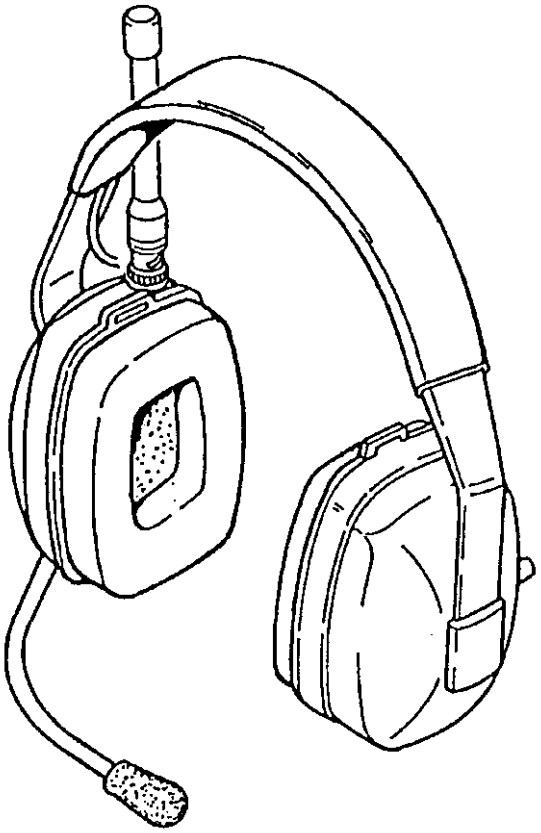
CeoTronics

TC 917

Transmitter/Receiver Headsets

Operating Instructions



Contents

A Safety Information

All Ceotronics Headsets TC 917 use type approved passive ear muffs. The integration of the electronic devices in the ear muffs can reduce the passive noise attenuation by approx. 3 dB. With very high noise levels we strongly recommend the additional use of earplugs to prevent hearing damage. If you are in doubt please contact your safety officer or works medical practitioner. Effective hearing protection is only guaranteed when you are wearing the headset permanently when in a designated high noise area. Replacement of the ear cushions after a period of 6 months of use is recommended to achieve optimum hearing protection. Please note, that when using headsets with ear muffs which protect against harmful ambient noise, and are not equipped with the feature for ambient sound reception, also the hearing of warning signals, warning cries etc. will be impaired.

Do not adjust the receive volume of your Transceiver Headset TC 917 to a level higher than necessary. Excessive receive volumes over long periods can damage your hearing.

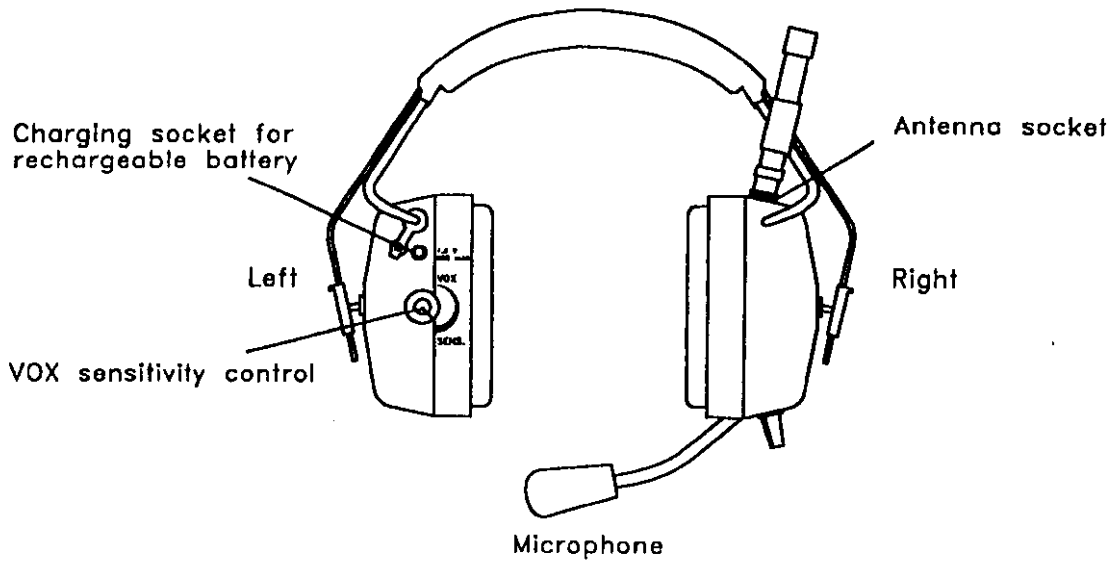
When using Ceotronics products follow the safety information given on the supplement sheet *"Important Safety Warnings"*. This supplement sheet is delivered with each Ceotronics product. To ensure proper operation and a long lifetime for the product, please follow the operating instructions. For further information please contact our experts.

B TC 917 Transceiver Headset

General

The Transceiver Headset TC 917 is a transmitter/receiver system for wireless communication over short distances. The operation time with fully charged battery is approx. 8 hours (duty cycle 5 % transmit, 15 % receive, 80 % standby).

Transceiver Headset TC 917 – rear view



Operation

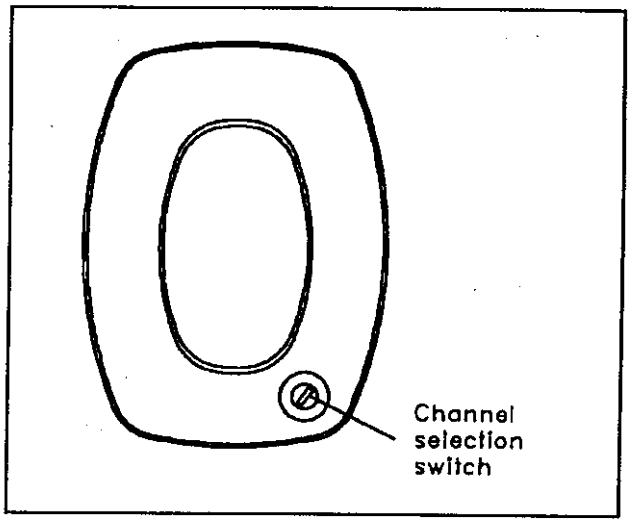
1. Before use, ensure the battery is adequately charged for normal operation.
2. Depending on your TC 917 Transceiver version, the antenna is either fixed on the headset or is delivered separately.

NOTE

Use the supplied Ceotronics antenna only, otherwise malfunction of the headset may occur. Do not carry the headset by the antenna.

Plug the antenna plug to the antenna socket on top of the right ear shell and turn the antenna connector in a clockwise direction until it locks in place (bayonet lock).

3. **Channel selection:** The Transceiver Headset TC 917 is equipped with up to 16 channels. The channel selection switch is placed under the ear cushion of the right ear shell. In order to select the channel, remove the ear cushion and turn the channel selection switch with a small screw driver to the desired channel. After that reinsert the ear cushion. It must lock in place completely.

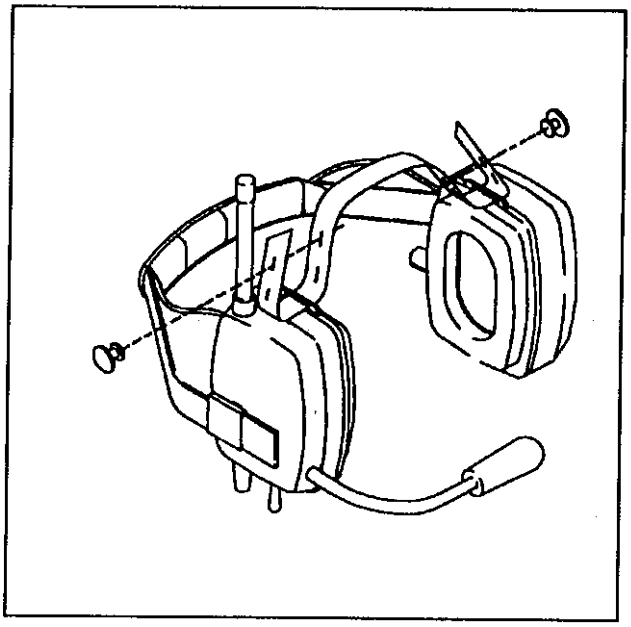


4. **Put on the headset.** Take care for a perfect comfortable fit. Only when the ear cushions are properly located around the ears the best noise attenuation of the ear muffs is provided. Adjust the hight of each ear muff equally on both sides while holding the headband down until the ear cushions have a tight and comfortable fit. The headband should sit straight and comfortable on the top of the head.

5. **Wearing the headset with additional headstrap:** For quick body movements or unusual working positions or in conjunction with a protection helmet we recommend wearing the headset by means of the additional headstrap supplied.

   Pull the headstrap in accordance with the illustration through the slits in the ear muffs and fasten the headstrap with the two fasteners supplied with the headstrap.

   Assembling the fasteners: Each fastener consists of two parts. If not assembled already ex-works, press the pin of the smaller part into the round opening of the larger part until it engages.



   Put on the headset, open out the headband to the rear and wear it as a neckband. Ensure that the headstrap and neckband are both firmly seated.

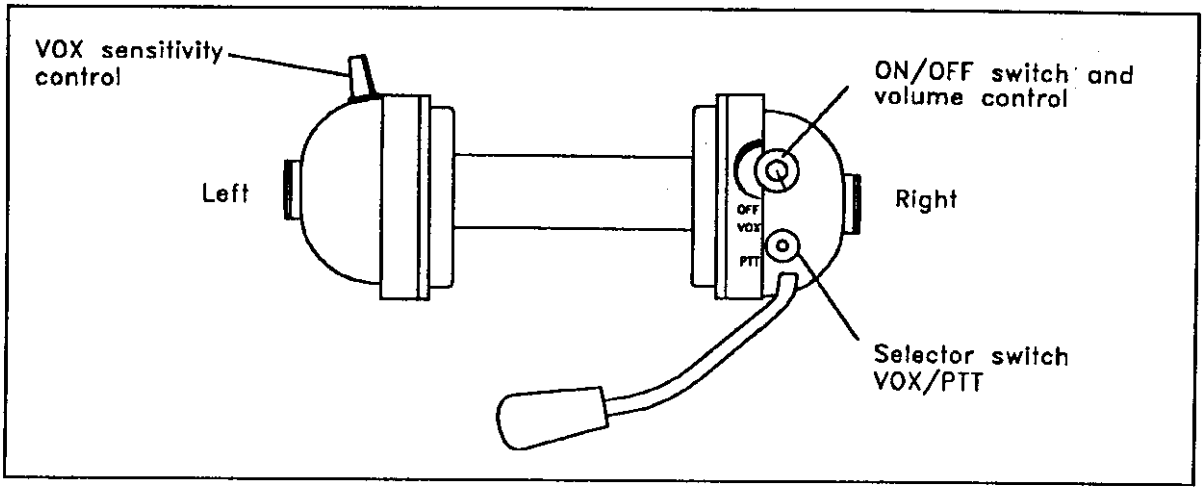
6.

WARNING

Never twist the flexible microphone arm and never carry the headset by the flexible microphone arm.

Adjust the flexible microphone boom so that the microphone is positioned at a distance of approx. 5 mm in front of your lips. Only then is optimal speech transmission provided with the best possible noise cancellation. The side of the microphone with the »CT-symbol« and the »rib«, which can be felt through the windshield, must be positioned in front of your lips.

7. **Control elements:**



8. **Switching on and speaker volume adjustment:** The headset is switched on and off with the ON/OFF switch and volume control knob. Switch it on by turning the knob from the OFF position in clockwise direction. This knob is also used for the adjustment of the receive volume. Adjust the receive volume for your personal comfort.

9. **PTT operation – Manual transmitter keying:** In the centre position of the VOX/PTT toggle switch the transceiver headset is in receive mode. By pushing the toggle switch forward in position PTT the system is in transmit function. If the radio channel is clear you can speak while the toggle switch is held in this position. You will then hear your own voice via the speaker (sidetone). The sidetone allows the continuous monitoring of the transmit function. Release the VOX/PTT switch for receiving again.

10. **VOX operation – Voice activated transmitter keying:** For VOX operation, push the toggle switch backward to the VOX position. When speaking, the system switches automatically to transmit function. After speaking it returns to receive mode.

    The VOX sensitivity can be adjusted with the VOX SENS. rotary knob which is on the rear of the left ear shell, depending on the environmental noise level. Proceed as follows – while in noisy environment: Set VOX SENS. rotary knob fully counter clockwise. This setting is the least sensitive and the system cannot be operated with normal speech.

    Adjust the VOX SENS. rotary knob slowly clockwise until your normal speech activates the transmitter. You will then hear your own voice via the speaker (sidetone). The sidetone allows the continuous monitoring of the transmit function. This is especially important for VOX operation.

11. Switch off the headset after use by turning the ON/OFF switch and volume control knob to the OFF position. This guarantees a longer usage from the rechargeable battery. Charge the rechargeable battery as necessary.

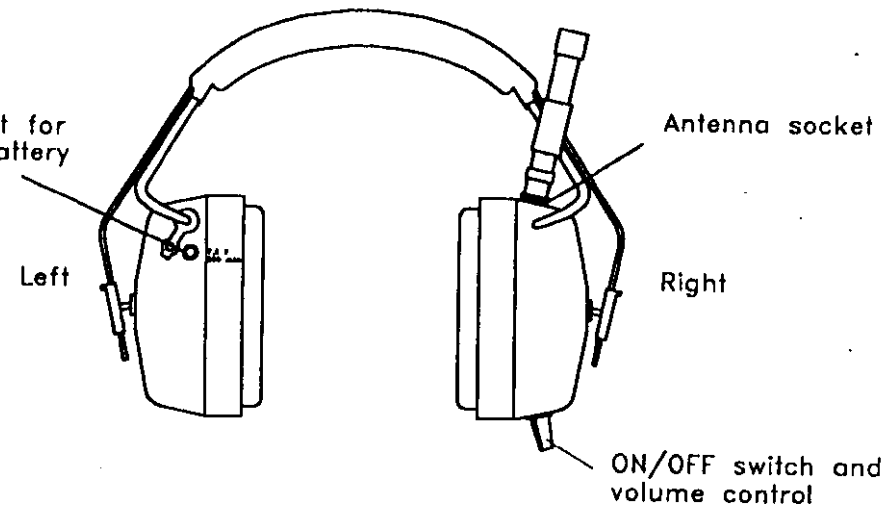
C TC 917 Receiver Headset

General

The Receiver Headset TC 917 is only used for the receiving of radio communications. The operation time with fully charged battery is approx. 8 hours.

Operation

Receiver Headset TC 917 – rear view



Information for operation of the Receiver Headset TC 917 is given in *chapter B, TC 917 Transceiver Headset, section Operation, steps 1...5, 8 and 11.*

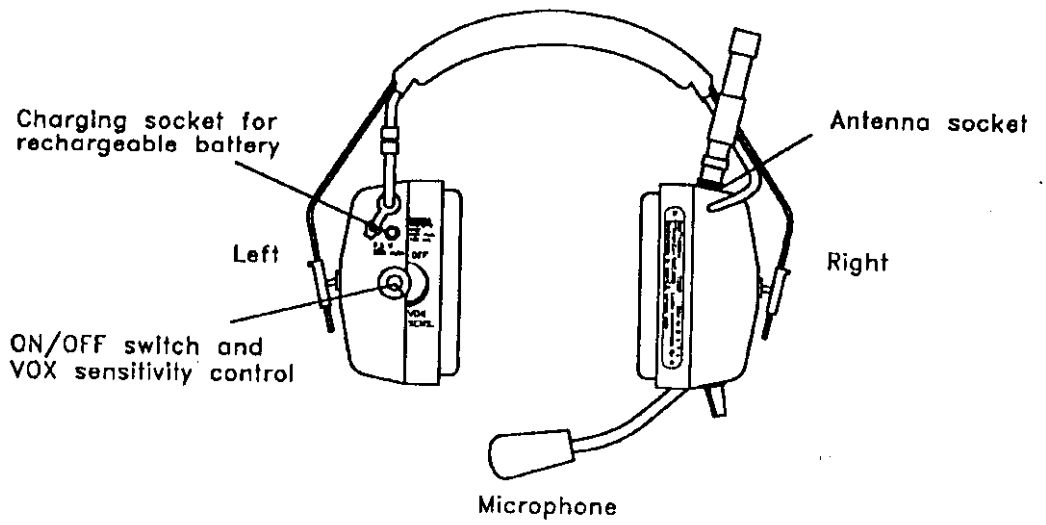
D TC 917/Ex Transceiver Headset

General

The intrinsically safe Transceiver Headset TC 917/Ex is designed for communication in areas with potentially explosive atmospheres. It is a transmitter/receiver system for wireless comunication over short distances. The headset is approved for the intrinsically safe class EEx ib IIB T4. The operation time with fully charged battery is approx. 8 hours (duty cycle 5 % transmit, 15 % receive, 80 % standby).

The Transceiver Headset TC 917/Ex is equipped with an exchangeable left ear shell where the rechargeable battery is located. When the battery is discharged, the left ear shell can be replaced easily by an ear shell with charged battery. Therefore the headset can be used, while charging the discharged battery. For further information refer to *chapter I, TC 917 Headset with Exchangeable Ear Shell.*

Transceiver Headset TC 917/Ex – rear view

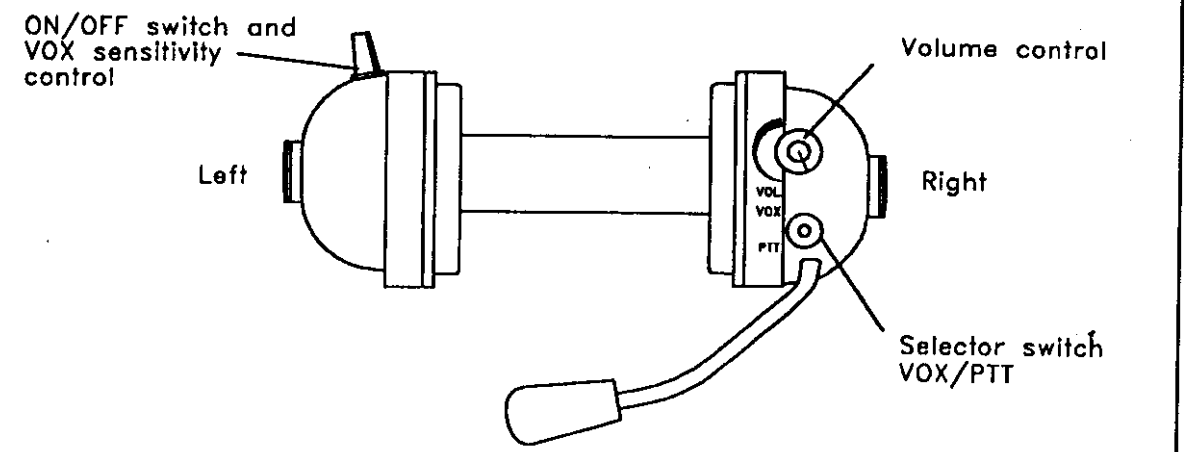


CAUTION

Each Headset TC 917/Ex is marked with the protection class it is designed for. Do not use an intrinsically safe headset in areas with an explosion risk where a higher protection class is required. Additionally note further informations given for the use of intrinsically safe products on the separate supplement sheet »Ex Important Note!« This supplement sheet is delivered with each intrinsically safe Ceotronics product.

Operation

Transceiver Headset TC 917/Ex – lower side



Operation of the Transceiver Headset TC 917/Ex is almost the same as the operation of the Transceiver Headset TC 917. Information is given in *chapter B, TC 917 Transceiver Headset, section Operation, steps 1...6 and 9.* In the following only the differences are described, which are due to the intrinsically safe construction.

The Transceiver Headset TC 917/Ex is switched on and off with the OFF/VOX-SENS. control knob. Switch it on by turning the knob from the OFF position in clockwise direction. This knob is also used for the adjustment of the VOX sensitivity. Turn the knob slowly clockwise until your normal speech activates the transmitter. You will then hear your own voice via the speaker (sidetone).

Use the volume control knob VOL on the bottom of the right ear shell to adjust the receive volume for your personal comfort.

Switch off the headset after use by turning the control knob OFF/VOX SENS. to the OFF position. This guarantees a longer usage from the rechargeable battery. Charge the rechargeable battery as necessary.

E TC 917/Ex Receiver Headset

General

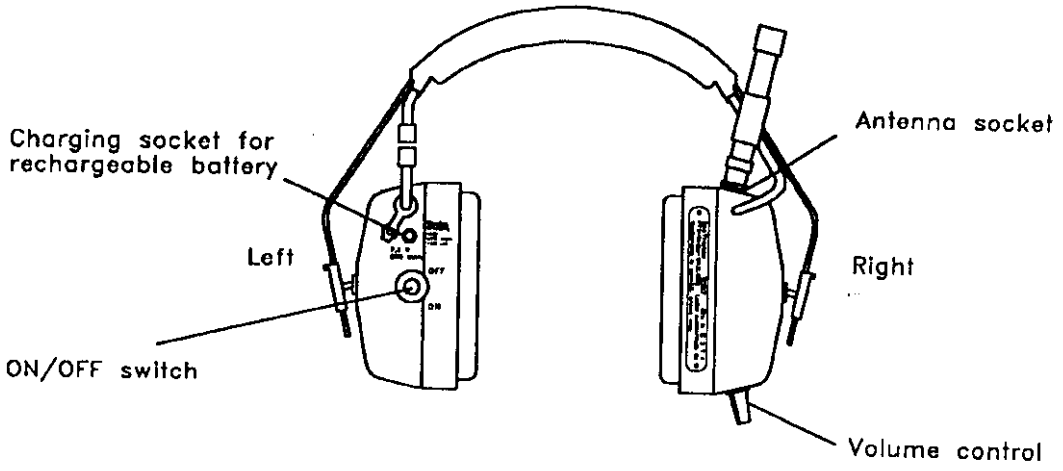
The intrinsically safe Receiver Headset TC 917/Ex is designed for use in areas with potentially explosive atmospheres. The headset is only used for the receiving of radio communications. The operation time with fully charged battery is approx. 8 hours. Further information for intrinsically safe Headsets TC 917/Ex is given in *chapter D, TC 917/Ex Transceiver Headset, section General.*

CAUTION

Each Receiver Headset TC 917/Ex is marked with the protection class it is designed for. Do not use an intrinsically safe headset in areas with an explosion risk where a higher protection class is required. Additionally note further informations given for the use of intrinsically safe products on the separate supplement sheet »Ex Important Note!« This supplement sheet is delivered with each intrinsically safe Ceotronics product.

Operation

Receiver Headset TC 917/Ex – rear view



Information for operation of the Receiver Headset TC 917/Ex is given in *chapter B, TC 917 Transceiver Headset, section Operation, steps 1...5.* In the following only the differences are described which are due to the intrinsically safe construction.

The Receiver Headset TC 917/Ex is switched on and off with the ON/OFF toggle switch on the rear of the left ear shell. Use the volume control knob VOL on the bottom of the right ear shell to adjust the receive volume for your personal comfort. Switch off the headset after use. Therefore set the ON/OFF toggle switch to the OFF position. This guarantees a longer usage from the rechargeable battery. Charge the rechargeable battery as necessary.

F TC 917 Transceiver-Headset with Ambient Sound Reception

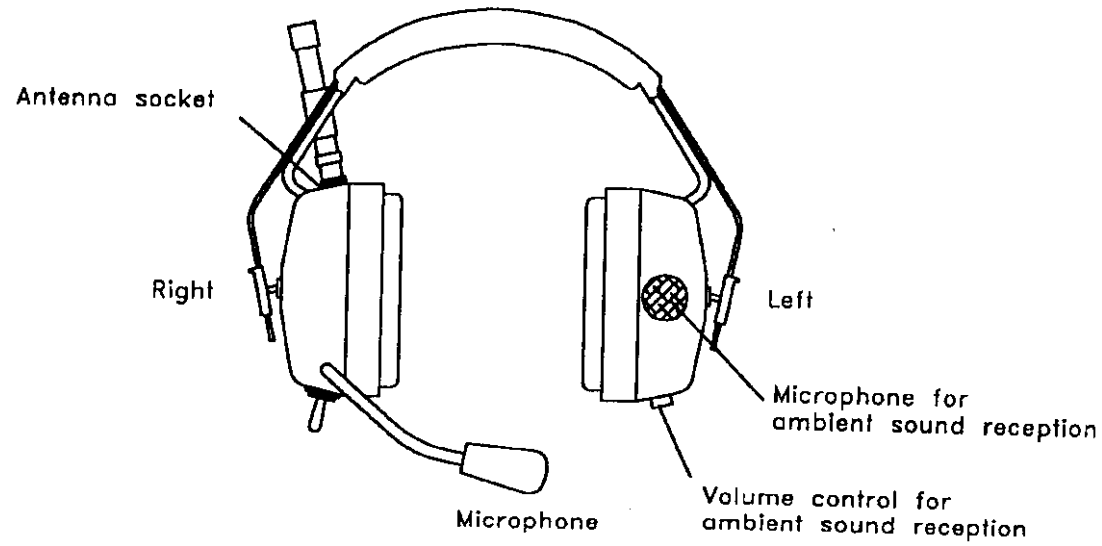
General

The Transceiver Headset TC 917 with the additional feature for level limited ambient sound reception allows in addition to wireless communication over short distances the reception of ambient sound. The electronics for ambient sound reception is integrated in the left ear shell of the headset. For ambient sound reception one microphone – equipped with a windshield – is placed in the middle of the left ear shell.

At sound levels over 85 dB(A), the output level of the ambient sound reception speaker in the left ear shell is electronically limited to max. 85 dB(A). Due to the design of the ambient sound electronics an increase of the output level of the speaker over 85 dB(A) is technically impossible. The total noise attenuation is limited to the noise attenuation of the ear muff. Additionally refer to the *Safety Information in chapter A.*

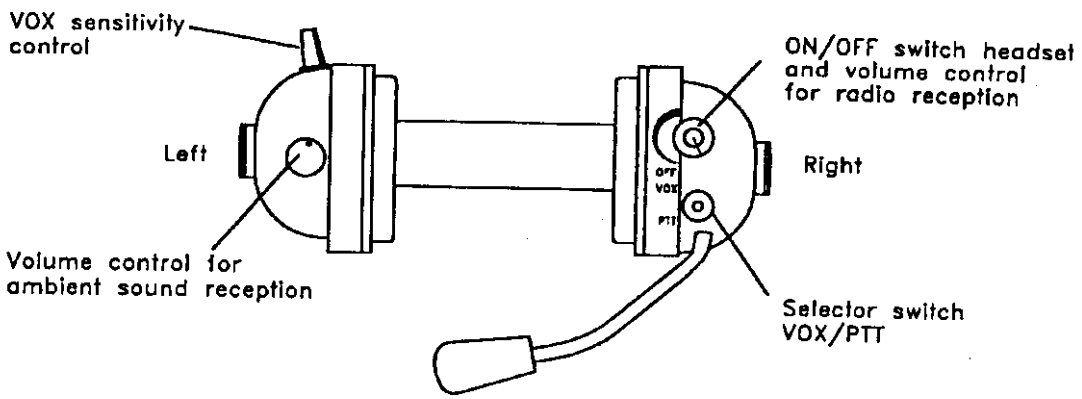
Power for the ambient sound reception electronics is supplied from the rechargeable battery in the headset. The operation time with fully charged battery is approx. 8 hours (duty cycle 5 % transmit, 15 % receive, 80 % standby).

Transceiver Headset TC 917 with ambient sound reception – front view



Operation

Transceiver Headset TC 917 with ambient sound reception – lower side



Operation of the Transceiver Headset TC 917 with ambient sound reception is almost the same as the operation of the Transceiver Headset TC 917. Information is given in *chapter B, TC 917 Transceiver Headset, section Operation, steps 1...6, 8...11.* In the following only the differences are described, relating to the ambient sound reception.

The headset and the ambient sound reception are switched on and off with the ON/OFF switch and volume control knob located on the bottom of the right ear shell.

On the bottom of the left ear shell is the volume control knob for the ambient sound reception. Adjust the volume level for your own comfort.

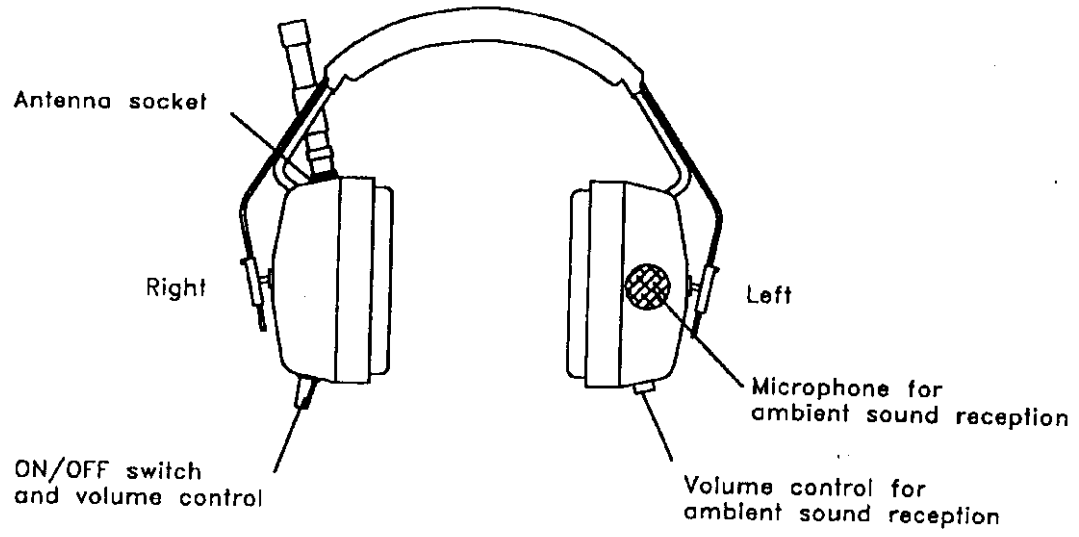
G TC 917 Receiver Headset Ambient Sound Reception

General

The Receiver Headset TC 917 with ambient sound reception is only used for the receiving of radio communication and ambient sound. A microphone placed in the middle of the left ear shell receives ambient sound and thus allows near normal hearing. The operation time with fully charged battery is approx. 8 hours. Further information for ambient sound reception is given in *chapter F, TC 917 Transceiver Headset with Ambient Sound Reception, section »General«.*

Operation

Receiver Headset TC 917 with ambient sound reception – front view



Information for operation of the Receiver Headset TC 917 with ambient sound reception is given in *chapter B, TC 917 Transceiver Headset, section Operation, steps 1...5, 8 and 11.* In the following only the differences are described, relating to the ambient sound reception.

The headset and the ambient sound reception are switched on and off with the ON/OFF switch and volume control knob located on the bottom of the right ear shell.

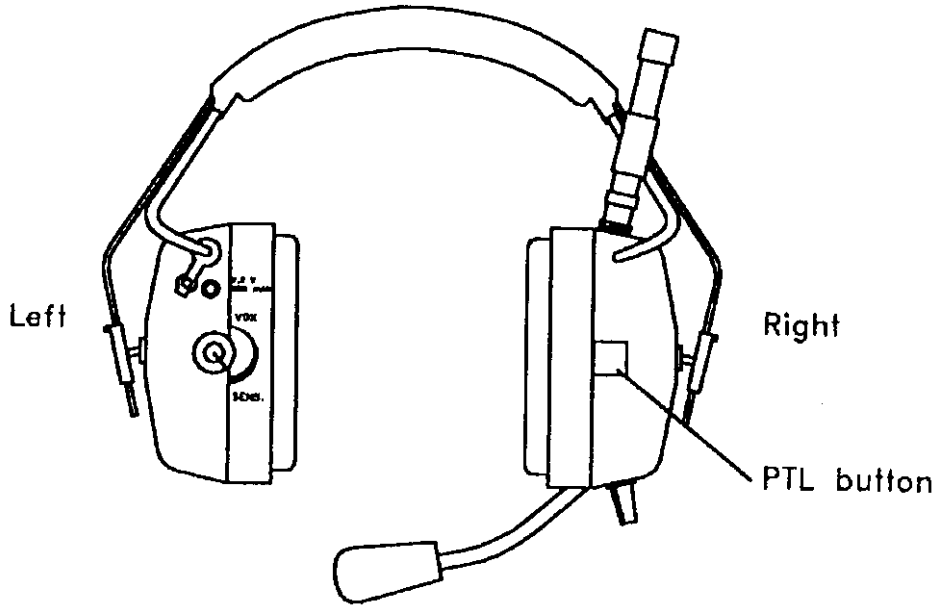
On the bottom of the left ear shell is the volume control knob for the ambient sound reception. Adjust the volume level for your own comfort.

H TC 917 Transceiver Headset with CTCSS

General

The Transceiver Headset TC 917 with CTCSS is a transmitter/receiver system for wireless communication over short distances. CTCSS (Continuous Tone Controlled Squelch System) is a sub-audio signalling and selective calling facility on a programmable frequency. There are 39 sub-audio frequencies programmable in the range 67.0 Hz to 250.3 Hz by the manufacturer, maximum 10 different sub-audio frequencies for each TC 917 unit.

Transceiver Headset TC 917 with CTCSS – rear view



Operation

Operation of the Transceiver Headset TC 917 with CTCSS is almost the same as the operation of the Transceiver Headsets TC 917 in chapters B, D or F. In the following only the differences due to the additional CTCSS are described.

Function of the PTL button (PTL = Push-to-Listen):

- PTL button not pushed (normal position): the CTCSS function for radio reception is switched on. The headset only receives radio messages encoded with CTCSS tone.
- Press PTL button and keep it pressed: the CTCSS function for radio reception is switched off. You can listen in, to the radio channel. If there is any radio communication on the channel, this is audible. If the radio channel is clear you will hear noise only. Now you can transmit CTCSS tone encoded radio messages to your communication partner without disturbing other users on the same carrier frequency.

I TC 917 Headset with Exchangeable Ear Shell

General

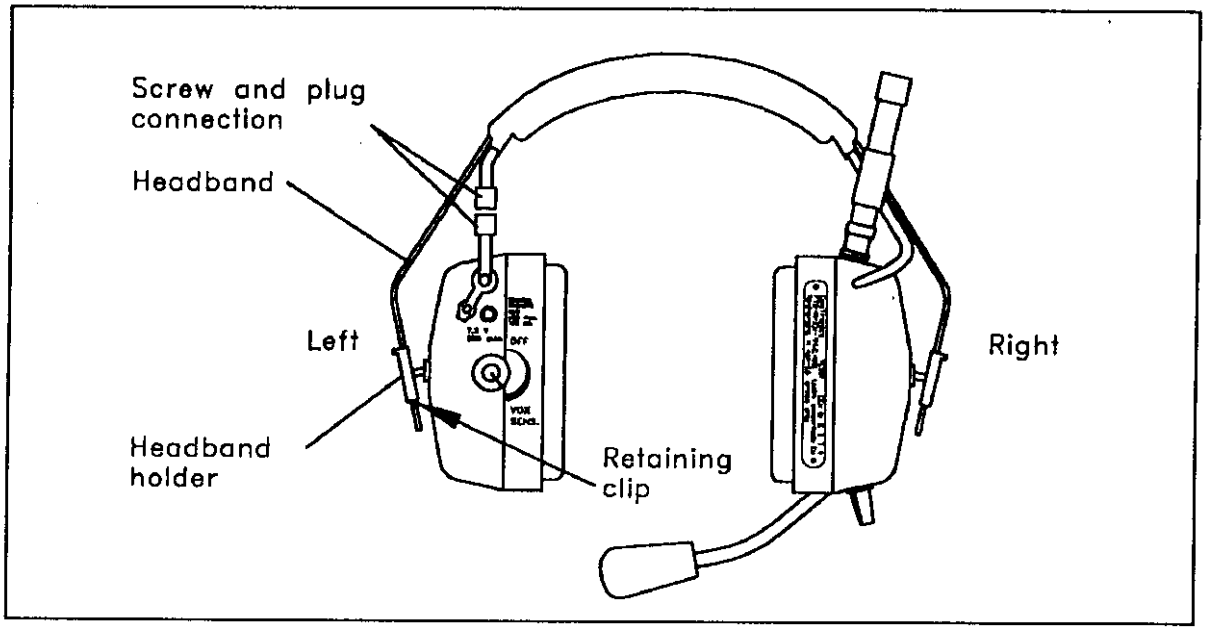
This headset version is equipped with an exchangeable left ear shell where the rechargeable battery is located. When the battery is discharged the left ear shell can be exchanged easily by an ear shell with charged battery. This allows the headset to be used while charging the battery. Intrinsically safe Headsets TC 917/Ex always have exchangeable left ear shells because intrinsically safe rechargeable batteries cannot be charged rapidly.

WARNING

Never replace ear shells and never charge rechargeable batteries in areas with an explosion risk !

Exchange of Ear Shell

1. Switch off headset. Loosen screw connection in the line to the left ear shell, disconnect the plug connection.



2. On the left ear shell pull the headband out of the headband holder until the end stop. On the inner side of the headband holder is a retaining clip. Use your thumb-nail or a small screwdriver to press the retaining clip away from the headband. While depressing the retaining clip, pull off the headband from the ear shell.
3. Reassemble the spare ear shell equipped with a charged battery in reverse order.

J TC 917 for Helmet Attachment

The two ear shells with TC 917 technology can be supplied without a headband for fastening to the sides of a helmet. Various fastening components are available depending on the type of helmet. Separate instructions are available for fastening to the helmet. These instructions are shipped with the attachment components.

The connection cable between the two ear shells is then placed in the helmet so that it causes no annoyance. In addition the headstrap, which is enclosed with each headset, can be used (*see chapter B, step »5«*).

If no ear protection is required for the job in question, the two fastening arms together with the ear shells are swung outwards and away from the helmet.

K TC 917 Charging of Rechargeable Batteries

CAUTION

Never use the battery charger for charging non-rechargeable batteries. NiCd rechargeable batteries contain cadmium. For this reason, never open these batteries. Never discard used batteries in fire. Do not dispose of used (defective) batteries in the domestic waste. Take these batteries to a suitable collection point for recycling or for environmentally safe disposal.

The rechargeable batteries, 7.2 V/600 mAh for the Headsets TC 917 should only be charged with Ceotronics chargers. Otherwise the batteries may be damaged. Ceotronics chargers see *chapter M, TC 917 Additional Accessories and Wear Parts.*

The charging time of a completely discharged battery 7.2 V/600 mAh depends on the battery charger used.

The charging socket on the left ear shell of the headset is protected by a rubber mini-plug. Pull out the mini-plug before connecting the headset to the battery charger.

After charging disconnect the headset from the charger. Replace the rubber mini-plug in the the charging socket on the left ear shell.

Charging of Intrinsically Safe Rechargeable Batteries

CAUTION

Never charge a rechargeable battery in areas with an explosion risk – an explosion may result. Chargers for intrinsically safe rechargeable batteries are not intrinsically safe!

The intrinsically safe Headsets TC 917/Ex are equipped with intrinsically safe rechargeable batteries 7.2 V/600 mAh. This batteries should only be charged with Ceotronics chargers. Chargers see *chapter M, TC 917 Additional Accessories and Wear Parts.*

L TC 917 Maintenance

Cleaning

WARNING

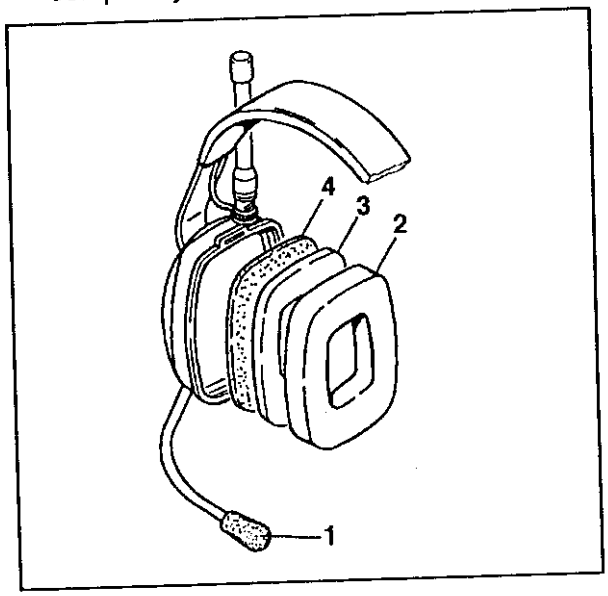
When cleaning do not immerse the headset into water. Ensure that no moisture enters the equipment. Do not use any solvents (fuel, alcohol, etc.) for cleaning.

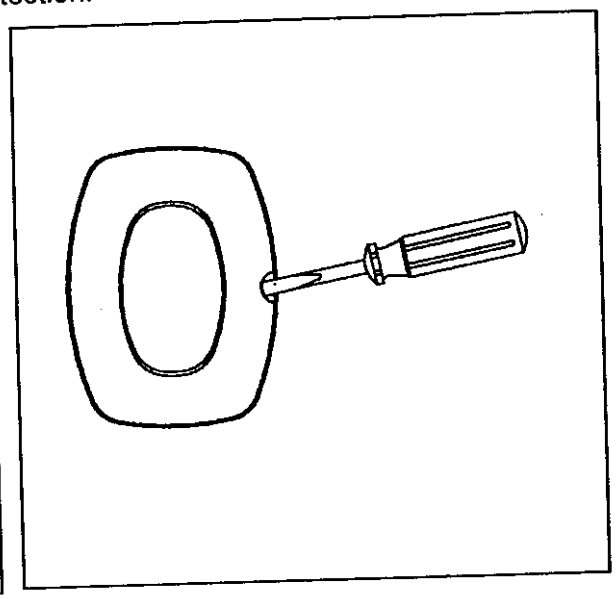
Remove loose dust with a soft dusting brush. If required, clean the outer surfaces of the headset with a little water and, if heavily soiled, add some washing-up liquid. Use a suitable, only slightly moistened tissue. Before cleaning a headset make sure that the sealing stopper is plugged in the battery charging socket to prevent moisture entering the ear shell. Rub thoroughly dry afterwards.

Replacement of windshield, ear cushions and cover foams

1. **Replacement of windshield:** Pull off the windshield (1) from the microphone and replace it.
2. **Replacement of ear cushions and cover foams:** We recommend that the ear cushions should be replaced after a period of approx. 6 months of use. If necessary replace the cover foams in the ear shells too.

   Pull off carefully the ear cushion (2) from the ear shell and replace it. Use a small screwdriver or a similar tool to remove the shell-ring (3). Put it in the slot of the shell-ring (see illustration) and use it carefully as a lever. Remove the cover foam (4) and replace it.
3. Reassemble carefully in reverse order. Make sure that you hear the engaging of the shell-ring, as it locates with a positive click. The ear cushion must lock in place completely to achieve optimum hearing protection.





M TC 917 Additional Accessories and Wear Parts

Additional Accessories

Designation and Description	Article Number
Carrying case for Headset TC 917, colour grey	40 35 030
Quick charger for Headset TC 917 Single-unit charger for one Headset TC 917 with rechargeable battery 7.2 V/600 mAh, charging time approx. 30 minutes Quick charger for 100...240 V AC mains Quick charger for 12 V DC vehicular power supply	 09 10 100 09 10 110
Single-unit charger for Headset TC 917 Plug-in charger for one Headset TC 917 with rechargeable battery 7.2 V/600 mAh, charging time approx. 7 hours Charger for 230 V AC mains Charger for 115 V AC mains	 40 06 525 40 06 530
Other chargers on request	

Wear Parts

Designation and Description	Article Number
Hygiene set for headsets with ear muffs consisting of: 2 pcs. ear cushion 2 pcs. cover foam 2 pcs. windshield for electret microphone	50 00 500
Ear cushion for headsets with ear muffs, 2 pcs.	50 00 501
Windshield for electret microphone, 10 pcs.	50 02 201
Comfort set for headsets with ear muffs consisting of 50 pcs. (25 pair-pack) sweat absorbing cotton pads	40 10 025

For further information please contact our experts.

Notes

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