

Panasonic

Digital Super Hybrid System

KX-TD816JT

KX-TD1232JT

Features Guide for KX-TD7590JT

and

Features Guide Addendum for

KX-TD816JT/ KX-TD1232JT

In this manual, the suffix "JT" of each model number is omitted.

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Section 1
DECT Portable Station Features

1.1 General Features

Digital Wireless Connection

Description

The system supports the connection of a DECT portable station (PS), KX-TD7590. It can be used in the system with other telephones.

Conditions

- The KX-TD816 system supports up to 16 PSs and the KX-TD1232 system supports up to 64 PSs.
- To support the PSs, a Cell Station Interface Unit (KX-TD144 / KX-TD146) and a Cell Station (KX-TD142) are required.
- Up to four calls can be made at the same time in the range.
- If you do not want your PS to ring, you can select the Vibration or Meeting mode, which is convenient while in a meeting, etc.
- **The following procedures are required to utilise a PS:**
 - a) Assign the radio system ID in program [680] Cell Station Number Assignment for Master CS.
 - b) Reset the system.
 - c) Register a PS in program [650] PS Registration.

Programming Guide References

- [020] PS Flexible Button Assignment
- [109] Expansion Unit Type
- [650] PS Registration
- [651] PS Termination
- [653] PS Extension Name Set
- [654] SXDP Assignment
- [655] PS Budget Management
- [656] PS Charge Verification Assignment
- [657] PS Class of Service
- [658] PS Extension Group Assignment
- [659-660] PS DIL 1:N Extension – Day / Night
- [661-662] PS Outgoing Permitted Outside Line Assignment – Day / Night
- [665] PS Voice Mail Access Codes
- [671] PS Extension Number Set
- [672] PS Password Set
- [673] PS CLIP / COLP Number Assignment
- [676] PS Incoming Call Display
- [680] Cell Station Number Assignment for Master CS
- [681] PS Radio System ID Reference
- [682] Radio Information Data Clear

Features Guide References

None

User Manual References

- 1 DECT Portable Station

PS Directory

Description

PS users can store names and/or numbers in the directory. A stored number is dialled out by selecting a name or phone number in the directory.

There are five types of directory features as follows.

Directory Type	Description
PS Dialling Directory	PS users can make an outside call by selecting privately-assigned names and phone numbers (100 max.).
PBX System Speed Dialling Directory	PS users can make a call via the system by selecting system-assigned names and phone numbers (500 max.).
PBX Extension Dialling Directory	PS users can make a call via the system by selecting system-assigned extension names.
PBX Station Speed Dialling Directory	PS users can make a call via the system by selecting privately-assigned names and phone numbers (10 max.).
Shortcut Directory	PS users can access a feature by selecting privately assigned feature names and numbers (10 max.).

Conditions

- It is possible to lock the PS Dialling Directory contents.
- It is not possible to edit items in the PBX System Speed Dialling and PBX Extension Dialling Directories.

Programming Guide References

- [001] System Speed Dialling Number Set
- [002] System Speed Dialling Name Set
- [003] Extension Number Set
- [004] Extension Name Set
- [012] ISDN Extension Number Set
- [013] ISDN Extension Name Set
- [671] PS Extension Number Set

Features Guide References

None

User Manual References

- 1.3.2 Making Calls
- 1.3.7 Using the Directories
- 1.4.2 PS Programming

PS Feature Button

Description

The following feature buttons can be activated using a display operations.
They can also be selected by a combination of buttons.

Button Name	Description	Button Combination
PAUSE Button	Used to insert a pause in numbers.	FUNCTION + 1
FWD/DND Button	Used to set the Call Forwarding or Do Not Disturb (DND) features.	FUNCTION + 2
MESSAGE Button	Used to leave a notification to the called party or call back the message sender.	FUNCTION + 3
CONF (Conference) Button	Used to establish a three-party conversation.	FUNCTION + 4
TONE Button	Used to change the dialling mode temporarily to tone.	FUNCTION + 5
FLASH Button	Used to disconnect a current call and make another call.	FUNCTION + 6
HOLD Button	Used to place a call on hold.	FUNCTION + 7
FKEY LIST Button	Used to display the features assigned on the Flexible CO buttons.	FUNCTION + 8
REDIAL Button	Used for redialing.	FUNCTION + 9
PS-PROGRAM Button	Used to enter the PS programming mode.	FUNCTION + 0
WAVESEARCH Button	Used to search the best Cell Station.	FUNCTION + *
EDIT MODE Button	Used to select a mode to edit.	FUNCTION + #
PROGRAM Button	Used to enter the programming mode.	FUNCTION + FUNCTION
F1 EDIT Button	Used to edit the Flexible CO button 1.	FUNCTION + F1
F2 EDIT Button	Used to edit the Flexible CO button 2.	FUNCTION + F2
F3 EDIT Button	Used to edit the Flexible CO button 3.	FUNCTION + F3

Conditions

None

Programming Guide References

No programming required.

Features Guide References

None

User Manual References

- 1.3.10 Selecting the Feature Button on the Display

PS Programming

Description

You may be required to enter a **PS Programming password** when entering the Security Setting mode. And you may be required to enter a **DECT System Lock password** when entering the DECT-SYS Setting mode. After the password is entered, it is unlocked once. The programming items are as follows.

Programming Item	
Answer Setting	Ringer Pattern Selection – Extension
	Ringer Pattern Selection – Outside Line
	Vibration and Ring Type Selection
	Quick Answering Mode Set
	Automatic Answering Mode Set
	Automatic Answer Delay Selection
Display Setting	Keypad Backlight Mode Set
	Display Language Selection
	Standby Display Selection
	Date / Time Display Selection
	LCD Contrast Selection
Beep Setting	Key Tone Set
	Range Warning Setting
DECT System Setting	PS Registration
	Display Language Deletion
	PS Registration Cancellation
	DECT System Lock Password Set
	DECT System Selection
Security Setting	Directory Lock Control
	PS Dialling Directory All Clear
	PS Programming Password Set
	Memory Clear

Super EXtra Device Port (SXDP)

Description

The Super EXtra Device Port (SXDP) allows a DECT portable station (PS) to be used in parallel with a proprietary wired (PT) or single line telephone (SLT). When in the SXDP mode, your PS can make or receive calls as usual, but can also receive calls reaching the paired telephone.

Conditions

- This feature can only be set from a PS. The wired telephone can enable or disable this feature in program [654] SXDP Assignment (default: enable).
- When the paralleled wired telephone receives a call, both the wired telephone and PS will ring.
- The following types of incoming calls can't be received even if they are received by the paralleled wired telephone.

Incoming call type	
Incoming calls by group	Direct In Lines (DIL) 1:N; Ring Group; Phantom extension
Incoming calls by feature	Recall; Timed Reminder; Off-Hook Call Announcement (OHCA)*; Whisper OHCA*

If the SXDP is set, the features marked with "*" are not available for both a portable station and its paired telephone.

- When you receive a call reaching the paired telephone by the PS or when making a call from a PS, the display message of the wired telephone is shown on the calling or called party's display (e.g., extension number and name).
- Paralleled telephones can call each other or transfer a call by dialling their own extension number.
- If a PS receives a call by its own extension number, it works as usual.
- The following list shows the conditions when using a certain feature while in SXDP mode.

Feature	Condition
Call Log, Outgoing	<ul style="list-style-type: none"> • The memory of Call Log is used together. The call logged by the wired telephone can be used by the PS and vice versa.
Budget Management	<ul style="list-style-type: none"> • The call charge of the PS is included with the wired telephone. If the pre-assigned limit is reached, both telephones cannot make further calls without authorization.

Feature	Condition
Call Forwarding	<ul style="list-style-type: none"> • Calls to the wired telephone due to the setting of the wired telephone. • The <i>Call Forwarding - All</i> feature for the wired telephone can be set from a PS so that all incoming calls to the wired telephone will be forwarded to the desired destination.
Class of Service (COS)	<ul style="list-style-type: none"> • The COS level of the wired telephone becomes available.
Do Not Disturb (DND)	<ul style="list-style-type: none"> • Calls to the wired telephone due to the setting of the wired telephone.
Electronic Station Lockout	<ul style="list-style-type: none"> • The PS can make a call even if the wired telephone is locked.
Executive Busy Override	<ul style="list-style-type: none"> • Even during a conversation using a PS, the setting of the wired telephone becomes available.
Pickup Dialling	<ul style="list-style-type: none"> • The memory of the Pickup Dialling exists individually.
Redial, Saved Number	<ul style="list-style-type: none"> • The memory of the Saved Number Redial of the wired telephone cannot be used by the PS.
Station Speed Dialling	<ul style="list-style-type: none"> • The memory of the Station Speed Dialling exists individually.

Programming Guide References

- [100] Flexible Numbering
- [654] SXDP Assignment

Features Guide References

None

User Manual References

- 1.3.8 Using Your PS in Parallel with the Wired Telephone (Super EXtra Device Ports [SXDP])

1.2 DECT Portable Station Information for Other Features

DECT Portable Station Information for Other Features

Description

Most of the features described in the "Installation Manual for the model KX-TD816 / KX-TD1232" are supported by a system with a DECT portable station (PS). However the following features are not supported.

Background Music (BGM)

EXtra Device Port (XDP)

Handsfree Operation

— PS is not provided with a built-in speaker.

Live Call Screening (LCS)

Log-In/Log-Out

Microphone Mute

Off-Hook Monitor

Operator

— As a PS cannot be assigned as an operator, it cannot perform the operator service features.

Paging - Deny

Paralleled Telephone

Phantom Extension

Redial, Automatic

Station Hunting



Uniform Call Distribution (UCD)

The list below describes the available feature conditions which are required with a PS.

Note

- In the list, for programs [020] and [650] through [682], refer to the DECT Programming section in Programming Guide. For PS and PBX Programming, refer to the User Manual Addendum for KX-TD7590. For other programs, refer to the KX-TD816 / KX-TD1232 Installation Manual.

Title	PS Condition
Budget Management	<ul style="list-style-type: none"> • Program [655] PS Budget Management, is required to assign the charge limit of a call on a PS basis.
Button, Flexible	<ul style="list-style-type: none"> • Program [020] PS Flexible Button Assignment, is used to determine the use of the PS flexible buttons.

Title	PS Condition
Call Forwarding (FWD)	<ul style="list-style-type: none"> • "  " is displayed as notification while on-hook. • The FWD/DND button can be assigned on a flexible button and display on the bottom line of the LCD does not flash while on-hook.
Calling / Connected Line Identification Presentation (CLIP / COLP)	<ul style="list-style-type: none"> • Program [673] PS CLIP / COLP Number Assignment, is required to assign the CLIP / COLP numbers for each PS.
Charge Fee Reference	<ul style="list-style-type: none"> • The charge fee reference allowed for a PS is determined by program [656] PS Charge Verification Assignment.
Class of Service (COS)	<ul style="list-style-type: none"> • Program [657] PS Class of Service, is required for assigning each PS a Class of Service (COS).
Conference	<ul style="list-style-type: none"> • The Conference button can be assigned on a flexible button and display on the bottom line of the LCD does not flash while on-hook.
Console	<ul style="list-style-type: none"> • The Console cannot work with a PS.
Direct In Lines (DIL)	<ul style="list-style-type: none"> • A PS can be assigned as the DIL 1:N destination. In this case, program [659-660] PS DIL 1:N Extension – Day / Night, is required. • Intercept Routing applies to DIL 1:1. When the line is busy, the PS is out of range or the PS power is OFF.
Do Not Disturb (DND)	<ul style="list-style-type: none"> • "  " is displayed as notification while on-hook. • The FWD/DND button can be assigned on a flexible button and display on the bottom line of the LCD does not flash while on-hook.
Extension Group	<ul style="list-style-type: none"> • The PS extension group can be used with the Group Call Pickup. • The PS extension group can be assigned in program [658] PS Extension Group Assignment.
Flexible Numbering	<ul style="list-style-type: none"> • In addition to current flexible numbering, the feature number for the Super EXtra Device Port (SXDP) can be assigned. For details, refer to the program [100] Flexible Numbering in Programming Guide.
Handsfree Answer	<ul style="list-style-type: none"> • This feature allows PS users to answer calls, all or intercom, without pressing any key only when the user-supplied headset is connected to the PS. If the PS user receives a call in this mode, a handsfree conversation is established immediately after the user hears beep tone and the caller hears a confirmation tone. PS Programming, "Setting the Automatic Answer Mode", is required to select the answering mode.

1.2 DECT Portable Station Information for Other Features

Title	PS Condition
Incoming Outside Call Information Display	<ul style="list-style-type: none"> The display type for a PS when an incoming call is received can be selected by program [676] PS Incoming Call Display. However, if an incoming call is received using DIL 1:N, the display will only show a Outside line number.
Message Waiting	<ul style="list-style-type: none"> " ☒ " is displayed as notification. The Message button can be assigned on a flexible button and display on the bottom line of the LCD does not flash while on-hook.
Module Expansion	<ul style="list-style-type: none"> In addition to the current expansion unit, a Cell Station Interface Unit (KX-TD144 / KX-TD146) can be connected to the system. One KX-TD144 supports up to two Cell Stations (KX-TD142). And one KX-TD146 supports up to six Cell Stations. One KX-TD144 / KX-TD146 can be connected to the KX-TD816, and up to two KX-TD144s / KX-TD146s can be connected to the KX-TD1232.
Night Service	<ul style="list-style-type: none"> PS users cannot confirm the current mode on the display. The following programming items may be assigned differently for the day and night modes. [659-660] PS DIL 1:N Extension — Day / Night [661-662] PS Outgoing Permitted Outside Line Assignment — Day / Night [674-675] PS Extension Intercept Routing — Day / Night
Outside Line Connection Assignment - Outgoing	<ul style="list-style-type: none"> Program [661-662] PS Outgoing Permitted outside Line Assignment – Day / Night, is used to determine the Outside line which can be accessed by a PS.
Paging — All / Group	<ul style="list-style-type: none"> PS users can page and answer a page, which is being announced over a nearby wired proprietary telephone or external pager. However, you cannot be directly paged at the PS.
User Programming (Manager Programming)	<ul style="list-style-type: none"> Program [020] PS Flexible Button Assignment, can also be programmed by any display proprietary telephone user in the System.
Voice Mail Integration	<ul style="list-style-type: none"> A mailbox number can be assigned for each PS in program [665] PS Voice Mail Access Codes.

Conditions

None

Section 2

***Feature Guide Addendum for
KX-TD816JT / KX-TD1232JT***

*The Feature Guide is for software version
P351G or later for KX-TD 816 and P251F or
later for KX-TD1232.*

*Please read this manual first and then Feature
Guide.*

2.1 Changed and Added Features

Features	Changing or Additional Information
Automatic Callback Busy (Camp-On)	This feature is revised. For details, refer to page 17.
Call Monitoring in UCD / Ring Group	This feature is added. For details, refer to page 18.
Call Transfer	This feature is revised. For details, refer to page 20.
Completion of Calls to Busy Subscriber (CCBS)	This feature is added. For details, refer to page 22.
Direct Inward System Access (DISA)	This feature is revised. For details, refer to page 24.
Integrated Services Digital Network (ISDN)	<p>Conditions (Changing & Additional)</p> <p>ETS 300 130 Malicious Call Identification (MCID) supplementary service.</p> <p>ETS 300 359 Completion of Calls to Busy Subscriber (CCBS) supplementary service.</p>
Log-In / Log-Out	<p>Conditions (Changing & Additional)</p> <p>This condition is added as follows:</p> <ul style="list-style-type: none"> • All extension users can be in log out status. To perform the IRNA feature after all extensions log out, you need to change the Selection from “1” to “0” (IRNA) in programme [990] “System Additional Information, Area 7-Bit 7”. <p>Please disregard the following condition.</p> <ul style="list-style-type: none"> • There should be at least one extension that is in log in status.
Malicious Call Identification (MCID)	This feature is added. For details, refer to page 28.
Ring Group	This feature is revised. For details, refer to page 29.
Uniform Call Distribution (UCD)	This feature is revised. For details, refer to page 30.

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. The result after the caller answers the callback ringing differs depending on the busy party.

Busy party	Result after the caller answers the callback ringing
Extension	The extension's number is automatically dialled.
Outside party	The line is automatically selected to allow the user to make an outside call.

Conditions

- If the extension user cancels setting this features, she needs to press the feature number which has been assigned. <[100] Flexible Numbering>
- If the callback ringing is not answered in four rings (within 10 seconds) the callback is cancelled.
- More than one extension user can set this function to one extension or outside line at the same time.

Programming Guide References

- [100] Flexible Numbering

Features Guide References

None

User Manual References

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

Call Monitoring in UCD / Ring Group

Description

Allows the extensions to monitor the information of incoming outside calls to the Station Hunting Type (UCD/Ring Group).

Extension users can confirm how the incoming calls have been treated. The display information is as follows:

<Information sample>

GRUPPO 2	N. ATT.	000	-- Extension group no. (1-8, *(*: all)) / Waiting calls (000-255)
N. CH. RICEVUTE		00000	-- Total of received calls (00000-65535)
N. CH. RISPOSTE		00000	-- Total of answered calls (00000-65535)
N. CH. OVERFLOW		00000	-- Total of transferred calls (00000-65535)
N. CH. PERSE		00000	-- Total of disconnected waiting calls (00000-65535)
MENU	CLR	MNTR	

Conditions

- This feature is only available for KX-T7536 and KX-T7235.
- Only extensions connected to the Master system can display the information. Up to 8 extension users can monitor simultaneously.
- Extensions which are enabled to monitor may be limited to ones pre-assigned as COS 1. <[990] System Additional Information, Area 08-Bit 11>
- Only extensions in the Hunting Type (UCD/Ring) are monitored. Other Hunting Type is skipped.
- When receiving a call, the monitoring display remains with the flashing LED and ringing. In this case, the automatically updated call monitoring stops.
- If the type of the Station Hunting is changed, "Total Call" in that group number is cleared.
- If "Total Call" counts 65535 calls (max.), the number freezes.
- When entering "×" for all, total calls of all groups is displayed.
- In the monitoring display, an extension user can clear "Total Call" at each Hunting Type (UCD/Ring).
- When the night mode is switched to the day mode, the system can clear "Total Call" in all group numbers. <[990] System Additional Information Area 08-Bit 12>

Programming Guide References

- [990] System Additional Information

Features Guide References

None

User Manual Addendum References

- 1.1.4 Monitoring the Calls (Call Monitoring in UCD / Ring Group) [KX-T7536, KX-T7235 only]

Call Transfer

Description

Allows the extension user to transfer a call to another party.
The following types are available.

Feature Type		Transferring method
Screened	to Extension	Transfers a call to the extension or the external party after a voice announcement.
	to Outside Line	
Unscreened	to Extension	Transfers a call to an extension party without a voice announcement. While listening for the ringback tone after dialling the destination extension, you can replace the handset.

Conditions

[General]

- The destination extension must have a CO button which is common to the outside line in use by the transferring party.
- Transferring a call to an external party cannot be performed from a single line telephone.
- If Music on Hold is enabled, music is sent to the caller while being transferred. It is system-programmable whether to send ringback tone or music on hold to the caller. <[990] System Additional Information, Area 01-Bit 1>
(**Music on Hold:** Automatically generates a music while a party is on hold. It is required to select the internal or external music source to be used <[990] System Additional Information, Area 06-Bits 11 and 10>, and also required to assign the music source to be used <[803] Music Source Use>.)
- The console and the proprietary telephone user can hold an outside call and quickly transfer it to an extension by pressing a DSS button directly (**One-Touch Transfer by DSS Button**). <[108] One-Touch Transfer by DSS Button> However, it cannot be performed when there is another call on Consultation Hold.
If One-Touch Transfer mode is disabled, the user transfers an outside call by pressing the TRANSFER button followed by the DSS button.
(**Consultation Hold:** Established by pressing TRANSFER or CONF button. With a single line telephone, it is established by pressing the hookswitch lightly. It allows the extension user to place a call on hold temporarily to transfer it, make a Conference call, or perform Call Splitting. <[990] System Additional Information, Area 01-Bits 2 and 9>)

[Screened – to Extension]

- The extension user can select to show CLIP or her extension number/name. <[990] System Additional Information, Area 08-Bit 13>

[Screened – to Outside Line]

- Class of Service programming determines the extensions that are able to perform this. <[503] Call Transfer to Outside Line>
- A call between two outside parties is established only when using an ISDN line.

[Unscreened – to Extension]

- If the destination party does not answer within the transfer recall time <[201] Transfer Recall Time>, the call will return to the user or Operator 1. You can select either one. <[990] System Additional Information, Area 02-Bit 1>
- This function is possible when the destination is sending ringback or busy tone. Camp-On Transfer occurs if the destination is busy.
- The ringing signal pattern follows the regular ringing pattern depending on the party being transferred: outside or extension call ringing.
- An outside call can be transferred directly to a Uniform Call Distribution (UCD) group so that an idle extension is automatically hunted by UCD. If all extensions in a UCD group are busy, the incoming outside call will be handled by the UCD Time Table.
- It is possible for any extension user to transfer a call to the modem for remote maintenance.

Programming Guide References

- [108] One-Touch Transfer by DSS Button
- [201] Transfer Recall Time
- [205] Extension-to-Outside Line Call Duration Time
- [206] Outside-to-Outside Line Call Duration Time
- [502] Extension-to-Outside Line Call Duration Limit
- [503] Call Transfer to Outside Line
- [990] System Additional Information

Features Guide References

None

User Manual References

- 2.4.3 Transferring a Call

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 dialled.

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. <[991] COS Additional Information, COS 5-Bit 9>
- An extension can set only one CCBS at a time.
- A proprietary telephone (PT), single line telephone (SLT) and portable station (PS) 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 PT or SLT and the call arrives via DIL 1:1, DDI 1:1 and MSN 1:1.
- If the callback ringing is not answered in four 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. <[991] COS Additional Information, COS 5-Bits 10-11>
- To activate this feature, use the following software version of the ISDN Card or Unit.

ISDN Unit Type	Software Version
KX-TD280	P071V / P072V or after
KX-TD286	P831H / P832H or after
KX-TD290	P851F / P852F or after

Programming Guide References

- [100] Flexible Numbering
- [991] COS 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

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, operator, modem (for remote system administration) or external pager (for TAFAS: Trunk (Outside Line) Answer From Any Station). A dialling route using a one digit number (DISA built-in automated attendant number) is available.
- Calling an external party.

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

Security Mode	Description
Non	Any caller can make outside or intercom calls.
Outside Line	A pre-assigned DISA user code is required to make outside calls.

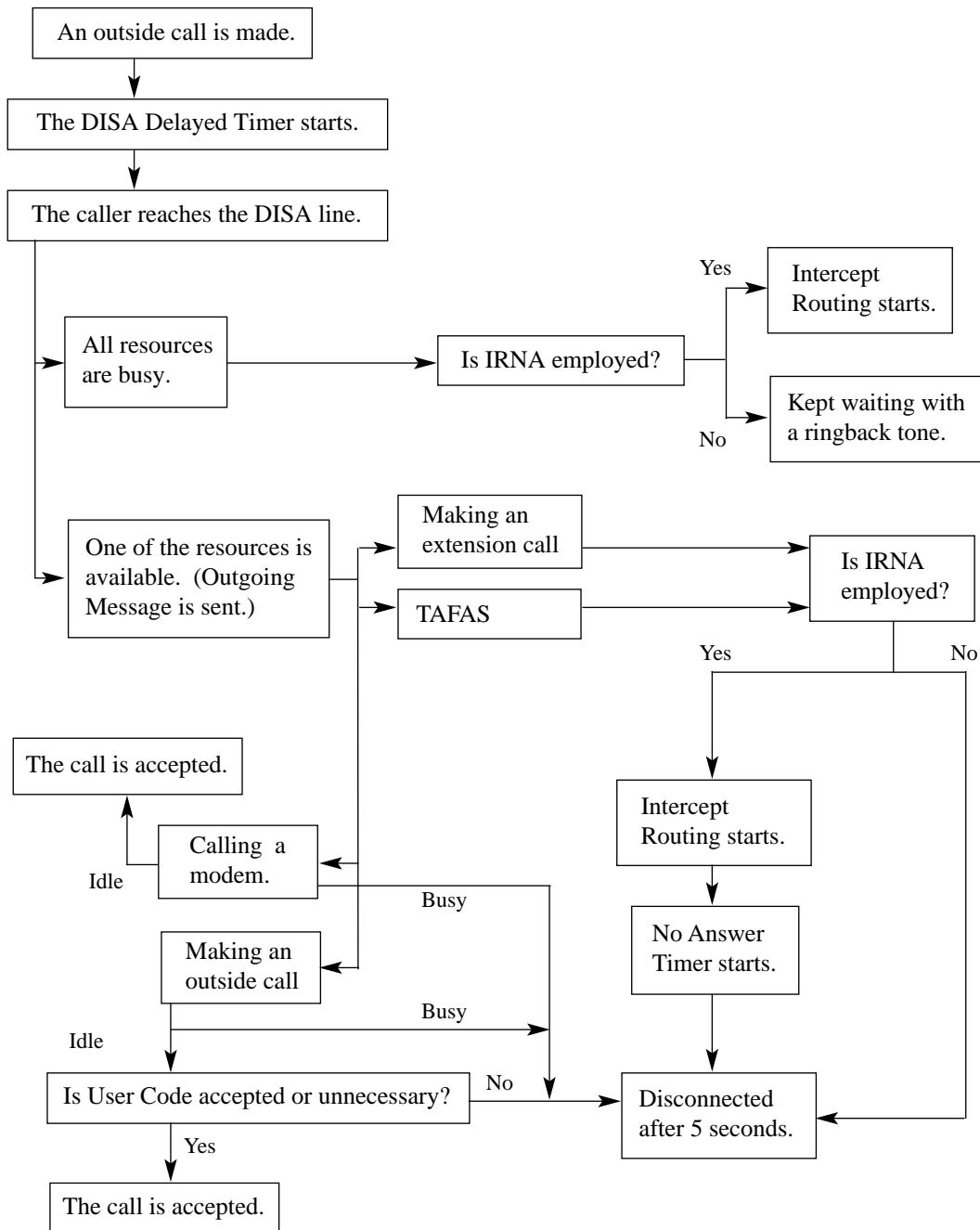
However, when making an outside call by Call Forwarding – to Outside Line, the call is permitted (exception).

An Outgoing Message can be programmed for the DISA feature. When a caller reaches the DISA line, a pre-recorded message will greet the caller. Two different DISA messages may be recorded by the operator. Thus, one message may be used in day mode and the other in night mode, or they can be used for different outside lines.

Warning

When you enable the Outside-to-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. In order to avoid this problem, we strongly recommend the following points:

- a) Carefully maintain the secrecy of the password.
- b) Specify a complicated password as long and random as you can make it.
- c) Change the password frequently.

Flow chart of possible cases and results for DISA calls**Conditions**

- The following items are required for the DISA feature:
 - a) An optional DISA Unit or Card must be installed.
 - b) The Floating Station number of the DISA message should be assigned as the Direct In Lines (DIL) 1:1 destination. <[813] Floating Number Assignment, [407-408] DIL 1:1

2.1 Changed and Added Features

Extension – Day / Night> This assigns the DISA line and the message accessed by external callers.

c) The DISA message(s) should be recorded by the operator.

- Only one DISA Unit (for KX-TD816) or DISA Card (for KX-TD1232) can be installed per system. During System Connection^{*1}, the DISA Card is effective only for an outside line used in the same system.
- A DISA call is answered after a ringback tone is returned to the caller after the DISA Delayed Answer Time expires. <[213] DISA Delayed Answer Time> The caller can dial during the message.
- The floating number of a DISA message may be selected as the destination of Intercept Routing. <[409-410] Intercept Extension – Day / Night>
- **DISA Built-in Automated Attendant:**

This system can store up to ten programmable DISA built-in automated attendant numbers. <[818] DISA Built-in Automated Attendant Number> 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 of time, the system assumes that the first digit is a DISA built-in automated attendant number. <[221] DISA 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 unique. 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. <[016] DISA / TIE User Codes / [811] DISA / TIE User Codes>
- The duration of outside-to-outside line calls can be limited. <[206] Outside-to-Outside Line Call Duration Time> When the specified time expires, both lines are disconnected unless the caller re-tries or extends the time, if available. A warning tone is sent to both parties 15 seconds before the time-limit at five-second intervals.
- Extending the call duration can be enabled from one to seven minutes or disabled. <[214] DISA Prolong Time> The caller can do this several times.
- To detect the end of an outside-to-outside line call, Calling Party Control (CPC) Signal Detection and Tone Detection can be assigned. <[405] CPC Signal Detection Incoming Set, [415] CPC Signal Detection Outgoing Set, [810] DISA Tone Detection>. And the system can detect the type of tone (Continuous/Cycled/No Tone). <[990] System Additional Information, Area 09-Bits 1-3>.
- Dialling "*" during DISA outside-to-outside line conversation enables or disables the call retry. If disables, "*" will simply be dialled. <[990] System Additional Information, Area 07-Bit 10>
- When you dial the wrong DISA user code 3 times, your call will be disconnected.
- When a DISA call arrives at a busy extension which has disabled Call Waiting, a busy tone will be sent to the caller. If required, Intercept Routing – No Answer (IRNA) can be activated. <[990] System Additional Information, Area 07-Bit 7>

^{*1} Available for the KX-TD1232 only.

Installation Manual References

- 2.4.6 DISA Card / Unit and Remote Card / Unit Installation

Programming Guide References

- [016] DISA / TIE User Codes
- [100] Flexible Numbering
- [203] Intercept Time
- [206] Outside-to-Outside Line Call Duration Time
- [213] DISA Delayed Answer Time
- [214] DISA Prolong Time
- [215] Outgoing Message Time
- [221] DISA AA Wait Time
- [405] CPC Signal Detection Incoming Set
- [407-408] DIL 1:1 Extension – Day / Night
- [409-410] Intercept Extension – Day / Night
- [415] CPC Signal Detection Outgoing Set
- [809] DISA Security Type
- [810] DISA Tone Detection
- [811] DISA / TIE User Codes
- [812] DISA DTMF Repeat
- [813] Floating Number Assignment
- [818] DISA Built-in Automated Attendant Number
- [990] System Additional Information

Features Guide References

- Intercept Routing
- Outgoing Message (OGM)

User Manual References

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

Malicious Call Identification (MCID)

Description

Allows you to ask your telephone company to trace a malicious caller during a call or after the caller hangs up. You will receive information on the malicious call later on.

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 300 130.
(ETS: European Telecommunication Standard)

Conditions

- The MCID service is only available for incoming calls using an ISDN line. Not available during a 3-party conference call.
- To activate the MCID service after the caller has hung up, System Programming is required. In this case, the call will not be disconnected until you go on-hook. <[990] System Additional Information, Area 08-Bit 2>

Programming Guide References

- [990] System Additional Information

Features Guide References

None

User Manual Addendum References

- 1.1.3 Identifying Malicious Callers (Malicious Call Identification [MCID])

Ring Group

Description

All extensions in a ring group ring simultaneously by dialling the floating number of the extension group. If all extensions in the ring group are busy, the incoming outside call will be handled by the Time Table. A ring group can be a Station Hunting type.

Conditions

- Types of calls whose destination can be the ring group are:

Call type	
Outside calls	Direct In Lines (DIL) 1:1; Direct Inward System Access (DISA); Intercept Routing – No Answer (IRNA); Uniform Call Distribution (UCD)-Overflow
Intercom calls	Extension; Transfer

- The floating number of the extension group is used for all other hunting types, Circular, Termination, Voice Mail (VM), Automated Attendant (AA) and Uniform Call Distribution (UCD).
- The Time Table is the same as UCD Time Table, refer to page 31.

Programming Guide References

- [106] Station Hunting Type
- [126] UCD Overflow
- [127] UCD Time Table
- [602] Extension Group Assignment
- [813] Floating Number Assignment
- [990] System Additional Information

Features Guide References

- Floating Station
- Station Hunting

User Manual References

None

Uniform Call Distribution (UCD)

Description

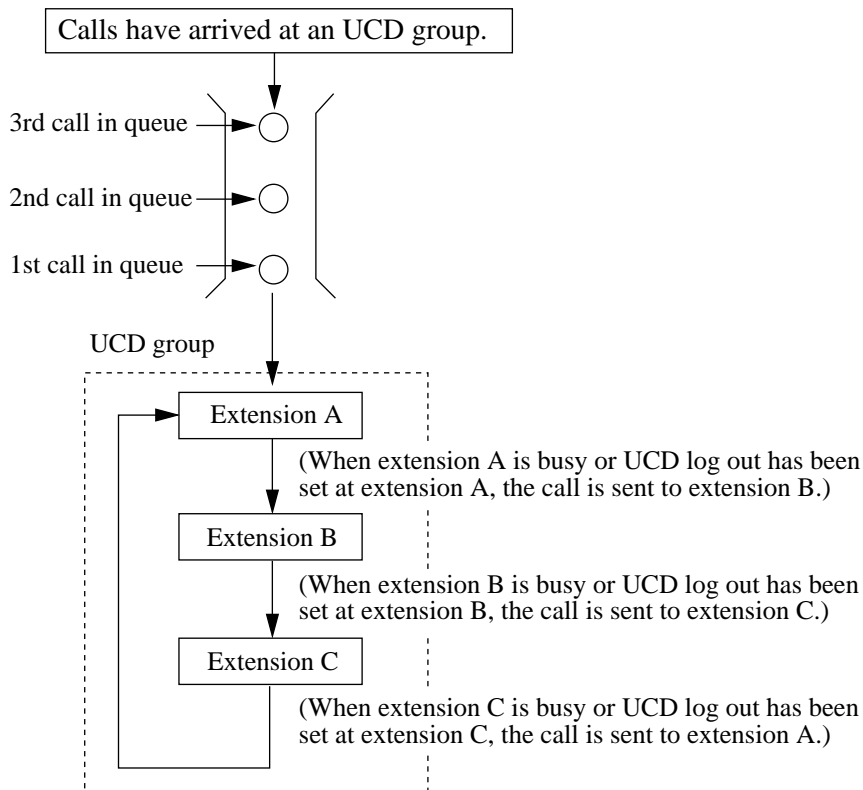
UCD is a Station Hunting feature which is activated by dialling the floating number of the extension group called an UCD group. Incoming calls to an UCD group are distributed uniformly by hunting for an idle extension in a circular way. This UCD feature is particularly helpful when a certain extension receives a high volume of calls compared with other extensions.

If all extensions in an UCD group are busy or not available, the incoming outside call will be handled by the UCD Time Table.

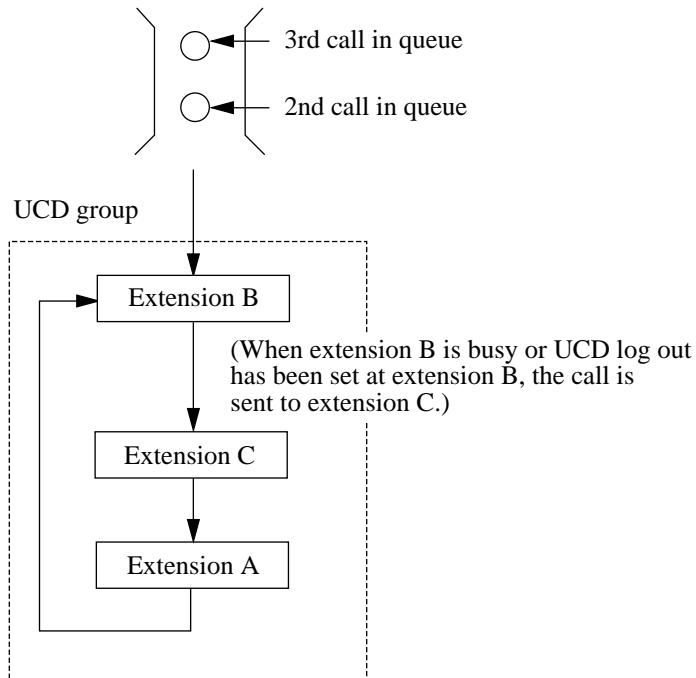
The UCD Time Table is the same as the Time Table of the Ring Group.

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 Time Table Assignment

UCD	FN	OFN	TT
1	191	101	1
2	192	291	2
3	193		
4	194		
5	291		
6	292		
7	293		
8	294		

UCD: UCD Group Number (1-8)
 FN: Floating Number of the UCD Group
 OFN: Overflow Extension Number
 TT: Time Table Number (1-4)

2.1 Changed and Added Features

Sequence Assignment

TT	SEQUENCE
1	S1 → 4T → 4T → TR →
2	S1 → 2T → → →
3	S4 → RT → → →
4	TR → RT → → →

S1: Send Outgoing Message (OGM) 1

S2: Send OGM 2

S3: Send OGM 3

S4: Send OGM 4

TR: Transfer to overflow extension

RT: Return to top

Blank: Disconnect the line

1T: Timer – 16 seconds

2T: Timer – 32 seconds

3T: Timer – 48 seconds

4T: Timer – 64 seconds

Sequence Activation Examples

Sequence Examples	Activation
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.)

Sequence Activation Examples

Sequence Examples	Activation
1T → TR → N/A → N/A → N/A	Waits for an idle extension for 16 seconds and then transfers to an overflow extension.

N/A: not available for assignment.

Note

- If the overflow extension or Time Table number is not assigned, the system will not answer the call and waits for an idle extension. In this case, IRNA will be employed.
- If the system sends the OGM after queuing, the OGM answering time is subject to the time assigned. <[213] DISA Delayed Answer Time>
- Dialling is disregarded during the OGM.
- 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. <[990] System Additional Information, Area 01-Bit 1>
- When an idle extension in a group receives a queuing call, the system selects to keep an outgoing message or not. <[990] System Additional Information, Area 08-Bit 6>
- When an incoming outside call arrives to an extension in a group directly, the caller hears a ringback tone or an outgoing message. <[990] System Additional Information, Area 08-Bits 4 and 5>
- The system can select "RT" to go to the top or second in each Time Table. <[990] System Additional Information, Area 08-Bits 7-10>

Conditions

- UCD can be used in the following cases:
 - a) The floating number of UCD is assigned as the Direct In Lines (DIL) 1:1 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 dialled from DISA (Direct Inward System Access).
 - e) The floating number of UCD is assigned as the UCD Overflow destination.
- This feature requires assigning an UCD for an extension group. <[106] Station Hunting Type> An extension cannot belong to two or more UCD groups.
- The floating number can be assigned on an UCD group basis. The UCD group is based on the extension group. <[813] Floating Number Assignment>
- 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

2.1 Changed and Added Features

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 her extension. When the extension re-joins the group, the extension sets the log-in status.

Programming Guide References

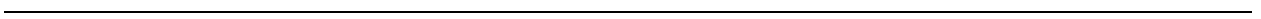
- [106] Station Hunting Type
- [126] UCD Overflow
- [127] UCD Time Table
- [602] Extension Group Assignment
- [813] Floating Number Assignment
- [990] System Additional Information

Features Guide References

- Extension Group
- Floating Station
- Log-In / Log-Out
- Station Hunting

User Manual References

None



Kyushu Matsushita Electric Co., Ltd.

1-62, 4-chome, Minoshima, Hakata-ku, Fukuoka 812-8531, Japan

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