

# User's Guide

**DCT1800-S**

**DECT Business Cordless Telephone System**





# **User's Guide**

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## Preface

Congratulations with the purchase of your DCT1800-S business cordless telephone system. This system provides business cordless telephony for up to 40 users in your organisation.

This user's guide contains all the information you need to use the cordless telephone system.

The user's guide gives a brief overview of the functions and possibilities of the system. Furthermore, this guide describes how the proper functioning of the system can be checked and problems can be fixed if these might occur.

### **Cordless System Manager software for Windows (optional)**

To manage the cordless system, a software package is optionally available, called Cordless System Manager (CSM) for Windows<sup>1</sup>. This user's guide describes the basic use of CSM. For a detailed description of the CSM functions, please refer to the help file of it.

### **Where to find what ...**

Chapter 1	Business Cordless Telephony Overview of business cordless telephony, expansion possibilities and safety instructions.
Chapter 2	Product overview Brief description of the DCT1800-S system, its building blocks and the options available.
Chapter 3	Switching the system on/off
Chapter 4	Checking the system How to check if the system functions properly.
Chapter 5	Fixing problems Instructions to solve eventual problems.

1. Hereinafter called CSM

- Chapter 6      Using CSM  
A brief introduction to using the CSM software. In this chapter you can find how to replace, add and remove cordless phones. Furthermore, you can find how to change date and time on the cordless system, how to make a backup of the cordless system and how CSM can help in case of troubles with the system.
- Chapter 7      Preparing for remote maintenance  
How to connect a modem and initialise it with CSM, if a supplier wants to do remote maintenance.
- Chapter 8      Technical data  
Overview of accessories and ordering numbers, plus technical specifications.

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# **Chapter 1 Business Cordless Telephony**

## **Digital Cordless Telephone system**

The DCT1800-S system is a Digital Cordless Telephone system, providing business cordless telephony for your organisation. The DCT1800-S system makes it possible to use cordless phones in the area covered by the system. The user of a cordless phone can make and receive telephone calls anywhere in the covered area. The cordless phone user can walk within the covered area while continuing the call, with the same speech quality.

Access to the system is protected. Only cordless phones subscribed to the system can make and receive calls. During a call nobody can eavesdrop on the conversation.

The Digital Cordless Telephone system DCT1800-S can be connected to any PABX (Private Automatic Branch Exchange) with analogue lines. All functions of the PABX can be used with the cordless phones as with the fixed phones.

Once installed, the DCT1800-S system requires no user-actions unless the system is malfunctioning. Further, it may be desired to replace, add or remove cordless phones with the CSM software. This user's guide gives you all information required to perform these user tasks.

## **Based on international DECT-GAP standards**

The DCT1800-S system is based on the international DECT standard for digital cordless telephony. DECT stands for Digital Enhanced Cordless Telecommunications.

The DCT1800-S system is Generic Access Profile (GAP) compliant. GAP is another standard in DECT. Therefore the DCT1800-S system can be combined with all DECT-GAP compliant business cordless phones.

## **Expanding the system**

The DCT1800-S cordless system can be expanded with extra cordless phones and extra base stations for a larger using area:

- Up to maximally 40 cordless phones can be used.
- Up to maximally 8 base stations can be used.

Your supplier will be happy to provide you with more information on the possibilities to expand your cordless system.

## **Safety instructions**



### **Warning**

- *Do not open the cordless system. This may cause electrically unsafe situations, with danger to life.*
- *Never push objects of any kind through openings in the equipment. Dangerous voltages may be present. Conductive foreign objects could produce a short circuit that could cause fire, electric shock or damage to the equipment.*



### **Warning**

- *Follow the instructions in this user's guide precisely. Performing other actions than described may cause risk of danger or damage.*
- *Please contact your supplier if the system has to be expanded, changed or re-installed.*
- *Note that the cordless system must remain installed in the environment specified in chapter 8. In case of any doubt about the environmental conditions, please contact your supplier.*

## **Chapter 2 Product overview**

### **2.1 Cordless system and components**

The main building blocks of the DCT1800-S system are:

- Cordless phones
- Base stations
- Radio exchange

Further options are:

- Printer
- Cordless System Manager (CSM) for Windows, a Windows® based software package

The system coverage is established by means of a network, consisting of a number of base stations connected to the radio exchange (see figure 1).

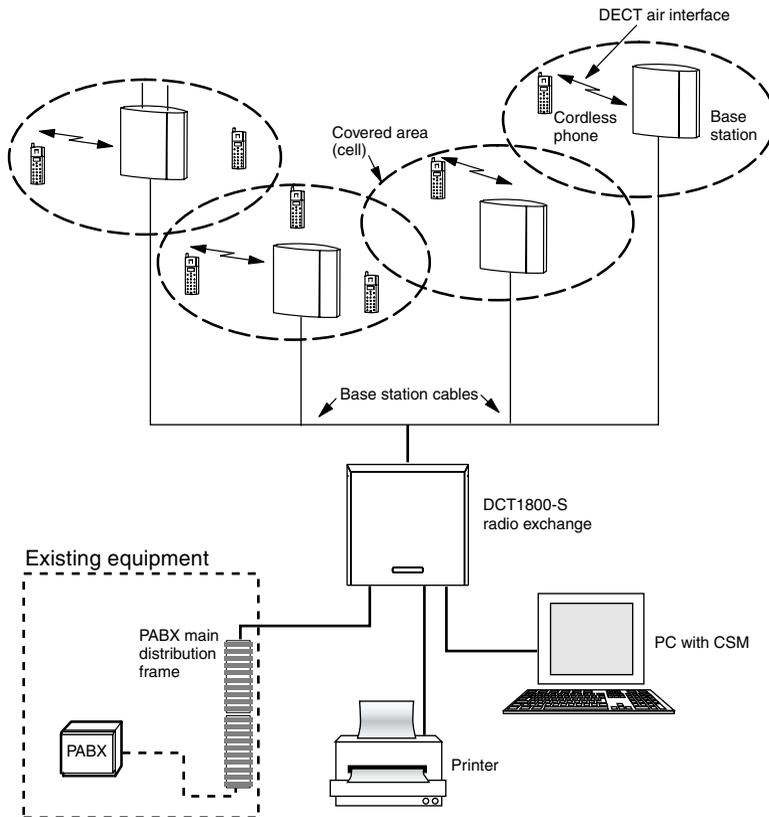


Fig. 1 Overview of the DCT1800-S cordless telephone system

## 2.2 Cordless phones

The cordless phone gives access to all the PABX functions, using the same codes as on a normal fixed phone. Up to maximally 40 cordless phones are possible.

Any business cordless phone that is DECT-GAP compliant can be used. Preferably Ericsson DECT-GAP compliant business cordless phones are used (type DT288, DT368 etc.).

The cordless phones are connected to the base stations via a radio link.

For more information on the cordless phone and possible accessories, please see the user's guide of the phone or contact your supplier.

## **2.3 Base stations**

While within range of a base station, phone calls can be made and received with the cordless phone. Via the radio link, the base station transmits speech data to the cordless phone and receives speech data from it.

The range of a base station depends on its type, the construction of the building and the used materials. To allow for flexibility in coverage area, the base station BS330-GAP with internal antennas and the BS340-GAP with external antennas are available. Up to maximally 8 base stations can be used.

## **2.4 Radio exchange**

The radio exchange enables data communication from the base stations to the PABX (Private Automatic Branch Exchange) and vice versa.

### **Note**

*The DCT1800-S system can be connected directly to the PSTN (Public Switched Telephone Network), with some restrictions that your supplier will observe. In this guide the word PABX is used for both PABX and PSTN.*

## **2.5 Cable connections**

The radio exchange has the following cable connections:

- Mains power cable
- Cables to base stations
- Cable from radio exchange to PABX, one for each cordless phone
- Printer cable (option)
- PC cable (optional)

A modem can be connected for remote maintenance by your supplier: see chapter 7.

## **2.6 Printer (option)**

A printer can be connected to the radio exchange, to print service and error messages from the cordless system.

## **2.7 Cordless System Manager (option)**

The Cordless System Manager (CSM) is a software package to be installed on a PC with Windows 95, Windows 98 or Windows NT 4.0.

CSM is required to:

- Add cordless phones
- Replace cordless phones
- Remove cordless phones
- Change date and time on the cordless system
- Examine the cordless system
- Generate and print service forms
- Initialise a modem for remote maintenance by a supplier

If you leave these actions to your supplier, CSM is not required.

## **2.8 Accessories**

Your supplier standardly delivers the cordless system with:

- Power cable
- PC cable (RS232)

Optionally can be ordered:

- Printer cable
- Cordless System Manager software (CSM for Windows)
- Modem shell adapter (to connect a modem, see chapter 7)

See chapter 8 for order numbers. Please contact your supplier for more information.

## Chapter 3 Switching the system on/off

The cordless system can be switched on and off with the switch at the bottom side of the radio exchange (see figure 1).

Switching the radio exchange on/off also switches the base stations on/off.

Once operational there is no need to switch the system off. Switching the system off is only necessary if the system has problems.

After switching on, the system must function properly within 90 seconds, with no red LEDs on.

### Note

*All current calls will be lost if the system is switched off.*

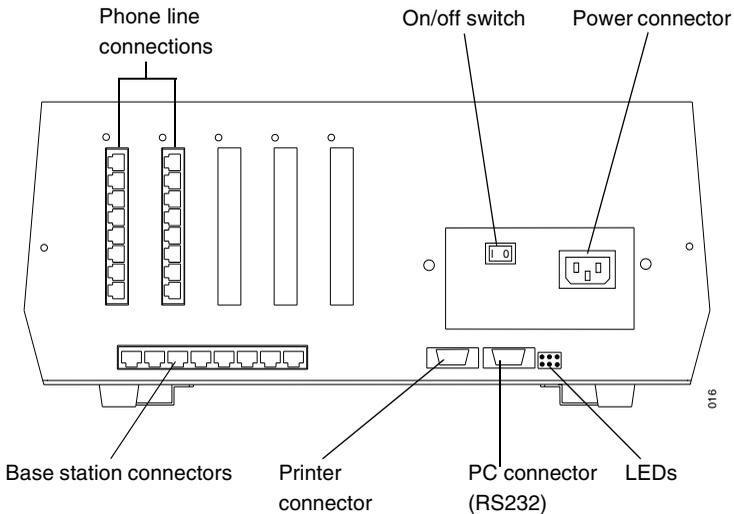


Fig. 2 Bottom side radio exchange with on/off switch and connectors



## Chapter 4 Checking the system

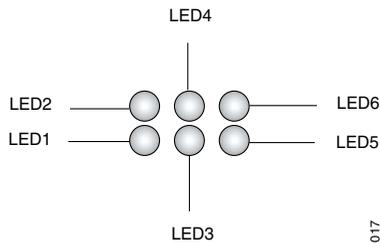
### 4.1 Checking possibilities

To check if the cordless system functions properly, you can inspect:

- The radio exchange LEDs (light indicators)

### 4.2 LEDs on the radio exchange

Figure 2 gives an overview of the LEDs at the bottom side of the radio exchange.



*Fig. 3 Radio exchange LEDs*

When the cordless system is operational, LED1 must be on (green) indicating power on. The other LEDs must be off.

When LED2 is on (red), the cordless system has sent a message that has not yet been read with CSM. The system may still function properly when LED2 is on.

LED3 - LED6 indicate fault situations when on (red).

LED	Normally	When On	Meaning	Required action when on
1	On	Green	Power on	None, normal situation
2	Off	Red	Message received but not read yet	Read the message with CSM if available. Note that the system may continue to function properly if only LED2 is on (red).
3 - 6	Off	Red	Radio exchange error	Try resetting the radio exchange: switch the radio exchange off, waiting half a minute and switching it on again. If this does not fix the problem, please contact your supplier.

Table 1 Meaning of radio exchange LEDs

### 4.3 LEDs on the base stations

Figure 3 shows the position of the two base station LEDs:

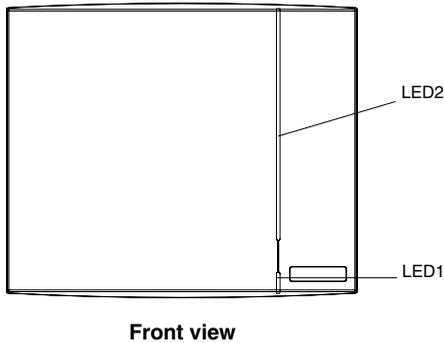


Fig. 4 Base station LEDs

**LEDs on base station**

LED1: Green power LED (on when powered)

LED2: Three colour LED, see table 2.

Status of LED2	Meaning	Required action
Off	Base station operational and <b>no</b> cordless phone is using the base station	None
Green	Base station operational <b>and</b> a cordless phone is using the base station	None
Red	Base station is malfunctioning.	<p>Try resetting the base station:</p> <ul style="list-style-type: none"> <li>• By switching the radio exchange off, waiting half a minute and switching it on again.</li> <li>• With CSM (if available).</li> </ul> <p>If the problem persists, please contact your supplier.</p>
Amber (yellow-brown)	Base station is OK, but not available (self-test, not initialized, no communication with radio exchange)	
Flashing green	8 cordless phones are currently using the base station: the maximum capacity of the base station has been reached	<p>None</p> <p>If this frequently happens while users having problems setting up a call, there may be not enough base stations. Please contact your supplier.</p>

*Table 2 Meaning of base station LED2*



## Chapter 5 Fixing problems

### 5.1 Fault finding

This chapter describes the actions the user can take if the system is not working properly. Table 3 sums up the problems the user can solve.



#### **Warning**

*Do not try to solve faults a supplier has to solve: incorrect actions may cause danger or damage the cordless system. Follow the instructions given in this chapter precisely.*

#### **Fault areas**

Distinguish the possible fault area and go to the appropriate paragraph:

<b>Fault area</b>	<b>See</b>
System does not function at all	Paragraph 5.2
Red LED radio exchange on (see figure 3, page 19)	Paragraph 5.3
LED2 of base station red on (see figure 4, page 20)	Paragraph 4.3
Complaint of one cordless phone user	Paragraph 5.4
Complaints of various cordless phone users	Paragraph 5.5
Problems with cordless phone	User's guide cordless phone
Cordless phone is lost, and may be misused.	See chapter 6.6 (CSM required).
Date and time on cordless system and cordless phones are not correct.	See paragraph 5.6 (CSM required)

*Table 3 Fault finding areas*

Fault finding procedures are described in a Go/No-Go way. Each question can be answered with Yes or No. Depending on the answer either take the action described, or continue the procedure. If 'Continue' is followed by a number, jump to that number. Otherwise continue at the next question.

### Resetting the cordless system

In case of problems, you can try resetting the cordless system:

- Switch off the system, waiting half a minute and switch it on again.
- Or reset using CSM (if available).

After a reset, the system must function properly within 90 seconds, with no red LEDs on.

#### Note

*When resetting the system, all current calls will be lost.*

#### Tip

*CSM (if available) can give a detailed overview of the cordless system.*

### 5.2 System does not function at all

1. *Is the green power LED1 on the radio exchange on? (See figure 3, page 19.)*

**Yes:** System is powered. Try another fault area: see paragraph 5.1.

**No:** Continue.

2. *Is the radio exchange switched on with the power switch?*

**Yes:** Continue.

**No:** Switch it on.

3. *Is the power cable connected properly to the mains socket and the radio exchange?*

**Yes:** Continue

**No:** Connect the power cable properly.

4. *Is power present on the mains socket?*

**Yes:** Contact your supplier.

**No:** Problem is in the mains.

### 5.3 Red LED radio exchange on

1. *Is only LED2 on?*

**Yes:** The system may function properly. This LED indicates that a message from the cordless system has not yet been read with CSM. If the system does not function properly, continue.

**No:** Continue.

2. *Reset the entire cordless system, with the on/off switch or CSM (if available). After a reset, the system must function properly within 90 seconds, with no red LEDs on. Is any red LED still on 90 seconds after resetting?*

**Yes:** Continue.

**No:** System is OK now.

3. *Are all cables connected properly (see figure 2, page 17)?*

**Yes:** Contact your supplier.

**No:** Try connecting the cables. If this does not help, contact your supplier.

### 5.4 Complaint of one user

1. *Cordless phone shows normal display? (See cordless phone user's guide.)*

**Yes:** Continue.

**No:** See the cordless phone user's guide.

2. *Go off hook, in the vicinity of a base station. Do you hear a dial tone?*

**Yes:** Continue.

**No:** Try going off hook again, the base station may be overloaded (LED2 on base station is flashing green). If still no dial tone is heard, continue.

3. *Do other cordless phones give a dial tone when off hook?*

**Yes:** Cordless phone is defective. Replace the cordless phone, see chapter 6.4.

**No:** Contact your supplier.

## **5.5 Complaints of more users**

1. *Are the complaints (bad speech quality, calls being blocked) coming from a specific area?*

**Yes:** Check the functioning of the base stations (check the base station LEDs, see paragraph 4.3). If a base station is malfunctioning, try resetting the cordless system. If this does not help, contact your supplier.

**No:** Continue.

2. *Is any of LED3 - LED6 on the radio exchange on?*

**Yes:** Try resetting the system. After a reset, the system must function properly within 90 seconds, with no red LEDs on. If after a reset any of LED3 - LED6 remains on (red), contact your supplier.

**No:** Contact your supplier.

## **5.6 Date and time on cordless phone not correct**

Use CSM (if available) to set date and time on the cordless system. Otherwise, please contact your supplier.

## **5.7 Problems to be solved by the supplier**

If any of the following problems occurs, please contact your supplier:

- The cordless system does not function at all, although it is switched on and powered properly.
- Any of LED3 - LED6 on the radio exchange remains on (red), even after a reset.
- A base station keeps malfunctioning, with a LED red on, even after resetting the cordless system.
- Various cordless phone users have problems making calls.
- Other problems that cannot be solved with the instructions from 5.1 to 5.6.

## Chapter 6 Using CSM

### 6.1 What CSM is required for ...

Once the DCT1800-S system has been installed by your supplier, no further actions have to be taken. It is possible to make phone calls right away.

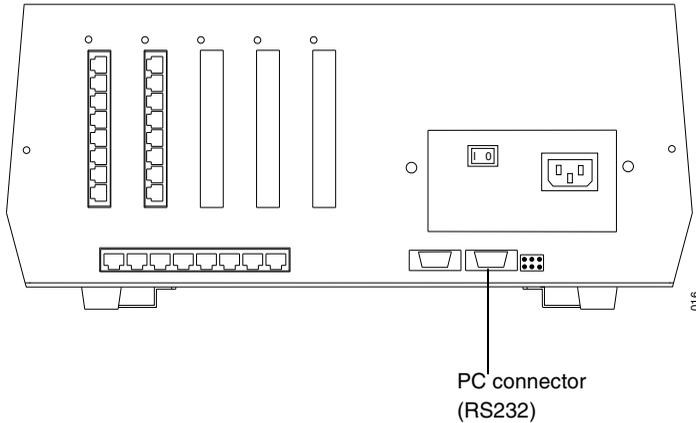
CSM is required to:

- Replace, add and remove cordless phones: see paragraph 6.4 to 6.6.
- Change date and time on the cordless system: see paragraph 6.7.
- Investigate the cordless system in case of troubles, and generate and print service forms: see paragraph 6.8.
- Initialise a modem for remote maintenance by a supplier: see chapter 7.

If you leave these actions to your supplier, CSM is not required.

### 6.2 Preparations to use CSM

1. Install the CSM software on a PC with Windows 95, Windows 98 or Windows NT 4.0 (see the installation instructions supplied with it).
2. Connect the PC with CSM to the radio exchange with the PC cable (RS232) that is delivered to the cordless system (see figure 5, page 28).



*Fig. 5 PC connector at bottom side radio exchange*

3. Start the CSM software.
4. Set the right COM port and baud rate for communication with the cordless system. Supported baud rates are 2400, 4800 and 9600 baud.
5. Establish the connection to the cordless system.

### **6.3 Working with CSM**

To work with CSM, use both the functions in the menu bar and the windows. For example, if you want to subscribe a cordless phone first establish a connection, then select the window 'Cordless Phones' and finally choose the option 'Subscribe Cordless Phone' from the 'Cordless Phone' menu.

For more information, please see the help file of CSM.

#### **Tip**

*Instead of using the menu bar, you can often use the right mouse button too. Clicking on the right mouse button often displays a pop-up menu.*

#### **Note**

*CSM has password-protected functions. These are special functions for your supplier (distributor).*

## 6.4 Replacing a cordless phone

To replace a cordless phone, for example when it is defective:

1. Cancel the subscription of the defective cordless phone in CSM: use the ‘*Delete Subscription*’ option in the ‘*Cordless Phone*’ menu.
2. Another cordless phone can be subscribed to the same extension number. Use the ‘*Subscribe Cordless Phone*’ option in the ‘*Cordless Phone*’ menu and fill in the IPEI number of the cordless phone.
3. Subscribe the cordless phone (see the user’s guide of the cordless phone).
4. It is recommended to make a new backup of the cordless system data: use the ‘*System Backup*’ option in the ‘*File*’ menu. Your supplier can restore this backup in case of serious system troubles.

### Note

*When the subscription has been cancelled, you can subscribe another cordless phone to the same extension number.*

## 6.5 Adding a cordless phone

The cordless system needs to know which cordless phones are in use. Before a cordless phone can be used, it must be subscribed to the cordless system.

### Note

*Adding a cordless phone is only possible if there are free line connections between PABX and the cordless system. If there are no free line connections any more, please contact your supplier.*

To add a cordless phone with CSM:

1. Select an extension number and use the ‘*Subscribe Cordless Phone*’ option in the ‘*Cordless Phone*’ menu.
2. It is recommended to make a new backup of the cordless system data: use the ‘*System Backup*’ option in the ‘*File*’ menu. Your supplier can restore this backup in case of serious system troubles.

## 6.6 Removing a cordless phone

If a cordless phone is no longer used, it is better to prevent misuse and remove it from the cordless system.

To remove a cordless phone from the cordless system:

1. Cancel the subscription of the cordless phone: use the *'Delete Subscription'* option in the *'Cordless phone'* menu.
2. It is recommended to make a new backup of the cordless system data: use the *'System Backup'* option in the *'File'* menu. Your supplier can restore this backup in case of serious system troubles.

### Note

*Do not use the 'Delete Extension Number' option to remove a cordless phone.*

*If an extension number is deleted, the line connection between PABX and cordless system is terminated. As a result, it is not possible to use that line with a cordless phone. If somehow an extension number has been deleted, see the CSM help file to add the extension number(s) again.*

## 6.7 Change system date and time

In some cases it is necessary to change the date and time of the clock on the DCT1800-S by using the *'Change Date/Time'* option in the *'System'* menu. These date and time are displayed on the cordless phones connected to the system.

For example, changing date and time is necessary when changing to daylight saving time and back.

## 6.8 Troubleshooting with CSM

CSM gives a detailed overview of the cordless system and its status. You can check the status of the cordless system and the service messages.

### **Create a service form**

With the *'Create Service Form'* option in the *'File'* menu, service forms can be printed or saved as a file. These service forms are useful for your supplier in case of problems.

### **Reset system and unit**

With the *'Reset System'* option in the *'System'* menu, the complete DCT1800-S system can be reset. The separate units in the radio exchange and the base stations can also be reset, using the *'Reset'* option in the *'Board'* or *'Base Station'* menu.

### **Note**

*When resetting the entire cordless system, all calls will be lost. When resetting a unit, only the calls using that unit will be lost.*

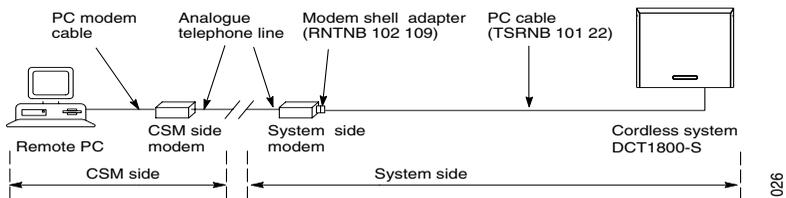


## Chapter 7 Preparing for remote maintenance

### Modem connection

Your supplier can perform remote maintenance on the cordless system by a modem connection.

The modem can be connected to the radio exchange with the Modem shell adapter (RNTNB 102 109) and the PC (RS232) cable. The Modem shell adapter connects with a 9 pins connector to the RS232 cable. At the other side it has a 25 pins connector, to which a modem can be connected (see figure 6).



**Note:** The CSM side modem can also be an internal PC modem

*Fig. 6 Remote maintenance configuration*

With CSM you can initialise the modem on the side of the cordless system for remote maintenance of the cordless system.

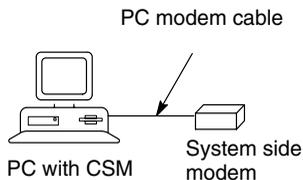
### Note

*In case of troubles with the modem, see the accompanying documentation.*

### Initialising the system side modem with CSM

1. Determine the baud rate of the cordless system.  
If necessary you can check the baud rate as follows:
  - a. Connect the PC with CSM to the cordless system.
  - b. Check the baud rate setting of the cordless system with the 'Connection Settings' option in the 'System' menu.
  - c. Disconnect the CSM software from the cordless system.

2. Disconnect the PC cable from the cordless system.
3. Connect the PC with a PC cable to the modem, see figure 7.



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Fig. 7 PC initialising system side mode

4. Switch on the modem.
5. Initialise the system side modem with CSM in the 'Tools' menu with the option 'Initialise System Side Modem':
  - a. Select the COM port of the modem.
  - b. Set the baud rate of the cordless system.
  - c. In case of non-standard modems, you can change the AT commands that will be sent to the modem by clicking the 'Advanced' button (see the CSM help file).
6. Disconnect the PC cable from the modem.
7. Connect the modem to the cordless system, with the Modem shell adapter and the PC cable (see figure 6).
8. Connect the modem to an analogue telephone line.
9. Check that the modem is on.  
The cordless system is now ready for remote maintenance.

### Installing the CSM side modem

1. If you use an external modem, connect the CSM side modem to COM1 or COM2 of the remote PC with the PC modem cable.
2. Make sure that CSM is installed on the remote PC.

3. If you use an external modem, switch on the CSM side modem.
4. Start CSM and choose from the *'Tools'* menu the option *'Manage Remote Systems'*. Follow then the instructions of the CSM help file.



## Chapter 8 Technical data

### 8.1 Radio exchange

#### Product number

NTM/CNHNB 301 04/x

#### Compliance to European regulations and standards

CE marking	: 
European Council Directives	: 91/263/EEC, Telecommunications Terminal Directive : 73/23/EEC, Low Voltage Directive : 89/336/EEC, Electromagnetic Compatibility Directive (EMC) : 93/68/EEC, CE Marking Directive
DECT	: TBR10, TBR22
Safety	: EN 60950
EMC	: ETS 300 329, EN 61000-3-2, EN 61000-3-3

#### Compliance to non-European regulations and standards

Applicable standards dependent on sales area

Safety	: IEC 950, AS/NZS 3260, ACA TS001
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#### Note

*The combination of radio exchange and interface boards complies with the regulations and standards mentioned.*

#### Environmental

Temperature	
Operating	: 0 to +40 °C
Storage	: -40 to +70 °C
Relative humidity	: 20 to 80%, non condensing

#### General specifications

Width x depth x height	: 421 x 186 x 417 mm
Weight	: ca. 10 kg (with 5 LTU boards added)
Power consumption	: max. 100 W
Housing material	: zinc plated steel sheet
Colour of cabinet	: RAL 9010

## Technical data

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Application information	: for indoor use only, wall mounted
Enclosure class	: IP 20
Number of LTU boards	: up to max. 5
Number of cordless phones	: up to max. 40
Number of base stations	: up to max. 8
Distance to base station	: up to max. 1.9 km
Required free space around	:
above	: min. 0.2 m
to the left and to the right:	min. 0.1 m
below	: min. 0.3 m
Supported baud rate	: 2400, 4800 and 9600 baud

### Accessories and spare parts

RS232 cable (PC cable)	: TSRNB 101 22
Modem shell adapter	: RNTNB 102 109
Printer cable	: TSRNB 101 23
Power cable	: RPMNB 101 03/x
CSM (for Windows, softw.)	: LZYNB 201 50/n

## 8.2 Base station BS330-GAP

Product number	: KRCNB 301 xx/n
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### Compliance to European regulations and standards

CE marking	: <b>CE 0344 X</b>
European Council Directives	: 91/263/EEC, Telecommunications Terminal Directive
	: 73/23/EEC, Low Voltage Directive
	: 89/336/EEC, Electromagnetic Compatibility Directive (EMC)
	: 93/68/EEC, CE Marking Directive
DECT	: TBR6, TBR22
Safety	: EN 60950, CENELEC CLS/SC111B, ENV 50166-2
EMC	: ETS 300 329
	: EN 55022 class B
	: EN 61000-4-5 (DC ports: 2 kV common mode, 1 kV differential mode)
	: EN 61000-4-2 (15 kV air discharge, 8 kV contact discharge)

## Compliance to non-European regulations and standards

Applicable standards dependent on sales area

Safety	: ANSI/IEEE C95.1, IEC 950, AS/NZS 3260, ACA TS001
EMC	: ITU-T Recommendation K.20, ACA TS006

## Environmental

Application	: for indoor use only
Temperature	
Operating	: -10 to +55 °C
Storage	: -40 to +70 °C
Relative humidity	
Operating	: 15 to 90%, non condensing
Storage	: 5 to 95%, non condensing

## General specifications

Powering method	: via 2 data pairs (unshielded twisted pairs) or 1 EPP, depending on distance between base station and radio exchange
Width x depth x height	: 200 x 165 x 56 mm (incl. mounting bracket)
Weight	: 470 grams
Colour cover	: light grey
Operating voltage	: 21 to 56 Vdc
Power consumption	: 3.0 W typical, 5 W maximum

## Radio specifications

Frequency band	: 1880 to 1900 MHz
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### 8.3 Base station BS340-GAP

Product number	: KRCNB302 0x/1
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## General specifications

Size standard antenna	: 107 (l) x 8.5 (d) mm
Weight standard antennas	: 17 grams

## Other specifications

For all other specifications refer to paragraph 8.2

## 8.4 LTU for DCT1800-S

### 8.4.1 LTU for DCT1800-S: CE marked version

Product number : RTM/ROFNB 101 72/2

#### Compliance to European regulations and standards

CE marking : **CE 0560 X**

European Council Directives : 98/13/EC, Telecommunications Terminal  
Equipment and Satellite Earth Station  
Equipment

: 93/68/EEC, CE Marking Directive

PSTN attachment : TBR21

: All applicable Advisory Notes of the  
Analogue Type Approval Advisory Board  
(dependent on sales area).

#### Compliance to non-European regulations and standards

Applicable standards dependent on sales area

Transmission performance : ITU-T Recommendation G.712

### 8.4.2 LTU for DCT1800-S: non-CE marked version

Product number : RTM/ROFNB 101 72/1

#### Compliance to non-European regulations and standards

Applicable standards dependent on sales area

Transmission performance : ITU-T Recommendation G.712

## **Abbreviations and glossary**

CSM	:	Cordless System Manager for Windows Windows based software to set up and examine the cordless system.
DCT	:	Digital Cordless Telephony
DECT	:	Digital Enhanced Cordless Telecommunications Standard for cordless telecommunication.
GAP	:	Generic Access Profile Communication protocol standard within DECT, that guarantees compatibility of systems and components.
LED	:	Light Emitting Diode
LTU	:	Line Termination Unit Interface board that connects cordless system and PABX.
PABX	:	Private Automatic Branch eXchange Telephone exchange.
PSTN	:	Public Switched Telephone Network The public telephone network.



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For further information please contact: