> <li>Y=01</li> <li>(1) 03: Destination to send an MP call information</li> <li>(2) 7◀: PN-AP00-B with AP00 program</li> </ul>
	Specify PMS via LAN port as the destination to send a Built-in SMDR call information, if PMS on IP is provided.	<ul> <li>Y=01</li> <li>(1) 05: Destination to send a Built-in SMDR call information</li> <li>(2) 1: PMS via LAN port</li> </ul>
CM08	Assign the Pseudo-Answer signal function when the answer signal (Battery Reversal) has not been detected within the time assigned by CM41 Y=0>03 after making an outgoing trunk call.	<ul> <li>(1) 123</li> <li>(2) 0 : Not sent</li> <li>1 &lt; : To send</li> </ul>
	<b>NOTE:</b> This data is effective when CM35 $Y=04$ is set to "1".	
CM13	Provide SMDR service for outgoing calls to required stations.	<ul> <li>Y=06</li> <li>(1) X-XXXXXX: Station No.</li> <li>(2) 1◀: To provide</li> </ul>
A		

A	DESCRIPTION	DATA
CM35	Specify the type of answer signal from distant office in outgoing connection for each trunk route.	<ul> <li>Y=04</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 1 : Battery Reversal from C.O. line</li> <li>2 : Answer signal arrives from Tie Line/ ISDN</li> <li>7◄: Answer signal does not arrive</li> </ul>
	Provide SMDR service for outgoing calls to required trunk routes.	<ul> <li>Y=14</li> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 1◀: To provide</li> </ul>
	Assign a trunk access code for SMDR.	<ul><li>Y=44</li><li>(1) 00-63: Trunk Route No.</li><li>(2) 00-99: Trunk Access Code</li></ul>
CM41	Specify the timing of SMDR valid call timer (pseudo-answer timer).	<ul> <li>Y=0</li> <li>(1) 03</li> <li>(2) 01-08: 4-40 seconds</li></ul>
CMD000	Send message to PMS, if a checked out station is originating a C.O. call.	<ul> <li>(1) 88</li> <li>(2) 0<b>◄</b>: Not sent</li> <li>1 : To send</li> </ul>
CMD015	Assign the charging Service Class number to each station number, if PMS with AP00 on RS-232C is provided.	<ul><li>(1) X-XXXX: Station No.</li><li>(2) 00◀-15: Service Class No.</li></ul>
CMD016	Send detail call information on outgoing calls to SMDR, if PMS with AP00 on RS-232C is provided.	<ul> <li>(1) XX 16     XX: Service Class No. assigned by     CMD015</li> <li>(2) 1: To send</li> </ul>
CMD026	Assign the Development Table number to outgoing trunk routes, if PMS with AP00 on RS-232C is provided.	<ul><li>(1) 00-63: Trunk Route No.</li><li>(2) 000◀-511: Development Table No.</li></ul>



## HARDWARE REQUIRED

AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA (for PMS with AP00 on RS-232C) Call Accounting System (customer provided) or PMS

#### **MESSAGE WAITING**

#### **PROGRAMMING**

To provide the Message Waiting from an administrative station, Front Desk Terminal, or PMS:

**NOTE:** PMS with AP00 on RS-232C is not available when using PN-AP00-B/PN-AP00-D with MRCA program.

START	DESCRIPTIO	N	
CM12	Assign Service Restriction Cl sage Waiting to required gues tive station as shown below.		
CM15	Allow Message Waiting in Ser Class A assigned by CM12 Y		striction
	GUEST/ADMINISTRATIVE	CM15	CM15

GUEST/ADMINISTRATIVE	CM15 Y=24	CM15 Y=40
Guest station w/o MW Lamp	0	0
Guest station with MW Lamp	0	1
Administrative station	1	0

Provide each station with Message Waiting Service (D<sup>term</sup> or Single Line Telephone with Message Waiting Lamp).

Specify guest station or administrative station to each station.

**NOTE 1:** This data assignment is not required when Message Waiting is set by *PMS*.

**DATA** 

- Y=02
- (1) X-XXXXXX: Station No.
- (2) XX ZZ

XX: 00-15**◄**: Service Restriction Class A

- Y=24 Administrative station allowing Message Waiting set/reset to guest room
- Y=40 Guest Station
- (1) 00-15: Service Restriction Class A assigned by CM12 Y=02
- (2) 0 : Restricted 1◀: Allow

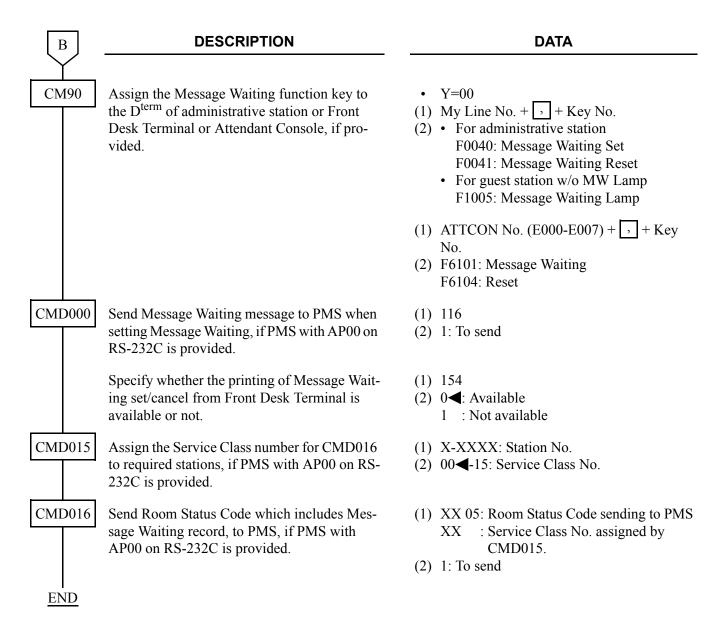
- Y=03
- (1) X-XXXXXX: Station No.
- (2) 0: To provide
- Y=13
- (1) X-XXXXXX: Station No.
- (2) 0 : Administrative station

1**◄**: Guest station



CM13

A	DESCRIPTION	DATA
CM20	Assign access code for Message Waiting Set/ Reset/Retrieve from administrative station, if required.	<ul> <li>Y=0-3 Numbering Plan Group 0-3</li> <li>(1) X-XXXX: Access Code</li> <li>(2) A040: MW Lamp Control-Set A041: MW Lamp Control-Reset</li> </ul>
	NOTE 2: This data assignment is not required when Message Waiting is set by PMS.	A147: MW Retrieve
CM51	Assign the Message Front destination to be	• Y=15
	routed by dialing MW Retrieve code or pressing MW key on D <sup>term</sup> to which Message Wait-	(1) 00-63: Tenant No. to which MW set D <sup>term</sup> belongs
	ing is set.	(2) X-XXXXXX: Station No./My Line No. or E000: Attendant Console
CM08	If an Attendant Console is assigned to as the	(1) 233
CIVIO	Message Front destination by CM51 Y=15, set the data for 233 to 0 and set the data for 234 to	(2) 0: Available
	1. With this setting, Message Waiting is automatically reset when the Attendant answers.	<ul><li>(1) 234</li><li>(2) 1◀: Not available</li></ul>
	To reset Message Waiting while the Message	(1) 234
	Front station or attendant rings, set the data for 234 to 0.	(2) 0: Available
	To reset Message Waiting when the desired	(1) 235
	station answers a second call from the Message	(2) 0: Available
	Front station or attendant, set the data for 235 to 0 and set the data for 234 to 1.	(1) 234
		(2) 1 <b>◄</b> : Not available
	Specify whether Message Waiting record is	(1) 267
	printed out on Hotel Printer, and the report is sent to PMS when setting or resetting Message Waiting.	(2) 0 : Available 1◀: Not available



#### HARDWARE REQUIRED

Single Line Telephone with Message Waiting Lamp 8LC or 4LCD/4LCF/4LCL/4LCW card

To provide Front Desk Terminal or PMS:

AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program

Front Desk Terminal or

**PMS** 

RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA (for PMS with AP00 on RS-232C)

# PROPERTY MANAGEMENT SYSTEM INTERFACE

# **PROGRAMMING**

The following shows the minimal programming to establish the PMS interface link. After this programming, the Status Inquiry (Feature Code "70", Function Code "F" and "0") is available.

To provide PMS with AP00 on RS-232C:

START DESCRIPTION DATA

CMD001

Assign the attribute data, depending on the port (Port 0-3) connected to PMS.

- (1) See the following table.
- (2) See the following table.

(AP00 INITIAL)

**◄**: Initial Data

1ST DATA				2ND		
PORT 0	PORT 1	PORT 2	PORT 3	MEANING	DATA	MEANING
20	24	28	32	Data speed	2/3/4/5 NOTE 1	1200/2400/4800/ 9600 bps
21	25	29	33	Stop bit length	0 1/2	1/1.5/2 bits
22	26	30	34	Data length	0 1	7/8 bits
23	27	31	35	Parity	0 1/2	None Parity/ Even Parity/Odd Parity
80	100	120	140	Function	4 <b>NOTE 2</b>	PMS
81	101	121	141	Priority for data processing	0	1st Priority
82	102	122	142	Message Format	6	PMS Format
83	103	123	143	Number of lines per page	0	Not used
84	104	124	144	Protocol	6	IMS Procedure
85	105	125	145	Station Address (SA)	49	1
86	106	126	146	Unit Address (UA)	33	!
87	107	127	147	Timer for detecting the terminal/no answer	8	1 second
89	109	129	149	Timer for detecting the end of block	70	35 seconds
90	110	130	150	Timer for detecting non data communication	70	35 seconds
91	111	131	151	Number of times to resend the Selecting Sequence when NAK is returned in Phase 2	3	3 times
92	112	132	152	Number of times to resend the Selecting Sequence when no answer in Phase 2	15	15 times
93	113	133	153	Number of times to resend the Selecting Sequence when NAK is returned in Phase 3	3	3 times
94	114	134	154	Number of times to resend the Selecting Sequence when no answer in Phase 3	32	15 times
95	115	135	155	Delay before resending the Selecting Sequence when NAK is returned	24	3 seconds
96	116	136	156	Delay before resending the text when WABT is returned	24	3 seconds
98	118	138	158	Guard timer between texts	0	Not used



**DESCRIPTION** CMD001 **NOTE 1:** For the Port 1 and Port 3, data speed 9600 bps cannot be set. **NOTE 2:** For the PMS, the 2nd data=4 should be assigned. CMD000 Send a Violation Code Message when PBX receives an illegal message from PMS. Assign the function of OPE LED (L0-L3) on CMD001 the AP00 card. AP00 INITIAL

**END** 

**DATA** 

(1) 140

(2) 1: To send

(1) 250

(2) See the table below.

0

L3	No. 3 port SD
L2	No. 2 port SD
L1	No. 1 port SD
L0	No. 0 port SD

L3	No. 0 port CS
L2	No. 0 port CD
L1	No. 0 port SD
L0	No. 0 port RD

2

L3	No. 1 port CS
L2	No. 1 port CD
L1	No. 1 port SD
L0	No. 1 port RD

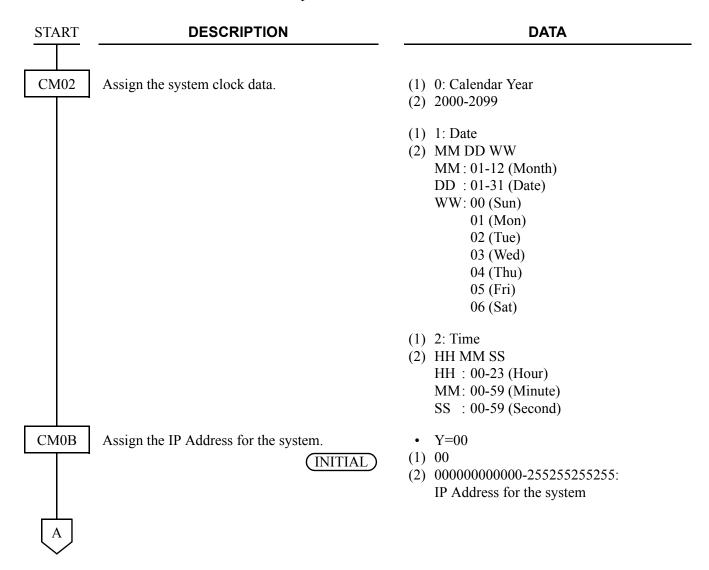
3

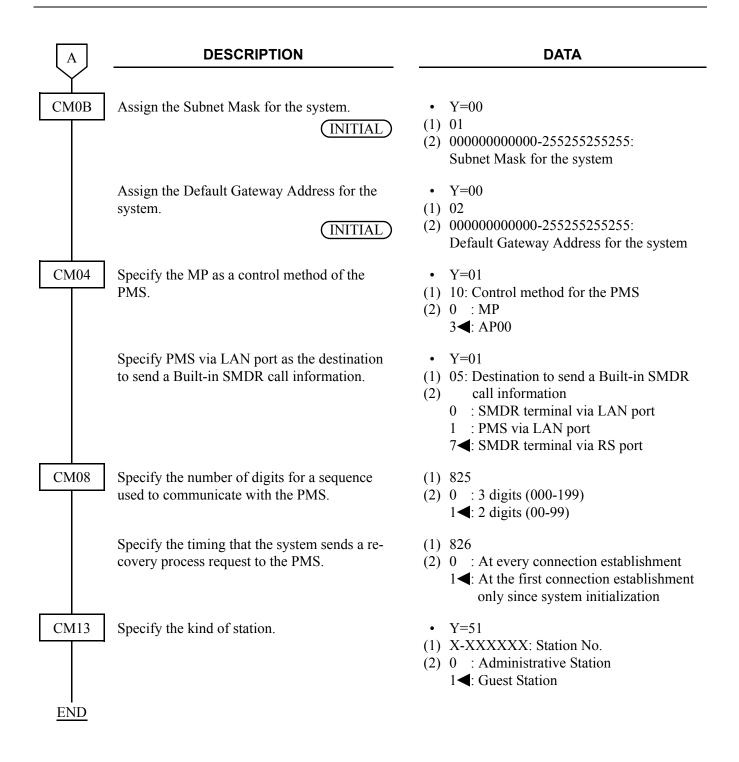
L3	No. 2 port CS
L2	No. 2 port CD
L1	No. 2 port SD
L0	No. 2 port RD

To provide MP built-in PMS on IP:

## [Series 3400 software required]

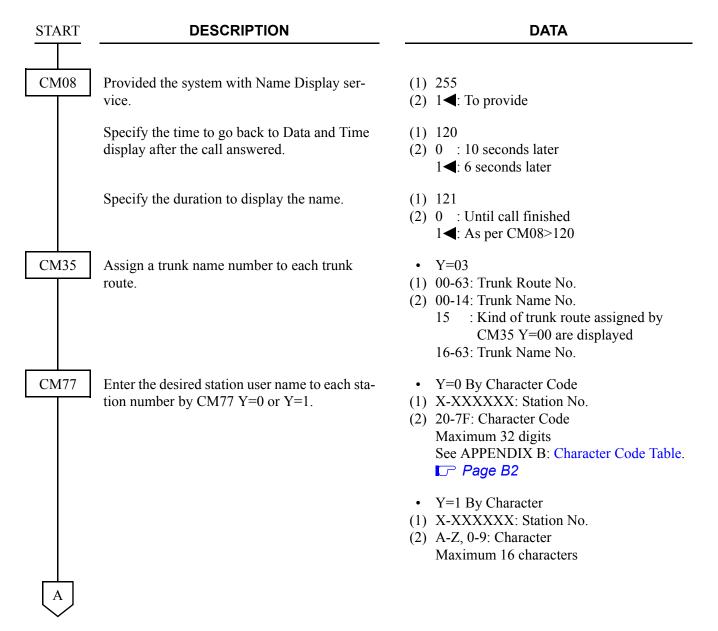
**NOTE:** The MP card (or the MP card in a Main Site when Remote PIM over IP feature is provided) communicates with the PMS terminal. For the settings in the PMS terminal side, set IP address assigned by CM0B Y=00 (or CM0B Y=02 when VLAN is provided) as a destination of the PMS terminal, and set "60050" as the port number.





When displaying PMS information on an Administrative station, a Front Desk Terminal, do the following programming in addition to the programming of MP built-in PMS on IP.

# [Series 3400 software required]



lacksquare	DESCRIPTION	DATA
CM77	Enter the desired trunk name to each trunk route by CM77 Y=2 or Y=3.	<ul> <li>Y=2 By Character Code</li> <li>(1) 00-14, 16-63: Trunk Name No. assigned by CM35 Y=03</li> <li>(2) 20-7F: Character Code Maximum 8 digits See APPENDIX B: Character Code Table.</li> <li>Page B2</li> </ul>
		<ul> <li>Y=3 By Character</li> <li>(1) 00-14, 16-63: Trunk Name No. assigned by CM35 Y=03</li> <li>(2) A-Z, 0-9: Character Maximum 4 characters</li> </ul>
CM08	Select the PMS information to display on an Administrative Station, a Front Desk Terminal and a Hotel Console.	<ul> <li>(1) 548</li> <li>(2) 0 : PMS information A/B</li> <li>1 ◀: VIP/language</li> </ul>
	Specify display PMS information set by CM08>548 on a Hotel Console.	<ul> <li>(1) 549</li> <li>(2) 0 : Display PMS information set by CM08&gt;548</li> <li>1 ✓: Not display</li> </ul>
CM13	Specify display PMS information set by CM08>548 on an Administrative Station and a Front Desk Console.	<ul> <li>Y=52</li> <li>(1) 0</li> <li>(2) X-XXXXXXX: Station No.</li> <li>0 : Display PMS information set by CM08&gt;548</li> <li>1◄: Not display</li> </ul>
END		

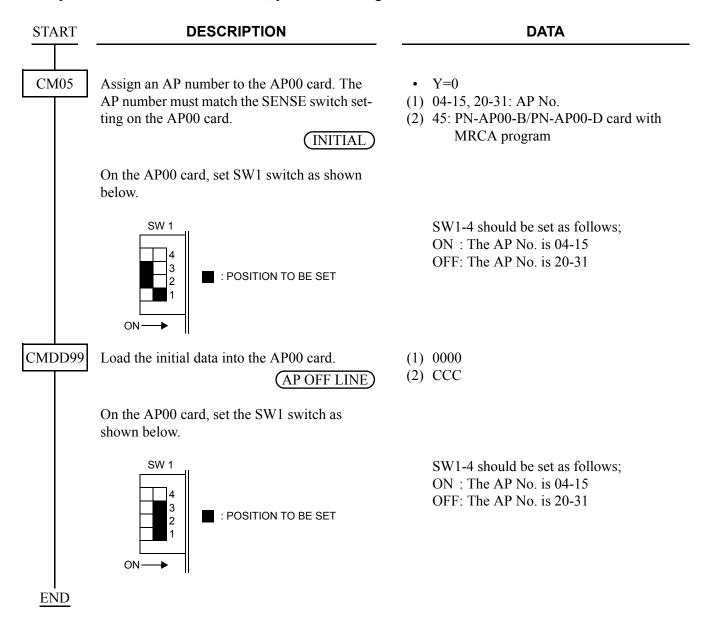
When printing the set/cancel/execution record of hotel features such as Automatic Wake Up/Do Not Disturb/Room Cutoff/Message Waiting, do the following programming in addition to the programming of MP built-in PMS on IP.

## [Series 3600 software required]

AP Initialization (PN-AP00-B/PN-AP00-D with MRCA program)

You can distinguish whether the AP is active or not by the RUN lamp indication. The RUN lamp flashes on green color when the AP is in active.

When you install the AP00 at first time, you should assign the data shown below.



To make available the RS port of PN-AP00-B/PN-AP00-D card (with MRCA program):

START	DESCRIPTION	DATA
CMDD01	Set interface condition for PN-AP00-B/PN-AP00-D with MRCA program RS port.  AP00 INITIAL	<ul> <li>(1) 101 (Port 1)     103 (Port 3)</li> <li>(2) 00</li></ul>
	<b>NOTE:</b> When setting the second data to 12, the is X05 is set automatically.	nitial data of CMDD10>X00, X01, X02, X03, X04,
CMDD10	To change the interface condition of each port set by CMDD01, assign the attribute data, according to the PMS.  AP00 INITIAL	<ul> <li>(1) X00: Equipment Type Connected to Port 1,         3         X : 1, 3: Port 1, 3</li> <li>(2) 6   External Printer 0</li> <li>(1) X01: Data Speed for Port 1, 3         X : 1, 3: Port 1, 3</li> <li>(2) 1 : 300 bps         2   : 1200 bps</li> </ul>
		3 : 2400 bps 4 : 4800 bps 5 : 9600 bps
		<ul> <li>(1) X02: Stop Bit Length for Port 1, 3</li> <li>X : 1, 3: Port 1, 3</li> <li>(2) 0 : 1 bit</li> <li>1 : 1.5 bits</li> <li>2 ■: 2 bits</li> </ul>
		<ul> <li>(1) X03: Data Length for Port 1, 3</li> <li>X : 1, 3: Port 1, 3</li> <li>(2) 0 : 7 bits</li> <li>1 ■: 8 bits</li> </ul>
		<ul> <li>(1) X04: Parity for Port 1, 3</li> <li>X : 1, 3: Port 1, 3</li> <li>(2) 0◀: No Parity</li> <li>1 : Even Parity</li> <li>2 : Odd Parity</li> </ul>
END		<ul> <li>(1) X05: Printer Digit Number for Port 1, 3</li> <li>X : 1, 3: Port 1, 3</li> <li>(2) 0 ■: 80 digits</li> <li>1 : 20 digits</li> </ul>
LILD		

To make available the printing of each hotel feature record:

START	DESCRIPTION	DATA	
CM08	Specify whether the printing of each hotel feature record with the printer that is connected to the PMS using the PN-AP00-B/PN-AP00-D card (with MRCA program) is available, or not.	<ul> <li>(1) 835</li> <li>(2) 0 : Available</li> <li>1 ◀: Not available</li> </ul>	
CMDD00	Specify whether the printing of Do Not Disturb set/cancel from a individual station is available, or not.	<ul> <li>(1) 21</li> <li>(2) 0◀: Available</li> <li>1 : Not available</li> </ul>	
	Specify whether the printing of Do Not Disturb for a individual station set/cancel from a Front console/Hotel console/DSS console/PMS/Attendant console is available, or not.	<ul> <li>(1) 22</li> <li>(2) 0◀: Available</li> <li>1 : Not available</li> </ul>	
	Specify whether the printing of Room Cutoff for a individual station set/cancel from a Front console/Hotel console/DSS console/PMS/Attendant console is available, or not.	<ul> <li>(1) 23</li> <li>(2) 0◀: Available</li> <li>1 : Not available</li> </ul>	
	Specify whether the printing of Message Waiting set/cancel from a Front console/Hotel console/DSS console/PMS/Attendant console is available, or not.	<ul> <li>(1) 24</li> <li>(2) 0◀: Available</li> <li>1 : Not available</li> </ul>	
	Specify whether the printing of Automatic Wake Up set/cancel from a individual station is available, or not.	<ul> <li>(1) 25</li> <li>(2) 0◀: Available</li> <li>1 : Not available</li> </ul>	
	Specify whether the printing of Automatic Wake Up for a individual station set/cancel from a Front console/Hotel console/DSS console/PMS/Attendant console is available, or not.	<ul> <li>(1) 26</li> <li>(2) 0</li> <li>1 : Not available</li> </ul>	
	Specify whether the printing of Automatic Wake Up for a individual station execution is available, or not.	<ul> <li>(1) 27</li> <li>(2) 0◀: Available</li> <li>1 : Not available</li> </ul>	
A			

A	DESCRIPTION	DATA
CMDD00	Specify the printing way of Automatic Wake Up for a individual station execution.	<ul> <li>(1) 28</li> <li>(2) 0  ∴ To print only result</li> <li>1 : To print process and result</li> </ul>
	NOTE: When the second data is set to 1, the record of the start of calling/the called station is busy/re-calling is also printed.	
	Specify whether the printing of Check In/ Check In cancel, Check Out/Check Out cancel is available, or not.	<ul> <li>(1) 33</li> <li>(2) 0◀: Available</li> <li>1 : Not available</li> </ul>
	Specify whether the printing when the PMS is connected/disconnected to/from the system is available, or not.	<ul> <li>(1) 34</li> <li>(2) 0◀: Available</li> <li>1 : Not available</li> </ul>
	Specify whether the printing of Room Status Code Record is available, or not.  [Series 3700 R12.2 software required]	<ul> <li>(1) 35</li> <li>(2) 0</li></ul>
	Specify the printing way of Immediate Printout Call Record.  [Series 3700 R12.2 software required]	<ul> <li>(1) 36</li> <li>(2) 0</li></ul>
	Specify whether the printing of Account Code (ACC)/Authorization Code is available, or not. [Series 3700 R12.2 software required]	<ul> <li>(1) 37</li> <li>(2) 0◀: Not available</li> <li>1 : Available</li> </ul>
CMDD04	Send detail information of Immediate Printout Call Record for the Printer.  [Series 3700 R12.2 software required]	(1) XX 14: Send detail information of Immediate Printout Call Record for the Printer  XX : Service Class No. assigned by CM12 Y=45

# **HARDWARE REQUIRED**

**PMS** 

**END** 

AP00-B card with AP00 program (for PMS with AP00 on RS-232C) RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA (for PMS with AP00 on RS-232C) AP00-B/AP00-D card with MRCA program (for MP built-in PMS on IP with printer)

(2) 0**<**: Not sent 1 : To send

## **ROOM CUTOFF**

## **PROGRAMMING**

• When using PN-AP00-B with AP00 program

To provide the Room Cutoff by using Room Cutoff key of a Front Desk Terminal or PMS, do the following programming in addition to the programming of "HOTEL/MOTEL FRONT DESK INSTRUMENT"

Page 800 or "PROPERTY MANAGEMENT SYSTEM INTERFACE" Page 821.

START	DESCRIPTION	DATA
CM08	Specify the type of call to be restricted by Room Cutoff.	<ul> <li>(1) 232</li> <li>(2) 0 : C.O. outgoing calls</li> <li>1 ◄: All outgoing calls</li> </ul>
	Specify whether Room Cutoff record is printed out on Hotel Printer, and the report is sent to PMS when setting or resetting Room Cutoff.	<ul> <li>(1) 267</li> <li>(2) 0 : Available</li> <li>1 ◀: Not available</li> </ul>
CM51	Assign the destination of a call transferred when the station in Room Cutoff condition dials outgoing access code.	<ul> <li>Y=11</li> <li>(1) 00-63: Tenant No.</li> <li>(2) X-XXXXXXX: Station No. or E000: Attendant Console</li> </ul>
CM90	Assign the Call Forwarding-Intercept (ICPT) key, if the DESKCON is assigned as destination by CM51 Y=11.	<ul> <li>Y=00</li> <li>ATTCON No. (E000-E007) + , + Key No.</li> <li>F6065: Call Forwarding-Intercept</li> </ul>
	Assign the function keys required for Room Cutoff on the Front Desk Terminal.  NOTE: This data assignment is not required when Room Cutoff is set by PMS.	<ul> <li>Y=00</li> <li>(1) My Line No. + + Key No.</li> <li>(2) F1065: Room Cutoff NOTE F1074: Set F1075: Reset F1077: Release</li> </ul>
	Assign the function key required for Room Cutoff on the DESKCON, if provided.	<ul> <li>Y=00</li> <li>(1) ATTCON No. (E000-E007) +  + Key No.</li> <li>(2) F6100: Room Cutoff F6104: Reset</li> </ul>
$\langle A \rangle$		

A	DESCRIPTION	DATA
CMD000	Send Controlled Restriction message to PMS when setting Room Cutoff feature, if PMS with AP00 on RS-232C is provided.	(1) 115 (2) 1: To send
	Specify whether the printing of Room Cutoff set/cancel from Front Desk Terminal is available or not.	<ul> <li>(1) 153</li> <li>(2) 0</li> <li>1 : Not available</li> </ul>
CMD015	Assign the Service Class number for CMD016 to required stations, if PMS with AP00 on RS-232C is provided.	<ul><li>(1) X-XXXX: Station No.</li><li>(2) 00◀-15: Service Class No.</li></ul>
CMD016 END	Send Room Status Code which includes Room Cutoff record, to PMS, if PMS with AP00 on RS-232C is provided.	<ul> <li>(1) XX 05: Room Status Code sending to PMS         XX : Service Class No. assigned by         CMD015</li> <li>(2) 1: To send</li> </ul>

To provide the Room Cutoff by using the Room Status Code, do the following programming in addition to the programming of "HOTEL/MOTEL FRONT DESK INSTRUMENT" Page 800 or "MAID STATUS" Page 810.

START	DESCRIPTION	DATA
CMD015	Assign the Class of Service for Room Status.	<ul><li>(1) X-XXXX: Guest Room Station No.</li><li>(2) 00-15: Service Class No.</li></ul>
CMD016	Assign the Room Status Processing to the Service Class assigned by CMD015.	<ul> <li>(1) XX 06     XX: Service Class No. assigned by     CMD015</li> <li>(2) 1: Yes</li> </ul>
	Assign the Toll Calls and International Calls restriction function to the Service Class assigned by CMD015.	<ul> <li>(1) XX 46     XX: Service Class No. assigned by     CMD015</li> <li>(2) 1: Yes</li> </ul>
CMD031	Assign the Room Cutoff function to the Room Status Code assigned by CMD001>12 and 13.	<ul> <li>(1) X 00: Room Cutoff is set</li> <li>X 01: Room Cutoff is reset</li> <li>X : 1-8: Room Status Code</li> <li>(2) 1: Yes</li> </ul>
	Assign the Room Status Code to be restricted for Toll Calls and International Calls.	<ul> <li>(1) X 08</li> <li>X: 1-8: Room Status Code</li> <li>(2) 0◀: Restricted</li> <li>1 : Allowed</li> </ul>
CMD026	Assign the Call Development Table Number to Outgoing trunk routes.	<ul> <li>(1) 00-63: Trunk Route No.</li> <li>(2) 0◀-511: Call Development Table No.</li> </ul>

A	Λ	DESCRIPTION
CMI	0027	Specify if the dialed digit should be changed (Toll Call and International Call) or not.  NOTE: When specifying the changed digits by CMD027, the same number of digits must be assigned as specifying the Type of Call by CMD034.
CMI	0033	Assign the Type of Call Development Table for each outgoing trunk routes.
CMI	0034	Assign the Type of Call for each dialed digit (0-9, A, B) on the basis of each Type of Call Development Table Number assigned by CMD033.
		NOTE 1: This feature restricts Toll Call and International Call (Type of Call No. 2 and No. 3).
		NOTE 2: When specifying Type of Call by CMD034, the same number of digits must be assigned as specifying the dialed digits to be changed by CMD027.

#### **DATA**

(1) XXX Y XXX: Call Development Table No. (000-511) assigned by CMD026

: First Dialed Digit: 0-9, A (\*), B (#) Y

(2) XXX 3 XXX: Call Development Table No. of next digit (000-511) : Referring to the next digit assign-3

(1) XXX Y

XXX: Call Development Table No. (000-511)

: Dialed Digit

ment

(2) 1 : Not to be charged 9**◄**: Send to SMDR terminal

(1) 00-63: Trunk Route No.

(2) 0**<**-127: Type of Call Development Table No.

(1) XXX Y

XXX: Type of Call Development Table No. (0-127) assigned by CMD033

Y : First Dialed Digit: 0-9, A (\*), B (#)

(2) X-XXX 0

X-XXX: Type of Call Development Table No. of next digit (0-127)

0 : Referring to next digit assignment

(1) XXX X

XXX: Type of Call Development Table No. (0-127)

: Dialed Digit

(2) X 1: For assigning Type of Call

X: 1**⋖**: Local Call

2 : Toll Call

3 : International Call 7-9: Tie Line Call

To provide Room Cutoff from a Front Desk Terminal with AP00-B/AP00-D card with MRCA program, refer to the programming in "HOTEL/MOTEL TOLL RESTRICTION CHANGE-GUEST STATION".

[Series 3900 software required]

#### HARDWARE REQUIRED

AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program Front Desk Terminal or PMS

RS RVS-15S CA/RS RVS-4S CA/RS NORM-4S CA (for PMS with AP00 on RS-232C)

# **ROOM STATUS**

# **PROGRAMMING**

Refer to "MAID STATUS" Page 810

## HARDWARE REQUIRED

AP00-B card with AP00 program or AP00-B/AP00-D card with MRCA program Front Desk Terminal

#### SINGLE DIGIT DIALING

#### **PROGRAMMING**

START

CM21

**DESCRIPTION** 

he re-

Assign the single digit access code for the required features.

For example, to provide the system with the following numbering plan:

1X : Service Feature Access

2XX:`

3XX: Station Numbers

4XX:

8X : Trunk Route Access 9 : C.O. Outgoing Access

0 : Operator Call

1-8 : Single Digit Station Numbers

The programming is:

- (1) Assign digit 1 through 8 to the Single Digit station number (Data=801), respectively. Assign the other access code by CM20.
- (2) Assign the station numbers (2XX, 3XX, 4XX, 1-8) to required LEN by CM10/CM14.

**DATA** 

- Y=0-3: Numbering Plan Group 0-3
- (1) X: Single Digit Access Code 0-9, A (\*), B (#)

(2) A047 : TAS Answer A A048 : TAS Answer B A049 : TAS Answer C A050 : TAS Answer D

> A051 : TAS Answer E 100-163: Trunk Route 00-63

200-231: Route Advance Block 00-31

800 : Operator Call

801 : Single Digit station No.

A



#### **DESCRIPTION**

#### **DATA**

CM20

If different digit station numbers of the same level are required within a system, set the leading one or two digits to the data for the required combination of station numbering plan.

For example, to provide the system with the following numbering plan:

200-299 : 3 digits station numbers 2100-2199: 4 digits station numbers 2200-2299: 4 digits station numbers

Assign the digit "2" to data 824 (2-4 digits station) and then assign the station numbers to required LEN by CM10/CM14. For calling the station 200-299 press "#" key or wait for ring start after dialing the station number.

CM41

**END** 

Specify the single digit dialing time-out (Timing Start) timer.

• Y=0-3: Numbering Plan Group 0-3

(1) X-XX: Leading one or two digits of station No.

(2) 823: 2-3 digits station 824: 2-4 digits station

- Y=0
- (1) 13
- (2) 03-08: 3-8 seconds

(1 second increments)

If no data is set, the default setting is 4-5 seconds.

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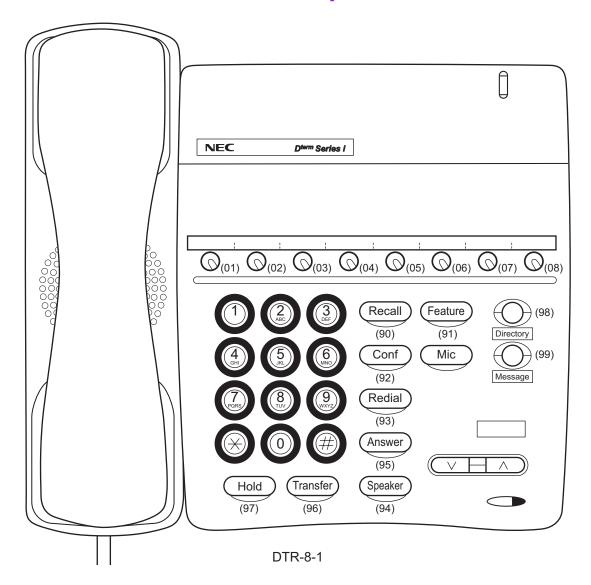
# **APPENDIX A**

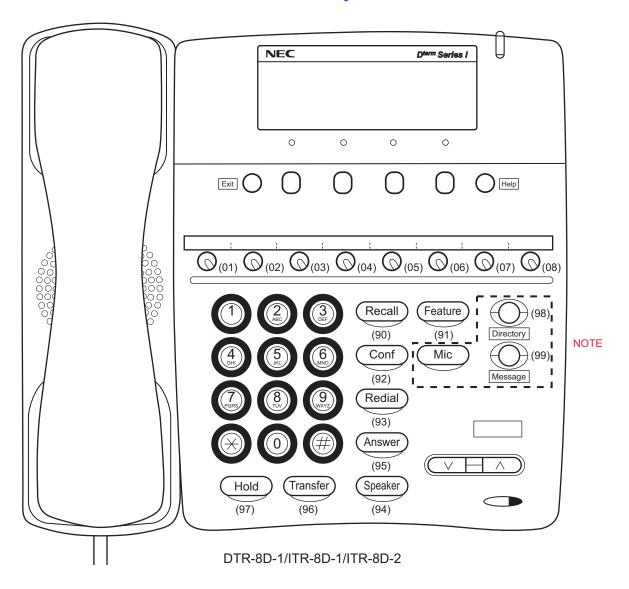
# TERMINAL KEY ASSIGNMENT

This appendix contains the key number layout of each  $D^{\text{term}}$ ,  $D^{\text{term}}IP$ , DESKCON, DSS Console, and Add-On Module.

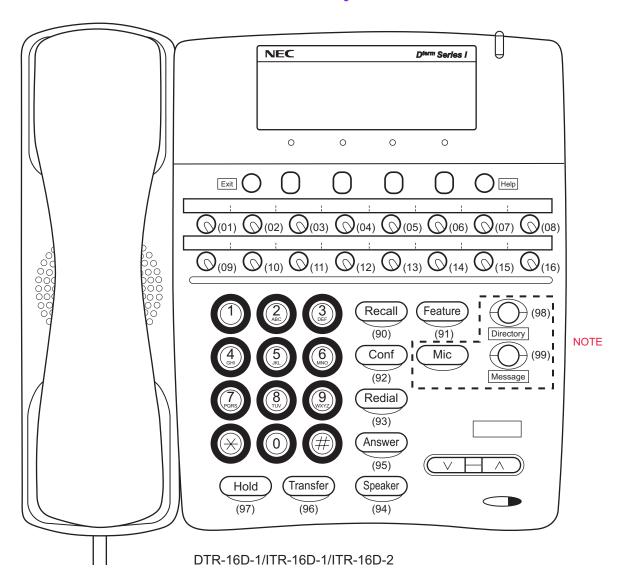
Refer to this appendix when you assign a key function by CM90 or CM97.

D <sup>term</sup> 85/D <sup>term</sup> IP Key Numbers	<b>A2</b>
D <sup>term</sup> 75 Key Numbers	<b>A8</b>
D <sup>term</sup> 65 Key Numbers	<b>A11</b>
DESKCON Key Numbers	<b>A16</b>
DSS Console Key Numbers	
Add-On Module Key Numbers	

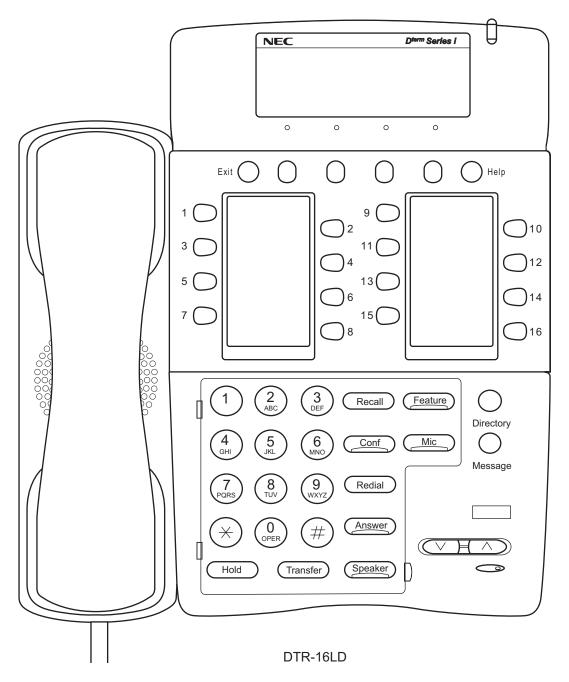




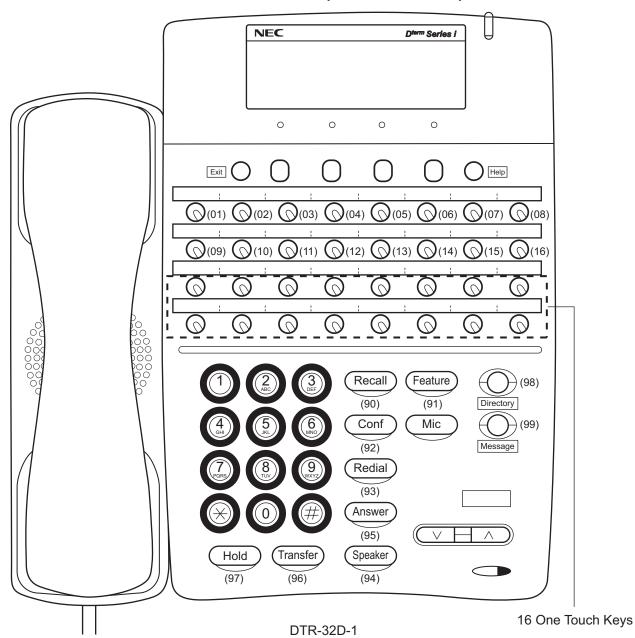
**NOTE:** *In case of ITR-8D-1, Directory, Message and Mic keys are not equipped.* 



**NOTE:** In case of ITR-16D-1, Directory, Message and Mic keys are not equipped.

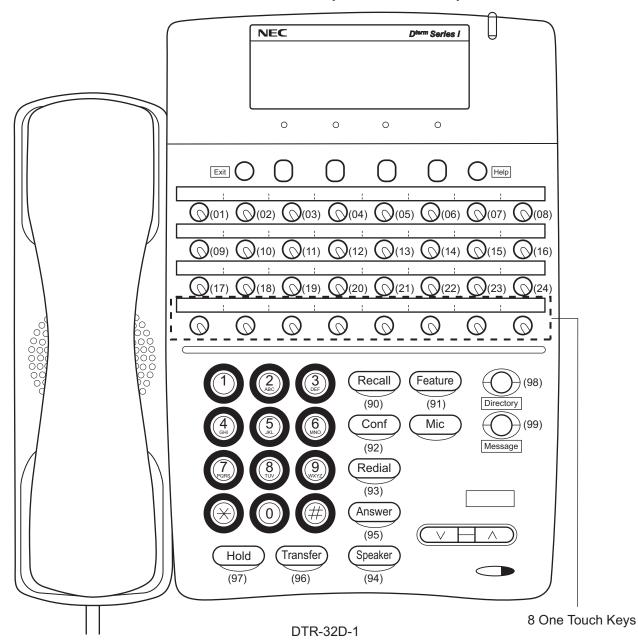


16 Line/Trunk/Feature Keys + 16 One Touch Keys

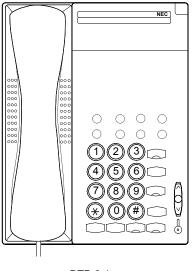


## D<sup>term</sup>85/D<sup>term</sup>IP Key Numbers

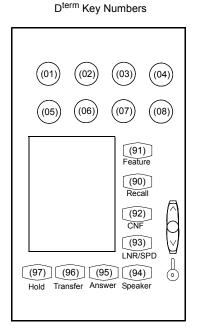
24 Line/Trunk/Feature Keys + 8 One Touch Keys



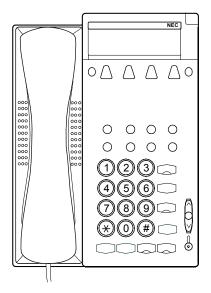
**NOTE:** The initial setting of key layout is for 16 Line/Trunk/Feature keys + 16 One Touch keys. When using key No. 17-24, set CM12 Y=24, 2nd data=0. After the 2nd data of CM12 Y=24 is changed, pull out and reconnect the modular connector of the D<sup>term</sup>.



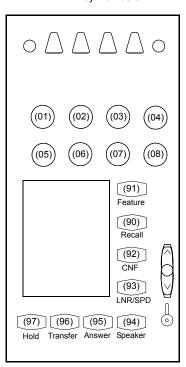
DTP-8-1



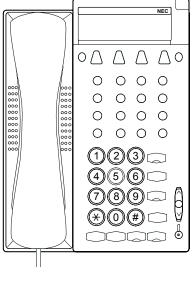
D<sup>term</sup> Key Numbers



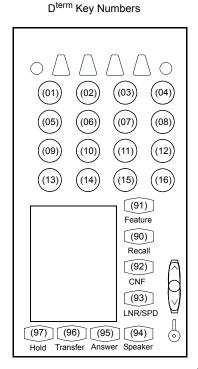
DTP-8D-1

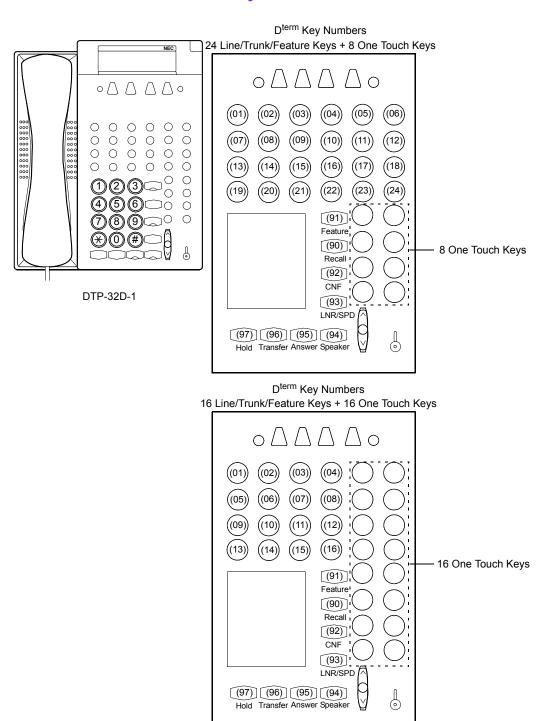


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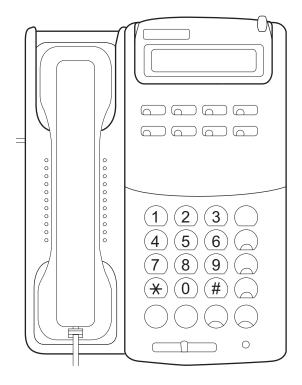


DTP-16D-1

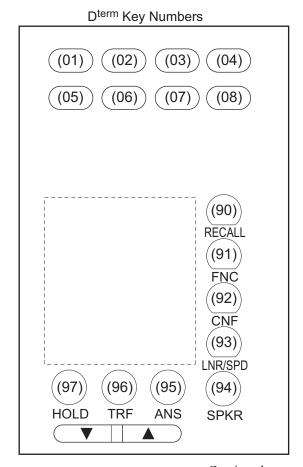




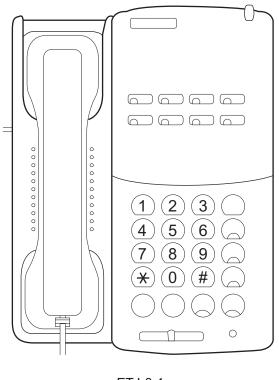
**NOTE:** The initial setting of key layout is for 16 Line/Trunk/Feature keys + 16 One Touch keys. When using key No. 17-24, set CM12 Y=24, 2nd data=0. After the 2nd data of CM12 Y=24 is changed, pull out and reconnect the modular connector of the D<sup>term</sup>.



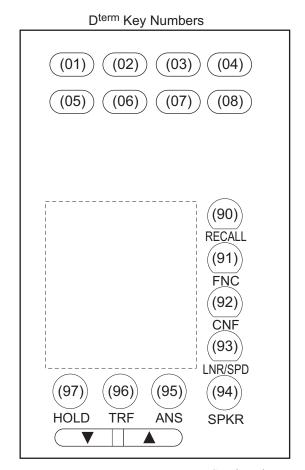
ETJ-8DC-1

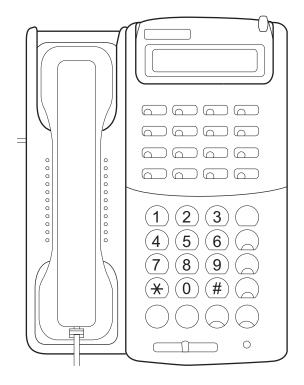


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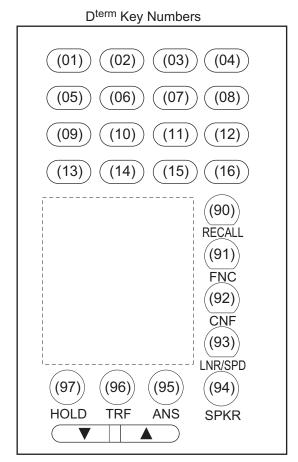


ETJ-8-1

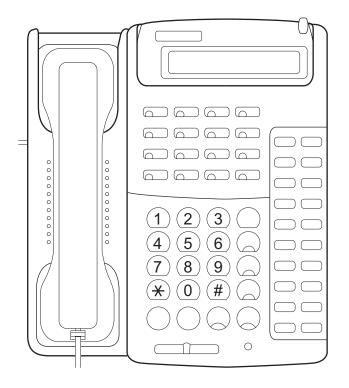




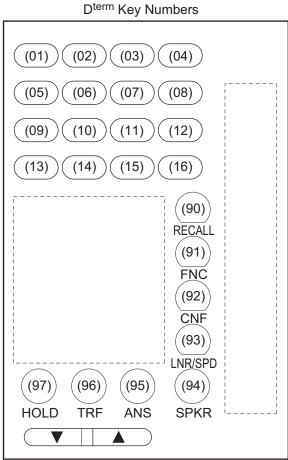
ETJ-16DC-1



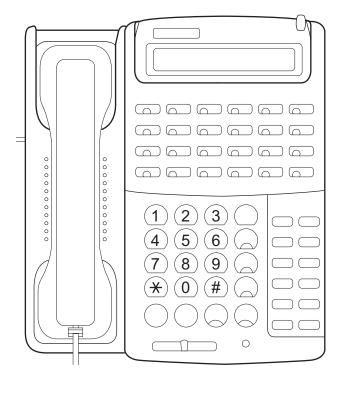
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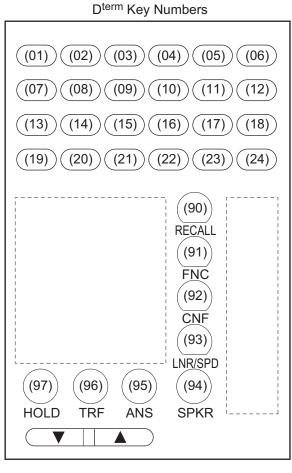
ETJ-16DD-1



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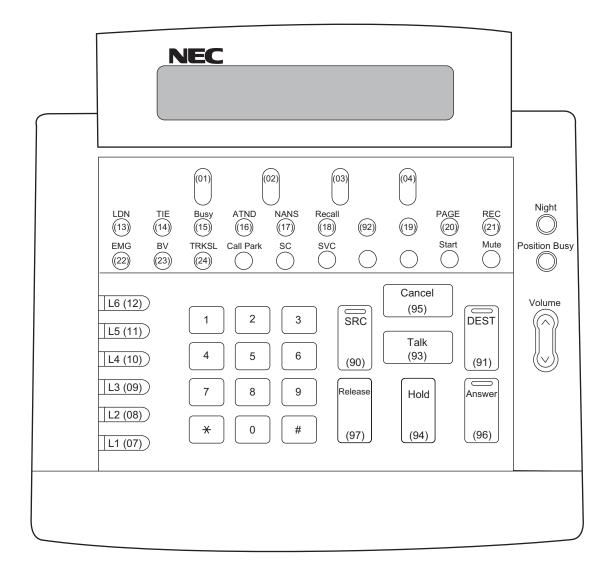


ETJ-24DS-1

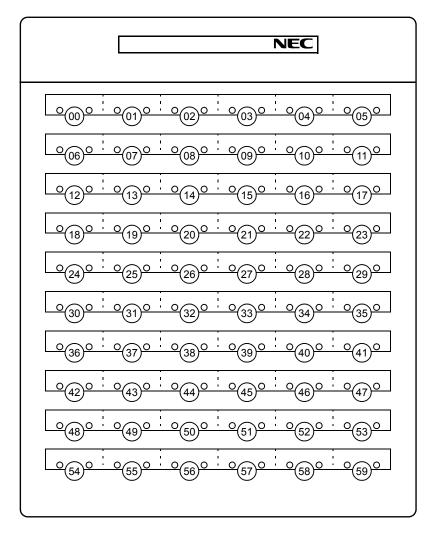


**NOTE:** When using key No. 17-24, set CM12 Y=24, 2nd data=0. After the 2nd data of CM12 Y=24 is changed, pull out and reconnect the modular connector of the  $D^{term}$ .

#### **DESKCON Key Numbers**

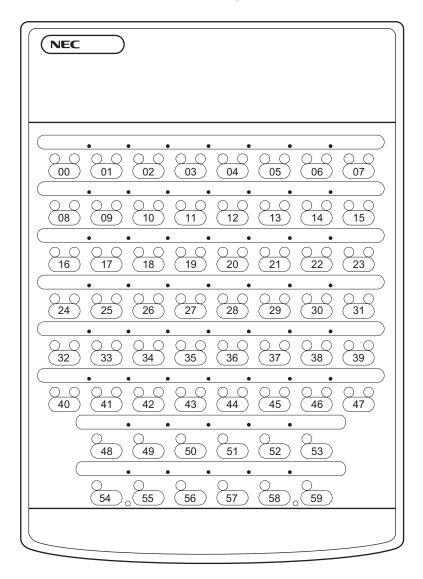


#### **DSS Console Key Numbers**



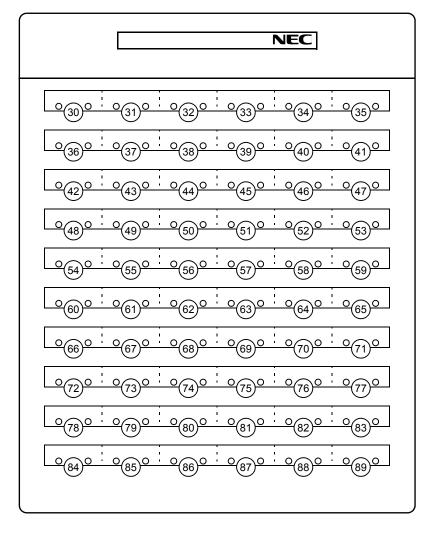
DCU-60-1

#### **DSS Console Key Numbers**



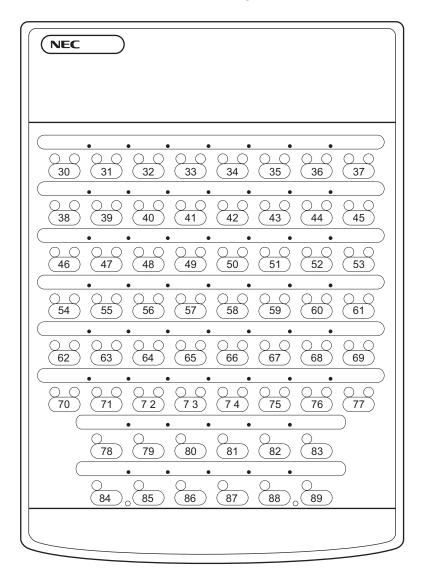
EDW-48-2

#### **Add-On Module Key Numbers**



DCU-60-1

#### **Add-On Module Key Numbers**



EDW-48-2

## **APPENDIX B**

# CHARACTER CODE TABLE

This appendix contains the character code table to set a station name displayed on  $D^{\text{term}}$  or Attendant Console.

Character Code Table	В
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#### **Character Code Table**

X: Upper digit Y: Lower digit

			71. 0 6	or argic		o. a.g.c
Y	2	3	4	5	6	7
0		0	@	P	\	p
1	!	1	A	Q	a	q
2	"	2	В	R	b	r
3	#	3	C	S	c	S
4	\$	4	D	T	d	t
5	%	5	Е	U	e	u
6	&	6	F	V	f	V
7	,	7	G	W	g	W
8	(	8	Н	X	h	X
9	)	9	Ι	Y	i	y
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E	·	^	N	^	n	~
F	/	?	О	_	O	<b>←</b>

**Example:** To set "John", do the following operation.

$$\frac{4A}{J} \, \frac{6F}{o} \, \frac{68}{h} \, \frac{6E}{n}$$