



# contactmini

digital bone conducted hearing system

- binaural
- monaural

## User Instruction

Thank you very much for your decision to use a quality product of BHM-Tech. The digital bone conducted hearing system contact mini will be produced in Austria according medical device directive 93/42/EEC and was developed and manufactured according to the latest audiological knowledge and state-of-the-art technical innovations. It has the CE-mark and follows therefore the newest requirements of quality and safety regulations. If you follow the User Instruction in detail, your bone conducted hearing system contact mini will be your reliable partner for many years.

**IMPORTANT!**

Your bone conducted hearing system contact mini was especially adapted to your individual hearing loss by a qualified hearing aid expert. Your hearing aid expert will also inform you about the correct use, handling and operation of the contact mini. Your hearing aid expert will also supply you with information on regular maintenance measures. Never pass on your hearing system

contact mini to another person and/or prevent unauthorized use.

**Intended use:**

Bone conduction hearing aids by BHM-Tech are wearable sound-amplifying devices intended to compensate impairments in personal hearing.

The fundamental operating principle is to receive, amplify, and transfer sound via the bone of the skull to the inner ear of a hearing impaired person.

The amplification suits the needs of a mild to a moderate hearing loss. They require individual fitting in performance executed by a hearing aid professional. The target populations for the contact mini are adults and children (> 8 months).

**Content**

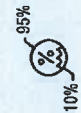
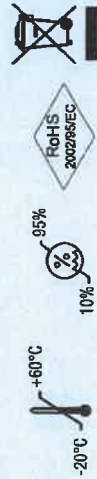
Parts on the hearing system ..... 5  
Handling of the hearing system ..... 6-13  
**ONLY FOR THE ACOUSTICIAN OR ENT .. 13-15**  
Important Information ..... 15 -17





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**CE** 0297 According to EU guidelines 93/42/EEC  
Quality management system according to DIN EN ISO 13485



Design: Rabold und Co / Photo: Erwin Milk  
Version 1.6 - 11/2014

Content may be changed without notice in order to improve product performance.

**READ THIS USER INSTRUCTION CAREFULLY BEFORE USING THE DEVICE.**

**IN CASE YOU ARE NOT THE USER OF THE HEARING SYSTEM, PLEASE FORWARD ALL INFORMATION & DETAILS OF THE INSTRUMENTS OPERATION TO A PERSON THAT MAY BE RESPONSIBLE FOR THE INSTRUMENT.**

Please ensure that you have followed all the relevant procedures within the User Instruction before you attempt to operate the device. The device should not be used if you suspect that it is not functioning or damaged. Please ensure that the hearing system does not have any mechanical problems. If the instrument has been dropped or otherwise damaged, please send it to your acoustician or ENT to review and repair. Do not attempt to open the device, or give to other persons for their use.

### Description of devices:

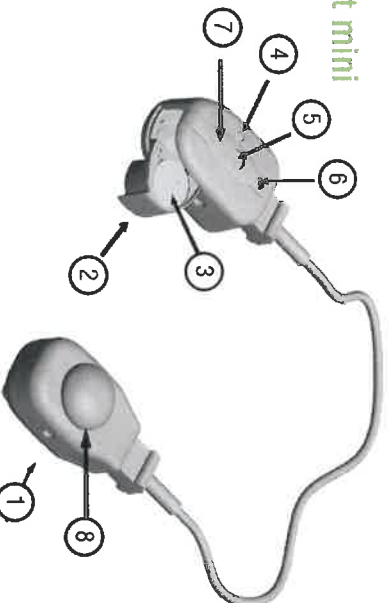
The bone conducted hearing system contact mini in monaural style, consists of one electronic housing and one conduction receiver housing.

The bone conducted hearing system contact mini in binaural style, consists of two electronic housings and two conduction receiver housings.

Utility model protection  
No: AT 010 553 U1

## Parts on the contact mini hearing system

- ① Bone conduction vibrator
- ② Battery door
- ③ Battery size 13
- ④ Paediatric lock
- ⑤ Microphone port
- ⑥ Volume control trimmer
- ⑦ Programming socket – below socket cover
- ⑧ Protection cap



Technical Data according to DIN IEC 118-9	
max. acoust.-mech. Sensitivity (dB)	51
max. Output-Force Level (dB0FL)	114
current consumption (mA)	1,06 +-10% @1,35V
battery size	13
battery life (@ 290mAh battery capacity)	approx. 270h



### Further important points!

- Your hearing system, accessories and batteries are parts belonging to the group of products of modern technology which have to be especially disposed of according to environmental protection. Please take care that you dispose of your hearing system and accessories at a hazardous waste disposal site under all circumstances. Your hearing aid expert will be glad to assist you in this matter.
- For extra hygienic and skin-protective cleaning we recommend special cleaning agents available at the relevant shops. Never use any chemical detergents.
- It is imperative that defective hearing aid must be repaired by an expert. Never try to open the hearing device yourself. Improper manipulation will cause any guarantee to become null and void. If your hearing system is defect, please consult your hearing aid expert. Regular maintenance

- and check-ups by your hearing aid expert may prevent the need for repairs.
- In the area of interfering with electromagnetic interference fields, such as radio transmitters, it may happen that the audio quality of your listening system is affected.

avoid possible damage to the ear, the fitting of the device must be carried out by an authorized hearing aid expert.

- Never try to recharge a disposable battery!
- Swallowing of batteries may be hazardous to your health and may cause severe injuries and even death!

For this reason: Never store batteries together with medicine! Immediately consult a doctor, if a battery has been swallowed!

- Incorrect manipulation or rough handling of the hearing system may cause detachment of small components of the hearing system.
- Never expose your hearing system to extremely hot sun (e.g. behind the windshield of a car), to direct heat (do not put it on a radiator) or severe cold (over night in a cold car) and avoid contact with chemicals and strong detergents.
- Always bear in mind that hearing devices do not properly function, if e.g. the battery

is low. This is especially hazardous, if you move in traffic or are otherwise dependent on warning signals.

- Switch off your hearing system in mines or other areas where explosions could take place, unless your hearing system is especially certified for such use.
- Never change batteries of the hearing system in the presence of babies and small children.
- Store batteries and parts of the hearing system out of reach of babies and small children.
- Perspiration and humidity should be removed from time to time from your hearing system (wipe with dry cloth). Always take off your hearing system before taking a shower or washing your hair, before going to the sauna or a steam bath.
- Consult a doctor in case of skin irritations of the ear or head.

## Handling of the hearing system contact mini:

Attention: The use of the appropriate wearing set up & components for the patient should be defined by your acoustician or ENT-doctor. Your acoustician or ENT will advise you about the handling of the contact mini and the accessories (components).

TO ENSURE THE SECURITY AND THE FUNCTIONALITY OF THE HEARING SYSTEM, IT IS ONLY ALLOWED TO USE ACCESSORIES OF BHM-TECH.

### 1. Cable connection

Plug-in the polarized cable into the electronic housing and on the opposite, plug-in the polarized cable into the bone conduction receiver housing. Please take care of the polarized pins of the cable plugs!



## 2. Opening of the battery-drawer- Insertion of battery:

Release the "red" paediatric lock by pushing the redbutton with the pin-side of the screw-driver no.1 and insert or replace the battery.



Take care to insert the battery the correct way (observe the +-mark and the polarity of the battery). Carefully close the battery drawer with your finger until it snaps into the paediatric lock.

- As the device is not equipped with an ON-OFF switch because of safety reasons, the device is switched off by opening the battery drawer. After daily use, we recommend you to store the device on a secure place with the battery drawer open. The open battery drawer allows for evaporation of possible penetrated moisture.

**Attention:** After removal of sealing tape on the battery, please wait for 15 seconds under all circumstances before you insert the battery!

- If you have tried everything and the hearing device still does not function properly, please take it to your hearing aid expert including a short description of failure.

### Important information:

The basic adjustment of the hearing aid is carried out by an authorized hearing aid expert according to the hearing loss of the patient. The end user is kindly requested only to operate those controls designed for his or her easily accessible use according to instructions.

#### WARNING!

Incorrect use of your hearing instrument and batteries may be hazardous to your health. Please read the following points carefully.

- Keep contact mini and parts of it, which you have taken off, out of reach of other persons or children!
- Adjust the volume of the hearing system according your individual.
- These hearing systems are able to transmit signals of very high volume. In order to



- Carefully slide the cover into the housing.
- Carefully press push the cover into the housing.

**Hint:** In case you want to disable the function of the volume trimmer, you can deactivate it by the programming software.

### If your hearing device doesn't work:

- Please remember that your hearing device automatically switches off if the battery output becomes very low.
- Check if the hearing device is switched on and the battery door is completely closed.
- Does your battery still supply enough power and is it correctly inserted? (Always take a spare battery with you!) – Try a new battery from a new pack.
- Is the volume control selected properly? – If the device whistles, please check whether the hearing device fit properly against the head.
- If you hear buzzing or whistling noises in your device, this may not necessarily be the fault of your hearing device. It may be caused by interference from a mobile phone or another electronic instrument.

### Battery:

Please always use high quality 13 size battery. Consult your acoustician or ENT about recommended batteries.

If the instrument is not used for longer period, open the battery drawer and store the device without battery inside in the delivered hardcase in a secure place.

### Battery Warning:

The contact mini is equipped with an acoustic battery-warning system. In case of a weak battery, the gain will be reduced automatically and a signal tone will be heard. The battery has to be changed immediately to ensure the proper function of the contact mini.

### 3. Adjustment of the volume:

The adjustment of the volume on the device can be done by turning the volume trimmer on the electronic housing by using the wedge

blade end of the screwdriver No 1. Consult your acoustician or ENT about the ideal volume of the device.

Do not change the volume without having the permission of your acoustician or ENT department. Let your acoustician or ENT instruct you about adjusting the volume of your hearing system.



Select the most pleasant volume by means of the volume control. The volume will be "higher", when you turn the volume trimmer clockwise by using the screwdriver. The volume will be "lower" when you move the volume control trimmer counter-clockwise.

**Please note:**

Special care must be taken to ensure that the system is properly seated on the head and the conductor plate of the bone conduction receiver is firmly seated against the head.

Ensure that the contact is directly in contact with the skin.

- Hairs between conductor plate and skin will reduce the transmission of the signals.
- Weak contact and too high volume can cause feed back (whistling).

#### 4. Mounting of the contact mini onto the wearing systems

The electronic housing, as well as the bone conduction receiver housing, are equipped with snap fasteners which enable you the use of the different wearing systems like headbands, hairband...

**WARNING:** If using the hearing system for babies or small children, because of the weak skull, you may have to change the position of the wearing system periodically.

Your acoustician or ent will instruct you.

9 14

**Attention:** Please always mount color rings as they absorb vibrations.

#### 5. Remove of the housing cover due to programming

Open the battery drawer as shown in section 2. Release the cover-lock by using the wedge-blade side of the screwdriver no. 1 and carefully slide it off as shown. Underneath you will find the programming socket. Plug in the programming cable into the programming socket.



**Note:** Take care that the red colour dot on the programming cable is on the same position as the yellow colour marking on the programming socket otherwise you can damage the connection!

#### 6. Programming-software

To ensure the proper function of the device, only use for this product released software. In case of uncertainty, contact your supplier or BHM-Tech Produktions-gesellschaft mbH.

#### 7. After the programming

Remove the programming cable and mount the socket cover as shown below.



and bone conduction receiver housing are removed. Perspiration and humidity should be removed from time to time by using a moist cloth, followed by wipe with dry cloth.

**Cleaning of wearing system headband:**

Make sure that before cleaning the wearing system headband, electronic housing, bone conduction receiver housing and the connection cable are removed. For exact cleaning information, see the instructions on the labels inside the headband.

**Fitting – Programming of the contact mini**

**(Only for the Acoustician or ENT – doctor):**

**IMPORTANT INFORMATION:**

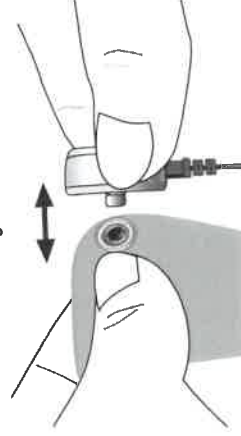
The hearing system contact mini is available as binaural or monaural hearing system. The decision which device will be left and which device will be right must be decided by the acoustician or ENT in the course of the programming process. To mark the devices clearly, assemble the supplied colour rings on the ball of the print button on the electronic part, as follows:

**Blue/Red color ring:**

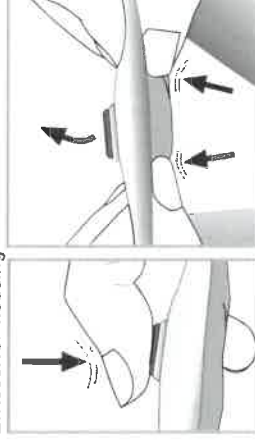
Left/Right device from the patient's perspective.

**Mounting/Dismounting of components:**

1. Electronic-housing:

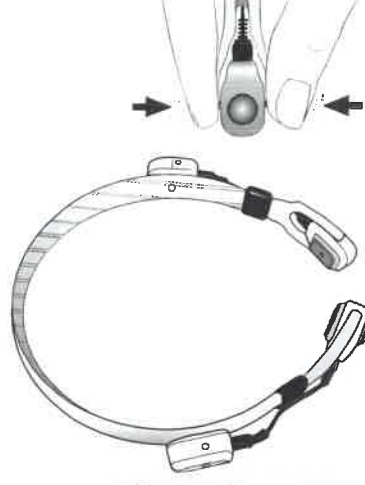


2. Receiver-housing



Always ensure that the electronic housing is mounted outside on the front of the head and the bone conduction receiver is mounted rear inside the wearing system. Improper mounting will disable the function of the contact mini.

**Mount the electronic part and the bone conduction receiver on the hairband and headband as shown:**





For using the system as a hairband set up, the snap fastener on the bone conduction receiver housing is removed and will be covered with a protection cap (8), which is part of delivery.

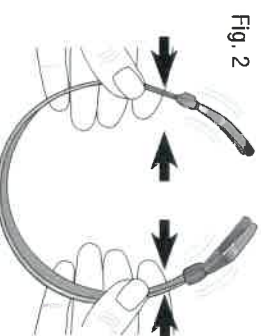
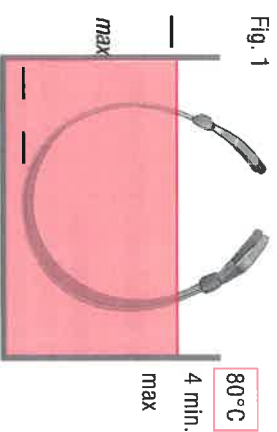
### Bending of the hairband:

To optimize the fitting of the wearing system hairband, we recommend you to adjust the hairband by bending, using the following procedure:

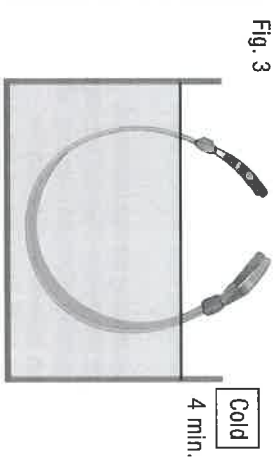
Follow this procedure as shown step by step.

**Attention:** Risk of burning: Please keep children away from the area whilst following this procedure!

- 1) Remove the electronic housing, bone conduction receiver housing and cables from the wearing system. Then put the hairband, as shown in picture 1, in a suitable vessel, filled with hot water (80 degrees Celsius) for 4 minutes. Take care that the cableholder made of rubber are not touching the water.



- 2) Bend the hairband according to the size of the head of the patient to get the best fitting.



- 3) Then put the hairband for 4 minutes in cold water to fix the bend position of the hairband. Again, take care that the cableholder made of rubber are not touching the water.
- 4) Finally, mount the electronic housing, bone conduction receiver housing and cable onto the hairband.

### Cleaning of wearing system hairband:

Make sure that before cleaning the wearing system hairband, electronic housing