

CT-DECT Multi M7

Configuration 2400105

Operating manual



English – USA

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1 General Operating- and Safety Instructions



For the use of the device and for prevention of personal injury or property damage, notice the national safety and accident prevention regulations and the following warning and safety instructions in this document.

- Before using CeoTronics products, read completely the appropriate operating instructions. If in doubt, ask our technical staff.
- Keep this document for later use.
- Use CeoTronics products only without damage and abrasion.
- If repair work of any kind needs to be done to CeoTronics products, arrange for it to be performed only by the company CeoTronics or by a specialized workshop that is authorized by CeoTronics. In all other cases, our warranty and liability for the product shall lapse.
- Keep CeoTronics products out of the reach of children and any other persons who are not familiar with the handling and operation thereof.
- CeoTronics products may only be used for the specific application envisaged.
- Safe operation requires clean devices. Ensure that the devices (microphones, connectors etc.) are clean and in good condition at all times.
- Should equipment, supplied by CeoTronics, be definitely put out of service you may return it to CeoTronics. We ensure recycling and / or disposal of outdated equipment in compliance with the applicable environment protection law.



Product damage!

- Do not immerse a CeoTronics product into water, unless expressly specified for this purpose.
- Connect CeoTronics accessories to a device or disconnect them from a device only after switching the device off, unless otherwise described in the operating instructions.

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- *Let devices that are designed for outdoor use during use outdoors always closed (e.g. CT-DECT Case) and close unused ports with appropriate cover – if available.*
 - *Do not store CeoTronics products in the open air or in damp ambient conditions. At all times keep them clean, dry and at normal air humidity. CeoTronics products must not be stored in areas with a temperature of over +80° C (+176° F), e.g. in the summertime on the parcel shelf of a car. If not stated otherwise, the following temperature ranges are acceptable for CeoTronics products: -10 to +55°C for operation, -40 to +80° C (-40 to +176° F) for storage.*
 - *Pay attention that no humidity could penetrate into the device during cleaning. Do not use solvents (e.g. benzene, alcohol, etc.) for cleaning! Safe operation requires clean devices. Ensure that the devices (microphones, connectors etc.) are clean and in good condition at all times.*

Risk of injury by connection leads!

- *When using CeoTronics products that are equipped with connection leads ensure that the leads do not get caught up in operational machinery or wheels!*

Risk of injury by speaker volume!

- *Please, note that in some audio devices (e.g. radios) very loud signaling beeps could be present as the radio is switched on. There are various types of devices generating a series of tones in different loudness levels. It may be necessary to adjust the volumes of the tones separately. These tones could damage your hearing if they are set too high. Therefore, adjust signaling beeps to a convenient level as desired before starting to use CeoTronics accessories. Follow the instructions of the audio device manufacturer's operating manual to adjust the signaling beeps.*
- *For safety reasons reception volumes in excess of 85 dB (A) are possible with a whole series of CeoTronics products. However, these can be regulated by the user. After switching on the communication system, set the reception volume to approx. 1/2 the available loudness volume and then test the speaker volume, e.g. by opening the squelch on the radio set.*
- *Do not set the volume any higher than is necessary. A very high volume setting can lead to damaged hearing, particularly if it is continuous. For high volumes or noise levels, wear additional earplugs. If in doubt, ask your safety officer or company doctor.*

Road traffic hazard!

- *Do not leave CeoTronics products lying around loose in cars, e.g. on the parcel shelf. Stow these products in a suitable, safe place in the car so that they do not present a danger to you or to other occupants of the car, if emergency braking is effected.*
- *When driving a car, do not use the radio because it may distract you from the other traffic. Never use a CeoTronics product (headset, insert earphone, induction receiver etc.) that will impair your hearing.*

Impairment of flight operation!

- *When on board an airplane always keep a transmitter/receiver switched off. Operation of the transmitter / receiver could affect the safety of the aircraft, and it is therefore prohibited. Never operate electronic devices on board an aircraft without the express approval of an authorized member of the cabin crew.*
- *The CT-DECT GateCom Compact must always be removed from the aircraft once the intercom communication is completed. Never remove the warning flag „Remove before flight“ from the CT-DECT GateCom Compact.*

Impairment of radio transmission!

- *Transmit only when it is necessary. Unnecessarily occupying a channel can prevent the transmission of vitally important information.*

Risk of explosion!

- *CeoTronics products that are not intrinsically safe (explosion-proof) and therefore have no special explosion-proof designation must basically not be operated in potentially explosive environments. Potentially explosive atmospheres can arise, for example, in refuelling areas or in storage and transport facilities for fuels and chemicals! Devices that are not explosion-proof can trigger off explosions in such areas!*

It is important that you strictly observe the guidelines, arrangements and regulations applicable to your area of activity!

Risk of electric shock!

- *Before opening line voltage operated products (e.g. for service purposes), always disconnect first the mains plug from the mains socket!*
- *Use CeoTronics products only in undamaged condition. In case of any kind of damage, refrain from further using the CeoTronics product and have it repaired.*

Adverse effect on cardiac pacemakers!

- *If you are a cardiac pacemaker carrier, before operating a transmitter / receiver ask the manufacturer of your cardiac pacemaker for information about any impairment that could be caused due to high frequencies.*

Rechargeable batteries and batteries!

- *Observe the environmental regulations when handling storage batteries! Do not throw used (defective) storage batteries into the domestic refuse. Observe the battery ordinance (BattV).*



Risk of injury by Rechargeable batteries and batteries!

- *Insert the rechargeable batteries only after having read and understood all safety instructions. Rechargeable batteries imply potential risks, which could cause physical injury and material damage.*
- *Never intend to open a rechargeable battery and never throw it into open fire. Ensure that contacts and charging sockets of the rechargeable battery do not cause short circuit (risk of fire and injury) by bridging (bent-open paper clip, bunch of keys or similar). In such a case, the guarantee is void.*
- *Transport spare rechargeable batteries in electrically non-conductive packing material in order to avoid shorting the rechargeable batteries.*
- *Keep the rechargeable batteries away from persons who are not familiar with their handling and use (e.g. children).*
- *Charging rechargeable batteries in potentially explosive areas is strictly prohibited (risk of explosion!). Charge and change rechargeable batteries only in areas where no explosive gases, vapours, or dusts could be present in combination with air.*

Damage to charger or rechargeable batteries!

- *Charge rechargeable batteries only using the corresponding appropriate CeoTronics charger. Regard voltage and current data, also on the mains side (e.g. 230 V AC or 115 V AC).*
- *Never use the battery charger for charging non-rechargeable batteries.*
- *Chargers are neither waterproof nor dust-tight and need protection against water, rain, and contamination. Use them only in the appropriate environment, intended for the system. Don't cover the ventilation openings.*
- *Don't charge rechargeable batteries outdoors.*

Radio Software (firmware) – Risk of malfunction!

Please note that the function of radio accessories is depending on the software settings set up in your radio. Be careful with software updates and / or changes to the software settings. If you update the radio's software, or if you change the software settings, check first on a radio that the radio accessory is still functioning properly after these changes. It is possible that the receiving volume of some radios is not satisfactory. In these cases, we suggest you check if an increase of the receiving volume is possible via the parameters in the audio profile of your radio.

Follow the information of the radio manufacturer!

If you have any further questions in regards to this subject, do not hesitate to contact our sales back office.

Important safety information concerning the use of CT-DECT digital radio systems!

- **Legal note for operation in the European Union**

The transmitter of the CT-DECT device should be used in the European Union only when it is marked as following:



- **Legal note for operation in the USA**

The transmitter of the CT-DECT device should be used in the USA only when it is marked as following:



Improper use!

The use of CeoTronics products for special applications, such as explosive and hazardous areas, aviation, bomb disposal (EOD) or other similar applications, is in the sole responsibility of the end user. The end user has to check and decide that the products can be used without risk.

CeoTronics does not take over responsibility for any damage or material losses nor injuries to persons, caused by the use described above or by any other abnormal use of the products.

Important Notes for operation of the CT-DECT System in the USA

Please note that any changes or modifications not expressly approved by the party responsible for compliance will void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- . Reorient or relocate the receiving antenna.**
- . Increase the separation between the equipment and receiver.**
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- . Consult the dealer or an experienced radio/TV technician for help.**

Definition

FP = Fixed Part (Base / Basis) – e.g. CT-DECT Case

PP = Portable Part (Standard / Mobilteil)

DNR = Digital Noise Reduction (Digitale Unterdrückung störender Geräusche)

Sidetone = S/T audible feedback of your voice

GC Multi = Profile for GateCom Multi (aircraft ground handling)

2 Purpose

The CT-DECT Multi M7 is a mobile communication device based on DECT radio technology. It enables the user to connect wirelessly to a CT-DECT network and thus use a voice communication (full duplex). The CT-DECT Multi M7 can use only as an “PP” device.

2.1 Profiles

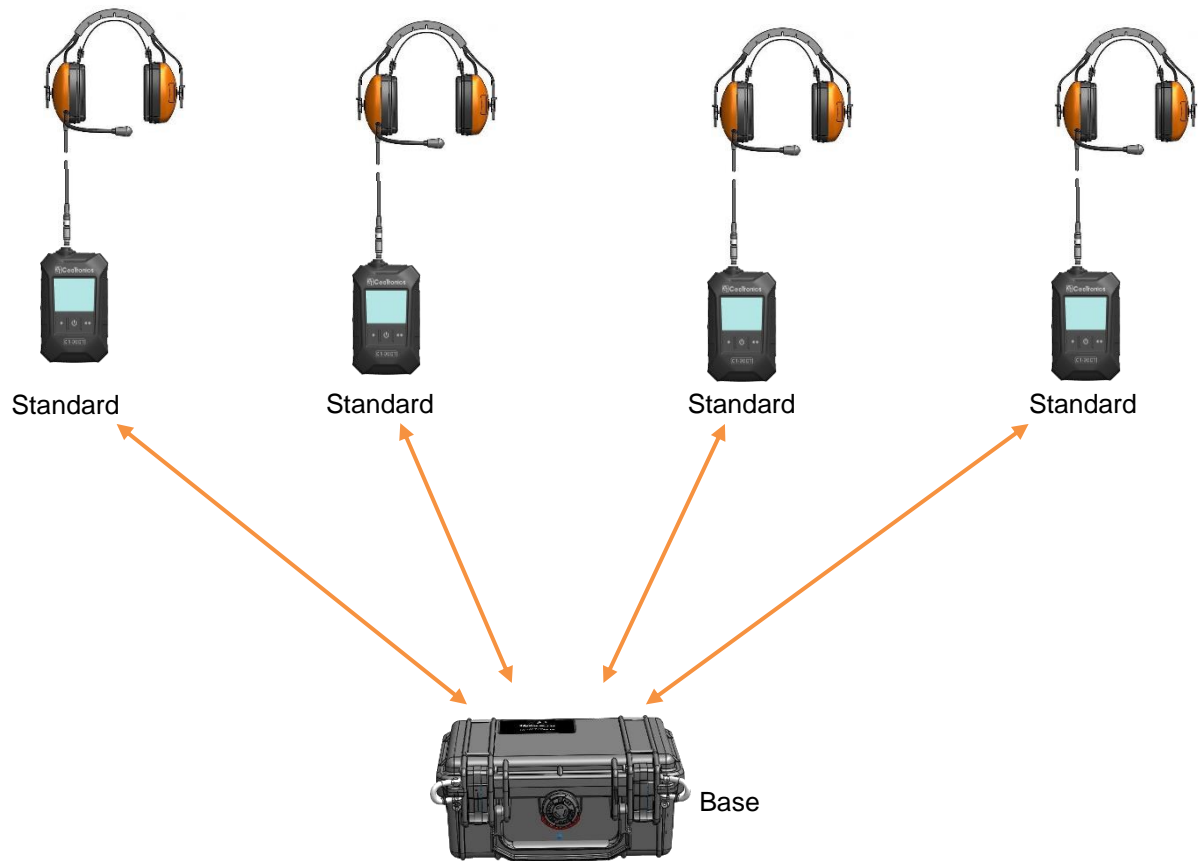
The device can be set to different profiles.

Profil	PP/FP	Application
Standard	PP	General DECT application as standard device
Expert	PP	Expert mode – for use by trained personnel only
GC Multi	PP	DECT application as standard device - aircraft ground handling

How to change the profiles is described in section 8.

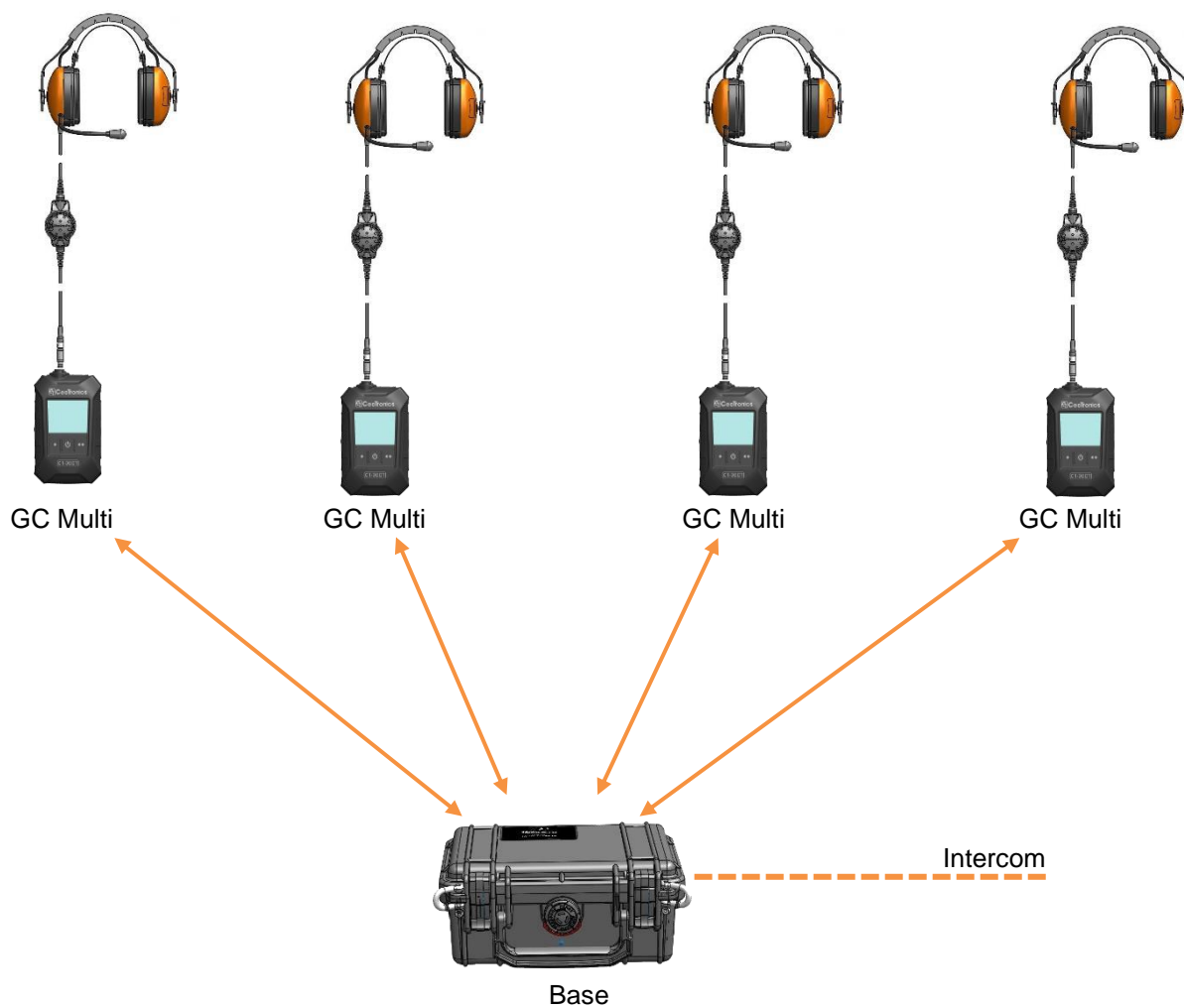
A DECT system always consists of a base station (FP / Base e.g. CT-DECT Case) and at least one mobile device (PP / Standard).

1



All users can communicate with each other in full duplex.

2



All users with profil „GC Multi“ and the Intercom can communicate in full duplex.

Suitable adapter cables are available for various intercom systems. Please contact us to select the appropriate adapter cable for your application.

3 Technical description

3 - Operating elements



3.1 Plug connections

4 - Connect and disconnect the plug connection



Place the plug on the socket. Make sure that the red dot on the plug and socket match.

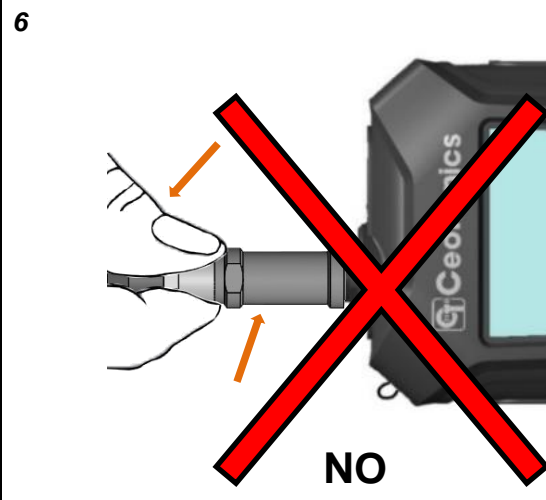
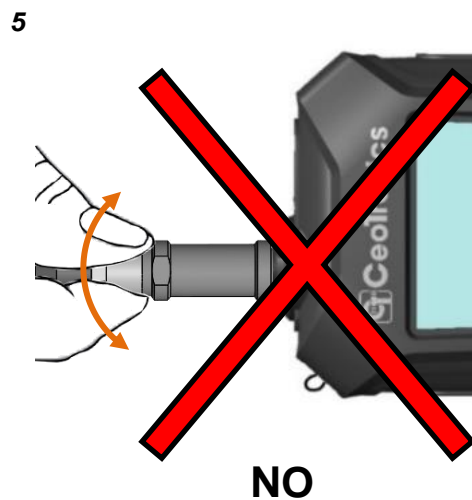
Turn the plug carefully on the socket until it something slides into the socket.

Press the plug into the socket until you feel it lock into place.

To disconnect the plug, grasp **only** the front part of the plug and **carefully** pull the plug out of the socket.

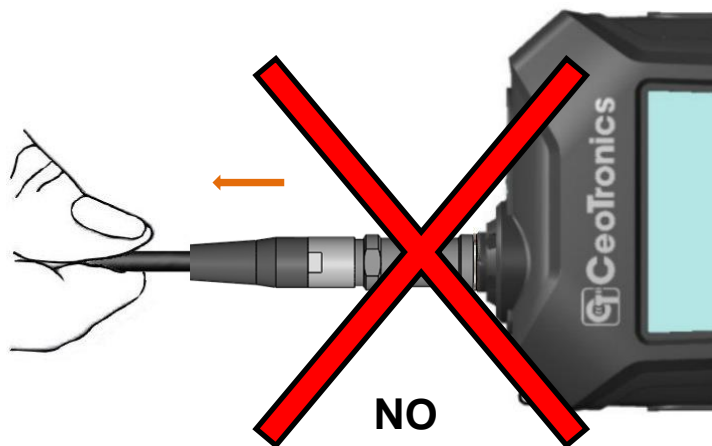
CAUTION

The locked connector must neither be twisted (Figure 5) nor kinked (Figure 6). Improper handling can damage the connector.



Never pull on the cable of the plug connection. Pulling on the cable can damage the connector (Figure 7).

7



4 Switch-on

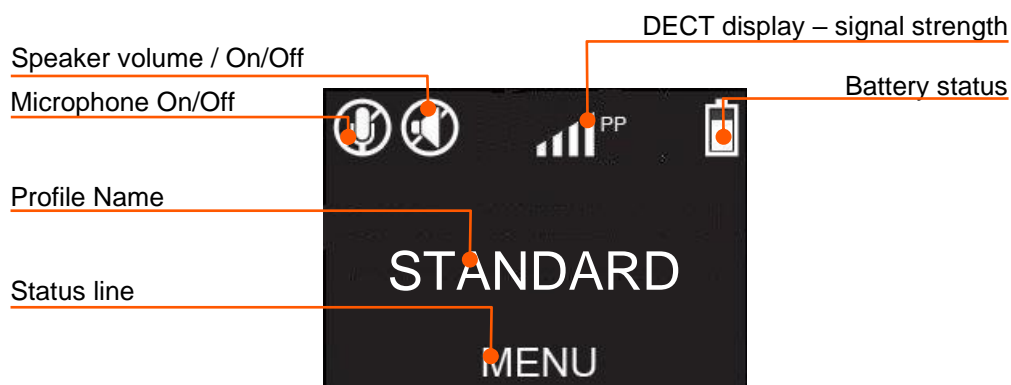
Press on/off button until display starts.
The display first shows the current profile

5 Switch-off

Keep the On/Off button pressed until “Shutdown” appears on the display – press the button again to confirm.

6 Display


8





7 Menu

7.1 Menu control

For menu control / menu selection use On/Off button and softkeys 1 and 2

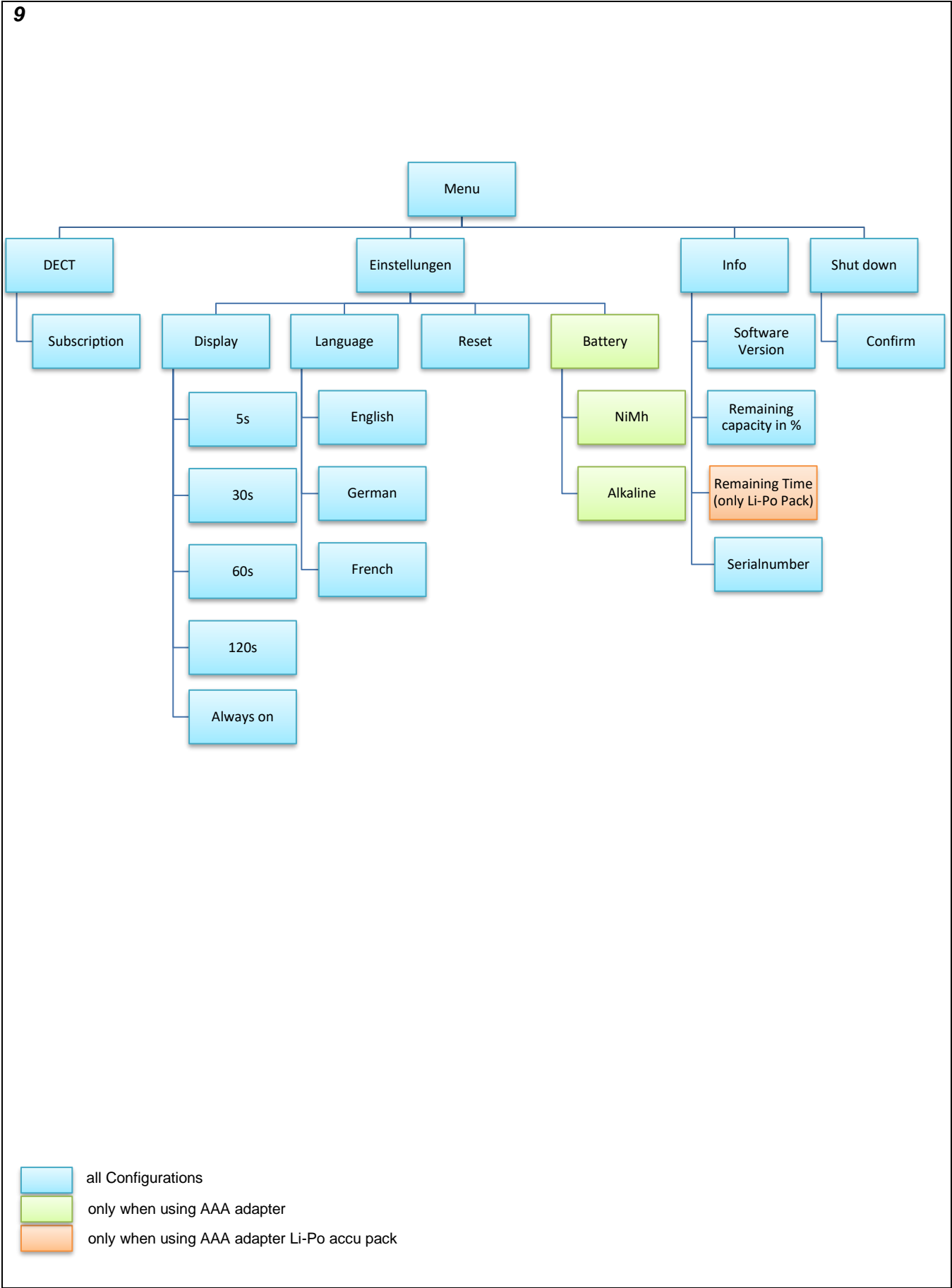
Select submenu: 

Change submenu:  

confirm selection: 

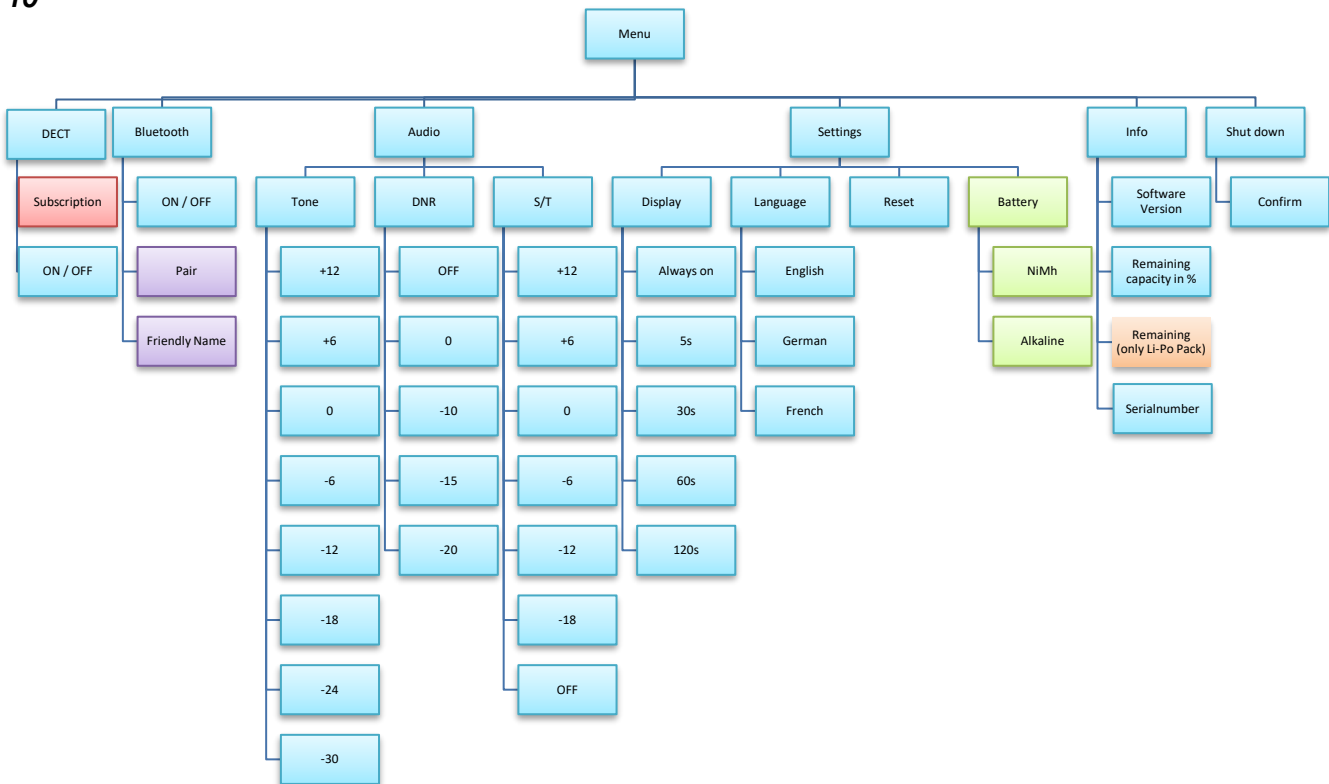
7.2 Menu structure

7.2.1 Profiles „Standard“ and „GC Multi“



7.2.1 Profil „Expert“

10



- all Configurations
- only when using AAA adapter
- only if Bluetooth ON
- only if DECT ON
- only when using Li-Po accu pack

Data in the menu „Audio“ in dB
 Tones: Volume of the signal tones transmitted to the radio default value (0)
 DNR: default value (-15)
 S/T: Sidetone default value (0)

8 Setting the profile

You can change the profile as follows:

Switch the device off



- Keep the On/Off button pressed until "Shutdown" appears on the display – press the button again to confirm.

Switch-on



- Press on/off button and Softkey 2 until display starts.
- The display first shows "Profile"
- The Display show now the menu for profil selection



- Select the desired profile with both buttons

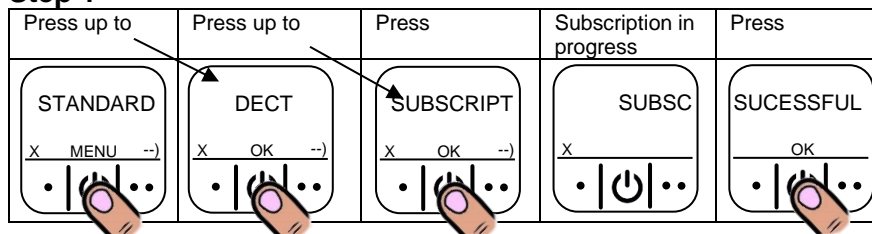


- Confirm your selection by renewed pressing the On/Off button

9 Subscription - DECT

Subscribe simultaneously always only one CT-DECT Multi M7 to a CT-DECT "FP" (CT-DECT Case). Set the CT-DECT "FP" in subscription mode. Start the subscription process on the CT-DECT Multi M7 as follows: Carry out steps 1 and 2 quickly one after another to avoid a "Time Out".

Step 1



and...

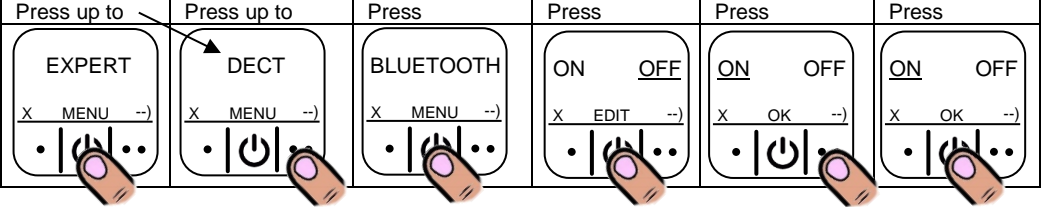
Step 2

Follow the subscription description of the operation manual of the CT-DECT "FP".

10 Pairing – Bluetooth (only in profile „Expert“)

In the "Expert" profile, a Bluetooth device can also be additionally paired with the CT-DECT Multi M7.

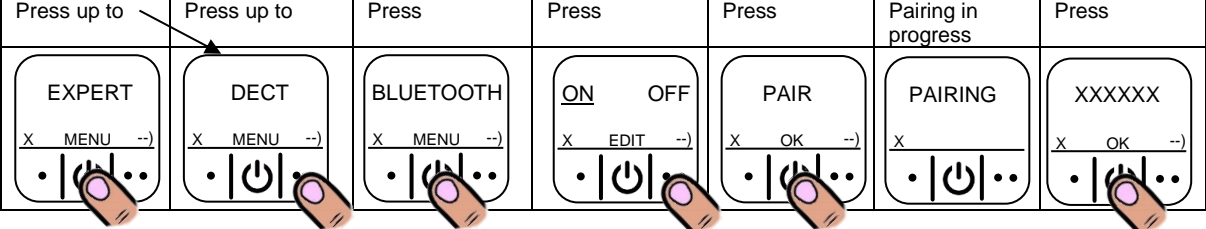
Step 1 – Switch On the Bluetooth function in CT-DECT Multi M7



Step 2

Set the desired Bluetooth device to pairing mode. Note the operating instructions of your Bluetooth device.

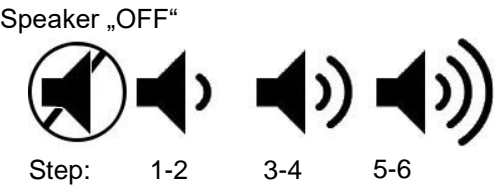
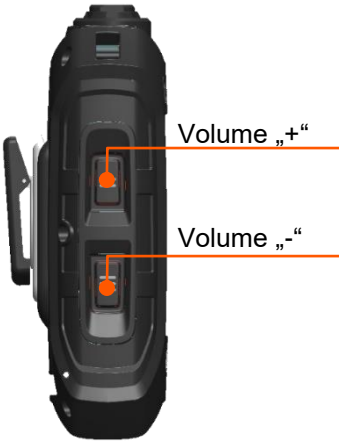
Step 3 – Pairing



After confirming the pairing code, the name of the other Bluetooth device is displayed.
The devices are now connected via Bluetooth.
If the pairing process takes longer than 1 minute, the CT-DECT Multi M7 interrupts the process with the message "Time Out".

11 Headset volume

The CT-DECT Multi M7 is equipped with 6 headset volumes. It can be adjusted with the Volume buttons "+" and "-". The display shows the volume levels in steps of two.



12 Microphone switch-off

The CT-DECT Multi M7 is equipped with a microphone switch-off function.



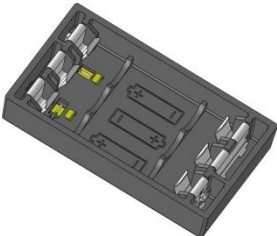

13 Power supply – Battery change

Power is supplied by a Li-Po battery pack or by 3 AAA cells, which are inserted into the device in a special adapter. Alkaline or NiMH batteries can be used in the adapter.



Batteries and accumulators must not be mixed in the adapter.

A runtime display is only possible when using the Li-Po battery pack.
Depending on the ambient temperature, the headset is used and the intensity of use (transmission / reception / standby), operating times of up to approx. 16 hours can be achieved with a Li-Po battery pack and operating times of up to approx. 8 hours can be achieved with NiMH AAA battery cells.

	Article Number
Adapter for 3 AAA cells: 	4024001
Li-Po accu pack: 	4024002

Changing the battery/rechargeable batteries - Li-Po battery pack or adapter with 3xAAA cells



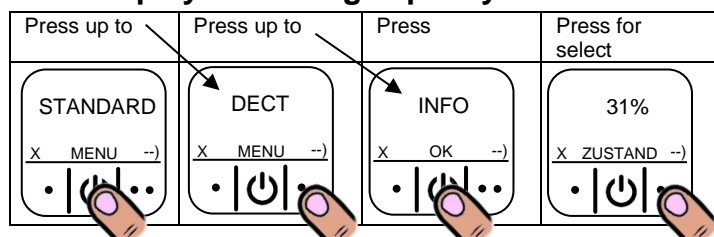
Open the battery compartment by turning the latches in the direction of the arrow



Example accu pack

Remove the accu pack or adapter from the device. When reinserting, make sure that the contacts are at the top and inside of the device. When using the AAA adapter, set the type of battery used in the Settings menu - NiMH or alkaline.

13.1 Display remaining capacity

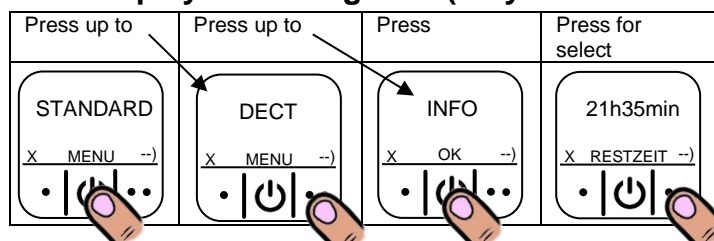


The remaining capacity can be requery via the menu (see diagram). The displayed value is an estimate designed for the following types of batteries and accus:

- LiPo accu pack (Article Number: 4024002)
- Ansmann Alkaline AAA Battery (Article Number: 4006504 – 2 piece)
- Panasonic eneloop AAA NiMh Accu (Article Number: 4008010 – 2 piece)

Using other types may lead to different results. A converted to the estimated remaining time is possible when using the LiPo battery pack. A general approximate indication of the state of charge is given by the status LED.

13.2 Display remaining time (only when use Li-Po accu pack)



The values only indicate the remaining estimated runtime based on the percentage of remaining capacity. This estimated runtime depends to a significant extent on the usage scenario and is permanently adjusted to this scenario.


13.3 Status LED

approximately 34% - 100%	capacity green
approximately 10% - 33%	capacity yellow
approximately 5% - 9%	capacity red flashing - 2s-cycle
approximately 0% - 4%	capacity red flashing - 200ms- cycle

status LED



The following charger is available for charging the Li-Po battery packs:

	Article Number
4-Slot battery charger 	4024003

14 Servicing and maintenance

14.1 Condition check

Regularly inspect the system – and especially cables and connectors – for signs of breakage, cracking, and wear.

14.2 Cleaning

Remove any loose dust with a soft brush. Clean the outside with a suitable clean cloth that has been slightly moistened with clear water, and rub the parts dry afterwards. If heavily soiled, some dishwashing liquid can be used in addition.

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



Management
System
ISO 9001:2015

www.tuv.com
ID 1100004023

Certificate No.: 01100004023 (ISO9001)

Certificate No.: 01220004023 (ATEX, Directive 2014/34/EU)



Certificate No.: 461801 (PPE, Regulation (EU) 2016/425)

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