

CT-DECT Headset / EX Base

CT-DECT Headset / EX Standard

Headset for wireless duplex communication

Operating Instructions



CE

English

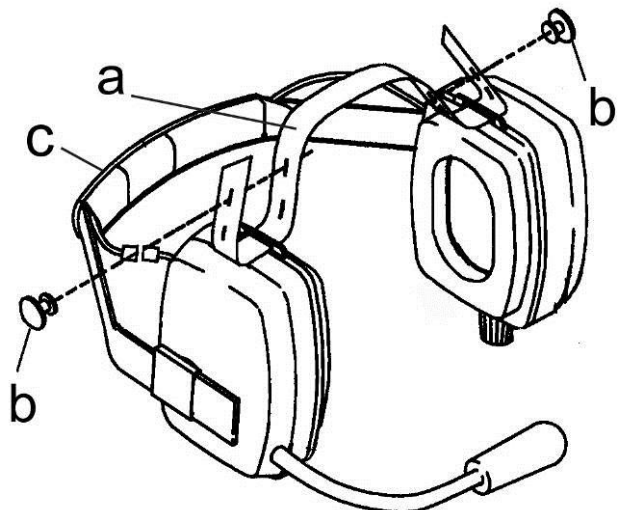
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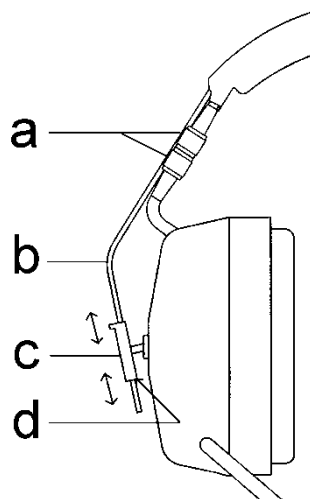
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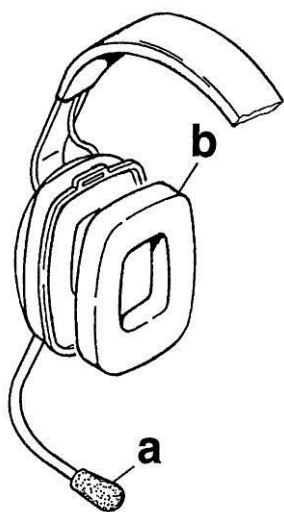
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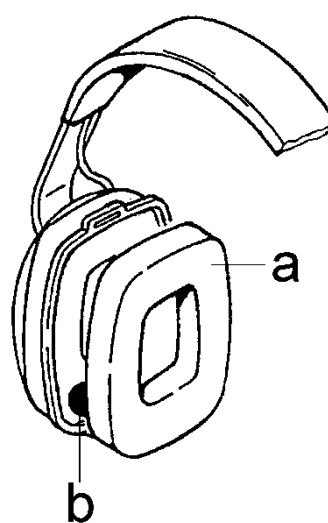
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Legend for figure1 – Headset (basic equipment)

- | | |
|------------------------------------|-------------------------------------|
| a Adjustable headband | f Flexible gooseneck |
| b LH ear defender | g RH ear defender |
| c ON/OFF switch and volume control | h Headband cable plug-in connection |
| d Ear defender cushion | |
| e Microphone and windscreen | |

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 outside or in damp ambient conditions but keep them always clean and dry at normal atmospheric humidity. CeoTronics products must not be stored in areas with temperatures above +80° C, e.g. in summertime on the rear window shelf of a car. If not otherwise indicated on the product, the following temperature ranges are allowed for intrinsically safe CeoTronics products: for operation -20 to +40° C, for storage -40 to +80° C.
- 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!

- Intrinsically safe (explosion-proof) CeoTronics products are used wherever potentially explosive atmospheres – e.g. explosive gases or vapours in conjunction with air – exist or can be present. For intrinsically safe CeoTronics products the special “Ex” advises in this manual have to be respected.
- CeoTronics products that are not intrinsically safe (explosion-proof) and therefore 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 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:



- *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:



- *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:

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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.

1.1 Additionally Safety Instructions

- *Muffs with a high degree of passive noise attenuation are used for CeoTronics headsets with headset muffs. If not stated otherwise, it is our experience that the passive noise attenuation of the headset muffs is reduced by approx. 3 dB due to the electronics that are integrated into the headset muffs. As a rule no empirical values are available for non-standard products.*

Information to noise attenuation values, which result from representative measurements of a named place, are to be regarded as orientation values, which cannot be guaranteed, if no "Type Examination Certificate" is present.

Note that it acts with electronic communication systems of CeoTronics, not around "Personal Protective Equipment" in the sense of the "PPE Directive 89/686/EEC", if not differently indicated.

At very high noise levels that exceed the passive protective effect of the headset muffs we recommend that ear plugs be worn as an additional measure. If in doubt, ask your safety officer or company doctor. Best noise attenuation exists only if the muff padding is in perfect condition. This should be replaced at the latest after every 6 months of use.

- *In the case of headsets with headset muffs that protect against harmful ambient noise and that are not equipped with additional electronics for level-limited ambient sound reception, take heed that the audibility of warning signals, warning calls etc. is also impaired!*

2. Description

2.1 General

The headset is a transceiver-receiver unit for wireless duplex communication over short distances between maximum five users. The working range depends on the local conditions. Up to four Standard headsets can subscribe to one base headset. Channel selection is done automatically by the headsets. High level of listening and interference protection is provided.

The headset protects against harmful ambient noise and makes possible communication in noisy environments. The headset microphone is either a noise-canceling gooseneck microphone with windscreen or a throat microphone.

The system consists of at least one Base headset and one Standard headset. Up to four Standard headsets can be operated in conjunction with the Base headset.

A label on the ear defenders of the headset identifies Base and Standard units.

2.2 Integration into a CT-DECT system

When part of a CT-DEC system one of the following Base stations, i.e. »CT-DECT Conference« or »CT-DECT Case« or »CT-DECT desk station« is used in lieu of the Base headset. Please attend to the special CeoTronics operating manuals for these Base stations.

2.3 Power supply and operating time

A rechargeable lithium polymer storage battery, fitted in the RH ear defender, supplies the headset with 3,7 V/ 1250 mAh power. With a fully charged storage battery, continuous cycle operating time is approximately 10 hours.

2.4 Audio signals used

Two different audible tones are used for signaling operating states. The tone used for indicating positive operating states has a higher frequency than the one indicating negative operating states. Different operating states are signaled by a varying number of consecutive high or low tones.

Positive acknowledgement tone

All positive operating states are indicated by a high tone.

Negative acknowledgement tone and error tone

All negative operating states and error states are indicated by a low tone.

2.5 Sidetone

The sidetone during conversation is audible in the headsets only after the headsets did successfully establish connection with one another. The sidetone allows permanent monitoring whether a connection is active or not.

2.6 ON/OFF switch for the microphone

With the »MIC ON « switch (figure 3/b) located on the back of the RH ear defender, the microphone can be switched ON and OFF. Three switch positions are available, but communication is possible only after establishment of connection has been successfully completed.

Center position (receiving): The headset microphone is switched-off. You can receive (hear) only.

Lower sensing position »MIC ON« (transmitting and receiving): The headset microphone is switched-on. You can speak in the microphone and simultaneously receive messages as long as you keep the switch depressed in this position. When releasing the switch returns to the center position (receiving).

Upper »fixed« switch position »MIC ON« (transmitting and receiving): The headset microphone is permanently switched-on. You can speak in the microphone and at the same time receive messages.

3. Information concerning explosion proofness

3.1 Equipment

Type designation: CT-DECT headset/Ex
Target group: Skilled electricians and instructed personnel in accordance with the National Safety Regulations and Accident Prevention Rules.



3.2 General

This CeoTronics product is also available as an intrinsically safe version for deployment in explosion hazard areas. It conforms to the European standards for intrinsically safe products (ignition protection type "i") and meets the requirements of protection class Ex ib IIB T4. For the explosion-proof class please refer to the explosion-proof marking on the product. Use the product only in explosion hazard areas that do not require a higher protection class than that specified. If in doubt ask your safety officer or superior.

Before using this product please read the explosion hazard instructions carefully and comply with the explosion hazard instructions in order to avoid any risk whatsoever of an unintended explosion.

3.3 Compliance

The intrinsically safe equipment complies with the requirements of the European Standards EN 60079-0 and EN 60079-11. It has been developed, manufactured, and tested in accordance with state-of-the-art technology and in compliance with DIN EN ISO 9001.



3.4 Product liability

We hereby expressly point out that any repair, modification and/or replacement of components – including connectors and cables – may only be carried out by CeoTronics or specialist firms duly authorized by CeoTronics. Otherwise our guarantee and product liability are void and passed on to the party responsible.

3.5 Use of intrinsically safe equipment

When using intrinsically safe CeoTronics equipment in potentially explosive environments the EX protection class indicated on the Ex marking must be strictly observed. Using CeoTronics equipment without an Ex marking, or the Ex marking of which has become illegible, in hazardous locations is strictly prohibited!

3.6 Marking

Manufacturer: CeoTronics AG
Type designation: CT-DECT headset/Ex
Ex Protection class: Ex ib IIB T4
Certificate number: TÜV 07 ATEX 552822 X
Marking in accordance with
EC Directive 94/9/EG:  ₀₀₃₅  II 2 G

3.7 Technical data

Ambient temperature: -20 to +40° C
Protection type: ≥ IP 40

3.8 Electrical data

Medium transmitting power: 10 mW
Maximum transmitting power: 500 mW

Power provided by integrated lithium polymer storage battery:

Type capacity: 1250 mAh

Nominal voltage: $U_{\text{Nenn}} = 3,8 \text{ V}$
Maximum voltage: $U_{\text{max}} = 4,2 \text{ V}$

Electrical data of charging device:
see chapter 9.1.2

3.9 Electrostatic charge



The unit is partially made of non-conducting plastic material. It is designed in such a way, that, if properly used (gas group IIB) no unacceptable electrostatic charge occurs.

3.10 Installation



For installation/operation purposes the respective national safety regulations and accident prevention rules, the generally accepted state-of-the-art technology, and these operating instructions are authoritative.

3.11 Ex instructions



Non-observance of the following Ex instructions could result in an unintentional explosion!

- (1) *Intrinsically safe CeoTronics equipment is not appropriate for use in category 1 (zone 0).*
- (2) *Operate CeoTronics equipment in accordance with the intended use in sound and clean condition.*
- (3) *Modifications on intrinsically safe CeoTronics equipment are strictly prohibited.*
- (4) *In case of any malfunction of intrinsically safe CeoTronics equipment, it must be removed from the Ex zone immediately.*

4. Commissioning and operation

4.1 Wearing the headset and adjusting the microphone

- a. Put the headset on. Adjust the ear defenders by moving the headband so that the ear defender cushions cover the ears well and the headband is centered on your head. Only this way best possible acoustic insulation is achieved.

For reasons of hygiene we recommend the use of washable cotton sweat absorbers (see chapter 11) which cover the ear defenders and make wearing headsets more comfortable.

PLEASE NOTE:

Do not »twist« the flexible gooseneck. Do not carry the microphone from the gooseneck. Use the microphone with windscreen only.

- b. Adjust the flexible gooseneck so that the microphone is approx. 5 mm in front of your lips. This ensures optimal voice transmission and maximum noise compensation.

4.2 Wearing the headset with a throat microphone

The headset may be equipped with a throat microphone in lieu of the gooseneck microphone. Place the headband around your neck and position the microphone at you throat.

4.3 Wearing the headset with an auxiliary strap

For quick body movements or extreme postures or in conjunction with safety helmets, the headset can be fastened on your head with the help of an auxiliary strap (figure 2/a). Put the headset on, fold the headband to the rear (figure 2/c) and use it as a neckband. Make sure that auxiliary strap and neckband are securely fastened.

4.4 Switch-on and automatic establishment of connection

- a. The headset is switched-off, if the ON/OFF switch and volume control (figure 4/a) is in the »OFF« position. Switch the headset on using the ON/OFF switch / volume control (rotary button).

After switch-on a beep can be heard in the headsets. After another 5 to 10 seconds you hear a double beep, signaling that the headsets are synchronized. Now the headsets initiate the automatic process of establishing connection between one another. Once the connection is established a high beep is heard in the headsets indicating that they are now ready for duplex communication.

For speaking, the microphone must be switched on (see chapter 2.6).

- b. Adjust the volume for your headset earpieces with the volume control button.

4.5 Working range warning

When near the working range limit a high 3-tone sequence sounds periodically in approx. 5-second intervals in the Base and Standard headsets. When passing the range limit, the connection is cut. As soon as the headsets are back within the range of reception, the connection is automatically reestablished. First a high double beep sounds in the headsets followed by a high single beep, signaling that the connection is reestablished.

4.6 Low battery warning

In case of low battery voltage a sequence of 3 low tones is heard in the headset in approx. 60-second intervals.

5. End of operation

Switch off the headset with the ON/OFF switch/volume control (figure 4/a) (switch position OFF) in order to save the headset's battery. Charge the storage battery of the headset.

6. Exchangeable ear defender

General

The RH ear defender of the headset containing the storage battery can be easily dismantled and exchanged against another one with a new fully charged battery. Thus, the headset can be used while the storage battery is being recharged.

Exchanging the ear defender

Do not exchange the ear defender inside an Ex zone. Switch the headset off. Unscrew the screwed union (figure 5/a) in the cable to the RH ear defender and unplug the plug-in connection. Pull the headband (figure 5/b) up to the stopper out of the headband holder (figure 5/c) on the RH ear defender. Push the snap-in clip (figure 5/d) on the inner side with your thumbnail or an appropriate tool away from the headband and pull the ear defender off the headband. Install the new ear defender with the charged storage battery in reverse order. The following exchangeable ear defenders are available:

Name and description	Part no.
Exchangeable ear defender for DECT headset ATEX Standard with gooseneck microphone	14 07 010
Exchangeable ear defender for DECT headset ATEX Base with gooseneck microphone	14 07 011
Exchangeable ear defender for DECT headset ATEX Base with throat microphone	14 07 012
Exchangeable ear defender for DECT headset ATEX Standard with throat microphone	14 07 013

7. Helmet mounting

Both ear defenders can be supplied without headband for lateral mounting on a safety helmet. For the different types of helmets various mounting kits are available. A separate assembly instruction comes with the mounting kits. Install the connecting cable appropriately inside the helmet between the two ear defenders. The headband can be used additionally (see chapter 4.3).

If noise protection is not required for the operation, the two mounting brackets with the ear defenders can be folded away.

8. Safekeeping – Storage

Store the cleaned device in a dry place at normal ambient temperature and atmospheric humidity. Storage temperatures may not fall below -20°C or exceed +60°C because of the integrated lithium polymer storage batteries.

9. Recharging storage batteries

WARNING

Never use battery chargers to recharge non-rechargeable batteries. Never open storage batteries or throw them into fire. Dead (defective) storage batteries must be disposed off environmentally safe. Do not throw into domestic waste!

PLEASE NOTE:

***“Special requirement” as per item (17) of the Ex Type Certificate:
Do not recharge in potentially explosive areas!
Use CeoTronics charger, part no. 0910135, only.***

Using other charging devices may destroy the storage battery or the electronics of the charger.

For recharging storage batteries, always switch the headset off to recharge the battery to its maximum capacity. Even if the headset has been switched off, the storage battery is slowly but continuously running down because of the built-in electronics. To save battery life we recommend in case of non-use (latest after 2 weeks), to recharge the storage battery.

9.1 Charging device for 3.7 V/1250 mAh lithium polymer storage battery

9.1.1 Use

The charger is intended for recharging 3.7 V DC/1250 mAh lithium polymer storage batteries in the CT-DECT headset/Ex. The charger is equipped with battery charger leads with a 4-pin connector for connection to the 4-pole charging socket of the CT-DECT headset /Ex.

WARNING

Do not open the charger. Repairs permitted by the manufacturer only.

9.1.2 Technical data – Features

Input voltage: 100 – 240 V / 50 – 60 Hz
Charge end voltage: 4.2 V DC ±1 %
Charging current: 800 mA ±10 %
Charging time: about 2-3 hours

- State of battery charge prior to recharging is irrelevant
- Charging process monitored by microcontroller
- Detection of battery defects and charging current cutoff
- Automatic recharging if battery voltage falls below a determined value

9.1.3 LED indicators

Green LED »POWER« illuminated:	Charger connected to power supply and ready for use
Red LED »CHARGE« flashing:	No battery inserted, battery defective or completely run down
Red LED »CHARGE« illuminated:	Battery is being recharged
Red LED »CHARGE« extinguished:	Battery is completely recharged

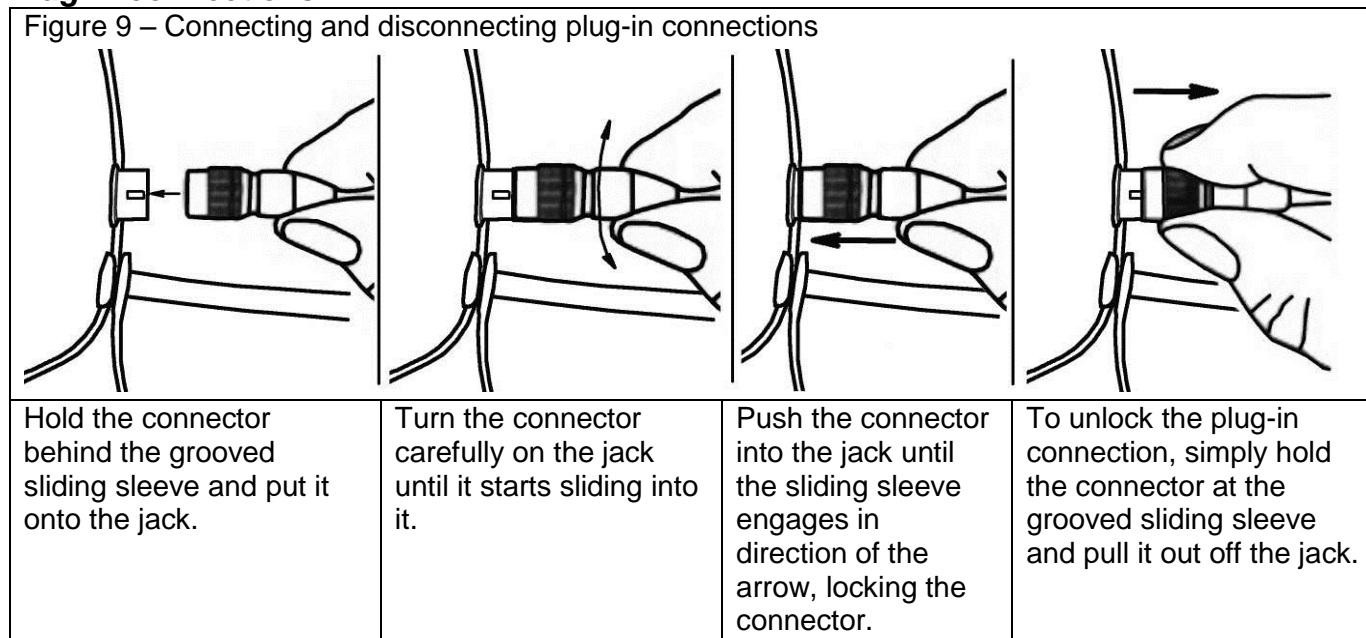
9.1.4 Starting the battery charger and charging

Remark about charging: The charging unit is suitable for use in dry rooms at normal ambient temperature. The device may not be used in potentially explosive (Ex) areas. While charging the unit may not be covered up.

Charging: Connect the charger to a properly installed life power socket. The green LED »POWER« illuminates. Connect the charging unit via its battery charger leads to the charging socket of the disconnected device. The battery charging socket (see figure 3/a) is located on the RH ear defender. After connection of the battery the red LED »CHARGE« is continuously lit. In case the red LED »CHARGE« keeps on flashing after connecting the battery, this indicates that the battery is defective or completely run down.

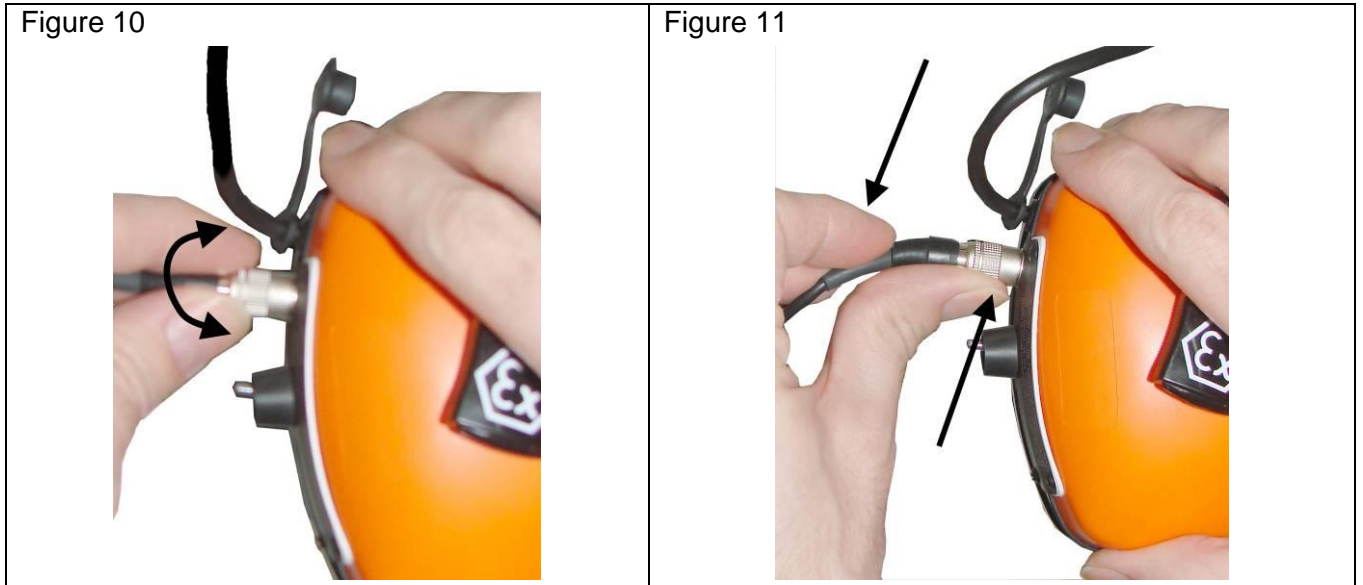
Charging time for a dead battery is approximately 2-3 hours. As soon as the battery is fully charged, the charger switches the charging current automatically off and the red LED extinguishes. After a possible power outage while charging is in process, the charger resumes the recharging process automatically. After about 10 hours, the battery charger switches off automatically. Up to this moment the battery charge is maintained.

Plug-in connections

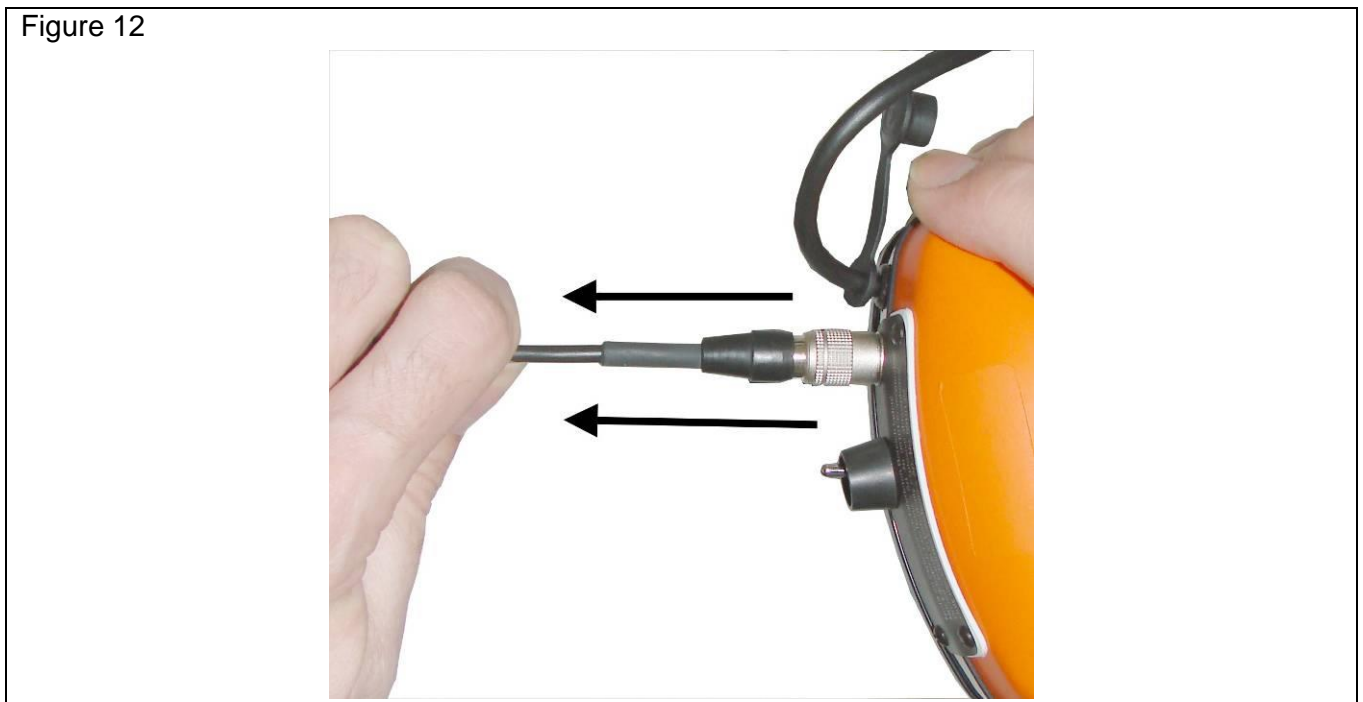


⚠ CAUTION!

The locked plug-in connection may neither be twisted (figure 10) nor bent (figure 11). Improper handling could damage the plug-in connection.



Never pull from the cable of the plug-in connection. Pulling the cable may damage the plug-in connection (figure 12).



10. Maintenance

10.1 Visual inspection

Inspect the ear defenders and particularly the headset cushions regularly for signs of cracks, fissures, and deterioration. Replace the headset if ear defenders are damaged and send it to CeoTronics for repair. Replace damaged or worn headset cushions as indicated in item 10.4, latest after 6 months of use.

10.2 Cleaning

ATTENTION!

***Make sure no humidity could penetrate into the device during cleaning.
Do not use solvents (e.g. benzene, alcohol, etc.) for cleaning!***

Remove loose dust with a soft brush. Clean the outside of components, if necessary, with an appropriate clean cloth, only lightly moistened with clear water, and then rub it thoroughly down. If heavily soiled, a few drops of rinsing agent may be added. Clean the connector pins with a commercial cleaning agent.

10.3 Changing the microphone windscreen

Remove the windscreen (figure 6/a) from the microphone and replace it.

10.4 Changing the headset cushion

Remove the headset cushion from the ear defender (figure 6/b) and replace it. Make sure, the new headset cushion is completely engaged.

10.5 Changing the headband

Remove the two retainers (figure 2/b) and pull the headband (figure 2/a) out of the slots in the ear defenders. Install the new headband as shown in figure 2.

11. Accessories and incidentals

Name and description	Part no.
Carrier bag for headset, gray	40 35 030
Charger for 3.7 V/1250 mAh lithium polymer storage batteries, charging time approx. 3 hours. For 100...240 V AC 50/60 Hz power supply	09 10 135
Headset cushions, 2 units	50 00 501
Windscreen for microphone, 10 units	50 02 201
Comfort set, consisting of 25 pairs washable cotton sweat absorbers	40 10 025
Headband with two retainers	50 00 707

12. Subscription of Standard headsets to the Base headset

Base headset and Standard headset(s) can also be operated in conjunction with other CT-DECT equipment. Subscribing a headset to one of these devices is done analogously and in the same order as described in chapter 12.2. In doing so one must bear in mind which one is the Base unit and which one a Standard unit.

For the subscription process, always the ON/OFF switch and the subscription switch of the CT-DECT devices are used.

Always follow the appropriate CeoTronics instruction manual for the other CT-DECT device.

12.1 General

➔ TAKE NOTE:

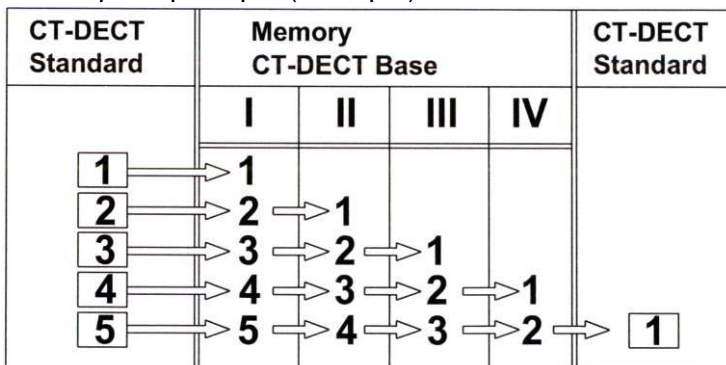
A subscription is a one-time procedure, normally performed in factory.

A subscription must be repeated only in case a headset, not subscribed to the system, shall be operated in the system.

Every headset has its own internal identification number. For the first time Base headset and maximum 4 Standard headsets must be assigned to one another. This one-time subscription is performed manually on the Base headset and the maximum 4 Standard headsets with the help of an operating procedure.

Should a fifth Standard headset be subscribed to the Base headset, then the Standard headset subscribed first would be deleted from the memory of the Base headset. See the following example.

Subscription principle (example)



A Standard headset which has been deleted from the Base headset's memory cannot communicate anymore with the system and must be subscribed anew to the Base headset, following the subscription instructions. If a subscription has been successfully completed, the identity of the subscribed user is stored in the headset's memory. The Standard headset can store one Base headset. The Base headset can store 4 successfully subscribed Standard headsets.

Timeout

If a subscription of a Standard headset to the Base headset is not successfully completed within maximum 2 minutes after starting the process, a timeout occurs. A timeout causes in the Base headset the deletion of data of max. 4 stored Standard headsets or in the Standard headset the deletion of the stored data of the Base headset.

After a timeout all required Standard headsets must be newly subscribed to the Base headset.

→ TAKE NOTE:

- *Two or more Standard headsets cannot be subscribed simultaneously to the Base headset, always only one at a time. In case two or more Standard headsets are used in conjunction with the Base headset, it is recommended to subscribe all Standard headsets one after the other to the Base headset, as it is possible to delete Standard headsets from the Base headset.*
- *Follow the instruction step sequence.*
- *After subscription all newly subscribed devices have to be switched off again.*

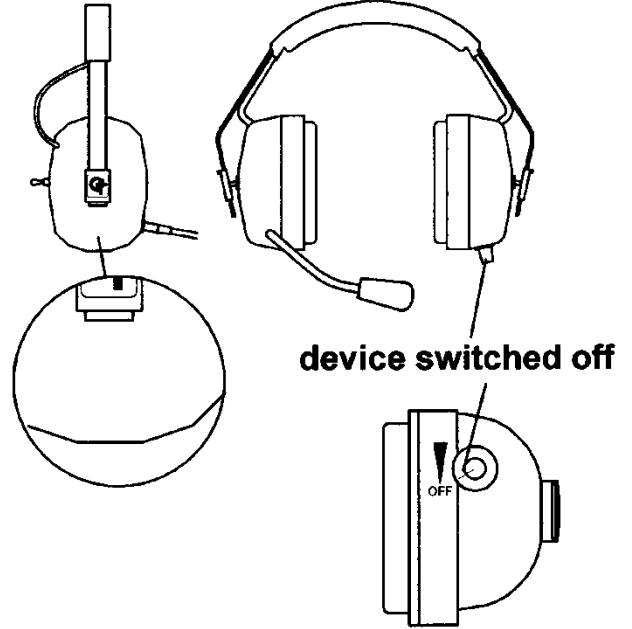
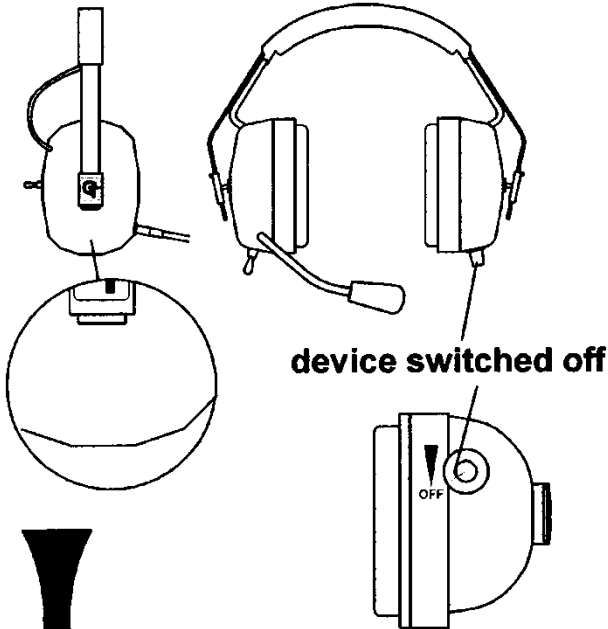
12.2 Subscription procedure

Step 1

All DECT-devices are switched OFF

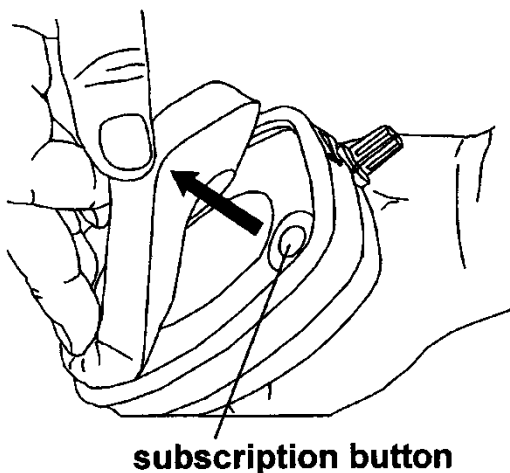
Base device

Standard device



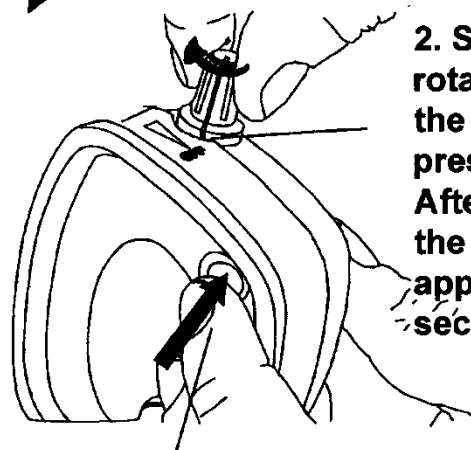
Step 2

remove the left ear cushion at both headsets



Step 3

Base device



2. Switch on the rotary knob, while the button is keep pressed. After, keep pressed the button approximately 2 seconds.

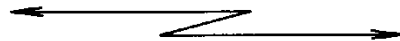
1. Button press and keep pressed

Step 4 Standard device, the same procedure like on base device

Step 5



On-air subscription
is running

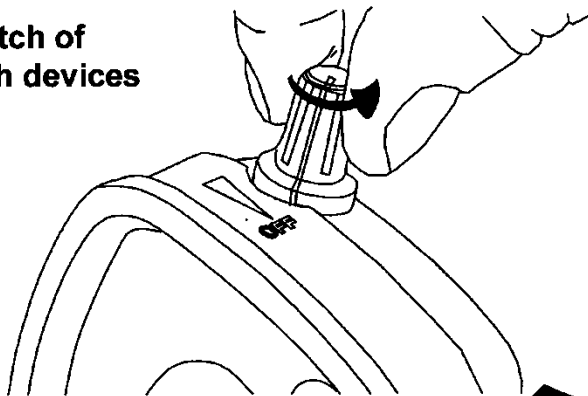


After approx. 30 seconds a high double-beep tone can be heard in both headsets. Two low tones before the high double-beep tone signalize an incorrect subscription. Start the on-air subscription procedure again.

If no successful the on-air subscription achieved after 2 minutes, a «Time Out» occurs. All devices have to be subscribed again.

Step 6

1. Switch of
both devices



2. Attach the ear cushions
again at the shells.

7. After restart of the CT-DECT
devices is a Duplex-
communication possible.

You can subscribe till
three other standard
devices with the same
procedure to the base
device. (Steps 1 - 6)

Switch the devices off in order to save batteries if they are not used after subscription.

EC Type Certificate TÜV 07 ATEX 552822 X

Translation

(1) **EC-Type Examination Certificate**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 94/9/EC**

(3) **Certificate Number** TÜV 07 ATEX 552822 X

(4) for the equipment: CT-DECT Headset/Ex

(5) of the manufacturer: **GeoTronics AG**

(6) Address: Adam-Opel-Str. 6
63322 Rödermark

Order number: 8000552822

Date of issue: 2007-11-01

(7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV NORD CERT GmbH, notified body No. 0044 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive. The examination and test results are recorded in the confidential report No. 07203552822.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2004

EN 60079-11:2007

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-type examination certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment or protective system must include the following:

 **II 2 G Ex ib IIB T4**

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body



Schwedt

Hanover office, Am TÜV 1, 30519 Hanover, Fon +49 (0)511 986 1455, Fax +49 (0)511 986 1590



This certificate may only be reproduced without any change, schedule included.
Excerpts or changes shall be allowed by the TÜV NORD CERT GmbH

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page 1/2

(13) **SCHEDULE**

(14) **EC-Type Examination Certificate No. TÜV 07 ATEX 552822 X**

(15) Description of equipment

The CT-DECT Headset/Ex is consisting of a wireless communication system integrated in an ear muff type "Viking". The headset can be equipped with a boom microphone or with a dynamic throat microphone. The ear muff can be fit with either a headband/neckband or with helmet arms and three different helmet fixations.

Technical data

Power supply	internal Lithium-Polymer Accumulator type Varta PoLiFlex [®] PLF 503759 C not replaceable
Transmitting power	max. 500 mW
Temperature range	-20 °C to + 40 °C

(16) Test documents are listed in the test report No. 07203552822.

(17) Special conditions for safe use

The loading of the accumulator may only occur outside of the hazardous area and with the battery charger Art.-No. 0910135 of the manufacturer.

(18) Essential Health and Safety Requirements

no additional ones

Translation

1. SUPPLEMENT

to Certificate No.	TÜV 07 ATEX 552822 X
Equipment:	CT-DECT Headset/Ex
Manufacturer:	CeoTronics AG
Address:	Adam-Opel-Str. 6 63322 Rödermark Germany
Order number:	8000430967
Date of issue:	2014/08/19

Amendments:

For the manufacturing of the CT-DECT Headset/Ex the documents listed in the test report must be additionally considered in the future.

The changes relate to the current editions of the specified standards.

The electrical data and all other data apply unchanged for this supplement.

The marking is in the future

 II 2 G Ex ib IIB T4 or II 2 G Ex ib IIB T4 Gb

The equipment incl. of this supplement meets the requirements of these standards:

EN 60079-0: 2012

EN 60079-11: 2012

(16) The test documents are listed in the test report No. 14 203 136750.

(17) Special conditions for safe use

no additional ones

(18) Essential Health and Safety Requirements

no additional ones

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, notified by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the notified body


Meyer

Hanover office, Am TÜV 1, 30519 Hannover, Tel.: +49 (0) 511 986-1455, Fax: +49 (0) 511 986-1590



Konformitätsinformation

Hiermit erklärt die CeoTronics AG, dass sich die Geräte „CT-DECT Headset / EX Base“
„CT-DECT Headset / EX Standard“
in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 2014/53/EU (RED) befinden.

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



Information of Conformity

Hereby the CeoTronics AG declares, that the devices „CT-DECT Headset / EX Base“
„CT-DECT Headset / EX Standard“ are
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.

CeoTronics AG

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63322 Rödermark
Tel. +49 6074 8751-0
Fax +49 6074 8751-676
E-Mail sales@ceotronics.com



Certificate No. 01100004023 (ISO 9001)

Certificate No. 01220004023 (ATEX)

**Deutschland und
Internationaler Vertrieb**

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**Deutschland und
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