



apollon

Das tragbare Taschenhörssystem

The Portable Hearing System

Gebrauchsanweisung/User Instruction

Thank you very much for your decision to use a quality product from BHM-Tech. The digital bodyworn hearing system apollon is produced in Austria according to medical device directive 93/42/EEC and has been 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 requirement of quality and safety regulations.

Intended Use: The hearing system is designed in such a way as to compensate hearing impairment by processing and amplifying the sound as well as transferring it to the ear.

Users: The hearing system is intended to be used by children and adults.

Indications: For moderate to severe hearing loss.

Contraindications: Irritated skin or pressure marks possible.

If you follow the instruction for use in detail, your digital bodyworn hearing system apollon will be your reliable partner for many years.

Your digital bodyworn hearing system apollon has been 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 apollon. Your hearing aid expert will also supply you with information on regular maintenance measures.

READ THIS INSTRUCTION FOR USE CAREFULLY BEFORE USING THE DEVICE.

Please ensure that you have followed all the relevant procedures within the instruction for use 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. Never pass on your digital bodyworn hearing system apollon to another person and prevent unauthorized use.

Warning note for the hearing aid acoustician/ ENT specialist:




This hearing system can generate an output sound pressure level of 132 dBSPL. Particular care must be taken when adjusting the device as there is a risk of damage to the user's residual hearing.

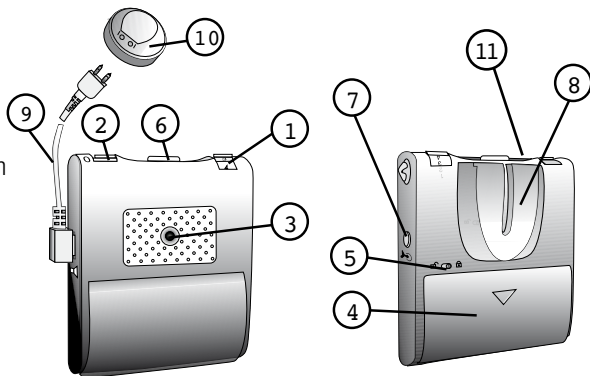
Swallowing of small parts of the hearing system or batteries may be hazardous to your health and may cause severe injuries and even death!

Index

Parts of the aid	23	Instruction after the use of the aid	33
Commissioning of apollon	24	Maintenance of apollon	33
Cable – connections	24	Dispose of apollon and batteries	33
Assembling of the earmould	25	Instructions for cleaning	
Fitting – Programming of apollon	25	your hearing system	34
Before programming	25	General Warnings	34
Programming software	26	General Information	36
Post programming	26	Service & Repair	37
Handling of apollon	27		
Battery type.....	27		
Insertion of the batteries	27		
Volume control.....	29		
Mode Control Switch.....	29		
DAI (Direct Audio Input).....	30		
Line-In 3.5mm	31		
Optical low battery warning – LED	32		
Receiver and receiver cable	32		
Shirt-clip.....	32		
Summary of signal tones	33		

Parts of the aid

- ① Volume control
- ② O-T-MT-M mode control switch
- ③ Low battery warning LED
- ④ Battery compartment
- ⑤ Paediatric lock 
- ⑥ DAI
- ⑦ Line-In 
(3.5 mm)
- ⑧ Shirt-clip
- ⑨ Receiver cable 
- ⑩ Earphone
- ⑪ Microphone



Technical data according IEC 60118-0	
Max. output (dB SPL)	154
Max. gain (dB)	94
Current consumption (mA)	13.2 +/-10% @ 3 V
Battery size	AA
Average lifetime of the batteries (hours) (at capacity of 2500 mAh)	Appr. 189 hours

Commissioning of apollon

Your ENT specialist or acoustician will instruct you in detail about the handling of the hearing system and about the accessories.

TO ENSURE SAFETY AND FUNCTIONALITY OF THE HEARING SYSTEM USE ONLY ACCESSORIES APPROVED BY BHM-TECH.

Cable – connections

Plug in the 2-pin end into the socket of the earphone and plug in the 3-pin end into the 3-pin socket at the aid-housing. Mind that all connections are polarized and must be plugged in right position!

See fig. 1 and 2.

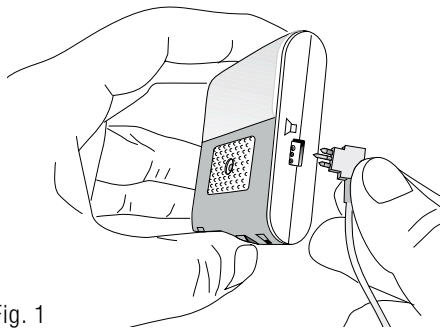


Fig. 1

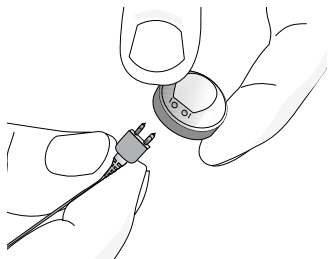


Fig. 2

Assembling of the earmould

Your individual earmould should be assembled onto the earphone by an acoustician.

Your ENT specialist or hearing aid acoustician will instruct you about the handling and daily maintenance of your earmould. In case of unpleasant comfort or skin irritation contact your ENT specialist or acoustician immediately.

Fitting – Programming of apollon

(For the ENT specialist or acoustician only!)

Important information:

The aid is pre-configured as monaural system by the factory!

1. Before programming

Remove the shirt-clip as shown in fig. 3a and 3b.

Attention: During programming, batteries must be inserted and the device must be switched on.

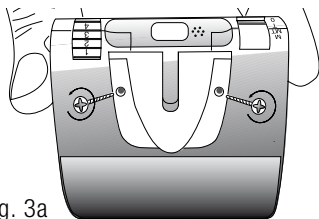


Fig. 3a

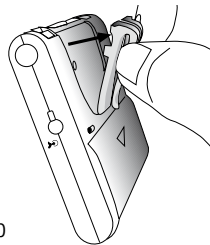


Fig. 3b

Connect the programming cable to the aid and to the programming interface.

Attention: Ensure that the cable is connected properly according the markings on the cable plugs and according the markings on the sockets on the aid and on the programming interface (see fig. 4).

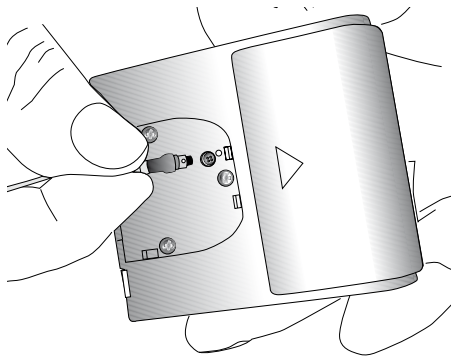


Fig. 4

2. Programming software

To ensure correct function of the aid, use only the software and the equipment approved by BHM-Tech.

3. Post programming

Unplug the programming cable and mount the shirt-clip as shown in fig. 5 and 6.

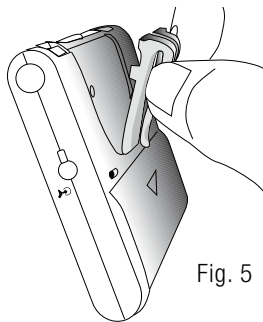


Fig. 5

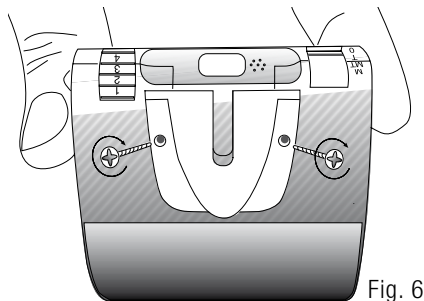


Fig. 6

Handling of apollon

Battery type

Only use quality batteries Type AA, batteries are not part of the delivery.

Insertion of the batteries

apollon is equipped with a paediatric lock for the battery compartment. By sliding the paediatric lock (5) to the right – the battery compartment (4) is locked; sliding to the left the battery compartment is unlocked (see fig. 7 and 8). Open the battery compartment by sliding it from the housing as shown in fig. 10 and 11. Insert the batteries polarized correctly.

Hint: Remove the batteries when the aid is not in use for longer time. In case a 5 times warning signal sounds and the low battery warning LED continuously lights up, change the batteries (see fig. 7-11).

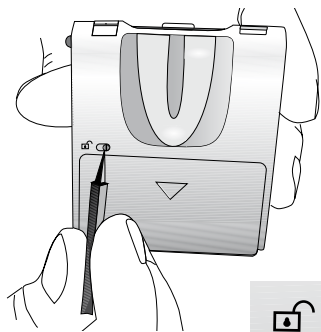


Fig. 7

Fig. 8



open ↔ locked

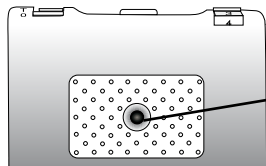


Fig. 9

Low battery
warning LED

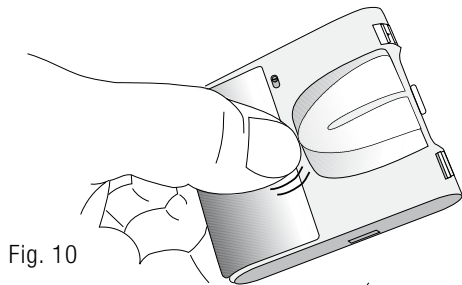


Fig. 10

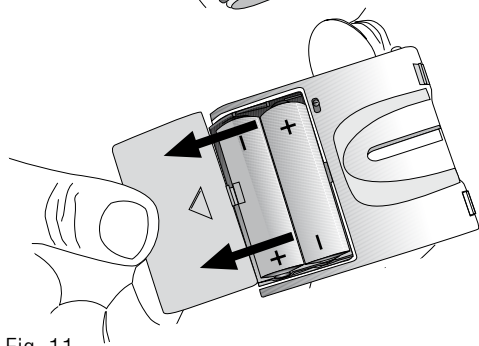


Fig. 11

Volume control

With the volume control **(1)** (see fig. 12) you can adjust the volume for your convenience. Adjusting range: 1 ... low volume
MAX ... maximum volume

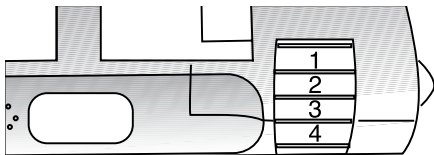


Fig. 12

Hint: Before switching on the aid, changing the modes, or connecting external devices to the aid, always turn the volume control **(1)** to **“1”** (lowest volume). Afterwards adjust the volume according to your convenience.

Recommendation: For your convenience, fit the volume of the aid in accordance with your environment.

Mode Control Switch

apollon is equipped with a 4 position O-T-MT-M switch **(2)** (see fig. 13). The chosen mode will be indicated with peep-tones. The signal-tones can be set and deactivated by using the “Setting” function in the fitting software. You can find more information about the signal-tones on page 33.

- Position 0: Aid is switched OFF
- Position T: Aid is in telecoil mode
- Position MT: Aid is in telecoil & microphone mode
- Position M: Aid is in microphone mode

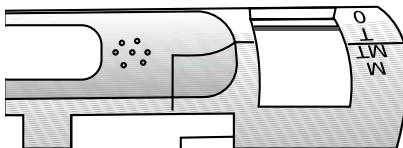


Fig. 13

Switching on

After switching on the aid, the battery-status will be checked and the LED-lamp **(3)** lights up shortly when the batteries are in good condition.

Microphone mode

Switching to the **“M”** position, the input signal from the internal microphone is used to receive acoustic signals, which are amplified by the device and forwarded to the ear.

Telecoil mode

Switching to the **“T”** position, the input signal from the internal Telecoil is used to receive inductive signals. The **“T”**-mode can be used for phone calls, in official buildings, cinemas, theatres, equipped with inductive system or at home with inductive-accessories. It enables you to listen without disturbance.

Microphone-telecoil mode

Switching to the **“MT”** mode you are in the combined telecoil-microphone mode. You can hear signals from the integrated microphone and from the integrated telecoil at the same time.

Switching OFF

To turn OFF the aid move the switch **(2)** to position **“0”**.

DAI (Direct Audio Input)

apollon is equipped with a DAI **(6)**. It enables you to use hearing aid accessories like blue-tooth link to your cell-phone, table microphone and so on via Bluetooth neckloop or adapter. Before connecting to DAI, make sure that the volume control is on position **“1”**! Consult your acoustician about the possibilities.

Hint: To ensure safety and functionality of the hearing system use only external devices approved by authorized hearing aid manufacturer or BHM-Tech. The use of unauthorized devices may be hazardous to your health.

Line-In 3.5mm

apollon is equipped with an external audio input **(7)**. Before connecting an external device on the external audio input, make sure that the volume control is on position **“1”**! Your acoustician or ENT-specialist will advise you about the opportunities of useful and available external accessory devices.

Hint: To ensure safety and functionality of the hearing system use only external devices approved by authorized hearing aid manufacturer or BHM-Tech. The use of unauthorized devices may be hazardous to your health.

Hint for the use of external audio input and DAI:

In case an external accessory device is connected to external audio input or DAI, the hearing device apollon is switching automatically to line-in or DAI-mode. Microphone and telecoil are deactivated.

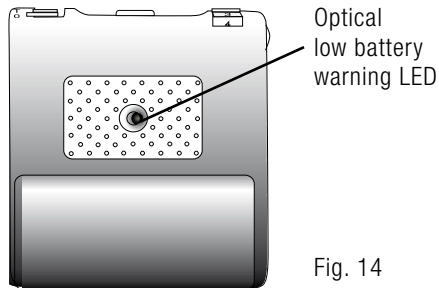
Audio input and DAI cannot be used at the same time. In case of trying to use both external inputs, the external audio input will be automatically preferred.

Consult your acoustician or ENT-specialist about the opportunities of external accessory devices and their applications.

Optical low battery warning – LED

apollon is equipped with an optical battery warning (3) (see fig. 14).

The batteries of apollon have to be replaced as soon as the optical battery warning lights up constantly.

**Receiver and receiver cable**

apollon is equipped with a receiver (10) and a receiver cable (9).

Your hearing aid expert will advise you in handling and maintenance of receiver and receiver cable.

Hint: To ensure safety and functionality of the hearing system use only receivers and receiver cables approved by BHM-Tech. The use of unauthorized receivers and receiver cables may be hazardous to your health.

Shirt-clip

apollon is equipped with a shirt-clip (8). Your acoustician or ENT specialist will advise you about the wearing opportunities with this shirt-clip.

Summary of signal tones

Microphone	1-time beep
Microphone/Telecoil	2-times beep
Telecoil	3-times beep
DAI	4-times beep
ext. audio input (Line-In)	5-times beep

Instruction after the use of the aid

Maintenance of apollon

Perspiration and humidity should be removed daily from your hearing system. Use a cleaning brush or soft tissue to remove debris from around the switches, microphone and battery compartment. Always take off your hearing system before taking a shower or washing your hair, before going to the sauna or in a steam bath.

Dispose of apollon and batteries

Your hearing system apollon, accessories and batteries are parts that belong to the group of products of modern technology which have to be especially disposed of according to environmental protection. Please make sure that you discard your hearing system properly as hazardous waste. Your hearing aid expert will be glad to assist you in this matter.

Instructions for cleaning your hearing system

In order to ensure the warranty and guarantee of your hearing system, please note that your hearing system must be cleaned thoroughly and properly at least once a day. Wipe your hearing device with a clean, dry cloth: please make sure that your fingers are also clean and dry. This enables you to remove sweat and moisture from your hearing device. Furthermore, it is necessary to remove the batteries from your hearing system at night after cleaning. Store overnight with the battery compartment open so that any moisture in the device can evaporate.

Remove your hearing device before showering, bathing or using the sauna, and before you put on body care products, hairspray or make-up powder. Such deposits can also soil the hearing device, thus impairing or damaging the flawless functioning of your hearing system.

General Warnings

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

The basic adjustment of the hearing system apollon 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 control elements designed for his or her easily accessible use according to instructions.

Switch off your hearing system in mines or other areas where explosions could take place.

Always bear in mind that your hearing system apollon will not perform properly, if e.g. the battery is low. This is a especially hazardous, if you move in traffic or are otherwise dependent on warning signals. Remove the batteries completely when apollon is not in use.

Store batteries and parts of the hearing system apollon out of reach of babies and small children.

Never change batteries of the hearing system apollon in the presence of babies and small children.

Keep apollon and any parts of it, which you have taken off, out of reach of other persons or children!

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 apollon may cause detachment of small components of the hearing system. If any small parts are swallowed by mistake or inserted into the ear or nose please contact your doctor.

The hearing system apollon is able to transmit signals of very high volume. The fitting of the device must be carried out by an authorized hearing aid expert.

Never expose your hearing system to extreme weather conditions, like strong wind, hot sun (e.g. behind the windshield of a car), direct heat (do not put it on a radiator) or severe cold (overnight in a cold car) and avoid contact with chemicals and strong detergents.

If you are in an area that may have electromagnetic interference fields, such as a radio transmitter, the audio quality of your hearing system may be affected.

Consult a doctor in case of skin irritations of the ear or head.

Be aware that devices which are connected to the line-in input of apollon has to comply with the safety requirements of EN 60601-1-1 or EN 60065.

General Information

It is absolutely necessary that a defective hearing aid must be repaired by an expert. Never try to open the hearing device by yourself. Improper handling and operation will lead to the loss of guarantee. If your hearing system becomes defective, please consult your hearing aid expert. Regular maintenance and check-ups by your hearing aid expert may prevent the need for repairs.

Service & Repair

If your hearing system does not work, it must be repaired by a qualified service technician. Do not try to open the hearing system casing, as this will void the guarantee and warranty. Please contact your hearing aid acoustician/doctor if your hearing system needs repair.



BHM-Tech Produktionsgesellschaft mbH
Grafenschachen 242
7423 Grafenschachen, Austria
www.bhm-tech.at



0297 nach EU-Richtlinie 93/42/EWG
Qualitätsmanagementsystem nach DIN EN ISO 13485

According to EU directive 93/42/EEC
Quality management system according to DIN EN ISO 13485

