Communication System for Operation with the EOD 9 Helmet of the Company Med-Eng

Description and Operation

Contents

1 CeoTronics Operating, Warning, 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 We ensure recycling and / or disposal of outdated equipment in compliance with the applicable environment protection law.*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.*
- *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 pro- ducts 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 airplane without the express approval of an authorized member of the cabin crew.*
- *The CT-DECT GateCom Compact must always be removed 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 there- fore have no special explosion-proof designation must never be operated in potentially explosive environments (e.g. when refueling cars, aircraft etc.). Devices that are not explosion-proof can unintentionally trigger off explosions in such areas!*

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 – 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:

CE

- *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:

FC

- *Legal note for operation in Canada*

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

IC

Improper use!

The use of CeoTronics products for special applications, such as explosive and hazardous areas, aviation, bomb disposal (EOD / IEED) 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.

2. Description

2.1 Purpose

The communication system (see system overview Fig. 3) is used in connection with the EOD 9 helmet of the company Med-Eng during bomb defusing. It allows wireless duplex communication over short distances (approx. 100 m) between the bomb defusing officers. The range between the CT-DECT devices (base/FP and standard/PP) depends on the local circumstances. The longest range is reached at eye contact in a free area. Surrounding conditions as mountains, buildings, trees, weather conditions, obstacles (especially the ones containing metal) and body damping especially with body worn systems may reduce transmitting distance.

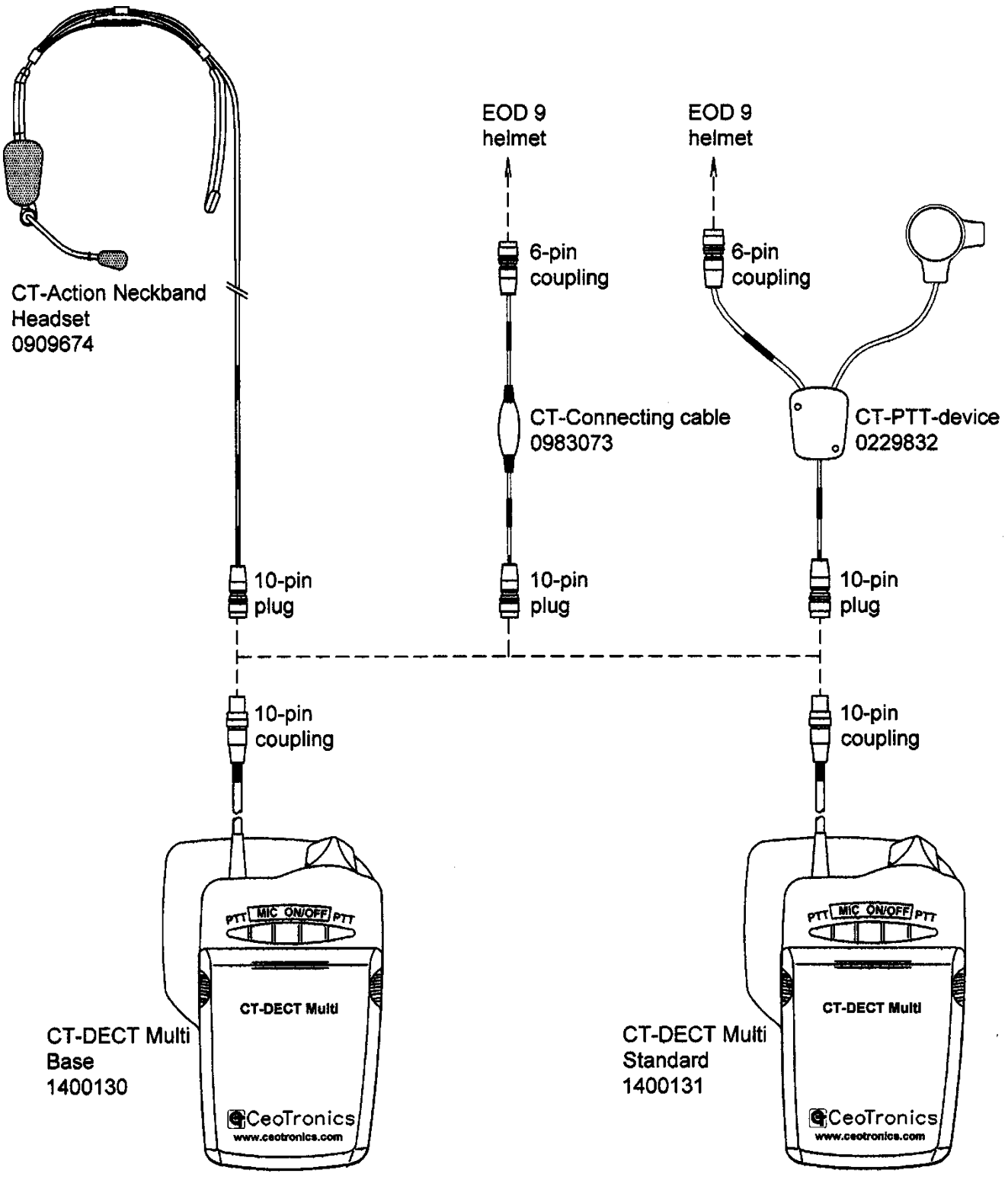
Everyone of the bomb defusing officers is equipped with a »mobile« transmitter/receiver device CT-DECT Multi, that is connected to the communication headset in the EOD 9 helmet via a special CT-Connecting cable or via a special CT-PTT device.

Instead of the CT-DECT multi other radios can be used. For these radios is other CT-PTT-device needed. Instead of the communication headset in the EOD 9 helmet the CT-Action Neckband Headset, e.g. for training purposes, can be connected directly to the CT-DECT Multi.

2.2 System overview

– Transmitter/receiver device CT-DECT Multi Base, Part No. 14 00 130
– Transmitter/receiver device CT-DECT Multi Standard, Part No. 14 00 131
– CT-Action Neckband Headset, Part No. 09 09 674
– CT-Connecting cable Part No. 09 83 073 for connection of the CT-DECT Multi to the EOD 9 helmet of the company Med-Eng
– CT-PTT device Part No. 02 29 832 for connection of the CT-DECT Multi to the EOD 9 helmet of the company Med-Eng and for remote controlled transmitter keying of an external two-way radio

Fig. 1 System overview – Example use with CT-DECT Multi



3. Transmitter/receiver devices CT-DECT Multi Part No. 14 00 130, 14 00 131

3.1 Description

3.1.1 General

The CT-DECT Multi Base Part No. 14 00 130 and the CT-DECT Multi Standard Part No. 14 00 131 are, in connection with a compatible communication set, e.g. the communication headset in the EOD 9 helmet or the CT-Action Neckband Headset Part No. 09 09 674, a transmitter/receiver device for wireless duplex communication between a max. of five communication parties over short distances. The range depends on the local circumstances. Up to four standard devices are allocated to a base device. Channel selection is effected automatically.

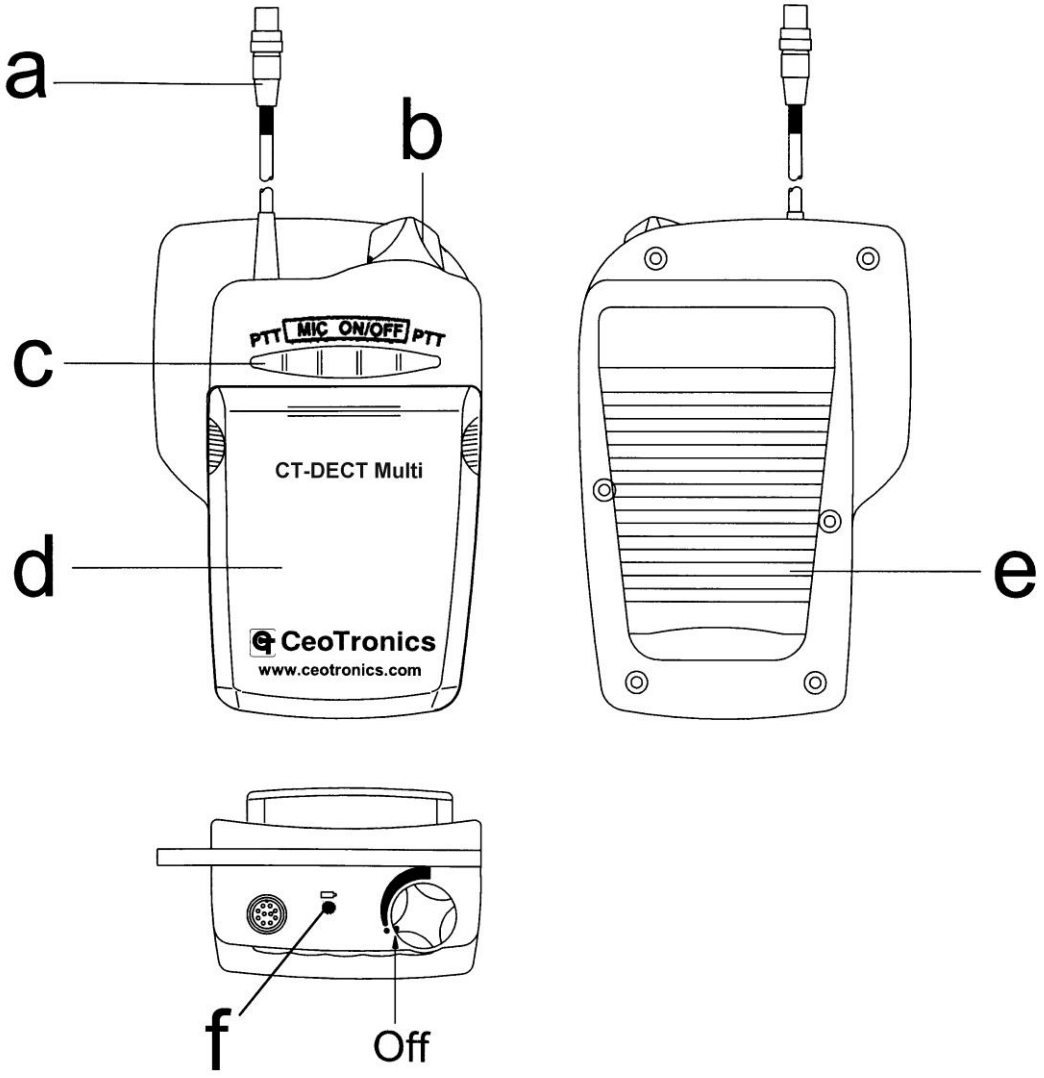
The Multi can be used as a hand-held unit or is worn on belt by means of the fastening clip on the rear.

The minimum version of the system comprises one base Multi and one standard Multi. Up to four standard Multi can be operated in conjunction with the base Multi.

The base Multi Part No. 14 00 130 has a red pushbutton bank and the standard Multi Part No. 14 00 131 has a black one.

3.1.2 Control and connection elements

Fig. 2 CT-DECT Multi, control and connection elements



Key to Fig. 2

a 10-pin coupling for connection of a compatible communication set, e.g. the communication headset in the EOD 9 helmet via the CT-Connecting cable Part No. 09 83 073 or via the CT-PTT device Part No. 02 29 832 or for the direct connection of the CT-Action Neckband Headset Part No. 09 09 674.

b On/off switch and volume control (rotary knob). The device is switched off if the rotary knob is set fully counter-clockwise (position » ● «). The volume control is used to adjust the volume for the communication set.

c Bank of 5 pushbuttons.

CT-DECT Multi Base: Red pushbutton bank
CT-DECT Multi Standard: Black pushbutton bank

1. Three pushbuttons »MIC ON/OFF«: One of the three pushbuttons in the middle has to be pressed to switch the microphone of the CT communication set on and off which is connected at the 10-pole female jack (Item »a«). (see 3.1.6)
2. Two pushbuttons »PTT« at the begin and end of the pushbutton bank.

   PTT (push to talk): as a rule without function. The PTT function is used only in the case a CT-DECT Multi (standard device) will be used in conjunction with a CT-DECT Interface (base device), e.g. for transmitter keying of an external two-way radio.
3. All five pushbuttons can be used for subscription of the CT-DECT Multi (see sections 3.6).

d Removable cover for the battery compartment.

e Fastening clip on the rear.

f Control lamp, batteries

green illuminates	batteries full
green flashes	batteries half-full
red flashes	battery nearly flat charge the batteries, still approx. 30 minutes readiness
LED OFF	batteries flat, no function

3.1.3 Usage within a CT-DECT system

In a CT-DECT system instead of the base Multi for example the base stations »CT-DECT Conference« or »CT-DECT Case« or the table top device »CT-DECT Station« or a »CT-DECT Interface« is used. Notice the special CeoTronics operating instructions for these base stations.

3.1.4 Power supply and operating time

Power for the Multi is supplied either by three rechargeable NiMH batteries 1.2 V type Mignon AA or by 3 alkaline batteries 1.5 V type Mignon AA in the battery compartment.

With fully charged rechargeable NiMH batteries 1.2 V/2300 mAh the operating time for continuous operation is approx. 18 hours. For charging, the batteries have to be removed from the Multi.

3.1.5 Audio signals used

Two different audible tones are used for signalling the operating status via the communication set connected to the device. The tone for the indication of positive operating status has a higher frequency than the tone for the indication of negative operating status. Signalling of the various operating status is effected by a varying number of consecutive high tones or low tones.

Positive acknowledgement tone
All positive operating status are indicated by a high tone.

Negative acknowledgement tone and error tone
All negative operating status and error status are indicated by a low tone.

3.1.6 On/off switches for the microphone of the communication set

The microphone can be switched on and off with one of the three pushbuttons in the middle of the pushbutton bank (Fig. 2/c):

– microphone on → two high beep tones
– microphone off → two low beep tones.

When the microphone is switched off you can listen (receive) only. In the case you don't want to take part in communication you can proceed as follows:

– switch off the microphone, turn back the volume completely
– switch off the device in the case of longer breaks

3.2 Commissioning and operation

3.2.1 Connecting the communication set

a. Connect the communication set to the 10-pin coupling (Fig. 2/a) of the device.
b. If a communication headset is used – Put on the headset and adjust it so that it fits comfortably and correctly.
c. Place the device on a suitable place of your clothing.

➔ NOTE

Protect the device against dampness.

3.2.2 Switching on, automatic connection setup, duplex communication

Switch on the base device and the standard devices by means of the on/off switch and volume control (rotary knob Fig. 2/b).

A high beep tone is audible in the communication sets of the devices after switching on. Subsequently the synchronization process between the base device and the standard devices begins, i.e. the standard devices seek the base device. The time a synchronization procedure can last is varying. During this time a high/deep tone sequence is audible in one-second intervals in the communication sets of the standard devices. The high/deep tone sequence signalizes that the standard devices seek the base device. In the communication set of the base device no high/deep tone sequence is audible.

After completion of synchronization – i.e. the standard device has found its base device – the high/deep tone sequence isn't audible any longer in the communication set of the standard device and in the communication set of the base device a high double beep tone sounds. Subsequently the connection setup between the base device and the standard device is effected automatically. The completed connection setup is finally signalized by a high beep tone in the communication set of the standard device and in that of the base device. The devices are now ready for duplex communication within the range between the standard device and its base device.

At the base device in each case a high double beep tone and finally a high beep tone signalizes every successful completed connection setup with an allocated standard device.

The microphone of the communication set must be switched on in order to speak. Further particulars see section 3.1.6.

When receiving voice adjust the speaker volume for your communication set by means of the on/off switch and volume control (rotary knob).

3.2.3 Exceeding the range limit

In the case the range limit is crossed the connection between the standard device and the base device will be released and a high/deep tone sequence with time intervals of 1 second is audible. After the devices are back again within the reception area the connection setup will be effected automatically and the high/deep tone sequence isn't audible any longer.

3.2.4 Undervoltage warning

Acoustic

If the three rechargeable batteries or batteries in the Multi have an undervoltage a constant low 3-beep tone sequence is audible in the communication set at the Multi approximately every 30 seconds.

From beginning of the battery undervoltage warning the Multi remains still in operation approx. 30 minutes.

Optical

Control lamp, batteries (Fig 2/f)

green illuminates	batteries full
green flashes	batteries half-full
red flashes	battery nearly flat
	charge the batteries, still approx. 30 minutes readiness
LED OFF	batteries flat, no function

3.2.5 End of operation

Switch off the device with the on/off switch and volume control knob (position » ● «). This guarantees a longer usage from the rechargeable batteries or batteries.

3.3 Recharging the rechargeable batteries

3.3.1 General

⚠ WARNING

The Multi can be supplied either by three rechargeable NiMH batteries 1.2 V type Mignon AA or by 3 alkaline batteries 1.5 V type Mignon AA. Before you start charging, always make sure, that it concerns rechargeable batteries in the battery compartment of the Multi and not non-rechargeable batteries!

The rechargeable NiMH batteries 1.2 V type Mignon AA in the device should only be charged with the charger supplied with the system. Otherwise the rechargeable batteries may be damaged. The charger is neither watertight nor dust-proof. Protect it against water, rain and dirt. The charger may only be used in rooms with normal relative air humidity and temperature. Do not cover up the charger.

3.3.2 Charging

The three NiMH batteries 1.2 V type Mignon AA are in the battery compartment of the device. For charging they have to be removed from the battery compartment.

a. Switch off the device.
b. Press on the two ribbed spots on the cover of the battery compartment, as shown in Fig. 3, and remove the cover from the battery compartment (Fig. 4).
c. Take the three NiMH batteries 1.2 V out the battery compartment.
d. Charge the rechargeable batteries only with the charger supplied with the system. For the charger notice the special CeoTronics operating instructions.
e. After charging: When inserting the charged NiMH batteries notice the polarity. Hang up the battery compartment cover with the two hooks into the two openings down at the battery compartment (Fig. 4). Touch the battery compartment cover with a little pressure at the two ribbed spots and press it against the battery compartment until it engages.

Fig. 3

Fig. 4

3.4 Replacement of the rechargeable batteries or non-rechargeable batteries

a. Switch off the device.

b. Press on the two ribbed spots on the cover of the battery compartment, as shown in Fig. 3, and remove the cover from the battery compartment (Fig. 4).

c. Take the 3 NiMH batteries or the 3 alkaline batteries out the battery compartment. Use only NiMH rechargeable batteries or alkaline batteries of the same type and value if you replace them.

➔ **NOTE**

Batteries are subject to compulsory waste disposal. Do not put them in the household waste.

d. Insert the new NiMH batteries or alkaline batteries in the battery compartment. When inserting notice the polarity. Hang up the battery compartment cover with the two hooks into the two openings down at the battery compartment (Fig. 4). Touch the battery compartment cover with a little pressure at the two ribbed spots and press it against the battery compartment until it engages.

3.5 Accessories and expendable items

Designation and description	Part No.
CT Quick charger for 4 NiMH rechargeable batteries 1.2 V type Mignon AA For a mains voltage of 100...240 V 50/60 Hz	40 06 527
3 pieces NiMH rechargeable batteries 1.2 V/2300 mAh type Mignon AA shrink-wrapped in foil	40 06 531

3.6 On-air subscription of the standard devices to the base device

Base Multi and standard Multi(s) can also be used in conjunction with other CT-DECT devices. The on-air subscription of a Multi to one of these devices is carried out analogous and in the sequence as described in sections 3.6.1, 3.6.2. Going to do so, first ascertain which of the devices is the base device and which a standard device.

After repair of a Multi by the factory, the repaired Multi has to be subscribed anew.

For on-air subscription at a DECT device always the on/off switch and the subscription button(s) are used.

Every time notice the special CeoTronics operating instructions for the other CT-DECT device.

3.6.1 General

➔ NOTE

The on-air subscription is a procedure which has to be performed once only by the factory. It must be performed again only in the case a Multi that isn't subscribed to the system has to be used within the system.

Differentiation base device and standard device

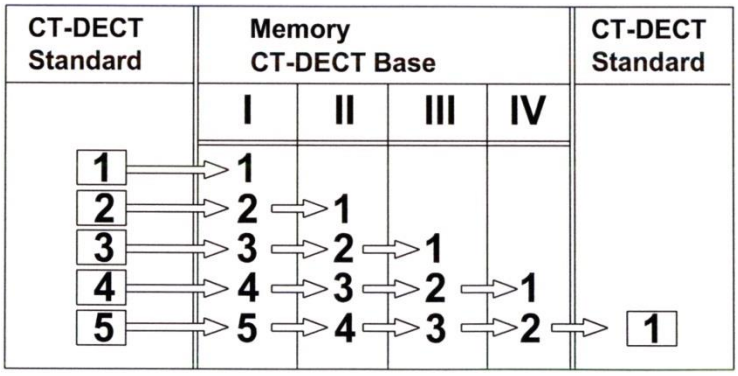
CT-DECT Multi Base: Red pushbutton bank
CT-DECT Multi Standard: Black pushbutton bank

Principle of subscription

Each device is equipped with a DECT module and has its own identification number. First of all an allocation must always take place between the base device and the maximum of four standard devices. This subscription procedure, which has to be performed once only, is performed on the base device and the maximum of four standard devices manually by means of a procedure carried out by the operator.

If a fifth standard device would be subscribed to the base device, the standard device that was subscribed in first would be deleted from the data memory of the base device. See the following example.

Principle of subscription (example)



A standard device that is deleted from the data memory of the base device cannot communicate any longer with the CT-DECT system. In this case the standard device has to be subscribed again to the base device according to the subscription procedure.

Once the subscription procedure has been successfully concluded, the identity of the communication participants is stored in the data memory of the device. The standard device stores one base device. The base device stores the last four successful subscribed standard devices.

Time Out

If no successful subscription between a standard device and the base device was achieved after maximally 2 minutes, a »Time Out« occurs. The »Time Out« is signalized by a tone sequence of 4 short deep tones in the communication headset of the CT-DECT Multi, which repeats itself every 4 seconds.

After a »Time Out« all necessary standard devices have to be subscribed again to the base device.

➔ NOTES

- ***Two ore more standard devices can never be simultaneously subscribed to the base device, they must always be subscribed one after the other. With two ore more standard devices it is recommendable to subscribe all standard devices one after the other to the base device, because a standard device can be deleted (see »Principle of subscription«).***
- ***A standard device can only be subscribed in one base device at the same time, never in two or more base devices.***
- ***Comply with the instruction step sequence.***
- ***After subscription the devices have to be switched off again.***

3.6.2 On-air subscription

In the following by way of an example the subscription of a standard device to the base device is described. The subscription of a second and perhaps a third and fourth standard device to the base device is analogous.

a. Make sure that all CT-DECT devices are switched off.

b. Connect the communication set to the 10-pin coupling (Fig. 2/a) of the base device and the standard device.

c. On the base device press at least one of the five pushbuttons in the pushbutton bank (Fig. 2/c) and keep the pushbutton pressed. While you keep the pushbutton pressed switch on the base device with the on/off switch and volume control (rotary knob Fig. 2/b) and after switching on keep the pushbutton still pressed for at least 5 seconds until a decreasing 5-tone sequence is audible in the communication set. Then release the pushbutton. Immediately carry out step »d«, otherwise a »Time Out« may occur.

d. On the standard device press at least one of the five pushbuttons in the pushbutton bank (Fig. 2/c) and keep the pushbutton pressed. While you keep the pushbutton pressed switch on the standard device with the on/off switch and volume control (rotary knob Fig. 2/b) and after switching on keep the pushbutton still pressed for at least 5 seconds until a decreasing 5-tone sequence is audible in the communication set. Then release the pushbutton.

   The on-air subscription is started and in the communication set of the base device and in that of the standard device a short high beep tone is audible periodically every 2 seconds. An increasing 5-tone sequence, which repeats itself every 4 seconds, signalizes that the subscription has been successful completed.

   If no successful subscription was achieved after maximally 2 minutes, then this is signalized by a tone sequence of 4 short deep tones, which repeats itself every 4 seconds.

   In this case switch off the both devices and restart the on-air subscription procedure again.

e. **After the on-air subscription switch off both devices.**

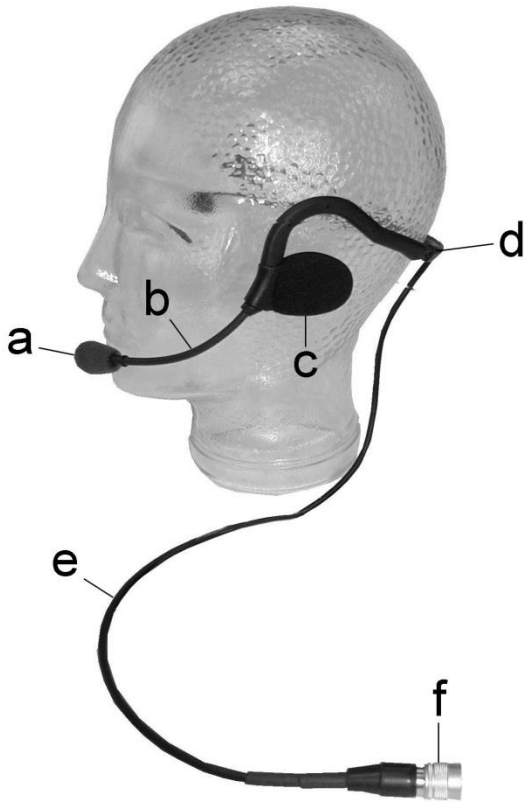
4. CT-Action Neckband Headset Part No. 09 09 674

4.1 General

The CT-Action Neckband Headset Part No. 09 09 674 (Fig. 5) is a especially sturdy low weight headset with high wearing comfort, that is directly connected to the both CT-DECT Multi Part No. 14 00 130 and 14 00 131.

a Noise-compensating electret microphone and windshield
b Flexible gooseneck
c Speaker
d Neckband
e Straight cable, approx. 900 mm long
f 10-pin plug for connection to the 10-pin coupling (Fig. 2/a) of the CT-DECT Multi Part No. 14 00 130, 14 00 131

Fig. 5 CT-Action Neckband Headset Part No. 09 09 674



4.2. Commissioning and operation

⚠ CAUTION

Never twist or bend the flexible gooseneck. Use the microphone only with windshield to protect the microphone against wind, moisture and soiling.

a. Put on the headset (see Fig. 5), place the speaker to the ear. The neckband has to be placed around the neck. The other end of the neckband has to be placed above the ear.
b. Adjust the flexible microphone boom so that the microphone is as close as possible to your lips. Only then optimum speech transmission and noise cancellation is given.
c. Connect the headset via the 10-pin plug (Fig. 5/f) to the 10-pin coupling (Fig. 2/a) of the switched off CT-DECT Multi.
d. Put the CT-DECT Multi in accordance with section 3.2.2 in operation.

4.3 Replacement of microphone windshield

Check the foam windshield at regular intervals for soiling, wear and deformation. Change it if required. The windshield can be pulled off from the microphone boom.

4.4 Expendable items

Designation and description	Part No.
Windshield for microphone, 10 pieces	50 02 203

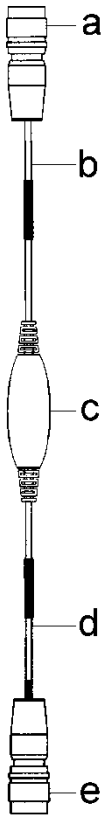
5. CT-Connecting cable Part No. 09 83 073 for connection of the CT-DECT Multi to the EOD 9 helmet

5.1. General

The CT-Connecting cable Part No. 09 83 073 (Fig. 6) is used for connection of the CT-DECT Multi Part No. 14 00 130 and 14 00 131 to the communication headset in the EOD 9 helmet.

a 6-pin coupling for connection to the 6-pin plug of the EOD 9 helmet
b Straight cable, approx. 100 mm long
c Housing with matching electronics
d Straight cable, approx. 300 mm long
e 10-pin plug for connection to the 10-pin coupling (Fig. 2/a) of the CT-DECT Multi Part No. 14 00 130, 14 00 131

Fig. 6 CT-Connecting cable Part No. 09 83 073



5.2. Connection

a. Connect the CT-Connecting cable via the 10-pin plug (Fig. 6/e) to the 10-pin coupling (Fig. 2/a) of the switched off CT-DECT Multi (Part No. 14 00 130, 14 00 131).
b. Connect the CT-Connecting cable via the 6-pin coupling (Fig. 6/a) to the 6-pin plug of the EOD 9 helmet.
c. Put the CT-DECT Multi in accordance with section 3.2.2 in operation.

6. CT-PTT device Part for connection of the CT-DECT Multi to the EOD 9 helmet

6.1 General

The CT-PTT device (Fig. 7) is used for connection of the CT-DECT Multi Part No. 14 00 130 and 14 00 131 to the communication headset in the EOD 9 helmet and for remote controlled transmitter keying of an external two-way radio.

With the PTT button (PTT = push to talk) the user can transmit a PTT criterium from a CT-DECT Multi Standard to a CT-DECT base station, e.g. a CT-DECT Case, in which an external two-way radio is built-in or connected via a cable.

Instead of the CT-DECT multi other radios can be used. For these radios is other CT-PTT-device needed.

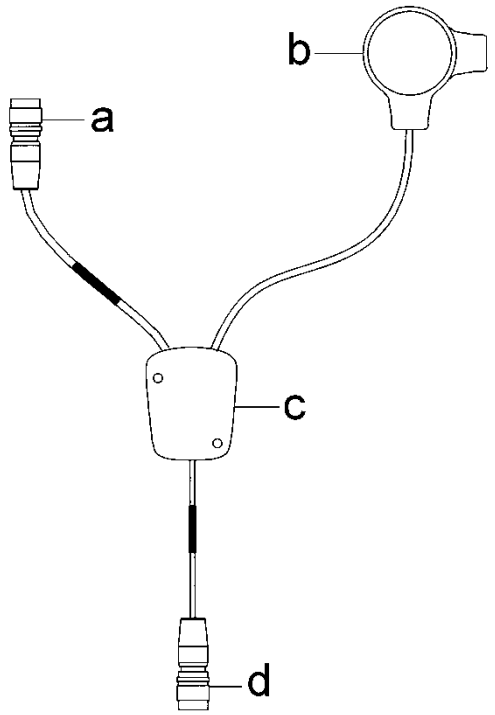
a 6-pin coupling for connection to the 6-pin plug of the EOD 9 helmet

b PTT button with fastening clamp on the rear

c Connection housing with matching electronics

d 10-pin plug for connection to the 10-pin coupling (Fig. 2/a) of the CT-DECT Multi Part No. 14 00 130, 14 00 131
While using of a other radio other plug possible.

Fig. 7 CT-PTT device Part No. 02 29 832



6.2 Commissioning and operation

a. Connect the CT-PTT device via the 10-pin plug (Fig. 7/d) to the 10-pin coupling (Fig. 2/a) of the switched off CT-DECT Multi (Part No. 14 00 130, 14 00 131).

b. Connect the CT-PTT device via the 6-pin coupling (Fig. 7/a) to the 6-pin plug of the EOD 9 helmet.

c. Fasten the PTT button (Fig. 7/b) with the clamp on the rear to a proper place of your clothing.

d. Place the CT-DECT Multi on a suitable place of your clothing.
Put the CT-DECT Multi in accordance with section 3.2.2 in operation.

e. Operation with a CT-DECT Multi Standard and an external two-way radio
Connect the external two-way radio via a special CT adapter cable to the CT-DECT base station, if it is not integrated into the CT-DECT base station. Put the CT-DECT base station, the CT-DECT Multi Standard (see section 3.2.2) and the external two-way radio into operation.
The CT-DECT Multi Standard must be subscribed to the CT-DECT base station. For the CT-DECT base station and the external two-way radio notice the special operating instructions.
Radio communication via the external two-way radio

Transmitter keying of the external two-way radio is carried out remote controlled, within the range of the CT-DECT Multi Standard to the CT-DECT base station, by pressing the PTT button (Fig. 7/b).

Press the PTT button and keep the PTT button pressed. You are able to transmit a radio message by speaking into the microphone of the communication headset at the CT-DECT Multi as long as you keep the PTT button pressed.

Release the PTT button again for standby/receiving. A radio message received from the external two-way radio you can hear in the communication headset.

7. Safekeeping – storage

After use, keep the cleaned devices in a clean and dry place at normal room temperature and at normal relative air humidity.

8. Maintenance

8.1 Visual inspection

Examine the devices and in particular the cables and connectors regularly for signs of fractures, cracks and wear. Send defective devices to CeoTronics for repair.

8.2 Cleaning

Remove any loose dust with a soft brush. Clean, if necessary, 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.

CE

Konformitätsinformation

Hiermit erklärt die CeoTronics AG, dass sich
das Gerät „CT-DECT Multi“
in Übereinstimmung mit den grundlegenden
Anforderungen und den übrigen einschlägigen
Bestimmungen der Richtlinie 2014/53/EU (RED) befindet.

Weitere Informationen zur Konformitätserklärung
erhalten Sie auf Anfrage von unserem Fachpersonal
bei der CeoTronics AG, Rödermark, Deutschland.

CE

Information of Conformity

Hereby the CeoTronics AG declares, that the
device „CT-DECT Multi“ is in
compliance with the essential
requirements and the other relevant regulations
of the directive 2014/53/EU (RED).

Further information regarding the Declaration of Conformity
you can receive upon request from our specialized staff at
CeoTronics AG Rödermark Germany.

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Certificate No. 01220004023 (ATEX)

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