EN

CT-DECT Multi M7

EXPERT profile

for use as base device or standard device with extended setting options

Operating manual

Software-Package: S-MULTI-04-004
ProfilSet: PSET-MULTI-STD.NBT-001
Profil: P-MULTI-EXP.NBT-001

Contents

1 Safety notices 5
2 Introduction 6
3 Applications 8
3.1 Application: independent DECT group 9
3.2 Application: BaseSelect - Switching between several groups 10
4 Operation 11
4.1 Controls 11
4.2 Plug connectors 14
4.2.1 Connecting 14
4.2.2 Disconnecting 15
4.3 Power on 16
4.4 Power off 16
4.5 Muting the microphone 16
4.5.1 Visual microphone status indicator (status LED) 16
4.6 Earpiece volume 17
4.7 PTT function 18
4.8 Menu control 20
4.9 Quick access menu 21
5 Changing the profile 22
6 Menu 24
7 Subscribing DECT 25
7.1 Subscribing consecutively 27
7.2 Maximum group size 27
8 BaseSelect 28
8.1 Selecting the number of base devices 30
8.2 Selecting the base device 31

8.2.1 Selecting the base device via the menu 31
8.2.2 Selecting the base device via shortcut 31
9 ASR-Control (Ambient Sound Reception) 33
9.1 Compatible products 33
9.2 ASR in combination with CT-ClipCom Digital 34
9.3 ASR in combination with 3M™ PELTOR™ ComTac™ VIII 35
10 Sidetone (S/T) 36
11 DNR 37
12 LED indication 38
13 SIG - Signalling 39
14 Internal power supply 40
14.1 Using AAA adapters 40
14.2 Changing the batteries / AAA adapters 42
14.3 Runtime 43
14.4 Battery level monitoring 44
14.5 Visual battery status indicator (status LED) 45
14.6 Acoustic battery warning 45
14.7 Automatic shutdown in case of undervoltage 46
15 Accessories 47
16 Maintenance and care 48
16.1 Inspecting devices 48
16.2 Cleaning 48
17 Labeling 49
18 Abbreviations and terms 51

CeoTronics
PP
DECT
OK
CT-DECT

1 Safety notices

⚠ DANGER

Immediate hazardous situation. Results in death or serious injury.

⚠ WARNING

Potentially hazardous situation. May result in death or serious injury.

⚠ CAUTION

Potentially hazardous situation with minor or moderate injury.

NOTICE

Indicates a situation that, if not avoided, may cause damage to the product or other property. Used to indicate useful information for efficient and safe use of the product.

Legal notice for operation in the European Union

The transmitter of the CT-DECT device may only be used in the European Union when it has the following label:

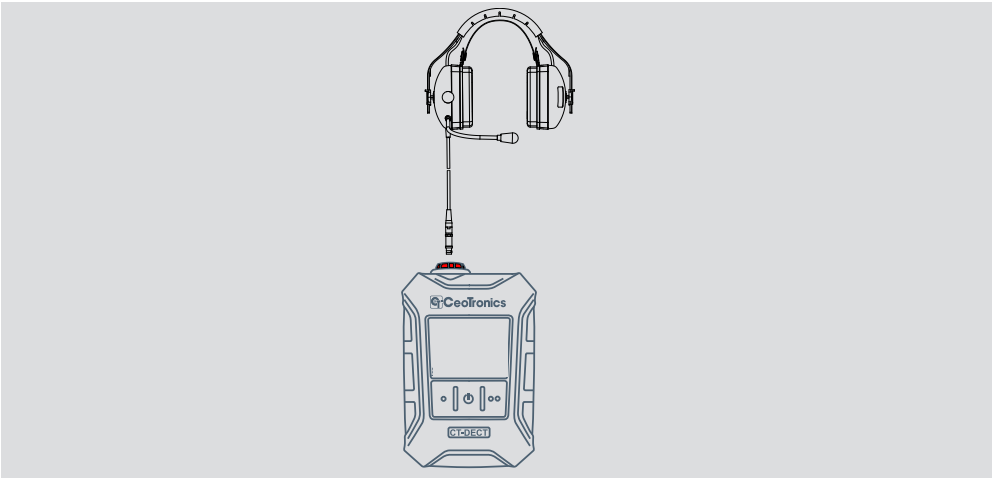
CE

2 Introduction

The CT-DECT Multi M7 is a mobile communication device based on DECT radio technology. It enables the user to connect wirelessly to other users in a DECT group.

All participants can talk to each other in full duplex. This means that they can communicate hands-free without pressing a button.

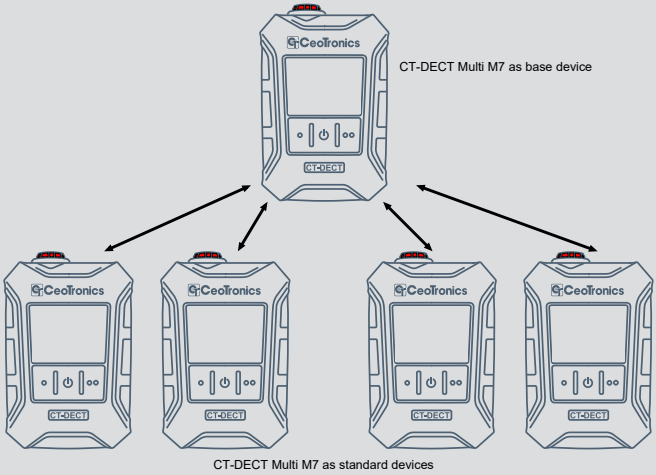
The CT-DECT Multi M7 is used together with a headset.



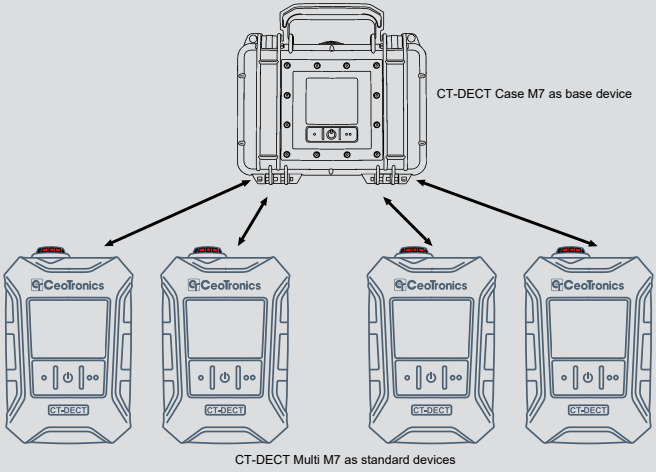
A DECT group always includes a base device, also known as a FixPart (FP), and at least one standard device, also known as a PortablePart (PP).

CT-DECT Multi M7 or CT-DECT Case M7 can be used as the base device.

DECT group with CT-DECT Multi M7



DECT group with CT-DECT Case M7 and CT-DECT Multi M7



Depending on the software it is equipped with, the CT-DECT Multi M7 offers various profiles made for different use cases and roles.

3 Applications

The CT-DECT-Multi M7 can be used in various application scenarios. Different software profiles can be selected for this purpose.

Only the EXPERT profile is described here.

For information on the use of other profiles, please refer to the corresponding operating manual.

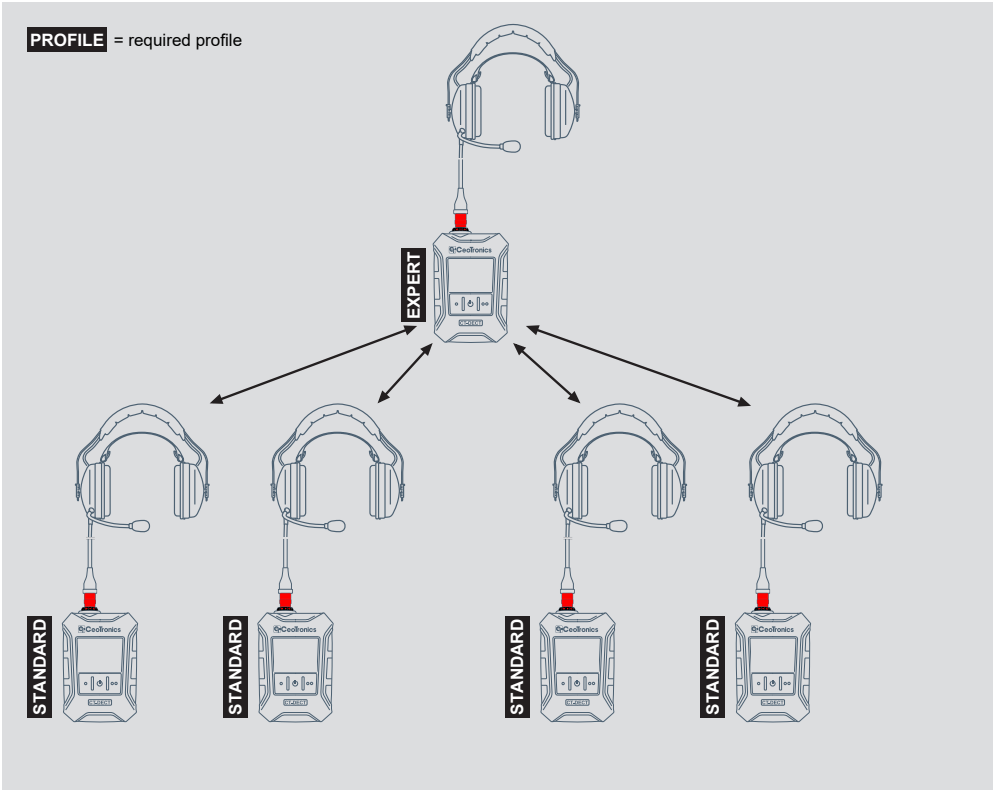
3.1 Application: independent DECT group

In this scenario, a DECT group with up to five CT-DECT Multi M7s is set up.

One of the devices must be set as the base device of the group. To do this, it must work with either the BASE or the EXPERT profile. If the EXPERT profile is selected, it must also be assigned the ‘FP’ role.

The remaining devices in the DECT group are subscribed on that device and must be set as standard devices. To do this, they must work with either the STANDARD or the EXPERT profile. If the EXPERT profile is selected, the devices concerned must also be assigned the ‘PP’ role.

The following shows an example configuration in which the base device works with the EXPERT profile and assumes the FP role. The 4 standard devices all work with the STANDARD profile and therefore automatically assume the PP role:



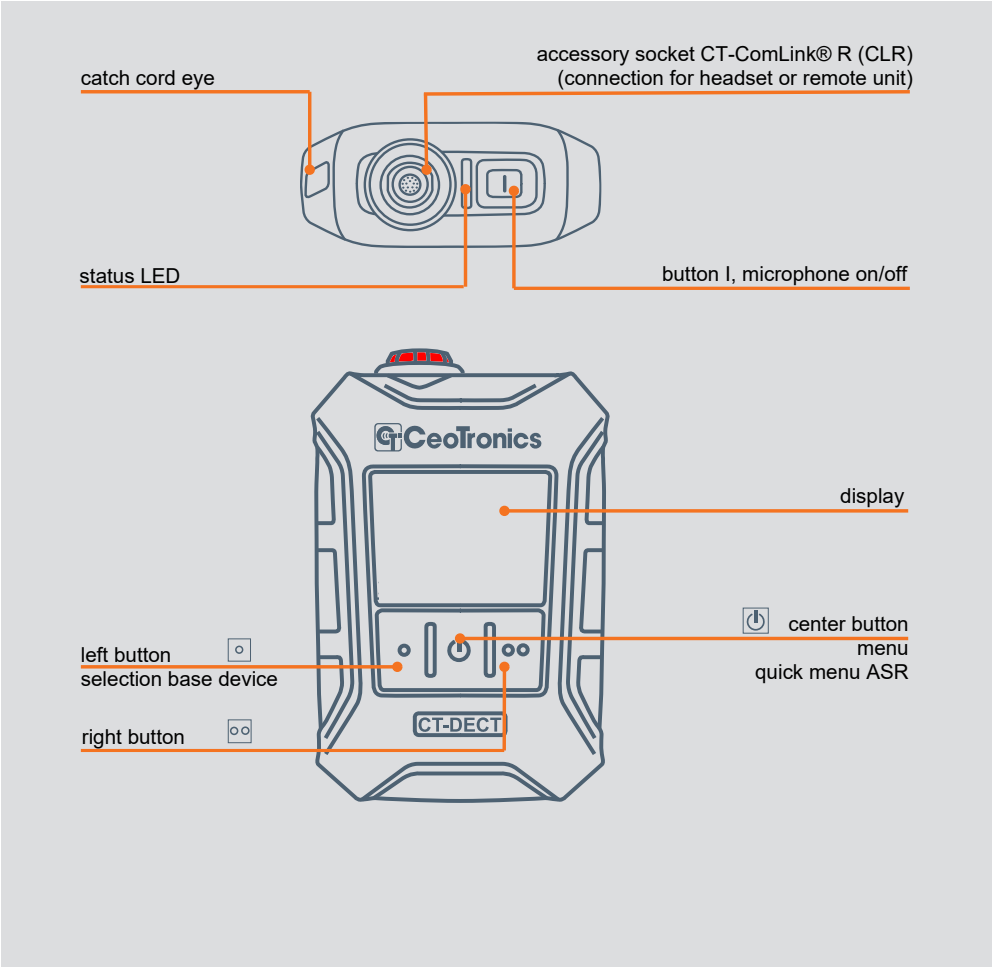
3.2 Application: BaseSelect - Switching between several groups

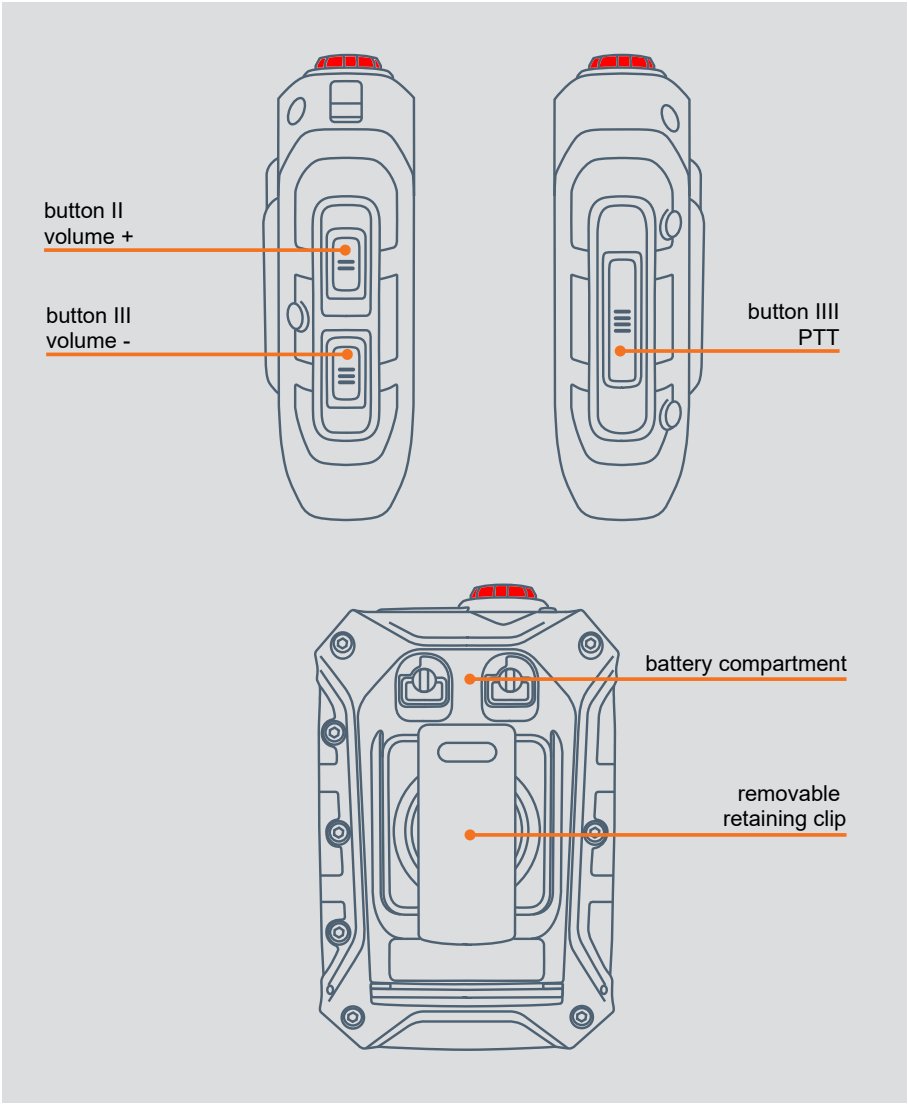
In this scenario, up to 5 DECT groups are set up with up to five CT-DECT Multi M7s each.

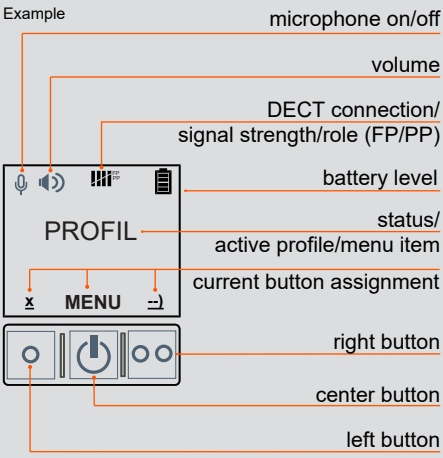
Using the BaseSelect function, individual participants who are already subscribed can switch between groups without having to subscribe again on the target group's base device (see BaseSelect [▶ 28]).

4 Operation

4.1 Controls




button II
volume +
button III
volume -
button IIII
PTT
battery compartment
removable
retaining clip



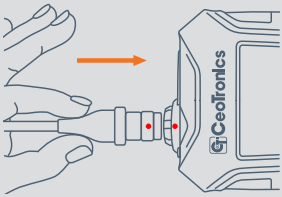
Only displayed
if headset connected.

4.2 Plug connectors

Ensure careful handling of the plug connectors.

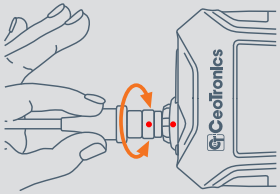
4.2.1 Connecting

Step 1



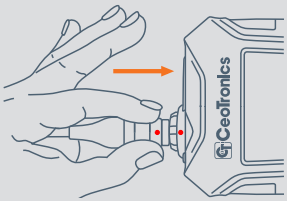
place the plug on the socket. Make sure that the red dots on the plug and socket match.

Step 2



carefully turn the plug on the socket until it slightly slides into the socket.

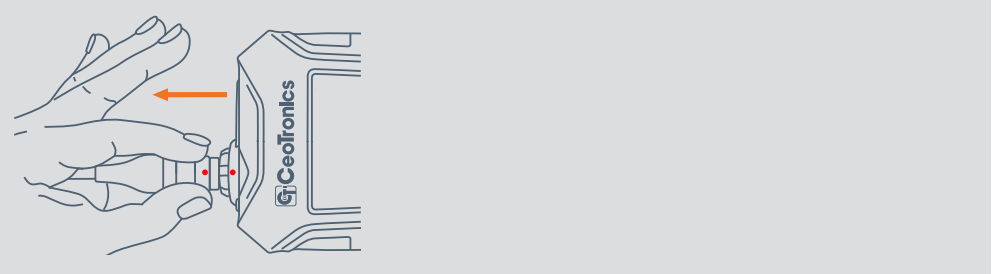
Step 3



press the plug into the socket until you feel it click into place.

4.2.2 Disconnecting

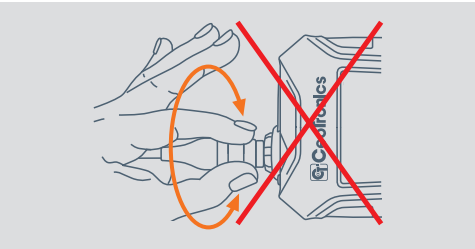
To release the plug grip it as close as possible to the socket:

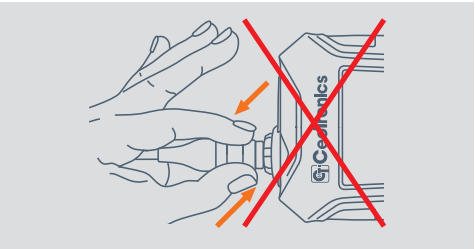


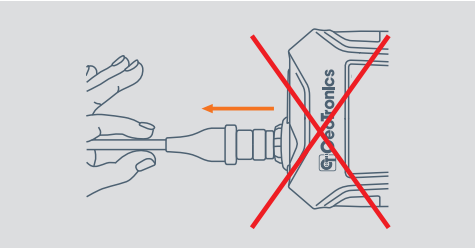
Avoid movements as shown in the following illustrations.

NOTICE

Improper handling can damage the connector. The locked connector may neither be twisted nor bent. Never pull on the cable to disconnect the connector.







4.3 Power on

Press the center button until the display is active. The currently set profile appears on the display.

4.4 Power off

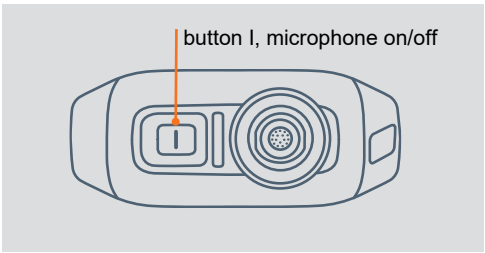
Press and hold the center button until SHUTDOWN appears on the display - press again to confirm.

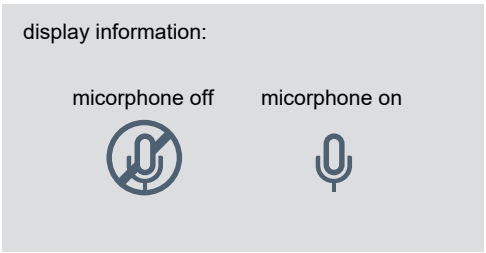
4.5 Muting the microphone

By default, the microphone of a connected headset is permanently active/open. This means that other users in the DECT group can always hear you.

If you do not want to be heard all the time, you can mute the microphone.

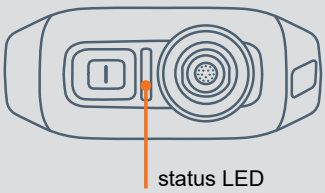
To mute the microphone of the connected headset, press button I.





4.5.1 Visual microphone status indicator (status LED)

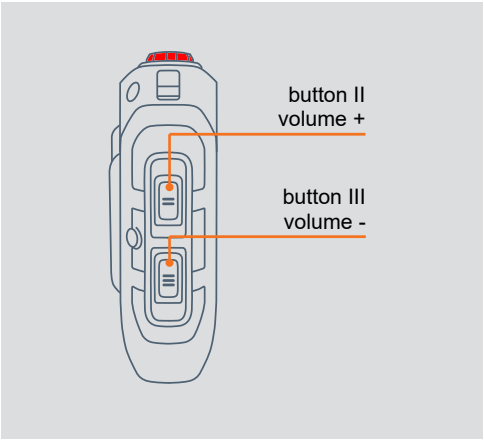
The current microphone status can be displayed via the status LED. To do this, the corresponding function of the status LED must be set (see LED indication [▶ 38]).

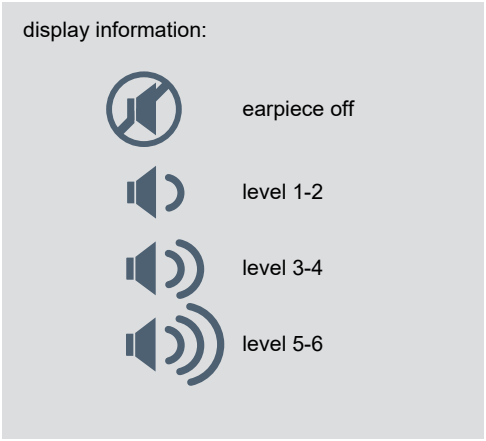


Status LED	Microphone status
green	Microphone on
red	Microphone off

4.6 Earpiece volume

There are 6 volume levels available. They can be selected using buttons II (volume +) and III (volume -). The display shows the volume levels in steps of two. The earpiece volume can be set to the ‘off’ by holding down button III (volume -) for a longer period of time.



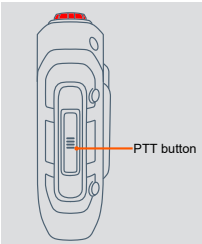


4.7 PTT function

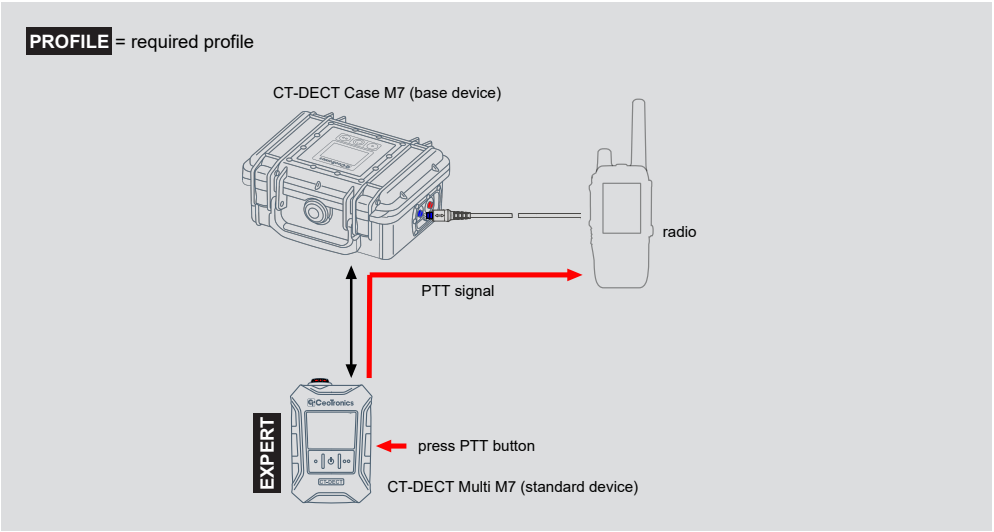
The PTT button allows you to activate the PTT function of a radio device that is connected to the DECT group.

NOTICE

A CT-DECT Multi M7 operation with the EXPERT profile can only use the PTT function of the button if it is used as a standard device (DECT role PP).



The connection is established, for example, via a CT-DECT Case M7:



As long as the PTT button is pressed, the user can speak into the radio circuit. Meanwhile, the user continues to hear the DECT group.

NOTICE

If the microphone of the CT-DECT Multi M7 is muted, the PTT function can still be activated. As long as the PTT button remains pressed, the microphone mute function is cancelled.

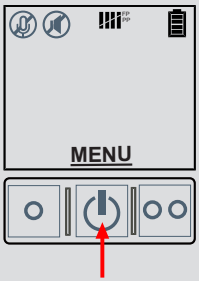
NOTICE

The behavior of the communication between the DECT group and the radio is strongly dependent on the configuration of the CT-DECT Case M7. See the operating manual of the CT-DECT Case M7 for further information.

4.8 Menu control

Enter menu

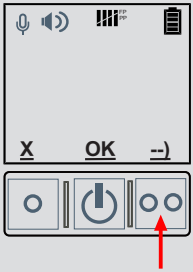
Press and hold the center button for 2 seconds to enter the menu.



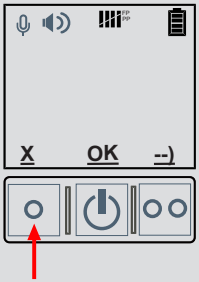
enter menu.

Navigation

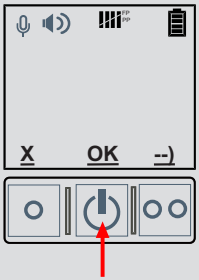
Use the three available buttons to navigate through the menu. The corresponding function of the buttons is shown above it on the display.



flip through menu items.



exit a submenu / flip through menu items.



confirm selection.

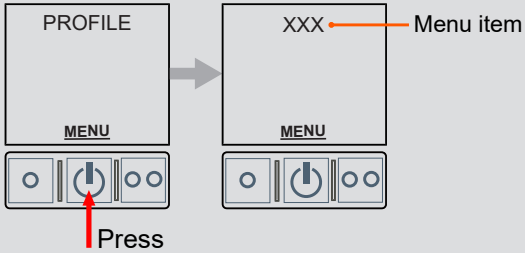
4.9 Quick access menu

The CT-DECT Multi M7 has a quick access menu that allows quick access to certain functions of the device depending on the connected hardware.

This menu is only active if a headset is connected to the accessory socket.

To access the quick access menu, briefly press the center button once on the home screen.

To flip through the menu items of the quick access menu, briefly press the center button repeatedly.



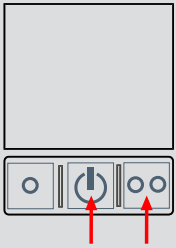
5 Changing the profile

If the wrong profile is set, you can change it as follows:

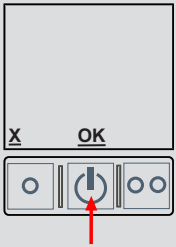
1. Power off

- press and hold the center button until SHUTDOWN appears on the display.
- press the center button one more time to confirm.

2. Switch on the device and start profile selection

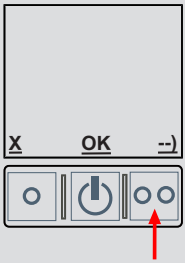


- press and hold the center button and the left button simultaneously until PROFILE appears on the display.

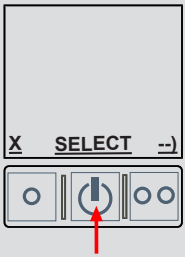


- press the center button one more time to confirm.

3. Select a profile

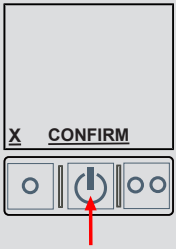


• use the right button to flip to the desired profile.



• press the center button to confirm your selection.

4. Confirm the profile change



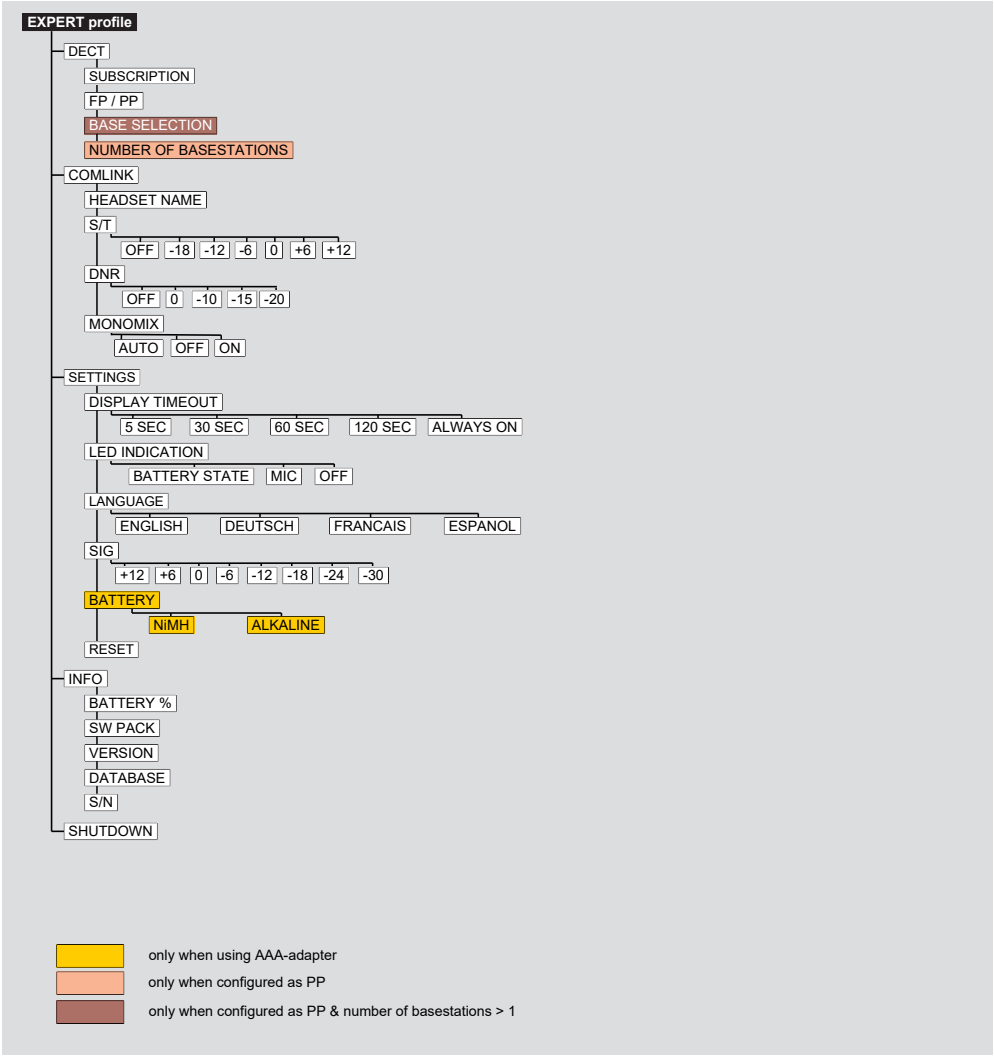
• press the center button one more time to confirm the change.

NOTICE

The device will then restart. All settings are reset.
After a profile change, all previously subscribed CT-DECT Multis M7 must subscribe again.

6 Menu

The following diagram shows all menu items available in EXPERT profile. Highlighted menu items are only available under certain conditions (see legend).

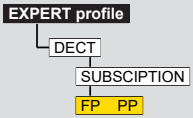


7 Subscribing DECT

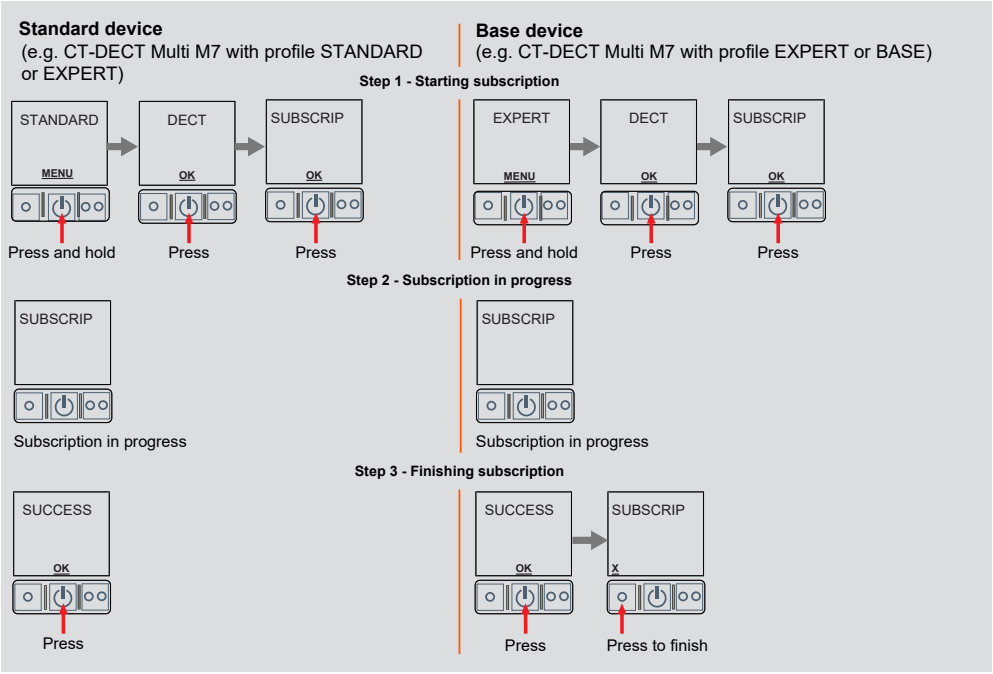
Setting the DECT role

In the EXPERT profile, you can switch between the DECT roles FP and PP. This is necessary to use the device as a base device (FP) or standard device (PP).

To do this, use the FP PP menu item:



Perform the steps quickly one after the other to avoid a timeout.



If you want another device to subscribe to the DECT group directly afterwards, see Subscribing consecutively [▷ 27].

NOTICE

Do not switch off already subscribed devices while a subscription process is still running. A switched off device can be overwritten during a new subscription process.
If it is unclear which and/or how many devices have already been subscribed, we recommend deleting all devices subscribed to the base unit via the SETTINGS - RESET menu and restarting the subscription process for all desired devices.

NOTICE

If you want to subscribe several standard devices (PP) to one base device (FP), make sure you only subscribe one device at a time. Do not try to subscribe several devices at the same time.

7.1 Subscribing consecutively

After a successful subscription, further CT-DECT devices can subscribe immediately.

After successful subscription the display in the CT-DECT Case M7 returns to the SUBSCRIPTION menu item ; step 1 on the base station has already been completed and can be skipped.

Continue with step 2 for the next standard device.

7.2 Maximum group size

If a CT-DECT Multi M7 is used as the base device, you can subscribe up to 4 standard devices.

When attempting to subscribe a fifth standard device while all subscribed devices are switched on, the message CONNECTED appears in the base device.

If a fifth standard device is subscribed while a standard device that has already been subscribed is switched off, the switched off standard device is replaced by the newly subscribed standard device.

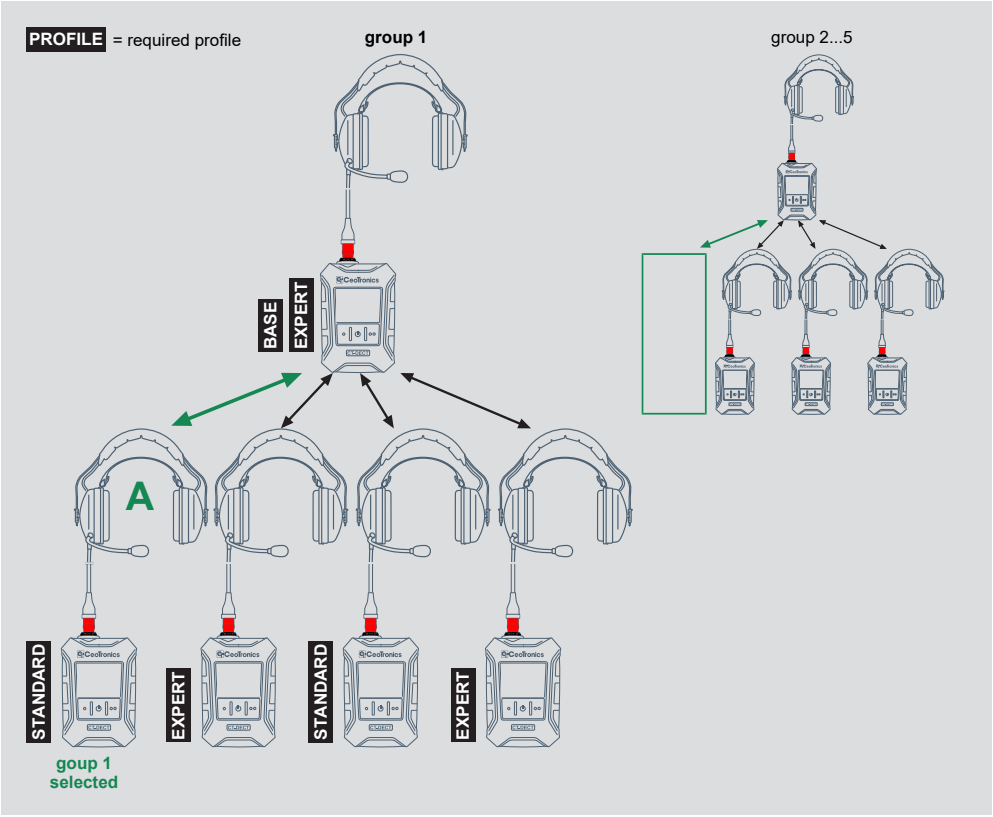
8 BaseSelect

BaseSelect enables quick and flexible switching between several DECT groups.

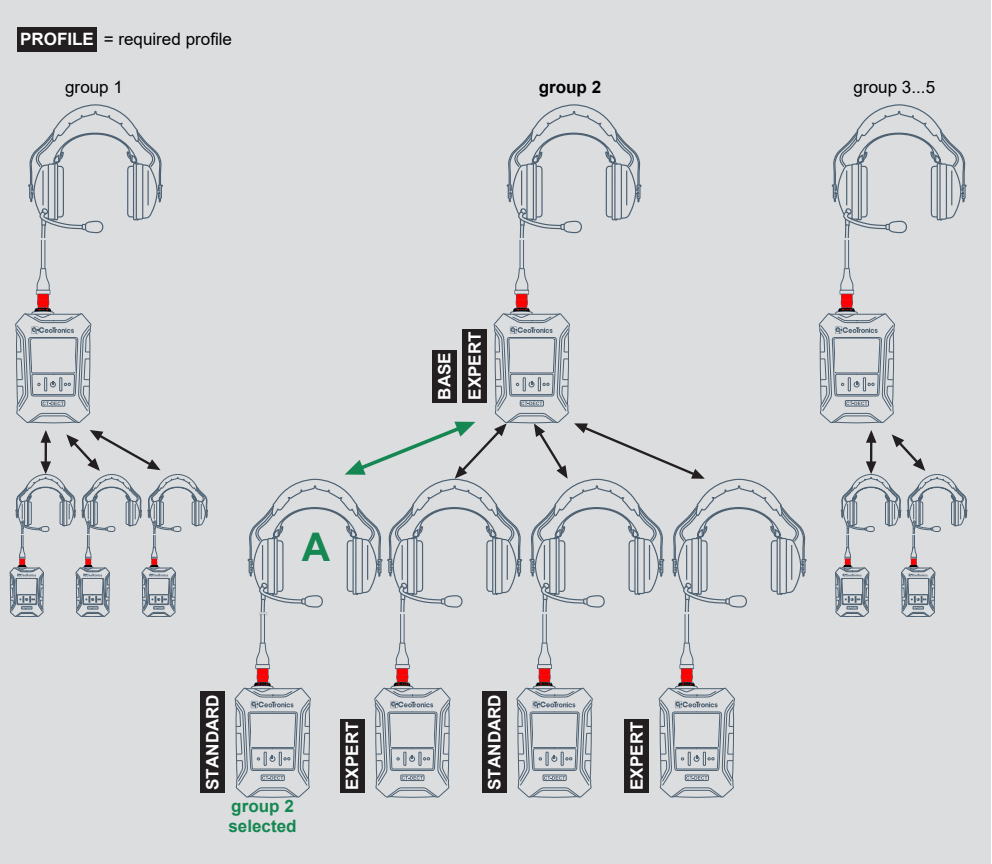
NOTICE

Only standard devices (STANDARD profile or EXPERT profile with DECT role PP) can use the BaseSelect function.

Initial situation: User A has selected the base device of group 1.



After group change: User A has selected the base device of group 2 and has thus switched to group 2.



BaseSelect - procedure

1. The user sets the number of base devices on their standard device (see Selecting the number of base devices [▶ 30]
2. The user subscribes his standard device once to the base devices of each target group (see Subscribing DECT [▶ 25]).
3. The user selects the base device of the target group on his standard device (see Selecting the base device [▶ 31]).

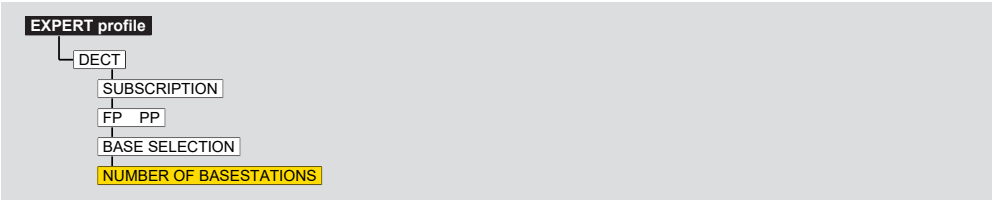
If you switch back to one of the other groups, it is no longer necessary to re-subscribe the base device to the target group.

It is also possible to return to the initial group without re-subscribing to the base device of the the group.

8.1 Selecting the number of base devices

If the CT-DECT Multi M7 is set as the standard device, it can be used with various base devices. To do this, it is necessary to select the number of base devices.

To do this, use the NUMBER OF BASE STATIONS menu item:



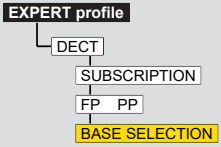
8.2 Selecting the base device

The base device can be selected either via the menu or a shortcut.

8.2.1 Selecting the base device via the menu

If the number of base devices in the CT-DECT Multi M7 is set to > 1, the base device to be used can be selected.

To do this, use the BASE SELECTION menu item:



NOTICE

The CT-DECT Multi M7 used as the standard device can only be used with one base device at a time.

8.2.2 Selecting the base device via shortcut

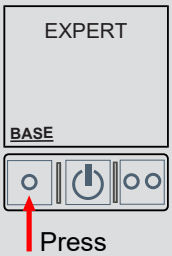
If the number of base devices in the CT-DECT Multi M7 is set to > 1, the base device to be used can be selected.

To do this, use the BASE shortcut.

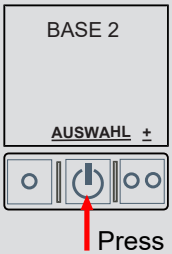
NOTICE

The BASE shortcut is only available when using a headset.

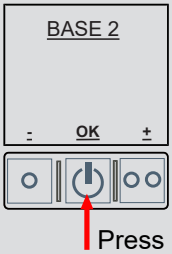
Call up the selection of the base device by pressing and holding the left button until BASE X appears on the display.



Voice output in the headset: BASE 1 active



Voice output in the headset: BASE 2



Voice output in the headset: done BASE 2 active

NOTICE

The CT-DECT Multi M7 used as the standard device can only be used with one base device at a time.

9 ASR-Control (Ambient Sound Reception)

If you have connected a compatible headset with external sound reception (ASR) **directly** via the accessory socket, you can operate the function via the CT-DECT Multi M7.

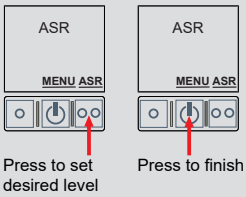
9.1 Compatible products

Part no	Short code	Description
0290251	CLIP-D-EMR-CLR	CT-ClipCom Digital, CT-ComLink® R plug connector, EarMike right side, with PPE approval
0290200	CLIP-D-EMR-CLR	CT-ClipCom Digital, CT-ComLink® R plug connector, EarMike right side, without PPE approval
0290250	CLIP-D-BML-CLR	CT-ClipCom Digital, CT-ComLink® R plug connector, BoomMike left side, with PPE approval
0290202	CLIP-D-BML-CLR	CT-ClipCom Digital, CT-ComLink® R plug connector, BoomMike left side, without PPE approval
0909101	TAC8-CLR	3M™ PELTOR™ ComTac™ VIII with CT-ComLink R plug connector (3M article number: MT14H418A-79)

9.2 ASR in combination with CT-ClipCom Digital

Use the quick access menu of the CT-DECT Multi M7 to access the ASR function (see Quick access menu [▷ 21])

The intensity of the ASR function of the CT-ClipCom Digital can be regulated in four stages. Press the ASR button repeatedly to switch through the levels.



This is a ring circuit: stage 4 is followed by stage 1.
The default setting is level 3 - ASR natural.

Level	Signalling sound	Feature
Level 1	1x long	ASR off
Level 2	1x short	ASR muffled
Level 3	2x short	ASR natural
Level 4	3x short	ASR amplified

NOTICE

After each restart, the ASR intensity is reset to the default setting. A change to this setting is therefore not saved permanently.

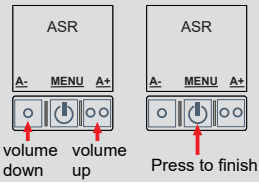
9.3 ASR in combination with 3M™ PELTOR™ ComTac™ VIII

Use the quick access menu of the CT-DECT Multi M7 to access the ASR function (see Quick access menu [▷ 21])

The intensity of the ASR function of the 3M™ PELTOR™ ComTac™ VIII can be regulated in five stages. Press the A- or A+ button to switch through the levels.

NOTICE

In addition to the description in this manual, please also refer to the description of the ASR setting options in the operating manual of your 3M™ PELTOR™ ComTac™ VIII.



The default setting is level 1 - ASR off.

Level	Signalling sound	Feature
Level 1	OFF	ASR off
Level 2		ASR muffled
Level 3		ASR natural
Level 4		ASR amplified
Level 5	1x short	ASR max

NOTICE

After each restart, the ASR intensity is reset to the default setting. A change to this setting is therefore not saved permanently.

10 Sidetone (S/T)

Sidetone is a desirable audible feedback of your own voice that headset users hear when they speak into their microphone. Their own voice is reproduced by their own headset speakers.

You can set the intensity of the Sidetone in the CT-DECT Multi M7 menu in 6 levels or switch it off.

To do this, use the S/T menu item:

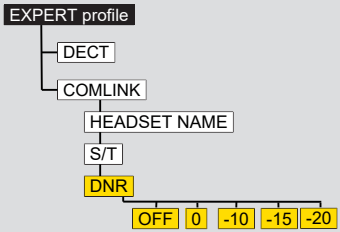
The default setting is 0.
A change is retained even after restart.

11 DNR

DNR refers to a function for digital noise reduction.
It only affects the microphone of a headset connected via the accessory socket.

You can set the intensity of the DNR function in 5 levels (-20 to OFF).

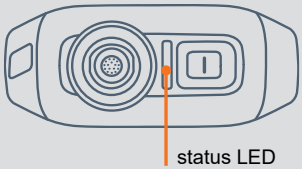
To do this, use the DNR menu item:



The default setting is -15.
A change is retained even after restart.

12 LED indication

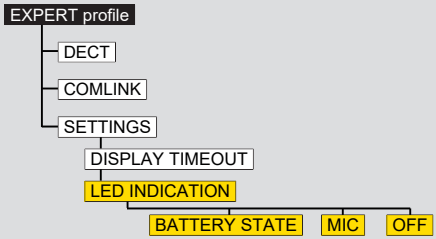
There is a status LED on top of the CT-DECT Multi M7.



The desired function of the status LED can be selected from 3 modes:

Mode	Function
BATTERY STATE	The status LED uses different colours and flashing sequences to indicate the current battery status (see Visual battery status indicator (status LED) [▷ 45].
MIC	The status LED uses different colours to indicate the current microphone status (see Visual microphone status indicator (status LED) [▷ 16].
OFF	The status LED is deactivated.

To do this, use the LED INDICATION menu item:



The default setting is BATTERY STATE.
A change is retained even after restart.

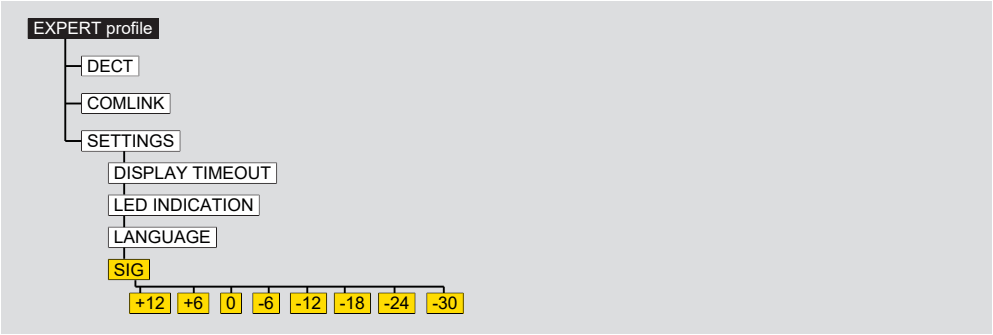
13 SIG - Signalling

The CT-DECT Multi M7 generates various audio signals and voice outputs to inform the user about various events (e.g. battery status) or as a confirmation of a user input (e.g. MIC ON or OFF).

The ratio of the volume of this sound signalling and voice output to normal communication with other participants can be set by the user.

A change is applied immediately and confirmed to the user by short beeps.

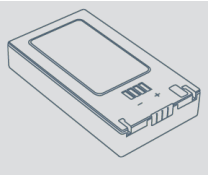
To set the signalling, use the SIG menu item:



The default setting is 0dB.
A change is retained even after restart.

14 Internal power supply

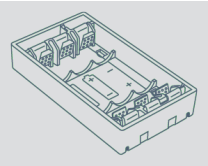
Power is supplied by VARTA EasyPacks XL (LiPo).



Alternatively, a special AAA adapter filled with three AAA cells can be inserted into the device.

14.1 Using AAA adapters

Instead of a battery pack, special AAA adapter filled with three AAA cells can be inserted into the device.



NiMH batteries or alkaline batteries can be used in the AAA adapters. The use of NiMH batteries is recommended.

The runtime depends to a large extent on the types of battery used.

The runtime depends to a large extent on the types of battery used:

- 3 AAA LR03 1.5V alkaline batteries
- 3 AAA HR03 1.2V NiMH batteries

⚠ WARNING

Batteries and rechargeable batteries must not be mixed in the AAA adapters. Mixing batteries and rechargeable batteries can result in damage to the device.

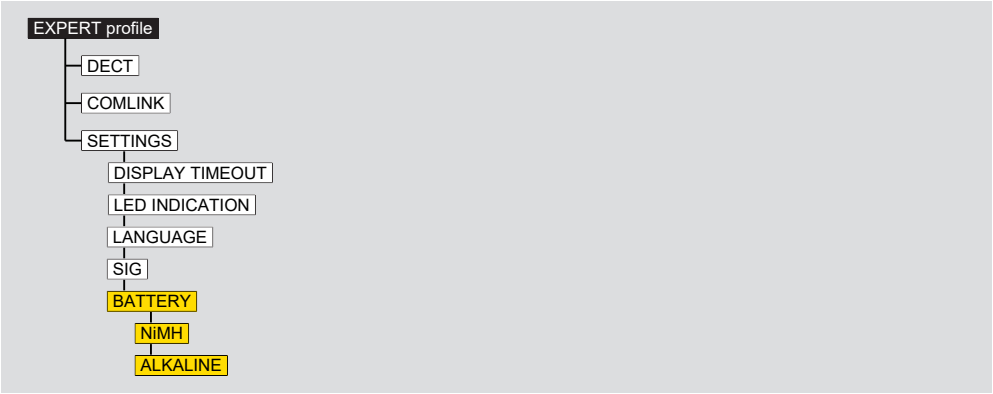
NOTICE

Batteries and rechargeable batteries must not be mixed in the AAA adapters. Mixing batteries and rechargeable batteries can result in damage to the device.

Setting the type of battery

For an accurate calculation of the battery level, the device must know the type of battery used in the AAA adapters.

To set the battery type, use the BATTERY menu item:



A change is retained even after a restart.

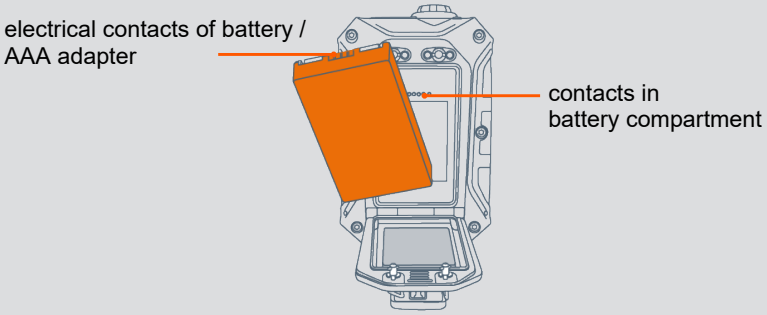
14.2 Changing the batteries / AAA adapters

1. Open the battery compartment

Open the battery compartment by turning the locks clockwise.

2. Change the batteries / AAA adapter

Remove the battery / AAA adapter from the battery department. When reinserting, make sure the electrical contacts of the batteries/battery adapters align with the contacts in the battery compartment.



14.3 Runtime

The runtime of the CT-DECT Multi M7 may vary depending on:

- the actual ambient temperature
- the number of connected participants
- the use of the accessory socket
- the intensity of use (transmitting / receiving / standby)

The runtimes in the following table serve only as a rough guide.

Runtimes of the CT-DECT Multi M7 at 20°C

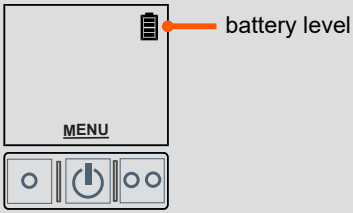
VARTA EasyPack XL	AAA NiMH-Akku Panasonic Eneloop Pro BK-4HCDE (930mAh)
up to **16** hours	up to **8** hours

Runtimes are shorter at lower temperatures. For example, a 10 % drop can be expected at 0 °C compared to 20 °C.

If rechargeable batteries/batteries with different filling levels are used, the runtime may also be shortened.

14.4 Battery level monitoring

Battery levels can be monitored on the display. Simplified icons can be seen permanently at the top of the display.



The exact remaining capacity can be called up in the menu.

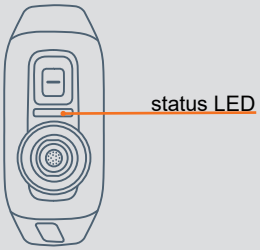
The battery level calculations are calibrated to the following items:

Description	Short code	Part no
VARTA EasyPack XL LiPo battery pack	AKKU-VARTAEP	4024006
Panasonic eneloop AAA-NiMH battery	AKKU-AAA-ELP	4006504

The use of other types may lead to different results.

14.5 Visual battery status indicator (status LED)

The status LED visually indicates the remaining battery capacity. The assigned values only indicate the estimated remaining battery capacity. They cannot be converted to the remaining runtime without further ado, as this depends considerably on the usage scenario. If the LED flashes red, replace the battery pack/batteries.



Status LED	Residual capacity
green	approx. 34 – 100 %
yellow	approx. 10 – 33 %
red	approx. 5 – 9 %
flashing red (2 sec cycle)	approx. < 5 %
flashing red (200 ms cycle)	shutdown imminent

NOTICE

Batteries and rechargeable batteries must not be mixed in the AAA adapters. Mixing batteries and rechargeable batteries can result in damage to the device.

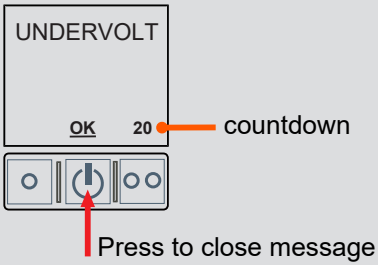
14.6 Acoustic battery warning

When the battery is low, the CT-DECT Multi M7 emits acoustic warnings. These are tones and voice announcements.

State of charge	Acoustic signal / voice announcement	Repetition cycle
0%	BEEP-BEEP – internal battery state – replace battery immediately	30 sec.
undervoltage	BEEP-BEEP – internal battery state – replace battery immediately	10 sec.

14.7 Automatic shutdown in case of undervoltage

To prevent uncontrolled switch-off, the device shuts down automatically if the battery voltage is too low. This switch-off is indicated by the scrolling text UNDERVOLTAGE and a countdown in the display.



15 Accessories

Description	Short code	Part no
Black bag, for MOLLE systems	TASCHE-MULTIM7	4035141C
Camouflage bag, for MOLLE systems	TASCHE-MULTIM7	4035141-NSN
Orange bag with shoulder strap	TASCHE-MULTIM7	4035150
VARTA EasyPack XL	AKKU-VARTAEP	4024006
Single charging unit for VARTA EasyPack XL	LADE-VARTAEP1	4024008C
4-way battery charger for VARTA EasyPack XL	LADE-VARTAEP4	4024004
AAA adapter for three AAA cells	BATADAP3-AAA	4024005

16 Maintenance and care

16.1 Inspecting devices

Routinely inspect your CeoTronics devices, especially cables and connectors, for damage and wear and have them repaired, if necessary.

16.2 Cleaning

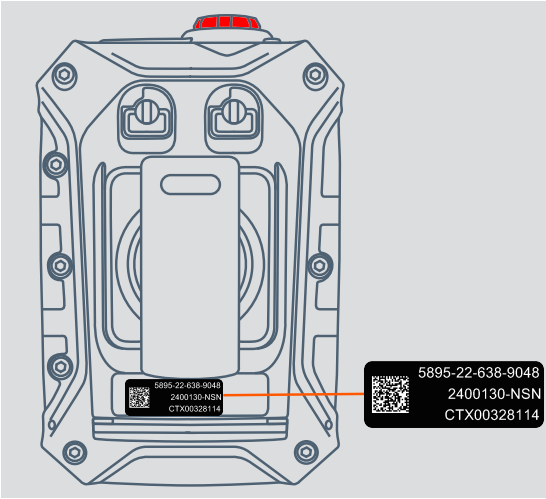
Clean your CeoTronics device with a suitable cloth moistened with clean water. If necessary, you can also use a mild soap solution, e.g. in the form of a hand dishwashing detergent or the following cleaning agents:

- Sterillium® classic pure
- Sterillium® med
- Bacillol® plus

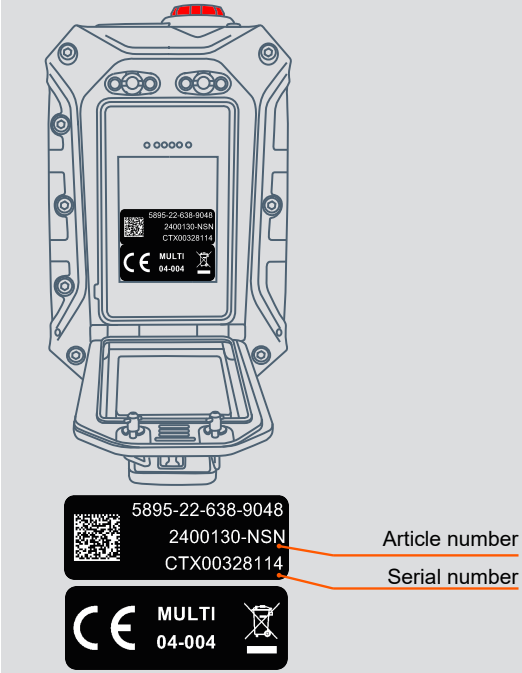
Clean the contacts of the plug connectors with a commercially available contact cleaning agent.

17 Labeling

Outside

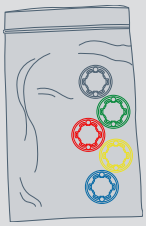


Inside

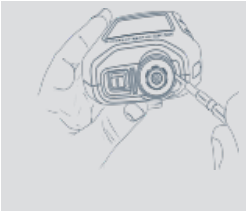


Identification rings

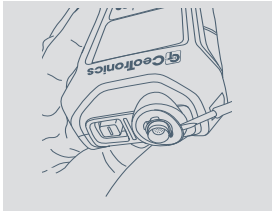
Each CT-DECT Multi M7 comes with a set of identification rings in different colours. These rings can be used by the user for identification and allocation within a system configuration.

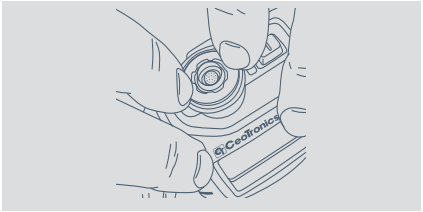


Changing the identification rings



Using a suitable tool (e.g. a precision mechanic's screwdriver), prise the inserted ring out of the holder.





Insert the desired ring and push it firmly into the holder.

18 Abbreviations and terms

Abbreviation/term	Explanation
AAA	Battery and rechargeable battery size micro
CT-ComLink® R (CLR)	R = Rot dient in der Regel zum Anschluss eines Headsets
FP	Fixed Part – DECT Basis-Gerät auf das mobile DECT-Teilnehmer (PP) eingelernt werden können
LiPo	Lithium polymer
NiMH	Nickel metal hydride
PP	Portable Part - mobiler DECT-Teilnehmer, der auf DECT Basis-Geräte (FP) eingelernt werden kann
PTT	Push-to-Talk
S/N	Serial number

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