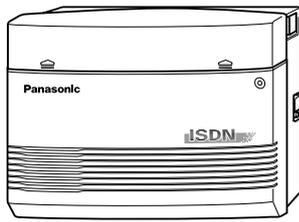


Panasonic

Digital Super Hybrid System Features Guide



Model No. **KX-TD612E**



Thank you for purchasing a Panasonic Digital Super Hybrid System, Model KX-TD612.
Please read this manual before connecting the Digital Super Hybrid System.

Introduction

About this Features Guide

This Features Guide describes every basic, optional, and programmable features in alphabetical order. It also provides information about the conditions, connection references, programming required, related features, and operation for every feature.

Terms used in this Features Guide

- The Digital Proprietary Telephone is abbreviated as "DPT".
- The Single Line Telephone is abbreviated as "SLT".
- "Console" is a generic designation of Digital DSS Console (KX-T7240/KX-T7440) and Digital Attendant Console (KX-T7441).

Installation Manual References

Lists any additional hardware required to use the feature.
Refer to "Installation" section in the *Installation Manual* for detailed information.

Programming Guide References

The related and required programming titles are noted for your reference.
System Programming should be done with a PC.
Refer to "System Programming" section in the *Installation Manual* for detailed information.
Station Programming is individual programming executed by each Digital Proprietary Telephone (DPT) user at his or her own DPT. They can customise their DPTs based on their personal needs.
Refer to "Station Programming" section in the *User Manual* for detailed information.

Features Guide References

The related feature titles described in this *Features Guide* are noted for your reference.

User Manual References

The operation required to implement the feature is noted for your reference.
Refer to "Station Features and Operation" section in the *User Manual* for detailed information.

About the other manuals

Along with this Features Guide, the following manuals are available to help you install, program, and use the KX-TD612 system:

Installation Manual

Provides instructions for installing the hardware.

Programming Guide

Provides programming instructions for a digital proprietary telephone.

User Manual

Designed for users of Digital Super Hybrid System, KX-TD612.

The focus is Digital Proprietary Telephones (DPTs), Digital DSS Consoles, Single Line Telephones (SLTs) and their features.

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Section 1
General Features

1.1 General Features

Absent Message Capability

Description

Once set this option provides a message, on the display of the calling extension, to show the reason for the called extension's absence. Nine messages can be programmed as desired which are available for every extension user. There are 6 pre-programmed default messages. Setting or cancelling a message can be done by individual extension users but only callers with a display telephone can receive the message.

Conditions

- Six default messages, which are changeable, are shown below. The "%" means a parameter to be entered when assigning a message at individual extension.
 - a) Will Return Soon
 - b) Gone Home
 - c) At Ext %%% (extension number)
 - d) Back at %% : %% (hour : minute)
 - e) Out until %%/%% (date)
 - f) In a Meeting
- An extension user can select only 1 message at a time. The selected message is displayed every time the user goes off-hook.
- If `Voice Msg Full` is displayed because the total recording time of your Built-in Voice Message resource becomes less than 5 minutes, none of the absent messages will be displayed on the calling extension when going off-hook, even if you have set an absent message.

Programming Guide References

- [008] Absent Messages
- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.5.4 Showing an Absent Message on the Caller's Telephone Display (Absent Message Capability)

Account Code Entry

Description

An account code is used to identify incoming and outgoing outside for accounting and billing purposes. The account code is appended to the Station Message Detail Recording (SMDR) call record. For incoming outside call, account codes are optional. For outgoing outside call there are 3 modes available to enter an account code: Verified — All Calls mode; Verified — Toll Restriction Override mode; and Option mode. One mode is selected for each extension on a Class of Service basis.

In Verified — All Calls mode, the user must always enter a pre-assigned account code when making any of the following calls unless it has previously been stored in memory:

- Call Forwarding — to CO Line
- Line Access, Automatic
- Line Access, CO Line Group
- Line Access, Direct
- Line Access, Individual
- Notebook Function
- One-Touch Dialling
- Pickup Dialling
- Redial, Saved Number
- Station Speed Dialling
- System Speed Dialling

In Verified — Toll Restriction Override mode, the user can enter a pre-assigned account code only when the user needs to override toll restriction.

In Option mode, the user can enter any account code when needed.

Conditions

- An account code can be stored into Memory Dialling (System/Station Speed Dialling; Notebook Function; One-Touch Dialling; Pickup Dialling; Call Forwarding — to CO Line).
- The Account button may be used in place of the feature number. A flexible button on the digital proprietary telephone set can be programmed as the Account button.
- If the account code stored in location 01 of the programming table is used, the dialled number is not printed out to SMDR (Private Call).
- It is possible to select whether the account code is printed out or not by the SMDR. If it is not printed out, it is shown in dots.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [105] Account Codes
- [508] Account Code Entry Mode
- [990] System Additional Information

Features Guide References

- Toll Restriction Override by Account Code Entry

User Manual References

- 2.2.5 Calling without Restrictions
- 4.1.3 Customising the Buttons
- 4.1.4 Charge Fee Management [Pre-assigned extension only]

Alert Indication

Description

If the following situations occur, the pre-warning indication is displayed on the digital proprietary telephone of Operator 1.

Memory: When the system finds the wrong system data, the indication `System Data Err 1` is displayed.

Printer: When the paper of the printer for SMDR runs out or the printer is out-of-service, the indication `Check Printer` is displayed. Check the printer.

Built-in Voice Message resource: When the rest of the total recording time of the assigned BV resource becomes less than 5 minutes, `Voice Msg Full` is displayed. (If the extension is assigned to Jack 1-1, the indication of both resource 1 and 2 will be displayed.)

Conditions

None

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

Not Applicable

Alternate Calling — Ring/Voice

Description

This system offers 2 methods of Intercom Calling: Ring-Calling or Voice-Calling. Ring-Calling informs the called party of an incoming call with a ring tone, while the Voice-Calling uses the calling party's voice. The called extension user, if a digital proprietary telephone, can select tone or voice calling. If the user selects Voice-Calling, the calling party can talk to the user immediately after confirmation tone. The calling extension user is able to change the calling method pre-selected once at a time by the called extension by pressing *; Ring-Calling can be switched to Voice-Calling, and vice versa. This operation is available for both proprietary and single line telephone users during calling.

Conditions

Single line telephone users can only receive Ring-Calling call.

Programming Guide References

No programming required.

Features Guide References

- Handsfree Answerback

User Manual References

- 2.2.6 Alternating the Calling Method (Alternate Calling — Ring/Voice)
- 4.1.2 Initial Settings

Answering, Direct CO Line

Description

Allows the digital proprietary telephone user to answer an incoming call by simply pressing the appropriate CO button without lifting the handset or pressing the SP-PHONE button. The user can specify the line to be answered when multiple incoming lines are ringing.

Conditions

None

Programming Guide References

No programming required.

Features Guide References

- CO Line Connection Assignment

User Manual References

- 2.3.1 Answering Calls

Automatic Adjust Time

Description

The system synchronises the time with the standard time when the first outgoing call is made through ISDN line after 3 o'clock each morning.

Conditions

- If the Date and Time setting is programmed, after synchronising the time, the programmed time is valid until the first outgoing call is made after the 3 o'clock of the next morning.
- The full date (day/month/year) and local time (hour:minutes) are captured by the system from the network.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

Not Applicable

Automatic Callback Busy (Camp-On)

Description

If the line is busy when a call is made, callback ringing will inform the caller when the line becomes free.

Automatic Callback — Extension

When the caller answers the callback ringing, other extension's number is automatically dialed.

Automatic Callback — CO Line

When the caller answers the callback ringing, the line is automatically selected to allow the user to make an outside call.

Conditions

- If the callback ringing is not answered in 4 rings (within 10 seconds) the callback is cancelled.
- More than 1 extension user can set this function for the same extension or CO line.

Programming Guide References

- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.2.4 When the Dialed Line is Busy or There is No Answer

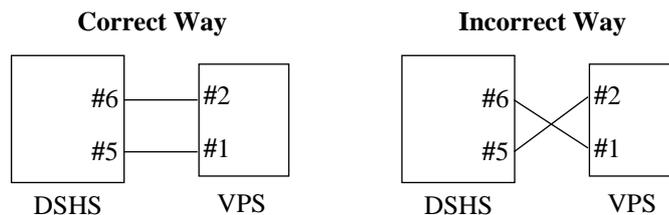
Automatic Configuration*1

Description

The system sends the VPS data which contains the extension number configuration information and the VPS automatically creates mailboxes with this data (Quick Setup). Time and date information is also sent to the Voice Processing System (VPS), so that the VPS and PBX have the same time and date.

Conditions

- Automatic Configuration should be executed:
 - 1) after extension numbers have been set ([003] Extension Number Set)
 - 2) after Voice Mail Integration for Digital Proprietary Telephones has been set ([126] Voice Mail Number Assignment)
 - 3) after the time has been set ([000] Date and Time Set)
 The order of 1) 2) 3) does not matter.
- Automatic Configuration can be executed from the VPS using DIP-switch initialisation or Personal Computer (PC) with VT100 emulation software.
(When you execute using PC with VT100 emulation software and choose the type of PBX, select the "KX-TD612" if it is on the list. If not, select the "KX-TD816/KX-TD1232" instead.)
- The data is transmitted to the VPS on the lowest jack port.
- If 2 or more lines are connected with the VPS, the port(s) with lower number(s) on the system need to be connected to one(s) with lower number(s) on the VPS.
<Example>



Programming Guide References

No programming required.

Features Guide References

- Voice Mail Integration for Digital Proprietary Telephones

*1 Available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration).

User Manual References

Not Applicable

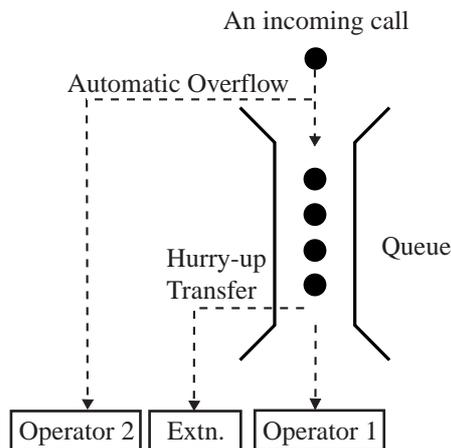
Automatic Overflow and Hurry-Up Transfer

Description

When Operator 1 is busy and the outside call reaches the Operator 1 directly, the incoming call can be waited until the waiting queue is over assigned number. When the incoming call is over assigned number, the last call will be transferred to the Operator 2.

(Automatic Overflow)

Operator 1 can refer the waiting queue with the indicator of the Hurry-Up button, and transfer the first waiting call to the pre-assigned extension with the Hurry-Up button. (Hurry-Up Transfer)



Conditions

- Automatic Overflow does not function in the following cases;
 - a) The waiting queue is set "0."
 - b) Operator 2 is not set.
 - c) Operator 1 belongs to a Station Hunting Group.
- Hurry-Up Transfer does not function in the following cases;
 - a) The waiting queue is set "0."
 - b) Hurry-Up Button is not assigned.
 - c) Operator 1 belongs to a Station Hunting Group.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [129] Operator Queue

Features Guide References

- Operator

User Manual References

- 3.2.1 Forwarding a Waiting Call (Automatic Overflow/Hurry-up Transfer)
- 4.1.3 Customising the Buttons

Automatic Station Release

Description

After going off-hook, if an extension user fails to dial any digits within a specified time period, the user will be disconnected from the line after reorder tone is sent. To get a line again, the user must go back on-hook and then off-hook.

Conditions

This function works in the following cases:

When making an intercom call

- 1) The first digit has not been dialed within 10 seconds.
- 2) After a digit is dialed, the next one is not dialed within 10 seconds (Intercom call only).

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

Not Applicable

Background Music (BGM)

Description

Allows the digital proprietary telephone user to listen to background music from the monitor speaker on the telephone.

Conditions

- The system has an external music jack. It is required to connect a user-supplied music source. One source can be connected to the system.
- It is required to select a music source used for BGM by System Programming.
- The BGM is interrupted while off-hooked.

Installation Manual References

- 2.4.8 External Music Source Connection

Programming Guide References

- [803] Music Source Use

Features Guide References

- Background Music (BGM) — External
- Music on Hold

User Manual References

- 2.7.10 Turning on the Background Music

Background Music (BGM) — External

Description

Background music (BGM) can be broadcasted in your office through external pager. The BGM can be turned on and off by operator.

Conditions

- It is required to connect an external pager and an external music source. These are user-supplied items. One pager and 1 external music source can be connected to the system.
- The pager can be programmed to send BGM or not.
- The access priority to external pager is: (1) TAFAS; (2) Paging; (3) BGM. Higher priorities will override BGM.

Installation Manual References

- 2.4.8 External Music Source Connection

Programming Guide References

- [100] Flexible Numbering
- [803] Music Source Use
- [804] External Pager BGM

Features Guide References

- Background Music (BGM)

User Manual References

- 3.2.2 Turning on the External Background Music

Budget Management

Description

Limit the telephone usage to a pre-assigned amount. For example, the limit may be the amount deposited during a hotel at check-in. If the pre-assigned limit is reached, the extension user cannot make further calls until she receives authorisation from the operator.

Conditions

None

Programming Guide References

- [010] Budget Management
- [014] Budget Management on ISDN Port
- [990] System Additional Information

Features Guide References

None

User Manual References

Not Applicable

Built-in Voice Message

Description

This function is only available if an optional card KX-TD61291 is installed in the main unit KX-TD612. Installing this optional card enables you to use these features.

- Internal/External (Intelligent Call Handling 1:1) callers forwarded to your message box can leave their messages in it.
- External callers guided by company outgoing messages can leave their messages in the company (operator) message box. (Refer to 3.2.3 Recording Company Greeting Outgoing Messages in User Manual.)
- Replay or delete the recorded messages from your extension. A password is necessary for remote replaying or deleting through CO lines.
- **The Direct Message function:**
Allows you to leave a voice message in another extension's personal message box, even if the extension has not been set to forward an incoming call to its personal message box nor has recorded the OGM.

Note

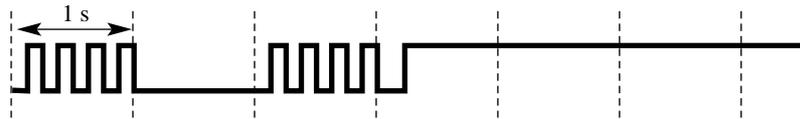
- Be sure to assign the Intelligent Call Handling table beforehand. Otherwise, outside caller cannot access the company message box. (Refer to Intelligent Call Handling — Distribution of Incoming Outside Calls)
- When the call information of the Built-in Voice Message is overwritten, the voice message itself is deleted at the same time.
- You can set either the Built-in Voice Message (BV) feature or the Voice Mail (VM) feature at a time, but not both. If you set VM, the functions of an optional voice message card KX-TD61291 cannot be used. In other words, BV, OGM and Direct Inward System Access (DISA) cannot work when VM is used. Before setting VM, be sure to listen to voice messages of BV and then delete call log entries if stored. Otherwise, you can do nothing with it after setting VM.

Conditions

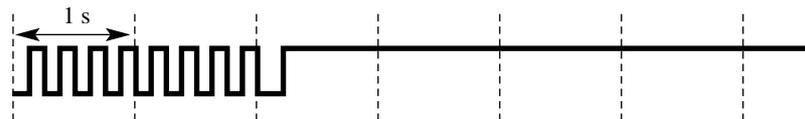
Built-in Voice Message Feature

- The voice message card has 2 resources. In default setting, resource 1 is for Jack1-1 and 2-1. Resource 2 is for the other jacks. The personal message box for each extension can be changed to either resource. Each resource can have maximum of 128 voice messages (including OGMs).
- You can record or delete an OGM only when no one else is using this feature such as replaying/recording/deleting a voice message or an OGM. If you try to record an OGM when someone else is using this feature, you will hear a reorder tone, and OGM BUSY will be indicated on the display (for Digital Proprietary Telephone user only).

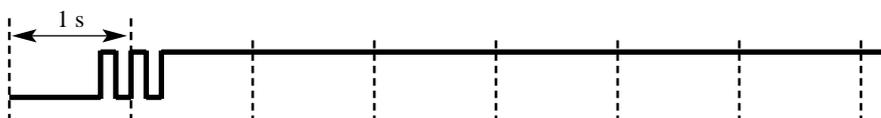
- Replaying/deleting company voice messages is only possible for the operator or the manager.
Operator 1 > Operator 2 > Manager/if not assigned, Jack 1-1
- You can choose the total recording time for the Built-in Voice Message feature (including OGM) out of 60 minutes/30 minutes/20 minutes per resource. (Default: 30 minutes) Refer to [822] Built-in Voice Message Total Recording Time.
- When the rest of recording time becomes less than 5 minutes, "Voice Msg Full" will be displayed, and you will hear dial tone 6 when going off-hook.



- When the rest of the total recording time of your BV resource becomes less than 5 minutes, the display will show the information. (Refer to [627] Voice Message Resource Assignment.)
Display example: Voice Msg Full
- If the rest of recording time of the BV resource is 0, after the OGM was replayed to the end an outside call rings at the extension in the order of priority described below:
Operator 1 > Operator 2 > Manager > Jack 1-1
- If the rest of recording time becomes 0, an incoming call cannot be forwarded to message box. In this case, called extension will ring.
- The LED indicator of the MESSAGE button is lit red, if there are any voice messages not yet heard.
- If you go off-hook and a new message has been recorded in the voice message box, dial tone 5 will sound.



- If Call Forwarding to Built-in Voice Message has been set, dial tone 2 will sound when you go off-hook.



- In Timed Reminder feature, if you cannot access your voice message resource or have not recorded Timed Reminder OGM, dial tone 3 will sound.



- If a call fails to have access to the voice message box, with an internal call, the called extension will ring; with an external call, a telephone will ring depending on the Intelligent Call Handling table.
- The callback of Automatic Callback Busy (Camp-On) and Hold Recall cannot be forwarded to the voice message box even if the called party set this feature.
- The Built-in Voice Message, the Voice Mail and the Message Waiting features share the function of the MESSAGE button. For the detailed operation, refer to 2.5.1 Built-in Voice Message in User Manual.
- Even the telephone which sets this feature can pick up the calls on other extensions.
- Intercept Routing No Answer (IRNA) can provide automatic redirection of an external call to the company (operator) voice message box.
- Even if you perform system data clear, OGM cannot be deleted. To delete an OGM, follow the steps described in 2.5.1 Built-in Voice Message and 3.2.3 Recording Company Greeting Outgoing Messages in User Manual. To delete all voice messages and OGMs at once, refer to programme [895] OGM and Voice Message Clear.

Voice Message Call Log

- The call log feature is only available for KX-T7433, KX-T7436, KX-T7230 and KX-T7235.
- Callers information can be logged by 3 methods.
 1. The automatic call log when no one can answer the call.
 2. The call log by pressing the LOG button during a conversation.
 3. The automatic call log of the voice message.
- Up to 128 incoming calls can be logged on an extension basis. This is owned jointly with incoming call log. The 129th call overwrites the oldest call log. If the call log entry of the voice message is overwritten, the voice message itself is deleted at the same time.
- The displayed information of the call log are as follows:
 - a) The receiving CO line number and name (max. 10 characters)
 - b) The caller's number (KX-T7436/KX-T7235: max. 24 digits) or the extension number and name (max. 16 characters)
 - c) The order of the logged number
 - d) The day and time the call was made
 - e) KX-T7436/KX-T7235 only: The calling attempt count of the same person.
- When there is another call from the same caller and the caller leaves a message, the calling attempt will not be counted and it will be logged separately.
- A log entry will be deleted automatically when its message is deleted.
- Even though you delete a message from outside, the call log entry cannot be deleted.

- If the company (operator) message box receives a message, a call log entry will be stored in an extension according to the priority as follows.
Operator 1 > Operator 2 > Manager > Jack 1-1
- If nothing is stored, such as the caller's name, that part will be blank.
- It is possible to prevent an other user from referring to the call log on the extension. The operator can cancel the prevention feature remotely (Call Log Lock Control).
- The display will change as follows after you see a call log entry.
Display example: OLD3 NEW1 → OLD4 NEW0
This is not applicable when you replay the message by entering the feature number. In this case, the LED indicator of the MESSAGE button turns off.
- If you change call log information, the change cannot be cancelled.
- Rotate the jog dial to the right or press VOLUME button — UP to see the next call log entry. Rotate the jog dial to the left or press VOLUME button — DOWN to see the previous call log entry.
- LCR cannot be used when you call back by using a call log.

Programming Guide References

- [222] OGM Recording Time
- [223] Built-in Voice Message Recording Time
- [455] Built-in Voice Message for Call Handling
- [456] Call Handling When All Busy
- [457] Intercept Extension
- [625-626] Built-in Voice Message for Extension — Day/Night
- [627] Voice Message Resource Assignment
- [628] Built-in Voice Message Access Code through CO Line
- [820] OGM Recording
- [822] Built-in Voice Message Total Recording Time
- [895] OGM and Voice Message Clear

Features Guide References

- Call Log, Incoming
- Intelligent Call Handling — Distribution of Incoming Outside Calls
- Message Waiting
- Outgoing Message (OGM)

User Manual References

- 2.5.1 Built-in Voice Message
- 2.9.1 Calling Using the Call Log (Incoming Call Log) [KX-T7433, KX-T7436, KX-T7230, KX-T7235 only]
- 3.2.3 Recording Company Greeting Outgoing Messages
- 4.1.3 Customising the Buttons

Busy Lamp Field

Description

The LED (Light Emitting Diode) indicators of the DSS (Direct Station Selection) buttons, each of which corresponds to a selected extension, tell whether the corresponding extensions are receiving a call, idle, busy or in Do Not Disturb (DND) mode.

Conditions

- This function is available for DSS buttons on Consoles and for flexible CO buttons assigned as DSS buttons on digital proprietary telephones.
- A DSS button indicator lights red if the corresponding extension is busy or in DND mode.
- The DSS indicator on a digital proprietary telephone also informs you of incoming calls except for the Intelligent Call Handling 1:N and door phone call to the corresponding extensions. You can pick up calls by pressing the corresponding flashing DSS button.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment

Features Guide References

- Button, Direct Station Selection (DSS)
- Console

User Manual References

- 4.1.3 Customising the Buttons

Busy Station Signalling (BSS)

Description

When attempting to call a busy extension, Busy Station Signalling allows you to signal the user on the phone to answer your call. The called extension user hears a Call Waiting tone and is able to answer the call.

Conditions

- This feature only works if the called extension has activated Call Waiting. If it is activated, the caller will hear ringback tone.
- If the called party has been set to activate the Off-Hook Call Announcement (OHCA) or Whisper OHCA function, the caller can announce the call through the speaker or the handset.
- If none of 3 features, Call Waiting, Off-Hook Call Announcement (OHCA) or Whisper OHCA is set at the called party, the caller will hear a reorder tone.

Programming Guide References

No programming required.

Features Guide References

- Call Waiting
- Off-Hook Call Announcement (OHCA)
- Whisper OHCA

User Manual References

- 2.2.4 When the Dialed Line is Busy or There is No Answer

Button, Direct Station Selection (DSS)

Description

The digital proprietary telephone user can access other extension users with one touch of this button.

Conditions

- A flexible CO button on a digital proprietary telephone can be assigned as a DSS button using either System Programming with Digital Proprietary Telephone or Station Programming.
- DSS buttons are provided on Consoles with default setting. Changing the setting is possible from the paired telephone using Station Programming.
- Once a button is assigned as a DSS button, it provides Busy Lamp Field (BLF) status.
- The mode of a DSS button can be programmed to disconnect the CO line and calls the extension or hold and transfer the call to the extension (One-Touch Transfer by DSS Button).

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [108] One-Touch Transfer by DSS Button

Features Guide References

- Busy Lamp Field
- Console
- One-Touch Transfer by DSS Button

User Manual References

- 2.2.1 Basic Calling
- 2.4.6 Transferring a Call
- 4.1.3 Customising the Buttons

Button, Flexible

Description

The use of flexible buttons is determined by either System Programming with Digital Proprietary Telephone or Station Programming. The following 3 types of flexible buttons are provided on digital proprietary telephones (DPT) and Consoles:

- Flexible CO buttons (provided on DPT only)
- Flexible DSS buttons (provided on Console only)
- Programmable Feature (PF) buttons

The below-mentioned table shows all of the features which can be assigned to flexible buttons.

In the table, " ✓" indicates that the feature can be assigned to the button.

Features to be assigned	Button	CO (DPT)	DSS (DSS)	PF (DSS)
Button, Single-CO (S-CO)		✓		
Button, Loop-CO (L-CO)		✓		
Hurry-Up		✓		
Log-In/Log-Out* ¹		✓		
DDI/CLIP		✓		
Call Forwarding — from Hunting Group* ¹		✓	✓	
Call Pickup Deny* ¹		✓	✓	
Call Waiting* ²		✓	✓	
Calling Line Identification Restriction (CLIR)* ¹		✓	✓	
Connected Line Identification Restriction (COLR)* ¹		✓	✓	
Direct Station Selection (DSS)		✓	✓	
Do Not Disturb for Direct Dialling In Call (DND for Intelligent Call Handling 1:1)* ¹		✓	✓	
Doorphone Call Forwarding to CO Line* ¹		✓	✓	
Executive Busy Override Deny* ¹		✓	✓	
Live Call Screening (LCS)* ³		✓	✓	
Live Call Screening Cancel* ³		✓	✓	
Message Waiting		✓	✓	

Features to be assigned	Button	CO (DPT)	DSS (DSS)	PF (DSS)
Night* ¹		✓	✓	
Paging Deny* ¹		✓	✓	
Paralleled Telephone Connection* ¹		✓	✓	
Phantom Extension		✓	✓	
Pickup Dialling (Hot Line)* ¹		✓	✓	
Two-Way Record* ³		✓	✓	
Two-Way Transfer* ³		✓	✓	
Account Code Entry		✓	✓	✓
Conference		✓	✓	✓
FWD/DND		✓	✓	✓
One-Touch Dialling		✓	✓	✓
One-Touch Dialling with Auto Hold		✓	✓	✓
Saved Number Redial		✓	✓	✓
Terminate		✓	✓	✓
Voice Mail Transfer		✓	✓	✓
ISDN Service Key		✓	✓	✓

*¹ The buttons which alternate the on/off setting of the corresponding feature.

*² Pressing this button changes the setting as follows:
Receiving Call Waiting Tone → OHCA → Whisper OHCA → none of these

*³ Available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration).

Conditions

- A CO line can only appear on 1 Single-CO button of any given telephone. A station can only appear on 1 DSS button of any given telephone or Console.
- It is possible to have multiple appearances of the same Loop-CO buttons on the same telephone. Incoming and outgoing calls on the line are shown on the button in the following

priority:
Single-CO > Loop-CO

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment

Features Guide References

- Buttons on Digital Proprietary Telephones
- Console

User Manual References

- 4.1.3 Customising the Buttons

Button, Loop-CO (L-CO)

Description

All CO lines can be assigned to a flexible CO button on a digital proprietary telephone (DPT). The assigned button serves as a Loop-CO (L-CO) button. An incoming call on any CO line arrives at the L-CO, unless there is an S-CO button associated with the line or unless the button is already in use. To make an outside call, the DPT user can simply press the dedicated L-CO button.

Conditions

- No L-CO button is originally provided on a DPT. A flexible CO button can be assigned as an L-CO button in either System or Station Programming.
- Pressing the L-CO button provides the same operation as entering the automatic line access code.
- Immediate, delayed, no ringing or no incoming call (disable) can be selected on an extension-CO line basis.
- The digital DPT user can choose a desired ringer frequency for each L-CO button by System or Station Programming.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [400] CO Port Connection Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day/Night

Features Guide References

- Answering, Direct CO Line
- Line Access, Automatic
- Line Access, Direct
- Ringing Tone Selection for CO Buttons

User Manual References

- 2.2.1 Basic Calling
- 2.3.1 Answering Calls
- 4.1.3 Customising the Buttons

Button, Single-CO (S-CO)

Description

A Single-CO (S-CO) button is a CO line access button. This allows the digital proprietary telephone user to access a specific line by pressing an S-CO button. An incoming call can be directed to an S-CO button.

Conditions

- An S-CO button provides CO Line status.
- Incoming calls appear on the digital proprietary telephone, when an extension is assigned as the incoming call destination and an S-CO and/or L-CO button is assigned.
- Immediate, delayed, no ringing or no incoming call (disable) can be selected on an extension-CO line basis.
- The digital proprietary telephone user can choose a desired ringing tone type for the S-CO button by System or Station Programming.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [400] CO Port Connection Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day/Night

Features Guide References

- Answering, Direct CO Line
- Line Access, Direct
- Line Access, Individual
- Ringing Tone Selection for CO Buttons

User Manual References

- 2.2.1 Basic Calling
- 2.3.1 Answering Calls
- 4.1.3 Customising the Buttons

Buttons on Digital Proprietary Telephones

Description

Digital proprietary telephones are provided with the feature/line access buttons listed below:

KX-T Digital Proprietary Telephones:

Buttons	7030	7230	7235	7431	7433	7436
AUTO ANSWER/MUTE* ¹	✓	✓	✓	✓	✓	✓
AUTO DIAL/STORE* ¹	✓	✓	✓	✓	✓	✓
CO* ¹ * ²	✓(12)	✓(24)	✓(12)	✓(12)	✓(12)	✓(12)
CONF* ¹	✓	✓	✓	✓	✓	✓
R button	✓	✓	✓	✓	✓	✓
Function			✓(10)			✓(10)
FWD/DND* ¹	✓	✓	✓	✓	✓	✓
HOLD	✓	✓	✓	✓	✓	✓
INTERCOM* ¹	✓	✓	✓	✓	✓	✓
Jog Dial				✓	✓	✓
MESSAGE* ¹	✓	✓	✓	✓	✓	✓
MODE				✓		
PAUSE	✓	✓	✓	✓	✓	✓
PF (Programmable Feature)	✓(4)					
PROGRAM		✓	✓	✓	✓	✓
REDIAL	✓	✓	✓	✓	✓	✓
SELECT				✓		
SHIFT* ¹		✓	✓		✓	✓
Soft		✓(3)	✓(3)		✓(3)	✓(3)
SP-PHONE* ¹	✓	✓	✓	✓	✓	✓
TRANSFER	✓	✓	✓	✓	✓	✓
VOLUME		✓	✓			

- *1 The button is provided with Light Emitting Diode (LED).
- *2 The button which can be changed to function as a feature button are called flexible buttons.

✓ : The button is provided on the designated telephones.

(x) : Shows the number of buttons only if multiple buttons are provided.

The functions of the listed buttons are described below:

AUTO ANSWER/MUTE: This dual function button is used for extension auto-answer and microphone mute during a conversation.

AUTO DIAL/STORE: Used for System Speed Dialling and storing programme changes.

CO (Central Office line): Can make or receive an outgoing call or can be re-assigned to a different CO or to various feature buttons.

CONF (Conference): Used to establish a three-party conference.

R button: Sends a flash signal to the Central Office or a host PBX to access their features (External Feature Access). This button is applicable when the PBX has CO lines, not when it only has ISDN lines.

Function: Used to perform the displayed function/operation.

FWD/DND (Call Forwarding/Do Not Disturb): Used to program Call Forwarding and set Do Not Disturb.

HOLD: Used to place a call on hold.

INTERCOM: Used to make or receive intercom calls.

Jog Dial: Used to adjust the ringer, speaker, handset and headset volume and the display contrast. It can also be used to select data of the Memory Dialling and the System Feature Access Menu on the display.

MESSAGE: Used to send a message or display current message.

MODE: Used to shift the display in order to access various features.

PAUSE: Inserts a pause in a speed dial number.

PF (Programmable Feature): This flexible button can be programmed to be a One-Touch Dialling, FWD/DND, Save, Account, Conference, Terminate or Voice Mail Transfer button, as desired.

PROGRAM: Used to enter and exit Programming mode.

REDIAL: Used for Last Number or Automatic Redial.

SELECT: Used to select the displayed function or to call for the displayed phone number.

SHIFT: Used to access the second level of Soft button function.

Soft: Pressing a Soft button performs the function/operation appearing on the bottom line of the display.

SP-PHONE (Speakerphone) Used for handsfree operation. Pressing the button causes the telephone to switch between handset and handsfree operation.

TRANSFER: Transfers a call to another extension or external destination.

VOLUME: Used to adjust the ringer and speaker volume and the display contrast.

Conditions

- Certain buttons are equipped with light indicators (LED's) to show line or feature status.
- CO buttons can be classified as the following 3 types:
Single-CO (S-CO) button/Loop-CO (L- CO) button.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment

Features Guide References

None

User Manual References

- 4.1.3 Customising the Buttons

CALL FORWARDING FEATURES — SUMMARY

Description

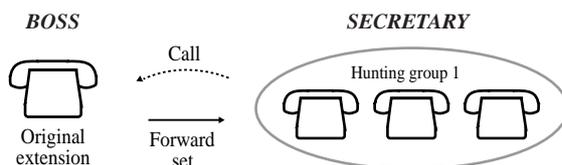
Call forwarding enables you to have your calls forwarded to a specified destination. You may specify the circumstances under which your calls are forwarded. The following Call Forwarding features are available:

- Call Forwarding — All Calls**
- Call Forwarding — Busy**
- Call Forwarding — Busy/No Answer**
- Call Forwarding — by ISDN Line**
- Call Forwarding — Follow Me**
- Call Forwarding — from Hunting Group**
- Call Forwarding — No Answer**
- Call Forwarding — to CO Line**

Assignable forwarding destinations are: (1) extension, (2) ISDN extension, (3) Hunting Group, or (4) Voice Mail extension.

There can be up to 4 stages of Call Forwarding. The fifth stage will be disregarded. If disregarded, the call will be treated according to the condition of the fourth destination. It is only possible to call an original extension or Hunting Group from the destination extension or Hunting Group immediately before it (Boss Secretary function).

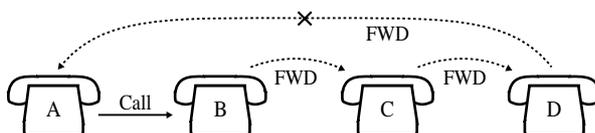
<Example>



Conditions

- Although calls are forwarded, Message Waiting is not. The MESSAGE button indicator is lit on the extension which was originally called.
- Setting this function cancels any other Call Forwarding functions.
- Intelligent Call Handling 1:N calls can only be forwarded 1 stage.
- If the final destination of the Call Forwarding is Voice Processing System, the mailbox number of the extension which was originally called is automatically sent (Follow On ID), even if it is forwarded more than 1 stage.
- The call will not return to the calling extension by the call Forwarding function.

<example>



Call Forwarding — All Calls

Description

This feature is used when you want all your calls to be automatically re-directed to another extension.

Conditions

- Types of calls which are forwarded by this feature are:
 - Outside calls** — Intelligent Call Handling 1:1; Intelligent Call Handling 1:N; Intercept Routing; DND transfer; Call forwarding; Station Hunting
 - Intercom calls** — Extension; Transfer; Call Forwarding; Station Hunting

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.5.2 Forwarding Your Calls (Call Forwarding)
- 4.1.3 Customising the Buttons

Call Forwarding — Busy

Description

A call directed to your extension is forwarded to another extension when your telephone is busy.

Conditions

- Types of calls which are forwarded by this feature are:
 - Outside calls** — Intelligent Call Handling 1:1; Intelligent Call Handling 1:N; Intercept Routing; DND transfer; Call forwarding; Station Hunting
 - Intercom calls** — Extension; Transfer; Call Forwarding; Station Hunting

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering

Features Guide References

- Call Forwarding — Busy/No Answer

User Manual References

- 2.5.2 Forwarding Your Calls (Call Forwarding)
- 4.1.3 Customising the Buttons

Call Forwarding — Busy/No Answer

Description

Your calls are forwarded to another extension when your extension is busy or you do not answer the call in a pre-determined time.

Conditions

- Types of calls which are forwarded by this function are:
 - Outside calls** — Intelligent Call Handling 1:1; Intelligent Call Handling 1:N; Intercept Routing; DND transfer; Call forwarding; Station Hunting
 - Intercom calls** — Extension; Transfer; Call Forwarding; Station Hunting
- This function operates the same way as Call Forwarding — Busy and Call Forwarding — No Answer.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [202] Call Forwarding — No Answer Time

Features Guide References

- Call Forwarding — Busy
- Call Forwarding — No Answer

User Manual References

- 2.5.2 Forwarding Your Calls (Call Forwarding)
- 4.1.3 Customising the Buttons

Call Forwarding — Follow Me

Description

When you forget to set Call Forwarding — All Calls before you leave your desk or when you move from pre-set place to another, this allows you to set the same function from the destination extension.

Conditions

- Same as the conditions of Call Forwarding — All Calls.
- It is programmable to enable or disable this feature on Class of Service basis.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [991] COS Additional Information

Features Guide References

- Call Forwarding — All Calls

User Manual References

- 2.5.2 Forwarding Your Calls (Call Forwarding)
- 4.1.3 Customising the Buttons

Call Forwarding — No Answer

Description

Calls to your extension are forwarded to another extension when you do not answer the call in a pre-determined time.

Conditions

- Types of calls which are forwarded by this function are:
 - Outside calls** — Intelligent Call Handling 1:1; Intelligent Call Handling 1:N; Intercept Routing; DND transfer; Call forwarding; Station Hunting
 - Intercom calls** — Extension; Transfer; Call Forwarding; Station Hunting

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [202] Call Forwarding — No Answer Time

Features Guide References

- Call Forwarding — Busy/No Answer

User Manual References

- 2.5.2 Forwarding Your Calls (Call Forwarding)
- 4.1.3 Customising the Buttons

Call Forwarding — to CO Line

Description

All calls directed to your extension will be sent to an external destination. The outside telephone number must be pre-programmed.

Conditions

- Types of calls which are forwarded by this function are:
 - Outside calls — Intelligent Call Handling 1:1; Intercept Routing
 - Intercom calls — Extension; Transfer
- The forwarding extension's Toll Restriction and Account Code Entry requirements still apply.
- Class of Service programming determines the extensions that are able to perform this function.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [504] Call Forwarding to CO Line

Features Guide References

None

User Manual References

- 2.5.2 Forwarding Your Calls (Call Forwarding)
- 4.1.3 Customising the Buttons

Call Forwarding — by ISDN Line (CFU/CFB/CFNR)

Description

The call forwarding service provided by ISDN can be assigned on an extension basis. The following features are available.

Call Forwarding — Unconditional (CFU)

All incoming calls to an extension are transferred by an ISDN line.

Call Forwarding — Busy (CFB)

An incoming call to an extension is transferred by an ISDN line when the extension is busy.

Call Forwarding — No Reply (CFNR)

An incoming call to an extension is transferred by an ISDN line when the extension does not answer within a pre-assigned time.

Conditions

- Class of Service programming determines the extensions that are able to perform this function.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [518] CFU/CFB/CFNR Assignment

Features Guide References

None

User Manual References

- 2.5.2 Forwarding Your Calls (Call Forwarding)
- 4.1.3 Customising the Buttons

Call Forwarding — from Hunting Group

Description

Pre-assigned extension users can forward calls arriving at any Hunting Group or calls arriving just at your own Hunting Group. The destination can be another Hunting Group or a specific extension, or a voice mail extension (DPT Integration).

Conditions

- Types of calls which are forwarded by this function are:
 - Outside calls** — Intelligent Call Handling 1:1; Intelligent Call Handling 1:N; Intercept Routing; DND transfer; Call forwarding; Station Hunting
 - Intercom calls** — Extension; Transfer; Call Forwarding; Station Hunting
- You can turn on and off from a digital proprietary telephone. (Refer to 4.1.3 Customising the Buttons in User Manual.)
- Class of Service programming determines the extensions that are able to perform this function.
- Do not forget to set the Station Hunting group type for each group you wish to use; the default is "disable".
- This feature does not work if the Station Hunting type of the forwarding Hunting Group is Voice Mail (VM) or Automated Attendant (AA).

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [131] Hunting Group Assignment
- [520] Call Forwarding from Hunting Group
- [813] Floating Number Assignment
- [990] System Additional Information

Features Guide References

- Station Hunting
- Hunting Group
- Voice Mail Integration for Digital Proprietary Telephones

User Manual References

- 2.5.3 Forwarding Calls from a Hunting Group
- 4.1.3 Customising the Buttons

Call Hold — CO Line

Description

Allows the digital proprietary telephone user to put an outside call on hold. The held call can be retrieved from the user who held it or from any other extension.

Conditions

- Call hold tone is sent to the party on hold. If Music on Hold is active, music is sent to the party on hold.
- If a call on hold is not retrieved in a specific period of time, Hold Recall results.
- If an outside party is placed on hold and not retrieved in 15 minutes, it is automatically disconnected.

Programming Guide References

- [100] Flexible Numbering
- [200] Hold Recall Time

Features Guide References

- Call Park
- Hold Recall
- Music on Hold

User Manual References

- 2.4.2 Holding a Call

Call Hold — Intercom

Description

This is used to place an intercom call on hold for the digital proprietary telephone user. The held call can be retrieved from the user who held it or from any other extension.

Conditions

- Only 1 intercom call can be placed on hold in a telephone at a time; however multiple calls can be placed on hold using a different feature. (see Call Park).
- If a call on hold is not retrieved in a specific period of time, Hold Recall results.
- Call hold tone is sent to the party on hold. If Music on Hold is active, music is sent to the party on hold.
- If an outside party is placed on hold and not retrieved in 15 minutes, it is automatically disconnected.

Programming Guide References

- [100] Flexible Numbering
- [200] Hold Recall Time

Features Guide References

- Call Park
- Hold Recall
- Music on Hold

User Manual References

- 2.4.2 Holding a Call

Call Hold Retrieve — CO Line

Description

Allows the extension user to retrieve a call that has been placed on hold by another extension, except for the exclusive hold.

Conditions

Confirmation tone is sent to the user when the call is retrieved by the feature number. Eliminating the tone is programmable.

Programming Guide References

- [100] Flexible Numbering
- [990] System Additional Information

Features Guide References

- Call Hold — CO Line

User Manual References

- 2.4.2 Holding a Call

Call Hold Retrieve — Intercom

Description

Allows the extension user to retrieve a call that has been placed on hold by another extension, except for the exclusive hold.

Conditions

Confirmation tone is sent to the user when the call is retrieved by the feature number. Eliminating the tone is programmable.

Programming Guide References

- [100] Flexible Numbering
- [990] System Additional Information

Features Guide References

- Call Hold — Intercom

User Manual References

- 2.4.2 Holding a Call

Call Hold, Exclusive — CO Line

Description

Allows the extension user to prevent any other extension users from retrieving a held outside call. Only the user who held it can retrieve the call.

Conditions

- If a call on hold is not retrieved in a specific period of time, Hold Recall results. After Hold Recall results, the held call can be retrieved from any other extension.
- If an outside party is placed on hold and not retrieved in 15 minutes, it is automatically disconnected.
- Call hold tone is sent to the party on hold. If Music on Hold is active, music is sent to the party on hold.
- With a single line telephone, either 1 outside or intercom call can be held.

Programming Guide References

- [200] Hold Recall Time

Features Guide References

- Hold Recall
- Music on Hold

User Manual References

- 2.4.2 Holding a Call

Call Hold, Exclusive — Intercom

Description

Allows the extension user to prevent any other extension users from retrieving a held intercom call. Only the user who held it can retrieve the call.

Conditions

- Only 1 intercom call can be placed on Call Hold or Exclusive Call Hold at a time.
- If a call on hold is not retrieved in a specific period of time, Hold Recall results. After Hold Recall results, the held call can be retrieved from any other extension.
- Call hold tone is sent to the party on hold. If Music on Hold is active, music is sent to the party on hold.

Programming Guide References

- [200] Hold Recall Time

Features Guide References

- Hold Recall
- Music on Hold

User Manual References

- 2.4.2 Holding a Call

Call Log, Incoming

Description

Allows you to have information of the external calling party which provides Calling Line Identification Presentation (CLIP) on the display of a digital proprietary telephone when the extension user does not answer the call. The phone number, name and time can be logged automatically or manually. Modification and calling back are possible.

The displayed information is as follows;

- a) The receiving CO line number and name (max. 10 characters)
- b) The caller's number (KX-T7436/KX-T7235: max. 24 digits) or the extension number and name (max. 24 characters)
- c) The order of the logged number
- d) The day and time the call was made
- e) KX-T7436/KX-T7235 only: The calling attempt time of the same person

This feature is owned jointly with the call log of the Built-in Voice Message. (Refer to Built-in Voice Message.)

Note

When the call information of the Built-in Voice Message is overwritten, the voice message itself is deleted at the same time.

Conditions

- This feature is only available for KX-T7433, KX-T7436, KX-T7230 and KX-T7235.
- Callers information can be logged by 3 methods.
 1. The automatic call log when no one can answer the call.
 2. The call log by pressing the LOG button during a conversation.
 3. The automatic call log of the voice message.
- Up to 128 incoming calls can be logged on an extension basis. The 129th call overwrites the oldest call log entry. If the call log entry of the voice message is overwritten, the voice message itself is deleted at the same time.
- The call log entry can be confirmed either pressing the VOLUME button or rotating the jog dial.
 - The VOLUME button (UP)/the jog dial (clockwise):** from the oldest call log entry to the newest.
 - The VOLUME button (DOWN)/the jog dial (counter-clockwise):** from the newest call log entry to the oldest.
- If you get a call when the caller's information has already been stored, the day/time the call was made and the calls count will change.

Display example

21 Aug 00 6:20 → 22 Aug 00 8:32

2 calls → 3 calls
- An incoming call will be logged if the called party does not answer and the caller hangs up.

- If something is not stored, such as the caller's name, that part will be blank.
- When the outside call rings at multiple extensions (1:N reception), the information will be logged at the DPT with the lowest extension number.
- If the LED indicator of the SHIFT button is red, there are unanswered calls.
- Once you change call log information, the change cannot be cancelled.
- It is possible to prevent an other user from referring to the call log on the extension. The operator can cancel the prevention feature remotely (Call Log Lock Control).
- The display will change as follows after you see a call log entry.
Display example: OLD3 NEW1 → OLD4 NEW0
- LCR cannot be used when you call back by using a call log.

Programming Guide References

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [002] System Speed Dialling and Intelligent Call Handling Name Set
- [100] Flexible Numbering

Features Guide References

- Built-in Voice Message
- Intelligent Call Handling — Distribution of Incoming Outside Calls

User Manual References

- 2.5.1 Built-in Voice Message
- 2.9.1 Calling Using the Call Log (Incoming Call Log) [KX-T7433, KX-T7436, KX-T7230, KX-T7235 only]
- 2.9.2 Recording a Call Log [KX-T7433, KX-T7436, KX-T7230, KX-T7235 only]
- 3.1.2 Changing the Settings

Call Park

Description

Allows the extension user to place a held call into a system parking area. This releases the user from the parked call to perform other operations. The parked call can be retrieved by any other extension user.

Conditions

- The system contains 10 parking areas, each of which has its own call park number. Up to 10 calls can be parked at the same time in the system. The number of holding slots remains at 10.
- If a parked call is not retrieved within Transfer Recall Timer period, Transfer Recall starts to the operator or the extension that parked the call.
- If Call Park Recall is not retrieved in 15 minutes, it is automatically disconnected.
- Confirmation tone is sent to the user when the parked call is retrieved. Eliminating the tone is programmable.

Programming Guide References

- [100] Flexible Numbering
- [201] Transfer Recall Time
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.2 Holding a Call

Call Pickup Deny

Description

Allows the user to inhibit other extensions from picking up calls ringing at his/her extension by using the call pickup features.

Conditions

Distinctive Dial Tone is sent to the user on the extension with this feature when the user goes off-hook.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering

Features Guide References

- Call Pickup, CO Line
- Call Pickup, Directed
- Call Pickup, Group
- Dial Tone, Distinctive

User Manual References

- 2.7.8 Denying Other People the Possibility of Picking up Your Calls (Call Pickup Deny)
- 4.1.3 Customising the Buttons

Call Pickup, CO Line

Description

Allows any extension user to answer an incoming outside call that is ringing at another's telephone.

Conditions

- Call Pickup starts with the lowest CO number.
- Confirmation tone is sent to the user when the call is picked up. Eliminating the tone is programmable.

Programming Guide References

- [100] Flexible Numbering
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.3.3 Answering a Call Ringing at Another Telephone (Call Pickup)

Call Pickup, Directed

Description

Allows any extension user to answer a call ringing at any other extension.

Conditions

- Doorphone call can be picked up by extensions that are not programmed to answer a doorphone call.
- Confirmation tone is sent to the user when the call is picked up. Eliminating the tone is programmable.
- You may pick up a call by pressing a flashing DSS button assigned on a digital proprietary telephone.

Programming Guide References

- [100] Flexible Numbering
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.3.3 Answering a Call Ringing at Another Telephone (Call Pickup)

Call Pickup, Group

Description

Allows the extension user to answer a call that is ringing at another telephone, if the call is ringing within the user's extension group.

Conditions

- The user can pick up an incoming outside, intercom, or doorphone call.
- Confirmation tone is sent to the user when the call is picked up. Eliminating the tone is programmable.

Programming Guide References

- [100] Flexible Numbering
- [602] Extension Group Assignment
- [990] System Additional Information

Features Guide References

- Extension Group

User Manual References

- 2.3.3 Answering a Call Ringing at Another Telephone (Call Pickup)

Call Retrieving, Telephone Answering Machine (TAM)

Description

Allows you to retrieve an incoming call received by TAM.

Conditions

- Through system programming, the extension with a TAM is specified.
- Incoming internal calls, outside calls and doorphone calls can be picked up.
- A reorder tone sounds after dialling the feature number when TAM is not answering a call.
- Generally, the other party can be heard through the TAM, and when you realize who is calling, you can retrieve the call from your desk.
- If the extension assigned as TAM is a paralleled telephone, the calls received by another paralleled telephone will be picked up by this feature.
- If the extension assigned as TAM is connected to an EXtra Device Port (XDP), the digital proprietary telephone connected to the same port can pick up the call received by TAM.

Programming Guide References

- [100] Flexible Numbering
- [629] Telephone Answering Machine (TAM) Connection Assignment
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.3 Retrieving a Call on a Telephone Answering Machine (TAM)

Call Splitting

Description

Allows the extension user to alternate between 2 other parties. Placing the current call on hold by pressing another CO/INTERCOM button allows the user to have a conversation with the other party.

Conditions

Call Splitting is impossible during Doorphone Call or Paging.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.4.5 Talking to Two Parties Alternately (Call Splitting)

Call Transfer, Screened — to CO Line

Description

Allows the digital proprietary telephone user to voice-announce to the external party and then transfer the call. The system does not support the Unscreened Call Transfer to CO Line feature. (You cannot transfer a call to CO line without a voice announcement.)

Conditions

- Class of Service programming determines the extensions that are able to perform it.
- In case of an incoming outside call, the only call with ISDN line can be transferred to the external party.

Programming Guide References

- [503] Call Transfer to CO Line
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.6 Transferring a Call

Call Transfer, Screened — to Extension

Description

Allows the extension user to voice-announce to the extension and transfer the call.

Conditions

None

Programming Guide References

- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.6 Transferring a Call

Call Transfer, Unscreened — to Extension

Description

Allows the user to transfer an intercom or outside to directly transfer to an extension party. After dialling the destination extension, the user replaces the handset while hearing ringback tone.

Conditions

- If the destination party does not answer within the transfer recall time, the call will return to the user or operator.
- This function is possible when the destination is sending ringback or busy tone. If the destination is busy, Camp-On Transfer occurs.
- The ringing signal pattern follows the regular ringing pattern depending on the party being transferred: outside or intercom call ringing.
- If music on hold is enabled, music is sent to the party while being transferred. It is system-programmable whether to send ringback tone or music on hold to the caller.
- If an outside party is transferred and unanswered, you can assign whether Transfer Recall occurs at the originating transfer extension or the Operator 1 in programming [990] System Additional Information, Area 02 — Bit 01.

Programming Guide References

- [201] Transfer Recall Time
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.6 Transferring a Call

Call Waiting

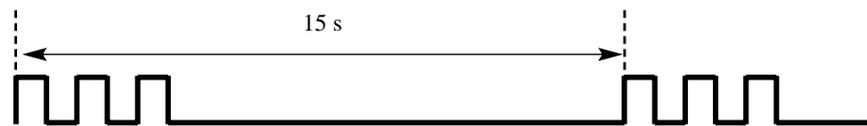
Description

While in conversation, a call waiting tone informs the user of another incoming call that is waiting. He or she can answer the second call by disconnecting or placing the current call on hold. Call waiting tone can be enabled or disabled by dialling the appropriate feature number or by pressing the call waiting button (refer to Button, Flexible). Either way, you can select tone, Off-Hook Call Announcement (OHCA), or no tone.

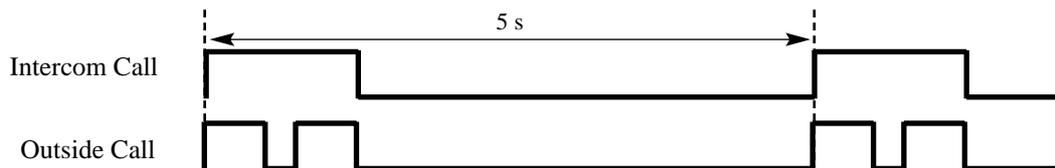
Conditions

- The call waiting tone is generated when an outside call comes in or when an extension caller executes Busy Station Signalling.
- Setting Data Line Security cancels Call Waiting which has been turned on.
- For digital proprietary telephone users, 2 types of call waiting tones are provided to prevent them from missing the tone as shown below: A digital proprietary telephone user can select the desired type by Station Programming.

Tone 1



Tone 2



Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering

Features Guide References

- Busy Station Signalling (BSS)

User Manual References

- 2.7.3 Receiving a Call Waiting (Call Waiting/Off-Hook Call Announcement [OHCA]/Whisper OHCA)
- 2.4.7 Answering a Call Waiting
- 4.1.2 Initial Settings
- 4.1.3 Customising the Buttons

Calling/Connected Line Identification Presentation (CLIP/COLP)

Description

Calling Line Identification Presentation (CLIP) enables showing the calling party's number and/or name on the display of the called party's telephone when making a call. Connected Line Identification Presentation (COLP) enables showing the called party's number and/or name on the display of the calling party's telephone when the called party answers a call. Each of these features is one of ISDN's services.

To use the CLIP or COLP service, number assignments are required as follows:

- CLIP/COLP number for each extension (Business/Private)

Automatic Selection of CLIP/COLP

Automatically selects the pre-assigned CLIP/COLP number on the called party's display. You can assign 2 CLIP numbers and 2 COLP numbers per a group of CLIP/COLP assignment table. One number is for business and the other is for private. One group consists of 100 System Speed Dialling (SSD) or 100 DDI/MSN numbers and Intelligent Call Handling (ICH) numbers. (Group 0: SSD & ICH 000-099, Group 1: SSD & ICH 100-199..., Group 4: SSD & ICH 400-499, Group 5: DDI/MSN & ICH 500-599, Group 6: DDI/MSN & ICH 600-699) In total there are 7 groups (0-6).

Conditions

- The CLIP service for outgoing calls can be restricted by System Programming (CLIR: Calling Line Identification Restriction).
- The COLP service for incoming calls can be restricted by System Programming (COLR: Connected Line Identification Restriction).
- The number actually sent to the calling or called party may be different from the system programmed number. It depends on the contract with your ISDN supplier.

Programming Guide References

- [100] Flexible Numbering
- [623] CLIP/COLP Number Assignment for Extension
- [624] CLIP/COLP Number Assignment for ISDN Extension

Features Guide References

- Calling/Connected Line Identification Restriction (CLIR/COLR)

User Manual References

- 2.7.5 Automatic Selection of Calling/Connected Line Identification Presentation (CLIP/COLP)

Calling/Connected Line Identification Restriction (CLIR/COLR)

Description

Calling Line Identification Restriction (CLIR) restricts showing the calling party's number on the display of the called party's telephone when a call is received.

Connected Line Identification Restriction (COLR) restricts showing the called party's number on the display of the calling party's telephone when the called party answers a call.

Each of these features is one of ISDN's services.

Conditions

- If the displaying is enabled, the called party can check the calling party's number before the called party answers it (CLIP: Calling Line Identification Presentation, case by case).
- If the displaying is enabled, the calling party can check the called party's number when the called party answers it (COLP: Connected Line Identification Presentation).

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [516] Calling Line Identification Restriction
- [517] Connected Line Identification Restriction
- [623] CLIP/COLP Number Assignment for Extension
- [624] CLIP/COLP Number Assignment for ISDN Extension

Features Guide References

None

User Manual References

- 2.7.6 Preventing Your Number Being Displayed on the Called Party's Telephone (Calling Line Identification Restriction [CLIR])
- 2.7.7 Preventing Your Number Being Displayed on the Calling Party's Telephone (Connected Line Identification Restriction [COLR])
- 4.1.3 Customising the Buttons

Charge Fee Reference

Description

Allows the pre-assigned display telephone user to see, clear charges and print out the data by SMDR. Charges are displayed per extension, CO line, account code, department code, or the total of each can be referred to.

Conditions

- The extensions allowed to perform this feature are specified by System Programming (default: all extensions are allowed).
- The verification ID is required to perform this feature.
- It is programmable to select the first display, Frequency or Charge by System Programming. This can be switched manually at each extension.
- Exchange rate between Frequency counter and Charges is assigned by System Programming.
- The displayed currency symbol can be programmed by "[125] Currency Assignment."
- If the amount exceeds the maximum displayable charge, then only the highest possible charge will be displayed (e.g. 99999.99£)

Programming Guide References

- [015] Charge Rate Fractional Point Assignment
- [016] Charge Rate Assignment
- [117] Charge Display Selection
- [118] Charge Verification Assignment
- [119] Charge Verification ID Code Set
- [125] Currency Assignment

Features Guide References

None

User Manual References

- 4.1.4 Charge Fee Management [Pre-assigned extension only]

Class of Service (COS)

Description

COS is used to define the features which are allowed for a group of extensions. Each extension is assigned by the operator a primary and a secondary COS number. Eight Classes of Service are available.

Conditions

- The operator can switch the extension's COS between a primary and a secondary.
- A list of the programmable items is given below:
 - a)** The ability to forward a call to an outside party
 - b)** The ability to transfer a call to an outside party
 - c)** The ability to override Do Not Disturb of the called station
 - d)** Account Code Entry operation — verified — all calls/verified — toll restriction override/option
 - e)** The ability to set Executive Busy Override
 - f)** The ability to deny Executive Busy Override
 - g)** Outgoing call restriction level (Day mode/Night mode)
 - h)** The ability to set Call Forwarding — Follow Me
 - i)** System speed dialling call restriction level (Day mode/Night mode)
 - j)** The ability to switch the Day/Night service
 - k)** The ability to unlock the door opener
 - l)** The ability to turn on the external relay
 - m)** The ability to set Do Not Disturb (DND) for Intelligent Call Handling 1:1 Call
 - n)** The ability to set Calling/Connected Line Identification Restriction (CLIR/COLR)
 - o)** The ability to set Call Forwarding — by ISDN Line (CFU/CFB/CFNR)
 - p)** The ability to perform Off-Hook Call Announcement (OHCA)
 - q)** The ability to set Call Forwarding — from Hunting Group
 - r)** The ability to set Doorphone Call Forwarding to CO Line

Programming Guide References

- [100] Flexible Numbering
- [500-501] Toll Restriction Level — Day/Night
- [503] Call Transfer to CO Line
- [504] Call Forwarding to CO Line
- [505] Executive Busy Override
- [506] Executive Busy Override Deny
- [507] Do Not Disturb Override
- [508] Account Code Entry Mode
- [509-510] Toll Restriction Level for System Speed Dialling – Day/Night
- [512] External Relay Access
- [513] Night Service Access
- [514] Do Not Disturb (DND) for Intelligent Call Handling 1:1 Call
- [516] Calling Line Identification Restriction
- [517] Connected Line Identification Restriction
- [518] CFU/CFB/CFNR Assignment
- [519] Off-Hook Call Announcement (OHCA)
- [520] Call Forwarding from Hunting Group
- [521] Doorphone Call Forwarding to CO Line
- [601] Class of Service
- [613] ISDN Class of Service
- [991] COS Additional Information

Features Guide References

None

User Manual References

- 3.1.1 Switching Level of Service

CO Incoming Call Information Display

Description

Provides the digital proprietary telephone with display user with pre-assigned information if an incoming outside call is received.

You can select one of the following by system programming.

- The caller's telephone number and name — available for an ISDN line provided with the CLIP (Calling Line Identification Presentation) feature.
- The CO line number and CO line name — this information is useful in the following case: When several divisions or companies are connected to one system and they have their own CO lines, a user can check the called party by the LCD before answering the call if each division's or company's name is assigned to a CO line.
- The called party's number and name.

The initial display on the LCD of the called extension is as follows:

Called to Type	Extension including Operator	Phantom Extension	Hunting Group
1:N	Selected Caller/CO line/ Called Party's Number	No incoming call is received.	No incoming call is received.
1:1	Selected Caller/CO line/ Called Party's Number	Selected Caller/CO line/ Called Party's Number	Called Party's number of hunting group and group name

Conditions

- It is required to name CO lines and extensions by system programming.
- With the CLIP feature, the ISDN line informs the system of the caller's telephone number. To display the name, the system compares the informed number with the System Speed Dialling Numbers stored in programme "[001] System Speed Dialling and Intelligent Call Handling Number Set" and if a match is found, determines the caller's name by using the System Speed Dialling Names stored in programme "[002] System Speed Dialling and Intelligent Call Handling Name Set."
- The digital proprietary telephone with display (KX-T7433, KX-T7436, KX-T7230 or KX-T7235) user can record the call information received by the CLIP feature (Call Log, Incoming feature).
- If the assigned information cannot be displayed, it will be shown according to the following priority:
 Caller → CO Line → Called Party's Number

Installation Manual References

- 2.5.3 Expanding the ISDN (BRI) Line Connection

Programming Guide References

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [002] System Speed Dialling and Intelligent Call Handling Name Set
- [003] Extension Number Set
- [004] Extension Name Set
- [012] ISDN Extension Number Set
- [013] ISDN Extension Name Set
- [622] Incoming Call Display

Features Guide References

- Call Log, Incoming

User Manual References

Not Applicable

CO Line Connection Assignment

Description

This allows you to specify the CO lines connected to your system to prevent an extension user from originating an outside call by selecting a line which is not connected. An idle line is selected from the connected ones when an extension user makes an Automatic Line Access.

Conditions

- If the user tries to make a call with a disconnected line, reorder tone sounds to indicate that the line is out of use.
- This is effective for all outgoing calls.

Programming Guide References

- [400] CO Port Connection Assignment

Features Guide References

None

User Manual References

Not Applicable

CO Line Connection Assignment — Outgoing

Description

Allows you to assign the CO line an extension user can use for outgoing calls. This feature is useful to prevent unauthorised toll calls.

Conditions

- When an extension user tries to make an outside call on a disallowed CO line, reorder tone is sent to indicate that the user cannot use the CO line.
- Day and Night Service are individually programmed. (Night Service)

Programming Guide References

- [605-606] Outgoing Permitted CO Line Assignment — Day/Night
- [615-616] Outgoing Permitted CO Line Assignment – Day/Night for ISDN Extension

Features Guide References

None

User Manual References

Not Applicable

Completion of Calls to Busy Subscriber (CCBS)

Description

Allows the extension users to set the telephone to receive callback ringing when a busy called party on an ISDN line becomes free. A special dial tone informs the caller that the called party is busy. When the caller answers the callback ringing, other party's number is automatically dialed.

This feature is one of ISDN's services and its availability depends on the service of your telephone company. This feature is in accordance with the ETS 300 359. (ETS: European Telecommunication Standard)

Conditions

- This feature is enabled or disabled by System Programming.
- An extension can set only one CCBS at a time.
- A digital proprietary telephone (DPT) and single line telephone (SLT) can set the CCBS to a busy party.
- The CCBS that has been set by an outside party works only if the called busy extension is a DPT or SLT and the call arrives via Intelligent Call Handling 1:1.
- If the callback ringing is not answered in 4 rings (within 10 seconds) the callback is cancelled.
- The callback rings even if the extension has set the Call Forwarding or Do Not Disturb (DND).
- The caller can use the telephone before the callback rings. The setting is cancelled only in the following conditions.
 - By the cancelling operation.
 - If there is no callback ringing within 60 minutes.
 - If the system power is off./If you reset the system.
- This feature does not work if the extension has set Data Line Security.
- The time the system waits before sending a CCBS signal while hearing a special dial tone is programmable.

Programming Guide References

- [100] Flexible Numbering
- [143] CCBS Feature
- [990] System Additional Information

Features Guide References

- Dial Tone, Distinctive

User Manual References

- 2.2.4 When the Dialed Line is Busy or There is No Answer

Conference

Description

The system supports three-party conference calls, including outside or inside parties. During a two-party conversation, the extension user can add a third party to their conversation, thereby establishing a conference.

Conditions

- Possible conference combinations are: 1-inside and 2-outside; 2-inside and 1-outside; and 3-inside.
- Up to 6 conference calls are allowed simultaneously.
- A three-party call is also established by Executive Busy Override.
- When a two-party call is changed to a three-party call and vice versa, a confirmation tone is sent to all 3 parties. Eliminating the tone is programmable.

Programming Guide References

- [990] System Additional Information

Features Guide References

- Executive Busy Override — CO Line
- Executive Busy Override — Extension

User Manual References

- 2.4.8 Three-party Conversation
- 4.1.3 Customising the Buttons

Conference, Unattended

Description

When a digital proprietary telephone user is in a conference with 2 outside parties with the ISDN line, the user can leave the conference to allow the other 2 parties to continue conversation. The user may return to the conference if desired.

Conditions

An Unattended Conference can be established when the extension is allowed to transfer a call to an outside line.

Programming Guide References

- [503] Call Transfer to CO Line

Features Guide References

- Conference

User Manual References

- 2.4.8 Three-party Conversation

Confirmation Tone

Description

At the end of many different functions the system confirms the success of the operation by sending a confirmation tone to the extension user through the speaker of the telephone.

Confirmation tone 1:

1. Indicates that the new setting differs from the previous setting.
2. Set or cancel the Electronic Station Lockout.



Confirmation tone 2:

1. Indicates that the new setting is identical to the previous setting.
2. In addition, sent when various features are successfully performed or accessed. (e.g. Call Hold; Automatic Callback Busy)
3. Sent when accessing external paging equipment. (e.g. Paging — All; Paging — External) Confirmation tone from external pager can be enabled or disabled.



Confirmation tone 3:

Sent when a conversation is established just after dialling. For example, when accessing the following features by the feature numbers:

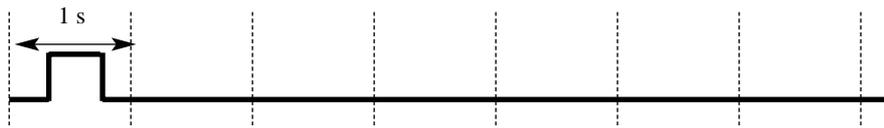
- Call Park Retrieve
- Call Pickup
- Hold Retrieve
- Paging/Paging Answer
- TAFAS Answer

This tone can be eliminated by System Programming so that the user can start talking instantly.



Confirmation tone 4:

Sent when moving from a two-party call to a three-party call, and vice versa. (These are caused by Executive Busy Override or Conference.) It is possible to eliminate this tone by System Programming.

**Conditions**

Confirmation Tone 1 and 2 are provided to reconfirm the assigned feature.

Programming Guide References

- [805] External Pager Confirmation Tone
- [990] System Additional Information

Features Guide References

None

User Manual References

Not Applicable

Console

Description

The Direct Station Selection (DSS) Console (KX-T7240/KX-T7440) or Attendant Console (KX-T7441) provides direct access to extensions and features and busy lamp display. The Console must be programmed to work with a digital proprietary telephone (DPT). System Programming assigns the jack numbers of the Console and its associated DPT. Up to 4 consoles can be installed. The paired telephone user can carry out the following operations using the Console:

- Direct access to an extension (Direct Station Selection)
- Quick access to an outside party (One-Touch Dialling)
- Easy transfer of an outside call to an extension
(The programmable One-Touch Transfer feature provides simplified operation.)
- Quick access to a system feature

The above functions are activated simply by pressing buttons on the console which were pre-programmed as function buttons.

Consoles are provided with the following buttons listed below:

KX-T Consoles:

Buttons	7240	7440	7441
DSS	✓(32)	✓(66)	✓(48)
PF (Programmable Feature)	✓(16)		
ANSWER			✓
RELEASE			✓

✓: The button is provided on the designated telephones.

(x) : Shows the number of buttons only if multiple buttons are provided.

The functions of the listed buttons are described below:

- **DSS (Direct Station Selection) buttons:**
Used to access extensions. Every button is programmed to correspond to an extension. Pressing a button allows the user to call the corresponding extension. Every button is provided with an indicator (Busy Lamp Field), which shows the current state of the corresponding extension as shown in the Table on the next page:

Busy Lamp Field Table

Light	State of extension
Off	Idle
On	Busy/DND

To meet the user's various needs, DSS buttons can be changed to the other function buttons.

- **PF (Programmable Feature) buttons printed as F1 through F16:**
These buttons are provided with no default setting. The paired telephone user can program the buttons for the other function buttons.
- **ANSWER button:**
Used to answer an incoming call to the paired telephone.
- **RELEASE button:**
Used to disconnect the line during or after a conversation or to complete a Call Transfer.

Conditions

- Programming the DSS and PF buttons can be done only from the paired telephone using Station Programming or System Programming and Diagnosis with Personal Computer. System Programming with a Digital Proprietary Telephone is not available.
- If the extension number assigned to a DSS button is changed to another number, the DSS button automatically follows the new number. (Re-programming is not necessary.)
- If a port connected to a Console is programmed for XDP jack, a single line telephone can be connected to the port in parallel.

Installation Manual References

- 2.4.3 Extension Connection

Programming Guide References

- [007] Console Port and Paired Telephone Assignment
- [600] EXtra Device Port

Features Guide References

- Button, Flexible
- EXtra Device Port (XDP)
- One-Touch Transfer by DSS Button

User Manual References

- 2.2.1 Basic Calling
- 2.4.6 Transferring a Call
- 3.2.4 Using the ANSWER/RELEASE Button [KX-T7441 only]
- 4.1.3 Customising the Buttons

Data Line Security

Description

Data Line Security is a function that can be set by System Programming. Once set, communication between the extension and the other end is protected from any signal such as Call Waiting, Hold Recall and from Executive Busy Override. Data equipment or a facsimile may be connected to an extension jack so that the user can perform data communications. During the communication, Data Line Security maintains secure data transmission against tones or barging in from other extensions.

Conditions

- Assigning Data Line Security always offers conversation privacy.
- If 1 extension in a conversation has set Data Line Security, it applies to the both extensions.

Programming Guide References

- [612] Data Line Security

Features Guide References

- Call Waiting
- Hold Recall
- Executive Busy Override — Extension

User Manual References

Not Applicable

Day/Night Service

Description

This supports both Night and Day modes of operation. The system operation for originating and receiving calls can be different for day and night modes. The system operation for restricting toll calls can be arranged separately to prevent unauthorised toll calls at night.

Switching of the Day/Night Mode

Day/Night mode can be switched either automatically at a pre-assigned time or manually by pre-assigned extensions or Operator at any time desired.

Class of Service programming determines the extensions that can perform it.

Automatic Night Service:

If you set automatic switching mode, your system will switch the Day/Night mode at the programmed time each day.

Manual Night Service:

Operator and the pre-assigned extension can switch the Day/Night mode manually.

Conditions

- The following programming items may be assigned in a different way between day mode and night mode:
 - [006] Operator/Manager Extension Assignment — Day/Night
 - [021-022] Doorphone Call Forwarding — Day/Night
 - [134-135] Hunting Intercept — Day/Night
 - [137-138] Time Table Assignment — Day/Night
 - [500-501] Toll Restriction Level — Day/Night
 - [509-510] Toll Restriction Level for System Speed Dialling – Day/Night
 - [605-606] Outgoing Permitted CO Line Assignment — Day/Night
 - [607-608] Doorphone Ringing Assignment — Day/Night
 - [615-616] Outgoing Permitted CO Line Assignment – Day/Night for ISDN Extension
 - [625-626] Built-in Voice Message for Extension — Day/Night
- After switching the service mode manually in Automatic mode the Automatic mode will be changed to the Manual mode.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [102] Day/Night Service Starting Time
- [513] Night Service Access

Features Guide References

None

User Manual References

- 2.7.12 Checking the Day/Night Service Status
- 2.7.11 Day/Night Service
- 4.1.3 Customising the Buttons

DDI/CLIP Key

Description

Assigns DDI/CLIP key for the Intelligent Call Handling — Distribution of Incoming Outside Calls feature. Up to 24 DDI/CLIP keys can be located at CO buttons on a digital proprietary telephone. The LED indicator of the DDI/CLIP key flashes green when receiving a call from the CLIP number, or with the DDI/MSN number, you assigned at System Speed Dialling and Intelligent Call Handling table. The extensions assigned in programme [452] Extension Ringing Assignment can answer the call by pressing the flashing DDI/CLIP key.

Conditions

- The DDI/CLIP Key is linked to the location number of the System Speed Dialling number. Only 1 System Speed Dialling number can be assigned per CO button.
- DDI/CLIP keys will not flash green in the following cases:
 1. During a conversation (including setting the Call Waiting feature).
 2. Forwarded incoming call is received at your extension.

Programming Guide References

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [452] Extension Ringing Assignment

Features Guide References

- Intelligent Call Handling — Distribution of Incoming Outside Calls

User Manual References

- 4.1.3 Customising the Buttons
- 4.2.3 System Speed Dialling and Intelligent Call Handling Number Set (001)

Department Codes

Description

A department code is used to identify outgoing outside calls on an extension basis for accounting and billing purpose. The department code is automatically appended to the Station Message Detail Recording (SMDR) call record without entering the code.

Conditions

- The department code is assigned up to 5 digits on an extension basis.

Programming Guide References

- [610] Department Codes
- [614] Department Codes of ISDN Port

Features Guide References

- Station Message Detail Recording (SMDR)

User Manual References

- 4.1.4 Charge Fee Management [Pre-assigned extension only]

Dial Tone, Distinctive

Description

Six types of dial tone patterns are available to give some information about features enabled on the telephone set.

- **Dial tone 1:**
Normal dial tone. None of the features listed below are enabled.



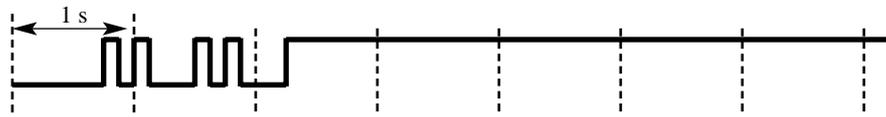
- **Dial tone 2:**
Is audible when any one of the features below are set.
 - 1) Absent Message Capability
 - 2) Background Music (BGM) (for digital proprietary telephones only)
 - 3) Call Forwarding
 - 4) Call Pickup Deny
 - 5) Call Waiting
 - 6) Do Not Disturb (DND)
 - 7) Electronic Station Lockout
 - 8) Executive Busy Override Deny
 - 9) Pickup Dialling
 - 10) Timed Reminder



- **Dial tone 3:**
Is audible when performing Account Code Entry or Completing Calls to Busy Subscriber (CCBS). Also sounds when answering Timed Reminder call.



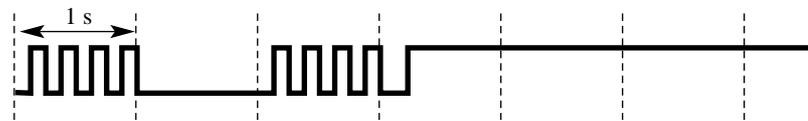
- **Dial tone 4:**
Is audible when messages are waiting for the digital proprietary telephone extension.



- **Dial tone 5:**
Is audible when new voice messages are received.



- **Dial tone 6:**
Is audible when the rest of voice message recording time becomes less than 5 minutes.



Conditions

None

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

Not Applicable

Direct Inward System Access (DISA)

Description

Allows an outside caller to access specific system features as if the caller is an extension in the system. The caller can have direct access to features such as:

- Placing an intercom call to an extension. A dialling route using a one-digit number (DISA Automated Attendant (AA) number) is available.
- Calling an external party.

One of the following security modes must be selected to prevent the caller from making unauthorised calls. <[809] DISA Security Type>

Security Mode	Description
Non Security	Allows the caller to access an outside line or make an intercom call without dialling DISA user code.
Trunk Security (Outside Line)	Requires the caller to enter a DISA user code before making an outside call.
All Security	Requires the user to enter a DISA user code before making an outside call or an intercom call.

When making an outside call by Call Forwarding — to Outside Line, the call is permitted exceptionally.

An Outgoing Message can be programmed for the DISA feature. When a caller reaches the DISA line, a prerecorded message will greet the caller. Up to 9 DISA messages may be recorded by the operator. And they can be used for different Intelligent Call Handling tables.

Warning

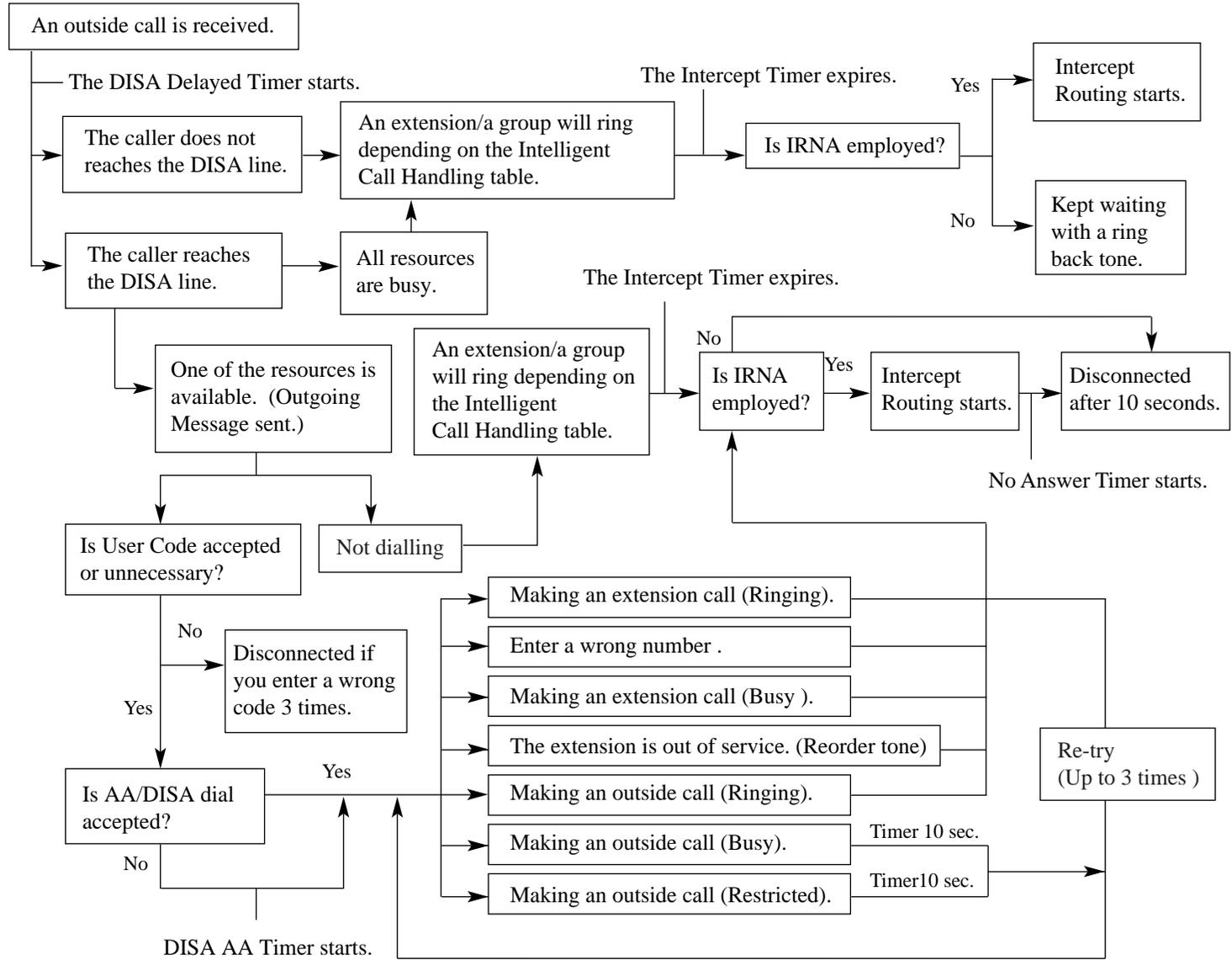
When you enable the Outside-Outside Line Call feature of DISA function, if a third party discovers the password (a DISA User Code) of the system, you have a risk that they will make illegal phone calls using your telephone line, and the cost may be charged to your account.

To prevent this problem from occurring, we strongly recommend the following points:

- 1: Carefully maintain the secrecy of the password.
- 2: Specify a complicated password with several digits.
- 3: Change the password frequently (at least once per month).

Note

You can set either the Built-in Voice Message (BV) feature or the Voice Mail (VM) feature at a time, but not both. If you set VM, the functions of an optional voice message card KX-TD61291 cannot be used. In other words, BV, OGM and Direct Inward System Access (DISA) cannot work when VM is used. Before setting VM, be sure to listen to voice messages of BV and then delete call log entries if stored. Otherwise, you can do nothing with it after setting VM.



Flowchart of possible cases and results for DISA calls

Conditions

- The following items are required for the DISA feature:
 - a) The direction of the DISA message should be assigned as the Intelligent Call Handling 1:1 destination. <[452] Extension Ringing Assignment, [453] Other Extension Ringing Assignment, [454] ISDN Extension Ringing Assignment, [455] Built-in Voice Message for Call Handling > This assigns the DISA line and the message accessed by external callers.
 - b) The DISA message(s) should be recorded by the operator.
- The direction of a DISA message may be selected as the destination of Intercept Routing. <[457] Intercept Extension> In case a destination of Intercept Routing is not assigned, the call which was made by DISA function will be disconnected automatically when it is over a programmed time period.
- This system can store up to 10 programmable DISA AA numbers. <[815] DISA Automated Attendant (AA)> After listening to the DISA message, the caller can dial a single digit. The number may be the same as the first digit of other numbers (extension number, floating number, etc.). To avoid confusion, the system waits for the second digit for a preprogrammed amount of time (default: 1 second). If the timer runs out, the system assumes that the first digit is a DISA AA number. <[221] DISA Automated Attendant (AA) Wait Time>
- The DISA line can be used to originate outside calls if a security code (if required) has been dialed.
- This system can store up to 32 programmable DISA user codes. Each code should be different. It is possible to assign a Class of Service number to each code. The Class of Service of the code defines the Toll Restriction level. <[811] DISA User Codes>
- The DISA AA feature can only ring regular extensions (digital proprietary telephones and single line telephones). It cannot ring ISDN extensions, floating extensions, etc.

Installation Manual References

- 2.5.1 Location of Optional Cards

Programming Guide References

- [100] Flexible Numbering
- [203] Intercept Time
- [221] DISA Automated Attendant (AA) Wait Time
- [222] OGM Recording Time
- [223] Built-in Voice Message Recording Time
- [455] Built-in Voice Message for Call Handling
- [457] Intercept Extension
- [809] DISA Security Type
- [811] DISA User Codes
- [813] Floating Number Assignment
- [815] DISA Automated Attendant (AA)

Features Guide References

- Intelligent Call Handling — Distribution of Incoming Outside Calls
- Intercept Routing
- Outgoing Message (OGM)

User Manual References

- 2.2.8 To Access Another Party Directly from Outside (Direct Inward System Access [DISA])

Display Contrast Adjustment

Description

Allows the user of digital proprietary telephone with display to adjust the display contrast.

Conditions

The adjusting method depends on the type of digital proprietary telephone (DPT) you have.

- With a KX-T7400 series DPT, the MODE or Soft buttons and the Jog Dial are used to select from 3 available levels.
- With a KX-T7200 series DPT, the Soft buttons and the Volume button are used to select from 3 available levels.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

Not Applicable

Display, Call Information

Description

The digital proprietary telephone with display shows the user the following call information:

Extension number and name

These are shown when calling or when called by an extension user and during an established intercom call.

A display example: 123: Smith

Dialled telephone number

This is shown when dialling the telephone number.

A display example: **91234567890**

CO Line number

This is shown when receiving an outside call.

A display example: **AI 03**

Number or name of the caller

These are shown before answering if the Caller ID feature is available.

Display examples

: 1234567890

: Panasonic

CO Line Name

This is shown when CO Line is received a call.

A display example: **AI 03: AZ Company**

Charge Meter

This is shown during an established outside call.

A display example: **AI 02: 00005**

Charge Fee

This is shown during an established outside call.

A display example: **AI 01: 00001.15 £**

Duration Time

This is shown during an established incoming outside call.

A display example: **AI 01 0: 02' 05**

Conditions

- Extension numbers and names are programmable. If no extension name is stored, only the extension number is displayed.
- It is programmable to select the first display, Charge Meter or Charge Fee by System Programming. To alternate another display, press the CO button.
- The displayed currency can be programmed by [125] Currency Assignment.

Programming Guide References

- [003] Extension Number Set
- [004] Extension Name Set
- [117] Charge Display Selection
- [125] Currency Assignment
- [421] CO Port Name

Features Guide References

- Charge Fee Reference

User Manual References

Not Applicable

Display, Self-Extension Number

Description

Allows the user of digital proprietary telephone with display to display her own jack number and extension number in Station Programming mode.

Conditions

Display example

If the jack number is 02 and the extension number is 202:

Jack02<=>EXT202

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 4.2.1 Customising Your System

Display, Time and Date

Description

Offers the digital proprietary telephone with display user a display of either the present time and the date or the date and the day of the week. It is displayed while on-hook.

Conditions

- There are 2 types of display (Pressing * switches the types of display.):

Display example 1: Day, Month, Time

1 Jan 13:00

Display example 2: Day, Month, Year, Day of the Week

1 Jan, 2000 Sat

- The present date and time are set by System Programming and by the ISDN service.

Programming Guide References

- [000] Date and Time Set

Features Guide References

- Automatic Adjust Time
- Flexible Numbering

User Manual References

Not Applicable

Do Not Disturb (DND)

Description

Allows an extension user to appear busy to an incoming extension call or allows to transfer an incoming outside call to the assigned extension. This can be set or cancelled by the extension user.

Conditions

- If your digital proprietary telephone (DPT) is not supplied with the FWD/DND button, it can be assigned on a flexible button.
- DND does not work for the following calls: doorphone calls; recalls for hold/Timed Reminder alarm.
- A DPT user in DND mode can answer a call by pressing the button showing the arrival of the call.
- An extension in DND mode can be called by other extension users who are allowed to override DND in their Class of Service (Do Not Disturb Override).
- The following extensions cannot set DND: operator, the Call Forwarding (C.FWD) destination or the DND destination.
- When the extension has set the C.FWD, Do Not Disturb (DND) for Intelligent Call Handling 1:1 Call, the extension cannot be a DND destination.
- Setting this feature cancels C.FWD or Do Not Disturb (DND) for Intelligent Call Handling 1:1 Call.
- If the destination extension has DND activated, then the DSS button corresponding to it will light up red. This indicates to the digital proprietary telephone or console user that the destination extension is unavailable.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering

Features Guide References

- Do Not Disturb (DND) for Intelligent Call Handling 1:1 Call
- Do Not Disturb (DND) Override

User Manual References

- 2.7.2 Refusing Incoming Calls (Do Not Disturb [DND])
- 4.1.3 Customising the Buttons

Do Not Disturb (DND) for Intelligent Call Handling 1:1 Call

Description

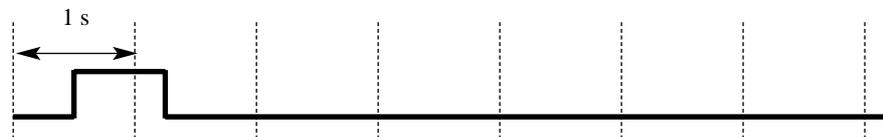
Allows the pre-assigned extension user to refuse to answer the Intelligent Call Handling (ICH) 1:1 call on Class of Service basis. The calls which have a specific called party will be transferred to an operator. The operator cannot refuse the ICH 1:1 call. This feature is one of ISDN's services.

Conditions

- The operator cannot set this feature.
- Setting this feature cancels Call Forwarding or DND.
- An internal call, Intelligent Call Handling 1:N call cannot be transferred.
- If the destination extension has DND activated, the DSS button corresponding to it will light up red. This indicates to the digital proprietary telephone or DSS console user that the destination extension is unavailable.
- If the operator is not assigned, incoming calls will be transferred to the extension which is assigned by Intercept Routing No Answer (IRNA).
- If the IRNA is not assigned, calls which are not received will be returned to the Integrated Services Digital Network.
- If this feature is assigned, a dial tone will sound when you go off-hook. The tone pattern is shown below.



- There are 2 types of confirmation tone.
Tone 1: When the new setting differs from the previous setting.



Tone 2: When the setting is identical to the previous setting.



Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [514] Do Not Disturb (DND) for Intelligent Call Handling 1:1 Call

Features Guide References

- Intelligent Call Handling — Distribution of Incoming Outside Calls
- Calling/Connected Line Identification Presentation (CLIP/COLP)

User Manual References

- 2.7.2 Refusing Incoming Calls (Do Not Disturb [DND])
- 4.1.3 Customising the Buttons

Do Not Disturb (DND) Override

Description

Permits the pre-assigned extension user to call another user who has set the Do Not Disturb feature. In this case the caller can override the DND programmed on the called extension's telephone and causes the telephone to ring.

Conditions

Class of Service (COS) programming determines the extension users who can perform DND Override.

Programming Guide References

- [507] Do Not Disturb Override

Features Guide References

- Do Not Disturb (DND)

User Manual References

- 2.2.5 Calling without Restrictions

Door Opener

Description

Allows the extension users to unlock the door for a visitor from their telephones. The door can be unlocked by the extension users on pre-assigned Class of Service. However, while engaged on a doorphone call, any extension user can open the door from the telephone to let the visitor in.

Conditions

- It is needed to install a user-supplied door opener on each door to be opened. A maximum of 3 door openers can be connected to the system.
- When a visitor presses the Call button on the doorphone, the system may automatically open the door, if the doorphone has a built-in door opener. It is required to set by the System Programming and cancel Forward Doorphone Calls to Outside Parties (see User Manual reference below).

Installation Manual References

- 2.4.5 Doorphone and Door Opener Connection

Programming Guide References

- [100] Flexible Numbering
- [122] Automatic Door Open Assignment

Features Guide References

- Doorphone Call

User Manual References

- 2.8.1 If a Doorphone/Door Opener is Connected

Doorphone Call

Description

Your system supports a doorphone. If a visitor presses the doorphone button, pre-assigned extensions are rung. The extension who answers the call can talk to the visitor. It is possible for any extension user to originate a call to a doorphone.

Conditions

- It is needed to install a user-supplied Doorphone.
- A maximum of three doorphones can be connected to the system.
- It is necessary to program the extensions that can receive calls from each doorphone during day and night mode.
- If no extension user answers an incoming doorphone call within 30 seconds, the call stops ringing and is cancelled.
- While engaged on a doorphone call, any extension user can open the door from the telephone to let the visitor in (Door Opener). This requires a user-supplied door opener.

Installation Manual References

- 2.4.5 Doorphone and Door Opener Connection
- 2.5.4 Optional Doorphone/Door Opener Card Installation

Programming Guide References

- [100] Flexible Numbering
- [607-608] Doorphone Ringing Assignment — Day/Night

Features Guide References

- Door Opener

User Manual References

- 2.8.1 If a Doorphone/Door Opener is Connected

Doorphone Call Forwarding to CO Line

Description

Allows the system to forward doorphone calls to ISDN lines. The extension user can change the forwarding destination, to an extension or outside party, for each doorphone. If an outside party is selected, calls from the doorphone are forwarded to the destination assigned in programme "[021-022] Doorphone Call Forwarding — Day/Night." If an extension is selected, calls from the doorphone are forwarded to the destination assigned in programme "[607-608] Doorphone Ringing Assignment — Day/Night."

Conditions

- Class of Service programming determines the extension users who can forward the doorphone calls to ISDN lines.
- If the transferred call is not answered within the programmed intercept time, the line will be disconnected.
- If the doorphone button is pressed again before the call is answered, the intercept timer starts again.
- If a call between a party at a doorphone and an outside party is established with this feature, the duration of the call period may be restricted depending on the setting of the system timer.
- When a doorphone call is transferred to an outside party, either the extension at Jack 1-1 or Operator 1 can be selected for the charge account.
- If at least 1 feature has been changed from the default setting, you normally hear dial tone 2 when going off-hook. However even if you set this feature, dial tone 2 will not be heard.
- The Doorphone Call Forwarding to Outside Line button light shows the current status as follows:
 - Off:** This feature has not been set.
 - Red on:** This feature has been set.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [021-022] Doorphone Call Forwarding — Day/Night
- [100] Flexible Numbering
- [218] Doorphone-to-CO Line Call Duration Time
- [521] Doorphone Call Forwarding to CO Line
- [607-608] Doorphone Ringing Assignment — Day/Night
- [990] System Additional Information

Features Guide References

- Doorphone Call

User Manual References

- 2.8.1 If a Doorphone/Door Opener is Connected
- 4.1.3 Customising the Buttons

Electronic Station Lockout

Description

Allows the extension users to lock their stations so that other users cannot make outgoing outside calls. Any 3-digit numeric code can be used to lock the station. The same code is used to unlock it.

Conditions

- Numbers registered in programming [311] Emergency Dial Number Set can always override this feature.
- Making intercom calls and receiving intercom or outside calls are permitted on the locked station.
- The new setting overrides the old one. If Operator sets Remote Station Lock on a station that has already been locked by the station user, the user cannot unlock it.
- It is programmable to admit the press of the terminate button during a outside call on the locked station.

Programming Guide References

- [100] Flexible Numbering
- [311] Emergency Dial Number Set

Features Guide References

- Remote Station Lock Control

User Manual References

- 2.5.5 Preventing Other People from Using Your Telephone (Electronic Station Lockout)

Emergency Call

Description

Allows the extension user to dial emergency numbers which have been pre-assigned in programming [311] Emergency Dial Number Set.

Conditions

- Emergency numbers are allowed to call even in the following cases;
 - in Account Code — Verified mode
 - in any toll restriction levels
 - after the pre-assigned charge limit is reached
 - in Electronic Station Lockout
- 10 emergency numbers can be assigned (some have default values). An emergency number must be 3 digits or less.
- It is possible to store the CO line access code and the emergency number into Quick Dialling. In this case, you need not press a CO button or dial a line access code.

Programming Guide References

- [100] Flexible Numbering
- [311] Emergency Dial Number Set

Features Guide References

- Quick Dialling

User Manual References

- 2.2.1 Basic Calling

End-to-End DTMF Signalling (Tone Through)

Description

DTMF signalling is required for access to special network services offered by some telephone companies. This system allows the digital proprietary telephone user to send DTMF signals to the line during an established call.

Conditions

- Tone through mode is established automatically after the dialling sequence is finished and the call is established.
- This function also applies to extension and conference calls.

Programming Guide References

No programming required.

Features Guide References

- Flexible Numbering

User Manual References

- 2.2.5 Calling without Restrictions

Executive Busy Override — CO Line

Description

Allows a digital proprietary telephone user to barge into an existing outside call either between 2 outside parties on the ISDN line through the system or between an outside and an inside parties, so as to establish a three-party conference call. It is possible for extension users to prevent this function from being executed by another extension user (Executive Busy Override Deny).

Conditions

- Class of Service programming determines the extension users who can perform Executive Busy Override.
- The pre-assigned extension users can barge in any CO line even if access to the line is not allowed by System Programming.
- This feature does not work if the extension has set Executive Busy Override Deny or Data Line Security.
- When a two-party call is changed to a three-party call and vice versa, a confirmation tone is sent to all 3 parties. This tone can be eliminated by System Programming.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [505] Executive Busy Override
- [506] Executive Busy Override Deny
- [612] Data Line Security
- [990] System Additional Information

Features Guide References

- Conference
- Conference, Unattended

User Manual References

- 2.2.4 When the Dialed Line is Busy or There is No Answer
- 2.7.9 Denying Other People the Possibility of Joining Your Conversation (Executive Busy Override Deny)
- 4.1.3 Customising the Buttons

Executive Busy Override — Extension

Description

Allows the pre-assigned extension user to barge into an existing extension call, either between two inside parties or between an outside and an inside parties, so as to establish a three-party conference call. It is possible for extension users to prevent this function from being executed by another extension user (Executive Busy Override Deny).

Conditions

- Class of Service programming determines the extension users who can perform Executive Busy Override and Executive Busy Override Deny.
- This feature does not work if the extension has set Executive Busy Override Deny or Data Line Security.
- When a two-party call is changed to a three-party call and vice versa, a confirmation tone is sent to all 3 parties. This tone can be eliminated by System Programming.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [505] Executive Busy Override
- [506] Executive Busy Override Deny
- [612] Data Line Security
- [990] System Additional Information

Features Guide References

- Conference

User Manual References

- 2.2.4 When the Dialed Line is Busy or There is No Answer
- 2.7.9 Denying Other People the Possibility of Joining Your Conversation (Executive Busy Override Deny)
- 4.1.3 Customising the Buttons

Extension Connection Assignment

Description

Assign whether the extension user can perform all accesses or not.
If the extension is assigned as "No Connect" in programming [611] Extension Connection Assignment, the extension cannot make or receive calls.

Conditions

- The extension of the jack number 1 should be set to "Connect."
- If the destination of Intelligent Call Handling 1:1 is set to "No Connect," the call is transferred to an operator.

Programming Guide References

- [611] Extension Connection Assignment

Features Guide References

None

User Manual References

Not Applicable

Extension Group

Description

An extension group is used for group paging and group pickup features. The system supports 8 extension groups. Any member of an extension group can pick up a call directed to another member of the same group (Group Call Pickup). In addition, there is the Paging — Group feature.

Conditions

- Every extension can belong to more than 1 group simultaneously.

Programming Guide References

- [602] Extension Group Assignment

Features Guide References

- Call Pickup, Group
- Paging — Group

User Manual References

Not Applicable

External Relay

Description

Extensions can close the external relay of the system. This relay has normally open and normally closed contacts.

Conditions

- Class of Service Programming determines the extension users who can access the relay.
- One external relay can be connected per system.
- It is possible to assign the closure time by System Programming.

Installation Manual References

- 1.3.1 Specifications
- 2.4.6 External Relay and Second Ringer Relay Connection

Programming Guide References

- [100] Flexible Numbering
- [213] External Relay Connecting Time
- [512] External Relay Access

Features Guide References

None

User Manual References

- 2.8.3 If an External Relay is Connected

EXtra Device Port (XDP)

Description

EXtra Device Port (XDP) expands the number of telephones available in the system by allowing an extension jack to contain 2 telephones. A digital proprietary telephone and a single line telephone (SLT) or console and SLT can be connected to the same jack but have different extension numbers so that they can act as completely different extensions.

Conditions

- XDP requires previous programming of the individual jack. Enable XDP mode for the desired jack by System Programming.

Installation Manual References

- 2.4.4 EXtra Device Port (XDP)/Paralleled Telephone Connection

Programming Guide References

- [600] EXtra Device Port

Features Guide References

- Paralleled Telephone

User Manual References

Not Applicable

Flexible Numbering

Description

The numbers used for the access codes of system features and the number used for extension numbers are not fixed. They can be set as required provided there are not any conflicts. Feature numbers can be from 1 to 3 digits, utilizing numbers **0 through 9** as well as * and #. Extension numbers can be 2 to 4r digits in length. Any number can be set as the leading first or second digit. If 1 digit is assigned as the leading digit, some extensions have 2-digit numbers and some have 3-digit numbers. If 2 digits are assigned as the leading digits, some have 3-digit numbers and some have 4-digit numbers.

Flexible Feature Numbers

Number	Feature	Default
01	1st hundred extension block	2
02	2nd hundred extension block	3
03-16	3rd through 16th hundred extension block	None
17	Operator call	0
18	Automatic line access	9
19	CO line group line access	8
20	System speed dialling	*
21	Station speed dialling	6*
22	Station speed dialling programming	60
23	Doorphone call	68
24	Paging — external	64
25	Paging — external answer/TAFAS answer	44
26	Paging — group	63
27	Paging — group answer	43
28	Call pickup, CO line	4*
29	Call pickup, group	40
30	Call pickup, directed	41
31	Call hold	50
32	Hold retrieve —intercom	51
33	Hold retrieve — CO line	53
34	Last number redial	#
35	Call park/call park retrieve	52

Flexible Feature Numbers

Number	Feature	Default
36	Account code entry	49
37	Door opener	55
38	Reserved	—
39	Station programming clear	790
40	Message waiting	70
41	External relay on	67
42	Call forwarding/Do Not Disturb	710
43	Call pickup deny	720
44	External ringer	730
45	Call waiting/OHCA/whisper OHCA	731
46	Executive busy override deny	733
47	Pickup dialling programming	74
48	Absent message	750
49	Timed reminder	76
50	Electronic station lockout	77
51	Night service mode	78
52	Parallel telephone mode	69
53	Background music — external	65
54	Paging — deny	721
55	Primary COS select	791
56	Secondary COS select	793
57	Log-in/log-out	45
58	Operator 1 call	61
59	Operator 2 call	62
60	Automatic callback busy cancel	46
61	Personal Greeting OGM	722
62	Voice Message Play	723
63	Voice Message Delete	724
64	Direct Message Recording	725
65	CLIP Business/Private	726
66	COLP Business/Private	727

Flexible Feature Numbers

Number	Feature	Default
67	Call Retrieving, TAM	728
68	ISDN Service Access (Key Pad Protocol)	729
69	External ringer answer	47
70	Timed reminder remote	7*
71	Reserved	—
72	Do not disturb for Intelligent Call Handling 1:1 calls	56
73	CLIR	57
74	COLR	58
75	Call log lock control, incoming	59
76	Live call screening password	799
77	System working report	794
78	Reserved	—
79	Outgoing message	712
80	Reserved	—
81	Reserved	—
82	Call Forwarding from hunting group	714
83	Doorphone call forwarding to CO line	715
84	Doorphone call forwarding mode switch	716
85	CCBS cancel	713

Default feature numbers are shown above.

In addition to the flexible feature numbers above, fixed feature numbers are provided.

Fixed Feature Numbers

Feature	Default
While busy tone is heard	
Automatic Callback Busy/ Completion of Calls to Busy Subscriber (CCBS)	6
Busy Station Signaling (BSS)/ Off-Hook Call Announcement (OHCA)/ Whisper OHCA	2
Executive Busy Override	3
Message Waiting	4

Fixed Feature Numbers

Feature	Default
While Do Not Disturb tone is heard Do Not Disturb Override	2
While calling or talking Account Code Delimiter Alternate Calling — Ring/Voice Conference Door Open	#/99 * 3 5
When the set is on-hook Day/night mode display Time display/date display switching	# *

Conditions

- Flexible feature numbers can only be dialled during dial tone.
- The following are examples of feature number conflicts:
Examples: 1 and 11, 0 and 00, 2 and 21, 10 and 101, 32 and 321, etc.
- Some flexible feature numbers require additional digits to make the feature active. For example, to set Call Waiting, the feature number for "Call Waiting" must be followed by "1" and to cancel it, the same feature number should be followed by "0."

Programming Guide References

- [003] Extension Number Set
- [100] Flexible Numbering
- [813] Floating Number Assignment

Features Guide References

None

User Manual References

Not Applicable

Floating Number

Description

You can assign virtual extension numbers for resources to make them appear to be extensions. These numbers are defined as floating numbers (FN); floating numbers for hunting groups are defined as FENOH (Floating Extension Number of Hunting Group). The following resources can have floating numbers:

- a) External paging instruments: used for TAFAS feature.
1 FN is available.
The FN can be assigned as:
 - 1) Intelligent Call Handling 1:1 destinations
 - 2) Intercept Routing destinations
- b) Second ringer: used for call reception.
1 FN is available.
The FN can be assigned as:
 - 1) Intelligent Call Handling 1:1 destinations
 - 2) Intercept Routing destinations
- c) Hunting group: used for Station Hunting feature. 32 FENOHs are available. These FENOHs can be assigned as :
 - 1) Intelligent Call Handling 1:1 destinations
 - 2) Extension
 - 3) Intercept Routing destinations
 - 4) Intelligent Call Handling 1:N destinations
 - 5) Uniform Call Distribution (UCD) Group — overflow
- d) Digital Test Access: used for testing
1 DTA is available.
The FN can be used as an extension.

Conditions

Floating numbers cannot be used for setting a feature such as Call Forwarding, etc.

Installation Manual References

- 2.4.6 External Relay and Second Ringer Relay Connection
- 2.4.7 External Pager (Paging Equipment) Connection

Programming Guide References

- [100] Flexible Numbering
- [813] Floating Number Assignment

Features Guide References

- Hunting Group
- Intelligent Call Handling — Distribution of Incoming Outside Calls
- Second Ringer
- Trunk (CO Line) Answer From Any Station (TAFAS)
- Uniform Call Distribution (UCD)

User Manual References

Not Applicable

Full One-Touch Dialling

Description

Allows the digital proprietary telephone user to make a call or have access to a system service with one button. There is no need to be off-hook before pressing the button, which is required for One-Touch Dialling. Handsfree operation is automatically provided by pressing a One-Touch Dialling button, a DSS button, a REDIAL button, a SAVE button, etc.

Conditions

- It is necessary to program automatic handsfree dial mode.
- This feature is also available with DSS buttons on a Console.
- This feature is also available with the display operation for KX-T7431, KX-T7433, KX-T7436 or KX-T7235 (Special Display Features).

Programming Guide References

No programming required.

Features Guide References

- Handsfree Operation

User Manual References

- 4.1.2 Initial Settings

Handset/Headset Selection

Description

The system supports the use of a user-supplied headset on a digital proprietary telephone (DPT).

Conditions

To set headset mode on a DPT, use Station Programming.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 4.1.2 Initial Settings

Handsfree Answerback

Description

Allows the speakerphone telephone user to talk to a caller without lifting the handset, if the user has set handsfree answerback mode. If the user receives an intercom call in the mode, handsfree conversation is established immediately after the user hears beep tone and the caller hears confirmation tone.

Conditions

- Handsfree answerback mode is set or cancelled by pressing the AUTO ANSWER button.
- This feature does not work for calls from outside parties or doorphone calls.
- Handsfree Answerback set on a telephone overrides the Ring/Voice Intercom Alerting mode preset on the telephone; Handsfree conversation mode is established as soon as confirmation tone is sent.
- Handsfree answerback mode is overridden and a ring tone is heard when an outside call is transferred to the extension where the mode is set.

Programming Guide References

No programming required.

Features Guide References

- Alternate Calling — Ring/Voice

User Manual References

- 2.3.2 Answering Hands-free (Hands-free Answerback)

Handsfree Operation

Description

Allows the digital proprietary telephone user to dial and to talk to the other party without lifting the handset. Pressing an appropriate button provides handsfree mode.

Conditions

- This function can be utilised by pressing a button listed below when the SP-PHONE button indicator is off:
SP-PHONE button; INTERCOM button; CO button
- A single press of a One-Touch Button, DSS button, REDIAL button or a SAVE button also provides handsfree mode if Full One-Touch Dialling is enabled.

Programming Guide References

No programming required.

Features Guide References

- Full One-Touch Dialling

User Manual References

- 2.2.1 Basic Calling
- 2.3.1 Answering Calls

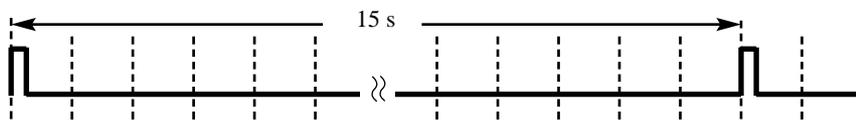
Hold Recall

Description

Prevents a call on hold from being kept waiting longer than a pre-determined time. If the timer expires, ringing or an alarm tone is generated as a reminder to the user who held the call. If the user is on-hook and its speakerphone is off, the phone is rung. If the user is off-hook or in speakerphone mode when the timer expires an alarm tone is sent from the built-in speaker of a digital proprietary telephone (DPT) or from the handset receiver of a single line telephone at 15-second intervals.

Conditions

- Hold Recall can be disabled by System Programming.
- The digital proprietary telephone with display flashes the indication of the held party for 5 seconds at 15-second intervals synchronised with the tone.
- Alarm tone is sent as follows:



Programming Guide References

- [200] Hold Recall Time

Features Guide References

- Call Hold — CO Line
- Call Hold — Intercom
- Call Hold, Exclusive — CO Line
- Call Hold, Exclusive — Intercom

User Manual References

Not Applicable

Host PBX Access

Description

If the system is installed behind a host PBX, an access code is required to make an outside call. Up to 4 codes can be stored for a CO port.

Conditions

- Host PBX access codes assigned in programme [411] Host PBX Access Codes can not be restricted by the Toll Restriction.

Programming Guide References

- [411] Host PBX Access Codes

Features Guide References

None

User Manual References

Not Applicable

Hunting Group

Description

A hunting group is a group of extensions organised in such a way that if the first destination is busy, the next destination is hunted until an idle destination is found. The order (hunting type) is assigned in programme [106] Station Hunting Type. The system supports 32 hunting groups. The station hunting feature is assigned on the hunting group basis.

Hunting works when an incoming call arrives at a floating number for a hunting group.

However, for Voice Mail/Automated Attendant hunting, an incoming call to any extension number which belongs to a hunting group is hunted as well.

The following assignments are determined for the hunting group.

- Floating Extension Number of Hunting Group (FENOH)
- The Hunting Group Name
- Numbers of Waiting Queues
- Overflow Status
- The Destination of Intercept Routing — Day/Night
- Hunting Type

Conditions

- Each extension can belong to more than 1 group simultaneously.

Programming Guide References

- [106] Station Hunting Type
- [131] Hunting Group Assignment
- [132] Hunting Group Name Assignment
- [133] Hunting Overflow
- [134-135] Hunting Intercept — Day/Night
- [813] Floating Number Assignment

Features Guide References

- No Reply Group
- Ring Group
- Station Hunting
- Uniform Call Distribution (UCD)

User Manual References

Not Applicable

Integrated Services Digital Network (ISDN)

Description

The system can manage a call received from the ISDN line by point-to-point or point-to-multipoint configuration.

Point-to-point

A call received through 1 ISDN port is sent directly to a specific extension using a Direct Dialling In (DDI) service.

Point-to-multipoint

One ISDN port can support a maximum of 10 Multiple Subscriber Numbers (MSN). A call received through an ISDN port is sent directly to the pre-assigned extension if the dialled number matches the stored MSN.

- The recommended parameter combinations are listed below. The underlined selections are recommended.

Programme	[422] ISDN Port Type	[423] ISDN Layer 1 Active Mode	[424] ISDN Configuration	[425] ISDN Data Link Mode	[426] ISDN TEI Mode
Parameter	CO (DDI)	Call/ <u>Permanent</u>	Point	Call/ <u>Permanent</u>	Fix 0
	CO (MSN)	Call/ <u>Permanent</u>	Multipoint	<u>Call</u> / Permanent	Automatic
	Extension	<u>Call</u> / Permanent	Multipoint	<u>Call</u> / Permanent	Automatic

Conditions

- After ISDN assignments, you should reset the system so that the assignments are effective. (Power off and power on.)

Installation Manual References

- 2.2.5 ISDN (BRI) CO Line Connection Structure
- 2.4.1 CO Line Connection
- 2.10.1 System Restart

Programming Guide References

- [024] Intelligent Call Handling Table
- [422] ISDN Port Type
- [423] ISDN Layer 1 Active Mode
- [424] ISDN Configuration
- [425] ISDN Data Link Mode
- [426] ISDN TEI Mode
- [452] Extension Ringing Assignment

Features Guide References

- Intelligent Call Handling — Distribution of Incoming Outside Calls

User Manual References

Not Applicable

Integrated Services Digital Network (ISDN) Extension

Description

ISDN extensions include ISDN terminal units such as ISDN telephones, facsimiles or personal computers which are connected to each ISDN (BRI) ports. A maximum of 8 terminal units can be connected to each ISDN (BRI) port with point-to-multipoint configuration. However, only up to 2 units can be used simultaneously. To user ISDN extension lines, an external or an internal power supply is required. Terminal equipment can be addressed individually with Multiple Subscriber Numbers (MSN). The MSN consists of the ISDN extension number and an additional digit, 0 through 99. If MSN is not assigned, all equipment on the same ISDN (BRI) port are called simultaneously.

The following bearer capabilities can be supported:

<u>Transfer Mode</u>	<u>Transfer Capability</u>
Circuit	Unrestricted digital
Circuit	Speech
Circuit	3.1 kHz Audio

The functions of terminal equipment are similar to single line telephone functions as below:

Features Available for ISDN Extension	
Absent Message Capability* ¹	Account Code Entry
Automatic Station Release	Budget Management* ¹
Built-in Voice Message* ²	Call Hold — CO Line
Call Hold — Intercom	Call Hold Retrieve — CO Line
Call Hold Retrieve — Intercom	Call Hold, Exclusive — CO Line
Call Hold, Exclusive — Intercom	Call Park
Call Pickup Deny* ¹	Call Pickup, CO Line
Call Pickup, Directed* ¹	Call Retrieving, Telephone Answering Machine (TAM)* ³
Call Splitting	Call Transfer, Screened — to CO Line
Call Transfer, Screened — to Extension	Call Transfer, Unscreened — to Extension
Calling/Connected Line Identification Presentation (CLIP/COLP)* ¹	Calling/Connected Line Identification Restriction (CLIR/COLR)* ¹
Class of Service (COS)* ¹	Conference
Department Codes* ¹	Do Not Disturb (DND) for Intelligent Call Handling 1:1 Call* ¹

Features Available for ISDN Extension	
Doorphone Call* ⁴	Electronic Station Lockout* ¹
Emergency Call	End-to-End DTMF Signalling (Tone Through)
External Relay	Hold Recall
Integrated Services Digital Network (ISDN) Service Access	Line Access, Automatic
Line Access, CO Line Group	Music on Hold
No Reply Group	Operator Call
Paging — All* ⁵	Paging — External
Privacy, Automatic	Private Call
Quick Dialling	Redial, Last Number* ¹
Second Ringer* ¹	Station Message Detail Recording (SMDR)* ¹
Station Programme Clear* ¹	Station Speed Dialling* ¹
System Speed Dialling	Terminal Portability for ISDN Extension
Trunk (CO Line) Answer From Any Station (TAFAS)	

- *¹: These features apply to all terminal units on the same ISDN (BRI) extension line.
 - *²: It is impossible to set this feature for ISDN extensions. However, it is possible for the ISDN extension users to leave a voice message at the extension that has been set to forward incoming calls to its personal message box, or by using the Direct Message function.
 - *³: If a TAM is connected to the ISDN (BRI) extension line, the calls on that TAM cannot be retrieved.
 - *⁴: You can call the doorphone, but cannot receive a call from the doorphone.
 - *⁵: A paged announcement cannot be heard from the speakers of ISDN extensions.
- The recommended parameter combinations are listed below. The underlined selections are recommended.

Programme	[422] ISDN Port Type	[423] ISDN Layer 1 Active Mode	[424] ISDN Configuration	[425] ISDN Data Link Mode	[426] ISDN TEI Mode
Parameter	Extension	<u>Call</u> / Permanent	Multipoint	<u>Call</u> / Permanent	Automatic

Conditions

- **After ISDN assignments, you should reset the system so that the assignments are effective.** (Power off and power on.)
- If your contract is Point-to-Multipoint, a maximum of 8 terminal units can be connected.
- If an ISDN extension belongs to a hunting group, the type of the group must be No Reply.
- Each port can be assigned as follows:

CO No.	ISDN Port	External	Internal
1, 2	1	○	—
3, 4	2	○	○
5, 6	3	○	○

Installation Manual References

- 2.4.1 CO Line Connection
- 2.2.5 ISDN (BRI) CO Line Connection Structure
- 2.2.6 ISDN Extension Connection Structure
- 2.10.1 System Restart

Programming Guide References

- [012] ISDN Extension Number Set
- [013] ISDN Extension Name Set
- [014] Budget Management on ISDN Port
- [422] ISDN Port Type
- [423] ISDN Layer 1 Active Mode
- [424] ISDN Configuration
- [425] ISDN Data Link Mode
- [426] ISDN TEI Mode
- [427] ISDN Extension Multiple Subscriber Number
- [428] ISDN Extension Progress Tone
- [613] ISDN Class of Service
- [614] Department Codes of ISDN Port
- [615-616] Outgoing Permitted CO Line Assignment – Day/Night for ISDN Extension

Features Guide References

- Hunting Group
- Station Hunting

User Manual References

- 2.1.2 For ISDN Extension Users

Integrated Services Digital Network (ISDN) Service Access

Description

Allows you to access a service which is provided by ISDN.

Conditions

- To use the ISDN service button on a digital proprietary telephone, you must first assign a flexible button as the ISDN service button.
- Make sure to press the ISDN service button after seizing a CO line. Otherwise a reorder tone will be heard.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.2.7 Integrated Services Digital Network (ISDN) Service Access

Intelligent Call Handling — Distribution of Incoming Outside Calls

Description

Directs an incoming outside call to a specific extension/group depending on the DDI/MSN numbers provided by Integrated Services Digital Network (ISDN) or the calling party's identification number (CLIP). Up to 500 CLIP numbers and 200 DDI/MSN numbers can be stored in programme [001] System Speed Dialling and Intelligent Call Handling Number Set (max. 23 digits).

Intelligent Call Handling (ICH) table 1 through 62 decide how an incoming outside call will be distributed.

CLIP stands for "Calling Line Identification Presentation";

it is the ISDN version of caller ID. The CLIP number assigned in programme [001] System Speed Dialling and Intelligent Call Handling Number Set is other party's telephone number, but not yours.

DDI/MSN stand for "Direct Dialling Inward"/"Multiple Subscriber Numbers";

DDI/MSN numbers are your telephone numbers. You can have more than one numbers with an ISDN line. Specific destinations can be assigned for each DDI/MSN number.

IMPORTANT

Please enable this feature as the first step. Especially, be sure to assign DDI/MSN numbers at System Speed Dialling and Intelligent Call Handling (SSD & ICH) locations 500-699.

Receiving Patterns

One of the following receiving patterns can be assigned to each Call Handling table.

a) 1:1 or 1:N distribution (Immediate Ringing, Delayed Ringing or No Ringing)

For a single line telephone (SLT) and a digital proprietary telephone (DPT), you can choose from Disable (Not Receive)/No Ring (CO or DDI/CLIP button is flashing)/ Immediate/2 Rings, 4 Rings, 6 Rings, 8 Rings Delay. ([452] Extension Ringing Assignment) Also, 1 ISDN extension number can be assigned to ring immediately.

1:1 distribution is realised by setting only 1 extension is assigned to ring and other extension is assigned as "Disable".

1:N distribution is realised by setting 2 or more extensions to ring.

Forwarding to the Built-in Voice Message Box – Personal Message Box

This is possible if an optional card KX-TD61291 is installed and the Built-in Voice Message (BV) feature is set up. If an SLT user or a DPT user sets call forwarding to BV box and only 1 extension is set to ring and other extensions are assigned as "Disable" (1:1 distribution), a personal message box of BV can be used.

Required Programming

[001] System Speed Dialling and Intelligent Call Handling Number Set

[024] Intelligent Call Handling Table

[452] Extension Ringing Assignment

[454] ISDN Extension Ringing Assignment

b) Floating Extension, Phantom Extension or Voice Mail Extension

One of the floating extension, phantom extension or voice mail extension number can be assigned. In this case, SLTs, DPTs and ISDN extension can not receive a call.

Required Programming

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [024] Intelligent Call Handling Table
- [126] Voice Mail Number Assignment (For voice mail extension)
- [127] Voice Mail Extension Number Assignment (For voice mail extension)
- [128] Voice Mail Extension Group Assignment (For voice mail extension)
- [130] Phantom Extension Number Assignment (For phantom extension)
- [131] Hunting Group Assignment (For hunting group)
- [132] Hunting Group Name Assignment (For hunting group)
- [133] Hunting Overflow (For hunting group)
- [453] Other Extension Ringing Assignment

c) Forwarding to the Built-in Voice Message Box – Company Message Box

This is possible if an optional card KX-TD61291 is installed and the BV feature is set up.

Required Programming

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [024] Intelligent Call Handling Table
- [452] Extension Ringing Assignment
- [454] ISDN Extension Ringing Assignment
- [455] Built-in Voice Message for Call Handling (Selection: **BV**)

d) Automated Attendant (AA) with Message

This is possible if an optional card KX-TD61291 is installed in the main unit. A caller can dial an extension by one-digit dialling (0-9). SLT or DPT can be assigned as the destination.

Required Programming

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [024] Intelligent Call Handling Table
- [452] Extension Ringing Assignment
- [454] ISDN Extension Ringing Assignment
- [455] Built-in Voice Message for Call Handling (Selection: **DISA**)
- [815] DISA Automated Attendant (AA)

e) Direct Inward System Access (DISA) with Message

This is possible if an optional card KX-TD61291 is installed in the main unit. A caller can dial an extension or dial out on a CO line following outgoing messages (OGM).

Required Programming

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [024] Intelligent Call Handling Table
- [452] Extension Ringing Assignment
- [454] ISDN Extension Ringing Assignment
- [455] Built-in Voice Message for Call Handling (Selection: **DISA**)

Receiving Patterns When All Busy

a) Recovery

If the called extension is busy, the ringing at the called extension will start when called extension becomes idle. Until the extension answers, the caller will hear the ringback tone.

Required Programming

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [024] Intelligent Call Handling Table
- [452] Extension Ringing Assignment
- [454] ISDN Extension Ringing Assignment
- [456] Call Handling When All Busy (Selection: **Recovery**)

b) Busy

An incoming outside call cannot be received. The caller will hear the busy tone.

Required Programming

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [024] Intelligent Call Handling Table
- [452] Extension Ringing Assignment
- [454] ISDN Extension Ringing Assignment
- [456] Call Handling When All Busy (Selection: **Busy**)

c) Forwarding to the Built-in Voice Message Box — Company Message Box

Required Programming

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [024] Intelligent Call Handling Table
- [452] Extension Ringing Assignment
- [454] ISDN Extension Ringing Assignment
- [456] Call Handling When All Busy (Selection: **Busy BV**)

d) UCD/Ring Group/No Reply with Message (Queuing)

If the receiving pattern is "**Floating Extension, Phantom Extension or Voice Mail Extension**" and the destination is UCD group, No Reply group or Ring group, queuing of the received call will be possible in accordance with the UCD time table when all extensions in the called group are busy. When at least 1 extension in the group becomes idle, the OGM will stop and the extension will ring.

Required Programming

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [024] Intelligent Call Handling Table
- [131] Hunting Group Assignment
- [132] Hunting Group Name Assignment
- [133] Hunting Overflow (If needed.)
- [137-138] Time Table Assignment — Day/Night
- [139] Time Table
- [453] Other Extension Ringing Assignment
- [456] Call Handling When All Busy (Selection: **Queuing**)

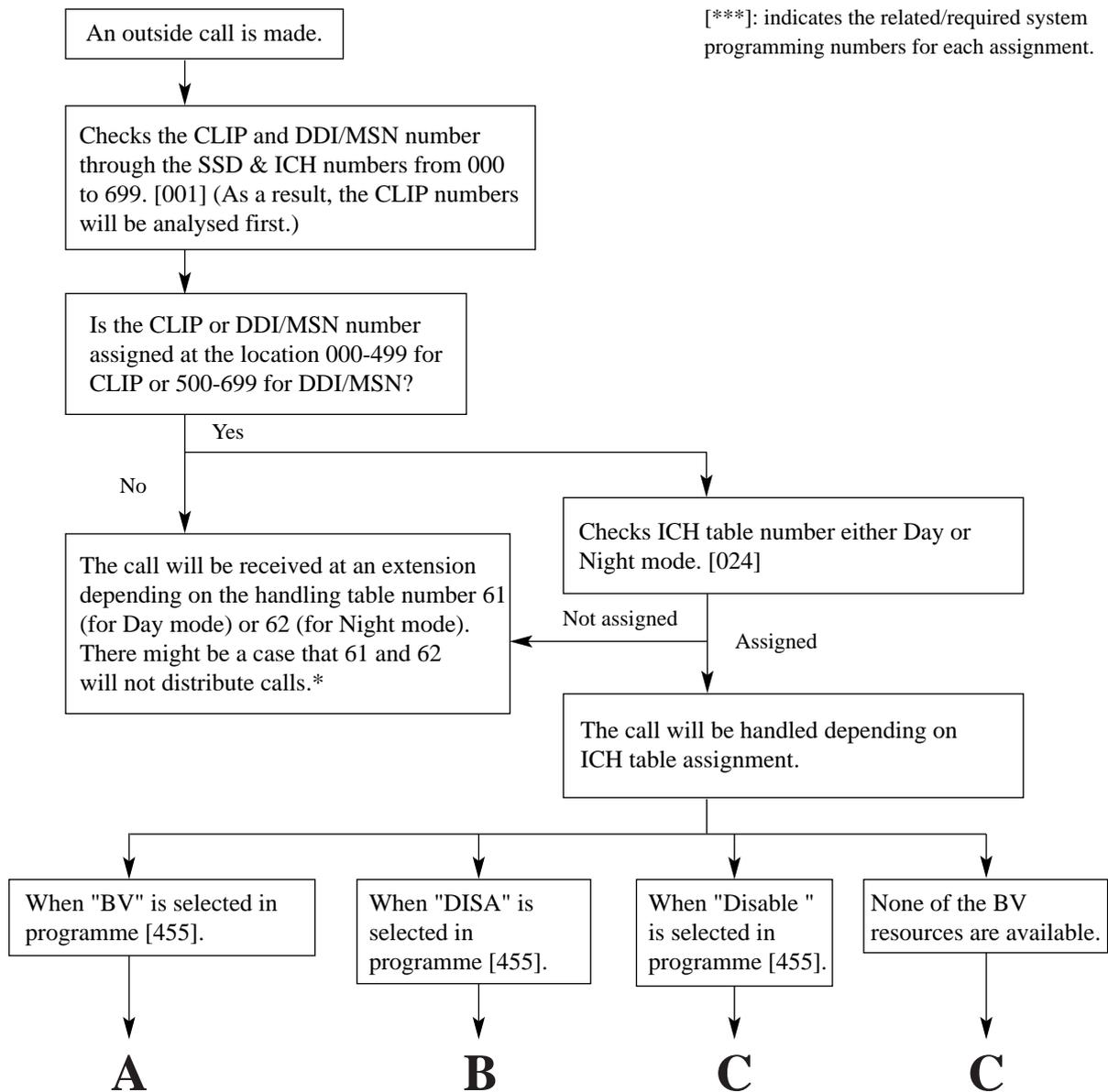
Following combinations of "receiving patterns" and "receiving patterns when all busy" are possible.

Receiving Patterns	Receiving Patterns When All Busy	Memo
1:1 or 1:N (Immediate/Delayed/No ringing/Disable)	Recovery/Busy/Company Message Box	
Floating Extension, Phantom Extension or Voice Mail Extension	Recovery/Busy/Company Message Box/Queuing	Queuing is only available when the destination is UCD group, No Reply group or Ring group
Built-in Voice Message — Company Message Box	Recovery/Busy	If the resource cannot be used, 1:1 or 1:N distribution will be used. If all busy, Recovery or Busy will be used.
Automated Attendant (AA)	Recovery/Busy	If the resource cannot be used, 1:1 or 1:N distribution will be used. If all busy, Recovery or Busy will be used.
Direct Inward System Access (DISA)	Recovery/Busy	If the resource cannot be used, 1:1 or 1:N distribution will be used. If all busy, Recovery or Busy will be used.

Note

You can set either the Built-in Voice Message (BV) feature or the Voice Mail (VM) feature at a time, but not both. If you set VM, the functions of an optional voice message card KX-TD61291 cannot be used. In other words, BV, OGM and Direct Inward System Access (DISA) cannot work when VM is used. Before setting VM, be sure to listen to voice messages of BV and then delete call log entries if stored. Otherwise, you can do nothing with it after setting VM.

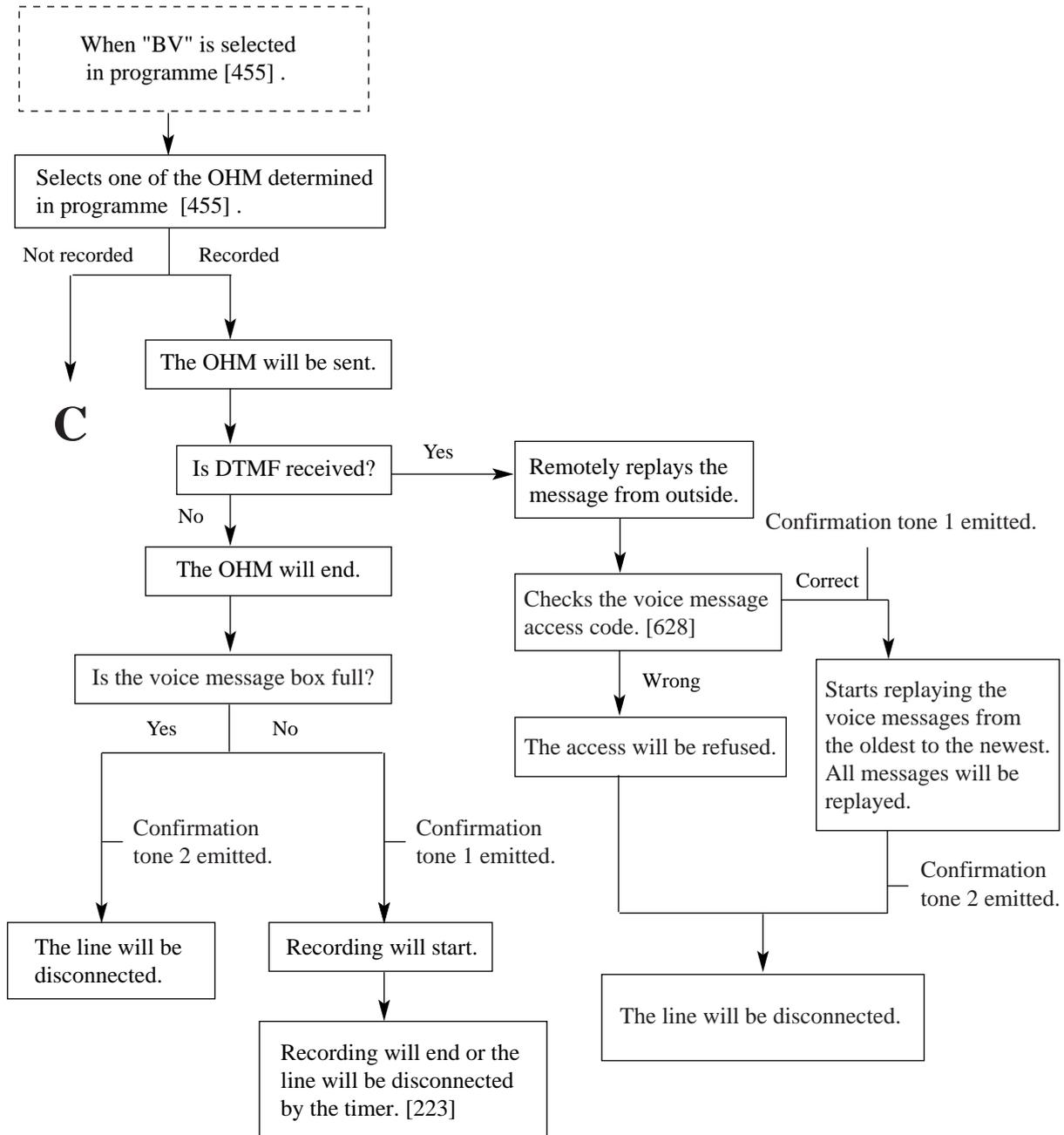
Flowchart of possible cases and results for the Intelligent Call Handling



* When the contract of your system is point-to-multipoint and if you forget to assign an MSN number at SSD & ICH locations 500-699, the system will not receive calls with that MSN.

A

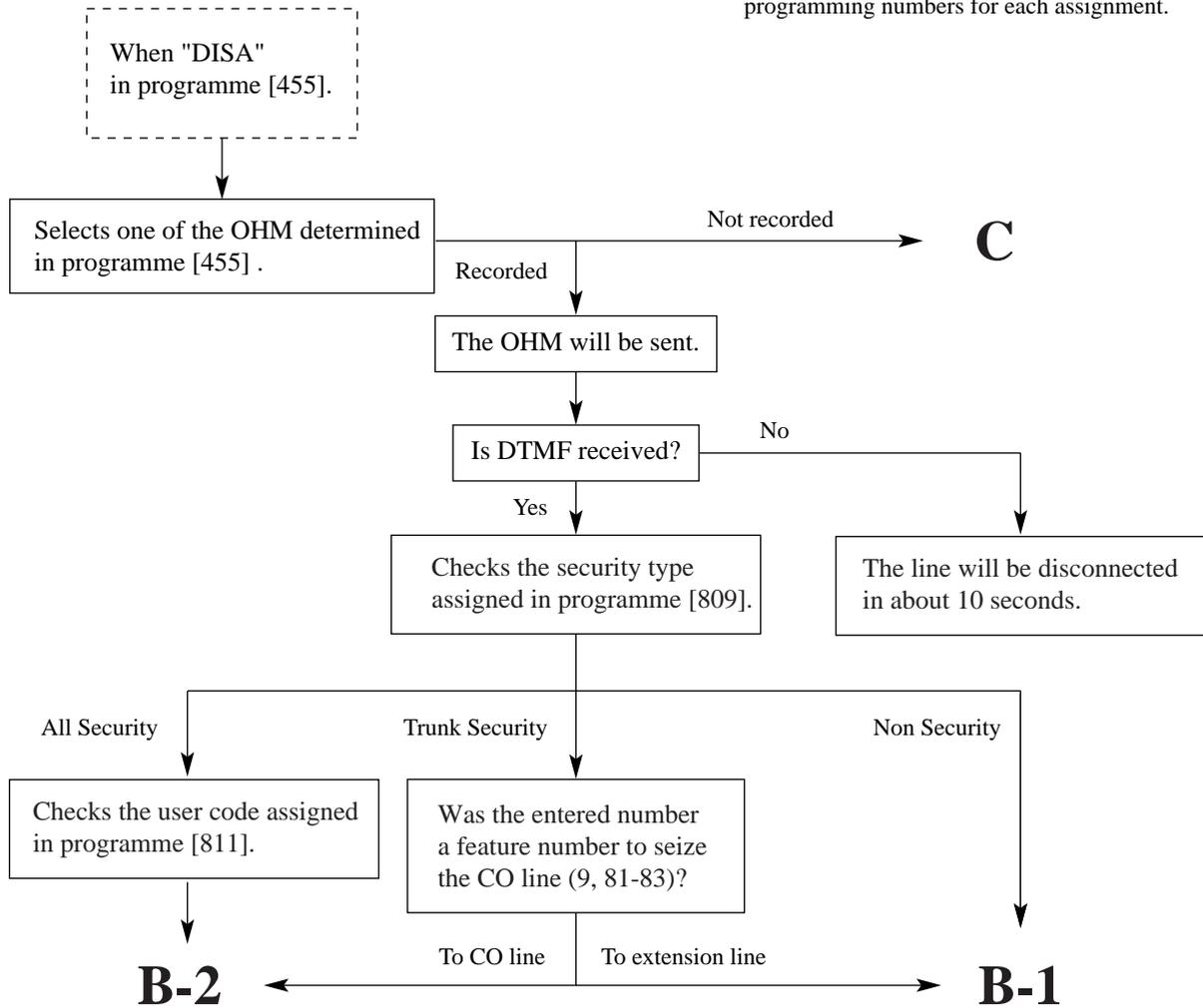
***: indicates the related/required system programming numbers for each assignment.



C

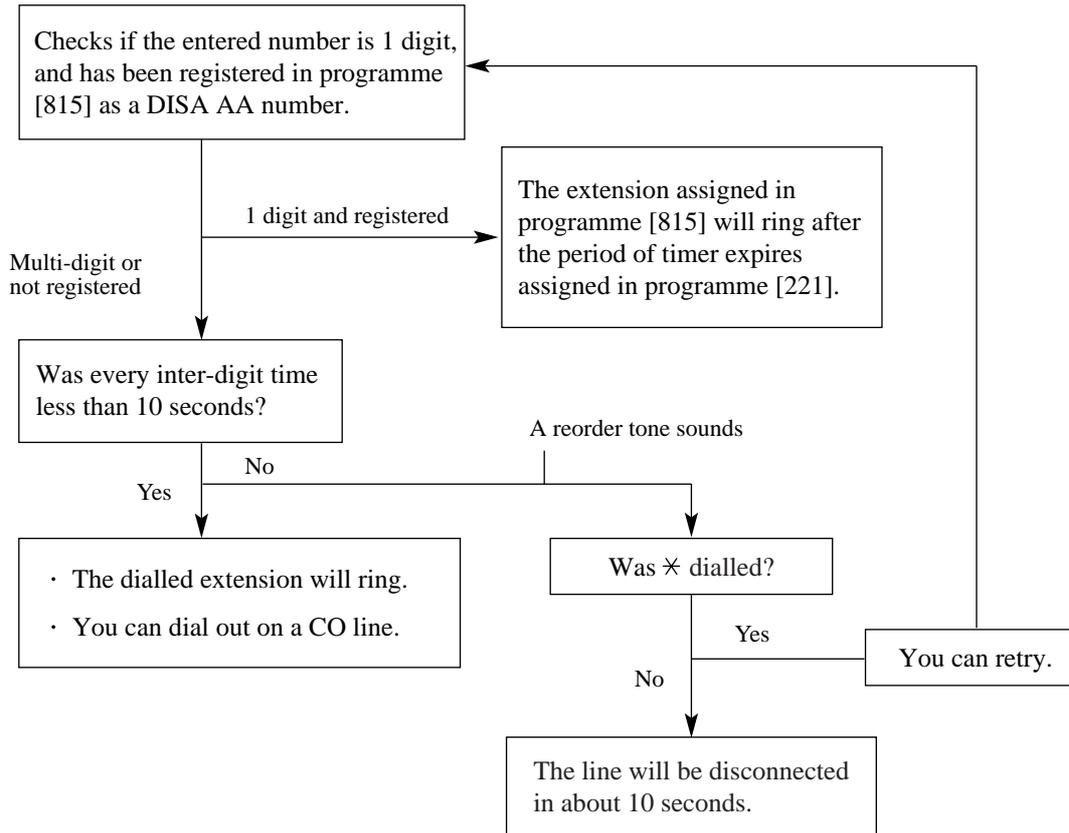
B

***: indicates the related/required system programming numbers for each assignment.



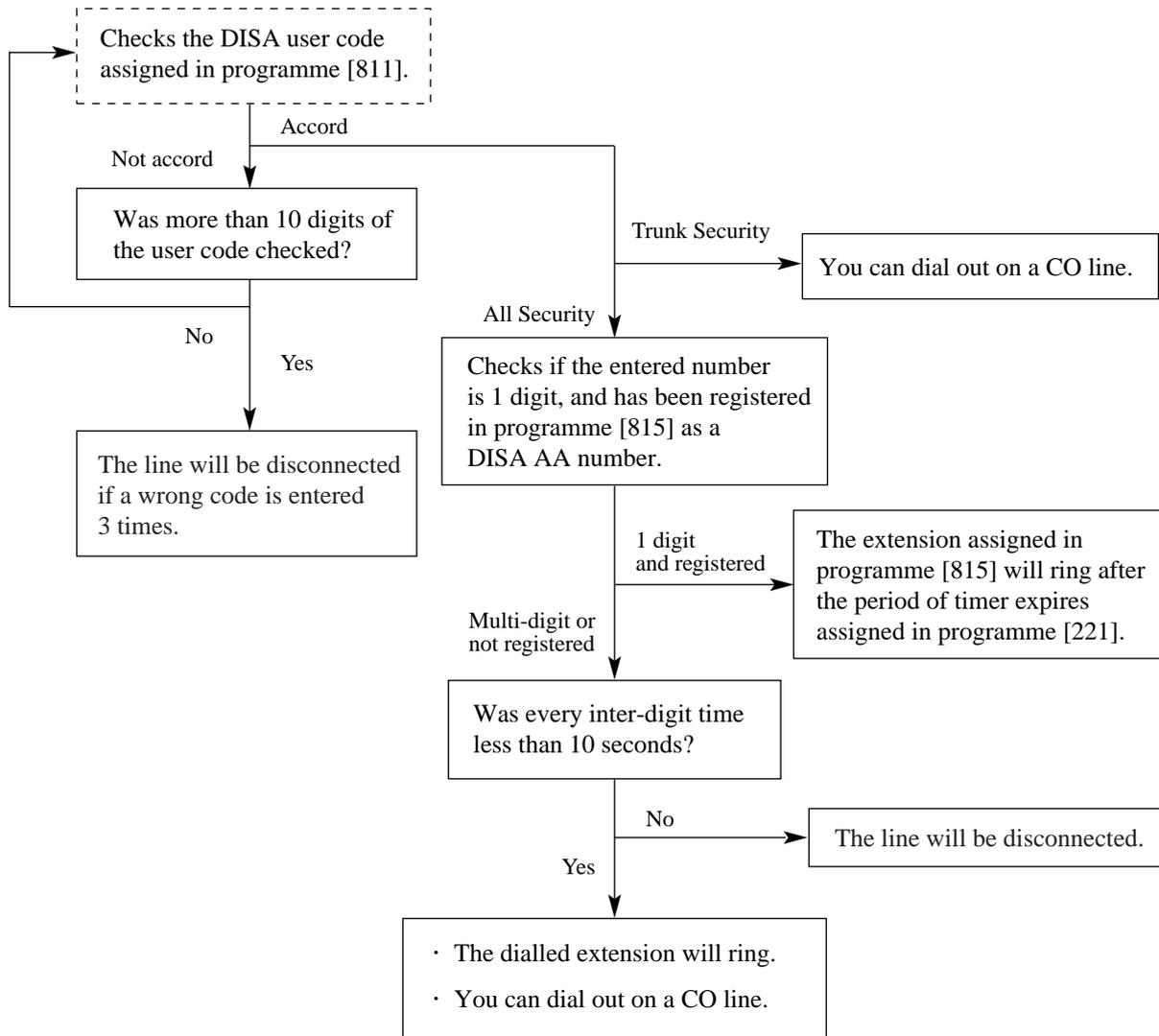
B-1

[***]: indicates the related/required system programming numbers for each assignment.



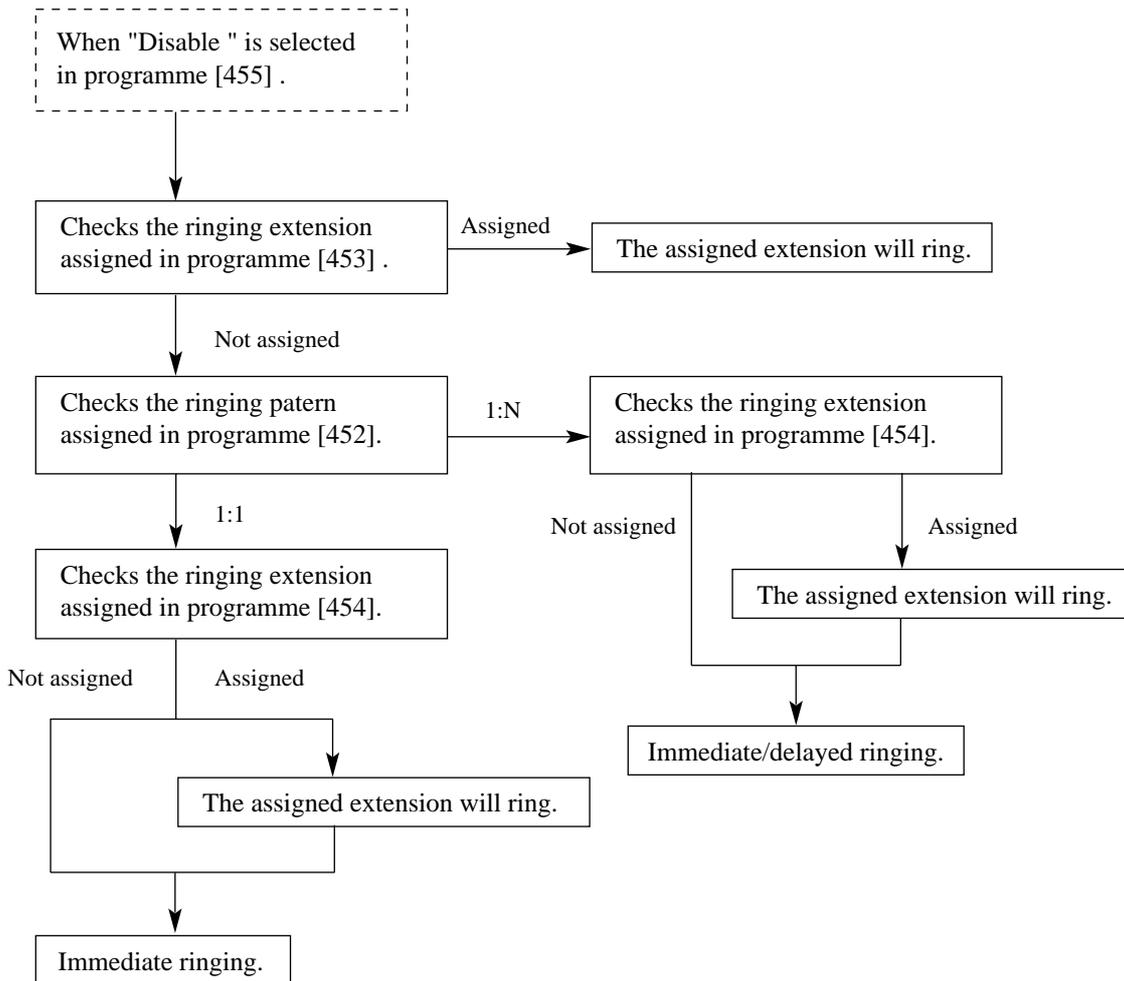
B-2

[***]: indicates the related/required system programming numbers for each assignment.



C

***: indicates the related/required system programming numbers for each assignment.



Note

- There might be the case that you want to use the CLIP number of Mr. A as a System Speed Dialling number but want calls from him received by the extensions that have a DDI/MSN match.
 In this case, **be sure not to assign the Handling Table number for his CLIP** in programme [024] Intelligent Call Handling Table. His number will be analysed twice: once for his CLIP (the handling table will not route the call) and then again for DDI/MSN he dialled (the handling table will route the call).

Recommendation of Intelligent Call Handling Table Assignments

Several recommendations of Intelligent Call Handling table assignments in certain cases are shown below. After examining the following case studies, determine which case is suitable for your application. (See Intelligent Call Handling Table Assignment on the next page.)

Case Study

Case 1—When analysing a calling party's CLIP

Case 2—When analysing a DDI/MSN number

Case 1: When Analysing a Calling Party's CLIP

SITUATION	RECOMMENDATION	Table Example no.
A call from an important customer	Ring the extension of the person in charge. (e.g. the president/a manager/a sales person)	1
	Let a caller choose a ringing extension by using the AA/DISA features. For the operation, refer to "2.2.8 To Access Another Party Directly from Outside (Direct Inward System Access [DISA])" in the User Manual.	2
A call from overseas (e.g. from Spain)	Ring the extension of the person in charge. (e.g. a sales person/a person who speaks Spanish)	1
When all are busy	Forward incoming calls to the company message box.	3

Case 2: When Analysing a DDI/MSN Number

SITUATION	RECOMMENDATION	Table Example no.	
When out of the office	Forward calls to GSM. (DISA, CO-to-CO) For the operation, refer to 2.2.8 To Access Another Party Directly from Outside (Direct Inward System Access [DISA])	2	
	Forward calls to Built-in Voice Message box.	(On a holiday) Forward calls to the Company message box.	4
		(When away from your desk) Forward calls to your Personal message box.	5
When all are busy	Forward incoming calls to the company message box.	3	

SITUATION	RECOMMENDATION	Table Example no.
The place where mainly receiving calls	Announce a sales campaign while the called party is busy. (UCD/Queuing) For the proper operation, set the following system programming beforehand. [131] Hunting Group Assignment/[132] Hunting Group Name Assignment/[133] Hunting Overflow/[134-135] Hunting Intercept — Day/Night/[137-138] Time Table Assignment — Day/Night/ [139] Time Table	6
Delayed ringing	Let the extensions ring according to priority. (Delayed Ringing) * Not available for Intelligent Call Handling 1:1 call.	7

Intelligent Call Handling Table Assignment

Table Example no.	Intelligent Call Handling Table Assignment								
	Extension and ISDN Extension Ringing Assignment					Other Extensions [453]	Built-in Voice Message [455]	All Busy [456]	IRNA [457]
	[452]				[454]				
	Jack 1-1	Jack 1-2	...	Jack 8	ISDN Extension				
1	Immediate	Disable	...	No Ring	—	—	Disable	Recovery	201
2	Immediate	Disable	...	Disable	—	—	DISA BV OGM1*	Recovery	—
3	Immediate	Immediate	...	Disable	—	—	Disable	BUSY BV OGM2*	—
4	Immediate	Disable	...	Disable	—	—	BV OGM3*	Recovery	—
5	Disable	Disable	...	Immediate	—	—	Disable	Recovery	—
6	Disable	Disable	...	Disable	—	293	Disable	Queuing	—
7	8 Rings	4 Rings	...	Immediate	—	—	Disable	Recovery	—

[***]: The programming numbers required for the ringing assignment.

BV: Built-in Voice Message

Other Extensions: Floating Extension, Phantom Extension and Voice Mail Extension

Note

- *: Some examples of OGMs are shown below.
- When all extensions in [452] Extension Ringing Assignment have been disabled, you cannot assign anything in [455] Built-in Voice Message for Call Handling. Be sure to assign at least 1 extension (as a backup when all BV resources are busy).

- If you assign an ISDN extension as the destination of 1:1 calls, be sure to select **Busy** in programme [456] Call Handling When All Busy. Other selections are not applicable.
- If you assign an ISDN extension as one of the destinations of 1:N calls, be sure to select **Recovery** in programme [456] Call Handling When All Busy. Other selections are not applicable.
- Up to 60 handling tables (1-60) can be assigned.
- Intelligent Call Handling table number 61 and 62 are reserved to handle calls which the system cannot analyse. Be sure 61 (for day mode) is assigned to at least 1 extension and 62 (for night mode) is assigned to at least 1 extension. The destinations of 61 and 62 cannot be a floating extension, a phantom extension, or a voice mail extension.
- If a floating extension/phantom extension/voice mail extension is assigned to receive a call, an extension and an ISDN extension cannot receive a call.

OGM examples

OGM 1

"This is ABC company. For the sales division, press 1. For the service division, press 2. To call the operator, press 0."

"This is ABC company. To contact Mr. D, press 101. To contact Mrs. E, press 102."

OGM 2

"We are sorry. The line is currently busy."

OGM 3

"This is ABC company. Please leave a message after the beep."

For the Night Mode

"This is ABC company. We are sorry but our office is closed for the day."

LED Pattern of CO Button and DDI/CLIP Key

Receiving Patterns	CO Button		CLIP Button	
	The Extension is Idle	Busy	The Extension is Idle	Busy
1:1 (Operator) or Call Waiting is on	Ringing Flashing Green	Flashing Green	Flashing Green	OFF
1:1 (Except for operator) and Call Waiting is off	Ringing Flashing Green	Busy Tone (for a Caller)	Flashing Green	OFF

1:N	Ringing Flashing Red	Flashing Red	Flashing Green	OFF
-----	----------------------------	-----------------	-------------------	-----

Conditions

- You can assign CLIP numbers at System Speed Dialling locations 000-499. DDI/MSN numbers can be assigned at locations 500-699. We recommend that wild card numbers for CLIP be stored starting at location 499, and then 498, 497, etc. That is, go backwards numbers starting 499.
We recommend the preceding because if you assign the wild card number "9-012*****" at location 000, then all calls that start with "012" will be processed according to that routing — even though you assign "9-0123456789" at another location. This is because the CLIP or called party's number is analysed sequentially from 000 to 699.
- When you assign a wild card, be sure to enter all the digits.
For example, when the telephone number has 10 digits and you want to assign an area code as the wild card, assign "9-012*****". ("012" is an example of an area code.)
- If you assign a wild card number at the locations 000-499, the name assigned in programme [002] System Speed Dialling and Intelligent Call Handling Name Set will not be displayed when receiving the call.
- A maximum of 24 DDI/CLIP keys can be located at CO buttons on DPT. The LED indicator of the DDI/CLIP key flashes green when receiving a call from the CLIP number, or with the DDI/MSN number, you assigned at SSD & ICH table. The extensions assigned in programme [452] Extension Ringing Assignment can answer the call by pressing the flashing DDI/CLIP key.
- If extensions, belonging to a hunting group, log out, incoming calls will be handled depending on ICH table 61 (day) or 62 (night).
- The Forwarding/Do Not Disturb features are available except for forwarding ICH 1:N calls to the personal message box.

Programming Guide References

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [002] System Speed Dialling and Intelligent Call Handling Name Set
- [024] Intelligent Call Handling Table
- [131] Hunting Group Assignment
- [132] Hunting Group Name Assignment
- [137-138] Time Table Assignment — Day/Night
- [139] Time Table
- [452] Extension Ringing Assignment
- [453] Other Extension Ringing Assignment
- [454] ISDN Extension Ringing Assignment
- [455] Built-in Voice Message for Call Handling
- [456] Call Handling When All Busy
- [623] CLIP/COLP Number Assignment for Extension
- [624] CLIP/COLP Number Assignment for ISDN Extension
- [813] Floating Number Assignment
- [990] System Additional Information

Features Guide References

- Built-in Voice Message
- Direct Inward System Access (DISA)

User Manual References

- 2.2.8 To Access Another Party Directly from Outside (Direct Inward System Access [DISA])
- 2.5.1 Built-in Voice Message
- 2.5.2 Forwarding Your Calls (Call Forwarding)
- 4.1.3 Customising the Buttons
- 4.2.3 System Speed Dialling and Intelligent Call Handling Number Set (001)
- 4.2.4 System Speed Dialling and Intelligent Call Handling Name Set (002)

Intercept Routing

Description

Provides automatic redirection of incoming outside calls. There are 2 types of Intercept Routing. In the first case, a call cannot be placed to the called party. This is called Rerouting. In the second case the call is not answered within a programmed time period. This is called Intercept Routing — No Answer (IRNA).

Items which can have the Intercept Routing destination are:

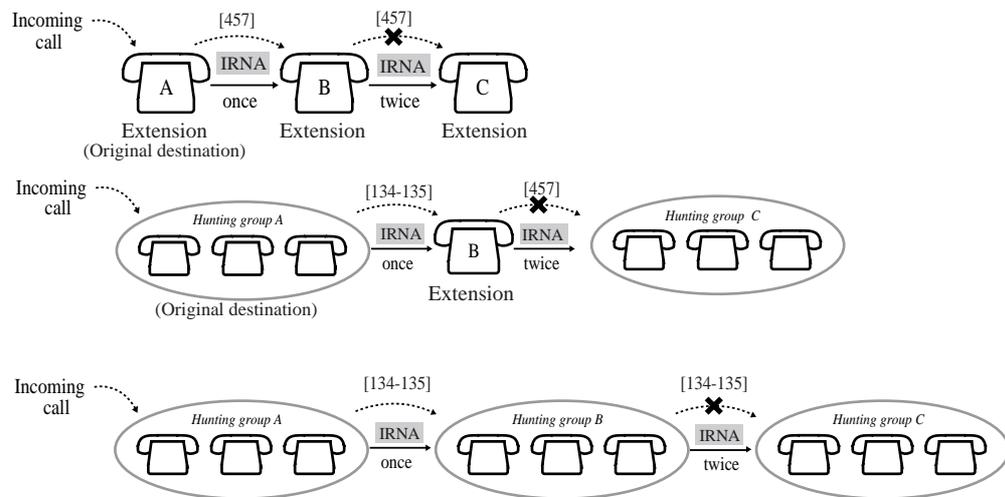
1. Intelligent Call Handling tables
2. Hunting Group

Conditions

- Calls arriving via Intelligent Call Handling table number 61 (for day mode) and 62 (for night mode) cannot be intercepted.
- Intercept Routing applies to Intelligent Call Handling 1:1, Intelligent Call Handling 1:N, TAFAS, Call Forwarding, and Station Hunting.
- The final destination may be set per Intelligent Call Handling table number (the number may be a day number or a night number) or per Hunting Group for day and night modes. There are 6 possible destinations:
 - a) an extension — digital proprietary telephone (DPT)/single line telephone (SLT)/ISDN Extension (point-to-point/point-to-multipoint)
 - b) an external pager
 - c) FENOH (Floating Extension Number of Hunting Group)
 - d) a second ringer
 - e) a phantom extension
 - f) a voice mail extension
- Intercept Routing is activated as shown below, depending on the combination of incoming type and called destination.

Destination Type	– Extensions – ISDN Extensions – Voice Mail Extensions – Phantom Extensions – Floating Numbers	– Hunting Groups
Intelligent Call Handling	Per Intelligent Call Handling table [457] Intercept Extension	Per Hunting Group [134-135] Hunting Intercept — Day/Night
Intercept	No more Intercept Routing	No more Intercept Routing

<Example>



[***] : System Programming number

To forward back the call to the hunting group which the call was forwarded from is not possible.

- If the Call Forwarding to CO Line feature is set at the IRNA destination, the call will be forwarded to the specific outside party.

Programming Guide References

- [134-135] Hunting Intercept — Day/Night
- [203] Intercept Time
- [457] Intercept Extension

Features Guide References

- Intelligent Call Handling — Distribution of Incoming Outside Calls

User Manual References

Not Applicable

Intercom Calling

Description

Allows the extension user to call another extension user within the system.

Conditions

- Extension numbers are assigned to all extensions by System Programming. An extension number is programmed to be 2, 3, or 4 digits. The ISDN extension number is programmed to be 1, 2 or 3 digits.
- Names can be given to extension numbers by System Programming. An extension number and a name, if programmed, is shown on the digital proprietary telephone with display during an intercom call.
- DSS buttons permit one-touch access to an extension and provide Busy Lamp Field.
- KX-T7431, KX-T7433, KX-T7436 and KX-T7235 users can make an extension call with an extension dialling directory on the display.
- After dialling an extension number, the user will hear one of the following:
 - Ringback tone: indicates that the other extension is being called.
 - Confirmation tone: indicates that the user can perform Voice Calling.
 - Busy tone: indicates that the other extension is busy.
 - Do Not Disturb tone: indicates that the other extension has DND assigned.

Programming Guide References

- [003] Extension Number Set
- [004] Extension Name Set
- [005] Flexible CO Button/PF Key Assignment
- [012] ISDN Extension Number Set
- [013] ISDN Extension Name Set
- [100] Flexible Numbering

Features Guide References

- Button, Direct Station Selection (DSS)

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

Least Cost Routing (LCR)

Description

Least Cost Routing (LCR) is a system programmable feature that automatically selects the least expensive route available at the time a long distance call is made. Previous programming eliminates the necessity for the user to dial the access code of the least expensive carrier. The appropriate CO port is selected and an appropriate access code is added before the number is outpulsed.

General Description

The dialling plan for long distance call is as follows:

01NX-NXX-XXXX

01NXX-NXXXXXX

(N=2-9; X=0-9)

<Example>

London	0171
	0181
Birmingham	0121
Edinburgh	0131
Glasgow	0141
Liverpool	0151
Manchester	0161
Tyneside	0191
Wearside	0191
Other Areas	01NXX

The charged fee is decided by three digits (NXX) following "0" of the area codes and time zone per carrier. For example, if charged fee by a carrier is as follows, program the carrier's fee in time zones. The system compares each carrier's charged fee and selects the least expensive carrier for the call.

Example of Charged Fee for Carrier

Area	Area 1	Area 2	...	Area 8
Area Code	021,0333,0444 0555, 0666	031,0344,0455 0566,0677	...	061,091,0355 0577, 0588
Peak Rate (9 a.m.–1 p.m., Mon.–Fri.)	£1.00	£2.00	...	£5.00

Example of Charged Fee for Carrier

Area	Area 1	Area 2	...	Area 8
Standard Rate (8 a.m.–9 a.m. and 1 a.m.–6 p.m., Mon.–Fri.)	£0.75	£1.50	...	£3.50
Cheapest Rate (6 p.m.–8 a.m., Mon.–Fri.) (6 a.m., Fri.–8 p.m., Mon.)	£0.50	£1.00	...	£2.00

LCR Programming consists of the following items:

Common Tables

1. [7000] LCR Mode

This program is used to turn on or off the LCR mode. If turned off, calls are sent to CO lines selected according to the Automatic Access CO Port Assignment table (Program [103]). If turned on, calls are sent to appropriate lines according to LCR programming tables. (Default=Disable)

If LCR mode is turned on, the user-dialled number is compared with the following tables:

2. [7002] BTL Access Code

This program is used to store the British Telecom Line (BTL) Access Code. (Default=121)
If the system finds out the same number as the user-dialled number in this table, the call is sent to the CO lines selected from the Automatic Access CO Port Assignment table (Program [103]).

3. [311] Emergency Dial Number Set

This is used to store emergency dial numbers. The dial numbers defined in this table are not applied to LCR and Toll Restriction. If the system finds out the same number as the user-dialled number in this table, the call is sent to the CO lines selected from the Automatic Access CO Port Assignment table (Program [103]).

Emergency dial table

Entry	Dial
1	999
2	112
•	•
•	•
•	•
10	

4. [103] Automatic Access CO Port Assignment

Usually this table is used for automatic line access in non-LCR mode. In LCR mode, if the system cannot find out the dialled number in Carrier Access Tables or LCR Routing Plan Tables, or if the system finds out the same number as the user-dialled number in Emergency Dial Number Set table or LCR Exceptional Code Set table, this table is used to select a CO.

Automatic access CO port table

Priority	1	2	3
CO port	1	2	3

Carrier Access Tables**1. [7X21] LCR Carrier Code**

This is used to store each carrier's access code. Example: Mercury Communications Line (MCL)=131. If the system finds out the same number as the user-dialled number in this table, the call is sent to the carrier's line selected from the LCR CO Port Assignment table (Program [7X23]).

2. [7X23] LCR CO Port Assignment

This program is used to assign CO ports available to access each carrier.

LCR Routing Plan Tables**1. [7X0Y] LCR Leading Digit Entry for Plan 1-8**

The user-dialled area code is compared with this table. If the system finds out the same number in the table, a corresponding [7X1Y] LCR Time and Fee for Plan 1-8 is applied to the call.

2. [7X1Y] LCR Time and Fee for Plan 1-8

This table is used to register each carrier's fee in pounds per minute in each time zone. The system compares the current time and each carrier's charge fee by this table in order to decide the least expensive carrier.

Example of programming tables

Route Plan Table 1**Leading digit table 1**

01	021*
02	0333
03	0444
04	0555
05	0666
•	•
•	•
•	•
80	

•
•
•

Time zone and fee table 1

Monday		Tuesday		...	Sunday	
Start time	Fee	Start time	Fee	...	Start time	Fee
8:00	0.75	8:00	0.75	...	All day	0.50
9:00	1.00	9:00	1.00	...		
13:00	0.75	13:00	0.75	...		
18:00	0.50	18:00	0.50	...		

•
•
•

Route Plan Table 8

Leading digit table 8

01	061*
02	091*
03	0355
04	0577
05	0588
•	•
•	•
•	•
80	

Time zone and fee table 8

Monday		Tuesday		...	Sunday	
Start time	Fee	Start time	Fee	...	Start time	Fee
8:00	3.50	8:00	3.50	...	All day	2.00
9:00	5.00	9:00	5.00	...		
13:00	3.50	13:00	3.50	...		
18:00	2.00	18:00	2.00	...		

3. [7X22] LCR Carrier Modify Command

When the carrier is decided, this table is used to modify the user-dialled number as appropriate for the carrier. This table has the following commands:

- C** : Insert carrier code
- P** : Send a pause
- T** : Change to tone (DTMF) mode
- A** : Insert an Authorization code

I : Insert an Itemised code

H: Home Position – the original number is put here

A maximum of 16 commands can be assigned to a carrier.

4. [7X24] LCR Authorisation Code

This is used to register an authorization code of a carrier to a CO line. The code is inserted at the 'A' position of the LCR Carrier Modify Command.

Example

Authorization code table

CO No.	Authorization Code
01	11111
02	22222
03	33333
•	•
•	•
•	•
24	12121

5. [7003] Itemised Code Set and [7004] ISDN Itemised Code Set

This is used to register an itemised code of an extension. The code is inserted at the 'I' position of the LCR Carrier Modify Command.

Example

Itemised code table

Extension No.	Itemised Code
201	201
202	202
203	203
•	•
•	•
•	•
364	364

6. [7X20] LCR Exceptional Code

This table is used to assign area codes that are excepted from LCR routing plans of the specified carrier. If the system finds out the same number as the user-dialled area code in this table, the call is sent to the CO line selected from Automatic Line Access CO Port Assignment table.

Example

LCR exceptional code table

01	0235
02	0332
•	•
•	•
•	•
80	

Programming Examples

1. If you use BTL/MCL

If you use MCL only for long distance calls, you may program the following tables to decide the carrier. In the table the wild card characters "***" substitute all the digits except the codes in the LCR Exceptional Code Set table. All the dialled numbers except for the excepted codes are sent to the MCL. The excepted codes are sent to the BTL.

a) Route Plan Table 1

Leading digit table 1

01	0***
02	
03	
04	
05	
•	•
•	•
•	•
80	

Time zone and fee table 1

Monday		Tuesday		•••	Sunday	
Start time	Fee	Start time	Fee	•••	Start time	Fee
				•••		
				•••		
				•••		
				•••		

b) Exceptional code set table

01	0235
02	0332

•	•
•	•
•	•
80	

2. If you use BTL/MCL/SPLASH TELECOM Line

If you use BTL/MCL/SPLASH TELECOM Line for long distance calls, you may program the following tables to decide the carrier. If you enter all area codes available, you should program eight hundreds area codes. However, you can use the wild card characters "※※※" for the largest number of area code. The wild card can be programmed at only one location of all the Leading Digit Entry tables 1 through 8 and the Exceptional Code Set table.

a) Carrier Table for MCL

Route Plan Table 1 ("A" rate calls up to 56km)

Leading digit table 1

01	021※
02	0333
03	0444
04	0555
05	0666
•	•
•	•
•	•
80	

Time zone and fee table 1

Monday		Tuesday		•••	Sunday	
Start time	Fee	Start time	Fee	•••	Start time	Fee
8:00	0.75	8:00	0.75	•••	All day	0.50
9:00	1.00	9:00	1.00	•••		
13:00	0.75	13:00	0.75	•••		
18:00	0.50	18:00	0.50	•••		

Route Plan Table 2 ("B1" rate calls on frequently used route over 56km)

Leading digit table 2

01	061※
02	091※
03	0355

04	0577
05	0588
•	•
•	•
•	•
80	

Time zone and fee table 2

Monday		Tuesday		•••	Sunday	
Start time	Fee	Start time	Fee	•••	Start time	Fee
8:00	1.50	8:00	1.50	•••	All day	1.00
9:00	2.00	9:00	2.00	•••		
13:00	1.50	13:00	1.50	•••		
18:00	1.00	18:00	1.00	•••		

Route Plan Table 3 ("B" rate calls calls over 56km)

Leading digit table 3

01	0***
02	
03	
04	
05	
•	•
•	•
•	•
80	

Time zone and fee table 3

Monday		Tuesday		•••	Sunday	
Start time	Fee	Start time	Fee	•••	Start time	Fee
8:00	3.50	8:00	3.50	•••	All day	2.00
9:00	5.00	9:00	5.00	•••		
13:00	3.50	13:00	3.50	•••		
18:00	2.00	18:00	2.00	•••		

Exceptional table (Local Call)

01	0235
02	0332
•	•
•	•
•	•
80	

b) Carrier Table for SPLASH TELECOM Line

Route Plan Table 1 ("A" rate calls up to 56km)

Leading digit table 1

01	021✕
02	0333
03	0444
04	0555
05	0666
•	•
•	•
•	•
80	

Time zone and fee table 1

Monday		Tuesday		•••	Sunday	
Start time	Fee	Start time	Fee	•••	Start time	Fee
8:00	0.50	8:00	0.50	•••	All day	0.40
9:00	1.00	9:00	1.00	•••		
13:00	0.50	13:00	0.50	•••		
18:00	0.40	18:00	0.40	•••		

Route Plan Table 2 ("B1" rate calls on frequently used route over 56km)

Leading digit table 2

01	061✕
02	091✕
03	0355
04	0577
05	0588

• • •	• • •
80	

Time zone and fee table 2

Monday		Tuesday		•••	Sunday	
Start time	Fee	Start time	Fee	•••	Start time	Fee
8:00	1.20	8:00	1.20	•••	All day	1.20
9:00	2.30	9:00	2.30	•••		
13:00	1.70	13:00	1.70	•••		
18:00	1.20	18:00	1.20	•••		

Route Plan Table 3 ("B" rate calls calls over 56km)

Leading digit table 3

01	0***
02	
03	
04	
05	
• • •	• • •
80	

Time zone and fee table 3

Monday		Tuesday		•••	Sunday	
Start time	Fee	Start time	Fee	•••	Start time	Fee
8:00	4.50	8:00	4.50	•••	All day	1.00
9:00	5.00	9:00	5.00	•••		
13:00	4.50	13:00	4.50	•••		
18:00	1.00	18:00	1.00	•••		

Exceptional table (Local Call)

01	0235
----	------

02	0332
• • •	• • •
80	

Conditions

- Toll Restriction check is done before LCR is applied.
- LCR works according to the selected dialling plan. If the user-dialled number is not found in the dialling plans, the dialled number is sent out with Local Access (Automatic line access) Code.
- This feature also applies to Call Forwarding – to CO Line.
- The same code with different digits may be assigned in program [7X0Y] LCR Leading Digit Entry for Plan 1-8 or in program [7X20] LCR Exceptional Code. In this case, the code which has smaller digits takes the more expensive route is priority. To prevent this, enter "*" (wild card) after the code with the smaller digits. Examples are shown below:
<Examples>
 - a) The code priority is as follows:
"044" in program [7201] > "0444" in program [7101]
In this case, "044*" should be assigned in program [7201].
 - b) The code priority is as follows:
"0332" in program [7120] > "03323" in program [7120]
In this case, "0332*" should be assigned in program [7120].
- When making a call to an ISDN line using the memory dialling, and the number has a pause in it, the number after the pause will be sent to the line as DTMF signals. This function is useful when accessing a special network service which can be accessed only by the DTMF signaling. Program [990], Area 07 – bit 1, is used to enable or disable this function (default: disabled).

Programming Guide References

- [100] Flexible Numbering
- [103] Automatic Access CO Port Assignment
- [311] Emergency Dial Number Set
- [7000] LCR Mode
- [7002] BTL Access Code
- [7003] Itemised Code Set
- [7004] ISDN Itemised Code Set
- [7X0Y] LCR Leading Digit Entry for Plan 1-8
- [7X1Y] LCR Time and Fee for Plan 1-8
- [7X20] LCR Exceptional Code
- [7X21] LCR Carrier Code
- [7X22] LCR Carrier Modify Command
- [7X23] LCR CO Port Assignment
- [7X24] LCR Authorisation Code
- [990] System Additional Information

Features Guide References

- Line Access, Automatic

User Manual References

- 2.2.1 Basic Calling

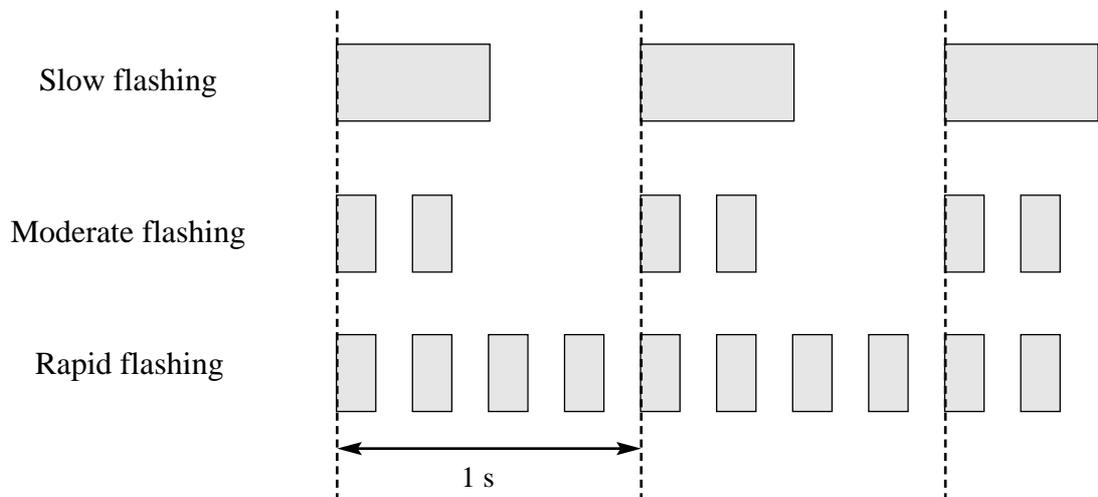
LED Indication, CO Line

Description

The LED (Light Emitting Diode) indicators of the buttons associated with CO lines tell the line conditions with a variety of lighting patterns. This allows the user to determine which lines are idle and which lines are in use. The table below shows the lighting patterns and line conditions according to the CO button type.

LED Indicator	CO Line Status
Off	Idle
Green On	You-use
Green slow flashing	You-hold
Green moderate flashing	One of the following You: Exclusive Hold/Outside-to-outside call /Unattended Conference
Green rapid flashing	Hold Recall/Incoming call
Red On	Other-use/Log-out
Red slow flashing	Other-hold

Flashing LED patterns



Conditions

Red slow flash indication appears on the S-CO button only.

Programming Guide References

No programming required.

Features Guide References

- Button, Loop-CO (L-CO)
- Button, Single-CO (S-CO)

User Manual References

Not Applicable

LED Indication, Intercom

Description

The LED (Light Emitting Diode) indicator of the INTERCOM button indicates the line condition with a variety of lighting patterns. This allows the user to see the current state of the intercom line. The table below shows the lighting patterns and the intercom line conditions.

INTERCOM Button	Intercom Status
Off	Idle
Green On	Intercom call/Conference established
Green slow flash	Intercom call hold
Green moderate flash	Intercom call exclusive hold
Green rapid flash	Incoming intercom/Doorphone call

Conditions

None

Programming Guide References

No programming required.

Features Guide References

- Busy Lamp Field

User Manual References

Not Applicable

Line Access, Automatic

Description

Allows the extension user to dial the automatic line access number and access an idle line from the CO line groups assigned for the extension. The digital proprietary telephone user can use the Loop-CO button in place of the access number.

Conditions

- Each extension is subject to System Programming items for CO lines available to access.
- An idle CO line is selected from the CO line groups assigned to the station. If 1 CO line group is available, an idle line is selected from that group. If multiple CO line groups are available, the CO line group hunting sequence is determined by System Programming.
- This feature requires a CO button (L-CO or S-CO) assignment on a digital proprietary telephone (DPT). Dialling the line access code selects a CO button on a DPT according to the priority:
 - S-CO > L-CO on a hunted CO line group
- If Idle Line Preference — Outgoing is set on the telephone, the user can access an idle line only by going off-hook.
- The system waits for a programmed time before dialling after a CO line is seized.

Programming Guide References

- [100] Flexible Numbering
- [103] Automatic Access CO Port Assignment
- [400] CO Port Connection Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day/Night

Features Guide References

- CO Line Connection Assignment — Outgoing

User Manual References

- 2.2.1 Basic Calling

Line Access, CO Line Group

Description

Allows the extension user to dial access a CO line group. An idle line is selected from the CO line group. To specify a CO line group, dial the feature number (the default setting is "8") and a desired CO line group number (1 through 3).

Conditions

- Each extension is subject to System Programming items for CO lines available to access.
- An idle line is selected in sequence from the lines in the specified CO line group.
- If Idle Line Preference — Outgoing is set on the telephone, the user can access an idle line only by going off-hook.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [400] CO Port Connection Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day/Night

Features Guide References

- CO Line Connection Assignment — Outgoing

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

Line Access, Direct

Description

Allows the digital proprietary telephone user to select a CO line by pressing an idle CO button, which automatically establishes handsfree operation mode and allows the user to perform On-Hook Dialling. The user need not press the SP-PHONE button nor lift the handset.

Conditions

- There are 2 types of CO buttons which can be programmed on an extension: Single-CO button and Loop-CO button.
- Each extension is subject to System Programming items for CO lines available to access.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [400] CO Port Connection Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day/Night

Features Guide References

- Button, Loop-CO (L-CO)
- Button, Single-CO (S-CO)
- CO Line Connection Assignment — Outgoing

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

Line Access, Individual

Description

Allows the digital proprietary telephone user one-button access to a CO line without having to dial a line access code.

Conditions

- Each extension is subject to System Programming items for CO lines available to access.
- This feature requires a Single-CO (S-CO) button assignment on a digital proprietary telephone.
- The system waits for a programmed time before dialling after a CO line is seized.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [400] CO Port Connection Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day/Night

Features Guide References

- Button, Single-CO (S-CO)
- CO Line Connection Assignment — Outgoing

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

Line Preference — Incoming (No Line/Prime Line/Ringing Line)

Description

A digital proprietary telephone user can select the method used to answer incoming calls from the following 3 line preferences:

- a) No Line Preference
No line is selected when you go off-hook. You must select a line to answer.
- b) Prime Line Preference
You can assign a prime line beforehand and answer a call on that line, when multiple calls are received simultaneously.
- c) Ringing Line Preference
When you go off-hook, you answer the call ringing at your telephone.

Conditions

- Setting a new line preference feature cancels the previous setting.
- If Prime Line Preference is selected and an incoming call arrives from a line other than the prime line, it cannot be answered just by going off-hook. The Prime Line should be assigned to the Single CO button.
- If Ringing Line Preference is selected, going off-hook does not answer a line programmed for "no ring" even though there is an incoming call. Going off-hook during the delay time does not answer a line programmed for "delayed ringing."
- A single line telephone is always set to Ringing Line Preference and cannot be changed.

Programming Guide References

- [400] CO Port Connection Assignment

Features Guide References

None

User Manual References

- 2.3.1 Answering Calls
- 4.1.2 Initial Settings

Line Preference — Outgoing (Idle Line/No Line/Prime Line)

Description

A digital proprietary telephone user can select a desired outgoing line preference to originate calls from the following 3 line preferences:

a) Idle Line Preference:

When you go off-hook, you are connected to an idle line. An idle line is automatically selected from the pre-assigned lines.

b) No Line Preference:

No line is selected when you go off-hook. You must select a line to make a call.

c) Prime Line Preference:

When you go off-hook, you are connected to the pre-assigned line. Assign a line as your prime line beforehand.

Conditions

- Setting a new line preference feature cancels the previous setting.
- To set Prime Line Preference, 1 prime line is selected from intercom or CO lines.
- The CO lines used by users must be connected by programming.
- To select Idle Line Preference, CO lines available for the user should be programmed. Also CO lines available for Automatic Line Access should be assigned.
- The user can override the Idle/Prime Line Preference temporarily to select a specific line. To select it, press the desired line access button (INTERCOM or CO button) before going off-hook or pressing the SP-PHONE button; or if Full One-Touch Dialling is enabled, press One-Touch Dialling, DSS, REDIAL or SAVE button.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [103] Automatic Access CO Port Assignment
- [400] CO Port Connection Assignment
- [605-606] Outgoing Permitted CO Line Assignment — Day/Night

Features Guide References

- CO Line Connection Assignment — Outgoing

User Manual References

- 2.3.1 Answering Calls
- 4.1.2 Initial Settings
- 4.1.3 Customising the Buttons

Live Call Screening (LCS)*1

Description

Allows a digital proprietary telephone (DPT) user to monitor her voice mailbox while incoming callers are leaving a message and, if desired, intercept the call. The voice mailbox can be monitored in one of 2 ways — Hands-free or Private.

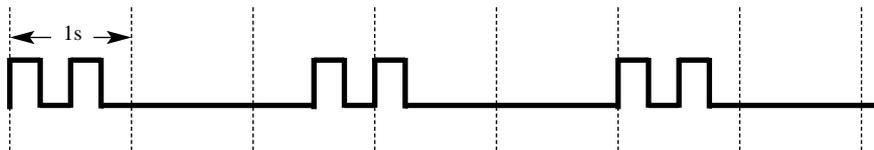
Hands-free Mode

The voice mailbox is monitored through the built-in speaker of the DPT.

Private Mode

The DPT emits an alert tone when callers are connected to the voice mailbox. To monitor the call, the user goes off hook on the handset or speakerphone.

Alert Tone



To intercept the call in either Hands-Free or Private mode, press the LCS button.

A single line telephone, which is connected with a DPT in parallel, can be also used to monitor a recording message. Be sure that the Live Call Screening on the connected DPT has been activated. This feature is useful when you are out with a portable handset of a cordless telephone (SLT). The handset emits an alert tone to let you know that a message is being recorded. To intercept the call, flash the hookswitch.

Conditions

- When the extension user is having a conversation, a call waiting tone is sent. The user can put an existing call on hold before accessing LCS.
- A flexible CO and DSS button can be assigned as a Live Call Screening button.
- To prevent unauthorised monitoring, a three-digit password must be set by the LCS user. If the user forgets his password, it can be cleared by the operator.
- Each extension can be programmed independently to either close the mailbox or keep recording the conversation after the call is intercepted.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [617] Live Call Screening Recording Mode Assignment

*1 Available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration).

Features Guide References

- Voice Mail Integration for Digital Proprietary Telephones

User Manual References

- 2.8.2 If a Voice Processing System is Connected
- 3.1.2 Changing the Settings
- 4.1.2 Initial Settings
- 4.1.3 Customising the Buttons

Lockout

Description

If 1 party in a conversation goes on-hook, they are both disconnected from the speech path automatically. This feature applies to extension and outside calls. Reorder tone is sent to the off-hook party after it is disconnected.

Conditions

None

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

Not Applicable

Log-In/Log-Out

Description

Assigns an extension to join (log-in) or leave (log-out) a hunting group. Extensions in log-out status receive no calls by Station Hunting but can receive other calls, unlike the DND feature.

Conditions

- There should be at least 1 extension that is in log-in status.
- The lighting patterns of Log-In/Log-Out button and the status are shown below.

Lighting pattern	CO Line Status
Red on	Log-Out (no reception)
Flashing Red	Log-In (multiple reception)
Off	Log-In

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering

Features Guide References

- Station Hunting
- Uniform Call Distribution (UCD)

User Manual References

- 2.5.6 Leaving a Hunting Group (Log-In/Log-Out)
- 4.1.3 Customising the Buttons

Manager Extension

Description

One extension in the system can be assigned as the system manager. This extension can perform System Programming.

Conditions

- Besides the manager extension, the extension that is connected to the jack 1 is able to perform System Programming.
- If eXtra Device Port mode is enabled at the manager extension, the digital proprietary telephone user is regarded as the manager.
- Manager extension can print out and clear the system working report.

Programming Guide References

- [006] Operator/Manager Extension Assignment — Day/Night
- [100] Flexible Numbering

Features Guide References

None

User Manual References

Not Applicable

Message Waiting

Description

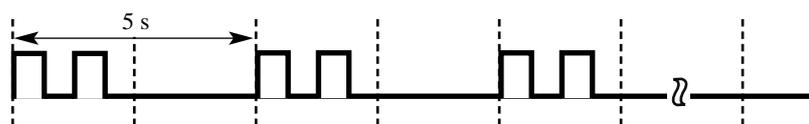
The system supports message notification from three sources:

- a) message from another extension
- b) message in the built-in voice message box
- c) message in a Panasonic Voice Processing System

When the MESSAGE button lit, you know there is a message waiting for you. Even if the button is not available, you can be notified by a special dial tone when you go off-hook.

Conditions

- For the digital proprietary telephone which is provided with no MESSAGE button, a flexible CO button can be assigned as the MESSAGE button either by System or Station Programming.
- The Message Waiting, the Built-in Voice Message and the Voice Mail features share the function of MESSAGE button. For the detailed operation, refer to 2.2.4 When the Dialed Line is Busy or There is No Answer — Leaving a message waiting indication (Message Waiting) in User Manual.
- SLT users can change the call back operation style (default: off-hook). Refer to [990] System Additional Information — Area 05, bit 4.
- Cancelling the message can be performed from the extension setting it or from the extension receiving it.
- The system supports a maximum of 128 simultaneous messages.
- Messages are always left on the original extension. It is not sent to a Call Forwarding or Station Hunting destination.
- A single line telephone user will hear the ring tone as a notification, if he/she receives a message. It is programmable to set the interval of a ring tone by System Programming.



Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [214] Message Waiting Ring Interval Time
- [990] System Additional Information

Features Guide References

- Dial Tone, Distinctive
- Voice Mail Integration

User Manual References

- 2.2.4 When the Dialed Line is Busy or There is No Answer
- 2.5.1 Built-in Voice Message
- 2.8.2 If a Voice Processing System is Connected
- 4.1.3 Customising the Buttons

Microphone Mute

Description

Allows the digital proprietary telephone user to turn off the microphone, for privacy reasons.

Conditions

- This is effective for the microphone only; your voice will only be muted during a handsfree conversation.
- The user can hear the other party's voice during Microphone Mute.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.4.10 Mute

Mixed Station Capability

Description

This system supports a wide range of telephone sets, not only Digital Proprietary Telephone (DPT) in the Digital Super Hybrid System, but also single line rotary telephones (employing dial pulse signals) and single line push-button dialling telephones (touch tone). The super hybrid method used in this system allows any telephone to be connected to an extension modular jack without an adaptor.

Conditions

- Extension jacks 5 to 8 can only accommodate DPTs.
- If a telephone is replaced by another one, the stored data (such as feature button storage) is held for the new one.
- It is possible to ignore the pulse dial by System Programming. In this case, a single line rotary telephone does not function.

Installation Manual References

- 2.4.3 Extension Connection

Programming Guide References

- [121] Pulse Dial Reception Assignment

Features Guide References

None

User Manual References

Not Applicable

Music on Hold

Description

While a party is on hold, music is automatically sent.

Conditions

- To send music during on hold, you have to assign [990] System Additional Information, Area 07 — Bit 7 as Selection 1: Music, otherwise tone will be heard.
- Operations such as Call Hold, or Exclusive Call Hold generates Music on Hold. In case of Call Transfer, it is possible to assign either Music or ringback tone.
- The music source is used for Music on Hold and/or BGM. Select a music source for each usage.
- For BGM and Music on Hold, it is required to connect a user-supplied external music source (such as a radio or CD player). This source can be turned off by System Programming.

Installation Manual References

- 2.4.8 External Music Source Connection

Programming Guide References

- [803] Music Source Use
- [990] System Additional Information

Features Guide References

- Background Music (BGM)

User Manual References

Not Applicable

Mute

Description

You can disable the microphone or the handset to consult privately with others in the room while listening to the other party on the phone through the speaker or the handset.

There are 2 types of mute as follows:

Handset Mute:

During a conversation using the handset. This function is available for the KX-T7400 series telephone users only.

Microphone Mute:

During a conversation using the microphone.

Conditions

- This is effective for the handset microphone only. Only your voice will be muted during a handset conversation.
- The user can hear the other party's voice during Handset Microphone Mute.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.4.10 Mute

No Reply Group

Description

When the floating number of this group is called, extensions are hunted in the order of registration. If an extension does not answer within pre-assigned time period ([202] Call Forwarding — No Answer Time), the extension is skipped. It is also skipped if it is busy. A No Reply group is a station hunting type.

Conditions

- Types of calls whose destination can be the no reply group are:
 - Outside calls — Intelligent Call Handling 1:1; Intelligent Call Handling 1:N ; IRNA; Hunting Group — Overflow
 - Intercom calls — Extension; Transfer
- Other hunting group types are Circular, Voice Mail (VM), Automated Attendant (AA), Uniform Call Distribution (UCD) and Ring.
- When the call arrives at the last member of the group, the call stays there. The call does not rotate around to the first member.

Programming Guide References

- [106] Station Hunting Type
- [131] Hunting Group Assignment
- [202] Call Forwarding — No Answer Time
- [813] Floating Number Assignment

Features Guide References

- Call Forwarding — No Answer
- Floating Number
- Station Hunting

User Manual References

Not Applicable

Notebook Function

Description

Allows the digital proprietary telephone user to store the phone number in the memory during conversation on the phone or on-hook status. The stored number is dialled automatically with simple operation.

Conditions

- The outside line, which was connected when the user stored the number is selected when re-dialling the number. If the line is busy, the busy tone is sent.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.4.9 Saving a Number (Notebook Function)

Off-Hook Call Announcement (OHCA)

Description

OHCA allows you to inform a busy extension that another call is waiting by talking through the built-in speaker of the called party's digital proprietary telephone. If the existing call is using the handset, the second conversation is made with the speakerphone so that the called party can talk to 2 parties independently. OHCA is performed the same way as Busy Station Signalling (BSS) or Whisper OHCA. It depends on the telephone type used by the called party whether Call Waiting, OHCA or Whisper OHCA is activated by the operation. If the called telephone is the following, OHCA becomes active: KX-T7436 and KX-T7235.

Conditions

- Class of Service programming determines which extensions can perform this feature.
- If none of 3 features, Call Waiting, OHCA or Whisper OHCA, is set at the called party, the caller will hear a reorder tone.

Programming Guide References

- [100] Flexible Numbering
- [519] Off-Hook Call Announcement (OHCA)

Features Guide References

- Busy Station Signalling (BSS)
- Call Waiting
- Whisper OHCA

User Manual References

- 2.7.3 Receiving a Call Waiting (Call Waiting/Off-Hook Call Announcement [OHCA]/Whisper OHCA)
- 2.4.7 Answering a Call Waiting

Off-Hook Monitor

Description

Allows one to let other people in the room listen to the conversation through the speaker while continuing the conversation using the handset.

Conditions

None

Programming Guide References

- [141] Off-Hook Monitor

Features Guide References

None

User Manual References

- 2.4.11 Letting Other People Listen to the Conversation (Off-Hook Monitor)

One-Touch Dialling

Description

One-Touch Dialling offers the digital proprietary telephone (DPT) user one-touch access to a desired party or system feature. This is enabled by storing a telephone number or a feature number of up to 24-digits on a One-Touch Dialling button. The number of buttons available depends on the type of DPT. One-Touch Dialling buttons can be programmed to flexible buttons: CO, DSS or PF (Programmable Feature).

Conditions

- It is possible to store an account code into a One-Touch Dialling button.
- Speed Dialling, One-Touch Dialling, manual dialling, Last Number Redial and Saved Number Redial can be used together.
- It is possible to store a number consisting of 25 digits or more by dividing it and storing it in 2 One-Touch Dialling buttons. In this case, a line access code should not be stored on the second button.
- If the Full One-Touch Dialling is enabled, there is no need to go off-hook, before pressing the One-Touch Button.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment

Features Guide References

- Full One-Touch Dialling

User Manual References

- 2.2.2 Easy Dialling
- 4.1.2 Initial Settings
- 4.1.3 Customising the Buttons

One-Touch Transfer by DSS Button

Description

This feature, if programmed, allows the Console and the digital proprietary telephone user to hold an outside call and quickly transfer it to an extension. While talking to an outside party, pressing a DSS button on the console or the digital proprietary telephone provides automatic hold and transfer. There is no need to press the TRANSFER button. The extension starts ringing immediately.

Conditions

- One-Touch Transfer cannot be performed when there is another call on transfer hold.
- If One-Touch Transfer mode is disabled, the user transfers an outside call by pressing the TRANSFER button followed by the DSS button.

Programming Guide References

- [108] One-Touch Transfer by DSS Button

Features Guide References

- Button, Direct Station Selection (DSS)

User Manual References

- 2.4.6 Transferring a Call

Operator

Description

The system supports up to 2 operators during day and night modes separately. Any extension can be appointed as an operator. The extension assigned as Operator has the ability to perform the following operations:

- Clearing the password of the Live Call Screening
- Printing/clearing the System Working Report
- Setting/clearing the Remote Station Lock
- Switching the Class of Service — primary/secondary
- Switching the Day/Night mode manually
- Turning on/off the external background music
- Setting/cancelling the Incoming Call Log Lock

Only Operator 1 has the ability to perform the following operations:

- Setting the Automatic Overflow
- Setting the Hurry-Up Transfer
- Recording/playing company outgoing messages*
- Playing/deleting the voice messages in the company message box*
- Receiving the Alert Indication (Memory, Printer)
- Receiving the call which is transferred from DND extension

*: The system determines which of the extension can perform these operations depending the priority as follows:

Operator 1 > Operator 2 > Manager > Jack 1-1

Conditions

- If eXtra Device Port mode is enabled at the operator's extension, the digital proprietary telephone user is regarded as the operator.
- The operator can be assigned as a destination of the Transfer Recall by System Programming.
- The Intelligent Call Handling 1:1 call which is refused by the receiving extension can be forwarded to the operator.
- The Intelligent Call Handling 1:1 call with an improperly dialled number will be handled by Intelligent Call Handling table 61 (day) or 62 (night).

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [006] Operator/Manager Extension Assignment — Day/Night
- [100] Flexible Numbering
- [129] Operator Queue

Features Guide References

None

User Manual References

- 4.1.3 Customising the Buttons

Operator Call

Description

Allows the extension user to call an operator extension by dialling the feature number, if at least 1 operator is assigned. There can be 1 or 2 extensions assigned as Operator 1 and 2.

When an operator call (default: 9) is made, the call is connected to Operator 1. If the Operator 1's line is busy, the call is connected to Operator 2.

Conditions

None

Programming Guide References

- [006] Operator/Manager Extension Assignment — Day/Night
- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.2.1 Basic Calling

Outgoing Message (OGM)

Description

This feature is only available if an optional card KX-TD61291 is installed in the main unit KX-TD612.

There are 2 types of outgoing messages that can be recorded.

OGM for Built-in Voice Message: (Default: Not Stored)

OGM for Private Message Box

This message is played if an extension user set the Built-in Voice Message feature so that an incoming internal/external call will be forwarded to the personal message box.

OGM for Company Message Box (Max. 9 OGMs)

This message is played if the system set the Built-in Voice Message feature so that an incoming external call is guided by the message. This is only available for Operator 1, Operator 2 or the extension connected to Jack 1-1. You can use these OGMs as company greetings of Direct Inward System Access (DISA), UCD (Uniform Call Distribution) message and so on.

Timed Reminder message: (Default: Not Stored)

This message is used in Timed Reminder. When answering the Timed Reminder alarm (often used as a wake-up call), the user will hear this message.

Note

You can set either the Built-in Voice Message (BV) feature or the Voice Mail (VM) feature at a time, but not both. If you set VM, the functions of an optional voice message card KX-TD61291 cannot be used. In other words, BV, OGM and Direct Inward System Access (DISA) cannot work when VM is used. Before setting VM, be sure to listen to voice messages of BV and then delete call log entries if stored. Otherwise, you can do nothing with it after setting VM.

Conditions

- A message card KX-TD61291 is required to record OGMs.
- The message card has 2 resources. The personal message box for each extension can be assigned to either resource. Resource 1 is for jack 1 and 2 (for the company message box), and resource 2 is for the another extensions (for each private message box) in the default status.
- You can record or delete an OGM when no one else is using the Built-in voice Message feature such as replaying/recording/deleting a voice message or an OGM. If you try to record an OGM when someone else is using that feature, you will hear a reorder tone and BV BUSY will be indicated on the display.
- Recording/replaying/deleting OGM for the company message box is only possible for the operator or the manager. (Operator 1 > Operator 2 > Manager/if not assigned, an extension connected to Jack 1-1)
- OGM for the company message box should be stored at the both resources.

- One OGM for a private message box and 1 Timed Reminder message can be recorded/ replayed/deleted for each extension.
- A maximum of 9 OGMs for the company message box can be recorded.
- The maximum time for 1 OGM recording is programmable from 1 minute to 15 minutes. (Default: 3 minutes) Refer to [222] OGM Recording Time.
- You can choose the total recording time for the Built-in Voice Message feature (including OGM) out of 60 minutes/30 minutes/20 minutes per resource. (Default: 30 minutes) Refer to [822] Built-in Voice Message Total Recording Time.
- Recording OGM from external music source is possible. (Default: Hand Set, Speaker Phone)
- Recording the timed reminder OGM is possible for any type of telephone except for the ISDN extensions.
- If a timed reminder OGM has not been stored, dial tone 3 will sound when you go off-hook to answer the ringing at the appointed time.



- Even if you perform System Data Clear, OGM cannot be deleted. To delete an OGM, follow the steps described in 2.5.1 Built-in Voice Message and 3.2.3 Recording Company Greeting Outgoing Messages in User Manual. To delete all voice messages and OGMs at once, refer to programme [895] OGM and Voice Message Clear.
- When the `voice msg full` is displayed (the information will be displayed when the rest of recording time becomes less than 5 minutes) and there is absolutely no recording time left, only overwriting of already recorded OGM is available and no other recordings such as OGM or voice messages are available.

Installation Manual References

- 2.5.2 Optional BRI Expansion Card and Voice Message Card Installation

Programming Guide References

- [222] OGM Recording Time
- [627] Voice Message Resource Assignment
- [820] OGM Recording
- [822] Built-in Voice Message Total Recording Time
- [895] OGM and Voice Message Clear

Features Guide References

- Built-in Voice Message
- Direct Inward System Access (DISA)
- Timed Reminder
- Uniform Call Distribution (UCD)

User Manual References

- 2.5.1 Built-in Voice Message
- 3.2.3 Recording Company Greeting Outgoing Messages

PAGING FEATURES — SUMMARY

Description

Paging allows you to make a voice announcement to multiple persons at the same time. Your message is announced over the built-in speakers of digital proprietary telephones and/or external speakers (the external pager). The paged person can answer your page from a nearby telephone. Making and answering a page is possible from either a proprietary or single line telephone. You can do paging with a call on hold in order to transfer the call (Paging and Transfer). It is also possible to deny the page.

Paging features are classified as follows:

Paging — All

Paging — External

Paging — Group

Conditions

None

Paging — All

Description

Allows you to make a voice announcement from the speakers of the digital proprietary telephones and from the external paging device (external pager). If one of the paged persons answers your paging, you can talk to the person through the connected line.

Conditions

- The confirmation tone is sent to extensions, when the paging is made or answered. Eliminating the tone is programmable.
- The confirmation tone is sent from external pager, before the voice announcement. Eliminating the tone is programmable.
- The ringing or busy extension cannot receive a page.

Installation Manual References

- 2.4.7 External Pager (Paging Equipment) Connection

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [805] External Pager Confirmation Tone
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.6.1 Paging
- 2.7.4 Denying the Paged Announcement (Paging — DENY)
- 4.1.3 Customising the Buttons

Paging — External

Description

Allows you to make a voice announcement using an external paging device (external pager). Up to 1 pager can be connected to the system. Any telephone user can answer your Paging — External.

Conditions

- Previous connection of an external pager is required.
- The external pager can be used for
 1. TAFAS
 2. Paging — External
 3. Background Music (BGM)**in this order.** For example, if Paging — External is overridden by TAFAS, reorder tone is returned to the performer of the Paging — External. If BGM is overridden by another higher priority, it is interrupted and starts again when the higher priority is finished.
- The confirmation tone is sent to the extensions and external pager, when the paging is made or answered. Eliminating the tone is programmable.
- The confirmation tone is sent from the external pager before the voice announcement. Eliminating the tone is programmable.

Installation Manual References

- 2.4.7 External Pager (Paging Equipment) Connection

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [805] External Pager Confirmation Tone
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.6.1 Paging
- 2.7.4 Denying the Paged Announcement (Paging — DENY)
- 4.1.3 Customising the Buttons

Paging — Group

Description

Allows you to select an extension group and make a voice announcement. All the digital proprietary telephones in the group will receive the page. If a member of the paged group answers your paging, you can talk to the person through the connected line.

Conditions

- Confirmation tone is sent when the page is made or answered. Eliminating the tone is programmable.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [602] Extension Group Assignment
- [990] System Additional Information

Features Guide References

- Extension Group

User Manual References

- 2.6.1 Paging
- 2.7.4 Denying the Paged Announcement (Paging — DENY)
- 4.1.3 Customising the Buttons

Paralleled Telephone

Description

The digital proprietary telephone device can be connected in parallel with a single line telephone (SLT).

When a parallel connection is made, an extension user can make and answer a call using either telephone.

Conditions

- SLTs can be connected only to Jack 1 through 4.
- The digital proprietary telephone (DPT) can be used to perform normal operations whether or not the SLT is enabled.
- In the SLT + digital proprietary telephone (DPT) combination, if 1 telephone goes off-hook while the other telephone is on a call, the call is switched to the former.
- When receiving a call;
The SLT is enabled; Both the DPT and the SLT ring except when the DPT is in Handsfree Answerback mode or Voice Alerting mode.
The SLT is disabled; DPT rings but the SLT does not ring. However the SLT can answer the phone.
- When the SLT is in operation, the display and LED indicator on the paired DPT will show in the same way as if the DPT is in operation.
- If eXtra Device Port feature is available, each telephone can act as completely different extensions.
- The Call Waiting tone can be heard only by the DPT.

Installation Manual References

- 2.4.4 EXtra Device Port (XDP)/Paralleled Telephone Connection

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering

Features Guide References

- EXtra Device Port (XDP)

User Manual References

- 2.7.13 Setting the Parallel Connected Telephone Ringer (Paralleled Telephone)
- 4.1.3 Customising the Buttons

Pause Insertion, Automatic

Description

To access the Integrated Services Digital Network (ISDN), sending out DTMF signals may be needed. To send out the dialled number in DTMF, you must insert a PAUSE. Any digits following the PAUSE will be sent as DTMF. This feature works for system stored numbers such as System Speed Dialling and One-Touch Dialling (Refer to 2.2.2 Easy Dialling and 2.2.3 Redial in User Manual) and Least Cost Routing (LCR).

Conditions

- This feature does not work when manually dialling.
- To use this feature, you have to assign [990] System Additional Information, Area 07 — Bit 1 as Selection 0 : enable (Default : disable), otherwise dialled numbers later than PAUSE entry cannot be sent.

Programming Guide References

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [412] Pause Time
- [990] System Additional Information

Features Guide References

- Least Cost Routing (LCR)

User Manual References

- 2.2.2 Easy Dialling
- 2.2.3 Redial

Phantom Extension

Description

Allows the system to route the calls to a phantom extension. A call to a phantom extension is sent to an extension who has the corresponding Phantom button. A Phantom button can be assigned by Station Programming.

Conditions

- Types of calls whose destination can be the phantom extension are:
 - Outside calls — Intelligent Call Handling 1:1; Intelligent Call Handling 1:N; IRNA; Hunting Group — Overflow
 - Intercom calls — Extension; Transfer
- You can call the phantom extension by pressing the Phantom button or by dialling the phantom extension number. If several extensions have the same phantom extension button, they will ring simultaneously.
- A phantom number must be assigned by System Programming before assigning the Phantom button by Station Programming.
- There is a maximum of 16 phantom numbers. Each number has 2 to 4 digits, consisting of numbers **0 through 9**.
- The phantom number cannot be used for feature settings such as Call Forwarding.
- The lighting patterns and each status of the Phantom button are shown below.

Lighting pattern	Phantom Extension Status
Off	Idle
Red on	Calling a phantom extension
Flashing green rapidly ^{*1}	Incoming call

^{*1} This lighting pattern is available only if the phantom button is assigned to the CO button.

- A DSS button can be assigned as the Phantom button so that the operator can use the button for transferring a call.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [130] Phantom Extension Number Assignment
- [140] Phantom Extension Name

Features Guide References

- Intelligent Call Handling — Distribution of Incoming Outside Calls

User Manual References

- 2.2.2 Easy Dialling
- 4.1.3 Customising the Buttons

Pickup Dialling

Description

Allows an extension user to make an outgoing call by going off-hook, if the user has previously stored the telephone number. This feature is also known as Hot Line.

Conditions

- A rotary dial telephone without the # button cannot program this feature. For programming the phone number, replace a rotary dial telephone to the telephone with the # button temporarily.
- The user uses a feature number to enable or disable pickup dialling.
- If the feature is enabled and the user goes off-hook, dial tone is generated for the waiting time and then dialling starts. During the waiting time the user can dial another party, overriding the Pickup Dialling function.
- If the user answers an incoming call or retrieves a call on hold, the Pickup Dialling feature does not work.
- If there is a new message which is not yet replayed, the Pickup Dialling feature does not work.
- The Pickup Dialling feature does not work when the remaining recording time of the Built-in Voice Message resource is less than 5 minutes and `Voice Msg Full` is displayed.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [204] Pickup Dial Waiting Time

Features Guide References

None

User Manual References

- 2.2.2 Easy Dialling
- 4.1.3 Customising the Buttons

Power Failure Restart

Description

When the power returns, the system restarts the stored data automatically. Before restarting, the system records the error logs if necessary.

Conditions

- In the event of a power failure, system memory is protected by the factory-provided lithium battery. There is no memory loss except the memories of Camp-On and Call Park. However if the system finds the wrong system data, the indication "Memory data loss" is displayed on the digital proprietary telephone with display of Operator 1.
- If your area often has power failures, we recommend that you connect backup batteries. See the Installation Manual, 2.6.1 Backup Batteries Connection.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

Not Applicable

Predial

Description

Allows the user of digital proprietary telephone with display to check and correct the dialled number in on-hook state before going off-hook. When going off-hook, making a call is initiated.

Conditions

- This feature is available during stand-by state only.
- A line access number is always required to make an outgoing outside call.
- Making a call is performed at the time the handset is lifted up or the CO or SP-PHONE button is pressed.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.2.1 Basic Calling

Privacy, Automatic

Description

By default all conversations established on CO lines, extension lines, and doorphone lines have privacy enabled.

Conditions

Automatic privacy may be temporarily released for a three-party conference, which is established by Executive Busy Override.

Programming Guide References

No programming required.

Features Guide References

- Executive Busy Override — CO Line
- Executive Busy Override — Extension

User Manual References

Not Applicable

Private Call

Description

Allows the user to exclude private calls from the SMDR printout. When making a private call, if the user enters the pre-set account code, the dialled number is not included in the SMDR printout.

Conditions

- It is required to program the account code for private calls in programme "[105] Account Codes." The location 01 of the entries is used as the account code for this feature.
- To prevent private calls, clear the entry above.

Programming Guide References

- [105] Account Codes

Features Guide References

- Account Code Entry
- Station Message Detail Recording (SMDR)

User Manual References

- 2.2.5 Calling without Restrictions
- 4.1.4 Charge Fee Management [Pre-assigned extension only]

Quick Dialling

Description

Quick Dialling offers the extension user easy access to a desired party. This is enabled by storing an extension number or a telephone number up to 24 digits as a quick dial number.

Conditions

- Up to 80 quick dial numbers can be stored.
- For example, Quick Dialling is convenient for the following.
 - Storing the CO line access code and the emergency number executes the Emergency Call without pressing a CO button or dialling a line access code. In this case, you can override the dial restriction.
- You must assign a feature number first in programme "[104] Quick Dial Assignment", and then a quick dial number in programme "[009] Quick Dial Number Set" in order for Quick Dial to be effective.

Example: If you want to dial "5" to call extension 201;

- a) Change or clear the feature numbers which have "5" in the first digit in programme "[100] Flexible Numbering."
 - b) Assign "5" in the location number 03 in programme "[104] Quick Dial Assignment."
 - c) Assign "201" in a quick dial location number 03 (same location number as the location number 03 in programme "[104] Quick Dial Assignment") in programme "[009] Quick Dial Number Set."
 - d) Fill in the Quick Dialling table. (User Manual, Section 5.3.1 Directory).
- Now you can dial the quick dial number 5 to call extension 201.
- Quick Dialling is available even if the toll restriction level is 6 which denies the intercom callings.

Programming Guide References

- [009] Quick Dial Number Set
- [104] Quick Dial Assignment

Features Guide References

None

User Manual References

- 2.2.2 Easy Dialling
- 5.3.1 Directory

Redial, Automatic

Description

This is a special feature for the digital proprietary telephones, that provides automatic redialling of the last dialled, saved number or call log, if the called party is busy. If the Last Number Redial, Saved Number Redial, Call Log operation or Notebook function is performed handsfree, the telephone set will hang up and try again after a pre-determined period of time.

Conditions

- Redial Repeat Time and Interval Time can be changed by System Programming.
- Pressing the R (FLASH) button allows the system to cancel this feature.
- If any dialling operation is done during Automatic Redial, this function is finished.

Programming Guide References

- [209] Automatic Redial Repeat Times
- [210] Automatic Redial Interval Time

Features Guide References

- Notebook Function
- Redial, Saved Number
- Redial, Last Number
- Special Display Features (Call Log, Outgoing)

User Manual References

- 2.2.3 Redial
- 2.9.1 Calling Using the Call Log (Incoming Call Log) [KX-T7433, KX-T7436, KX-T7230, KX-T7235 only]

Redial, Last Number

Description

Every telephone in the system automatically saves the last telephone number dialled to a CO line and allows the extension user to dial the same number again.

Conditions

- With a digital proprietary telephone, REDIAL button is used to carry out Last Number Redial. With a single line telephone, the feature number is used.
- The memorised telephone number is replaced by a new one if at least 1 digit to be sent to a CO line is dialled. Dialling a CO line access code alone does not change the memorised number.
- Digital Proprietary telephones allows multiple redialling automatically (Automatic Redial).

Programming Guide References

- [100] Flexible Numbering

Features Guide References

- Redial, Automatic

User Manual References

- 2.2.3 Redial

Redial, Saved Number

Description

Allows the digital proprietary telephone user to save a telephone number and redial the number afterwards. The user can store it while in conversation on a CO line. The saved number can be redialled many times until another one is stored.

Conditions

- Digital proprietary telephones (DPT) allow automatic multiple redialling (Automatic Redial).
- If the SAVE button is not provided on your DPT, it is possible to assign a flexible button to be the SAVE button.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment

Features Guide References

- Redial, Automatic

User Manual References

- 2.2.3 Redial
- 4.1.3 Customising the Buttons

Remote Station Lock Control

Description

Operator is given the privilege of controlling Electronic Station Lockout on any station.

Conditions

The new setting is superior to the old one. If Station Lockout has already been set by the extension user and Remote Station Lock is set by Operator, cancelling the lock is only possible by Operator.

Programming Guide References

No programming required.

Features Guide References

- Electronic Station Lockout

User Manual References

- 3.1.2 Changing the Settings

Ring Group

Description

By dialling the floating number of a hunting group, all extensions in the ring group ring simultaneously.

A ring group can be a Station Hunting type.

Conditions

- Types of calls whose destination can be a ring group are:
 - Outside calls — Intelligent Call Handling 1:1; Intelligent Call Handling 1:N; IRNA;
 - Intercom calls — Extension; Transfer
- Other hunting group types are Circular, Voice Mail (VM), Automated Attendant (AA), Uniform Call Distribution (UCD) and No Reply.

Programming Guide References

- [106] Station Hunting Type
- [131] Hunting Group Assignment
- [813] Floating Number Assignment

Features Guide References

- Floating Number
- Station Hunting

User Manual References

Not Applicable

Ringling Tone Selection for CO Buttons

Description

Allows the digital proprietary telephone user to select the desired ringer frequency for each CO button. This provides discrimination of incoming outside calls.

Conditions

There are 8 ringer frequencies available. One of them can be assigned to a CO button that is assigned as each of the following buttons: Single-CO or Loop-CO button. It is not possible to assign a ringer frequency to any other button.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment

Features Guide References

None

User Manual References

- 4.1.3 Customising the Buttons

Ringling Tone Selection for the INTERCOM Button

Description

Allows the digital proprietary telephone user to select the desired ringer frequency for the intercom button. This distinguishes incoming intercom calls.

Conditions

There are 8 ringer frequencies available. One of them can be assigned to an intercom button.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 4.1.3 Customising the Buttons

Ringling, Discriminating

Description

Allows the extension user to identify the incoming call by the ringing pattern. (See User Manual, 5.4.1 What is This Tone?)

Conditions

- When there are multiple incoming calls and the extension goes from off-hook to on-hook, the calls are rung according to the following priority:
 - a) Transfer Hold Recall
 - b) An incoming call from a line in which the Prime Line Preference — Incoming function has been set (with a digital proprietary telephone only)
 - c) Call Waiting
 - d) Incoming calls; Hold Recall; Transfer Recall; Unattended Conference Recall
- If multiple incoming calls arrive at an on-hook extension simultaneously, priority as to which calls should be rung is generally on a "first-come first-served" basis. In the case of digital proprietary telephones (DPT), however, when the Prime Line Preference — Incoming function has been set, this line takes precedence.
- Incoming TAFAS calls can be identified by ringing signals sent out from the external pager or ringer. The ringing pattern is the same as the outside calls.
- The DPT user can select a desired tone frequency for each CO and the INTERCOM button.

Programming Guide References

No programming required.

Features Guide References

- Ringing Tone Selection for CO Buttons
- Ringing Tone Selection for the INTERCOM Button

User Manual References

Not Applicable

Second Ringer

Description

If a call is placed on a specified extension or a CO line, an external bell connected to the system will ring together. Any extension can answer the call by entering the feature number. The second ringer can be assigned as a destination of the following feature:

1. ISDN Port — Intelligent Call Handling
2. Extension — All incoming call
3. TAFAS

Conditions

- It is assignable to enable/disable the second ringer per extension/CO line.
- One ringer can be connected per system.
- The ringer can be assigned a floating number.

Installation Manual References

- 1.3.1 Specifications
- 2.4.6 External Relay and Second Ringer Relay Connection

Programming Guide References

- [100] Flexible Numbering
- [418] Second Ringer Assignment
- [813] Floating Number Assignment

Features Guide References

None

User Manual References

- 2.8.4 If a Second Ringer is Connected

Secret Dialling

Description

Allows an extension user to conceal all or part of a registered telephone number that normally appears on the display during System Speed Dialling or One-Touch Dialling. Numbers can be assigned to Programmable Feature buttons on digital proprietary telephone and Console. When a display telephone user makes a call to the telephone number that is set to Secret Dialling, all or part of the number does not appear on the display. Additionally, KX-T7431, KX-T7433, KX-T7436 and KX-T7235 are capable of Secret Dialling for "Station Speed Dialling" numbers.

Conditions

- When storing a number, press the INTERCOM button at the beginning and the end of the number to be concealed.
- You can conceal one or more parts of a telephone number.
- The concealed part will be printed out by SMDR.

Programming Guide References

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [990] System Additional Information

Features Guide References

- One-Touch Dialling
- Special Display Features (System Speed Dialling)
- Special Display Features (Station Speed Dialling)

User Manual References

- 2.9.3 Using the KX-T7431, KX-T7433, KX-T7436 or KX-T7235
- 4.1.3 Customising the Buttons

Special Display Features (Call Log, Outgoing)

Description

Provides a KX-T7436 and KX-T7235 display of the last dialled telephone numbers and allows the user to perform redialling the number by pressing the associated button.

Conditions

The oldest telephone number will be eliminated when over the limited numbers are dialled out.

Programming Guide References

No programming required.

Features Guide References

- Redial, Automatic

User Manual References

- 2.9.3 Using the KX-T7431, KX-T7433, KX-T7436 or KX-T7235

Special Display Features (Extension Dialling)

Description

Provides a display of extension names and numbers. The user can call an extension by pressing the associated function button.

Conditions

System Programming of extension numbers and names is required.

Programming Guide References

- [003] Extension Number Set
- [004] Extension Name Set
- [012] ISDN Extension Number Set
- [013] ISDN Extension Name Set
- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.9.3 Using the KX-T7431, KX-T7433, KX-T7436 or KX-T7235

Special Display Features (Station Speed Dialling)

Description

A list of the names and telephone numbers stored for One-Touch Dialling is displayed allowing the user to make a one-touch call by name without having to know the number.

Conditions

- It is necessary to program One-Touch Dialling Numbers and Names into the 10 function buttons F1 through F10.
- It is programmable to select the first display, number or name.

Programming Guide References

- [990] System Additional Information

Features Guide References

- One-Touch Dialling

User Manual References

- 2.9.3 Using the KX-T7431, KX-T7433, KX-T7436 or KX-T7235

Special Display Features (System Feature Access Menu)

Description

This feature provides a display of the system features available at any time and allows the user to have access to the desired features.

Conditions

- The features available to access are:
 - Absent Message Capability
 - Call Park
 - Call Pickup, Group
 - Call Forwarding (set/cancel)
 - Do Not Disturb (set/cancel)
 - Message Waiting
 - Paging (access/answer)
 - Paralleled Telephone
 - Personal OGM (record/delete/replay)
- In addition to the features above, the operator can have the display of the following features:
 - Background Music (BGM) — External
 - Class of Service (primary/secondary)
 - Company OGM (record/delete/replay)
 - Recording/replaying/deleting OGM for the company message box is only possible for the operator or the manager. (Operator 1 > Operator 2 > Manager/if not assigned, an extension connected to Jack 1-1)
 - Day/Night Service (pre-assigned extension also)

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 2.9.3 Using the KX-T7431, KX-T7433, KX-T7436 or KX-T7235

Special Display Features (System Speed Dialling)

Description

A list of the names stored for System Speed Dialling is displayed. This allows the user to dial by name without having to know the telephone number. All the user needs to do is pressing the button associated with the desired name.

Conditions

- The numbers and names for System Speed Dialling must be programmed.
- If a name is not stored for a number, it is not displayed and cannot be called with this feature.

Programming Guide References

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [002] System Speed Dialling and Intelligent Call Handling Name Set

Features Guide References

- Special Display Features (System Speed Dialling)

User Manual References

- 2.9.3 Using the KX-T7431, KX-T7433, KX-T7436 or KX-T7235

Station Hunting

Description

If a call reaches a floating number of a hunting group, Station Hunting redirects the incoming call to an idle member of the hunting group. There are a maximum of 32 hunting groups. Idle extensions are automatically hunted according to the programmed type. There are 6 hunting types available — Circular, UCD (Uniform Call Distribution), Voice Mail (VM), Automated Attendant (AA), Ring and No Reply.

Circular hunting:

The extensions are hunted in a circular pattern, regardless of the jack number.

UCD:

Refer to "Uniform Call Distribution (UCD)" in this section.

AA hunting:

All of the AA ports are hunted until an idle one is found to permit AA Service.

VM hunting:

All of the VM ports are hunted until an idle one is found to permit VM Service.

Ring:

All of the extensions in the group ring simultaneously.

No Reply hunting:

The extensions are hunted in the order of registration. If a called extension is busy or does not answer ("Call Forwarding — No Answer" time) the extension is skipped.

One hunting type is selected for each hunting group. The hunting order corresponds to the order of registration in programme "[131] Hunting Group Assignment." For VM/AA Hunting, an incoming call to any extension number which belongs to a hunting group is hunted as well.

Available hunting types may vary depending on a destination.

Hunting Type	Circular	VM/ AA	UCD	Ring	No Reply
Destination of incoming calls					
Floating number of a hunting group	✓	✓	✓	✓	✓
An extension which belongs to a hunting group		✓			

✓: A call is hunted.

Ring extension in a hunting group may vary depending on hunting types.

Hunting Group Assignment

		[131] Hunting Group Assignment				
		Other Hunting Group	DPT/SLT Extension	ISDN Extension	ISDN MSN Extension	Voice Mail Extension
[106] Station Hunting Type	Disable					
	Circular		✓			
	VM					✓
	AA					✓
	UCD		✓			
	Ring		✓			
	No Reply	Ring Group only	✓	✓	✓	

Conditions

- If the called extension has set Do Not Disturb, the call does not reach the extension. However, this can be changed in programme [990] System Additional Information — Area 06, Bit 10.
- If the called extension has set Call Forwarding, the call does not reach the extension. However, this can be changed in programme [990] System Additional Information — Area 06, Bit 11.

Programming Guide References

- [106] Station Hunting Type
- [131] Hunting Group Assignment
- [132] Hunting Group Name Assignment
- [133] Hunting Overflow

Features Guide References

- Hunting Group
- Log-In/Log-Out
- Uniform Call Distribution (UCD)
- No Reply Group
- Ring Group

User Manual References

Not Applicable

Station Message Detail Recording (SMDR)

Description

Station Message Detail Recording (SMDR) automatically records detailed call information for outside calls. A printer connected to the Serial Interface (RS-232C) port can be used to print incoming and outgoing outside calls and charge fee as well as print a hard copy of the System Programming. To print the record of System Programming items that have been assigned, use the programme [802] System Data Printout. To print the charge fee, use the Station Programming. To print the call records, use the programme [800] SMDR Incoming/Outgoing Call Log Printout, which allows you to print out the following records:

- Records of all outgoing outside calls or outgoing toll calls.
- Record of incoming outside calls.

An example of printed call records

Date	Time	Extn	Dept	CO	Dial Number	Ring	Duration	Cost:£	Acc	CD
24.03.94	10:03	201	12345	01	12345678901234567	0'56	00:05'12	00007. 00	12345	
24.03.94	10:07	203	00001	03	<I>111222333	0'56	00:00'56	00000. 00		
24.03.94	10:08	204	10	04	<I>111444555	0'04	00:00'20	00000. 00	43121	
24.03.94	10:08	205		05	<I>MARY WARD		00:10'01	00000. 00	43212	T
24.03.94	10:09	228		01	10222P1-202-346-7		00:09'18	00011. 28	001	F
24.03.94	10:20	2103		01	<I>1022330		00:21'46	00000. 00		M
24.03.94	13:01	201	12345	02	<Private>		00:10'54	00012. 48	11111	
24.03.94	14:52	209	12345	02	<Private>		00:03'02	00017	11111	
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

Example of SMDR printout format:

Explanation

1. Date : shows the date of the call as Day/Month/Year.
2. Time : shows the end time of a call as Hour:Minute.
3. Ext : shows the extension number, floating number, etc. that engaged in a call.
4. Dept : shows the department code appended to the call.
5. CO : shows the CO line number used for the call.
6. Dial Number

Outgoing call: shows the other party's telephone number (maximum 30 digits). Valid digits are **0 thorough 9**, *, #, P (if PAUSE button is pressed), - (if a hyphen is entered) or the mark "=" (if a Host PBX access code is entered).

Received call: shows <I> which indicates 'Incoming' and if the Caller ID is available, the calling party's name or number (maximum 14 digits) is shown.

7. Ring : shows the ring duration of the incoming call as Minutes/Seconds.
8. Duration : shows the duration of the call as Hours/Minutes/Seconds.
9. Cost : shows the amount of charge in matter units or currency units (e.g. £).
10. Acc Code : shows the account code appended to the call.
11. CD : shows the condition code.
 - T : Transfer
 - F : Call Forwarding to CO line
 - R : Receive an incoming call
 - A : Answer an incoming call
 - N : No answer an incoming call
 - D : Doorphone Call Forwarding to CO line

Conditions

- When programmed for outgoing toll calls only, printing occurs only for calls which start with the numbers stored in any Denied Code Table from levels 2 to 6.
- This system can store information on up to 100 calls. If more calls are initiated or received, stored records are deleted starting from the oldest one.
- It is possible to select the SMDR format, page length, skip perforation and page width. If 80 characters for page width is selected, the last 5 digits of account codes are not printed out.
- This data is not deleted when you restart the system.
- "(8) Cost" is printed out in the format selected in programme "[117] Charge Display Selection."
- It is programmable to enable or disable the printout of secret dial numbers.
- If the account code stored in location 01 of the programming table is dialled, the dialled phone number is not printed out to SMDR (Private Call). Refer to lines 7 and 8 on the example of printed call records.
- When the paper of the printer runs out or the printer is out-of-service, the indication "Check Printer" is displayed on the telephone of Operator 1.
- It is possible to select whether or not to print out the data when the system receives a call and a call is answered.
- It is possible to select whether the account code is printed out or not. If it is not printed out, it is shown in dots.

Installation Manual References

- 2.4.9 Printer and PC Connection

Programming Guide References

- [000] Date and Time Set
- [117] Charge Display Selection
- [800] SMDR Incoming/Outgoing Call Log Printout
- [801] SMDR Format
- [802] System Data Printout
- [806] RS-232C Parameters
- [990] System Additional Information

Features Guide References

- Charge Fee Reference

User Manual References

- 4.1.4 Charge Fee Management [Pre-assigned extension only]

Station Programme Clear

Description

Allows the extension user to cancel the functions set on the user's own telephone. The following functions will be cancelled by this feature:

- Absent Message Capability — The message set on the telephone
- Automatic Callback Busy (Camp-On)
- Background Music that has been turned on
- Call Forwarding
- Call Log, Incoming — Over-stored mode
- Call Pickup Deny
- Call Waiting enabled
- Calling Line Identification Restriction (CLIR)
- Connected Line Identification Restriction (COLR)
- Do Not Disturb (DND)
- Executive Busy Override Deny
- Second Ringer
- Log-Out Status
- Message Waiting — All the messages that have been left by other extension users
- Paging Deny
- Paralleled Telephone enabled
- Pickup Dialling
- Timed Reminder

Conditions

None

Programming Guide References

- [100] Flexible Numbering

Features Guide References

None

User Manual References

- 2.7.14 Clearing the Feature Settings at Your Extension (Station Programme Clear)

Station Programming

Description

Allows the digital proprietary telephone (DPT) user to customise the extension to their needs. The following are the programming items available:

For DPT

- Call Waiting Tone Type Assignment
- Flexible Button Assignment
- Full One-Touch Dialling Assignment
- Handset/Headset Selection
- Intercom Alerting Assignment
- Key Click Tone On/Off Assignment
- Preferred Line Assignment — Incoming/Outgoing
- Ringing Tone Selection for CO Buttons
- Ringing Tone Selection for INTERCOM Button
- Station Programming Data Default Set

For digital proprietary telephone with display,

- Charge Fee Reference
- Self-Extension Number Confirmation

For KX-T7431, KX-T7433, KX-T7436 and KX-T7235 ,

- Station Speed Dialling and Intelligent Call Handling Number/Name Assignment

For Operator extension DPT only,

- Remote Station Lock Control
- Call Log Lock Control, Incoming
- Live Call Screening Password Control

Detailed information and programming instructions are described in the User Manual, Station Programming.

Conditions

During Station Programming, the DPT is considered to be in busy status.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 4.1.2 Initial Settings

Station Programming Data Default Set

Description

Allows the digital proprietary telephone user to return all the following items programmed on the telephone to default setting.

Programming Items	Default
Call Waiting Tone Type Assignment	Tone 1
Full One-Touch Dialling Assignment	On
Handset/Headset Selection	Handset
Intercom Alerting Assignment	Tone Call
Key Click Tone Assignment	On
Preferred Line Assignment — Incoming	Ringing Line
Preferred Line Assignment — Outgoing	Intercom Line

Station Programming is used to set or cancel these items at individual telephones.

Conditions

None

Programming Guide References

No programming required.

Features Guide References

- Station Programming

User Manual References

- 4.1.2 Initial Settings

Station Speed Dialling

Description

Allows an extension user to store frequently dialled numbers in order to place a call with abbreviated dialling. It is performed by dialling the feature number and a speed dial number from 0 through 9. Up to 10 numbers can be stored for each telephone.

Conditions

- Station Speed Dialling can be followed by manual dialling to supplement the dialled digits.
- You may make a call with One-Touch Dialling button, instead of Station Speed Dialling.
- The single line telephone (SLT) may be replaced to a digital proprietary telephone temporarily to store one-touch dialling into memory. The Function Buttons F1 through F10 correspond to speed dial numbers as follows:

F1 — 0	F6 — 5
F2 — 1	F7 — 6
F3 — 2	F8 — 7
F4 — 3	F9 — 8
F5 — 4	F10 — 9

Programming Guide References

- [100] Flexible Numbering

Features Guide References

- One-Touch Dialling

User Manual References

- 2.2.2 Easy Dialling
- 2.9.3 Using the KX-T7431, KX-T7433, KX-T7436 or KX-T7235

System Data Default Set

Description

This system permits re-initialisation of system-programmed data. If all the programmed data is cleared, the system will restart with the default setting.

Conditions

The default setting for each programming item is listed in Programming Guide, Section 11 Default Values.

Installation Manual References

- 2.11.1 System Data Default Set

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

Not Applicable

System Programming and Diagnosis with Personal Computer

Description

This system can be programmed and administered using a personal computer (PC) connected to a Serial Interface (RS-232C) port. There are 3 types of possible connections.

- PC — KX-TD612
- PC — Central Office — KX-TD612
- PC — KX-TD612 — Central Office — KX-TD612

Refer to 2.2.7 System Programming and Diagnosis with Personal Computer in Installation Manual. There are 4 functions as follows.

On-Site/Remote System Administration by PC Programming Software

By connecting a personal computer (PC) to your system, system programming and maintenance can be performed. There are 2 types of PC programming software. One is the standard version and the other is the feature limited version. The password (4-7 digits) determines which of the software is set up. The password to set up the standard version is [TD612] only. And the one to set up the feature limited version is programmable (default: no password). Following programming is available in the feature limited version.

1. System Programming [000] through [024] and [811].
2. Station Programming

On-Site/Remote Software Download

You can download the software of the KX-TD612 by using the PC connected to the main unit. Remote software download is to be possible through the Integrated Services Digital Network.

On-Site/Remote Software System Change

Allows you to change the systems leaving the power switch on by a digital proprietary telephone or PC connected to a Serial Interface (RS-232C) port of your system. You can set up the system again after a new system is adopted.

On-Site/Remote Maintenance

You can perform the remote maintenance and programming as well as the on-site maintenance by using a personal computer through the Integrated Services Digital Network.

Conditions

- A digital proprietary telephone can be used to perform System Programming.
- To connect with a remote KX-TD612, the system password of KX-TD612 is necessary.
- Least Cost Routing (LCR) feature does not work, when making a call on "PC — KX-TD612 — Central Office — KX-TD612" connection.

- Some procedures are inhibited except making or receiving a call and leaving a voice message and so on during the software download or the PC programming data load.
- When a trouble happens during the remote maintenance, the analysed cause will be displayed on PC.
The causes of trouble: 1. The telephone line is cut. 2. A telephone line of your system is busy. 3. A Telephone line of remote controlled system is busy. 4. The Password Error.
- The KX-TD612 and PC should go on-line so that the remote alarm is functioned.
- The system should go on-line to carry out the remote diagnosis.

Installation Manual References

- 2.2.7 System Programming and Diagnosis with Personal Computer

Programming Guide References

- [107] System Password

Features Guide References

None

User Manual References

Not Applicable

System Programming with Digital Proprietary Telephone

Description

This system can be programmed with a personal computer or a digital proprietary telephone (DPT).

DPTs available for System Programming are: KX-T7431; KX-T7433; KX-T7436; KX-T7230 and KX-T7235 (Digital Proprietary Telephones with Display).

2 extensions are allowed to perform System Programming. The extensions available are:

- a) An extension that is connected to jack 1.
- b) An extension that is assigned as a manager.

For more information and programming instructions, refer to Programming Guide, Section 3 System Programming.

Conditions

- During System Programming the system operates normally.
- During System Programming the extension is considered to be busy.
- The display on the DPT permits interactive programming.
- Only 1 access is allowed to System Programming at any one time.
- To access system administration, a valid password must be entered. The password is factory-programmed and can be changed.
- A personal computer can be used to perform System Programming.

Programming Guide References

- [006] Operator/Manager Extension Assignment — Day/Night
- [107] System Password

Features Guide References

None

User Manual References

Not Applicable

System Speed Dialling

Description

This feature supports 500 abbreviated dial numbers available to all users. A system speed dial number is dialled out by pressing the AUTO button and a 3-digit code (000 through 499). It is possible to store 500 32-digit telephone numbers per system (maximum).

Conditions

[For digital proprietary telephone users only]

- Speed Dialling, One-Touch Dialling, manual dialling, Last Number Redial and Saved Number Redial can be used in combination.

[For single line telephone users only]

- If a stored feature number includes * or #, a rotary or pulse single line telephones cannot use it.

Programming Guide References

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [002] System Speed Dialling and Intelligent Call Handling Name Set
- [100] Flexible Numbering
- [509-510] Toll Restriction Level for System Speed Dialling – Day/Night

Features Guide References

- Toll Restriction Override for System Speed Dialling

User Manual References

- 2.2.2 Easy Dialling

System Working Report

Description

The Digital Super Hybrid System automatically records the system's working state. A printer connected to the EIA (RS-232C) port can be used to print the recorded data.

Recorded contents are as follows:

a) Date of record

- The date and time when cleared.
- The date and time when printed out.

b) Incoming calls

- The number of incoming calls
- The number of answered incoming calls
- The ratio of the answered calls to the incoming calls

$$\frac{\text{Number of answered calls}}{\text{Number of incoming calls}} \times 100(\%)$$

- The average time from receipt of call to answer of the incoming and answered calls.
- The average duration time of talk of the answered calls.

c) Outgoing calls

- The number of access requested
- The number of access succeeded
- The ratio of access succeeded

$$\frac{\text{Number of access succeeded}}{\text{Number of access requested}} \times 100(\%)$$

- The average duration of the dialled calls

These records can be deleted by the manager and the operator, and new data will be recorded thereafter.

Conditions

Connect a printer provided with an EIA (RS-232C) connector located on the main unit. After connecting a printer, do not press the RETURN key, if provided on the printer, in 10 seconds.

Installation Manual References

- 2.4.9 Printer and PC Connection

Programming Guide References

- [100] Flexible Numbering
- [806] RS-232C Parameters

Features Guide References

- Station Message Detail Recording (SMDR)

User Manual References

- 3.2.5 Printing the System Working Report

Terminal Portability for ISDN Extension

Description

The ISDN extension users can move to anywhere on the same ISDN (BRI) Extension line while holding the call. If your ISDN extension is on the ISDN (BRI) Extension line connected to the port 2, you cannot move to the ISDN (BRI) Extension line connected to the port 3.

Conditions

While a caller is moving, the calling party will hear nothing such as dial tone.

Installation Manual References

- 2.2.6 ISDN Extension Connection Structure

Programming Guide References

No programming required.

Features Guide References

- Integrated Services Digital Network (ISDN) Extension

User Manual References

- 2.4.4 Terminal Portability (TP) for ISDN Extension

Terminate

Description

The terminate button is used to allow the digital proprietary telephone user to disconnect the current call and originate another call without hanging up first.

Conditions

- Pressing the terminate button disconnects the conversation, outputs an SMDR record, and gets an internal dial tone.
- The digital proprietary telephone is provided with no terminate button originally. However a flexible CO button can be assigned as the terminate button either by System or Station Programming.
- The terminate button cannot be used if the Built-in Voice Message feature is activated.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment

Features Guide References

None

User Manual References

- 2.2.1 Basic Calling
- 4.1.3 Customising the Buttons

Time-Out, Variable

Description

Provides timers to control various features or functions.
The following timers are programmable:

System Timer Items	Range
Automatic Redial Interval Time	30-1200 s
Automatic Redial Repeated Times	1-12 times
Built-in Voice Message Recording Time	1-60 min
Built-in Voice Message Total Recording Time	60/30/20 min
Call Forwarding — No Answer Time-Out	1-12 rings
DISA Automated Attendant (AA) Wait Time	1-5 s
Doorphone-to-CO Line Call Duration Time	0-300 s
External Relay Time	0-99 s
Hold Recall Time	0-240 s
Intercept Routing Time-Out	1-48 rings
Message Waiting Ring Interval Time	0-64 min
OGM Recording Time	1-15 min
Pickup Dialling Waiting Time	1-8 s
Timed Reminder Alarm Ring Time	30-240 s
Toll Restriction First Digit Time-Out	5-120 s
Toll Restriction Inter-digit Time-Out	5-30 s
Transfer Recall Time	3-48 rings
 CO Line Group Timer Items	
Pause Time	1.5/2.5/3.5/4.5/ 5.5/6.5 s
 Extension Timer Items	
Delayed Ringing Count	Disable/Immediate/ 2/4/6/8 rings/No ring
 Voice Mail Integration Timer Items	
DTMF Signal Duration	80/160 ms
DTMF Signal Waiting Time after VPS Answer	0.5/1.0/1.5/2.0 s
DTMF Signal Waiting Time after VPS calls Extension	0.5/1.0/1.5/2.0 s

SLT Timer Items

Hooking Flash Time 116/196/300/1000 ms

Conditions

None

Programming Guide References

- [200] Hold Recall Time
- [201] Transfer Recall Time
- [202] Call Forwarding — No Answer Time
- [203] Intercept Time
- [204] Pickup Dial Waiting Time
- [207] First Digit Time
- [208] Inter Digit Time
- [209] Automatic Redial Repeat Times
- [210] Automatic Redial Interval Time
- [213] External Relay Connecting Time
- [214] Message Waiting Ring Interval Time
- [217] Timed Reminder Alarm Ring Time
- [218] Doorphone-to-CO Line Call Duration Time
- [221] DISA Automated Attendant (AA) Wait Time
- [222] OGM Recording Time
- [223] Built-in Voice Message Recording Time
- [412] Pause Time
- [822] Built-in Voice Message Total Recording Time
- [990] System Additional Information

Features Guide References

None

User Manual References

Not Applicable

Timed Reminder

Description

Each telephone can be set to generate an alarm ringing at a preset time as reminder. This feature can be programmed to be active only once or every day. With an optional card, a voice message can be recorded for this feature.

Conditions

- Be sure the system clock is set to the correct time.
- The alarm continues for a programmed period of time (default: 30 seconds). To stop it, lift the handset or, with a digital proprietary telephone, press any button.
- When the user goes off-hook during the alarm tone, an announcement (if recorded) is heard.
- An optional card KX-TD61291 is required to record and use a timed reminder OGM.

Programming Guide References

- [100] Flexible Numbering
- [217] Timed Reminder Alarm Ring Time

Features Guide References

- Built-in Voice Message
- Outgoing Message (OGM)

User Manual References

- 2.5.1 Built-in Voice Message
- 2.7.1 Setting the Alarm (Timed Reminder)

Toll Restriction

Description

Toll restriction is used in conjunction with the assigned Class of Service, and can prohibit certain extension users from placing unauthorised toll calls.

Every extension is programmed to belong to one of 8 Classes of Service. Each Class of Service is programmed to have a toll restriction level for day mode and night mode.

There are 8 toll restriction levels available. Toll restriction level 1 is the highest level and the level 8 is the lowest. That is, level 1 allows all toll calls and levels 7 and 8 disallow all toll calls. Levels 2 through 6 are used to restrict calls by combining pre-programmed deny and excepted code tables.

The pre-assigned emergency numbers such as "999" and "112" are allowed to call in any level.

Denied Code Tables

An outgoing outside call made by an extension with a toll restriction level between 2 and 6 is first checked against the selected Denied Code Tables. If the leading 7 digits of the dialled number (not including the line access code) are not found in the table, the call is made. There are 5 system programmes for Denied Code Tables: [301-305] TRS Denied Code Entry for Levels 2 through 6: each programme is used to make up a Denied Code Table for Levels 2 through 6 respectively.

Complete every table by storing numbers that are to be prohibited. These numbers are defined as denied codes. Each table can store up to 20 denied codes, each of which consisting of 7 digits.

Excepted Code Tables

These tables are used to override a programmed denied code. A call denied by the selected Denied Code Tables is checked against the selected Excepted Code Tables, and if a match is found, the call is made.

There are 5 system programmes for these tables:

[306]-[310] TRS Excepted Code Entry for Levels 2 through 6: each programming is used to make up an Excepted Code Table for Levels 2 through 6. Complete every table by storing numbers that are exceptions to the denied codes. These numbers are defined as excepted codes. Each table can store up to 20 excepted codes, each of which consisting of 7 digits.

Applicable Denied and Excepted Code Tables depend on the assigned toll restriction level of an extension as follows:

Level	Denied Code Tables	Excepted Code Tables
Level 1	None	None
Level 2	Table for Level 2	Tables for Levels 2 through 6
Level 3	Tables for Levels 2 and 3	Tables for Levels 3 through 6
Level 4	Tables for Levels 2 to 4	Tables for Levels 4 through 6
Level 5	Tables for Levels 2 to 5	Tables for Levels 5 through 6
Level 6	Tables for Levels 2 to 6	Tables for Level 6
Level 7	None	None
Level 8	None	None

[Explanation]

- Level 1: allows all calls.
- Level 2:
denies the codes stored in the Denied Code Table for Level 2 except the codes stored in Excepted Code Tables for Levels 2 through 6.
- Level 3:
denies the codes stored in the Denied Code Tables for Levels 2 and 3 except the codes stored in Excepted Code Tables for Levels 3 through 6.
- Level 4:
denies the codes stored in the Denied Code Tables for Levels 2 through 4 except the codes stored in Excepted Code Tables for Levels 4 through 6.
- Level 5:
denies the codes stored in the Denied Code Tables for Levels 2 through 5 except the codes stored in Excepted Code Tables for Levels 5 and 6.
- Level 6:
 - denies the codes stored in the Denied Code Tables for Levels 2 through 6 except the codes stored in Excepted Code Table for Level 6.
 - denied intercom calls except operator calls.
- Level 7: Allows intercom calls only.
- Level 8: Allows operator calls only.

Example of Toll Restriction programming

Here is an example to explain the procedures for Toll Restriction programming.

1. Determining the application

Determine the dialling numbers that should be denied for levels 2 through 6. (Levels 1, 7 and 8 are fixed and do not require programming.)

[Entry Example]

Level	Denied Code	Excepted Code
2	011	None
3	011 976 1xxx976	None
4	011 976 1xxx976 0	None
5	011 976 1xxx976 0 411 1xxx555	None
6	011 976 1xxx976 0 411 1xxx555 1 x0 x1	911 1911 130

Note: "x" substitutes a digit.

2. Programming

- a) [500-501] Toll Restriction Level — Day/Night
 Assign a toll restriction level to each Class of Service (COS).

[Example]

COS	Level (Day)	Level (Night)
1	1	6
2	2	6
:	:	:
8	8	8

- b) [301-305] TRS Denied Code Entry for Levels 2 through 6
 Depending on the application, enter the denied codes in the associated tables. You can use numeric characters and the wild card character "×."

Level-2 Denied Code Table

Location	Code
01	001
:	
:	
20	

Level-3 Denied Code Table

Location	Code
01	976
02	1 × × × 976
:	
20	

Level-4 Denied Code Table

Location	Code
01	0
:	
:	
20	

Level-5 Denied Code Table

Location	Code
01	411
02	1 * * * 555
:	
20	

Level-6 Denied Code Table

Location	Code
01	1
02	* 0
03	* 1
:	
20	

- c) [306-310] TRS Excepted Code Entry for Levels 2 through 6
Depending on the application, enter the excepted codes in the associated tables. You can use numeric characters and the wild card character "*."

Level-6 Excepted Code Table

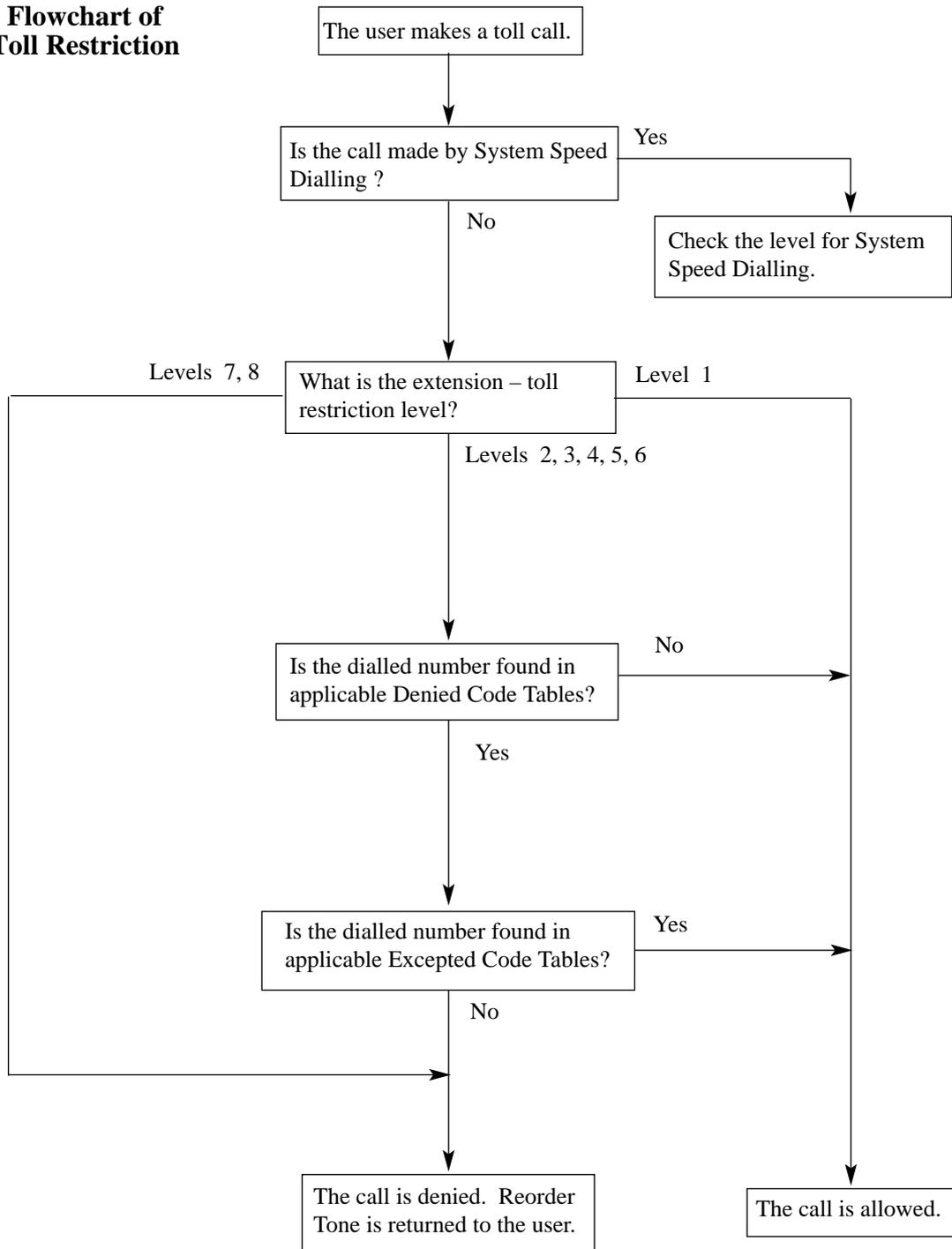
Location	Code
1	911
2	1911
3	130
:	
20	

[Explanation]

If your Toll Restriction Level is 6;

- a) You cannot make a call whose toll call number is "201," because the number whose second digit "0" is one of the Denied Codes for Level 6.
- b) You can make a call whose toll call number is "130." Though the number whose first digit "1" is one of the Denied Codes for Level 6, the number "130" is one of the Excepted Codes for Level 6. The Excepted Codes override the Denied Codes.

Flowchart of Toll Restriction



Conditions

- Toll restriction checks are applied to the following:
 - a) Account Code Entry
 - b) Dial Access, Automatic
 - c) Line Access, CO Line Group
 - d) Line Access, Individual
- If a stored Host PBX access code is found in the dialled number, a toll restriction check starts for succeeding telephone number.
- Toll restriction for System Speed Dialling can be assigned in the Class of Service setting.
- It is programmable whether the * or # the user dials is to be checked or not on the Toll Restriction code. This is useful to prevent unauthorised calls which could be possible through certain Central Offices' exchange system.
- It is programmable to admit the press of the R button, during an outside call on the extensions in Levels 7 and 8.

Programming Guide References

- [301-305] TRS Denied Code Entry for Levels 2 through 6
- [306-310] TRS Excepted Code Entry for Levels 2 through 6
- [311] Emergency Dial Number Set
- [500-501] Toll Restriction Level — Day/Night
- [509-510] Toll Restriction Level for System Speed Dialling – Day/Night
- [990] System Additional Information

Features Guide References

- Toll Restriction Override by Account Code Entry
- Toll Restriction Override for System Speed Dialling

User Manual References

Not Applicable

Programming Guide References

- [100] Flexible Numbering
- [508] Account Code Entry Mode

Features Guide References

- Account Code Entry
- Toll Restriction

User Manual References

Not Applicable

Toll Restriction Override for System Speed Dialling

Description

Calls originated by System Speed Dialling are restricted depending on the extension's toll restriction level for System Speed Dialling.

Conditions

Same as the conditions of Toll Restriction feature except that the data for System Speed Dialling are used as the toll restriction levels.

Programming Guide References

- [001] System Speed Dialling and Intelligent Call Handling Number Set
- [100] Flexible Numbering
- [509-510] Toll Restriction Level for System Speed Dialling – Day/Night

Features Guide References

- Station Speed Dialling
- Toll Restriction

User Manual References

Not Applicable

Trunk (CO Line) Answer From Any Station (TAFAS)

Description

A tone signal is sent from the external pager or the second ringer when an incoming outside call is received. Any extension user can answer the call.

Conditions

- Connect a user-supplied external device (pager or ringer).
- 1 external pager can be connected to the system. 1 second ringer can be connected to the system.
- Floating number of device is programmable.
- TAFAS can be used in the following cases:
 - a) The floating number of an external device is assigned as the Intelligent Call Handling 1:1 destination. In this case all the incoming calls on the specified line will be signalled.
 - b) The floating number of an external device is assigned as the Intercept Routing destination. In this case incoming calls redirected to the destination will be signalled.
- Confirmation tone is sent to the user before being connected to the caller. Eliminating the tone is programmable.

Installation Manual References

- 2.4.6 External Relay and Second Ringer Relay Connection
- 2.4.7 External Pager (Paging Equipment) Connection

Programming Guide References

- [100] Flexible Numbering
- [418] Second Ringer Assignment
- [453] Other Extension Ringing Assignment
- [805] External Pager Confirmation Tone
- [813] Floating Number Assignment
- [990] System Additional Information

Features Guide References

- Second Ringer
- Paging — External

User Manual References

- 2.3.4 Answering a Call via an External Speaker (Trunk Answer From Any Station [TAFAS])

Two-Way Recording into Voice Mailbox*¹

Description

Allows the digital proprietary telephone user to record the conversation into one's mailbox or another mailbox, while talking on the phone. Two-Way Recording (TWR) is recording into your own mailbox. Two-Way Transfer (TWT) is recording into a third party's mailbox.

Note:

When you record Two-Way telephone conversations, you should inform the other party that the conversation is being recorded.

Conditions

- A flexible CO and DSS button can be assigned as a Two-Way Record button or a Two-Way Transfer button.
- When all the voice mail ports are busy, pressing the Two-Way Record button sends an alarm tone.
- When all the voice mail ports are busy, pressing the Two-Way Transfer button followed by an extension number sends an alarm tone.

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment

Features Guide References

None

User Manual References

- 2.8.2 If a Voice Processing System is Connected
- 4.1.3 Customising the Buttons

*¹ Available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration).

Uniform Call Distribution (UCD)

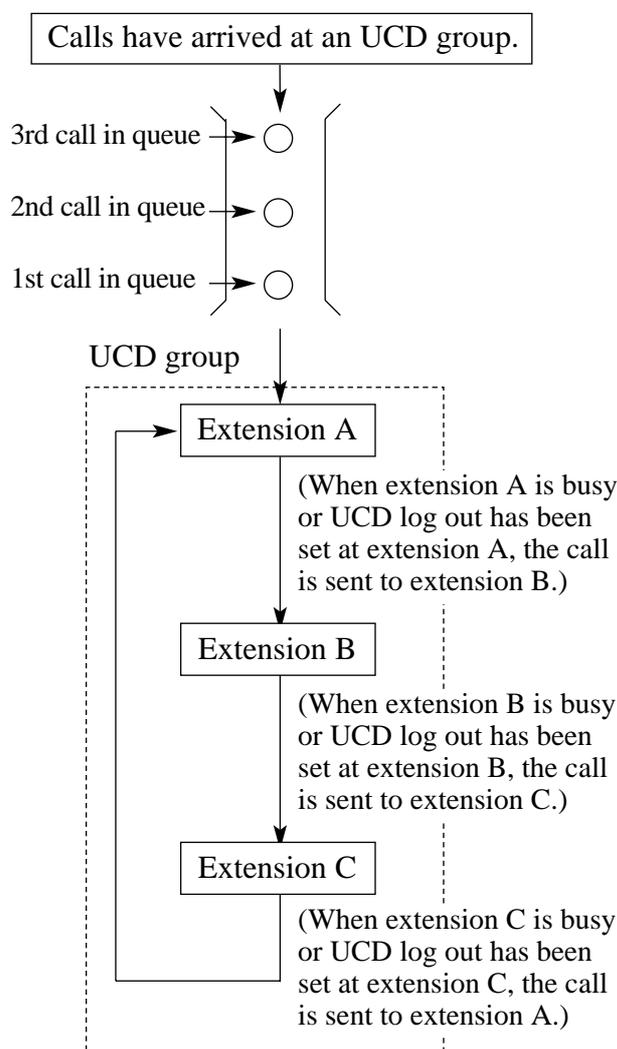
Description

Allows incoming calls to be distributed uniformly to a specific group of extensions called an UCD group. Calls to an UCD group hunt for an idle station in a circular way. This UCD feature is particularly helpful when a certain extension receives a high volume of calls compared with other extensions.

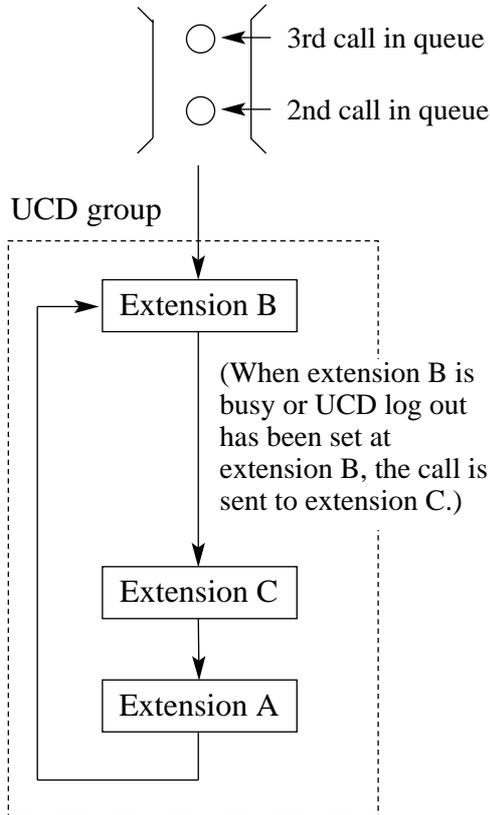
If all extensions in an UCD group, Ring group, or No reply group are busy or not available, the incoming outside call will be handled by the UCD Time Table.

An outline sketch of an UCD is shown below.

1. When a number of calls have arrived at an UCD group, the 1st call is sent to extension A first.



- When the 1st call arrives at extension A, the 2nd call is sent to extension B.



- When the 2nd call arrives at extension C, the 3rd call will be sent to extension A.
- When all extensions in an UCD group are busy or not available, the incoming outside call will be handled by the UCD Time Table.
An example is shown below.

UCD	FN	TT
1	291	1
2	291	2
:	:	:
32		

UCD: UCD Group Number(1-32)
 FN: Floating Number of the UCD Group
 TT: Time Table Number(1-4)

Sequence Assignment

TT	SEQUENCE
1	S1 → 4T → 4T → TR →
2	S1 → 2T → → →
3	S4 → RT → → →

Sequence Assignment

TT	SEQUENCE
4	TR → → → →

- S1** : Sends the outgoing message Built-in Voice Message (BV) 1.
- S2** : Sends the outgoing message BV2.
- S3** : Sends the outgoing message BV3.
- S4** : Sends the outgoing message BV4.
- S5** : Sends the outgoing message BV5.
- S6** : Sends the outgoing message BV6.
- S7** : Sends the outgoing message BV7.
- S8** : Sends the outgoing message BV8.
- S9** : Sends the outgoing message BV9.
- TR** : Transfers to the overflow extension.
- RT** : Returns to the top of the sequence.
- 1T** : Timer — 16 seconds
- 2T** : Timer — 32 seconds
- 3T** : Timer — 48 seconds
- 4T** : Timer — 64 seconds
- Blank** : Disconnects.

Sequence Activation Examples

- ☐ S4 → → → → :
Sends OGM 4 and then disconnects the line.
- ☐ S4 → TR → N/A → N/A → N/A :
Sends OGM 4 and then transfers to an overflow extension.
- ☐ S4 → 1T → → → :
Sends OGM 4, Music on Hold for 16 seconds and then disconnects the line.
- ☐ S1 → S2 → S3 → → :
Sends OGM 1, OGM 2, OGM 3 and then disconnects the line.
- ☐ S4 → 1T → S1 → → :
Sends OGM 4, Music on Hold for 16 seconds, OGM 1 and then disconnects the line.
- ☐ S4 → 1T → 4T → RT → N/A :
Sends OGM 4, Music on Hold for 16 + 64 seconds, and then OGM 4 again.
- ☐ S4 → RT → N/A → N/A → N/A :
Sends OGM 4 repeatedly.

- TR → N/A → N/A → N/A → N/A :
Directly transfers to an overflow extension.
- RT → N/A → N/A → N/A → N/A :
Waits for an idle extension. The caller hears a ringback tone.
(Intercept Routing — No Answer (IRNA) works.)
- → N/A → N/A → N/A → N/A :
Waits for an idle extension. The caller hears a ringback tone. (IRNA works.)
- 1T → → → → :
Waits for an idle extension. The caller hears a ringback tone. (IRNA does not work.)
- 1T → RT → N/A → N/A → N/A :
Waits for an idle extension. The caller hears a ringback tone. (IRNA does not work.)
- 1T → TR → N/A → N/A → N/A :
Waits for an idle extension for 16 seconds and then transfers to an overflow extension.

Note

N/A: not available for assignment.

Note

- The UCD Time Table is not available for incoming extensions or transferred calls.
- The overflow extension is the IRNA destination of the hunting group or the CO line group assigned by programme "[134-135] Hunting Intercept — Day/Night" or "[457] Intercept Extension ". If both of them are assigned, the IRNA destination of the hunting group will be effective.
- If the overflow extension is not assigned, the system will not answer the call and waits for an idle extension.
- If the Time Table number is not assigned, the system will not answer the call. In this case, IRNA will be employed.
- In sequence assignment, "Sx" can be assigned to a space other than the first only when another "Sx" is assigned in the first space.
- In sequence assignment, an assignment after "TR", "RT" or "Blank" is not available.
- If a timer is the first item in a Time Table sequence, it will delay answering according to the Timer's setting. The caller will hear a ringback tone.
- Music on Hold after an OGM can be changed to a ringback tone by programme "[990] System Additional Information, Area 01 — Bit 1."

Conditions

- UCD can be used in the following cases:
 - a) The floating number of UCD is assigned as Intelligent Call Handling destination.
 - b) The floating number of UCD is assigned as the Intercept Routing destination.
 - c) The floating number of UCD is dialled from an extension.
 - d) The floating number of UCD is assigned as the UCD Overflow destination.

- This feature requires assigning an UCD group in System Programming. An extension can belong to 2 or more UCD groups.
- The floating number can be assigned on a hunting group basis. The UCD group is based on the hunting group.
- It is possible to set the log-in or log-out status on an extension basis. An UCD call can be sent to an extension in log-in status within the UCD group, but cannot be sent to extensions in log-out status. If the extension would like to leave the group temporarily, the extension sets the log-out status by the feature number to prevent UCD calls being sent to his/her extension. When the extension re-joins the group, the extension sets the log-in status.
- If all extensions are in the log-out status, the extensions assigned to Intelligent Call Handling table 61 (day mode) and 62 (night mode) will ring.
- If a UCD call is not answered within the intercept time ([203] Intercept Time), the call will go to the intercept extension ([457] Intercept Extension).
- For time tables to work, you need to set the queue length to 1 or greater in programme [131] Hunting Group Assignment.

Programming Guide References

- [106] Station Hunting Type
- [131] Hunting Group Assignment
- [133] Hunting Overflow
- [134-135] Hunting Intercept — Day/Night
- [137-138] Time Table Assignment — Day/Night
- [139] Time Table
- [453] Other Extension Ringing Assignment
- [456] Call Handling When All Busy
- [457] Intercept Extension
- [813] Floating Number Assignment

Features Guide References

- Intelligent Call Handling — Distribution of Incoming Outside Calls
- Log-In/Log-Out
- Station Hunting

User Manual References

Not Applicable

Voice Mail Integration

Description

This system can accommodate Voice Processing System (VPS) equipment, which offers the user a Voice Mail and an Automated Attendant (AA) Services. If an extension user has set Call Forwarding destination to the VPS, a calling party will be forwarded to the VPS and can leave a voice message in the mailbox of the extension. When a call is transferred to the VPS by the Call Forwarding or Intercept Routing — No Answer features, the mailbox number is sent to the VPS automatically with DTMF signalling (Follow On ID). Up to 2 extension jacks can be connected to VPS as extensions in the system.

Note

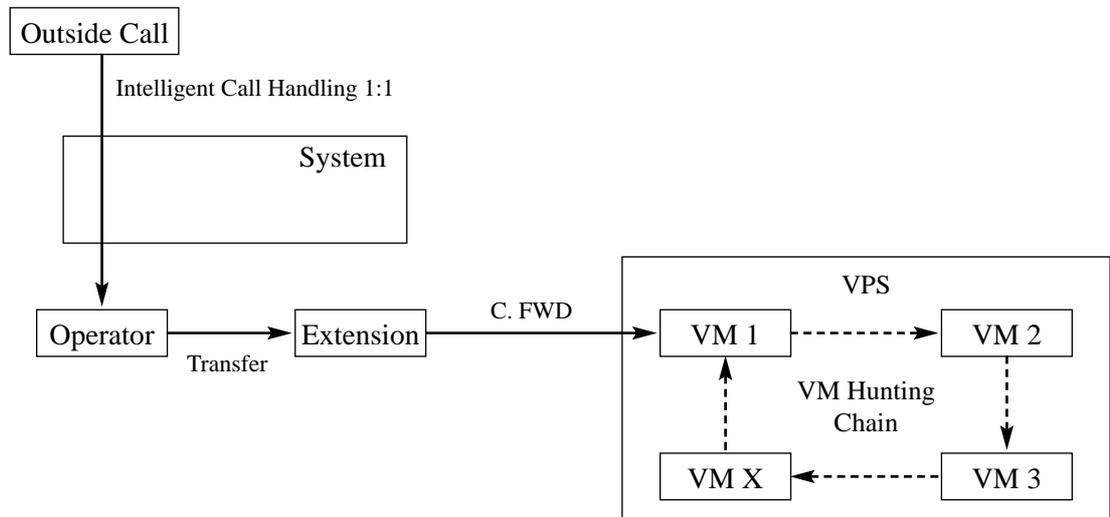
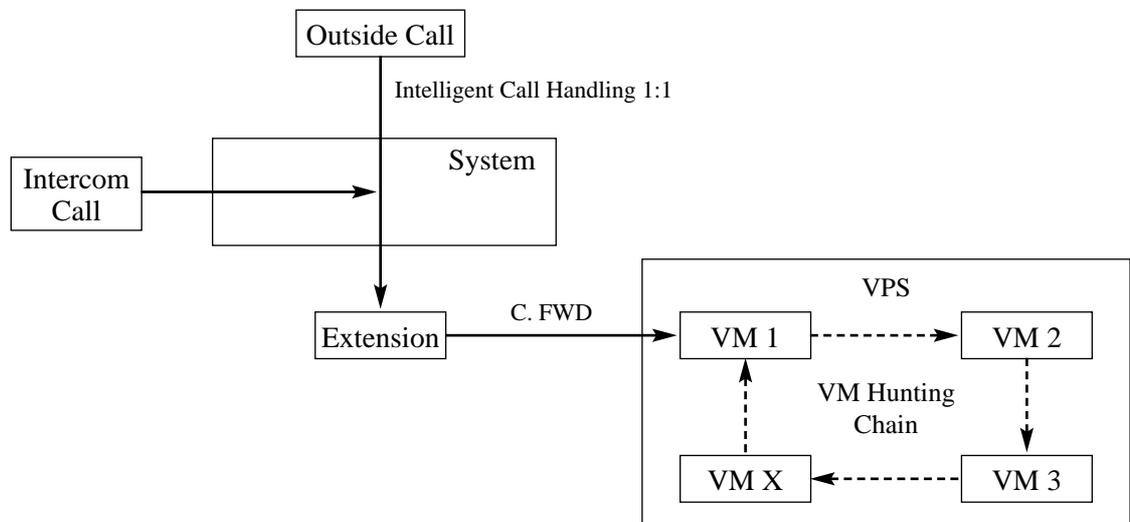
You can set either the Voice Mail (VM) feature or the Built-in Voice Message (BV) feature at a time, but not both. If you set VM, the functions of an optional voice message card KX-TD61291 cannot be used. In other words, BV, OGM and Direct Inward System Access (DISA) cannot work when VM is used. Before setting VM, be sure to listen to voice messages of BV and then delete call log entries if stored. Otherwise, you can do nothing with it after setting VM.

System Explanation

1. Voice Mail Service

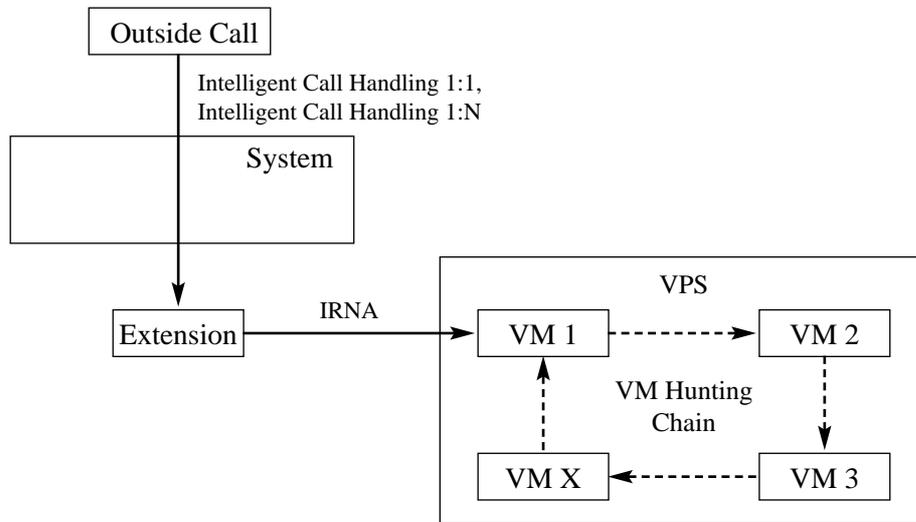
1.1 Call Forwarding to VM

If an extension user sets Call Forwarding (C. FWD) whose destination is the VPS, an incoming call is forwarded to the VPS under the proper conditions. The system sends to the VPS a mailbox number of the corresponding extension at that time. Therefore the calling party can leave his/her message in the mailbox of the desired extension without knowing the mailbox number.



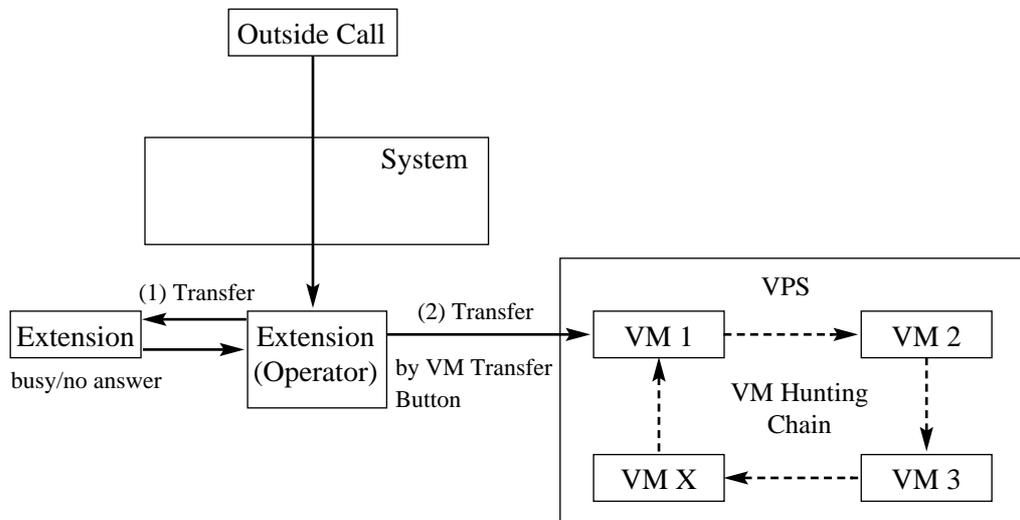
1.2 Intercept Routing to VM

If a CO line is set as Intercept Routing — No Answer (IRNA) whose destination is the VPS, an outside call is forwarded to the VPS under the proper conditions. The system sends to the VPS a mailbox number of the corresponding extension at that time. Therefore the calling party can leave his/her message in the mailbox of the desired extension without knowing the mailbox number.



1.3 Transferring to VM

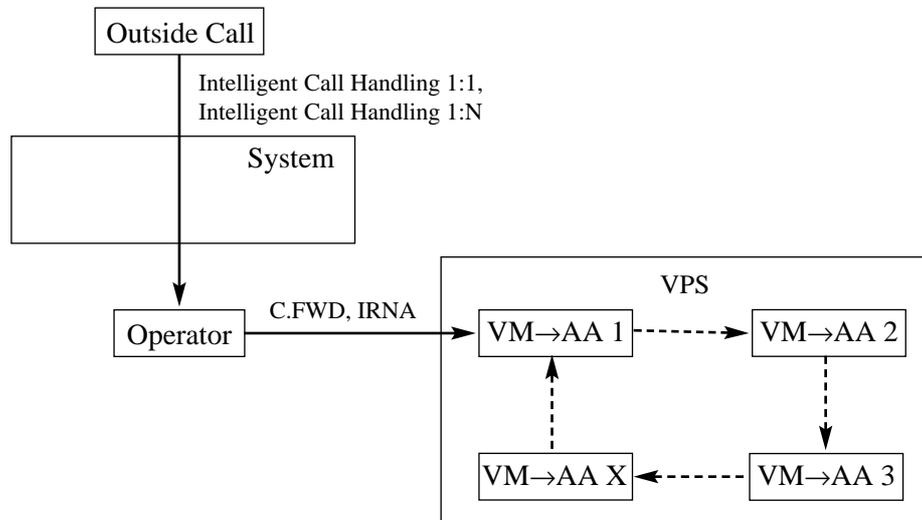
The extension user can transfer an outside call to the VPS so that calling party can leave his/her message in the mailbox of the desired extension. The extension user should use the Voice Mail (VM) Transfer button, when transferring a call to the VPS. Pressing this button and entering the extension number allows the extension user to transfer the call to the mailbox of the corresponding extension.



1.4 Changing from VM to Automated Attendant (AA)

The Automated Attendant (AA) Service is automatically activated in the following cases:

- 1) The incoming call is not answered by the operator and IRNA is activated.
- 2) The operator is assigned as a destination of Intelligent Call Handling 1:1 and the operator sets the Call Forwarding to VPS.



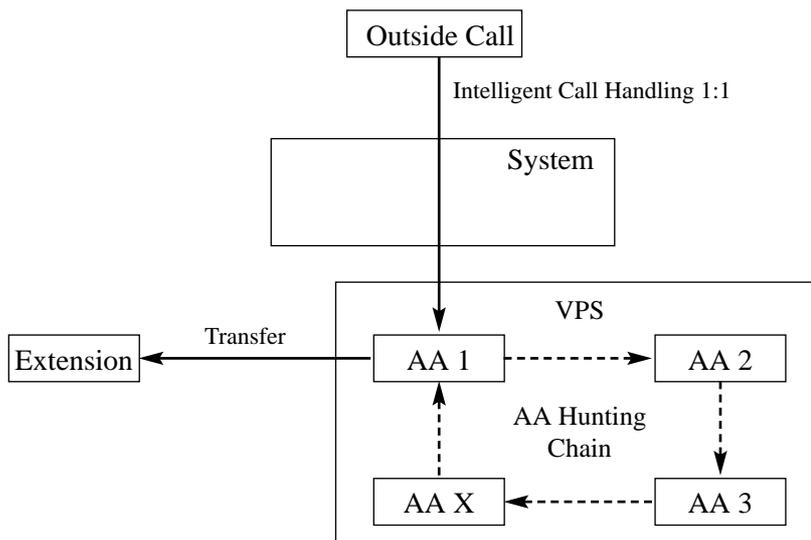
1.5 Listening to a Recorded Message

If the VPS receives a message, the VPS can turn on the MESSAGE button indicator of the corresponding telephone as a notification to the user of the telephone. (Panasonic KX-TVP series can do this.) The VPS notifies the extension user that there is a message waiting in his/her mailbox. When the MESSAGE button indicator is lit, pressing the button allows the extension user to play back the stored message.

2. Automated Attendant (AA) Service

2.1 AA to Extension

AA receives and answers an outside call and offers services such as transferring to a specified extension or the corresponding mailbox by the DTMF signalling which is sent from the calling party.



Conditions

- A maximum of 1 VPS can be connected to the system.

- A maximum of 2 jacks can be assigned: Be sure to connect the VPS to the SLT jacks (Jack X-2). Otherwise, the VPS cannot receive the DTMF signal. See 2.4.3 Extension Connection and 2.4.4 EXtra Device Port (XDP)/Paralleled Telephone Connection in Installation Manual.
- A VPS can be assigned as the destination of the following features:
 - Call Forwarding — All Calls
 - Call Forwarding — Busy
 - Call Forwarding — Busy/No Answer
 - Call Forwarding — No Answer
 - Intelligent Call Handling — Distribution of Incoming Outside Calls
 - Intercept Routing(— No Answer)

In these functions, the caller to the extension need not know the mailbox number of the called extension because the code is automatically transmitted to the VPS (Follow On ID function). If a Intelligent Call Handling 1:N call is transferred to the VPS by IRNA, your system transmits the mailbox number of the lowest jack number of the receiving extensions.
- A mailbox number is a respective extension number by default. The mailbox number can be changed, only if programme "[990] System Additional Information, Area 02 — Bit 8" is set to "free."
- Pressing the Voice Mail Transfer button and dialling the extension number allows the extension user to transfer to the corresponding mailbox. In this case, Follow On ID function is available.
- The Voice Mail extension should be set to Data Line Security to achieve proper recording.
- The Voice Mail, the Built-in Voice Message and the Message Waiting features share the function of the MESSAGE button. For the detailed operation, refer to 2.8.2 If a Voice Processing System is Connected in User Manual.

Installation Manual References

- 2.4.3 Extension Connection
- 2.4.4 EXtra Device Port (XDP)/Paralleled Telephone Connection

Programming Guide References

- [005] Flexible CO Button/PF Key Assignment
- [100] Flexible Numbering
- [106] Station Hunting Type
- [113] Voice Mail Status DTMF Set
- [114] Voice Mail Command DTMF Set
- [131] Hunting Group Assignment
- [457] Intercept Extension
- [609] Voice Mail Access Codes
- [990] System Additional Information

Features Guide References

- Call Forwarding — All Calls
- Call Forwarding — Busy
- Call Forwarding — Busy/No Answer
- Call Forwarding — No Answer
- Intelligent Call Handling — Distribution of Incoming Outside Calls
- Intercept Routing
- Station Hunting

User Manual References

- 2.8.2 If a Voice Processing System is Connected
- 4.1.3 Customising the Buttons

Voice Mail Integration for Digital Proprietary Telephones*¹

Description

The Digital Proprietary Telephone capable Panasonic Voice Processing System (VPS) can be connected to the Digital Super Hybrid System (DSHS) in a tightly integrated fashion. The system sends the VPS data which contains the extension number configuration information and the VPS automatically creates mailboxes with this data (Automatic Configuration — Quick Setup).

Note

Before executing Auto Configuration of the VPS, finalise the extension number set of the PBX with [003] Extension Number Set. Then be sure to assign a voice mail extension number in programme [126] Voice Mail Number Assignment and [127] Voice Mail Extension Number Assignment, and to assign a voice mail extension as the destination for incoming outside calls, refer to Intelligent Call Handling — Distribution of Incoming Outside Calls. Otherwise an outside caller cannot access the VPS.

Conditions

- A maximum of 1 VPS can be connected to the system.
- A maximum of 2 extension jacks can be assigned to a Digital Proprietary Telephone (DPT) capable VPS. Because a DPT connection supports up to 2 simultaneous voice calls, only 1 extension jack needs to be connected for every 2 VPS ports.
- Under a DPT connection, the VPS can be connected to H-L pins (Jack 2 through 4). If you connect the VPS, EXtra Device Port (XDP) connection becomes unavailable. Refer to 2.4.3 Extension Connection in Installation Manual.
- Connect the jacks and ports in ascending order. In other words, the lowest number DSHS jack used for VPS connection must be connected to the lowest number VPS port.
- The VPS data is transmitted to the VPS on the lowest jack port.
- Only extensions which are assigned as "Connect" in the programme "[611] Extension Connection Assignment" can have mailboxes.
- The voice mail service codes and names can be stored in station speed dialling.

Installation Manual References

- 2.4.3 Extension Connection

*¹ Available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration).

Programming Guide References

- [003] Extension Number Set
- [126] Voice Mail Number Assignment
- [127] Voice Mail Extension Number Assignment
- [128] Voice Mail Extension Group Assignment
- [611] Extension Connection Assignment
- [617] Live Call Screening Recording Mode Assignment

Features Guide References

- Automatic Configuration

User Manual References

Not Applicable

Volume Control — Speaker/Ringer

Description

Allows the digital proprietary telephone user to turn up or down the following volumes as desired:

- Ringer volume
- Speaker volume

Conditions

The control method depends on the telephone type:

- With a KX-T7400 series digital proprietary telephone, rotate the Jog Dial in the desired direction to select the desired volume level.
With a KX-T7200 series digital proprietary telephone, press the volume control button (VOLUME ^/∇ UP/DOWN) to select a desired volume level.

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

Not Applicable

Whisper OHCA

Description

When attempting to call a busy extension, Whisper OHCA allows the extension user to notify the busy party through the handset, which will only be heard by the party. Only KX-T7400 series telephone users can send or receive the Whisper OHCA.

Conditions

- Class of Service programming determines which extensions are able to perform this feature.
- You can select receiving Call Waiting tone, Off-Hook Call Announcement (OHCA), Whisper OHCA or none of these at your extension. However, the setting may change depending on each telephone setting or the telephone type as listed below.

Calling Party's OHCA COS mode	Called party's call waiting mode			
	OFF	ON		
	0: Cancel	1: Call Waiting	2: OHCA	3: Whisper OHCA
Disable	Call Waiting disabled	Call Waiting tone	Call Waiting tone	Call Waiting tone
Enable (default)	Call Waiting disabled	Call Waiting tone	OHCA Call Waiting tone	Whisper OHCA, OHCA, Call Waiting tone

<Example> If the user selects 3 (Whisper OHCA mode);

–If using the KX-T7400 series telephone handset.....Whisper OHCA

–If using the KX-T7400 series telephone SP-PHONE.....Call Waiting tone

–Other.....OHCA, Call Waiting tone

- If the Whisper OHCA sender does not use a KX-T7400 series telephone, it will work as OHCA. If the receiver does not use a KX-T7400 series telephone, the announcement may also be heard by the other party.
- It is possible to enable the Whisper OHCA by any telephone by system programming. However, it may not work properly. (E.g. the announcement may be heard by the other party.)

Programming Guide References

- [100] Flexible Numbering
- [519] Off-Hook Call Announcement (OHCA)
- [990] System Additional Information

Features Guide References

- Busy Station Signalling (BSS)
- Call Waiting
- Off-Hook Call Announcement (OHCA)

User Manual References

- 2.7.3 Receiving a Call Waiting (Call Waiting/Off-Hook Call Announcement [OHCA]/Whisper OHCA)
- 2.4.7 Answering a Call Waiting



This Equipment complies with the essential requirements of the Directive 1999/05/EC Radio and telecommunications terminal equipment directive.

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