Panasonic

Operation

Installation

Programming

Operation Installation Programming

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OPERATION INSTRUCTIONS

TABLE OF CONTENTS

Important Information

Please observe the following guidelines for installation and use.

1. Install the main unit properly.
   (For details about installation, refer to Installation Manual.)
2. Do not use the telephone near sources of electric 'noise' such as fluorescent lamps, air conditioners, washing machines, TV sets or radios.
3. Telephone should not be exposed to direct sunlight, extreme temperature, moisture, strong vibrations, or greasy or dusty environments.
   Operating temperature : 0°C to 40°C
   Operating humidity : 30% to 80%
4. Never attempt to insert wires, pins, or similar objects in the vents or openings of the telephone set.
5. Never clean the telephone with benzene, paint thinner of other solvent materials to clean. Instead, wipe with a soft cloth.
6. Do not move the unit without consulting your dealer/installer.
7. Installation of the telephone system close to welding equipment or a broadcasting material may cause interference.

WARNING

Do not remove the cover of the Central Control Unit or key telephone. It may cause electrical shock and expose equipment operating at high temperature.
For installation and wiring, contact your dealer.

IMPORTANT

1) This is a class A product. In domestic environment this product may cause radio interference in which case the user may be required to take adeguate measures.
2) This apparatus must be installed in accordance with BS6701 and general approval NS/G/23/L/100005. This is a condition of the approval and any installation which does not comply with the above will invalidate the approval status of that particular installation.
3) This equipment requires a maintenance contract issued by a maintainer holding BSI approval. This is a statutory requirement.

Overview

Thank you for purchasing the Panasonic SBS Key Telephone System. The SBS is designed, using state-of-the-art technology, to provide you with a telephone system perfectly tailored to the needs of today's business communications.

The SBS allows connection of both key telephones and Single Line Telephones. The system ranges from an initial configuration of 2 lines and 8 extensions up to a maximum of 4 lines and 16 extensions to meet the special needs of small businesses, with optional expansion cards.

Panasonic offers you a valuable feature in a system for this size: hybrid ports in the initial configuration. This allows you to connect Single Line Telephones. With this feature, your answering machines, modems, fax machines, etc., can easily be integrated into the system.

The Panasonic SBS provides you with the complete answer to efficient business communications as well as the best return on your investment.

In This Manual

This manual consists of the following chapters:

Introduction:
Describes important information for the system. Before using the system, please read this chapter.

Making an Exchange Line Call:
Describes useful features for when you make an Exchange Line call.

Making an Intercom Call:
Describes useful features for when you make an intercom call.

Answering a Call:
Describes useful features for when you answer a call.

Hold and Transfer:
Describes useful features for when you want to transfer a call to an extension.

Other Useful Features:
Describes additional useful features.

Assignment:
Describes operations for assigning various features.

Operator Features:
Describes useful features for use with the attendant's phone.

Administrator's Phone:
Describes various settings for the entire system. These settings can be made only with the administrator's phone.

Single Line Telephone (SLT):
Describes features for use with the SLT.

Optional Features:
Describes optional features available with the system.

Icons and Abbreviations

Listed below are icons used in this manual:

Indicates the feature which can be programmed to an FF key.

Indicates the feature requires system programming. Refer to "Programming Instructions" for more details.

Listed below are abbreviations used in this manual:

ABM ..... Absence Message
BGM ..... Background Music
CCU ..... Central Control Unit
CDR ..... Calling Detail Record (Same as Call Logging)
CF ..... Call Forward
CW ..... Call Wait
DISA ..... Direct Inward System Access
DND ..... Do-Not-Disturb
DPSLT ..... Dial Pulse Type SLT
DSS ..... Direct Station Selector
DT ..... Dial Tone
DTMF ..... Dual Tone Multi-Frequency
EXT ..... Extension
FF key ..... Flexible Function key
IDT ..... Intercom Dial Tone
INT ..... Intercom
LCD ..... Liquid Crystal Display
LCR ..... Least Cost Routing
LED ..... Light Emitting Diode
LRB ..... Loud Ringing Bell
MCO ..... Pooled Trunk (Line) Access
MFSLT ..... DTMF (Tone) Type SLT
MOH ..... Music On Hold
OGM ..... Out Going Message
ODT ..... Exchange Line Dial Tone
PFU ..... Power FailureTransfer Unit
PSD ..... Personal Speed Dial
SLT ..... Single Line Telephone
SMDR ..... Station Message Detail Recorder
SSD ..... System Speed Dial
TRS ..... Toll Restriction (Call Barring)
TTY ..... Teletypewriter
VAU ..... DISA OGM Unit

Introduction

Important Information Before Use

Please read this information before proceeding to a further part of this manual.

1. Port and its usage

Ports which is available with SBS is shown below.

Port Type	Port usage
PA1	2-wire PSTN exchange line without DDI 2-wire PBX extension Loop calling unguarded clearing MF tone or loop disconnect signalling Timed break recall
1AS	2-wire analogue speechband apparatus MF tone or loop disconnect signalling Timed break recall
ITS	Panasonic SBS key telephone

2. Description of port types

Type of circuit	Port location	Port description
TNV	Exchange Line Port of the Central Control Unit (VB-9150UK) Exchange Line Port of expansion cards (VB-9260UK,VB-9261UK)	Analogue PSTN Port
	Power Failure Port of the Central Control Unit	Port for power failure
SELV	Extension port 7, 8 of the Central Control Unit (VB-9150UK) Extension port 1 to 8 of expansion cards (VB-9261UK,VB-9262UK)	Port for Single Line Telephone

Interconnection circuits should be such that the equipment continues to comply with the requirements of 4.2 of EN41003 for TNV circuits and 2.3 of EN60950 for SELV circuits after making connections between circuits.

3. Port types and call paths between ports

Call paths can be established between following ports.

PA1 ⟶ PA1	ITS ⟶ ITS	1AS ⟶ PA1
PA1 ⟶ ITS	ITS ⟶ 1AS	1AS ⟶ 1AS
PA1 ⟶ 1AS	ITS ⟶ PA1	1AS ⟶ ITS

4. Port to port loss and associated cable loss for each port

Port to port losses and associated cable losses are as follows.

Call path	Port to port loss	Associated cable loss
PA1 ⟷ 1AS	1dB	0dB to 1dB

5. Cabling Requirement

Cabling between the Central Control Unit (CCU) and each Panasonic key telephone must be four wire, and between the CCU and each 2/3 wire apparatus shall be two wire, 0.5mm diameter copper conductor cable and terminated with LJU, slave socket for Panasonic key telephone and master socket for 2/3 wire apparatus.
Cable length from the CCU to each extensions should comply with following requirements.
Also cabling from TJF which is not a part of Panasonic system, normally supplied by PTO to the CCU shall comply with following requirement.

Cabling	Max. cable resistance	Cable length
CCU to ITS	40 ohms (loop)	Max. 240m
CCU to 1AS	100 ohms (loop)	Max. 600m

6. Over voltage protection

Surge absorber is fitted to exchange line ports (PA1) and extension ports (1AS) of the system.
If extension cable extends between buildings, surge arresters should be fitted at the point of entry and exit at both ends of the cable.

7. PBX register recall

SBS can be connected to the extention ports of approved PBXs (piggy backing).
SBS extension ports also connect to the exchange line ports of approved call routing system to work as host PBX system.
Timed break recall is available to work with another call routing apparatus.

8. Ring eqivalent number (REN)

REN for exchange line port (PA1) is 3.

9. Line feeding

Line feeding from 1AS ports to telephones is derived internally from SBS the Central Control Unit (CCU).
The SBS is not a through-fed system.
Maximum 30mA current is supplied to extension apparatus.

10. Recommended extension apparatus

When using separately approved extension apparatus, any UK approved 2 wire apparatus can be used.
But in order to maximize the benefit Panasonic recommend the apparatus with MF signalling and timed break recall.

11. Call path delay

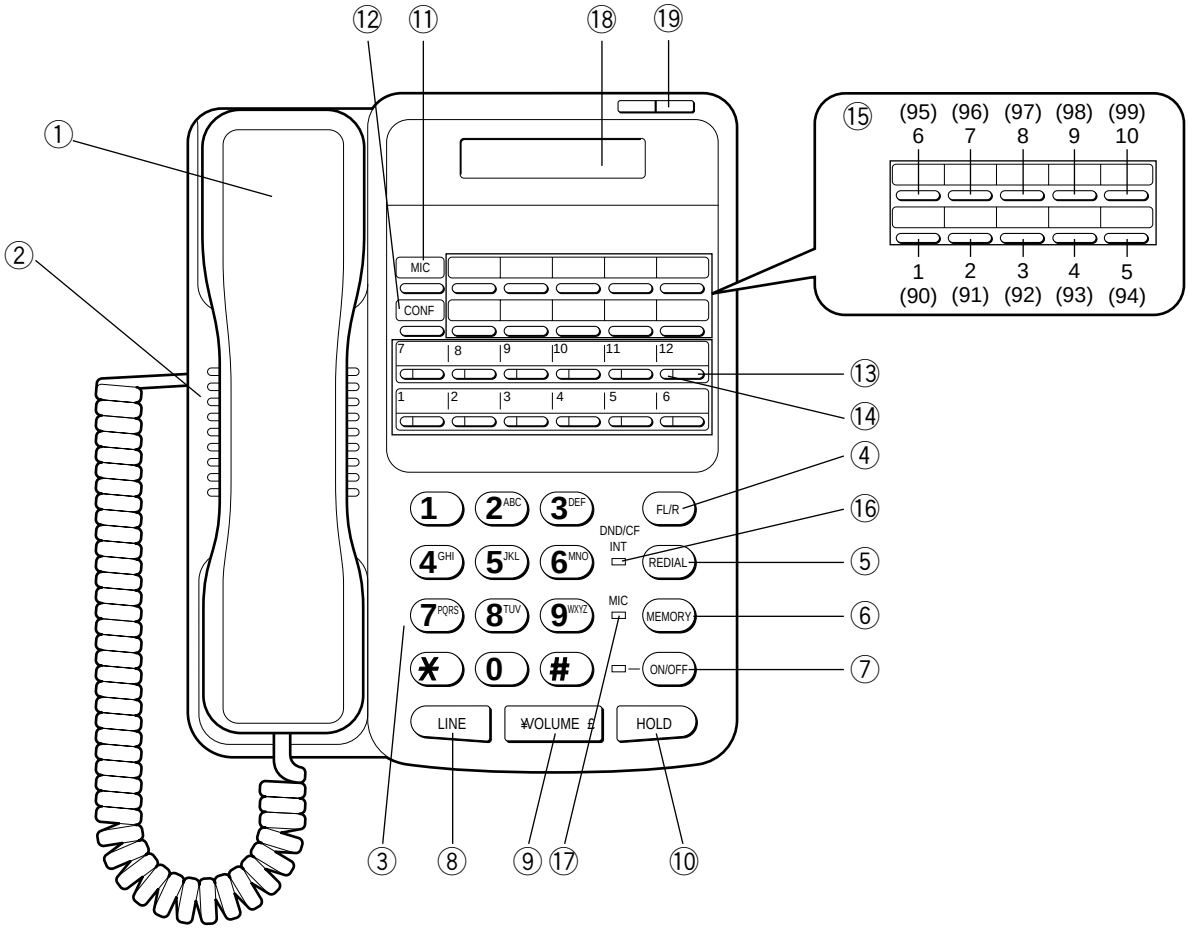
Call path delay for each speech direction is as follows.

Call path	Max. delay	Call path	Max. delay
PA1—> ITS	1000uS	ITS —> PA1	1000uS
PA1—> 1AS	1000uS	1AS—> PA1	1000uS

12. In the event of power failure

A battery installed inside of the Central Control Unit (CCU) will back up full operation of SBS for approximately 15 to 30 minutes (depends on call traffic condition).
When the battery is exhausted up, an exchange line is switched over to power fail telephone socket, which is installed adjacent to the CCU.
Connect ordinary telephone to originate and receive calls.

Parts and Features



VB-9411ADSUK Key Telephone with a Speaker and Display

①	Handset	For speaking and listening.
②	Built-In Speaker	For ringing, or listening to tone and voice calls.
③	Dial keys 	For dialing telephone numbers and programming.
④	FL/R key 	For sending the Timed Break signal while talking on an exchange line.
⑤	REDIAL key 	For redialing the last exchange line number dialed.
⑥	MEMORY key 	For assigning speed dial numbers and making exchange line calls with SSD codes.

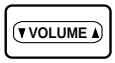
⑦ ON/OFF key and LED

For making on-hook calls and assigning speed dial numbers. The LED lights up when the ON/OFF key is pressed or when a FF key is used to get an exchange line and activate the monitor function.

⑧ LINE key

For making exchange line calls.

⑨ VOLUME key



For adjusting the LCD contrast, ringing volume, speaker volume and BGM volume.

⑩ HOLD key

For placing calls on hold or releasing intercom calls on hold. Also used for storing SSD and PSD assignments.

⑪ MIC key

For turning the built-in microphone on and off.

⑫ CONF key

For making conference calls, or confirming entries of speed dial numbers and FF key functions. It's also used temporarily for releasing privacy of your exchange line conversation.

⑬ FF keys

For accessing a vacant exchange line, and a variety of other features.

⑭ FF key indicator

Indicates the FF key is in use. It lights or blinks in green or red depending on the features.

⑮ ONE-TOUCH keys

For making exchange line calls or intercom calls to specific numbers.
1 to 10 indicate the number of ONE-TOUCH keys. (90) to (99) indicate PSD codes.

⑯ DND/CF INT LED

Lights up in green when Do-Not-Disturb or call forward has been set. Also lights up in red when you make an intercom call, flashes quickly when you have an intercom call on hold, and flashes slowly when you receive an intercom tone call.

⑰ MIC LED

Indicates the MIC key has been pressed to turn on the built-in microphone, and on-hook answer is available. It blinks in handsfree speakerphone mode.

⑱ Display(LCD)

Displays date and time when the telephone is not in use. During a call, it displays the dialed number, PSD or SSD name, or extension name, as well as the duration of the call. When you receive an intercom call, the extension number or name of the caller is displayed.
Also displays guidance for feature assignments, absence messages, alarms, the extension number of the telephone you are connected to, and other information.
Note: Segment type display models (VB-9211DSUK, VB-9411DSUK) have limited guidances compared to alphanumeric display model (VB-9411ADSUK)

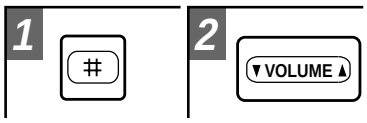
⑲ Large LED

Blinks on reception of an incoming call.
Also, this LED blinks when Message Wait feature is assigned from other extension.

Adjusting Display Contrast and Volume Level

LCD Display Contrast (Telephones with Alphanumeric LCD Only)...

You can adjust the LCD display contrast. The display will grow dimmer when the right side of the VOLUME key is pressed, and brighter when the left side is pressed. Do not pick up the handset or press the ON/OFF key before the following operation.



Note

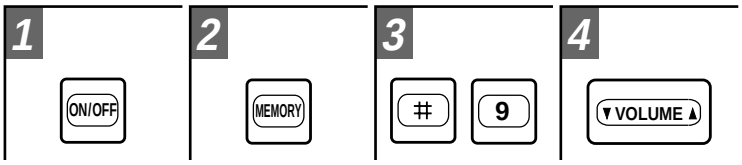
Display contrasting is available for alphanumeric display type telephone (VB-9411ADSUK) only.

Ringing Volume .....

You can set the ringing volume to any of five different levels. It becomes louder when the right side of the VOLUME key is pressed, and softer when the left side is pressed.

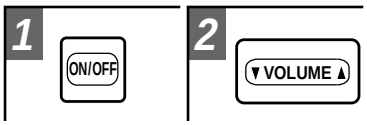
• When Ringing

• When not Ringing



Speaker Volume .....

You can set the speaker volume (including the voice call receiving volume) to any of five different levels. It becomes louder when the right side of the VOLUME key is pressed, and softer when the left side is pressed. Adjust the volume while you hear a tone or voice through the speaker.



BGM Volume .....

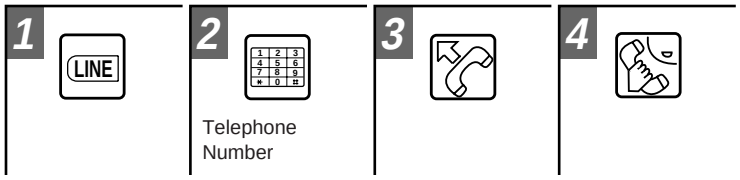
You can set the BGM volume to any of five different levels. It becomes louder when the right side of the VOLUME key is pressed, and softer when the left side is pressed. Adjust the volume while listening to the BGM.

Making an Exchange Line Call

Making a Call

Using the LINE Key .....

You can make an exchange line call by pressing the LINE key and dialing a telephone number. You need not dial a group number.



Pulse to DTMF Signal Conversion

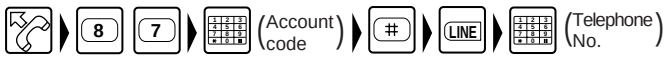
You can send DTMF signals by pressing ∗ or # after dialing a telephone number. This feature is useful for calling bank computers.
By programming, the system automatically sends DTMF signals after dialing a telephone number.

Long Speech Alarm

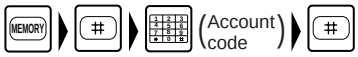
The alarm beeps after you have been speaking for 2 min. and 30 sec. Afterwards, it beeps every 3 min.
This feature requires programming and only available for key telephones.

Account Code

This system can record a separate account code for each client. Each account code can be up to 10 digits long. If you want to enter an account code and make a call, do the following:



If you want to enter an account code during the conversation, do the following:



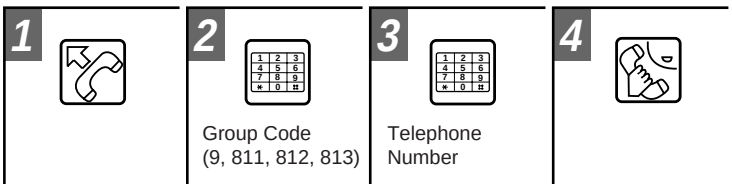
Trunk Queuing

When all exchange lines are busy, use this feature to tell you when a line becomes free.

When your telephone rings, pick up the handset within 16 sec. You are immediately connected to a vacant line.

Line Group Dial

This feature is useful when your telephone has more than two exchange lines and you want to select a specific group. Use this feature when you are calling from an SLT and you need a vacant line.

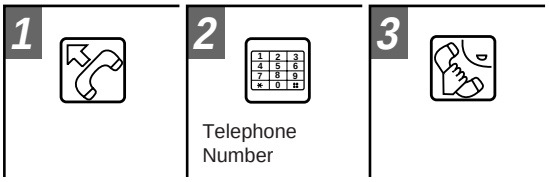


Group Code

The system can handle up to four exchange lines. All exchange lines belong to group code 9. You can also divide these exchange lines into group code 811 to 813 by programming. Dialing 9 or one of these group codes opens a vacant line.

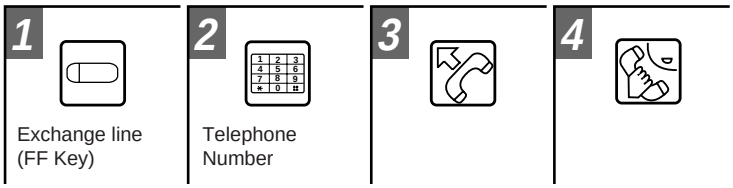
Prime Line Preference

You can automatically access a specific line group without pressing the LINE key. You can make a call by picking up the handset or pressing the ON/OFF key and dialing a telephone number. This feature requires pre-programming.



Direct Exchange Line Access

You can select an exchange line by pressing an FF key if you have assigned it an exchange line number.



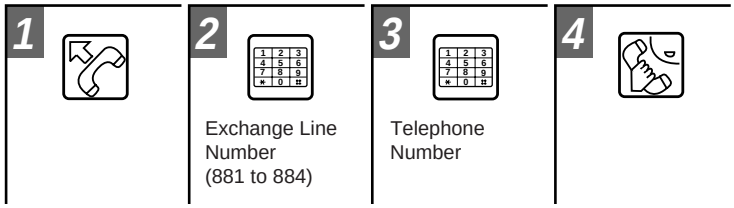
Using an FF Key

You can assign SSD codes to FF keys. Once you have assigned them, you can reach the number just by pressing the FF key instead of dialing the telephone number. Be sure to assign group code 9 before SSD codes.

Dial Exchange Line Access

FF

You can select a specific exchange line. This feature is useful when sending a fax or using the SLT.



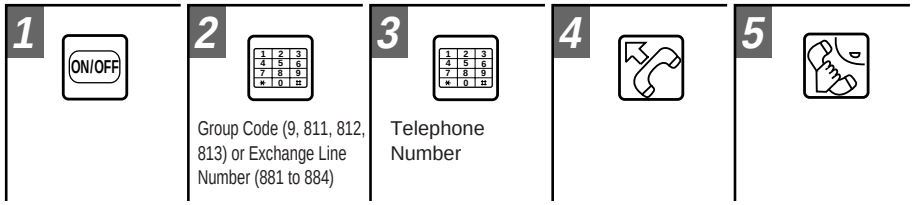
Exchange Line Number

Available exchange line numbers are 881 to 884. Initially 881 to 884 are assigned to FF key 1 to 4.

On-Hook Dial

FF

You can make a call without picking up the handset. Use the handset when you hear the voice from the speaker. Using a speakerphone (VB-9211DSUK, VB-9411DSUK, 9411ADSUK) allows you to talk through the built-in microphone when you hear the voice.



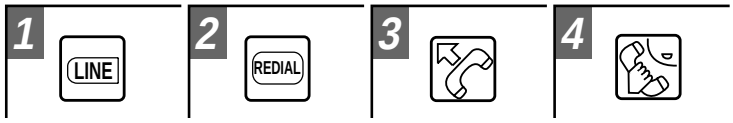
Line key, One-Touch Key, FF Key

When you call using the LINE key, ONE-TOUCH key, or FF key, you need not press the ON/OFF key for exchange line call.

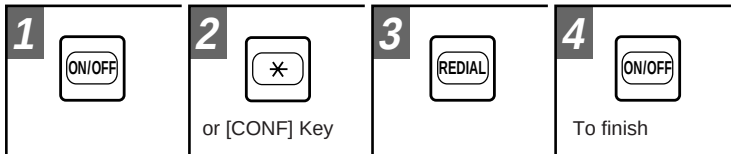
Last Number Redial

You can redial the last outside telephone number dialed just by pressing the REDIAL key after seizing a line.

• To Redial



• To confirm the last telephone number dialed (Telephones with LCD Only)



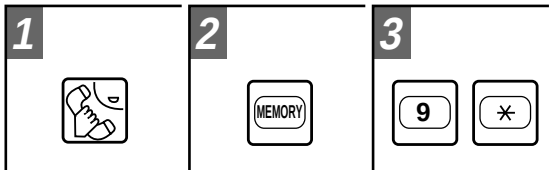
Auto Repeat Dial

If you redial with the REDIAL while you hear a busy tone, the telephone automatically redials after a certain period of time.
This feature is available when making an on-hook dial call on a key telephone.
After Auto Repeat Dial is set, ON/OFF key's led will blink red.

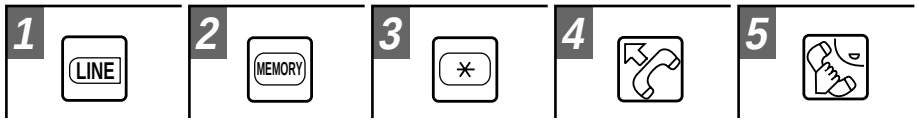
Save Dial

During an exchange line call, you can save the telephone number of the outgoing call for later use. Unlike the Redial feature, the number saved in this way will not be erased when you call another number. However, it will be erased if you save a different number.

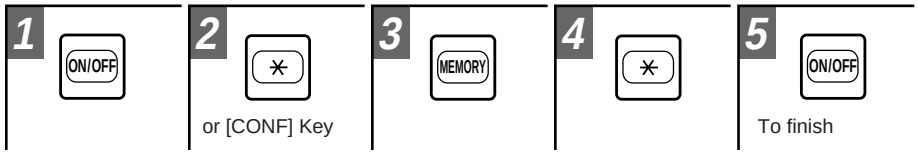
• To save the telephone number on Line



• To call the telephone number saved



• To confirm the telephone number saved (Telephones with LCD Only)



Speed Dial

ONE-TOUCH Key (Personal Speed Dial) .....

FF

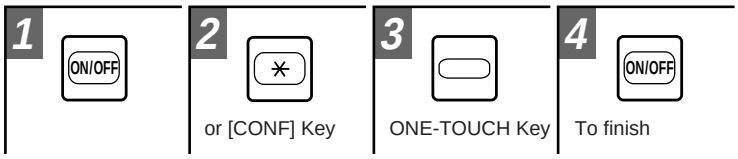
You can assign up to 10 frequently dialed telephone numbers to ONE-TOUCH keys for use at your telephone only. ONE-TOUCH keys (1-10) correspond to PSD codes (90-99) respectively, and the numbers assigned to ONE-TOUCH keys are also assigned to corresponding PSD codes (90-99) on your telephone automatically. Once you have assigned them, you need press only one key, or short code in case of SLT, to call the desired telephone number. For more about ONE-TOUCH key assignment, refer to the ONE-TOUCH key part of the Assignment section in this book.

• To call with a ONE-TOUCH Key from key telephone (An Extension Number, Feature Code, or Number with Outside Access Code is Assigned)

To assign

See page O-39.

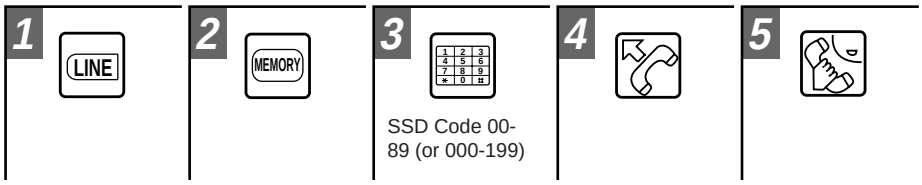
• To confirm the Telephone Number Assigned to a ONE-TOUCH Key (Telephones with LCD Only)



System Speed Dial .....

You can assign up to 90 or 200 (if preprogrammed) frequently dialed telephone numbers to SSD codes, 00-89 (or 000-199), with the administrator's phone. For more about SSD assignment, refer to the System Speed Dial part of the Assignment section in this book.

• To call with an SSD Code



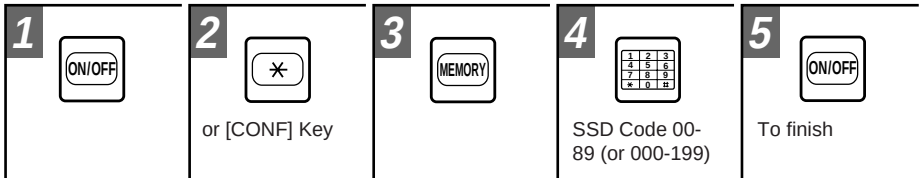
To assign

See page O-42.

SLT

See User Guide (SLT).

• To confirm the telephone number assigned to an SSD Code (Telephones with LCD Only)



LCR

PGM

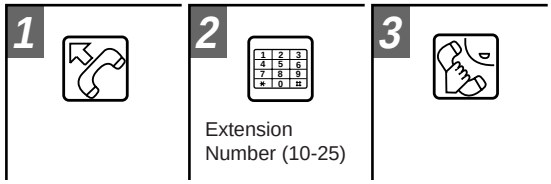
When the LCR function has been programmed, the LCR function is automatically activated when you make a call. When you dial the other party's phone number, the cheapest route is automatically selected. This feature requires system programming and a special contract with the telephone company. Please consult with your local dealer.

Making an Intercom Call

Tone Call

FF

You can choose between tone call (ringing sounds) and voice call (speaking). The system default is tone call. You can switch tone call to voice call by dialing 1 during an intercom call. You can also program your telephone to make an intercom voice call when only an extension number is dialed, or to make an intercom tone call when 1 is dialed following an extension number.



Operator Call

If you want to call the operator, dial 0.

Speed Dial

An extension number can be assigned to a ONE-TOUCH key or an FF key.

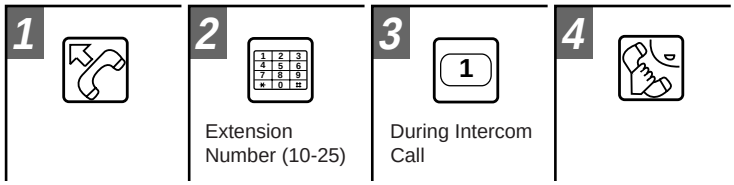
On-Hook Dial

You can make a call without picking up the handset.
Press the ON/OFF key instead of picking up the handset.

Voice Call

FF

You can choose between tone call (ringing sounds) and voice call (speaking). When making a voice call, a splash tone, followed by your voice, is heard from the telephone receiving your call. You can switch voice call to tone call by dialing 1 during an intercom call. You can also program your telephone to make an intercom voice call when only an extension number is dialed, or to make an intercom tone call when 1 is dialed following an extension number.



To Set to Tone Call

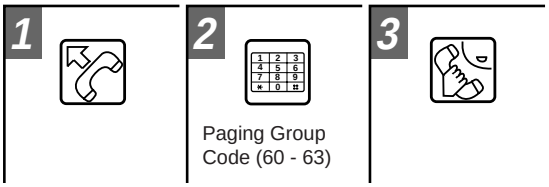
To set back to tone call, repeat the procedure.

Paging

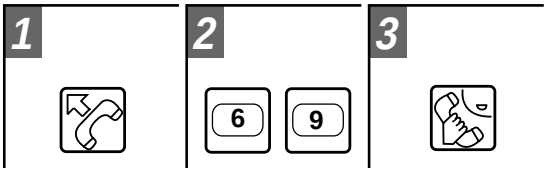
PGM FF

This feature projects your voice through the speakers of other key telephones, enabling you to contact someone who is temporarily away from his/her telephone.

• To Page



• To answer a Page/LRB (Meet Me Answer)



External Paging

If an external paging system is connected the system, you can also page through it. See External Paging in the Optional Features section.

Paging Group Code

The system has 3 paging groups (1-3). Select the group(s) you want to page.

All groups & External Paging	60
Group 1	61
Group 2	62
Group 3 & External Paging	63

LRB (Loud Ringing Bell)

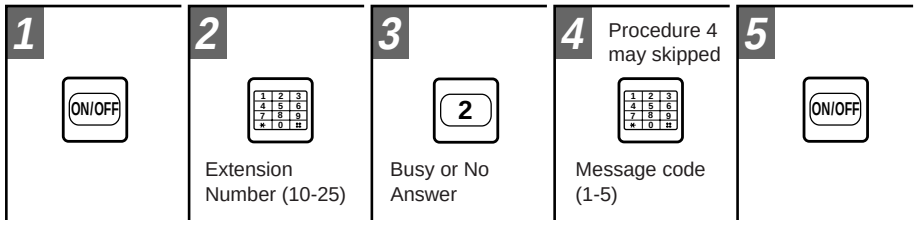
Program setting allows you to transmit the incoming ring tone on an exchange or internal line to external paging.

Message Wait

FF

When no one answers at an extension, or the extension is busy, you can leave a message and your extension name at the extension you tried to reach.

• To send a Message Wait (With Add-on Message)



Add-on Message (Procedure 4)

Message No.	Message
1	VISITOR HERE
2	NEED HELP
3	IMPORTANT
4	URGENT
5	EMERGENCY

These messages are already stored in the system and used commonly for Call Wait. You can modify them with the administrator's phone.

Message Wait with SLT

Sending a message wait from a SBS telephone to a SLT can not be performed. In the reversed direction, it is available.

DND, Absence Message, Call Forward

You can leave a message to the extension which is set in DND or absence message. However, if the extension you reached is set in call forward, your message will be forwarded to the other extension specified.

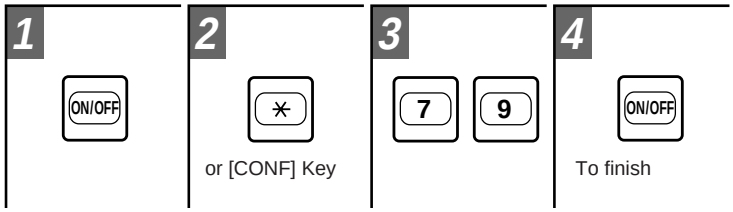
Busy Tone or Ringback Tone after Leaving a Message

If a busy tone or ringback tone continues after dialing a message code, you could not leave a message.

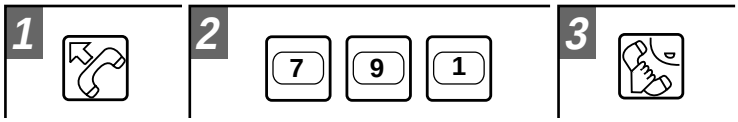
Number of Message Settings

Though only one message can be received for each key telephone, messages can be sent to two or more key telephones from one key telephone.

• To confirm an Add-on message you have received (Telephones with Alphanumeric LCD Only)



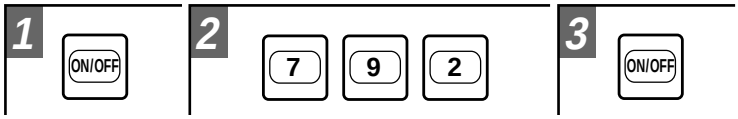
• To call back to an extension that Left the message



Automatic Cancellation of Message Wait

Message wait is automatically canceled when you return a call.

• To cancel a message without calling back



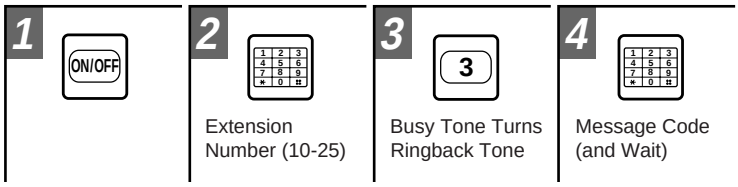
To cancel the Message You Left

If you want to cancel the message you left, call the extension again from the telephone you used to leave it.

Call Wait (Camp-On)

When an extension is busy, you can camp-on the extension by dialing 3. Additionally, you can notify the extension of your call by sending various messages.

• To send a Call Wait



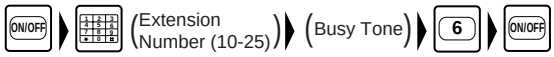
Message Code

Message No.	Message
1	VISITOR HERE
2	NEED HELP
3	IMPORTANT
4	URGENT
5	EMERGENCY

These messages are already stored in the system and used commonly with Add-on Massage for Massage Wait. You can modify them with the administrator's phone.

Intercom Call Back

If you cannot reach an extension you want to contact, dial 6 and press the ON/OFF key when you hear the busy tone. When the extension becomes free, it will automatically call you and you can reach the extension just by picking up the handset.



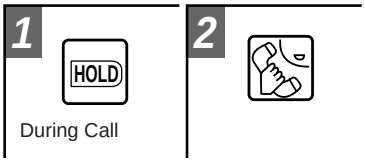
To Cancel

Call wait is automatically canceled when you press the ON/OFF key or replace the handset.

Call Wait with SLT

Sending a call wait from a key telephone to an SLT can not be performed. However, in the reversed direction, it is available.

• To answer a Call Wait during a call



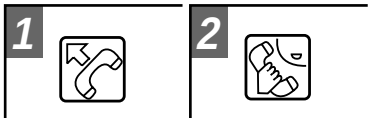
The First Call

If you answer a call wait, the first call is placed on hold and you are automatically connected to the other line. The first call you have can be either an exchange line call or intercom call.

Answering a Call

Auto Answer

You can answer any calls (intercom or exchange line calls) just by picking up the handset.



Exchange Line Incoming Ringing Alarm

If no one answers a ringing telephone, the ringing tone will change to the alaming tone if programmed.

To answer with the ON/OFF Key

If programmed, you can answer a call with the ON/OFF key instead of picking up the handset.

Ringing Tone

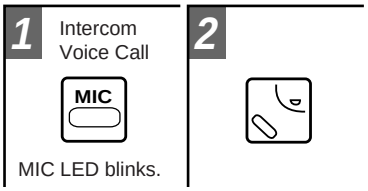
The ringing tone for incoming calls can be changed for each line port with programming.

Non-Ringing Auto Answer

When an incoming call is on the line to which your telephone does not have a direct access, your telephone does not ring and the LED on an FF key blinks slowly in red. If non-ringing auto answer is programmed, you can answer any calls to your paging group, just by picking up the handset.

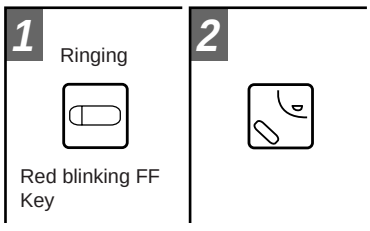
Handsfree Answer Back, Intercom (Key Telephones only)

You can answer an intercom voice call without picking up the handset. You can talk through the built-in microphone when its LED lights. You can also use the handset if you pick up.



Handsfree Answer, Speakerphone

If your telephone is a speakerphone (VB-9211DSUK, VB-9411DSUK, 9411ADSUK), you can answer any calls (intercom or exchange line calls) by pressing the ON/OFF key. You can talk through the built-in microphone when its LED blinks. You can also use the handset if you pick up.



Note

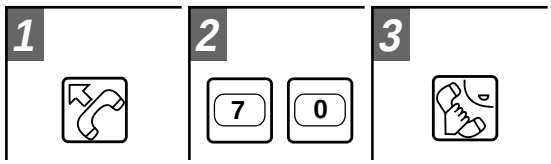
To Hands Free Answer using ON/OFF key, programming is required, MODE4-(10-25)04#-2#.

Call Pick-up

Group Call Pick-up

PGM FF

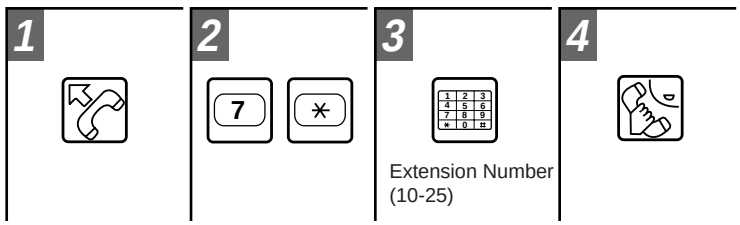
You can answer calls to other extensions in your paging group using your telephone. However, you cannot answer alarm (time reminder) calls, or perform call back for other extensions.



Direct Call Pick-up

PGM FF

You can answer calls to other extensions not only in your paging group but also in other paging groups using your telephone. However, you cannot answer an alarm (time reminder) call, or perform call back for other extensions.



Hold and Transfer

Exclusive Hold

You can put a call on exclusive hold to do something else. A call on exclusive hold can only be released by the extension from which it was put on hold. Exclusive hold is available both for exchange line calls and intercom calls.

Exchange Line Hold .....

1 To Hold

Exchange Line which you are using

2 To Release

Press same Exchange Line again

Hold Recall

If a call on hold is not answered within a certain period of time, a hold recall tone sounds on the telephone which placed the call on hold.

Intercom Hold .....

1 To Hold

2 To Release

Hold Recall

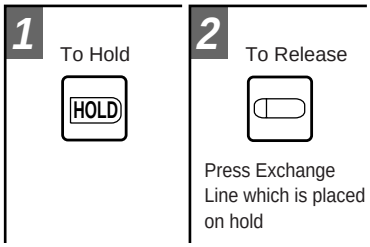
Hold recall is not available for intercom hold.

Brokers Hold

When you are talking to an extension with another intercom call on hold, you can switch the line just by pressing the HOLD key.

System Hold

You can put an exchange line call on system hold to transfer it or make a conference with it. A call on system hold can be released by any extension.



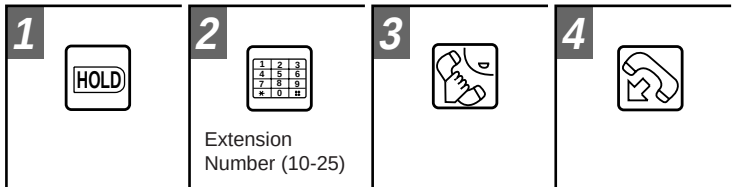
To release a call on hold

• Pick up the handset and press the held FF key. (The FF key flashes in red.)

• Pick up the handset and dial “88n” if FF keys are not equipped. (n: exchange line number)

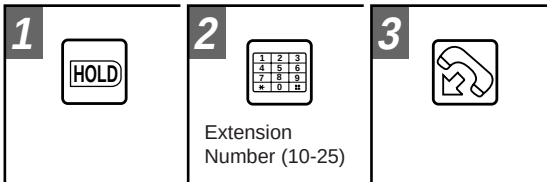
Supervised Transfer

You can notify a third party extension of an exchange line call on hold before transferring it. This feature is useful when the third party is in another room and visual confirmation is not possible.



Unsupervised Transfer

You can force transfer an exchange line call to an extension without notification. This feature is useful when you know that the extension exists or it is busy.



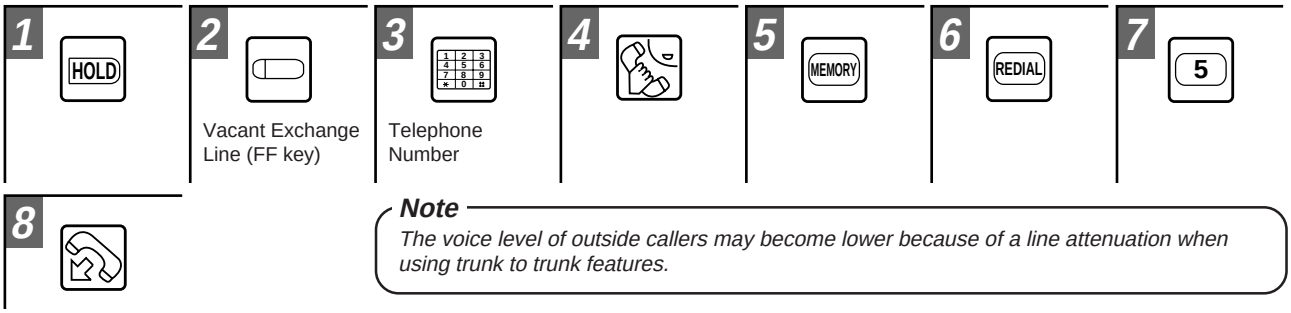
Transfer Recall

If a transferred call is not answered within a certain period of time, a transfer recall tone sounds on the telephone which transferred the call.

Trunk-to-Trunk

PGM

You can transfer an exchange line call to another exchange line.



Note

The voice level of outside callers may become lower because of a line attenuation when using trunk to trunk features.

Disconnection

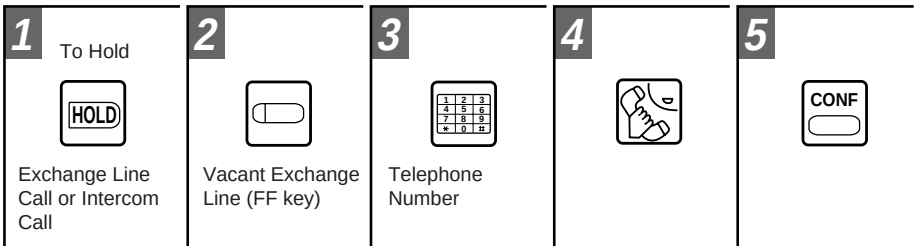
Trunk-to-trunk talk is disconnected when;

1. A disconnection signal is received from exchange line.
   It is disconnected when a Polarity Reverse signal or break signal is received from an exchange line.
2. A specified period of time has been passed.
   The system has a timer monitoring a trunk-to-trunk talk. You can set this timer to 1 to 40 minutes.
   Trunk-to-trunk talk is automatically disconnected after a period of time specified to the timer.
3. A Busy Tone from PSTN is detected.
   Set the number of Busy Tone detections by the programmed setting. Trunk-to-trunk talk is disconnected when the number of Busy Tones set here is detected.
4. The extension which transferred the call joins the conversation again.

External Conference

You can make a conference call among two exchange lines and one extension, or one exchange line and two extensions. This feature is particularly useful when making arrangements among three parties or when arranging schedules.

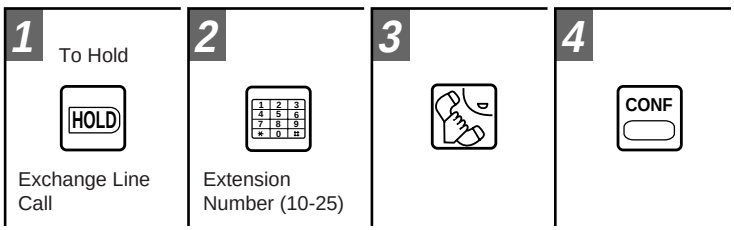
• To Make a Conference Call with an External 3rd Party



Note

When having a conference, the voice level becomes lower (approximately 6dB). This is normal operation as the system balances the conference party's speech to avoid feedback occurring.

• To Make a Conference Call with an Internal 3rd Party

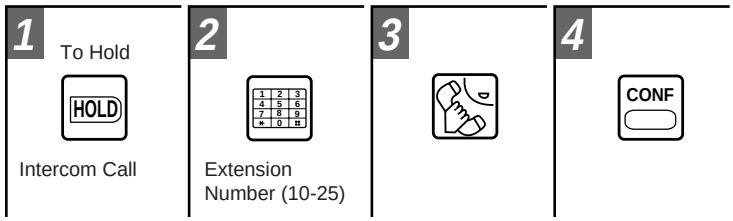


Note

When having a conference, the voice level becomes lower (approximately 6dB). This is normal operation as the system balances the conference party's speech to avoid feedback occurring.

Intercom Three Party Conference

You can make a conference call among three extensions. This feature is useful when you need a third person's opinion.

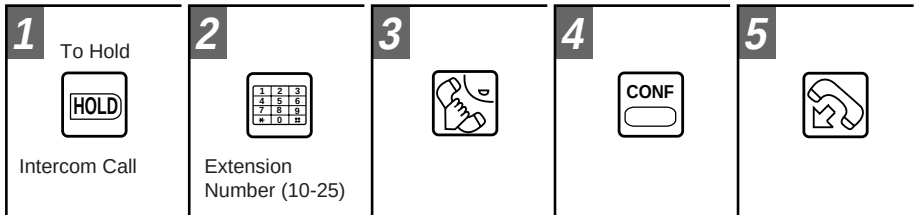


Note

When having a conference, the voice level becomes lower (approximately 6dB). This is normal operation as the system balances the conference party's speech to avoid feedback occurring.

Intercom Transfer

You can transfer an intercom call to another extension by entering Intercom Three Party Conference temporarily.



Other Useful Features

FF Key

You can assign frequently used features to FF keys. Once you have assigned them, you can perform a feature just by pressing one FF key instead of dialing its number. You can assign exchange lines, PSD/SSD codes, or extension numbers to FF keys. For FF key assignment, refer to the FF key part of the "Assignment" section in this book (See page O-37).

• To Use an FF Key

1

Direct Exchange Line Access

If you assign exchange lines, 881-884 (intially assigned), to FF keys, you can access an exchange line just by pressing an FF key. You don't have to press the ON/OFF key or pick up the handset.

Exchange Line Status Indication

The LED on an FF key indicates condition of the exchange line if assigned. When you use the line, it flashes in green. When another extension uses the line, it stays lit in red.

Serial Call

If extension numbers, 10-25, are assigned to FF keys, you can terminate the current intercom call and make another intercom call by pressing an FF key. This feature is available either when you are talking or when the busy tone is audible.

Exchange Line Auto Hold

If extension numbers, 10-25, are assigned to FF keys, you can place the current exchange line call on hold and make an intercom call by pressing an FF key.
If the paging feature is assigned to an FF key, you can place the current exchange line call on hold and page by pressing the FF key.

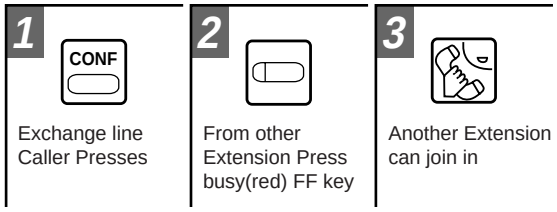
INT One-Touch Call (DSS/BLF)

If extension numbers, 10-25, are assigned to FF keys, you can call an extension by pressing an FF key. The LED on an FF key indicates the following conditions of the extension assigned.

Ringing	Flashes in Red
Speaking	Stays Lit in Red
DND/Call Forward/Absence Message	Stays Lit in Green
Free/Idle	Off

Privacy Release

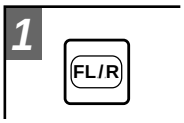
When you are talking on an exchange line, you can let another extension join in to make a conference call. The extension must press the Exchange Line key (FF key) within 15 sec. after you give it permission to join in.



Sending a Timed Break Signal

PGM

You can send a Timed Break Signal while talking on an exchange line.



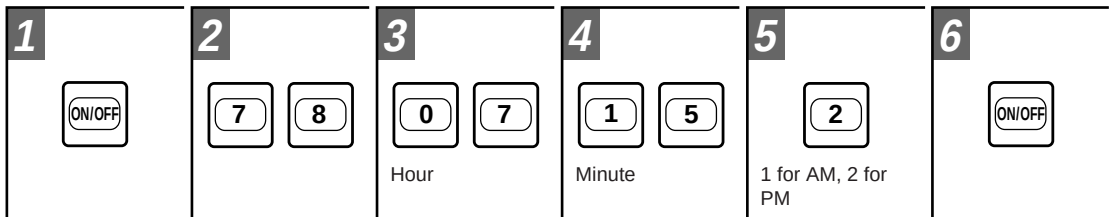
Flash

You can use the FL/R key for the flash function according to the program setting. If you press the FL/R key while talking on an exchange line or an internal line, you can release current call and reseize same line as a new call, without returning the handset.

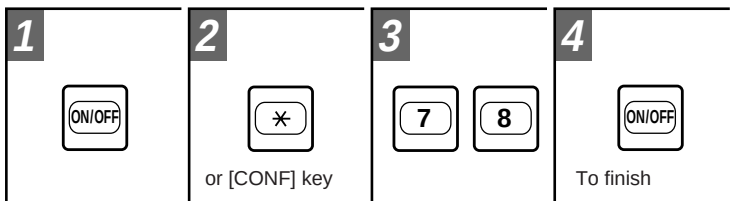
Alarm

You can set an alarm to ring at your key telephone at a specific time. Once it has rung, the alarm is automatically canceled. If you are using the telephone at the time the alarm is set to ring, there will be no alarm. In the following example, enter 07152 to set the alarm at 7:15 PM (19:15). This feature is available for key telephone only.

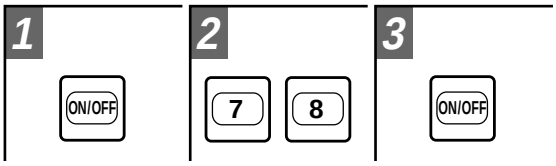
• To set the Alarm



• To confirm the Alarm Setting (Telephones with LCD Only)



• To cancel the Alarm



To Stop the Alarm Ringing

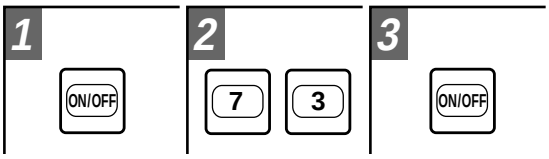
Pick up the handset or press the ON / OFF key.

No-Answer

DND (Do-Not-Disturb) .....

FF

You can make your telephone unavailable for incoming calls. Anyone calling your extension will receive a busy signal.



To Cancel

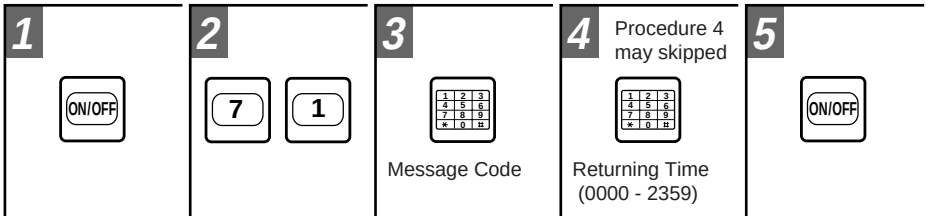
Repeat the procedure.

Absence Message .....

FF

You can leave a message at your extension saying why you are out and the time you will return.

• To set the Absence Message

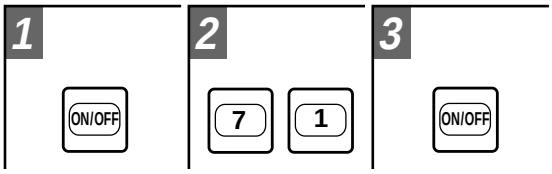


Message Code

You can assign five messages to the message codes, 5-9. The message codes, 0-4, are initially assigned for the system. For message code assignment, refer to the Absence Message part of the "Assignment" section in this book.

Message Code	Message	Message Code	Message
0	IN MEETING (changeable)	5	(assignable)
1	AT LUNCH (changeable)	6	(assignable)
2	OUT OF OFFICE (changeable)	7	(assignable)
3	HOLIDAY (changeable)	8	(assignable)
4	ANOTHER OFFICE (changeable)	9	(assignable)

• To cancel the Absence Message

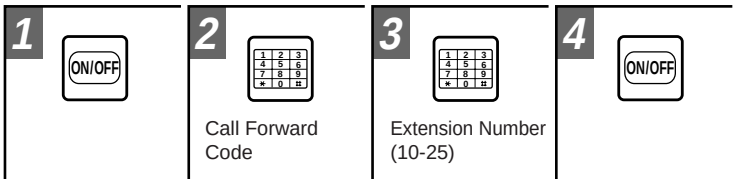


Call Forward

FF

You can forward an incoming call to another extension or an exchange line.

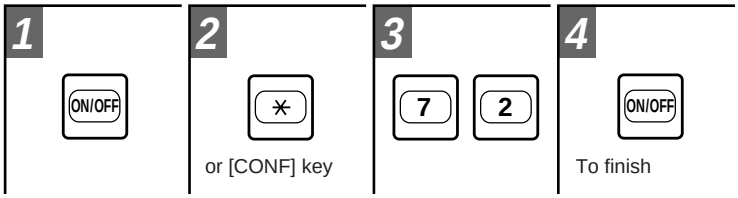
• To forward a Call to an Extension



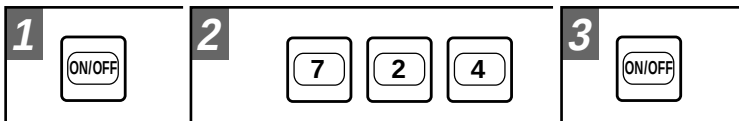
Call Forward Code

Call Forward Code	Function
721	All Calls
722	Busy or No Answer
723	On-Busy
725	No-Answer

• To confirm the Call Forward from an extension assigned (Telephones with LCD Only)



• To forward a Call to an exchange line



Note

The voice level of outside callers may become lower because of a line attenuation when using trunk to trunk features.

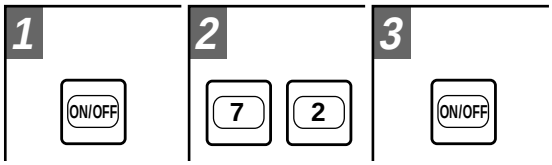
Outside Forwarding

If you set a telephone to forward calls to outside, incoming calls to the telephone are automatically transferred to the number assigned to PSD code 99. Line Access Code(9, or 811-813) must be included in front of dialing number on PSD 99. Therefore, you need not dial an extension number when setting. If PSD code 99 is not assigned, you will hear a busy tone, and can not set the call forward.
When a telephone is set to forward calls to exchange line, you can not use it to make and receive a call.
The following operations can be carried out even during setting of Call Forward from the exchange line.

72 : Cancels Call Forward
88x : Acquires an extra exchange line (x: Exchange line No.)
74nnnn : Sets/cancels Station Lock Out (nnnn: ID code)

When this feature is assigned, outgoing intercom call will not be available. Operator cannot assign this feature.

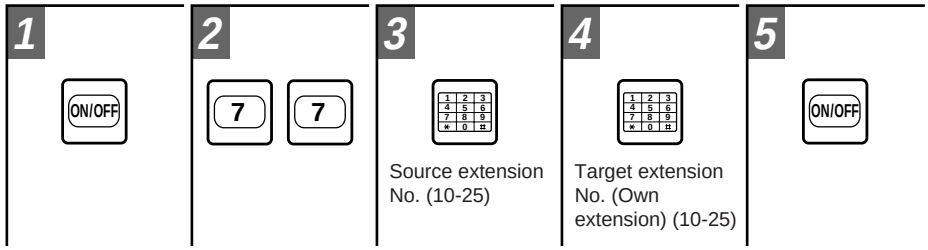
• To cancel the Call Forward



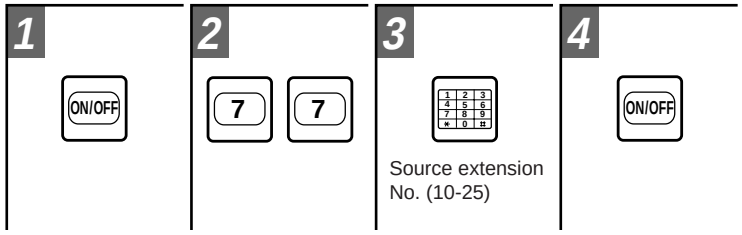
Follow Me .....

Allows you to automatically transfer incoming calls on each of the extension phones to your own extension phone.

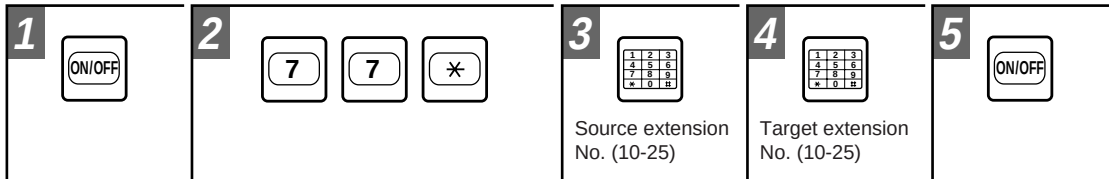
• To set Follow Me



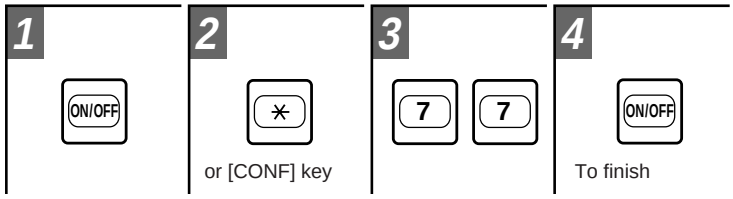
• To cancel Follow Me



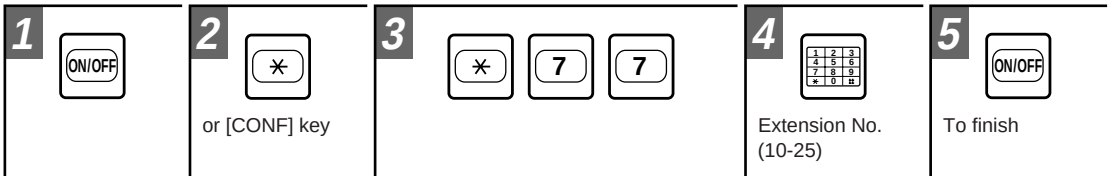
• To cancel Follow Me from Operator's Phone and Admistrator's Phone



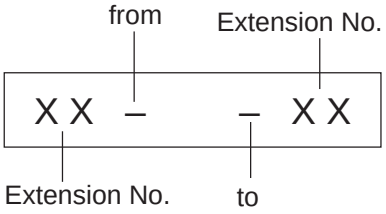
• To confirm Follow Me assignment from an extension assigned



• To confirm Follow Me assignment from Operator's Phone or Admistrator's Phone



[Display]



For example, 13-14- means this extension is forwarded from extension 13 and 14.

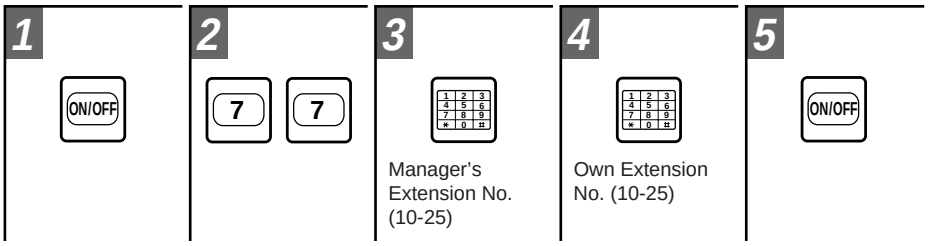
Manager/Secretary working .....

PGM

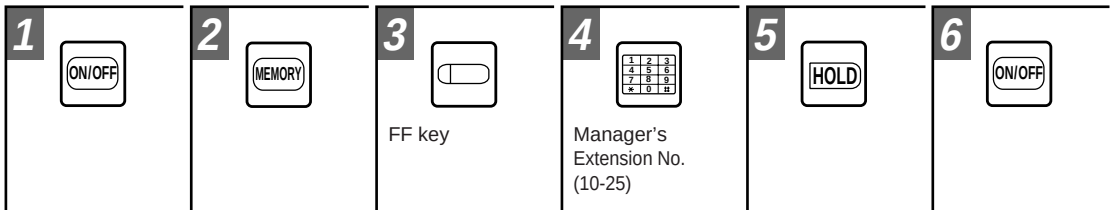
Manager Secretary working groups are set by the system programming. Each group consists of one secretary and up to three manager extensions.
Maximum eight groups can be set in the system. When a group is set up by the system programming, call coverage is activated by a manager's extension.
When the secretary passes a call to the manager whose extension is busy, call waiting will be generated at the manager's extension and the secretary can notify her manager.

■ Preparation (At secretary's extension)

• To set Follow Me to secretary



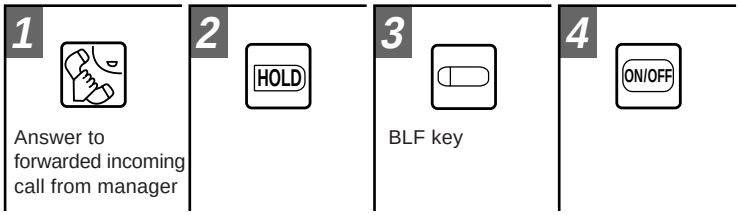
• To set BLF key of Manager's extension to secretary's extension



BLF(Busy Lamp Field)

By assigning an extension number to each FF key, this feature indicates whether each extension is in use or not, on each LED of FF key.
Although BLF is registered a use is not allowed to pick up an incoming call by pressing its key.
This feature is useful for an operator.

■ Operation (At secretary's extension)



When DND/ABM is Set

When the manager's extension is set to DND/ABM, incoming calls and Call Back calls cannot be made to ring.

Call Barring

Class of Service .....

PGM

You can control access from your telephone by assigning one of the five access levels to each exchange line. This feature can only be programmed with the administrator's phone.

Class 0:	Exchange line calls are prohibited. (except emergency calls.)
Class 1:	Long distance calls are prohibited.
Class 2:	Specific long distance calls are permitted.
Class 3:	International dialing is prohibited
Class 4:	No restrictions.

Day Mode and Night Mode

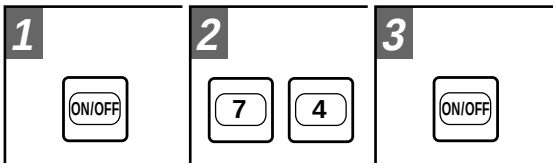
A different access level can be programmed for day and night at each extension.

Station Lock Out.....

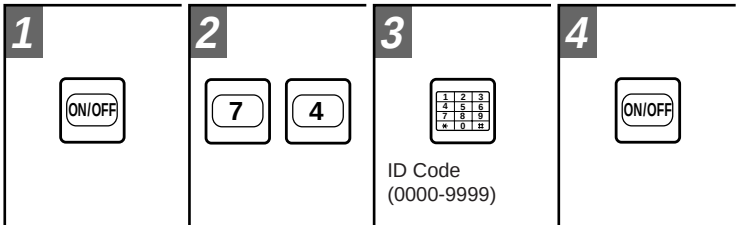
PGM FF

You can make your telephone unavailable for exchange line calls except emergency calls. However, a locked out telephone is still available for intercom calls.

• To Lock Out an extension



• To Unlock an extension



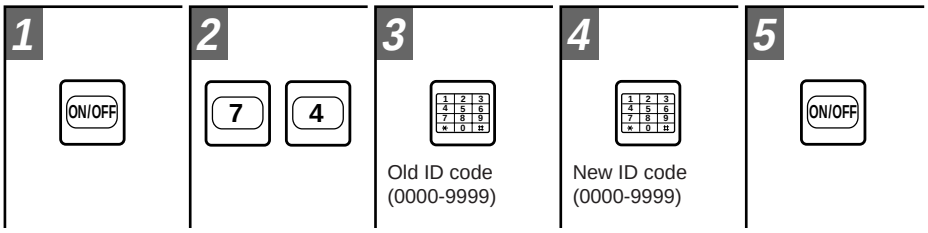
ID Code

ID codes, 0000-9999 must be programmed from the administrator's phone. See the ID Code for Station Lock Out part in the Assignment section in this book.

Making a Call

Exchange line calls are prohibited until Station Lock Out is canceled.

• To change the ID Code of Station Lock Out

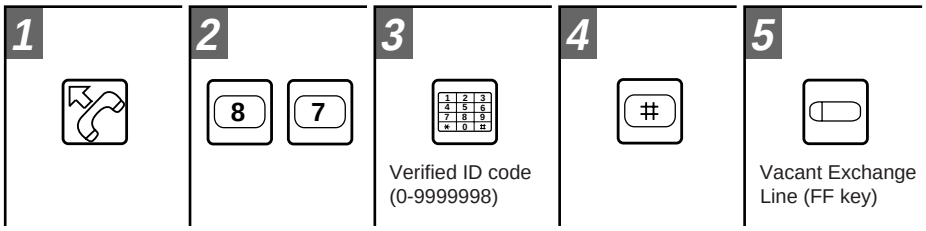


PGM

Verified ID Code

Verified ID code entry overrides any toll restrictions placed on an extension. By entering a verified ID code, you will get an access class to make a call using any extension. The extension regains its service class when you hung up.

• To Call



Verified ID Code

A verified ID code is a 7 (max.) digit code programmed with the administrator's phone. You can assign a class of service to a verified ID code. When you enter a verified ID code, you receive a class of service assigned to the verified ID code. If a wrong verified ID code is entered, you receive a class of service assigned to the extension.

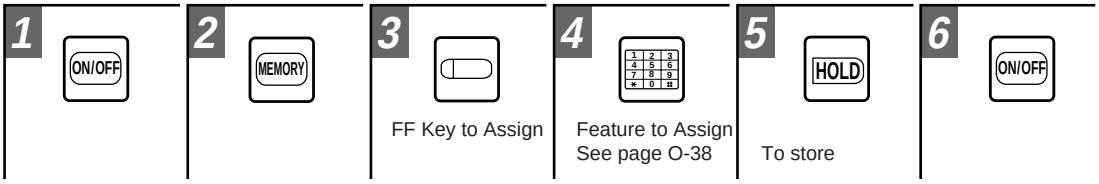
Assignment

Extension Assignment

FF Key .....

You can assign exchange lines, extension numbers, PSD/SSD codes, etc., to FF keys. The number of digits assigned must be no more than four.

• To assign a feature to an FF Key



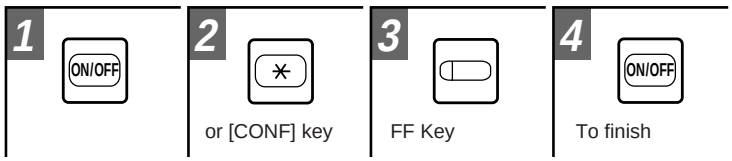
To Repeat

If you want to assign another FF key, repeat the procedure 2 to 5 (do not press ON/OFF key).

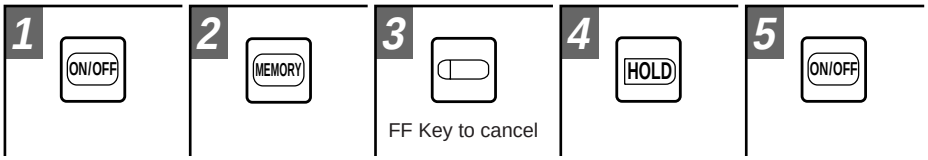
To Assign by Programming

You can also program to assign a feature to an FF key using the administrator's phone.
If four exchange lines are accommodated, FF1 to FF4 is fixed as the exchange line key 1 to the exchange line key 4.

• To confirm a feature assigned (Telephones with LCD Only)



• To cancel a feature assigned



FF Key Features and LED

LED lights to indicates that any of the following FF key features are in use. It does not light for any other FF key features.

Exchange Line	Headset Connection
Trunk Queuing	INT One-touch Call
Doorphone	Paging
Door Opener	

Features Available for FF Key Assignment

Any of the following (four digits max.) can be assigned to FF keys:

FEATURE	OPERATION	REMARKS	PAGE
Absence Message Setting	[71] [n] (XXXX)	n=Message Code (0-9) XXXX=Returning Time (0000-2359)	O - 30
Absence Message Cancellation	[71]		O - 31
Answer to Paging	[69]		O - 18
Batch Output of Programming Data	[#97] (XXXXn)	XXXX=ID code (0000-9999) n = Output code (0 - 4)	P - 11
BGM (On/Off)	[#53]		O - 52
Call Forward Setting (All calls)	[721] (nn)	nn=Extension No. (10-25)	O - 31
Call Forward Setting (No Answer)	[725] (nn)	nn=Extension No. (10-25)	O - 31
Call Forward Setting (No Answer/Busy)	[722] (nn)	nn=Extension No. (10-25)	O - 31
Call Forward Setting (On Busy)	[723] (nn)	nn=Extension No. (10-25)	O - 31
Call Forward Setting (Exchange Line)	[724]		O - 32
Call Forward Cancellation	[72]		O - 32
Call Forward Confirmation	[* 72]		O - 31
Call Logging (SMDR)	[#93]	Available only with the administrator's phone	I - 21
Call Wait	[3]		O - 21
Change ID Code of Station Lock Out	[74] (XXXXYYYY)	XXXX=Old ID Code for Station Lock Out (0000-9999) YYYY=New ID Code for Station Lock Out (0000-9999)	O - 36
Direct Call Pick-up	[7 *] [nn]	nn=Extension No.	O - 23
DND Setting/Cancellation	[73]		O - 30
Door Opener A	[54]		O - 51
Door Opener B	[55]		O - 51
Door Opener A/B	[53]	Available when talking through a doorphone	O - 51
Doorphone A Call	[51]		O - 51
Doorphone B Call	[52]		O - 51
Exchange Line	[88n]	n=Exchange Line Number (1-4)	O - 13
Follow Me Setting	[77] (nnmm)	nn = Transfer source extension No. (10 - 25) mm = Transfer target extension No. (10 - 25)	O - 33
Follow Me Cancellation	[77] (nn)		O - 33
Follow Me Cancellation from operator or administrator	[77 *] (nnmm)		O - 33
Follow Me Confirmation	[* 77]		O - 33
Follow Me Confirmation from operator	[* * 77] (nn)	nn = Extension No. (10 - 25)	O - 34
Group Call Pick-up	[70]		O - 23
Headset Mode(Setting/Cancellation)	[#51]		O - 52
INT Call Back with CW	[6]		O - 21
Intercom call	[10] - [25]	10 - 25 = Extension No.	O - 17
Line Group Dial	[9] or [nnn]	nnn=Group No. (811-813)	O - 12
Lunch Mode (Setting/Cancellation)	[#54]	Available only with the operator's phone or administrator's phone.	O - 49
Message Wait	[2]		O - 19
Message Wait Cancellation	[792]		O - 20
Message Wait Confirmation	[* 79]		O - 19
Message Wait with Call Back	[791]		O - 20
Automatic Mode Switching Cancellation (Holiday Night Mode Setting)	[#55]	Available only with the operator's phone or administrator's phone.	O - 48
Day/Night Mode Switching (Day/Night)	[#52]	Available only with the operator's phone or administrator's phone.	O - 48
Operator Call	[0]		O - 17
Paging (All Groups)	[60]		O - 18
Paging (Group 1)	[61]		O - 18
Paging (Group 2)	[62]		O - 18
Paging (Group 3 & External Paging)	[63]		O - 18
Programming Mode	[MEMORY ##] (ONE-TOUCH)	Available only with the administrator's phone.	P - 3
PSD Call	[MEMORY] [nn]	nn=PSD No. (90-99)	O - 39
Save Dial Assignment	[MEMORY 9 *]		O - 14
Save Dial Call	[MEMORY *]		O - 14
Save Dial Confirmation	[* MEMORY *]		O - 14
SSD Call	[MEMORY nn] or [MEMORY nnn]	nn or nnn=SSD No. (00-89) or (000-199)	O - 16
Station Lock Out Setting/Cancellation	[74] (XXXX)	XXXX=ID Code for Station Lock Out (0000-9999)	O - 35
Tone/Voice Call Switching	[1]		O - 17
Trunk Queuing	[6]		O - 11
DISA Message recording (1st message)	[* 981]		O - 53
DISA Message recording (2nd message)	[* 982]		O - 53
DISA Confirmation of Recording (1st message)	[* 971]		O - 53
DISA Confirmation of Recording (2nd message)	[* 972]		O - 53
DISA Registration of reception extension No./DISA speed-dial	[* 99] (nmm)	n = Registration code (0 - 9) mm = Extention Number (10-25)	O - 53

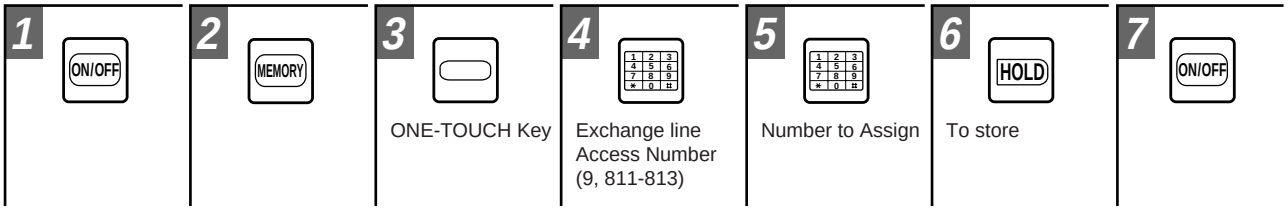
Note [ ]: One procedure in the operation ( ): Can not be assigned though necessary in operation

ONE-TOUCH Key (Personal Speed Dial) .....

FF

You can assign up to 10 frequently dialed telephone numbers to ONE-TOUCH keys. The number of digits assigned to a ONE-TOUCH key must be no more than 24. Numbers assigned to ONE-TOUCH keys are automatically assigned to corresponding PSD codes.

• To assign a number to a ONE-TOUCH Key for key telephone



To Repeat

If you want to assign another ONE-TOUCH key, repeat the procedure 2 to 6 (do not press ON/OFF key).

SLT

See User Guide (SLT).

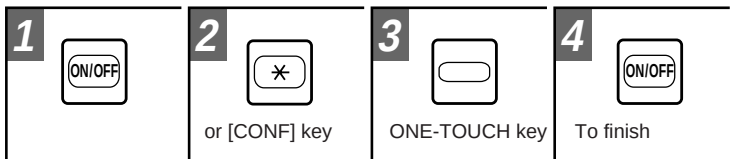
Keys Available for One-Touch Dial Assignment

KEY	FEATURE
[0]-[9]	Dial numbers
[*], [#]	Converts the following entries to DTMF signals.
[REDIAL]	Pause insertion
[MEMORY] [00]-[89]	Assigns an SSD code.
[ONE-TOUCH-1]	Characters entered between this key will not be displayed on LCD.

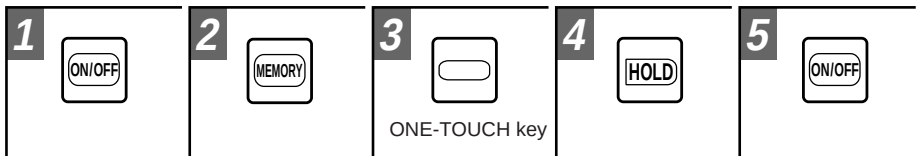
PSD Codes and ONE-TOUCH Keys

PSD codes (90-99) correspond to ONE-TOUCH keys (1-10). The left most ONE-TOUCH key in the lower row represents No.1, and the right most ONE-TOUCH key in the upper row represents No.10.

• To confirm a number assigned to a ONE-TOUCH Key (Telephones with LCD Only)

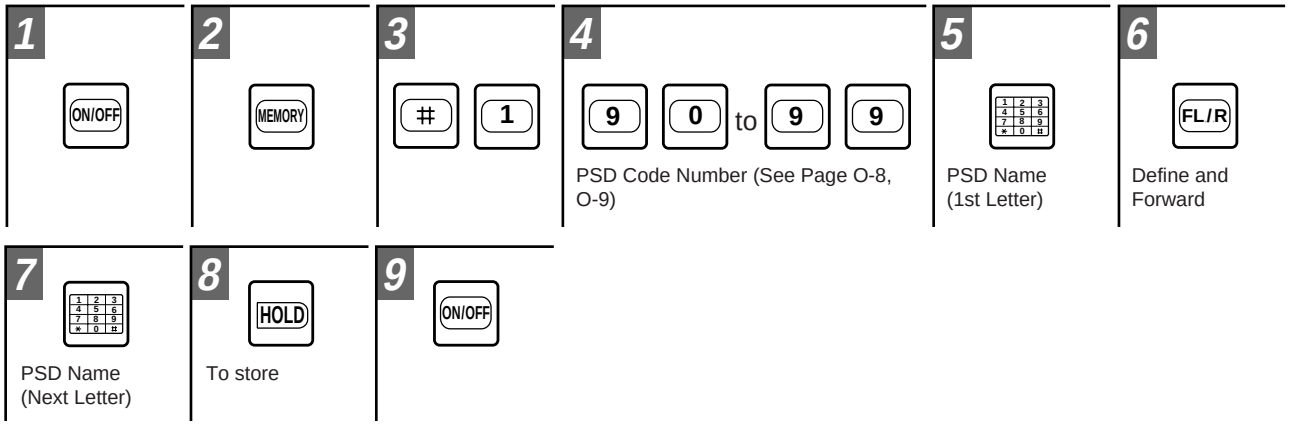


• To cancel a number assigned to a ONE-TOUCH Key



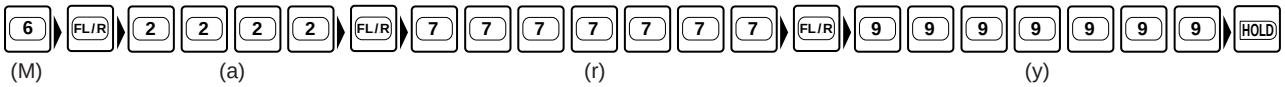
* By assigning a new number, the original number will be erased automatically.

• To assign a PSD Name (Corresponding ONE-TOUCH Key)



Example of PSD Name Entry

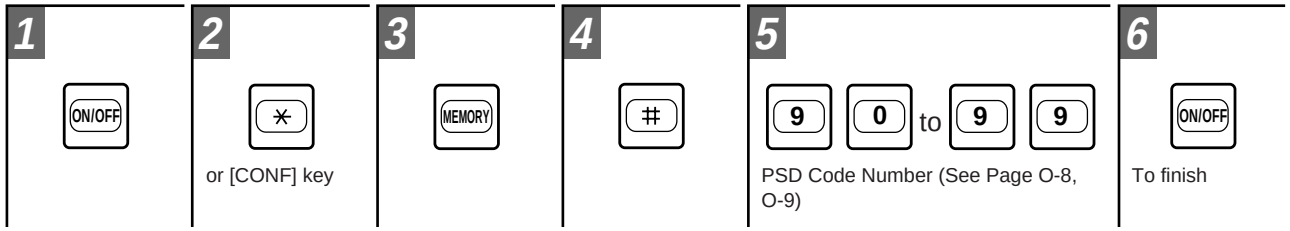
If you want to assign “Mary” as a PSD name, for example, do the following. You need press the FL/R key after each character to proceed. See page O-47.



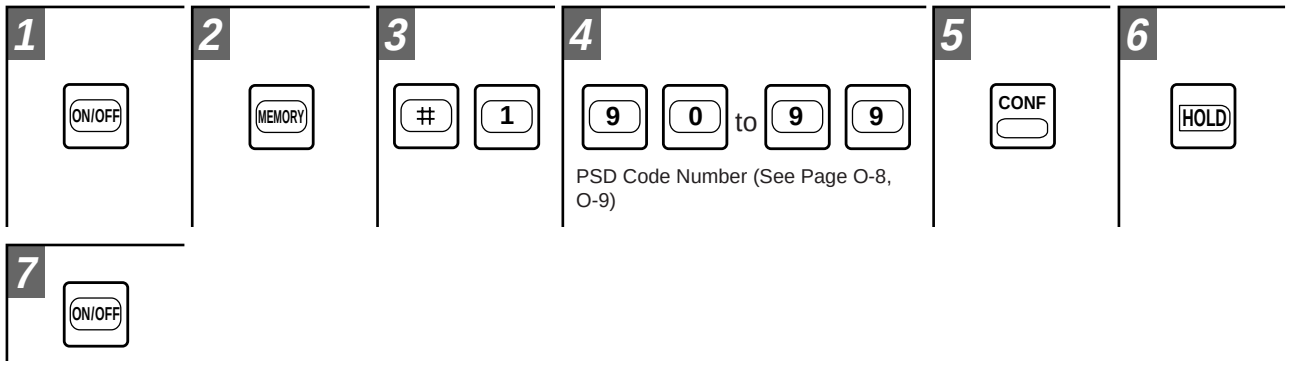
To Repeat

If you want to assign another PSD Name, repeat the procedure 4 to 8 (do not press ON/OFF key)

• To confirm a PSD Name (Telephones with Alphanumeric LCD Only)



• To cancel a PSD Name



PSD Name after Cancellation

A PSD name is replaced with its default name when canceled.

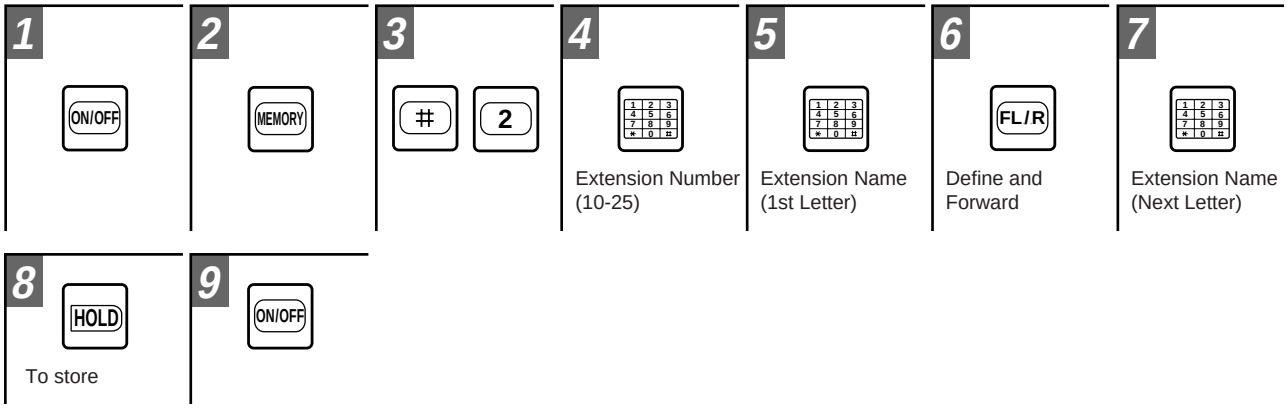
* By assigning a new name, the original name will be erased automatically.

Administrator's Phone Assignment

Extension Name .....

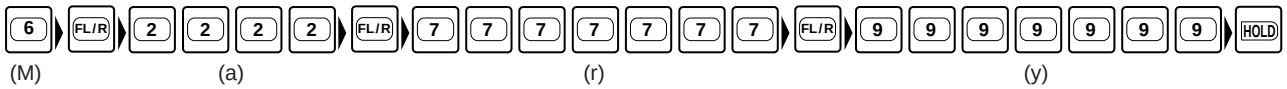
Once a name is assigned to each extension, the name of the extension you reach is displayed on the LCD on your telephone. Extension names can only be programmed with the administrator's phone. This feature is available for alphanumeric key telephones.

• To assign a name to an extension



Example of Extension Name Entry

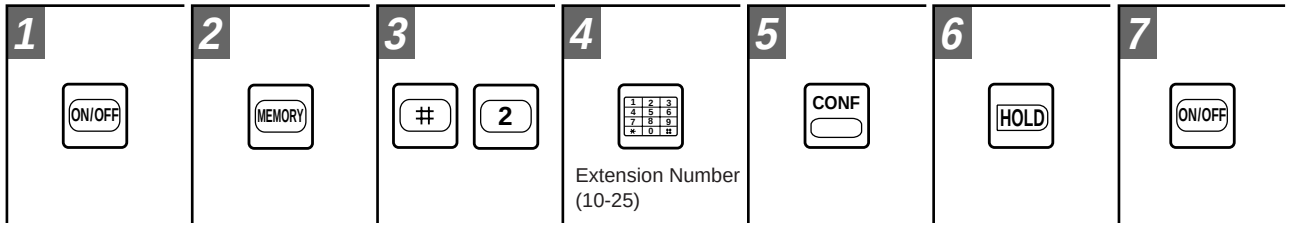
If you want to assign "Mary" as an Extension name, for example, do the following. You need press the FL/R key after each character to proceed. See page O-47.



To Repeat

If you want to assign another Extension Name, repeat the procedure 4 to 8 (do not press ON/OFF key).

• To cancel an extension name



Extension Name after Cancellation

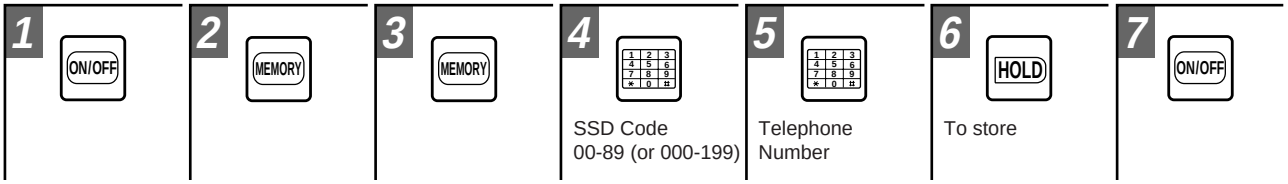
An extension name is replaced with its default name when cancelled.

System Speed Dial .....

PGM FF

You can assign telephone numbers frequently used by everyone in the system to SSD codes. SSD codes consist of either two digits (00-89) or three digits (000-199) depending on your selection in the program, allowing 90 or 200 SSD codes available for your convenience. SSD codes can only be programmed with the administrator's phone.

• To assign a number to an SSD Code



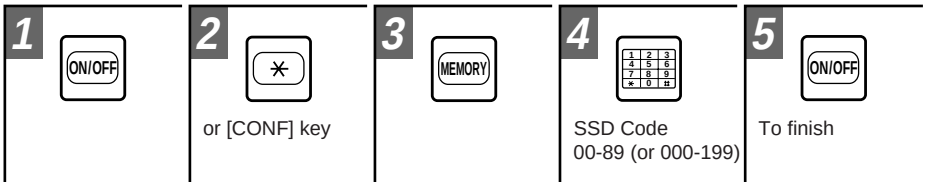
3-digit SSD Codes

Requires programming to use 3-digit codes (000-199).

To Repeat

If you want to assign another SSD Code, repeat the procedure 3 to 6 (do not press ON/OFF key).

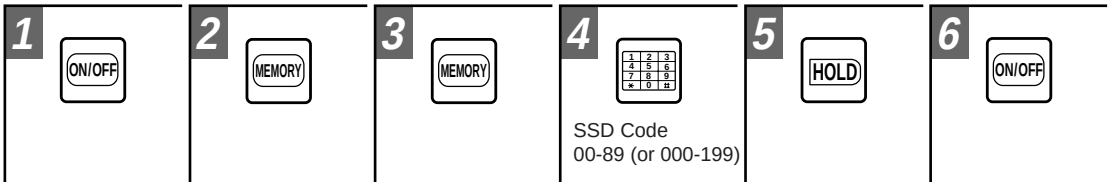
• To confirm an SSD Code assigned (Telephones with LCD Only)



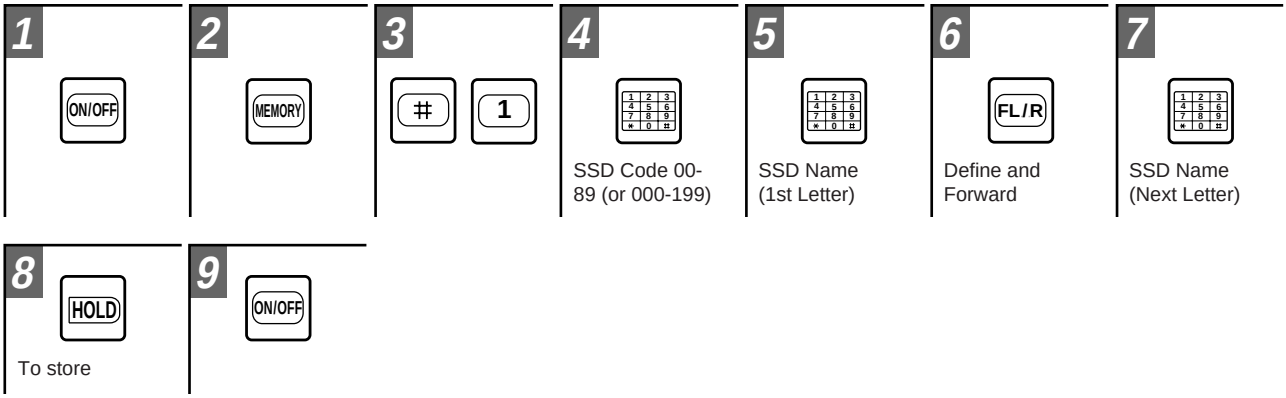
To Confirm an SSD Code with Non Administrator's Telephone

You can confirm an SSD code using any key telephones with LCD.

• To cancel an SSD Code assigned

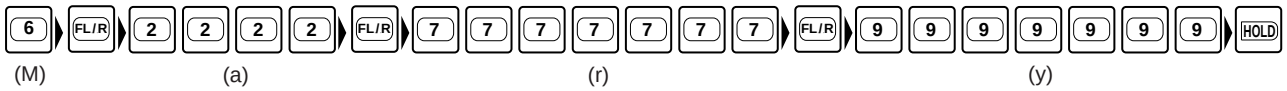


• To assign an SSD Name



Example of SSD Name Entry

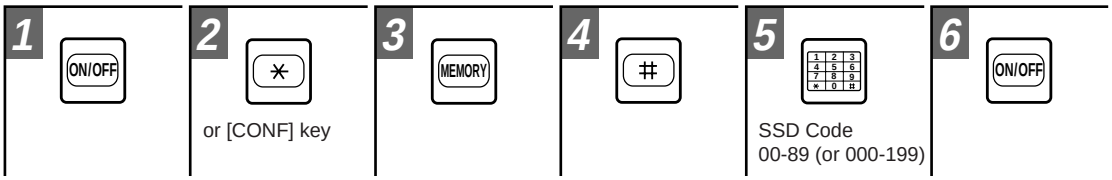
If you want to assign “Mary” as an SSD name, for example, do the following. You need press the FL/R key after each character to proceed. See page O-47.



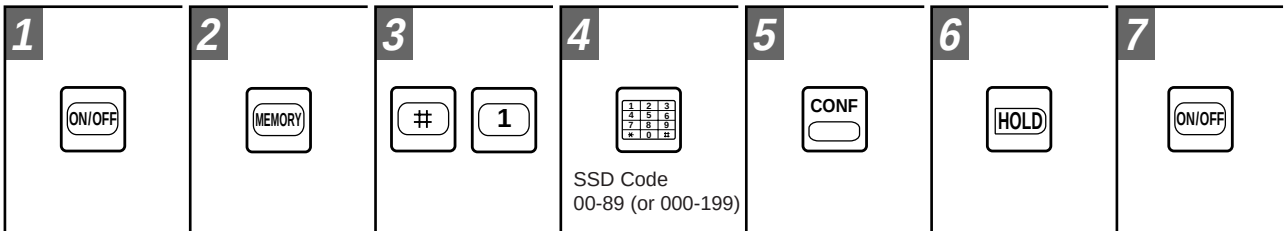
To Repeat

If you want to assign another Extension Name, repeat the procedure 4 to 8 (do not press ON/OFF key).

• To confirm an SSD Name assigned (Telephones with Alphanumeric LCD Only)



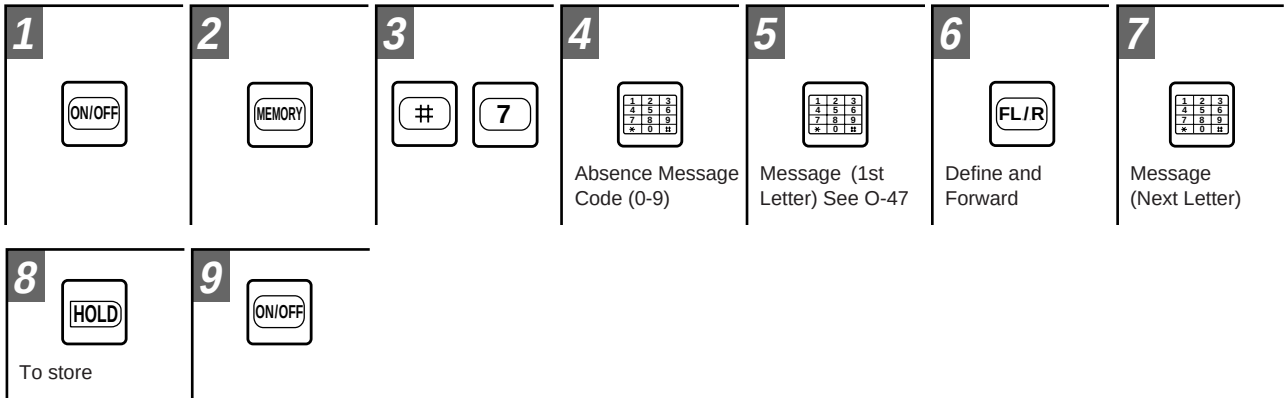
• To cancel an SSD Name assigned



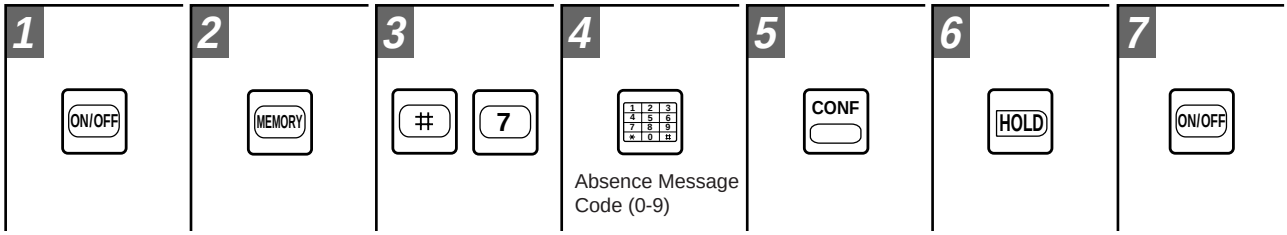
Absence Message .....

You can create 10 absence messages (0-9) which all extensions can use. Absence messages (0-4) are preprogrammed for your convenience. Absence messages can only be entered with the administrator's phone.

• To assign a Message to an Absence Message Code



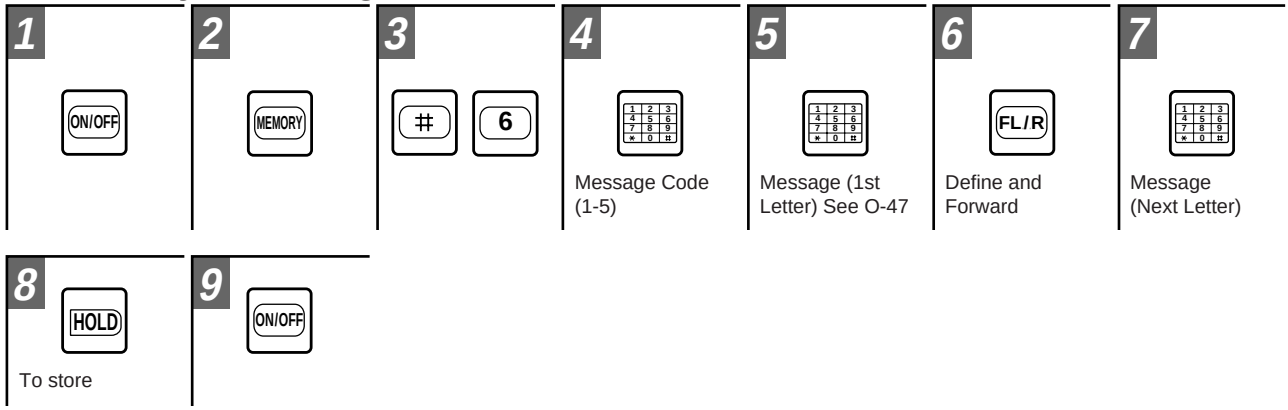
• To cancel an Absence Message assigned



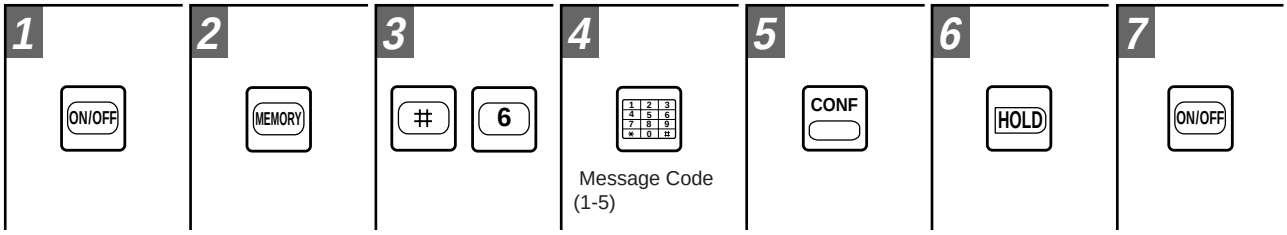
Call Wait, Message Wait .....

You can modify five system messages for call wait and message wait. Both features share the same messages. Messages can only be modified with the administrator's phone.

• To modify a Message



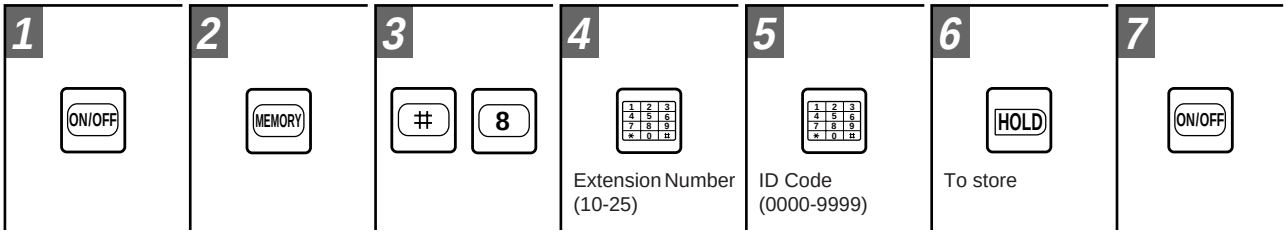
• To cancel a Message assigned



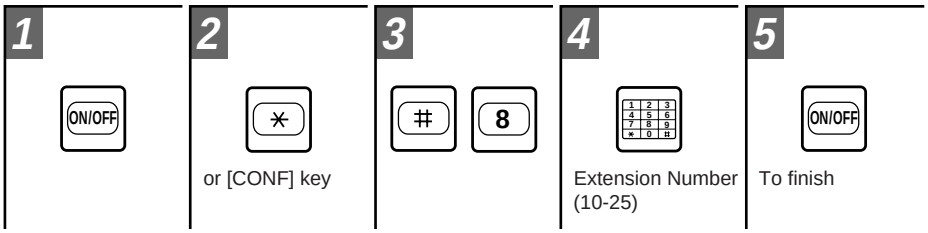
ID Code for Station Lock Out .....

You can assign an ID code to each extension for station lock out. When a telephone is locked out, a caller has to enter an ID code to make an exchange line call. The default is no lockout. ID codes can only be entered and confirmed with the administrator's phone.

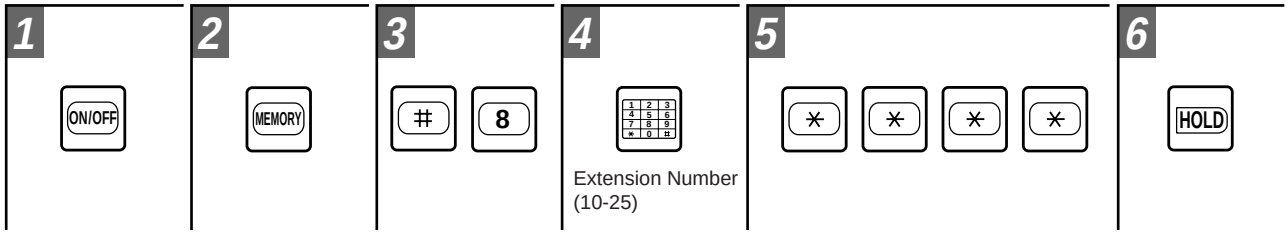
• To assign an ID Code for Station Lock Out



• To confirm an ID Code assigned for Station Lock Out (Requires Preprogramming, and Administrator's Phone only)



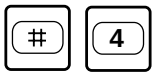
• To clear an ID Code assigned for Station Lock Out



Changing Date and Time .....

You can set the date and time for the system from administrator's phone. The date and time assigned are displayed on the LCD on all extensions.

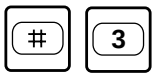
• To set the Time

1	2	3	4	5	6	7
			 Hour (00-23)	 Minute (00-59)	 To store	
ON/OFF	MEMORY	# 4			HOLD	ON/OFF

To Enter the Time

Enter the time as HHMM (HH=hour, MM=minute), using a 24-hour system.
For example, for 5:33PM, enter 1733.

• To set the Date

1	2	3	4	5	6	7	8
			 Day (01-31)	 Month (01-12)	 Year (00-99)	 To store	
ON/OFF	MEMORY	# 3				HOLD	ON/OFF

To Enter the Date

Enter the date as DDMMYY (DD=date, MM=month, YY=year).
For example, for September 10,1996, enter 100996.

Alphanumeric Character Assignment

PGM

You can enter alphanumeric characters with the number keys and, in some cases, special keys. You will need alphanumeric characters for PSD names, SSD names, extension names, and messages. Alphabetical letters can be selected according to the number of times a number key is pressed.

Key and Feature

KEY	FUNCTION	DESCRIPTION
Number keys ([0]-[9])	Characters	Enter alphanumeric characters. (See below table)
[FL/R] Key	Forward	Takes a character and moves a cursor to the right.
[HOLD] Key	Enter	Stores characters displayed.
[CONF] Key	Shift	Switches between letter entry and number entry.
	Clear	Clears previous name in the beginning.
[MEMORY] Key	Back Space	Erases a character at the cursor and moves the cursor to the left during editing.

Alphabet Table

Number Key	Press 1 time	Press 2 times	Press 3 times	Press 4 times	Press 5 times	Press 6 times	Press 7 times	Press 8 times	Press 9 times		Press 1 time
[1]											1
[2]	A	B	C	a	b	c	Ä	Å	A		2
[3]	D	E	F	d	e	f	Æ	Œ	D		3
[4]	G	H	I	g	h	i	Ç		G		4
[5]	J	K	L	j	k	l			J	⟷	5
[6]	M	N	O	m	n	o	Ñ	Ö	M	Switch [CONF]	6
[7]	P	Q	R	S	p	q	r	s	P		7
[8]	T	U	V	t	u	v	Ü		T		8
[9]	W	X	Y	Z	w	x	y	z	W		9
[0]	.	:	.	:	.	:	.	:	.		0
[*]	*	–	?	¿	*	–	?	¿	*		*
[#]	#	/	!	¡	#	/	!	¡	#		#

* Pressing for more than 9 times will be repeated from 1 time again.
* Alphanumeric character assignment is available for alphanumeric display type telephones.

Operator Features

Operator's Phone

The operator's phone is designed specially for an operator, having more functions than telephones located at extensions. Its extension number is set to 10 as a default, and only one operator's phone is installed in the system.
You must use the operator's phone to perform the following operator features.

Day / Night Mode Switching

PGM FF

The system has Day mode, Night mode, and Lunch mode. Exchange Line Ringing Assignment and Toll Restriction vary depending on whether the system is in Day or Night mode. These two modes are switched automatically at a preprogrammed time. However, the operator can manually switch the mode, and may also set Lunch mode. Night mode switching may also be performed with the administrator's phone.

• To change Day / Night Mode manually

1 ON/OFF
2 # 5 2
3 ON/OFF

To Return to the Previous Mode

Repeat the procedure.

• To turn off Automatic Switching between Modes (for a Holiday)

1 ON/OFF
2 # 5 5
3 Date to Return to Day Mode (01-31)
4 Hour (00-23)
5 Minute (00-59)
6 HOLD
7 ON/OFF

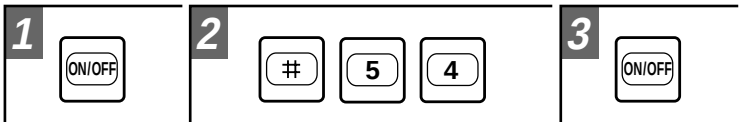
Setting the Returning Date, Hour, and Minute for Day Mode

You must set when to return to Day mode on a day before a holiday.
Suppose Day mode is usually set between 8:30 to 17:30 and today is August 3. If tomorrow is a holiday, enter 050830 to set Day mode to begin at 8:30 on August 5.

Temporary Mode Change (Lunch Mode).....

You can set Lunch mode to transfer all calls to an extension, voice mail, etc. You may find this feature useful when you leave your desk temporarily for some occasions as well as for the lunch break. However, you can change only exchange line ringing assignment in Lunch mode. Other assignments such as toll restrictions remain as before. Once you set Lunch mode, it continues until you cancel it manually. If you don't cancel Lunch mode and Night and Day modes automatically shift, exchange line ringing assignment remains as Lunch mode and other assignments follow the new mode.

• To set Lunch Mode



To Cancel Lunch Mode

Repeat the procedure.

Delayed Ring

To prevent an extension with exchange line ringing assignment from ringing without being answered, you can program another phone to ring after a certain period of time. You can program the delay time and an exchange line number to forward calls to. You can assign a different delayed ring for each of Night, Day, and Lunch modes.

Exchange Line Ringing Assignment

You can transfer all calls to one extension in any of Night, Day, or Lunch mode. For example, you can transfer all calls to the night-duty room extension during Night mode.

Recall Timer for Operator

You can separately preprogram the recall timer and transfer recall timer for the operator's phone and the other telephones.

DSS Console

PGM

A DSS console has keys to which you can assign extension numbers. You can connect a DSS console through an extension port to maximum of two extensions in the system. This allows you to add more FF key features on the operator's phone. The functions that can be assigned to a DSS console is the same as those of the FF keys (See page O-38). However, any exchange line cannot be assigned to a DSS console.

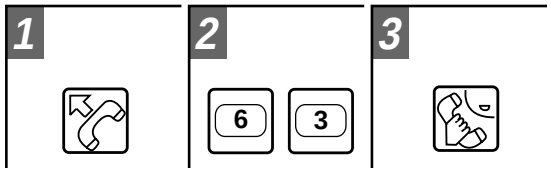
Optional Features

External Paging

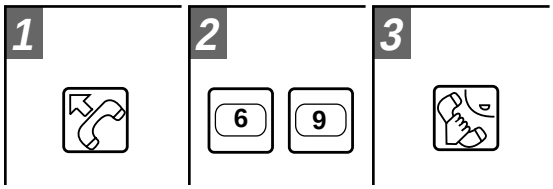
PGM FF

You can page through an external paging system if one is connected to the system. Your voice also goes through the speakers on all telephones belonging to paging group 3 or all groups. When you are paged, you can answer at any extension.

• To Page



• To answer a Page (Meet-Me Answer)



Using a Paging Unit

When you use a paging unit, connect an external paging amplifier and a loud speaker to the paging unit.

Power Failure

When a power failure occurs, you can still use the system for approximately 20 minutes if it has a built-in battery. However, it will not work when the battery is completely discharged. Connecting a Power Failure Telephone (SLT) to the system allows trunk line to cut through directly to SLT during a power failure, enabling outgoing and incoming exchange line calls.

Sensor

PGM

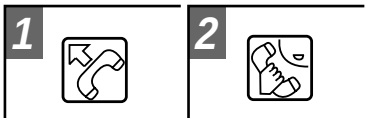
A sensor can be connected to the system through the sensor terminal on the doorphone/doorlatch interface cord. When a sensor detects visitors or any other alarms, it sends a signal to the key telephone.

Doorphone

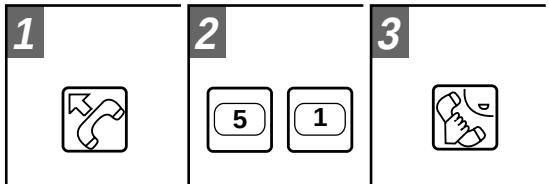
PGM FF

Up to two doorphones (A and B) can be connected to the system. When someone presses the button on a doorphone, a telephone assigned to the door will ring and remain in a stand-by condition for 15 sec. You may use it to speak to the person at the door.

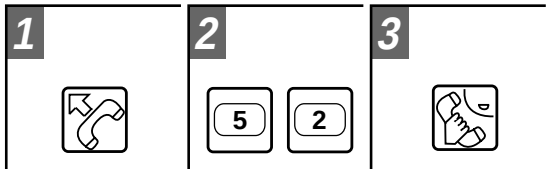
• To answer a call from a Doorphone



• To call the Doorphone A



• To call the Doorphone B

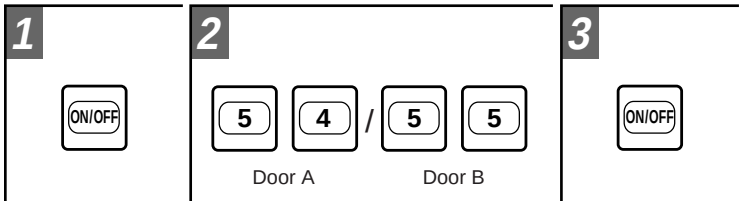


Door Opener

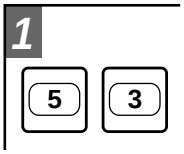
PGM FF

Up to two door openers (A and B) can be connected to the system. You can open a door using the telephone assigned to the door opener. You may open the door where a visitor is located while speaking to the visitor, or a specific door (A or B) without speaking to the visitor.

• To open the Door A (B) without speaking to a visitor



• To open the Door where a visitor is located while speaking

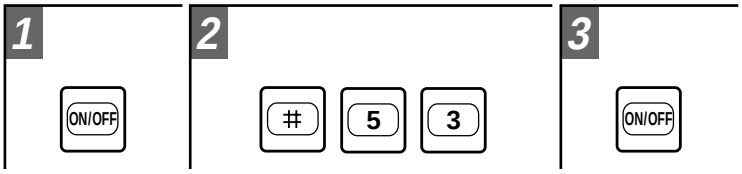


Background Music (BGM)

PGM FF

You can play background music through the speaker on your telephone. Music stops when the handset is off-hook and also when your telephone rings. This feature requires preprogramming. MOH source must be changed to external music source, and requires installation. In this case, music on hold will also be changed to this BGM. BGM and external MOH use same source.

• To turn BGM On



To turn BGM off

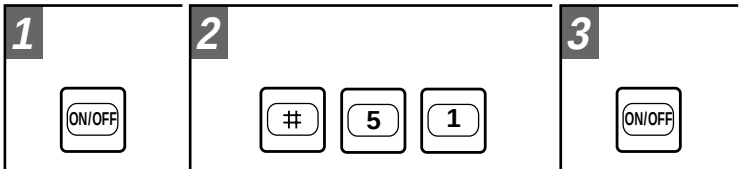
Repeat the procedure.

Headset Connection

PGM FF

You can use a headset when you need both hands free. Disconnect the handset cable from the telephone, and connect the headset. In headset mode, use the ON/OFF key to answer a call, and do not pick up the handset. Use an electret-type headset; a carbon-type headset is not compatible with the system.
Note that headset mode is disabled as a default. Enabling the mode requires preprogramming to prevent false operation.

• To enter Headset Mode



To cancel Headset Mode

Repeat the procedure.

Headset Adaptor

If you use a headset adapter, use its switch to enter and cancel Headset Mode.

To turn off the Dial Tone

Press the ON/OFF key and dial #50.
This feature requires preprogramming.

DISA OGM Unit (VAU)

PGM FF

If you connect a DISA OGM Unit to the system, the DISA OGM Unit speaks to an incoming call. Then, the caller can proceed with DTMF signals, following the message.

• To paccess an extension from outside

1 VAU Answered

Extension Number (10-25)

Automatic Connection to Operator

If an outside caller does not dial any number within the pre-programmed period of time, he/she will be automatically connected to the operator.

• To record a Message

1 VAU Answered

Extention Number (10-25)

2 ✳ 9 8

3 1 / 2

1st Message / 2nd Message

• To confirm the Recorded Message

1 VAU Answered

Extention Number (10-25)

2 ✳ 9 7

3 1 / 2

1st Message / 2nd Message

• To register the Reception Extension No./VAU Speed-dial

1 VAU Answered

Extention Number (10-25)

2 ✳ 9 9

3

Abbreviate Number (0, 1-9)

4

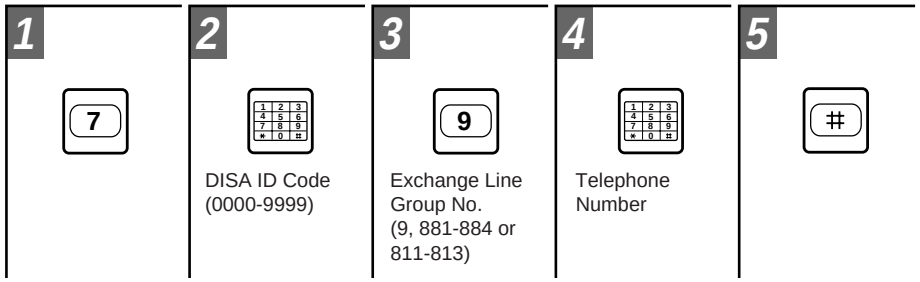
Extention Number (10-25)

5 ✳

Abbreviated Number

0	Non dialled call transfer.
1-9	Abbreviated dial extension No.

• To access an exchange line from outside



Note

The voice level of outside callers may become lower because of a line attenuation when using trunk to trunk features.

Disconnection

Trunk-to-trunk talk is disconnected when:

1. A disconnection signal is received from exchange line.
   It is disconnected when a Polarity Reverse signal or CPC signal is received from a station of either exchange line.
2. A specified period of time has been passed.
   The system has a timer monitoring a trunk-to-trunk talk. You can set this timer to 1 to 40 minutes.
   Trunk-to-trunk talk is automatically disconnected after a period of time specified to the timer.
3. A Busy Tone from PSTN is detected.
   Set the number of Busy Tone detections by the programmed setting. Trunk-to-trunk talk is disconnected when the number of Busy Tones set here is detected.

Call Logging

FF

You can print or display a variety of information concerning calls made using the system by connecting an optional RS-232C interface, serial printer (or SMDR), and computer to the system. Call logging includes date and time of calls, number of calls, exchange line numbers called, and an account code, if desired.

• Print Out Format

```
  EXT. COL    START.          DURAT.  DIAL DATA ACCOUNT.                  ← Title
—NN—LL—DD—MM—HH:NN—h:dd.ss-C-YYY~YYY-AAAAAAAAAA———CR LF
```

NN	Extension No. (10-25)
LL	Exchange line No. (01-04)
DD	Day (01-31)
MM	Month (01-12)
HH	Hour (00-23)
NN	Minute (00-59)
h	Call duration time (Hour.0-9)
dd	Call duration time (Minute.00-59)
ss	Call duration time (Second 00-59)
c	Condition code (I:Incoming, O:Outgoing)
YYY~Y	Dial Data (Max. 24 digits) (Indented to the right)
AAA~A	Account Code (Max. 10 digits) (Indented to the left)

Title is printed out at every 60 calls.

TTY Parameters

You can program TTY parameters.

Telephone Number Print Out Specification

You can program the system to print out information on administrator's phone numbers only.

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MEMORANDUM

INSTALLATION MANUAL

TABLE OF CONTENTS

1. INTRODUCTION

This is a class A product.
In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

■ SYSTEM CONFIGURATION

Table 1. System Configuration

	Model No.	Description	Quantity	Remarks
Central Control Unit	VB-9150UK	Central Control Unit 416 At initial mounting: 2 Exchange lines, 8 extensions (Including two hybrid ports 7, 8)	1	At mounting of the Expansion card (Max.): 4 Exchange lines, 16 Extensions
6 Exchange line Key Telephone	VB-9211UK	6 Key Telephone	16	
	VB-9211DSUK	6 Key Telephone with LCD and Speakerphone		
12 Exchange line Key Telephone	VB-9411UK	12 Key Telephone		
	VB-9411DSUK	12 Key Telephone with LCD and Speakerphone		
	VB-9411ADSUK	12 Key Telephone with Alpha-numeric LCD and Speakerphone		
DSS Console	VB-9431UK	33 Key DSS Console	2	
Optional Equipment	VB-9260UK	2 Exchange line/8 KT Expansion Card	1	
	VB-9261UK	2 Exchange line/8 SLT Expansion Card		
	VB-9262UK	8 SLT Expansion Card		
	VB-9273UK	Doorphone/Doorlatch I/F Card	1	2 Doorphone I/F 2 Doorlatch I/F Sensor I/F
	VB-9283UK	Call Logging I/F Card	1	RS-232C I/F (1200/4800bps) Modem I/F (300bps)
	VB-9289UK	DISA OGM Unit	1	2 Port
	VB-3295PUK	Built-in Battery	1	20 MIN. 0.7AH
	VA-30966UK	External Paging Adaptor	1	

■ SYSTEM CAPACITY AND SPECIFICATIONS

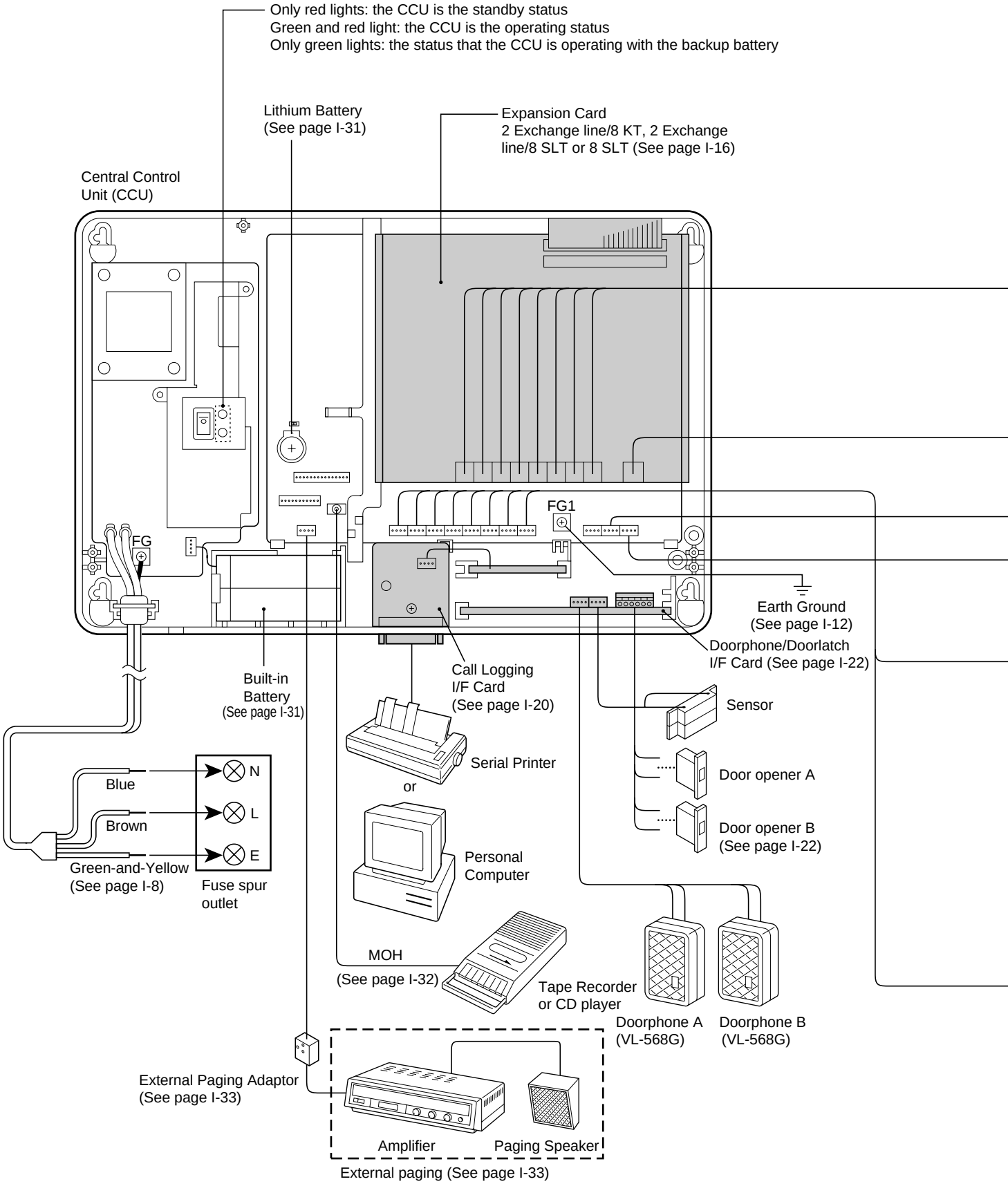
Table 2. System Capacity and Specifications (Maximum)

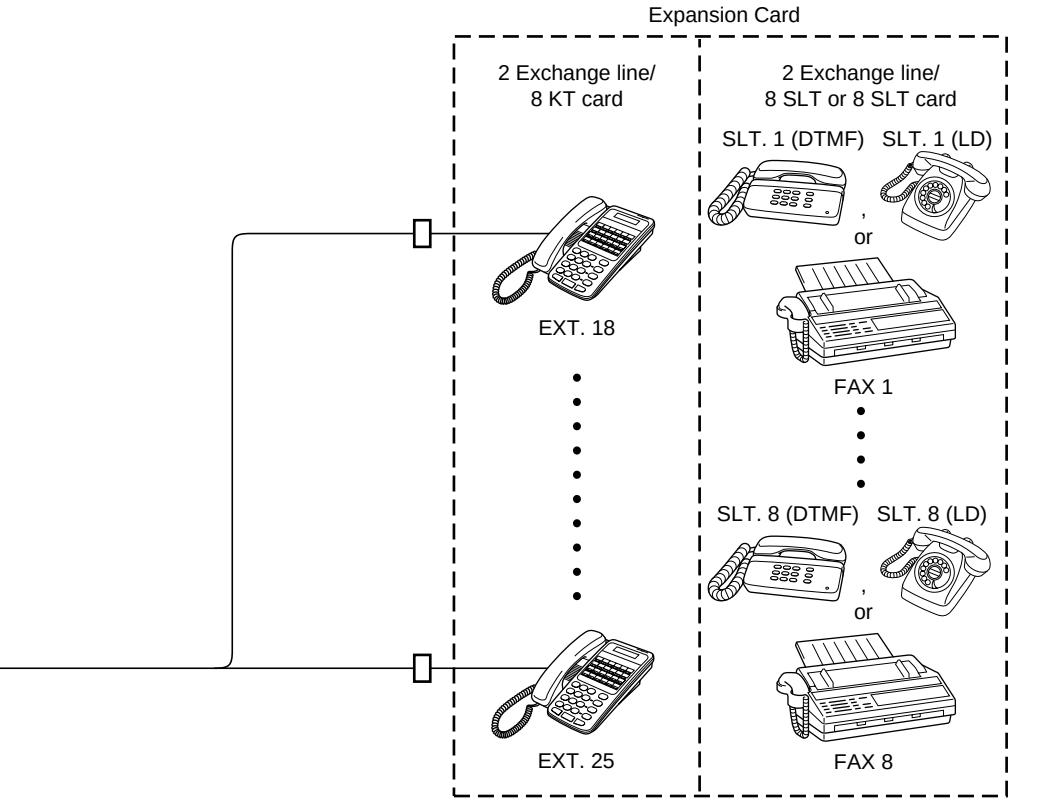
Item		Capacity and Specifications
Exchange line Capacity		4
Intercom Speech Path		4
Group Page Speech Path		1
Doorphone Speech Path		1
Extensions	Key Telephone	16
	Single Line Telephone	10
Speed Dial	Personal Speed Dial Memory	10
	System Speed Dial Memory	90 or 200
	Number of Digit	24
Extension Number		2 Digit
Battery Back-up Time	Built-in Battery	20 MIN. *
Power Consumption		64 W
Dimension Weight	Central Control Unit	330 x 500 x 99mm, 4.3kg
	Key Telephone	230 x 186 x 82mm, 0.85kg
	DSS Console	172 x 139 x 44mm, 0.8kg
	DISA OGM Unit	240 x 120 x 45mm, 0.4kg

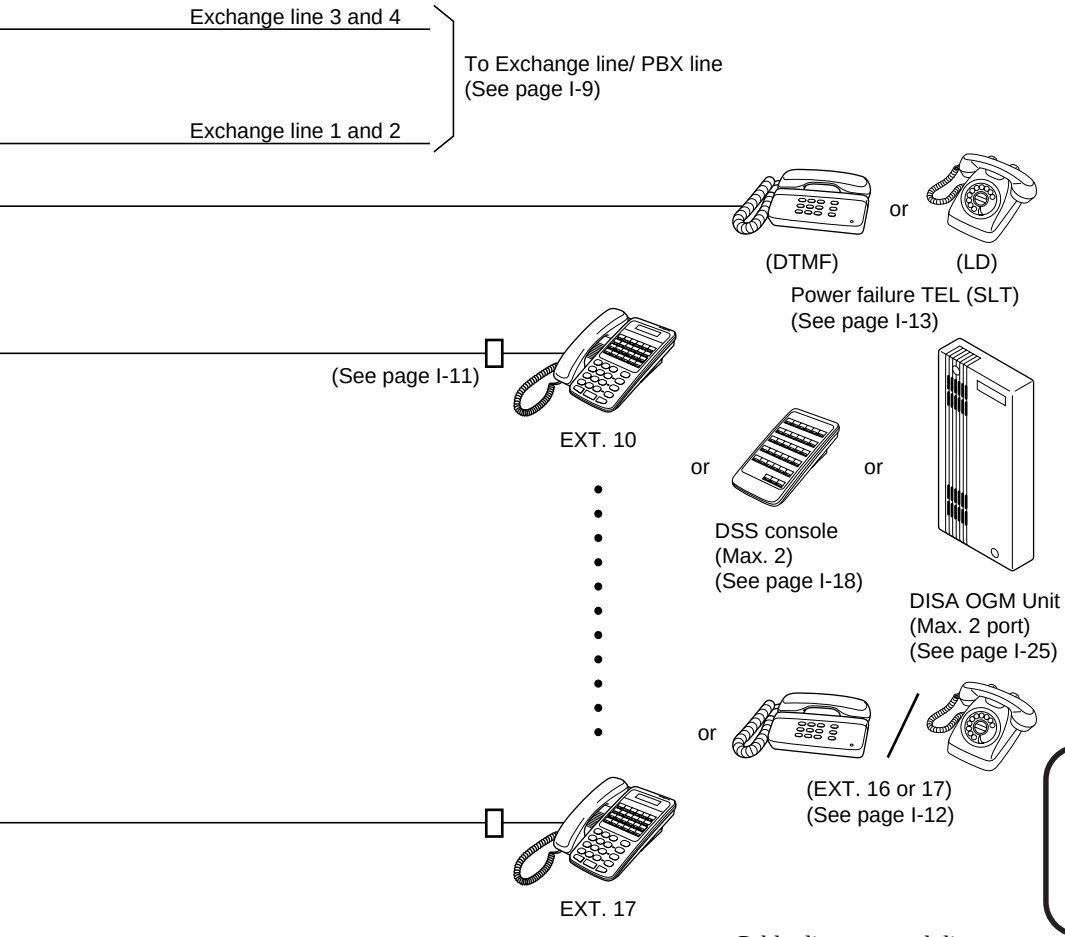
* Indicates an approximation of battery back-up time when the battery is fully charged.
It may vary depending on the amount of charge and consumption.

■ SYSTEM CONNECTION LAYOUT

Full system configuration layout.







WARNING

Please use solid wire instead of stranded cable to prevent from loose wiring.

Cable diameter and distance

	0.4mm (A.W.G.26)	0.5mm (A.W.G.24)	0.65mm (A.W.G.22)	Loop Resistance
Key Tel/ DSS	120m	240m	360m	40 ohms
Single Line Tel	300m	600m	900m	100 ohms
Doorphone	60m	120m	180m	20 ohms

NOTE

▭ : For optional Card

□ : Secondary Socket or Master Socket

■ ENVIRONMENT

Frame Ground Connection

IMPORTANT

Grounding the Central Control Unit (CCU) is very important not only as a countermeasure for lightning protection described in the next item, but also for ensuring correct operation of the system.
Always make sure that the FG terminal of the CCU is grounded.
(See page I-8 for detailed instructions on installation.)

Lightning

Protect the system from lightning by properly grounding the AC cable as well as installing voltage surge suppressors and diode clamps on all external cables attached to the system.

WARNING

Do not leave any of the cables or the internal lines outside because lightning may cause serious damage to the system. But, if you install in any reason, use protectors.

Electrical Noise

Electrical noise might disturb the operation of the system's digital control circuits.
Place the equipment away from heavy motors, welders or dimmers, and radio receivers and computers which generate electrical noise.

Conversely, this system may interfere with radio receivers and computers. Place the CCU at least 10 feet (3 meters) away from all other equipment.

Gas and Airborne Particles

To avoid corrosion or oxidation of electrical relay contacts, place the equipment in an area free of airborne particles and corrosive gas.

Humidity

Excessive humidity may oxidize the metallic parts and cause errors in performance.
Do not install equipment in high-humidity areas.

Humidity: 30% to 90% relative humidity (non-condensing)

Temperature

Integrated circuits (ICs) and large scale integrated circuits (LSICs) require adequate ventilation for the CCU to allow upward circulation of air through the cabinet grille.

Operating room temperature : 0℃ to 40℃ (32℉ to 104℉)
Storage temperature : -10℃ to 50℃ (14℉ to 122℉)

Vibration

Do not install the system in an area with excessive vibration which can cause disconnection or loosening of components.

Water

Water is a dangerous hazard to equipment and can damage the system beyond repair.
Do not place the equipment near anything containing water, under overhead plumbing or sprinkler system valves, or in areas that are susceptible to flooding.

2. INSTALLATION OF CCU

WARNING

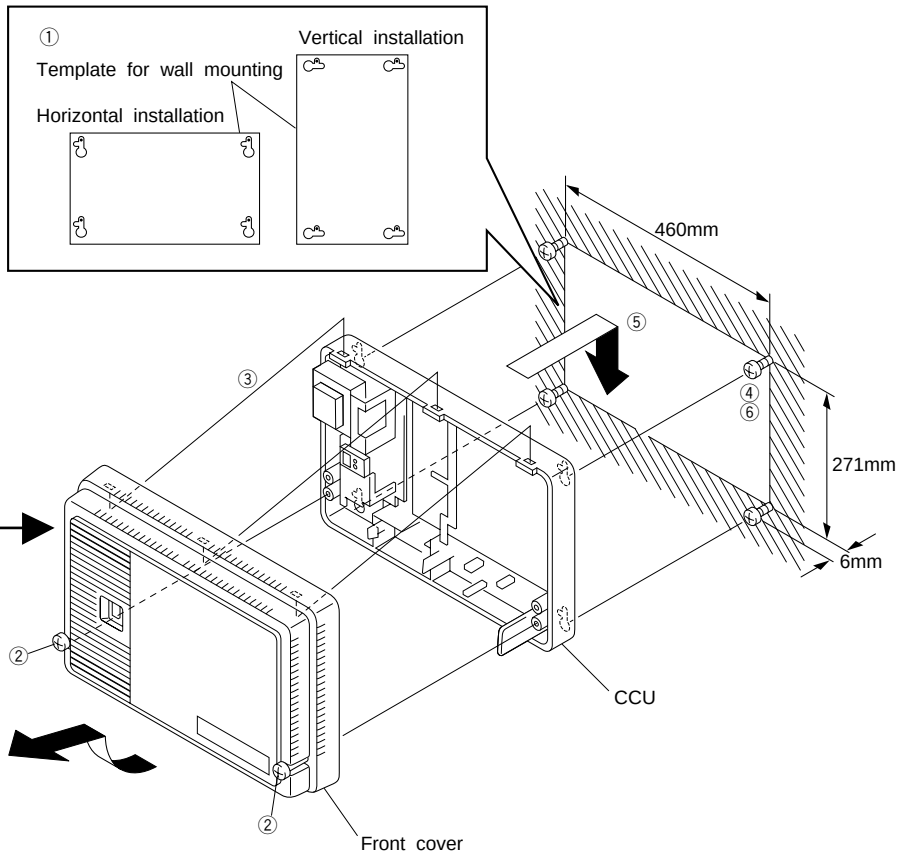
Always unplug the AC plug from the outlet when working. If you do not, you may receive an electric shock.
Do not touch the Power Supply Unit. You may be exposed to dangerously high temperatures.

■ MOUNTING THE CCU ON THE WALL

NOTE : Use the appropriate screwdriver to fasten the screws.
Handle the CCU carefully to avoid damaging the cover.

The CCU can be installed horizontally or vertically.
The following explanation deals with how to horizontally install the CCU. When installing the CCU vertically, install so that the power switch is facing upwards.

① Use the wall-installation template supplied with the CCU (packed topmost) to determine the installation position.
② Remove two screws securing the front cover of the CCU.
③ Lift up the front cover, and remove the front cover from the three claws at the top of the CCU.
④ Attach four screws loosely to a wall strong enough to hold the weight of a CCU. The screws should stand out 6mm from the wall surface.
⑤ Pass the screws through the holes on the back of the CCU and pull the unit in a downward direction.
⑥ Tighten the four screws with a screwdriver to secure the CCU to the wall.



IMPORTANT

Place the CCU away from heavy motors, welders, dimmers, radio receivers, and computers which generate electrical noise.

■ CONNECTION OF THE AC MAINS LEAD

Use BS1363 approved AC plug.
For pluggable equipment, that the socket-outlet shall be installed near the equipment and shall be easily accessible.
If a device other than a 13Amp plug top is used as a disconnection device it must meet the requirement of all of cls. 2.6 of EN60950 / 1992 / A21993.
The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow ..... Earth (E)
Blue ..... Neutral (N)
Brown ..... Live (L)

As the colours of the wires in the mains lead of this equipment may not correspond with the coloured markings identifying the terminals in your connector proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal which is marked by the letter E or by the safety earth symbol or coloured green or green-and-yellow. The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red. This equipment must be earthed when it is connected to an AC mains.

Protective Earth

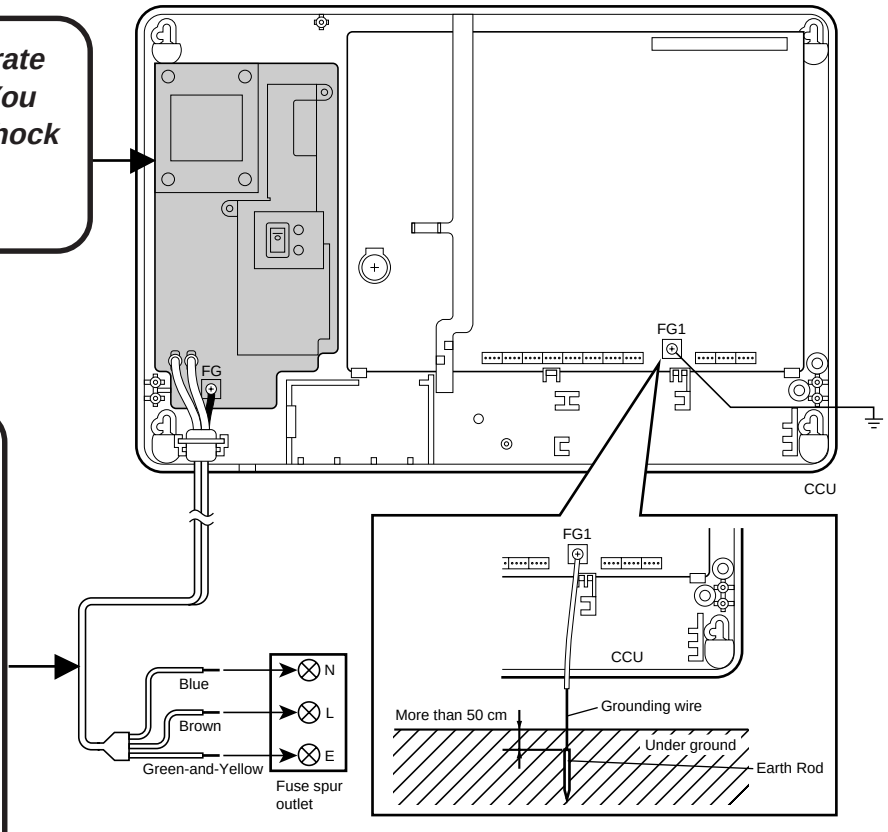
A separate protective earth wire may be connected to the system to protect the network and the CCU from the possible hazardous voltage. If so required, use the screw terminal FG1 to connect the earth wire.

WARNING

Be careful when you operate the Power Supply Unit. You may receive an electric shock or dangerously high temperatues.

WARNING

- ***AC power line must be dedicated. If you cannot dedicate for the CCU, connect a regulator. If voltage drops are too big (less than 170V), connect back-up battery.***
- ***Do not bundle AC power line and internal lines or exchange lines together outside the CCU. Distance of 50cm is required between them to assure proper functioning.***



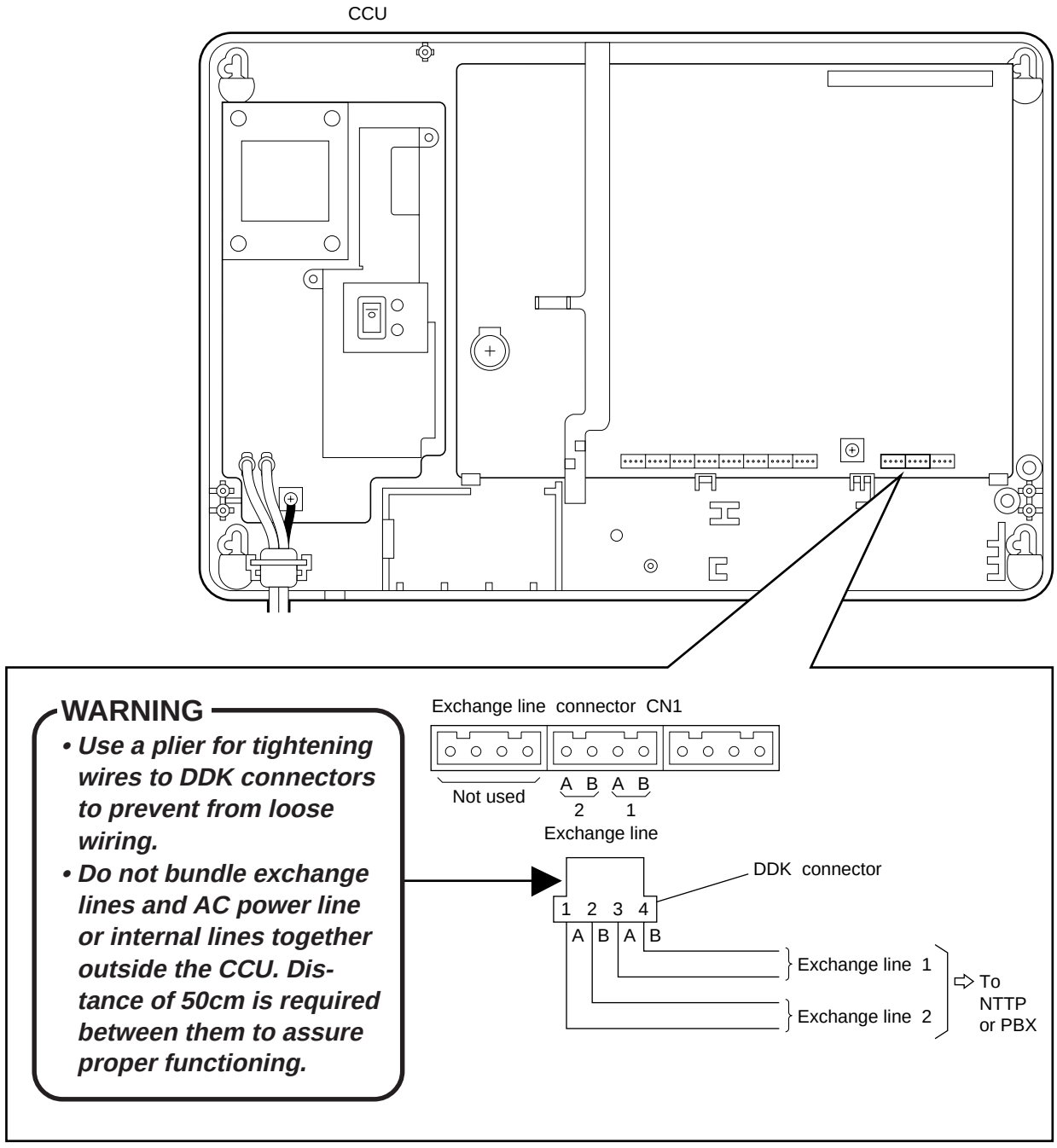
■ CONNECTION OF EXCHANGE LINE / PBX LINES

Two Exchange lines or PBX lines can be connected to the 416 system at initial mounting.

NOTE : Installing the optional expansion card allows up to four lines to be connected to the 416 system. (See page I-20.)

The Exchange lines or PBX lines can be connected directly to the CCU using a DDK connector. A single DDK (4-terminal) connector allows two Exchange lines or PBX lines to be connected.

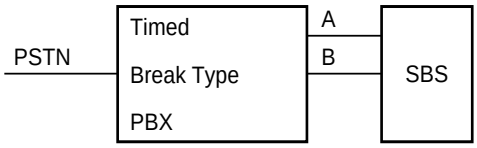
① Connect Exchange line 1 “A” to pin No.3 on the DDK connector, and Exchange line 1 “B” to pin No.4.
② Connect Exchange line 2 “A” to pin No.1 on the DDK connector, and Exchange line 2 “B” to pin No.2.
③ Connect to Exchange line connector (Exchange line 1 / Exchange line 2) on the CCU.
④ In the same way, connect Exchange lines 3 and 4 on the expansion card.



NOTE : In this manual “T” and “R” on the PCB have been replaced with “A” and “B”, respectively, in the description.

■ PIGGY-BACKING TO PBX

SBS can be connected to the extension circuits of another PBX. In this case the PBX must be approved as a host PBX system.
The connection of PBX extension to SBS is made in the same way as PSTN connection and terminated at exchange line ports on the CCU.



NOTE : In this manual "T" and "R" on the PCB have been replaced with "A" and "B", respectively, in the description.

■ CONNECTION OF INTERNAL LINES

Eight internal lines can be connected to the 416 system at initial mounting.

NOTE : Installing the optional expansion card allows up to 16 lines to be connected to the 416 system. (See page I-20.)

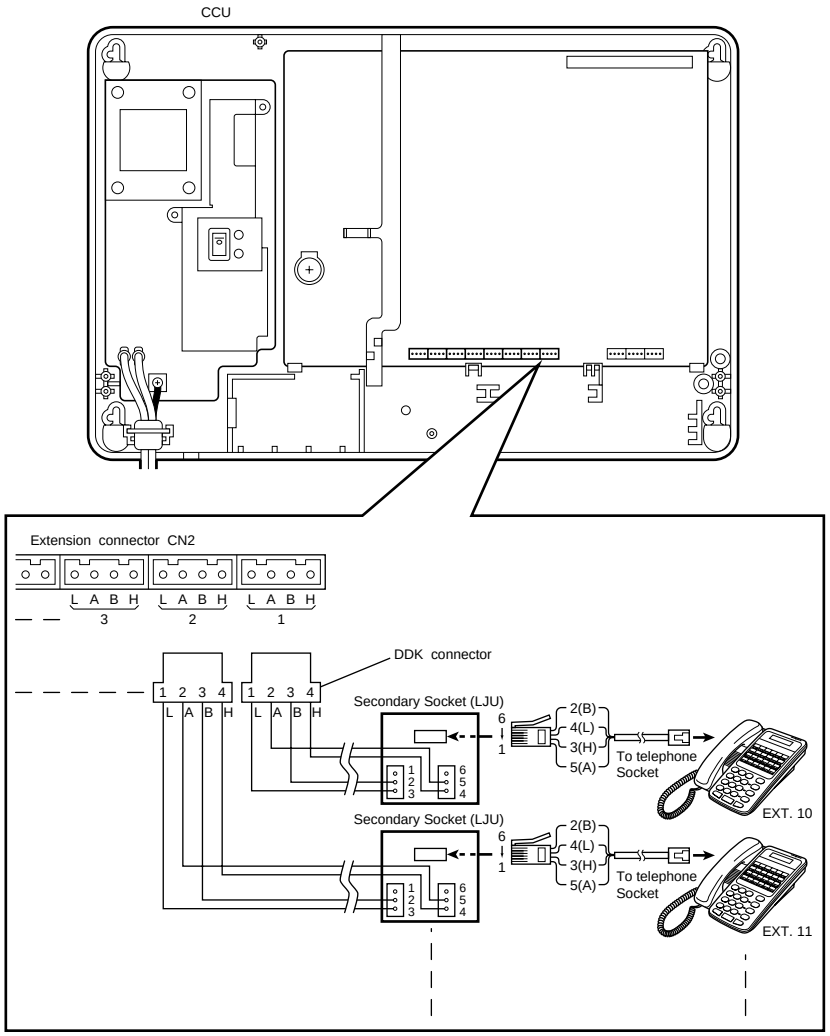
Connect the internal line to the CCU using a DDK connector cable and a secondary socket (LJU).

① Connect the internal line "L", "A", "B" and "H" lines to pin Nos. 1, 2, 3 and 4 of the DDK connector.
② Connect to EXT.1 of the Extension connector on the CCU.
③ Connect the "L", "A", "B" and "H" lines from the DDK connector to the "3", "5", "2" and "4" terminals of the secondary socket (LJU).
④ Connect Key Tel.10 to the modular jack of the secondary socket (LJU).
⑤ In the same way, connect Key Tel.11 to Key Tel.17 to the extension connector of EXT.2 to EXT.8 on the CCU.

NOTE : Connect the administrator's telephone on which programming is performed to EXT.10 (at initial setting).

WARNING

- ***Use a plier for tightening wires to DDK connectors to prevent from loose wiring.***
- ***Do not leave any of the internal lines outside because lightning may cause serious damage to the system. But, if you install in any reason, use protectors.***
- ***Do not bundle internal lines and AC power line or exchange lines together outside the CCU. Distance of 50cm is required between them to assure proper functioning.***



NOTE : In this manual "T" and "R" on the PCB have been replaced with "A" and "B", respectively, in the description.

■ CONNECTION OF INTERNAL LINES ON HYBRID PORT

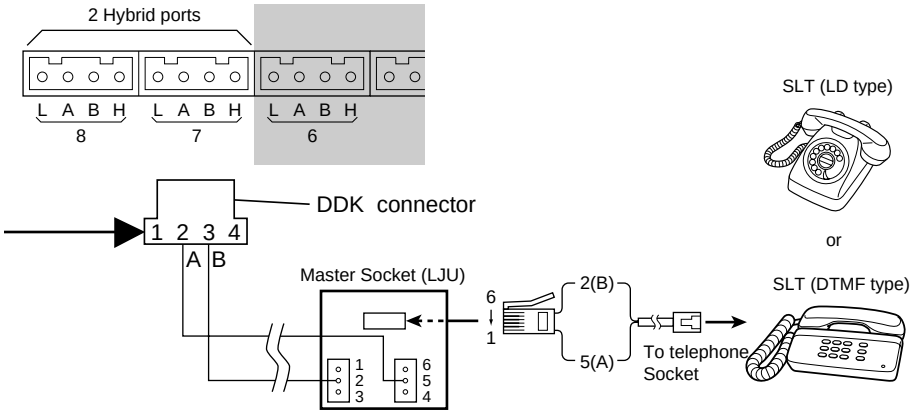
Port 7 (EXT. 16) and Port 8 (EXT. 17) are Hybrid Ports and can be connected to either Key Telephone or Single Line Telephone.

● Connection of Single Line Telephone (SLT)

① Connect “A” to pin No.2 of the DDK connector and “B” to pin No.3.
② Connect the “A” and “B” lines from the DDK connector to the “5” and “2” terminals the master socket (LJU).
③ Connect SLT to the modular jack of the master socket (LJU).

NOTE : A facsimile or telephone answering machine can be connected to the SLT connector in place of the SLT.

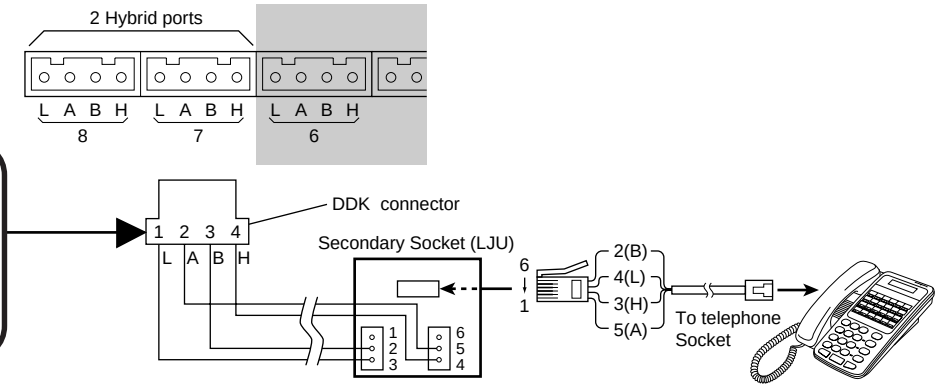
WARNING
- ***Use a plier for tightening wires to DDK connectors to prevent from loose wiring.***
- ***SLT lines must not be bundled with key telephone lines or exchange lines outside the CCU.***



● Connection of Key Telephone

① Connect the internal line “L”, “A”, “B” and “H” lines to pin No. 1, 2, 3 and 4 of the DDK connector.
② Connect the “L”, “A”, “B” and “H” lines from the DDK connector to the “3”, “5”, “2” and “4” terminals of the secondary socket (LJU).
③ Connect Key Telephone to the modular jack of secondary socket (LJU).

WARNING
- ***Use a plier for tightening wires to DDK connectors to prevent from loose wiring.***



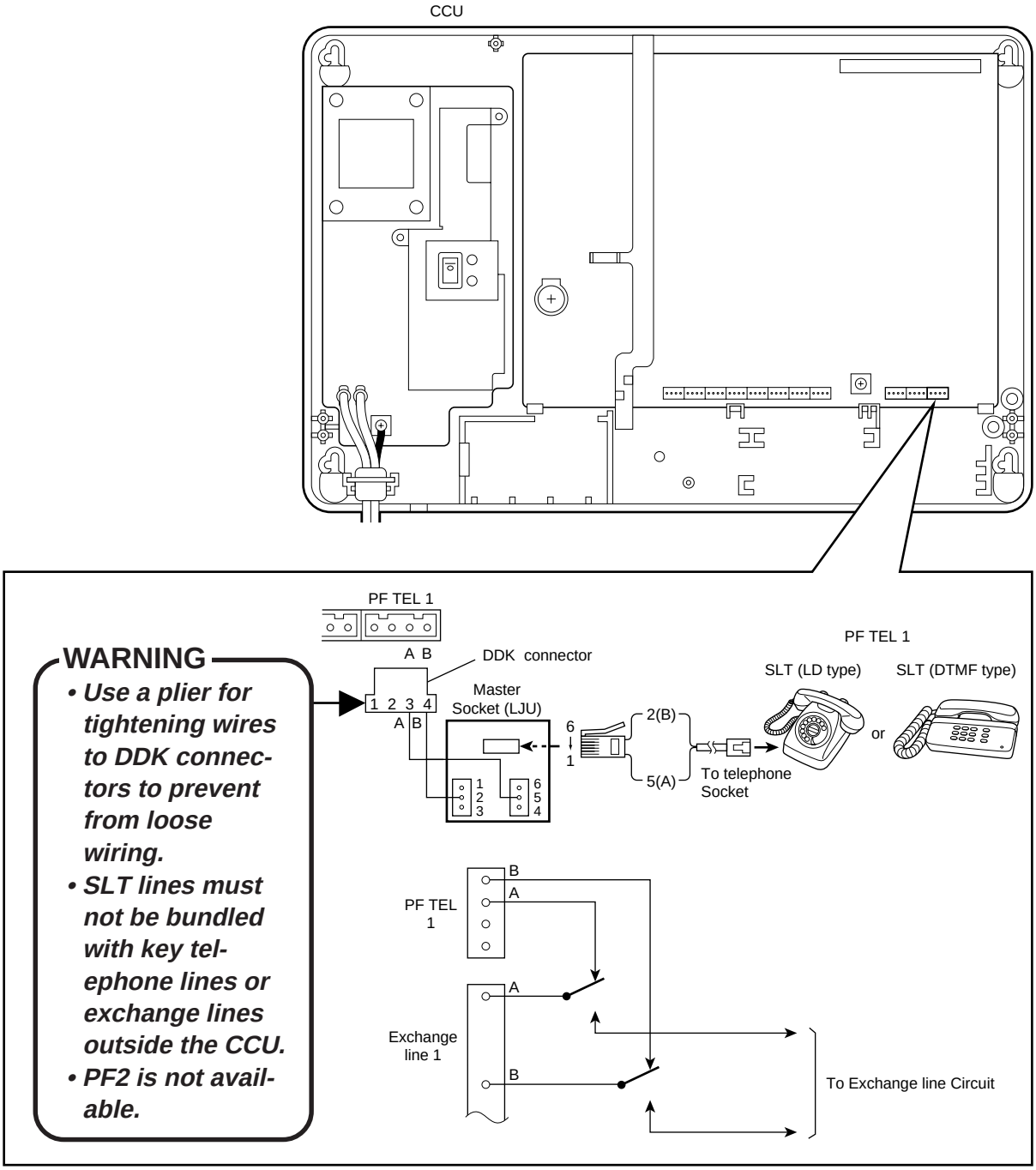
NOTE : In this manual “T” and “R” on the PCB have been replaced with “A” and “B”, respectively, in the description.

■ CONNECTION OF SINGLE LINE TELEPHONE (SLT) FOR POWER FAILURE

Connect the Single Line Telephone for use in power failures to the PF1 port of the CCU.
During a power failure, the SLT connected to the PF1 port will be directly connected to Exchange Line 1.

NOTE : A SLT connected to PF1 of the CCU is for power failures and cannot be used for other purposes.

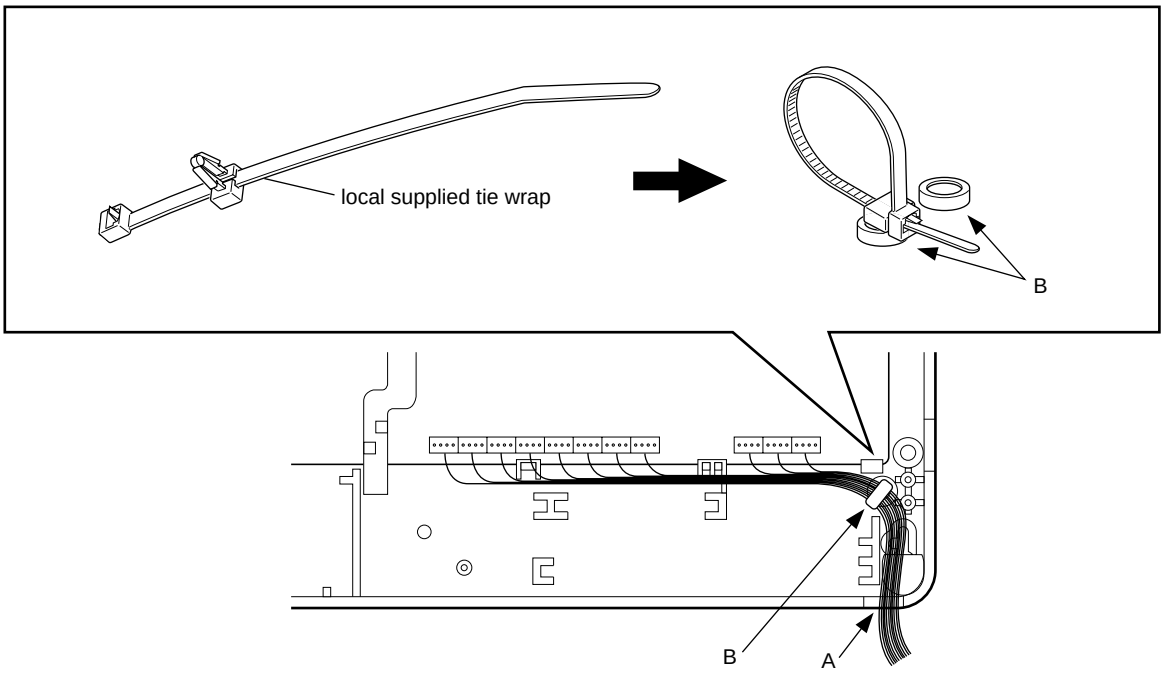
① Connect “A” to pin No.3 of the DDK connector and “B” to pin No.4.
② Connect “A” and “B” lines from the DDK connector to the “5” and “2” terminals of the Master Socket (LJU).
③ Connect SLT to the modular jack of the Master Socket (LJU).



NOTE : In this manual “T” and “R” on the PCB have been replaced with “A” and “B”, respectively, in the description.

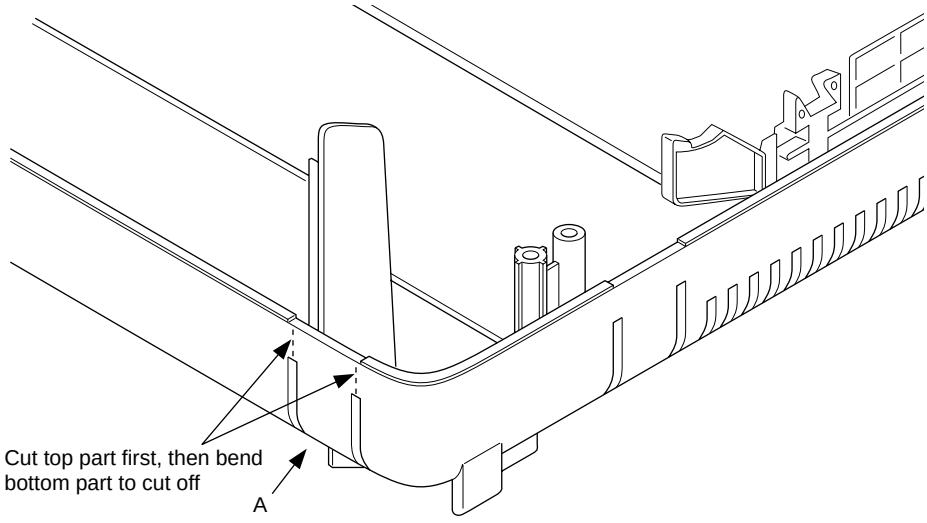
■ CLAMPING INSTALLING WIRE

After connecting the Exchange line and the Internal line to the CCU, put those cables out of the unit at A shown on the figure below. Cut off A using pliers and bundle it with the supplied tie wrap.



WARNING

Do not bundle key telephone lines, SLT lines and exchange lines together outside the CCU. Distance of 50cm is required between them to assure proper functioning.

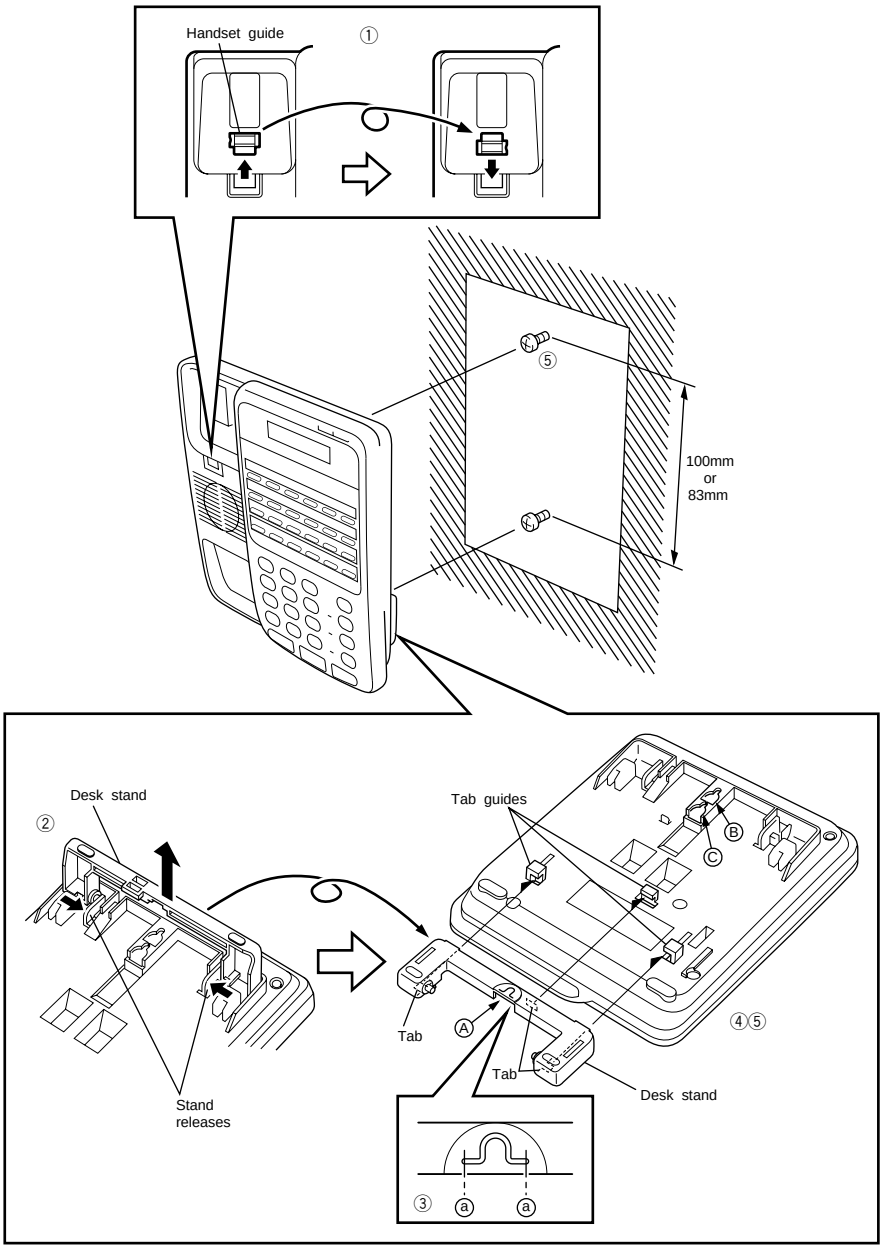


3. WALL MOUNTING OF KEY TELEPHONES

Install the key telephone on the wall according to the following procedure.
DSS console can be installed by the following procedure too.

① Remove the handset guide with a small screwdriver, turn it over, and reinsert it into the telephone.
② Press the Stand releases in toward the middle of the telephone to release the Desk stand.
③ Cut parts ⓐ of the Desk stand with electrical wire cutters, and prepare wall mounting holes.
④ Attach the Desk stand to the bottom of the telephone by aligning the tabs and tab guides, and sliding the Desk stand into place.
⑤ Attach two screws at the wall mounting positions (at 100 mm or 83 mm intervals), and secure at mounting holes Ⓐ-Ⓑ or Ⓐ-Ⓒ on the Key telephone.

NOTE : • When securing at mounting holes Ⓐ-Ⓑ, the pitch between screws should be 100 mm.
• When securing at mounting holes Ⓐ-Ⓒ, the pitch between screws should be 83 mm.



4. CONNECTION OF OPTIONAL UNITS

WARNING

Always unplug the AC plug from the outlet and power off the switch (STD BY) of the CCU when working. If you do not, you may receive an electric shock.
Please do not touch the Power Supply Unit.
You may be exposed to dangerously high temperatures.

■ EXPANSION CARD

Three expansion cards are available. One expansion card can be connected to the 416 system.

● Types of Expansion Cards

(1) 2 Exchange line / 8KT Expansion Card (VB-9260UK)
This expansion card allows two Exchange lines and eight Key telephones to be added on.

(2) 2 Exchange line / 8SLT Expansion Card (VB-9261UK)
This expansion card allows two Exchange lines and eight SLTs to be added on.

(3) 8 SLT Expansion Card (VB-9262UK)
This expansion card allows eight SLTs to be added on.

● Attaching Expansion Cards

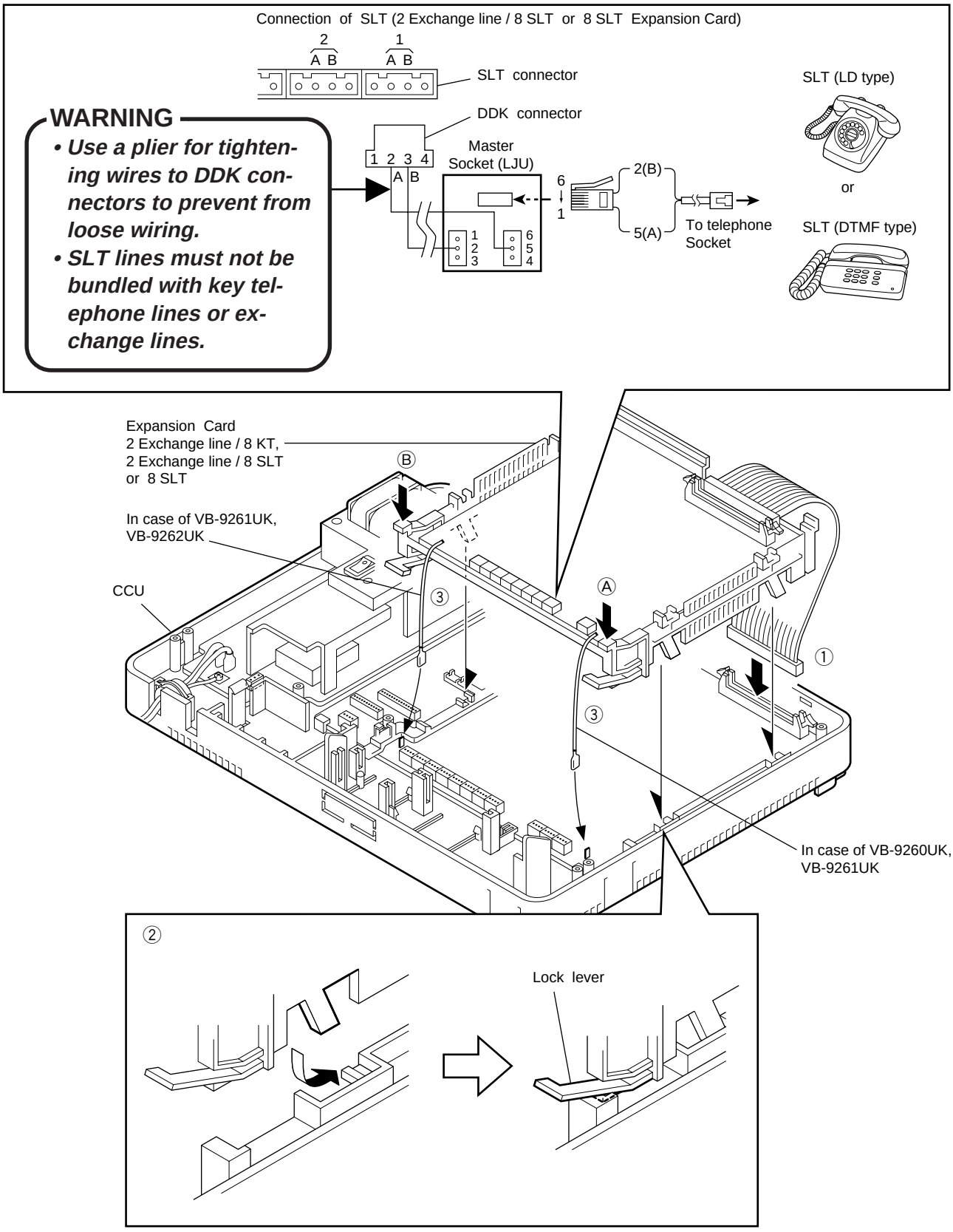
① Insert the connector cable from the expansion card to CN7 of the CCU.
② Align the protrusion of the expansion card with the installation groove on the CCU, and press the both edges (Ⓐ and Ⓑ) of the expansion card to snap it into the place.
③ Connect the connector cable on the expansion card to the ground terminal of the CCU.
④ Use the Expansion DDK connector to add on to the Exchange line, Internal line or SLT.

● Connecting the SLT

When connecting the SLT by an expansion card, use the master socket (LJU) to connect the connector cable of the DDK connector to the CCU.

① Connect “A” to pin No.2 of the DDK connector and “B” to pin No.3.
② Connect to the SLT connector (SLT No.1) of the expansion card.
③ Connect the “A” and “B” lines from the DDK connector to the “5” and “2” terminals of the master socket (LJU).
④ Connect SLT to the modular jack of the master socket (LJU).

NOTE : • A facsimile or telephone answering machine can be connected to the SLT connector in place of the SLT.
• In this manual “T” and “R” on the PCB have been replaced with “A” and “B”, respectively, in the description.



NOTE : In this manual "T" and "R" on the PCB have been replaced with "A" and "B", respectively, in the description.

■ DIRECT STATION SELECTOR (DSS)

Perform the connection of a Direct Station Selector (DSS) console and the fixing of the DSS console to a key telephone, according to the following procedures. Up to 2 DSS consoles can be connected to the system. However, when you use a DSS, programming is required (See Telephone Type Setting (10-25) 01# of MODE 4).

● Connecting the DSS console (VB-9431UK)

Connect the DSS console to the connector having the Extension No. designated during programming.

NOTE : • During programming, also designate the key telephone to be used as a pair with the DSS console. (See "DSS1 PAIR PORT NUMBER 0901#" and "DSS2 PAIR PORT NUMBER 0902#".)
• For details on how to connect the DSS console and the CCU, see "Connection of Key Telephone (page I-16)."

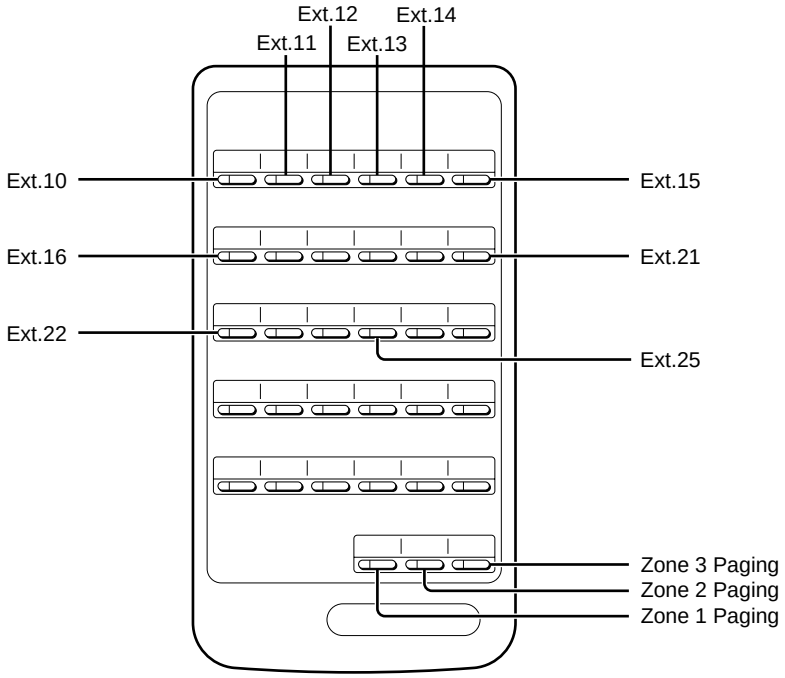
● Fixing of DSS console to key telephone

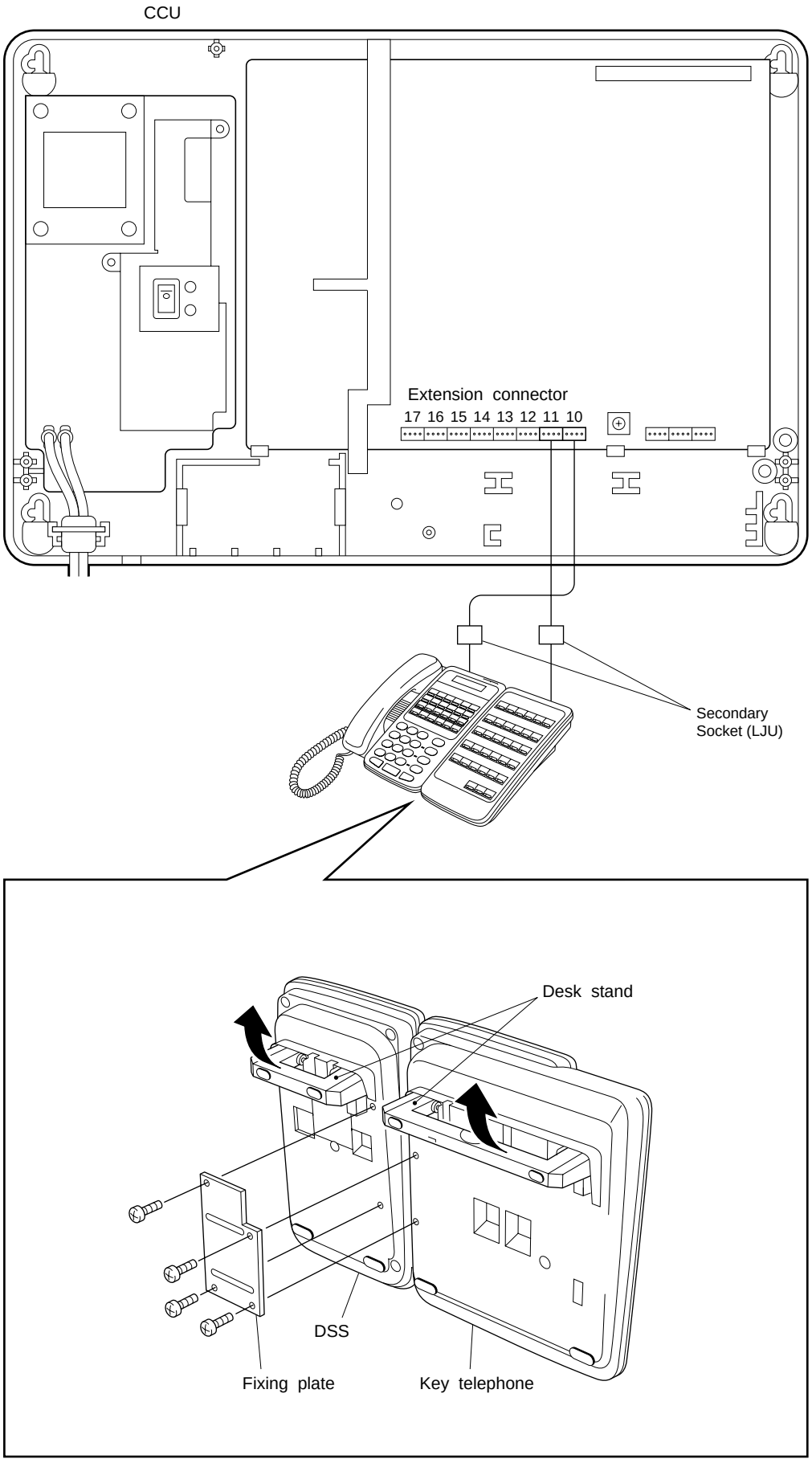
① Stand upright on the Desk stand.
② Fix the DSS console to the key telephone at the four fixing installation holes provided at the bottom of the key telephone, via a fixing plate by fastening screws.

NOTE : • When doing the wiring between the CCU and DSS, make sure that the connector pins on the CCU side and the DSS side are arranged at different points.
• DSS loop resistance: 40Ω.

● Initial status of the DSS console

The initial setting of each key of the DSS console is as follows.




CCU
Extension connector
17 16 15 14 13 12 11 10
Secondary
Socket (LJU)
Desk stand
DSS
Fixing plate
Key telephone

■ CALL LOGGING I/F CARD

Installing the Call Logging I/F Card (VB-9283UK) to the CCU enables the following operations.

(1) Connection of a printer outputs a record of calls (Call Logging).
(2) Connection of a Personal Computer enables programming by a Personal Computer.

NOTE : The necessary communications software must be installed when using the Personal Computer.

● Call Logging I/F Card Specifications

Table 3. Specifications

Item		Description
Interface	I/F	RS-232C x 1
	Output signals	1pin: FG, 2pin: TXD, 3pin: RXD, 5pin: CTS, 6pin: DSR, 7pin: SG, 8pin: DCD, 20pin: DTR
Protocol	Communication channel	Asynchronous, full duplex
	Baud rate	1200/4800
	Parity	EVEN/ODD/NONE
Bit lengths	Start bit	1 bit
	Data bit	7/8 bit
	Stop bit	1/2 bit
MODEM	Baud rate	300 Baud
	Mode	Full duplex, asynchronous, FSK
	Standard	CCITT
Others	Power supply	12V and 5V Supplied from CCU
	Current consumption	4mA

● Installing the Call Logging I/F Card

WARNING

Always unplug the AC plug from the outlet and power off the switch (STD BY) of the CCU when mounting the Call Logging I/F card.

① Make holes at A, B, C shown on the figure using pliers.
② Align the protrusion on the CCU with the hole on the Call Logging I/F Card-A board, and secure by screw ②.
③ Align the Call Logging I/F Card-B board with the installation groove on the CCU, and insert until the Call Logging I/F Card-B board is locked by the claws on the CCU.
④ Insert the connector from the Call Logging I/F Card-A board into CN5 on the CCU.
⑤ Attach the EMI filter to the cable.
⑥ Put the cables together into the cable clamp.

● Connecting the Printer (Serial Printer)

① Connect the printer via the RS-232C cable referring to the specifications of Table 3 and Figure.

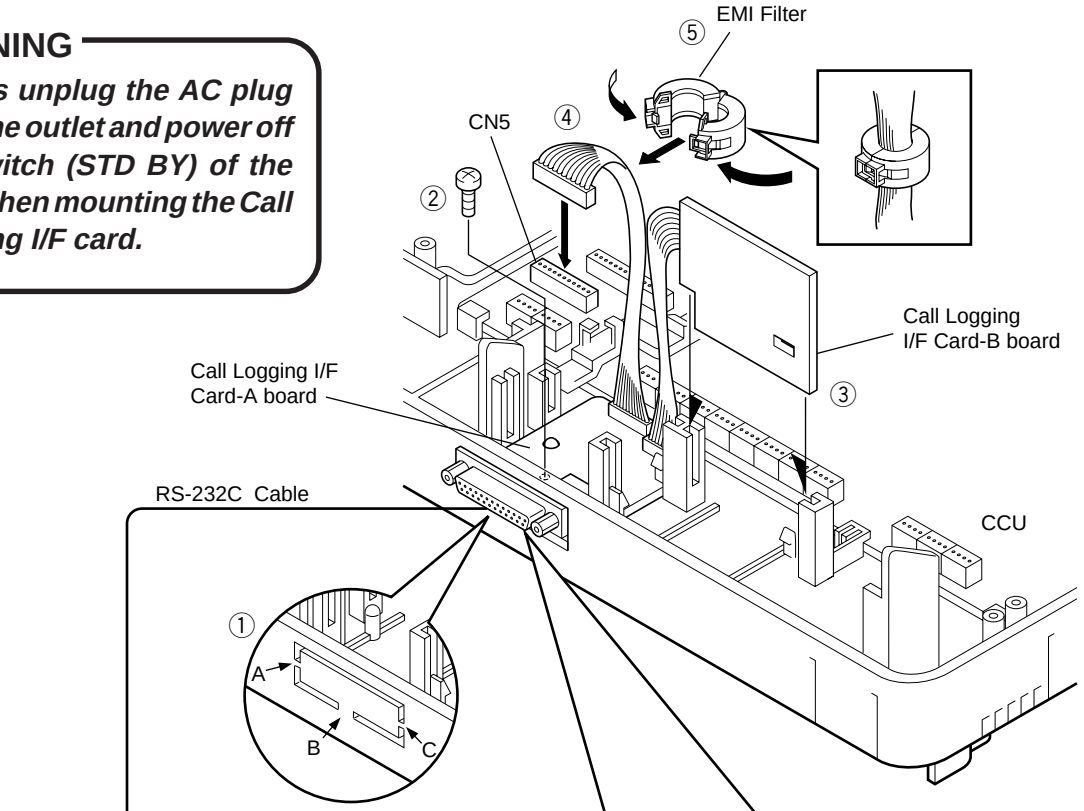
NOTE : For details on the output format of the call record, see programming MODE8 “Communication Parameter Setting”.

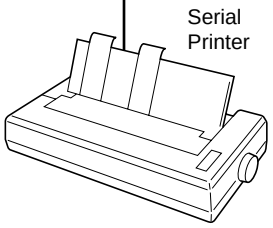
● Connecting the Personal Computer

① Connect the Personal Computer via the RS-232C cable referring to the specifications of Table 3 and Figure.

WARNING

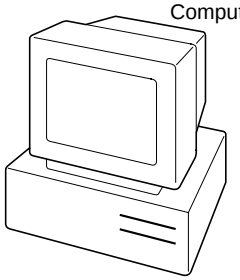
Always unplug the AC plug from the outlet and power off the switch (STD BY) of the CCU when mounting the Call Logging I/F card.



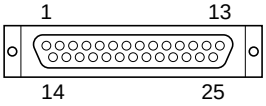


Serial Printer

or



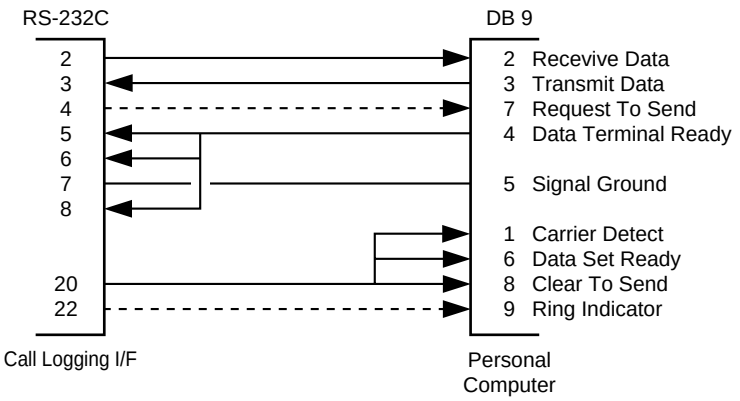
Personal Computer



● RS-232C to RS-232C

Call Logging RS-232C				Printer or Personal Computer RS-232C			
Circuit type(EIA)	Signal name	Pin No. and connection		Signal name	Circuit type		
					EIA	CCITT	
AA	FG	1	1	FG	AA	101	
BA	TXD	2	2	TXD	BA	103	
BB	RXD	3	3	RXD	BB	104	
CB	CTS	5	5	CTS	CB	105	
CC	DSR	6	6	DSR	CC	106	
AB	SG	7	7	SG	AB	102	
CF	DCD	8	8	DCD	CF	109	
CD	DTR	20	20	DTR	CD	108.2	

● If Connecting direct RS-232C to 9Pin (DB9) Interface



Note : Dotted lines need not be connected when wiring.

● To Start to Print or Display Information

① Press [ON/OFF] key.
② Press [#][9][3].

■ DOORPHONE/DOORLATCH I/F CARD

● Doorphone/Doorlatch I/F Card Specifications

Table 4. Specifications

Item		Description
Doorphone	Number of connected units	2
	Loop resistance	20 Ohms
	Ringing tone	2 Types (Chime, tremolo)
Door opener (relay)	Number of outputs	2
	Contact capacity	Max. DC 24V, 1A
	Modes	3 Modes (Door opener, multi, ringer)
Sensor	Type	Non-voltage
	Detection time	250m Seconds, MIN (10mA)
	Ringing tone	Siren (settable)
Others	Power supply	24V Supplied from CCU
	Current consumption	20mA

● Installing the Doorphone/Doorlatch I/F Card

WARNING

Always unplug the AC plug from the outlet and power off the switch (STD BY) of the CCU when mounting the Doorphone/Doorlatch I/F card.

① Align the Doorphone/Doorlatch I/F Card with the installation groove on the CCU, and insert until the Doorphone/Doorlatch I/F Card is locked by the claws on the CCU.
② Insert the connector from the Doorphone/Doorlatch I/F Card into CN4 on the CCU.

● Connecting the Doorphone

Two Doorphones can be connected by using a DDK connector.

① Connect Doorphone A to pin Nos.1 and 2 of the DDK connector, and Doorphone B to pin Nos. 3 and 4.
② Connect the DDK connector to CN2 on the Doorphone I/F Card.
③ Attach the EMI filter to the cable.

● Connecting the Sensor

A Sensor can be connected by using a DDK connector.

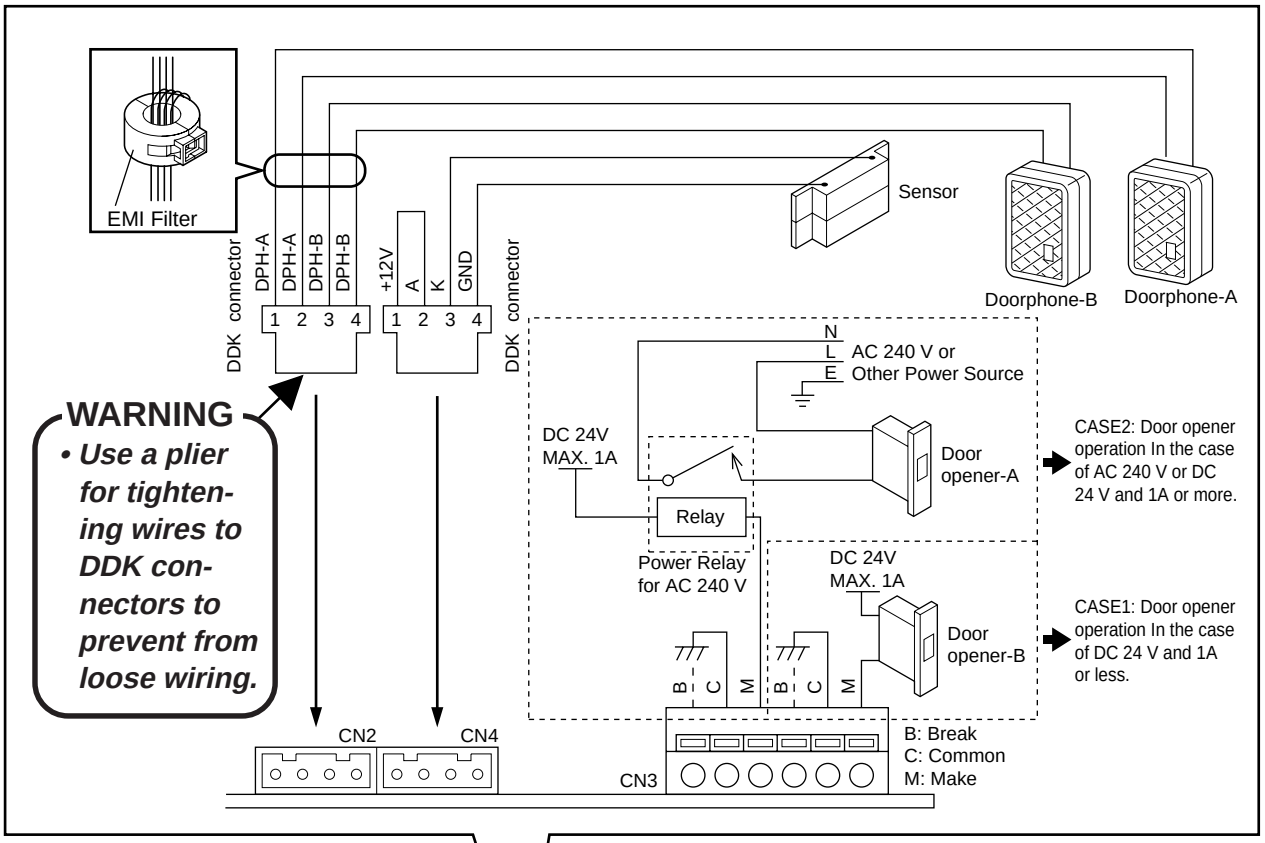
① Short-circuit the pins Nos.1 and 2 of the DDK connector.
② Connect Sensor+ to pin No.3 of the DDK connector and Sensor- to pin No.4.
③ Connect the DDK connector to CN4 on the Doorphone/Doorlatch I/F Card.

● Connecting the Door Opener

Up to two Door Openers can be connected.

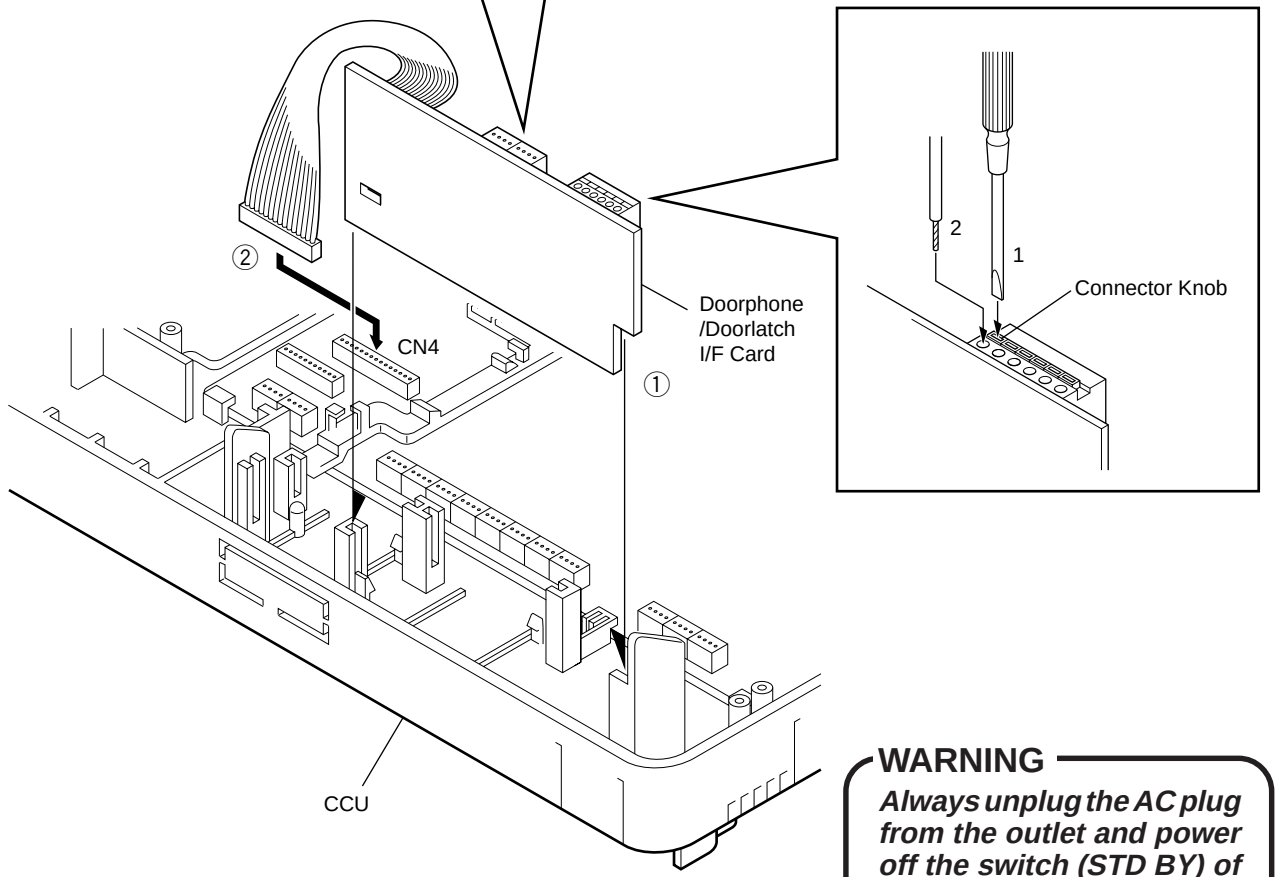
① Connect the leads from Door Opener A to the C (Common) and M (Make) terminals of CN3 Door Opener-A on the Doorphone/Doorlatch I/F Card.
② In the same way, connect the leads from Door Opener B to the C (Common) and M (Make) terminals of CN3 Door Opener-B on the Doorphone/Doorlatch I/F Card. Put the cables together into the cable clamp.

NOTE : • When connecting the leads to the terminals of CN3 on the Doorphone/Doorlatch I/F Card, press the connector knob using a screwdriver to insert the lead. Return the connector knob to secure the lead in place.
• Method or time of control can be set using Program. (See MODE 1 System 0502# to 0505# of Programming Manual.)



WARNING

• Use a plier for tightening wires to DDK connectors to prevent from loose wiring.



WARNING

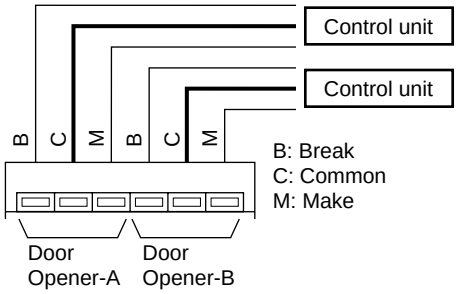
Always unplug the AC plug from the outlet and power off the switch (STD BY) of the CCU when mounting the Doorphone/Doorlatch I/F card.

● Use Door opener terminals as Multi Purpose Relay terminals

Door opener terminals A or B can be used not only for connections of door openers but for Multi Purpose.
Door opener terminal B also can be used as an external output terminal for receiving calls.
Program settings are need to use the terminal as an external output terminal for receiving calls.
(See MODE 1 0501# of Programming Manual.)

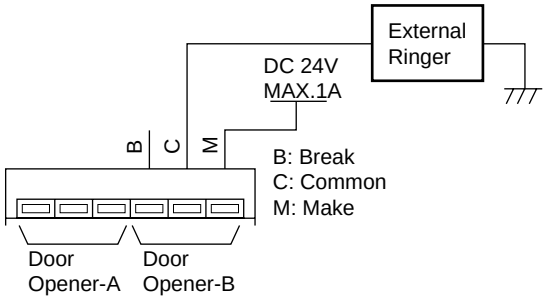
NOTE : Allowable current between each terminal is DC24V 1A. Current more than that may cause the damage of the parts of the CCU.

(1) Multi Purpose



NOTE : • Terminals C and M are used for Make controlled devices.
• Terminals C and B are used for Break controlled devices.

(2) External Ringer



■ DISA OGM UNIT

Connecting the DISA OGM Unit (VB-9289UK) enables the following operations.

1) The DISA function allows the external call to directly call an extension telephone.
2) The OGM function allows guidance using audio messages to be sent to an external caller who has accessed the DISA line.
3) Remote programming can be carried out using the DISA line.

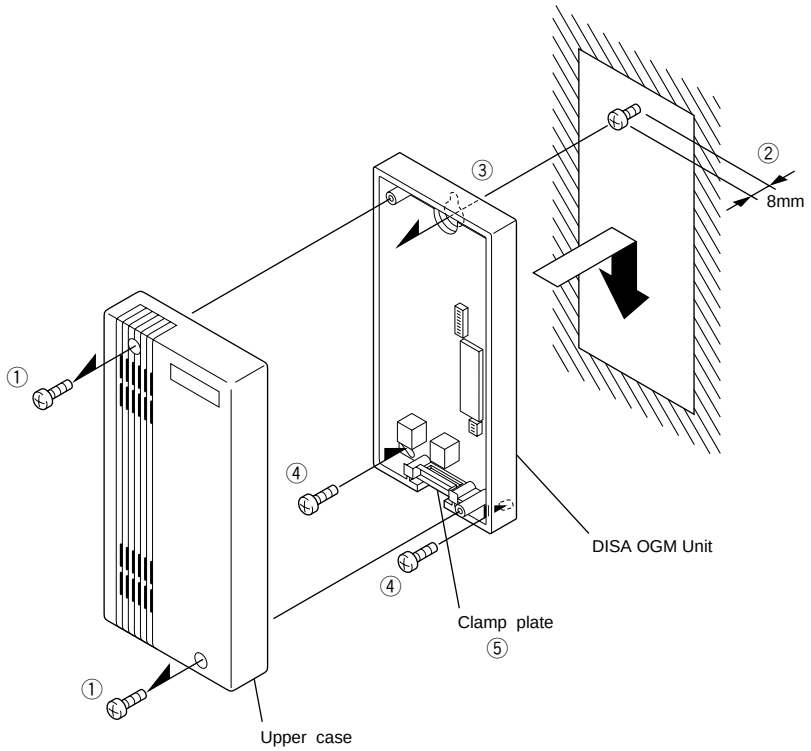
● DISA OGM Unit Specifications

Table 5. Specifications

Item		Description	Remarks
DISA	Number of DISAs	2 lines	
OGM	Number of messages	2 (1st, 2nd) or 1 (1st only)	Per 1 line
	Message length	16 seconds (2 messages) or 32 seconds (1 message)	
Others	Power supply	24V Supplied from CCU through Line1	
	Current consumption	30mA	
	Memory Backup	1 week using Re-chargable Litheum Battery	Required 2 days to fully charge

● Mounting the DISA OGM Unit on the wall

① Remove the two screws from the DISA OGM Unit and lift off the upper case.
② Use screws to mount the DISA OGM Unit onto the wall. The screw should stick out from the wall about 8mm.
③ Hook the DISA OGM Unit onto the screw and tighten the screw.
④ Screw the screws into the holes at the bottom of the lower case.
⑤ Cut the knockout parts from the bottom of the lower case with pliers and remove the clamp plate.

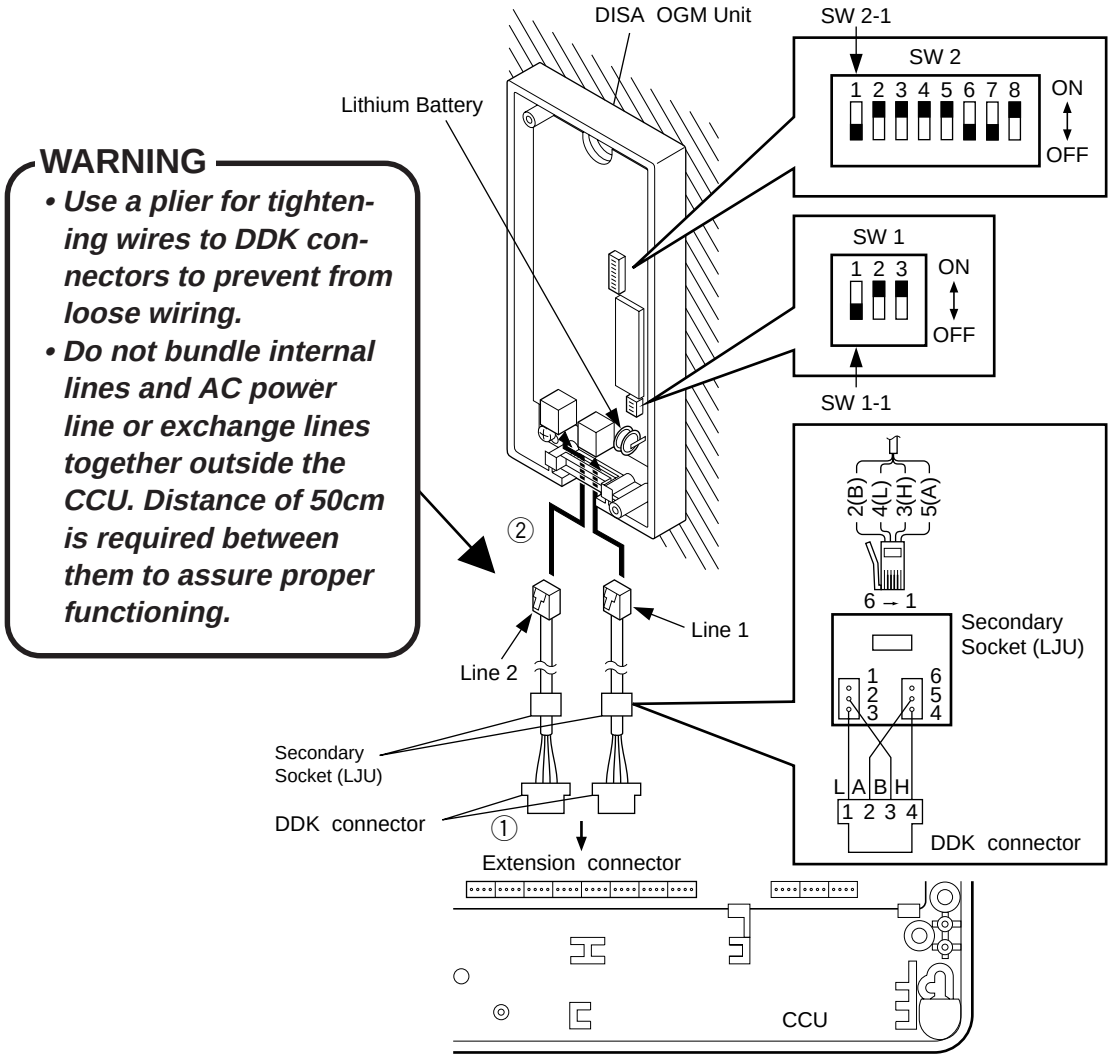


● Connecting the DISA OGM Unit

When you use a DISA OGM Unit, programming must be performed (See Telephone Type Setting (10-25) 01# of MODE 4).

① Connect the internal line to the main unit using a DDK connector cable and secondary socket (LJU).
② Connect the modular plug to the DISA OGM Unit and replace the DISA OGM Unit's top cover.

NOTE : When using only 1 line, connect the cable to Line 1.



WARNING

- ***Use a plier for tightening wires to DDK connectors to prevent from loose wiring.***
- ***Do not bundle internal lines and AC power line or exchange lines together outside the CCU. Distance of 50cm is required between them to assure proper functioning.***

● DIP Switch Settings

IMPORTANT

To register the contents of the Dip switches either:
① Turn off the main switch and turn it on again.
② Disconnect the main power on the line 1 side and connect it again.

(1) Setting the Exchange line incoming call Answer Time

Sets how long after detection of ringing the unit will answer the call. This setting is set by DIP switches SW2-2 and SW2-3 of SW2.

Table 6

SW2-2	SW2-3	Exchange line incoming call Response Standby Time	Initial setting
OFF	OFF	8 Seconds	
OFF	ON	16 Seconds	
ON	OFF	32 Seconds	
ON	ON	Immediate answer	○

(2) Setting the Recording Time

The recording time setting sets the recording time of the response message. This setting is set by DIP switch SW1-3 of SW1.

Table 7

SW1-3	Recording Time	Description	Initial setting
ON	Max. 16 seconds	When this setting is made, the recording time of the response message becomes the maximum 16 seconds. Two messages can be recorded.	○
OFF	Max. 32 seconds	When this setting is made, the recording time of the response message becomes the maximum 32 seconds. Only one message can be recorded.	

(3) Wait for dialling timer

Sets how long the unit waits for the caller to dial after completion of OGM, before proceeding. This setting is set by DIP switches SW2-5 and SW2-6 of SW2.

Table 8

SW2-5	SW2-6	Exchange line Response Standby Time	Initial setting
OFF	OFF	2 Seconds	
OFF	ON	6 Seconds	
ON	OFF	10 Seconds	○
ON	ON	14 Seconds	

(4) Setting the Internal Line Call Mode

The internal line call mode setting sets the extension dial mode when a designated extension is called determining either tone or voice call is used. This setting is set by DIP switch SW2-1 of SW2.

Table 9

SW2-1	Dial Method	Description	Initial setting
OFF	Dial “1” not appended	When this setting is made, the reception dial from the calling side is dialed as it is to call up the other party’s extension.	○
ON	Dial “1” appended	When this setting is made, the reception dial from the calling side appended with “1” is dialed to call up the other party’s extension. This setting must be set when the system is set to voice call up.	

(5) Setting the Extension Dial Number of Digits

This setting is set by DIP switches SW2-7 and SW2-8 of SW2.

Table 10

SW2-7	SW2-8	Extension Dial Number of Digits	Initial setting
OFF	OFF	1 Digit	
OFF	ON	2 Digits	○
ON	OFF	–	
ON	ON	–	

(6) Setting the DTMF Detection Time

This setting is set by DIP switch SW2-4 of SW2.

Table 11

SW2-4	DTMF Detection Time	Initial setting
OFF	80 m Seconds	
ON	40 m Seconds	○

(7) Setting Inhibit Message Recording at an Incoming Call Response

There is the possibility that the message may be changed from the outside or from another extension. So, this setting inhibits recording of messages. When recording of messages is inhibited, abbreviated dial extension number storing on the DISA OGM Unit can also be guarded. This setting is set by DIP switch SW1-2 of SW1.

Table 12

SW1-2	Description	Initial setting
OFF	Recording impossible	
ON	Recording possible	○

NOTE : Do not use SW1-1.
Please leave set to OFF, all the time.

● Message Recording

Using Key Telephone or DTMF type Single Line Telephone.

(1) Recording the 1st Message

① Call DISA OGM extension number.
② After DISA answered, dial [*][9][8][1].
③ Start recording after a beep sound. (Recording time is 16 second or 32 second.)
④ Hung the handset up softly to finish. (Press the hook with a finger to avoid recording noise.)

(2) Recording the 2nd Message

Follow the above steps except for dialing [*][9][8][2].
Repeat the same procedure for the 2nd DISA OGM line.

● Recorded Message Confirmation

(1) 1st Message

Call DISA OGM extension number.
The 1st message will be played automatically.
Dial [*][9][7][1] to play the 1st message again after starting to play the message.

(2) 2nd Message

Dial [*][9][7][2] to play the 2nd message while playing the message. (Either the 1st or the 2nd message.)

● Store abbreviated dial extension numbers

DISA OGM unit can use 1 digit dialing for faster operation. If DISA OGM set 1 digit extension number (DIP SW2-7 : OFF, SW2-8 : OFF), outside caller need dial only 1 digit (1 to 9), which the DISA OGM unit will automatically convert and transfer appropriate extension.

(1) Storing

① Call DISA OGM unit.
② After DISA answered, dial [*][9][9][m] (m=1 to 9).
③ Dial appropriate extension number (10 to 25).
④ Dial [*] to finish.
- If storing is completed, you will hear one beep confirmation tone.
- If storing is failed, you will hear error tone (two beep sounds).

⑤ Repeat the steps 2 to 4 for other abbreviate numbers.
- If non-assigned abbreviation number is dialed, that call will be transfered to the operator automatically.
- Skip entering the extension number assignment (step ③ above) to clear the programmed data.

● Changing non-dialed call transfer

If the outside caller has a pulse dialling phone or waits too long, calls will reroute to an operator automatically. If you wish to reroute to an extension other than operator, you can change it.

(1) Store/change reroute extension number

① Call DISA OGM unit.
② After DISA answered, dial [*][9][9][0].
③ Dial the appropriate extension number (10 to 25).
④ Dial [*] to finish.

- If [#][#] is stored instead of extension number, dialing abbreviaion number "0" disconnects the DISA line.
- If storing is completed, you will hear one beep confirmation tone.
- If storing is failed, you will hear error tone (two beep sounds).
- To clear or return to the initial data (operator call).
  Skip the dialing extension number (step ③ above).

● Dial 9 for operator call

If the system is programmed dial 9 as operator call, please set non-dial call transfer on [*][9][9][9] instead of [*][9][9][0].

● Replacement of Backup Lithium Battery

WARNING

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufucturer. Dispose of used batteries according to the manufacturer's instructions.

■ BUILT IN BATTERY AND LITHIUM BATTERY

Connecting the built-in battery (VB-3295PEX) automatically switches to battery power when a power failure occurs, allowing the system to operate even in a power failure.

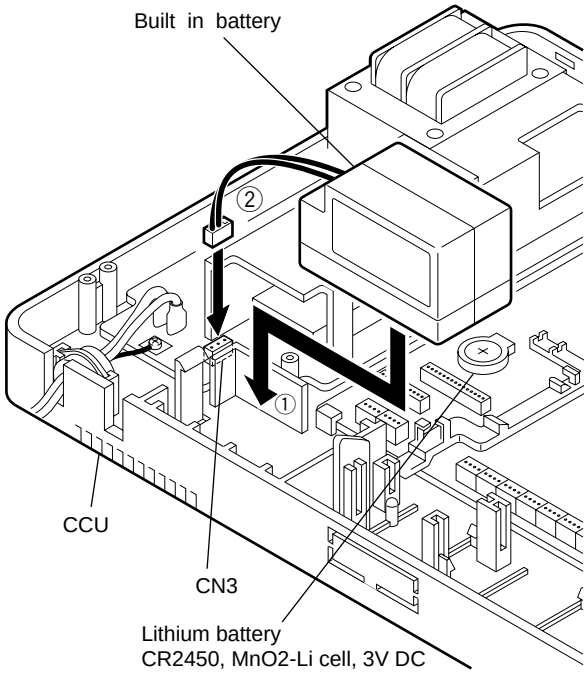
● Installing the Built-in Battery

① Secure the built-in battery at the battery installation position on the CCU. (The built-in battery is secured by claws on the CCU.)
② Insert the connector into CN3 on the CCU.

● Replacement of Backup Lithium Battery

WARNING

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.



● Replacement of Fuse

CAUTION

Double pole / neutral fusing. Be sure to replace with the same rated fuse.

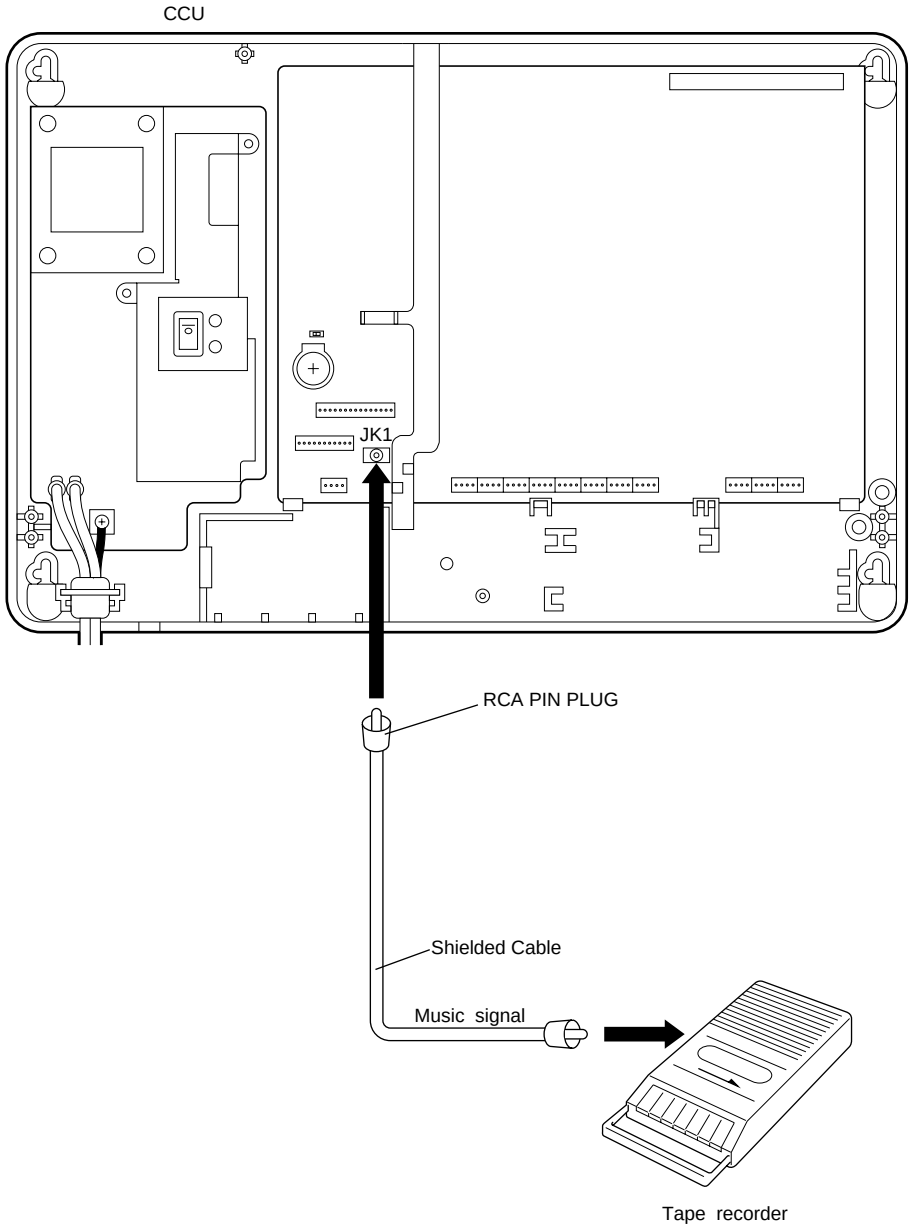
■ MUSIC-ON-HOLD (MOH)

● Connecting the External Music Source to the MOH Connector

NOTE : Program settings are needed.
Set 1# (External MOH) at the settings of 0413# (MUSIC ON HOLD) of MODE 1.

The MOH connector is the input terminal for external music-on hold (MOH). Connect the music source to the MOH connector on the CCU using the RCA PIN PLUG.

NOTE : • If a tape recorder is connected to the MOH connector, place the recorder away from the CCU to prevent interference.
• MOH terminal input impedance: 1.5k Ohms maximum
• MOH terminal input level: 150 mV maximum
• Do not connect speaker terminal with Audio Power Amplifier.



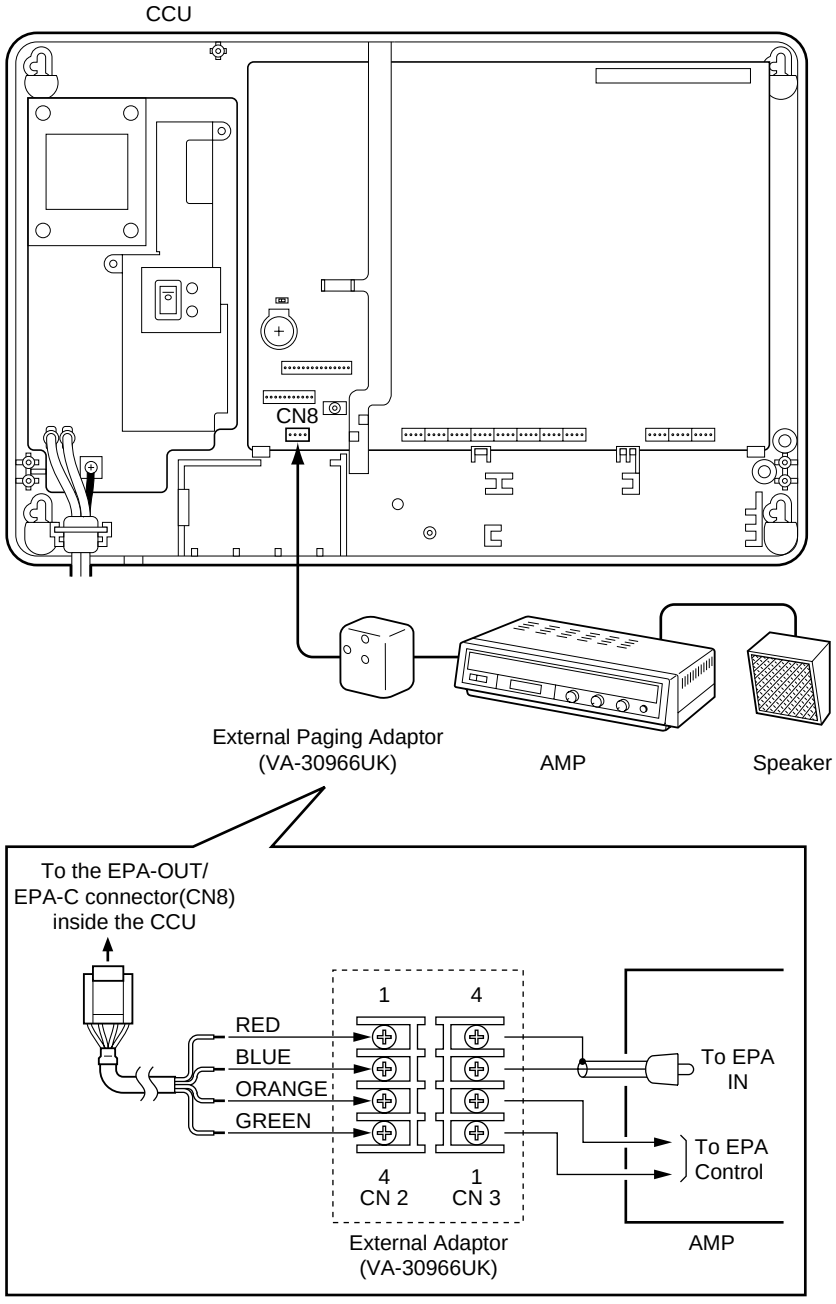
■ EXTERNAL PAGING / LOUD RINGING BELL

The External Paging Amplifier (EPA) is the output terminal for external paging. To carry out external paging, connect the External Paging Adaptor (VA-30966UK) and the External Paging Amplifier.

● Connecting the External Paging Adaptor and External Paging Amplifier

Connect an external amplifier and external adaptor to the “EPA-OUT/EPA-C” connector (CN8) inside the CCU. The “EPA-C” terminals control the external amplifier.

NOTE : • EPA terminal output impedance: 600 Ohms
• EPA terminal output level: -20dB



MEMORANDUM

PROGRAMMING MANUAL

TABLE OF CONTENTS

1. PROGRAMMING GUIDELINES

Before programming the SBS:

- Make certain all connections to Central Control Unit have been properly installed and tested. See the Installation instructions manual.
- Complete the programming table form with all necessary information obtained from the end user.
- Perform the initialization procedure before programming.
- Enter features and installation specifications on a programming table form. See the Programming Tables manual.

2. INITIALIZING THE SYSTEM BEFORE PROGRAMMING

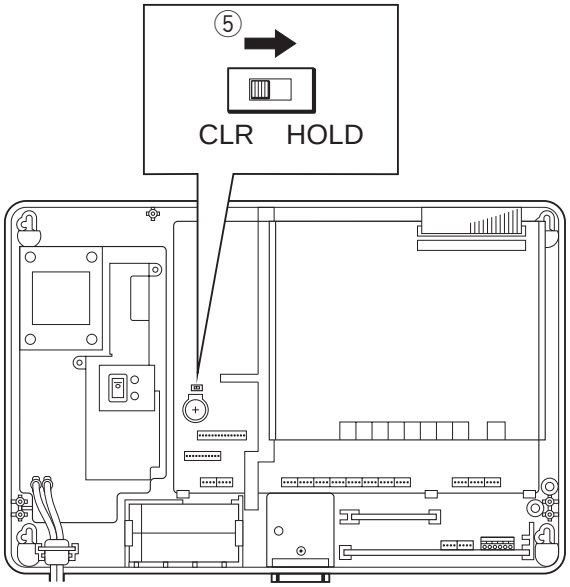
WARNING

Please do not touch the Power Supply Unit.
You may be exposed to an electric shock or to dangerously high temperatures.

Before programming for the first time, reset the system as follows:

① Turn off power for Central Control Unit.
⬇
② Move the RAM switch to “CLR”.
⬇
③ Turn the power for the Central Control Unit back on.
⬇
④ Wait 5 seconds.
⬇
⑤ Move the RAM switch to “HOLD”.

NOTE : This is a one-time operation. If the procedure is repeated at the next programming session, all previously programmed data will be erased.



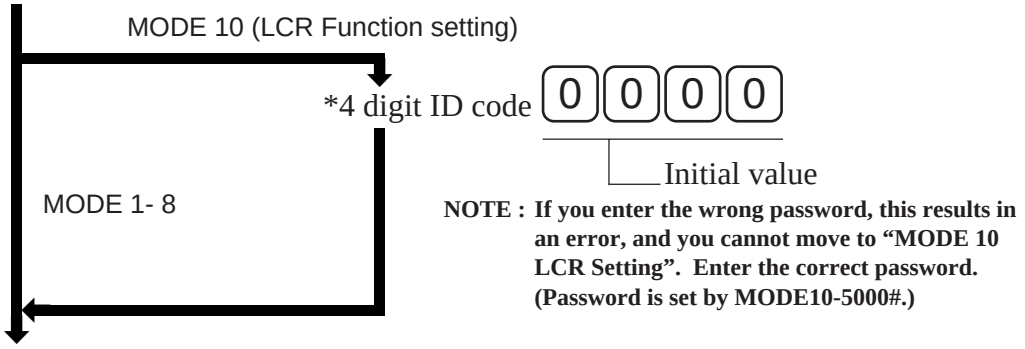
3. BEFORE PROGRAMMING

3-1. BASIC PROGRAMMING

■ HOW TO ENTER THE PROGRAM MODE

● **From administrator's phone:**
An administrator's telephone is port 1 (extension 10) initially.

① [ON/OFF]
↓
② [MEMORY]
↓
③ [#][#] (The system is now in Program Mode.)
↓
④ One-touch key (PSD key) to select mode.



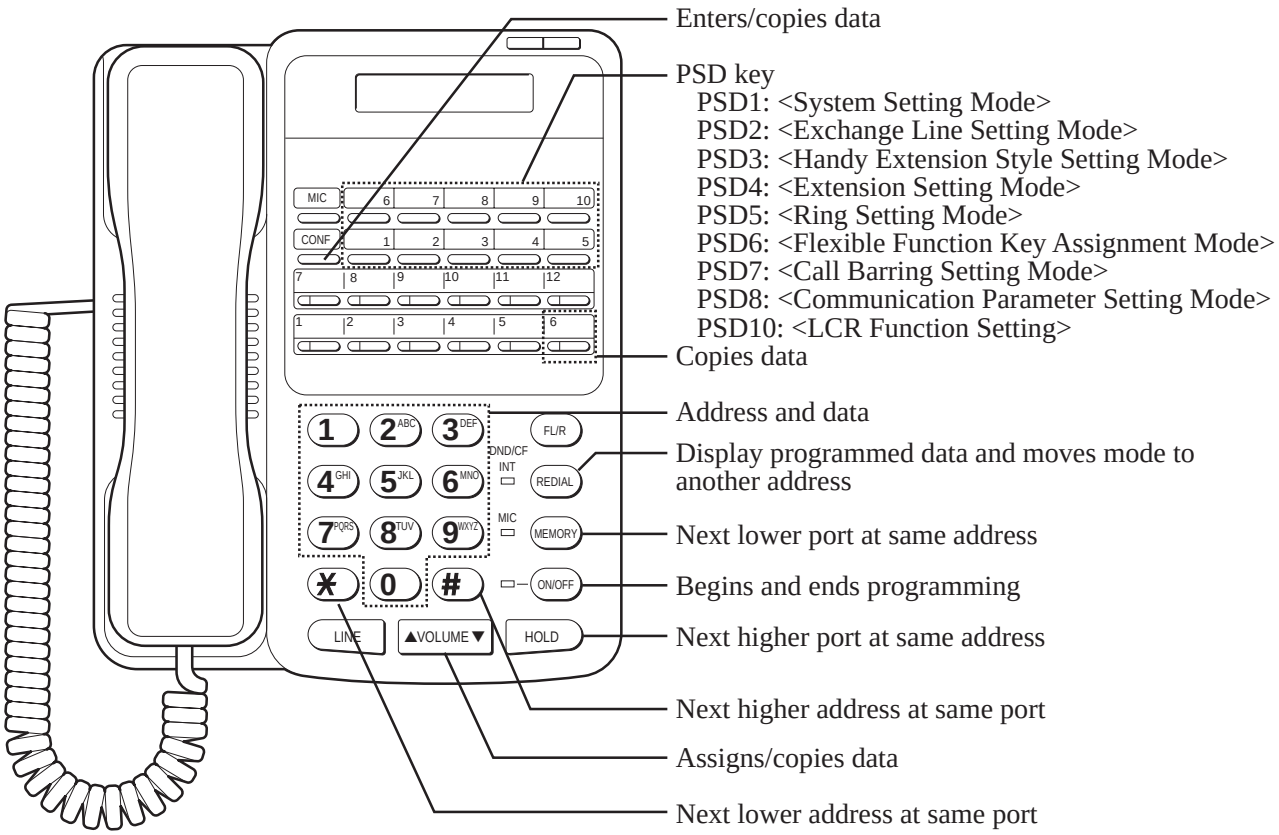
NOTE : If you enter the wrong password, this results in an error, and you cannot move to "MODE 10 LCR Setting". Enter the correct password. (Password is set by MODE10-5000#.)

⑤ Press [#] to move to next address or press [REDIAL]+ address number + [#] to access to each address directly.

● **Mode Selection**
Programming of the system consists of the following nine modes. Each of these modes is represented by personal speed dial(PSD) keys 1-8 and 10. See figure on page P-4 of this section.

PSD Key No.	MODE	Description	Page
PSD 1 Key	MODE 1 : System Setting	Contains feature options that are based system-wide.	P-26 to P-36
PSD 2 Key	MODE 2 : Exchange Line Setting	Contains feature options on a per-Exchange line basis.	P-37 to P-41
PSD 3 Key	MODE 3 : Handy Extension Style Setting	Contains settings of up to eight styles of telephone operation patterns required by users according to feature options on a per-station basis. [Extension Setting (MODE 4), Ring Setting (MODE 5), Flexible Function Key Assignment (MODE 6) and Call Barring Setting (MODE 7)].	P-6 to P-7 P-41 to P-45
PSD 4 Key	MODE 4 : Extension Setting	Contains feature options on a per-station basis.	P-45 to P-47
PSD 5 Key	MODE 5 : Ring setting	Contains all of the exchange line ringing options.	P-48
PSD 6 Key	MODE 6 : Flexible Function Key Assignment	Contains feature options on a per-key, per-station basis.	P-49 to P-50
PSD 7 Key	MODE 7 : Call Barring Setting	Contains program steps for performing toll restrictions on a per-line, per-station basis.	P-51 to P-55
PSD 8 Key	MODE 8 : Communication Parameter Setting	Contains features on the Comm. port for Call Logging/data terminal programming/remote programming.	P-56 to P-58
PSD 9 Key	Not Available		
PSD 10 Key	MODE 10 : LCR Setting	Contains feature options that are for Least Cost Routing.	P-59 to P-62

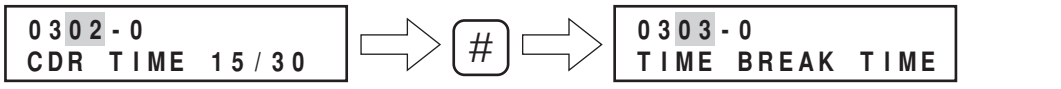
■ PROGRAMMING KEYS



● **Data Set**

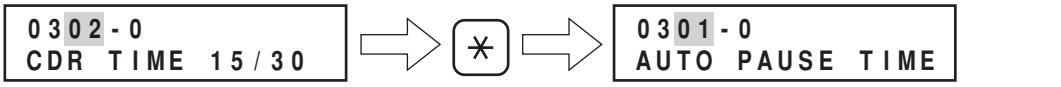
The following keys can be assigned new data and set to a different address within the same port or a different port the same address.

[#] : Assigns data and advances to next higher number address within same port.



(Advances to the next higher number address.)

[✳] : Assigns data and advances to the next lower number address within same port.



(Advances to the next lower number address.)

[HOLD] : Assigns data and advances to the next higher number port within same address except MODE 1 System setting mode, MODE 3 Handy Extension Style setting mode and MODE 8 Communication Parameter setting mode. If you are in these modes, then the key assigns data and advances to the next higher number port within same address.

(Advances to the next higher number port.)

MEMORY : Assigns data and advances to the next lower number port within same address except MODE 1 System setting mode, MODE 3 Handy Extension Style setting mode and MODE 8 Communication Parameter setting mode. If you are in these modes, then the key assigns data and advances to the next lower number port within the same address.

(Advances to the next lower number port.)

REDIAL : When unacceptable data is input and entered by pressing #, *, HOLD, MEMORY keys, you will hear a beep. Press REDIAL key to stop the beep sound and return to the status of the original data.

(Returns to the status of the original data.)

: Moves to a new address within the same mode by pressing this key and the new address numbers.

(Input new address numbers)

■ PROGRAMMING GUIDANCE DISPLAY

Programming allows various instructional messages to appear on the display, thereby making programming easier.
However, the contents of the program may change.

● LCD Display Programming

Program the LCD display of the key telephone according to the format shown below.

• Using new Dot-Matrix 2 line LCD phone

• Using 7 segment 1 line LCD phone

Information pertaining to each capital letter in the LCD display is explained below.

x = Programming Address

This is a decimal counter of 4 digits. When setting Exchange lines, Internal lines, and Call Barring, the first 2 digits become Internal and Exchange line port numbers.

N = Setting Data

This is the position of the current setting data, as well as the position of the settings to be entered.

C = Operation Guidance

This is an explanation of each setting item, It is a message with a maximum of 15 characters(displayed only using Dot-Matrix 2 line phone).

3-2. ADVANCED PROGRAMMING

■ ABOUT THE HANDY HANDY EXTENSION STYLE SETTING MODE (MODE 3)

MODE 3 allows to set up to eight required styles of telephone operation patterns according to all of the feature options (Extension Setting (MODE 4), Ring Setting (MODE 5), FF Key Assignment (MODE 6) and Call Barring Setting (MODE 7) required on a per-station basis.
After the modification of MODE3, you are able to assign “STYLE SETTING (10-25)03#” in the Extension Setting mode (MODE 4). This handy programming eliminates the detailed settings that were required for each telephone, and reduces the program time.

● **Using MODE 3 in the initial set state**

If style 1 to 8 settings are acceptable as they are in the initial set state, MODE 3 to MODE 7 settings can be omitted simply by setting the “STYLE SETTING (10-25)03#” in the Extension Setting mode (MODE 4).

● **Using MODE 3 with the initial set changed**

If you want to change the initial set state, reset only the desired item in the MODE 3. This allows to change the pattern of each style.
After changing the parameters of MODE 3, MODE 3 to MODE 7 settings can be omitted simply by setting “STYLE SETTING (10-25)03#” in the Extension Setting mode (MODE 4).

IMPORTANT

The latter assignment will be effective, if you assign both Handy Extension Style Setting Mode and normal programs (MODE 4 to 7).
Initially normal programs are effective.

NOTE : The following page shows the “Handy Extension Style Setting Table (Initial)” indicating the initial set states of each style. Use this table together with the “Handy Extension Style Setting Table (Own)” in the “Programming Tables Manual” for entering the newly changed state.

Enter a summary of the Style setting statuses in MODE 3 in order to carry out mode 4 style setting more smoothly.

Handy Extension Setting Style Table (Initial)

Features and Initial Setting of Normal Program				Initial Setting for Each Style in MODE 3							
Address in Mode 3		Features	Initial of normal program	Operator Style 1	President Style 2	Manager Style 3	Supervisor Style 4	Employee 1 Style 5	Employee 2 Style 6		
Extension (MODE 4)	0(1-8)02#	SLT DIALING TYPE	(1#) DTMF	(1#) DTMF	←	←	←	←	←		
	0(1-8)04#	ANSWER (AUTOMATIC)	(1#) Handset	(1#) Handset	←	←	←	←	←		
	0(1-8)05#	AUTOMATIC ANSWER WITHOUT RINGER	(0#) No	(0#) No	←	←	(1#) Yes	←	←		
	0(1-8)06#	PAGING GROUP	(1#) Group 1	(1#) Group 1	←	←	←	←	←		
	0(1-8)07#	PRIME LINE PREFERENCE	(0#) No	(0#) No	←	←	←	←	←		
	0(1-8)08#	PRIME LINE ACCESS GROUP	(0#) 9/0	(0#) 9 / 0	←	←	←	←	←		
	0(1-8)09#	SENSOR ALARM RING	(0#) except Ext. 10	(1#) Ring	(0#) No Ring	←	←	←	←		
	0(1-8)10#	DOORPHONE RING	(0#) except Ext. 10	(3#) Ring A, B	(0#) No Ring	←	←	←	←		
	0(1-8)11#	CALL DURATION DISPLAY	(1#) Yes	(1#) Yes	←	←	←	←	←		
	0(1-8)15#	OFF-HOOK SIGNAL (CALL WAIT)	(2#) except Ext. 10	(1#) Exchange/ Intercom	(2#) Intercom	←	←	←	←		
	0(1-8)16#	DATA SECURITY	(0#) No	(0#) No	←	←	←	←	←		
Ring (MODE 5)	1(1-8)0x#	DAY RINGER SETTING FOR EXCHANGE LINES (x=1-4)	(0#) except Ext. 10	(1#) Ring	(0#) No Ring	←	(1#) Ring	←	(0#) No Ring		
	1(1-8)1x#	NIGHT RINGER SETTING FOR EXCHANGE LINES (x=1-4)	(0#) except Ext. 10	(1#) Ring	(0#) No Ring	←	(1#) Ring	←	(0#) No Ring		
	1(1-8)2x#	LUNCH RINGER SETTING FOR EXCHANGE LINES (x=1-4)	(0#) except Ext. 10	(1#) Ring	(0#) No Ring	←	(1#) Ring	←	(0#) No Ring		
	1(1-8)3x#	DAY DELAYED INCOMING SETTING FOR EXCHANGE LINES (x=1-4)	(0#) except Ext. 10	(1#) Ring	(0#) No Ring	(1#) Ring	←	←	(0#) No Ring		
	1(1-8)4x#	NIGHT DELAYED INCOMING SETTING FOR EXCHANGE LINES (x=1-4)	(0#) except Ext. 10	(1#) Ring	(0#) No Ring	(1#) Ring	←	←	(0#) No Ring		
	1(1-8)5x#	LUNCH DELAYED INCOMING SETTING FOR EXCHANGE LINES (x=1-4)	(0#) except Ext. 10	(1#) Ring	(0#) No Ring	(1#) Ring	←	←	(0#) No Ring		
FF Key	2(1-8)nn#	FF KEY ASSIGNMENT (nn = 01-12)	(881#)-(884#)	Pattern "A" (See FF key Assignment below)	Pattern "B"	←	←	←	←		
Call Barring (MODE 7)	3(1-8)01#	SSD CALL BARRING OVERRIDE	(0#) No	(1#) Yes	←	←	←	←	(0#) No		
	3(1-8)1x#	DAY RESTRICTION TYPES EXCHANGE LINES (x=1-4)	(4#) Type 4	(4#) Type 4	←	(3#) Type 3	←	(2#) Type 2	(1#) Type 1		
	3(1-8)2x#	NIGHT RESTRICTION TYPES EXCHANGE LINES (x=1-4)	(4#) Type 4	(4#) Type 4	←	(3#) Type 3	←	(2#) Type 2	(1#) Type 1		

FF Key (MODE 6)	FF Key Assignment Pattern "A"	7] None	8] None	9] Group Call Pick-up (70)	10] Station Lock out (74)	11] All Page (60)	12] Night Key (#52)
		1] Exchange line 1 (881)	2] Exchange line 2 (882)	3] Exchange line 3 (883)	4] Exchange line 4 (884)	5] None	6] None
	FF Key Assignment Pattern "B"	7] None	8] None	9] Group Call Pick-up (70)	10] Station Lock out (74)	11] All Page (60)	12] DND (73)
		1] Exchange line 1 (881)	2] Exchange line 2 (882)	3] Exchange line 3 (883)	4] Exchange line 4 (884)	5] None	6] None

NOTE :
← = Same as Left
x = Exchange line No.
nn = FF Key No.
( ) = Initial No.

NOTE : To modify styles (1-8) enter MODE 3. To assign styles (1-8) of each extension, enter MODE 4 (10-25)03#.

■ DATA COPY

You can copy programmed data to another address. This means that after you have programmed a specified address, you can copy the data to another address. Also, if you program a specified port you can copy the program to other ports.

● Copying Single Data

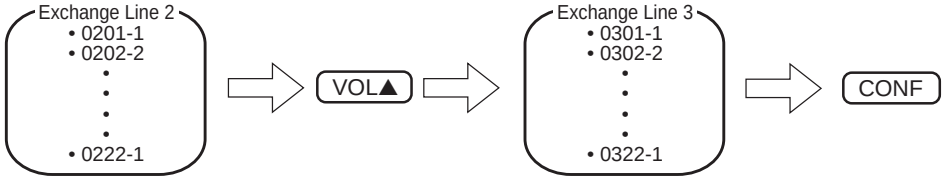
FF6 : Copies data to the next higher port by pressing the FF6 key. Press the FF6 key again to enter the new data and advance to the next higher port.

Press the FF6 key again to copy the data that is programmed at the previous lower port and advance to the next higher port.

● Copying Bundle Data

VOL▲ : Assigns the displayed port's data and moves to the next higher number port and reset the last digit to the default settings (0) by pressing VOL▲ key. And then whole contents of the port's data displayed previously is copied to the next higher number port by pressing CONF key.

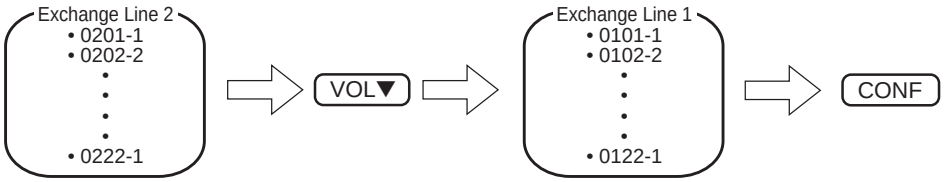
* MODE 1 System settings and some of the MODE 7 Call Barring setting cannot be copied.



Some data cannot be copied from port to port. Text under each address in this manual is noted accordingly.

VOL▼ : Assigns the displayed port's data and moves to the next lower number port and reset the last digit to the default settings (0) by pressing VOL▼ key. And then whole contents of the port's data displayed previously is copied to the next lower number port by pressing CONF key.

* MODE 1 System settings and some of the MODE 7 Call Barring setting cannot be copied.



Some data cannot be copied from port to port. Text under each address in this manual is noted accordingly.

IMPORTANT

In Programming Manual and Programming Table, ⓒ mark is indicated for the programmings that allows Data Copy.

■ DATA TERMINAL PROGRAMMING

You can also program the system using a data terminal, which gives you the advantage of checking the programming steps on the display screen before making final changes. At every stage in the programming there are help screens available by pressing the "H" key on the terminal keyboard.

● Entering The Data Terminal Programming Mode

◆ To Enter On-Site Progrmming

① [ON/OFF] (From administrator's phone)

⬇

② [#]

⬇

③ [9][9]

⬇

④ Enter programmed 4-digit ID code (Initially not stored).

IMPORTANT

Communication software must be installed to the personal computer to activate On-Site/Remote Programming.
Call Logging I/F Card must be installed to the CCU to activate On-Site/Remote Programming.

◆ To Enter Remote programming

① [HOLD] after picking up an incoming call from Exchange line (Personal Computer).

⬇

② [#][6]

⬇

③ Enter programmed 4-digit ID code (Initially not stored).

◆ To Store and Confirm ID code

(1) To Store

① [ON/OFF] (From administrator's phone)

⬇

② [*][#][6]

⬇

③ Enter 4-digit ID code.

⬇

④ [HOLD]

⬇

⑤ [ON/OFF]

(2) To Confirm

① [ON/OFF] (From administrator's phone)

⬇

② [*][#][6]

⬇

③ [ON/OFF]

NOTE : ID code is used for both Remote programming and On-Site programming.

● Data Terminal Programming Keys

The programming keys for the telephone are the equivalent of the following control keys on the data terminal keyboard.

KEY TELEPHONE	DATA TERMINAL
HOLD	= CONTROL S (Next port)
MEMORY	= CONTROL D (Previous port)
#	= CONTROL X (Next address)
*	= CONTROL E (Previous address)
REDIAL	= CONTROL R (Resets data)
VOL▲	= CONTROL T (Moves to next port with data)
VOL▼	= CONTROL V (Moves to previous port with data)
FF6	= CONTROL U (Carries new data to the next port)
ON/OFF	= CONTROL Z (Exit)
CONF	= CONTROL P (Completes the data copying operation done by the CONTROL T or CONTROL V.)

● How To Program With A Data Terminal

At the REMT> prompt press “H” for help.
The screen will prompt you to select from the Maintenance Mode menu:

P = Program Set
S = Speed Dial Set
N = Ext./SPD Name and Absence Message Set
Control Z = Exit

If you enter “P” (P plus return) the screen will display the following:

REMT> P
VB-9 Programming
Prog>

At the Prog> prompt press “H”. The screen will display the menu and Prog> prompt again. At the Prog> prompt press the S key or the Tilde key (~) followed by number of the setting, for example, “~01” for System programming, and press return.

At the 01 Sys> prompt, press return again. The first address in the system (Exchange lines) will appear on the screen:

S0001 2

The screen will advance to the next address every time you press return, or you can change the data in address “0001” to 4, for example, by entering (press return) 4.

The screen will advance to the next address. To check that the data is entered correctly, press “Control E” to bring you back to the previous address, which in our example is “0001”.

Pressing “H” for help at any stage will access control key menus and other information to help you move from port to port or address to address, access a menu, return to a previous operation, or exit.

● **Batch Output of Programming Data**

When a printer is connected via the optional RS-232C interface, the program settings can be batch output by operating the administrator's phone.

① [ON/OFF] (From administrator's phone)

⬇

② [#][9][7]

⬇

③ Enter 4-digit ID code (0000-9999).

⬇

④ Enter output code (0-4).

⬇

⑤ [#]

◆Output Code

Output Code	Description
0	All set data including program settings
1	All program setting data
2	SSD dial data
3	PSD dial data
4	Extension name, SSD/PSD name and ABM data

NOTE : You can program TTY parameters.

● **To Enter The Program Mode from Non-Administrator's Phone**

Programming can be performed from telephones other than the administrator's phone by pressing the following button to change the telephone to the temporary programming telephone.

① [ON/OFF]

⬇

② [#][9][8]

⬇

③ Program ID 4-digit code (initial value is 9999).

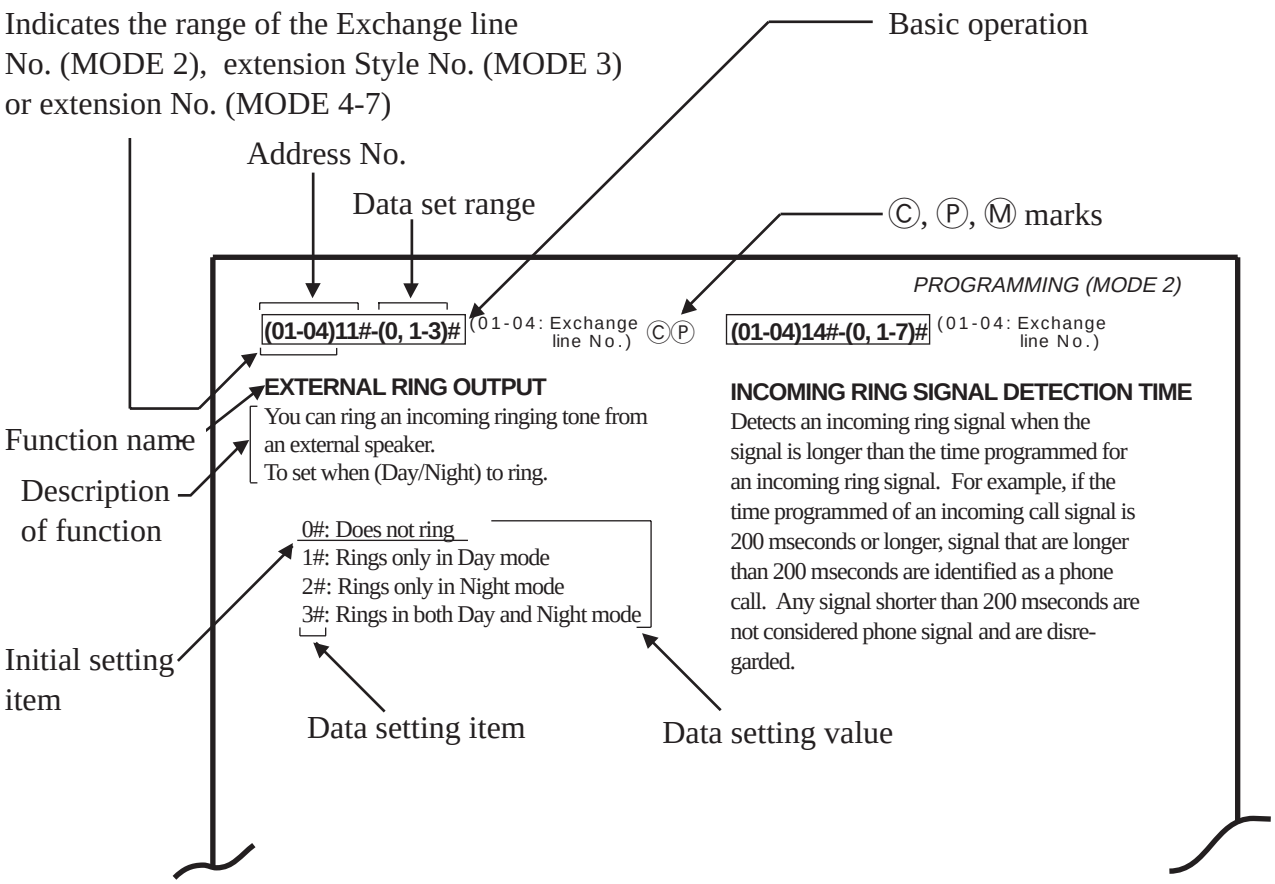
⬇

④ [ON/OFF] (Finish of assigning temporary administrator's phone).

⬇

⑤ Enter the program mode (See page P-3).

■ PROGRAMMING OUTLINE



IMPORTANT

Ⓒ: The data copy is available for items with this mark.
Ⓟ: Power setting is required for items with this mark.
Ⓜ: Two or more setting can be assigned with this mark.

POWER SETTING using ON/OFF Switch:

There are four exceptions to programming from the administrator's telephone. The following addresses can be only be programmed using the POWER SETTING:

MODE 1 - addresses: 0001# (EXCHANGE LINE)
0313# (SLT ON HOOK DETECTION TIMER)
0412# (SYSTEM SPEED DIAL)
0419# (OFF-HOOK MONITOR)

To change the data in the addresses above, perform the following steps:

① Power ON
↓
② Enter data
↓
③ Power OFF
↓
④ Power ON

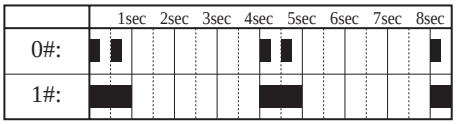
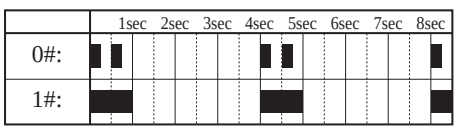
After POWER SETTING, the data has been changed.

4. INITIAL SET TABLE

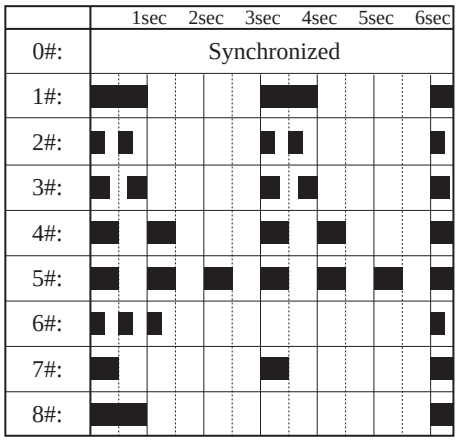
NOTES : Ⓟ: Power setting is required for this item.
Ⓒ: Data of this item can be copied.
Ⓜ: Two or more setting can be assigned with this mark.

	Address	Function	Initial setting	Other settings	Page
MODE 1 (System Setting)	0001#-	EXCHANGE LINES Ⓟ	2#: 2 lines (208 initial)	1#: 1 line 4#: 4 line 3#: 3 lines	P-26
	0101#-	DATE	010190		P-26
	0102#-	TIME DISPLAY	0#: 12-Hour System	1#: 24-Hour System	P-26
	0103#-	TIME	1200001#		P-26
	020n#- (n=0-9: Dial No.)	PBX ACCESS DIGIT TO EXCHANGE LINE DIAL n	0#: No digits dialed (Dial 0-8) 1#: 1 digit (Dial 9)	2#: 2 digits 3#: 3 digits	P-26, P-27
	021n#- (n=0-9: Dial No.)	AUTOMATIC PAUSE - DIAL n Ⓜ	None (No Pause) (Dial 0-8) 1#: Pause after the 1st digit (Dial 9)	2#: Pause after the 2nd digit 3#: Pause after the 3rd digit	P-27
	0301#-	AUTOMATIC PAUSE TIMER	1#: 3 sec. pause	0#: 2 sec. pause 2#: 4 sec. pause 3#: 5 sec. pause 4#: 6 sec. pause 5#: 7 sec. pause 6#: 8 sec. pause 7#: 9 sec. pause	P-27
	0302#-	CALL LOGGING TIMER - STARTING TIME DISPLAY FOR EXCHANGE LINE CALLS	0#: 15 sec.	1#: 30 sec.	P-27
	0303#-	TIMED BREAK TIME	0#: 80 m sec.	1#: 110 m sec. 2#: 275 m sec.	P-28
	0304#-	MANUAL FLASH TIME	4#: 3 sec.	0#: 0.5 sec. 2#: 1.5 sec. 1#: 1 sec. 3#: 2 sec.	P-28
	0308#-	CALL FORWARD NO ANSWER DELAYED TRANSFER TIME	2#: 16 sec.	0#: 4 sec. 3#: 24 sec. 1#: 8 sec. 4#: 32 sec.	P-28
	0309#-	EXTENSION HOLD RECALL TIMER	3#: Recall after 60 sec.	1#: Recall after 20 sec. 2#: Recall after 40 sec. 4#: Recall after 90 sec. 5#: Recall after 120 sec. 6#: Recall after 150 sec. 7#: Recall after 180 sec.	P-28
	0310#-	OPERATOR HOLD RECALL TIMER	1#: Recall after 20 sec.	2#: Recall after 40 sec. 3#: Recall after 60 sec. 4#: Recall after 90 sec. 5#: Recall after 120 sec. 6#: Recall after 150 sec. 7#: Recall after 180 sec.	P-28
	0311#-	EXTENSION TRANSFER RECALL TIMER	3#: Recall after 60 sec.	1#: Recall after 20 sec. 2#: Recall after 40 sec. 4#: Recall after 90 sec. 5#: Recall after 120 sec. 6#: Recall after 150 sec. 7#: Recall after 180 sec.	P-28
	0312#-	OPERATOR TRANSFER RECALL TIMER	1#: Recall after 20 sec.	2#: Recall after 40 sec. 3#: Recall after 60 sec. 4#: Recall after 90 sec. 5#: Recall after 120 sec. 6#: Recall after 150 sec. 7#: Recall after 180 sec.	P-28

	Address	Function	Initial setting	Other settings	Page
MODE 1 (System Setting)	0313#-	SLT ON HOOK DETECTION TIMER Ⓟ	10#: 82 - 165 m sec.	0#: None 1#: 200 - 500 m sec. 2#: 200 - 750 m sec. 3#: 200 - 1000 m sec. 4#: 200 - 1200 m sec. 5#: 200 - 1500 m sec. 6#: 200 - 2000 m sec. 7#: 27 - 165 m sec. 8#: 55 - 165 m sec. 9#: 73 - 165 m sec.	P-29
	0314#-	MUTE TIME OF TRANSMITTED CALL	4#: 4 sec.	1#: 1sec. 6#: 6 sec. 2#: 2 sec. 7#: 7 sec. 3#: 3 sec. 8#: 8 sec. 5#: 5 sec.	P-29
	0401#-	FLASH - REDIAL (AUTOMATIC)	1#: Automatic FLASH	0#: No automatic FLASH	P-29
	0402#-	EXCHANGE FLASH TIMER (AUTOMATIC)	1#: 1 sec.	0#: 0.5 sec. 3#: 2 sec. 2#: 1.5 sec. 4#: 3 sec.	P-29
	0403#-	ON-HOOK TRANSFER (AUTMATIC)	1#: On-Hook transfer enable	0#: On-Hook transfer disable	P-29
	0404#-	ONE-TOUCH KEY	1#: One-touch call	0#: One-touch call not available	P-29
	0405#-	BACKGROUND MUSIC (BGM)	0#: BGM disable	1#: BGM enable	P-30
	0406#-	INFORMATION TONE FOR VOICE CALLING, PAGING CALL	0#: Tone for voice call and paging call	1#: Tone for voice call 2#: Tone for paging call 3#: No information tone	P-30
	0407#- 0408#-	**Not Available**			P-30
	0409#-	LONG SPEECH ALARM	0#: No alarm	1#: Alarm	P-30
	0410#-	INTERNAL TONE/VOICE CALL (EXTENSION)	1#: Extension call using internal ringing tone	0#: Extension by voice	P-30
	0411#-	OPERATOR CALL DIAL	0#: “ 0 ” call (Exchange line access 9)	1#: “ 9 ”call (Exchange line access 0)	P-30
	0412#-	SYSTEM SPEED DIAL Ⓟ	0#: 90 (2 digits 00-89)	1#: 200 (3 digits 000-199)	P-30
	0413#-	MUSIC ON HOLD	0#: Internal sound	1#: External music source	P-30
	0414#-	LARGE LED BLINKING	1#: Blinks with an Exchange line incoming call	0#: Does not blink	P-31
	0416#-	SENSOR DETECTING TYPE	0#: Detects a make signal	1#: Detects a break signal	P-31
	0417#-	SENSOR ALARM RING STOP	0#: An alarm signal is controlled by a sensor detection signal	1#: Picking up the receiver stops alarm ring	P-31
	0418#-	**Not Available**			P-31
	0419#-	OFF-HOOK MONITOR Ⓟ	1#: Activate Speaker	0#: Inactivate Speaker	P-31
	0420#-	LRB SETTING	0#: Disable	1#: Exchange line Incoming call 2#: Incoming to monitored extension	P-31
	0421#-	LRB MONITOR EXCHANGE LINE NO. SETTING Ⓜ	None	(1-8)#: Exchange line No.	P-31
	0422#-	LRB MONITOR EXTENSION NO. SETTING	Clear: Press FF5 key	(10-25)#: Extension No.	P-31
	0423#-	LRB RING MODE AT THE SPECIFIED EXTENSION Ⓜ	None	1#: Exchange line incoming call. 2#: Internal incoming call 3#: Doorphone incoming call	P-31

	Address	Function	Initial setting	Other settings	Page
MODE 1 (System Setting)	0501#-	MULTI-PURPOSE RELAY 2 FUNCTION	0#: Control of doorphone B	1#: Control of external ringer	P-32
	0502#-	MULTI-PURPOSE RELAY 1 OPERATION	0#: Relay operated as programmed time	1#: Relay operated continually	P-32
	0503#-	MULTI-PURPOSE RELAY 2 OPERATION			
	0504#-	MULTI-PURPOSE RELAY 1 OPERATION TIMER	3#: 3 sec.	0#: 0.125 sec. 1#: 1 sec. 5#: 5 sec. 2#: 2 sec. 6#: 6 sec. 4#: 4 sec. 7#: 7 sec.	P-32
	0505#-	MULTI-PURPOSE RELAY 2 OPERATION TIMER			
	0601#-	TRUNK TO TRUNK	1#: Enable	0#: Disable	P-32
	0602#-	TRUNK TO TRUNK END TYPE	2#: End by call detection or timer	~~0#: End by call detection~~ (Do not use) 1#: Timer	P-32
	0603#-	TRUNK TO TRUNK TIMER	3#: MAX. 3 minutes	0#: End by call detection 1#: MAX. 1 minute 2#: MAX. 2 minutes 4#: MAX. 5 minutes 5#: MAX. 10 minutes 6#: MAX. 20 minutes 7#: MAX. 30 minutes 8#: MAX. 40 minutes	P-33
	0604#-	TRUNK TO TRUNK INTERRUPT EXTENSION	1#: Function Assigned extension	0#: No interrupt extension 2#: Administrator's telephone or Function Assigned extension	P-33
	0605#-	BUSY TONE COUNT FOR TRUNK TO TRUNK END	4#: 4 sets	0#: None 1#: 1 set 6#: 6 sets 2#: 2 sets 7#: 7 sets 3#: 3 sets 8#: 8 sets 5#: 5 sets 9#: 9 sets	P-33
	0701#-	INTERNAL DTMF SENDING TIME	0#: 80/80 m sec. (Transmission time/ Minimum pause time)	1#: 125/125 m sec. 2#: 250/250 m sec.	P-33
	0702#-	EXTEND INTERNAL DTMF SENDING TIME (MODIFICATION)	0#: DTMF signal does not change	1#: Lengthen signal	P-33
	0703#-	EXTEND INTERNAL DTMF SENDING TIMER	0#: 320/320 m sec.	1#: 480/480 m sec. 2#: 695/695 m sec.	P-33
	0801#-	CALL BROAKERING (SHUTTLING)-SINGLE LINE TELEPHONE	1#: Retrieve held Exchange line	0#: Return to internal dial tone	P-33
	0802#-	SLT HOLD BY Recall	0#: Hold by Recall	1#: Hold by recall and numbering plan	P-34
	0803#-	SLT EXCHANGE LINE HOLD	0#: System Hold	1#: Exclusive Hold	P-34
	0804#-	SLT INTERNAL RING PATTERN	(Initial) 		P-34
	0805#-	SLT EXCHANGE LINE RING PATTERN	(Initial) 		P-34
	0806#-	SLT RINGER FREQUENCY	0#: 20Hz	1#: 25Hz	P-34
	0901#-	DSS1 PAIR PORT NUMBER	0#: Does not use DSS1	(01-16)#: Key Telephone Port Number	P-34

	Address	Function	Initial setting	Other settings	Page
MODE 1 (System Setting)	0902#-	DSS2 PAIR PORT NUMBER	0#: Does not use DSS2	(01-16)#: Key Telephone Port Number	P-34
	1001#-	ADMINISTRATOR'S TELEPHONE ID	9999#	0#: Does not set ID (0000-9998)#: ID code Clear: Press FF5 key	P-34
	1010#-	EXCHANGE LINE CONNECTION ID CODE 1-DISA BREAKOUT	Clear: Press FF5 key	(0000-9999)#: ID code	P-35
	1011#-	EXCHANGE LINE CONNECTION ID CODE 2 -DISA BREAKOUT			
	20n0#- (n=1-8: Secretary No.)	SECRETARY n EXTENSION NO.	Clear: Press FF5 key	(10-25)#: Extension No.	P-35
	20n1#- (n=1-8: Secretary No.)	MANAGER 1 EXTENSION NO. OF SECRETARY n	Clear: Press FF5 key	(10-25)#: Extension No.	P-35
	20n2#- (n=1-8: Secretary No.)	MANAGER 2 EXTENSION NO. OF SECRETARY n	Clear: Press FF5 key	(10-25)#: Extension No.	P-35
	20n3#- (n=1-8: Secretary No.)	MANAGER 3 EXTENSION NO. OF SECRETARY n	Clear: Press FF5 key	(10-25)#: Extension No.	P-35
	5010#-	AUTOMATIC SWITCH (Monday Day Mode Start)	Clear: Press FF5 key	HH : Hour (01-12) MM: Minute (00-59) N : a.m./p.m.(1: a.m., 2: p.m.)	P-36
	5011#-	AUTOMATIC SWITCH (Monday Night Mode Start)			
	5020#-	AUTOMATIC SWITCH (Tuesday Day Mode Start)			
	5021#-	AUTOMATIC SWITCH (Tuesday Night Mode Start)			
	5030#-	AUTOMATIC SWITCH (Wednesday Day Mode Start)			
	5031#-	AUTOMATIC SWITCH (Wednesday Night Mode Start)			
	5040#-	AUTOMATIC SWITCH (Thursday Day Mode Start)			
	5041#-	AUTOMATIC SWITCH(Thursday Night Mode Start)			
	5050#-	AUTOMATIC SWITCH (Friday Day Mode Start)			
	5051#-	AUTOMATIC SWITCH (Friday Night Mode Start)			
	5060#-	AUTOMATIC SWITCH (Saturday Day Mode Start)			
	5061#-	AUTOMATIC SWITCH (Saturday Night Mode Start)			
	5070#-	AUTOMATIC SWITCH (Sunday Day Mode Start)			
	5071#-	AUTOMATIC SWITCH (Sunday Night Mode Start)			
	9009#-	BUSY TONE DETECTION TIME	7#: 4 sec.	0#: 0.5 sec. 9#: 5 sec. 1#: 1 sec. 10#: 5.5 sec. 2#: 1.5 sec. 11#: 6 sec. 3#: 2 sec. 12#: 6.5 sec. 4#: 2.5 sec. 13#: 7 sec. 5#: 3 sec. 14#: 7.5 sec. 6#: 3.5 sec. 15#: 8 sec. 8#: 4.5 sec.	P-36

	Address	Function	Initial setting	Other settings	Page
MODE 1 (System Setting)	9010#-	BUSY TONE DETECTION LOWER LIMIT COUNT	4#: 4 times	0#: 0 time 9#: 9 times 1#: 1 time 10#: 10 times 2#: 2 times 11#: 11 times 3#: 3 times 12#: 12 times 5#: 5 times 13#: 13 times 6#: 6 times 14#: 14 times 7#: 7 times 15#: 15 times 8#: 8 times	P-36
	9011#-	BUSY TONE DETECTION UPPER LIMIT COUNT	7#: 7 times	0#: 0 time 9#: 9 times 1#: 1 time 10#: 10 times 2#: 2 times 11#: 11 times 3#: 3 times 12#: 12 times 4#: 4 times 13#: 13 times 5#: 5 times 14#: 14 times 6#: 6 times 15#: 15 times 8#: 8 times	P-36
	9012#-	BUSY TONE DETECTION MINI MUM TIME	0#: 73 m sec.	1#: 146 m sec. 2#: 220 m sec. 3#: 293 m sec. 4#: 366 m sec. 5#: 439 m sec.	P-36
MODE 2 (Exchange Line Setting)	(01-04)01#-	DIAL SIGNAL/EXCHANGE LINE Ⓒ	1#: DTMF signal tone	0#: 10 pps pulse dial	P-37
	(01-04)02#-	DTMF SIGNAL SENDING TIME Ⓒ	0#: 80 m sec. ON/ 80 m sec. OFF (Signal length/ Pause length)	1#: 125 m sec. ON/ 125 m sec. OFF 2#: 250 m sec. ON/ 250 m sec. OFF	P-37
	(01-04)03#-	CONNECTED PHONE LINE Ⓒ	0#: Exchange line	1#: PBX line	P-37
	(01-04)04#-	(AUTO) PAUSE PBX LINE Ⓒ	0#: No automatic pause	1#: Automatic pause	P-37
	(01-04)05#-	POOLED TRUNK ACCESS GROUP (9/0, 811, 812, and 813) ⒸⓂ	0#: Pooled trunk access group 9/0	1#: Pooled trunk access group 811 2#: Pooled trunk access group 812 3#: Pooled trunk access group 813	P-37
	(01-04)06#-	INCOMING RING TONE PATTERN Ⓒ	(Initial) 		P-37
	(01-04)07#-	DTMF SIGNAL CONVERSION (AUTOMATIC) Ⓒ	0#: Automatic conversion disable	1#: Automatic conversion enable	P-38
	(01-04)08#-	DTMF SIGNAL CONVERSION (MANUAL) Ⓒ	1#: Conversion enable	0#: Conversion disable	P-38
	(01-04)09#-	DTMF SIGNAL TIME CHANGE (AFTER THE OTHER PARTY'S ANSWER) Ⓒ	0#: No change	1#: Changes length of the DTMF signal sending time	P-38
	(01-04)10#-	DTMF SIGNAL TIME TABLE (AFTER THE CONVERSION) Ⓒ	0#: 320/320 m sec. (Signal length/ Pause length)	1#: 480/480 m sec. 2#: 695/695 m sec.	P-38

	Address	Function	Initial setting	Other settings	Page
MODE 2 (Exchange Line Setting)	(01-04)11#-	EXTERNAL RINGER CONTROL Ⓒ	0#: Does not ring	1#: Control only in Day mode 2#: Control only in Night mode 3#: Control in both Day and Night mode	P-38
	(01-04)12#-	INCOMING CALL FORWARDING TO OUTSIDE Ⓒ	1#: Enable call forwarding to the exchange line	0#: Cannot accept call forwarding	P-38
	(01-04)13#-	DELAYED RING TRANSFERRING TIME Ⓒ	1#: After 15 sec.	0#: Disable 2#: After 30 sec. 3#: After 45 sec. 4#: After 60 sec.	P-38
	(01-04)14#-	INCOMING RING SIGNAL DETECTION TIME Ⓒ	3#: More than 200 m sec.	0#: More than 50 m sec. 1#: More than 100 m sec. 2#: More than 150 m sec. 4#: More than 250 m sec. 5#: More than 300 m sec. 6#: More than 350 m sec. 7#: More than 400 m sec.	P-39
	(01-04)15#-	INCOMING RING PATTERN DETECTION TIMER Ⓒ	1#: 4 sec.	0#: 3 sec. 5#: 10 sec. 2#: 5 sec. 6#: 12 sec. 3#: 6 sec. 7#: 14 sec. 4#: 8 sec.	P-39
	(01-04)16#-	FL/R KEY TYPE	0#: FLASH	1#: TIMED BREAK RECALL	P-39
	(01-04)17#-	DT DETECTION AT OUTGOING CALL	1#: Detects Dial Tone	0#: Does not detect Dial Tone	P-39
	(01-04)18#-	BUSY TONE DETECTION	1#: Detects Busy Tones	0#: Does not detect Busy Tone	P-39
	(01-04)19#-	END DETECTION OF OUTGOING CALL Ⓜ	None (No Detection)	1#: Detects by the polarity reverse signal 2#: Detects by Break signal	P-39
	(01-04)20#-	END DETECTION OF INCOMING CALL Ⓜ	None (No Detection)	1#: Detects by the polarity reverse signal 2#: Detects by Break signal	P-40
	(01-04)21#-	EXCHANGE LINE END DETECTION MODE Ⓒ	2#: Detection anytime	0#: No detection 1#: Detection only while on HOLD	P-40
	(01-04)22#-	BREAK SIGNAL DETECTING TIMER (to disconnect the Exchange line) Ⓒ	0#: More than 50 m sec.	1#: More than 100 m sec. 2#: More than 200 m sec. 3#: More than 300 m sec. 4#: More than 400 m sec. 5#: More than 500 m sec. 6#: More than 600 m sec. 7#: More than 700 m sec.	P-40
	(01-04)23#-	ANSWER DETECTION OF OUTGOING CALL	3#: Detection by timer and polarity reverse signal	1#: Detection by timer 2#: Detection by polarity reverse signal	P-40
	(01-04)24#-	DT DETECTION TIME Ⓒ	0#: 0.5 sec.	1#: 1 sec. 8#: 4.5 sec. 2#: 1.5 sec. 9#: 5 sec. 3#: 2 sec. 10#: 5.5 sec. 4#: 2.5 sec. 11#: 6 sec. 5#: 3 sec. 12#: 6.5 sec. 6#: 3.5 sec. 13#: 7 sec. 7#: 4 sec. 14#: 7.5 sec.	P-40

	Address	Function	Initial setting	Other settings	Page
MODE 2 (Exchange Line Setting)	(01-04)25#-	DT DETECTION LOWER LIMIT COUNT Ⓒ	0#: 0 (Continuous tone)	1#: 1 9#: 9 2#: 2 10#: 10 3#: 3 11#: 11 4#: 4 12#: 12 5#: 5 13#: 13 6#: 6 14#: 14 7#: 7 15#: 15 8#: 8	P-40
	(01-04)26#-	DT DETECTION UPPER LIMIT COUNT Ⓒ	0#: 0 (Continuous tone)	1#: 1 9#: 9 2#: 2 10#: 10 3#: 3 11#: 11 4#: 4 12#: 12 5#: 5 13#: 13 6#: 6 14#: 14 7#: 7 15#: 15 8#: 8	P-41
	(01-04)27#-	SYSTEM OPERATION AT NON-DETECTION OF DT Ⓒ	1#: Detect signal as incoming	0#: Detect signal as outgoing	P-41
MODE 3 (Handy Extension Style Setting)	0(1-8)02#-	SLT DIALING TYPE Ⓒ	1#: DTMF signal	0#: Pulse	P-41
	0(1-8)04#-	ANSWER (AUTOMATIC) Ⓒ	1#: Handset only	0#: No automatic pick up 2#: Handset or ON/OFF key	P-41
	0(1-8)05#-	AUTOMATIC ANSWER WITHOUT RINGER Ⓒ	0#: Does not answer (Style 1- 3, 7, 8,) 1#: Answers (Style 4-6)		P-41
	0(1-8)06#-	PAGING GROUP Ⓒ	1#: Paging group 1	None (No paging group assigned) 2#: Paging group 2 3#: Paging group 3	P-42
	0(1-8)07#-	PRIME LINE PREFERENCE Ⓒ	0#: No preference	1#: Pick up handset 2#: Pick up handset or press ON/OFF key	P-42
	0(1-8)08#-	PRIME LINE ACCESS GROUP Ⓒ	0#: 9/0	1#: 811 2#: 812	P-42
	0(1-8)09#-	SENSOR ALARM RING Ⓒ	0#: No ring (Style 2-8) 1#: Ring (Style 1)		P-42
	0(1-8)10#-	DOORPHONE RING Ⓒ	0#: No doorphone ring (Style 2-8) 3#: Doorphone A and B ring (Style 1)	1#: Doorphone A ring only 3#: 813 2#: Doorphone B ring only	P-42
	0(1-8)11#-	CALL DURATION DISPLAY Ⓒ	1#: Conversation time displayed	0#: Conversation time not displayed	P-42
	0(1-8)12#-	**Not Available**			P-42
	0(1-8)13#-				
	0(1-8)14#-				
	0(1-8)15#-	OFF-HOOKSIGNAL (Call Wait) Ⓒ	2#: Accepts internal calls only (Style 2-8) 3#: Accepts Exchange line and internal calls (Style 1)	0#: Cannot accept call wait 1#: Accepts Exchange line call only	P-42
	0(1-8)16#-	DATA SECURITY Ⓒ	0#: Disable	1#: Enable	P-42

	Address	Function	Initial setting	Other settings	Page
MODE 3 (Handy Extension Style Setting)	1(1-8) 0x#- (x=1-4: Exchange line No.)	DAY RINGER SETTINGS FOR EXCHANGE LINES 1-4 Ⓒ	0#: Does not ring (Style 2, 3, 6-8) 1#: Rings (Style 1, 4, 5)		P-43
	1(1-8) 1x#- (x=1-4: Exchange line No.)	NIGHT RINGER SETS FOR EXCHANGE LINES 1-4 Ⓒ			
	1(1-8) 2x#- (x=1-4: Exchange line No.)	LUNCH RINGER SETTINGS FOR EXCHANGE LINES 1-4 Ⓒ			
	1(1-8) 3x#- (x=1-4: Exchange line No.)	DAY DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINES 1-4	0#: Does not ring (Style 2, 6-8) 1#: Rings (Style 1, 3-5)		P-43
	1(1-8) 4x#- (x=1-4: Exchange line No.)	NIGHT DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINES 1-4			
	1(1-8) 5x#- (x=1-4: Exchange line No.)	LUNCH DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINES 1-4			
	2(1-8)nn#- (nn=01-12: FF key No.)	FF-KEY(1-12) ASSIGNMENT SETTING	FF-key 1: 881 FF-key 9: 70 FF-key 2: 882 FF-key 10: 74 FF-key 3: 883 FF-key 11: 60 FF-key 4: 884 FF-key 5-8: None FF-key 12: #52 (Style 1) FF-key 12: 73 (Style 2-8)	(0-9999)#: Dial Number Clear: Press FF5 key	P-43, P-44, P-45
	3(1-8)01#-	SSD CALL BARRING OVERRIDE Ⓒ	0#: Call barring valid (Style 6-8) 1#: Call barring overriden (Style 1-5)		P-45
	3(1-8)1x#- (x=1-4: Exchange line No.)	DAY RESTRICTION TYPES EXCHANGE LINES 1-4 Ⓒ	0#: Type 0 (Style 7) 1#: Type 1 (Style 6, 8) 2#: Type 2 (Style 5) 3#: Type 3 (Style 3, 4) 4#: Type 4 (Style 1, 2)		P-45
	3(1-8)2x#- (x=1-4: Exchange line No.)	NIGHT RESTRICTION TYPES EXCHANGE LINES 1-4 Ⓒ			
MODE 4 (Extension Setting)	(10-25)01#-	TELEPHONE TYPE SETTING	0#: Key Telephone 1#: SLT (Ext. 16,17 only)	2#: DSS1 4#: DISA 3#: DSS2	P-45
	(10-25)02#-	SLT DIALLING TYPE Ⓒ	1#: DTMF signal	0#: Pulse	P-45
	(10-25)03#-	STYLE SETTING	0#: No setting	1#: Style 1 5#: Style 5 2#: Style 2 6#: Style 6 3#: Style 3 7#: Style 7 4#: Style 4 8#: Style 8	P-45
	(10-25)04#-	ANSWER (AUTOMATIC) Ⓒ	1#: Handset only	0#: No automatic pick up 2#: Handset and ON/OFF key	P-46
	(10-25)05#-	AUTOMATIC ANSWER WITHOUT RINGER Ⓒ	0#: Does not answer	1#: Answers	P-46
	(10-25)06#-	PAGING GROUP ⒸⓂ	1#: Paging group 1	None (Paging group assigned) 2#: Paging group 2 3#: Paging group 3	P-46
	(10-25)07#-	PRIME LINE PREFERENCE Ⓒ	0#: No preference	1#: Pick up handset 2#: Pick up handset or press ON OFF key	P-46
	(10-25)08#-	PRIME LINE ACCESS GROUP Ⓒ	0#: 9/0	1#: 811 3#: 813 2#: 812	P-46
	(10-25)09#-	SENSOR ALARM RING Ⓒ	0#: No ring (Ext. 11-25) 1#: Ring (Ext. 10)		P-46

	Address	Function	Initial setting	Other settings	Page
MODE 4 (Extension Setting)	(10-25)10#-	DOORPHONE RING Ⓒ	0#: No doorphone ring (Ext. 11-25) 3#: Doorphone A and B ring (Ext. 10)	1#: Doorphone A ring only 2#: Doorphone B ring only	P-46
	(10-25)11#-	CALL DURATION DISPLAY Ⓒ	1#: Conversation time displayed	0#: Conversation time not displayed	P-46
	(10-25)12#-	**Not Available**			P-47
	(10-25)13#-				
	(10-25)14#-				
	(10-25)15#-	OFF-HOOK SIGNAL Ⓒ	2#: Accepts internal calls (Ext. 11-25) 3#: Accepts Exchange line and internal calls (Ext. 10)	0#: Cannot accept call waiting 1#: Accepts Exchange line call	P-47
	(10-25)16#-	DATA SECURITY Ⓒ	0#: Disable	1#: Enable	P-47
	(10-25)17#-	HEADSET MODE	0#: Headset mode not available	1#: Headset mode available	P-47
	(10-25)18#-	DIAL TONE STOP/INTERNAL	0#: Disable	1#: Enable	P-47
	(10-25)19#-	OPERATOR TELEPHONE	0#: No Operator function (Ext. 11-25) 1#: Operator function (Ext. 10)		P-47
	(10-25)20#-	ADMINISTRATOR'S TELEPHONE	0#: Regular telephone (Ext. 11-25) 1#: Administrator's telephone (Ext. 10)		P-47
MODE 5 (Ring Setting)	(10-25) 0x#- (x=1-4: Exchange line No.)	DAY RINGER SETTINGS FOR EXCHANGE LINES 1-4	0#: Does not ring (Ext. 11-25) 1#: Rings (Ext. 10)		P-48
	(10-25) 1x#- (x=1-4: Exchange line No.)	NIGHT RINGER SETTINGS FOR EXCHANGE LINES 1-4			
	(10-25) 2x#- (x=1-4: Exchange line No.)	LUNCH RINGER SETTINGS FOR EXCHANGE LINES 1-4			
	(10-25) 3x#- (x=1-4: Exchange line No.)	DAY DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINES 1-4	0#:Does not ring	1#: Rings	P-48
	(10-25) 4x#- (x=1-4: Exchange line No.)	NIGHT DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINES 1-4			
	(10-25) 5x#- (x=1-4: Exchange line No.)	LUNCH DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINES 1-4			
MODE 6 (Flexible Function Key Setting)	(10-25)nn#- (nn=01-12: FF key No.)	FF-KEY (1-12) ASSIGNMENT SETTING	FF-key 1: 881 FF-key 2: 882 FF-key 3: 883 FF-key 4: 884 FF-key 5-12: None	(0-9999)#: Dial Number Clear: Press FF5 key	P-49, P-50

	Address	Function	Initial setting	Other settings	Page
MODE 7 (Call Barring Setting)	0001#-	PBX INTERNAL CALL RESTRICT (VALID FOR RESTRICTION TYPE 0)	1#: PBX intercom calls are available	0#: PBX intercom calls restricted	P-51
	0002#-	MAXIMUM NUMBER OF DIGITS DIALED (VALID FOR RESTRICTION TYPE 0, 1, 2 AND 3)	0#: Dial any number of digits	7#-32#: Maxmum number of digits available for an outgoing call	P-51
	0003#-	DIALING RESTRICTION DURING INCOMING CALLS (VALID FOR RESTRICTION TYPE 0, 1, 2 AND 3)	1#: According to programmed TRS restrictions	0#: Dialing during incoming calls not restricted 2#: Dialing during conversation restricted	P-51
	0004#-	# AND ＊ KEYS DIAL RESTRICT (VALID FOR RESTRICTION TYPE 1, 2 AND 3)	0#: Not restricted	1#: # and ＊ dial restricted	P51
	0005#-	STATION LOCKOUT ID CODE DISPLAY	1#: ID code displayed	0#: ID code not displayed	P-51
	0006#-	STATION LOCKOUT TYPE	0#: Type 0 (Cannot access exchange line except emergency call)	1#: Type 1 (Can not access long distance call)	P-51
	0007#-	SSD RESTRICTIONS OVERRIDE NUMBER	00	(00-99)#: SSD code	P-51
	0008#-	PAGER SSD RESTRICTIONS OVERRIDE NUMBER	None	(00-99 or 000-199)#: Pager SSD code	P-51
	0009#-	NUMBER OF DIGITS FOR PAGER CALL	0	0-99#: Number of digits	P-52
	0010#-	ENHANCED TRS Ⓜ	1#: Type 0 (Intercom calls only) 2#: Type 1 (Incoming calls only)	3#: Type 2 (Local calls only) 4#: Type 3 (Long distance calls, restricted by area)	P-52
	01(01-16)#-	6-DIGIT TRS TYPE 1 DATA1-16 (VALID FOR RESTRICTION TYPE 1 AND 2)	None	0-999999: Dial Number Clear: Press FF5 key	P-52
	02(01-16)#-	6-DIGIT TRS TYPE 2 DATA1-16 (VALID FOR RESTRICTION TYPE 1, 2 AND 3)	00 (DATA 1) 100 (DATA 2) 155 (DATA 3) 010 (DATA 4) None (DATA 5-16)	0-999999: Dial Number Clear: Press FF5 key	P-52
	03(01-16)#-	CANCELLING 6-DIGIT RESTRICTION TYPE 1 DATA 1-16 (VALID FOR RESTRICTION TYPE 2)	None	0-999999: Dial Number Clear: Press FF5 key	P-52
	04(01-16)#-	CANCELLING 6-DIGIT RESTRICTION TYPE 2 DATA 1-16 (VALID FOR RESTRICTION TYPE 3)	None	0-999999: Dial Number Clear: Press FF5 key	P-52
	09(01-16)#-	EMERGENCY CALL RESTRICTION OVERRIDE DATA1-16 (VALID FOR RESTRICTION TYPE 0, 1, 2 AND 3)	999 (DATA 1) 112 (DATA 2) None (DATA 3-16)	0-999999: Dial Number Clear: Press FF5 key	P-53
	(10-25)01#-	SSD CALL BARRING OVERRIDE Ⓒ	0#: Call Barring valid	1#: Call Barring overriden	P-53
	(10-25)1x#- (x=1-4: Exchange line No.)	DAY RESTRICTION TYPES EXCHANGE LINES 1-4 Ⓒ	4#: Type 4 (No restrictions)	0#: Type 0 (Intercom calls only) 1#: Type 1 (Incoming calls only) 2#: Type 2 (Local calls only) 3#: Type 3 (Long distance calls, restricted by area)	P-53
	(10-25)2x#- (x=1-4: Exchange line No.)	NIGHT RESTRICTION TYPES EXCHANGE LINES 1-4 Ⓒ			

	Address	Function	Initial setting	Other settings	Page
MODE 7 (Call Barring Setting)	70nn#- (nn=00-99: 2-digit No.)	2-DIGIT RESTRICTION (VALID FOR RESTRICTION TYPES 1, 2)	0#: Not restricted (10-99) 1#: Restricted (00-09)		P-53
	8nn1#- (nn=01-16: ID code group No.)	VERIFIED ID CODE	None	(0-9999998)#: Verified ID code number 9999999#: Clear	P-53
	8nn2#- (nn=01-16: ID code group No.)	CANCELLING SSD RESTRICTION BY VERIFIED ID CODE	0#: According to programmed call barring class	1#: Override	P-53
	8nn3#- (nn=01-16: ID code group No.)	SERVICE TYPE SETTING OF VERIFIED ID CODE	4#: Type 4 (No restrictions)	0#: Type 0 (Intercom calls only) 1#: Type 1 (Incoming calls only) 2#: Type 2 (Local calls only) 3#: Type 3 (Long distance calls, restricted by area)	P-54
MODE 8 (Communication Parameter Setting)	0001#-	OUTPUT MODE	0#: Outgoing data only	1#: Outgoing and incoming data	P-56
	0002#-	TITLE PRINTING	1#: Titles every 60 data	0#: No output	P-56
	0003#-	OUTPUT DIAL	0#: All dial calls	1#: Specified dial calls only	P-56
	0004#-	PBX INTERCOM CALL	0#: Does not output data	1#: Outputs data	P-56
	0005#-	PRINTER OUTPUT WHEN EXCHANGE LINE CALL ON HOLD ANSWERED	1#: Outputs data	0#: Does not output data	P-56
	0006#-	PRINTER OUTPUT WHEN ACCOUNT CODE ENTERED	0#: Outputs later (After end of a call)	1#: Output immediately	P-56
	01nn#- (nn=01-16: Out dial No.)	PRINTER OUTPUT OF SPECIFIED INITIATING DIAL NUMBER	None	(0-9999)#: Dial number Clear: Press FF5 key	P-56
	0201#-	SPECIAL CHARACTER "Ä" CONVERSION CODE (F4)	158#: Character "Ä" code for IBM computer	(33-254)#: Setting character code	P-57
	0202#-	SPECIAL CHARACTER "Ö" CONVERSION CODE (F5)	153#: Character "Ö" code for IBM computer	(33-254)#: Setting character code	P-57
	0203#-	SPECIAL CHARACTER "Ü" CONVERSION CODE (F6)	154#: Character "Ü" code for IBM computer	(33-254)#: Setting character code	P-57
	0204#-	SPECIAL CHARACTER "Ç" CONVERSION CODE (F7)	128#: Character "Ç" code for IBM computer	(33-254)#: Setting character code	P-57
	0205#-	SPECIAL CHARACTER "Ñ" CONVERSION CODE (F8)	165#: Character "Ñ" code for IBM computer	(33-254)#: Setting character code	P-57
	0206#-	SPECIAL CHARACTER "¿" CONVERSION CODE (F9)	168#: Character "¿" code for IBM computer	(33-254)#: Setting character code	P-57
	0207#-	SPECIAL CHARACTER "¡" CONVERSION CODE (FA)	173#: Character "¡" code for IBM computer	(33-254)#: Setting character code	P-57
	0208#-	SPECIAL CHARACTER "Æ" CONVERSION CODE (FB)	146#: Character "Æ" code for IBM computer	(33-254)#: Setting character code	P-57
	0209#-	SPECIAL CHARACTER "Œ" CONVERSION CODE (FC)	64#: Character "Œ" code for IBM computer	(33-254)#: Setting character code	P-57
	0210#-	SPECIAL CHARACTER "Å" CONVERSION CODE (FD)	143#: Character "Å" code for IBM computer	(33-254)#: Setting character code	P-58
	1001#-	BAUD RATE for CALL LOGGING or PROGRAMMING DATA TERMINAL	0#: 4800 bps	1#: 1200 bps	P-58
	1002#-	STOP BIT LENGTH for CALL LOGGING or PROGRAMMING DATA TERMINAL	0#: 1 bit	1#: 2 bits	P-58

	Address	Function	Initial setting	Other settings	Page
MODE 8 (Communication Parameter Setting)	1003#-	DATA LENGTH for CALL LOGGING or PROGRAMMING DATA TERMINAL	1#: 8 bits	0#: 7 bits	P-58
	1004#-	PARITY CHECK for CALL LOGGING or PROGRAMMING DATA TERMINAL	0#: No parity check	1#: Odd number parity 2#: Even number parity	P-58
	1102#-	STOP BIT for REMOTE PROGRAMMING	0#: 1 bit	1#: 2 bits	P-58
	1103#-	DATA LENGTH for REMOTE PROGRAMMING	1#: 8 bits	0#: 7 bits	P-58
	1104#-	PARITY for REMOTE PROGRAMMING	0#: No parity check	1#: Odd number parity 2#: Even number parity	P-58
MODE 10 (Communication Parameter Setting)	0xxxx#-	LOOK UP TABLE Ⓜ	See P. 59	0#: BT 1#: NCC1 (Mercury) 2#: NCC2 3#: NCC3 4#: NCC4	P-59
	1001#-	LCR FUNCTION	0#: Disable	1#: Enable	P-59
	201m#- (m=1-8: Authorization code type)	AUTHORIZATION CODE (NCC1)	None	Max. 16 digits	P-59
	202m#- (m=1-8: Authorization code type)	AUTHORIZATION CODE (NCC2)	None	Max. 16 digits	P-59
	203m#- (m=1-8: Authorization code type)	AUTHORIZATION CODE (NCC3)	None	Max. 16 digits	P-59
	204m#- (m=1-8: Authorization code type)	AUTHORIZATION CODE (NCC4)	None	Max. 16 digits	P-59
	211m#- (m=1-8: Authorization code type)	SETTING THE OPTIONAL FEATURES (NCC1)	0#: Not used	1#:Call Serial No. 2#: Internal Itemized Bill (Extension No.)	P-59
	212m#- (m=1-8: Authorization code type)	SETTING THE OPTIONAL FEATURES (NCC2)	0#: Not used	1#: Call Serial No. 2#: Internal Itemized Bill (Extension No.)	P-60
	213m#- (m=1-8: Authorization code type)	SETTING THE OPTIONAL FEATURES (NCC3)	0#: Not used	1#: Call Serial No. 2#: Internal Itemized Bill (Extension No.)	P-60
	214m#- (m=1-8: Authorization code type)	SETTING THE OPTIONAL FEATURES (NCC4)	0#: Not used	1#: Call Serial No 2#: Internal Itemized Bill (Extension No.)	P-60
	221m#- (m=1-4: Exchange Line No.)	SELECTION OF AUTHORIZATION CODE FOR EACH EXCHANGE LINE TO USE LCR	None		P-60

	Address	Function	Initial setting	Other settings	Page
MODE 10 (Communication Parameter Setting)	222m#- (m=1-4: Exchange Line No.)	SELECTION OF AUTHORIZATION CODE FOR EACH EXCHANGE LINE TO USE LCR FEATURE (NCC2)	None		P-60
	223m#- (m=1-4: Exchange Line No.)	SELECTION OF AUTHORIZATION CODE FOR EACH EXCHANGE LINE TO USE LCR FEATURE (NCC3)	None		P-60
	224m#- (m=1-4: Exchange Line No.)	SELECTION OF AUTHORIZATION CODE FOR EACH EXCHANGE LINE TO USE LCR FEATURE (NCC4)	None		P-60
	3000#-	BT ACCESS CODE	BT access code:121		P-60
	3001#-	NCC1 ACCESS CODE	MCL access code:131		P-60
	3002#-	NCC2 ACCESS CODE	NCC2 access code:clear		P-61
	3003#-	NCC3 ACCESS CODE	NCC3 access code:clear		P-61
	3004#-	NCC4 ACCESS CODE	NCC4 accesscode:clear		P-61
	3010#-	ACCUMULATION DIAL DESIGNATION	Accumulation:0		P-61
	301x#- (x=1-8:Dial No.)	NCC1 RESTRICTION DIAL	999#: (Dial 1) 112#: (Dial 2) Restriction dial: Clear (Dial No.3-8)		P-61
	302x#- (x=1-8:Dial No.)	NCC2 RESTRICTION DIAL			
	303x#- (x=1-8:Dial No.)	NCC3 RESTRICTION DIAL	Restriction dial: Clear (Dial No.3-8)	999#: (Dial No.1) 112#: (Dial No.2)	P-61
	304x#- (x=1-8:Dial No.)	NCC4 RESTRICTION DIAL			
	4001#-	PAUSE TIMER (NCC1)	5#: 5sec.	1#:1sec. 6#:6sec. 2#:2sec. 7#:7sec. 3#:3sec. 8#:8sec. 4#:4sec. 9#:9sec.	P-61, P-62
	4002#-	PAUSE TIMER (NCC2)			
	4003#-	PAUSE TIMER (NCC3)			
	4004#-	PAUSE TIMER (NCC4)			
	401n#- (n=1-4: correspond to NCC1-4)	AUTOMATIC MF SINGNAL CONVERSION	1#: Convert	0#:No convert	P-62
	5000#-	PASSWORD TO ACCESS MODE 10			P-62

5. PROGRAMMING

MODE 1 (System Setting)

0001#-(1-4)# Ⓟ

EXCHANGE LINES

To set the number of lines that are available in a system:

1#: 1 line	3#: 3 lines
2#: 2 lines (208 inital)	4#: 4 lines

NOTE : • Turn the power off and on of the CCU after the programming to activate the new settings.

- **You may choose to select only some of the lines in a system for Exchange lines, leaving the remaining lines free for other use.**
- **The number in front of the # sign in the list of settings indicates the number of lines you have in your system. For example, "3#" shows that there are three Exchange lines in your system.**
- **When the program is started up, the number of station lines in the system (2 in the 208 system) are assigned to FF keys from the smallest number upwards. Assigned FF keys cannot be changed to other functions.**

0101#-(DDMMYY)#

(DD=Date; MM=Month; YY=year)

DATE

Shows the date on the LCD display and Station Message Detail Recorder printouts.
To set the data to 9 May 1997, enter the day (DD), month (MM), and year (YY) as follows:

090597#: MAY 9, 1997 (Example)
010190#: JAN 1, 1990 (Initial)

0102#-(0 or 1)#

TIME DISPLAY

The LCD display shows the time according to a 12-hour system (standard time) and a 24-hour system (military time).

0#: 12-Hour System
1#: 24-Hour System

NOTE : The LCD display on the Station Message Detail Recorder shows the time according to the 24-hour system only.

0103#-(HHMMSSN)#

(HH=Hour; MM=Minutes; SS=Seconds, N=1:a.m., 2:p.m.)

TIME

To set the time to 3:28 p.m. and display it, enter the hour and minutes followed by 1 for a.m. or 2 for p.m.:

0328002#: 3:28 p.m. (Example)

To return to the default value 12:00:00 a.m., enter as follows:

1200001#: 12:00 a.m. (Initial)

0200#-(0, 1-3)#

PBX ACCESS DIGIT TO EXCHANGE LINE DIAL 0

Sets the number of digits in the number for accessing the Exchange line from the PBX. Here, set the number of digits of the Exchange line access number beginning with 0.

<Example>
- When the Exchange line access No. is 0 (1 digit): Select 1#.
- When the Exchange line access No. is 06 (2 digits): Select 2#.

To set how many digits your access code will have in order to make an Exchange line call when there are Call Barring. For example, if you select "1#", your access code will be 1 digit long.

Entering an access code before dialing the telephone number informs the PBX that an Exchange line call, not an intercom call, is being made.

0#: No digits dialed	2#: 2 digits
1#: 1 digit	3#: 3 digits

020n#-(0, 1-3)#

(n=1-8: Dial Number)

PBX ACCESS DIGIT TO EXCHANGE LINE DIAL n (n=1 to 8)

See 0200# "PBX ACCESS DIGIT TO EXCHANGE LINE DIAL 0" for detailed information.

0#: No digits dialed	2#: 2 digits
1#: 1 digit	3#: 3 digits

0209#-(0, 1-3)#

PBX ACCESS DIGIT TO EXCHANGE LINE DIAL 9

See 0200# "PBX ACCESS DIGIT TO EXCHANGE LINE DIAL 0" for detailed information.

0#: No digits dialed
<u>1#: 1 digit</u>
2#: 2 digits
3#: 3 digits

0210#-(1-3)# Ⓜ

AUTOMATIC PAUSE - DIAL 0

Automatically inserts a pause after the Exchange line access number beginning with "0". Here, set at which point to insert the pause.

<Example>

- When the Exchange line access number is 0 (1 digit): Select 1#
  When an Exchange line connection is made, a pause is automatically inserted after the Exchange line access number "0" even if dialing is carried out following the Exchange line access number "0" and the telephone number.
- When the Exchange line access number is 06 (2 digits): Select 2#
  When an Exchange line connection is made, a pause is automatically inserted after the Exchange line access number "06" even if dialing is carried out following the Exchange line access number "06" and the telephone number.

Automatically inserts a pause during dialing. When accessing an Exchange line through PBX, it can take several seconds from the time the line is accessed to when it connects with an Exchange line.

The following settings determine where the automatic pause will occur after dialing 0.

<u>None (No pause)</u>
1#: Pause after the 1st digit
2#: Pause after the 2nd digit
3#: Pause after the 3rd digit

Numbers dialed before the connection is made result in a wrong number.
This setting also affects dialing SSD and PSD numbers. Pause time is set with the Automatic Pause Timer at MODE 1 system 0301#-(0, 1-7)#.

NOTE : • Two or more settings can be assigned.
• To delete the input data, press the same data number again.
• The pause time can be set. For details, see MODE1, address 0301#.
• This setting is invalid unless 1#: Automatic pause is selected by setting MODE 2, (01 - 04)04#.

REFERENCE : See MODE 1 0301#.
See MODE 2 (01-04)-04#.

021n#-(1-3)# (n=1-8: Dial Number) Ⓜ

AUTOMATIC PAUSE - DIAL n (n=1 to 8)

See 0210# "AUTOMATIC PAUSE-DIAL 0" for detailed information.

<u>None (No pause)</u>
1#: Pause after the 1st digit
2#: Pause after the 2nd digit
3#: Pause after the 3rd digit

0219#-(1-3)# Ⓜ

AUTOMATIC PAUSE - DIAL 9

See 0210# "AUTOMATIC PAUSE-DIAL 0" for detailed information.

None (No pause)
<u>1#: Pause after the 1st digit</u>
2#: Pause after the 2nd digit
3#: Pause after the 3rd digit

0301#-(0, 1-7)#

AUTOMATIC PAUSE TIMER

Set the pause timer at the automatic pause position. When REDIAL is stored in SSD and PSD, a pause is automatically inserted during dialing.
The pause timer can be set within a range of 2 to 9 seconds.

0#: 2-second pause
<u>1#: 3-second pause</u>
2#: 4-second pause
3#: 5-second pause
4#: 6-second pause
5#: 7-second pause
6#: 8-second pause
7#: 9-second pause

REFERENCE : See MODE 1 0210#-0219#.

0302#-(0 or 1)#

CALL LOGGING TIMER - STARTING TIME DISPLAY FOR EXCHANGE LINE CALLS

The start time of an outgoing exchange line call appears on the display 15 seconds after the dial signal is sent out. The 15-second default can reset to 30 seconds.
The start time for an incoming exchange call appears on the display immediately after the call is answered.

<u>0#: 15 seconds</u>
1#: 30 seconds

NOTE : If you assign 2 or 3 to MODE 2, (01-04)23#, then the start time for outgoing call appears immediately after the polarity reverse is detected.

0303#-(0, 1 or 2)#

TIMED BREAK TIME

You can send a recall signal by pressing FL/R key during Exchange line call.
However, time break must be set in "FL/R KEY TYPE" setting of "MODE 2 Trunk Setting", address (01-04)16#-(0 or 1)#.
To set the timed break time:

0#: 80 mseconds
1#: 110 mseconds
2#: 275 mseconds

0304#-(0, 1-4)#

MANUAL FLASH TIME

You can set the telephone so that it seizes the line and makes an Exchange line call after temporarily releasing the Exchange line by pressing FL/R key during Exchange line call.
Flash must be set in "FL/R KEY TYPE" setting of "MODE 2 TRUNK Setting", addresses (01-04)16#-(0 or 1)#.
To set the manual flash time:

0#: 0.5 second
1#: 1 second
2#: 1.5 seconds
3#: 2 seconds
4#: 3 seconds

0308#-(0, 1-4)#

CALL FORWARD NO ANSWER DELAYED TRANSFER TIME

When the telephone is set to the Call Forward No Answer function, you can set how long the telephone should ring before the call is transferred elsewhere.

0#: 4 seconds
1#: 8 seconds
2#: 16 seconds
3#: 24 seconds
4#: 32 seconds

0309#-(1-7)#

EXTENSION HOLD RECALL TIMER

A recall warning tone sounds to indicate that an Exchange line call has not been answered within a specified time after being put on HOLD.

1#: Recall after 20 seconds
2#: Recall after 40 seconds
3#: Recall after 60 seconds
4#: Recall after 90 seconds
5#: Recall after 120 seconds
6#: Recall after 150 seconds
7#: Recall after 180 seconds

0310#-(1-7)#

OPERATOR HOLD RECALL TIMER

This is a timer of Hold Recall of an operator. The timer is activated only when an operator phone holds the call. This setting means how long a call is to be placed on hold before hold Recall is activated to an operator.

1#: Recall after 20 seconds
2#: Recall after 40 seconds
3#: Recall after 60 seconds
4#: Recall after 90 seconds
5#: Recall after 120 seconds
6#: Recall after 150 seconds
7#: Recall after 180 seconds

0311#-(1-7)#

EXTENSION TRANSFER RECALL TIMER

If an Exchange line call is not answered within a specified time after being transferred, the call will revert back to the original extension.

1#: Recall after 20 seconds
2#: Recall after 40 seconds
3#: Recall after 60 seconds
4#: Recall after 90 seconds
5#: Recall after 120 seconds
6#: Recall after 150 seconds
7#: Recall after 180 seconds

0312#-(1-7)#

OPERATOR TRANSFER RECALL TIMER

This is a timer of Transfer Recall of an operator. The timer activates only when an operator phone transfers the call. This setting means how long the transferred call should ring before the Transfer Recall is activated to an operator.

1#: Recall after 20 seconds
2#: Recall after 40 seconds
3#: Recall after 60 seconds
4#: Recall after 90 seconds
5#: Recall after 120 seconds
6#: Recall after 150 seconds
7#: Recall after 180 seconds

0313#-(0, 1-10)# Ⓟ

SLT ON HOOK DETECTION TIMER

Set an SLT to either Timed break recall or disconnect when the Hook switch is pressed longer or less than the time set for a line disconnect.

	No Detection	Break Signal	Disconnect	
0#			More than 0 msecond	
1#	Less than 200 mseconds	200 - 500 mseconds	More than 500 mseconds	
2#	Less than 200 mseconds	200 - 750 mseconds	More than 750 mseconds	
3#	Less than 200 mseconds	200 - 1000 mseconds	More than 1000 mseconds	For FLASH
4#	Less than 200 mseconds	200 - 1200 mseconds	More than 1200 mseconds	
5#	Less than 200 mseconds	200 - 1500 mseconds	More than 1500 mseconds	
6#	Less than 200 mseconds	200 - 2000 mseconds	More than 2000 mseconds	
7#	Less than 27 mseconds	27 - 165 mseconds	More than 165 mseconds	
8#	Less than 55 mseconds	55 - 165 mseconds	More than 165 mseconds	For TIMED BREAK RECALL
9#	Less than 73 mseconds	73 - 165 mseconds	More than 165 mseconds	
10#	Less than 82 mseconds	82 - 165 mseconds	More than 165 mseconds	

NOTE : Turn the power off and on of the CCU after the programming to activate the new settings.

0314#-(1-8)#

MUTE TIME OF TRANSMITTED CALL

After a SLT accesses an exchange line, this time decides how long will CCU wait for next dial number after the last number is dialled.
During this span, outgoing voice will be muted.

1#: 1 seconds
2#: 2 seconds
3#: 3 seconds
4#: 4 seconds
5#: 5 seconds
6#: 6 seconds
7#: 7 seconds
8#: 8 seconds

0401#-(0 or 1)#

FLASH - REDIAL (AUTOMATIC)

The REDIAL key can automatically cut off an Exchange line after one or more digits have been dialed and then redial the same numbers again.

0#: No automatic FLASH
1#: Automatic FLASH

0402#-(0, 1-4)#

EXCHANGE LINE FLASH TIMER (AUTOMATIC)

Sets the timer to temporally release the Exchange line by pressing the REDIAL key.

0#: 0.5 second
1#: 1 second
2#: 1.5 seconds
3#: 2 seconds
4#: 3 seconds

0403#-(0 or 1)#

ON-HOOK TRANSFER (AUTOMATIC)

A call that is on hold can be transferred to another extension by entering the extension number and replacing the handset. The call is transferred to the extension. If automatic transfer is not programmed, see Operating Instruction for information on manual transfer.

0#: On-Hook transfer disable
1#: On-Hook transfer enable

0404#-(0 or 1)#

ONE-TOUCH KEY

You can dial stored telephone numbers and SSD codes by pressing a single key if the system is programmed for One-Touch call.

0#: One-touch call not available
1#: One-touch call

0405#-(0 or 1)#

BACKGROUND MUSIC (BGM)

Sets BGM operation (#53) to enable or disable.

0#: BGM disable
1#: BGM enable

0406#-(0, 1-3)#

INFORMATION TONE FOR VOICE CALLING, PAGING CALL

Set the information or alert tone for extensions called by voice. The tone is sounded for 0.5 second before the caller's voice is heard.

0#: Tone for voice call and paging call
1#: Tone for voice call
2#: Tone for paging call
3#: No information tone

0407#-(0 or 1)#

Not Available

0408#-(0 or 1)#

Not Available

0409#-(0 or 1)#

LONG SPEECH ALARM

To prevent a long call, you can set the telephone to sound an alarm at specified intervals during Exchange line call.
To set an alarm or not:

0#: No alarm
1#: Alarm

NOTE : • The alarm sounds 2 minutes 30 seconds after initiating a call, and continues to sound every 3 minutes afterward.

• Available for key telephone only.

0410#-(0 or 1)#

INTERNAL TONE/VOICE CALL (EXTENSION)

When an extension is calling an other extension, the call be invoked by voice or internal ringing tone.

0#: Extension call by voice
1#: Extension call using internal ringing tone

0411#-(0 or 1)#

OPERATOR CALL DIAL

You can call an operator from other extension by dialling "0" or "9".
To set the operator call dial number to "0" or "9":

0#: "0" call (Exchange line Access 9)
1#: "9" call (Exchange line Access 0)

NOTE : • This setting automatically determines the outgoing dial as follows.

• Leave it default for UK systems.

Operator call dial No.	Exchange line Access No.
Dial 0	9
Dial 9	0

0412#-(0 or 1)# Ⓟ

SYSTEM SPEED DIAL

To set the memory size for SSD to 90 or 200:

0#: 90 (2 digits 00-89)
1#: 200 (3 digits 000-199)

NOTE : Turn the power off and on of the CCU after the programming to activate the new settings.

0413#-(0 or 1)#

MUSIC ON HOLD

While an Exchange line call is placed on hold, you can send music to the other party.
To use an internal sound or external music source for MOH:

0#: Internal sound
1#: External music source

0414#-(0 or 1)#

LARGE LED BLINKING

Blinks to indicate that there is a call from Exchange line or internal extension.
To set the LED to blink or not:

0#: Does not blink
1#: Blinks with an Exchange line incoming call

NOTE : • Followings are the types of telephones whose LED can blink.
VB-9211UK/VB-9211DSUK/VB-9411UK/VB-9411DSUK/VB-9411ADSUK

• If message wait feature is set to telephones listed above, then LED will blink all the time until the feature is cancelled.

0416#-(0 or 1)#

SENSOR DETECTING TYPE

Sensor detection with doorphone adapter.

0#: Detects a make signal
1#: Detects a break signal

0417#-(0 or 1)#

SENSOR ALARM RING STOP

What action will stop sensor alarm ringing.

0#: An alarm signal is controlled by a sensor detection signal
1#: Picking up the receiver stops alarm ring

0418#-(0 or 1)#

Not Available

0419#-(0 or 1)# Ⓟ

OFF-HOOK MONITOR

0#: Inactivate Speaker
1#: Activate Speaker

NOTE : Turn the power off and on of the CCU after the programming to activate the new settings.

0420#-(0, 1 or 2)#

LRB SETTING

The LRB (Loud Ringing Bell) function allows you to transmit the ringing signal to an external paging system when there is an incoming call to a specified exchange line or internal line. This setting sets to set the incoming call to be transmitted to an exchange line or internal line.

0#: None
1#: Exchange line incoming call
2#: Incoming to monitored extension

0421#-(0, 1-4)# Ⓜ

LRB MONITOR EXCHANGE LINE NO. SETTING

This setting monitors which exchange line is to be monitored when the exchange line is set in the LRB mode setting (0420#-).

None
(1-4)#: Exchange line No.

NOTE : Two or more settings can be assigned.

0422#-(10-25)#

LRB MONITOR EXTENSION NO. SETTING

This setting determines which extension is to be monitored when the internal line is set in the LRB mode setting (0420#-).

(10-25)#: Extension No.
Clear : Press FF5 Key

0423#-(1-3)# Ⓜ

LRB RING MODE AT THE SPECIFIED EXTENSION

Set which incoming call is rung at the specified extension (0422#-) when the internal incoming call is set in the LRB setting
(0420#-) .

None
1# : Exchange line incoming call
2# : Internal incoming call
3# : Doorphone incoming call

NOTE : Two or more setting can be assigned.

0501#-(0 or 1)#

MULTI-PURPOSE RELAY 2 FUNCTION

Sets which function is used to operate relay 2 on VB-9273UK (Doorphone/Doorlatch I/F Card).
Sets whether to use relay 2 for control of door opener B, or to use relay 2 for control of the External Ringer.

0#: Control of door opener B
1#: Control of external ringer

REFERENCE : See External Ringer control in MODE 2 (01-04)11#.

0502#-(0 or 1)#

MULTI-PURPOSE RELAY 1 OPERATION

Sets the time that relay 1 on VB-9273UK (Doorphone/Doorlatch I/F Card) operates.

0#: Relay operated as programmed time
1#: Relay operated continually

REFERENCE : See operating time in MODE 1 0504#.

0503#-(0 or 1)#

MULTI-PURPOSE RELAY 2 OPERATION

Sets the time that relay 2 on VB-9273UK (Doorphone/Doorlatch I/F Card) operates.

0#: Relay operated as programmed time
1#: Relay operated continually

REFERENCE : See operating time in MODE 1 0505#.

0504#-(0, 1-7)#

MULTI-PURPOSE RELAY 1 OPERATION TIMER

Sets the control time when "0# Relay operated as programmed time" is set at MODE 1, address 0502#-(0 or 1).

0#: 0.125 second
1#: 1 second
2#: 2 seconds
3#: 3 seconds
4#: 4 seconds
5#: 5 seconds
6#: 6 seconds
7#: 7 seconds

REFERENCE : See Relay 1 in MODE1 0502#.

0505#-(0, 1-7)#

MULTI-PURPOSE RELAY 2 OPERATION TIMER

Sets the control time when "0# Relay operated as programmed time" is set at MODE 1, address 0503#-(0 or 1).

0#: 0.125 second
1#: 1 second
2#: 2 seconds
3#: 3 seconds
4#: 4 seconds
5#: 5 seconds
6#: 6 seconds
7#: 7 seconds

REFERENCE : See MODE 1 0503#.

0601#-(0 or 1)#

TRUNK TO TRUNK

By pressing the MEMORY REDIAL 5, an Exchange line on hold and another Exchange line on talk are connected together.
This function also applies to conference calls that have been connected through the Direct Inward System Access (DISA).

0#: Disable
1#: Enable

0602#-(0, 1 or 2)#

TRUNK TO TRUNK END TYPE

The following are ways to cut off the connection of a trunk-to-trunk call.

a) Detects end of call (break signal) on Exchange line and ends call.
b) Ends call after a specified time period elapses after connection is made (timer).
c) Ends call using a combination of above two methods.

~~0#: End by call detection~~ (Do not use)
1#: Timer
2#: End by call detection or timer

0603#-(0,1-8)#

TRUNK TO TRUNK TIMER

Sets the time if the timer was activated using Trunk to Trunk of call.

0#: End by call detection
1#: MAX.1 minute
2#: MAX.2 minutes
3#: MAX.3 minutes
4#: MAX.5 minutes
5#: MAX.10 minutes
6#: MAX.20 minutes
7#: MAX.30 minutes
8#: MAX.40 minutes

REFERENCE : See MODE 1 0605#.

0604#-(0, 1 or 2)#

TRUNK TO TRUNK INTERRUPT EX-TENSION

To enable extension to interrupt a Trunk to Trunk call.

0#: No interrupt extension
1#: Function Assigned extension
2#: Administrator's telephone or Function Assigned extension

NOTE : "Function Assigned extension" is the extension which originally operated Trunk to Trunk feature.

0605#-(0, 1-9)#

BUSY TONE COUNT FOR TRUNK-TO-TRUNK END

During an exchange line call, a noise is sometimes detected as a busy tone by mistake and disconnects an exchange line.
To prevent this disconnection, initially CCU will watch for 16 seconds (4sets) and decides whether its noise or not.

0#: None
1#: 1 set
2#: 2 sets
3#: 3 sets
4#: 4 sets
5#: 5 sets
6#: 6 sets
7#: 7 sets
8#: 8 sets
9#: 9 sets

NOTE : With some switchboards, there is a howler signal or mute state following a Busy Tone of a fixed length of time.
If this happens, the call cannot be ended by Busy Tone detection.

0701#-(0, 1 or 2)#

INTERNAL DTMF SENDING TIME

While the key telephone and the single-line telephone are connected on the intercom line, you can send DTMF signals to the single-line telephone. You can set the transmission time and minimum pause time.

0#: 80/80 mseconds (Transmission time/ Minimum pause time)
1#: 125/125 mseconds
2#: 250/250 mseconds

REFERENCE : See MODE 1 0702# and 0703#.

0702#-(0 or 1)#

EXTEND INTERNAL DTMF SENDING TIME (MODIFICATION)

Depending on the time set in internal DTMF Sending Time, you can lengthen the DTMF signal.

0#: DTMF signal does not change
1#: Lengthen signal

REFERENCE : See MODE 1 0701# and 0703#.

0703#-(0, 1 or 2)#

EXTEND INTERNAL DTMF SENDING TIMER

If the time set in DTMF Sending Time is lengthened, you can determine how long the transmission will be.

0#: 320/320 mseconds
1#: 480/480 mseconds
2#: 695/695 mseconds

REFERENCE : See MODE 1 0701# and 0702#.

0801#-(0 or 1)#

CALL BROAKERING (SHUTTLING)-SINGLE LINE TELEPHONE

On an SLT after an Exchange line call is put on hold an internal call may be made, if busy tone is receieved, on pressing Recall key program specifies whether to receive internal dial tone or retrieve to the held Ex-change line.

0#: Return to internal dial tone
1#: Retrieve held Exchange line

0802#-(0 or 1)#

SLT HOLD BY RECALL KEY

Sets how to hold SLT.
To set the hold mode by Recall operation or Recall and numbering plan operation:

0#: Hold by Recall
1#: Hold by Recall and numbering plan

REFERENCE : Numbering plans are as follows.

- **Recall + [5]: Exchange line System Hold or Intercom Hold**
- **Recall + [6]: Exchange line Exclusive Hold or Intercom Hold**

0803#-(0 or 1)#

SLT EXCHANGE LINE HOLD

An Exchange line call on your single-line telephone extension can be automatically put on System Hold or Exclusive Hold.

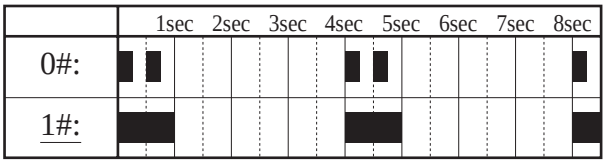
0#: System Hold
1#: Exclusive Hold

NOTE : This function will be valid only when hold by Recall (0#) is set in the MODE 1 0802#.

0804#-(0 or 1)#

SLT INTERNAL RING PATTERN

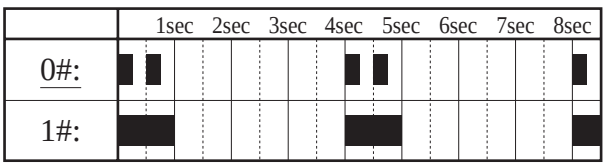
Set which pattern to use for the internal ring signal (including extension recall ring and doorphone ring).



0805#-(0 or 1)#

SLT EXCHANGE LINE RING PATTERN

Set which pattern to use for the exchange line ring signal (including extension recall ring and doorphone ring).



0806#-(0 or 1)#

SLT RINGER FREQUENCY

Changes the ringer frequency of the SLT ring signal.
Set the ringer frequency to either of 20Hz or 25Hz.

0#: 20Hz
1#: 25Hz

0901#-(0, 01-16)#

DSS1 PAIR PORT NUMBER

When DSS1 is connected to the system, it is necessary to set the DSS1 to pair with one of the extension No., or not.
When paired with DSS1, set the telephone port number.

0# : Does not use DSS1
(01-16)# : Key Telephone Port Number

0902#-(0, 01-16)#

DSS2 PAIR PORT NUMBER

When DSS2 is connected to the system, it is necessary to set the DSS2 to pair with one of the extension No., or not.
When paired with DSS2, set the telephone port number.

0# : Does not use DSS2
(01-16)#: Key Telephone Port Number

1001#-(0000-9999)#

ADMINISTRATOR'S TELEPHONE ID

A telephone which is not set by "Administrator's Telephone Setting" of MODE4 Extension Setting can be temporarily used as an Administrator's Telephone by ID code.
To set 4-digit ID code which is necessary to use the telephone as an Administrator's Telephone.

0#	: Does not set ID
(0000-9998)#	: ID code
9999#	
Clear	: Press FF5 Key

1010#-(0000-9999)#

EXCHANGE LINE CONNECTION ID CODE 1 - DISA BREAKOUT

To enter an ID code when making an Exchange line call from outside using the Direct Inward System Access (DISA).

(0000-9999)#: ID Code
Clear : Press FF5 Key

NOTE : For details on DISA operations, see "Optional Features" in the "Operating Instructions Manual."

1011#-(0000-9999)#

EXCHANGE LINE CONNECTION ID CODE 2 - DISA BREAKOUT

To enter an ID code when making an Exchange line call from outside using the Direct Inward System Access (DISA).

(0000-9999)# : ID code
Clear : Press FF5 Key

NOTE : For details on DISA operations, see "Optional Features" in the "Operating Instructions Manual."

20n0#-(10-25)#

(n=1-8: Secretary No.)

SECRETARY n (n=1 to 8) EXTENTION NO.

Specify up to eight internal lines for the secretary when setting manager/secretary working.
Set the extension No. of the extension specified for secretarial use.

(10-25)#: Extension No.
Clear : Press FF5 Key

NOTE : When setting manager/secretary working, the Call Forward setting must also be set to the secretary's extension from the manager's extension matched to this program setting.

20n1#-(10-25)#

(n=1-8: Secretary No.)

MANAGER 1 EXTENTION NO. OF SECRETARY n (n = 1 to 8)

Allows manager/secretary working, and specifies three manager phones for one secretary.
Set the extension No. of the phone specified for manager 1's use with respect to secretary (n).

(10-25)#: Extension No.
Clear : Press FF5 Key

NOTE : When setting manager/secretary working, the Call Forward setting must also be set to the secretary's extension from the manager's extension matched to this program setting.

20n2#-(10-25)#

(n=1-8: Secretary No.)

MANAGER 2 EXTENTION NO. OF SECRETARY n (n = 1 to 8)

Allows manager/secretary working, and specifies three manager phones for one secretary.
Set the extension No. of the phone specified for manager 2's use with respect to secretary (n).

(10-25)#: Extension No.
Clear : Press FF5 Key

NOTE : When setting manager/secretary working, the Call Forward setting must also be set to the secretary's extension from the manager's extension matched to this program setting.

20n3#-(10-25)#

(n=1-8: Secretary No.)

MANAGER 3 EXTENTION NO. OF SECRETARY n (n = 1 to 8)

Allows manager/secretary working, and specifies three manager phones for one secretary.
Set the extension No. of the phone specified for manager 3's use with respect to secretary (n).

(10-25)#: Extension No.
Clear : Press FF5 Key

NOTE : When setting manager/secretary working, the Call Forward setting must also be set to the secretary's extension from the manager's extension matched to this program setting.

50n0#-(HHMMN)#

(n=1: Monday n=5: Friday
n=2: Tuesday n=6:Saturday
n=3: Wednesday n=7: Sunday
n=4: Thursday)

AUTOMATIC SWITCH (Day Mode Start)

By assigning this time, telephones will be switched to day mode automatically when the programmed time comes.

To set the time of starting day mode, enter HHMMN.

HH : Hour (01-12)
MM : Minute (00-59)
N : a.m./p.m. (1: a.m., 2: p.m.)
Clear : Press FF5 Key

50n1#-(HHMMN)#

(n=1: Monday n=5: Friday
n=2: Tuesday n=6:Saturday
n=3: Wednesday n=7: Sunday
n=4: Thursday)

AUTOMATIC SWITCH (Night Mode Start)

By assigning this time, telephones will be switched to night mode automatically when the programmed time comes.

To set the time of starting night mode, enter HHMMN.

HH : Hour (01-12)
MM : Minute (00-59)
N : a.m./p.m. (1: a.m., 2: p.m.)
Clear : Press FF5 Key

9009#-(0, 1-15)#

BUSY TONE DETECTION TIME

Sets the detection time for Busy Tone detection. During Busy Tone detection, the detection time preset here is counted to detect the Busy Tone.

Set the detection time (0.5 to 8 seconds, 0.5 second units).

0#: 0.5 seconds
1#: 1 second
2#: 1.5 seconds
3#: 2 seconds
4#: 2.5 seconds
5#: 3 seconds
6#: 3.5 seconds
7#: 4 seconds
8# : 4.5 seconds
9# : 5 seconds
10#: 5.5 seconds
11#: 6 seconds
12#: 6.5 seconds
13#: 7 seconds
14#: 7.5 seconds
15#: 8 seconds

9010#-(0, 1-15)#

BUSY TONE DETECTION LOWER LIMIT COUNT

Sets the lower limit of the count for judging detection of Busy Tone. If the Busy Tone detection count is smaller than this lower limit, this is treated as an Ring Back Tone, and this is not judged as a Busy Tone.

Set how many times should be counted as the lower limit.

0#: 0 time
1#: 1 time
2#: 2 times
3#: 3 times
4#: 4 times
5#: 5 times
6#: 6 times
7#: 7 times
8# : 8 times
9# : 9 times
10#: 10 times
11#: 11 times
12#: 12 times
13#: 13 times
14#: 14 times
15#: 15 times

9011#-(0, 1-15)#

BUSY TONE DETECTION UPPER LIMIT COUNT

Sets the upper limit of the count for judging detection of Busy Tone. If the Busy Tone detection count is larger than this upper limit, this is treated as a conversation, and this is not judged as a Busy Tone.

Set how many times should be counted as the upper limit.

0#: 0 time
1#: 1 time
2#: 2 times
3#: 3 times
4#: 4 times
5#: 5 times
6#: 6 times
7#: 7 times
8# : 8 times
9# : 9 times
10#: 10 times
11#: 11 times
12#: 12 times
13#: 13 times
14#: 14 times
15#: 15 times

9012#-(0, 1-5)#

BUSY TONE DETECTION MINIMUM TIME

Changes the judgment time for Busy Tone detection. During Busy Tone detection, if a signal longer that this preset judgment time is detected, it is judged that there is a Busy Tone, and counting is carried out for the preset Busy Tone detection count.

Set the judgment time (msecond).

0#: 73 mseconds
1#: 146 mseconds
2#: 220 mseconds
3#: 293 mseconds
4#: 366 mseconds
5#: 439 mseconds

MODE 2 (Exchange Line Setting)

(01-04)01#-(0 or 1)# (01-04: Exchange line No.) Ⓒ

DIAL SIGNAL / EXCHANGE LINE

The dial signal type you select must be in accordance with the type of PBX or local telephone service provider.

0#: 10 pps pulse dial
1#: DTMF signal tone

(01-04)02#-(0, 1 or 2)# (01-04:Exchange line No.) Ⓒ

DTMF SIGNAL SENDING TIME

To set the length of the signal and the pause for Exchange line.

0#: 80 mseconds ON/80 mseconds OFF(Signal length/Pause length)
1#: 125 mseconds ON/125 mseconds OFF
2#: 250 mseconds ON/250 mseconds OFF

(01-04)03#-(0 or 1)# (01-04: Exchange line No.) Ⓒ

CONNECTED PHONE LINE

To connect Exchange lines or PBX lines.

0#: Exchange line
1#: PBX line

(01-04)04#-(0 or 1)# (01-04: Exchange line No.) Ⓒ

(AUTO) PAUSE PBX LINE

Inserts a pause after dialing. When accessing a trunk line through a PBX, it can take several seconds from the time the line is accessed to when it a trunk line.
If a pause is not inserted after dialing, connection to the trunk line may not be possible.

0#: No automatic pause
1#: Automatic pause

REFERENCE : See MODE 1 0210# to 0219#.

(01-04)05#-(0, 1-3)# (01-04: Exchange line No.) ⓒⓂ

POOLED TRUNK ACCESS GROUP (9/0, 811, 812, and 813)

When 9/0, 811,812, or 813 is dialed there is an automatic connection to a vacant line in the trunk groups.

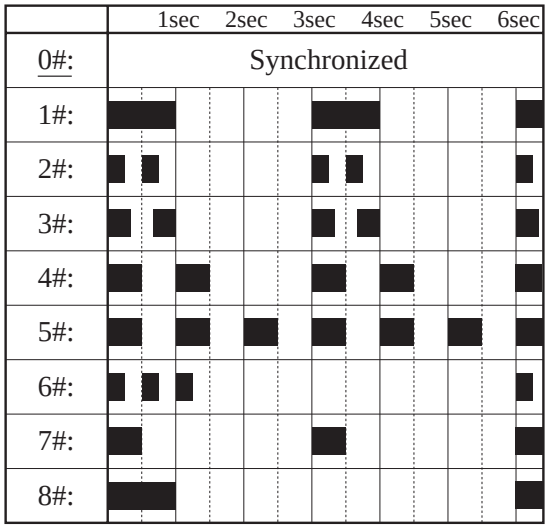
0#: Pooled trunk access group 9/0
1#: Pooled trunk access group 811
2#: Pooled trunk access group 812
3#: Pooled trunk access group 813

NOTE : • Using Dial 9 or using Dial 0 will be determined by Operator Call Dial Setting [MODE 1 0411#].
• Two or more settings can be assigened.
• To delete the input data, press the same data number (0-3) again.
• The LINE key has the same function as group 9/0.

(01-04)06#-(0, 1-8)# (01-04: Exchange line No.) Ⓒ

INCOMING RING TONE PATTERN

The ring tone pattern can be changed for each Exchange line port. The incoming ring interval is synchronized by your telephone service provider.
This function allows you to set different ring patterns for each Exchange line in the system. Lines with this setting have their own distinctive ring pattern, which makes it easier to identify which line is ringing.



(01-04)07#-(0 or 1)#

(01-04: Exchange line No.) Ⓒ

DTMF SIGNAL CONVERSION (AUTOMATIC)

The dial signal automatically converts to a DTMF signal from pulse dialing. Timing of conversion will depend on programmings listed below (REFERENCE). Pressing # or * is not required.
However, during incoming calls the dial signal automatically converts immediately without an interval.

0#: Automatic conversion disable
1#: Automatic conversion enable

REFERENCE : • See MODE 1 0302#.
• See MODE 2 (01-04)23#.

(01-04)08#-(0 or 1)#

(01-04: Exchange line No.) Ⓒ

DTMF SIGNAL CONVERSION (MANUAL)

Press # or * to convert the dial signal to a DTMF signal.

0#: Conversion disable
1#: Conversion enable

(01-04)09#-(0 or 1)#

(01-04: Exchange line No.)

DTMF SIGNAL TIME CHANGE (AFTER THE OTHER PARTY'S ANSWER)

When you change from pulse dialing to a DTMF signal after the other party's answer, the sending time of the DTMF signal can be changed. Or DTMF signal time will be changed if it's originally DTMF signal. Actual signal length after the conversion is selected in Mode 2 (01-04)10#. This programming is effective for both automatic and manual conversion.

0#: No change
1#: Changes length of the DTMF signal sending time

REFERENCE : • See MODE 1 0302#.
• See MODE 2 (01-04)07#, (01-04)08#, (01-04)10# and (01-04)23#.

(01-04)10#-(0, 1 or 2)#

(01-04: Exchange line No.) Ⓒ

DTMF SIGNAL TIME TABLE (AFTER THE CONVERSION)

The settings for the DTMF signal time are shown below (Signal length/Pause length).

0#: 320/320 mseconds
1#: 480/480 mseconds
2#: 695/695 mseconds

REFERENCE : See MODE 2 (01-04)02#, (01-04)07#, (01-04)08# and (01-04)09#.

(01-04)11#-(0, 1-3)#

(01-04: Exchange line No.) Ⓒ

EXTERNAL RINGER CONTROL

You can control external ringer using multi purpose relay on doorphone adaptor.
To set when (Day/Night) to ring.

0#: Does not ring
1#: Control only in Day mode
2#: Control only in Night mode
3#: Control in both Day and Night mode

REFERENCE : See MODE 1 0501#.

(01-04)12#-(0 or 1)#

(01-04: Exchange line No.) Ⓒ

INCOMING CALL FORWARDING TO OUTSIDE

To set a received call forwarding to outside. This function does not work if the Do-Not-Disturb and Absence functions are activated.

0#: Cannot accept call forwarding
1#: Enable call forwarding to the exchange line

(01-04)13#-(0, 1-4)#

(01-04: Exchange line No.) Ⓒ

DELAYED RING TRANSFERRING TIME

To set the amount of a call is to remain unanswered before the other designated phones start ringing.

0#: Disable
1#: After 15 seconds
2#: After 30 seconds
3#: After 45 seconds
4#: After 60 seconds

(01-04)14#-(0, 1-7)# (01-04: Exchange line No.) Ⓒ

INCOMING RING SIGNAL DETECTION TIME

Detects an incoming ring signal when the signal is longer than the time programmed for an incoming ring signal. For example, if the time programmed of an incoming call signal is 200 mseconds or longer, signal that are longer than 200 mseconds are identified as a phone call. Any signal shorter than 200 mseconds are not considered phone signal and are disregarded.

0#: More than 50 mseconds
1#: More than 100 mseconds
2#: More than 150 mseconds
3#: More than 200 mseconds
4#: More than 250 mseconds
5#: More than 300 mseconds
6#: More than 350 mseconds
7#: More than 400 mseconds

(01-04)15#-(0, 1-7)# (01-04: Exchange line No.)

INCOMING RING PATTERN DETECTION TIMER

Because incoming call ring patterns sometimes vary, the timer can be set up to a maximum of 14 seconds to ensure that the ring cycle on incoming call is not cut off prematurely.
For example, if the ring cycle of a call is 4 seconds (1 second of the signal and 3 seconds for the pause), the timer must be set for 4 seconds.
This is to prevent the call from getting cut off before the full ring cycle. If you set the time for 3 seconds for a call ring pattern that has a 4-second cycle, you may cause the call to be cut off prematurely.

0#: 3 seconds
1#: 4 seconds
2#: 5 seconds
3#: 6 seconds
4#: 8 seconds
5#: 10 seconds
6#: 12 seconds
7#: 14 seconds

(01-04)16#-(0 or 1)# (01-04: Exchange line No.)

FL/R KEY TYPE

Sets the function of FL/R key.
To set to use FL/R key as FLASH or TIMED BREAK RECALL:

0#: FLASH
1#: TIMED BREAK RECALL

(01-04)17#-(0 or 1)# (01-04: Exchange line No.)

DT DETECTION AT OUTGOING CALL

When making an outgoing call, it is possible to dial without pause by detecting the dial tone from Exchange line or PBX.
To set each line to detect the dial tone or not.

0#: Does not detect Dial Tone
1#: Detects Dial Tone

(01-04)18#-(0 or 1)# (01-04: Exchange line No.)

BUSY TONE DETECTION

When making an outgoing call, using auto repeat dial it is possible to detect the Busy Tone if the line of the other party is busy.
To set each line to detect the Busy Tone or not.

0#: Does not detect Busy Tone
1#: Detects Busy Tone

NOTE : When making an on-hook dial from a Proprietary Telephone, Auto Repeat Dial operation will be initiated by Busy Tone detection (Auto Repeat Dial setting is required).

(01-04)19#-(1-3)# (01-04: Exchange line No.) Ⓜ

END DETECTION OF OUTGOING CALL

In case of outgoing call, it is possible to automatically release the Exchange line when the other party ends the call.
To set how to detect the other party's end.

None (No Detects)
1#: Detects by the polarity reverse signal
2#: Detects by Break signal

NOTE : • Two or more settings can be assigned.
• To delete the input data, press the same data number again.

(01-04)20#-(1-3)# (01-04: Exchange line No.) Ⓜ

END DETECTION OF INCOMING CALL

In case of incoming call, it is possible to automatically release the Exchange line when the other party ends the call.
To set how to detect the other party's end.

None (No Detects)
1#: Detects by the polarity reverse signal
2#: Detects by Break signal

NOTE : • Two or more settings can be assigned.
• To delete the input data, press the same data number again.

(01-04)21#-(0, 1 or 2)# (01-04: Exchange line No.) Ⓒ

EXCHANGE LINE END DETECTION MODE

This sets in which state the "END DETECTION OF OUTGOING CALL (01-04)19#" and "END DETECTION OF INCOMING CALL (01-04)20#" are detected.

0#: No detection
1#: Detection only while on HOLD
2#: Detection anytime

(01-04)22#-(0, 1-7)# (01-04: Exchange line No.) Ⓒ

BREAK SIGNAL DETECTING TIMER (to disconnect the Exchange line)

The signal detection time can be set within a range of 50 mseconds to 700 mseconds.

0#: More than 50 mseconds
1#: More than 100 mseconds
2#: More than 200 mseconds
3#: More than 300 mseconds
4#: More than 400 mseconds
5#: More than 500 mseconds
6#: More than 600 mseconds
7#: More than 700 mseconds

(01-04)23#-(1-3)# (01-04: Exchange line No.)

ANSWER DETECTION OF OUTGOING CALL

Sets how to detect the other party's answer to an outgoing call.

1#: Detection by timer
2#: Detection by polarity reverse signal
3#: Detection by timer and polarity reverse signal

NOTE : The start time for an Exchange line call will be defined by this detection. Printing to SMDR will be done incorrectly unless the detection is correct.

REFERENCE : See MODE 1 0302#.

(01-04)24#-(0, 1-14)# (01-04: Exchange line No.) Ⓒ

DT DETECTION TIME

Sets the detection time for DT detection. During DT detection, the detection time preset here is counted to detect the DT.
Set the detection time (0.5 to 7.5 seconds, 0.5 second units).

0#: 0.5 seconds
1#: 1 second
2#: 1.5 seconds
3#: 2 seconds
4#: 2.5 seconds
5#: 3 seconds
6#: 3.5 seconds
7#: 4 seconds
8# : 4.5 seconds
9# : 5 seconds
10#: 5.5 seconds
11#: 6 seconds
12#: 6.5 seconds
13#: 7 seconds
14#: 7.5 seconds

(01-04)25#-(0, 1-15)# (01-04: Exchange line No.) Ⓒ

DT DETECTION LOWER LIMIT COUNT

Sets the lower limit of the count for judging detection of DT. If the DT detection count is larger than this lower limit, this is judged as a DT.
Set how many times should be counted as the lower limit.

0#: 0 (Continuous tone)
1#: 1
2#: 2
3#: 3
4#: 4
5#: 5
6#: 6
7#: 7
8# : 8
9# : 9
10#: 10
11#: 11
12#: 12
13#: 13
14#: 14
15#: 15

(01-04)26#-(0, 1-15)# (01-04: Exchange line No.) Ⓒ

DT DETECTION UPPER LIMIT COUNT

Sets the upper limit of the count for judging detection of DT. If the DT detection count is smaller than this upper limit, this is judged as a DT.
Set how many times should be counted as the upper limit.

0#: 0 (Continuous tone)	8# : 8
1#: 1	9# : 9
2#: 2	10#: 10
3#: 3	11#: 11
4#: 4	12#: 12
5#: 5	13#: 13
6#: 6	14#: 14
7#: 7	15#: 15

(01-04)27#-(0, 1-15)# (01-04: Exchange line No.) Ⓒ

SYSTEM OPERATION AT NON-DETECTION OF DT

Select whether the system regards the signal to be outgoing or incoming when it is judged that the signal is not DT when DT detection is set to ON (1#) in the DT DETECTION AT OUTGOING CALL setting ((01-04)17#-).
Set which system operation is to be carried out when it is judged that the signal is not DT.

0#: Detect signal as outgoing
1#: Detect signal as incoming

MODE 3
(Handy Extension Style Setting)

To reduce time of programming for all extensions, this mode contains settings of up to eight styles of telephone operation patterns required by users according to all of the feature options on a per-station basis, “Extension Setting (MODE4), Ring Setting (MODE5), FF Key Assignment (MODE6) and Call Barring Setting (MODE7)”.
See page P-6 for the details of “ADVANCED PROGRAMMING”.

To modify settings for individual extensions,

1) Find the style whose content is closest from among the eight styles set in this mode.
2) Set the style in MODE 4, address (10-25)03#-(0,1-8) “STYLE SETTING”.
3) Reset only different contents.

<Extension Setting>

0(1-8)02#-(0 or 1)# (1-8: Style No.) Ⓒ

SLT DIALING TYPE

0#: Pulse
1#: DTMF signal

REFERENCE : See MODE 4 (10-25)02#.

0(1-8)04#-(0, 1 or 2)# (1-8: Style No.) Ⓒ

ANSWER (AUTOMATIC)

0#: No automatic pickup
1#: Handset only
2#: Handset or ON/OFF key

REFERENCE : See MODE 4 (10-25)03#.

0(1-8)05#-(0 or 1)# (1-8: Style No.) Ⓒ

AUTOMATIC ANSWER WITHOUT RINGER

0#: Does not answer (Style 1-3, 7, 8)
1#: Answers (Style 4-6)

REFERENCE : See MODE 4 (10-25)05#.

0(1-8)06#-(1-3)# (1-8: Style No.) Ⓒ

PAGING GROUP

None (No paging group assigned)
1#: Paging group 1
2#: Paging group 2
3#: Paging group 3

NOTE : • Two or more settings can be assigned.
• To delete the input data, press the same data number again.

REFERENCE : See MODE 4 (10-25)06#.

0(1-8)07#-(0, 1 or 2)# (1-8: Style No.) Ⓒ

PRIME LINE PREFERENCE

0#: No preference
1#: Pick up handset
2#: Pick up handset or press ON/OFF key

REFERENCE : See MODE 4 (10-25)07#, MODE 3 0(1-8)08#.

0(1-8)08#-(0, 1-3)# (1-8: Style No.) Ⓒ

PRIME LINE ACCESS GROUP

0#: 9/0
1#: 811
2#: 812
3#: 813

REFERENCE : See MODE 4 (10-25)08#, MODE 3 0(1-8)07#.

0(1-8)09#-(0 or 1)# (1-8: Style No.) Ⓒ

SENSOR ALARM RING

0#: No ring (Style 2-8)
1#: Ring (Style 1)

NOTE : Only Style 1 rings initially.

REFERENCE : See MODE 4 (10-25)09#.

0(1-8)10#-(0, 1-3)# (1-8: Style No.) Ⓒ

DOORPHONE RING

0#: No doorphone ring (Style 2-8)
1#: Doorphone A ring only
2#: Doorphone B ring only
3#: Doorphone A and B ring (Style 1)

REFERENCE : See MODE 4 (10-25)10#.

0(1-8)11#-(0 or 1)# (1-8: Style No.) Ⓒ

CALL DURATION DISPLAY

0#: Conversation time not displayed
1#: Conversation time displayed

REFERENCE : See MODE 4 (10-25)11#.

0(1-8)12#- (1-8: Style No.)

Not Available

0(1-8)13#- (1-8: Style No.)

Not Available

0(1-8)14#- (1-8: Style No.)

Not Available

0(1-8)15#-(0, 1-3)# (1-8: Style No.) Ⓒ

OFF-HOOK SIGNAL (Call Wait)

0#: Cannot accept call wait
1#: Accepts Exchange line call only
2#: Accepts internal calls only (Style 2-8)
3#: Accepts Exchange line and internal calls (Style 1)

REFERENCE : See MODE 4 (10-25)15#.

0(1-8)16#-(0 or 1)# (1-8: Style No.) Ⓒ

DATA SECURITY

0#: Disable
1#: Enable

REFERENCE : See MODE 4 (10-25)16#.

<Ring Setting>

1(1-8) (0x)#-(0 or 1)# (1-8: Style No., x=1-4: Exchange line No.) Ⓒ

DAY RINGER SETTINGS FOR EXCHANGE LINES 1-4

0#: Does not ring (Style 2, 3, 6-8)
1#: Rings (Style 1, 4, 5)

REFERENCE : See MODE 5 (10-25) (0n)#.

1(1-8) (1x)#-(0 or 1)# (1-8: Style No., x=1-4: Exchange line No.) Ⓒ

NIGHT RINGER SETTINGS FOR EXCHANGE LINES 1-4

0#: Does not ring (Style 2, 3, 6-8)
1#: Rings (Style 1, 4, 5)

REFERENCE : See MODE 5 (10-25) (1n)#.

1(1-8) (2x)#-(0 or 1)# (1-8: Style No., x=1-4: Exchange line No.) Ⓒ

LUNCH RINGER SETTINGS FOR EXCHANGE LINES 1-4

0#: Does not ring (Style 2, 3, 6-8)
1#: Rings (Style 1, 4, 5)

REFERENCE : See MODE 5 (10-25) (2n)#.

1(1-8) (3x)#-(0 or 1)# (1-8: Style No., x=1-4: Exchange line No.)

DAY DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINES 1-4

0#: Does not ring (Style 2, 6-8)
1#: Rings (Style 1, 3-5)

REFERENCE : • See Delayed Ring Transferring Time in MODE 2 (01-04)13#.
• See MODE 5 (10-25) (3n)#.

1(1-8) (4x)#-(0 or 1)# (1-8: Style No., x=1-4: Exchange line No.)

NIGHT DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINES 1-4

0#: Does not ring (Style 2, 6-8)
1#: Rings (Style 1, 3-5)

REFERENCE : • See Delayed Ring Transferring Time in MODE 2 (01-04)13#.
• See MODE 5 (10-25) (4n)#.

1(1-8) (5x)#-(0 or 1)# (1-8: Style No., x=1-4: Exchange line No.)

LUNCH DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINES 1-4

0#: Does not ring (Style 2, 6-8)
1#: Rings (Style 1, 3-5)

REFERENCE : See MODE 5 (10-25) (5n)#.

<FF Key Setting>

NOTE : See MODE6 Flexible Function (FF) Key Assignments Table.

2(1-8)01#-(0-9999)# (1-8: Style No.)

FF-KEY 1 ASSIGNMENT

(0-9999)# : Dial Number
881

REFERENCE : See MODE 6 (10-25) 01#.

2(1-8)02#-(0-9999)# (1-8: Style No.)

FF-KEY 2 ASSIGNMENT

(0-9999)# : Dial Number
882
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 02#.

2(1-8)03#-(0-9999)# (1-8: Style No.)

FF-KEY 3 ASSIGNMENT

(0-9999)# : Dial Number
883
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 03#.

2(1-8)04#-(0-9999)# (1-8: Style No.)

FF-KEY 4 ASSIGNMENT

(0-9999)# : Dial Number
884
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 04#.

2(1-8)05#-(0-9999)# (1-8: Style No.)

FF-KEY 5 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 05#.

2(1-8)06#-(0-9999)# (1-8: Style No.)

FF-KEY 6 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 06#.

2(1-8)07#-(0-9999)# (1-8: Style No.)

FF-KEY 7 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 07#.

2(1-8)08#-(0-9999)# (1-8: Style No.)

FF-KEY 8 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 08#.

2(1-8)09#-(0-9999)# (1-8: Style No.)

FF-KEY 9 ASSIGNMENT

(0-9999)# : Dial Number
70 (Group Call Pick-up)
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 09#.

2(1-8)10#-(0-9999)# (1-8: Style No.)

FF-KEY 10 ASSIGNMENT

(0-9999)# : Dial Number
74 (Station Lock Out Setting/Cancelling)
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 10#.

2(1-8)11#-(0-9999)# (1-8: Style No.)

FF-KEY 11 ASSIGNMENT

(0-9999)# : Dial Number
60 (Paging (All Groups))
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 11#.

2(1-8)12#-(0-9999)# (1-8: Style No.)

FF-KEY 12 ASSIGNMENT

(0-9999)# : Dial Number
73 (Style 2-8) (DND Setting/Cancelling)
#52 (Style 1)
Clear : Press FF5 Key

REFERENCE : See MODE 6 (10-25) 12#.

<Call Barring Setting>

NOTE : See MODE7 Program settings for each service type Table.

3(1-8)01#-(0 or 1)# (1-8: Style No.) Ⓒ

SSD CALL BARRING OVERRIDE

0#: Call barring valid (Style 6-8)
1#: Call barring overriden (Style 1-5)

NOTE : When restriction is overridden, the setting conforms to the content of each toll restriction class.

REFERENCE : See MODE 7 (10-25) 01#.

3(1-8)1x#- (0, 1-4)# (1-8: Style No., x=1-8: Exchange line No.) Ⓒ

DAY RESTRICTION TYPES EXCHANGE LINES 1-4

0#: Type 0 (Style 7)
1#: Type 1 (Style 6, 8)
2#: Type 2 (Style 5)
3#: Type 3 (Style 3, 4)
4#: Type 4 (Style 1, 2)

REFERENCE : See MODE 7 (10-25) 1n#.

3(1-8)2x#- (0, 1-4)# (1-8: Style No., x=1-8: Exchange line No.) Ⓒ

NIGHT RESTRICTION TYPES EXCHANGE LINE 1-4

0#: Type 0 (Style 7)
1#: Type 1 (Style 6, 8)
2#: Type 2 (Style 5)
3#: Type 3 (Style 3, 4)
4#: Type 4 (Style 1, 2)

REFERENCE : See MODE 7 (10-25) 2n#.

MODE 4 (Extension Setting)

When all of the telephone operation conditions required by the user are satisfied by the content of the eight telephone styles set in MODE 3, address (10-25)03#-(0, 1-8)# "STYLE SETTING" and MODE 4 address (10-25)01#-(0, 1-4)# "TELEPHONE TYPE SETTING" need merely be set, and other settings need not be set. However, note that the following addresses must be set as required as they are not included in MODE 3 items.

- (10-25)17#(0 or 1)# "HEADSET MODE"
- (10-25)18#(0 or 1)# "DIAL TONE STOP/ INTERNAL"
- (10-25)19#(0 or 1)# "OPERATOR TELEPHONE"
- (10-25)20#(0 or 1)# "ADMINISTRATOR's TELEPHONE"

(10-25)01#-(0, 1-4)# (10-25: Extension No.)

TELEPHONE TYPE SETTING

Sets the type of the telephone connected to each port.

0#: Key Telephone
1#: SLT (Ext.16, 17 only)
2#: DSS 1
3#: DSS 2
4#: DISA

(10-25)02#-(0 or 1)# (10-25: Extension No.) Ⓒ

SLT DIALING TYPE

Sets the type of dial of your Single Line Telephone.

0#: Pulse
1#: DTMF signal

(10-25)03#-(0, 1-8)# (10-25: Extension No.)

STYLE SETTING

The content set to each style 1-8 in the MODE 3 setting can be copied.
Set the style number to be copied.
Confirm the content of each style before setting.

0#: No setting
1#: Style 1
2#: Style 2
3#: Style 3
4#: Style 4
5#: Style 5
6#: Style 6
7#: Style 7
8#: Style 8

(10-25)04#-(0, 1 or 2)# (10-25: Extension No.) Ⓒ

ANSWER (AUTOMATIC)

Incoming calls assigned to ring can be answered in the order received by simply picking up the handset or pressing the ON/OFF key. If you have selected the "1#" setting, you can make Exchange line calls without answering incoming calls by pressing the ON/OFF button. The "2#" selection automatically picks up the first call. To access a line if the setting is at "0#", you must pick up the handset and press a Exchange line key.

0#: No automatic pickup
1#: Handset only
2#: Handset and ON/OFF key

(10-25)05#-(0 or 1)# (10-25: Extension No.) Ⓒ

AUTOMATIC ANSWER WITHOUT RINGER

The telephone set to "Does not ring" in the Ring Setting (MODE 5) can answer an incoming call within the same paging group. However, it is impossible to set the telephone to answer when it has been set to "No (0#)" for (10-25)04# in the MODE 4.
To set the telephone to answer or not:

0#: Does not answer
1#: Answers

(10-25)06#-(1-3)# (10-25: Extension No.) ⒸⓂ

PAGING GROUP

Sets an extension for Paging groups 1, 2, or 3.

None (No Paging group assigned)
1#: Paging group 1
2#: Paging group 2
3#: Paging group 3

NOTE : • Two or more settings can be assigned.
• To delete the input data, press the same data number again.

(10-25)07#-(0, 1 or 2)# (10-25: Extension No.) Ⓒ

PRIME LINE PREFERENCE

This function is used to determine how an unoccupied Trunk Group Exchange line can be accessed.

0#: No preference
1#: Pick up handset
2#: Pick up handset or press ON/OFF key

REFERENCE : See MODE 4 (10-25)08#.

(10-25)08#-(0, 1-3)# (10-25: Extension No.) Ⓒ

PRIME LINE ACCESS GROUP

This setting is used to determine which pooled Trunk Group is to be accessed when the prime line preference function activated.

0#: 9/0
1#: 811
2#: 812
3#: 813

REFERENCE : See MODE 4 (10-25)07#.

(10-25)09#-(0 or 1)# (10-25: Extension No.) Ⓒ

SENSOR ALARM RING

0#: No ring (Ext.11-25)
1#: Ring (Ext.10)

(10-25)10#-(0, 1-3)# (10-25: Extension No.) Ⓒ

DOORPHONE RING

Sets an extension to receive doophone calls.

0#: No doorphone ring (Ext.11-25)
1#: Doorphone A ring only
2#: Doorphone B ring only
3#: Doorphone A and B ring (Ext.10)

(10-25)11#-(0 or 1)# (10-25: Extension No.) Ⓒ

CALL DURATION DISPLAY

Displays conversation time on an LCD telephone.

0#: Conversation time not displayed
1#: Conversation time displayed

(10-25)12#- (10-25: Extension No.)

Not Available

(10-25)13#- (10-25: Extension No.)

Not Available

(10-25)14#- (10-25: Extension No.)

Not Available

(10-25)15#-(0, 1-3)# (10-25: Extension No.) Ⓒ

OFF-HOOK SIGNAL

Specify whether to ring OFF-HOOK signal when receiving an exchange line incoming call during on line or receiving Call Waiting (Press "3" during the Busy Tone) during on line.

0#: Cannot accept call waiting
1#: Accepts Exchange line call
2#: Accepts internal calls (Ext.11-25)
3#: Accepts Exchange line and internal calls (Ext.10)

(10-25)16#-(0 or 1)# (10-25: Extension No.) Ⓒ

DATA SECURITY

Temporarily prevents an incoming call from overriding your line, such as when you prevent incoming call from interrupting a modem transmission.

0#: Disable
1#: Enable

(10-25)17#-(0 or 1)# (10-25: Extension No.)

HEADSET MODE

Determine whether the headset can be used with your phone.

0#: Headset mode not available
1#: Headset mode available

(10-25)18#-(0 or 1)# (10-25: Extension No.)

DIAL TONE STOP/INTERNAL

Determine whether the internal dial tone is enabled or disabled.

0#: Disable
1#: Enable

(10-25)19#-(0 or 1)# (10-25: Extension No.)

OPERATOR TELEPHONE

Operator teature activates such as operator call "0" (0411#), operator hold recall (0310#) or operator transfer recall (0312#) etc.

0#: No Operator function (Ext. 11-25)
1#: Operator function (Ext. 10)

REFERENCE : See MODE 1 0310#, 0312# and 0411#.

(10-25)20#-(0 or 1)# (10-25: Extension No.)

ADMINISTRATOR'S TELEPHONE

A variety of programmings can be performed by key operation of a telephone.
Set a telephone to None Administrator's telephone or Administrator's telephone.

NOTE : Only one Administrator's telephone can be used in a system.

0#: Regular telephone (Ext. 11-25)
1#: Administrator's telephone (Ext. 10)

MODE 5 (Ring Setting)

When all of the telephone operation conditions required by the user are satisfied by the content of the eight telephone styles set in MODE 3, MODE 5 need not be set.

(10-25) (0x)#-(0 or 1)# (10-25: Extension No., x=1-4: Exchange line No.) Ⓒ

DAY RINGER SETTINGS FOR EXCHANGE LINE 1-4

It is possible to set the Exchange line 1-4 to ring only in the Day Mode.
To set the telephones to ring or not:

0#: Does not ring (Ext.11-25)
1#: Rings (Ext.10)

(10-25) (1x)#-(0 or 1)# (10-25: Extension No., x=1-4: Exchange line No.) Ⓒ

NIGHT RINGER SETTINGS FOR EXCHANGE LINE 1-4

It is possible to set the Exchange line 1-4 to ring only in the Night Mode.
To set the telephones to ring or not:

0#: Does not ring (Ext.11-25)
1#: Rings (Ext.10)

(10-25) (2x)#-(0 or 1)# (10-25: Extension No., x=1-4: Exchange line No.) Ⓒ

LUNCH RINGER SETTINGS FOR EXCHANGE LINE 1-4

It is possible to set the Exchange line 1-4 to ring only in the Lunch Mode.
To set the telephones to ring or not:

0#: Does not ring (Ext.11-25)
1#: Rings (Ext.10)

(10-25) (3x)#-(0 or 1)# (10-25: Extension No., x=1-4: Exchange line No.) Ⓒ

DAY DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINE 1-4

If an incoming call to the Exchange line 1-4 is not answered within a specified period in the Day Mode, it is possible to set the telephones other than the ringing telephone to ring.
To set the telephones to ring or not:

0#: Does not ring
1#: Rings

(10-25) (4x)#-(0 or 1)# (10-25: Extension No., x=1-4: Exchange line No.) Ⓒ

NIGHT DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINE 1-4

If an incoming call to the Exchange line 1-4 is not answered within a specified period in the Night Mode, it is possible to set the telephones other than the ringing telephone to ring.
To set the telephones to ring or not:

0#: Does not ring
1#: Rings

(10-25) (5x)#-(0 or 1)# (10-25: Extension No., x=1-4: Exchange line No.) Ⓒ

LUNCH DELAYED RING TRANSFER SETTINGS FOR EXCHANGE LINE 1-4

If an incoming call to the Exchange line 1-4 is not answered within a specified period in the Lunch Mode, it is possible to set the telephones other than the ringing telephone to ring.
To set the telephones to ring or not:

0#: Does not ring
1#: Rings

MODE 6 (Flexible Function Key Assignments)

When all of the telephone operation conditions required by the user are satisfied by the content of the eight telephone styles set in MODE 3, MODE 6 need not be set.
The following functions can be registered to FF keys to perform each function with one-touch operation. Up to 4-digit dial number can be registered to each FF key.

NOTE : To delete the input data, press FF5 key, to input "#", use FF2 key, and to input " * ", use FF1 key.

Flexible Function (FF) Key Assignments Table

Any of the following (four digits max.) can be assigned to FF keys:

FEATURE	OPERATION	REMARKS
Absence Message Setting	[71] [n] (XXXX)	n=Message Code (0-9) XXXX=Returning Time (0000-2359)
Absence Message Cancellation	[71]	
Answer to Paging	[69]	
Batch Output of Programming Data	[#97] (XXXXn)	XXXX=ID code (0000-9999) n = Output code (0-4)
BGM (On/Off)	[#53]	
Call Forward Setting (All calls)	[721] (nn)	nn=Extension No. (10-25)
Call Forward Setting (No Answer)	[725] (nn)	nn=Extension No. (10-25)
Call Forward Setting (No Answer/Busy)	[722] (nn)	nn=Extension No. (10-25)
Call Forward Setting (On Busy)	[723] (nn)	nn=Extension No. (10-25)
Call Forward Setting (Exchange Line)	[724]	
Call Forward Cancellation	[72]	
Call Forward Confirmation	[* 72]	
Call Logging	[#93]	Available only with the administrator's phone.
Call Wait	[3]	
Change ID Code of Station Lock Out	[74] (XXXXYYYY)	XXXX=Old ID Code for Station Lock Out (0000-9999) YYYY=New ID Code for Station Lock Out (0000-9999)
Direct Call Pick-up	[7 *] [nn]	nn=Extension No.
DND Setting/Cancellation	[73]	
Door Opener A	[54]	
Door Opener B	[55]	
Door Opener A/B	[53]	Available when talking through a doorphone.
Doorphone A Call	[51]	
Doorphone B Call	[52]	
Exchange Line	[88n]	n=Exchange Line Number (1-4)
Follow Me Setting	[77] (nnmm)	nn = Transfer source extension No. (10-25) mm = Transfer target extension No. (10-25)
Follow Me Cancellation	[77] (nn)	
Follow Me Cancellation from operator or administrator	[77 *] (nnmm)	
Follow Me Confirmation	[* 77]	
Follow Me Confirmation from operator	[* * 77] (nn)	nn=Extension No. (10-25)
Group Call Pick-up	[70]	
Headset Mode(Setting/Cancellation)	[#51]	
INT Call Back with CW	[6]	
Intercom call	[10] - [25]	10-25 = Extension No.
Line Group Dial	[9] or [nnn]	nnn=Group No. (811-813)
Lunch Mode (Setting/Cancellation)	[#54]	Available only with the operator's phone or administrator's phone.
Message Wait	[2]	
Message Wait Cancellation	[792]	
Message Wait Confirmation	[* 79]	
Message Wait with Call Back	[791]	
Automatic Mode Switching Cancellation (Holiday Night Mode Setting)	[#55]	Available only with the operator's phone or administrator's phone.
Day/Night Mode Switching (Day/Night)	[#52]	Available only with the operator's phone or administrator's phone.
Operator Call	[0]	
Paging (All Groups)	[60]	
Paging (Group 1)	[61]	
Paging (Group 2)	[62]	
Paging (Group 3 & External Paging)	[63]	
Programming Mode	[MEMORY ##] (ONE-TOUCH)	Available only with the administrator's phone.
Save Dial Assignment	[MEMORY 9 *]	
Save Dial Call	[MEMORY *]	
Save Dial Confirmation	[* MEMORY *]	
SSD Call	[MEMORY nn] or [MEMORY nnn]	nn or nnn=SSD No. (00-89) or (000-199)
Station Lock Out Setting/Cancellation	[74] (XXXX)	XXXX=ID Code for Station Lock Out (0000-9999)
Tone/Voice Call Switching	[1]	
Trunk Queuing	[6]	
DISA Message recording (1st message)	[* 981]	
DISA Message recording (2nd message)	[* 982]	
DISA Confirmation of Recording (1st message)	[* 971]	
DISA Confirmation of Recording (2nd message)	[* 972]	
DISA Registration of reception extension No./DISA speed-dial	[* 99] (nmm)	n = Registration code (0-9) mm = Extention Number (10-25)

NOTE [ ] : One procedure in the operation ( ) : Can not be assigned though necessary in operation

(10-25)01#-(0-9999)# (10-25: Extension No.)

FF-KEY 1 ASSIGNMENT

881

NOTE : This assignment cannnot be changed.

(10-25)02#-(0-9999)# (10-25: Extension No.)

FF-KEY 2 ASSIGNMENT

882
Clear : Press FF5 Key

NOTE : This assignment cannnot be changed. If 2 or more exchange lines are connected.

(10-25)03#-(0-9999)# (10-25: Extension No.)

FF-KEY 3 ASSIGNMENT

883
Clear : Press FF5 Key

NOTE : This assignment cannnot be changed. If 3 or more exchange lines are connected.

(10-25)04#-(0-9999)# (10-25: Extension No.)

FF-KEY 4 ASSIGNMENT

884
Clear : Press FF5 Key

NOTE : This assignment cannnot be changed. If 4 exchange lines are connected.

(10-25)05#-(0-9999)# (10-25: Extension No.)

FF-KEY 5 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

(10-25)06#-(0-9999)# (10-25: Extension No.)

FF-KEY 6 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

(10-25)07#-(0-9999)# (10-25: Extension No.)

FF-KEY 7 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

(10-25)08#-(0-9999)# (10-25: Extension No.)

FF-KEY 8 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

(10-25)09#-(0-9999)# (10-25: Extension No.)

FF-KEY 9 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

(10-25)10#-(0-9999)# (10-25: Extension No.)

FF-KEY 10 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

(10-25)11#-(0-9999)# (10-25: Extension No.)

FF-KEY 11 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

(10-25)12#-(0-9999)# (10-25: Extension No.)

FF-KEY 12 ASSIGNMENT

(0-9999)# : Dial Number
None
Clear : Press FF5 Key

MODE 7 (Call Barring Setting)

0001#-(0 or 1)#

PBX INTERNAL CALL RESTRICT (VALID FOR RESTRICTION TYPE 0)

To set whether PBX intercom calls is available or not.

0#: PBX intercom calls restricted
1#: PBX intercom calls are available

0002#-(0 or 7-32)#

MAXIMUM NUMBER OF DIGITS DIALED (VALID FOR RESTRICTION TYPE 0, 1, 2 AND 3)

To set the maximum number of digits for an outgoing call for all extensions.

0# : Dial any number of digits
7#-32# : Maximum number of digits available for an outgoing call.

0003#-(0, 1 or 2)#

DIALING RESTRICTION DURING INCOMING CALLS (VALID FOR RESTRICTION TYPE 0, 1, 2 AND 3)

Dial signal cannot be sent to incoming Exchange lines.

0#: Dialing during incoming calls not restricted
1#: According to programmed TRS restrictions
2#: Dialing during conversation restricted

0004#-(0 or 1)#

AND * KEYS DIAL RESTRICT (VALID FOR RESTRICTION TYPE 1, 2 AND 3)

Pressing the # or * key within 6 digits will disconnect the line.

0#: Not restricted
1#: # and * dial restricted

0005#-(0 or 1)#

STATION LOCKOUT ID CODE DISPLAY

Depending on the ID code setting, the ID code will or will not display on the administrator's phone.

0#: ID code not displayed
1#: ID code displayed

0006#-(0 or 1)#

STATION LOCKOUT TYPE

To set call barring class type of station lockout.

0#: Type 0 (Cannot access Exchange line except emergency call)
1#: Type 1 (Can not access long distance call)

0007#-(00-99)#

SSD RESTRICTIONS OVERRIDE NUMBER

Exchange line calls from SSD numbers are not restricted even on telephones set for restriction.
Set SSD number so that calls from SSD number or more (up to 89 or 199 for 3-digit system) can be made.
Example) If parameter is set to 60, calls from SSD code 60-89 (or 160-199) can be made.

(00-99)#: SSD code
00

0008#-(00-99)#

PAGER SSD RESTRICTIONS OVERRIDE NUMBER

Exchange line calls from pager SSD numbers are not restricted even on telephones set for restriction. However, the number of digits of the telephone numbers (pager access number and the telephone numbers of the other party and yours) registered to the pager SSD is restricted by 0009# pager SSD settings. The restrictions on the number of digits set in the MODE7 0002# will be ignored.
Set SSD number from which to 89 will be the pager SSD numbers.

<Example>
If SSD number is set to 60, the SSD numbers 60-89 (or 160-199) will be the pager SSD numbers.

(00-99 or 000-199)#: Pager SSD code
None

About Pagers
When calling a pager, the pager may not be able to be called if the number of dial digits is longer than the regular call, and dial restriction is set in MODE 7, address 0002# "MAXIMUM NUMBER OF DIGITS DIALED". Two settings are provided in order to solve this problem, address 0008# "PAGER SSD RESTRICTIONS OVERRIDE NUMBER" and address 0009# "NUMBER OF DIGITS FOR PAGER CALL".

0009#-(0-99)#

NUMBER OF DIGITS FOR PAGER CALL

Sets the number of digits for the pager call set in the MODE 7 0008#.

0-99#: Number of digits
0

0010#-(1-4)# Ⓜ

ENHANCED TRS

This setting can enhance restrictions in order to prevent TRS omissions. Here, set whether or not to enhance TRS omissions.
If there is nobody omitting TRS, do not enhance TRS as doing so will sacrifice convenience.
When ENHANCED TRS is set, the transmission path is not connected until the restrictions are fixed for each transmission restriction type.

1#: Type 0 (Intercom calls only)
2#: Type 1 (Incoming calls only)
3#: Type 2 (Local calls only)
4#: Type 3 (Long distance calls, restricted by area)

NOTE : • See MODE7 "Program settings for each service type Table".
• Two or more settings can be assigned.

01(01-16)#-(0-999999)# (01-16: Data No.)

6-DIGIT TRS TYPE 1 DATA1-16 (VALID FOR RESTRICTION TYPE 1 AND 2) (DENY TABLE 1)

Dialing is restricted if the maximum 6-digit number set here matches the number at start of dialing.
Registering toll service codes allows you to restrict toll services in restriction class type 1 and 2.

0-999999: Dial Number
None
Clear : Press FF5 Key

02(01-16)#-(0-999999)# (01-16: Data No.)

6-DIGIT TRS TYPE 2 DATA1-16 (VALID FOR RESTRICTION TYPES 1, 2 AND 3) (DENY TABLE 2)

Dialing is restricted if the maximum 6-digit number set here matches the number at start of dialing.
Registering international telephone access codes allows you to prohibit international calls by in restriction types 1, 2 and 3.

0-999999: Dial Number
00 (DATA1)
100 (DATA2)
155 (DATA3)
010 (DATA4)
None (DATA5-16)
Clear : Press FF5 Key

03(01-16)#-(0-999999)# (01-16: Data No.)

CANCELLING 6-DIGIT RESTRICTION TYPE 1 DATA 1-16 (VALID FOR RESTRICTION TYPES 2)(ALLOW TABLE 1)

Restrictions on dialing are canceled if the maximum 6-digit number set here matches the number at start of dialing.
This setting allows you to enable long distance call to specific areas in restriction type 2.

0-999999: Dial Number
None
Clear : Press FF5 Key

04(01-16)#-(0-999999)# (01-16: Data No.)

CANCELLING 6-DIGIT RESTRICTION TYPE 2 DATA 1-16 (VALID FOR RESTRICTION TYPE 3) (ALLOW TABLE 2)

Restrictions on dialing are canceled if the maximum 6-digit number set here matches the number at start of dialing.
This setting allows you to enable international calls to specific countries in restriction type 3.

0-999999: Dial Number
None
Clear : Press FF5 Key

09(01-16)#-(0-999999)# (01-16: Data No.)

EMERGENCY CALL RESTRICTION OVERRIDE DATA 1-16 (VALID FOR RESTRICTION TYPE 0, 1, 2 AND 3 (ALLOW TABLE 3)

Restrictions on dialing are cancelled if the maximum 6-digit number set here matches the number of dialing.
*Exceed dialing data are ignored not send out through the Exchange line.

0-999999: Dial Number
999 (DATA1)
112 (DATA2)
None (DATA3-16)
Clear : Press FF5 Key

When all of the telephone operation conditions required by the user are satisfied by the content of the eight telephone styles set in MODE 3, the following addresses need not be set:

- (10-25)01#-(0 or 1)# "SSD CALL BARRING OVERRIDE"
- (10-25)1n#-(001-4)# "DAY RESTRICTION TYPES EXCHANGE LINE 1-4"
- (10-25)2n#-(0 or 1)# "NIGHT RESTRICTION TYPES EXCHANGE LINE 1-4"

(10-25)01#-(0 or 1)# (10-25: Extension No.) Ⓒ

SSD CALL BARRING OVERRIDE

Sets whether or not to override SSD toll restriction.

0#: Call Barring valid
1#: Call Barring overriden

NOTES : • When restriction is overridden, the setting conforms to the content of each toll restriction class.
• See MODE 7 "Program settings for each service type Table".

(10-25)1x#-(0, 1-4)# (10-25: Extension No., x=1-4: Exchange line No.) Ⓒ

DAY RESTRICTION TYPES EXCHANGE LINE 1-4

Sets which type fall under for day mode.

0#: Type 0 (Intercom calls only)
1#: Type 1 (Incoming calls only)
2#: Type 2 (Local calls only)
3#: Type 3 (Long distance calls, restricted by area)
4#: Type 4 (No restrictions)

NOTE : See MODE 7 "Program settings for each service type Table".

(10-25)2x#-(0, 1-4)# (10-25: Extension No., x=1-4: Exchange line No.) Ⓒ

NIGHT RESTRICTION TYPES EXCHANGE LINE 1-4

Sets which type fall under for night mode.

0#: Type 0 (Intercom calls only)
1#: Type 1 (Incoming calls only)
2#: Type 2 (Local calls only)
3#: Type 3 (Long distance calls, restricted by area)
4#: Type 4 (No restrictions)

NOTE : See MODE 7 "Program settings for each service type Table".

70nn#-(0 or 1)# (nn=00-99: 2-digit number to be restricted) Ⓒ

2-DIGIT RESTRICTION (VALID FOR RESTRICTION TYPES 1, 2)

Dialing is restricted if the maximum 2-digit number (00 to 99) set here matches the number at start of dialing. In the initial setting (1#), prohibiting 00-09 allows you to prohibit trunk transmissions in restriction types 1 and 2.

0#: Not restricted (10-99)
1#: Restricted (00-09)

8nn1#-(0-9999999)# (nn=01-16: Verified ID code group numbers)

VERIFIED ID CODE

Calls from restricted telephone can be made by entering the verified ID code to temporarily release the restriction.
16 ID code with up to 7 digits can be set.
To set the verified code:

(0-9999998)#: Verified ID code number
9999999 : Clear
None

8nn2#-(0 or 1)# (nn=01-16: Verified ID code group numbers)

CANCELLING SSD RESTRICTION BY VERIFIED ID CODE

When calls from the restricted telephone are made by entering the verified ID code, the calls can be made using SSD.
To set the system so that calls per verified ID code group using SSD are overridden or not.

0#: Accoding to programmed call barring class
1#: Override

NOTE : With the MODE 7 0007# setting, the SSD number for overriding SSD must be set.

8nn3#-(0,1-4)# (nn=01-16: Verified ID code group numbers)

SERVICE TYPE SETTING WITH VERIFIED ID CODE

Service type can be set to the calls from restricted telephones by entering the verified ID code.
Set each verified ID code group to one of the following types.

0#: Type 0 (Intercom calls only)
1#: Type 1 (Incoming calls only)
2#: Type 2 (Local calls only)
3#: Type 3 (Long distance calls, restricted by area)
4#: Type 4 (No restrictions)

NOTE : See MODE 7 "Program settings for each service type Table".

Program Settings for each service type table

Service Type	Valid program settings											Restrictions	Initial status
	PBX internal line	Incoming line	✳ #	2-digit Restriction	6-digit restriction type 1	6-digit restriction type 2	Cancelling 6-digit restriction type 1	Cancelling 6-digit restriction type 2	Number of digits	Cancelling 6-digit restriction type 3	Cancelling SSD restriction		
Type 0	Valid	Valid	—	—	—	—	—	—	Valid	Valid	—	Exchange line calls are prohibited	Non-emergency calls are prohibited.
Type 1	—	Valid	Valid	Valid	Valid	Valid	—	—	Valid	Valid	Valid	Long distance calls are prohibited.	Calls beginning with 0 are prohibited.
Type 2	—	Valid	Valid	Valid	Valid	Valid	Valid	—	Valid	Valid	Valid	Specific long distance calls are permitted.	Calls beginning with 0 are prohibited.
Type 3	—	Valid	Valid	—	—	Valid	—	Valid	Valid	Valid	Valid	International dialing is prohibited.	00, 100, 155, 010 calls are prohibited.
Type 4	—	—	—	—	—	—	—	—	—	—	—	No call restrictions	—
Purpose	Allowable items of dial prohibited terminal	Cancelling restrictions	Prohibition of special services	Long distance call prohibition	Toll services prohibition	International dialing prohibition	Specific long distance call permission	Special international call permission		Emergency dial permission (transmission suspended)	Specific party registered in SSD permission		
Intial	Enabled	Restricted	Prohibited	00 - 09	—	00, 100, 155, 010	—	—	None	999, 112	None		

MODE 8 (Communication Parameter Setting)

For Call Logging/on site programming/remote programming.

0001#-(0 or 1)#

OUTPUT MODE

Data of outgoing/incoming calls can be output to Call Logger (or printer).
To set to output only outgoing data or both outgoing and incoming data:

0#: Outgoing data only
1#: Outgoing and incoming data

0002#-(0 or 1)#

TITLE PRINTING

Titles can be output to printer.
To set to output titles or not:

0#: No output
1#: Titles every 60 data

0003#-(0 or 1)#

OUTPUT DIAL

Data of all dial calls can be output to printer. Only the data of specified dial calls can be also output to printer.
To set to output all dial calls or only the specified dial call:

0#: All dial calls
1#: Specified dial calls only

REFERENCE : See MODE 8 01(01-16)#.

0004#-(0 or 1)#

PBX INTERCOM CALL

Data of PBX intercom call can be output to printer.
To set to output the data or not:

0#: Does not output data
1#: Outputs data

0005#-(0 or 1)#

PRINTER OUTPUT WHEN EXCHANGE LINE CALL ON HOLD ANSWERED

The data including hold time when answering the Exchange line call on hold can be output to printer.
When set to “no output”, the total time from when the line is first acquired to the end of the final call is output.
When set to “output”, the time is output at each hold response.
To set to output the data or not:

0#: Does not output data
1#: Outputs data

0006#-(0 or 1)#

PRINTER OUTPUT WHEN ACCOUNT CODE ENTERED

The data of calls made by entering the account code can be output to printer, immediatery or later the data being put together by account code.
To set to output the data or not:

0#: Output later (At finish a call)
1#: Output immediately

01nn#(0-9999)#

(nn=01-16: Out Dial No.)

PRINTER OUTPUT OF SPECIFIED INITIATING DIAL NUMBER

Only the data of calls made by specified dial can be output to printer. This function is valid only when “Specified dial calls only” has been set in the MODE 8 0003#.
16 types with up to 4 digits can be set.
To set the initiating dial number:

(0-9999)#: Dial number
None
Clear : Press FF5 Key

NOTE : “ * ” or “ # ” can not be set.

0201#-(33-254)#

SPECIAL CHARACTER "Ä" CONVERSION CODE

Uses the special character in names or messages when inputting or outputting during programming using a personal computer. Select and set one of character codes 33 to 254 (excluding the control code) in order to use special characters.
Set the character code when special character "Ä" is input.

(33-254)#: Setting character code
158# : Character "Ä" code for IBM computer

NOTE : Special characters according to character codes 128 onwards cannot be input during maintenance when the data length is set to 7 bits (0#) in the DATA LENGTH for REMOTE PROGRAMMING setting (1103#).

0202#-(33-254)#

SPECIAL CHARACTER "Ö" CONVERSION CODE

See 0201# "SPECIAL CHARACTER "Ä" CONVERSION CODE" for detailed information.

(33-254)#: Setting character code
153# : Character "Ö" code for IBM computer

0203#-(33-254)#

SPECIAL CHARACTER "Ü" CONVERSION CODE

See 0201# "SPECIAL CHARACTER "Ä" CONVERSION CODE" for detailed information.

(33-254)#: Setting character code
154# : Character "Ü" code for IBM computer

0204#-(33-254)#

SPECIAL CHARACTER "Ç" CONVERSION CODE

See 0201# "SPECIAL CHARACTER "Ä" CONVERSION CODE" for detailed information.

(33-254)#: Setting character code
128# : Character "Ç" code for IBM computer

0205#-(33-254)#

SPECIAL CHARACTER "Ñ" CONVERSION CODE

See 0201# "SPECIAL CHARACTER "Ä" CONVERSION CODE" for detailed information.

(33-254)#: Setting character code
165# : Character "Ñ" code for IBM computer

0206#-(33-254)#

SPECIAL CHARACTER "¿" CONVERSION CODE

See 0201# "SPECIAL CHARACTER "Ä" CONVERSION CODE" for detailed information.

(33-254)#: Setting character code
168# : Character "¿" code for IBM computer

0207#-(33-254)#

SPECIAL CHARACTER "¡" CONVERSION CODE

See 0201# "SPECIAL CHARACTER "Ä" CONVERSION CODE" for detailed information.

(33-254)#: Setting character code
173# : Character "¡" code for IBM computer

0208#-(33-254)#

SPECIAL CHARACTER "Æ" CONVERSION CODE

See 0201# "SPECIAL CHARACTER "Ä" CONVERSION CODE" for detailed information.

(33-254)#: Setting character code
146# : Character "Æ" code for IBM computer

0209#-(33-254)#

SPECIAL CHARACTER "Œ" CONVERSION CODE

See 0201# "SPECIAL CHARACTER "Ä" CONVERSION CODE" for detailed information.

(33-254)#: Setting character code
64# : Character "Œ" code for IBM computer

0210#-(33-254)#

SPECIAL CHARACTER "Å" CONVERSION CODE

See 0201# "SPECIAL CHARACTER "Ä" CONVERSION CODE" for detailed information.

(33-254)#: Setting character code
143# : Character "Å" code for IBM computer

1001#-(0 or 1)#

BAUD RATE for CALL LOGGING or PROGRAMMING DATA TERMINAL

0#: 4800 bps
1#: 1200 bps

1002#-(0 or 1)#

STOP BIT LENGTH for CALL LOGGING or PROGRAMMING DATA TERMINAL

0#: 1 bit
1#: 2 bits

1003#-(0 or 1)#

DATA LENGTH for CALL LOGGING or PROGRAMMING DATA TERMINAL

0#: 7 bits
1#: 8 bits

1004#-(0 or 1)#

PARITY CHECK for CALL LOGGING or PROGRAMMING DATA TERMINAL

0#: No parity check
1#: Odd number parity
2#: Even number parity

1102#-(0 or 1)#

STOP BIT for REMOTE PROGRAMMING

Can set signal specifications for DISA modem serial signals during remote programming.

0#: 1 bit
1#: 2 bits

NOTE : The remote transmission speed is fixed at 300 bps.

1103#-(0 or 1)#

DATA LENGTH for REMOTE PROGRAMMING

Can set signal specifications for DISA modem serial signals during remote programming.

0#: 7 bits
1#: 8 bits

1104#-(0 or 1)#

PARITY for REMOTE PROGRAMMING

Can set signal specifications for DISA modem serial signals during remote programming.

0#: No parity check
1#: Odd number parity
2#: Even number parity

MODE 10 (LCR Function Setting)

0xxxx#-(0-4)# Ⓜ

LOOK UP TABLE

Set the look-up table so the system knows to select BT (British Telecom) or any of NCCs when dialling a particular destination.

0#: BT
1#: NCC1 (Mercury)
2#: NCC2
3#: NCC3
4#: NCC4

Telephone No.	Initial	Telephone No.	Initial
00000-01425	NCC1	*04590-04599	BT
*01426	BT	04600-04999	NCC1
01427-01458	NCC1	*05000-05009	BT
*01459	BT	05010-06449	NCC1
01460-01892	NCC1	06450-06459	BT
01893	BT	06460-07999	NCC1
01894-01940	NCC1	*08000-08009	BT
*01941	BT	08010-08929	NCC1
01942-03449	NCC1	*08930-08939	BT
*03450-03459	BT	08940-09409	NCC1
03460-04259	NCC1	09410-09419	BT
04260-04269	BT	09420-09999	NCC1
04270-04589	NCC1		

NOTE : • Multiple Settings Possible.

• Phone Nos. can be set at one setting.
Example: When setting phone Nos. 05000 to 05999.

Enter [0][5][#] (to the 2nd digit). 000 to 999 are automatically added from the 3rd digit of the phone No. onwards.

Even when three (or four) digits of the phone No. are entered, 00 to 99 (or, 0 to 9) are automatically added from the 4th (or, 5th) digit of the phone No. onwards.

• Only the BT can be set to phone Nos. marked by an " * ".

1001#-(0-1)#

LCR FUNCTION

In default programme, the LCR is set to off.
If LCR is required, change programme to enable.

0#: Disable
1#: Enable

201m#-(Max. 16 digits code)# (m=1-8: Authorization code type)

AUTHORIZATION CODE (NCC1)

Store the authorization codes supplied by NCC1 (Mercury).

Max. 16 digits
None

202m#-(Max. 16 digits code)# (m=1-8: Authorization code type)

AUTHORIZATION CODE (NCC2)

Store the authorization codes supplied by NCC2.

Max. 16 digits
None

203m#-(Max. 16 digits code)# (m=1-8: Authorization code type)

AUTHORIZATION CODE (NCC3)

Store the authorization codes supplied by NCC3.

Max. 16 digits
None

204m#-(Max. 16 digits code)# (m=1-8: Authorization code type)

AUTHORIZATION CODE (NCC4)

Store the authorization codes supplied by NCC4.

Max. 16 digits
None

211m#-(0 to 2)# (m=1-8: Authorization code type)

SETTING THE OPTIONAL FEATURES (NCC1)

The user can select to have a call serial number or extension number shown for each call on the itemized NCC1 (Mercury) bill.
Select either facility if desired for each authorization code.

0#: Not used
1#: Call Serial No.
2#: Internal Itemized Bill (Extension No.)

212m#-(0 to 2)# (m=1-8: Authorization code type)

SETTING THE OPTIONAL FEATURES (NCC2)

The user can select to have a call serial number or extension number shown for each call on the itemized NCC2 bill.
Select either facility if desired for each authorization code.

0#: Not used
1#: Call Serial No.
2#: Internal Itemized Bill (Extension No.)

213m#-(0 to 2)# (m=1-8: Authorization code type)

SETTING THE OPTIONAL FEATURES (NCC3)

The user can select to have a call serial number or extension number shown for each call on the itemized NCC3 bill.
Select either facility if desired for each authorization code.

0#: Not used
1#: Call Serial No.
2#: Internal Itemized Bill (Extension No.)

214m#-(0 to 2)# (m=1-8: Authorization code type)

SETTING THE OPTIONAL FEATURES (NCC4)

The user can select to have a call serial number or extension number shown for each call on the itemized NCC4 bill.
Select either facility if desired for each authorization code.

0#: Not used
1#: Call Serial No.
2#: Internal Itemized Bill (Extension No.)

221(1-4)#-m# (1-4: Exchange line No. m=0: Disable use of LCR feature m=1-8: Authorization code type)

SELECTION OF AUTHORIZATION CODE FOR EACH EXCHANGE LINE TO USE LCR FEATURE (NCC1)

The authorization code must be assigned to each exchange line to use the LCR feature.
Change programme as desired by inputting authorization code number (1-8).

222(1-4)#-m# (1-4: Exchange line No. m=0: Disable use of LCR feature m=1-8: Authorization code type)

SELECTION OF AUTHORIZATION CODE FOR EACH EXCHANGE LINE TO USE LCR FEATURE (NCC2)

The authorization code must be assigned to each exchange line to use the LCR feature. Change programme as desired by inputting authorization code number (1-8).

223(1-4)#-m# (1-4: Exchange line No. m=0: Disable use of LCR feature m=1-8: Authorization code type)

SELECTION OF AUTHORIZATION CODE FOR EACH EXCHANGE LINE TO USE LCR FEATURE (NCC3)

The authorization code must be assigned to each exchange line to use the LCR feature. Change programme as desired by inputting authorization code number (1-8).

224(1-4)#-m# (1-4: Exchange line No. m=0: Disable use of LCR feature m=1-8: Authorization code type)

SELECTION OF AUTHORIZATION CODE FOR EACH EXCHANGE LINE TO USE LCR FEATURE (NCC4)

The authorization code must be assigned to each exchange line to use the LCR feature. Change programme as desired by inputting authorization code number (1-8).

3000#-(Max.16 digit BT Access code)#

BT ACCESS CODE

Current BT access code 121 is stored by default programming. Programming can be changed if access code is changed.

BT access code: 121

3001#-(Max.16 digit NCC1 Access code)#

NCC1 ACCESS CODE

Current MCL access code 131 is stored by default programming. This programme can be changed if NCC1 assigns a new access code.

MCL access code: 131

3002#-(Max.16 digit NCC2 Access code)#

NCC2 ACCESS CODE

Assign access number for NCC2.

NCC2 access code: Clear

3003#-(Max.16 digit NCC3 Access code)#

NCC3 ACCESS CODE

Assign access number for NCC3.

NCC3 access code: Clear

3004#-(Max.16 digit NCC4 Access code)#

NCC4 ACCESS CODE

Assign access number for NCC4.

NCC4 access code: Clear

3010#-(0-9)#

ACCUMULATION DIAL DESIGNATION

Assign accumulation dial (0-9).

Accumulation: 0

301x#-(nnnnn)# (x=1-8: Restriction Dial No. nnnnn=00000-99999: 5digits No.)

NCC1 RESTRICTION DIAL

Special codes such as 999 and 112 numbers must not be sent via NCC1 and should be restricted.
3011 (for dialling “999”) and 3012 (for dialling “112”) are fixed.

999# : (Dial No.1)
112# : (Dial No.2)
Restriction dial: Clear (Dial No.3-8)

302x#-(nnnnn)# (x=1-8: Restriction Dial No. nnnnn=00000-99999: 5digits No.)

NCC2 RESTRICTION DIAL

Special codes such as 999 and 112 numbers must not be sent via NCC2 and should be restricted.
3021 (for dialling “999”) and 3022 (for dialling “112”) are fixed.

999# : (Dial No.1)
112# : (Dial No.2)
Restriction dial: Clear (Dial No.3-8)

303x#-(nnnnn)# (x=1-8: Restriction Dial No. nnnnn=00000-99999: 5digits No.)

NCC3 RESTRICTION DIAL

Special codes such as 999 and 112 numbers must not be sent via NCC3 and should be restricted.
3031 (for dialling “999”) and 3032 (for dialling “112”) are fixed.

999# : (Dial No.1)
112# : (Dial No.2)
Restriction dial: Clear (Dial No.3-8)

304x#-(nnnnn)# (x=1-8: Restriction Dial No. nnnnn=00000-99999: 5digits No.)

NCC4 Restriction Dial

Special codes such as 999 and 112 numbers must not be sent via NCC4 and should be restricted.
3041 (for dialling “999”) and 3042 (for dialling “112”) are fixed.

999# : (Dial No.1)
112# : (Dial No.2)
Restriction dial: Clear (Dial No.3-8)

4001#-(1 to 9)

PAUSE TIMER (NCC1)

It is possible to insert a pause after the NCC1 access code, to wait for a dial tone from the NCC1 switch.

1#: 1 second
2#: 2 seconds
3#: 3 seconds
4#: 4 seconds
5#: 5 seconds
6#: 6 seconds
7#: 7 seconds
8#: 8 seconds
9#: 9 seconds

4002#-(1 to 9)

PAUSE TIMER (NCC2)

It is possible to insert a pause after the NCC2 access code, to wait for a dial tone from the NCC2 switch.

1#: 1 second
2#: 2 seconds
3#: 3 seconds
4#: 4 seconds
5#: 5 seconds
6#: 6 seconds
7#: 7 seconds
8#: 8 seconds
9#: 9 seconds

4003#-(1 to 9)

PAUSE TIMER (NCC3)

It is possible to insert a pause after the NCC3 access code, to wait for a dial tone from the NCC3 switch.

1#: 1 second
2#: 2 seconds
3#: 3 seconds
4#: 4 seconds
5#: 5 seconds
6#: 6 seconds
7#: 7 seconds
8#: 8 seconds
9#: 9 seconds

4004#-(1 to 9)

PAUSE TIMER (NCC4)

It is possible to insert a pause after the NCC4 access code, to wait for a dial tone from the NCC4 switch.

1#: 1 second
2#: 2 seconds
3#: 3 seconds
4#: 4 seconds
5#: 5 seconds
6#: 6 seconds
7#: 7 seconds
8#: 8 seconds
9#: 9 seconds

401n#-(0 or 1)#

(n=1-4: correspond to NCC1-4)

AUTOMATIC MF SIGNAL CONVERSION

This specify whether the MF signal conversion for dialling out to NCC. It is useful when the system is routed to the system X local exchanger by Lookup table which does not accept MF signal when “132” is sent out in Dial Pulse.

0#: No convert
1#: Convert

5000#-(4 digits password)#

(4 digits passeord: 0000-9999)

PASSWORD TO ACCESS MODE 10

It is possible to set a new password to allow access to mode 10 programming.

NOTE : Since the current password is not displayed if you forget your password, a complete system reset and reprogramming must be performed.

0000
0001-9999

MEMORANDUM

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