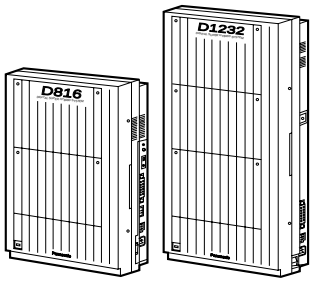
Panasonic



Digital Super Hybrid System

Programming Guide

KX-TD816

Model KX-TD1232

Please read this manual before using the Digital Super Hybrid System.
This manual is for software version P341I, P342I or later for KX-TD816 and P241I, P242I or later for 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 EuropeanTelecommunication 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 300 122 Generic keypad protocol for the support of supplementary service (ISDN Service Access).
ETS 300 130 Malicious Call Identification (MCID) supplementary service.
ETS 300 182 Advice of Charge (AOC) supplementary service Digital Signalling Syste No.one (DSS1) protocol.

Section 4, E&M Programming
Provides details about the system programmings required to use E&M (TIE) lines.

Section 5, DECT Programming
Provides details about the system programmings required to use the wireless system with a DECT portable station.

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, consoles or DECT portable stations.

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Section

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-T7536, KX-T7533, KX-T7531, KX-T7436, KX-T7433, KX-T7235, KX-T7230
- Analogue Proprietary Telephone (APT):
  KX-T7330, 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]Op erator / 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

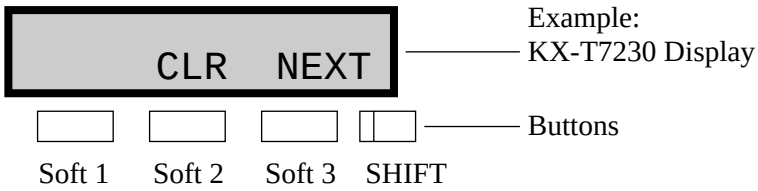
Soft Buttons and SHIFT Button on the Display DPT

Three soft buttons are provided just below the display of Digital Proprietary Telephones (DPT), KX-T7533, KX-T7536, 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.)

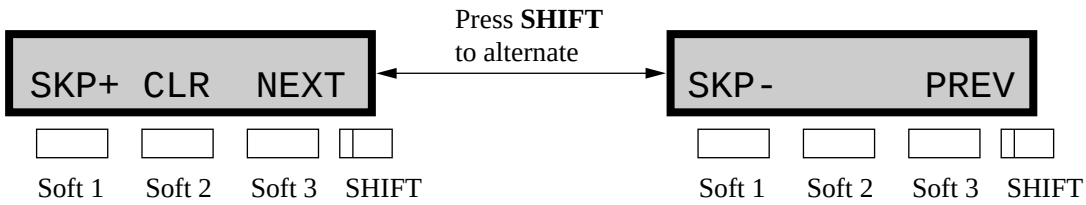
If the **SHIFT** button indicator is on, two functions are available with each soft button. To alternate between the two functions, press the **SHIFT** button on the right side of the display.

Soft button variations

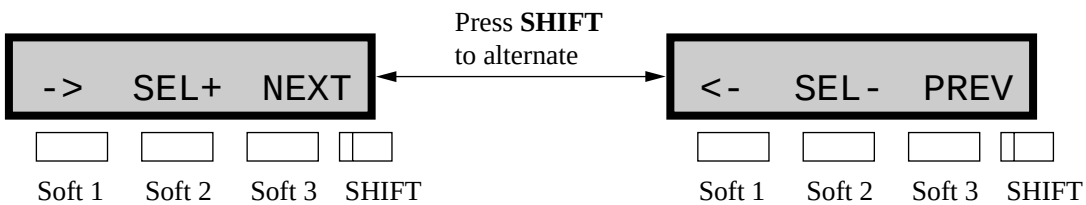
Type 1



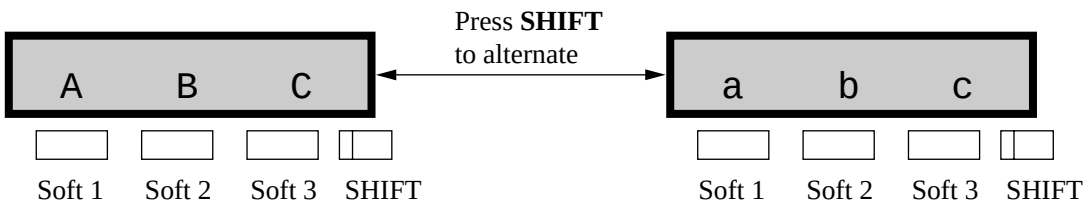
Type 2



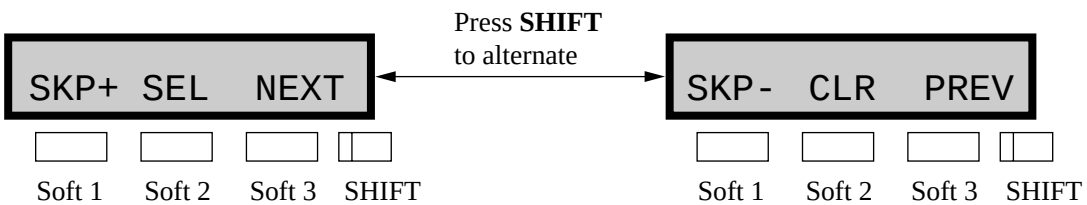
Type 3



Type 4



Type 5



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

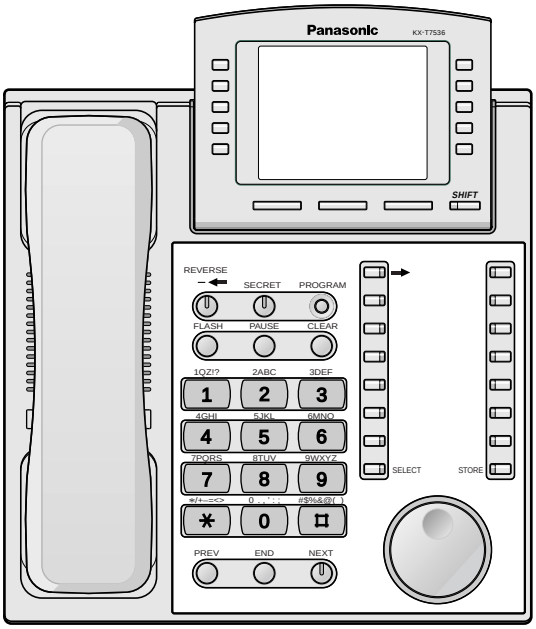
Using the Overlay

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.)

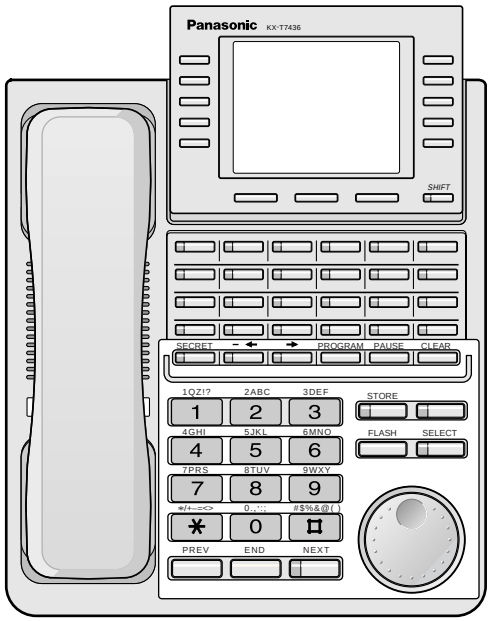
During Normal Operation	During Programming
(PAUSE)	PAUSE / PROGRAM
(SP-PHONE)	NEXT
(REDIAL)	PREV (PREVIOUS)
(AUTO ANSWER / MUTE)	SELECT
(FLASH)	FLASH
(TRANSFER)	CLEAR
(FWD/DND)	➡
(CONF)	— / ⬅
(INTERCOM)	SECRET
(AUTO DIAL / STORE)	STORE
(HOLD)	END

Location of Controls with the Overlay

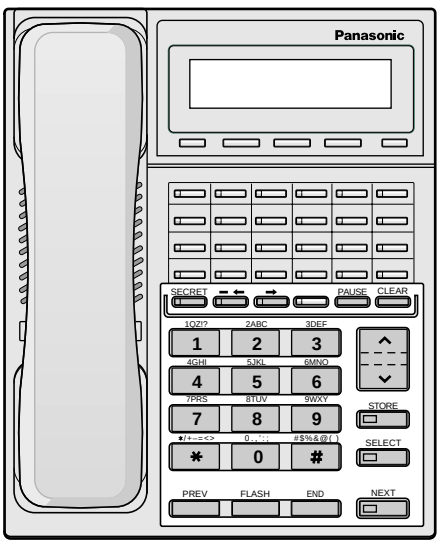
The pictures below show the functions of the buttons of the proprietary telephone while in programming mode. There are Overlays for the KX-T7500, KX-T7400 and KX-T7200 series telephones. KX-T7536 and KX-T7230 are used for the examples.



KX-T7536



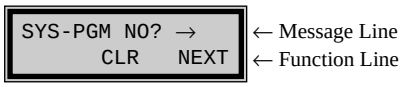
KX-T7436



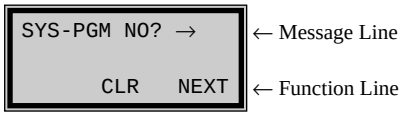
KX-T7230

Viewing the Display

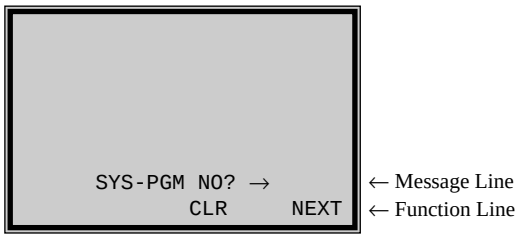
The display gives you helpful information, such as what you should do now, what you have done, etc..
The KX-T7533, KX-T7536, KX-T7433, KX-T7436, KX-T7230 and the KX-T7235 utilise two information lines for programming. The upper line is called the Message Line and the lower one is called the Function 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 ▶ or ◀ button.
The Function Line (lower) shows the current function of the soft buttons. These functions change with the programming procedures.



2-Line Display



3-Line Display



6-Line Display

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

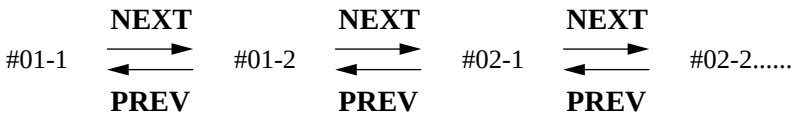
When "SYS-PGM NO? →" is displayed, you can select one of the following:

- 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 rorate the **Jog Dial** in the counter-clockwise direction.
To go to the next smaller programme address:
Press **SHIFT + Soft 1** (**SKP–**) or **VOLUME ∧ (UP)** or rorate 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 ∨**. You can move in reverse order from [008] to [007], etc. by pressing the **SKP–** or **VOLUME∧** .
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? →` 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	A	a	B	b	C	c		
3	3	D	d	E	e	F	f		
4	4	G	g	H	h	I	i		
5	5	J	j	K	k	L	l		
6	6	M	m	N	n	O	o		
7	7	P	p	Q	q	R	r	S	s
8	8	T	t	U	u	V	v		
9	9	W	w	X	x	Y	y	Z	z
0	0	(space)	.	,	’	:	;		
⚹	*	/	+	-	=	<	>		
#	#	$	%	&	@	(	)		

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 l 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 a:**
  If your telephone is a KX-T7531, do not use the provided SELECT button. Use the AUTO ANSWER/MUTE button which becomes the SELECT button when using the overlay.
- **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-T7533 / KX-T7536 / 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-T7531 / KX-T7533 / KX-T7536 / 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**.

```
          6
 M    N    O
```

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

```
          M
 M    N    O
```

c) Enter **4**.

```
         M4
 G    H    I
```

d) Press **SHIFT**.

```
         M4
 g    h    i
```

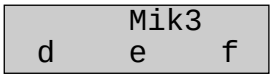
e) Press **Soft 3** (i).

```
         Mi
 g    h    i
```

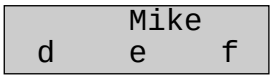
f) Enter **5**.

g) Press **Soft 2** (k).

h) Enter **3**.



i) Press **Soft 2** (e).



Using method (2)
* See Combination Table a.

Procedures	The display shows:
1. Enter **6**.	6
2. Press **SELEC** .	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

Note

- 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 [125]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 P rogramming Methods.

Example: programme [001] S ystem Speed Dialling Number Set

Sample of Description	Explanation
[001](1) **System Speed Dialling Number Set**(2)	(1) Programme address. (2) Programme title.
Description (3) Used to program the System Speed Dial numbers. These numbers are available to all extension users. There are 500 numbers from 000 through 499.	(3) Provides a more detailed description of the programme.
Selection (4) • Speed dial number: **000 through 499** • Telephone number: **24 digits (max.)**	(4) Shows you choices that you can assign.
Default (5) All speed dial numbers – Not stored	(5) Shows you the default (factory setting).
Programming (6)	(6) Shows you programming procedures step by step. • While programming, use the overlay. • Before starting to programme, enter the programming mode. (See Entering the programming mode in Section 1.2 Using Proprietary Telephones.)
1. Enter **001**.(7) `Display: SPD Number Set`(8)	(7) Enter the programme address. (8) The display shows the programme title. If your telephone has soft buttons, the lower line shows the functions that are currently assigned to them.
2. Press **NEXT**.(9) `Display: SPD Code?→`(10)	(9) Press either **Soft 3** (`NEXT`) shown on the display or the **NEXT** shown on the overlay. (10) The message line advises you to enter a speed dial number.
3. Enter a **speed dial number**. To enter speed dial number 000, you can also press **NEXT**. `Display example: 000:Not Stored`(11)	(11) If the telephone number has already been stored, the number is displayed.
4. Enter a **telephone number**.(12) To delete the current entry, press **CLEAR**.(13) To change the current entry, press **CLEAR** and enter the new number.	(12) Enter the telephone number that you want to store. Your entry is displayed as you enter the digits. (13) Pressing **CLEAR** erases the whole entry.
5. Press **STORE**.(14)	(14) Your entry is now stored. 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.
Conditions (18) • Each speed dial number has a maximum of 24 digits. The valid characters are **0 through 9**, ✳ and # keys, **FLASH**, **PAUSE**, **SECRET** and – **(hyphen)** buttons. • • • • • • • •	(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.
Features Guide References (19) System Speed Dialling	(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 the Features Guide.

Programming Structur

Programme Address	Programming Group	Description
[0XX]	Manager Programming	These programmes may be accessed by the syste 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 RoutingTable.
[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.

Programming Structur

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

General Programming

2.1 Manager Programming

[000] D ate and Time Set

Description

Sets the current date and time.

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: **00 through 23**
- Minute: **00 through 59**
- **AM / PM**

Default

'95 Jan. 1 SUN 00:00

Programming

1. Enter **000**.

```
Display: Day / Time set
```

2. Press **NEXT.**

```
Display example: '95 Jan. 1 SUN
```

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
```

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 **STORE.**

18. 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 16.
- 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: SPD Number Set`
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 numbe** .
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 ✻nd **#** 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, 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 ➡. ⬅
- Programme [002]System Speed Dialling Name Set is used to name the speed dial numbers.

Features Guide References

Call Directory

System Speed Dialling

[002] System Speed Dialling Name Set

Description

Assigns names to the system speed dial numbers assigned in programme [001]System Speed Dialling Number Set. KX-T7531, KX-T7533, KX-T7536, 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: SPD Name Set`

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 Set.
- 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

[003] E xtension Number Set

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: EXT Number 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 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 [10 0]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 178
  KX-TD1232 – 165 through 180

  [130] Phantom Extension Number Set
  Not stored.

  [813] Floating Number Assignment
  KX-TD816 – 191 through 194, 196, 198, 199, 291 through 294, 298, 299
  KX-TD1232 – 191 through 194, 196 through 199, 291 through 294, 296 through 299

  [671] PS Extension Number Set
  Not stored.
- 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

[004] E xtension Name Set

Description

Assigns names to the extension numbers programmed in program me [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: EXT Name Set`
2. Press **NEXT.**
   `Display: Jack NO?→`
3. Enter a **jack numbe**r.
   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] F lexible 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
4 (FWD/DND)	None
5 (Save)	None
6 (Account)	None
7 (Conference)	None
80 (Log-In/Log-Out)	None
82 (Voice Mail Transfer)	**2 through 4 digits** (Voice mail extension number)
83 (Two-Way Record)*	**2 through 4 digits** (Voice mail extension number)
84 (Two-Way Transfer)*	**2 through 4 digits** (Voice mail extension number)
85 (Live Call Screening)*	None
86 (Live Call Screening Cancel)*	None
87 (Alert)	None
88 (Phantom Extension)	**2 through 4 digits** (Phantom extension number)
89 (ISDN Service)	**16 digits max**. (ISDN service number)
8✱ (Night)	None
✱ (Loop-CO)	None
# (Group-CO	1 through 8 (Outside line group number)
CO (Ringer frequency)	1 through 8 (Ring tone type number)

* Available when this system is connected toa Voice Processing System which supports digital proprietary telephone integration (e.g. KX-TVP200).

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: Flexible Key Asn`
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]Op erator / 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.) For the KX-T7500 series telephones, 24 CO buttons can be programmed by adding 12 CO buttons by connecting the KX-T7545 Add-on key Module.
- 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 perfor System Programming. 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: Operator / Manage`

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 [00 7]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**
  KX-TD1232 – **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: DSS Console Asn
```

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 [407-4 08]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 9**
- Message: **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: Message Asn`
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 .4Entering 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 numbe** .
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 ➡ or ⬅

Features Guide References

Absent Message Capability

[009] Emergency Dial Number Set

Description

Assigns emergency call numbers.

Selection

- Emergency dial location number: **1 through 8**
- Telephone number: **16 digits (max.)**

Default

All locations – Not stored

Programming

1. Enter **009**.
   `Display: Emergency Call`
2. Press **NEXT**.
   `Display: Emergency NO?→`
3. Enter an **emergency dial location numbe** .
   To enter emergency number 1, you can also press **NEXT**.
   `Display example: 1:9110`
4. Enter a **telephone numbe** .
   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 emergency dial number, press **NEXT** or **PREV**, or **SELECT** and the desired **emergency dial location numbe** .
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

- There is a maximum of eight emergency call numbers. Each number has a maximum of 16 digits, consisting of **0 through 9, ✳ , #, F (Flash), P (Pause)** and **– (hyphen)**.
- No restriction is applied to emergency call numbers.
- For outside calls, enter a line access number (9, 81 through 88) before the phone number.
- Emergency dial location number (1-8) corresponds to [100] Flexible Numbering – No. 55-62.

Features Guide References

Emergency Call

[010] 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 59999**

Default

All jacks – 0

Programming

1. Enter **010**.
   `Display: Charge Limit`
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 numbe** .
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 denomination can be programmed by [121]Assignment of Denomination.

Features Guide References

Budget Management

Charge Fee Reference

[011] Charge Margin Rate

Description

Assigns the margin rate of a telephone charge.

Selection

Margin (%): **0 through 999**

Default

0%

Programming

1. Enter **011**.
   `Display: Charge Margin`
2. Press **NEXT**.
   `Display: Margin: 0%`
3. Enter a **charge margin rate**.
   To delete the charge limitation, press **CLEAR**.
4. Press **STORE**.
5. Press **END**.

Conditions

$$\text{Telephone charge} = \text{Real charge} \times \left(\frac{100 + \text{rate}}{100}\right)$$

The telephone charge will be printed out when checking out.

Features Guide References

Hotel Application

[015] Q uick Dialling Number Set

Description

Stores the desired extension or telephone numbers for Quick Dialling.
Quick dialling numbers must be assigned in programme [104]Flexible Quick Dialling Number Set.

Selection

- Location number: **01 through 80**
- Desired number: **16 digits (max.)**

Default

All location numbers – Not stored

Programming

1. Enter **015.**

```
Display: Quick Dial
```

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 **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

- Each quick dialling number has a maximum of 16 digits, consisting of **0 through 9**, *** #, F (FLASH), P (PAUSE)** and **– (hyphen)**.

Features Guide References

Quick Dialling

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
18	Automatic line access / ARS	9
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	Night service mode	78
52	Parallel telephone mode	39
53	Background music – external	35
54	Reserved	
55-62	Emergency call 1 through 8	None
63	Timed reminder, remote	7✳
64	Call log, incoming	56
65	Call log lock, incoming	57
66	Check-out ready	736
67	TIE line access number	None
68-83	Other PBX Extension 01 through 16	None
84	LCS password set / cancel	799
85	Log-in / log-out	45
86	SXDP	48
87	CLIP / COLP	711
88	Reserved	
89	MCID	737

Selection

- Selection number: **01 through 89** (See "Feature Number List" for the corresponding features.)
- Feature number:
  1 or 2 digits (for selection numbers 01 through 16, 68 through 83);
  1 through 3 digits (for selection numbers 17 through 67, 84 through 89)

Default

See "Feature Number List".

Programming

1. Enter **100.**
   `Display: FLX Numbering`
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.**

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 [00 3]Extension Number Set, [0 12]ISDN Extension Number Set, [11 8]Voice Mail Extension Number Set, [130] Phantom Extension Number Set, [81 3]Floating Number Assignment and [671]PS Extension Number Set.
- If ✳r # 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 programmes [003]Ex tension Number Set, [012]IS DN Extension Number Set, [118]Voice Mail Extension Number Set, [130]Ph antom Extension Number Set, [813] F loating Number Assignment and [671]PS Extension Number Set.

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: Day/Night Mode`
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 [10 2]Day / Night Service Starting Time.
- The operator can switch the day / night mode at any time.

Features Guide References

Night Service

[102] D ay / Night Service Starting Time

Description

Sets the starting time on a day of the week basis, when automatic day / night switching is programmed in programme [101] D ay / 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: Day/Night 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-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 9.
   If **SELEC** 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 ✳ 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

Night Service

[103]Automatic Access Outside Line Group Assignment

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) 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: Local Access`
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

[104] Flexible Quick Dialling Number Set

Description

Assigns the flexible quick dialling numbers.

The desired extension or telephone numbers must be stored in programme [015]Quick Dialling Number Set.

Selection

- Location number: **01 through 80**
- Flexible quick dialling number: **4 digits (max.)**

Default

All locations – Not stored

Programming

1. Enter **104**.
   `Display: FLX Quick Dial`
2. Press **NEXT**.
   `Display: Location NO?→`
3. Enter a **location numbe** .
   To enter location number 01, you can also press **NEXT**.
   `Display example: 01:Not Stored`
4. Enter a **flexible quick dialling numbe** .
   To delete the current entry, press **CLEAR**.
   To change the current entry, press **CLEAR** and the new number.
5. Press **STORE**.
6. To programme another location, press **NEXT** or **PREV**, or **SELECT** and the desired **location numbe** .
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

- There is a maximum of 80 flexible dialling numbers. Each number has a maximum of 4 digits, consisting of **0 through 9**, ✱nd #.
- The double storing or the contradictory combination of storing is disabled.
  <Example>
  Enable: 30 and 31, 210 and 211, 44 and 450 etc.
  Disable: 5 and 5, 1 and 10, 30 and 301 etc.

Features Guide References

Quick Dialling

[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. IfVerified– 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: Account Code`
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, Terminating,Voice Mail (VM), Automated Attendant (AA), Ring Group and Uniform Call Distribution (UCD).
If circular hunting is assigned for a group, all of the extensions in the group are searched until an idle one is found. If terminating hunting is assigned, searching stops at the extension which has the largest jack number in the group. If VM hunting is assigned, all of the VM ports of an extension group are searched until an idle one is found whichallows Voice Mail Service. If AA hunting is assigned, all of the AA ports of an extension group are searched until an idle one is found which allows AA Service. If Ring Group is assigned, all of the extensions in the ring group ring simultaneously. If UCD is assigned, group members are hunted in a circular way.

Selection

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

Default

All extension groups – Disable

Programming

1. Enter **106.**
   `Display: Call Hunting`
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 ✳ 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: System 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

[108] One-Touch Transfer by DSS Button

Description

Enables or disables the function of automatically holding the outside call when a DSS button on the console or proprietary telephone is pressed.

Selection

Enable / Disable

Default

Enable

Programming

1. Enter **108.**
   `Display: DSS Auto Hold`
2. Press **NEXT**
   `Display example: Auto. HLD:Enable`
3. Keep pressing **SELECT** until the desired selection is displayed.
4. Press **STORE.**
5. Press **END.**

Conditions

None

Features Guide References

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) / S1 (2 S0) / S2 (6 S0) / EM (4 E&M) / E (EXT) / A (16 SLT) / D (No Use)**

KX-TD1232

- **Master / Slave**
- Areas 1; 2; 3 = **C (4 CO) / S1 (2 S0) / S2 (6 S0) / S3 (1 PRI) / EM (4 E&M) / E1 (8 EXT1) / E2 (8 EXT2) / A1 (16 SLT1) / A2 (16 SLT2) / D (No Use)**
  (Master system only: S3, E1 and E2 for the KX-TD144 or KX-TD146)

Default

KX-TD816: C;E

KX-TD1232: Master and Slave – C;E1;E2

Programming

KX-TD816

1. Enter **109.**
   `Display: Expansion Card`
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: Expansion Card`
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
  – S1 (2-ISDN S0 lines): KX-TD280
  – S2 (6-ISDN S0 lines): KX-TD286
  – S3 (1-PRI ISDN line): KX-TD290
  – EM (4-E&M lines): KX-TD184
  – E, E1, E2 (8-Extension lines): KX-TD170, KX-TD144 or KX-TD146
  – 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 / E&M) unit can be installed.
- There are three expansion areas in each system for the KX-TD1232, areas 1, 2 and 3 fro bottom to top. Up to two extension line units and one outside line (CO / ISDN S0 / E&M) unit can be installed. The PRI ISDN line unit can be installed with the ISDN S0 line unit, but not with the analogue outside line unit.
- 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

[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: VM Status Set`
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 toVoice 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 06-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]; [665]; [990], Area 06-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]; [665]; [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: VM Command Set
   ```

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 and [665]PS Voice Mail Access Codes, or an extension number will be sent to the port succeeding the ✳ "".

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 12**
- Minute: **00 through 59**
- **AM / PM**

Default

1:00 AM

Programming

1. Enter **115.**
   `Display: Adjust Time`
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 ➡ to 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 synchronsed with each other.

Features Guide References

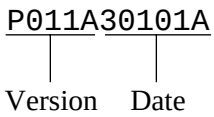
None

[116]ROM Version Display

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: 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 four ports (8 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-TVP200).

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: VMS Port Asn`
2. Press **NEXT**.
   To programme the Slave System, press **NEXT** again.
   `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 **END**.

KX-TD123

1. Enter **117**.
   `Display: VMS Port Asn`
2. Press **NEXT** to programme the Master System.
   To programme the Slave System, press **NEXT** again.
   `Display example: Mast1:# # # #`
3. Enter a **jack numbe** .
   To delete the current entry, press **CLEA** .
   To change the current entry, press **CLEAR** and enter the new jack number.
4. Press ➡ nter another jack number.
5. Repeat steps 3 through 4 to enter another jack number.
6. Press **STORE**.
7. Press **NEXT** to programme the Slave System.
   `Display example: Slav1:# # # #`
8. Repeat steps 3 through 4 to enter another jack number.
9. Press **STORE**.
10. 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
  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

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-TVP200).

Selection

- Voice mail number (VM):
  KX-TD816 – **01 through 08**
  KX-TD1232 – **01 through 16**
- 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

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=171, VM-10=172, VM-11=173, VM-12=174, VM-13=175, VM-14=176, VM-15=179, VM-16=180

Programming

1. Enter **118**.
   `Display: VM EXT NO. Set`
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-08 are for the Master System and VM-09 through VM-16 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 [10 0]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.

  [130] Phantom Extension Number Set
  Not stored.

  [813] Floating Number Assignment
  KX-TD816 – 191 through 194, 196, 198, 199, 291 through 294, 298, 299
  KX-TD1232 – 191 through 194, 196 through 199, 291 through 294, 296 through 299

  [671] PS Extension Number Set
  Not stored.

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-TVP200).

Selection

- Voice mail number (VM):
  KX-TD816 – **01 through 08, ✳**
  KX-TD1232 – **01 through 16, ✳**
  (✳=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: VM EXT Group Asn`

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 numbe** .
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-08 are for the Master System and VM-09 through VM-16 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 [1 17]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 ✳ 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] Charge Display Selection

Description

Assigns the initial display format of charge fee.

Selection

in Meter / in Charge

Default

in Meter

Programming

1. Enter **120**.
   ```
   Display: 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 [815]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)

[121] A ssignment of Denomination

Description

Assigns the Denomination required for your country.

Selection

2 characters (Max.)

Default

Not stored

Programming

1. Enter **121**.

```
Display: Denomination
```

2. Press **NEXT**.

```
Display example: Denomi.: KC
```

3. Enter a **denomination**.

To delete the current entry, press **CLEA** .
To change the current entry, press **CLEAR** and enter the new denomination.
To enter characters, see Section 1. 4Entering Characters.

4. Press **STORE**.

5. Press **END**.

Conditions

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

Features Guide References

Display Message

[122] Charge Verification Assignment

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 **122**.
`Display: Charge Refer 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: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 numbe** .

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 ✳ key in step 3.
  In this case, the display shows the contents programmed for Jack 01.

Features Guide References

Charge Fee Reference

[123] 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 **123**.
   `Display: Charge ID Code`
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

[124] Hotel Application

Description

Assigns whether the hotel application is enabled or disabled.

Selection

Enable / Disable

Default

Disable

Programming

1. Enter **124**.
   `Display: Hotel Apply Asn`
2. Press **NEXT**.
   `Display example: Hotel:Disable`
3. Keep pressing **SELECT** until the desired selection is displayed.
4. Press **STORE**.
5. Press **END**.

Conditions

If "Enable" is selected, the "Hotel" menu is displayed on the operator extension's KX-T7536 or KX-T7235.

Features Guide References

Hotel Application

[125] U ser 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 **125**.

```
Display: User 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

[126] 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 **126**.

```
Display: UCD Overflow
```

2. Press **NEXT**.

```
Display: UCD NO? →
```

3. Enter a **UCD group numbe** .

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

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

4. Enter an **overflow extension numbe** .

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

5. Press ➡

6. Enter a **Time Table numbe** .

```
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)

[127] 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 **127**.
   `Display: UCD Time Table`
2. Press **NEXT**.
   `Display: Table NO.? →`
3. Enter a **Time Table numbe** .
   To enter Time Table number 1, you can also press **NEXT**.
   `Display example: 1: → → → →`
4. Keep pressing **SELECT** until the desired selection is displayed.
   `Display example: 1:S4→ → → →`
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)

[130] 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 **130**.
   `Display: Phantom NO.`
2. Press **NEXT**.
   `Display: Location NO? →`
3. Enter a **location numbe** .
   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 numbe** .
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 [10 0]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
KX-TD1232 – 165 through 180

[813] Floating Number Assignment
KX-TD816 – 191 through 194, 196, 198, 199, 291 through 294, 298, 299
KX-TD1232 – 191 through 194, 196 through 199, 291 through 294, 296 through 299

[671] PS Extension Number Set
Not stored.

Features Guide References

Phantom Extension

[148] Off-Hook Monitor

Description

Enables or disables to perform the Off-Hook Monitor.

Selection

Enable / Disable

Default

Enable

Programming

1. Enter **148**.

```
Display: Off 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-T7531, KX-T7533, KX-T7536, KX-T7433 and KX-T7436 telephone users.

Features Guide References

Off-Hook Monitor

[154] M essage 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 **154**.
   `Display: MW CONTROL`
2. Press **NEXT**.
   `Display: MW UNIT NO? →`
3. Enter a **unit numbe** .
   To enter unit number 1, you can also press **NEXT**.
   `Display example: Unit:1 Jack`
4. Enter a **jack numbe** .
   `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.
  Jack 01
  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

[155] M essage Waiting Lamp Assignment

Description

Assigns the message waiting light pattern.

Selection

Message waiting light pattern number: **01 through 12**

Default

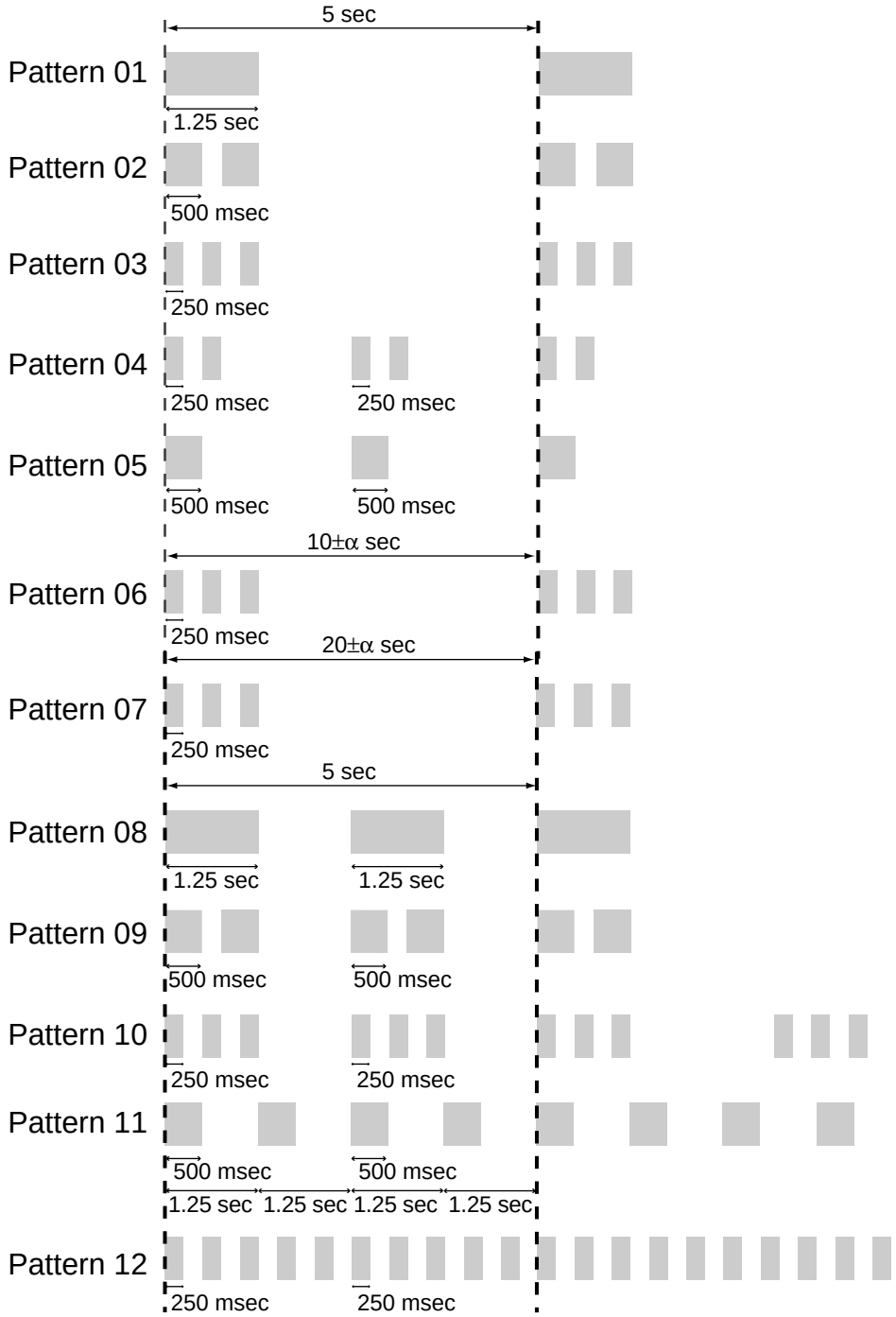
1

Programming

1. Enter **155**.
   `Display: 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

[156] M essage Waiting Port Set

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 **156**.

```
Display: MW PORT
```

2. Press **NEXT**.

```
Display: MW UNIT NO? →
```

3. Enter a **unit numbe** .

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

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

4. Enter a **message waiting port numbe** .

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

5. Press ➡

6. Enter a **single line telephone jack numbe** .

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

7. Press ➡

8. Enter a **sub port numbe** .

```
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 numbe** .

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 [154].
  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

2.3 Timer Programming

[200] H old 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: Hold Recall 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

- 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: **3 through 48**

Default

12 rings

Programming

1. Enter **201**.

   ```
   Display: Transfer 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 [99 0]System Additional Information, Area 02-Bit 1.

Features Guide References

Call Transfer

[202] C all Forwarding – No Answer Time

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: No Answer Time`
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 station.

Selection

Number of rings: **3 through 48**

Default

12 rings

Programming

1. Enter **203**.

   `Display: Intercept Time`
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

[204] P ickup Dial Waiting Time

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: Pickup Dial Time`
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: CO Dur. 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 [50 2]Extension-to-Outside Line Call Duration Limit.
- This time cannot be set to zero or be left empty.

Features Guide References

None

[206] O utside-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: CO-CO Dur. 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: 1st Digit Time`
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

[208] I nter Digit Time

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 (DualTone 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: Inter Digit Time`
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

10 times

Programming

1. Enter **209**.
   ```
   Display: Redial Times
   ```
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

[210]Automatic Redial Interval Time

Description

Sets the interval time between Automatic Redial attempts.

Selection

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

Default

60 s

Programming

1. Enter **210**.
   `Display: Interval 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 seised.

Selection

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

Default

500 ms

Programming

1. Enter **211**.
   `Display: CO 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

[212] C all Duration Count Start Time

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: SMDR Durat Time`
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: DISA Delayed Ans`
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)

[214] D ISA Prolong Time

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 ✳ 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: DISA Prolng Time`
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: OGM 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)

[216] M essage Waiting Ring Interval Time

Description

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

Selection

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

Default

10 min

Programming

1. Enter **216.**
   `Display: MW Ring Time`
2. Press **NEXT.**
   `Display example: Interval: 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

None

Features Guide References

Message Waiting

[217] Timed Reminder Alarm Repeat Times

Description

Sets the number of times Timed Reminder alarm is tried.

Selection

Number of times: **1 through 5**

Default

3 times

Programming

1. Enter **217**.
   `Display: Alarm Times`
2. Press **NEXT.**
   `Display example: Attempt: 3`
3. Enter the **time**.
   To change the current entry, press **CLEAR** and enter the new time.
4. Press **STORE.**
5. Press **END.**

Conditions

One attempt is equivalent to 30 seconds.

Features Guide References

Timed Reminder

[218]Timed Reminder Alarm Interval Time

Description

Sets the Timed Reminder alarm interval time.

Selection

Time (seconds): **30 through 240**

Default

60 s

Programming

1. Enter **218.**
   `Display: Alarm Interval`
2. Press **NEXT.**
   `Display example: Interval: 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

None

Features Guide References

Timed Reminder
Hotel Application

[221] 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 automated attendant number if assigned in progra mme [818]DISA Built-in Automated Attendant Number.

Selection

Time (seconds): **1 through 5**

Default

1 s

Programming

1. Enter **221.**

   `Display: 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)

2.4 TRS / ARS Programming

[300] T RS 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: SPD Override`
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

Toll Restriction

[301-305] T RS 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: **7 digits (max.)**

Default

All locations – Not stored

Programming

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

   `Display example: TRS Deny LVL–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 seven 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

Toll Restriction

[306-310] T RS 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: **7 digits (max.)**

Default

All locations – Not stored

Programming

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

   `Display example: TRS Excp LVL–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 seven digits, consisting of **0 through 9**, and ✳. The character "✳" can be used as a wild card character.

Features Guide References

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: ARS Mode`
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] A RS 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

- Time schedule: **Time-A / Time-B / Time-C / Time-D**
- Time (hour) : **1 through 12 / Disable** (no schedule)
- **AM / PM**

Default

Time-A – 8:00 AM; Time-B – 5:00 PM; Time-C – 9:00 PM; Time-D – Disable

Programming

1. Enter **313**.

   `Display: ARS Time`

2. Press **NEXT** to programme Time-A

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

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

3. 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.

4. Press ➡ select AM / PM.
5. Press **SELECT** for AM or PM.
6. Press **STORE**.
7. To programme another time schedule, keep pressing **NEXT** or **PREV** until the desired time schedule is displayed.
8. Repeat steps 3 through 7.
9. Press **END**.

Conditions

- The times must be programmed in sequence from Time-A to Time-D. Enter a starting time for each time schedule. Select "Disable" for idle schedules.
- You cannot leave an entry empty.

Features Guide References

Automatic Route Selection (ARS)

[314-321] A RS 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: **01 through 50**
- Leading digit number: **7 digits (max.)**

Default

All locations – Not stored.

Programming

1. Enter a **programme address (314 through 321)**.
   `Display example: ARS Leading PL-1`
2. Press **NEXT**.
   `Display: Location NO?→`
3. Enter a **location numbe** .
   To enter location number 01, you can also press **NEXT**.
   `Display example: 01:Not Stored`
4. Enter a **leading digit numbe** .
   To delete the current entry, press **CLEA** .
   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 numbe** .
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

Each number has a maximum of seven digits, consisting of **0 through 9,** and ✳. The character "✳" can be used as a wild card character.

Features Guide References

Automatic Route Selection (ARS)

[322-329] A RS 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 8**
- Modification table number: **1 through 8**

Default

All time schedules – Not stored

Programming

1. Enter a **programme address (322 through 329)**.

```
Display example: ARS Route PL-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 **CLEA** .
To change the current entry, enter the new number.

4. Press ➡ :nter the paired modification table number.

5. Enter a **modification table numbe** .

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

To change the current entry, enter the new modification table number.

6. Press ➡ :nter 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 [3 30]ARS Modify Removed Digit and [3 31]ARS Modify Added Number are used to make up the eight Modification Tables.

Features Guide References

Automatic Route Selection (ARS)

[330] A RS 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: ARS Modify Remov`
2. Press **NEXT**.
   `Display: Modify Table?→`
3. Enter a **modification table numbe** .
   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 numbe** .
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

Automatic Route Selection (ARS)

[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: ARS Modify Add`
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 numbe** .
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

Automatic Route Selection (ARS)

2.5 Outside Line Programming

[400] O utside 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 is connected: All outside lines in the Slave System – No Connect)

Programming

1. Enter **400**.
   `Display: CO Connection`
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 expansion unit is installed in the KX-TD1232.
- 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

Outside Line Connection Assignment

[401] O utside 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: Trunk Group Asn`
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 numbe** .
   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 expansion unit is installed in the KX-TD1232.
- To assign all outside lines to one outside line group, press the ✳ key in step 3. In this case, the display shows the contents programmed for outside line 01.

Features Guide References

Outside Line Group

[402] D i al 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

All outside lines – Pulse

Programming

1. Enter **402**.
   `Display: CO 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 ✳ 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 [40 4]DTMF Time.
- If pulse or call blocking is assigned, set the pulse speed of the line in programme [40 3]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] P ulse Speed Selection

Description

An outside line set for pulse or call blocking mode in program me [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: 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: CO01:10pps`
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 ✳ 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: 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 ✳ 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

[407-408] D IL 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: DIL 1:1 Asn 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 numbe** .

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 ✳ 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 – [0 03]Extension Number Set
  ISDN extension numbers – [01 2]ISDN Extension Number Set
  Voice Mail extension numbers – [118] Voice Mail Extension Number Set
  Phantom extension numbers – [130] Phantom Extension Number Set
  Floating numbers (of External Pagers, DISA messages, extension groups and modem only) – [813] Floating Number Assignment
  PS extension number – [6 7 1]PS Extension Number Set

Features Guide References

Direct In Lines (DIL)

Direct Inward System Access (DISA)

Night Service

[409-410] I ntercept 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, ✳** ✳ıll 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: TRG Intercpt 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 ✳ey 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 – [0 03]Extension Number Set
  ISDN extension numbers – [012] ISDN Extension Number Set

Voice Mail extension numbers – [118] Voice Mail Extension Number Set
Phantom extension numbers – [130] Phantom Extension Number Set
Floating numbers (of External Pagers, DISA messages and extension groups only) – [81 3]Floating Number Assignment
PS extension number – [6 7 1]PS Extension Number Set

Features Guide References

Intercept Routing

[411] H ost 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, ✳ ✳**ıll 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: TRG Host PBX NO.
```

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 ➡l 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 numbe** .

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 [40 1]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 programme d 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, ✳** ✳ıll outside line groups)
- Time (seconds): **1.5 / 2.5 / 3.5 / 4.5**

Default

All outside line groups – 4.5 s

Programming

1. Enter **412.**
   `Display: TRG 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: TRG1:4.5sec`
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 ✳ey 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, ✳** ✳ll 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 – 96 ms

Programming

1. Enter **413.**
   `Display: TRG 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: 96 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: TRG Discnct Time`
2. Press **NEXT.**
   `Display: TRK GRP NO?→`
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 PBX.
- 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

Flash

[417] O utside Line Name Assignment

Description

Assigns company or customer names to each outside line so that the operator or extension user can view the destination which the caller is trying to reach before answering.

Selection

- Outside line (CO) number:
  KX-TD816 – **01 through 08, ✳**
  KX-TD1232 – **01 through 54, ✳**
  (✳=all outside lines)
- Name: **10 characters (max.)**

Default

All outside lines – Not stored

Programming

1. Enter **417**.

```
Display: 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 **CLEA** .
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 expansion unit is installed in the KX-TD1232.

- 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

Display Message

Incoming Outside Call Information Display

[423] Pay Tone Assignment

Description

Enables Pay Tone for the outside lines.
An optional Pay Tone Card (KX-TD189) must be installed on the CO Line Card to receive a Pay Tone.

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 **423**.
   `Display: Pay-Tone Asn`
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.
- 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.
- It is not necessary to install the Pay Tone Card on the ISDN Line Unit.

Features Guide References

Incoming Outside Call Information Display
Hotel Application

[441] L ine 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, ✳** ✳ll outside line groups)
- **Small → Large / Large → Small**

Default

All outside line groups – Small –> Large

Programming

1. Enter **441**.
   `Display: Line Hunting`
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 numbe** .
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 ✳ key in step 3. In this case, the display shows the contents programmed for outside line group number 1.

Features Guide References

None

2.6 COS Programming

[500-501] Toll Restriction Level – Day / Night

Description

Each extension must be assigned a Class of Service (COS). These programs 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: TRS Level Day`
2. Press **NEXT.**
   `Display: COS NO?→`
3. Enter a **COS number.**
   To enter COS number 1, you can also press **NEXT.**
   `Display example: COS1:1`
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

Night Service
Toll Restriction

[502] Extension-to-Outside Line Call Duration Limit

Description

This programme allows you to restrict the duration of outside calls on a Class of Service (COS) basis.

Selection

- COS number: **1 through 8, ✳** (✳=all COS)
- **Disable** (no limit) / **Enable** (limit)

Default

All COS – Disable

Programming

1. Enter **502.**
   `Display: CO Durat. Limit`
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] CallTransfer to Outside Line

Description

This programme 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: Transfer to 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 ✳ key in step 3. In this case, the display shows the contents programmed for COS 1.

Features Guide References

Call Transfer

[504] C all Forwarding to Outside Line

Description

This programme 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: Call FWD to 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 ✳ 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: Busy 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 ✳ key in step 3. In this case, the display shows the contents programmed for COS 1.

Features Guide References

Executive Busy Override

[506] E xecutive Busy Override Deny

Description

This programme is used to determine which Classes of Services (COS) are allowed to den 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, ✳** (✳=all COS)
- **Disable / Enable**

Default

All COS – Enable

Programming

1. Enter **506.**
   `Display: Busy Over. Deny`
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

This programme 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: 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 ✳ key in step 3. In this case, the display shows the contents programmed for COS 1.

Features Guide References

Do Not Disturb (DND)

[508] A ccount Code Entry Mode

Description

There are three account code modes: Option, Verified-All Calls and Verified-Toll Restriction Override. This programme determines the 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: Call Accounting`
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.**
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.

- Programme [105]Account Codes is used to define the Account Codes for the Verified modes.

Features Guide References

Account Code Entry

Toll Restriction

[509] O ff-Hook Call Announcement (OHCA)

Description

This programme determines which Class of Service (COS) are allowed to perform the Off-Hook Call Announcement (OHCA) function.

Selection

- COS number: **1 through 8, ✻** (✻=all COS)
- **Enable / Disable**

Default

All COS – Enable

Programming

1. Enter **509.**
   `Display: 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

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: XDP Assign`
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 ✳ 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. Primary and secondary COS numbers can be assigned per 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 – Primary, Secondary – COS 1, COS 1

Programming

1. Enter **601.**

`Display: COS Assign`

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 **primary COS number.**

To change the current entry, enter the new number.

5. Press ➡.

6. Enter a **secondary COS number.**

To change the current entry, enter the new number.

7. Press **STORE.**

8. To programme another jack, press **NEXT** or **PREV,** or **SELECT** and the desired **jack number.**

9. Repeat steps 4 through 8.

10. 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 [811]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)

Hotel Application

[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: EXT Group Asn`
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 ✳ 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) / **1RN** (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: DIL 1:N Asn 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 ➡ 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

Direct In Lines (DIL)

Night Service

[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: CO Out 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:CO01:Enabl`
4. Enter the desired **outside line number,** or keep pressing ➡ 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 **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 1.3 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

Night Service

Outside Line Connection Assignment – Outgoing

[607-608] D oorphone 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: Doorphone In 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 ✳ 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

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: Mailbox ID Code`
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 ➡ ⬅.

Features Guide References

Voice Mail Integration for Inband

[612] Incoming Call Display

Description

Allows you to choose between three display types when an incoming call is received.
Calling: The incoming caller's telephone number is displayed.
Called: The called telephone number is displayed.
Line Name: The outside line name assigned in the program me [417]Outside Line Name Assignment is displayed.

Selection

- Jack number:
  KX-TD816 – **01 through 16, ✳**
  KX-TD1232 – **01 through 64, ✳**
  (✳=all jacks)
- Display Types: **Calling / Called / CO Line Nam**

Default

All jacks – Calling

Programming

1. Enter **612**.
   `Display: Incoming Display`
2. Press **NEXT**.
   `Display: Jack NO?→`
3. Enter a **jack number**.
   To enter jack number 01, you can also press **NEXT**.
   `Display example: #01:Calling`
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 numbe** .
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 assign all jacks to one selection, press the ✳ key in step 3. In this case, the display shows the contents programmed for jack 01.

Features Guide References

Display Message
Incoming Outside Call Information Display

[616] 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-TVP200).

Selection

- Jack number:
  KX-TD816 – **01 through 16, ✳**
  KX-TD1232 – **01 through 64, ✳**
  (✳=all jacks)
- **Stop Record / Keep Record**

Default

All jacks – Stop Record

Programming

1. Enter **616.**

```
Display: 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 Record
```

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.**

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 ✳ 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

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: Duration Log`
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.**

Conditions

- 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 syste 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 [301-3 0 5]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: 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] S ystem Data Printou

Description

Starts or stops printing the system data. All the current system-programmed data is printed out.

Selection

Start / Stop

Default

Not applicable.

Programming

1. Enter **802.**

`Display: System Data Dump`

2. Press **NEXT.**

`Display: Print-out:Start`

3. 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`

4. Press **STORE.**

`Display: Print-Out:Stop`

5. 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: Music Source Use`
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.**

Conditions

- 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 or tone for

Music Source 1 in programme [99 0]System Additional Information, Area 06 - Bits 11 and 10.

- To disable music, press **CLEA** 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.

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: Ext-Pag 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 **SELEC** and the desired **external pager number**
7. Repeat steps 4 through 6.
8. Press **END.**

Conditions

- 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.
- In the case of KX-TD816, please skip steps 6 and 7.
- 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: Ext-Pag Ack-Ton`
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

[806-807] S erial Interface (RS-232C) Parameters

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**
- 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: RS232C Paramet. 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 **SELEC** until the desired selection is displayed.
13. Press **STORE.**
14. Press **NEXT** to programme stop bit.

```
Display example: Stop Bit:1bit
```

15. Keep pressing **SELEC** 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] D ISA Security Type

Description

Assigns the security mode for outside calls attempted by the DISA (Direct Inward System Access) caller. 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 DISA user code. Trunk Security mode requires the caller to enter a DISA User Code before making an outside call.

Selection

Non (non security) / **Trunk** (trunk security)

Default

Trunk

Programming

1. Enter **809.**
   `Display: DISA Security`
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 [811]DISA / TIE User Codes is used to programme DISA User Codes.

Features Guide References

Direct Inward System Access (DISA)

[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: DISA Tone Detect`
2. Press **NEXT.**
   `Display: Tone DTC:Enable`
3. Keep pressing **SELECT** until the desired selection is displayed.
4. Press **STORE.**
5. Press **END.**

Conditions

None

Features Guide References

Direct Inward System Access (DISA)

[811] D ISA / 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.

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 **811.**

   `Display: User Code`

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

5. Press ➡1 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 [44 0]TIE Security Type and [8 09]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)

E&M (TIE) Line Service

[812] D ISA DTMF Repeat

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: DISA DTMF Repeat`
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

Direct Inward System Access (DISA)

[813] Floating Number Assignment

Description

Assigns the floating numbers for External Pagers, DISA (Direct Inward System Access) messages, modem, DTA(Digital Test Access) 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 / DTA / 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; DTA=199; 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: FLT EXT NO.`
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.**

Conditions

- 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 [10 0]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
KX-TD1232 – 165 through 180

[130] Phantom Extension Number Set
Not stored.

[671] PS 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: MODEM Standard`
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] S MDR Output Mode

Description

Assigns the SMDR Output Mode. There are two standards available – Regular and Charge.

Selection

Regular / Charge

Default

Regular

Programming

1. Enter **815**.
   `Display: SMDR Output 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 [12 0]Charge Display Selection.

Features Guide References

Station Message Detail Recording (SMDR)

[817] KX-TD197 Baud Rate Set

Description

Assigns the KX-TD197 standard. There are two standards available – BELL and CCITT-V.34.

Selection

BELL / V.34-9600 / V.34-14400 / V.34-19200 / V34-28800 / V.34-33600

Default

V.34-33600

Programming

1. Enter **817.**
   `Display: TD197 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

[818] D ISA 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 **818.**
   `Display: 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

Direct Inward System Access (DISA)

2.9 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

		Bit Number															
		16	**15**	**14**	**13**	**12**	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**
Display Example	**Area 01**	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	1
	Area 02	1	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0
	Area 03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Area 04	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0
	Area 05	1	1	1	1	1	1	1	0	1	1	1	0	1	0	1	1
	Area 06	1	1	1	1	1	0	0	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

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
01	1	Sound source during transfer	**0** : ringback tone **1** : Music on Hold	1	• Call Transfer • Music 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 Access • Flash
	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
	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
	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
	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 Waiting • Voice Mail Integration
	16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature 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] E xtension-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 byToll 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	Enables or disables the Flash function when an outside call is received at a locked or toll-restricted station. Flash, if enabled, allows the user to make an outside call using the same line. If "0" (disconnection signal) is selected in Area 01 - bit 3 above, this is also allowed for those extensions that have the Account Code- Verified - All Calls mode assigned.	**0** : disable **1** : enable	0	Flash
	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 Retriev and Call Park Retrieve.	**0** : disable **1** : enable	1	Confirmation Tone

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
02	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	Dial Type Selection
	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 and [665] PSVoice Mail Access Codes.	**0** : extension number **1** : free	0	Voice Mail Integration
	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	Reserved			
	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	Reserved			
	15	Sets the maximum time for detecting a hooking signal from a single line telephone.	**0** : 1000 ms **1** : 136 ms	0	None
	16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
03	1-16	These bits are provided to assign PAD 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.	**0** : 0 dB **1** : -3 dB	0	None
04	1-8				
	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
	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			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
05	1-6	Reserved			
	7	In the day mode, selects the destination of incoming DDI numbers or MSN numbers when "0" is assigned in programmes [151- 152]DDI Ringing Assignment – Day / Night and [448-449] Extension Ringing Assignment – Day / Night for ISDN.	**0** : DIL 1:N **1** : operator	1	• DDI • MSN Ringing Service
	8	In the night mode, selects the destination of incoming DDI numbers or MSN numbers when "0" is assigned in programmes [151- 152]DDI Ringing Assignment – Day / Night and [448-449] Extension Ringing Assignment – Day / Night for ISDN.	**0** : DIL 1:N **1** : operator	1	• DDI • MSN Ringing Service
	9	Assigns whether a new page is ejected or not when the Hotel Application is printed out by SMDR.	**0** : disable **1** : enable	0	Hotel Application
	10	When Timed Reminder starts and is not answered, this programme enables or disables the SMDR printout for Timed Reminder	**0** : disable **1** : enable	1	Timed Reminder
	11	Enables or disables to send a COLP number.	**0** : enable **1** : disable	1	• COLP • CLIR • COLR
	12-16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
06	1	Sets the time after terminating the OGM.	**0** : 0 s **1** : 5 s	1	• DISA • OGM
	2	Determines whether the account code is printed out or not (shown in dots) by the SMDR.	**0** : shown in dots **1** : shown	1	SMDR
	3-5	Reserved			
	6	Selects the result when an outside call is routed by Call Forwarding to a voice mail port which is in the AA service mode. [For both Inband and DPT Integration] **disable:** AA service mode **enable:** The mode will change to the VM service mode and a Follow On ID is sent. When the voice mail port is in the VM service mode, this programme will not be affected.	**0** : disable **1** : enable	1	Voice Mail Integration
	7	Selects the result when an outside call is routed to a voice mail port by IRNA [For both Inband and DPT Integration]. When the voice mail port is in the VM service mode; **enable:** VM service mode **disable:** The mode will change to the AA service mode [Only when Inband]. When the voice mail port is in the AA service mode; **enable:** The mode will change to the VM service mode and a Follow On ID is sent. **disable:** AA service mode	**0** : enable **1** : disable	1	Voice Mail Integration

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
06	8	Enables or disables sending outside line access number "9" to a TIE line. When you dial outside line access number "9" and the outside line is busy, the system can automatically send outside line access number "9" 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
	9	Enables or disables the ARS with DTMF function.	**0** : enable **1** : disable	1	ARS
	11,10	Assigns the source of Music Source 1 for Music on Hold and BGM.	**00**: internal music source **01**: external music source **11**: tone	00	• BGM • Music on Hold
	12	Reserved			
	13	Enables or disables dial tone 2 when an extension sets programmable extension features such as Call Waiting.	**0** : disable **1** : enable	1	Dial Tone, Distinctive
	14	Enables or disables the Whisper OHCA feature.	**0**: any telephone **1**: KX-T7500 and KX-T7400 series telephone only	1	Whisper OHCA
	15, 16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
07	1-3	Reserved			
	4	Allows to access an outside line has the lowest number among idle lines with priority.	**0** : enable **1** : disable	1	Outside Line Access, Automatic
	5	Reserved			
	6	Selects the result when a DISA / DDI / MSN / TIE call is invalid.	**0** : reorder tone is sent **1** : IRNA	1	None
	7	Selects the result when a DISA / DDI / MSN / TIE call arrives at a busy extension which has disabled Call Waiting.	**0** : IRNA **1** : busy tone is sent	1	None
	8	Selects the forwarding destination when an outside call is transferred from an extension or the VPS to an extension where the Call Forwarding has been set.	**0** : destination of intercom calls **1** : destination of incoming outside calls	1	Call Forwarding
	9	Selects the result when the first digit timer or the inter digit timer, used for toll restriction checking, (assigned in programme [207]Fi rst Digit Time or [208] I nter Digit Time) expires.	**0** : disconnect **1** : do not disconnect	1	None
	10	Enables or disables retry by diall ing"⁎" during DISA outside-to-outside line conversation. If disabled, "⁎" will simply be dialled.	**0** : dial "⁎" **1** : retry	1	DISA
	11	Selects whether the display, which is assigned in programme [612] I ncoming Call Display and [676] P S Incoming Call Display, changes after answering an incoming call or not.	**0** : not change **1** : change to duration time	1	Incoming Outside Call Information Display
	12	Selects how long the system keeps the door opener unlocked.	**0** : 3 s **1** : 5 s	1	Door Opener
	13	Enables or disables the automatic time adjustment. The time is automatically adjusted when the first call after 3:00 AM is received.	**0** : enable **1** : disable	1	ISDN
	14	Selects the bearer when using a single line telephone.	**0** : Speech **1** : 3.1k Audio	1	ISDN

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
07	15	Selects the bearer when using a proprietary telephone or DECT portable station.	**0** : 3.1k Audio **1** : Speech	1	ISDN
	16	Reserved			
08	1	Reserved			
	2	Enables or disables the MCID service even after the caller hangs up. If enabled, the call will not be disconnected until you go on-hook.	**0** : enable **1** : disable	1	Malicious Call Identification (MCID)
	3-16	Reserved			

Selection

- Area code: **01 through 08**
- Selection: See **"Selection"** in the explanation table.

Default

See "Default" shown in the explanation table.

Programming

1. Enter **990.**

```
Display: System Add Inf.
```

2. Press **NEXT.**

```
Display: Area NO?→
```

3. Enter an **area code (01 through 08).**

```
Display example: 00101000011000001
```

4. Keep pressing ➡ 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] C OS 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.
   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	O	O	O	O

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: COS Add Inf.`
2. Press **NEXT.**
   `Display: COS NO?→`
3. Enter a **COS number.**
   `Display example: 1111111111110000`
4. Keep pressing ➡ 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

ISDN Programming

3.1 Manager Programming

[005] F lexible 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
4 (FWD/DND)	None
5 (Save)	None
6 (Account)	None
7 (Conference)	None
80 (Log-In/Log-Out)	None
82 (Voice Mail Transfer)	**2 through 4 digits** (Voice mail extension number)
83 (Two-Way Record)*	**2 through 4 digits** (Voice mail extension number)
84 (Two-Way Transfer)*	**2 through 4 digits** (Voice mail extension number)
85 (Live Call Screening)*	None
86 (Live Call Screening Cancel)*	None
87 (Alert)	None
88 (Phantom Extension)	**2 through 4 digits** (Phantom extension number)
89 (ISDN Service)	**16 digits max**. (ISDN service number)
8✳ (Night)	None
✳ (Loop-CO)	None

Button Code	Parameter
# (Group-CO)	1 through 8 (Outside line group number)
CO (Ringer frequency)	1 through 8 (Ring tone type number)

* Available when this system is connected toa Voice Processing System which supports digital proprietary telephone integration (e.g. KX-TVP200).

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: Flexible Key Asn`

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]Ope rator / 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.) For the KX-T7500 series telephones, 24 CO buttons can be programmed by adding 12 CO buttons by connecting the KX-T7545 Add-on key Module.
- 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

[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: ISDN EXT NO.`
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.**

Conditions

- Each extension number can be two or three digits, consisting of **0 through 9**. The ✳ 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 ISD 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 178
  KX-TD1232 – 165 through 180

  [130] Phantom Extension Number Set
  Not stored.

  [813] Floating Number Assignment
  KX-TD816 – 191 through 194, 196, 198, 199, 291 through 294, 298, 299
  KX-TD1232 – 191 through 194, 196 through 199, 291 through 294, 296 through 299

  [671] PS Extension Number Set
  Not stored.
- Programme [013]ISDN Extension Name Set is used to give names to the extension numbers.

Features Guide References

Integrated Services Digital Network (ISDN) Extension

[013] ISDN Extension Name Set

Description

Assigns names to the ISDN extension numbers programmed in programme [012]ISD 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: ISDN EXT. 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 .4Entering 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

[014] Budget Management on ISDN Port

Description

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

Selection

- Port number:
  KX-TD816 – **01 through 06, ✳**
  KX-TD1232 – **01 through 12, ✳**
  (✳=all ports)
- Charge limitation (Charge): **0 through 59999**

Default

All ports – 0

Programming

1. Enter **014**.
`Display: ISDN Charge Lim.`

2. Press **NEXT**.
`Display: Port NO?→`

3. Enter a **port numbe** .
To enter port number 01, you can also press **NEXT**.
`Display example: #01: 0`

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 numbe** .

7. Repeat steps 4 through 6.

8. Press **END**.

Conditions

- If the charge limitation is set "0", no restriction is applied.
- 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.
- 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 denomination can be programmed by [121]Assignment of Denomination.

Features Guide References

Budget Management

Charge Fee Reference

3.2 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
18	Automatic line access / ARS	9
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	Night service mode	78
52	Parallel telephone mode	39
53	Background music – external	35
54	Reserved	
55-62	Emergency call 1 through 8	None
63	Timed reminder, remote	7✳
64	Call log, incoming	56
65	Call log lock, incoming	57
66	Check-out ready	736
67	TIE line access number	None
68-83	Other PBX Extension 01 through 16	None
84	LCS password set / cancel	799
85	Log-in / log-out	45
86	SXDP	48
87	CLIP / COLP	711
88	Reserved	
89	MCID	737

Selection

- Selection number: **01 through 89** (See "Feature Number List" for the corresponding features.)
- Feature number:
  1 or 2 digits (for selection numbers 01 through 16, 68 through 83);
  1 through 3 digits (for selection numbers 17 through 67, 84 through 89)

Default

See "Feature Number List".

Programming

1. Enter **100.**
   `Display: FLX Numbering`
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.**

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 [00 3]Extension Number Set, [0 12]ISDN Extension Number Set, [11 8]Voice Mail Extension Number Set, [130] Phantom Extension Number Set, [81 3]Floating Number Assignment and [671]PS Extension Number Set.
- If ✳r # 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 programmes [003]Ex tension Number Set, [012]IS DN Extension Number Set, [118]Voice Mail Extension Number Set, [130]Ph antom Extension Number Set, [813] F loating Number Assignment and [671]PS Extension Number Set.

Features Guide References

Flexible Numbering

[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) / S1 (2 S0) / S2 (6 S0) / EM (4 E&M) / E (EXT) / A (16 SLT) / D (No Use)**

KX-TD1232

- **Master / Slave**
- Areas 1; 2; 3 = **C (4 CO) / S1 (2 S0) / S2 (6 S0) / S3 (1 PRI) / EM (4 E&M) / E1 (8 EXT1) / E2 (8 EXT2) / A1 (16 SLT1) / A2 (16 SLT2) / D (No Use)**
  (Master system only: S3, E1 and E2 for the KX-TD144 or KX-TD146)

Default

KX-TD816: C;E

KX-TD1232: Master and Slave – C;E1;E2

Programming

KX-TD816

1. Enter **109.**
   `Display: Expansion Card`
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: Expansion Card`
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
  – S1 (2-ISDN S0 lines): KX-TD280
  – S2 (6-ISDN S0 lines): KX-TD286
  – S3 (1-PRI ISDN line): KX-TD290
  – EM (4-E&M lines): KX-TD184
  – E, E1, E2 (8-Extension lines): KX-TD170, KX-TD144 or KX-TD146
  – 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 / E&M) unit can be installed.
- There are three expansion areas in each system for the KX-TD1232, areas 1, 2 and 3 fro bottom to top. Up to two extension line units and one outside line (CO / ISDN S0 / E&M) unit can be installed. The PRI ISDN line unit can be installed with the ISDN S0 line unit, but not with the analogue outside line unit.
- 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

[112] ISDN Network Type Assignment

Description

Assigns the type of ISDN network.

Selection

ISDN network mode: **000 through 255**

Default

Mode 8

Programming

1. Enter **112.**
   `Display: Network Type`
2. Press **NEXT.**
   `Display example: Mode 8`
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)

[150] D DI Translation Table

Description

Assigns a destination location of incoming Direct Dialling In (DDI) numbers.
Incoming DDI numbers are received at extensions assigned to each location number.

Selection

- Location number: **000 through 399**
- DDI number: **16 digits max.**

Default

All locations – Not stored

Programming

1. Enter **150**.
   `Display: DDI Assign`
2. Press **NEXT**.
   `Display: Location NO?→`
3. Enter a **location numbe** .
   To enter location number 000, you can also press **NEXT**.
   `Display example: 000:Not Stored`
4. Enter a **DDI numbe** .
   To delete the current entry, press **CLEA** .
   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

- The DDI number can be a maximum of 16 digits, consisting of **0 through 9**.
- Programmes [151-152]DDI Ringing Assignment – Day / Night are used to assign an extension to each location number in the day and night modes.
- To assign a destination location of incoming DDI numbers, select "DDI" in programme [452-4 53]ISDN Ring Service Assignment – Day / Night first.

Features Guide References

Direct Dialling In (DDI)

Integrated Services Digital Network (ISDN)

[151-152] D DI Ringing Assignment – Day / Night

Description

Assigns the destination of each Direct Dialling In (DDI) number in the day and night modes.

Selection

- Location number: **000 through 399**
- Extension number: **2 through 4 digits / 0** (the same as [990] Area 5 – bits 7 and 8 assignments)

Default

All locations – Not stored

Programming

1. Enter a **programme address (151 for day or 152 for night)**.
   ```
   Display example: DDI Ring Day
   ```
2. Press **NEXT**.
   ```
   Display: Location NO?→
   ```
3. Enter a **location numbe** .
   To enter location number 000, you can also press **NEXT**.
   ```
   Display example: 000:Not Stored
   ```
4. Enter an **extension number** or **0**.
   ```
   Display example: 000:EXT 201
   ```
   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

- Each extension number can be 2 through 4 digits, consisting of **0 through 9**.
- When "0" is assigned, the incoming DDI number is sent to the destination assigned in programme [990]System Additional Information, Area 5 - bits 7 and 8.
- To assign a destination location of incoming DDI numbers, select "DDI" in programme [452-4 53]ISDN Ring Service Assignment – Day / Night first.
- Assignable extension numbers are programmed in the following programmes.
  Extension numbers – [0 03]Extension Number Set

ISDN extension numbers – [01 2]ISDN Extension Number Set
Voice Mail extension numbers – [118] Voice Mail Extension Number Set
Phantom extension numbers – [130] Phantom Extension Number Set
Floating numbers – [8 13]Floating Number Assignment
PS extension number – [6 7 1]PS Extension Number Set

Features Guide References

Direct Dialling In (DDI)
Integrated Services Digital Network (ISDN)

3.3 ISDN Line Programming

[418] I SDN Line Number Assignment

Description

Assigns your ISDN network line telephone number. Your 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.

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: ISDN CO NO.`
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 numbe** .
   To delete the current entry, press **CLEA** .
   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 ➡ or ⬅.
- Outside lines 25 through 54 become available when the KX-TD290 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 [4 1 9]ISDN Outgoing CLIR Service Assignment.
- Your telephone number will be informed to the calling party if the COLP feature is disabled for the ISDN line in programme [990]System Additional Information, Area 5 - bit 11.

Features Guide References

Calling Line Identification Presentation (CLIP)

Calling Line Identification Restriction (CLIR)

Call Log, Incoming

Connected Line Identification Presentation (COLP)

Connected Line Identification Restriction (COLR)

Incoming Outside Call Information Display

[419] I SDN 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, ✳**
  (✳=all outside lines)
- **Enable / Disable**

Default

All outside lines – Enable

Programming

1. Enter **419.**
   `Display: ISDN CLIR Send`
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 ✳ key in step 3. In this case, the display shows the contents programmed for outside line 01.
- Programme [418]ISDN Line Number Assignment is used to store the subscriber's number of your system that is informed to the called party

Features Guide References

Calling Line Identification Restriction (CLIR)

[421] ISDN DDI / MSN 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

- Port number:
  KX-TD816 – **01 through 04**, ✳
  KX-TD1232 – **01 through 12**, ✳
  (✳=all ports)
- Removed digits: **0 through 16** (0=no deleting)
- Added number: **4 digits (max.)**

Default

All ports – Removed digit=0; Added number=Not stored

Programming

1. Enter **421**.

```
Display: DDI/MSN RMV/Add
```

2. Press **NEXT**.

```
Display: Port NO?→
```

3. Enter an **port numbe** .

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

```
Display example: 01: 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: 01: 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 port, press **NEXT** or **PREV**, or **SELECT** and the desired **outside line number**.

8. Press **STORE**.

9. Press **END**.

Conditions

- For the KX-TD1232, port numbers 01 through 06 are for the Master System and port numbers 07 through 12 are for the Slave, if available.
- Each added number has a maximum of four digits, consisting of **0 through 9**.
- To assign all ports to the same number, press the ✳ key in step 3. In this case, the display will show the contents programmed for Port 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: 8549260 3
  Six digits are deleted and "2" is added, and the number becomes "203".

Features Guide References

Direct Dialling In (DDI)

Multiple Subscriber Numbers (MSN) Ringing Service

[424] I SDN 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 **424**.
   `Display: ISDN Line 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 ✳ 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.

Features Guide References

Integrated Services Digital Network (ISDN)

[425] 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 **425.**
   `Display: L1 Active 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 ✳ 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.

Features Guide References

Integrated Services Digital Network (ISDN)

[426] I SDN 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 **426.**
   `Display: 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.**
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 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)

[427] I SDN 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 **427.**
   `Display: Data Link 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 ✳ 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.

Features Guide References

Integrated Services Digital Network (ISDN)

[428] 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 **428.**
   `Display: 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 **CLEA** 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 [426], assign the fixed TEI. If "Multipoint" is selected, assign "Automatic".

- 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 effective.

Features Guide References

Integrated Services Digital Network (ISDN)

[429] ISDN Extension Multiple Subscriber Number

Description

Selects whether the Multiple Subscriber Number (MSN) is 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 **429.**
   `Display: 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.**
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 ✳ 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.

Features Guide References

Multiple Subscriber Numbers (MSN) Ringing Service

[430] I SDN 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 **430**.
`Display: ISDN EXT Tone`

2. Press **NEXT**.
`Display: Port NO?→`

3. Enter a **port numbe** .
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 ✳ 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.

Features Guide References

Integrated Services Digital Network (ISDN) Extension

[447] M SN Assignment

Description

Assigns a maximum of ten Multiple Subscriber Numbers (MSN) on an ISDN port basis.

Selection

- Port number:
  KX-TD816 – **01 through 04**
  KX-TD1232 – **01 through 12**
- Location number: **01 through 10**
- MSN: **16 digits (max.)**

Default

All ports – All locations – Not stored

Programming

1. Enter **447.**

`Display: 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 16 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.
- This programme becomes available when "MSN" is selected in programme [452-453] I SDN Ring Service Assignment – Day / Night.

Features Guide References

Integrated Services Digital Network (ISDN)

Multiple Subscriber Numbers (MSN) Ringing Service

[448-449] E xtension 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 04**
  KX-TD1232 – **01 through 12**
- Location number: **01 through 10**
- Extension number:
  2 through 4 digits / 0 (the same as programme [990] Area 05 - bits 7 and 8 assignments) / **Disable**

Default

All ports – All locations – Disable (Day / Night)

Programming

1. Enter a **programme address (448 for day or 449 for night).**
   `Display: MSN Ring Day`
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:Disable`
   Location number
   Port number
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.**
- When "0" is assigned, the incoming MSN number is sent to the destination assigned in programme [990]System Additional Information, Area 05 - bits 7 and 8.
- These programmes become available when "MSN" is selected in programme [452-453] I SDN Ring Service Assignment – Day / Night.
- 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 – [0 03]Extension Number Set
  ISDN extension numbers – [01 2]ISDN Extension Number Set
  Voice Mail extension numbers – [118] Voice Mail Extension Number Set
  Phantom extension numbers – [130] Phantom Extension Number Set
  Floating numbers – [8 13]Floating Number Assignment
  PS extension number – [6 7 1]PS Extension Number Set

Features Guide References

Integrated Services Digital Network (ISDN)

Multiple Subscriber Numbers (MSN) Ringing Service

[450] P RI 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**
- CRC4: **Disable / Enable**

Default

B channel number – 0 line; CRC4 – Enable

Programming

1. Enter **450**.
   `Display: PRI Config.`
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 13 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

None

[451] PRI Reference CO

Description

Assigns which outside line number system data each PRI line uses except for the following programmes:

- [40 1]Outside Line Group Assignment
- [41 7]Outside Line Name Assignment
- [41 8]ISDN Line Number Assignment

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
- [41 9]ISDN Outgoing CLIR Service Assignment
- [42 1]ISDN DDI / MSN Removed Digit / Added Number Assignment
- [42 3]Pay Tone Assignment
- [452- 453]ISDN Ring Service Assignment – Day / Night
- [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
- [661- 662]PS 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).

Selection

- PRI outside line (CO) number: **25 through 54, ✳** ✳ıll outside lines)
- Outside line (CO) number: **01 through 24**

Default

All outside lines (PRI line) – CO 13

Programming

1. Enter **451**.

```
Display: PRI Reference CO
```

2. Press **NEXT**.

```
Display: CO NO?→
```

3. Enter the **PRI outside line number**.

```
Display example: CO25 : CO 13
```

4. Enter the desired **outside line number**.

5. Press **STORE**.

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 25.

Features Guide References

None

[452-453] I SDN Ring Service Assignment – Day / Night

Description

Assigns the ISDN service type for each ISDN port.

Selection

- Port number:
  KX-TD816 – **01 through 04, ✳**
  KX-TD1232 – **01 through 12, ✳**
  (✳=all ports)
- **DDI / MSN / Disable**

Default

All ports – Disable (Day / Night)

Programming

1. Enter a **programme address (452 for day or 453 for night)**.
   `Display example: ISDN Ring Day`
2. Press **NEXT**.
   `Display: Port NO?→`
3. Enter a **port numbe** .
   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 **SELECT** and the desired **port numbe** .
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

- This assignment depends on the contract with your ISDN supplier.
- 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 the same number, press the ✳ key in step 3. In this case, the display shows the contents programmed for Port 01.

Features Guide References

Direct Dialling In (DDI)

Multiple Subscriber Numbers (MSN) Ringing Service

3.4 Extension Programming

[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. A primary and a secondary COS numbers can be assiged per port.

Selection

- Port number:
  KX-TD816 – **01 through 06, ✳**
  KX-TD1232 – **01 through 12, ✳**
  (✳=all ports)
- COS number: **1 through 8**

Default

All ports – Primary, Secondary – COS 1, COS 1

Programming

1. Enter **613.**
`Display: ISDN COS 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:COS1, COS1`

4. Enter a **primary COS number.**
To change the current entry, enter the new number.

5. Press ➡.

6. Enter a **secondary COS number.**
To change the current entry, enter the new number.

7. Press **STORE.**

8. To programme another port, press **NEXT** or **PREV,** or **SELECT** and the desired **port number.**

9. Repeat steps 4 through 8.

10. 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 ✳ 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: CO Out(ISDN) Day`
2. Press **NEXT.**
   `Display: Port NO?→`
3. Enter a **port number.**
   To enter port number 01, you can also press **NEXT.**
   `Display example: #01:CO01:Enabl`
4. Enter the desired **outside line number,** or keep pressing ➡ 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 ✳ 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 ✳ 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

Night Service

Outside Line Connection Assignment – Outgoing

[617] CLIP / COLP Number Assignment for Extension

Description

Assigns a CLIP/COLP number for 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)
- CLIP/COLP number: **16 digits (max.)**

Default

All jacks – Not stored

Programming

1. Enter **617**.
`Display: CLIP for EXT`

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 a **CLIP/COLP 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 numbe** .

7. Repeat steps 4 through 6.

8. Press **END**.

Conditions

- Each CLIP/COLP number consists 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.
- To assign all jacks to one selection, press the ✳ key in step 3. In this case, the display shows the contents programme for jack 01.

Features Guide References

Calling Line Identification Presentation (CLIP)
Connected Line Identification Presentation (COLP)

[618] CLIP / COLP Number Assignment for ISDN Extension

Description

Assigns a CLIP/COLP number for each ISDN extension port.

Selection

- Jack number:
  KX-TD816 – **01 through 06, ✳**
  KX-TD1232 – **01 through 12, ✳**
  (✳=all ports)
- CLIP/COLP number: **16 digits (max.)**

Default

All ports – Not stored

Programming

1. Enter **618**.
`Display: CLIP for I-EXT`

2. Press **NEXT**.
`Display: Port NO?→`

3. Enter a **port numbe** .
To enter port number 01, you can also press **NEXT**.
`Display example: #01:Not Stored`

4. Enter a **CLIP/COLP 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 numbe** .

7. Repeat steps 4 through 6.

8. Press **END**.

Conditions

- Each CLIP/COLP number consists 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 assign all jacks to one selection, press the ✳ key in step 3. In this case, the display shows the contents programmed for Port 01.

Features Guide References

Calling Line Identification Presentation (CLIP)
Connected Line Identification Presentation (COLP)

3.5 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

		Bit Number															
		16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
Display Example	Area 01	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	1
	Area 02	1	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0
	Area 03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Area 04	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0
	Area 05	1	1	1	1	1	1	1	0	1	1	1	0	1	0	1	1
	Area 06	1	1	1	1	1	0	0	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

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
01	1	Sound source during transfer	**0** : ringback tone **1** : Music on Hold	1	• Call Transfer • Music 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 Access • Flash
	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
	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
	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
	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 Waiting • Voice Mail Integration
	16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature 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 byToll 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	Enables or disables the Flash function when an outside call is received at a locked or toll-restricted station. Flash, if enabled, allows the user to make an outside call using the same line. If "0" (disconnection signal) is selected in Area 01 - bit 3 above, this is also allowed for those extensions that have the Account Code- Verified - All Calls mode assigned.	**0** : disable **1** : enable	0	Flash
	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 Retriev and Call Park Retrieve.	**0** : disable **1** : enable	1	Confirmation Tone

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
02	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	Dial Type Selection
	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 and [665] PSVoice Mail Access Codes.	**0** : extension number **1** : free	0	Voice Mail Integration
	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	Reserved			
	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	Reserved			
	15	Sets the maximum time for detecting a hooking signal from a single line telephone.	**0** : 1000 ms **1** : 136 ms	0	None
	16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
03	1-16	These bits are provided to assign PAD 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.	**0** : 0 dB **1** : -3 dB	0	None
04	1-8				
	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
	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			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
05	1-6	Reserved			
	7	In the day mode, selects the destination of incoming DDI numbers or MSN numbers when "0" is assigned in programmes [151- 152]DDI Ringing Assignment – Day / Night and [448-449] Extension Ringing Assignment – Day / Night for ISDN.	**0** : DIL 1:N **1** : operator	1	• DDI • MSN Ringing Service
	8	In the night mode, selects the destination of incoming DDI numbers or MSN numbers when "0" is assigned in programmes [151- 152]DDI Ringing Assignment – Day / Night and [448-449] Extension Ringing Assignment – Day / Night for ISDN.	**0** : DIL 1:N **1** : operator	1	• DDI • MSN Ringing Service
	9	Assigns whether a new page is ejected or not when the Hotel Application is printed out by SMDR.	**0** : disable **1** : enable	0	Hotel Application
	10	When Timed Reminder starts and is not answered, this programme enables or disables the SMDR printout for Timed Reminder	**0** : disable **1** : enable	1	Timed Reminder
	11	Enables or disables to send a COLP number.	**0** : enable **1** : disable	1	• COLP • CLIR • COLR
	12-16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
06	1	Sets the time after terminating the OGM.	**0** : 0 s **1** : 5 s	1	• DISA • OGM
	2	Determines whether the account code is printed out or not (shown in dots) by the SMDR.	**0** : shown in dots **1** : shown	1	SMDR
	3-5	Reserved			
	6	Selects the result when an outside call is routed by Call Forwarding to a voice mail port which is in the AA service mode. [For both Inband and DPT Integration] **disable:** AA service mode **enable:** The mode will change to the VM service mode and a Follow On ID is sent. When the voice mail port is in the VM service mode, this programme will not be affected.	**0** : disable **1** : enable	1	Voice Mail Integration
	7	Selects the result when an outside call is routed to a voice mail port by IRNA [For both Inband and DPT Integration]. When the voice mail port is in the VM service mode; **enable:** VM service mode **disable:** The mode will change to the AA service mode [Only when Inband]. When the voice mail port is in the AA service mode; **enable:** The mode will change to the VM service mode and a Follow On ID is sent. **disable:** AA service mode	**0** : enable **1** : disable	1	Voice Mail Integration

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
06	8	Enables or disables sending outside line access number "9" to a TIE line. When you dial outside line access number "9" and the outside line is busy, the system can automatically send outside line access number "9" 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
	9	Enables or disables the ARS with DTMF function.	**0** : enable **1** : disable	1	ARS
	11,10	Assigns the source of Music Source 1 for Music on Hold and BGM.	**00**: internal music source **01**: external music source **11**: tone	00	• BGM • Music on Hold
	12	Reserved			
	13	Enables or disables dial tone 2 when an extension sets programmable extension features such as Call Waiting.	**0** : disable **1** : enable	1	Dial Tone, Distinctive
	14	Enables or disables the Whisper OHCA feature.	**0**: any telephone **1**: KX-T7500 and KX-T7400 series telephone only	1	Whisper OHCA
	15, 16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
07	1-3	Reserved			
	4	Allows to access an outside line has the lowest number among idle lines with priority.	**0** : enable **1** : disable	1	Outside Line Access, Automatic
	5	Reserved			
	6	Selects the result when a DISA / DDI / MSN / TIE call is invalid.	**0** : reorder tone is sent **1** : IRNA	1	None
	7	Selects the result when a DISA / DDI / MSN / TIE call arrives at a busy extension which has disabled Call Waiting.	**0** : IRNA **1** : busy tone is sent	1	None
	8	Selects the forwarding destination when an outside call is transferred from an extension or the VPS to an extension where the Call Forwarding has been set.	**0** : destination of intercom calls **1** : destination of incoming outside calls	1	Call Forwarding
	9	Selects the result when the first digit timer or the inter digit timer, used for toll restriction checking, (assigned in programme [207]Fi rst Digit Time or [208] I nter Digit Time) expires.	**0** : disconnect **1** : do not disconnect	1	None
	10	Enables or disables retry by diall ing"⁎" during DISA outside-to-outside line conversation. If disabled, "⁎" will simply be dialled.	**0** : dial "⁎" **1** : retry	1	DISA
	11	Selects whether the display, which is assigned in programme [612] I ncoming Call Display and [676] P S Incoming Call Display, changes after answering an incoming call or not.	**0** : not change **1** : change to duration time	1	Incoming Outside Call Information Display
	12	Selects how long the system keeps the door opener unlocked.	**0** : 3 s **1** : 5 s	1	Door Opener
	13	Enables or disables the automatic time adjustment. The time is automatically adjusted when the first call after 3:00 AM is received.	**0** : enable **1** : disable	1	ISDN
	14	Selects the bearer when using a single line telephone.	**0** : Speech **1** : 3.1k Audio	1	ISDN

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
07	15	Selects the bearer when using a proprietary telephone or DECT portable station.	**0** : 3.1k Audio **1** : Speech	1	ISDN
	16	Reserved			
08	1	Reserved			
	2	Enables or disables the MCID service even after the caller hangs up. If enabled, the call will not be disconnected until you go on-hook.	**0** : enable **1** : disable	1	Malicious Call Identification (MCID)
	3-16	Reserved			

Selection

- Area code: **01 through 08**
- Selection: See **"Selection"** in the explanation table.

Default

See "Default" shown in the explanation table.

Programming

1. Enter **990.**

```
Display: System Add Inf.
```

2. Press **NEXT.**

```
Display: Area NO?→
```

3. Enter an **area code (01 through 08).**

```
Display example: 00101000011000001
```

4. Keep pressing ➡ 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

Section

E & M Programming

4.1 System Programming

[100] F lexible 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
18	Automatic line access / ARS	9
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	Night service mode	78
52	Parallel telephone mode	39
53	Background music – external	35
54	Reserved	
55-62	Emergency call 1 through 8	None
63	Timed reminder, remote	7✳
64	Call log, incoming	56
65	Call log lock, incoming	57
66	Check-out ready	736
67	TIE line access number	None
68-83	Other PBX Extension 01 through 16	None
84	LCS password set / cancel	799
85	Log-in / log-out	45
86	SXDP	48
87	CLIP / COLP	711
88	Reserved	
89	MCID	737

Selection

- Selection number: **01 through 89** (See "Feature Number List" for the corresponding features.)
- Feature number:
  1 or 2 digits (for selection numbers 01 through 16, 68 through 83);
  1 through 3 digits (for selection numbers 17 through 67, 84 through 89)

Default

See "Feature Number List".

Programming

1. Enter **100.**
   `Display: FLX Numbering`
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.**

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, [130] Phantom Extension Number Set, [813]Floating Number Assignment and [671]PS Extension Number Set.
- If ✳r # 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 programmes [003]Extension Number Set, [012]ISDN Extension Number Set, [118]Voice Mail Extension Number Set, [130] Phantom Extension Number Set, [813]Floating Number Assignment and [671]PS Extension Number Set.

Features Guide References

Flexible Numbering

[109] E xpansion 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) / S1 (2 S0) / S2 (6 S0) / EM (4 E&M) / E (EXT) / A (16 SLT) / D (No Use)**

KX-TD1232

- **Master / Slave**
- Areas 1; 2; 3 = **C (4 CO) / S1 (2 S0) / S2 (6 S0) / S3 (1 PRI) / EM (4 E&M) / E1 (8 EXT1) / E2 (8 EXT2) / A1 (16 SLT1) / A2 (16 SLT2) / D (No Use)**
  (Master system only: S3, E1 and E2 for the KX-TD144 or KX-TD146)

Default

KX-TD816: C;E

KX-TD1232: Master and Slave – C;E1;E2

Programming

KX-TD816

1. Enter **109.**
   `Display: Expansion Card`
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-TD123

1. Enter **109.**
   `Display: Expansion Card`
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
  – S1 (2-ISDN S0 lines): KX-TD280
  – S2 (6-ISDN S0 lines): KX-TD286
  – S3 (1-PRI ISDN line): KX-TD290
  – EM (4-E&M lines): KX-TD184
  – E, E1, E2 (8-Extension lines): KX-TD170, KX-TD144 or KX-TD146
  – 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 / 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 / E&M) unit can be installed. The PRI ISDN line unit can be installed with the ISDN S0 line unit, but not with the analogue outside line unit.
- 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

[128] P BX Code

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: 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

E&M (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: 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

E&M (TIE) Line Service

4.2 Timer Programming

[220] T IE First / Inter Digit Time

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

10 s

Programming

1. Enter **220**.
   `Display: TIE Timer`
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

E&M (TIE) Line Service
Toll Restriction

4.3 TIE Line RoutingTable Programming

[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 entry max.)**

Default

All locations – Not stored

Programming

1. Enter **340**.

```
Display example: TIE Route
```

2. Press **NEXT**.

```
Display: Location NO?→
```

3. Enter a **location numbe** .

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

```
Display example: 01:
```

4. Enter a **TIE line access numbe** .

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

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

5. Press ➡ programme the outside line group hunt sequence number.

6. Enter an outside line **group hunt sequence numbe** .

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 numbe** .

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 Dial is used to modify the TIE line access number.

Features Guide References

E&M (TIE) Line Service

[341] TIE Modify Removed Digit / Added Dial

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 Dial=Blank

Programming

1. Enter **341**.
   `Display: TIE Remove/Add`
2. Press **NEXT**.
   `Display: Location NO?→`
3. Enter a **location numbe** .
   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 ➡ 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 numbe** .
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

E&M (TIE) Line Service

4.4 TIE Line Programming

[431] TIE Table Number Assignment

Description

Assigns a TIE table number to each outside line group.

Selection

- Outside line group (TRG) number: **1 through 8, ✳** (✳=all outside line groups)
- TIE table number: **1 through 4**

Default

All outside line groups – Not stored

Programming

1. Enter **431**

   `Display: TIE Table NO.`
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 **TIE table 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 E&M (TIE) Line feature. If this assignment is changed, it will affect other programming ([432] through [436]).
- 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

E&M (TIE) Line Service

[432] TIE Incoming Assignment

Description

Assigns the TIE incoming method, immediate or wink, to each TIE table according to your central office service.
Immediate: Incoming TIE calls can be received right after the receiving signal arrives.
Wink: Incoming TIE calls can be received after the wink signal is transmitted to the central office (after the receiving signal arrives).

Selection

- TIE table number: **1 through 4, ✳** (✳=all TIE tables)
- **Immediate / Wink**

Default

All TIE tables – Wink

Programming

1. Enter **432.**
   `Display: TIE Signal In`
2. Press **NEXT.**
   `Display: Table NO?→`
3. Enter a **TIE table number.**
   To enter TIE table 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 TIE table, press **NEXT** or **PREV,** or **SELECT** and the desired **TIE table number.**
7. Repeat steps 4 through 6.
8. Press **END.**

Conditions

To assign all TIE tables to one selection, press the ✳ key in step 3. In this case, the display shows the contents programmed for TIE table number 1.

Features Guide References

E&M (TIE) Line Service

[433] T IE Outgoing Assignment

Description

Assings a TIE outgoing method, immediate or wink, to each TIE table according to your central office service.
Immediate: Outgoing TIE numbers can be transmitted right after seizing the outside line.
Wink: Outgoing TIE numbers can be transmitted after receiving the wink signal from the central office after seizing the outside line.

Selection

- TIE table number: **1 through 4, ✳** (✳=all TIE tables)
- **Immediate / Wink**

Default

All TIE tables – Wink

Programming

1. Enter **433.**
   `Display: TIE Signal Out`
2. Press **NEXT.**
   `Display: Table NO?→`
3. Enter a **TIE table number.**
   To enter TIE table 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 TIE table, press **NEXT** or **PREV,** or **SELECT** and the desired **TIE table 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 [436]TIE Wink Time Out Assignment.
  The system disconnects the outside line when the time-out time expires.
- To assign all TIE tables to one selection, press the ✳ey in step 3.
  In this case, the display shows the contents programmed for TIE table number 1.

Features Guide References

E&M (TIE) Line Service

[434] T IE Subscriber Number Removed Digit

Description

Assigns the removed digits of a received TIE subscriber number for each TIE table. In this case, digits are removed from the beginning of the received digits.

Selection

- TIE table number: **1 through 4**
- Number of digits to be deleted: **0 through 6** (0=no deletion)

Default

All TIE tables – 0

Programming

1. Enter **434.**
   `Display: TIE Remove Digit`
2. Press **NEXT.**
   `Display: Table NO?→`
3. Enter a **TIE table number.**
   To enter TIE 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, press **CLEAR** and enter the new number.
5. Press **STORE.**
6. To programme another TIE table, press **NEXT** or **PREV,** or **SELECT** and the desired **TIE table 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

E&M (TIE) Line Service

[435] TIE Added Number

Description

Assigns the added number to the TIE subscriber number which is determined in programme [43 4]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

- TIE table number: **1 through 4**
- Number to be added: **4 digits (max.)**

Default

All TIE tables – Blank

Programming

1. Enter **435.**
   `Display: TIE Add Dial`
2. Press **NEXT.**
   `Display: Table NO?→`
3. Enter a **TIE table number.**
   To enter TIE table 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 TIE table, press **NEXT** or **PREV,** or **SELECT** and the desired **TIE table number.**
7. Repeat steps 4 through 6.
8. Press **END.**

Conditions

- Each added number has a maximum of four digits, consisting of **0 through 9.**

Features Guide References

E&M (TIE) Line Service

[436] T IE Wink Time Out Assignment

Description

The TIE outgoing method can be set to the wink mode in programme [433]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. The system disconnects the outside line when the time-out expires.

Selection

- TIE table number: **1 through 4, ✳** (✳=all TIE tables)
- Time: **1 through 127** (× 64 milliseconds is the actual time)

Default

All TIE tables – 16

Programming

1. Enter **436.**
   `Display: TIE Wink Timeout`
2. Press **NEXT.**
   `Display: Table NO?→`
3. Enter a **TIE table number.**
   To enter TIE table 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 TIE table, press **NEXT** or **PREV,** or **SELECT** and the desired **TIE table number.**
7. Repeat steps 4 through 6.
8. Press **END.**

Conditions

- You cannot leave the entry empty.
- To assign all TIE tables to one selection, press the ✳ key in step 3. In this case, the display shows the contents programmed for TIE table number 1.

Features Guide References

E&M (TIE) Line Service

[437] O utside-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, ✳** ✳=all outside line groups)
- **Enable / Disable**

Default

All outside line groups – Disable

Programming

1. Enter **437**.
   `Display: CO-TIE Transfer`
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 numbe** .
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

To assign all outside line groups to the same selection, press the ✳ key in step 3. In this case, the display shows the contents programmed for outside line group number 1.

Features Guide References

E&M (TIE) Line Service

[438] TIE-to-Outside Transfer

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, ✳** (✳=all outside line groups)
- **Enable / Disable**

Default

All outside line groups – Disable

Programming

1. Enter **438**.
   `Display: TIE-CO Transfer`
2. Press **NEXT**.
   `Display: TRK GRP NO?→`
3. Enter an **outside line group numbe** .
   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 numbe** .
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

To assign all outside line groups to the same selection, press the ✳ key in step 3. In this case, the display shows the contents programmed for outside line group number 1.

Features Guide References

E&M (TIE) Line Service

[439] T IE-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, ✳** ✳ll outside line groups)
- **Enable / Disable**

Default

All outside line groups – Enable

Programming

1. Enter **439**.
   `Display: TIE-TIE Transfer`
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 numbe** .
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

To assign all outside line groups to the same selection, press the ✳ key in step 3. In this case, the display shows the contents programmed for outside line group number 1.

Features Guide References

E&M (TIE) Line Service

[440] TIE Security Type

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 [811] D ISA / 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 – Trunk

Programming

1. Enter **440**.
   `Display: TIE Security`
2. Press **NEXT**.
   `Display: TRK GRP NO?→`
3. Enter an **outside line group numbe** .
   To enter outside line group number 1, you can also press **NEXT**.
   `Display example: TRG1:Trunk`
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 ✳ key in step 3. In this case, the display shows the contents programmed for outside line group number 1.

Features Guide References

E&M (TIE) Line Service

[442] 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 **442**.
   `Display: Voice 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 ✳ key in step 3.

Features Guide References

E&M (TIE) Line Service

[443] 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 **443**.

```
Display: Voice 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 ✳ key in step 3.

Features Guide References

E&M (TIE) Line Service

[444] 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 **444**.

```
Display: Voice 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 ✳ key in step 3.

Features Guide References

E&M (TIE) Line Service

[445] 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 **445**.

```
Display: TIE 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 ✳ key in step 3.

Features Guide References

E&M (TIE) Line Service

4.5 Resource Programming

[811] D ISA / 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.

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 **811.**
   `Display: User Code`
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 carrent entry, press **CLEAR**.
   To change the current entry, enter the new code.
5. Press ➡, 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 [44 0]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)

E&M (TIE) Line Service

4.6 Optional Programming

[990] S ystem 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

		Bit Number															
		16	**15**	**14**	**13**	**12**	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**
Display Example	**Area 01**	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	1
	Area 02	1	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0
	Area 03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Area 04	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0
	Area 05	1	1	1	1	1	1	1	0	1	1	1	0	1	0	1	1
	Area 06	1	1	1	1	1	0	0	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

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
01	1	Sound source during transfer.	**0** : ringback tone **1** : Music on Hold	1	• Call Transfer • Music 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 Access • Flash
	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
	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
	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
	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 Waiting • Voice Mail Integration
	16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature 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	Enables or disables the Flash function when an outside call is received at a locked or toll-restricted station. Flash, if enabled, allows the user to make an outside call using the same line. If "0" (disconnection signal) is selected in Area 01 - bit 3 above, this is also allowed for those extensions that have the Account Code- Verified - All Calls mode assigned.	**0** : disable **1** : enable	0	Flash
	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

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
02	7	An outside line set to pulse or call blocking mode in programme [402] D ial 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	Dial Type Selection
	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 and [665] P S Voice Mail Access Codes.	**0** : extension number **1** : free	0	Voice Mail Integration
	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	Reserved			
	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	Reserved			
	15	Sets the maximum time for detecting a hooking signal from a single line telephone.	**0** : 1000 ms **1** : 136 ms	0	None
	16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
03	1-16	These bits are provided to assign PAD 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.	**0** : 0 dB **1** : -3 dB	0	None
04	1-8				
	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
	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			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
05	1-6	Reserved			
	7	In the day mode, selects the destination of incoming DDI numbers or MSN numbers when "0" is assigned in programmes [151-1 52]DDI Ringing Assignment – Day / Night and [448-44 9]Extension Ringing Assignment – Day / Night for ISDN.	**0** : DIL 1:N **1** : operator	1	• DDI • MSN Ringing Service
	8	In the night mode, selects the destination of incoming DDI numbers or MSN numbers when "0" is assigned in programmes [151-1 52]DDI Ringing Assignment – Day / Night and [448-44 9]Extension Ringing Assignment – Day / Night for ISDN.	**0** : DIL 1:N **1** : operator	1	• DDI • MSN Ringing Service
	9	Assigns whether a new page is ejected or not when the Hotel Application is printed out by SMDR.	**0** : disable **1** : enable	0	Hotel Application
	10	When Timed Reminder starts and is not answered, this programme enables or disables the SMDR printout for Timed Reminder	**0** : disable **1** : enable	1	Timed Reminder
	11	Enables or disables to send a COLP number.	**0** : enable **1** : disable	1	• COLP • CLIR • COLR
	12-16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
06	1	Sets the time after terminating the OGM.	**0** : 0 s **1** : 5 s	1	• DISA • OGM
	2	Determines whether the account code is printed out or not (shown in dots) by the SMDR.	**0** : shown in dots **1** : shown	1	SMDR
	3-5	Reserved			
	6	Selects the result when an outside call is routed by Call Forwarding to a voice mail port which is in the AA service mode. [For both Inband and DPT Integration] **disable:** AA service mode **enable:** The mode will change to the VM service mode and a Follow On ID is sent. When the voice mail port is in the VM service mode, this programme will not be affected.	**0** : disable **1** : enable	1	Voice Mail Integration
	7	Selects the result when an outside call is routed to a voice mail port by IRNA [For both Inband and DPT Integration]. When the voice mail port is in the VM service mode; **enable:** VM service mode **disable:** The mode will change to the AA service mode [Only when Inband]. When the voice mail port is in the AA service mode; **enable:** The mode will change to the VM service mode and a Follow On ID is sent. **disable:** AA service mode	**0** : enable **1** : disable	1	Voice Mail Integration

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
06	8	Enables or disables sending outside line access number "9" to a TIE line. When you dial outside line access number "9" and the outside line is busy, the system can automatically send outside line access number "9" 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
	9	Enables or disables the ARS with DTMF function.	**0** : enable **1** : disable	1	ARS
	11,10	Assigns the source of Music Source 1 for Music on Hold and BGM.	**00**: internal music source **01**: external music source **11**: tone	00	• BGM • Music on Hold
	12	Reserved			
	13	Enables or disables dial tone 2 when an extension sets programmable extension features such as Call Waiting.	**0** : disable **1** : enable	1	Dial Tone, Distinctive
	14	Enables or disables the Whisper OHC feature.	**0**: any telephone **1**: KX-T7500 and KX-T7400 series telephone only	1	Whisper OHCA
	15, 16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
07	1-3	Reserved			
	4	Allows to access an outside line has the lowest number among idle lines with priority.	**0** : enable **1** : disable	1	Outside Line Access, Automatic
	5	Reserved			
	6	Selects the result when a DISA / DDI / MSN / TIE call is invalid.	**0** : reorder tone is sent **1** : IRNA	1	None
	7	Selects the result when a DISA / DDI / MSN / TIE call arrives at a busy extension which has disabled Call Waiting.	**0** : IRNA **1** : busy tone is sent	1	None
	8	Selects the forwarding destination when an outside call is transferred from an extension or the VPS to an extension where the Call Forwarding has been set.	**0** : destination of intercom calls **1** : destination of incoming outside calls	1	Call Forwarding
	9	Selects the result when the first digit timer or the inter digit timer, used for toll restriction checking, (assigned in programme [207]First Digit Time or [208] Inter Digit Time) expires.	**0** : disconnect **1** : do not disconnect	1	None
	10	Enables or disables retry by diall ing⁎'" during DISA outside-to-outside line conversation. If disabled, "⁎" will simply be dialled.	**0** : dial "⁎" **1** : retry	1	DISA
	11	Selects whether the display, which is assigned in programme [612] Incoming Call Display and [676] PS Incoming Call Display, changes after answering an incoming call or not.	**0** : not change **1** : change to duration time	1	Incoming Outside Call Information Display
	12	Selects how long the system keeps the door opener unlocked.	**0** : 3 s **1** : 5 s	1	Door Opener
	13	Enables or disables the automatic time adjustment. The time is automatically adjusted when the first call after 3:00 AM is received.	**0** : enable **1** : disable	1	ISDN
	14	Selects the bearer when using a single line telephone.	**0** : Speech **1** : 3.1k Audio	1	ISDN

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
07	15	Selects the bearer when using a proprietary telephone or DECT portable station.	**0** : 3.1k Audio **1** : Speech	1	ISDN
	16	Reserved			
08	1	Reserved			
	2	Enables or disables the MCID service even after the caller hangs up. If enabled, the call will not be disconnected until you go on-hook.	**0** : enable **1** : disable	1	Malicious Call Identification (MCID)
	3-16	Reserved			

Selection

- Area code: **01 through 08**
- Selection: See **"Selection"** in the explanation table.

Default

See "Default" shown in the explanation table.

Programming

1. Enter **990.**

```
Display: System Add Inf.
```

2. Press **NEXT.**

```
Display: Area NO?→
```

3. Enter an **area code (01 through 08).**

```
Display example: 0010100011000001
```

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 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

Section

DECT Programming

5.1 Manager Programming

[020] P S Flexible CO Button Assignment

Description

Used to determine how the flexible CO buttons are used on PSs.

Selection

- PS registration number:
  KX-TD816 – **01 through 16**
  KX-TD1232 – **01 through 64**
- Flexible CO button number: **1 through 3**
- 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
4 (FWD/DND)	None
5 (Save)	None
6 (Account)	None
7 (Conference)	None
82 (Voice Mail Transfer)	**2 through 4 digits** (Voice mail extension number)
83 (Two-Way Record)*	**2 through 4 digits** (Voice mail extension number)
84 (Two-Way Transfer)*	**2 through 4 digits** (Voice mail extension number)
✳ (Loop-CO)	None
# (Group-CO)	**1 through 8** (Outside line group number)

* Available when the Digital Super Hybrid System is connected to a Digital Proprietary Telephone capable Panasonic Voice Processing System (one that supports digital proprietary telephone integration; e.g. KX-TVP200).

Default

All PSs – CO 01 = Loop-CO; CO 02 and CO 03 = Not stored

Programming

1. Enter **020**.
   `Display: PS Flexible Key`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .
   You can also keep pressing **NEXT** until the desired PS registration number is displayed.
   `Display: PT-PGM Mode`
4. Press the **CO button** to be changed.
   The display shows the button pre-assignment.
   `Display example: CO-01`
5. Enter the **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 for the same PS, repeat steps 4 through 6.
   To programme another PS, 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

None

Features Guide References

Button, Flexible

5.2 System Programming

[100] F lexible 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
18	Automatic line access / ARS	9
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	Night service mode	78
52	Parallel telephone mode	39
53	Background music – external	35
54	Reserved	
55-62	Emergency call 1 through 8	None
63	Timed reminder, remote	7*
64	Call log, incoming	56
65	Call log lock, incoming	57
66	Check-out ready	736
67	TIE line access number	None
68-83	Other PBX Extension 01 through 16	None
84	LCS password set / cancel	799
85	Log-in / log-out	45
86	SXDP	48
87	CLIP / COLP	711
88	Reserved	
89	MCID	737

Selection

- Selection number: **01 through 89** (See "Feature Number List" for the corresponding features.)
- Feature number:
  1 or 2 digits (for selection numbers 01 through 16, 68 through 83);
  1 through 3 digits (for selection numbers 17 through 67, 84 through 89)

Default

See "Feature Number List".

Programming

1. Enter **100.**
   `Display: FLX Numbering`
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.**

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, [130] Phantom Extension Number Set, [813]Floating Number Assignment and [671]PS Extension Number Set.
- If ✳r # 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 programmes [003]Extension Number Set, [012]ISDN Extension Number Set, [118]Voice Mail Extension Number Set, [130] Phantom Extension Number Set, [813]Floating Number Assignment and [671]PS Extension Number Set.

Features Guide References

Flexible Numbering

[109] E xpansion 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) / S1 (2 S0) / S2 (6 S0) / EM (4 E&M) / E (EXT) / A (16 SLT) / D (No Use)**

KX-TD1232

- **Master / Slave**
- Areas 1; 2; 3 = **C (4 CO) / S1 (2 S0) / S2 (6 S0) / S3 (1 PRI) / EM (4 E&M) / E1 (8 EXT1) / E2 (8 EXT2) / A1 (16 SLT1) / A2 (16 SLT2) / D (No Use)**
  (Master system only: S3, E1 and E2 for the KX-TD144 or KX-TD146)

Default

KX-TD816: C;E

KX-TD1232: Master and Slave – C;E1;E2

Programming

KX-TD816

1. Enter **109.**
   `Display: Expansion Card`
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-TD123

1. Enter **109.**
   `Display: Expansion Card`
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
  – S1 (2-ISDN S0 lines): KX-TD280
  – S2 (6-ISDN S0 lines): KX-TD286
  – S3 (1-PRI ISDN line): KX-TD290
  – EM (4-E&M lines): KX-TD184
  – E, E1, E2 (8-Extension lines): KX-TD170, KX-TD144 or KX-TD146
  – 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 / 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 / E&M) unit can be installed. The PRI ISDN line unit can be installed with the ISDN S0 line unit, but not with the analogue outside line unit.
- 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

5.3 Extension Programming

[650] P S Registration

Description

Assigns a registration number and an extension number to each PS. Steps 1 through 5 and 22 through 24 must be operated with your display PT, and steps 6 through 21 with the PS whose registration number is to be set.

Selection

(With a display PT)

- PS registration number:
  KX-TD816 – **01 through 16**
  KX-TD1232 – **01 through 64**
- PS extension number: **2 through 4 digits**

(With a PS)

- DECT system number: **1 through 4**
- PS password: **4 digits**
- System lock password: **1 through 4 digits**

Default

All PSs – Not stored

Programming

(With a display PT)

1. Enter **650**.
   `Display: PS Registration`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .
   `Display example: PS01:Not Stored`
4. Enter the **PS extension number**.
   `Display example: PS01:Ext 281`
5. Press **STORE**.
   - (If enabled)
     `Display: Executing`
     Continue programming from step 6 with a PS within five minutes.

- (If disabled)
  `Display: Rejected`
  The Cell Station (CS) may not be connected or not working. After connecting the CS or resetting the PBX, wait for at least one minute and try again from the beginning.

(With a PS)

6. Slide the **Power switch ON**.

7. Press the **Function button**.

```
Display: KEY
```

8. Press the **Book** button twice.

```
Display: PROGRAMMING
```

9. Press the **Auto/OK** button.

10. Press the **Book** button repeatedly until the display below appears.

```
Display: REGISTRATION
```

11. Press the **Auto/OK** button.

```
Display example: DECT-SYS-NO.
                 1234
```

12. Enter the **DECT system numbe** .

```
Display example: DECT-SYS-NO.
                 1
```

13. Press the **Auto/OK** button.

```
Display example: ENTER PASSWORD
                 =
```

14. Enter the **PS password**.

```
Display example: ENTER PASSWORD
                 =****
```

You will hear a confirmation tone.

15. Press the **Auto/OK** button.

```
Display:  DECT-SYS LOCK
          =DISABLE
```

16. Press the **Book** button to select "DISABLE" or "ENABLE" for the System Lock.

```
Display:  DECT-SYS LOCK
          =DISABLE
```

17. Press the **Auto/OK** button.

```
Display example:

     (if disabled): UNLOCKED
     (if enabled):  ENTER PASSWORD
                    =
```

18. If you select "ENABLE" in step 16, enter a **System Lock password**.

```
Display:  ENTER PASSWORD
          =****
```

19. Press the **Auto/OK** button.

```
Display:  REENTER PASSWORD
          =
```

20. Enter the **System Lock password** again.

```
Display:  REENTER PASSWORD
          =****
```

21. Press the **Auto/OK** button.

```
Display:  LOCKED
```

(With a display PT)

22. To programme another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration numbe** .

23. Repeat steps 4 through 21.

24. Press **END**.

Conditions

- It is possible to search the display by pressing # (Next) or * (Previous) in steps 8 and 10.
- You can assign an extension number to each PS also in progr amme [671]PS Extension Number Set.
- The PS password can be assigned in progr amme [672]PS Password Set.
- One PS must have only one registration number. It is not possible to assign the different registration number for one PS.
- If the PS extension number or the PS password is changed after registering, the PS cannot be used until it is registered again in this programme.
- Do not press END after step 15, or it may not registered correctly.

- To re-assign the PS, which is set the System Lock, to the other DECT system, it is required to cancel the System Lock first in PS Programming, "Setting the System Lock".
- 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
  KX-TD1232 – 165 through 180

  [130] Phantom Extension Number Set
  Not stored.

  [813] Floating Number Assignment
  KX-TD816 – 191 through 194, 196, 198, 199, 291 through 294, 298, 299
  KX-TD1232 – 191 through 194, 196 through 199, 291 through 294, 296 through 299

Features Guide References

Digital Wireless Connection

[651] P S Termination

Description

Deletes a stored PS so that it cannot be used in the system.

Selection

- PS registration number:
  KX-TD816 – **01 through 16**
  KX-TD1232 – **01 through 64**

Default

Not applicable

Programming

1. Enter **651**.
   `Display: PS Termination`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .
   You can also keep pressing **NEXT** until the desired PS registration number is displayed.
   `Display example: PS01:EXT 281`
4. Press **STORE**.
   `Display: Executing`
   The system searches for the PS registration number while "Executing" is blinking, and deletes the registration after it is found.
   `Display example: Deleted`
5. To delete another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration number**.
6. Repeat steps 3 through 5.
7. Press **END**.

Even if "Rejected" is displayed in step 4 above, you can delete the PS. In this case, Registration Clear on the PS (PS Programming) is required.

1. Enter **651**.
   `Display: PS Termination`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .

You can also keep pressing **NEXT** until the desired PS registration number is displayed.

`Display example: PS01:EXT 281`

4. Press **STORE**.

   `Display: Rejected` (The PS is not registered correctly.)

   The display will show the next example below in a few seconds.

   `Display example: Delete?`

5. Go to Step 7 when not deleting.
6. Press **STORE**.
7. To delete another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration numbe** .
8. Repeat steps 3 through 7.
9. Press **END**.

Conditions

- Deleting the same PS registration number from the PS by PS Programming is only necessary when it is deleted after "Rejected" is displayed in this programme.
- If a PS registration is terminated in this programme, all the PS assignments and its extension assignments will return to the default settings. If you only want to change the PS, retaining all the assignments, re-enter the replacing PS on the old PS registration number in programme [650]PS Registration. In this case, you should reset the system so that the assignment is activated.

Features Guide References

Digital Wireless Connection

[653] P S Extension Name Set

Description

Assigns names to the PS extension numbers programmed in progr amme [671]PS Extension Number Set.

Selection

- PS registration number:
  KX-TD816 – **01 through 16**
  KX-TD1232 – **01 through 64**
- Name: **10 characters (max.)**

Default

All PSs – Not stored

Programming

1. Enter **653**.
   `Display: PS EXT Name Set`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .
   You can also keep pressing **NEXT** until the desired PS registration number is displayed.
   `Display example: PS01:Not Stored`
4. Enter the **name**.
   - For entering characters, see Section 1 .4Entering 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 PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration numbe** .
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

None

Features Guide References

Digital Wireless Connection

[654] SXDP Assignment

Description

Disables or enables the Super EXtra Device Port (SXDP) feature for wired extensions.

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)
- **Enable / Disable**

Default

All jacks – Enable

Programming

1. Enter **654**.
`Display: SXDP Assign`

2. Press **NEXT**.
`Display: Jack NO?→`

3. Enter the **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: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 numbe** .

7. Repeat steps 4 through 6.

8. Press **END**.

Conditions

- After programmed, you must reset your system.
- To assign all jacks to one selection, press the ✳ key in step 3. In this case, the display shows the contents programmed for the jack 01.

Features Guide References

Super EXtra Device Port (SXDP)

[655] P S Budget Management

Description

Assigns the charge limitation for a call on a PS basis.

Selection

- PS registration number:
  KX-TD816 – **01 through 16, ✳**
  KX-TD1232 – **01 through 64, ✳**
  (✳=all PS registration numbers)
- Charge limitation: **0 through 59999**

Default

All PSs – 0

Programming

1. Enter **655**.
   `Display: PS Charge Limit`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .
   You can also keep pressing **NEXT** until the desired PS registration number is displayed.
   `Display example: PS01: 0`
4. Enter a **charge limit**.
   To delete the charge limit, press **CLEAR**.
5. Press **STORE**.
6. To programme another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration numbe** .
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

- If the charge limit is set "0", no restriction is applied.
- To assign all PSs to one selection, press the ✳ey in step 3. In this case, the display shows the contents programmed for the PS which has the lowest PS registration number.
- The displayed currency denomination can be programmed by programme [12 1]Assignment of Denomination.

Features Guide References

Budget Management
Charge Fee Reference

[656] PS Charge Verification Assignment

Description

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

Selection

- PS registration number:
  KX-TD816 – **01 through 16, ***
  KX-TD1232 – **01 through 64, ***
  (*=all PS registration numbers)
- **Enable / Disable**

Default

All PSs – Enable

Programming

1. Enter **656**.
   `Display: PS Charge Refer`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration number**.
   You can also keep pressing **NEXT** until the desired PS registration number is displayed.
   `Display example: PS01:Enable`
4. Keep pressing **SELECT** until the desired selection is displayed.
5. Press **STORE**.
6. To programme another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration number**.
7. Press **END**.

Conditions

- To assign all PSs to one selection, press the * key in step 3. In this case, the display shows the contents programmed for the PS which has the lowest PS registration number.

Features Guide References

Charge Fee Reference

[657] PS Class of Service

Description

Programmes each PS a Class of Service (COS). The COS determines the call handling abilities for each PS. Primary and secondary COS numbers can be assigned for each PS.

Selection

- PS registration number:
  KX-TD816 – **01 through 16, ✳**
  KX-TD1232 – **01 through 64, ✳**
  (✳=all PS registration numbers)
- COS number: **1 through 8**

Default

All PSs – Primary, Secondary – COS 1, COS 1

Programming

1. Enter **657**.

```
Display: PS COS Assign
```

2. Press **NEXT**.

```
Display: PS NO?→
```

3. Enter the **PS registration numbe** .

You can also keep pressing **NEXT** until the desired PS registration number is displayed.

```
Display example: PS01:COS1, COS1
```

4. Enter a **primary COS numbe** .

To change the current entry, enter the new number.

5. Press ■▶.

6. Enter a **secondary COS numbe** .

To change the current entry, enter the new number.

7. Press **STORE**.

8. To programme another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration number**.

9. Repeat steps 4 through 8.

10. Press **END**.

Conditions

- There is a maximum of eight Classes of Service. Every PS must be assigned to a Class of Service and is subject to COS Programming in programmes [5XX] and [991].

- To assign all PSs to one COS, press the ✳ key in step 3. In this case, the display shows the contents programmed for the PS which has the lowest PS registration number.

Features Guide References

Class of Service (COS)

[658] PS Extension Group Assignment

Description

Assigns each PS to an extension group. Extension groups are used for Group Call Pickup.

Selection

- PS registration number:
  KX-TD816 – **01 through 16, ✳**
  KX-TD1232 – **01 through 64, ✳**
  (✳=all PS registration numbers)
- Extension group number: **1 through 8**

Default

All PSs – Extension group 1

Programming

1. Enter **658**.
`Display: PS EXT Group`

2. Press **NEXT**.
`Display: PS NO?→`

3. Enter the **PS registration numbe** .
You can also keep pressing **NEXT** until the desired PS registration number is displayed.
`Display example: PS01:EXG01`

4. Enter an **extension group number**.
To change the current entry, press **CLEAR** and enter the new extension group number.

5. Press **STORE**.

6. To programme another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration number**.

7. Repeat steps 4 through 6.

8. Press **END**.

Conditions

- There is a maximum of eight extension groups. Each PS can only belong to one group.
- To assign all PSs to one selection, press the ✳ key in step 3. In this case, the display shows the contents programmed for the PS which has the lowest PS registration number.

Features Guide References

Call Pickup

Extension Group

[659-660] P S DIL 1:N Extension – Day / Night

Description

A DIL 1:N line can be assigned to call more than one extension. All incoming calls from the programmed outside lines are directed to the specified PSs. This programme assigns the PSs for each outside line in both the day and night modes.

Selection

- PS registration number:
  KX-TD816 – **01 through 16**
  KX-TD1232 – **01 through 64**
- Outside line number:
  KX-TD816 – **01 through 08, ✳**
  KX-TD1232 – **01 through 24, ✳**
  (✳=all outside lines)
- **Enabl** (enable) / **Disab** (disable)

Default

All PSs – All outside lines – Disable (Day / Night)

Programming

1. Enter a programme address (**659 for day or 660 for night**).

```
Display example: PS DIL 1:N Day
```

2. Press **NEXT**.

```
Display: PS NO?→
```

3. Enter the **PS registration numbe** .

You can also keep pressing **NEXT** until the desired PS registration number is displayed.

```
Display example: PS01:CO01:Disab
```

4. Enter the **outside line numbe** .

You can also keep pressing ➡unt⬅e desired outside line number 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 PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration number**.

8. Repeat steps 4 through 7.

9. Press **END**.

Conditions

- To assign all outside lines to "Disable", press the ✳ey in step 4. In this case, the display shows the contents programmed for outside line 01.
- When you change the PS registration number by pressing **NEXT** or **PREV**, the outside line number will not changed.
  <Example> PS01:CO06.....Press **NEXT**.....PS02:CO06

Features Guide References

Direct In Lines (DIL)

Night Service

[661-662] P S Outgoing Permitted Outside Line Assignment – Day / Night

Description

Determines which outside lines can be accessed by a PS in both the day and night modes. PS users can make outgoing outside calls using the assigned outside lines.

Selection

- PS registration number:
  KX-TD816 – **01 through 16, ✳**
  KX-TD1232 – **01 through 64, ✳**
  (✳=all PS registration numbers)
- Outside line number:
  KX-TD816 – **01 through 08, ✳**
  KX-TD1232 – **01 through 24, ✳**
  (✳=all outside lines)
- **Enabl** (enable) / **Disab** (disable)

Default

All PSs – All outside lines – Enable (Day / Night)

Programming

1. Enter a programme address (**661 for day or 662 for night**).

```
Display example: PS CO Out Day
```

2. Press **NEXT**.

```
Display: PS NO?→
```

3. Enter the **PS registration numbe** .

You can also keep pressing **NEXT** until the desired PS registration number is displayed.

```
Display example: PS01:CO01:Enabl
```

4. Enter the **outside line numbe** .

You can also keep pressing ➡unt⬅e desired outside line number 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 PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration number**.

8. Repeat steps 4 through 7.

9. Press **END**.

Conditions

- To assign all PSs or all outside lines to one selection, press the ✳ key in step 3 or 4. In this case, the display shows the contents programmed for outside line 01 or the PS 01.
- When you change the PS registration number by pressing **NEXT** or **PREV**, the outside line number will not changed.
  <Example> PS01:CO06.....Press **NEXT**.....PS02:CO06

Features Guide References

Night Service

Outside Line Connection Assignment – Outgoing

[663-664] P S Doorphone Ringing Assignment – Day / Night

Description

These programmes assign which PSs will ring when a doorphone call is received during the day and night modes. Programmed PSs are also allowed to open the door.

Selection

- PS registration number:
  KX-TD816 – **01 through 16**
  KX-TD1232 – **01 through 64**
- Doorphone number:
  KX-TD816 – **1 or 2, Disable, two entries (max.)**
  KX-TD1232 – **1 through 4, Disable, four entries (max.)**

Default

All PSs – Disable (No doorphones) (Day / Night)

Programming

1. Enter a programme address (**663 for day or 664 for night**).
   `Display example: PS DPH in Day`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .
   You can also keep pressing **NEXT** until the desired PS registration number is displayed.
   `Display example: PS01:12`
4. Enter the **doorphone number**.
   To not assign a doorphone, press **CLEA** .
   To change the current entry, press **CLEAR** and enter the new doorphone number.
5. Press **STORE**.
6. To programme another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration number**.
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

- For the KX-TD1232, doorphone 1, 2 are installed in the Master System and 3, 4 in the Slave, if available.
- You can enter two (KX-TD816) or up to four (KX-TD1232) doorphone numbers for each extension.

Features Guide References

Door Opener
Doorphone Call
Night Service

[665] PS Voice Mail Access Codes

Description

Assigns a mailbox number for each PS only if programme [990] System Additional Information, Area 02 - bit 8 , is set to "free".

Selection

- PS registration number:
  KX-TD816 – **01 through 16**
  KX-TD1232 – **01 through 64**
- Mailbox number: **16 digits (max.)**

Default

All PSs – Not stored

Programming

1. Enter **665**.
   `Display: PS VM ID Code`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .
   You can also keep pressing **NEXT** until the desired PS registration number is displayed.
   `Display example: PS01:Not Stored`
4. Enter the **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 PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration number**.
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

- The system supports a maximum of eight jacks (16 jacks during System Connection for KX-TD1232) for connection toa Voice Processing System as theVoice 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 ➡ ⬅.

Features Guide References

Voice Mail Integration for Inband

[671] PS Extension Number Set

Description

Assigns an extension number to each PS.

Selection

- PS registration number:
  KX-TD816 – **01 through 16**
  KX-TD1232 – **01 through 64**
- PS extension number: **2 through 4 digits**

Default

All PSs – Not stored

Programming

1. Enter **671**.
`Display: PS EXT NO SET`

2. Press **NEXT**.
`Display: PS NO?→`

3. Enter the **PS registration numbe** .
You can also keep pressing **NEXT** until the desired PS registration number is displayed.
`Display example: PS01:Not Stored`

4. Enter the **PS extension number**.
To delete the current entry, press **CLEAR**.
To change the current entry, press **CLEAR** and enter the new name.
`Display example: PS01:EXT 281`

5. Press **STORE**.

6. To programme another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration number**.

7. Repeat steps 4 through 6.

8. Press **END**.

Conditions

- Each PS extension number can be two through four digits, consisting of **0 through 9**. The ✳ and # keys cannot be used.
- A PS extension number can also be assigned in programme [650]PS Registration.
- A PS extension number is invalid if the first or second digits do not match with the setting in programme [100] Flexible Numbering, (01) - (16) 1st through 16th hundred extension

blocks. If one digit is assigned as the leading digit, some PS extension numbers have two or three digits. If two digits are assigned, they have three digits and some may have four digits.

- 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
  KX-TD1232 – 165 through 180

  [130] Phantom Extension Number Set
  Not stored.

  [813] Floating Number Assignment
  KX-TD816 – 191 through 194, 196, 198, 199, 291 through 294, 298, 299
  KX-TD1232 – 191 through 194, 196 through 199, 291 through 294, 296 through 299
- Programme [653]PS Extension Name Set is used to name the PSs.
- It is possible to modify the extension number in this programme. If the PS extension number was modified, re-register the PS to the system in programme [6 50]PS Registration in order to use the extension number.

Features Guide References

Digital Wireless Connection

[672] PS Password Set

Description

Assigns a registration password, which is used for registration (programme [650]PS Registration), to each PS.

Selection

- PS registration number:
  KX-TD816 – **01 through 16**
  KX-TD1232 – **01 through 64**
- PS password: **4 digits**

Default

All PSs – 1234

Programming

1. Enter **672**.
   `Display: PS Password SET`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .
   You can also keep pressing **NEXT** until the desired PS registration number is displayed.
   `Display example: PS01:1234`
4. Enter the **PS password**.
   `Display example: PS01:5678`
5. Press **STORE**.
6. To programme another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration number**.
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

- If you modify the PS password, re-register the PS to the system in order to use the password.

Features Guide References

None

[673] C LIP / COLP Number Assignment for PS

Description

Assigns a CLIP / COLP number to each Portable Station.

Selection

- PS registration number:
  KX-TD816 – **01 through 16, ✳**
  KX-TD1232 – **01 through 64, ✳**
  (✳=all PS registration numbers)
- CLIP / COLP number: **16 digits (max.)**

Default

All PSs – Not stored

Programming

1. Enter **673**.
   `Display: PS CLIP/COLP`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .
   You can also keep pressing **NEXT** until the desired PS registration number is displayed.
   `Display example: PS01:Not stored`
4. Enter **CLIP / COLP numbe** .
   To change the current entry, press **CLEAR** and enter the new number.
5. Press **STORE**.
6. To programme another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration numbe** .
7. Repeat steps 3 through 6.
8. Press **END**.

Conditions

- Each CLIP / COLP number can be a maximum of 16 digits, consisting of **0 through 9**.
- To assign all PSs to one selection, press the ✳ey in step 3. In this case, the display shows the contents programmed for the PS 01.

Features Guide References

Calling Line Identification Presentation (CLIP)

Connected Line Identification Presentation (COLP)

[676] P S Incoming Call Display

Description

Allows you to select between three display types when an incoming call is received.
Calling: The incoming caller's telephone number is displayed.
Called: The called telephone number is displayed.
Line Name: The outside line name assigned in the [417] programme is displayed.

Selection

- PS registration number:
  KX-TD816 – **01 through 16, ✳**
  KX-TD1232 – **01 through 64, ✳**
  (✳=all PS registration numbers)
- Display Types: **Calling / Called / Line Name**

Default

All PSs – Calling

Programming

1. Enter **676**.
   `Display: PS Incoming Disp`
2. Press **NEXT**.
   `Display: PS NO?→`
3. Enter the **PS registration numbe** .
   You can also keep pressing **NEXT** until the desired PS registration number is displayed.
   `Display example: PS01:Calling`
4. Keep pressing **SELECT** until the desired selection is displayed.
5. Press **STORE**.
6. To programme another PS, press **NEXT** or **PREV**, or **SELECT** and the desired **PS registration numbe** .
7. Repeat steps 4 through 6.
8. Press **END**.

Conditions

- To assign all PSs to one selection, press the ✳ey in step 3. In this case, the display shows the contents programmed for the PS which has the lowest PS registration number.
- If the receiving call is in the 1:N status, the display only shows outside line number.

Features Guide References

Display Message
Incoming Outside Call Information Display

[680] Cell Station Number Assignment for Master CS

Description

Assigns the cell station number which is used for the master CS.

Selection

- Cell Station number:
  KX-TD816 – **RIF1 / RIF2 / RIF3 / RIF4 / RIF5 / RIF6**
  KX-TD1232 – **E1-RIF1 / E1-RIF2 / E1-RIF3 / E1-RIF4 / E1-RIF5 / E1-RIF6 / E2-RIF1 / E2-RIF2 / E2-RIF3 / E2-RIF4 / E2-RIF5 / E2-RIF6**
  (E1: Cell Station Interface Unit1 / E2: Cell Station Interface Unit2 / RIF1: Cell Station1 / RIF2: Cell Station2 / RIF3: Cell Station3 / RIF4: Cell Station4 / RIF5: Cell Station5 / RIF6: Cell Station6)

Default

Not stored

Programming

1. Enter **680**.
   `Display: Master CS Assign`
2. Press **NEXT**.
   `Display example: M-CS:Not Stored`
3. Keep pressing **SELECT** until the desired selection is displayed.
   `Display example: M-CS:E1-RIF1`
4. Press **STORE**.
5. Press **END**.

Conditions

- For changing the assignment of the Master CS, the assigned system programming data or radio information data should be cleared in programme [682]Radio Information Data Clear. In this case, the re-registration of PSs is essential.
- CSs do not work without this assignment.
- The Master CS must support GAP. In case a CS doesn't support GAP, the operation under this CS is not guaranteed (except with a proprietary telephone).

Features Guide References

None

[681] PS Radio System ID Reference

Description

Shows a radio system ID which is required for each PS to recognise its registered PBX.

Selection

None

Default

Not stored

Programming

1. Enter **681**.

`Display: Radio Sys-ID SET`

2. Press **NEXT**.

Before a Radio System ID is assigned;

`Display: Not Stored`

After a Radio System ID is assigned;

`Display example: 00123456`

3. Press **END**.

Conditions

- The radio system ID must be assigned to support the DECT system (KX-TD144 / TD146 / KX-TD142). If not, only the wired extension port of the KX-TD144 can be used.
- If the radio system ID is not assigned properly, the registered PS may not work properly.

Features Guide References

None

[682] R adio Information Data Clear

Description

Clears the assigned radio information data.

Selection

None

Default

Not applicable

Programming

1. Enter **682**.

```
Display: Radio DATA Clear
```

2. Press **NEXT**.

```
Display example: Clear OK?
```

3. Press **STORE**.

4. Press **END**.

Conditions

- The data, regarding following system programmings, is cleared;
  [65 0]PS Registration
  [67 2]PS Password Set

Features Guide References

None

5.4 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

		Bit Number															
		16	**15**	**14**	**13**	**12**	**11**	**10**	**9**	**8**	**7**	**6**	**5**	**4**	**3**	**2**	**1**
Display Example	**Area 01**	0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	1
	Area 02	1	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0
	Area 03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Area 04	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0
	Area 05	1	1	1	1	1	1	1	0	1	1	1	0	1	0	1	1
	Area 06	1	1	1	1	1	0	0	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

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
01	1	Sound source during transfer	**0** : ringback tone **1** : Music on Hold	1	• Call Transfer • Music 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 Access • Flash
	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
	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
	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
	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 Waiting • Voice Mail Integration
	16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature 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] E xtension-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 byToll 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	Enables or disables the Flash function when an outside call is received at a locked or toll-restricted station. Flash, if enabled, allows the user to make an outside call using the same line. If "0" (disconnection signal) is selected in Area 01 - bit 3 above, this is also allowed for those extensions that have the Account Code- Verified - All Calls mode assigned.	**0** : disable **1** : enable	0	Flash
	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 Retriev and Call Park Retrieve.	**0** : disable **1** : enable	1	Confirmation Tone

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
02	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	Dial Type Selection
	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 and [665] PSVoice Mail Access Codes.	**0** : extension number **1** : free	0	Voice Mail Integration
	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	Reserved			
	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	Reserved			
	15	Sets the maximum time for detecting a hooking signal from a single line telephone.	**0** : 1000 ms **1** : 136 ms	0	None
	16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
03	1-16	These bits are provided to assign PAD 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.	**0** : 0 dB **1** : -3 dB	0	None
04	1-8				
	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
	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			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
05	1-6	Reserved			
	7	In the day mode, selects the destination of incoming DDI numbers or MSN numbers when "0" is assigned in programmes [151- 152]DDI Ringing Assignment – Day / Night and [448-449] Extension Ringing Assignment – Day / Night for ISDN.	**0** : DIL 1:N **1** : operator	1	• DDI • MSN Ringing Service
	8	In the night mode, selects the destination of incoming DDI numbers or MSN numbers when "0" is assigned in programmes [151- 152]DDI Ringing Assignment – Day / Night and [448-449] Extension Ringing Assignment – Day / Night for ISDN.	**0** : DIL 1:N **1** : operator	1	• DDI • MSN Ringing Service
	9	Assigns whether a new page is ejected or not when the Hotel Application is printed out by SMDR.	**0** : disable **1** : enable	0	Hotel Application
	10	When Timed Reminder starts and is not answered, this programme enables or disables the SMDR printout for Timed Reminder	**0** : disable **1** : enable	1	Timed Reminder
	11	Enables or disables to send a COLP number.	**0** : enable **1** : disable	1	• COLP • CLIR • COLR
	12-16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
06	1	Sets the time after terminating the OGM.	**0** : 0 s **1** : 5 s	1	• DISA • OGM
	2	Determines whether the account code is printed out or not (shown in dots) by the SMDR.	**0** : shown in dots **1** : shown	1	SMDR
	3-5	Reserved			
	6	Selects the result when an outside call is routed by Call Forwarding to a voice mail port which is in the AA service mode. [For both Inband and DPT Integration] **disable:** AA service mode **enable:** The mode will change to the VM service mode and a Follow On ID is sent. When the voice mail port is in the VM service mode, this programme will not be affected.	**0** : disable **1** : enable	1	Voice Mail Integration
	7	Selects the result when an outside call is routed to a voice mail port by IRNA [For both Inband and DPT Integration]. When the voice mail port is in the VM service mode; **enable:** VM service mode **disable:** The mode will change to the AA service mode [Only when Inband]. When the voice mail port is in the AA service mode; **enable:** The mode will change to the VM service mode and a Follow On ID is sent. **disable:** AA service mode	**0** : enable **1** : disable	1	Voice Mail Integration

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
06	8	Enables or disables sending outside line access number "9" to a TIE line. When you dial outside line access number "9" and the outside line is busy, the system can automatically send outside line access number "9" 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
	9	Enables or disables the ARS with DTMF function.	**0** : enable **1** : disable	1	ARS
	11,10	Assigns the source of Music Source 1 for Music on Hold and BGM.	**00**: internal music source **01**: external music source **11**: tone	00	• BGM • Music on Hold
	12	Reserved			
	13	Enables or disables dial tone 2 when an extension sets programmable extension features such as Call Waiting.	**0** : disable **1** : enable	1	Dial Tone, Distinctive
	14	Enables or disables the Whisper OHCA feature.	**0**: any telephone **1**: KX-T7500 and KX-T7400 series telephone only	1	Whisper OHCA
	15, 16	Reserved			

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
07	1-3	Reserved			
	4	Allows to access an outside line has the lowest number among idle lines with priority.	**0** : enable **1** : disable	1	Outside Line Access, Automatic
	5	Reserved			
	6	Selects the result when a DISA / DDI / MSN / TIE call is invalid.	**0** : reorder tone is sent **1** : IRNA	1	None
	7	Selects the result when a DISA / DDI / MSN / TIE call arrives at a busy extension which has disabled Call Waiting.	**0** : IRNA **1** : busy tone is sent	1	None
	8	Selects the forwarding destination when an outside call is transferred from an extension or the VPS to an extension where the Call Forwarding has been set.	**0** : destination of intercom calls **1** : destination of incoming outside calls	1	Call Forwarding
	9	Selects the result when the first digit timer or the inter digit timer, used for toll restriction checking, (assigned in programme [207]Fi rst Digit Time or [208] I nter Digit Time) expires.	**0** : disconnect **1** : do not disconnect	1	None
	10	Enables or disables retry by diall ing"⁎" during DISA outside-to-outside line conversation. If disabled, "⁎" will simply be dialled.	**0** : dial "⁎" **1** : retry	1	DISA
	11	Selects whether the display, which is assigned in programme [612] I ncoming Call Display and [676] P S Incoming Call Display, changes after answering an incoming call or not.	**0** : not change **1** : change to duration time	1	Incoming Outside Call Information Display
	12	Selects how long the system keeps the door opener unlocked.	**0** : 3 s **1** : 5 s	1	Door Opener
	13	Enables or disables the automatic time adjustment. The time is automatically adjusted when the first call after 3:00 AM is received.	**0** : enable **1** : disable	1	ISDN
	14	Selects the bearer when using a single line telephone.	**0** : Speech **1** : 3.1k Audio	1	ISDN

Explanation

Area	Bit	Description	Selection	Default	Feature Guide References
07	15	Selects the bearer when using a proprietary telephone or DECT portable station.	**0** : 3.1k Audio **1** : Speech	1	ISDN
	16	Reserved			
08	1	Reserved			
	2	Enables or disables the MCID service even after the caller hangs up. If enabled, the call will not be disconnected until you go on-hook.	**0** : enable **1** : disable	1	Malicious Call Identification (MCID)
	3-16	Reserved			

Selection

- Area code: **01 through 08**
- Selection: See **"Selection"** in the explanation table.

Default

See "Default" shown in the explanation table.

Programming

1. Enter **990.**

```
Display: System Add Inf.
```

2. Press **NEXT.**

```
Display: Area NO?→
```

3. Enter an **area code (01 through 08).**

```
Display example: 00101000011000001
```

4. Keep pressing ➡ 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

Section

Default Values

2 General Programming

Programme	Default
[000] Date and Time Set	'95 Jan. 1 SUN 00:00
[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 Hom 3: At Ext %% 4: Back at %%:%% 5: Out Until %%/%% 6: In a Meeting 7 through 9: Blank (not stored)
[009] Emergency Dial Number Set	All locations – Not stored
[010] Budget Management	All jacks – 0
[011] Charge Margin Rate	0%
[015] Quick Dialling Number Set	All location numbers – Not stored

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] Automatic Access Outside Line Group Assignment	12345678
[104] Flexible Quick Dialling Number Set	All locations – Not stored
[105] Account Codes	All locations – Not stored
[106] Station Hunting Type	All extension groups – Disable
[107] System Password	1234
[108] One-Touch Transfer by DSS Button	Enable
[109] Expansion Unit Type	KX-TD816: C;E KX-TD1232: Master and Slave – C;E1;E2
[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
[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 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=171, VM-10=172, VM-11=173, VM-12=174, VM-13=175, VM-14=176, VM-15=179, VM-16=180

Programme	Default
[119] Voice Mail Extension Group Assignment	All voice mail numbers – EXG 1
[120] Charge Display Selection	in Meter
[121] Assignment of Denomination	Not stored
[122] Charge Verification Assignment	All jacks – Enable
[123] Charge Verification ID Code Set	1234
[124] Hotel Application	Disable
[125] User Password	1234
[126] UCD Overflow	All UCD groups – Not stored
[127] UCD Time Table	All time tables – Not stored
[130] Phantom Extension Number Set	All locations – Not stored
[148] Off-Hook Monitor	Enable
[154] Message Waiting Control	All units – Not stored
[155] Message Waiting Lamp Assignment	1
[156] Message Waiting Port Set	All units – All message waiting ports – Not stored
[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	10 times
[210] Automatic Redial Interval Time	60 s
[211] Dial Start Time	500 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 Tim	32, 0, 32, 0 (for OGM 1 through 4 from left to right)
[216] MessageWaiting Ring Interval Time	10 min
[217] Timed Reminder Alarm Repeat Times	3 times
[218] Timed Reminder Alarm Interval Time	60 s
[221] DISA AA Wait Time	1 s
[300] TRS Override for System Speed Dialling	Disable
[301-305] T RS Denied Code Entry for Levels 2 through 6	All locations – Not stored
[306-310] T RS Excepted Code Entry for Levels 2 through 6	All locations – Not stored
[312] ARS Mode	Off
[313] ARS Time	Time-A – 8:00 AM; Time-B – 5:00 PM; Time-C – 9:00 PM; Time-D – Disable
[314-321] A RS Leading Digit Entry for Plans 1 through 8	All locations – Not stored.
[322-329] A RS 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
[400] Outside Line Connection Assignment	All outside lines – Connect (If KX-TD290 is connected: All outside lines in the Slave System – No Connect)

Programme	Default
[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	All outside lines – Pulse
[403] Pulse Speed Selection	All outside lines – 10 pps
[404] DTMF Time	All outside lines – 80 ms
[407-408] D IL 1:1 Extension – Day / Night	All outside lines – Disable (Day / Night)
[409-410] I ntercept 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 – 4.5 s
[413] Flash Time	All outside line groups – 96 ms
[414] Disconnect Time	All outside line groups – 1.5 s
[417] Outside Line Name Assignment	All outside lines – Not stored
[423] Pay Tone Assignment	All outside lines – Disable
[441] Line Hunting Sequence	All outside line groups – Small –> Large
[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

Programme	Default
[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
[600] EXtra Device Port	All jacks – Disable
[601] Class of Service	All jacks-1/2 – Primary, Secondary – COS 1, COS 1
[602] Extension Group Assignment	All jacks-1/2 – Extension group 1
[603-604] D IL 1:N Extension and Delayed Ringing – Day / Night	All jacks-1/2 – All outside lines – Immediate ringing (Day / Night)
[605-606] O utgoing Permitted Outside Line Assignment – Day / Night	All jacks-1/2 – All outside lines – Enable (Day / Night)
[607-608] D oorphone Ringing Assignment – Day / Night	Jack 01-1– All doorphones; Other jacks – no doorphone (Day / Night)
[609] Voice Mail Access Codes	All jacks – Not stored
[612] Incoming Call Display	All jacks – Calling
[616] Live Call Screening Recording Mode Assignment	All jacks – Stop Record
[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
[806-807] S erial 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

Programme	Default
[810] DISA Tone Detection	Enable
[811] DISA / TIE User Codes	All DISA / TIE user code numbers – DISA / TIE user code=Blank; COS number=8
[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; DTA=199; 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] SMDR Output Mode	Regular
[817] KX-TD197 Baud Rate Set	V.34-33600
[818] DISA Built-in Automated Attendant Number	Disable
[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

3 ISDN Programming

Programme	Default
[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
[012] ISDN Extension Number Set	All ports – Not stored
[013] ISDN Extension Name Set	All ports – Not stored
[014] Budget Management on ISDN Port	All ports – 0
[100] Flexible Numbering	See "Feature Number List".

Programme	Default
[109] Expansion Unit Type	KX-TD816: C;E KX-TD1232: Master and Slave – C;E1;E2
[112] ISDN Network Type Assignment	Mode 8
[150] DDI Translation Table	All locations – Not stored
[151-152] DDI Ringing Assignment – Day / Night	All locations – Not stored
[418] ISDN Line Number Assignment	All outside lines – Not stored
[419] ISDN Outgoing CLIR Service Assignment	All outside lines – Enable
[421] ISDN DDI / MSN Removed Digit / Added Number Assignment	All ports – Removed digit=0; Added number=Not stored
[424] ISDN Port Type	All ports – CO
[425] ISDN Layer 1 Active Mode	KX-TD816: Port 05 and 06 – Call; Other ports – Permanent KX-TD1232: All ports – Permanent
[426] ISDN Configuration	KX-TD816: Ports 05 and 06 – Multipoint; Other ports – Point KX-TD1232: All ports – Point
[427] ISDN Data Link Mode	KX-TD816: Port 05 and 06 – Call; Other ports – Permanent KX-TD1232: All ports – Permanent
[428] ISDN TEI Mode	KX-TD816: Port 05 and 06 – Automatic; Other ports – Fix 0 KX-TD1232: All ports – Fix 0
[429] ISDN Extension Multiple Subscriber Number	All ports – Disable
[430] ISDN Extension Progress Tone	All ports – Disable
[447] MSN Assignment	All ports – All locations – Not stored
[448-449] Extension Ringing Assignment – Day / Night for ISDN	All ports – All locations – Disable (Day / Night)
[450] PRI Configuration	B channel number – 0 line; CRC4 – Enable

Programme	Default
[451] PRI Reference CO	All outside lines (PRI line) – CO 13
[452-453] I SDN Ring Service Assignment – Day / Night	All ports – Disable (Day / Night)
[613] ISDN Class of Service	All ports – Primary, Secondary – COS 1, COS 1
[614-615] O utgoing Permitted Outside Line Assignment – Day / Night for ISDN Extension	All ports – All outside lines – Enabl (Day / Night)
[617] CLIP / COLP Number Assignment for Extension	All jacks – Not stored
[618] CLIP / COLP Number Assignment for ISDN Extension	All ports – Not stored
[990] System Additional Information	See "Default" shown in the explanation table.

4 E & M Programming

Programme	Default
[100] Flexible Numbering	See "Feature Number List".
[109] Expansion Unit Type	KX-TD816: C;E KX-TD1232: Master and Slave – C;E1;E2
[128] PBX Code	Not stored
[129] E&M Signal Assignment	Continuous
[220] TIE First / Inter Digit Time	10 s
[340] TIE Line Routing Table	All locations – Not stored
[341] TIE Modify Removed Digit / Added Dial	All locations – Deleted digit=0; Added Dial=Blank
[431] TIE Table Number Assignment	All outside line groups – Not stored
[432] TIE Incoming Assignment	All TIE tables – Wink
[433] TIE Outgoing Assignment	All TIE tables – Wink
[434] TIE Subscriber Number Removed Digit	All TIE tables – 0

Programme	Default
[435] TIE Added Number	All TIE tables – Blank
[436] TIE Wink Time Out Assignment	All TIE tables – 16
[437] Outside-to-TIE Transfer	All outside line groups – Disable
[438] TIE-to-Outside Transfer	All outside line groups – Disable
[439] TIE-to-TIE Transfer	All outside line groups – Enable
[440] TIE Security Type	All outside line groups – Trunk
[442] Voice Path Type	All outside lines – 2 wire
[443] Voice Level (Transmit)	All outside lines – -3 db
[444] Voice Level (Receive)	All outside lines – -3 db
[445] TIE Receive Dial	All outside line ports –Yes
[811] DISA / TIE User Codes	All DISA / TIE user code numbers – DISA / TIE user code=Blank; COS number=8
[990] System Additional Information	See "Default" shown in the explanation table.

5 DECT Programming

Programme	Default
[020] PS Flexible CO Button Assignment	All PSs – CO 01 = Loop-CO; CO 02 and CO 03 = Not stored
[100] Flexible Numbering	See "Feature Number List".
[109] Expansion Unit Type	KX-TD816: C;E KX-TD1232: Master and Slave – C;E1;E2
[650] PS Registration	All PSs – Not stored
[651] PS Termination	Not applicable
[653] PS Extension Name Set	All PSs – Not stored
[654] SXDP Assignment	All jacks – Enable

Programme	Default
[655] PS Budget Management	All PSs – 0
[656] PS ChargeVerification Assignment	All PSs – Enable
[657] PS Class of Service	All PSs – Primary, Secondary – COS 1, COS 1
[658] PS Extension Group Assignment	All PSs – Extension group 1
[659-660] P S DIL 1:N Extension – Day / Night	All PSs – All outside lines – Disable (Day / Night)
[661-662] P S Outgoing Permitted Outside Line Assignment – Day / Night	All PSs – All outside lines – Enable (Day / Night)
[663-664] P S Doorphone Ringing Assignment – Day / Night	All PSs – Disable (No doorphones) (Day / Night)
[665] PSVoice Mail Access Codes	All PSs – Not stored
[671] PS Extension Number Set	All PSs – Not stored
[672] PS Password Set	All PSs – 1234
[673] CLIP / COLP Number Assignment for PS	All PSs – Not stored
[676] PS Incoming Call Display	All PSs – Calling
[680] Cell Station Number Assignment for Master CS	Not stored
[681] PS Radio System ID Reference	Not stored
[682] Radio Information Data Clear	Not applicable
[990] System Additional Information	See "Default" shown in the explanation table.

Section 7

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This PBX except KX-TD816PD fulfills the requirements of following European regulations:

CE

73/23/EEC	Low Voltage Directive
89/336/EEC	Electromagnetic compatibility (Basic EMC Publication)
92/31/EEC	Electromagnetic compatibility (Supplement)
93/68/EEC	CE mark

For above mentioned standards the unit is signed with the CE-mark.

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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