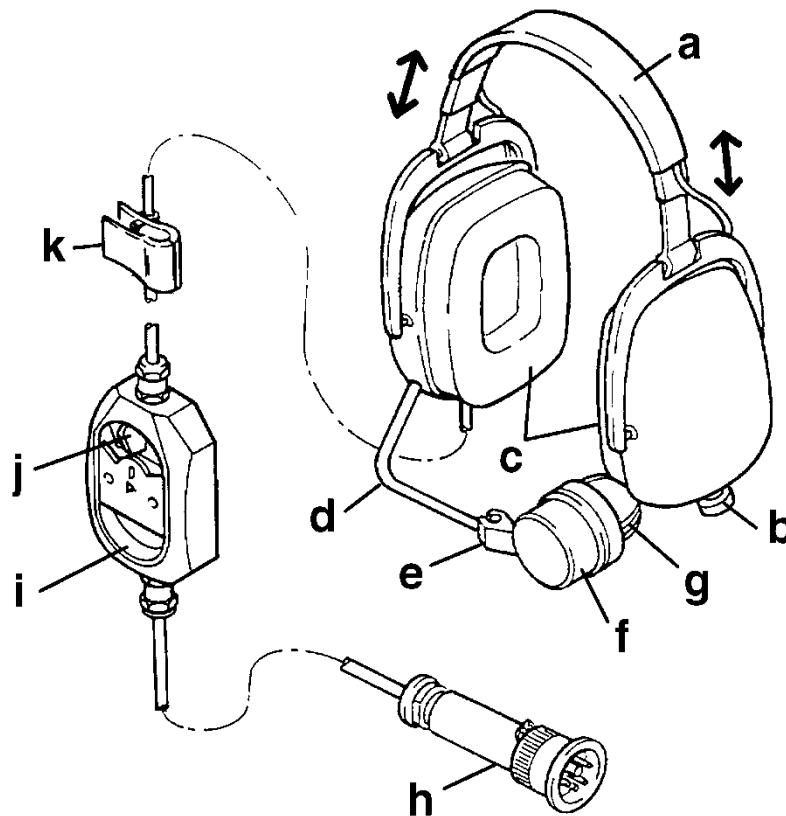


CT-Sound Powered Headset

Operating Instructions

Fig. 1 CT-Sound Powered Headset (example)



- a Adjustable headband
- b Secured rubber plug to bypass the noise attenuation of the left ear muff
- c Ear muffs with speakers and ear cushions
- d Flexible microphone boom
- e Microphone hinge

- f Microphone housing
- g Microphone
- h Connection plug (example)
- i PTT button unit with fixing clip on the rear
- j Red switching lever
- k Fixing clip

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 We ensure recycling and / or disposal of outdated equipment in compliance with the applicable environment protection law.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 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 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 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:



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 Additional safety instructions

Type-tested 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. Full 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.

2. Description

General: The Sound Powered Headset with ear muffs (see Fig. 1 on the title-page) protects against harmful ambient noise and allows cable-bound duplex intercom communication. It does not need any power supply and is protected against dust, moisture, shock, and excessive atmospheric pressure. Depending on the usage requirements various headsets are available. In this operating instruction the mostly used headset is described. The operation of other headsets is similar.

Speakers and microphone: The headset is normally equipped with two speakers. The microphone is permanently mounted in a housing that is fixed to the flexible microphone boom via a hinge. Other microphones are available.

PTT button unit: The waterproof PTT button unit (PTT = push to talk) is provided with a fixing clip on the rear. The red switching lever allows three switch positions for carrying out intercom communication (see section 3, item »e«).

Connection cable and connection plug: For connection of the headset to the communication device various connection cables and connection plugs are available. The connection plug is not included in the supply and depends on the communication device.

3. Putting into operation and operation

- a. **Putting on the headset:** Put on the headset. Take care for a perfect comfortable fit. Only when the ear cushions are properly located around the ears the best noise attenuation of the ear muffs is provided. Adjust the height of each ear muff equally on both sides while holding the headband down until the ear cushions have a tight and comfortable fit. The headband should sit straight and comfortable on the top of the head.
- b. **Fixing the PTT button unit:** Fix the PTT button unit with the rear side clip and the clip at the cable to your clothing so that the PTT button unit is within easy reach and the headset is protected against tensile stress.
- c. **Connecting the headset and putting it into operation:** Connect the headset via the connection plug to the communication device. If not carried out already switch on the communication device and adjust the receive volume for your headset on the communication device for your personal comfort.

WARNING

For adjustment of the flexible microphone boom use only the flexible mid-section. Never twist the flexible microphone boom and the microphone housing. Never carry the headset by the microphone boom.

- d. **Adjustment of flexible microphone boom:** Adjust the flexible microphone boom so that the microphone is positioned at a distance of approx. 1 cm (0.4 in.) in front of your lips. Only then is optimal speech transmission provided. The accurate positioning of the microphone can be achieved by means of the hinge between microphone boom and microphone housing.
- e. **Speaking and listening:** The red switching lever on the PTT button unit provides three switch positions for carrying out intercom communication.
Neutral mid-position (listening) – The headset microphone is switched off. You can listen in the intercom only.
PTT keying position (speaking and listening) – By pushing the switching lever in this position the headset microphone is switched on. You can speak into the microphone while the switching lever is held in this position and at the same time you can listen in the intercom. As soon as you release the switching lever the microphone is switched off and the switching lever goes back to the neutral mid-position.
Permanent PTT position (speaking and listening) – The headset microphone is permanently switched on. You can speak and listen in the intercom.
- f. **Hearing of ambient sound:** Pull the secured rubber plug out off the left ear muff to bypass the noise attenuation of the ear muff. This allows in addition to intercom communication the hearing of ambient sound.

4. Safekeeping – storage

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

5. Maintenance

5.1 Visual inspection

Regularly examine the devices and in particular the headset muffs, ear cushions, cable and plug for signs of fractures, cracks and wear. Replace damaged or worn ear cushions in accordance with section 5.3, and, even if not damaged, every 6 months of use at the latest. Replace also, as required, the cover foams inside the ear muffs, if they are soiled.

5.2 Cleaning



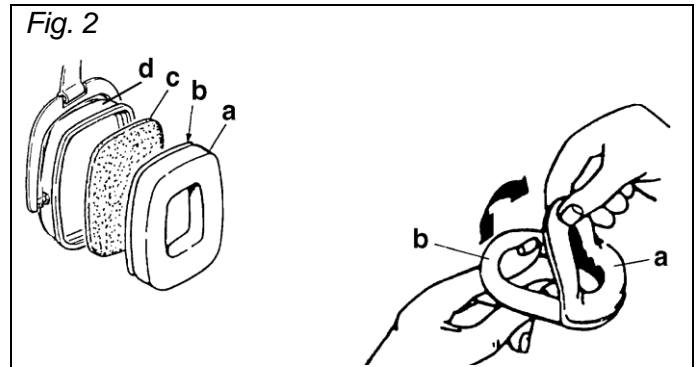
WARNING

When cleaning ensure that no moisture is allowed to penetrate to the inside of the unit. Do not use any solvents (e.g. benzine, alcohol etc.).

Remove any loose dust with a soft brush. If necessary, clean the outside with a suitable clean tissue only slightly moistened with clear water and subsequently rub the unit dry again. If heavily soiled, a little dishwashing liquid can be used in addition. If necessary clean the plug terminals with a commonly available contact cleaning agent.

5.3 Replacement of ear cushions and cover foams (Fig. 2)

- a. Pull with force – but carefully – the shell-ring (b) together with the ear cushion (a) off the ear muff (d). Replace the cover foam (c).
- b. Pull the old self-adhesive ear cushion (a) off the shell-ring (b). Clean the shell-ring. Pull the protective foil off the new ear cushion and adhere the new ear cushion to the shell-ring. Attach shell-ring and new ear cushion to the ear muff. Ensure that the shell-ring audibly engages.



Designation and description	Art. No.
Ear cushion, self-adhesive, for AS shells, 1 pair	50 00 502
Cover foam 6 mm, weatherproof, 1 piece	50 00 308



Certificate No. 01100004023 (ISO 9001)

Certificate No. 01220004023 (ATEX)

**Germany and
International Sales**

CeoTronics AG

Adam-Opel-Str. 6
63322 Rödermark
Tel. +49 6074 8751-0
Fax +49 6074 8751-676
E-Mail sales@ceotronics.com

USA/Canada/Mexico

CeoTronics, Inc.

512 South Lynnhaven Road, Suite 104
Virginia Beach, Virginia 23452
Tel. +1 757 549-6220
Fax +1 757 549-6240
E-Mail sales@ceotronicsusa.com

Spain

CeoTronics S.L.

C/Ciudad de Frias 7 y 9
Nave 19
28021 Madrid
Tel. +34 91 4608250 51
Fax +34 91 4603193
E-Mail ventas@ceotronics.es

**Germany and
International Sales**

CT-Video GmbH

Gewerbegebiet Rothenschirmbach 9
06295 Lutherstadt Eisleben
Tel. +49 34776 6149-0
Fax +49 34776 6149-11
E-Mail ctv.info@ceotronics.com