

CT-ClipCom Digital

Operating Instructions



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1. Important safety instructions



For the use of the device notice the national safety and accident prevention regulations and the following safety instructions shown in italics in this instruction manual.

- Before using CeoTronics products read completely the appropriate operating instructions. If in doubt, ask our technical staff.
- Use only CeoTronics products without damage and wear.
- 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.
- Do not store CeoTronics products outside 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 allowed for CeoTronics products: -10 to +55° C (+14 to +131° F) for operation, -40 to +80° C (-40 to +176° F) for storage.
- Do not immerse a CeoTronics product into water, if it is not expressly specified for this purpose.
- When using CeoTronics products that are equipped with connection leads ensure that the latter do not get caught up in operational machinery or wheels!
- 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 refuelling cars, aircraft etc.). Devices that are not explosion-proof can unintentionally trigger off explosions in such areas!
- Connect CeoTronics accessories to a device or disconnect them from a device only when the device is switched off.
- After switching on the communication system, set the reception volume to approx. 1/2 the available loudness volume and then test the audible 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 ear plugs. If in doubt, ask your safety officer or company doctor.

- 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.
- Keep CeoTronics products out of the reach of children and any other persons who are not familiar with the handling and operation thereof.
- Packaging materials, e.g. filling materials and plastic bags are not toys and have to be kept out of the reach of children. There is a risk of children ingesting them and choking!
- Safe operation requires clean devices. Ensure that the devices (microphones, connectors etc.) are clean and in good condition at all times.
- CeoTronics products may only be used for the specific application envisaged.
- 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.
- Keep these operating instructions for later use.

2. Description

General

The CT-ClipCom Digital is a binaural communication system for use with radio equipment. The PTT buttons (PTT=push-to-talk) of the system are used to transmit PTT commands to the radio unit or similar communication systems.

The following two system configurations are available:

CT-ClipCom Digital ear microphone consisting of one ear microphones plus one earphone, a PTT transmit button, and an optional CT-Wireless-PTT

CT-ClipCom Digital gooseneck microphone consisting of one earphone plus one earphone with gooseneck microphone, a PTT transmit button, and an optional CT-Wireless-PTT

The earphones/ear microphones are electro-acoustic transducers, used either as microphones (for transmitting) or earphones (for receiving), worn in the ear with individually formed ear moulds.

The system is optionally equipped with ambient sound reception (ASR) for both sides.

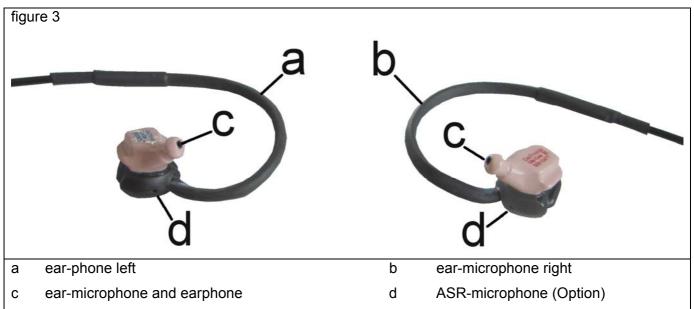
Power is normally provided by the radio unit.

The components of the CT-ClipCom Digital are supplied either firmly connected or with plug-type connectors.

System overview (examples)	
figure 1 CT-ClipCom Digital gooseneck microphone	figure 2 CT-ClipCom Digital ear-microphone
a b c c d f	a c d e e
a ear-phone	a ear-microphone
b earphone with gooseneck microphone	b ear-phone
c connector	c connector
d PTT-button	d PTT-button
e CT-Wireless-PTT (Option)	e CT-Wireless-PTT (Option)
f accessories or two-way radio (example, not in scope of delivery)	f accessories or two-way radio (example, not in scope of delivery)

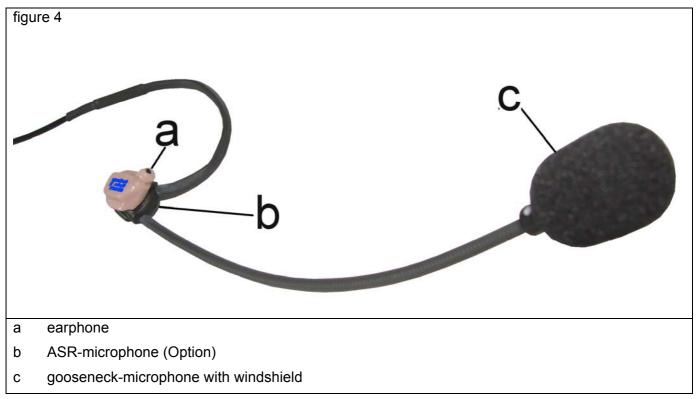
2.1 Ear-microphone

The ear-microphone is at the right side and is identified by a red marking. The earphone is at the left side and is identified by a blue marking. The casing of the ear-microphone contains the optional ASR-microphone (figure 3/d) in addition to the ear-microphone itself (figure 3/c). For using the ear-microphone it is just clipped onto the individual ear mould (see 2.3).



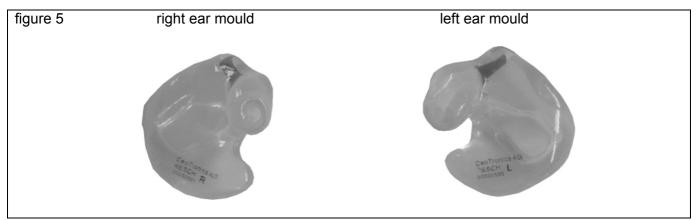
2.2 Earphone with gooseneck-microphone

The earphone with gooseneck microphone is available for the left ear only. Gooseneck microphone with protective cover (figure 4/c) and optional ASR-microphone (figure 4/b) are attached to the earphone. For using the earphone it is clipped onto an individual ear mould.



2.3 Individually ear mould

This ear mould (example Fig. 5) ensures maximum wear comfort and transmission quality. It is moulded according to an individual impression of the auditory canal either for wearing in the right ear or in the left ear. For different personal needs different variants are available. The earphone is "clipped" in the ear mould. The ear mould is worn in the ear.

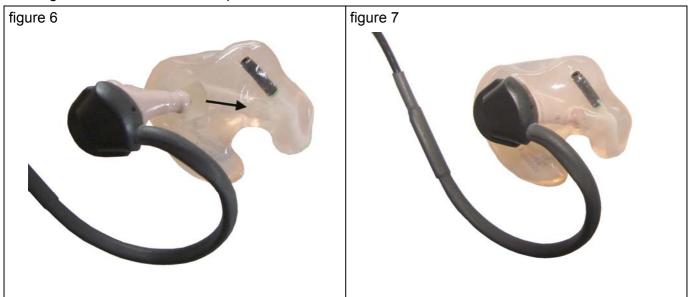


Installing the ear microphone in the ear mould

➔ PLEASE NOTE

Earphone and ear mould for the right ear have a red ink marking, the ear microphone and ear mould for the left ear are marked with blue ink.

- a. Take the ear mould in one and the ear microphone in the other hand. The sound channels of ear mould and ear microphone must be looking into the same direction (figure 6).
- b. Push the ear microphone in direction of the arrow into the ear mould until it "engages". Figure 7 shows the ear microphone inserted in the ear mould.



Removing the earphone from the ear mould figure 8

a. Take the ear mould in one hand and press the two ends of it against each other (figure 8) until ear microphone "disengages" from the ear mould.

\triangle ATTENTION!

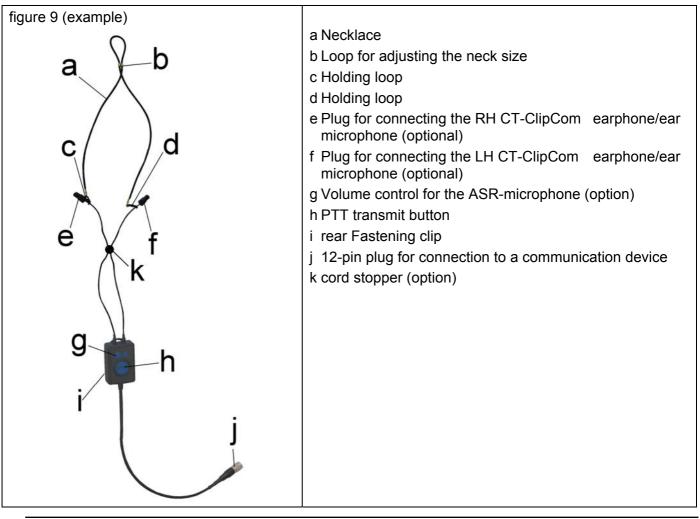
Never extract the earphone from the ear mould by pulling the cable.

b. Now hold the earphone with the other hand and pull it out of the ear mould.



2.4 Wired PTT-button

The PTT transmit button is provided with connecting cable and plug for connection to a radio unit adaptor. The PTT transmit button and the optional CT-Wireless-PTT have equality of function. The optional CT-Wireless-PTT must be subscribed to the wire-bound transmit button. Earphones/ear microphones are available either with firm connection to the PTT transmit button or with plug-type connectors.



2.4.1 Ambient sound reception (option)

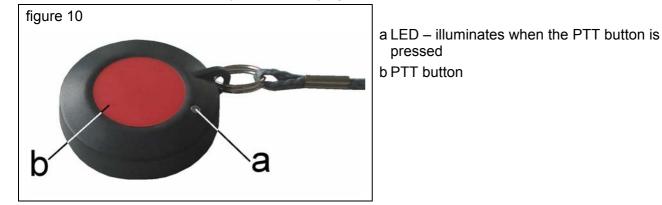
The ambient sound reception (ASR) happens via the microphones in the ClipCom earphones. He can be adjusted with the key fig. 9/g of the appropriate situation. The adjustment takes place in 4 steps

Initial position: 0dB (normal hearing)

	(
1 st keying	+6dB
2 nd keying	OFF
3 rd keying	-6dB
4 th keying	RESET to 0dB

2.5 CT-Wireless-PTT (option)

This transmit button is a radio key to transmit PTT commands to a connected radio device. The CT-Wireless-PTT and the wire-bound PTT transmit button (see chapter 2.4) have equality of function. The CT-Wireless-PTT must be subscribed to the wire-bound transmit button. A battery provides power to the CT-Wireless-PTT. For safety reasons, keying of the CT-Wireless-PTT is limited to 30 seconds.



2.5.1 Subscription of the CT-Wireless-PTT to the wire-bound PTT transmit button

- 1. Switch OFF the radio unit connected to the wire-bound PTT transmit button if it is in switched-on state
- 2. Insert the CT-ClipCom ear microphones/earphones in the ears
- 3. Press the two keys (figure 9/g, h) of the wire-bound PTT transmit button
 - Keep the keys depressed and switch the radio ON
 - Continue keeping the two keys depressed until you hear a short beep in the RH CT-ClipCom ear microphone/earphone
 - After it, let the two keys go
- 4. Press the PTT key (figure 9/h) of the wire-bound PTT transmit button 3 times
 - After it you hear the following tone sequence beep-beep-beep-beep-beep-beep-beep-
- 5. Now press the PTT key on the CT-Wireless-PTT until you hear a long tone lasting 4 seconds. Then let the key go. Now you hear again the previous sequence of beeps.
- 6. Now, press the PTT key of the wire-bound PTT transmit button once. After it, you hear no more beeps.
- 7. Then switch the communication system OFF.

➔ PLEASE NOTE

As long as the wire-bound PTT transmit button is in programming mode, all other functions are disabled. To exit the programming mode and enter into operating mode, the radio evice must be switched OFF for at least 2 seconds and then switched ON again.

In case of loss of a CT-Wireless-PTT we recommend deleting it from the receiver.

2.5.2 Deleting <u>one</u> CT-Wireless-PTT from the memory of a wire-bound PTT transmit button

- 1. Switch OFF the radio unit connected to the wire-bound PTT transmit button if it is in switched-on state
- 2. Insert the CT-ClipCom ear microphones/earphones in the ears
- 3. Press the two keys (figure 9/d, e) of the wire-bound PTT transmit button
 - Keep the keys depressed and switch the radio ON
 - Continue keeping the two keys depressed until you hear a short beep in the RH CT-ClipCom ear microphone/earphone
 - After it, let the two keys go
- 4. Press the PTT key (figure 9/e) of the wire-bound PTT transmit button once and keep it depressed for at least 1.6 seconds. The deletion mode is now activated.
 - In deletion mode your hear a very fast tone sequence
 - The deletion mode can be aborted by briefly pressing again the PTT key.
- 5. Now, press the PTT key for the CT-Wireless-PTT you want to delete and keep it depressed until you hear a long tone lasting 4 seconds. The transmitter code is now deleted and you may release the key.

2.5.3 Deleting <u>all</u> CT-Wireless-PTTs from the memory of a wire-bound PTT transmit button

- 1. Switch OFF the radio unit connected to the wire-bound PTT transmit button if it is in switched-on state
- 2. Insert the CT-ClipCom ear microphones/earphones into the ears
- 3. Press the two keys (figure 9/d, e) of the wire-bound PTT transmit button
 - Keep the keys depressed and switch the radio ON
 - Continue keeping the two keys depressed until you hear a short beep in the RH CT-ClipCom ear microphone/earphone
 - After it, let the two keys go
- 4. Press the PTT key (figure 9/e) of the wire-bound PTT transmit button once and keep it depressed for at least 1.6 seconds. The deletion mode is now activated.
 - In deletion mode your hear a very fast tone sequence
 - The deletion mode can be aborted by briefly pressing again the PTT key.
- 5. Press now once more the PTT key of the wire-bound PTT transmit button for more than 1.6 seconds. As soon as you hear a long tone lasting 4 seconds, all transmitter codes are deleted.

3. Commissioning and operation

- a. Connect the ear microphones/earphones to the wire-bound PTT transmit button.
- b. Place the necklace with the wire-bound PTT transmit button around your neck.
- c. Inserting the ear microphone/earphone: Place the earhanger behind the ear. Insert the ear mould into your ear with a quarter turn towards the back of the head until it has a snug fit. Adjust the seat of the earhanger, if necessary.
- d. Connect the wire-bound PTT transmit button with the connection plug to the radio or communication device.

PLEASE NOTE

For connecting the PTT transmit button use only an adapter without keyload function. In case of doubt, consult CeoTronics' specialists.

Switch the radio or communication device ON and adjust at the radio or communication device the desired volume of reception for the ear microphone.

Before each start of operation control the volume of reception and adjust it, if necessary. Very loud signals could damage your hearing.

Observe the manufacturer's operating instruction for the radio and/or communication device.

 e. Transmitting and receiving: For transmitting (speaking) press the wire-bound PTT transmit button or the optional CT-Wireless-PTT and keep it depressed. For safety reasons, keying of the CT-Wireless-PTT is limited to 30 seconds. The radio unit or communication device is switched to transmission. You can speak as long as you keep the transmit button depressed. Let the transmit button go in order to switch the radio unit or communication device back to standby/receiving (hearing).
 CT-ClipCom Digital ear microphone

Radio messages and ringing tone of a cellular phone are heard on both sides. In case a PTT transmit button is actuated or a communication is via a cellular phone, the ear microphone in the right ear switches from earphone to microphone operation. Consequently, the ambient sound reception (ASR) of this CT-ClipCom Digital is not active. The DNR electronics (Digital Noise Reduction) filter and eliminate optional ambient noise from the voice signal.

CT-ClipCom Digital gooseneck microphone

During activation of the PTT transmit button, ambient sound reception is active on both sides. The noise cancelling gooseneck microphone works without DNR function.

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 inspections

Check the CT-ClipCom Digital and particularly the cables and connectors <u>periodically</u> for signs of fractures, cracks and wear. Check ear moulds and earphones/ear microphones after every use for pollution. Pollution can be the cause for skin irritation and malfunction.

5.2 Cleaning

When cleaning, make sure that no moisture penetrates inside the device. Do not use any solvents (e.g. benzine, alcohol, sterilizing agents, etc.). After cleaning, keep earphones/ear microphones unpacked until completely dry.

Obstructed sound channels of ear moulds and ear plugs cause poor communication in transmitting (speaking) and reception (hearing). For periodical cleaning of components we recommend special cleaning tissues (see chapter 6).

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

Ear moulds and Earphones

Obstructed sound channels of ear moulds and earphones cause poor reception. For regular cleaning (after every use) we recommend the use of special antiseptic cleaning tissues (see item 6), an appropriate cleaning spray, or soft clean cloths and pure water with some dishwashing liquid. Do not use solvents for cleaning purposes.

For a basic cleaning of ear moulds we recommend a cleaning bath once a week (effervescent tablets; e.g. Detax Smarttabs).

5.3 Changing the protective cover of the gooseneck microphone

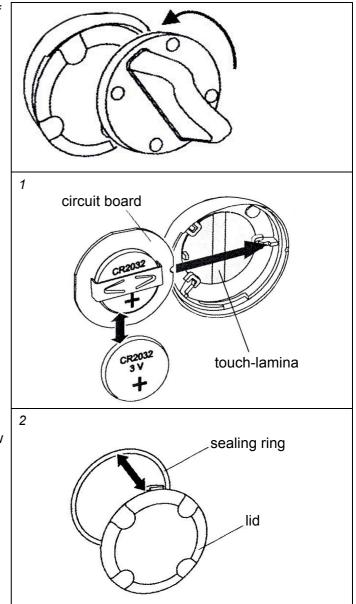
Check the protective foam cover periodically for pollution, wear and deformation and replace it, if necessary. It can be easily pulled off the microphone.

5.4 Changing the battery of the optional CT-Wireless-PTT

 Open the battery compartment on the back of the CT-Wireless-PTT using the opening tool TKZ: 4008011 by a swift left turn.
 Cautiously remove the circuit board from the housing. Change the battery minding correct polarity; lettering must be visible. Use 3-V batteries type CR2032 only
 ATENTION Mind correct polarity!

Batteries may not be disposed off in the domestic waste!

When closing the CT-Wireless-PTT put a new sealing ring under the lid, if necessary.
 Place the lid notches into the guides in the housing and lock the lid with a right turn.
 Make sure lid and housing have a tight fit.



6. **Consumable parts**

Designation	Unit	Part No.
Cleaning tissues	pack of 100	60 98 293
Protective microphone cover	pack of 10	50 022 03

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