

# **CT-DECT Headset M7**

## **Operating manual**



WHEN IT COUNTS

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## 1 General operating and safety instructions

Ensure that you comply with national safety and accident-prevention regulations as well as the warnings and safety instructions in this document to avoid material damage and injury to persons when using the device.

Before using CeoTronics products, read the relevant operating instructions thoroughly. If in doubt, ask our technical staff.

Keep this document for later use.

Use only CeoTronics products without signs of damage or wear.

Have any servicing on CeoTronics products carried only by CeoTronics or specialist workshops authorised by CeoTronics. In all other cases, our warranty and liability for the product will automatically lapse.

Keep CeoTronics products out of the reach of children and any other persons who are not familiar with handling and operating them.

CeoTronics products may only be used for the envisaged specific applications.

Safe operation is contingent on clean devices. Ensure that the devices are clean and in good condition at all times.

#### **Equipment damage**



If equipment supplied to you by Ceo-Tronics is to be taken out of service and no longer required, you may return it to CeoTronics. We will send the end-of-life equipment for recycling and/or environmentally compatible disposal on your behalf.

Do not immerse a CeoTronics product in water, unless it is expressly intended for this purpose. Connect or disconnect CeoTronics accessories to or from a device only when the device is switched off, unless otherwise described in the operating instructions.

When using devices designed for outdoor use, always keep the devices closed when outdoors (e.g. CT-DECT Case) and cover unused ports with the appropriate caps – if available.

Do not store CeoTronics products outdoors or in damp ambient conditions but always in a clean and dry place at normal air humidity. CeoTronics products must not be stored in areas with a temperature of over +80 °C (+176 °F), e.g. on the parcel shelf of a car in summer. Unless otherwise indicated, the following temperature ranges are allowed for CeoTronics products: Operation -10 to +55 °C (14 to +131 °F), storage -40 to +80 °C (-40 to +176 °F).

Ensure that no moisture penetrates the inside of the device during cleaning. Do not use solvents (e.g. benzine, alcohol, etc.) for cleaning! Safe operation is contingent on clean devices. Ensure that devices (microphones, plug connectors, etc.) are always clean and in a good condition.

## Risk of injury from 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 from high speaker volume!

Please note that some audio devices (e.g. radios) can emit very loud signal tones as soon as the devices is switched on. Some devices generate different a variety of tones at different volumes. It may be necessary to adjust the volumes of the different tones separately. These tones could damage your hearing if they are set too high. It is therefore important to adjust the signal tone volumes to the desired levels before using



CeoTronics accessories. Follow the audio device manufacturer's operating instructions to adjust the signal tones.

Receiver volumes in excess of 85 dB(A) are possible with a range of CeoTronics products but these can be controlled by the user for safety reasons. After switching on the communication system, set the receiver volume to approx. 1/2 of the available volume and then test the speaker volume, e.g. by opening the squelch on the radio device.

Do not set the volume any higher than necessary. Very high volume settings may damage hearing, especially over extended periods of use. At high volumes or noise levels, wear additional earplugs. If in doubt, ask your occupational health and safety officer or company doctor.

#### Interference with road traffic!

Do not leave CeoTronics products lying around loose in cars, e.g. on the parcel shelf. Stow the products in a suitable, safe place in the car so that they do not present a danger to you or your passengers in the event of an emergency stop.

When driving a car, do not operate a radio because it may distract you from other traffic and never use a CeoTronics product (headset, in-ear headsets, induction receiver etc.) that impairs your hearing.

## Interference with flight operations!

When on board an aeroplane, always keep transmitter/receiver devices switched off. Operation of a transmitter/receiver could affect the safety of the aircraft and is therefore prohibited. Never operate electronic devices on board an aircraft without the express approval of an authorised member of the onboard personnel.

Always remove the device after the aircraft intercom announcement. Never remove the warning label "REMOVE BEFORE FLIGHT" from CeoTronics products.

## Interference with radio transmission!

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

## Danger 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. Potentially explosive environments include, for example, refuelling areas as well as storage and transport facilities for fuel and chemicals! Unprotected devices can cause explosions in those areas!

Strictly adhere to the applicable guidelines, regulations and requirements for your field of activity!

## **Risk of electric shock!**

Always remove the mains plug from the mains socket first before opening mains-operated products (e.g. for service purposes)!

Only use CeoTronics products that are in an undamaged condition. In case of any kind of damage, stop using the CeoTronics product and have it repaired.

#### Interference with pacemakers!

If you wear a pacemaker, ask the manufacturer of your pacemaker for information about any interference that could be caused by high frequencies before operating a transmitter/receiver.

## Non-rechargeable and rechargeable batteries!

Dispose of used batteries free of charge at your local battery retailer or collection point or return them to CeoTronics in accordance with environmental regulations. Observe the battery regulation (BattV).



# Risk of injury from rechargeable batteries and non-rechargeable batteries!

Insert rechargeable batteries only after having read and understood all of the safety instructions. Rechargeable batteries carry potential risks, which could cause physical injury to persons and/or material damage.

Never try to open a rechargeable battery and never throw a rechargeable battery into a fire. Ensure that rechargeable battery contacts and charging sockets do not cause a short circuit (risk of fire and injury) due to bridging (bent-open paper clip, key ring or similar). In such cases, the warranty will be rendered void.

Transport spare rechargeable batteries in electrically non-conductive packaging material in order to avoid shorting the rechargeable batteries.

Keep 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! Only charge and change rechargeable batteries in areas where no explosive gases, vapours, or dust could be present in the air.

Only charge rechargeable batteries using the correct, corresponding CeoTronics charger. Ensure the correct voltage and current data, also on the mains side (e.g. 230 V AC or 115 V AC).

## Damage to charger or rechargeable batteries!

Never use the rechargeable battery charger for charging non-rechargeable batteries.

Chargers are neither waterproof nor dusttight and need protection against water, rain, and contamination. Only use chargers indoors in conditions of normal humidity and normal room temperature. Do not cover the ventilation openings. Do not charge rechargeable batteries outdoors.

## Radio software (firmware) – Risk of malfunction!

Please note that the operation of radio accessories may depend on which radio software version and software settings are used. Caution is required with software updates and/or changes to the software settings. If you update the software and/or change the software settings, check first on a radio whether the radio accessory is still functioning properly after these changes.

It may be the case that the receiver volume of some radios is unsatisfactory. In such cases, we suggest you check the parameters in the audio profile for your device to see whether it is possible to increase the receiver volume.

Please contact our customer advisers if you have any further questions on this matter.

#### Important information concerning the use of CT-DECT receivers/ transmitters!

Legal notice for operation in the European Union

The transmitter of the CT-DECT device may only be used in the European Union when it has the following label:



Legal notice for operation in the USA

The transmitter of the CT-DECT device may only be used in the USA when it has the following label:





#### Legal notice for operation in Canada

The transmitter of the CT-DECT device may only be used in Canada when it has the following label:



#### Improper use!

It is the sole responsibility of the end user to check and decide whether the CeoTronics products are suitable for use and can be operated safely without risk during special applications, such as in potentially explosive environments, aviation, bomb disposal or other similar applications.

CeoTronics does not take responsibility for any material damage or loss nor injuries to persons caused by the uses described above or by any other improper use of the products.

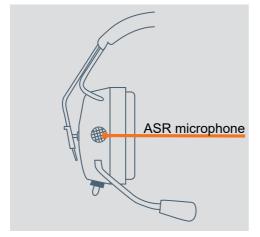


## 2 Description

The headset is a sending/receiving device for wireless duplex voice communication over short distances and is based on DECT radio technology.

The headset with level-limited ambient sound reception (ASR) is mainly used where ambient sounds, warning signals, etc. have to be clearly audible in addition to carrying out voice communication.

With ASR, ambient sounds can be received by a second microphone on the front of the right headset shell and listened to via an ASR speaker in the right headset shell.

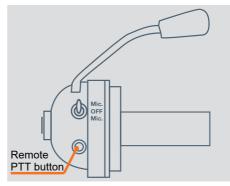


Ambient sound reception is also in operation during voice communication.

At high ambient sound levels, the sound level emitted to the ear by the ASE speakers in the headset shells is electronically limited. However, the overall noise attenuation of the headset is limited to the passive attenuation of the headset shells.

Using the Remote PTT button, the communication user can send a PTT criterion (PTT = push to talk) from a headset. This PTT criterion can be evaluated in the DECT system and a corresponding action triggered, such as the sender keying of a radio device.

This sender keying of the external radio device is remote controlled in synchronisation with the Remote PTT button. Next, the communication user can send a radio message over the microphone of their headset and the external radio device for as long as they press and hold the Remote PTT button.



As a general rule, the headset is used with a base that has been allocated to it, e.g. CT-DECT Multi M7, and must be subscribed to it. The use of a headset in conjunction with another base is only possible after the headset has to subscribed to this base first.

The range between the CT-DECT devices (Base/FP and Standard/PP) depends on conditions. Maximum local range is achieved in open terrain conditions where there is visual contact. Environmental influences such as mountains, buildings, trees, weather, obstacles (especially metal) and body attenuation of systems worn on the person can reduce the range. If the range limit is exceeded, this is signalled to the headset wearer by an acoustic signal in the headset

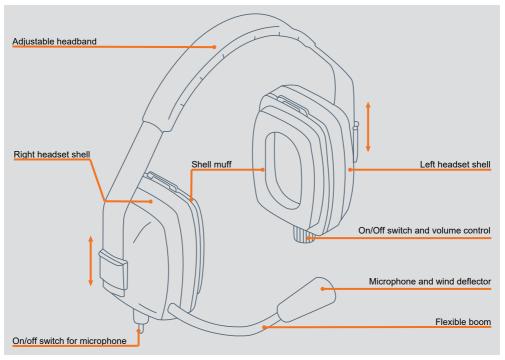


## 2.1 Compatibility

## NOTICE

The headset (designation "S-7.5.42A") is part of a wireless communication system with corresponding base as remote station. The matching remote station is the CT- DECT Multi M7 with the designation "S-7.5.41A". Compatibility with other components cannot be guaranteed. This headset can only be subscribed to the CT-DECT Multi M7 with the designation "S-7.5.41A".

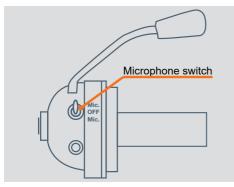
## 2.2 Layout





## 2.3 On/Off switch for microphone

The microphone can be switched on and off with the "Mic.–OFF–Mic." switch on the bottom of the right headset shell. Three switch settings are possible. However, communication is only possible after a connection has been established.



**Middle setting "OFF" (receive):** The headset microphone is switched off. You can only receive.

## Forward switch setting "Mic." (send and receive):

The headset microphone is switched on. You can speak into the microphone for as long as you hold the switch in this position. After releasing the switch, it returns to the middle position "OFF".

## Rear "locked" switch setting "Mic." (send and receive):

The headset microphone is permanently switched on. You can speak into the microphone and receive speech at the same time.

#### 2.4 Side tone

Successfully sending with an activated microphone is signalled to the use via a side tone. This side tone repeats the user's speech in the speaker. When a connection is established, this is only audible while sending. This provides a constant check of whether a connection is established and sending is actually taking place.



## 3 Start-up and operation

## 3.1 Putting on the headset and adjusting the microphone

## NOTICE

Before using the headset for the first time, the rechargeable battery pack must be fully charged (approx. 4 hours).

Put the headset on. Adjust the headset shells by moving the headband so that the shell muffs enclose the ears well and the headband lies across the middle of your head. This ensures the best level of noise attenuation.

For hygiene reasons, we recommend using washable sweat absorbers made from cotton on the headset.

These are pulled over the shell muffs and make the headset more comfortable to wear.

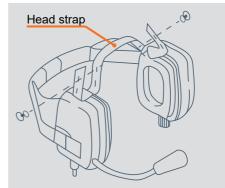
## NOTICE

Do not "twist" the flexible boom. Do not carry the headset by the boom. Use the microphone only with a wind deflector.

Adjust the flexible boom so that the microphone is about 5 mm in front of your lips. This ensures optimal voice transmission with the best possible sound compensation.

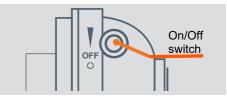
## 3.2 Wearing the headset with an additional head strap

If making rapid head movements or extreme body positions, or when also wearing a safety helmet, the headset can additionally be fixed in place on your head with the head strap. Put on the headset, push the headband backwards and wear it as a neckband. Ensure the head strap and neckband cannot move.



### 3.3 Switching on and automatic connection

Switch the headset on with the On/Off switch and volume control (rotary knob).





Ensure that the corresponding remote station, e.g. a CT-DECT Multi M7 as base station, is switched on.

Follow the special CeoTronics operating instructions for setting up and operating the remote station.

Next, a connection is automatically established between the headset and base, which can take a short while. After a few seconds, synchronisation of the headset and the remote station is signalled by a signal tone. Once the connection has been established, a tone can be heard in the headset and the procedure is complete. The headset and base are now ready for duplex communication within the range of the headset to its base station. In case of a faulty voice connection, a falling double tone can be heard in the headset.

### 3.4 Communicating

Following automatic establishment of the connection, the mobile communication users can talk to one another. The user with headset can speak via the microphone of headset and hear what other speakers are saying through the speakers in his headset (duplex communication). To speak, the headset mi-

### 3.5 Range warning

When exceeding the range limit, a double tone sequence sounds in the headset. The connection is dropped. When the headset returns within reception range, the connection is automatically re-established. In the headset, the user first hears a high double tone followed by a high tone which signals that connection has been re-established. crophone must be switched on. All users can hear announcements received via the base station.

For voice reception, set the speaker volume for your headset using the On/Off switch and volume control.

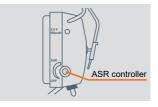


## 3.6 Switching off - end of operation

Switch the headset off with the On/Off switch and volume control (switch setting "OFF") to save the headset battery. Recharge the headset battery pack.



Also switch off the ambient sound reception with the rotary knob "ASR" to prevent the headset battery from discharging.



## NOTICE

The headset is only completely switched off when both controllers are switched off.



# 4 Power supply and operating time

Power supply: NiMH rechargeable battery 3.6 V / approx. 2300 mAh in the right headset shell

## 4.1 Charging the batteries

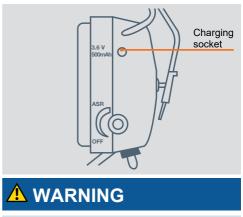
Never use battery chargers to charge nonrechargeable batteries. Never open batteries or throw them into fire. Consumed (defective) batteries must be disposed of correctly. Do not dispose of in household waste!

Only use a CeoTronics charger to charge the NiMH rechargeable batteries 3.6 V / 2300 mAh in the headset. The use of other chargers can result in damage to the rechargeable batteries. The battery charging socket is located on the right headset shell. Follow the special CeoTronics operating instructions for the charger.

### 4.2 Battery monitoring

When the battery is running low, a sequence of three deep tones will be heard periodically in the headset. The lower the battery level, the more often the warning is heard. If the battery is running low when the headset is switched on, the warning signal will sound after 10 seconds. Operating times for fully charged battery:

Depending on the ambient temperature, the headset used and the intensity of use (sending / receiving / standby), operating times of up to approx. 20 hours can be achieved.



Always switch the headset off before charging the battery.



## 5 Subscription

### 5.1 General

## NOTICE

As a general rule, CT-DECT Standard (PP) devices only need to be subscribed to a CE-DECT Base (FP) device the first time a CT-DECT system is put into use or when individual CT-DECT devices are replaced, e.g. after repairs.

A CT-DECT device with the network role "PP" can only ever be subscribed to one CT-DECT device with the network role "FP", never to two or more at the same time.

Depending on the scope of delivery, it is possible that the CT-DECT devices have already been subscribed to each other at the time of delivery. In this case, a note will be enclosed with the delivery. Where there are several CT-DECT devices configured as a base "FP", the CT-DECT devices will then be identified according to the allocation to the respective CT-DECT Base device with the network role "FP".

Two CT-DECT devices with the network role "PP" can never be subscribed to a CT-DECT Base (FP) at the same time, but only ever one after the other. Where several CT-DECT devices have the network role "PP", it is recommended to subscribe all devices in a device group immediately to the CT-DECT Base device "FP" one after the other, otherwise a device may be accidentally deleted again.

Keep to the sequence of operating steps.

### 5.2 Principle of subscription

Each device is equipped with a CT-DECT module and has its own identification number. An allocation between the base (FP) and the mobile users (PP) must always be made the first time. This one-off subscription procedure is done on the base and the mobile users (PP) manually by means of an operating procedure.

The maximum number of users per base is limited and depends on the number of DECT modules used. Four users per DECT module are possible.

When a user is subscribed, this user will be the first subscribed user without an active connection to be deleted from the database. Only users without an active connection can be deleted. If all users have an active connection to the base, it is not possible to subscribe another user.

A headset (PP) deleted from the database can no longer communicate with the system and must be subscribed to the base again in accordance with the subscription instructions.

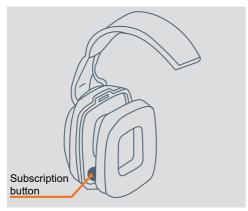
Once the subscription procedure has been successfully completed, the identity of the communication partner is saved in the data memory of the device. The headset (PP) can save one base (FP). The base (FP) saves the last successfully subscribed headsets (PP).



### 5.3 Subscription

Ensure that the headset to be subscribed is switched off. Pull the shell muff off the left headset shell. The subscription button is located in the shell ring of the headset.

Put the base (FP) in subscription mode, then continue immediately with the next step to avoid a timeout.



Press and hold the subscription button on the headset. While holding the subscription button pressed, switch on the headset with the On/Off button and volume control (rotary knob). After the headset switches on, keep the subscription button pressed for at least another 2 seconds until you hear a falling sequence of tones. Then release the subscription button.

Subscription has started and a short, high signal tone can periodically be heard in the headset approx. every 2 seconds. Following successful subscription, you will hear a rising sequence of tones.

The devices automatically establish a connection with each other.

### **Cancelling subscription**

The subscription procedure can be cancelled by pressing the subscription button again. The cancellation is confirmed by a low tone. If the subscription procedure is cancelled due to an error, the cancellation will be signalled by a sequence of 3 tones.

If the subscription procedure is cancelled, the headset attempts to establish a connection with the previously connected base.

#### Timeout

If there has been no successful subscription within max. 2 minutes of starting the subscription procedure, there will be a "timeout". The "timeout" is signalled by a sequence of 2 short, low tones in the headset.



## 6 Maintenance

#### 6.1 Visual inspections

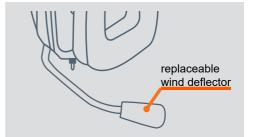
Examine the headset shells and especially the shell muffs regularly for signs of breakage, tears and wear. Replace the headset if the headset shells are damaged and send them to CeoTronics for repair. Replace damaged and worn shell muffs, in any event after a maximum of 6 months of use.

### 6.2 Cleaning

Remove loose dust with a soft brush. If necessary, clean the outside of the device with a suitable clean cloth slightly moistened with clean water and then rub the device dry. A little detergent can also be used if the device is very dirty. Clean the contacts of the plug connectors with a commercially available contact cleaner.

#### 6.3 Replacing the microphone wind deflector

Pull the wind deflector off the microphone and replace it.



#### 6.4 Replacing a shell muff

Pull the shell muff off the headset shell and replace it. Ensure that the new shell muff clicks fully into place.

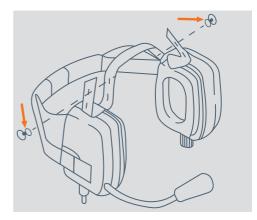




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## 6.5 Replacing the head strap

Remove both holders and then pull the head strap out of the slots in the headset shells. Fit the new head strap.



## 6.6 Accessories and consumables

Designation and description	Art. no.		
Carry bag for headset, colour grey	40 35 030		
Single-charger for NiMH rechargeable battery packs 3.6 V for mains voltage 100240 V AC 50/60 Hz	40 06 543		
Shell muff, 2 pieces	50 00 501		
Microphone wind deflector, 10 pieces	50 02 201		
Comfort set consisting of 25 pairs of washable, cotton sweat ab- 40 10 025 sorbers			
Head strap including two holders	50 00 707		

## 6.7 Storage

Keep the cleaned device clean and dry and store at normal room temperature and in normal humidity levels.



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





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