



Fitting Manual

pan 

Content

Purpose	3
Warning information for hearing care professionals	3
Determining the temple length	4
Preparation of the temple	5
Cosmetic adjustment of the temple	6
Mounting the adapter	7
Mounting the hearing module	9
Individual fitting	9
External receiver	10
Determining the receiver tube length	10
Selection and mounting of the earpiece	11
Mounting the High Power earpiece	12
Mounting and dismantling the receiver	14
Adaptation of the receiver	15

Congratulations on acquiring your digital hearing module **pan** – a quality product from BHM. The digital hearing module for spectacle wearers is manufactured in Austria in line with the latest audiological findings and technical innovations and meets the requirements of 93/42/EEC. The following pages are directed at hearing care professionals and show proper fitting and adjustment of the **pan** hearing module.

Purpose

Hearing modules are developed to improve hearing. The key functions of a hearing module are the sound pick-up and reproduction of the signal to the ear drum of those with impaired hearing. Your hearing module lends itself to the compensation of hearing loss as well as for masking of tinnitus with **pan Ti**.

Warning information for hearing care professionals

When selecting and adjusting hearing modules whose maximum sound pressure level can exceed 132 dB SPL (ear simulator), particular caution must be exercised because there is a risk of damaging the residual hearing of the wearer.

Prior to using the hearing module, reassure yourself of its functionality and proper condition. The hearing module should not be used under any circumstances if there is a suspicion it does not work perfectly or is damaged.

pan is suitable for mounting on almost any pair of spectacles.

Determining the temple length

To determine the correct temple length, use the fitting template supplied (Symbolic image 1). Ensure the wearing position of the spectacles is correct.

Use a pen to mark **points A** and **B** by putting the fitting template onto the spectacle temple (Figs. 3 to 5).



The fitting template is labelled with letters L (left) and R (right) for the respective side. (Symbolic image 1)

Symbolic image 1



Symbolic image 2

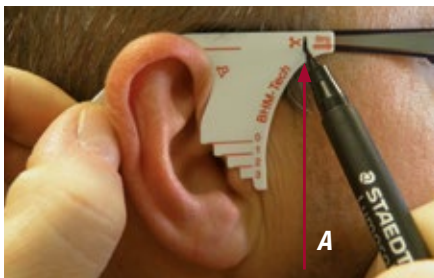
A: Cut to length here (✂ symbol)

B: Strip plastic



Symbolic image 3

Put on fitting template



Symbolic image 4

The mark for cutting the temple to length (A ✂)



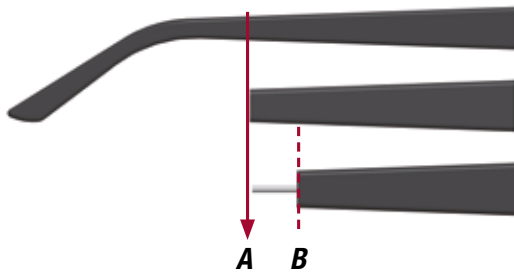
Symbolic image 5

The mark for stripping the plastic (B Strip →)

Preparation of the temple

To prepare the temple, remove the temple from the front of the spectacles if required. The temple is cut to length at **marking A** using a suitable tool (such as with side-cutting pliers) and the plastic is stripped to the wire core at **marking B** (Symbolic image 6). Then the cut surface has to be worked with a suitable tool as required (such as a file or sandpaper) - Symbolic image 6.

Note: When using spectacles with metal temple, this must be cut at **marking A** using a suitable tool (such as side-cutting pliers) and be adjusted to the shape of the inner profile of the adapter at **marking B** (Symbolic image 7).

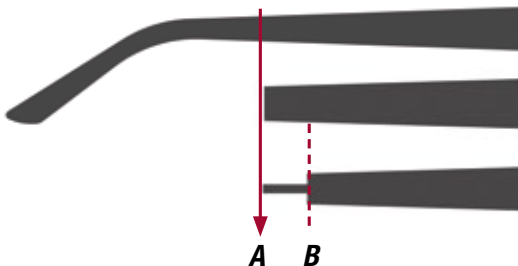


Symbolic image 6

Plastic temple example:

A: Cut to length temple

B: Strip temple, prepare cut surface



Symbolic image 7

Metal temple example:

A: Cut to length temple

B: Align to adapter inner profile

Cosmetic adjustment of the temple

The temple must be adapted cosmetically to the hearing module by cutting, sanding or similar such that a smooth transition is created (Symbolic image 8).

plastic temple

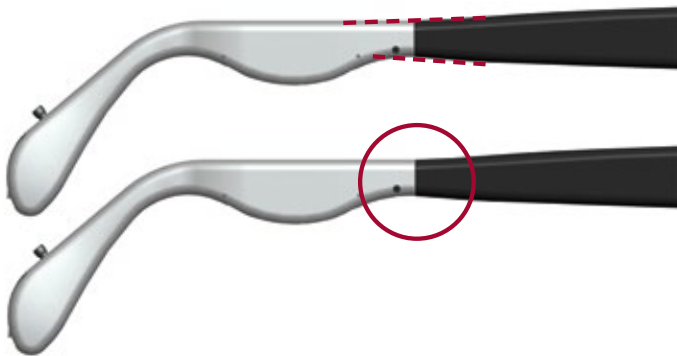


or flat metal temple



Symbolic image 8

Cosmetic adaptation of plastic or flat metal temple

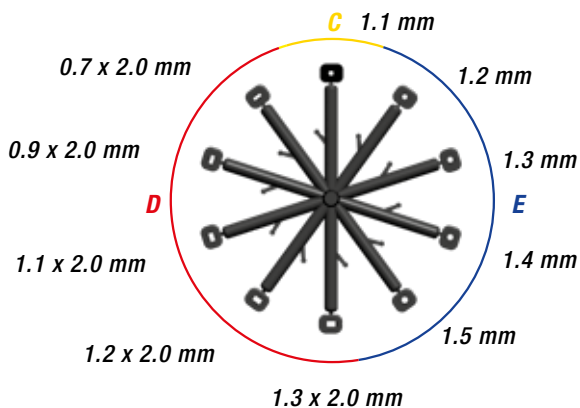


Mounting the adapter

Clean the protruding wire core with spirit. The glued surface must be free of grease (Symbolic image 9). Included with the product is an adapter ring with different adapters suitable for different wire cores (Symbolic image 10). Select from them the adapter suitable for your temple.

Symbolic image 9

Clean the wire core and remove any grease



Symbolic image 10

C: Adapter for plastic and metal glasses with slimline temples (\emptyset 1.1 mm)

D: Adapter for plastic and metal glasses with flat wire core (0.7 x 2.0 mm to 1.3 x 2.0 mm)

E: Adapter for plastic and metal glasses with round wire core (\emptyset 1.2 to \emptyset 1.5 mm)

Apply glue to the wire core and the cut surface and fit the adapter onto the temple. Ensure the adapter sits straight and secure (Symbolic image 11).

Recommendation: Cyanoacrylate quick-action glue with low viscosity (such as Loctite 406). Hardening time: approx. 2 minutes.

WARNING! Please ensure that no excess adhesive escapes from the point of attachment after you have attached the adapter to the glasses frame i.e. there is no adhesive present on the outside. If any excess adhesive residue is present, please remove it immediately and clean the module with a clean, dry cloth before fitting it to the patient. The patient must not come into contact with the adhesive!

Symbolic image 11

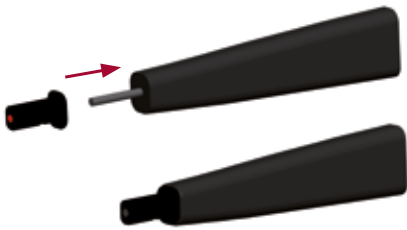
Push the adapter onto the temple all the way



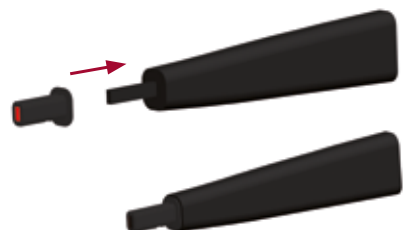
The indent must be on the underside when fitting



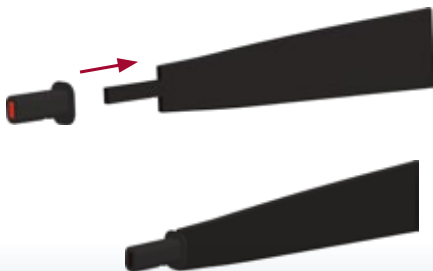
Plastic temple with round wire core



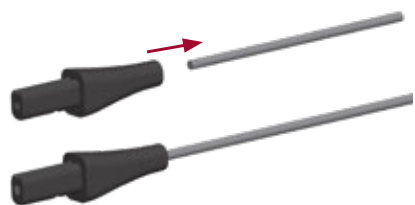
Plastic temple with flat wire core



Flat metal temple

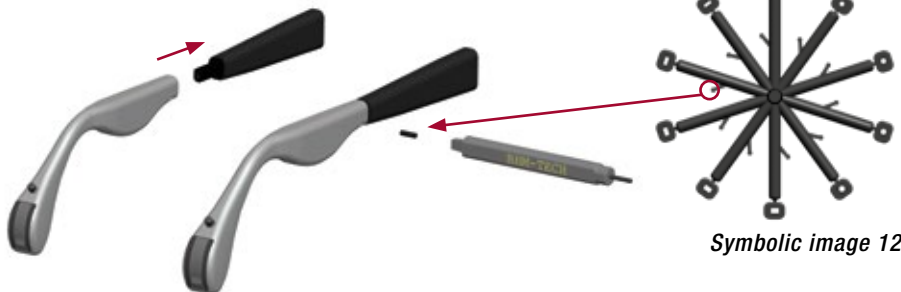


Slimline and round metal temple



Mounting the hearing module

Mount the hearing module onto the adapter and secure it using a BHM pin setter and locating pin (on the adapter ring) - Symbolic image 12.



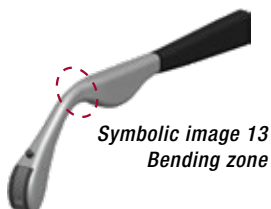
Symbolic image 12

Individual fitting

Individual fitting (Symbolic images 13 to 15) is possible after adequate warming of the hearing module by using hot air only on the area specified in Symbolic image 13 using a frame heater. The hearing module may only be heated uniformly in the area stipulated. Please do not use any tools such as pliers because damage to the plastic material may result.

WARNING: RISK OF BURNS – ENSURE THAT ALL THE PARTS OF THE HEARING MODULE HAVE COOLED BEFORE COMING INTO CONTACT WITH BODY PARTS!!!

CAUTION: When bending the hearing module, never use a naked flame for heating. This can cause damage to the hearing module. Only the frame heater with slit nozzle provided may be used for heating. Max. temperature: 60 degrees Celsius / max. 45 seconds



Symbolic image 13
Bending zone

Note: Please note that after using the hearing module by a patient, a possible transfer of the hearing module to other patients is only possible after a reprocessing of the hearing module by BHM.



Symbolic image 14



Symbolic image 15

Caution: Make sure that the stability and the functionality of the visual aid and the module have not been affected by the installation and the individual adaptation.

External receiver

Use the audiogram, the condition of the auditory canal and the datasheet to decide whether your customer requires a **Normal Power** (Symbolic image 16) or **High Power receiver** (Symbolic image 17).



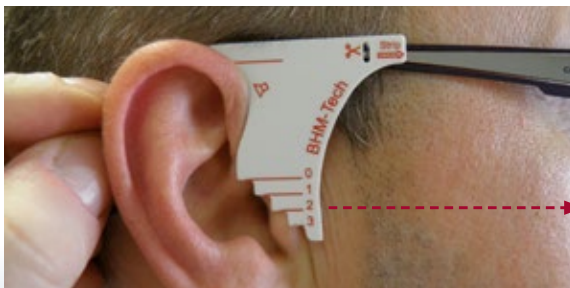
Symbolic image 16
Normal Power receiver
 $F = 10 \text{ mm}$, $G = 3.8 \text{ mm}$, $H = 3.6 \text{ mm}$



Symbolic image 17
High Power receiver
 $I = 10 \text{ mm}$, $J = 4.5 \text{ mm}$, $K = 5.5 \text{ mm}$

Determining the receiver tube length

At the same time as determining the temple length, the fitting template is used to determine the correct length of the external receiver tube length, as shown in Symbolic image 18. Lengths 0, 1, 2 and 3 are available. The value in the centre of the auditory canal is read to determine the receiver tube length (Symbolic image 18).



Symbolic image 18
Receiver tube length 2
for example

Selection and mounting of the earpiece

Use the condition of the auditory canal to select the earpiece suitable for your customer and fit it onto the external receiver (Figs. 21 and 22).

Note there are different earpiece types for Normal Power and High Power receivers (Figs. 19 and 20).

Symbolic image 19
Earpieces, Normal Power

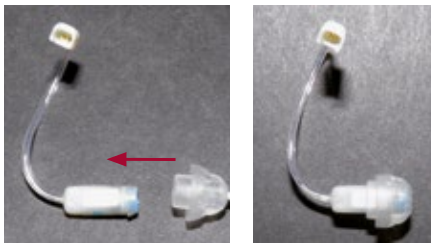


Standard Small Medium Large

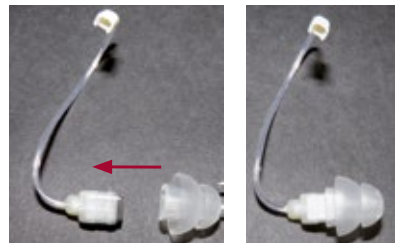
Symbolic image 20
Earpieces, High Power



Small Medium Large



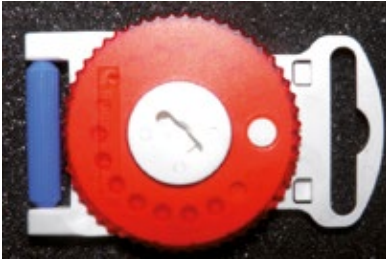
Symbolic image 21
Example: Normal Power, medium



Symbolic image 22
Example: High Power, medium

Note: Please note that the receiver and dome must be individually adapted to the wearer and are therefore not suitable for transferring to other wearers.

Mounting the High Power earpiece



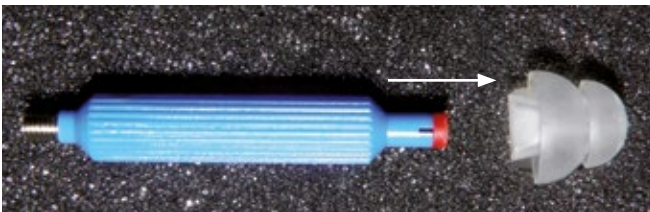
Cerumen Filter HF3



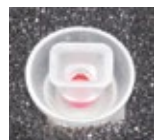
Mounting tool for High Power earpiece



Removing the HF3 filter



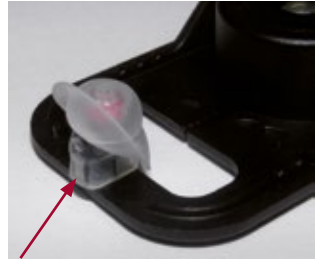
Press the HF3 filter as far as it will go into the High Power earpiece.



Hold the earpiece and filter at the end and release the tool from the filter by turning.



Fit the earpiece over the adapter of the mounting tool.



Ensure that the earpiece is fully on the mounting tool.



Open the earpiece by pressing together the mounting tool.



Insert the High Power receiver into the open earpiece.



Carefully remove the mounting tool.

Mounting and dismounting the receiver

Symbolic images 23 to 25 for fitting and removing the receiver.

Symbolic image 23

1. Receiver lock must be open



Symbolic image 24

2. Open or close the lock with the BHM screwdriver supplied



Symbolic image 25

3. Receiver lock closed



Note: Unlock 90° clockwise.
Lock 90° anti-clockwise.

**Remove the receiver
in the reverse sequence!**

Adaptation of the receiver

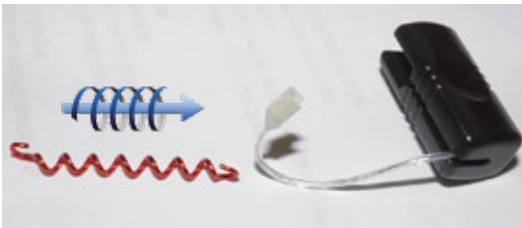
The tube shape of the receiver can be adapted as follows if required:

Place the receiver into the protective sleeve provided (Symbolic image 26). Rotate the spiral spring onto the receiver tube (Symbolic image 27). Adapt the receiver shape to the customer and heat the receiver tube using the frame heater (Symbolic image 28).

Allow the receiver to cool for at least one minute and remove the spiral spring and protective sleeve (Symbolic image 29).



Symbolic image 26



Symbolic image 27



Symbolic image 28



Symbolic image 29



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Quality management system according to DIN EN ISO 13485:2016

Perfection made in Austria

**100 %
AUSTRIA**



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