Panasonic



Digital Super Hybrid System **Programming Guide**

KX-TD816 Model KX-TD1232



Introduction

About this Programming Guide

This Programming Guide is designed to serve as an overall system programming reference for the Panasonic Digital Super Hybrid System, KX-TD816 / KX-TD1232.

This manual contains the following sections:

Section 1, Programming Instructions

Provides information about what you need or what you should do before/during programming.

Section 2, General Programming

Provides details about the general system programmings.

Section 3, ISDN Programming

Provides details about the system programmings required to use ISDN lines.

The system is in accordance with European Telecommunication Standard (ETS) specifications below:

ETS 300 092 Calling Line Identification Presentation (CLIP) supplementary service.

ETS 300 093 Calling Line Identification Restriction (CLIR) supplementary service.

ETS 300 097 Connected Line Identification Presentation (COLP) supplementary service.

ETS 300 098 Connected Line Identification Restriction (COLR) supplementary service.

ETS 300 064 1 – 6 Direct Dialling In (DDI) supplementary service.

Section 4, E1 Programming

Provides details about the system programmings required to use the E1 line.

Section 5, Optional Programming

Provides details about the optional system programmings.

Section 6, Default Values

Provides the list of default values for all programmings.

Section 7, Index

Provides the programming titles, important words and phrases to help you access the required information easily.

About the other manuals

Along with this Programming Guide, the following manuals are available to help you install, know the available features and use the KX-TD816 / KX-TD1232 system:

Installation Manual

Provides instructions for installing the hardware and optional equipment.

Features Guide

Provides information about the system features.

User Manual

Provides operating instructions for the end users using proprietary telephones, single line telephones or consoles.

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Section 1 Programming Instructions

1.1 Programming Instructions

Default Setting

This system has a default factory setting. If any of the programming needs to be changed, you will find the necessary information in the Features Guide. This makes the system very simple to install and customise as required by the customer. Any required changes can be written in "Programming Tables".

Required Telephone Set

One of the following telephone sets is required for System Programming:

- Digital Proprietary Telephone (DPT): KX-T7436, KX-T7433, KX-T7235, KX-T7230
- Analogue Proprietary Telephone (APT): KX-T7130, KX-T7030, KX-T7033

Extensions Used for Programming

Connect one of the above-mentioned telephone sets to either of the following:

- Jack number 1
- Jack programmed as a manager extension

To assign the manager extension, see Section 2.1 [006] Operator / Manager Extension Assignment.

User Programming (Manager Programming)

Manager programming items are allowed for any display proprietary telephone user in the system. See Section 1.5 User Programming Mode.

1.2 Using Proprietary Telephones

Soft Buttons and SHIFT Button on the Display DPT

Three soft buttons are provided just below the display of Digital Proprietary Telephones (DPT), KX-T7433, KX-T7436, KX-T7230 and KX-T7235. The functions of these soft buttons vary as the programming procedures advance step by step. Those functions that are currently assigned to the buttons are shown on the lower line of the display. (See "Viewing the Display" in this section for more information on the display lines.)

If the **SHIFT** button indicator is on, two functions are available with each soft button. To alternate between the two functions, press the **SHIFT** button on the right side of the display.

Soft button variations

Type 1 Example: KX-T7230 Display CLR NEXT **Buttons** Soft 1 Soft 2 Soft 3 **SHIFT** Type 2 Press SHIFT to alternate SKP+ SKP-**PREV** CLR NEXT Soft 2 Soft 3 SHIFT Soft 2 Soft 3 SHIFT Soft 1 Soft 1 Type 3 Press SHIFT to alternate -> SEL+ NEXT < -SEL-**PREV** Soft 1 Soft 2 Soft 3 SHIFT Soft 1 Soft 2 Soft 3 SHIFT Type 4 Press SHIFT to alternate Α В C b а C Soft 1 Soft 2 Soft 3 SHIFT Soft 1 Soft 2 Soft 3 **SHIFT** Type 5 Press SHIFT to alternate SKP+ SEL SKP-CLR NEXT PREV Soft 1 Soft 2 Soft 3 SHIFT Soft 1 Soft 2 Soft 3 SHIFT

You can use either the soft buttons or the overlay buttons. (For overlay buttons, refer to "Using the Overlay" below.)

Throughout programming you will see instructions such as "Press PREV". If you use soft buttons, this means press SHIFT, release SHIFT and then press Soft 3. The (PREV) function is performed.

Note

If you use soft buttons and if programming instructions tell you to press the following buttons, you may press soft buttons shown below.

Instructions	Soft button	
SELECT	SEL+, SEL-, or SEL	
CLEAR	CLR	

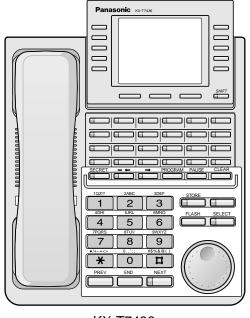
Using the Overlay

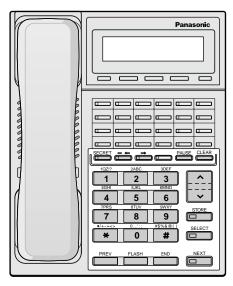
A programming overlay is packed with the telephone at the factory. This overlay should be used at all times while in programming mode since the functions of the telephone keys change while in programming mode as follows: (The original functions are in parentheses.)

During Normal Operation	During Programming
(PAUSE)	PAUSE / PROGRAM
(SP-PHONE)	NEXT
(REDIAL)	PREV (PREVIOUS)
(AUTO ANSWER / MUTE)	SELECT
(FLASH)	FLASH
(TRANSFER)	CLEAR
(FWD/DND)	•
(CONF)	_/
(INTERCOM)	SECRET
(AUTO DIAL / STORE)	STORE
(HOLD)	END

Location of Controls with the Overlay

The pictures below show the functions of the buttons of the proprietary telephone while in programming mode. There are Overlays for the KX-T7400 and KX-T7200 series telephones. KX-T7436 and KX-T7230 are used for the examples.





KX-T7436

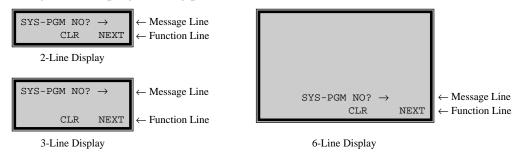
KX-T7230

Viewing the Display

The display gives you helpful information, such as what you should do now, what you have done, etc.

The KX-T7433, KX-T7436, KX-T7230 and the KX-T7235 utilise two information lines for programming. The upper line is called the Message Line and the lower one is called the Function Line.

The Message Line (upper) shows you what you should do or what you should select. It also allows you to confirm what you have just entered. The display capacity is 16 digits. If your entry exceeds the capacity, you can shift the display by pressing \rightarrow or \leftarrow button. The Function Line (lower) shows the current function of the soft buttons. These functions change with the programming procedures.



Before entering the programming mode

Before entering programming mode, confirm that:

- Your telephone is on-hook.
- No calls are on hold at your telephone.

Entering the programming mode

Press **PROGRAM** (or **PAUSE**) + * + # and enter your **System Password** (default=1234).

• The display shows the Initial Message: SYG-PGM NO? →

Note

- If your telephone set does not have a PROGRAM button, substitute it with the PAUSE button.
- If nothing is entered in five seconds after the **PROGRAM** (or **PAUSE**) button is pressed, it is cancelled.
- The System Password entered is not shown on the display. The System Password can be changed by System Programming. Refer to Section 2.2 [107] System Password.
- During the programming mode, your extension is treated as a busy extension.
- Only one proprietary telephone can be in programming mode at any one time.

1.3 Programming Methods

Advancing to the next stage

When "SYS-PGM NO? \rightarrow " is displayed, you can select one of the following:

- To go to programme [000], press the **NEXT** button.
- To go to another programme, enter the 3-digit programme address.

Rotation of jack number

Each jack of the Digital Super Hybrid System supports the connection of a digital proprietary telephone and a single line device with different extension numbers (eXtra Device Port: XDP function). To programme this function it is necessary to assign two parts for each jack. The first part of jack one is 01-1. The second part of jack one is 01-2. The first part of jack two is 02-1 and so on. The **NEXT** and **PREV** buttons can be used to move from jack to jack as required.

Example

Note

The first part of a jack is for a DPT of a XDP-assigned jack. The second part is for a single line device. Programme [600] EXtra Device Port assigns which jacks are XDP.

Storing your data

Press **STORE** to store your data.

• The **STORE** indicator lights red and a confirmation tone is emitted.

* Confirmation tone (one beep)

After pressing **STORE**, you will hear a beep. This informs you that storage is completed.

* Alarm tone (three beeps)

If you hear this alarm, your entry is not valid.

Making another selection within the same programme address

- To make the next higher selection, press **NEXT**.
- To make the previous selection, press **PREV.**
- To make a specific selection, press **SELECT** and then enter the number.

Going to another programme address

After pressing STORE, you can go to another programme with either of the following two methods:

a) To go to the next larger programme address:

Press Soft 1 (SKP+) or VOLUME ∨ (DOWN) or rotate the Jog Dial in the counterclockwise direction.

To go to the next smaller programme address:

Press SHIFT + Soft 1 (SKP-) or VOLUME \land (UP) or rotate the Jog Dial in the clockwise direction.

b) To go to a specific programme address: Press **END**, then enter the programme Address.

Method (1) is useful when you want to perform a series of programmes consecutively. For example, to change the programming in addresses [0XX], use this method. You can move from [000] to [001], from [001] to [002], and so on by pressing the **SKP**+ or **VOLUME** \vee . You can move in reverse order from [008] to [007], etc. by pressing the **SKP**- or **VOLUME** \wedge . This method can also be used to move between neighboring programme groups: For example, you can move between the programme addresses of the largest [0XX] and [100], the largest [1XX] and [200], and so on. Also, you can move between the smallest programme address [000] and the largest one [9XX].

Method (2) is useful when you wish to jump to another programme address. For example, you have just finished with programme [006] and now you want to go to programme [301]. Neither SKP+ / VOLUME ∨ nor SKP-/VOLUME ∧ is convenient in this case. So you should press **END** and enter 301.

Note

The following programming instructions assume that you have already entered the programming mode and that you will use Method (b).

Confirming the entries

You may review the stored programming without making any changes.

Going back to the operation mode

Two ways are available to go back to the operation mode:

- a) Lift the handset while in programming mode.
- b) When the Initial Message: SYS-PGM NO? → is displayed, press the **PROGRAM** (or **PAUSE**) button. (To display the Initial Message, press **END.**)

1.4 Entering Characters

Entering Characters

You can enter characters to store names or messages by using the dialling key pad, buttons or the Jog Dial.

See the Combination Tables below.

Combination Table a

Soft button		S1	SHIFT+S1	S2	SHIFT+S2	S3	SHIFT+S3	SHIFT+ SHIFT+S1	SHIFT+ SHIFT+S2
SELECT button pressing times keys	0	1	2	3	4	5	6	7	8
1	1	Q	q	Z	Z	!	?		
2	2	Α	а	В	b	С	С		
3	3	D	d	Е	е	F	f		
4	4	G	g	Н	h	I	i		
5	5	J	j	K	k	L	I		
6	6	М	m	Ν	n	0	O		
7	7	Р	р	Q	q	R	r	S	s
8	8	Т	t	U	u	V	v		
9	9	W	W	Χ	х	Y	У	Z	Z
0	0	(space)	ē	,	,		;		
*	*	/	+	ı	=	<	>		
#	#	\$	%	&	@	()		

Combination Table b

Jog Dial keys	Display sequence by rotating the Jog Dial
1	1 Q q R r S s T t
2	2 A a B b C c D d
3	3 D d E e F f G g
4	4 G g H h I i J j
5	5 J j K k L I M m
6	6 M m N n O o P p
7	7 P p Q q R r S s ···
8	8 T t U u V v W w
9	9 W w X x Y y Z z (space) ···
0	0 (space) ! ? . , ' : ; ···
*	* / + - = < > # \$
#	# \$ % & @ () A a B b

Note

- The alphabetical characters correspond to the letters shown on the twelve dialling keys on the proprietary telephone. (except symbols)
- In Combination Table b:

If you keep rotating the Jog Dial, all of the characters in the table will be displayed.

Character Entering Methods

Please see the following example which shows how to select a desired character.

For example, to select the letter "M":

Select either of the following three methods:

- **1.** Using the **SHIFT** and **Soft** buttons
 - (for KX-T7433 / KX-T7436 / KX-T7230 / KX-T7235 only)
 - * See Combination Table a.
 - **a)** Press **6.** ("M" belongs to "6".)
 - The Function Line shows: M N O
 - **b)** Press the **Soft 1** (M) button.

(Press **SHIFT** to display the lower case of the above letters.)

- 2. Using the **SELECT** button
 - * See Combination Table a.
 - a) Press 6. ("M" belongs to "6".)
 - **b)** Press the **SELECT** button once.
 - Pressing the SELECT button an appropriate number of times gives you the desired letter. Pressing SELECT twice gives the letter "m", pressing three times gives "N", and so on.

3. Using the Jog Dial

(for KX-T7433 / KX-T7436 only)

- * See Combination Table b.
- **a)** Press **6.** ("M" belongs to "6".)
- b) Rotate the Jog Dial one pulse.
 - Rotating the **Jog Dial** an appropriate number of pulses gives you the desired letter. Rotating the **Jog Dial** two pulses gives the letter "m", rotating three pulses gives "N", and so on.

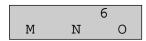
OR

- a) Press any dialling keypad.
- **b)** Rotate the **Jog Dial** until the desired character appears.
 - If you keep rotating the Jog Dial, all of the characters will be displayed. For example, if you rotate the Jog Dial after pressing 2, characters will appear in the following order: A a B b •••• Z z (space)!?.,':;*/+—=<># \$ % & @ () A a B b ••••

Example of entering characters: to enter "Mike":

Using method (1)

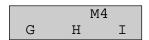
- * See Combination Table a.
 - a) Enter 6.



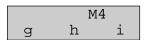
b) Press **Soft 1** (M).



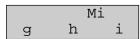
c) Enter 4.



d) Press SHIFT.



e) Press Soft 3 (i).



f) Enter **5**.

g) Press Soft 2 (k).

	Mik		
j	k	1	

h) Enter 3.

	Mik	3
d	е	f

i) Press Soft 2 (e).

	Mike	
d	е	f

Using method (2)

* See Combination Table a.

Procedures	The display shows:
1. Enter 6 .	6
2. Press SELECT .	M
3. Enter 4.	M4
4. Press SELECT six times.	Mi
5. Enter 5 .	Mi5
6. Press SELECT four times.	Mik
7. Enter 3 .	Mik3
8. Press SELECT four times.	Mike

Using method (3)

^{*} See Combination Table b.

Procedures	The display shows:
1. Enter 6 .	6
2. Rotate Jog Dial one pulse.	M
3. Enter 4.	M4
4. Rotate Jog Dial six pulse.	Mi
5. Enter 5 .	Mi5
6. Rotate Jog Dial four pulses.	Mik
7. Enter 3.	Mik3
8. Rotate Jog Dial four pulses.	Mike

OR

Procedures	The display shows:
1. Enter 2.	2
2. Rotate Jog Dial until "M" appears.	M
3. Enter 2 .	M2
4. Rotate Jog Dial until "i" appears.	Mi
5. Enter 2 .	Mi2
6. Rotate Jog Dial until "k" appears.	Mik
7. Enter 2.	Mik2
8. Rotate Jog Dial until "e" appears.	Mike

<u>Note</u>

- To erase all the letters, press **CLEAR.**
- To erase the last letter, press **-**.

1.5 User Programming Mode

User Programming Mode

Manager programming items (programme address: [0XX]) are accessible by any display proprietary telephone user in the system.

Entering the user programming mode

You can access these programmes by entering the User Programming Mode as follows: Before entering the mode, confirm that:

- Your telephone is on-hook.
- No calls are on hold at your telephone

Press **PROGRAM** (or **PAUSE**) + * + * and enter the **User Password** (default=1234)

After entering the mode, perform the same programming steps as the system programming steps in each programme address.

Note

- If your telephone set does not have a **PROGRAM** button, substitute it with the **PAUSE** button.
- If nothing is entered in five seconds after the **PROGRAM** (or **PAUSE**) button is pressed, it is cancelled.
- The User Password is not shown on the display. The password can be changed by system programming. Refer to Section 2.2 [120] User Password.
- During the programming mode, your extension is treated as a busy extension.
- Only one proprietary telephone can be in programming mode at any one time.

1.6 Programming Example

Programming Example

The following programming instructions assume that you have already entered the programming mode and that you will employ method (b) of "Going to another programme address" in Section 1.3 Programming Methods.

Example: programme [001] System Speed Dialling Number Set

Sample of Description **Explanation** [001]⁽¹⁾ System Speed Dialling Number Set (1) Programme address. (2) Programme title. (3) Provides a more detailed description of the **Description** (3) programme. Used to program the System Speed Dial numbers. These numbers are available to all extension users. There are 500 numbers from 000 through (4) Shows you choices that you can assign. $\textbf{Selection}^{\ (4)}$ (5) Shows you the default (factory setting). • Speed dial number: 000 through 499 (6) Shows you programming procedures step by step. • Telephone number: 24 digits (max.) • While programming, use the overlay. **Default** (5) • Before starting to programme, enter the All speed dial numbers - Not stored programming mode. (See Entering the programming mode in Section 1.2 Using $\mathbf{Programming}^{(6)}$ Proprietary Telephones.) (7) Enter the programme address. **1.** Enter **001**. (7) (8) The display shows the programme title. If your Display: SPD Number Set (8) telephone has soft buttons, the lower line shows **2.** Press **NEXT**. (9) the functions that are currently assigned to them. Display: SPD Code? \rightarrow ⁽¹⁰⁾ (9) Press either Soft 3 (NEXT) shown on the display or the **NEXT** shown on the overlay. 3. Enter a speed dial number. (10) The message line advises you to enter a speed dial To enter speed dial number 000, number. you can also press NEXT. (11) If the telephone number has already been stored, Display example: 000:Not Stored $^{(11)}$ the number is displayed. **4.** Enter a **telephone number**. (12) (12) Enter the telephone number that you want to store. To delete the current entry, press **CLEAR**. (13) Your entry is displayed as you enter the digits. (13) Pressing **CLEAR** erases the whole entry. To change the current entry, press **CLEAR** and enter the new number. (14) Your entry is now stored.

5. Press STORE. (14)

The indicator lights red and a confirmation tone lets you know that storage is completed.

Sample of Description	Explanation
 6. To programme another speed dial number, press NEXT or PREV, or SELECT and the desired speed dial number. (15) 7. Repeat steps 4 through 6. (16) 8. Press END. (17) 	(15) Select the best way for you to store another speed dial number. Pressing the NEXT / PREV allows you to select the next higher / lower speed dial number. You can also keep pressing them until the desired one is displayed. If you press SELECT and the desired speed dial number, the selected code is displayed.
• Each speed dial number has a maximum of 24 digits. The valid characters are 0 through 9,	 (16) You can continue to programme another entry. (17) After you have stored all your entries, finish this programme by pressing END. After pressing END you can go to any programme address you desire. You can return to the Initial Message mode any time by pressing END. To go to the next larger programme address, do not press END but press Soft 1 (SKP+) or VOLUME ∨ or rorate the Jog Dial in the counter-clockwise direction. To go to the next smaller programme address, do not press END but press SHIFT + Soft 1 (SKP-) or VOLUME ∧ or rorate the Jog Dial in the counter-clockwise direction. (18) Tells you what you should notice or consider when doing the programming. (19) Lists all of the features related to the programming. These features are described in

Programming Structure

Programme Address	Programming Group	Description
[0XX]	Manager Programming	These programmes may be accessed by the system manager of the customer to meet frequent changes requested by the customer.
[1XX]	System Programming	Entire system programming.
[2XX]	Timer Programming	Flexible system timer setting.
[3XX]	TRS / ARS / TIE Line Routing Table Programming	Assignment of Toll Restriction, Automatic Route Selection (ARS) or TIE Line Routing Table.
[4XX]	Outside Line / ISDN Line / TIE Line Programming	Setting of outside line, outside line group, ISDN line or TIE line values.
[5XX]	COS Programming	Setting of Class of Service (COS).
[6XX]	Extension Programming	Setting of extension values.
[7XX]	E1 Line Programming	Setting of E1 line values.

Programming Structure

Programme Address	Programming Group	Description
[8XX]	Resource Programming	Assignment of customer-supplied peripherals connected to the system.
[9XX]	Optional Programming	Used to answer the user's requirements or troubles, if needed.

Section 2 General Programming

2.1 Manager Programming

[000] Date and Time Set

Description

Sets the current date and time. A 12 hour clock or 24 hour clock can be selected.

Selection

- Year: 00 through 99
- Month: Jan. through Dec.
- Day: 1 through 31
- Day of the week: SUN / MON / TUE / WED / THU / FRI / SAT
- Hour: 1 through 12
- Minute: 00 through 59
- AM / PM
- Clock hour: 12 or 24

Default

'93 Jan. 1 FRI 12:00 AM 12

Programming

1. Enter 000.

```
Display: 000 DATE / TIME
```

2. Press NEXT.

```
Display example: '93 Jan. 1 FRI
```

3. Enter the year.

To change the current entry, press **CLEAR** and enter the new year.

- **4.** Press **▶**.
- **5.** Keep pressing **SELECT** until the desired month is displayed.
- **6.** Press **→**.
- 7. Enter the day.

To change the current entry, press **CLEAR** and enter the new day.

- **8.** Press **▶**.
- **9.** Keep pressing **SELECT** until the desired day of the week is displayed.
- 10.Press STORE.
- 11.Press NEXT.

```
Display example: 12:00 PM 24
```

12.Enter the hour.

To change the current entry, press **CLEAR** and enter the new hour.

13.Press **▶**.

14.Enter the minute.

To change the current entry, press **CLEAR** and enter the new minute.

15.Press **▶**.

16.Press **SELECT** for AM or PM.

17.Press **▶**.

18.Press **SELECT** for 12 or 24 (clock hour).

19. Press STORE.

20.Press END.

Conditions

- After changing an entry, you can press **STORE.** You do not have to perform the rest of the steps.
- To return to a previous field, press in steps 4 through 9 and steps 13 through 18.
- If you hear an alarm after pressing **STORE**, check that the date is valid.
- The clock starts immediately after the **STORE** button is pressed.
- You cannot leave an entry empty.

Features Guide References

Display Message

[001] **System Speed Dialling Number Set**

Description

Used to programme the System Speed Dial numbers. These numbers are available to all extension users. There are 500 numbers available from 000 to 499.

Selection

Speed dial number: 000 through 499 Telephone number: 24 digits (max.)

Default

All speed dial numbers – Not stored

Programming

1. Enter 001.

```
Display: 001 SYS SPD DIAL
```

2. Press NEXT.

```
Display: SPD Code?→
```

3. Enter a speed dial number.

To enter speed dial number 000, you can also press **NEXT.**

```
Display example: 000:Not Stored
```

4. Enter a **telephone number.**

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- 6. To programme another speed dial number, press NEXT or PREV, or SELECT and the desired speed dial number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Each speed dial number has a maximum of 24 digits. The valid characters are **0 through 9**, the ***** and **#** keys, and the **FLASH**, **PAUSE**, **SECRET** and **–** (**hyphen**) buttons.
 - To store a flash signal, press **FLASH**.

Note:

The stored flash will only be effective during a call. (Refer to External Feature Access in the Features Guide.)

- To store a hyphen, press the "–" button.
- To store a pause, press **PAUSE.** (Refer to Pause Insertion, Automatic in the Features Guide.)
- To store a feature number to convert pulse signals to DTMF (Dual Tone Multi-Frequency) signals, press the * and # keys.
 (Refer to Pulse to Tone Conversion in the Features Guide.)
- To prevent displaying of all or part of the number, press SECRET before and after the secret number. (Secret Dialling)
- If you are storing an external number, include the line access number (default: 9/0, 81 through 88) before the number. When dialling, a pause is automatically inserted after the line access number.
- If you are storing an account code, enter the account code before the line access number. (Refer to Account Code Entry in the Features Guide.)
- If you are storing a number for Incoming Outside Call Information Display with name, enter "-" (hyphen) after the line access number. The system starts to compare the calling party's number or called party's number with the System Speed Dialling number stored after "-".

Example: 9 – 12345678

(Refer to Incoming Outside Call Information Display in the Features Guide.)

- A number consisting of 25 digits or more can be stored by storing it in two speed dial numbers. The line access number should be stored in the first speed dial number.
- To access another speed dial number in step 6, press **SELECT** and start with step 3.
- To display parts of the number which have scrolled off the display, press \blacksquare or \blacksquare .
- Programme [002] System Speed Dialling Name Set is used to name the speed dial numbers.

Features Guide References

Call Directory
System Speed Dialling

System Speed Dialling Name Set [002]

Description

Assigns names to the system speed dial numbers assigned in programme [001] System Speed Dialling Number Set. KX-T7433, KX-T7436 and KX-T7235 telephones can show the stored name during System Speed Dialling.

Selection

Speed dial number: 000 through 499

• Name: 10 characters (max.)

Default

All speed dial numbers – Not stored

Programming

1. Enter 002.

Display: 002 SYS SPD NAME

2. Press NEXT.

Display: SPD Code?→

3. Enter a speed dial number.

To enter speed dial number 000, you can also press **NEXT.**

```
Display example: 000:Not Stored
```

4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new name.

- 5. Press STORE.
- **6.** To programme another speed dial number, press **NEXT** or **PREV**, or **SELECT** and the desired speed dial number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Speed dial numbers are programmed in programme [001] System Speed Dialling Number
- To go to another speed dial number in step 6, press **SELECT** and start with step 3.

Features Guide References

Call Directory
System Speed Dialling

Extension Number Set [003]

Description

Assigns an extension number to each extension.

Selection

Jack number:

```
KX-TD816 - 01 through 16(-1/-2)
KX-TD1232 – 01 through 64 (-1 / -2)
(-1 = first part, -2 = second part)
```

• Extension Number: 2 through 4 digits

Default

```
KX-TD816:
```

```
Jack 01-1 through 16-1 = 101 through 116;
Jack 01-2 through 16-2 = 201 through 216
KX-TD1232:
Jack 01-1 through 64-1 = 101 through 164;
Jack 01-2 through 64-2 = 201 through 264
```

Programming

1. Enter 003.

```
Display: 003 EXT NUMBER
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

```
To enter jack number 01, you can also press NEXT.
```

To select the second part (-2), press **NEXT** after entering the jack number.

```
Display: #01-1:EXT101
```

4. Enter an **extension number.**

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- 6. To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack** number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- There is a maximum of 32 extension numbers for KX-TD816, and 128 extension numbers for KX-TD1232. Each extension number can be two, three, or four digits, consisting of 0 through 9. The ** and #* keys cannot be used.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- An extension number is invalid if the first or second digits do not match with the programme [100] Flexible Numbering, (01) (16) 1st through 16th hundred extension blocks" setting. If one digit is assigned as the leading digit, some extensions have two digits and some have three digits. If two digits are assigned, some have three digits and some have four digits.
- Two extension numbers can be assigned per jack. If eXtra Device Port (XDP) is disabled for the jack in programme [600] EXtra Device Port, the extension number of the second part (XX-2) is not available. (XX=jack number)
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- Double entry and incompatible entry for these numbers are invalid. Valid entry example: 10 and 11, 10 and 110. Invalid entry example: 10 and 106, 210 and 21.

 To avoid making an invalid entry, check the other extension numbers. The default of each extension number is as follows:

[012] ISDN Extension Number Set

Not stored.

[118] VM Extension Number Set

KX-TD816 – 165 through 170, 177, 178, 181 through 184

KX-TD1232 - 165 through 188

[124] Phantom Extension Number Set

Not stored.

[813] Floating Number Assignment

KX-TD816 – 191 through 194, 196, 198, 291 through 294, 298, 299

KX-TD1232 – 191 through 194, 196 through 198, 291 through 294, 296 through 299

Programme [004] Extension Name Set is used to name the extension numbers.

Features Guide References

Call Directory

Display Message

EXtra Device Port (XDP)

Flexible Numbering

Intercom Calling

Extension Name Set [004]

Description

Assigns names to the extension numbers programmed in programme [003] Extension Number Set.

Selection

Jack number:

```
KX-TD816 - 01 through 16(-1/-2)
KX-TD1232 - 01 through 64 (-1 / -2)
(-1 = first part, -2 = second part)
```

• Name: 10 characters (max.)

Default

All jacks - Not stored

Programming

1. Enter 004.

```
Display: 004 EXT NAME SET
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

To enter jack number 01, you can also press **NEXT.**

To select the second part (-2), press **NEXT** after entering a jack number.

```
Display: #01-1:Not Stored
```

4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new name.

- 5. Press STORE.
- 6. To programme another jack, press NEXT or PREV, or SELECT and the desired jack number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• There is a maximum of 32 names for KX-TD816, and 128 names for KX-TD1232. Each name has a maximum of 10 characters.

- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.

Features Guide References

Call Directory Display Message Intercom Calling

[005] Flexible CO Button Assignment

Description

Used to determine the use of the flexible CO buttons on proprietary telephones from a centralised telephone.

Selection

Jack number:

KX-TD816 – 01 through 16 KX-TD1232 - **01 through 64**

• Button Code (plus parameter, if required):

Button Code	Parameter	
0 (Single-CO)	KX-TD816: 01 through 08 (Outside line number)	
	KX-TD1232: 01 through 54 (Outside line number)	
1 (DSS)	2 through 4 digits (Extension number)	
2 (One-Touch Dialling)	16 digits max. (Telephone number)	
3 (Message Waiting)	None	
3 (Another Extension Message Waiting)	2 through 4 digits (Another extension number)	
3 (Phantom Extension Message Waiting)	2 through 4 digits (Phantom extension number)	
4 (FWD/DND)	None	
5 (Save)	None	
6 (Account)	None	
70 (Conference)	None	
71 (Log-In/Log-Out)	None	
72 (Phantom Extension)	2 through 4 digits (Phantom extension number)	
73 (Night)	None	
8 (Voice Mail Transfer)	2 through 4 digits (Voice mail extension number)	
90 (Two-Way Record)*	2 through 4 digits (Voice mail extension number)	
91 (Two-Way Transfer)*	2 through 4 digits (Voice mail extension number)	
92 (Live Call Screening)*	None	
93 (Live Call Screening Cancel)*	None	
★ (Loop-CO)	None	
# (Group-CO)	1 through 8 (Outside line group number)	

Button Code	Parameter
CO (Ringer frequency)	1 through 8 (Ring tone type number)

^{*} Available when this system is connected to a Voice Processing System which supports digital proprietary telephone integration (e.g. KX-TVP100).

Default

KX-TD816:

All jacks – CO buttons 1 through $8 = Single-CO\ 01$ through 08; Ring tone type 2

Other CO buttons = Not stored

KX-TD1232:

All jacks – CO buttons 1 through 24 = Single-CO 01 through 24; Ring tone type 2

Programming

1. Enter 005.

Display: 005 FLEXIBLE CO

2. Press NEXT.

Display: Jack NO?→

3. Enter a jack number.

To enter jack number 01, you can also press **NEXT.**

Display: PT-PGM Mode

4. Press the **CO button** which is changed to another button.

The display shows the contents pre-assigned to the button.

Display example: CO-01

5. Enter a **button code** (plus **parameter**, if required).

To change the parameter, press **CLEAR** and enter the new parameter.

- **6.** Press **STORE**.
- **7.** To programme another CO button of the same jack, repeat steps 4 through 6. To programme another jack, press **SELECT** and repeat steps 3 through 6.
- 8. Press END.

Cancelling

- **1.** Perform the same procedures as steps 1 through 4 above.
- 2. Enter 2.
- 3. Press STORE.
- 4. Press END.

Conditions

- A centralised telephone is a telephone connected to jack 01 or a jack programmed as a manager extension in programme [006] Operator / Manager Extension Assignment.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. Jack numbers in the out-of-service system are unacceptable.
- The number of the CO buttons available depends on the telephone type. (Refer to Buttons on Proprietary Telephones and Consoles in the Features Guide.)
- If you press the same CO button again in step 5, you can select a desired ringer frequency for the CO button from eight types of ring tones. When you enter the tone type number (1 through 8), you will hear the selected tone type until STORE is pressed. This selection is possible only for the CO buttons that have been assigned to Single-CO, Group-CO, or Loop-CO.

Features Guide References

Button, Flexible

Buttons on Proprietary Telephones and Consoles

[006] Operator / Manager Extension Assignment

Description

Assigns the jack number for a manager and/or operators. The manager extension can perform System Programming and manager services. The operators have the ability to perform operator services.

Selection

- **OPE-1** (operator 1) / **OPE-2** (operator 2) / **MNGER** (manager)
- Jack number:

```
KX-TD816 – 01 through 16
KX-TD1232 – 01 through 64
```

Default

```
Operator 1 – Jack 01;
Operator 2 and Manager – Not stored
```

Programming

1. Enter 006.

```
Display: 006 OP-1, 2, MGR
```

2. Press **NEXT** to programme operator 1.

```
Display: OPE-1:Jack01
```

To programme another item, you can also keep pressing **NEXT** or **PREV** until the desired one is displayed.

3. Enter a jack number.

To assign no operator or manager, press CLEAR.

To change the current entry, press **CLEAR** and enter the new jack number.

- 4. Press STORE.
- **5.** To programme another item, press **NEXT** or **PREV**.
- **6.** Repeat steps 3 through 5.
- 7. Press END.

Conditions

- Up to two operators and a manager can be programmed.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- The manager cannot be assigned the jack number of the Console Port set in programme [007] Console Port and Paired Telephone Assignment.

• If the assigned jack is in eXtra Device Port (XDP) mode, the proprietary telephone jack is treated as the manager / operator extension.

Features Guide References

Manager Extension Operator

[007] Console Port and Paired Telephone Assignment

Description

Assigns the jack numbers for the console and the paired extension.

Selection

• Console number:

```
KX-TD816 – 1 through 4 (for Master), 5 through 8 (for Slave)
```

• Jack number for Console:

```
KX-TD816 – 02 through 16
KX-TD1232 – 02 through 32 (for Master), 33 through 64 (for Slave)
```

• Jack number for paired extension:

```
KX-TD816 – 01 through 16
KX-TD1232 – 01 through 32 (for Master), 33 through 64 (for Slave)
```

Default

All consoles – Not stored

Programming

1. Enter 007.

```
Display: 007 DSS CONSOLE
```

2. Press NEXT.

```
Display: DSS NO?→
```

3. Enter a console number.

```
To enter console number 1, you can also press NEXT.
```

```
Display example: DSS-1:# P:#
```

4. Enter a **jack number** for the console.

To delete the current entry, press **CLEAR**.

To change the current entry, press CLEAR and enter the new jack number.

- **5.** Press **▶**.
- **6.** Enter a **jack number** for the paired extension.

To change the current entry, press **CLEAR** and enter the new jack number.

```
Display example: DSS-1:#02 P:#03
```

- 7. Press STORE.
- **8.** To programme another console, press **NEXT** or **PREV**, or **SELECT** and the desired **console number.**
- **9.** Repeat steps 4 through 8.

10.Press END.

Conditions

- The jack number for the console and that for the paired extension must be entered together.
- Multiple consoles cannot be assigned to the same console jack.
- Multiple consoles can be paired with the same proprietary telephone jack.
- A console jack cannot be assigned the jack 01 and the jack number of manager set in programme [006] Operator / Manager Extension Assignment.
- If all incoming outside calls are set to ring at the operator extension telephone in programme [407-408] DIL 1:1 Extension – Day / Night, assigning a console to the operator extension makes the operator's job much easier.
- If a single line telephone is assigned as the pair extension, the paired console will not function.
- If a console assigned jack is programmed for eXtra Device Port (XDP), a single line telephone can be connected to the jack in parallel with the console.

Features Guide References

Console

[008] Absent Messages

Description

Used to programme the absent messages. An absent message, if set by the extension user, is displayed on the calling extension's telephone to show the reason for the user's absence.

Selection

Message number: 1 through 9Message: 16 characters (max.)

Default

- 1: Will Return Soon
- 2: Gone Home
- 3: At Ext %%%
- 4: Back at %%:%%
- 5: Out Until %%/%%
- 6: In a Meeting

7 through 9: Blank (not stored)

Programming

1. Enter 008.

Display: 008 ABSENT MSG.

2. Press NEXT.

Display: MSG NO?→

3. Enter a message number.

To enter message number 1, you can also press **NEXT**.

Display example: MSG1:Will Return

4. Enter the **message**.

For entering characters, see Section 1.4 Entering Characters.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new message.

- **5.** Press **STORE**.
- **6.** To programme another message, press **NEXT** or **PREV**, or **SELECT** and the desired **message number**.
- **7.** Repeat steps 4 through 6.
- **8.** Press **END**.

Conditions

- Messages 1 through 6 are programmed at the factory but can be changed.
- You can enter a maximum of seven "%" characters per message which can be programmed at each user's extension. The extension user can enter **0 through 9**, ****** and **#** for the % characters. If the user enters digits less than the number of "%" characters, it is recommended to fill the remaining "%" characters with "#" or "*".
- If there are 4-digit extension numbers available in your system, add one "%" to Message 3.
- To display parts of the message which have scrolled off the display, press \blacksquare or \blacksquare .

Features Guide References

Absent Message Capability

[009] Quick Dial Number Set

Description

Stores up to eight quick dial numbers.

Selection

Location number: 1 through 8Desired number: 16 digits (max.)

Default

All location numbers - Not stored

Programming

1. Enter 009.

Display: 009 QUICK DIAL

2. Press NEXT.

Display: Location NO?→

3. Enter a location number.

To enter location number 1, you can also press **NEXT.**

```
Display example: 1:Not Stored
```

4. Enter a desired number.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- A maximum of sixteen digits, consisting of **0 through 9**, ★ and #, can be assigned to a quick dial number.
- Before programming, assign a feature number for each location first in programme [100] Flexible Numbering.

Features Guide References

Quick Dialling

[014] VM Name Set

Description

Assigns a name for each voice mail port.

Selection

• Voice Mail (VM) number:

```
KX-TD816 – 01 through 12
KX-TD1232 - 01 through 24
```

• Name: 10 characters (max.)

Default

All Voice Mails – V.Mail xx (xx=01 through 24)

Programming

1. Enter 014.

```
Display: 014 VM PORT NAME
```

2. Press NEXT.

```
Display: VM Port NO?→
```

3. Enter a VM number.

```
To enter VM number 01, you can also press NEXT.
```

```
Display example: VM01:V.Mail 01
```

4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new name.

```
Display example: VM01:Voice No.1
```

- 5. Press STORE.
- **6.** To programme another voice mail port, press **NEXT** or **PREV**, or **SELECT** and the desired voice mail number.
- **7.** Repeat steps 4 through 6.
- **8.** Press END.

Conditions

None

Features Guide References

Voice Mail Integration for Inband

[015] Budget Management

Description

Assigns the charge limitation of a call on the extension basis.

Selection

• Jack number:

```
KX-TD816 – 01 through 16 (-1 / -2), *

KX-TD1232 – 01 through 64 (-1 / -2), *

(*=all jacks, -1=first part, -2=second part)
```

• Charge limitation (Charge): 0 through 99999999

Default

```
All jacks - 0
```

Programming

1. Enter 015.

```
Display: 015 BUDGET MNG
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

```
To enter jack number 01, you can also press NEXT. Display example: #01-1: 0 $
```

4. Enter a charge limitation.

To delete the charge limitation, press **CLEAR**.

- **5.** Press **STORE**.
- **6.** To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- **7.** Repeat steps 4 through 6.
- **8.** Press END.

Conditions

- If the charge limitation is set "0", no restriction is applied.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- To assign all jack numbers to one selection, press the ★ key in step 3. In this case, the display shows the contents programmed for Jack 01.
- The displayed currency can be programmed by [144] Currency Assignment.

Features Guide References

Budget Management Charge Fee Reference

[017] DISA / TIE User Codes

Description

Assigns the Direct Inward System Access (DISA) and TIE User Codes and a Class of Service (COS) to each code. The code COS determines the toll restriction level of the DISA and TIE caller.

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:

- 1: Carefully maintain the secrecy of the password.
- 2: Specify a complicated password as long and random as you can make it.
- 3: Change the password frequently.

Selection

- DISA / TIE user code number: 01 through 32
- DISA / TIE user code: 4 through 10 digits
- COS number: 1 through 8

Default

All DISA / TIE user code numbers – DISA / TIE user code=Blank; COS number=8

Programming

1. Enter 017.

Display: 017 USER CODES

2. Press NEXT.

Display: User Code NO?→

3. Enter a DISA / TIE user code number.

To enter user code number 01, you can also press NEXT.

```
Display example: 01: C:8
```

4. Enter a DISA / TIE user code.

To delete the current entry, press **CLEAR**.

To change the current entry, enter the new code.

- **5.** Press **t** to programme **COS**.
- 6. Enter a COS number.

To change the current entry, enter the new COS number.

7. Press STORE.

- **8.** To programme another user code, press **NEXT** or **PREV**, or **SELECT** and the desired **DISA / TIE user code number**.
- **9.** Repeat steps 4 through 8.
- 10.Press END.

Conditions

- This setting is required if Trunk (Outside line) Security mode is selected in programmes [439] TIE Security Type and [809] DISA Security Type.
- Each code should be unique and composed of four through ten numerical digits, **0 through 9.**
- You cannot leave an entry empty.

Features Guide References

Direct Inward System Access (DISA) TIE Line Service

2.2 System Programming

[100] Flexible Numbering

Description

Assigns the leading digits of extension numbers and feature numbers for system features.

Feature Number List

Number	Feature	Default
01	1st hundred extension block	1
02	2nd hundred extension block	2
03 - 16	3rd through 16th hundred extension block	None
17	Operator call	0 / 9*1
18	Automatic line access / ARS	9 / 0*2
19	Outside line group line access	8
20	System speed dialling	*
21	Station speed dialling	3*
22	Station speed dialling programming	30
23	Doorphone call	31
24	Paging – external	32
25	Paging – external answer / TAFAS answer	42
26	Paging – group	33
27	Paging – group answer	43
28	Call pickup, outside line	4×
29	Call pickup, group	40
30	Call pickup, directed	41
31	Call hold	50
32	Call hold retrieve – intercom	51
33	Call hold retrieve – outside line	53
34	Last number redial	#
35	Call park / call park retrieve	52
36	Account code entry	49
37	Door opener	55

Feature Number List

Number	Feature	Default
38	External feature access	6
39	Station feature clear	790
40	Message waiting	70
41	Outgoing message	36
42	Call forwarding / do not disturb	710
43	Call pickup deny	720
44	Data line security	730
45	Call waiting / OHCA / whisper OHCA	731
46	Executive busy override deny	733
47	Pickup dialling	74
48	Absent message	750
49	Timed reminder	76
50	Electronic station lockout	77
51	Day / Lunch / Break / Night service mode	78
52	Parallel telephone mode	39
53	Background music – external	35
54	LCS password	799
55	Call log, incoming	56
56	Call log lock, incoming	57
57	Timed reminder, remote	7×
58	Log-in / log-out	45
59	Automatic callback busy cancel	46
60	Walking COS	47
61	Reserved	
62	System working report	794
63 - 70	Quick dial location numbers 1 through 8	None
71 - 72	Reserved	None
73	TIE Line access number	None
74 - 89	Other PBX Extension 01 through 16	None
90	Paging – deny	721
91	Hotel application – room status	736

```
*1 For KX-TD1232X = 9, Others = 0
```

Selection

• Selection number:

01 through 91 (See "Feature Number List" for the corresponding features.)

• Feature number:

1 or 2 digits (for selection numbers 01 through 16, 74 through 89);1 through 3 digits (for selection numbers 17 through 73 and 90 through 91)

Default

See "Feature Number List".

Programming

1. Enter 100.

```
Display: 100 FLEX. NUMBER
```

2. Press NEXT.

```
Display: Select NO?→
```

3. Enter a selection number.

To enter selection number 01, you can also press **NEXT.**

```
Display example: 01. 1-EXT BL:1
```

4. Enter the feature number.

To delete the feature number, press CLEAR.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another selection, press **NEXT** or **PREV**, or **SELECT** and the desired **selection number.**
- **7.** Repeat steps 4 through 6.
- **8.** Press END.

To remove all the feature numbers except selection numbers (01) through (16) 1st through 16th extension blocks;

- 1. Enter 100.
- 2. Press NEXT.
- 3. Enter 00.

```
Display: All Feature CLR?
```

- 4. Press STORE.
- 5. Press END.

^{*2} For KX-TD1232X = 0, Others = 9

Conditions

• Required digits and valid entries for the feature numbers are as follows.

Feature number type	Required digits	Valid entry
Extension blocks / other PBX extensions	1 or 2 digits	0 through 9
TIE line access number	1 through 3 digits	0 through 9
Other feature numbers	1 through 3 digits	0 through 9, *, #

- It is possible to assign the leading digits for extension numbers of the respective extension blocks. Assignment of extension blocks defines the limits for programmes [003] Extension Number Set, [012] ISDN Extension Number Set, [118] Voice Mail Extension Number Set, [124] Phantom Extension Number Set and [813] Floating Number Assignment.
- If \times or # is included in a feature number, dial pulse telephone users cannot access the feature.
- Double entry and incompatible combinations are invalid. Valid entry examples: 30 and 31, 210 and 211. Invalid entry examples: 5 and 5, 30 and 301.
- If you delete a feature number, the feature cannot be used by dialling operation.
- You can remove all the feature numbers except selections (01) through (16).
- To clear an extension block (01) through (16), it is required to change the corresponding numbers assigned in programme [003] Extension Number Set, [012] ISDN Extension Number Set, [118] Voice Mail Extension Number Set, [124] Phantom Extension Number Set and [813] Floating Number Assignment.

Features Guide References

Flexible Numbering

[101] Day / Night Service Switching Mode

Description

This programme is used to determine if night mode is set automatically or manually.

Selection

Manual / Auto (automatic)

Default

Manual

Programming

1. Enter 101.

```
Display: 101 DAY/NT AUTO
```

2. Press NEXT.

```
Display example: D/N Mode:Manual
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

- If automatic switching is assigned, day / night mode is switched at the time programmed in [102] Day / Night Service Starting Time.
- The operator and manager can switch the day / night mode at any time.

Features Guide References

Day / Night Service

Day / Night Service Starting Time [102]

Description

Sets the starting time on a day of the week basis, when automatic day / night switching is programmed in programme [101] Day / Night Service Switching Mode.

Selection

- Day of the week selection number:
 - 1 (Sunday) / 2 (Monday) / 3 (Tuesday) / 4 (Wednesday) /
 - 5 (Thursday) / 6 (Friday) / 7 (Saturday) / * (every day of the week)
- Hour: 1 through 12 / Disable (no switching)
- Minute: 0 through 59
- AM / PM

Default

Every day of the week - Day - 9:00 AM / Night - 5:00 PM

Programming

1. Enter 102.

```
Display: 102 DAY/NT CLOCK
```

2. Press **NEXT**.

```
Display: Day of Week?→
```

3. Enter the day of the week selection number.

```
To select Sunday, you can also press NEXT.
```

```
Display example: Sun-Day: 9:00 AM
```

To select night mode, press **NEXT**.

```
Display example: Sun-Nig: 5:00 PM
```

4. Enter the hour.

To set no switching, keep pressing SELECT until "Disable" is displayed and go to step

If **SELECT** is pressed, the display shows the previous entry. If the previous setting was "Disable", press **SELECT** to enter the starting time.

To change the current entry, press **CLEAR** and enter the new time.

- **5.** Press **▶** .
- **6.** Enter the **minute**.

To change the current entry, press **CLEAR** and enter the new minutes.

- **7.** Press **▶** .
- **8.** Press **SELECT** for AM or PM.
- 9. Press STORE.

10.To programme another day / night mode or day of the week, press **NEXT** or **PREV**, or **SELECT** and the **day of the week selection number.**

11.Repeat steps 4 through 10.

12.Press END.

Conditions

- To select the desired day, you may keep pressing **NEXT** in step 3. To assign every day of the week to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Sunday.
- If day / night switching is not desired, select "Disable" in step 4.
- You cannot leave the entry empty.

Features Guide References

Day / Night Service

Automatic Access Outside Line Group Assignment [103]

Description

Assigns the sequence in which outside line groups will be accessed when in Automatic Line Access mode. When a user dials the feature number for automatic line access (default=9/0) or presses the Loop-CO button, an idle line is searched for in the programmed outside line group order.

Selection

Outside line group number: 1 through 8 in desired order

Default

12345678

Programming

1. Enter 103.

```
Display: 103 AUTO CO GRP
```

2. Press NEXT.

```
Display example: Access:12345678
```

3. Enter the **outside line group numbers** in priority from top to bottom.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new order.

- 4. Press STORE.
- 5. Press END.

Conditions

- The system supports a maximum of eight outside line groups.
- Automatic Line Access feature works only if the Automatic Route Selection mode is turned off in programme [312] ARS Mode.

Features Guide References

```
Line Preference – Outgoing (Idle Line / No Line / Prime Line)
Outside Line Access
```

[105] Account Codes

Description

Assigns the account codes for Account Code Entry, Verified – All Calls and Verified – Toll Restriction Override modes. If Verified – All Calls is assigned in programme [508] "Account Code Entry Mode", an account code is required to make an outside call. If Verified – Toll Restriction Override is assigned, an account code is only required for a toll call and overrides toll restriction.

Selection

Location number: 001 through 128
Account code: 10 digits (max.)

Default

All locations - Not stored

Programming

1. Enter 105.

Display: 105 ACCT CODES

2. Press NEXT.

Display: Location NO?→

3. Enter a location number.

To enter location number 001, you can also press **NEXT.**

Display example: 001:Not Stored

4. Enter an **account code**.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new account code.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Each code has a maximum of 10 digits, consisting of **0 through 9**.
- Programme [508] Account Code Entry Mode is used to select the Account Code Entry mode.
- Account codes having "99" in any part or ending with "9" are invalid, as "99" is used as a delimiter when entering an account code.

Features Guide References

Account Code Entry Toll Restriction

[106] Station Hunting Type

Description

Used to enable or disable hunting and set the Station Hunting type for each extension group. There are six Station Hunting types available:

Circular: all of the extensions in the group are searched until an idle one is found.

Termination: searching stops at the extension which has the largest jack number in the group. **Voice Mail (VM)**: all of the VM ports of an extension group are searched until an idle one is found which allows Voice Mail Service.

Automated Attendant (AA): all of the AA ports of an extension group are searched until an idle one is found which allows AA Service.

Ring Group: all of the extensions in the ring group ring simultaneously.

Uniform Call Distribution (UCD): group members are hunted in a circular way.

Selection

- Extension group number: **1 through 8,** \star (\star = all extension groups)
- Disable (no hunting) / Terminate (termination) / Circular / VM (voice mail) / AA (automated attendant) / RING / UCD

Default

All extension groups – Disable

Programming

1. Enter 106.

```
Display: 106 STATION HUNT
```

2. Press NEXT.

```
Display: EXT GRP NO?→
```

3. Enter an extension group number.

To enter extension group number 1, you can also press **NEXT**.

```
Display example: Group1:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another extension group, press **NEXT** or **PREV**, or **SELECT** and the desired **extension group number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Programme [602] Extension Group Assignment is used to assign the extension group members.
- The system supports a maximum of eight jacks (16 jacks during System Connection for KX-TD1232) for connection to a Voice Processing System as VM or AA ports.
- To assign all extension groups to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for extension group 1.

Features Guide References

Ring Group **Station Hunting** Uniform Call Distribution (UCD) Voice Mail Integration for Inband

[107] System Password

Description

Assigns the password required for entering System Programming mode and for maintenance from a personal computer.

Selection

Password: 4 through 7 digits

Default

1234

Programming

1. Enter 107.

Display: 107 SYS PASSWORD

2. Press NEXT.

Display: Password:1234

3. Enter a password.

To change the current entry, press **CLEAR** and enter the new password.

- 4. Press STORE.
- 5. Press END.

Conditions

- The password can be from four to seven digits long, consisting of **0 through 9.**
- If less than four digits are entered, they are not stored.
- You cannot leave the entry empty.

Features Guide References

System Programming and Diagnosis with Personal Computer System Programming with Proprietary Telephone

Automatic Hold by CO / DSS Button [108]

Description

Enables or disables automatically holding an outside call when a DSS (Direct Station Selection) button on the console or proprietary telephone, or a CO button on a proprietary telephone is pressed. Through this assignment, each button acts as follows:

- Pressing the DSS button holds an outside call and quickly transfers it to an extension without pressing the TRANSFER button.
- Pressing another CO button holds the current outside call.

Selection

Button: **DSS or CO Enable / Disable**

Default

DSS button – Enable, CO button – Disable

Programming

1. Enter 108.

Display: 108 AUTO HOLD

2. Press **NEXT** to programme the DSS button.

```
Display example: DSS XFER: Enable
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- **4.** Press **NEXT** to programme the CO button.

```
Display example: CO Hold :Disable
```

- **5.** Keep pressing **SELECT** until the desired selection is displayed.
- 6. Press STORE.
- 7. Press END.

Conditions

This assignment applies to all DSS and CO buttons on all consoles and proprietary telephones in the system.

Features Guide References

Call Hold

Call Transfer

[109] Expansion Unit Type

Description

Assigns the type of expansion units to be used in the system.

This allows the system to identify the unit in each expansion unit location.

Selection

KX-TD816

Areas 1; 2 = C (4 CO) / S2 (2 S0) / S6 (6 S0) / BD (4 DID-Pulse/DTMF) / MD (4 DID-MFC) / EM (4 E&M) / E (EXT) / A (16 SLT)

KX-TD1232

- Master / Slave
- Areas 1; 2; 3 = C (4 CO) / S2 (2 S0) / S6 (6 S0) / PR (1 PRI) / BD (4 DID-Pulse/DTMF) / MD (4 DID-MFC) / EM (4 E&M) / EL (1 E1) / E1 (8 EXT1) / E2 (8 EXT2) / A1 (16 SLT1) / A2 (16 SLT2) (Master system only: PR, EL)

Default

```
KX-TD816: C;E
```

KX-TD1232: Master and Slave – C;E1;E2

Programming

KX-TD816

1. Enter 109.

```
Display: 109 EXPAND C,E1
```

2. Press NEXT.

```
Display example: Master:C ;E
```

- **3.** Keep pressing **SELECT** until the desired selection in Area 1 is displayed.
- **4.** Press to programme Area 2, if required.
- **5.** Keep pressing **SELECT** until the desired selection in the Area 2 is displayed.
- 6. Press STORE.
- 7. Press END.

KX-TD1232

1. Enter **109**.

```
Display: 109 EXPAND C,E1
```

2. Press **NEXT** to programme the Master System.

To programme "Slave", press NEXT again.

Display example: Master:C ;E1;E2

- **3.** Keep pressing **SELECT** until the desired selection in Area 1 is displayed.
- **4.** Press to programme another Area, if required.
- **5.** Keep pressing **SELECT** until the desired selection in the Area is displayed.
- **6.** Repeat steps 4 and 5 until all the required entries are completed.
- 7. Press STORE.

If only one system is in operation, go to step 10.

8. Press **NEXT** to programme the Slave System.

```
Display example: Slave :C ;E1;E2
```

- **9.** Repeat steps 3 through 7, if required.
- 10.Press END.

Conditions

- The following units can be installed in the slots.
 - C (4-CO lines): KX-TD180
 - S2 (2-ISDN S0 lines): KX-TD280
 - S6 (6-ISDN S0 lines): KX-TD286
 - PR (1-PRI ISDN line): KX-TD290
 - BD (4-DID lines with Pulse/DTMF): KX-TD185
 - MD (4-DID lines with MFC): KX-TD185
 - EM (4-E&M lines): KX-TD184
 - EL (1-E1 line): KX-TD188
 - E, E1, E2 (8-Extension lines): KX-TD170
 - A, A1, A2 (16-SLT lines): KX-TD174
- There are two expansion areas in the KX-TD816, areas 1 and 2 from bottom to top. One extension line unit and one outside line (CO / ISDN S0 / DID / E&M) unit can be installed.
- There are three expansion areas in each system for the KX-TD1232, areas 1, 2 and 3 from bottom to top. Up to two extension line units and one outside line (CO / ISDN S0 / E1 / DID / E&M) unit can be installed.
- The KX-TD188 and KX-TD290 can only be installed to the KX-TD1232 Master system. In this case, the basic and extended outside line in the Slave system cannot be used.
- If the KX-TD290 is installed to the KX-TD1232 Master system, the KX-TD280 or KX-TD286 can be installed to the Slave system only to use the ISDN extension lines.
- An out-of-service system is unassignable. In this case, skip steps 8 and 9 for the KX-TD1232.
- For the KX-TD1232, if only the Slave system is in operation, the display shows "Slave" in step 2.
- After changing the setting, turn the Power Switch off and on once. Otherwise, the previous setting will remain.

Features Guide References

None

Caller ID Code Set [110]

Description

Sets the identification code of the calling party (Caller ID Code) to utilise a Caller ID Service provided by a specific central office (CO). If an ID Code transmitted from the CO is found in the Caller ID Code Table, the caller's ID Code or name given to the code in programme [111] Caller ID Name Set is displayed on the telephone. This allows the called party to recognise the caller.

Selection

• Location number: 001 through 500 • Caller ID Code: 24 digits (max.)

Default

All locations - Not stored

Programming

1. Enter 110.

```
Display: 110 CALLER ID #
```

2. Press NEXT.

```
Display: Location NO?→
```

3. Enter a location number.

To enter location number 001, you can also press **NEXT.**

```
Display example: 001:Not Stored
```

4. Enter a Caller ID Code.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new code.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired location number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Each Caller ID Code has a maximum of 24 digits, consisting of **0 through 9.**
- Programme [111] Caller ID Name Set is used to give names to the Caller ID Codes. If an ID Code is assigned a name, the called party's telephone will show the name in place of the ID Code.

• Programme [406] Caller ID Assignment is used to enable the Caller ID Service on an outside line basis.

Features Guide References

Caller ID

Caller ID Name Set [111]

Description

With Caller ID Service, the calling party is displayed either by its ID Code or by its name. If the name display is required, use this programme to give a name to a caller ID Code stored in programme [110] Caller ID Code Set.

Selection

• Location number: **001 through 500**

• Caller ID Name: 15 characters (max.)

Default

All locations – Not stored

Programming

1. Enter 111.

Display: 111 CALLER NAME

2. Press NEXT.

Display: Location NO?→

3. Enter a location number.

To enter location number 001, you can also press **NEXT.**

```
Display example: 001:Not Stored
```

4. Enter a Caller ID Name.

For entering characters, see Section 1.4 Entering Characters.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new name.

- **5.** Press **STORE**.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired location number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

Caller ID Name corresponds to the Caller ID Codes stored in programme [110] Caller ID Code Set.

Features Guide References

Caller ID

[113] VM Status DTMF Set

Description

Sets the DTMF (Dual Tone Multi-Frequency) signals transmitted to your Voice Processing System (VPS) to inform the VPS of the VPS ports states quickly:

The following signals are sent to the VPS with the assigned DTMF signals:

RBT (ringback tone):

This signal is sent when calling an extension.

BT (busy tone):

This is sent when the called extension is busy.

ROT (reorder tone):

This is sent when the dialled number is invalid.

DND (DND tone):

This is sent when the other extension has DND assigned.

Answer:

This is sent when the other extension answers the call.

Disconnect:

This is sent when the other extension hangs up.

Confirm (confirmation tone):

This is sent when the feature number for "Message Waiting Lamp" is valid.

FWD VM RBT (FWD to VM ringback tone):

Not available (reserved).

FWD VM BT (FWD to VM busy tone):

This is sent when the called extension has set Call Forwarding to VPS.

FWD EXT RBT (FWD to extension ringback tone):

Not available (reserved).

Selection

- RBT / BT / ROT / DND / Answer / Disconnect / Confirm / FWD VM RBT / FWD VM BT / FWD EXT RBT
- DTMF signal number: 3 digits (max.)

Default

```
RBT – 1; BT – 2; ROT – 3; DND – 4; Answer – 5; Disconnect – #9; Confirm – 9; FWD VM RBT – 6; FWD VM BT – 7; FWD EXT RBT – 8
```

Programming

1. Enter 113.

Display: 113 VM DTMF CMD

2. Press **NEXT** to programme ringback tone status.

To programme another status, keep pressing **NEXT** until the desired status is displayed.

Display example: RBT :1

3. Enter a DTMF signal number.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new number.

- 4. Press STORE.
- **5.** To programme another selection, keep pressing **NEXT** or **PREV** until the desired selection is displayed.
- **6.** Repeat steps 3 through 5.
- 7. Press END.

Conditions

- A DTMF signal number can have a maximum of three digits, consisting of **0 through 9**, *****, # and **PAUSE**.
- The DTMF signals are sent to the extensions in the extension group that is assigned as "VM" or "AA" in programme [106] Station Hunting Type.

Features Guide References

Voice Mail Integration for Inband

[114] VM Command DTMF Set

Description

Sets the DTMF (Dual Tone Multi-Frequency) command signals transmitted to your Voice Processing System (VPS). There are four commands available: Leave Message; Get Message; Automated Attendant Service; Voice Mail Service. These commands are used in the following ways:

(A) If your VPS is used for Voice Mail (VM) Service

(1) Call Forwarding / Intercept Routing to Voice Mail

If a call is forwarded to the VPS, your system will send a mailbox number to the VM port. This allows the caller to leave a message without knowing the mailbox number.

- Required entries (selections):
 - **LV-MSG** (Leave Message): This command is transmitted to a VM port if a call is forwarded or intercepted and rerouted to the port.
 - **AA-SVC** (Automated Attendant Service): If AA Service is effective in programme [990], Area 05-bits 6 and 7, the "AA-SVC" command is sent to a VM port if an incoming outside call is answered by the VM port.
- Other programming required (programme addresses): [106]; [602]; [609]; [990], Area 05-bits 6 and 7; [990], Area 02-bit 8

(2) Hearing the message at the extension

If the VPS receives a message and lights the MESSAGE button indicator of the dialled telephone, the telephone user can hear the message by pressing the MESSAGE button.

- Required entries (selections):
 - **GETMSG** (Get Message): This command is transmitted to a VM port when the message receiver presses the MESSAGE button.
 - **VM-SVC** (Voice Mail Service): The "VM-SVC" command is a code transmitted preceding the "GETMSG" command above.
 - This is effective to switch to VM port when an AA port lights the MESSAGE indicator.
- Other programming required (programme addresses): [609]; [990], Area 02-bit 8

(B) If your VPS is used for Automated Attendant (AA) Service

An AA port answers an incoming outside call to provide AA services, such as call transfer, receiving a message.

- Required entries (selections):
 - **VM-SVC** (Voice Mail Service): The "VM-SVC" command is a code transmitted before the "LV-MSG" code if an operator transfers a call to an extension and then it is forwarded to an AA port so that the AA port can be switched to the VM port temporarily.
- Other programming required (programme addresses): [106], [602]

Selection

- LV-MSG / GETMSG / AA-SVC / VM-SVC
- DTMF signal number: 16 digits (max.)

Default

LV-MSG - H; GETMSG - *H; AA-SVC - #8; VM-SVC - #6

Programming

1. Enter 114.

Display: 114 VM DTMF CMD

2. Press **NEXT** to programme the LV-MSG command.

To programme another command, keep pressing **NEXT** until the desired command is displayed.

Display example: LV-MSG:H

3. Enter a DTMF signal number.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new number.

- 4. Press STORE.
- 5. To programme another selection, keep pressing **NEXT** or **PREV** until the desired selection is displayed.
- **6.** Repeat steps 3 through 5.
- 7. Press END.

Conditions

- A command signal number can have a maximum of 16 digits, consisting of **0 through 9**, *, #, FLASH and PAUSE.
- The **FLASH** button is available only for LV-MSG and GETMSG commands to store "H" which means "Home Position".
- If "H" is stored for "LV-MSG", a mailbox number programmed in programme [609] Voice Mail Access Codes or an extension number will be sent to the VM port (Follow On ID function). If certain codes are required before and after the ID code, insert "H" between the codes, as "aaaHbbb". If nothing is stored, it will operate as "H".
- If "×H" is stored for "GETMSG", a mailbox number programmed in programme [609] Voice Mail Access Codes or an extension number will be sent to the port succeeding the " \times ".

Features Guide References

Voice Mail Integration for Inband

[115] Adjust Time

Description

Used to adjust the time for checking the normality of system data. Every day at the programmed time, the data adjustment is performed.

Selection

Hour: 1 through 12Minute: 00 through 59

• AM / PM

Default

1:00 AM

Programming

1. Enter 115.

```
Display: 115 TIME ADJ M/S
```

2. Press **NEXT** to programme hour.

```
Display example: 1:00 AM
```

3. Enter the hour.

To change the current entry, press **CLEAR** and enter the new hour.

- **4.** Press **t** o programme minute.
- 5. Enter the Minute.

To change the current entry, enter the new minute.

- **6.** Press **→** to programme AM / PM.
- 7. Press **SELECT** for AM or PM.
- 8. Press STORE.
- 9. Press END.

Conditions

- You cannot leave the entry empty.
- Master and slave systems are synchronised with each other.

Features Guide References

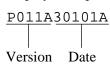
None

ROM Version Display [116]

Description

Confirms the version of ROM of the system.

Display example:



Selection

```
System number:
  KX-TD816-0
  KX-TD1232 – 0 (Master) / 1 (Slave)
```

Default

Not applicable

Programming

1. Enter 116.

Display: 116 ROM VERSION

2. Press NEXT.

Display: System NO?→

3. Enter the **system number**.

The display shows the ROM version of the specified system.

- **4.** To confirm the other system, press **SELECT** and enter the **system number.**
 - The display shows the ROM version of the specified system.
- 5. Press END.

Conditions

- The out-of-service system number is unacceptable.
- For KX-TD816, you can enter the system number "0" only. Skip step 4.

Features Guide References

None

[117] Voice Mail Number Assignment

Description

Assigns the jack number corresponding to the voice mail port for data transmission to the Voice Processing System. The voice mail port is expandable to six ports (12 ports during System Connection for KX-TD1232).

This programme is available when this system is connected to a Panasonic Voice Processing System which supports digital proprietary telephone integration (e.g. KX-TVP100).

Selection

KX-TD816

• Jack number: 02 through 16

KX-TD1232

- Mast (Master) / Slav (Slave)
- Jack number: **02 through 32** / Master; **33 through 64** / Slave

Default

All jacks – Blank

Programming

KX-TD816

1. Enter 117.

```
Display: 117 VMS PORT ASN
```

2. Press NEXT.

```
Display example: Mast1:# # #
```

3. Enter a jack number.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new jack number.

- **4.** Press **→** to enter another jack number.
- **5.** Repeat steps 3 through 4 to enter another jack number.
- **6.** Press **STORE**.
- 7. Press **NEXT** to programme another jack number.

```
Display example: Mast2:# # #
```

- **8.** Repeat steps 3 through 5 to enter another jack number.
- 9. Press STORE.

10.Press END.

KX-TD1232

1. Enter 117.

```
Display: 117 VMS PORT ASN
```

2. Press **NEXT** to programme the Master System.

```
Display example: Mast1:# # #
```

3. Enter a jack number.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new jack number.

- **4.** Press **t** o enter another jack number.
- **5.** Repeat steps 3 through 4 to enter another jack number.
- **6.** Press **STORE**.
- **7.** Press **NEXT** to programme another jack number.

```
Display example: Mast2:# # #
```

- **8.** Repeat steps 3 through 5 to enter another jack number.
- 9. Press STORE.
- **10.**Press **NEXT** to programme the Slave System.

```
Display example: Slav1:# # #
```

- **11.**Repeat steps 3 through 5 to enter another jack number.
- 12.Press STORE.
- **13.**Press **NEXT** to programme another jack number.

```
Display example: Slav2:# # #
```

- **14.**Repeat steps 3 through 5 to enter other jack numbers.
- 15.Press STORE.
- 16.Press END.

Conditions

- Neither jack number 01 nor the manager extension can be assigned as a voice mail port jack.
- The jack numbers correspond to the voice mail port in numerical order.

```
Example: Stored jack numbers: Jacks 02, 03, 05, 08, 11, 13
```

Jack 02=Voice mail numbers 01, 02; Jack 03=Voice mail numbers 03, 04;

Jack 05=Voice mail numbers 05, 06; Jack 08=Voice mail numbers 07, 08;

Jack 11=Voice mail numbers 09, 10; Jack 13=Voice mail numbers 11, 12

Features Guide References

Voice Mail Integration for Digital Proprietary Telephones

[118] Voice Mail Extension Number Set

Description

Assigns the extension number for the voice mail number. These numbers can be used the same way extension numbers are used for station access.

This programme is available when this system is connected to a Panasonic Voice Processing System which supports digital proprietary telephone integration (e.g. KX-TVP100).

Selection

• Voice mail number (VM):

```
KX-TD816 – 01 through 12
KX-TD1232 – 01 through 24
```

• Extension Number: 2 through 4 digits

Default

KX-TD816:

```
VM-01=165, VM-02=166, VM-03=167, VM-04=168, VM-05=169, VM-06=170, VM-07=177, VM-08=178, VM-09=181, VM-10=182, VM-11=183, VM-12=184 KX-TD1232:
```

```
VM-01=165, VM-02=166, VM-03=167, VM-04=168, VM-05=169, VM-06=170, VM-07=177, VM-08=178, VM-09=181, VM-10=182, VM-11=183, VM-12=184, VM-13=171, VM-14=172, VM-15=173, VM-16=174, VM-17=175, VM-18=176, VM-19=179, VM-20=180, VM-21=185, VM-22=186, VM-23=187, VM-24=188
```

Programming

1. Enter 118.

```
Display: 118 VM EXT #
```

2. Press NEXT.

```
Display: VM NO?→
```

3. Enter a voice mail number.

To enter voice mail number 01, you can also press **NEXT**.

```
Display: VM-01:#02-1:165
```

4. Enter an extension number.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another voice mail number, press **NEXT** or **PREV**, or **SELECT** and the desired **voice mail number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, VM-01 through VM-12 are for the Master System and VM-13 through VM-24 are for the Slave System, if available.
- You cannot leave an entry empty.
- The first one or two digits of the voice mail extension numbers are subject to programme [100] Flexible Numbering (01) through (16) 1st through 16th hundred extension blocks.
- The display shows "VM-XX:#YY-1:ZZZ" in step 3. "XX" means the voice mail number. "YY" means the jack number of the voice mail port programmed in [117] Voice Mail Number Assignment.
 - "-1" of YY-1 means the first part of the jack number in digital line.
 - YY-2 means the second number of the jack number in digital line.
- Double entry and incompatible entry for these numbers are invalid. Valid entry example: 10 and 11, 10 and 110. Invalid entry example: 10 and 106, 210 and 21.

To avoid making an invalid entry, check the other extension numbers. The default of each extension number is as follows:

[003] Extension Number Set

KX-TD816 - 101 through 116, 201 through 216

KX-TD1232 – 101 through 164, 201 through 264

[012] ISDN Extension Number Set

Not stored.

[124] Phantom Extension Number Set

Not stored.

[813] Floating Number Assignment

KX-TD816 – 191 through 194, 196, 198, 291 through 294, 298, 299

KX-TD1232 – 191 through 194, 196 through 198, 291 through 294, 296 through 299

Features Guide References

Voice Mail Integration for Digital Proprietary Telephones

[119] Voice Mail Extension Group Assignment

Description

Assigns each voice mail number to a voice mail extension group number.

This programme is available when this system is connected to a Panasonic Voice Processing System which supports digital proprietary telephone integration (e.g. KX-TVP100).

Selection

• Voice mail number (VM):

```
KX-TD816 – 01 through 12, *
KX-TD1232 – 01 through 24, *
(*=all voice mail numbers)
```

• Voice mail extension group number (EXG): 1 through 8

Default

All voice mail numbers - EXG 1

Programming

1. Enter 119.

```
Display: 119 VM EXT GROUP
```

2. Press NEXT.

```
Display: VM NO? →
```

3. Enter a voice mail number.

To enter voice mail number 01, you can also press **NEXT**.

```
Display example: VM-01:#02-1:EXG1
```

4. Enter the **voice mail extension group number**.

To delete the current entry, press **CLEAR**.

To change the current entry, enter the new number.

- **5.** Press **STORE**.
- 6. To programme another voice mail number, press NEXT or PREV, or SELECT and the desired voice mail number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, VM-01 through VM-12 are for the Master System and VM-13 through VM-24 are for the Slave System, if available.
- The display shows "VM-XX:#YY-1:EXG Z" in step 3.
 "XX" means a voice mail number. "YY" means the jack number of the voice mail port

programmed in [117] Voice Mail Number Assignment.

"-1" of YY-1 means the first part of the jack number in digital line.

"YY-2" means the second part of the jack number in digital line.

To assign all voice mail numbers to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for voice mail number 01.

Features Guide References

Voice Mail Integration for Digital Proprietary Telephones

[120] User Password

Description

Assigns the password required for entering the User Programming mode. In the User Programming mode, any display digital proprietary telephone user in the system can set the Manager Programmings (Programme address: [0XX]).

Selection

Password: 4 through 7 digits

Default

1234

Programming

1. Enter 120.

```
Display: 120 USR PASSWORD
```

2. Press NEXT.

```
Display example: Password:1234
```

3. Enter a **password**.

To change the current entry, press **CLEAR** and enter the new password.

- 4. Press STORE.
- 5. Press END.

Conditions

- The password can be from four to seven digits long, consisting of **0 through 9**.
- If less than four digits are entered, they will not be stored.
- You cannot leave the entry empty.

Features Guide References

System Programming with Proprietary Telephone

Walking COS Password [121]

Description

Assigns the password required for Walking COS.

Selection

Password: 4 through 7 digits

Default

1234

Programming

1. Enter 121.

```
Display: 121 COS PASSWORD
```

2. Press NEXT.

```
Display example: Password:1234
```

3. Enter a **password**.

To change the current entry, press **CLEAR** and enter the new password.

- 4. Press STORE.
- 5. Press END.

Conditions

- The password can be from four through seven digits long. Valid numbers are from **0** through 9.
- If less than four digits are entered, they will not be stored.
- You cannot leave the entry empty.

Features Guide References

Class of Service (COS)

[122] UCD Overflow

Description

Assigns the destination where the call is transferred to when all extensions in the Uniform Call Distribution (UCD) group are busy. The Time Table number of the overflow extension must also be assigned.

Selection

- UCD group number: 1 through 8
- Overflow extension number: 2 through 4 digits
- Time Table number: 1 through 4

Default

All UCD groups - Not stored

Programming

1. Enter 122.

```
Display: 122 UCD OVERFLOW
```

2. Press NEXT.

```
Display: UCD NO? →
```

3. Enter a UCD group number.

To enter UCD group number 1, you can also press **NEXT**.

```
Display example: UCD1: ,TT:
```

4. Enter an overflow extension number.

```
Display example: UCD1:102,TT:
```

- **5.** Press **▶** .
- **6.** Enter a **Time Table number**.

```
Display example: UCD1:102,TT:1
```

- 7. Press STORE.
- 8. Press END.

Conditions

If the overflow extension or Time Table number is not assigned, the system will not answer the call and waits for any extension to become idle. In this case, Intercept Routing – No Answer (IRNA) will be employed.

Features Guide References

Uniform Call Distribution (UCD)

[123] UCD Time Table

Description

Assigns the queuing sequence in the Uniform Call Distribution (UCD) Time Table. The queuing sequences are as follows:

- S1: Sends DISA (Direct Inward System Access) outgoing message 1.
- **S2**: Sends DISA outgoing message 2.
- S3: Sends DISA outgoing message 3.
- **S4**: Sends DISA outgoing message 4.
- **TR**: Transfers to the overflow extension.
- **RT**: Returns to the top of the sequence.

Blank: Disconnects.

- **1T**: Timer 16 seconds
- **2T**: Timer 32 seconds
- 3T: Timer 48 seconds
- **4T**: Timer 64 seconds

Selection

- Time Table number: 1 through 4
- S1/S2/S3/S4/TR/RT/1T/2T/3T/4T/Blank

Default

All time tables - Not stored

Programming

1. Enter 123.

```
Display: 123 UCD T.TABLE
```

2. Press NEXT.

```
Display: Table NO? →
```

3. Enter a Time Table number.

To enter Time Table number 1, you can also press **NEXT**.

```
Display example: 1: \rightarrow \rightarrow \rightarrow
```

4. Keep pressing **SELECT** until the desired selection is displayed.

```
Display example: 1:S1 \rightarrow \rightarrow \rightarrow
```

- **5.** Press **▶** .
- **6.** Repeat steps 4 and 5.
- 7. Press STORE.
- **8.** Press **END**.

Conditions

- "Sx" can be assigned in a space other than in the first only when another "Sx" is assigned in the first space.
- An assignment after "TR", "RT" or "Blank" is not available.

Features Guide References

Uniform Call Distribution (UCD)

[124] Phantom Extension Number Set

Description

Assigns the phantom extension numbers. Each number will be assigned to a flexible CO or DSS (Direct Station Selection) button and used as a Phantom Extension button.

Selection

- Location number: 001 through 128
- Phantom extension number: 2 through 4 digits

Default

All locations - Not stored

Programming

1. Enter 124.

Display: 124 PHANTOM #

2. Press NEXT.

Display: Location NO? →

3. Enter a location number.

To enter location number 001, you can also press **NEXT**.

```
Display example: 001:Not Stored
```

4. Enter a phantom extension number.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Each phantom extension number has two through four digits, consisting of numbers 0 through 9.
- The first one or two digits of the phantom extension numbers are subject to programme [100] Flexible Numbering, (01) through (16) 1st through 16th hundred extension blocks.
- Phantom extension numbers and other extension numbers should be different. Double entry and incompatible entry for these numbers are invalid. Valid entry example: 10 and 11, 10 and 110. Invalid entry example: 10 and 106, 210 and 21.

To avoid making an invalid entry, check the other extension numbers. The default of each extension number is as follows:

[003] Extension Number Set

KX-TD816 – 101 through 116, 201 through 216

KX-TD1232 - 101 through 164, 201 through 264

[012] ISDN Extension Number Set

Not stored.

[118] VM Extension Number Set

KX-TD816 – 165 through 178, 181 through 184

KX-TD1232 – 165 through 188

[813] Floating Number Assignment

KX-TD816 - 191 through 194, 196, 198, 291 through 294, 298, 299

KX-TD1232 - 191 through 194, 196 through 198, 291 through 294, 296 through 299

Features Guide References

Phantom Extension

[125] Area Code Assignment

Description

Assigns up to ten area codes which are necessary when using the Caller ID feature. By assigning your area code, the system records the caller's phone number modified by programmes [126] Caller ID Modification for Local Call and [127] Caller ID Modification for Long Distance Call.

Selection

Location number: 01 through 10Area code: 1 through 6 digits

Default

All locations – Blank

Programming

1. Enter 125.

Display: 125 AREA CODE

2. Press NEXT.

Display: Location NO? →

3. Enter a location number.

To enter location number 01, you can also press **NEXT**.

```
Display example: 01:
```

4. Enter an **area code**.

To change the current entry, press **CLEAR** and enter the new area code.

- **5.** Press **STORE**.
- **6.** To programme another location number, press **NEXT** or **PREV**, or **SELECT** and the desired **location number**.
- 7. Repeat steps 4 through 6.
- **8.** Press **END**.

Conditions

- The area code can be six digits long. Valid numbers are from **0 through 9**.
- The location numbers used in this programme corresponds to those in programme [126] Caller ID Modification for Local Call.

Features Guide References

Caller ID

Call Log, Incoming

[126] Caller ID Modification for Local Call

Description

Assigns removed digits from the received caller's number of a local call, and adds number to make the final number which serves as the Caller ID number. The system records the modified caller's number to the incoming call log list so that the extension user can call back the caller. Digits are removed from or added to the beginning of the received digits.

Selection

- Location number: 01 through 10
- Number of digits to be deleted: **0 through 9** (0=no deletion)
- Number to be added: 4 digits (max.)

Default

All locations – Deleted number = 0, Added number = Blank

Programming

1. Enter 126.

Display: 126 CID LOCAL

2. Press NEXT.

Display: Location NO? →

3. Enter a **location number**.

To enter location number 01, you can also press **NEXT**.

```
Display example: 01:Del0,Add
```

4. Enter the **number of digits to be deleted**.

To change the current entry, press **CLEAR** and enter the new number.

- **5.** Press to programme the number to be added, if required.
- **6.** Enter the **number to be added**.

To change the current entry, press **CLEAR** and enter the new number.

- 7. Press STORE.
- **8.** To programme another location number, press **NEXT** or **PREV**, or **SELECT** and the desired **location number**.
- **9.** Repeat steps 4 through 8.
- 10.Press END.

Conditions

• The added number has a maximum of 4 digits, consisting of **0 through 9**, * and #.

• There are ten location numbers for modified numbers, which corresponds to those in programme [125] Area Code Assignment.

Features Guide References

Caller ID
Call Log, Incoming

[127] Caller ID Modification for Long Distance Call

Description

Assigns removed digits from the received caller's number of a long distance call, and adds number to make the final number which serves as the Caller ID number. The system records the modified caller's number to the incoming call log list so that the extension user can call back the caller.

Digits are removed from or added to the beginning of the received digits.

Selection

- Number of digits to be deleted: **0 through 9** (0=no deletion)
- Number to be added: 4 digits (max.)

Default

Deleted digits – 0; Added number – Blank

Programming

1. Enter 127.

```
Display: 127 CID LD
```

2. Press NEXT.

```
Display example: Del,Add:0,
```

3. Enter the number of digits to be deleted.

To change the current entry, press **CLEAR** and enter the new number.

- **4.** Press to programme the number to be added, if required.
- 5. Enter the number to be added.

To change the current entry, press **CLEAR** and enter the new number.

- **6.** Press **STORE**.
- 7. Press END.

Conditions

The added number has a maximum of 4 digits, consisting of **0 through 9**, \star and #.

Features Guide References

Caller ID

Call Log, Incoming

PBX Code [128]

Description

Assigns the PBX Code as your location number if the "PBX Code method" is employed for TIE Line Network calling.

Selection

PBX Code: 1 through 3 digits

Default

Not stored

Programming

1. Enter 128.

```
Display: 128 PBX CODE
```

2. Press NEXT.

```
Display: Code:
```

3. Enter a PBX Code.

To change the current entry, press **CLEAR** and enter the new code.

- 4. Press STORE.
- 5. Press END.

Conditions

- Valid numbers for the PBX Code are **0 through 9**.
- The PBX Code method is: PBX Code + Extension number.

Features Guide References

TIE Line Service

[129] E&M Signal Assignment

Description

Assigns the E&M signal. There are three signals available:

Continuous: Continuous E&M (Wink/Immediate)

Pulsed Ans: Pulsed E&M with Answer Signal (Wink only)

Pulsed No Ans: Pulsed E&M without Answer Signal (Wink only)

Selection

Continuous / Pulsed Ans / Pulsed No Ans

Default

Continuous

Programming

1. Enter 129.

Display: 129 E&M SIGNAL

2. Press NEXT.

Display example:Continuous

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

If you select "Pulsed Ans" or "Pulsed No Ans", you must select "Wink" as the start type.

Features Guide References

TIE Line Service

[130] **Message Waiting Control**

Description

Assigns the data ports which communicate with the Message Waiting Lamp Adaptor Unit (KX-TD194).

Selection

Unit (TD194) number:

```
KX-TD816 - 1
KX-TD1232 - 1 through 6
```

Jack number:

```
KX-TD816 – 02 through 16
KX-TD1232 - 02 through 64
```

Default

All units - Not stored

Programming

1. Enter 130.

```
Display: 130 MW CONTROL
```

2. Press NEXT.

```
Display: MW UNIT NO?→
```

3. Enter a unit number.

To enter unit number 1, you can also press **NEXT**.

```
Display example: Unit:1 Jack
```

4. Enter a jack number.

```
Display example: Unit:1 Jack:05
```

- **5.** Press **STORE**.
- 6. To programme another unit, press **NEXT** or **PREV**, or **SELECT** and the desired **unit** number.
- **7.** Repeat steps 4 and 6.
- 8. Press END.

Conditions

The following jacks are not available for this assignment.

The jack for the manager extension Jacks assigned to voice mail ports

Jacks assigned to consoles and paired telephones
Jacks already assigned to the message waiting adaptor unit

If the unit is connected to a port which is not assigned as the data port, a clicking sound may be heard from the unit.

Please make sure that the unit is connected to the assigned port.

- When the data port is assigned properly and the unit is connected to the assigned port, the unit power indicator lights red. If the assignment and connection are wrong, the power indicator will flash.
- For the KX-TD1232, unit numbers 1 through 3 are for the Master System, and 4 through 6 are for the Slave System. Jack numbers 02 through 32 are for the Master System and 33 through 64 are for the Slave System.
- After this assignment, the message waiting ring tone will not be sent to single line telephone users.

Features Guide References

Message Waiting

Message Waiting Lamp Assignment [131]

Description

Assigns the message waiting light pattern.

Selection

Message waiting light pattern number: 01 through 12

Default

Programming

1. Enter 131.

```
Display: 131 MW LAMP
```

2. Press NEXT.

```
Display: MW LAMP NO:1
```

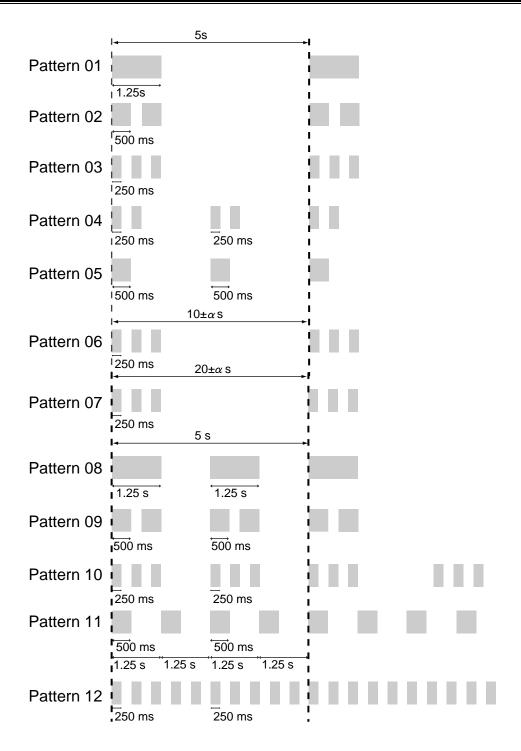
3. Enter a message waiting light number.

```
Display example: MW LAMP NO:12
```

- 4. Press STORE.
- 5. Press END.

Conditions

• The available message waiting light patterns are as follows.



Features Guide References

Message Waiting

Message Waiting Port Set [132]

Description

Assigns which single line telephone port is connected to the KX-TD194 port.

Selection

• Unit (TD194) number:

```
KX-TD816 - 1
KX-TD1232 – 1 through 6
```

- Message waiting port number: 01 through 16
- Single line telephone jack number:

```
KX-TD816 – 01 through 16
KX-TD1232 - 01 through 64
```

• Sub port number: 1 or 2 (1 = main port, 2 = XDP single line telephone port)

Default

All units – All message waiting ports – Not stored

Programming

1. Enter 132.

```
Display: 132 MW PORT SET
```

2. Press NEXT.

```
Display: MW UNIT NO? →
```

3. Enter a unit number.

To enter unit number 1, you can also press **NEXT**.

```
Display example: U1 MW: J: -
```

4. Enter a message waiting port number.

```
Display example: U1 MW:01J: -
```

- **5.** Press **▶** .
- **6.** Enter a single line telephone jack number.

```
Display example: U1 MW:01J:15-
```

- **7.** Press **▶** .
- **8.** Enter a **sub port number**.

```
Display example: U1 MW:01J:15-2
```

- **9.** Press **STORE**.
- 10. To programme another message waiting port, press NEXT or PREV, or SELECT and the desired message waiting port number.
- **11.**Repeat steps 5 through 10.

12.Press END.

Conditions

- To programme another unit, start from step 1.
- For the KX-TD1232, the unit numbers 1 through 3 are for the Master System and 4 through 6 are for the Slave System, and jack numbers 01 through 32 are for Master System and 33 through 64 are for Slave System.
- For the KX-TD1232, single line telephone jacks connected to the KX-TD194 must belong to the same system as the data port assigned in programme [130].

For example, if the assigned data port is one of the extension jacks in the master system, the KX-TD194 must be connected to jacks 01 through 32.

On the other hand, if the assigned data port is one of the extension jacks in the slave system, the KX-TD194 must be connected to jacks 33 through 64.

Programming example for the KX-TD1232

Unit 1

Data port = jack 02

MW port 1 = single line telephone jack 01-2

MW port 3 = single line telephone jack 05-2

Unit 4

Data port = jack 33

MW port 2 = single line telephone jack 34-2

MW port 6 = single line telephone jack 35-1

• A single line telephone jack cannot be assigned to more than one unit.

Features Guide References

Message Waiting

Hotel Application [134]

Description

Assigns whether the hotel application is enabled or disabled.

Selection

ON / OFF

Default

OFF

Programming

1. Enter 134.

```
Display: 134 HOTEL ON/OFF
```

2. Press NEXT.

```
Display example: Hotel:OFF
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

If "ON" is selected, the "Hotel" menu is displayed on the operator extension's KX-T7436 or KX-T7235, and the "Room Status" feature is available.

Features Guide References

Hotel Application - Room Status

[135] DID Number Conversion Selection

Description

Selects whether the Direct Inward Dialling (DID) number is allocated as an extension number or is converted using the Transfer Table.

Selection

EXT Number / Transfer Table

Default

EXT Number

Programming

1. Enter 135.

```
Display: 135 DID SELECT
```

2. Press NEXT.

```
Display: EXT Number
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

- The DID number is converted from the DID subscriber number using the programmes [433] DID / TIE Subscriber Number Removed Digit and [434] DID / TIE Added Number.
- Programmes [136] through [139] are required to use the Transfer Table.

Features Guide References

Direct Inward Dialling (DID)

DID / DDI Number Assignment [136]

Description

Assigns the Direct Inward Dialling (DID) number which is converted from the DID subscriber number using the programmes [433] DID / TIE Subscriber Number Removed Digit and [434] DID / TIE Added Number. And also assigns the Direct Dialling In (DDI) number. If the converted number matches the number assigned in this programme, it reaches the destination assigned in programme [137-138] DID / DDI Extension – Day / Night.

Selection

• Location number: 001 through 200 DID / DDI number: 16 digits (max.)

Default

All locations - Not stored

Programming

1. Enter 136.

```
Display: 136 DID NUMBER
```

2. Press NEXT.

```
Display: Location NO? →
```

3. Enter a location number.

To enter location number 001, you can also press **NEXT**.

```
Display example: #001:Not Stored
```

4. Enter a **DID / DDI number**.

To delete the current entry, press **CLEAR** and enter the new number.

To assign no number, press **CLEAR**.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired location number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- There is a maximum of 200 DID / DDI numbers. Each DID / DDI number can be one through 16 digits, consisting of **0 through 9** and \times (wild card).
- If the same DID / DDI number is assigned to different locations, only the number at the lowest location number becomes available. The others are disregarded.

- To use this programme for DID numbers, "Transfer Table" must be selected beforehand in programme [135] DID Number Conversion Selection.
- To use this programme for DDI numbers, "Use" must be selected beforehand in programme [154] DID Transfer Table for DDI Call.

Features Guide References

Direct Dialling In (DDI)
Direct Inward Dialling (DID)

DID / DDI Extension – Day / Night [137-138]

Description

Determines the extension which receive a Direct Inward Dialling (DID) or Direct Dialling In (DDI) call in both the day and night modes.

Selection

- Location number: 001 through 200
- Extension number: 2 through 4 digits / 0 (operator)

Default

All locations - Not stored

Programming

1. Enter a programme address (137 for day or 138 for night).

```
Display example: 137 DID NUM DAY
```

2. Press NEXT.

```
Display: Location NO? →
```

3. Enter a location number.

To enter location number 001, you can also press **NEXT**.

```
Display example: #001:Not Stored
```

4. Enter an **extension number**.

To change the current entry, press **CLEAR** and enter the new number.

To disable the DID, press **CLEAR**.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired location number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

Assignable numbers are programmed in the following programmes.

```
Extension numbers — [003] Extension Number Set
```

ISDN extension numbers — [012] ISDN Extension Number Set

Voice Mail numbers — [118] Voice Mail Extension Number Set

Phantom numbers — [124] Phantom Extension Number Set

Floating numbers — [813] Floating Number Assignment (For a DID extension, a DISA floating number is not assignable.)

- To use this programme for DID, "Transfer Table" must be selected first in programme [135] DID Number Conversion Selection, and then the DID number must be assigned in programme [136] DID / DDI Number Assignment.
- To use this programme for DDI, "Use" must be selected first in programme [154] DID Transfer Table for DDI Call, and then the DDI number must be assigned in programme [136] DID / DDI Number Assignment.

Features Guide References

Direct Dialling In (DDI)
Direct Inward Dialling (DID)
Day / Night Service

DID / DDI Extension Name Set [139]

Description

Assigns names to the Direct Inward Dialling (DID) or Direct Dialling In (DDI) extension assigned in programme [136] DID / DDI Number Assignment.

Selection

- Location number: 001 through 200
- Extension number: 10 characters (max.)

Default

All locations - Not stored

Programming

1. Enter 139.

Display: 139 DID NAME

2. Press NEXT.

Display: Location NO? →

3. Enter a location number.

To enter location number 001, you can also press **NEXT**.

```
Display example: 001:Not Stored
```

4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new name.

- **5.** Press **STORE**.
- 6. To programme another location, press NEXT or PREV, or SELECT and the desired location number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- A DID / DDI extension name is displayed only when the Transfer Table is used.
- You can programme the initial display as the DID / DDI extension name in Station Programming.

Features Guide References

Direct Dialling In (DDI)

Direct Inward Dialling (DID)

Charge Rate Decimal Point Assignment [141]

Description

Assigns how many decimal places to set for the charge rate.

Selection

Number of decimal places: 0 through 8

Default

Programming

1. Enter 141.

```
Display: 141 DECI. POINT
```

2. Press NEXT.

```
Display example: Fraction place 2
```

3. Enter the desired number.

To delete the current entry, press **CLEAR**.

- 4. Press STORE.
- 5. Press END.

Conditions

- This programme is used when the rate is assigned in programme [142] Charge Rate Assignment. The change in this programme is reflected automatically to programme [142].
- According to this assignment, the charge is displayed during the conversation and shown on the SMDR print out.
- This assignment is used for the charge fee reference.

Features Guide References

Charge Fee Reference

[142] Charge Rate Assignment

Description

Assigns the rate to each outside line.

Selection

• Outside line number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• Desired number: 10 digits max. (including the decimal point)

Default

All outside lines -0.00

Programming

1. Enter 142.

```
Display: 142 CHARGE RATE
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an **outside line number**.

```
To enter outside line number 01, you can also press NEXT. Display example: CO01: 0.00
```

4. Enter a **charge rate**.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new rate.

To enter a decimal point, press the * key.

- **5.** Press **STORE**.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to the same selection, press the *key in step 3. In this case, the display shows the contents programmed for outside line 01.

A maximum of ten digits, consisting of 0 through 9 and * (decimal point), can be assigned as the rate. The number of spaces depends on the assignment in programme [141] Charge Rate Decimal Point Assignment.

<Example> To assign the rate "0.25" when the decimal place is 3 (assigned in [141]), enter "0.250".

Features Guide References

Charge Fee Reference

[143] Charge Display Selection

Description

Assigns the initial display format of charge fee.

Selection

in Meter / in Charge

Default

in Meter

Programming

1. Enter 143.

```
Display: 143 CHARGE METER
```

2. Press NEXT.

```
Display example: in Meter
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

- This programming is only effective when you select for charge (SMDR Output) by programme [816] SMDR Output Mode.
- This programming will also determine the print-out format of the charge fee reference.

Features Guide References

Charge Fee Reference

Display Message

Station Message Detail Recording (SMDR)

Currency Assignment [144]

Description

Assigns the currency required for your country.

Selection

2 characters (Max.)

Default

Programming

1. Enter 144.

```
Display: 144 CURRENCY
```

2. Press NEXT.

```
Display example: Currency: $
```

3. Enter a **currency**.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new currency.

To enter characters, see Section 1.4 Entering Characters.

- 4. Press STORE.
- 5. Press END.

Conditions

If more than two digits are entered, they are ignored.

Features Guide References

Charge Fee Reference

Display Message

[148] Off-Hook Monitor

Description

Enables or disables to perform the Off-Hook Monitor.

Selection

Enable / Disable

Default

Enable

Programming

1. Enter 148.

```
Display: 148 HOOK MONITOR
```

2. Press NEXT.

```
Display example: Monitor: Enable
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Off-Hook Monitor is only available for the KX-T7433 and KX-T7436 telephone users.

Features Guide References

Off-Hook Monitor

Lunch Service Starting / Ending Time [150]

Description

Sets the Lunch starting and ending time for each day of the week.

Selection

- Day of the week selection number: 1 (Sunday) / 2 (Monday) / 3 (Tuesday) / 4 (Wednesday) / 5 (Thursday) / 6 (Friday) / 7 (Saturday) / ★ (every day of the week)
- Hour: 1 through 12 Minute: 0 through 59
- AM / PM

Default

Every day of the week -12:00 - 12:59 PM

Programming

1. Enter 150.

```
Display: 150 LUNCH TIME
```

2. Press NEXT.

```
Display: Day of Week?→
```

3. Enter the day of the week selection number.

```
To select Sunday, you can also press NEXT.
Display example: Sun-BGN:12:00PM
```

- **4.** Enter the **hour of starting time**.
- **5.** Press **▶**.
- **6.** Enter the **minute**.

To change the current entry, press **CLEAR** and enter the new minutes.

- **7.** Press **▶**.
- **8.** Press **SELECT** for AM or PM.
- 9. Press STORE.
- 10. To programme another lunch mode or day of the week, press NEXT or PREV, or SELECT and the day of the week selection number.
- **11.**Repeat steps 4 through 10.
- 12.Press END.

Conditions

- This programming can only be used if "Auto (automatic)" is selected in programme [101] Day / Night Service Switching Mode.
- Lunch / Break service ends at the assigned time. For example:

If Lunch is 3:00 - 4:00 PM, Day mode starts at 4:01 PM.

If Lunch is 3:00 - 3:59 PM, Day mode starts at 4:00 PM.

Features Guide References

Day / Night Service

Break Service Starting / Ending Time [151]

Description

Sets the Break starting and ending time for each day of the week.

Selection

- Day of the week selection number: 1 (Sunday) / 2 (Monday) / 3 (Tuesday) / 4 (Wednesday) / 5 (Thursday) / 6 (Friday) / 7 (Saturday) / ★ (every day of the week)
- Hour: 1 through 12 • Minute: **0 through 59**
- AM / PM

Default

Every day of the week -3:00-3:29 PM

Programming

1. Enter 150.

```
Display: 151 BREAK TIME
```

2. Press NEXT.

```
Display: Day of Week?→
```

3. Enter the day of the week selection number.

```
To select Sunday, you can also press NEXT.
Display example: Sun-BGN: 3:00PM
```

4. Enter the **hour of starting time**.

To change the current entry, press **CLEAR** and enter the new time.

- 5. Press .
- **6.** Enter the **minute**.

To change the current entry, press **CLEAR** and enter the new minutes.

- **7.** Press **▶**.
- **8.** Press **SELECT** for AM or PM.
- 9. Press STORE.
- 10. To programme another break mode or day of the week, press NEXT or PREV, or SELECT and the day of the week selection number.
- **11.**Repeat steps 4 through 10.
- 12.Press END.

Conditions

- This feature can only be used if "Auto (automatic)" is selected in programme [101] Day / Night Service Switching Mode.
- Lunch / Break service ends at the assigned time.

For example:

If Lunch is 3:00 - 4:00 PM, Day mode starts at 4:01 PM.

If Lunch is 3:00 - 3:59 PM, Day mode starts at 4:00 PM.

Features Guide References

Day / Night Service

Charge Verification Assignment [152]

Description

Assigns the extension which is allowed to refer or clear for the call information on the extension, outside line, account code, and the total.

Selection

Jack number:

```
KX-TD816 – 01 through 16, ★
KX-TD1232 – 01 through 64, *
(*=all jacks)
```

Enable / Disable

Default

All jacks - Enable

Programming

1. Enter 152.

```
Display: 152 CHARGE REF
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

```
To enter jack number 01, you can also press NEXT.
```

```
Display example: #01:Enable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- 6. To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack** number.
- 7. Press END.

Conditions

- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the slave, if available.
- To assign all jack numbers to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Jack 01.

Features Guide References

Charge Fee Reference

[153] Charge Verification ID Code Set

Description

Assigns an ID code required to refer the charge information.

Selection

4 digits (0000 through 9999)

Default

1234

Programming

1. Enter 153.

```
Display: 153 CHARGE ID
```

2. Press NEXT.

```
Display example: Code:1234
```

3. Enter an **ID code**.

To delete the current entry, press **CLEAR**.

- 4. Press STORE.
- 5. Press END.

Conditions

None

Features Guide References

Charge Fee Reference

2.3 Timer Programming

[200] Hold Recall Time

Description

Assigns the length of the hold recall timer. This timer is used to alert an extension that a call has been held for an extended period of time.

Selection

Time (seconds): **0 through 240** (0=Hold Recall disabled)

Default

60 s

Programming

1. Enter 200.

```
Display: 200 HOLD RECALL
```

2. Press NEXT.

```
Display example: Time: 60 sec
```

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

- Select "0" if Hold Recall is not required.
- You cannot leave the entry empty.

Features Guide References

Call Hold

[201] Transfer Recall Time

Description

Sets the number of rings before transfer recall occurs. If a transferred call is not answered after the programmed number of rings, the call returns to the original caller.

Selection

Number of rings: **0 through 48** (0=Transfer Recall disabled)

Default

12 rings

Programming

1. Enter 201.

```
Display: 201 TRAN RECALL
```

2. Press NEXT.

```
Display example: Time:12 rings
```

3. Enter the number of rings.

To change the current entry, press **CLEAR** and enter the new number of rings.

- 4. Press STORE.
- 5. Press END.

Conditions

- One ring is equivalent to five seconds.
- You cannot leave the entry empty.
- Operator 1 can also be the Transfer Recall destination, which can be assigned in programme [990] System Additional Information, Area 02-Bit 1.

Features Guide References

Call Transfer

Call Forwarding - No Answer Time [202]

Description

Sets the number of rings for the Call Forwarding – No Answer feature. If a call is not answered after the programmed number of rings, the call is forwarded to the destination.

Selection

Number of rings: 1 through 12

Default

3 rings

Programming

1. Enter 202.

```
Display: 202 CALL FWD-NA
```

2. Press NEXT.

```
Display example: Time: 3 rings
```

3. Enter the number of rings.

To change the current entry, press **CLEAR** and enter the new number of rings.

- 4. Press STORE.
- 5. Press END.

Conditions

- One ring is equivalent to five seconds.
- This timer is also used for Intercept Routing. If an incoming DISA (Direct Inward System Access) call to the Intercept Routing destination is not answered before this timer expires, the call will be disconnected.
- You cannot leave the entry empty.

Features Guide References

Call Forwarding

[203] Intercept Time

Description

Sets the number of rings for the Intercept Routing – No Answer (IRNA) feature. If a call is not answered after the programmed number of rings, the call is redirected to the programmed extension.

Selection

Number of rings: 3 through 48

Default

12 rings

Programming

1. Enter 203.

```
Display: 203 INTERCEPT
```

2. Press NEXT.

```
Display example: Time:12 rings
```

3. Enter the **number of rings.**

To change the current entry, press **CLEAR** and enter the new number of rings.

- 4. Press STORE.
- 5. Press END.

Conditions

- One ring is equivalent to five seconds.
- Programmes [409-410] Intercept Extension Day / Night are used to programme the destination of Intercept Routing on an outside line group basis in day and night modes.
- If the original extension has set Call Forwarding No Answer, Intercept Timer starts after the Call Forwarding.
- You cannot leave the entry empty.

Features Guide References

Intercept Routing

Pickup Dial Waiting Time [204]

Description

Sets the number of seconds for Pickup Dialling. If the telephone user lifts the handset, the programmed party is called when the time expires.

Selection

Time (seconds): 1 through 5

Default

1 s

Programming

1. Enter 204.

```
Display: 204 PICKUP DIAL
```

2. Press NEXT.

```
Display example: Time:1 sec
```

3. Enter the time.

To change the current entry, enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

• This time gives the user an opportunity to dial digits before the automatic dialling process takes place.

Features Guide References

Pickup Dialling

[205] Extension-to-Outside Line Call Duration Time

Description

Sets the maximum time allowed for a conversation with an outside party. If an outside call is originated or answered by a programmed extension user and the timer expires, the call is disconnected.

Selection

Time (minutes): 1 through 64

Default

10 min

Programming

1. Enter 205.

```
Display: 205 EXT-CO TIME
```

2. Press NEXT.

```
Display example: Time:10 min
```

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

- This time-out applies to extensions to which limited call duration is assigned by programme [502] Extension-to-Outside Line Call Duration Limit.
- This time cannot be set to zero or be left empty.

Features Guide References

None

[206] Outside-to-Outside Line Call Duration Time

Description

Sets the maximum time allowed for a conversation between two outside parties. When the timer expires, the outside-to-outside line call is disconnected.

Selection

Time (minutes): 1 through 64

Default

10 min

Programming

1. Enter 206.

```
Display: 206 CO-CO TIME
```

2. Press NEXT.

```
Display example: Time:10 min
```

3. Enter the time.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

• You cannot leave the entry empty.

Features Guide References

Call Forwarding

Call Transfer

Conference

Direct Inward System Access (DISA)

[207] First Digit Time

Description

Sets the maximum time allowed between the start of an outside dial tone and the first digit dialled on an outgoing outside call. If an extension user fails to dial any digits during this time, the DTMF (Dual Tone Multi-Frequency) receiver is released.

Selection

Time (seconds): 5 through 120

Default

10 s

Programming

1. Enter 207.

```
Display: 207 1ST DIGIT T
```

2. Press NEXT.

```
Display example: Time: 10 sec
```

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

- This timer is used for toll restriction checking.
- You cannot leave the entry empty.

Features Guide References

Toll Restriction

Inter Digit Time [208]

Description

Assigns the maximum time allowed between digits on an outgoing toll call. If an extension user fails to dial any digits during this time, the DTMF (Dual Tone Multi-Frequency) receiver is released. This timer applies until the Toll Restriction check is completed.

Selection

Time (seconds): 5 through 30

Default

10 s

Programming

1. Enter 208.

```
Display: 208 INTER DIGIT
```

2. Press NEXT.

```
Display example: Time:10 sec
```

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

- This timer is used for toll restriction checking.
- You cannot leave the entry empty.

Features Guide References

Toll Restriction

[209] Automatic Redial Repeat Times

Description

Sets the number of times Automatic Redial is tried. Automatic redialling of the last dialled or saved number is done up to the specified number of times.

Selection

Number of times: 1 through 30

Default

```
KX-TD816BX, KX-TD1232(D)BX/ML, KX-TDN1232 – 10 times
KX-TD816HK, KX-TD1232HK – 3 times
KX-TD1232X – 2 times
```

Programming

1. Enter 209.

```
Display: 209 AUTO RD QTY
```

2. Press NEXT.

```
Display example: Attempt:10
```

3. Enter the **number of times**.

To change the current entry, press **CLEAR** and enter the new number of times.

- 4. Press STORE.
- 5. Press END.

Conditions

- Programme [210] Automatic Redial Interval Time is used to set the interval time between Automatic Redial attempts.
- You cannot leave the entry empty.

Features Guide References

Redial

Automatic Redial Interval Time [210]

Description

Sets the interval time between Automatic Redial attempts.

Selection

Time (seconds): **3 through 120** (\times 10 is the actual time)

Default

```
KX-TD816BX, KX-TD1232(D)BX/ML, KX-TDN1232 - 60 s
KX-TD816HK, KX-TD1232HK – 900 s (15 min)
KX-TD1232X - 30 s
```

Programming

1. Enter 210.

```
Display: 210 REDIAL TIME
```

2. Press NEXT.

```
Display example: Time: 60 sec
```

3. Enter the time.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

- You enter a number from 3 through 120. The actual time is 10 times your input.
- Programme [209] Automatic Redial Repeat Times is used to set the number of times Automatic Redial is tried.
- You cannot leave the entry empty.

Features Guide References

Redial

[211] Dial Start Time

Description

Sets the number of milliseconds the system waits before dialling after an outside line is seized.

Selection

Time (milliseconds): **0 through 40** (\times 100 is the actual time)

Default

```
KX-TD816BX, KX-TD1232(D)BX/ML/X, KX-TDN1232 – 500 ms
KX-TD816HK, KX-TD1232HK – 1000 ms
```

Programming

1. Enter 211.

```
Display: 211 DIAL START
```

2. Press NEXT.

```
Display example: Time: 500 msec
```

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

- You enter a number from **0 through 40**. The actual time is a 100 times your input.
- You cannot leave the entry empty.

Features Guide References

Outside Line Access

Call Duration Count Start Time [212]

Description

Sets the number of seconds the system waits between the end of dialling and the start of the Station Message Detail Recording (SMDR) timer for outgoing toll calls. When the system has sent out all the digits to the central office and this timer expires, the system starts counting the call. A display telephone shows the elapsed time of the call. The starting time and the duration of a call are recorded in the SMDR record.

Selection

Time (seconds): 0 through 60

Default

0 s

Programming

1. Enter 212.

```
Display: 212 CALL TIMER
```

2. Press NEXT.

```
Display example: Time: 0 sec
```

3. Enter the time.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

- The timer starts counting after all the digits are dialled. This timer does not apply to incoming calls. The timer for incoming calls starts immediately.
- You cannot leave the entry empty.

Features Guide References

Display Message

Station Message Detail Recording (SMDR)

[213] DISA Delayed Answer Time

Description

Assigns the number of rings between a call received and the answer by the Direct Inward System Access (DISA) feature.

Selection

Number of rings: 0 through 6

Default

1 ring

Programming

1. Enter 213.

```
Display: 213 DISA ANSWER
```

2. Press NEXT.

```
Display example: Time:1 rings
```

3. Enter the **number of rings.**

To change the current entry, enter the new number of rings.

- 4. Press STORE.
- 5. Press END.

Conditions

- One ring is equivalent to five seconds.
- You cannot leave the entry empty.

Features Guide References

Direct Inward System Access (DISA)

DISA Prolong Time [214]

Description

Sets the maximum allowable prolonged time for an outside-to-outside line call via the Direct Inward System Access (DISA) feature. An outside-to-outside line call is initially limited by the "Outside-to-Outside Line Call Duration Time" (Programme [206]). However, the DISA caller can prolong the call after hearing the warning tones by pressing any key (except the \times key). The DISA prolong time sets the duration of these extended periods.

Selection

Time (minutes): **0 through 7** (0=no prolonging)

Default

3 min

Programming

1. Enter 214.

```
Display: 214 DISA PROLONG
```

2. Press NEXT.

```
Display example: Time: 3 min
```

3. Enter the time.

To change the current entry, enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

- Do not confuse this parameter with the "Outside-to-Outside Line Call Duration Time" (Programme [206]) parameter. Programme [206] is used to set the duration time allowed for an outside-to-outside line call.
- You cannot leave the entry empty.

Features Guide References

Direct Inward System Access (DISA)

[215] Outgoing Message Time

Description

Sets the maximum allowable recording time for Outgoing Messages (OGM).

Selection

Time (seconds): 0 / 16 / 32 / 64 (0=no recording)

Default

32, 0, 32, 0 (for OGM 1 through 4 from left to right)

Programming

1. Enter 215.

```
Display: 215 OGM MSG TIME
```

2. Press **NEXT** to programme the time for OGM 1.

```
Display example: OGM:32, 0,32, 0
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- **4.** Press to programme the time for OGM 2.
- **5.** Keep pressing **SELECT** until the desired selection is displayed.
- **6.** Repeat steps 4 and 5 to programme the time for OGM's 3 and 4.
- 7. Press STORE.
- 8. Press END.

Conditions

• There are four messages available:

OGM 1: used for DISA (Direct Inward System Access) message 1 or UCD (Uniform Call Distribution) message 1

OGM 2: used for DISA message 2 or UCD message 2

OGM 3: used for Timed Reminder or UCD message 3

OGM 4: used for UCD message 4

- Enter the times starting from the left for OGM 1 to OGM 4.
- The total time of the outgoing messages cannot exceed 64 seconds.

Features Guide References

Direct Inward System Access (DISA)

Outgoing Message (OGM)

Timed Reminder

Uniform Call Distribution (UCD)

Message Waiting Ring Interval Time [216]

Description

Sets the Message Waiting ring interval time for a single line telephone.

Selection

Time (minutes): **0 through 64** (0=no ring)

Default

0 min

Programming

1. Enter 216.

```
Display: 216 MW RING TIME
```

2. Press NEXT.

```
Display example: Interval: 0 min
```

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

- When the interval time is set to "0", the telephone does not ring for Message Waiting notification.
- Selecting the message waiting ring type, 3 quick rings or 2 normal rings, in programme [990] System Additional Information, Area 5 - Bit 11 is available. If you prefer soft ringing, select "3 quick rings". In this case, there may be some kinds of telephones which do not ring.

Features Guide References

Message Waiting

[217] Timed Reminder Alarm Ring Time

Description

Sets the number of seconds the Timed Reminder alarm rings.

Selection

Time (seconds): 30 through 240

Default

30 s

Programming

1. Enter 217.

```
Display: 217 TIMED REMIND
```

2. Press NEXT.

```
Display example: Reminder: 30sec
```

3. Enter the **time.**

To change the current entry, enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

None

Features Guide References

Timed Reminder

[218] DISA AA Wait Time

Description

Sets the number of seconds the system waits for a second digit entry. If the timer expires, the system assumes that the first digit is a DISA (Direct Inward System Access) built-in auto attendant number if assigned in programme [815] DISA Built-in Automated Attendant Number.

Selection

Time (seconds): 1 through 5

Default

1 s

Programming

1. Enter 218.

```
Display: 218 DISA AA WAIT
```

2. Press NEXT.

```
Display example: Time:1 sec
```

3. Enter the time.

To change the current entry, enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

None

Features Guide References

Direct Inward System Access (DISA)

[219] Call Park Recall Time

Description

Sets the number of rings before call park recall occurs. Call park recall is used to alert an extension that a call has been parked for an extended period of time.

Selection

Number of rings: **0 through 48** (0=Call Park Recall disabled)

Default

12 rings

Programming

1. Enter 219.

```
Display: 219 PARK RECALL
```

2. Press NEXT.

```
Display example: Time:12 rings
```

3. Enter the number of rings.

To change the current entry, press **CLEAR** and enter the new number of rings.

- 4. Press STORE.
- 5. Press END.

Conditions

- One ring is equivalent to five seconds.
- Select "0" if Call Park Recall is not required.
- You cannot leave the entry empty.

Features Guide References

Call Park

TIE First / Inter Digit Time [220]

Description

Assigns the maximum time allowed between the start of the dial tone and the first digit dialled (First Digit Time), and between digits (Inter Digit Time) on an TIE call. If an extension user fails to dial any digits during this time, the DTMF receiver is released. This timer applies until the Toll Restriction check is completed.

Selection

Time (seconds): 3 through 30

Default

5 s

Programming

1. Enter 220.

```
Display: 220 TIE TIMER
```

2. Press NEXT.

```
Display example: Time:5 sec
```

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

- This timer is used for toll restriction checking.
- You cannot leave the entry empty.

Features Guide References

TIE Line Service

2.4 TRS / ARS Programming

[300] TRS Override for System Speed Dialling

Description

Allows you to enable toll restriction override for System Speed Dial Numbers. If this is enabled, all extension users can make System Speed Dialling calls with no restriction.

Selection

Enable / Disable

Default

Disable

Programming

1. Enter 300.

```
Display: 300 TRS SPEED DL
```

2. Press NEXT.

```
Display example: Override:Disable
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Select "Enable" for toll restriction override; Select "Disable" for toll restriction.

Features Guide References

[301-305] TRS Denied Code Entry for Levels 2 through 6

Description

These allow you to specify the numbers which are toll-restricted for each toll restriction level as follows:

Programme [301]: restricts levels 2 through 6 Programme [302]: restricts levels 3 through 6 Programme [303]: restricts levels 4 through 6 Programme [304]: restricts levels 5 through 6 Programme [305]: restricts level 6

Selection

Location number: **01 through 20** Toll call number: **10 digits (max.)**

Default

All locations - Not stored

Programming

1. Enter a programme address (301 through 305).

```
Display example: 301 TRS DENY L-2
```

2. Press NEXT.

```
Display: Location NO?→
```

3. Enter a location number.

To enter location number 01, you can also press **NEXT.**

```
Display example: 01:Not Stored
```

4. Enter a toll call number.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- There is a maximum of 20 toll call numbers which can be restricted for each programme. Each number has a maximum of ten digits, consisting of **0 through 9**, and *****. The character "*" can be used as a wild card character.
- Programmes [306-310] TRS Excepted Code Entry for Levels 2 through 6 are used to assign exceptions to these numbers. Programmes [500-501] Toll Restriction Level Day / Night are used to set the toll restriction value for each COS.

Features Guide References

[306-310] TRS Excepted Code Entry for Levels 2 through 6

Description

These allow you to assign numbers which are exceptions to the toll restriction specified in programmes [301] through [305] as follows:

Programme [306]: applies to level 2

Programme [307]: applies to levels 2 through 3

Programme [308]: applies to levels 2 through 4

Programme [309]: applies to levels 2 through 5

Programme [310]: applies to levels 2 through 6

Selection

• Location number: 1 through 5

• Exceptional number: 10 digits (max.)

Default

All locations - Not stored

Programming

1. Enter a programme address (306 through 310).

```
Display example: 306 TRS ALLOW 2
```

2. Press NEXT.

```
Display: Location NO?→
```

3. Enter a location number.

To enter location number 1, you can also press NEXT.

```
Display example: 1:Not Stored
```

4. Enter an exceptional number.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

There is a maximum of five numbers for each programme. Each number has a maximum of ten digits, consisting of 0 through 9, and *. The character "*" can be used as a wild card character.

Features Guide References

[311] Special Carrier Access Codes

Description

Assigns special carrier numbers. This allows the system to recognise the user-dialled special carrier number in order to insert the required pause and apply toll restriction.

Selection

- Location number: 01 through 20
- Special carrier number: 7 digits (max.)

Default

All locations - Not stored

Programming

1. Enter 311.

```
Display: 311 CARRIER #
```

2. Press NEXT.

```
Display: Location NO?→
```

3. Enter a location number.

To enter location number 01, you can also press NEXT.

```
Display example: 01:Not Stored
```

4. Enter a special carrier number.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

There is a maximum of 20 special carrier numbers. Each carrier number has a maximum of seven digits, consisting of **0 through 9**, *****, and **#**. You can also use the PAUSE button to enter a wild card character. It will be displayed as "X".

Features Guide References

Pause Insertion, Automatic
Toll Restriction

[312] ARS Mode

Description

Allows you to turn on or off the Automatic Route Selection (ARS) mode. ARS, if enabled, selects the least expensive route to be used for an outside call.

Selection

On / Off

Default

Off

Programming

1. Enter 312.

```
Display: 312 ARS MODE SET
```

2. Press NEXT.

```
Display example: ARS:Off
```

- **3.** Press **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

- If "Off" is selected, the Automatic Line Access feature functions instead of ARS.
- Programmes [313] through [331] are used to programme ARS.

Features Guide References

Automatic Route Selection (ARS)

Outside Line Access

[313] ARS Time

Description

Assigns times for the four Automatic Route Selection (ARS) time schedules. It is possible to split a day into four time zones (maximum) so that the least expensive line is selected for that time. According to the service hours and charges offered by your carriers, enter the starting time of each zone.

Selection

- Day of the week:
 - 1 (Mon) / 2 (Tue) / 3 (Wed) / 4 (Thu) / 5 (Fri) / 6 (Sat) / 7 (Sun) / * (all days)
- Time schedule: A / B / C / D
- Time (hour): 1 through 12 / Disable (no schedule)
- AM / PM

Default

All days of the week: A - 8:00 AM; B - 5:00 PM; C - 9:00 PM; D - Disable

Programming

1. Enter 313.

Display: 313 ARS TIME SET

2. Press NEXT.

Display: Day of week?→

3. Enter the day of the week.

```
Display example: Mon-A: 8:00 AM
```

To programme another time schedule, keep pressing **NEXT** or **PREV** until the desired time schedule is displayed.

4. Enter the hour.

To set no schedule (Disable), press **SELECT** and go to step 6.

If "Disable" is selected, pressing **SELECT** shows the previous stored hour.

To change the current entry, press **CLEAR** and enter the new hour.

- 5. Press to select AM / PM.
- **6.** Press **SELECT** for AM or PM.
- 7. Press STORE.
- **8.** To programme another time schedule, keep pressing **NEXT** or **PREV** until the desired time schedule is displayed.
- **9.** Repeat steps 4 through 8.
- 10.Press END.

Conditions

- Enter a starting time for each time schedule. Select "Disable" for idle schedules.
- You cannot leave an entry empty.
- To assign all days of the week, press the *key in step 3. In this case, the display shows the contents programmed for Monday.

Features Guide References

[314-321] ARS Leading Digit Entry for Plans 1 through 8

Description

By entering numbers into each leading digit plan (programmes below) you are starting the process to determine which outside line group will be used to route the call.

Programme	[314]	[315]	[316]	[317]	[318]	[319]	[320]	[321]
Plan	1	2	3	4	5	6	7	8

These eight plans are used to analyse the number which the user dials and decide the route plan for the call. If the user-dialled number is registered in Plan 1, then Routing Plan 1 is selected for the call. Automatic Route Selection (ARS) Leading Digit Entry for Plans 1 through 8 match ARS Routing Plans 1 through 8 (programmes [322] through [329]) respectively.

Selection

• Location number: 001 through 100

• Leading digit number: 10 digits (max.)

Default

All locations - Not stored

Programming

1. Enter a program address (314 through 321).

Display example: 314 ARS LEAD D-1

2. Press NEXT.

Display: Location NO?→

3. Enter a location number.

To enter location number 001, you can also press **NEXT**.

Display example: 001:Not Stored

4. Enter a **leading digit number**.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

Each number has a maximum of ten digits, consisting of **0 through 9**, and \star . The character " \star " can be used as a wild card character (i.e., "do not care" digit). The system scans all the ARS Leading Digit Plans simultaneously from left to right. The scan ends as soon as the dialled number matches a table entry. When using a wild card character, it is important to use one in each digit position that must be scanned. For example, to differentiate local and long distance calls with the same leading digits: Plan 1) $1-\star\star\star$; Plan 2) 1-215. Note that three wild card digits were used to ensure that the system scanned the first four digits. A shorter string of " \star "s would send all the calls to the Plan 1 carrier.

Features Guide References

[322-329] ARS Routing Plans 1 through 8

Description

Assigns the outside line group and modification plan to be used for each route plan and time schedule.

Programme	[322]	[323]	[324]	[325]	[326]	[327]	[328]	[329]
Plan	1	2	3	4	5	6	7	8

Selection

• Time schedule: A / B / C / D

Outside line group number: 1 through 8Modification table number: 1 through 8

Default

All time schedules - Not stored

Programming

1. Enter a programme address (322 through 329).

Display example: 322 ARS ROUTE 1

2. Press **NEXT** to programme time schedule A.

To programme another time schedule, keep pressing **NEXT** or **PREV** until the desired time schedule is displayed.

Display example: A:G M ,G M ,G M

3. Enter an outside line group number.

To delete the current entry, press **CLEAR**.

To change the current entry, enter the new number.

- **4.** Press to enter the paired modification table number.
- 5. Enter a modification table number.

To delete the current entry, press **CLEAR**.

To change the current entry, enter the new modification table number.

- **6.** Press to enter the next priority outside line group number.
- **7.** Repeat steps 3 through 6 to enter other outside line group numbers and modification table numbers.
- 8. Press STORE.
- **9.** To programme another time schedule, keep pressing **NEXT** or **PREV** until the desired time schedule is displayed.
- **10.**Repeat steps 3 through 9.

11.Press END.

Conditions

- Up to three outside line groups and modification plans can be assigned for each time schedule. The outside line group number and modification table number must be entered together. The highest priority outside line group number and modification table number is entered first (left to right).
- Programmes [330] ARS Modify Removed Digit and [331] ARS Modify Added Number are used to make up the eight Modification Tables.

Features Guide References

[330] ARS Modify Removed Digit

Description

Determines how the dialled number should be modified before transmitting to the central office. You can delete the digits from the beginning of the dialled number.

Selection

- Modification table number: 1 through 8
- Number of digits to be deleted: **0 through 9** (0=no deletion)

Default

All modification tables – 0

Programming

1. Enter 330.

```
Display: 330 ARS REMOVE
```

2. Press NEXT.

```
Display: Modify Table?→
```

3. Enter a modification table number.

To enter table number 1, you can also press **NEXT**.

```
Display example: 1:0
```

4. Enter the **number of digits to be deleted**.

To change the current entry, enter the new number.

- 5. Press STORE.
- **6.** To programme another modification table, press **NEXT** or **PREV**, or **SELECT** and the desired **modification table number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

There is a maximum of eight Modification Tables, each of which can be given a number of digits to be deleted.

Features Guide References

[331] ARS Modify Added Number

Description

Determines how the dialled number should be modified before transmitting to the central office. Assigned numbers are added to the beginning of the dialled number.

Selection

- Modification table number: 1 through 8
- Number to be added: 20 digits (max.)

Default

All modification tables - Not stored

Programming

1. Enter 331.

```
Display: 331 ARS ADD #'S
```

2. Press NEXT.

```
Display: Modify Table?→
```

3. Enter a modification table number.

To enter table number 1, you can also press **NEXT**.

```
Display example: 1:
```

4. Enter the **number to be added**.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another modification table, press **NEXT** or **PREV**, or **SELECT** and the desired **modification table number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- There is a maximum of eight Modification Tables, each of which can be given a number to be added.
- Each number has a maximum of 20 digits, consisting of **0 through 9**, *****, **#**, and **PAUSE**.

Features Guide References

[332] Extra Entry Table Selection

Description

Selects the code table which enables an extra 400 entries within Denied or Except Code Table.

Selection

- Deny / Except
- Level number: 2 through 6

Default

```
Except - 2
```

Programming

1. Enter 332.

```
Display: 332 TRS EXTRA +
```

2. Press NEXT.

```
Display example: Table: Except-2
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- **4.** Press **t**o enter a level number.
- **5.** Enter a **level number**.

```
Display example: Table: Except-3
```

- 6. Press STORE.
- 7. Press END.

Conditions

There is a maximum of either 420 toll call numbers for Denied Code Table or a maximum of 405 toll call numbers for Excepted Code Table.

Features Guide References

[333] TRS Entry Code Assignment for Extra Table

Description

Used to specify the numbers for extra Denied or Excepted Code Table for expansion.

Selection

Location number: 001 through 400
Toll call number: 10 digits (max.)

Default

All locations - Not stored

Programming

1. Enter 333.

Display: 333 TRS EXTRA -

2. Press NEXT.

Display: Location NO?→

3. Enter a location number.

To enter location number 001, you can also press **NEXT**.

```
Display example: 001:Not Stored
```

4. Enter a toll call number.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another location number, press **NEXT** or **PREV**, or **SELECT** and the desired **location number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

There is a maximum of either 420 toll call numbers for Denied Code Table or a maximum of 405 toll call numbers for Excepted Code Table. Each number has a maximum of ten digits, consisting of **0 through 9**, and *****. The character "*" can be used as a wild card character.

Features Guide References

[334] Emergency Dial Number Set

Description

Stores up to ten emergency call numbers.

Emergency numbers are not subject to toll restriction, Account Code – Verified mode and Electronic Station Lockout.

Selection

- Location number: **01 through 10**
- Emergency number: 7 digits (max.)

Default

All locations - Not stored

Programming

1. Enter 334.

```
Display: 334 EMERGENCY #
```

2. Press NEXT.

```
Display: Location NO?→
```

3. Enter a **location number**.

To enter location number 01, you can also press **NEXT**.

```
Display example: 01:Not Stored
```

4. Enter an **emergency number**.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new number.

- **5.** Press **STORE**.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

Each emergency number has a maximum of seven digits, consisting of **0 through 9**.

Features Guide References

Automatic Route Selection (ARS)

[340] TIE Line Routing Table

Description

The TIE line routing table can be programmed. This table is referenced by the system to identify the outside line route, when an extension user makes a TIE call.

A routing pattern appropriate for each call is decided by the first three digits (except the TIE line access number) of the dialled number. This programme assigns the TIE line access number and outside line group hunt sequence.

Selection

- Location number: 01 through 32
- TIE line access number: 1 through 3 digits
- Outside line group hunt sequence number: 1 through 8 (5 entries max.)

Default

All locations - Not stored

Programming

1. Enter 340.

Display: 340 TIE ROUTE

2. Press NEXT.

Display: Location NO?→

3. Enter a location number.

To enter location number 01, you can also press **NEXT**.

```
Display example: 01:
```

4. Enter a TIE line access number.

To delete the current entry, press **CLEAR**.

To change the current entry, press CLEAR and enter the new number.

- **5.** Press to programme the outside line group hunt sequence number.
- **6.** Enter an outside line **group hunt sequence number**.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new number.

- 7. Press STORE.
- **8.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location number**.
- **9.** Repeat steps 4 through 8.

10.Press END.

Conditions

- Each TIE line access number has a maximum of three digits, consisting of **0 through 9** and *****. The character "*" can be used as a wild card character.
- Programme [341] TIE Modify Removed Digit / Added Number is used to modify the TIE line access number.

Features Guide References

TIE Line Service

[341] TIE Modify Removed Digit / Added Number

Description

Assigns the removed digits and added numbers of a received TIE call. Digits are removed and added from the beginning of the dialled digits.

Selection

- Location number: 01 through 32
- Number of digits to be deleted: **0 through 4** (0=no deletion)
- Number to be added: 4 digits (max.)

Default

All locations - Deleted digit=0; Added Number=Blank

Programming

1. Enter 341.

```
Display: 341 TIE MODIFY
```

2. Press NEXT.

```
Display: Location NO?→
```

3. Enter a location number.

To enter location number 01, you can also press **NEXT**.

```
Display example: 01:0,
```

4. Enter the **number of digits to be deleted**.

To change the current entry, press **CLEAR** and enter the new number.

- **5.** Press to programme the number to be added.
- 6. Enter the number to be added.

To change the current entry, press **CLEAR** and enter the new number.

- 7. Press STORE.
- **8.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location number**.
- **9.** Repeat steps 4 through 8.

10.Press END.

Conditions

Each added number has a maximum of 4 digits, consisting of **0 through 9**.

Features Guide References

TIE Line Service

2.5 Outside Line Programming

[400] Outside Line Connection Assignment

Description

Used to identify the outside lines which are connected to the system(s). This prevents users from originating a call to a line which is not connected.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 54, *
(*=all outside lines)
```

Connect / No Connect

Default

All outside lines – Connect (If KX-TD290 or KX-TD188 is connected: All outside lines in the Slave System – No Connect)

Programming

1. Enter 400.

```
Display: 400 CO CONNECT
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an **outside line number**.

To enter outside line number 01, you can also press **NEXT**.

```
Display example: CO01:Connect
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- **7.** Repeat steps 4 through 6.
- **8.** Press END.

Conditions

• For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.

- Outside lines 25 through 54 become available when the KX-TD290 or KX-TD188 expansion unit is installed in the KX-TD1232.
- To assign all outside lines to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 01.

Features Guide References

Outside Line Connection Assignment

[401] Outside Line Group Assignment

Description

Each outside line must be assigned to an outside line group. This programme defines the outside line group assignment for each outside line. For example, if there are multiple telephone service companies available, the outside lines can be grouped by company.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 54, *
(*=all outside lines)
```

• Outside line group (TRG) number: 1 through 8

Default

```
CO01 – TRG 1;

CO02 – TRG 2;

CO03 – TRG 3;

CO04 – TRG 4;

CO05 – TRG 5;

CO06 – TRG 6;

CO07 – TRG 7;

CO08 – TRG 8 (for KX-TD816)

CO08 through CO54 – TRG 8 (for KX-TD1232)
```

Programming

1. Enter 401.

```
Display: 401 CO GROUP 1-8

2. Press NEXT.
```

Display: CO Line NO?→

3. Enter an outside line number.

To enter outside line number 01, you can also press **NEXT**. Display example: CO01:TRG1

4. Enter the **outside line group number**.

To change the current entry, enter the new outside line group number.

- 5. Press STORE.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- 7. Repeat steps 4 through 6.

8. Press END.

Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- Outside lines 25 through 54 become available when the KX-TD290 or KX-TD188 expansion unit is installed in the KX-TD1232.
- To assign all outside lines to one outside line group, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 01.

Features Guide References

Outside Line Group

[402] Dial Mode Selection

Description

Each outside line can be programmed for DTMF (Dual Tone Multi-Frequency), pulse (rotary) or call blocking. This programme assigns your choice to each line.

DTMF:

The dialling signals from an extension, either tone or pulse, are converted to tone signals and transmitted to the outside line.

Pulse:

The dialling signals from an extension, either tone or pulse, are converted to pulse signals and transmitted to the outside line.

Call blocking:

If your central office can receive both DTMF and pulse signals but you are contracted for pulse, select this mode. When dialling on the line with a touch tone telephone, only the pulse signals are sent to the outside line.

Selection

Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• DTMF / Pulse / C. Block (call blocking)

Default

```
KX-TD816BX, KX-TD1232(D)BX/ML, KX-TDN1232: All outside lines – Pulse KX-TD816HK, KX-TD1232HK/X: All outside lines – DTMF
```

Programming

1. Enter 402.

```
Display: 402 DIAL MODE
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an **outside line number**.

To enter outside line number 01, you can also press **NEXT**.

```
Display example: CO01:Pulse
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- **7.** Repeat steps 4 through 6.

8. Press **END**.

Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all lines to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 01.
- If DTMF is assigned, set the DTMF time of the line in programme [404] DTMF Time.
- If pulse or call blocking is assigned, set the pulse speed of the line in programme [403] Pulse Speed Selection, and set the pulse break ratio and inter-digit pause in programme [990] System Additional Information, Area 02 bit 7, and bits 12 and 11, if necessary.

Features Guide References

Dial Type Selection

[403] Pulse Speed Selection

Description

An outside line set for pulse or call blocking mode in programme [402] Dial Mode Selection can have two pulse rates, 10 pps (low) and 20 pps (high). This programme sets the pulse speed for each outside line set to pulse or call blocking mode.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• 10 pps / 20 pps

Default

All outside lines – 10 pps

Programming

1. Enter 403.

```
Display: 403 PULSE SPEED
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter outside line number 01, you can also press **NEXT**.

```
Display example: C001:10pps
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 01.
- The pulse speed required is determined by the outside line or PBX line.

• Programme [990] System Additional Information, Area 02 - bit 7, and bits 12 and 11 are used to select a pulse break ratio and inter-digit pause, if needed.

Features Guide References

Dial Type Selection

[404] DTMF Time

Description

An outside line set to DTMF (Dual Tone Multi-Frequency) mode in programme [402] Dial Mode Selection can have two settings. This programme sets the duration of the DTMF signals sent to an outside line to DTMF mode.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• Time (milliseconds): **80 / 160**

Default

All outside lines – 80 ms

Programming

1. Enter 404.

```
Display: 404 DTMF TIME
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

```
To enter outside line number 01, you can also press NEXT.
```

```
Display example: CO01: 80msec
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 01.
- The DTMF time required is determined by the outside line or PBX line.

Features Guide References

Dial Type Selection

[405] CPC Signal Detection Incoming Set

Description

Assigns the expected minimum duration of the Calling Party Control (CPC) Signal on incoming outside calls. If this is programmed, the system disconnects the line when the CPC Signal is detected.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• Time (milliseconds): **Disable** (no detection) / 100 / 200 / 300 / 400 / 500 / 600

Default

All outside lines – Disable

Programming

1. Enter 405.

```
Display: 405 CPC INCOMING
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.

```
Display example: CO01:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- 7. Repeat steps 4 through 6.
- **8.** Press **END**.

Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 01.
- You may disable CPC Signal Detection for an outside line.

• Programme [415] CPC Signal Detection Outgoing Set is used to programme CPC Signal Detection for outgoing outside calls.

Features Guide References

Calling Party Control (CPC) Signal Detection Direct Inward System Access (DISA)

[406] Caller ID Assignment

Description

Enables the Caller ID feature for the outside lines to which a Caller ID Service is offered by a Central Office by contract.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• Enable / Disable

Default

All outside lines - Disable

Programming

1. Enter 406.

```
Display: 406 CALLER ID CO
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

```
To enter outside line number 01, you can also press NEXT.
```

```
Display example: CO01:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the *key in step 3. In this case, the display shows the contents programmed for outside line 01.
- The following programmes are used to programme Caller ID feature: [110] Caller ID Code Set and [111] Caller ID Name Set.

Features Guide References

Caller ID

[407-408] DIL 1:1 Extension – Day / Night

Description

The Direct In Lines (DIL) 1:1 feature allows incoming outside calls to be directed to a specific extension. When an outside line is assigned as DIL 1:1, it is necessary to assign the destination. These programmes specify the extension number for day or night mode.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• Extension number: 2 through 4 digits / Disable (no DIL 1:1)

Default

All outside lines – Disable (Day / Night)

Programming

1. Enter a programme address (407 for day or 408 for night).

```
Display example: 407 DIL 1:1 DAY
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

```
To enter outside line number 01, you can also press NEXT. Display example: CO01:Disable
```

4. Enter an extension number.

To change the current entry, press **CLEAR** and enter the new number. To disable DIL 1:1, press **CLEAR**.

- **5.** Press **STORE**.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available. Outside line numbers in the out-of-service system are unacceptable.

- To assign all outside lines to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 01.
- If an outside line is also programmed for DIL 1:N in programmes [603-604] DIL 1:N Extension and Delayed Ringing Day / Night, it is regarded as a DIL 1:1 line.
- Assignable extension numbers are programmed in the following programmes.
 Extension numbers [003] Extension Number Set
 ISDN extension numbers [012] ISDN Extension Number Set
 Voice Mail extension numbers [118] Voice Mail Extension Number Set
 Phantom extension numbers [124] Phantom Extension Number Set
 Floating numbers [813] Floating Number Assignment

Features Guide References

Direct In Lines (DIL)
Direct Inward System Access (DISA)
Day / Night Service

[409-410] Intercept Extension – Day / Night

Description

Intercept Routing provides an automatic re-direction of calls which cannot or have not been answered (IRNA: Intercept Routing – No Answer). These programmes set the destination in both day and night modes for each outside line group.

Selection

- Outside line group (TRG) number: 1 through 8, ★ (★=all outside line groups)
- Extension number: 2 through 4 digits / Disable (no Intercept Routing)

Default

All outside line groups – Disable (Day / Night)

Programming

1. Enter a programme address (409 for day or 410 for night).

```
Display example: 409 INTERCEP DAY
```

2. Press NEXT.

```
Display: TRK GRP NO?→
```

3. Enter the outside line group number.

To enter outside line group number 1, you can also press **NEXT.**

```
Display example: TRG1:Disable
```

4. Enter an extension number.

To change the current entry, press **CLEAR** and enter the new number.

To disable Intercept Routing, press CLEAR.

- 5. Press STORE.
- **6.** To programme another outside line group, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line group number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- To assign all outside line groups to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line group 1.
- Programme [401] Outside Line Group Assignment is used to assign each outside line to an outside line group.
- Assignable extension numbers are programmed in the following programmes.

Extension numbers – [003] Extension Number Set

ISDN extension numbers – [012] ISDN Extension Number Set

Voice Mail extension numbers – [118] Voice Mail Extension Number Set Phantom extension numbers – [124] Phantom Extension Number Set Floating numbers – [813] Floating Number Assignment

Features Guide References

Intercept Routing

[411] Host PBX Access Codes

Description

Assigns Host PBX access codes. If the system is installed behind a host PBX, an access code is required to make an outside call. Up to four codes can be stored for an outside line group assigned to the line.

Selection

- Outside line group (TRG) number: 1 through 8, \star (\star =all outside line groups)
- Access code: 1 or 2 digits, four different entries (max.)

Default

All outside line groups – Not stored

Programming

1. Enter **411**.

```
Display: 411 HOST PBX #'S
```

2. Press NEXT.

```
Display: TRK GRP NO?→
```

3. Enter an outside line group number.

To enter outside line group number 1, you can also press **NEXT**.

```
Display example: TRG1: , , ,
```

4. Enter an access code.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new access code.

```
Display example: TRG1:01, , ,
```

5. To enter more access codes for the same outside line group, press ightharpoonup and enter the **access** codes until all the required entries are completed.

```
Display example: TRG1:01,08,10,22
```

- 6. Press STORE.
- **7.** To programme another outside line group, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line group number**.
- **8.** Repeat steps 4 through 7.
- 9. Press END.

Conditions

• This programme is only required if a host PBX line is connected to the system. Programme [401] Outside Line Group Assignment is used to assign the line to an outside line group.

- There is a maximum of four access codes per outside line group. Each code has one or two digits, consisting of **0 through 9**, and *****.
- If conflicting access codes (such as 8 and 81) are stored for the same outside line group, the 1-digit code (8) only will be in effect.
- When the programmed codes are dialled, Automatic Pause Insertion and Toll Restriction are applied to the calls. The programmed pause time (in programme [412] Pause Time) is automatically inserted after the access code.
- To assign all outside line groups to one selection, press the ★ key in step 3. In this case, the display shows the contents programmed for outside line group 1.

Features Guide References

External Feature Access
Host PBX Access
Pause Insertion, Automatic

[412] Pause Time

Description

Assigns the length of the pause time. The programmed pause time is automatically inserted after a line access number or a host PBX access code programmed in [411] Host PBX Access Codes or manually inserted if the **PAUSE** button is pressed by the user.

Selection

- Outside line group (TRG) number:1 through 8, ★ (★=all outside line groups)
- Time (seconds): 1.5 / 2.5 / 3.5 / 4.5

Default

All outside line groups – 1.5 s

Programming

1. Enter 412.

```
Display: 412 PAUSE TIME
```

2. Press NEXT.

```
Display: TRK GRP NO?→
```

3. Enter an outside line group number.

To enter outside line group number 1, you can also press **NEXT.**

```
Display example: TRG1:1.5sec
```

- **4.** Keep pressing **SELECT** until the desired time is displayed.
- 5. Press STORE.
- **6.** To programme another outside line group, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line group number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- To assign all outside line groups to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line group 1.
- Programme [401] Outside Line Group Assignment is used to assign each outside line to an outside line group.

Features Guide References

Host PBX Access

Pause Insertion, Automatic

[413] Flash Time

Description

Assigns the length of the flash time. If your system is installed behind a host PBX, External Feature Access (EFA) is necessary to obtain their services. To enable it, select a required hooking signal sending time for the outside line group.

Selection

- Outside line group (TRG) number: 1 through 8, \star (\star =all outside line groups)
- Time (milliseconds):
 Disable (no EFA) / 80 / 96 / 112 / 200 / 300 / 400 / 500 / 600 / 700 / 800 / 900 / 1000 / 1100 / 1200

Default

All outside line groups – 600 ms

Programming

1. Enter 413.

```
Display: 413 FLASH TIME
```

2. Press NEXT.

```
Display: TRK GRP NO?→
```

3. Enter an outside line group number.

To enter outside line group number 1, you can also press **NEXT.**

```
Display example: TRG1: 600 msec
```

- **4.** Keep pressing **SELECT** until the desired time is displayed.
- 5. Press STORE.
- **6.** To programme another outside line group, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line group number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- You may disable EFA, if not required. The Flash feature will be in effect in place of EFA.
 Programme [414] Disconnect Time is used to select the time required for the Flash feature.
- The flash time required is determined by the central office or the host PBX lines.
- To assign all outside line groups to one selection, press the ★ key in step 3. In this case, the display shows the contents programmed for outside line group 1.

• Programme [401] Outside Line Group Assignment is used to assign each outside line to an outside line group.

Features Guide References

External Feature Access Flash

[414] Disconnect Time

Description

Determines the amount of time between successive accesses to the same outside line.

Selection

- Outside line group (TRG) number: 1 through 8, ★ (★=all outside line groups)
- Time (seconds): **1.5 / 4.0**

Default

All outside line groups -1.5 s

Programming

1. Enter 414.

```
Display: 414 DISCONNECT
```

2. Press NEXT.

```
Display: TRK GRP NO?\rightarrow
```

3. Enter an outside line group number.

To programme outside line group number 1, you can also press **NEXT.**

```
Display example: TRG1:1.5sec
```

- **4.** Keep pressing **SELECT** until the desired time is displayed.
- 5. Press STORE.
- **6.** To programme another outside line group, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line group number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- The disconnect time must be longer than the requirements of the central office or the host PRX
- To assign all outside line groups to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line group 1.
- Programme [401] Outside Line Group Assignment is used to assign each outside line to an outside line group.

Features Guide References

Flash

[415] CPC Signal Detection Outgoing Set

Description

Enables or disables Calling Party Control (CPC) Signal Detection during the time between the originated outside call and the established outside call. If this is enabled, the system disconnects the line with the time set in programme [405] CPC Signal Detection Incoming Set when the CPC Signal is detected.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• Enable (detection) / Disable (no detection)

Default

Disable

Programming

1. Enter 415.

```
Display: 415 CPC OUTGOING
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.

```
Display example: CO01:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Some central offices (CO) may send CPC-like signals during the dialling sequence and an attempt to make a call may be terminated. If your CO is such a type, select "Disable".
- Programme [405] CPC Signal Detection Incoming Set is used to set CPC Signal Detection Time.

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the *key in step 3. In this case, the display shows the contents programmed for outside line 01.

Features Guide References

Calling Party Control (CPC) Signal Detection Direct Inward System Access (DISA)

[416] Reverse Circuit Assignment

Description

Enables or disables Reverse Circuit detection.

This programme is only available for the following models: KX-TD816BX/HK, KX-TD1232DBX/ML, TDN1232.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• Regular (no detection) / Reverse (detection)

Default

Regular

Programming

1. Enter 416.

```
Display: 416 REV. CURRENT
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter outside line number 01, you can also press NEXT.

```
Display example: CO01:Regular
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To program another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

To assign all outside lines to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 01.

Features Guide References

Reverse Circuit

Outside Line Name Assignment [417]

Description

Assigns a name to each outside line so that the extension user can view the outside line number and name when receiving an outside call. If Caller ID is assigned, each extension can select either the initial display, Caller ID or outside line name, by Station Programming.

Selection

Outside line (CO) number:

```
KX-TD816 - 01 through 08, \star
KX-TD1232 - 01 through 54, \star
(*=all outside lines)
```

• Name: 10 characters (max.)

Default

All outside lines - Not stored

Programming

1. Enter 417.

```
Display: 417 CO LINE NAME
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an **outside line number**.

To enter outside line number 01, you can also press **NEXT**.

```
Display example: CO01:Not Stored
```

4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new name.

- 5. Press STORE.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired outside line number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.

- Outside lines 25 through 54 become available when the KX-TD290 or KX-TD188 expansion unit is installed in the KX-TD1232.
- To assign all outside lines to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 01.

Features Guide References

Display Message Incoming Outside Call Information Display

[430] DID / TIE Format Number Assignment

Description

Assigns a Direct Inward Dialling (DID) and TIE format number to each outside line group.

Selection

- Outside line group (TRG) number: 1 through 8, ★ (★=all outside line groups)
- DID / TIE format number: 1 through 8

Default

All outside line groups – Not stored

Programming

1. Enter 430.

```
Display: 430 MODIFY FORM
```

2. Press NEXT.

```
Display: TRK GRP NO?→
```

3. Enter an outside line group number.

To enter outside line group number 1, you can also press **NEXT.**

```
Display example: TRG1:Not Stored
```

4. Enter a DID / TIE format number.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another outside line group, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line group number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

This is the first and basic programming for the DID / TIE feature. If this assignment is changed, it will affect other programming ([431] through [435]).

Features Guide References

Direct Inward Dialling (DID)

E1 Line Service

[431] DID / TIE Incoming Assignment

Description

Assigns a DID / TIE incoming method, immediate or wink, to each DID / TIE format according to your central office service.

Immediate: Incoming DID and TIE calls can be received right after the receiving signal arrives.

Wink: Incoming DID and TIE calls can be received after the wink signal is transmitted to the central office (after the receiving signal arrives).

Selection

- DID / TIE format number: 1 through 8, * (*=all DID / TIE formats)
- Immediate / Wink

Default

All DID / TIE formats – Wink

Programming

1. Enter 431.

```
Display: 431 SIGNAL IN
```

2. Press NEXT.

```
Display: Format NO?→
```

3. Enter a DID / TIE format number.

To enter DID / TIE format number 1, you can also press **NEXT.**

```
Display example: 1:Wink
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another DID / TIE format, press **NEXT** or **PREV**, or **SELECT** and the desired **DID** / **TIE** format number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

To assign all DID / TIE formats to one selection, press the ★ key in step 3. In this case, the display shows the contents programed for DID / TIE format number 1.

Features Guide References

Direct Inward Dialling (DID)

E1 Line Service TIE Line Service

[432] DID / TIE Outgoing Assignment

Description

Assigns a DID and TIE outgoing method, immediate or wink, to each DID / TIE format according to your central office service.

Immediate: Outgoing DID and TIE numbers can be transmitted right after seizing the outside line.

Wink: Outgoing DID and TIE numbers can be transmitted after receiving the wink signal from the central office after seizing the outside line.

Selection

- DID / TIE format number: 1 through 8, * (*=all DID / TIE formats)
- · Immediate / Wink

Default

All DID / TIE formats – Wink

Programming

1. Enter 432.

Display: 432 SIGNAL OUT

2. Press NEXT.

Display: Format NO?→

3. Enter a DID / TIE format number.

To enter DID / TIE format number 1, you can also press **NEXT.**

```
Display example: 1:Wink
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another DID / TIE format, press **NEXT** or **PREV**, or **SELECT** and the desired **DID / TIE format number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- The time the system waits for the confirmation wink signal can be programmed in programme [435] DID / TIE Wink Time Out Assignment.

 The system disconnects the outside line when the time-out time expires.
- To assign all DID / TIE formats to one selection, press the *key in step 3.

In this case, the display shows the contents programmed for DID / TIE format number 1.

Features Guide References

Direct Inward Dialling (DID) E1 Line Service TIE Line Service

[433] DID / TIE Subscriber Number Removed Digit

Description

Assigns the removed digits of received a DID and TIE subscriber number for each DID / TIE format. In this case, digits are removed from the beginning of the received digits.

Selection

- DID / TIE format number: 1 through 8
- Number of digits to be deleted (RMV): **0 through 6** (0=no deletion)

Default

All DID / TIE formats – RMV:0

Programming

1. Enter 433.

Display: 433 REMOVE DIAL

2. Press NEXT.

Display: Format NO?→

3. Enter a DID / TIE format number.

To enter DID / TIE format number 1, you can also press **NEXT.**

```
Display example: 1:0
```

4. Enter the number of digits to be deleted.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another DID / TIE format, press **NEXT** or **PREV**, or **SELECT** and the desired **DID / TIE format number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- You cannot leave the entry empty.
- You must confirm with your central office regarding the number of digits being sent.

Features Guide References

Direct Inward Dialling (DID)

E1 Line Service

[434] DID / TIE Added Number

Description

Assigns the added number to the DID and TIE subscriber number which is determined in programme [433] DID / TIE Subscriber Number Removed Digit. This makes the final number which serves as the extension number. Note that digits are inserted at the beginning of the number.

Selection

- DID / TIE format number: 1 through 8
- Number to be added: 4 digits (max.)

Default

All DID / TIE formats – Blank

Programming

1. Enter 434.

```
Display: 434 ADD DIAL
```

2. Press NEXT.

```
Display: DID Format NO?\rightarrow
```

3. Enter a DID / TIE format number.

To enter DID format number 1, you can also press NEXT.

```
Display example: 1:
```

4. Enter the number to be added.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another DID / TIE format, press **NEXT** or **PREV**, or **SELECT** and the desired **DID** / **TIE** format number.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

• Each added number has a maximum of 4 digits, consisting of **0 through 9.**

Features Guide References

Direct Inward Dialling (DID) E1 Line Service

[435] DID / TIE Wink Time Out Assignment

Description

The DID / TIE outgoing method can be set to the wink mode in programme [432] DID / TIE Outgoing Assignment. This programme sets the time the system waits for the confirmation wink signal after an outside line is seized according to your central office service.

Selection

- DID / TIE format number: 1 through 8, ★ (★=all DID / TIE formats)
- Time: 1 through 127 (\times 64 milliseconds is the actual time)

Default

All DID / TIE formats - 16

Programming

1. Enter 435.

```
Display: 435 WINK TIMEOUT
```

2. Press NEXT.

```
Display: Format NO?→
```

3. Enter a DID / TIE format number.

To enter DID / TIE format number 1, you can also press **NEXT.**

```
Display example: 1:16
```

4. Enter the time.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another DID / TIE format, press **NEXT** or **PREV**, or **SELECT** and the desired **DID / TIE format number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- You cannot leave the entry empty.
- To assign all DID / TIE formats to one selection, press the * key in step 3. In this case, the display shows the contents programmed for DID / TIE format number 1.

Features Guide References

Direct Inward Dialling (DID)

E1 Line Service TIE Line Service

[436] Outside-to-TIE Transfer

Description

Enables or disables transferring an incoming outside call to the TIE line on an outside line group basis. This restriction applies to the following: 1) A TIE call using DISA 2) Call Forwarding to a TIE line 3) Call Transfer to a TIE line.

Selection

- Outside line group (TRG) number: 1 through 8, \star (\star =all outside line groups)
- Enable / Disable

Default

All outside line groups – Disable

Programming

1. Enter 436.

```
Display: 436 CO-TIE XFER
```

2. Press NEXT.

```
Display: TRK GRP NO?→
```

3. Enter an outside line group number.

To enter outside line group number 1, you can also press **NEXT**.

```
Display example: TRG1:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another outside line group, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line group number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

To assign all outside line groups to the same selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line group number 1.

Features Guide References

TIE-to-Outside Transfer [437]

Description

Enables or disables transferring TIE calls to an outside line on an outside line group basis. This restriction applies to the following: 1) An outside call through another PBX 2) Call Forwarding to an outside line 3) Call Transfer to an outside line.

Selection

- Outside line group (TRG) number: 1 through 8, \star (\star =all outside line groups)
- **Enable / Disable**

Default

All outside line groups – Disable

Programming

1. Enter 437.

```
Display: 437 TIE-CO XFER
```

2. Press NEXT.

```
Display: TRK GRP NO?→
```

3. Enter an **outside line group number**.

To enter outside line group number 1, you can also press **NEXT**.

```
Display example: TRG1:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- 6. To programme another outside line group, press NEXT or PREV, or SELECT and the desired outside line group number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

To assign all outside line groups to the same selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line group number 1.

Features Guide References

[438] TIE-to-TIE Transfer

Description

Enables or disables transferring TIE calls to a TIE line on an outside line group basis. This restriction applies to the following: 1) A TIE call through another PBX 2) Call Forwarding to a TIE line 3) Call Transfer to a TIE line.

Selection

- Outside line group (TRG) number: 1 through 8, \star (\star =all outside line groups)
- Enable / Disable

Default

All outside line groups – Enable

Programming

1. Enter 438.

```
Display: 438 TIE-TIE XFER
```

2. Press NEXT.

```
Display: TRK GRP NO?→
```

3. Enter an outside line group number.

To enter outside line group number 1, you can also press **NEXT**.

```
Display example: TRG1:Enable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another outside line group, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line group number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

To assign all outside line groups to the same selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line group number 1.

Features Guide References

TIE Security Type [439]

Description

Assigns the security mode for TIE calls. There are two modes, Non Security and Trunk Security (Outside line security). Non Security mode allows the caller to access an outside line without dialling a TIE user code. Trunk Security mode requires the caller to enter a TIE User Code assigned in programme [017] DISA / TIE User Codes before making a TIE call.

Selection

- Outside line group (TRG) number: **1 through 8, *** (*=all outside line groups)
- Non (Non security) / Trunk (Outside line security)

Default

All outside line groups - Non

Programming

1. Enter 439.

```
Display: 439 TIE SECURITY
```

2. Press NEXT.

```
Display: TRK GRP NO?→
```

3. Enter an **outside line group number**.

To enter outside line group number 1, you can also press **NEXT**.

```
Display example: TRG1:Non
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- **6.** Press **END**.

Conditions

To assign all outside line groups to the same selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line group number 1.

Features Guide References

[440] Line Hunting Sequence

Description

Assigns the hunting sequence of idle lines, seizing from the smallest to the largest line number or vice versa in an outside line group, on an outside line group basis.

Selection

- Outside line group (TRG) number: 1 through 8, ★ (★=all outside line groups)
- Small \rightarrow Large / Large \rightarrow Small

Default

All outside line groups – Small –> Large

Programming

1. Enter 440.

```
Display: 440 LINE HUNT
```

2. Press NEXT.

```
Display: TRK GRP NO?→
```

3. Enter an outside line group number.

To enter outside line group number 1, you can also press **NEXT**.

```
Display example: TRG1:Small>Large
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- **6.** To programme another outside line group, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line group number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- The default setting (Small → Large) often may cause a busy situation between two PBXs, as the same line may be seized by both sides simultaneously. In this case, we recommend changing the setting of either PBX to Large → Small.
- To assign all outside line groups to the same selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line group number 1.

Features Guide References

None

[441] Voice Path Type

Description

Assigns the voice path type on an outside line basis.

Selection

• Outside line (CO) number:

```
KX-TD816 – 05 through 08, ★
KX-TD1232 – 09 through 12 (Master), 21 through 24 (Slave), ★
(★=all outside lines)
```

• 2 wire / 4 wire

Default

All outside lines – 2 wire

Programming

1. Enter 441.

```
Display: 441 V.PATH TYPE
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter outside line number 09, you can also press **NEXT**.

```
Display example: CO09:2 Wire
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- 6. Press END.

Conditions

To assign all outside lines to one selection, press the \times key in step 3.

Features Guide References

[442] Voice Level (Transmit)

Description

Assigns the transmitted voice level on an outside line port basis. This programme is valid only when the voice path type is set to "4 wire".

Selection

• Outside line (CO) number:

```
KX-TD816 – 05 through 08, *
KX-TD1232 – 09 through 12 (Master), 21 through 24 (Slave), *
(*=all outside lines)
```

• $-6 \, db / -3 \, db / 0 \, db / +3 \, db$

Default

All outside lines – -3 db

Programming

1. Enter 442.

```
Display: 442 V.LEVEL (TX)
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter outside line number 09, you can also press NEXT.

```
Display example: CO09:-3db
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- 6. Press END.

Conditions

To assign all outside lines to one selection, press the \times key in step 3.

Features Guide References

[443] Voice Level (Receive)

Description

Assigns the received voice level on an outside line basis. This programme is valid only when the voice path type is set to "4 wire".

Selection

• Outside line (CO) number:

```
KX-TD816 – 05 through 08, *
KX-TD1232 – 09 through 12 (Master), 21 through 24 (Slave), *
(*=all outside lines)
```

• $-6 \, db / -3 \, db / 0 \, db / +3 \, db$

Default

All outside lines – -3 db

Programming

1. Enter 443.

```
Display: 443 V.LEVEL (RX)
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

```
To enter outside line number 09, you can also press NEXT.
```

```
Display example: CO09:-3db
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- 6. Press END.

Conditions

To assign all outside lines to one selection, press the \times key in step 3.

Features Guide References

[444] TIE Receive Dial

Description

Assigns whether the system receives TIE dial numbers on an outside line basis. If "No" is selected, the dialled number is treated as a local number and sent to DIL 1:1 or DIL 1:N.

Selection

• Outside line (CO) number:

```
KX-TD816 – 05 through 08, *
KX-TD1232 – 09 through 12 (Master), 21 through 24 (Slave), *
(*=all outside lines)
```

Yes / No

Default

All outside line ports – Yes

Programming

1. Enter 444.

```
Display: 444 RECEIVE DIAL
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

```
To enter outside line number 09, you can also press NEXT.
```

```
Display example: CO09:Yes
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- 6. Press END.

Conditions

To assign all outside lines to one selection, press the \times key in step 3.

Features Guide References

DID Forward Timer (for MFC-R2) [445]

Description

Assigns the length of waiting time of the incoming Direct Inward Dialling (DID) call forward signal from your central office.

Selection

- DID format number: **1 through 8, ★** (★=all DID formats)
- Time (seconds): 1 through 30

Default

All DID formats – 15 s

Programming

1. Enter 445.

```
Display: 445 FWD TIMER
```

2. Press NEXT.

```
Display: Format NO?→
```

3. Enter a DID format number.

To enter DID format number 1, you can also press NEXT.

```
Display example: 1:15 sec
```

4. Enter the time.

To change the current entry, press **CLEAR** and enter the new number.

- 6. To programme another DID format, press NEXT or PREV, or SELECT and the desired DID format number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- You cannot leave the entry empty.
- To assign all DID formats to one selection, press the \star key in step 3. In this case, the display shows the contents programmed for DID format number 1.

Features Guide References

Direct Inward Dialling (DID)

[446] DID Backward Timer (for MFC-R2)

Description

Assigns the length of waiting time of the outgoing outside call backward signal from your central office.

Selection

- DID format number: **1 through 8, ★** (★=all DID formats)
- Time (seconds): 1 through 30

Default

All DID formats - 15 s

Programming

1. Enter 446.

Display: 446 BACKWARD TM

2. Press NEXT.

Display: Format NO?→

3. Enter a DID format number.

To enter DID format number 1, you can also press **NEXT**.

```
Display example: 1:15 sec
```

4. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE
- **6.** To programme another DID format, press **NEXT** or **PREV**, or **SELECT** and the desired **DID format number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- You cannot leave the entry empty.
- To assign all DID formats to one selection, press the *key in step 3.

 In this case, the display shows the contents programmed for DID format number 1.

Features Guide References

[447] DID Disappearance Timer (for MFC-R2)

Description

Assigns the length of waiting time of the stop signal from your central office.

Selection

- DID format number: **1 through 8, ★** (★=all DID formats)
- Time (seconds): 1 through 30

Default

All DID formats – 24 s

Programming

1. Enter 447.

```
Display: 447 DISAPPEAR
```

2. Press NEXT.

```
Display: Format NO?→
```

3. Enter a **DID** format number.

To enter DID format number 1, you can also press NEXT.

```
Display example: 1:24 sec
```

4. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another DID format, press **NEXT** or **PREV**, or **SELECT** and the desired **DID format number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- You cannot leave the entry empty.
- To assign all DID formats to one selection, press the *key in step 3.

 In this case, the display shows the contents programmed for DID format number 1.

Features Guide References

[448] DID First Dial Start Time (for MFC-R2)

Description

Assigns the number of milliseconds the system waits before dialling a Direct Inward Dialling (DID) number after an outside line is seized.

Selection

- DID format number: 1 through 8, * (*=all DID / TIE formats)
- Time: 1 through 255 (\times 32 milliseconds is the actual time)

Default

All DID formats – 2

Programming

1. Enter 448.

```
Display: 448 1ST DIAL TM
```

2. Press NEXT.

```
Display: Format NO?→
```

3. Enter a DID format number.

To enter DID format number 1, you can also press **NEXT**.

```
Display example: 1:2
```

4. Enter the time.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- 6. To programme another DID format, press NEXT or PREV, or SELECT and the desired DID format number.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- You cannot leave the entry empty.
- To assign all DID formats to one selection, press the *key in step 3.

 In this case, the display shows the contents programmed for DID format number 1.

Features Guide References

[449] DID Forward Group-I Signal Code (for MFC-R2)

Description

Assigns a Direct Inward Dialling (DID) call forward group-I signal code according to your central office service.

Selection

- Code number: 01 through 15
- Not Use / Dial 1 / Dial 2 / Dial 3 / Dial 4 / Dial 5 / Dial 6 / Dial 7 / Dial 8 / Dial 9 / Dial 0

Default

```
Code 01=Dial 1; Code 02=Dial 2; Code 03=Dial 3; Code 04=Dial 4; Code 05=Dial 5; Code 06=Dial 6; Code 07=Dial 7; Code 08=Dial 8; Code 09=Dial 9; Code 10=Dial 0; Code 11 to Code 15=Not Use
```

Programming

1. Enter 449.

```
Display: 449 FWD SIGN GP1
```

2. Press NEXT.

```
Display: Code NO?→
```

3. Enter a **code number**.

To enter code number 01, you can also press **NEXT**.

```
Display example: 01:Dial 1
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another code, press **NEXT** or **PREV**, or **SELECT** and the desired **code** number
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

None

Features Guide References

[450] DID Forward Group-II Signal Code (for MFC-R2)

Description

Assigns a Direct Inward Dialling (DID) call backward group-II signal code according to your central office service.

Selection

- Code number: 01 through 15
- Not Use / Subscriber / Operator / Collect (collect call)

Default

Code 01=Not Use; Code 02=Subscriber; Code 03=Not Use; Code 04=Not Use; Code 05=Operator; Code 06=Not Use; Code 07=Not Use; Code 08=Collect; Code 09 to Code 15=Not Use

Programming

1. Enter 450.

```
Display: 450 FWD SIGN GP2
```

2. Press NEXT.

```
Display: Code NO?→
```

3. Enter a code number.

To enter code number 01, you can also press **NEXT**.

```
Display example: 01:Not Use
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- **6.** To programme another code, press **NEXT** or **PREV**, or **SELECT** and the desired **code number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

None

Features Guide References

[451] DID Backward Group-A Signal Code (for MFC-R2)

Description

Assigns a Direct Inward Dialling (DID) call backward group-A signal code according to your central office service.

Selection

- Code number: 01 through 15
- Not Use / Next Digit / Complete / Congestion

Default

Code 01=Next Digit; Code 02=Not Use; Code 03=Complete; Code 04=Congestion; Code 05 to Code 15=Not Use

Programming

1. Enter 451.

```
Display: 451 FWD SIGN GPA
```

2. Press NEXT.

```
Display: Code NO?→
```

3. Enter a **code number**.

To enter code number 01, you can also press **NEXT**.

```
Display example: 01:Next Digit
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another code, press **NEXT** or **PREV**, or **SELECT** and the desired **code number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

None

Features Guide References

[452] DID Backward Group-B Signal Code (for MFC-R2)

Description

Assigns a Direct Inward Dialling (DID) call backward group-B signal code according to your central office service.

Selection

- Code number: 01 through 15
- Not Use / Idle / Busy / Congestion / Unallocation

Default

Code 01=Idle; Code 02=Not Use; Code 03=Busy; Code 04=Congestion; Code 05=Unallocation; Code 6 to Code 15=Not Use

Programming

1. Enter 452.

```
Display: 452 BWD SIGN GPB
```

2. Press NEXT.

```
Display: Code NO?→
```

3. Enter a **code number**.

To enter code number 01, you can also press **NEXT**.

```
Display example: 01:Idle
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- 6. To programme another code, press NEXT or PREV, or SELECT and the desired code number.
- **7.** Repeat steps 4 through 6.
- **8.** Press **END**.

Conditions

None

Features Guide References

[457-458] DIL 1:1 – Lunch / Break Group

Description

Assigns a lunch / break group to each Direct In Lines (DIL) 1:1 destination.

Selection

• Outside (CO) line number:

```
KX-TD816 – 01 through 08
KX-TD1232 – 01 through 24
```

• Group number: 1 through 8

Default

All outside lines - Blank

Programming

For Lunch

1. Enter 457.

```
Display: 457 DIL 1:1 LUN
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter outside line number 01, you can also press **NEXT**.

```
Display example: CO01:
```

4. Enter a group number.

To change the current entry, press **CLEAR** and the new number.

```
Display example: CO01:1
```

- **5.** Press **STORE**.
- **6.** To programme another location, press **NEXT** or **PREV**.
- **7.** Repeat steps 4 through 6.
- **8.** To programme another outside line, press **SELECT** and the desired **outside line number**.
- **9.** Repeat steps 4 through 8.
- 10.Press END.

For Break

1. Enter 458.

```
Display: 458 DIL 1:1 BRK
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an **outside line number**.

To enter outside line number 01, you can also press NEXT.

```
Display example: CO01:
```

4. Enter a group number.

To change the current entry, press **CLEAR** and the new number.

```
Display example: CO01:1
```

- **5.** Press **STORE**.
- **6.** To programme another location, press **NEXT** or **PREV**.
- **7.** Repeat steps 4 through 6.
- **8.** To programme another outside line, press **SELECT** and the desired **outside line number**.
- **9.** Repeat steps 4 through 8.
- 10.Press END.

Conditions

• If a destination for this programming is not assigned, the assignment for DIL 1:1 (Day) / DIL 1:N performs in day mode as usual.

Features Guide References

Day / Night Service

Direct In Lines (DIL)

2.6 COS Programming

[500-501] Toll Restriction Level – Day / Night

Description

Each extension must be assigned a Class of Service (COS). These programmes set the toll restriction value for each COS in day or night mode.

Selection

- COS number: 1 through 8, ★ (★=all COS)
- Level number: 1 through 8

Default

```
COS 1 through 7 – Level 1 (Day / Night);
COS 8 – Level 7 (Day / Night)
```

Programming

1. Enter a programme address (500 for day or 501 for night).

```
Display example: 500 TRS DAY LVL
```

2. Press NEXT.

```
Display: COS NO?→
```

Display example: COS1:1

3. Enter a **COS** number.

```
To enter COS number 1, you can also press NEXT.
```

4. Enter a **level number**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another COS, press **NEXT** or **PREV**, or **SELECT** and the desired **COS number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• To assign all COS to one selection, press the ★ key in step 3. In this case, the display shows the contents programmed for COS 1.

Features Guide References

Day / Night Service Toll Restriction

[502]

Description

Allows you to restrict the duration of outside calls on a Class of Service (COS) basis.

Extension-to-Outside Line Call Duration Limit

Selection

- COS number: 1 through 8, * (*=all COS)
- **Disable** (no limit) / **Enable** (limit)

Default

All COS - Disable

Programming

1. Enter 502.

```
Display: 502 EXT-CO TIMER
```

- 2. Press NEXT.
- 3. Display: COS NO?→
- 4. Enter a COS number.

To enter COS number 1, you can also press NEXT.

```
Display example: COS1:Disable
```

- **5.** Keep pressing **SELECT** until the desired selection is displayed.
- 6. Press STORE.
- 7. To programme another COS, press **NEXT** or **PREV**, or **SELECT** and the desired **COS number**.
- **8.** Repeat steps 4 through 6.
- 9. Press END.

Conditions

- An outside call originated or answered by the programmed extension user is disconnected when the time specified in programme [205] Extension-to-Outside Line Call Duration Time expires.
- Extensions in limited classes cannot establish an outside-to-outside call, that is, cannot transfer / forward an outside call to another outside line or perform an Unattended Conference.
- To assign all COS to one selection, press the ★ key in step 3. In this case, the display shows the contents programmed for COS 1.
- Programme [990] System Additional Information, Area 02 Bit 2 is used to programme limited call duration to be done for outgoing calls only.

Features Guide References

Call Forwarding Call Transfer Conference

[503] Call Transfer to Outside Line

Description

Determines which Classes of Services (COS) are allowed to perform the Call Transfer to Outside Line function.

Selection

- COS number: 1 through 8, * (*=all COS)
- Enable / Disable

Default

All COS - Disable

Programming

1. Enter 503.

```
Display: 503 CALL XFER CO
```

2. Press NEXT.

```
Display: COS NO?→
```

3. Enter a COS number.

```
To enter COS number 1, you can also press NEXT.
```

```
Display example: COS1:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another COS, press **NEXT** or **PREV**, or **SELECT** and the desired **COS number.**
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

• To assign all COS to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for COS 1.

Features Guide References

Call Transfer

[504] Call Forwarding to Outside Line

Description

Determines which Classes of Services (COS) are allowed to perform the Call Forwarding to Outside Line function.

Selection

- COS number: **1 through 8, *** (*=all COS)
- Disable / Enable

Default

All COS - Disable

Programming

1. Enter 504.

```
Display: 504 CALL FWD CO
```

2. Press NEXT.

```
Display: COS NO?→
```

3. Enter a COS number.

To enter COS number 1, you can also press NEXT.

```
Display example: COS1:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another COS, press **NEXT** or **PREV**, or **SELECT** and the desired **COS number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• To assign all COS to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for COS 1.

Features Guide References

Call Forwarding

[505] Executive Busy Override

Description

Determines which Classes of Services (COS) are allowed to perform Executive Busy Override. Executive Busy Override allows the user to interrupt an established call.

Selection

- COS number: 1 through 8, * (*=all COS)
- Disable / Enable

Default

All COS - Disable

Programming

1. Enter 505.

```
Display: 505 EXEC BSY OR
```

2. Press NEXT.

```
Display: COS NO?→
```

3. Enter a COS number.

```
To enter COS number 1, you can also press NEXT.
```

```
Display example: COS1:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another COS, press **NEXT** or **PREV**, or **SELECT** and the desired **COS number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• To assign all COS to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for COS 1.

Features Guide References

Executive Busy Override

[506] Executive Busy Override Deny

Description

Determines which Classes of Services (COS) are allowed to deny Executive Busy Override. Executive Busy Override Deny allows the user to prevent Executive Busy Override from being executed by another extension user.

Selection

- COS number: 1 through 8, \star (\star =all COS)
- Disable / Enable

Default

All COS - Enable

Programming

1. Enter 506.

```
Display: 506 EXEC BSY DNY
```

2. Press NEXT.

```
Display: COS NO?→
```

3. Enter a COS number.

```
To enter COS number 1, you can also press NEXT.
```

```
Display example: COS1:Enable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another COS, press **NEXT** or **PREV**, or **SELECT** and the desired **COS number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• To assign all COS to one selection, press the ★ key in step 3. In this case, the display shows the contents programmed for COS 1.

Features Guide References

Executive Busy Override

[507] Do Not Disturb Override

Description

Determines which Classes of Services (COS) are allowed to perform Do Not Disturb (DND) Override.

Selection

- COS number: 1 through 8, * (*=all COS)
- Disable / Enable

Default

All COS - Disable

Programming

1. Enter 507.

```
Display: 507 DND OVERRIDE
```

2. Press NEXT.

```
Display: COS NO?→
```

3. Enter a COS number.

To enter COS number 1, you can also press NEXT.

```
Display example: COS1:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another COS, press **NEXT** or **PREV**, or **SELECT** and the desired **COS number.**
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

• To assign all COS to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for COS 1.

Features Guide References

Do Not Disturb (DND)

[508] Account Code Entry Mode

Description

Determines the account code mode to be used by each Class of Service (COS).

Option mode:

The user can enter any account code, if needed.

Verified – All Calls mode:

The user must always enter a pre-assigned account code to make an outside call.

Verified – Toll Restriction Override mode:

The user must enter a pre-assigned account code when the user needs to override toll restriction.

Selection

- COS number: **1 through 8, ★** (★=all COS)
- Option / Verify All (Verified-All Calls) / Verify Toll (Verified-Toll Restriction Override)

Default

All COS - Option

Programming

1. Enter 508.

Display: 508 ACC CODE OPT

2. Press NEXT.

Display: COS NO?→

3. Enter a COS number.

To enter COS number 1, you can also press **NEXT.**

```
Display example: COS1:Option
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- To programme another COS, press NEXT or PREV, or SELECT and the desired COS number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• To assign all COS to one selection, press the ★ key in step 3. In this case, the display shows the contents programmed for COS 1.

• Programme [105] Account Codes is used to define the Account Codes for the Verified modes.

Features Guide References

Account Code Entry
Toll Restriction

[509] Off-Hook Call Announcement (OHCA)

Description

Determines which Class of Service (COS) are allowed to perform the Off-Hook Call Announcement (OHCA) and Whisper OHCA function.

Selection

- COS number: **1 through 8, *** (*=all COS)
- Enable / Disable

Default

All COS - Enable

Programming

1. Enter 509.

Display: 509 OHCA

2. Press NEXT.

Display: COS NO?→

3. Enter a COS number.

To enter COS number 1, you can also press NEXT.

```
Display example: COS1:Enable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another COS, press **NEXT** or **PREV**, or **SELECT** and the desired **COS number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• To assign all COS to one selection, press the ★ key in step 3. In this case, the display shows the contents programmed for COS 1.

Features Guide References

Off-Hook Call Announcement (OHCA) Whisper OHCA

Description

Enables or disables switching the Day / Night service on a Class of Service (COS) basis.

Selection

- COS number: 1 through 8, ★ (*=all COS)
- Enable / Disable

Default

All COS - Disable

Programming

1. Enter 510.

```
Display: 510 NITE SERVICE
```

2. Press NEXT.

```
Display: COS NO?→
```

3. Enter a COS number.

To enter COS number 1, you can also press NEXT.

```
Display example: COS1:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another COS, press **NEXT** or **PREV**, or **SELECT** and the desired **COS number.**
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- To assign all COS to one selection, press the *key in step 3. In this case, the display shows the contents programmed for COS 1.
- The operator extension can switch the mode regardless of setting.

Features Guide References

Day / Night Service

[511] PT Programming Level

Description

Determines the Station Programming level on a Class of Service (COS) basis. There are two levels as follows.

Level 1: enables all Station Programming.

Level 2: disables CO button programming in Station Programming.

Selection

- COS number: 1 through 8, ★ (*=all COS)
- LVL 1 / LVL 2

Default

All COS - LVL1

Programming

1. Enter 511.

Display: 511 PITS PGM LVL

2. Press NEXT.

Display: COS NO?→

3. Enter a COS number.

To enter COS number 1, you can also press **NEXT.**

```
Display example: COS1:LVL1
```

4. Keep pressing **SELECT** until the desired selection is displayed.

```
Display example: COS1:LVL2
```

- 5. Press STORE.
- **6.** To programme another COS, press **NEXT** or **PREV**, or **SELECT** and the desired **COS number.**
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- If you try to execute the CO button programming while on level 2, a warning tone is heard and the initial programming display appears.
- A ringer frequency for each CO button cannot be changed on level 2.
- The programming assigned on [005] Flexible CO Button Assignment can be overwritten, regardless of the level of this programming.

Features Guide References

Station Programming

2.7 Extension Programming

[600] EXtra Device Port

Description

EXtra Device Port (XDP) allows a single line telephone (SLT) to be connected to the same jack as a digital proprietary telephone (DPT). This programme assigns which jacks are XDP. The SLT and DPT of the programmed jack work as independent extensions.

Selection

• Jack number:

```
KX-TD816 – 01 through 16, *
KX-TD1232 – 01 through 64, *
(*=all jacks)
```

Disable / Enable

Default

All jacks - Disable

Programming

1. Enter 600.

```
Display: 600 XDP PORT
```

2. Press **NEXT**.

```
Display: Jack NO?→
```

3. Enter a jack number.

```
To enter jack number 01, you can also press NEXT.
```

```
Display example: #01:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- The eXtra Device Port feature must be assigned "Disable" for console ports.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.

- To assign all jacks to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Jack 01.
- Immediately after changing your assignment, the changed setting may not work for a maximum of eight seconds.

Features Guide References

EXtra Device Port (XDP)

[601] Class of Service

Description

Programmes each extension for Class of Service (COS). The COS determines the call handling abilities of each extension.

Selection

• Jack number:

```
KX-TD816 – 01 through 16 (-1 / -2), *
KX-TD1232 – 01 through 64 (-1 / -2), *
(*=all jacks, -1 = first part, -2 = second part)
```

• COS number: 1 through 8

Default

```
All jacks-1/2 – COS 1
```

Programming

1. Enter 601.

```
Display: 601 COS #
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

To enter jack number 01, you can also press **NEXT.**

To select the second part (-2), press **NEXT** after entering a jack number.

```
Display example: #01-1:COS1, COS1
```

4. Enter a COS number.

To change the current entry, enter the new number.

- 5. Press STORE.
- **6.** To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- There is a maximum of eight Classes of Service. Every extension must be assigned to a Class of Service and is subject to the COS Programming of programmes [5XX] and [991].
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. Jack numbers in the out-of-service system are unacceptable.

- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks to one COS, press the *key in step 3. In this case, the display shows the contents programmed for Jack 01.
- Programme [017] DISA / TIE User Codes is also used to assign a Class of Service to a DISA (Direct Inward System Access) / TIE User Code.

Features Guide References

Class of Service (COS)

[602] Extension Group Assignment

Description

Assigns each extension to an extension group. Extension groups are used for Group Call Pickup, Station Hunting, and Paging – Group.

Selection

· Jack number:

```
KX-TD816 – 01 through 16 (-1 / -2), *
KX-TD1232 – 01 through 64 (-1 / -2), *
(*=all jacks, -1 = first part, -2 = second part)
```

• Extension group number: 1 through 8

Default

All jacks-1/2 – Extension group 1

Programming

1. Enter 602.

```
Display: 602 EXT GROUP #
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

To enter jack number 01, you can also press **NEXT.**

To select the second part (-2), press **NEXT** after entering the jack number.

```
Display example: #01-1:EXG1
```

4. Enter the **extension group number.**

To change the current entry, enter the new extension group number.

- **5.** Press **STORE**.
- **6.** To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- There is a maximum of eight extension groups. Each extension can only belong to one group.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.

- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks to one extension group, press the \times key in step 3. In this case, the display shows the contents programmed for Jack 01.

Features Guide References

Call Pickup
Extension Group
Paging
Station Hunting

[603-604] DIL 1:N Extension and Delayed Ringing – Day / Night

Description

The Direct In Lines (DIL) 1:N feature can be assigned to ring more than one extension. All incoming calls from the programmed outside lines are directed to the specified extensions. These programmes assign the extensions and the notification method for each outside line in both day and night modes.

Selection

• Jack number:

```
KX-TD816 – 01 through 16 (-1 / -2), *

KX-TD1232 – 01 through 64 (-1 / -2), *

(*=all jacks, -1 = first part, -2 = second part)
```

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• **Disab** (disable) / **Immdt** (immediate ringing) / **1RNG** (1 ring delay) / **3RNG** (3 ring delay) / **6RNG** (6 ring delay) / **NoRNG** (no ring)

Default

All jacks-1/2 – All outside lines – Immediate ringing (Day / Night)

Programming

1. Enter a programme address (603 for day or 604 for night).

```
Display example: 603 DIL 1:N DAY
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

To enter jack number 01, you can also press **NEXT.**

To select the second part (-2), press **NEXT** after entering the jack number.

```
Display example: #01-1:CO01:Immdt
```

4. Enter the outside line number.

You can also keep pressing or until the desired outside line number is displayed.

- **5.** Keep pressing **SELECT** until the desired selection is displayed.
- 6. Press STORE.
- 7. To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- **8.** Repeat steps 4 through 7.

9. Press END.

Conditions

- An extension can be assigned as the destination of as many outside lines as required.
- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. Jack numbers in the out-of-service system are unacceptable.
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks or all outside lines to one selection, press the *key in step 3 or step 4. In these cases, the display shows the contents programmed for Jack 01 or for outside line 01.
- There are six notification methods:
 - a) Immediate ringing: rings immediately
 - b) 1 ring delay
 - c) 3 ring delay
 - d) 6 ring delay
 - e) No ring: only the indicator flashes
 - f) Disable: no incoming call
- When you change the jack number by pressing **NEXT** or **PREV**, the outside line number is not changed. Example #03-1:CO06.....Press NEXT.....#03-2:CO06

Features Guide References

Day / Night Service Direct In Lines (DIL)

[605-606] Outgoing Permitted Outside Line Assignment – Day / Night

Description

Determines the outside lines which can be accessed by an extension in both day and night modes. The extension users can make outgoing outside calls using the assigned outside lines.

Selection

• Jack number:

```
KX-TD816 – 01 through 16 (-1 / -2), *
KX-TD1232 – 01 through 64 (-1 / -2), *
(*=all jacks, -1 = first part, -2 = second part)
```

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• Enabl (enable) / Disab (disable)

Default

All jacks-1/2 – All outside lines – Enable (Day / Night)

Programming

1. Enter a programme address (605 for day or 606 for night).

```
Display example: 605 CO DAY OUT
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

To enter jack number 01, you can also press **NEXT.**

To select the second part (-2), press **NEXT** after entering a jack number.

```
Display example: #01-1:CO01:Enabl
```

4. Enter the desired **outside line number**, or keep pressing or until the desired outside line is displayed.

To change the current entry, enter the new number.

- **5.** Keep pressing **SELECT** until the desired selection is displayed.
- 6. Press STORE.
- To programme another jack, press NEXT or PREV, or SELECT and the desired jack number.
- **8.** Repeat steps 4 through 7.
- 9. Press END.

Conditions

- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. Jack numbers in the out-of-service system are unacceptable.
- For an explanation of jack numbering, see "Rotation of jack number" in Section Programming Methods.
- To assign all jacks or all outside lines to one selection, press the *key in step 3 or 4. In these cases, the display shows the contents programmed for Jack 01 or outside line 01.
- To assign no outside line for an extension, press **CLEAR** in step 4.

Features Guide References

Day / Night Service Outside Line Connection Assignment – Outgoing

[607-608] Doorphone Ringing Assignment – Day / Night

Description

These programmes assign the extensions which will ring when a doorphone call is received during the day and night modes. Programmed extensions are also allowed to open the door.

Selection

· Jack number:

```
KX-TD816 – 01 through 16 (-1 / -2), *
KX-TD1232 – 01 through 64 (-1 / -2), *
(*=all jacks, -1 = first part, -2 = second part)
```

• Doorphone number:

```
KX-TD816 - 1 and 2, two entries (max.) KX-TD1232 - 1 through 4, four entries (max.)
```

Default

Jack 01-1– All doorphones; Other jacks – no doorphone (Day / Night)

Programming

1. Enter a programme address (607 for day or 608 for night).

```
Display example: 607 DOOR SET DAY
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

To enter jack number 01, you can also press **NEXT.**

To select the second part (-2), press **NEXT** after entering a jack number.

```
Display example: #01-1:1234
```

4. Enter the **doorphone numbers**.

To assign no doorphone, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new doorphone numbers.

- 5. Press STORE.
- **6.** To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.

- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Jack 01.
- Two doorphones can be installed. For the KX-TD1232, doorphones 1 and 2 are installed in the Master System, 3 and 4 in the Slave, if available.
- You can enter up to two (for KX-TD816) or four (for KX-TD1232) doorphone numbers for each extension.

Features Guide References

Door Opener
Doorphone Call
Day / Night Service

[609] Voice Mail Access Codes

Description

Assigns a mailbox number for each extension, only if programme [990] System Additional Information, Area 02 - bit 8 is set to "free".

Selection

• Jack number:

```
KX-TD816 – 01 through 16 (-1 / -2)

KX-TD1232 – 01 through 64 (-1 / -2)

(-1 = first part, -2 = second part)
```

• Mailbox number: 16 digits (max.)

Default

All jacks - Not stored

Programming

1. Enter 609.

```
Display: 609 V-MAIL CODES
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

To enter jack number 01, you can also press **NEXT.**

```
To select the second part (-2), press NEXT after entering a jack number.
```

```
Display example: #01-1:Not Stored
```

4. Enter a mailbox number.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new number.

- **5.** Press **STORE**.
- **6.** To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

 For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available. Jack numbers in the out-of-service system are unacceptable.

- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- The system supports a maximum of eight jacks (16 jacks during System Connection for KX-TD1232) for connection to a Voice Processing System as the Voice Mail or Automated Attendant ports.
- Each mailbox number has a maximum of 16 digits, consisting of **0 through 9**, ★ , # and **PAUSE**.
- To display parts of the mailbox number which have scrolled off the display, press **→** or **→**.

Features Guide References

Voice Mail Integration for Inband

[610] Live Call Screening Recording Mode Assignment

Description

Assigns whether to close the mailbox or keep recording the conversation after a call is intercepted.

This programme is available when this system is connected to a Panasonic Voice Processing System which supports digital proprietary telephone integration (e.g. KX-TVP100).

Selection

Jack number:

```
KX-TD816 – 01 through 16, *
KX-TD1232 – 01 through 64, *
(*=all jacks)
```

• Stop Rec (Stop Recording) / Keep Rec (Keep Recording)

Default

All jacks - Stop Rec

Programming

1. Enter 610.

```
Display: 610 LCS REC.MODE
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

```
To enter jack number 01, you can also press NEXT.
```

```
Display example: #01:Stop Rec
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another jack number, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.

• To assign all jacks to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for jack 01.

Features Guide References

Voice Mail Integration for Digital Proprietary Telephones

[619] Extension Call Forwarding – No Answer Time

Description

The number of rings before the call is forwarded is programmable for each extension.

Selection

• Jack number:

```
KX-TD816 – 01 through 16 (-1 / -2), *

KX-TD1232 – 01 through 64 (-1 / -2), *

(-1 = first part, -2 = second part, *=all jacks)
```

• Number of rings: 0 through 12

Default

```
All jacks - 0
```

Programming

1. Enter 619.

```
Display: 619 EXT FWD TIME
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

```
To enter jack number 01, you can also press NEXT. Display example: #01-1: 0
```

4. Enter the **number of rings**.

```
Enter the number of rings.
```

```
Display example: #01-1: 6
```

- 5. Press STORE.
- **6.** To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

- If the number of rings is assigned to "0", the time assigned on programme [202] Call Forwarding No Answer Time will be used.
- As a timer on ISDN extension cannot be assigned on this programming, the time assigned on programme [202] Call Forwarding No Answer Time will be used.

Features Guide References

Call Forwarding

[620] Lunch / Break Group Assignment

Description

Assigns extensions for a lunch / break group. A lunch / break group can be assigned to up to 8 extensions (PT / SLT).

Selection

Group number: 1 through 8 Location number: 1 through 8

• Extension number: 2 through 4 digits

Default

 $All\ groups-Blank$

Programming

1. Enter 620.

```
Display: 620 LUN/BRK EXT
```

2. Press NEXT.

```
Display: Group NO?→
```

3. Enter a group number.

To enter group number 01, you can also press **NEXT.**

```
Display example: #1-1:
```

4. Enter the desired **extension number.**

To change the current entry, enter the new number.

```
Display example: #1-1:101
```

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **group** number
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- This programming can only be used if DIL1:1 for lunch / break group is set.
- ISDN extensions, phantom extensions, floating numbers and voice mail extensions cannot be assigned to a lunch / break group.

Features Guide References

Day / Night Service

Cordless PT Extension Port [621]

Description

Prevents the cordless proprietary telephone speakerphone functions from working in the following cases, if connected to extension ports such as KX-T7890;

- a) BGM: start or end the BGM.
- **b)** LCS: work on the private mode even if the hands-free mode is set.
- c) A voice calling: using a voice calling. (Only Ring-calling can be used.)
- **d**) Paging: using the paging features.

Selection

Jack number:

```
KX-TD816 - 01 through 16, \star
KX-TD1232 - 01 through 64, *
(*=all jacks)
```

Yes (prevent) / No (allow)

Default

All jacks – all outside lines – No

Programming

1. Enter a 621.

```
Display: 621 CORDLESS EXT
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

```
To enter jack number 01, you can also press NEXT.
```

```
Display example: #01:No
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- 6. To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack** number.
- **7.** Repeat steps 4 through 7.
- 8. Press END.

Conditions

• If "Yes" is selected for a jack for wired proprietary telephone, the speakerphone functions written in the description do not work. Connect a cordless proprietary telephone if "Yes" is selected.

Features Guide References

None

2.8 Resource Programming

[800] SMDR Incoming / Outgoing Call Log Printout

Description

Used to determine which calls will produce a Station Message Detail Recording (SMDR) printout.

Selection

- Outgoing calls: All (all calls) / Toll (toll calls only) / Off (no printing)
- Incoming calls: **On** (all calls) / **Off** (no printing)

Default

Outgoing calls – All; Incoming calls – On

Programming

1. Enter 800.

```
Display: 800 SMDR IN/OUT
```

2. Press **NEXT** to programme outgoing calls.

```
Display: Outgoing:All
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- **5.** Press **NEXT** to programme incoming calls.

```
Display: Incoming:On
```

- **6.** Keep pressing **SELECT** until the desired selection is displayed.
- 7. Press STORE.
- 8. Press END.

- It is necessary to connect a printer to the Serial Interface (RS-232C) port provided on the system.
- After connecting a printer, do not press the RETURN key, if provided on the printer, within 10 seconds. Otherwise, the usage of the Serial Interface port is changed to system programming and printing will not occur.
- If "Toll" is selected, the system will print out all the calls starting from the numbers stored in programmes [301-305] TRS Denied Code Entry for Levels 2 through 6.

Features Guide References

Station Message Detail Recording (SMDR)

[801] SMDR Format

Description

Used to match the SMDR output to the paper size being used in the printer. Page length determines the number of lines per page. Skip perforation determines the number of lines to be skipped at the end of every page.

Selection

- Page length (lines): 4 through 99
- Skip perforation (lines): 0 through 95

Default

Page length -66; Skip perforation -0

Programming

1. Enter 801.

```
Display: 801 SMDR FORMAT
```

2. Press **NEXT** to programme page length.

```
Display example: Page Length:66
```

3. Enter the page length.

To change the current entry, press **CLEAR** and enter the new page length.

- 4. Press STORE.
- **5.** Press **NEXT** to programme skip perforation.

```
Display example: Skip Perf: 0
```

6. Enter the skip perforation.

To change the current entry, press **CLEAR** and enter the new skip perforation.

- 7. Press STORE.
- 8. Press END.

Conditions

- The page length should be four lines or more longer than the skip perforation length.
- A title is positioned on the first three lines on every page.
- The programmed format becomes valid only if the Serial Interface (RS-232C) cable is connected. If a printer is already connected, disconnect it and connect again. Otherwise the former format becomes valid.

Features Guide References

Station Message Detail Recording (SMDR)

[802] System Data Printout

Description

Starts or stops printing the system data. All or a specific range of the current system-programmed data is printed out. The ranges are as follows:

Manager: Manager Programming [0XX] **System**: System Programming [1XX] **Timers**: Timer Programming [2XX]

TRS / ARS: TRS / ARS Programming [3XX] **Outside line**: Outside Line Programming [4XX]

COS: COS Programming [5XX]

Extension: Extension Programming [6XX]

E1: E1 Programming [7XX]

Resource: Resource Programming [8XX] **Option**: Option Programming [9XX]

Selection

• Printout range number:

```
* (All) / 0 (Manager) / 1 (System) / 2 (Timer) / 3 (TRS/ARS) / 4 (Outside line) / 5 (COS) / 6 (Extension) / 7 (E1) / 8 (Resource) / 9 (Option)
```

Start / Stop

Default

Not applicable.

Programming

1. Enter 802.

```
Display: 802 SYSTEM DATA
```

2. Press NEXT.

```
Display: Enter Range?→
```

3. Enter a **printout range number** or ***** for "All".

```
Display: Print-Out:Start
```

4. Press **STORE** to start printing.

Printing starts.

To stop printing, press **SELECT** and go to step 4. When printing is completed, the display shows:

```
Display: Print-Out:Finish
```

5. Press STORE.

```
Display: Print-Out:Stop
```

6. Press END.

Conditions

- It is necessary to connect a printer to the Serial Interface (RS-232C) port provided on the system.
- You may stop printing by pressing the **END** button while records are being printed out.
- You cannot restart the printout while records are being output.

Features Guide References

Station Message Detail Recording (SMDR)

[803] Music Source Use

Description

Assigns the music source to be used for Music on Hold and Background Music (BGM).

Selection

- Hold / BGM
- Music source number:

```
KX-TD816 – 1 / No Use
KX-TD1232 – 1 through 4 / No Use
```

Default

Hold and BGM - Music 1

Programming

1. Enter 803.

```
Display: 803 MUSIC SOURCE
```

2. Press **NEXT** to programme Music on Hold.

```
Display example: Hold:Music1
```

3. Enter a music source number.

To select no music source, press **CLEAR**.

To change the current entry, enter the new music source number.

- 4. Press STORE.
- **5.** Press **NEXT** to programme BGM.

```
Display example: BGM : Music1
```

6. Enter a music source number.

To select no music source, press **CLEAR**.

To change the current entry, enter the new music source number.

- 7. Press STORE.
- 8. Press END.

- The music source is a user-supplied item. For KX-TD816, one music source can be installed, for KX-TD1232, two music sources can be installed per system. Music sources 1 and 2 are connected to the Master System, 3 and 4 are to the Slave, if available. Any music source can be used by either system.
- The system is provided with an internal music source. By default setting, internal music source is used as Music Source 1. It is possible to select external music source for Music Source 1 in programme [990] System Additional Information, Area 02-Bit 10.

- To disable music, press **CLEAR** in steps 3 and 6.
- Programme [804] External Pager BGM is used to enable / disable BGM for each external pager.

Features Guide References

Background Music (BGM)

[804] External Pager BGM

Description

Used to determine which external pagers will receive Background Music (BGM). External BGM is turned on and off by the operator or manager.

Selection

• External pager number:

```
KX-TD816 – 1
KX-TD1232 – 1 through 4
```

• **Disable** (sends no BGM) / **Enable** (sends BGM)

Default

All external pagers - Disable

Programming

1. Enter 804.

```
Display: 804 EXTERNAL BGM
```

2. Press NEXT.

```
Display: Pager NO?→
```

3. Enter an external pager number.

```
To enter pager number 1, you can also press NEXT.
```

```
Display example: Pager1:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another pager, press **NEXT** or **PREV**, or **SELECT** and the desired **external pager number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

- In the case of KX-TD816, please skip steps 6 and 7.
- The external pager is a user-supplied item. One external pager can be installed for KX-TD816, and two external pagers can be installed for KX-TD1232.
- For the KX-TD1232, external pagers 1 and 2 are installed in the Master System, 3 and 4 in the Slave, if available.
- Programme [803] Music Source Use is used to select the music source to be used for BGM.

Features Guide References

Background Music (BGM)

[805] External Pager Confirmation Tone

Description

Used to remove the confirmation tone for external pagers. The default setting sends confirmation tone 2 to the external pagers before paging is broadcast. This programming applies to all the external pagers.

Selection

On / Off

Default

On

Programming

1. Enter 805.

```
Display: 805 EX PAGE TONE
```

2. Press NEXT.

```
Display example: Tone:On
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

The external pager is a user-supplied item. For KX-TD816, one external pager can be installed, for KX-TD1232, two external pagers can be installed per system. External pagers 1 and 2 are installed in the Master System, 3 and 4 in the Slave, if available.

Features Guide References

Confirmation Tone

Paging

Serial Interface (RS-232C) Parameters [806-807]

Description

Assigns the communication parameters for the Serial Interface (RS-232C) for Port 1 (for KX-TD816 and Master System of KX-TD1232) or Port 2 (for Slave System of KX-TD1232). New line code:

Select the code for your printer or personal computer. If your printer or personal computer automatically feeds lines with a carriage return, select "CR". If not, select "CR+LF".

Baud rate:

A baud rate code indicates the data transmission speed from the system to the printer or personal computer.

Word length:

A word length code indicates how many bits compose a character.

Parity:

A parity code indicates what type of parity is used to detect an error in the string of bits composing a character. Make an appropriate selection depending on the requirements of your printer or personal computer.

Stop bit:

A stop bit code indicates the end of a bit string which composes a character. Select an appropriate value depending on the requirements of your printer or personal computer.

Selection

- New line code: **CR+LF / CR** (CR=Carriage Return, LF=Line Feed)
- Baud rate (baud): 150 / 300 / 600 / 1200 / 2400 / 4800 / 9600 / 19200
- Word length (bits): 7 / 8
- Parity bit: None / Mark / Space / Even / Odd
- Stop bit length (bits): 1/2

Default

```
Port 1 / Port 2:
New line code = CR+LF; Baud rate = 9600; Word length = 8;
Parity bit = Mark; Stop bit = 1
```

Programming

1. Enter a programme address (806 for Port 1 or 807 for Port 2).

```
Display example: 806 RS232C PORT 1
```

2. Press **NEXT** to programme new line code.

```
Display example: NL-Code:CR+LF
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- **5.** Press **NEXT** to programme baud rate.

Display example: Baud Rate:9600

- **6.** Keep pressing **SELECT** until the desired selection is displayed.
- 7. Press STORE.
- **8.** Press **NEXT** to programme word length.

Display example: Word Lengt:8bits

9. Keep pressing **SELECT** until the desired selection is displayed.

10.Press STORE.

11.Press **NEXT** to programme parity bit.

Display example: Parity:Mark

12.Keep pressing **SELECT** until the desired selection is displayed.

13.Press STORE.

14.Press **NEXT** to programme stop bit.

Display example: Stop Bit:1bit

15.Keep pressing **SELECT** until the desired selection is displayed.

16.Press STORE.

17.Press END.

Conditions

• The following combinations are invalid.

Parity	Word Length	Stop Bit
Mark	8	2
Space	8	1
Space	8	2

• The programme address of the out-of-service system port is unacceptable.

Features Guide References

Station Message Detail Recording (SMDR)

[809] DISA Security Type

Description

Assigns the security mode for outside calls attempted by the DISA (Direct Inward System Access) caller. There are three modes as follows.

Non Security mode: allows the caller to access an outside line without dialling a DISA user code.

Trunk (Outside Line) Security mode: requires the caller to enter a DISA user code before making an outside call.

All Security mode: requires the caller to enter a DISA user code before making both an outside call and an intercom call.

Selection

Non (non security) / Trunk (outside line security) / All (all security)

Default

Trunk

Programming

1. Enter 809.

```
Display: 809 DISA SECURE
```

2. Press NEXT.

```
Display example: Security:Trunk
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Programme [017] DISA / TIE User Codes is used to programme DISA user codes.

Features Guide References

[810] DISA Tone Detection

Description

Enables or disables Tone Detection for outside-to-outside line calls via the Direct Inward System Access (DISA) feature. Enabling tone detection allows the system to detect the end of the call.

Selection

Enable / Disable

Default

Enable

Programming

1. Enter 810.

```
Display: 810 DISA TONE
```

2. Press NEXT.

```
Display example: Tone DTC: Enable
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

None

Features Guide References

Description

Selects whether the system transmits DTMF (Dual Tone Multi-Frequency) signals directly to the central office (CO) or if the system repeats the DTMF signals to CO in order to adjust gain. This can be done for an outside-to-outside line call via the Direct Inward System Access (DISA) feature during dialling and / or during an established call.

Selection

- **Dial** (during dialling) / **Call** (during an established call)
- Mode: Repeat / Through

Default

Dial and Call – Repeat

Programming

1. Enter 812.

```
Display: 812 DISA DTMF
```

2. Press **NEXT** to programme the mode during dialling.

To programme the mode during an established call, press **NEXT** again.

```
Display example: Dial:Repeat
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- **5.** Press **NEXT** to programme the mode during an established call.

```
Display example: Call:Repeat
```

- **6.** Keep pressing **SELECT** until the desired selection is displayed.
- 7. Press STORE.
- 8. Press END.

Conditions

None

Features Guide References

[813] Floating Number Assignment

Description

Assigns the floating numbers for External Pagers, DISA (Direct Inward System Access) messages, modem and extension groups. These numbers can be used in the same way extension numbers are used for station access.

Selection

• Floating station:

Pager1 through 4 / DISA1 / DISA2 / MODEM / E-Grp 1 through 8 (Pager2 through 4 are available for the KX-TD1232 only.)

• Floating number: 2 through 4 digits

Default

```
Pager 1=196; Pager 2=197; Pager 3=296; Pager 4=297; DISA 1=198; DISA 2=298; MODEM=299; E-Grp 1=191; E-Grp 2=192; E-Grp 3=193; E-Grp 4=194; E-Grp 5=291; E-Grp 6=292; E-Grp 7=293; E-Grp 8=294
```

Programming

1. Enter 813.

```
Display: 813 FLOATING #
```

2. Press **NEXT** to programme Pager 1.

```
Display example: Pager1 :EXT196
```

To programme another floating station, keep pressing **NEXT** or **PREV** until the desired floating station is displayed.

3. Enter a floating number.

To change the current entry, press **CLEAR** and enter the new floating number.

- 4. Press STORE.
- **5.** To programme another floating station, keep pressing **NEXT** or **PREV** until the desired floating station is displayed.
- **6.** Repeat steps 3 through 5.
- 7. Press END.

- A floating number is composed of two through four numerical digits, 0 through 9.
- The first one or two digits of the floating numbers are subject to programme [100] Flexible Numbering, (01) through (16) 1st through 16th hundred extension blocks.
- Floating numbers and extension numbers should be different. Double entry and incompatible entry for these numbers are invalid. Valid entry example: 10 and 11, 10 and

110. Invalid entry example: 10 and 106, 210 and 21.

To avoid making an invalid entry, check the other extension numbers. The default of each extension number is as follows:

[003] Extension Number Set

KX-TD816 - 101 through 116, 201 through 216

KX-TD1232 - 101 through 164, 201 through 264

[012] ISDN Extension Number Set

Not stored.

[118] VM Extension Number Set

KX-TD816 - 165 through 178, 181 through 184

KX-TD1232 - 165 through 188

[124] Phantom Extension Number Set

Not stored.

- You cannot leave an entry empty.
- Floating numbers of extension groups are available for the Uniform Call Distribution (UCD) and Ring Group features.

Features Guide References

Floating Station

[814] Modem Standard

Description

Assigns the modem standard. There are two standards available – BELL and CCITT.

Selection

BELL / CCITT

Default

CCITT

Programming

1. Enter 814.

```
Display: 814 MODEM TYPE
```

2. Press NEXT.

```
Display example: MODEM:CCITT
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Select the standard used by your modem.

Features Guide References

System Programming and Diagnosis with Personal Computer

[815] DISA Built-in Automated Attendant Number

Description

Assigns the DISA (Direct Inward System Access) built-in automated attendant (AA) number. The extension number and the floating number can be assigned as a one digit number and used as a DISA built-in automated attendant number.

Selection

- DISA built-in automated attendant number: **0 through 9**
- Extension number / Floating number: 2 through 4 digits

Default

Disable

Programming

1. Enter 815.

```
Display: 815 DISA AA
```

2. Press NEXT.

```
Display example: Dial NO?→
```

3. Enter a DISA built-in automated attendant number.

```
To enter DISA AA number 0, you can also press NEXT.
```

```
Display example: Dial 0:Disable
```

4. Enter an extension or floating number.

To change the current entry, press **CLEAR** and enter the new floating number.

```
Display example: Dial 0:EXT112
```

- 5. Press STORE.
- **6.** To programme another DISA AA number, press **NEXT** or **PREV**, or **SELECT** and the desired DISA AA number.
- **7.** Repeat steps 3 through 6.
- 8. Press END.

Conditions

This system can store up to ten programmable DISA built-in auto attendant numbers.

Features Guide References

[816] SMDR Output Mode

Description

Assigns the SMDR output mode. There are two standards available - Regular and Charge.

Selection

Regular / Charge

Default

Regular

Programming

1. Enter 816.

```
Display: 816 SMDR MODE
```

2. Press NEXT.

```
Display example: SMDR:Regular
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

- Select the output mode used by your SMDR.
- If you assign for Charge, you can select the display in Meter / in Charge through programme [143] Charge Display Selection.
- When "Charge" is selected, the assignment in programme [990] System Additional Information, Area 05 bit 12, is ignored and "<I> + caller no." is printed out in the SMDR.

Features Guide References

Station Message Detail Recording (SMDR)

[817] KX-TD197 / KX-TD198 Baud Rate Set

Description

Assigns the KX-TD197 / KX-TD198 standard. There are two standards available — BELL and CCITT-V.34.

Selection

BELL / V.34-9600 / V.34-14400 / V.34-19200 / V.34-28800 / V.34-33600

Default

V.34-33600

Programming

1. Enter 817.

```
Display (for KX-TD1232): 817 TD197 TYPE Display (for KX-TD816): 817 TD198 TYPE
```

2. Press NEXT.

```
Display example: Mast.: V.34-33600
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press NEXT.

```
Display example: Slave: V.34-33600
```

- **5.** Keep pressing **SELECT** until the desired selection is displayed.
- 6. Press STORE.
- 7. Press END.

Conditions

- · Select the standard used by your modem.
- This assignment is effective for both the Master and Slave systems.

Features Guide References

System Programming and Diagnosis with Personal Computer

Section 3 ISDN Programming

ISDN Programming 283

3.1 Manager Programming

[012] ISDN Extension Number Set

Description

Assigns an extension number to each port which is connected to the ISDN S0 unit.

Selection

• Port number:

KX-TD816 – **01 through 06** KX-TD1232 – **01 through 12**

• Extension Number: 2 or 3 digits

Default

All ports – Not stored

Programming

1. Enter 012.

```
Display: 012 ISDN EXT #
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a port number.

To enter a first port number, you can also press **NEXT.**

```
Display: #01:Not Stored
```

4. Enter an **extension number.**

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another port, press **NEXT** or **PREV**, or **SELECT** and the desired **port number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

- Each extension number can be two or three digits, consisting of **0 through 9**. The \times and # keys cannot be used.
- A multiple subscribers number (MSN) is determined regarding of this assignment. The MSN consists of the assigned extension number and an additional digit, 0 through 9. <Example> If an ISDN extension number is assigned as "3";

30 through 39 are effective as MSN's. The extension user can call any terminal equipment on the ISDN S0 bus with MSN individually. Pressing "30" calls all extensions on the ISDN S0 bus simultaneously.

- Port numbers 01 through 06 are for the Master System, and 07 through 12 are for the Slave, if available.
- An extension number is invalid if the first or second digit does not match with the setting in programme [100] Flexible Numbering, 1st through 16th hundred extension blocks.
- Double entry and incompatible entry for these numbers are invalid. Valid entry example: 10 and 11, 10 and 110. Invalid entry example: 10 and 106, 210 and 21.

To avoid making an invalid entry, check the other extension numbers. The default of each extension number is as follows:

[003] Extension Number Set

KX-TD816 – 101 through 116, 201 through 216

KX-TD1232 - 101 through 164, 201 through 264

[118] VM Extension Number Set

KX-TD816 - 165 through 170, 177, 178, 181 through 184

KX-TD1232 – 165 through 188

[124] Phantom Extension Number Set

Not stored.

[813] Floating Number Assignment

KX-TD816 – 191 through 194, 196, 198, 291 through 294, 298, 299

KX-TD1232 - 191 through 194, 196 through 198, 291 through 294, 296 through 299

• Programme [013] ISDN Extension Name Set is used to give names to the extension numbers.

Features Guide References

Integrated Services Digital Network (ISDN) Extension

ISDN Programming 285

ISDN Extension Name Set [013]

Description

Assigns names to the ISDN extension numbers programmed in programme [012] ISDN Extension Number Set.

Selection

Port number:

```
KX-TD816 – 01 through 06
KX-TD1232 - 01 through 12
```

• Name: 10 characters (max.)

Default

All ports – Not stored

Programming

1. Enter 013.

```
Display: 013 ISDN NAME
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a port number.

To enter the first port number, you can also press **NEXT.**

```
Display: #01:Not Stored
```

4. Enter a name.

For entering characters, see Section 1.4 Entering Characters.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new name.

- 5. Press STORE.
- 6. To programme another port, press NEXT or PREV, or SELECT and the desired port number.
- **7.** Repeat steps 4 through 6.
- **8.** Press END.

Conditions

• Port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.

Features Guide References

Integrated Services Digital Network (ISDN) Extension

ISDN Programming 287

Budget Management for ISDN Extension [018]

Description

Assigns the charge limitation of a call on the ISDN extension port basis.

Selection

• Port number:

```
KX-TD816-01 through 06, \star
KX-TD1232 − 01 through 12, ★
(*=all ports)
```

• Charge limitation (Charge): 0 through 99999999

Default

```
All ports -0
```

Programming

1. Enter 018.

```
Display: 018 BUDGET ISDN
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a port number.

```
To enter port number 01, you can also press NEXT.
Display example: #01:
```

4. Enter a charge limitation.

To delete the charge limitation, press **CLEAR**.

- **5.** Press **STORE**.
- 6. To programme another port, press **NEXT** or **PREV**, or **SELECT** and the desired **port** number.
- 7. Repeat steps 4 through 6.
- 8. Press END.

- If the charge limitation is set "0", no restriction is applied.
- To assign all ports to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for port 01.
- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- The displayed currency can be programmed by [144] Currency Assignment.

Budget Management Charge Fee Reference

3.2 System Programming

[109] Expansion Unit Type

Description

Assigns the type of expansion units to be used in the system. This allows the system to identify the unit in each expansion unit location.

Selection

KX-TD816

Areas 1; 2 = C (4 CO) / S2 (2 S0) / S6 (6 S0) / BD (4 DID-Pulse/DTMF) / MD (4 DID-MFC) / EM (4 E&M) / E (EXT) / A (16 SLT)

KX-TD1232

- · Master / Slave
- Areas 1; 2; 3 = C (4 CO) / S2 (2 S0) / S6 (6 S0) / PR (1 PRI) / BD (4 DID-Pulse/DTMF) / MD (4 DID-MFC) / EM (4 E&M) / EL (1 E1) / E1 (8 EXT1) / E2 (8 EXT2) / A1 (16 SLT1) / A2 (16 SLT2)

(Master system only: PR, EL)

Default

KX-TD816: C;E

KX-TD1232: Master and Slave – C;E1;E2

Programming

KX-TD816

1. Enter 109.

```
Display: 109 EXPAND C,E1
```

2. Press NEXT.

```
Display example: Master:C ;E
```

- **3.** Keep pressing **SELECT** until the desired selection in Area 1 is displayed.
- **4.** Press **to programme Area 2, if required.**
- **5.** Keep pressing **SELECT** until the desired selection in the Area 2 is displayed.
- 6. Press STORE.
- 7. Press END.

KX-TD1232

1. Enter 109.

```
Display: 109 EXPAND C,E1
```

2. Press **NEXT** to programme the Master System.

```
To programme "Slave", press NEXT again.

Display example: Master:C ;E1;E2
```

- **3.** Keep pressing **SELECT** until the desired selection in Area 1 is displayed.
- **4.** Press to programme another Area, if required.
- **5.** Keep pressing **SELECT** until the desired selection in the Area is displayed.
- **6.** Repeat steps 4 and 5 until all the required entries are completed.
- 7. Press STORE.

If only one system is in operation, go to step 10.

8. Press **NEXT** to programme the Slave System.

```
Display example: Slave :C ;E1;E2
```

9. Repeat steps 3 through 7, if required.

10.Press END.

Conditions

- The following units can be installed in the slots.
 - C (4-CO lines): KX-TD180
 - S2 (2-ISDN S0 lines): KX-TD280
 - S6 (6-ISDN S0 lines): KX-TD286
 - PR (1-PRI ISDN line): KX-TD290
 - BD (4-DID lines with Pulse/DTMF): KX-TD185
 - MD (4-DID lines with MFC): KX-TD185
 - EM (4-E&M lines): KX-TD184
 - EL (1-E1 line): KX-TD188
 - E, E1, E2 (8-Extension lines): KX-TD170
 - A, A1, A2 (16-SLT lines): KX-TD174
- There are two expansion areas in the KX-TD816, areas 1 and 2 from bottom to top. One extension line unit and one outside line (CO / ISDN S0 / DID / E&M) unit can be installed.
- There are three expansion areas in each system for the KX-TD1232, areas 1, 2 and 3 from bottom to top. Up to two extension line units and one outside line (CO / ISDN S0 / E1 / DID / E&M) unit can be installed.
- The KX-TD188 and KX-TD290 can only be installed to the KX-TD1232 Master system. In this case, the basic and extended outside line in the Slave system cannot be used.
- If the KX-TD290 is installed to the KX-TD1232 Master system, the KX-TD280 or KX-TD286 can be installed to the Slave system only to use the ISDN extension lines.
- An out-of-service system is unassignable. In this case, skip steps 8 and 9 for the KX-TD1232.
- For the KX-TD1232, if only the Slave system is in operation, the display shows "Slave" in step 2.
- After changing the setting, turn the Power Switch off and on once. Otherwise, the previous setting will remain.

None

[112] ISDN Network Type Assignment

Description

Assigns the type of ISDN network.

Selection

ISDN network mode: 000 through 255

Default

KX-TD816HK/KX-TD1232HK: Mode 39

Others: Mode 51

Programming

1. Enter 112.

Display: 112 SWITCH TYPE

2. Press NEXT.

Display example: Mode 51

3. Enter an ISDN network mode.

To change the current entry, press **CLEAR** and enter the new network mode.

- 4. Press STORE.
- 5. Press END.

Conditions

None

Features Guide References

Integrated Services Digital Network (ISDN)

DDI Number / Phantom Extension Number Conversion [140]

Description

Used to convert a Direct Dialling In (DDI) number to a phantom extension number in order to send an incoming DDI call to a specific extension.

Selection

- Location number: 000 through 128
- DDI number: 1 through 6 digits / Blank (no number)

Default

All locations - Blank

Programming

1. Enter 140.

```
Display: 140 PHANTOM DDI
```

2. Press NEXT.

```
Display: Location NO?→
```

3. Enter a location number.

To enter location number 001, you can also press **NEXT**.

```
Display example: 001:
```

4. Enter a **DDI number**.

To delete the current entry, press **CLEAR** and enter the new number.

To assign no number, press **CLEAR**.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired location number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• Each DDI number can be one through six digits, consisting of **0 through 9**.

Features Guide References

Direct Dialling In (DDI)

[149] ISDN Data Assignment

Description

Assigns the following ISDN data.

Selection

- (1) ADPCM Type: A-Law / M-Law
- (2) Status Message: Send / Stop
- (3) Status Receiving Mode: **Disc** (disconnect) / **Ignr** (ignore)
- (4) Number Type:
 - 0 (Unknown) / 1 (International Number) / 2 (National Number / 3 (Network Specific Number) / 4 (Subscriber Number)
- (5) Numbering Plan:
 - **0** (Unknown) / **1** (ISDN/Telephone Numbering Plan) / **8** (National Standard Numbering Plan) / **9** (Private Numbering Plan)
- (6) T200 Extension Timer (seconds): **0.0 through 255.0**
- (7) T203 Extension Timer (seconds): 0.0 through 255.0
- (8) T302 Extension Timer (seconds): **0.0 through 255.0**
- (9) T303 Extension Timer (seconds): 0.0 through 255.0
- (10) T304 Extension Timer (seconds): **0.0 through 255.0**
- (11) T305 Extension Timer (seconds): 0.0 through 255.0
- (12) T306 Extension Timer (seconds): 0.0 through 255.0
- (13) T310 Extension Timer (seconds): 0.0 through 255.0
- (14) T3D3 Extension Timer (seconds): **0.0 through 255.0**
- (15) T3D9 Extension Timer (seconds): **0.0 through 255.0**
- (16) T200 CO Timer (seconds): **0.0 through 255.0**
- (17) T203 CO Timer (seconds): **0.0 through 255.0**
- (18) T302 CO Timer (seconds): **0.0 through 255.0**
- (19) T303 CO Timer (seconds): **0.0 through 255.0**
- (20) T304 CO Timer (seconds): **0.0 through 255.0**
- (21) T305 CO Timer (seconds): **0.0 through 255.0**
- (22) T306 CO Timer (seconds): **0.0 through 255.0**
- (23) T310 CO Timer (seconds): **0.0 through 255.0**
- (24) T3D3 CO Timer (seconds): **0.0 through 255.0**
- (25) T3D9 CO Timer (seconds): **0.0 through 255.0**

Default

- (1) ADPCM Type: KX-TD816HK / KX-TD1232HK=M-Law, Others=A-Law
- (2) Status Message: Send

- (3) Status Receiving Mode: Disc
- (4) Numbering Type: 0 (Unknown)
- (5) Numbering Plan: 1 (ISDN/Telephone Numbering Plan)
- (6) T200 Extension Timer: 1.0 s
- (7) T203 Extension Timer: 10.0 s
- (8) T302 Extension Timer: 15.0 s
- (9) T303 Extension Timer: 4.0 s
- (10) T304 Extension Timer: 20.0 s
- (11) T305 Extension Timer: 30.0 s
- (12) T306 Extension Timer: 30.0 s
- (13) T310 Extension Timer: 40.0 s
- (14) T3D3 Extension Timer: 30.0 s
- (15) T3D9 Extension Timer: 20.0 s
- (16) T200 CO Timer: 1.0 s
- (17) T203 CO Timer: 10.0 s
- (18) T302 CO Timer: 15.0 s
- (19) T303 CO Timer: 4.0 s
- (20) T304 CO Timer: 30.0 s
- (21) T305 CO Timer: 30.0 s
- (22) T306 CO Timer: 0.0 s
- (23) T310 CO Timer: 100.0 s
- (24) T3D3 CO Timer: 60.0 s
- (25) T3D9 CO Timer: 20.0 s

Programming

1. Enter 149.

Display: 149 ISDN DATA

2. Press **NEXT** repeatedly until the desired item is displayed.

Display example: ADPCM TYPE: A-Law

3. For Data (1) through (3), keep pressing **SELECT** until the desired selection is displayed. For Data (4) through (25), enter the desired **parameter**.

To change the current entry, press **CLEAR** and enter the new parameter.

To enter decimal point for Data (6) through (25), press \times .

- 4. Press STORE.
- **5.** To programme another items, press **NEXT** or **PREV**, or **SELECT**.
- **6.** Repeat steps 3 through 5.
- 7. Press END.

Conditions

• After this assignment, you should reset the system so that this assignment is activated.

Features Guide References

Integrated Services Digital Network (ISDN)

DID Transfer Table for DDI Call [154]

Description

Selects whether the DID Transfer Table is used for DDI calls.

Selection

Use / No Use

Default

No Use

Programming

1. Enter 154.

```
Display: 154 DDI TRANS
```

2. Press NEXT.

```
Display example: No Use
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

None

Features Guide References

Direct Dialling In (DDI)

Direct Inward Dialling (DID)

3.3 ISDN Line Programming

[418] Outside Line Number Assignment for ISDN / E1

Description

Assigns your ISDN network or E1 line telephone number.

Your ISDN network telephone number is sent to the called party with the CLIP (Calling Line Identification Presentation) feature and to the calling party with the COLP (Connected Line Identification Presentation) feature offered by the ISDN network service.

Your E1 line telephone number is sent to the called party (Outgoing ANI).

Selection

• Outside line (CO) number:

KX-TD816 – **01 through 08** KX-TD1232 – **01 through 54**

• Telephone number: 16 digits (max.)

Default

All outside lines - Not stored

Programming

1. Enter 418.

Display: 418 CO LINE #

2. Press NEXT.

Display: CO Line NO?→

3. Enter an outside line number.

To enter outside line number 01, you can also press **NEXT**.

```
Display example: CO01:Not Stored
```

4. Enter a telephone number.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Each number has a maximum of 16 digits, consisting of **0 through 9**.
- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To display parts of the number which have scrolled off the display, press \blacksquare or \blacksquare .
- Outside lines 25 through 54 become available when the KX-TD290 or KX-TD188 expansion unit is installed in the KX-TD1232.
- Your telephone number will be informed to the called party if the outgoing CLIR feature is disabled for the ISDN line in programme [419] ISDN Outgoing CLIR Service Assignment.
- Your telephone number will be informed to the calling party if the COLP feature is enabled for the ISDN line in programme [990] System Additional Information, Area 06-Bit 11.

Features Guide References

Calling / Connected Line Identification Presentation (CLIP / COLP)
Calling Line Identification Restriction (CLIR)
E1 Line Service
Incoming Outside Call Information Display

[419] ISDN Outgoing CLIR Service Assignment

Description

Assigns whether ISDN CLIR (Calling Line Identification Restriction) service is enabled or disabled for outgoing outside calls. If disabled, the subscriber's number of your system is informed to the called party.

Selection

• Outside line (CO) number:

```
KX-TD816 - 01 through 08, * KX-TD1232 - 01 through 24, * (\times=all outside lines)
```

• Enable / Disable

Default

All outside lines - Enable

Programming

1. Enter 419.

```
Display: 419 ISDN CLIR
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

```
To enter outside line number 01, you can also press NEXT. Display example: CO01:Enable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To assign all outside lines to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 01.
- Programme [418] Outside Line Number Assignment for ISDN / E1 is used to store the subscriber's number of your system that is informed to the called party.

Calling Line Identification Restriction (CLIR)

[420] ISDN Ring Service Assignment

Description

Assigns the ISDN ring service type for each outside line.

ISDN: A call is received using the Direct Dialling In (DDI) or Multiple Subscriber Numbers (MSN) ringing service which is assigned in programme [425] ISDN Configuration.

Regular: A call is received using Direct In Lines (DIL) 1:1 or 1:N which are assigned in programmes [407-408] DIL 1:1 Extension – Day / Night and [603-604] DIL 1:N Extension and Delayed Ringing – Day / Night.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• ISDN / Regular

Default

All outside lines – Regular

Programming

1. Enter 420.

```
Display: 420 ISDN RING
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter outside line number 01, you can also press **NEXT.**

```
Display example: CO01:Regular
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.

- To assign all outside lines to one selection, press the *key in step 3. In this case, the display shows the contents programmed for outside line 01.
- Lunch / break mode will only work when "Regular" is assigned in this programme.

Integrated Services Digital Network (ISDN)

[421] DDI Removed Digit / Added Number Assignment

Description

Assigns the removed digits and added number to a subscriber's number, and a DDI number sent from the network.

Selection

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

- Removed digits: **0 through 16** (0=no deleting)
- Added number: 4 digits (max.)

Default

All outside lines – Removed digit=0; Added number=Not stored

Programming

1. Enter 421.

```
Display: 421 DDI RMV/ADD
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter outside line number 01, you can also press **NEXT**.

```
Display example: CO01: 0,
```

4. Enter the **digit(s)** to be deleted.

To change the current entry, press CLEAR and enter the new number.

5. Press **▶**.

```
Display example: CO01: 3,
```

6. Enter the **number(s)** to be added.

To change the current entry, press **CLEAR** and enter the new number.

- 7. To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- 8. Press STORE.
- 9. Press END.

Conditions

- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- Each added number has a maximum of four digits, consisting of **0 through 9**.
- To assign all outside lines to the same number, press the \times key in step 3. In this case, the display will show the contents programmed for outside line 01.

• Example:

If the removed digits are assigned as "6" and the added number is assigned as "2", the number sent from the network will be changed as follows: <u>854926</u>03 Six digits are deleted and "2" is added, and the number becomes "203".

• This programme becomes available when the programme [990] System Additional Information, Area 06 - bit 12, is assigned to use this programme.

Features Guide References

Direct Dialling In (DDI)

[423] ISDN Port Type

Description

Assigns the type of each port to either outside line or extension line on an ISDN port basis.

Selection

• Port number:

```
KX-TD816 – 01 through 04, *
KX-TD1232 – 01 through 12, *
(*=all ports)
```

• CO (outside line) / Extension

Default

```
All ports – CO
```

Programming

1. Enter 423.

```
Display: 423 ISDN TYPE
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a port number.

```
To enter port number 01, you can also press NEXT.
```

- Display example: #01:CO
- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another port, press **NEXT** or **PREV**, or **SELECT** and the desired **port number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD816, port numbers 05 and 06 are fixed as "Extension".
- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- To assign all ports to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Port 01.
- After this assignment, you should reset the system to make this assignment effective.

Integrated Services Digital Network (ISDN)

[424] ISDN Layer 1 Active Mode

Description

Assigns the active mode of Layer 1 on an ISDN port basis.

Selection

• Port number:

```
KX-TD816 – 01 through 06, *
KX-TD1232 – 01 through 12, *
(*=all ports)
```

Permanent / Call

Default

```
KX-TD816: Port 05 and 06 – Call; Other ports – Permanent KX-TD1232: All ports – Permanent
```

Programming

1. Enter 424.

```
Display: 424 LAYER1 MODE
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a **port number.**

```
To enter port number 01, you can also press NEXT. Display example: #01:Permanent
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another port, press **NEXT** or **PREV**, or **SELECT** and the desired **port number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- To assign all ports to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Port 01.
- After this assignment, you should reset the system to make this assignment effective.

Integrated Services Digital Network (ISDN)

[425] ISDN Configuration

Description

Assigns the configuration on an ISDN port basis. This programme is available for ISDN extensions only.

Selection

• Port number:

```
KX-TD816 – 01 through 06, *
KX-TD1232 – 01 through 12, *
(*=all ports)
```

• **Point** (point to point) / **Multipoint** (point to multipoint)

Default

```
KX-TD816: Ports 05 and 06 – Multipoint; Other ports – Point KX-TD1232: All ports – Point
```

Programming

1. Enter 425.

```
Display: 425 ACCESS MODE
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a port number.

```
To enter port number 01, you can also press NEXT.
```

```
Display example: #01:Point
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- To programme another port, press NEXT or PREV, or SELECT and the desired port number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- If one equipment is connected to the ISDN port, select "Point". If multiple equipment are connected, select "Multipoint".
- To assign all ports to one selection, press the ★ key in step 3. In this case, the display shows the contents programmed for Port 01.

• After this assignment, you should reset the system to make this assignment is effective.

Features Guide References

Integrated Services Digital Network (ISDN)

[426] ISDN Data Link Mode

Description

Assigns the data link mode on an ISDN port basis.

Selection

• Port number:

```
KX-TD816 – 01 through 06, *
KX-TD1232 – 01 through 12, *
(*=all ports)
```

Permanent / Call

Default

```
KX-TD816: Port 05 and 06 – Call; Other ports – Permanent KX-TD1232: All ports – Permanent
```

Programming

1. Enter 426.

```
Display: 426 LAYER2 MODE
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a **port number.**

```
To enter port number 01, you can also press NEXT. Display example: #01:Permanent
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another port, press **NEXT** or **PREV**, or **SELECT** and the desired **port number.**
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- To assign all ports to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Port 01.
- After this assignment, you should reset the system to make this assignment effective.

Integrated Services Digital Network (ISDN)

[427] ISDN TEI Mode

Description

Assigns the Terminal Endpoint Identifier (TEI) mode on an ISDN port basis.

Selection

• Port number:

```
KX-TD816 – 01 through 06, *
KX-TD1232 – 01 through 12, *
(*=all ports)
```

• Fix 0 through 63 / Automatic

Default

```
KX-TD816: Port 05 and 06 – Automatic; Other ports – Fix 0 KX-TD1232: All ports – Fix 0
```

Programming

1. Enter 427.

```
Display: 427 TEI ASSIGN
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a port number.

```
To enter port number 01, you can also press NEXT.
```

```
Display example: #01:Fix 0
```

4. Enter the **TEI**.

To change the current entry, press **CLEAR** and enter the new number. If you do not enter a number, "Automatic" is automatically assigned.

- 5. Press STORE.
- **6.** To programme another port, press **NEXT** or **PREV**, or **SELECT** and the desired **port number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- If "Point" is selected in programme [425], assign the fixed TEI. If "Multipoint" is selected, assign "Automatic".

- To assign all ports to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Port 01.
- After this assignment, you should reset the system to make this assignment effective.

Integrated Services Digital Network (ISDN)

[428] ISDN Extension Multiple Subscriber Number

Description

Selects whether the Multiple Subscriber Numbers (MSN) are allocated to each terminal equipment (e.g. ISDN telephone) on the ISDN S0 bus or not on an ISDN port basis.

Selection

• Port number:

```
KX-TD816 – 01 through 06, *
KX-TD1232 – 01 through 12, *
(*=all ports)
```

• Enable / Disable (no number)

Default

```
All ports – Disable
```

Programming

1. Enter 428.

```
Display: 428 MSN SERVICE
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a **port number.**

```
To enter port number 01, you can also press NEXT.
```

```
Display example: #01:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- To programme another port, press NEXT or PREV, or SELECT and the desired port number.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- To assign all ports to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Port 01.
- You must assign on extension number to the ISDN terminal beforehand. For details, refer to your terminal's manual.

Multiple Subscriber Numbers (MSN) Ringing Service

[429] ISDN Extension Progress Tone

Description

Enables or disables to send the progress tone to ISDN extension on ISDN port basis.

Selection

• Port number:

```
KX-TD816 – 01 through 06, *
KX-TD1232 – 01 through 12, *
(*=all ports)
```

• Enable / Disable (no tone)

Default

```
All ports - Disable
```

Programming

1. Enter 429.

```
Display: 429 ISDN TONE
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a **port number**.

```
To enter port number 01, you can also press NEXT.
```

```
Display example: #01:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another port, press **NEXT** or **PREV**, or **SELECT** and the desired **port number**.
- **7.** Repeat steps 4 through 6.
- **8.** Press END.

Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- To assign all ports to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Port 01.
- After this assignment, you should reset the system to make this assignment effective.

Integrated Services Digital Network (ISDN) Extension

[454] MSN Assignment

Description

Assigns a maximum of ten Multiple Subscriber Numbers (MSN) on an ISDN port basis.

Selection

• Port number:

```
KX-TD816 – 01 through 06
KX-TD1232 – 01 through 12
```

- Location number: 01 through 10
- MSN: 20 digits (max.)

Default

All ports – All locations – Not stored

Programming

1. Enter 454.

```
Display: 454 MSN ASSIGN
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a port number.

To enter port number 01, you can also press **NEXT.**

```
Display example: 01:01:Not Stored

Location number

Port number
```

4. Enter a MSN.

To delete the current entry, press CLEAR.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV**.
- **7.** Repeat steps 4 through 6.
- **8.** To programme another port, press **SELECT** and the desired **port number**.
- **9.** Repeat steps 4 through 8.
- 10.Press END.

Conditions

• Each MSN can be 20 digits, consisting of **0 through 9**, *****, **#** and **PAUSE**.

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- This programme becomes available when "Multipoint" is selected in programme [425] ISDN Configuration.

Integrated Services Digital Network (ISDN) Multiple Subscriber Numbers (MSN) Ringing Service

[455-456] Extension Ringing Assignment – Day / Night for ISDN

Description

Determines which extension receives a call on a MSN basis of the ISDN port in both the day and night modes.

Selection

• Port number:

```
KX-TD816 – 01 through 06
KX-TD1232 – 01 through 12
```

- Location number: 01 through 10
- Extension number:

2 through 4 digits / 0 (operator) / Disable

Default

All ports - All locations - Disable (Day / Night)

Programming

1. Enter a programme address (455 for day or 456 for night).

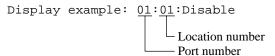
```
Display example: 455 MSN RING DAY
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a port number.

To enter port number 01, you can also press **NEXT.**



4. Enter an extension number or 0.

To change the current entry, press **CLEAR** and enter the new number. To select "Disable", press **CLEAR**.

- 5. Press STORE.
- **6.** To programme another location, press **NEXT** or **PREV.**
- **7.** Repeat steps 4 through 6.
- **8.** To programme another port, press **SELECT** and the desired **port number.**
- **9.** Repeat steps 4 through 8.
- 10.Press END.

Conditions

- Each extension number can be 2 through 4 digits, consisting of **0 through 9.**
- These programmes become available when "Multipoint" is selected in programme [425] ISDN Configuration.
- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- Assignable extension numbers are programmed in the following programmes.
 Extension numbers [003] Extension Number Set
 ISDN extension numbers [012] ISDN Extension Number Set
 Voice Mail extension numbers [118] Voice Mail Extension Number Set
 Phantom extension numbers [124] Phantom Extension Number Set
 Floating numbers [813] Floating Number Assignment
- You can assign a MSN as a destination extension. In this case, add one digit to the ISDN extension number.

Features Guide References

Integrated Services Digital Network (ISDN)
Multiple Subscriber Numbers (MSN) Ringing Service

[460] PRI Configuration

Description

Assigns the number of B channels which are actually used out of the 30 PRI line channels. The CRC4 mode can be also assigned.

This programme is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290).

Selection

- B channel number: **0 through 30** (0=no use)
- CRC4: Enable / Disable

Default

B channel number – 0 line; CRC4 – Enable

Programming

1. Enter 460.

```
Display: 460 PRI CONFIG.1
```

2. Press NEXT.

```
Display example: Use: 0 Line
```

- **3.** Enter the **number of B channels**.
- 4. Press STORE.
- **5.** Press **NEXT** to assign the CRC4 mode.

```
Display example: CRC4:Enable
```

- **6.** Keep pressing **SELECT** until the desired selection is displayed.
- 7. Press STORE.
- 8. Press END.

Conditions

If the available number of B channels are not assigned as "0 Line", outside lines 9 through 24 will become "No Connect", and the assigned B channel numbers of outside lines starting from outside line 25 will become "Connect" automatically in programme [400] Outside Line Connection Assignment.

For example, if the B channel number is assigned as "3", outside lines 25 through 27 will become "Connect".

Features Guide References

Integrated Services Digital Network (ISDN)

[721] PRI / E1 Reference CO

Description

Assigns which outside line number system data each PRI line or E1 line uses.

After assigning this programme, the following programme data will become available for PRI outside lines 25 through 54.

- [407-408] DIL 1:1 Extension Day / Night
- [419] ISDN Outgoing CLIR Service Assignment
- [420] ISDN Ring Service Assignment
- [421] DDI Removed Digit / Added Number Assignment
- [603-604] DIL 1:N Extension and Delayed Ringing Day / Night
- [605-606] Outgoing Permitted Outside Line Assignment Day / Night
- [614-615] Outgoing Permitted Outside Line Assignment Day / Night for ISDN Extension

After assigning this programme, the following programme data will become available for E1 outside lines 25 through 54.

- [407-408] DIL 1:1 Extension Day / Night
- [457-458] DIL 1:1 Lunch / Break Group
- [603-604] DIL 1:N Extension and Delayed Ringing Day / Night
- [605-606] Outgoing Permitted Outside Line Assignment Day / Night

This programme is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290) or with the E1 Unit (KX-TD188).

Selection

- PRI / E1 outside line (CO) number: 25 through 54, * (*=all outside lines)
- Outside line (CO) number: 01 through 24

Default

All outside lines (PRI / E1 line) - CO 09

Programming

1. Enter 721.

Display: 721 REFERENCE CO

2. Press NEXT.

Display: CO Line NO? \rightarrow

3. Enter the PRI / E1 outside line number.

Display example: CO25:09

- 4. Enter the desired outside line number.
- 5. Press STORE.

Conditions

• To assign all outside lines to the same selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 25.

Features Guide References

E1 Line Service Integrated Services Digital Network (ISDN)

3.4 Extension Programming

[611] DDI Number / Extension Number Conversion

Description

Used to convert a Direct Dialling In (DDI) number to an extension number in order to place an incoming DDI call at a specific extension.

Selection

• Jack number:

```
KX-TD816 – 01 through 16 (-1 / -2)
KX-TD1232 – 01 through 64 (-1 / -2)
(-1 = first part, -2 = second part)
```

• DDI Number: 6 digits (max.)

Default

All jacks – Not stored

Programming

1. Enter 611.

```
Display: 611 EXT DDI #
```

2. Press NEXT.

```
Display: Jack NO?→
```

3. Enter a jack number.

To enter jack number 01, you can also press **NEXT**.

To select the second part (-2), press **NEXT** after entering the jack number.

```
Display example: #01-1:
```

4. Enter a DDI number.

To delete the current entry, press **CLEAR**.

- **5.** Press **STORE**.
- **6.** To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

• There is a maximum of 128 DDI numbers. Each DDI number can be a maximum of six digits, consisting of **0 through 9**.

- For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.
- For an explanation on jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To use this programme, "DDI conversion number" must be selected in programme [990] System Additional Information, Area 06 bit 13.

Features Guide References

Direct Dialling In (DDI)

[612] DDI Number / Floating Number Conversion

Description

Used to convert a Direct Dialling In (DDI) number to an floating number in order to place an incoming DDI call at a specific floating station.

Selection

• Floating Station:

Operator / Pager 1 / Pager 2 / Pager 3 / Pager 4 / DISA 1 / DISA 2 / MODEM / EXT Group 1 / EXT Group 2 / EXT Group 3 / EXT Group 4 / EXT Group 5 / EXT Group 6 / EXT Group 7 / EXT Group 8

(Pager 2 through 4 are available for the KX-TD1232 only.)

• DDI Number: 6 digits (max.)

Default

All floating stations - Blank

Programming

1. Enter 612.

Display: 612 FLOAT DDI #

2. Press **NEXT** to programme the operator.

Display: Operator:

3. Enter a DDI number.

To delete the current entry, press **CLEAR**.

- 4. Press STORE.
- **5.** To programme another floating station, press **NEXT** or **PREV** until the desired floating station is displayed.
- **6.** Repeat steps 3 through 5.
- 7. Press END.

Conditions

- Each DDI number can be a maximum of six digits, consisting of **0 through 9**.
- To use this programme, "DDI conversion number" must be selected in programme [990] System Additional Information, Area 06 bit 13.

Features Guide References

Direct Dialling In (DDI)

[613] ISDN Class of Service

Description

Programmes a Class of Service (COS) number for each ISDN extension port. The COS determines the call handling abilities of each port.

Selection

• Port number:

```
KX-TD816 – 01 through 06, *
KX-TD1232 – 01 through 12, *
(*=all ports)
```

• COS number: 1 through 8

Default

```
All ports - COS 1
```

Programming

1. Enter 613.

```
Display: 613 ISDN COS #
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a port number.

```
To enter port number 01, you can also press NEXT.
```

```
Display example: #01:COS1
```

4. Enter a COS number.

To change the current entry, enter the new number.

- 5. Press STORE.
- **6.** To programme another port, press **NEXT** or **PREV**, or **SELECT** and the desired **port number.**
- **7.** Repeat steps 4 through 6.
- **8.** Press END.

Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- There is a maximum of eight Classes of Services. Each ISDN extension must be assigned to a Class of Service and is subject to the COS Programming for programmes [5XX] and [991], bit 5.

• To assign all ports to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Port 01.

Features Guide References

Class of Service (COS)

[614-615] Outgoing Permitted Outside Line Assignment – Day / Night for ISDN Extension

Description

Determines which outside lines can be accessed by an ISDN extension in both the day and night modes. The extension users can make outgoing outside calls using the assigned outside lines.

Selection

• Port number:

```
KX-TD816 – 01 through 06, *
KX-TD1232 – 01 through 12, *
(*=all ports)
```

• Outside line (CO) number:

```
KX-TD816 – 01 through 08, *
KX-TD1232 – 01 through 24, *
(*=all outside lines)
```

• Enabl (enable) / Disab (disable)

Default

```
All ports – All outside lines – Enabl (Day / Night)
```

Programming

1. Enter a programme address (614 for day or 615 for night).

```
Display example: 614 ISDN DAY OUT
```

2. Press NEXT.

```
Display: Port NO?→
```

3. Enter a port number.

```
To enter port number 01, you can also press NEXT. Display example: #01:C001:Enabl
```

4. Enter the desired **outside line number**, or keep pressing or until the desired outside line is displayed.

To change the current entry, enter the new number.

- **5.** Keep pressing **SELECT** until the desired selection is displayed.
- 6. Press STORE.
- 7. To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **port number**.
- **8.** Repeat steps 4 through 7.
- 9. Press END.

Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- To assign all ports to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Port 01.
- To assign all outside lines to one selection, press the \times key in step 4. In this case, the display shows the contents programmed for outside line 01.
- When you change a port number by pressing **NEXT** or **PREV**, the outside line number is not changed.

Example #03:CO02......Pressing **NEXT**....#04:CO02

Features Guide References

Day / Night Service
Outside Line Connection Assignment – Outgoing

[616] DDI Number / ISDN Extension Number Conversion

Description

Used to convert a Direct Dialling In (DDI) number to an ISDN extension number in order to place an incoming DDI call at a specific extension.

Selection

• Port number:

```
KX-TD816 – 01 through 06
KX-TD1232 – 01 through 12
```

• DDI Number: 6 digits (max.)

Default

```
All ports – Blank
```

Programming

1. Enter 616.

```
Display: 616 ISDN DDI #
```

2. Press **NEXT**.

```
Display: Port NO?→
```

3. Enter a port number.

To enter port number 01, you can also press **NEXT**.

```
Display: #01:
```

4. Enter a **DDI number**.

To delete the current entry, press **CLEAR**.

- **5.** Press **STORE**.
- **6.** To programme another floating station, press **NEXT** or **PREV** or **SELECT** and the desired port number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- There is a maximum of 128 DDI numbers. Each DDI number can be a maximum of six digits, consisting of **0 through 9**.
- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- To use this programme, "DDI conversion number" must be selected in programme [990] System Additional Information, Area 06 bit 13.

Features Guide References

Direct Dialling In (DDI)

[617] CLIP / COLP Number Assignment for Extension

Description

Selects the type of additional number for the CLIP and COLP information when making and answering a call through an ISDN line. You can select the type from one of the following:

DDI: Subscriber number + DDI number **None**: Subscriber number + Optional number

Selection

• Jack number:

```
KX-TD816 – 01 through 16 (-1 / -2)
KX-TD1232 – 01 through 64 (-1 / -2)
(-1 = first part, -2 = second part)
```

• Types: DDI / Any number, 6 digits (max.)

Default

```
All jacks - DDI
```

Programming

1. Enter 617.

```
Display: 617 CLIP/COLP #

2. Press NEXT.

Display: Jack NO?→
```

3. Enter a jack number.

To enter jack number 01, you can also press NEXT.

To select the second part (-2), press **NEXT** after entering the jack number.

```
Display example: #01-1:DDI
```

- **4.** Press **SELECT** until the desired selection is displayed and enter the number, if required.
 - To change the current entry, press CLEAR and enter the new number.
- **5.** Press **STORE**.
- 6. To programme another jack, press NEXT or PREV, or SELECT and the desired jack number.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

• For the KX-TD1232, jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.

• To use this programme, "DDI conversion number" must be selected in programme [990] System Additional Information, Area 06 - bit 13.

Features Guide References

Calling / Connected Line Identification Presentation (CLIP / COLP)

[618] CLIP / COLP Number Assignment for ISDN Extension

Description

Selects the type of additional number for the CLIP and COLP information when making and answering a call through an ISDN line. You can select the type from one of the following:

DDI: Subscriber number + DDI number **None**: Subscriber number + Optional number

Selection

• Port number:

KX-TD816 – **01 through 06** KX-TD1232 – **01 through 12**

• Types: **DDI / Any number, 6 digits (max.)**

Default

All ports – DDI

Programming

1. Enter 618.

Display: 618 ISDN C/COLP

2. Press **NEXT**.

Display: Port NO?→

3. Enter a **port number**.

To enter port number 01, you can also press **NEXT**.

```
Display example: #01:DDI
```

- **4.** Press **SELECT** until the desired selection is displayed and enter the number, if required. To change the current entry, press **CLEAR** and enter the new number.
- **5.** Press **STORE**.
- **6.** To programme another port, press **NEXT** or **PREV**, or **SELECT** and the desired **port number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and 07 through 12 are for the Slave, if available.
- To use this programme, "DDI conversion number" must be selected in programme [990] System Additional Information, Area 06 bit 13.

Features Guide References

Calling / Connected Line Identification Presentation (CLIP / COLP)

Section 4 E1 Programming

4.1 System Programming

[109] Expansion Unit Type

Description

Assigns the type of expansion units to be used in the system. This allows the system to identify the unit in each expansion unit location.

Selection

KX-TD816

Areas 1; 2 = C (4 CO) / S2 (2 S0) / S6 (6 S0) / BD (4 DID-Pulse/DTMF) / MD (4 DID-MFC) / EM (4 E&M) / E (EXT) / A (16 SLT)

KX-TD1232

- · Master / Slave
- Areas 1; 2; 3 = C (4 CO) / S2 (2 S0) / S6 (6 S0) / PR (1 PRI) / BD (4 DID-Pulse/DTMF) / MD (4 DID-MFC) / EM (4 E&M) / EL (1 E1) / E1 (8 EXT1) / E2 (8 EXT2) / A1 (16 SLT1) / A2 (16 SLT2)

(Master system only: PR, EL)

Default

KX-TD816: C;E

KX-TD1232: Master and Slave – C;E1;E2

Programming

KX-TD816

1. Enter 109.

```
Display: 109 EXPAND C,E1
```

2. Press NEXT.

```
Display example: Master:C ;E
```

- **3.** Keep pressing **SELECT** until the desired selection in Area 1 is displayed.
- **4.** Press **to programme Area 2, if required.**
- **5.** Keep pressing **SELECT** until the desired selection in the Area 2 is displayed.
- 6. Press STORE.
- 7. Press END.

KX-TD1232

1. Enter 109.

342

```
Display: 109 EXPAND C,E1
```

2. Press **NEXT** to programme the Master System.

```
To programme "Slave", press NEXT again.

Display example: Master:C ;E1;E2
```

- **3.** Keep pressing **SELECT** until the desired selection in Area 1 is displayed.
- **4.** Press to programme another Area, if required.
- **5.** Keep pressing **SELECT** until the desired selection in the Area is displayed.
- **6.** Repeat steps 4 and 5 until all the required entries are completed.
- 7. Press STORE.

If only one system is in operation, go to step 10.

8. Press **NEXT** to programme the Slave System.

```
Display example: Slave :C ;E1;E2
```

9. Repeat steps 3 through 7, if required.

10.Press END.

Conditions

- The following units can be installed in the slots.
 - C (4-CO lines): KX-TD180
 - S2 (2-ISDN S0 lines): KX-TD280
 - S6 (6-ISDN S0 lines): KX-TD286
 - PR (1-PRI ISDN line): KX-TD290
 - BD (4-DID lines with Pulse/DTMF): KX-TD185
 - MD (4-DID lines with MFC): KX-TD185
 - EM (4-E&M lines): KX-TD184
 - EL (1-E1 line): KX-TD188
 - E, E1, E2 (8-Extension lines): KX-TD170
 - A, A1, A2 (16-SLT lines): KX-TD174
- There are two expansion areas in the KX-TD816, areas 1 and 2 from bottom to top. One extension line unit and one outside line (CO / ISDN S0 / DID / E&M) unit can be installed.
- There are three expansion areas in each system for the KX-TD1232, areas 1, 2 and 3 from bottom to top. Up to two extension line units and one outside line (CO / ISDN S0 / E1 / DID / E&M) unit can be installed.
- The KX-TD188 and KX-TD290 can only be installed to the KX-TD1232 Master system. In this case, the basic and extended outside line in the Slave system cannot be used.
- If the KX-TD290 is installed to the KX-TD1232 Master system, the KX-TD280 or KX-TD286 can be installed to the Slave system only to use the ISDN extension lines.
- An out-of-service system is unassignable. In this case, skip steps 8 and 9 for the KX-TD1232.
- For the KX-TD1232, if only the Slave system is in operation, the display shows "Slave" in step 2.
- After changing the setting, turn the Power Switch off and on once. Otherwise, the previous setting will remain.

Features Guide References

None

4.2 E1 Outside Line Programming

[418] Outside Line Number Assignment for ISDN / E1

Description

Assigns your ISDN network or E1 line telephone number.

Your ISDN network telephone number is sent to the called party with the CLIP (Calling Line Identification Presentation) feature and to the calling party with the COLP (Connected Line Identification Presentation) feature offered by the ISDN network service.

Your E1 line telephone number is sent to the called party (Outgoing ANI).

Selection

• Outside line (CO) number:

KX-TD816 – **01 through 08** KX-TD1232 – **01 through 54**

• Telephone number: 16 digits (max.)

Default

All outside lines - Not stored

Programming

1. Enter 418.

```
Display: 418 CO LINE #
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter outside line number 01, you can also press **NEXT**.

```
Display example: CO01:Not Stored
```

4. Enter a telephone number.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Each number has a maximum of 16 digits, consisting of **0 through 9**.
- For the KX-TD1232, outside lines 01 through 12 are for the Master System and outside lines 13 through 24 are for the Slave, if available.
- To display parts of the number which have scrolled off the display, press \blacksquare or \blacksquare .
- Outside lines 25 through 54 become available when the KX-TD290 or KX-TD188 expansion unit is installed in the KX-TD1232.
- Your telephone number will be informed to the called party if the outgoing CLIR feature is disabled for the ISDN line in programme [419] ISDN Outgoing CLIR Service Assignment.
- Your telephone number will be informed to the calling party if the COLP feature is enabled for the ISDN line in programme [990] System Additional Information, Area 06-Bit 11.

Features Guide References

Calling / Connected Line Identification Presentation (CLIP / COLP)
Calling Line Identification Restriction (CLIR)
E1 Line Service
Incoming Outside Call Information Display

4.3 Extension Programming

[622] Extension ANI Number

Description

Assigns the identification number of the calling party to utilise the Automatic Number Identification (ANI) feature provided by the E1 line service.

This programme is available for the KX-TD1232 only.

Selection

- Jack number: 01 through 64 (-1/-2), \star (\star =all jacks, -1 = first part, -2 = second part)
- ANI number: 16 digits (max.)

Default

All jacks-1/2 – Not stored

Programming

1. Enter 622.

Display: 622 EXT ANI NO

2. Press NEXT.

Display: Jack NO?→

3. Enter a **jack number**.

To enter jack number 01, you can also press **NEXT.**

To select the second part (-2), press **NEXT** after entering the jack number.

Display example: #01-1:Not Stored

4. Enter the ANI number.

To delete the current entry, press **CLEAR**.

To change the current entry, press **CLEAR** and enter the new number.

- 5. Press STORE.
- **6.** To programme another jack, press **NEXT** or **PREV**, or **SELECT** and the desired **jack number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Each number has a maximum of 16 digits, consisting of **0 through 9**.
- Jack numbers 01 through 32 are for the Master System and 33 through 64 are for the Slave, if available.

- For an explanation of jack numbering, see "Rotation of jack number" in Section 1.3 Programming Methods.
- To assign all jacks to one selection, press the \times key in step 3. In this case, the display shows the contents programmed for Jack 01.

Features Guide References

E1 Line Service

4.4 E1 Line Programming

[707] E1 Clock Mode

Description

Assigns a clock mode for the E1 line. This programme is available for the KX-TD1232 only.

Selection

External / Internal

Default

External

Programming

1. Enter 707.

Display: 707 CLOCK MODE

2. Press NEXT.

Display example: External

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

If "External" is selected, the system works using the external clock of the central office or the other PBX if connected.

If "Internal" is selected, your system supplies the internal clock to the other PBX.

Features Guide References

E1 Line Service

[720] E1 TIE Ringing Service

Description

Sets a call receiving type for the E1 channels assigned to TIE. If "DIL" is selected, DIL 1:1 or DIL 1:N will perform.

This programme is available for the KX-TD1232 only.

Selection

- Outside (CO) line number: 25 through 54, * (*= all outside lines from 25 to 54)
- Type: TIE / DIL

Default

All outside lines – TIE

Programming

1. Enter 720.

```
Display: 720 TIE RING
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an **outside line number**.

To enter an outside line number 25, you can also press **NEXT**.

```
Display example: CO Line NO?→25
```

4. Press NEXT.

```
Display example: CO25:TIE
```

- **5.** Keep pressing **SELECT** until the desired selection is displayed.
- **6.** Press **STORE**.
- **7.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- **8.** Repeat steps 4 through 7.
- 9. Press END.

Conditions

If "TIE" is selected for the E1 channels assigned to DR2, then not the DID, but the DIL 1:1 or DIL 1:N will perform.

Features Guide References

E1 Line Service

TIE Line Service

[721] PRI / E1 Reference CO

Description

Assigns which outside line number system data each PRI line or E1 line uses.

After assigning this programme, the following programme data will become available for PRI outside lines 25 through 54.

- [407-408] DIL 1:1 Extension Day / Night
- [419] ISDN Outgoing CLIR Service Assignment
- [420] ISDN Ring Service Assignment
- [421] DDI Removed Digit / Added Number Assignment
- [603-604] DIL 1:N Extension and Delayed Ringing Day / Night
- [605-606] Outgoing Permitted Outside Line Assignment Day / Night
- [614-615] Outgoing Permitted Outside Line Assignment Day / Night for ISDN Extension

After assigning this programme, the following programme data will become available for E1 outside lines 25 through 54.

- [407-408] DIL 1:1 Extension Day / Night
- [457-458] DIL 1:1 Lunch / Break Group
- [603-604] DIL 1:N Extension and Delayed Ringing Day / Night
- [605-606] Outgoing Permitted Outside Line Assignment Day / Night

This programme is only available for the KX-TD1232 with the Primary Rate Interface ISDN Expansion Unit (KX-TD290) or with the E1 Unit (KX-TD188).

Selection

- PRI / E1 outside line (CO) number: 25 through 54, * (*=all outside lines)
- Outside line (CO) number: 01 through 24

Default

All outside lines (PRI / E1 line) - CO 09

Programming

1. Enter 721.

Display: 721 REFERENCE CO

2. Press NEXT.

Display: CO Line NO?→

3. Enter the PRI / E1 outside line number.

Display example: CO25:09

- **4.** Enter the desired **outside line number**.
- **5.** Press **STORE**.

Conditions

• To assign all outside lines to the same selection, press the \times key in step 3. In this case, the display shows the contents programmed for outside line 25.

Features Guide References

E1 Line Service Integrated Services Digital Network (ISDN)

[722] E1 Answer Wait Timer

Description

Assigns an automatic disconnect timer to stop making a call on E1 line, if the called party does not answer.

This programme is available for the KX-TD1232 only.

Selection

- Outside (CO) line number: 25 through 54, \star (\star = all outside lines from 25 to 54)
- Time (minutes): **0 / 1 / 2 / 3 / 4** (0=no disconnection)

Default

All outside lines – 1 min

Programming

1. Enter 722.

Display: 722 ANSWER WAIT

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an outside line number.

To enter an outside line number 25, you can also press **NEXT**.

```
Display example: CO Line NO?\rightarrow25
```

4. Press NEXT.

```
Display example: CO25:1min
```

- **5.** Keep pressing **SELECT** until the desired selection is displayed.
- **6.** Press **STORE**.
- 7. To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.
- **8.** Repeat steps 4 through 7.
- 9. Press END.

Conditions

None

Features Guide References

E1 Line Service

[723] E1 Sending TIE Caller ID

Description

Sends a Caller ID on the DTMF (Dual Tone Multi-Frequency) signalling on the E1 channels assigned to TIE.

This programme is available for the KX-TD1232 only.

Selection

- Outside (CO) line number: 25 through 54, \star (\star = all outside lines from 25 to 54)
- Yes (to send) / No (not to send)

Default

All outside lines - No

Programming

1. Enter 723.

```
Display: 723 TIE CALL ID
```

2. Press NEXT.

```
Display: CO Line NO?→
```

3. Enter an **outside line number**.

To enter an outside line number 25, you can also press **NEXT**.

```
Display example: CO Line NO?→25
```

4. Press NEXT.

```
Display example: CO25:No
```

- **5.** Keep pressing **SELECT** until the desired selection is displayed.
- **6.** Press **STORE**.
- **7.** To programme another outside line, press **NEXT** or **PREV**, or **SELECT** and the desired outside line number.
- **8.** Repeat steps 4 through 6.
- 9. Press END.

Conditions

- This feature is only available between Panasonic PBXs which support a Caller ID on the DTMF.
- If a PBX code is assigned, "PBX code + extension number" will be sent. If not assigned, only the extension number will be sent.

Features Guide References

E1 Line Service TIE Line Service

[740] E1 Channel Assignment

Description

Assigns a channel type to each E1 channel. This programme is available for the KX-TD1232 only.

Selection

- E1 channel number: **01 through 30**, ★ (★=All E1 channels)
- Channel type: DR2 / E&M-C / E&M-P / Disable

Default

All E1 channels - Disable

Programming

1. Enter 740.

```
Display: 740 E1 CH ASSIGN
```

2. Press NEXT.

```
Display: CH NO?→
```

3. Enter a channel number.

To enter a channel number 01, you can also press **NEXT**.

```
Display example: CH01:Disable
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another channel, press **NEXT** or **PREV**, or **SELECT** and the desired **channel number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

To assign all channels to one selection, press the \star key in step 3. In this case, the display shows the contents programmed for channel 01.

Features Guide References

E1 Line Service

[741] **E1 Dial Mode**

Description

Assigns a dial type to each E1 channel.

For DR2 channel, only the dial sending mode can be assigned in this programme. For dial receiving mode, the assignment in programme [745] E1 DR2 Receiver is activated. For the other channels, the assignment in this programme is used for both the dial sending and receiving mode.

This programme is available for the KX-TD1232 only.

Selection

- E1 channel number: **01 through 30**, ★ (★=All E1 channels)
- Signal type: Pulse-10 / Pulse-20 / DTMF-80 / DTMF-160 / MFC-R2

Default

All E1 channels – Pulse-10

Programming

1. Enter 741.

```
Display: 741 E1 DIAL MODE
```

2. Press NEXT.

```
Display: CH NO?→
```

3. Enter a channel number.

To enter a channel number 01, you can also press **NEXT**.

```
Display example: CH01:Pulse-10
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another channel, press **NEXT** or **PREV**, or **SELECT** and the desired **channel number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Adjust to a setting of the connected telephone company.
- To assign all channels to one selection, press the *key in step 3. In this case, the display shows the contents programmed for channel 01.

Features Guide References

E1 Line Service

[742] E1 CPC (IN)

Description

Sets a CPC signal detection time to each E1 channel on receiving a call. This programme is available for the KX-TD1232 only.

Selection

- E1 channel number: **01 through 30**, ★ (★=All E1 channels)
- Time: **00 through 15** (\times 80 milliseconds is the actual time) (00=no detection)

Default

All E1 channels – 02

Programming

1. Enter 742.

```
Display: 742 E1 CPC IN
```

2. Press **NEXT**.

```
Display: CH NO?→
```

3. Enter a channel number.

To enter a channel number 01, you can also press NEXT.

```
Display example: CH01:02
```

4. Enter a time.

To assign no time, press CLEAR.

- 5. Press STORE.
- **6.** To programme another channel, press **NEXT** or **PREV**, or **SELECT** and the desired **channel number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Adjust to a setting of the connected telephone company.
- To assign all channels to one selection, press the *key in step 3. In this case, the display shows the contents programmed for channel 01.

Features Guide References

E1 Line Service

[743] E1 CPC (OUT)

Description

Sets a CPC signal detection time to each E1 channel on making a call. This programme is available for the KX-TD1232 only.

Selection

- E1 channel number: **01 through 30**, ★ (★=All E1 channels)
- Time: **00 through 15** (\times 80 milliseconds is the actual time) (00=no detection)

Default

All E1 channels – 02

Programming

1. Enter 743.

```
Display: 743 E1 CPC OUT
```

2. Press NEXT.

```
Display: CH NO?→
```

3. Enter a channel number.

To enter a channel number 01, you can also press NEXT.

```
Display example: CH01:02
```

4. Enter a time.

To assign no time, press CLEAR.

- 5. Press STORE.
- **6.** To programme another channel, press **NEXT** or **PREV**, or **SELECT** and the desired **channel number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Adjust to a setting of the connected telephone company.
- To assign all channels to one selection, press the *key in step 3. In this case, the display shows the contents programmed for channel 01.

Features Guide References

E1 Line Service

[744] E1 DID Receive Digit

Description

Sets a maximum number of the received dial digits for each E1 channel assigned to MFC-R2. This programme is available for the KX-TD1232 only.

Selection

- E1 channel number: **01 through 30**, ★ (★=All E1 channels)
- Digit to be received: 1 through 7

Default

All E1 channels – 4

Programming

1. Enter 744.

```
Display: 744 DID RCV DIAL
```

2. Press NEXT.

```
Display: CH NO?→
```

3. Enter a channel number.

To enter a channel number 01, you can also press **NEXT**.

```
Display example: CH01:4
```

4. Enter a digit.

To assign no time, press CLEAR.

- 5. Press STORE.
- **6.** To programme another channel, press **NEXT** or **PREV**, or **SELECT** and the desired **channel number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

- Adjust to a setting of the connected telephone company.
- To assign all channels to one selection, press the *key in step 3. In this case, the display shows the contents programmed for channel 01.

Features Guide References

E1 Line Service

[745] E1 DR2 Receiver

Description

Sets a dial receiving type to each E1 channel assigned to DR2. This programme is available for the KX-TD1232 only.

Selection

- E1 channel number: **01 through 30**, ★ (★=All E1 channels)
- Dial receiving type: Pulse / DTMF / MFC-R2 / Undefined

Default

All E1 channels - Undefined

Programming

1. Enter 745.

```
Display: 745 DR2 RCV DIAL
```

2. Press NEXT.

```
Display: CH NO?→
```

3. Enter a **channel number**.

To enter a channel number 01, you can also press NEXT.

```
Display example: CH01:Undefined
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- **5.** Press **STORE**.
- **6.** To programme another channel, press **NEXT** or **PREV**, or **SELECT** and the desired **channel number**.
- 7. Repeat steps 4 through 6.
- **8.** Press END.

Conditions

- Adjust to a setting of the connected telephone company.
- If "Undefined" is selected, the assignment in programme [741] E1 Dial Mode is activated.
- To assign all channels to one selection, press the *key in step 3. In this case, the display shows the contents programmed for channel 01.

Features Guide References

E1 Line Service

[747] E1 Line Coding

Description

Sets a line coding for the E1 line. This programme is available for the KX-TD1232 only.

Selection

AMI/HDB3

Default

HDB3

Programming

1. Enter 747.

```
Display: 747 LINE CODING
```

2. Press NEXT.

```
Display example: HDB3
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[748] E1 Frame Sequence

Description

Sets a frame format for the E1 line. This programme is available for the KX-TD1232 only.

Selection

PCM30 / PCM30-CRC

Default

PCM30

Programming

1. Enter 748.

```
Display: 748 FRAME SEQ
```

2. Press NEXT.

```
Display example: PCM30
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[749] E1 Frame Option

Description

Assigns a frame option for the E1 line. This programme is available for the KX-TD1232 only.

Selection

Default

C=0, D=1

Programming

1. Enter 749.

```
Display: 749 FRAME OPTION
```

2. Press NEXT.

```
Display example: C=0,D=1
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[750] E1 First Dial Timer (DR2 / TIE)

Description

Sets a timer to prevent the first dial being sent too early on the E1 channels assigned to DR2 and E&M.

This programme is available for the KX-TD1232 only.

Selection

Time: **001 through 255** (\times 32 milliseconds is the actual time)

Default

002

Programming

1. Enter 750.

```
Display: 750 FIRST DL TM
```

2. Press NEXT.

```
Display example: 1st Timer:002
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

Direct Inward Dialling (DID) E1 Line Service

TIE Line Service

[751] E1 %Break

Description

Sets a "%Break" for the E1 line assigned Pulse. This programme is available for the KX-TD1232 only.

Selection

60% / 67%

Default

60%

Programming

1. Enter 751.

```
Display: 751 %BREAK
```

2. Press NEXT.

```
Display example: E1 %Break:60%
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[752] E1 Dial Click Tone

Description

Sets to send a dial click tone of the E1 line. This programme is available for the KX-TD1232 only.

Selection

Yes (to send) / No (not to send)

Default

Yes

Programming

1. Enter 752.

```
Display: 752 CLICK TONE
```

2. Press NEXT.

```
Display example: E1 CLICK:Yes
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

None

Features Guide References

E1 Line Service

[753] E1 Inter Digit Pause

Description

Sets a time of the inter digit pause for the E1 line. This programme is available for the KX-TD1232 only.

Selection

Time (milliseconds): 630 / 830 / 1030

Default

830 ms

Programming

1. Enter 753.

```
Display: 753 DGT PAUSE
```

2. Press NEXT.

```
Display example: Pause:830msec
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[754] E1 Flash Detection

Description

Sets a flash detection time for the E1 line assigned to E&M-C. This programme is available for the KX-TD1232 only.

Selection

Time (milliseconds): 208-1016 / 80-1016 / 208-1544 / 80-1544 / Disable

Default

208-1016

Programming

1. Enter 754.

```
Display: 754 FLASH TIME
```

2. Press NEXT.

```
Display example: Flash:208-1016
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[755] E1 Answer Decision Timer

Description

Sets an answering detection time for the E1 line. This programme is available for the KX-TD1232 only.

Selection

Time: **001 through 255** (\times 32 milliseconds is the actual time)

Default

001

Programming

1. Enter 755.

```
Display: 755 ANSWER TIME
```

2. Press NEXT.

```
Display example: Answer:001
```

3. Enter a **number** for an answering detection time.

To enter number 001, you can also press **NEXT**.

- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[756] E1 Seizure ACK Wait Timer

Description

Sets the waiting time to acknowledge the seizure of the E1 line assigned to DR2. This programme is available for the KX-TD1232 only.

Selection

Time: **01 through 20** (\times 0.5 seconds is the actual time)

Default

05

Programming

1. Enter 756.

```
Display: 756 SEIZ ACK WT
```

2. Press NEXT.

```
Display example: Seiz Ack WT:05
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[757] E1 Pulse Type

Description

Sets a dialling pulse type for the E1 line. This programme is available for the KX-TD1232 only.

Selection

Type-A / Type-B / Type-C

Default

Type-A

Programming

1. Enter 757.

```
Display: 757 PULSE TYPE
```

2. Press NEXT.

```
Display example: Type-A
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[758] E1 DR2 Signalling Type

Description

Sets a DR2 signalling type.

Normal: CCITT Option-1: ANSI

Option-2: CCITT + MFC-R2 (Group-C)

Option-3: Dialling mode=ANSI, Receiving mode=CCITT This programme is available for the KX-TD1232 only.

Selection

Normal / Option-1 / Option-2 / Option-3

Default

Normal

Programming

1. Enter 758.

Display: 758 DR2 SIGNAL

2. Press NEXT.

Display example: Normal

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[759] E1 Inter Digit Timer

Description

Sets a maximum time the system waits before answering a call on the E1 line assigned to DR2 of option 1 signalling.

This programme is available for the KX-TD1232 only.

Selection

Time (seconds): 03 through 15

Default

05

Programming

1. Enter 759.

```
Display: 759 INTER DIGIT
```

2. Press NEXT.

```
Display example: Inter Digit:05
```

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[760] E1 Bit Position for Dial Pulse

Description

Sets a bit position for dial pulse on the E1 line assigned to DR2. This programme is available for the KX-TD1232 only.

Selection

A-bit / B-bit

Default

A-bit

Programming

1. Enter 760.

```
Display: 760 DIAL BIT
```

2. Press NEXT.

```
Display example: Dial Bit:A-bit
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[761] E1 Bit Position for Clear Back

Description

Sets a bit position for clear back on the E1 line assigned to DR2. This programme is available for the KX-TD1232 only.

Selection

A-bit / B-bit / AB-bit

Default

A-bit

Programming

1. Enter 761.

```
Display: 761 CLEAR BIT
```

2. Press NEXT.

```
Display example: Clear Bit:A-bit
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[762] E1 E&M Signalling Type

Description

Sets an E&M signalling type for the E1 line.

Type-1: A-bit control, default setting=0

Type-2: A-bit control, default setting=1

Type-3: B-bit control, default setting=0

Type-4: B-bit control, default setting=1

This programme is available for the KX-TD1232 only.

Selection

Type-1 / Type-2 / Type-3 / Type-4

Default

Type-2

Programming

1. Enter 762.

Display: 762 E&M SIGNAL

2. Press NEXT.

Display example: Type-2

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[763] E1 E&M Pulse Length (Seizure)

Description

Sets a pulse length when seizing an E1 line assigned to E&M. This programme is available for the KX-TD1232 only.

Selection

Time (milliseconds): 150 / 600

Default

150 ms

Programming

1. Enter 763.

Display: 763 SEIZURE

2. Press NEXT.

Display example: Seizure:150msec

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[764] E1 E&M Pulse Length (Answer)

Description

Sets a pulse length when answering an E1 line assigned to E&M. This programme is available for the KX-TD1232 only.

Selection

Time (millisecond): 150 / 600

Default

600 ms

Programming

1. Enter 764.

```
Display: 764 ANSWER
```

2. Press NEXT.

```
Display example: Answer:600msec
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[765] E1 E&M Pulse Length (Clear)

Description

Sets a pulse length when clearing an E1 line assigned to E&M. This programme is available for the KX-TD1232 only.

Selection

Time (milliseconds): 150 / 600

Default

600 ms

Programming

1. Enter 765.

Display: 765 CLEAR

2. Press NEXT.

Display example: Clear:600msec

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[766] E1 Meter Pulse Detection Mode

Description

Sets the charge meter pulse detection mode for the E1 line assigned to DR2. This programme is available for the KX-TD1232 only.

Selection

No Detection / Outgoing Only / Both Calls

Default

No Detection

Programming

1. Enter 766.

```
Display: 766 METER DETECT
```

2. Press NEXT.

```
Display example: No Detection
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[767] E1 Meter Pulse Detection Bit Position

Description

Sets a bit position for charge meter pulse detection on the E1 line assigned to DR2. This programme is available for the KX-TD1232 only.

Selection

A-bit / B-bit / C-bit / D-bit

Default

B-bit

Programming

1. Enter 767.

```
Display: 767 METER BIT
```

2. Press NEXT.

```
Display example: Meter Bit:B-bit
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[768] E1 Meter Pulse Detection Length

Description

Sets a length of charge meter pulse detection on the E1 line assigned to DR2. This programme is available for the KX-TD1232 only.

Selection

Time (milliseconds): **01 through 60** (\times 8 is the actual time)

Default

16

Programming

1. Enter 768.

```
Display: 768 METER LENGTH
```

2. Press NEXT.

```
Display example: Meter Length:16
```

- **3.** Enter a **number** for an answering detection time.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[769] E1 DSP Gain (DTMF Transmit)

Description

Assigns a DTMF transmitting level from DSP on the E1 line. This programme is available for the KX-TD1232 only.

Selection

Level: 01 through 16

Default

03

Programming

1. Enter 769.

```
Display: 769 DTMF TX DSP
```

2. Press NEXT.

```
Display: DTMF TX:03
```

- **3.** Enter a level.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[770] E1 DSP Gain (DTMF Receive)

Description

Assigns a DTMF receiving level on DSP on the E1 line. This program is available for the KX-TD1232 only.

Selection

Level: 01 through 32

Default

16

Programming

1. Enter 770.

```
Display: 770 DTMF RX DSP
```

2. Press NEXT.

```
Display: DTMF RX:16
```

- 3. Enter a level.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[771] E1 DSP Gain (MFC-R2 Transmit)

Description

Assigns a MFC-R2 transmitting level from DSP on the E1 line. This programme is available for the KX-TD1232 only.

Selection

Level: 01 through 32

Default

16

Programming

1. Enter 771.

```
Display: 771 MFC TX DSP
```

2. Press NEXT.

```
Display: MFC TX:16
```

- 3. Enter a level.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[772] E1 DSP Gain (MFC-R2 Receive)

Description

Assigns a MFC-R2 receiving level on DSP on the E1 line. This programme is available for the KX-TD1232 only.

Selection

Level: 01 through 16

Default

08

Programming

1. Enter 772.

Display: 772 MFC RX DSP

2. Press NEXT.

Display: MFC RX:08

- **3.** Enter a level.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[773] E1 Frame Error Detection

Description

Sets the frame error detection for the E1 line. This programme is available for the KX-TD1232 only.

Selection

No / Yes

Default

No

Programming

1. Enter 773.

```
Display: 773 ERR DETECT
```

2. Press NEXT.

```
Display example: Error Detect:No
```

- 3. Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

None

Features Guide References

E1 Line Service

[774] E1 Error Rate

Description

Sets the number of times of the frame error detection for the E1 line. This programme is available for the KX-TD1232 only.

Selection

Number of times: **0 through 7** (\times 16 is the actual number of time) (0=no limit)

Default

0

Programming

1. Enter 774.

```
Display: 774 ERR RATE
```

2. Press NEXT.

```
Display example: Error RATE:0
```

3. Enter the **number of times**.

To change the current entry, press **CLEAR** and enter the new number of times.

- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[775] E1 ANI Service Mode

Description

Sets the Automatic Number Identification (ANI) mode for the E1 line. This programme is available for the KX-TD1232 only.

Selection

None / Incoming Only / Outgoing Only / Both Calls

Default

None

Programming

1. Enter 775.

```
Display: 775 ANI MODE
```

2. Press NEXT.

```
Display example: None
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[776] E1 ANI Maximum Digits

Description

Assigns the maximum digits for Automatic Number Identification (ANI) number. This programme is available for the KX-TD1232 only.

Selection

Number of digits: **00 through 16** (00=no ANI number)

Default

00

Programming

1. Enter 776.

```
Display: 776 ANI MAX
```

2. Press NEXT.

```
Display example: ANI Max:00
```

3. Enter the **number of digits**.

To change the current entry, press CLEAR and enter the new number of digits.

- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[777] E1 MFC-R2 Forward Timer

Description

Sets the length of waiting time of the incoming call forward signal on the E1 line assigned to MFC-R2.

This programme is available for the KX-TD1232 only.

Selection

Time (seconds): 01 through 30

Default

15 s

Programming

1. Enter 777.

Display: 777 FORWARD

2. Press NEXT.

Display example: Forward:15

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[778] E1 MFC-R2 Backward Timer

Description

Sets the length of waiting time of the outgoing call backward signal on the E1 line assigned to MFC-R2.

This programme is available for the KX-TD1232 only.

Selection

Time (seconds): 01 through 30

Default

15 s

Programming

1. Enter 778.

```
Display: 778 BACKWARD
```

2. Press NEXT.

```
Display example: Backward:15
```

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[779] E1 MFC-R2 Disappearance Timer

Description

Sets the length of waiting time of the stop signal on the E1 line assigned to MFC-R2. This programme is available for the KX-TD1232 only.

Selection

Time (seconds): 01 through 30

Default

24 s

Programming

1. Enter 779.

```
Display: 779 DISAPPEAR
```

2. Press NEXT.

```
Display example: Disappear:24
```

3. Enter the **time**.

To change the current entry, press **CLEAR** and enter the new time.

- 4. Press STORE.
- 5. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[780] E1 Group-I

Description

Assigns a signal code for Group-I parameters on the E1 line assigned to MFC-R2. This programme is available for the KX-TD1232 only.

Selection

- Parameter number: 01 (ANI Start) / 02 (ANI Complete) / 03 (ANI Reject)
- Signal code: **00 through 15** (00=Undefine)

Default

Parameter 01 - 14; Parameter 02 - 15; Parameter 03 - 12

Programming

1. Enter 780.

```
Display: 780 GROUP-I
```

2. Press NEXT.

```
Display: Parameter NO?→
```

3. Enter a parameter number.

To enter a parameter number 01, you can also press **NEXT**.

```
Display example: 01:14
```

4. Enter the **signal code**.

To change the current entry, press **CLEAR** and enter the new code.

- **5.** Press **STORE**.
- **6.** To programme another parameter, press **NEXT** or **PREV**, or **SELECT** and the desired **parameter number**.
- 7. Repeat steps 4 through 6.
- 8. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[781] E1 Group-II

Description

Assigns a signal type for Group-II parameters on the E1 line assigned to MFC-R2. This programme is available for the KX-TD1232 only.

Selection

- Parameter number: 01 through 15
- Signal type: Undefined / Subscriber / Operator / Collect Call

Default

Parameter 02 – Subscriber; Other parameters – Undefined

Programming

1. Enter 781.

```
Display: 781 GROUP-II
```

2. Press NEXT.

```
Display: Parameter NO?→
```

3. Enter a parameter number.

To enter a parameter number 01, you can also press NEXT.

```
Display example: 01:Undefined
```

- **4.** Keep pressing **SELECT** until the desired selection is displayed.
- 5. Press STORE.
- **6.** To programme another parameter, press **NEXT** or **PREV**, or **SELECT** and the desired **parameter number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[782] E1 Group-A

Description

Assigns a signal code for Group-A parameters on the E1 line assigned to MFC-R2. This programme is available for the KX-TD1232 only.

Selection

- Parameter number: 01 (Address Complete) / 02 (ANI Request) / 03 (Set UP Speech) / 04 ((First)Request) / 05 ((N)Request) / 06 ((N-1)Request) / 07 ((N-2)Request) / 08 ((N-3)Request)
- Signal code: **00 through 15** (00=Undefined)

Default

Parameter 01 - 03; Parameter 02 - 05; Parameter 03 - 06; Other parameters -00

Programming

1. Enter 782.

```
Display: 782 GROUP-A
```

2. Press NEXT.

```
Display: Parameter NO?→
```

3. Enter a parameter number.

To enter a parameter number 01, you can also press **NEXT**.

```
Display example: 01:03
```

4. Enter the **signal code**.

To change the current entry, press **CLEAR** and enter the new code.

- **5.** Press **STORE**.
- **6.** To programme another parameter, press **NEXT** or **PREV**, or **SELECT** and the desired **parameter number**.
- **7.** Repeat steps 4 through 6.
- **8.** Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[783] E1 Group-B

Description

Assigns a signal code for Group-B parameters on the E1 line assigned to MFC-R2. This programme is available for the KX-TD1232 only.

Selection

- Parameter number: 01 (Idle(1)) / 02 (Idle(2)) / 03 (Idle(3)) / 04 (No Billing) / 05 (Busy) / 06 (Unallocated) / 07 (Congestion) / 08 (Out of Service) / 09 (Collect Call Reject)
- Signal code: **00 through 15** (00=Undefined)

Default

Parameter 01 - 01; Parameter 05 - 02; Parameter 06 - 03; Parameter 07 and 08 - 04; Other parameters -00

Programming

1. Enter 783.

```
Display: 783 GROUP-B
```

2. Press NEXT.

```
Display: Parameter NO?→
```

3. Enter a parameter number.

To enter a parameter number 01, you can also press **NEXT**.

```
Display example: 01:01
```

4. Enter the **signal code**.

To change the current entry, press **CLEAR** and enter the new code.

- **5.** Press **STORE**.
- **6.** To programme another parameter, press **NEXT** or **PREV**, or **SELECT** and the desired **parameter number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[784] E1 Group-C

Description

Assigns a signal code for Group-C parameters on the E1 line assigned to MFC-R2. This programme is available for the KX-TD1232 only.

Selection

- Parameter number: 01 (Group-C ANI(N+1)) / 02 (Group-II ANI)
- Signal code: **00 through 15** (00=Undefined)

Default

All Parameters – 00

Programming

1. Enter 784.

```
Display: 784 GROUP-C
```

2. Press NEXT.

```
Display: Parameter NO?→
```

3. Enter a parameter number.

To enter a parameter number 01, you can also press **NEXT**.

```
Display example: 01:00
```

4. Enter the **signal code**.

To change the current entry, press **CLEAR** and enter the new code.

- 5. Press STORE.
- **6.** To programme another parameter, press **NEXT** or **PREV**, or **SELECT** and the desired **parameter number**.
- **7.** Repeat steps 4 through 6.
- 8. Press END.

Conditions

Adjust to a setting of the connected telephone company.

Features Guide References

E1 Line Service

[785] E1 Tone Type for Making Calls

Description

Sets a tone type for busy or reorder mode when making a call using the E1 line assigned to DR2-MFC.

This programme is available for the KX-TD1232 only.

Selection

Busy+Reorder / Busy / Reorder

Default

Busy+Reorder

Programming

1. Enter 785.

```
Display: 785 E1 TONE TYPE
```

2. Press NEXT.

```
Display example: Busy+Reorder
```

- **3.** Keep pressing **SELECT** until the desired selection is displayed.
- 4. Press STORE.
- 5. Press END.

Conditions

None

Features Guide References

E1 Line Service

Section 5 Optional Programming

5.1 Optional Programming

[990] System Additional Information

Description

Allows the following programming items to be changed, if required. Each bit in each Area represents a programming item.

Chart for the Areas and Bits

								В	it Nı	ımb	er						
		16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Display Example	Area 01	Ο	0	1	0	1	0	0	О	1	1	0	0	О	0	0	1
	Area 02	1	1	1	0	0	1	0	Ο	0	1	1	0	1	1	0	Ο
	Area 03	Ο	0	0	0	0	0	0	Ο	0	0	0	0	О	0	0	Ο
	Area 04	1	1	1	1	1	1	1	1	О	О	О	О	О	0	0	Ο
	Area 05	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Area 06	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1
	Area 07	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Area 08	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Area 09	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Area 10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Area	Bit	Description	Selection	Default	Features Guide References
01	1	Sound source during transfer.	0 : ringback tone 1 : Music on Hold	1	Call TransferMusic on Hold
	2	Result of pressing the hookswitch lightly and then placing down the handset (during an outside call; single line telephones only).	0 : Consultation Hold 1 : disconnection	0	Consultation Hold
	3	Result of pressing the FLASH button on proprietary telephones (during an outside call). External Feature Access is effective only during a call via an analogue outside line.	0 : disconnection signal 1 : External Feature Access	0	External Feature AccessFlash
	4-7	Reserved			
	8	Enables or disables the dial tone between obtaining an outside line and dialling the phone number when using the one-touch dial, redial or speed dial function.	0 : disable 1 : enable	1	None
	9	Result of pressing the hookswitch lightly (single line telephones only).	0 : Consultation Hold 1 : disconnection	0	Consultation Hold
	10	Sets the duration of the DTMF signals sent to the VPS ports.	0 : 80 ms 1 : 160 ms	0	Voice Mail Integration for Inband
	12,11	Sets the time the system waits before sending DTMF signals (such as a mailbox number) to the VPS after the VPS answers a call.	00 : 0.5 s 01 : 1.0 s 10 : 1.5 s 11 : 2.0 s	10	Voice Mail Integration for Inband
	14,13	Sets the time the system waits before sending DTMF signals (programmed in [113]) to VPS after the VPS calls an extension.	00 : 0.5 s 01 : 1.0 s 10 : 1.5 s 11 : 2.0 s	10	Voice Mail Integration for Inband
	15	Assigns whether the system or the VPS turns off the Message Waiting lamp when the user hears a message recorded in a mailbox.	0 : system 1 : VPS	0	Message WaitingVoice Mail Integration for Inband
	16	Reserved			

Area	Bit	Description	Selection	Default	Features Guide References
02	1	If an outside party is transferred and unanswered, assigns whether Transfer Recall occurs at the transfer initiating extension or at Operator 1.	0 : initiating extension 1 : Operator 1	0	Call Transfer
	2	If the restriction of outside call duration is enabled in programme [502] Extension-to-Outside Line Call Duration Limit, assigns if the restriction is done for both outgoing and incoming calls or for outgoing calls only.	0 : both calls 1 : outgoing calls only	0	None
	3	Allows you to remove confirmation tone 4. By default, a beep tone sounds when a three-party conference is started / ended.	0 : disable 1 : enable	1	Confirmation Tone
	4	Determines if the dialled "*" and "#" will be checked by Toll Restriction. This assignment is required for certain central offices (CO) to prevent toll fraud. Some COs ignore the user-dialled "*" and "#". If your CO is such a type, select "0" (no check).	0 : no check 1 : check	1	Toll Restriction
	5	Reserved			
	6	Allows you to remove confirmation tone 3. This tone is sent when a conversation is established just after dialling the feature number for accessing the following features: Call Pickup, Paging, Paging Answer, TAFAS, Hold Retrieve and Call Park Retrieve.	0 : disable 1 : enable	1	Confirmation Tone
	7	An outside line set to pulse or call blocking mode in programme [402] Dial Mode Selection can have two settings. This assigns the pulse break ratio during dial pulsing. Select an appropriate ratio depending on the standard in your country.	0 : 60 % 1 : 67 %	0 for HK 1 for Others	Dial Type Selection

Area	Bit	Description	Selection	Default	Features Guide References
02	8	Determines whether an extension mailbox number is substituted by the extension number or it is programmable (free). If a call is forwarded or rerouted to the VPS, this system automatically transmits the mailbox number to the VPS to specify the user's mailbox. To make it programmable, select "1 (free)", then assign the number in programme [609] Voice Mail Access Codes.	0 : extension number 1 : free	0	Voice Mail Integration for Inband
	9	Determines the initial display of a digital display proprietary telephone (except for KX-T7230) in Station Speed Dialling.	0 : names 1 : numbers	0	Call Directory
	10	Determines the source of Music Source 1 for Music on Hold and BGM.	0 : internal music source 1 : external music source	0	BGM Music on Hold
	12,11	Selects inter-digit pause for pulse dialling.	00 : 630 ms 01 : 830 ms 10 : 1030 ms	01	None
	13	Selects intercom dial tone frequency.	0 : normal 1 : distinctive	0	None
	14	Sets the extension – hooking signal detection time.	0 : 84 – 1000 ms 1 : 204 – 1000 ms	1	None
	15,16	Reserved			

Area	Bit	Description	Selection	Default	Features Guide References
03	1-16	These bits are provided to assign PAD	0 :0 dB	0	None
04	1-8	Switch Control (volume control of received calls on an outside line). This can be assigned for each outside line. The bits 1 through 16 in Area 03 correspond to outside lines 1 through 16 and the bits 1 through 8 in Area 04 correspond to outside lines 17 through 24. The outside lines 9 through 24 are only available for KX-TD1232.	1:-3 dB		
	9	9 Prevents or allows a call originated by an AA port of VPS to another AA port.	0 : prevent 1 : allow	1	Voice Mail Integration for Inband
	10	Prevents or allows sending pulse dialling signals during an outside call.	0 : prevent 1 : allow	1	None
	11,12	Reserved			
	13	Enables or disables the pulse feedback sound when a dialled number is sent to an outside line.	0 : disable 1 : enable	1	None
	14-16	Reserved			

Area	Bit	Description	Selection	Default	Features Guide References
05	1	Reserved			
	2	Have an option to restrict the DISA outside-to-outside line extending time. 10 attempts are allowed.	0:10 times 1: no limitation	1	DISA
	3	Enables or disables retry by dialling "*" during DISA outside call.	0 : disable 1 : enable	1	DISA
	4	Reserved			
	5	Sets the time the system waits for IRNA after the OGM.	0 : immediately 1 : after 5 seconds	1	OGM
	6	 [For VM DPT Integration] Enables or disables sending the Follow On ID when an outside call is routed to a voice mail port by Call Forwarding. [For VM Inband Integration] Enables or disables sending the Follow On ID when an outside call is routed to a voice mail port by Call Forwarding. When the port is in AA service mode; enable: the mode will change to the VM service mode. disable: the mode will not be changed. When the port is in VM service mode; The Follow On ID is always sent regardless of this programme. 	0 : disable 1 : enable	1	Voice Mail Integration for Digital Proprietary Telephones Voice Mail Integration for Inband

Area	Bit	Description	Selection	Default	Features Guide References
05	7	 [For VM DPT Integration] Enables or disables sending the Follow On ID when an outside call is routed to a voice mail port by IRNA. [For VM Inband Integration] Enables or disables sending the Follow On ID when an outside call is routed to a voice mail port by IRNA. When the port is in AA service mode; enable: the mode will change to the VM service mode. disable: the mode will not be changed. When the port is in VM service mode; enable: the mode will not be changed. disable: the mode will change to the AA service mode. 	0 : enable 1 : disable	1	Voice Mail Integration for Digital Proprietary Telephones Voice Mail Integration for Inband
	8	Reserved			
	9	Enables or disables dial tone 2 when an extension sets programmable extension features such as Call Waiting.	0 : disable 1 : enable	1	None
	10	Determines the result when pressing the FLASH button during an outside call (When Area 01-bit 3=0). Flash: Disconnects and accesses the same outside line. Terminate: Terminates the outside line and accesses the intercom. It is convenient to route the outside call according to ARS if ARS is active.	0 : Terminate 1 : Flash	1	Flash
	11	Selects the message waiting ring type: 3 quick rings or 2 normal rings, for single line telephones.	0: 3 times by 40 ms 1: 2 times by 280 ms	1	Message Waiting

Area	Bit	Description	Selection	Default	Features Guide References
05	12	Selects the SMDR format for an incoming call with Caller ID. The caller's number only or caller's number only or caller's number and name is selected.	0 : <incoming> + caller no. 1 : <i> + caller no. + name</i></incoming>	1	SMDR
	13	Enables or disables the SMDR printout for RC (when an incoming call occurs) and AN (when an incoming call is answered).	0 : enable 1 : disable	1	SMDR
	14	Selects the result when a call from DISA / DID is invalid.	0 : IRNA 1 : reorder tone is sent	1	None
	15	Selects the result of pressing "0" (default); calls operators 1 and 2 at the same time or Operator 1 first and then Operator 2 if Operator 1 is busy.	0 : Operators 1 and 2 simultaneously 1 : Operator 1 first and then Operator 2	1	Operator
	16	Enables or disables the SMDR printout when the Timed Reminder starts and the alarm is not answered.		1	Timed Reminder

Area	Bit	Description	Selection	Default	Features Guide References
06	1	Determines whether the account code is printed out or not (shown in dots) by the SMDR.	0 : not printed out 1 : printed out	1	Account Code Entry
	2,3	Reserved			
	4	Enables or disables sending outside line access number "9/0" to a TIE line. When you dial outside line access number "9/0" and the outside line is busy, the system can automatically send outside line access number "9/0" to a TIE line so that you can access the outside line through another PBX.	0 : enable 1 : disable	1	E&M (TIE) Line Service
	5	Determines whether to printout the last entered or the first entered account code in the SMDR.	0 : first entered code 1 : last entered code	1	Account Code Entry
	6	When an incoming call is received in a Hunting group (Ring, UCD, Circular, Terminate), this programme determines whether the extension where the Do Not Disturb feature is set receives the call or not.	0 : receive 1 : not receive	1	None
	7	When an incoming call is received in a Hunting group (Ring, UCD, Circular, Terminate), this programme determines whether the extension where the Call Forwarding feature is set receives the call or not.	0 : receive 1 : not receive	1	None
	8	Enables or disables Circular and Termination hunting.	0 : disable 1 : enable	1	Station Hunting
	9,10	Reserved			
	11	Enables or disables the COLP feature.	0 : enable 1 : disable	1	COLP

Area	Bit	Description	Selection	Default	Features Guide References
06	12	Assigns how the number is changed via the ISDN line into an extension number which receives incoming DDI calls.	0: The number converted in [421] 1: The number equals the number from the ISDN line minus the subscriber's number programmed in [418].	0	DDI
	13	Assigns whether an extension number or a DDI number is used when a DDI call is received or the CLIP and COLP feature becomes available.	0 : DDI conversion number 1 : extension number	0	CLIPCOLPDDI
	14	Allows or prevents dialing "0" when the MSN number is "0".	0 : allow 1 : prevent	1	None
	15	Selects the DDI call destination during the day mode, if it is not assigned.	0 : DIL 1:N 1 : Operator	1	DDI
	16	Selects the DDI call destination during the day mode, if it is not assigned.	0 : DIL 1:N 1 : Operator	1	DDI

Area	Bit	Description	Selection	Default	Features Guide References
07	1	Enables or disables the DTMF signals to the ISDN line.	0 : enable 1 : disable	1	None
	2,3	Reserved			
	4	Enables or disables the Whisper OHCA feature.	0 : any telephone 1 : KX-T7400 series telephones only	1	Whisper OHCA
	5	Enables or disables the hooking signal when the reverse signal does not return.	0 : disable 1 : enable	1	None
	6	Reserved			
	7	Allows a beep or Music on Hold while holding a call.	0 : beep 1 : usual music source	1	Music on Hold
	9,8	Determines how the call is treated when a call from DISA arrives at a DND extension or busy extension which has disabled Call Waiting.	01 : IRNA 10 / 11 : receive at the CO button (only flashes) 00 : busy tone is sent	11	DISA

Area	Bit	Description	Selection	Default	Features Guide References
07	11,10	Determines how the call is treated when a call from DID arrives at a DND extension or busy extension which has disabled Call Waiting. If "IRNA" whose destination is DISA is selected, a reorder tone is sent.	01 : IRNA 10 / 11 : receive at the CO button (only flashes) 00 : busy tone is sent	11	DID
	13,12	Determines how the call is treated when a call from ISDN line arrives at a DND extension or busy extension which has disabled Call Waiting.	01 : IRNA 10 / 11 : receive at the CO button (only flashes) 00 : busy tone is sent	11	ISDN
	15,14	Determines how the call is treated when a call from TIE line arrives at a Do Not Disturb (DND) extension or busy extension which has disabled Call Waiting. If "IRNA" whose destination is DISA is selected, a reorder tone is sent.	01 : IRNA 10 / 11 : receive at the CO button (only flashes) 00 : busy tone is sent	11	TIE Line Service
	16	Enables or disables the SMDR printout for DID subscriber number. A DID subscriber number replaces a Caller ID number.	0 : enable 1 : disable	1	SMDR
08	1	Sends a dial tone to another system when a channel assigned on TIE is captured.	0 : send 1 : not send	1	TIE Line Service
	2	Reserved			
	3	Sends a dial tone to extensions when a TIE line access code is dialled.	0 : send 1 : not send	1	TIE Line Service
	4-16	Reserved			

Area	Bit	Description	Selection	Default	Features Guide References
09	1	Determines the ring interval time for incoming calls with Caller ID.	0 : short 1 : normal	1	Caller ID
	2	Reserved			
	4,3	Selects the LED flashing pattern of the FWD/DND button which indicates the activating feature (Call Forwarding/Do Not Disturb). Reset the system to function this assignment.	11 : Red Flashing / Red On 10 : Red On / Red On 01 : Red On / Red Flashing 00 : Red Flashing / Red Flashing	11	Call ForwardingDND
	5-8	Reserved			
	9	Allows the calling party's number and name to remain on the display of the call.	0 : remains the current display 1 : Call duration	1	Caller ID
	10,11	Reserved			
	12	Permits or disallows the last extension in a group to log-out.	0 : permit 1 : disallow	1	Log-in / Log-out
	13-15	Reserved			
	16	Determines what should be done with the call after emitting an alarm because the Budget Management limit was reached.	0 : disconnect in 15 secon 1 : do not disconnect	1	Budget Management
10	1-8	Sends a dial tone to the extension when a CO button is pressed or the line access (Automatic or Outside Line Group) code is entered to access the E1 line. This can be assigned for each outside line group (TRG). The bits 1 through 8 correspond to TRG 1 through 8.	0 : send 1 : not send	1	E1 Line
	9-16	Reserved			

Selection

• Area code: 01 through 10

• Selection: See "Selection" in the explanation table.

Default

See "Default" shown in the explanation table.

Programming

1. Enter 990.

```
Display: 990 SYS ADD DATA
```

2. Press NEXT.

```
Display: Area NO?→
```

3. Enter an area code (01 through 10).

```
Display example: 0010100011000001
```

- **4.** Keep pressing \rightarrow or \triangleleft to move the cursor to the desired bit.
- 5. Enter your selection (0 or 1).

To change the current entry, press **STORE** and enter the new selection.

- **6.** To programme another bit, repeat steps 4 and 5.
- 7. Press STORE.
- **8.** To programme another area, press **SELECT** and the desired **area code.**
- **9.** Repeat steps 4 through 8.

10.Press END.

Conditions

None

Features Guide References

None

[991] COS Additional Information

Description

1. Sets the number of digits allowed to dial out during an analogue outside call on a Class of Service (COS) basis. If an outside party hangs up and the extension user tries to dial out still on the outside line, the system will disconnect the line at the time the assigned number of digits are dialled.

This programme is effective if the Calling Party Control (CPC) Signal Detection is not provided by the outside line.

The bits 4, 3, 2 and 1 shown below is used to enter your selection.

2. Enables or disables Call Forwarding – Follow Me feature on a COS basis. The bit 5 below is used to enter your selection.

Display Example

	Bit Number														
16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
1	1	1	1	1	1	1	1	1	1	1	1	Ο	Ο	О	Ο
	unused 2 1														

Selection

- COS number: 1 through 8, ★ (*=all COS)
- Selection for bits 4, 3, 2 and 1:

0000: no limit / **0001:** 1 digit / **0010:** 2 digits / **0011:** 3 digits / **0100:** 4 digits / **0101:** 5 digits / **0110:** 6 digits / **0111:** 7 digits / **1000:** 8 digits / **1001:** 9 digits / **1010:** 10 digits / **1011:** 11 digits / **1100:** 12 digits / **1101:** 13 digits / **1110:** 14 digits / **1111:** 15 digits

• Selection for bit 5: 0: disable / 1: enable

Default

Bits 4, 3, 2 and 1: All COS – 0000 / Bit 5: All COS – 1

Programming

1. Enter 991.

Display: 991 COS ADD DATA

2. Press NEXT.

Display: COS NO?→

3. Enter a COS number.

Display example: 11111111111110000

4. Keep pressing or to move the cursor to the desired bit.

5. Enter your selection (0 or 1).

To change the current entry, press **STORE** and the new selection.

- **6.** To programme another bit, repeat steps 4 and 5.
- 7. Press STORE.
- **8.** To programme another COS, press **SELECT** and the desired **COS number.**
- **9.** Repeat steps 4 through 8.
- 10.Press END.

Conditions

None

Features Guide References

Call Forwarding

Class of Service (COS)

Section 6 Default Values

2 General Programming

Programme	Default
[000] Date and Time Set	'93 Jan. 1 FRI 12:00 AM 12
[001] System Speed Dialling Number Set	All speed dial numbers – Not stored
[002] System Speed Dialling Name Set	All speed dial numbers – Not stored
[003] Extension Number Set	KX-TD816: Jack 01-1 through 16-1 = 101 through 116; Jack 01-2 through 16-2 = 201 through 216 KX-TD1232: Jack 01-1 through 64-1 = 101 through 164; Jack 01-2 through 64-2 = 201 through 264
[004] Extension Name Set	All jacks – Not stored
[005] Flexible CO Button Assignment	KX-TD816: All jacks – CO buttons 1 through 8 = Single-CO 01 through 08; Ring tone type 2 Other CO buttons = Not stored KX-TD1232: All jacks – CO buttons 1 through 24 = Single-CO 01 through 24; Ring tone type 2
[006] Operator / Manager Extension Assignment	Operator 1 – Jack 01; Operator 2 and Manager – Not stored
[007] Console Port and Paired Telephone Assignment	All consoles – Not stored
[008] Absent Messages	1: Will Return Soon 2: Gone Home 3: At Ext %%% 4: Back at %%:%% 5: Out Until %%/%% 6: In a Meeting 7 through 9: Blank (not stored)
[009] Quick Dial Number Set	All location numbers – Not stored
[014] VM Name Set	All Voice Mails – V.Mail xx (xx=01 through 24)
[015] Budget Management	All jacks – 0
[017] DISA / TIE User Codes	All DISA / TIE user code numbers – DISA / TIE user code=Blank; COS number=8

	Programme	Default
[100]	Flexible Numbering	See "Feature Number List".
[101]	Day / Night Service Switching Mode	Manual
[102]	Day / Night Service Starting Time	Every day of the week – Day – 9:00 AM / Night – 5:00 PM
[103] Assign	Automatic Access Outside Line Group	12345678
[105]	Account Codes	All locations – Not stored
[106]	Station Hunting Type	All extension groups – Disable
[107]	System Password	1234
[108]	Automatic Hold by CO / DSS Button	DSS button – Enable, CO button – Disable
[109]	Expansion Unit Type	KX-TD816: C;E KX-TD1232: Master and Slave – C;E1;E2
[110]	Caller ID Code Set	All locations – Not stored
[111]	Caller ID Name Set	All locations – Not stored
[113]	VM Status DTMF Set	RBT – 1; BT – 2; ROT – 3; DND – 4; Answer – 5; Disconnect – #9; Confirm – 9; FWD VM RBT – 6; FWD VM BT – 7; FWD EXT RBT – 8
[114]	VM Command DTMF Set	LV-MSG – H; GETMSG – *H; AA-SVC – #8; VM-SVC – #6
[115]	Adjust Time	1:00 AM
[116]	ROM Version Display	Not applicable
[117]	Voice Mail Number Assignment	All jacks – Blank

	Programme	Default
[118]	Voice Mail Extension Number Set	KX-TD816: VM-01=165, VM-02=166, VM-03=167, VM-04=168, VM-05=169, VM-06=170, VM-07=177, VM-08=178, VM-09=181, VM-10=182, VM-11=183, VM-12=184 KX-TD1232: VM-01=165, VM-02=166, VM-03=167, VM-04=168, VM-05=169, VM-06=170, VM-07=177, VM-08=178, VM-09=181, VM-10=182, VM-11=183, VM-12=184, VM-13=171, VM-14=172, VM-15=173, VM-16=174, VM-17=175, VM-18=176, VM-19=179, VM-20=180, VM-21=185, VM-22=186, VM-23=187, VM-24=188
[119]	Voice Mail Extension Group Assignment	All voice mail numbers – EXG 1
[120]	User Password	1234
[121]	Walking COS Password	1234
[122]	UCD Overflow	All UCD groups – Not stored
[123]	UCD Time Table	All time tables – Not stored
[124]	Phantom Extension Number Set	All locations – Not stored
[125]	Area Code Assignment	All locations – Blank
[126]	Caller ID Modification for Local Call	All locations – Deleted number = 0, Added number = Blank
[127] Call	Caller ID Modification for Long Distance	Deleted digits – 0; Added number – Blank
[128]	PBX Code	Not stored
[129]	E&M Signal Assignment	Continuous
[130]	Message Waiting Control	All units – Not stored
[131]	Message Waiting Lamp Assignment	1
[132]	Message Waiting Port Set	All units – All message waiting ports – Not stored
[134]	Hotel Application	OFF
[135]	DID Number Conversion Selection	EXT Number

Programme	Default
[136] DID / DDI Number Assignment	All locations – Not stored
[137-138] DID / DDI Extension – Day / Night	All locations – Not stored
[139] DID / DDI Extension Name Set	All locations – Not stored
[141] Charge Rate Decimal Point Assignment	2
[142] Charge Rate Assignment	All outside lines – 0.00
[143] Charge Display Selection	in Meter
[144] Currency Assignment	\$
[148] Off-Hook Monitor	Enable
[150] Lunch Service Starting / Ending Time	Every day of the week – 12:00 – 12:59 PM
[151] Break Service Starting / Ending Time	Every day of the week – 3:00 – 3:29 PM
[152] Charge Verification Assignment	All jacks – Enable
[153] Charge Verification ID Code Set	1234
[200] Hold Recall Time	60 s
[201] Transfer Recall Time	12 rings
[202] Call Forwarding – No Answer Time	3 rings
[203] Intercept Time	12 rings
[204] Pickup Dial Waiting Time	1 s
[205] Extension-to-Outside Line Call Duration Time	10 min
[206] Outside-to-Outside Line Call Duration Time	10 min
[207] First Digit Time	10 s
[208] Inter Digit Time	10 s

Programme	Default
[209] Automatic Redial Repeat Times	KX-TD816BX, KX-TD1232(D)BX/ML, KX- TDN1232 – 10 times KX-TD816HK, KX-TD1232HK – 3 times KX-TD1232X – 2 times
[210] Automatic Redial Interval Time	KX-TD816BX, KX-TD1232(D)BX/ML, KX- TDN1232 – 60 s KX-TD816HK, KX-TD1232HK – 900 s (15 min) KX-TD1232X – 30 s
[211] Dial Start Time	KX-TD816BX, KX-TD1232(D)BX/ML/X, KX- TDN1232 – 500 ms KX-TD816HK, KX-TD1232HK – 1000 ms
[212] Call Duration Count Start Time	0 s
[213] DISA Delayed Answer Time	1 ring
[214] DISA Prolong Time	3 min
[215] Outgoing Message Time	32, 0, 32, 0 (for OGM 1 through 4 from left to right)
[216] Message Waiting Ring Interval Time	0 min
[217] Timed Reminder Alarm Ring Time	30 s
[218] DISA AA Wait Time	1 s
[219] Call Park Recall Time	12 rings
[220] TIE First / Inter Digit Time	5 s
[300] TRS Override for System Speed Dialling	Disable
[301-305] TRS Denied Code Entry for Levels 2 through 6	All locations – Not stored
[306-310] TRS Excepted Code Entry for Levels 2 through 6	All locations – Not stored
[311] Special Carrier Access Codes	All locations – Not stored
[312] ARS Mode	Off
[313] ARS Time	All days of the week: A – 8:00 AM; B – 5:00 PM; C – 9:00 PM; D – Disable

Programme	Default
[314-321] ARS Leading Digit Entry for Plans 1 through 8	All locations – Not stored
[322-329] ARS Routing Plans 1 through 8	All time schedules – Not stored
[330] ARS Modify Removed Digit	All modification tables – 0
[331] ARS Modify Added Number	All modification tables – Not stored
[332] Extra Entry Table Selection	Except - 2
[333] TRS Entry Code Assignment for Extra Table	All locations – Not stored
[334] Emergency Dial Number Set	All locations – Not stored
[340] TIE Line Routing Table	All locations – Not stored
[341] TIE Modify Removed Digit / Added Number	All locations – Deleted digit=0; Added Number=Blank
[400] Outside Line Connection Assignment	All outside lines – Connect (If KX-TD290 or KX-TD188 is connected: All outside lines in the Slave System – No Connect)
[401] Outside Line Group Assignment	CO01 – TRG 1; CO02 – TRG 2; CO03 – TRG 3; CO04 – TRG 4; CO05 – TRG 5; CO06 – TRG 6; CO07 – TRG 7; CO08 – TRG 8 (for KX-TD816) CO08 through CO54 – TRG 8 (for KX-TD1232)
[402] Dial Mode Selection	KX-TD816BX, KX-TD1232(D)BX/ML, KX-TDN1232: All outside lines – Pulse KX-TD816HK, KX-TD1232HK/X: All outside lines – DTMF
[403] Pulse Speed Selection	All outside lines – 10 pps
[404] DTMF Time	All outside lines – 80 ms
[405] CPC Signal Detection Incoming Set	All outside lines – Disable
[406] Caller ID Assignment	All outside lines – Disable

Programme	Default
[407-408] DIL 1:1 Extension – Day / Night	All outside lines – Disable (Day / Night)
[409-410] Intercept Extension – Day / Night	All outside line groups – Disable (Day / Night)
[411] Host PBX Access Codes	All outside line groups – Not stored
[412] Pause Time	All outside line groups – 1.5 s
[413] Flash Time	All outside line groups – 600 ms
[414] Disconnect Time	All outside line groups – 1.5 s
[415] CPC Signal Detection Outgoing Set	Disable
[416] Reverse Circuit Assignment	Regular
[417] Outside Line Name Assignment	All outside lines – Not stored
[430] DID / TIE Format Number Assignment	All outside line groups – Not stored
[431] DID / TIE Incoming Assignment	All DID / TIE formats – Wink
[432] DID / TIE Outgoing Assignment	All DID / TIE formats – Wink
[433] DID / TIE Subscriber Number Removed Digit	All DID / TIE formats – RMV:0
[434] DID / TIE Added Number	All DID / TIE formats – Blank
[435] DID / TIE Wink Time Out Assignment	All DID / TIE formats – 16
[436] Outside-to-TIE Transfer	All outside line groups – Disable
[437] TIE-to-Outside Transfer	All outside line groups – Disable
[438] TIE-to-TIE Transfer	All outside line groups – Enable
[439] TIE Security Type	All outside line groups – Non
[440] Line Hunting Sequence	All outside line groups – Small –> Large
[441] Voice Path Type	All outside lines – 2 wire
[442] Voice Level (Transmit)	All outside lines – -3 db
[443] Voice Level (Receive)	All outside lines – -3 db
[444] TIE Receive Dial	All outside line ports – Yes

Programme	Default
[445] DID Forward Timer (for MFC-R2)	All DID formats – 15 s
[446] DID Backward Timer (for MFC-R2)	All DID formats – 15 s
[447] DID Disappearance Timer (for MFC-R2)	All DID formats – 24 s
[448] DID First Dial Start Time (for MFC-R2)	All DID formats – 2
[449] DID Forward Group-I Signal Code (for MFC-R2)	Code 01=Dial 1; Code 02=Dial 2; Code 03=Dial 3; Code 04=Dial 4; Code 05=Dial 5; Code 06=Dial 6; Code 07=Dial 7; Code 08=Dial 8; Code 09=Dial 9; Code 10=Dial 0; Code 11 to Code 15=Not Use
[450] DID Forward Group-II Signal Code (for MFC-R2)	Code 01=Not Use; Code 02=Subscriber; Code 03=Not Use; Code 04=Not Use; Code 05=Operator; Code 06=Not Use; Code 07=Not Use; Code 08=Collect; Code 09 to Code 15=Not Use
[451] DID Backward Group-A Signal Code (for MFC-R2)	Code 01=Next Digit; Code 02=Not Use; Code 03=Complete; Code 04=Congestion; Code 05 to Code 15=Not Use
[452] DID Backward Group-B Signal Code (for MFC-R2)	Code 01=Idle; Code 02=Not Use; Code 03=Busy; Code 04=Congestion; Code 05=Unallocation; Code 6 to Code 15=Not Use
[457-458] DIL 1:1 – Lunch / Break Group	All outside lines – Blank
[500-501] Toll Restriction Level – Day / Night	COS 1 through 7 – Level 1 (Day / Night); COS 8 – Level 7 (Day / Night)
[502] Extension-to-Outside Line Call Duration Limit	All COS – Disable
[503] Call Transfer to Outside Line	All COS – Disable
[504] Call Forwarding to Outside Line	All COS – Disable
[505] Executive Busy Override	All COS – Disable
[506] Executive Busy Override Deny	All COS – Enable
[507] Do Not Disturb Override	All COS – Disable
[508] Account Code Entry Mode	All COS – Option
[509] Off-Hook Call Announcement (OHCA)	All COS – Enable

Programme	Default
[510] Night Service Access	All COS – Disable
[511] PT Programming Level	All COS – LVL1
[600] EXtra Device Port	All jacks – Disable
[601] Class of Service	All jacks-1/2 – COS 1
[602] Extension Group Assignment	All jacks-1/2 – Extension group 1
[603-604] DIL 1:N Extension and Delayed Ringing – Day / Night	All jacks-1/2 – All outside lines – Immediate ringing (Day / Night)
[605-606] Outgoing Permitted Outside Line Assignment – Day / Night	All jacks-1/2 – All outside lines – Enable (Day / Night)
[607-608] Doorphone Ringing Assignment – Day / Night	Jack 01-1– All doorphones; Other jacks – no doorphone (Day / Night)
[609] Voice Mail Access Codes	All jacks – Not stored
[610] Live Call Screening Recording Mode Assignment	All jacks – Stop Rec
[619] Extension Call Forwarding – No Answer Time	All jacks – 0
[620] Lunch / Break Group Assignment	All groups – Blank
[621] Cordless PT Extension Port	All jacks – all outside lines – No
[800] SMDR Incoming / Outgoing Call Log Printout	Outgoing calls – All; Incoming calls – On
[801] SMDR Format	Page length – 66; Skip perforation – 0
[802] System Data Printout	Not applicable.
[803] Music Source Use	Hold and BGM – Music 1
[804] External Pager BGM	All external pagers – Disable
[805] External Pager Confirmation Tone	On

Programme	Default
[806-807] Serial Interface (RS-232C) Parameters	Port 1 / Port 2: New line code = CR+LF; Baud rate = 9600; Word length = 8; Parity bit = Mark; Stop bit = 1
[809] DISA Security Type	Trunk
[810] DISA Tone Detection	Enable
[812] DISA DTMF Repeat	Dial and Call – Repeat
[813] Floating Number Assignment	Pager 1=196; Pager 2=197; Pager 3=296; Pager 4=297; DISA 1=198; DISA 2=298; MODEM=299; E-Grp 1=191; E-Grp 2=192; E-Grp 3=193; E-Grp 4=194; E-Grp 5=291; E-Grp 6=292; E-Grp 7=293; E-Grp 8=294
[814] Modem Standard	CCITT
[815] DISA Built-in Automated Attendant Number	Disable
[816] SMDR Output Mode	Regular
[817] KX-TD197 / KX-TD198 Baud Rate Set	V.34-33600

3 ISDN Programming

Programme	Default
[012] ISDN Extension Number Set	All ports – Not stored
[013] ISDN Extension Name Set	All ports – Not stored
[018] Budget Management for ISDN Extension	All ports – 0
[109] Expansion Unit Type	KX-TD816: C;E KX-TD1232: Master and Slave – C;E1;E2
[112] ISDN Network Type Assignment	KX-TD816HK/KX-TD1232HK: Mode 39 Others: Mode 51
[140] DDI Number / Phantom Extension Number Conversion	All locations – Blank

Programme	Default
[149] ISDN Data Assignment	(1) ADPCM Type: KX-TD816HK / KX-TD1232HK=M-Law, Others=A-Law (2) Status Message: Send (3) Status Receiving Mode: Disc (4) Numbering Type: 0 (Unknown) (5) Numbering Plan: 1 (ISDN/Telephone Numbering Plan) (6) T200 Extension Timer: 1.0 s (7) T203 Extension Timer: 10.0 s (8) T302 Extension Timer: 15.0 s (9) T303 Extension Timer: 4.0 s (10) T304 Extension Timer: 30.0 s (11) T305 Extension Timer: 30.0 s (12) T306 Extension Timer: 30.0 s (13) T310 Extension Timer: 40.0 s (14) T3D3 Extension Timer: 20.0 s (15) T3D9 Extension Timer: 20.0 s (16) T200 CO Timer: 1.0 s (17) T203 CO Timer: 15.0 s (19) T303 CO Timer: 4.0 s (20) T304 CO Timer: 30.0 s (21) T305 CO Timer: 30.0 s (22) T306 CO Timer: 0.0 s (23) T310 CO Timer: 0.0 s (24) T3D3 CO Timer: 60.0 s (25) T3D9 CO Timer: 60.0 s
[154] DID Transfer Table for DDI Call	No Use
[418] Outside Line Number Assignment for ISDN / E1	All outside lines – Not stored
[419] ISDN Outgoing CLIR Service Assignment	All outside lines – Enable
[420] ISDN Ring Service Assignment	All outside lines – Regular
[421] DDI Removed Digit / Added Number Assignment	All outside lines – Removed digit=0; Added number=Not stored
[423] ISDN Port Type	All ports – CO
[424] ISDN Layer 1 Active Mode	KX-TD816: Port 05 and 06 – Call; Other ports – Permanent KX-TD1232: All ports – Permanent

Programme	Default
[425] ISDN Configuration	KX-TD816: Ports 05 and 06 – Multipoint; Other ports – Point KX-TD1232: All ports – Point
[426] ISDN Data Link Mode	KX-TD816: Port 05 and 06 – Call; Other ports – Permanent KX-TD1232: All ports – Permanent
[427] ISDN TEI Mode	KX-TD816: Port 05 and 06 – Automatic; Other ports – Fix 0 KX-TD1232: All ports – Fix 0
[428] ISDN Extension Multiple Subscriber Number	All ports – Disable
[429] ISDN Extension Progress Tone	All ports – Disable
[454] MSN Assignment	All ports – All locations – Not stored
[455-456] Extension Ringing Assignment – Day / Night for ISDN	All ports – All locations – Disable (Day / Night)
[460] PRI Configuration	B channel number – 0 line; CRC4 – Enable
[721] PRI / E1 Reference CO	All outside lines (PRI / E1 line) – CO 09
[611] DDI Number / Extension Number Conversion	All jacks – Not stored
[612] DDI Number / Floating Number Conversion	All floating stations – Blank
[613] ISDN Class of Service	All ports – COS 1
[614-615] Outgoing Permitted Outside Line Assignment – Day / Night for ISDN Extension	All ports – All outside lines – Enabl (Day / Night)
[616] DDI Number / ISDN Extension Number Conversion	All ports – Blank
[617] CLIP / COLP Number Assignment for Extension	All jacks – DDI
[618] CLIP / COLP Number Assignment for ISDN Extension	All ports – DDI

4 E1 Programming

	Programme	Default
[109]	Expansion Unit Type	KX-TD816: C;E KX-TD1232: Master and Slave – C;E1;E2
[418] ISDN /	Outside Line Number Assignment for E1	All outside lines – Not stored
[622]	Extension ANI Number	All jacks-1/2 – Not stored
[707]	E1 Clock Mode	External
[720]	E1 TIE Ringing Service	All outside lines – TIE
[721]	PRI / E1 Reference CO	All outside lines (PRI / E1 line) – CO 09
[722]	E1 Answer Wait Timer	All outside lines – 1 min
[723]	E1 Sending TIE Caller ID	All outside lines – No
[740]	E1 Channel Assignment	All E1 channels – Disable
[741]	E1 Dial Mode	All E1 channels – Pulse-10
[742]	E1 CPC (IN)	All E1 channels – 02
[743]	E1 CPC (OUT)	All E1 channels – 02
[744]	E1 DID Receive Digit	All E1 channels – 4
[745]	E1 DR2 Receiver	All E1 channels – Undefined
[747]	E1 Line Coding	HDB3
[748]	E1 Frame Sequence	PCM30
[749]	E1 Frame Option	C=0, D=1
[750]	E1 First Dial Timer (DR2 / TIE)	002
[751]	E1 %Break	60%
[752]	E1 Dial Click Tone	Yes
[753]	E1 Inter Digit Pause	830 ms
[754]	E1 Flash Detection	208-1016

	Programme	Default
[755]	E1 Answer Decision Timer	001
[756]	E1 Seizure ACK Wait Timer	05
[757]	E1 Pulse Type	Type-A
[758]	E1 DR2 Signalling Type	Normal
[759]	E1 Inter Digit Timer	05
[760]	E1 Bit Position for Dial Pulse	A-bit
[761]	E1 Bit Position for Clear Back	A-bit
[762]	E1 E&M Signalling Type	Type-2
[763]	E1 E&M Pulse Length (Seizure)	150 ms
[764]	E1 E&M Pulse Length (Answer)	600 ms
[765]	E1 E&M Pulse Length (Clear)	600 ms
[766]	E1 Meter Pulse Detection Mode	No Detection
[767]	E1 Meter Pulse Detection Bit Position	B-bit
[768]	E1 Meter Pulse Detection Length	16
[769]	E1 DSP Gain (DTMF Transmit)	03
[770]	E1 DSP Gain (DTMF Receive)	16
[771]	E1 DSP Gain (MFC-R2 Transmit)	16
[772]	E1 DSP Gain (MFC-R2 Receive)	08
[773]	E1 Frame Error Detection	No
[774]	E1 Error Rate	0
[775]	E1 ANI Service Mode	None
[776]	E1 ANI Maximum Digits	00
[777]	E1 MFC-R2 Forward Timer	15 s
[778]	E1 MFC-R2 Backward Timer	15 s

	Programme	Default
[779]	E1 MFC-R2 Disappearance Timer	24 s
[780]	E1 Group-I	Parameter 01 – 14; Parameter 02 – 15; Parameter 03 – 12
[781]	E1 Group-II	Parameter 02 – Subscriber; Other parameters – Undefined
[782]	E1 Group-A	Parameter 01 – 03; Parameter 02 – 05; Parameter 03 – 06; Other parameters – 00
[783]	E1 Group-B	Parameter 01 – 01; Parameter 05 – 02; Parameter 06 – 03; Parameter 07 and 08 – 04; Other parameters – 00
[784]	E1 Group-C	All Parameters – 00
[785]	E1 Tone Type for Making Calls	Busy+Reorder

5 Optional Programming

	Programme	Default
[990] System Additional Information	See "Default" shown in the explanation table.
[991] COS Additional Information	Bits 4, 3, 2 and 1: All COS – 0000 / Bit 5: All COS – 1

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Warning:

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

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