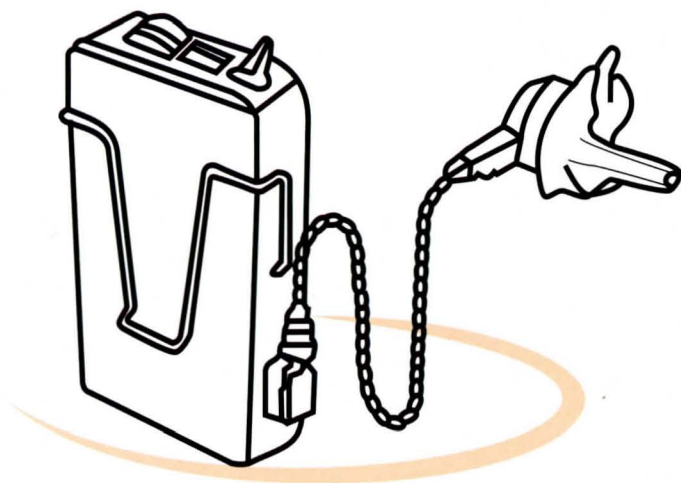


Body level **HEARING AID CARE**

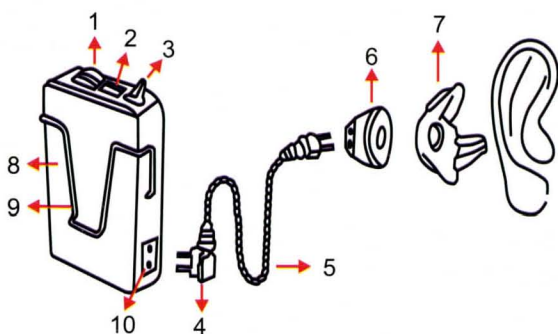


ALL INDIA INSTITUTE OF SPEECH AND HEARING
Manasagangothri, Mysore - 570 006

Body level HEARING AID CARE

A hearing aid is an electronic device that makes sounds louder for a listener with hearing impairment. It is composed of small and delicate parts. Therefore, it should be handled gently and with care.

Your hearing aid consists mainly of the following parts:



- 1-Volume Control
- 2-Microphone grid
- 3-On/Off Switch
- 4-Cord pin
- 5-Cord
- 6-Receiver
- 7-Earmold
- 8-Battery Compartment
- 9-Clip
- 10-Socket

M-T-O Switch:

At the top of your hearing aid, there is a switch with the markings M, T and O on it. This acts as the On/Off switch of the hearing aid.

O : Off

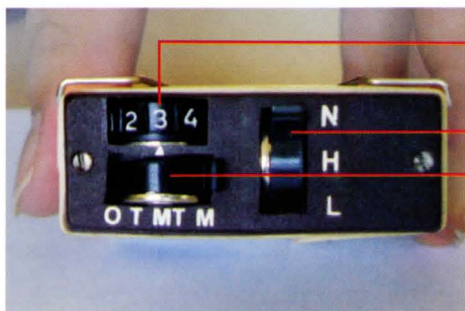
M : On (for normal conversations)

T : To be used when the hearing aid is being used with a telephone

MT: To be used when telephone as well as normal conversation are to be listened to.

Whenever you turn the hearing aid 'on', make sure that the volume is set to a minimum. Also, do not forget to turn the hearing aid off when it is not in use. This will reduce the battery drainage. It is also important to keep the hearing aid switched 'off' while changing batteries

To use the telephone, switch the hearing aid to the 'T' position. Hold the telephone handset such that the earpiece of the telephone handset is close to the microphone of the hearing aid, as shown in the figure.



Volume Control

Tone Control

MTO Switch

Volume Control

This is a control by means of which sounds can be made louder or softer. The volume control of the hearing aid has numbers from 1 to 9 or 1 to 7 or 1 to 5 marked on it. It works just like the volume control on a radio. When increased to a higher number, the sound increases, and when set to a lower number, the sound decreases. For best results, the volume should be maintained at the recommended level (usually 1/3rd of the total range). You can safely increase the volume till up to 2/3rd of the total volume range. Keeping the volume close to maximum distorts sound and makes speech difficult to understand.

Tone Control

This control is used when the listener needs only certain aspects of sound to be amplified. The tone control provides three options for amplification:

N: Normal

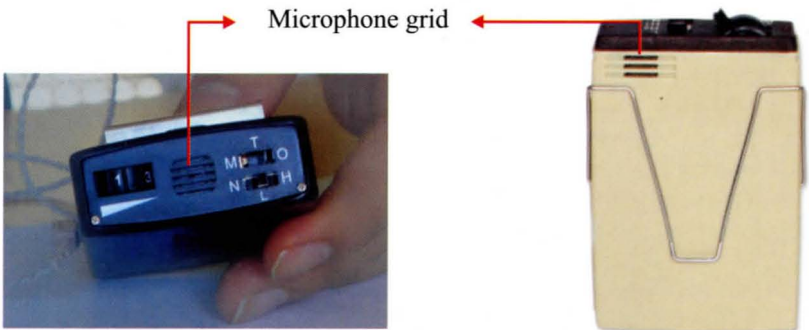
H: Low frequencies are reduced

L: High frequencies are reduced

For example, if a person has better hearing in the low frequencies, he would want the low frequencies to be reduced. Then, the hearing aid should be set to 'H'. You must set the tone control only to the position prescribed by your audiologist. In noisy situations, you can try using the 'H' setting.

Microphone

The microphone collects sound and changes it to electric signals. It is located under the grid-like area on the hearing aid. The microphone grid may be on located on the top or on the front panel.



Take good care of the microphone, as it is a very important part of your hearing aid.

- Do not cover the microphone with cloth, as this distorts the sound you hear.
- Keep the microphone free from dust and water.
- To ensure that small insects do not crawl into the microphone, keep the hearing aid in a box when it is not in use.
- While eating, make sure food particles and water do not get into the microphone.
- Do not drop or put things through the microphone.
- While feeding the child, you can clip the hearing aid at the back, to avoid food or water falling into the microphone grid.

- Do not expose the microphone to excessive heat, moisture, X-rays, etc.
- If you need to clean the microphone, wipe it gently using a soft, dry cloth.

Batteries

For most hearing aids, the battery used is similar in size (AA size) and shape to the ones used with alarm clocks. Ensure that you are using the right type and size of battery; otherwise your hearing aid will not work. It is also important that the battery provides the required voltage (usually 1.5V).

As the voltage decreases, you may have to turn up the volume in order to receive the desired amplification. However, increasing the volume, beyond a certain point, results in distorted sound output. If 2/3rds of the full volume range has been reached and the sound is still weak, replace the batteries.

A Voltmeter might be useful to determine when it is time to change the battery. Whenever the voltage dips down below 1.0V, replace the battery with a fresh one.

Buy batteries from a shop where they get fresh stock. Make a mark on the calendar the day you start using the new battery, in order to check the battery life.



- Do not leave old batteries in the battery compartment, as they may leak and damage other parts of the hearing aid also.
- Do not store old batteries, as it may cause fresh and used batteries to be mixed up.
- Always have spare batteries available, to ensure uninterrupted use of the hearing aid.
- Store batteries in a cool and dry place, away from coins, pins and other metal objects.
- Dispose off used batteries properly.

Whenever you change batteries, make sure the hearing aid is switched off.

- Do not leave the batteries in the hearing aid for long durations of time if the hearing aid is not in use.
- Dampness may cause the batteries to corrode.
- Do not use corroded batteries in your hearing aid.
- If there is any corrosion on the battery terminal contacts in the battery compartment, the hearing aid will produce a hissing/frying noise.
- Carefully scrape away any corrosion with a knife, or use a pencil eraser.



Battery compartment

While inserting the battery into the battery compartment, check that the positive terminal of the battery (marked with +) is in contact with the positive

terminal of the battery (marked with +) is in contact with the positive terminal of the battery compartment (also marked with +), and the negative terminal of the battery(-) is in contact with the negative terminal contact of the battery compartment (-), as shown in the figure:

Solar battery charger:

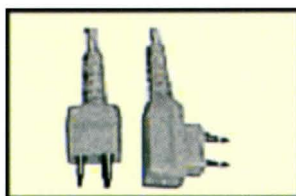
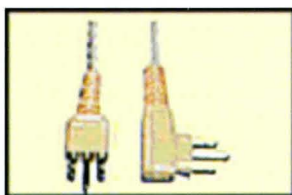
A solar battery charger and two rechargeable solar batteries may be provided with your hearing aid. This charger uses solar energy to power the batteries. To use this device:

- Place the battery provided in the battery compartment of the charger, ensuring that the + and – terminals of the battery and the charger correspond.
- Place the charger in direct sunlight for the entire day (sunrise to sunset). On sunny days, it generally takes one day to fully charge the battery. On cloudy days, however, it might take 2-3 days.
- While the battery is being charged, you can use the other battery provided to power your hearing aid. Once the battery is recharged, you may use that in your hearing aid, and recharge the other one.

Do not use any other batteries in the solar charger, as this may damage the device. Make sure you use only the batteries provided with the charger. Do not use the charger on rainy days. For best results, place the charger in direct sunlight, facing south. Dust should not form a layer over the light-sensitive surface of the charger. Wipe the charger with a dry cloth regularly. Keep the charger in a safe place, away from children and pets. If used properly, the solar charger should work for 9-12 years.

Cord

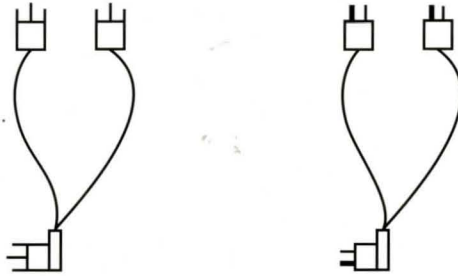
The hearing aid cord or wire is made of fine metal wires, enclosed in soft plastic or rubber. It connects the body of the hearing aid to the receiver. The cord has plugs with pins at either end, as shown in the figure. The cord may be:



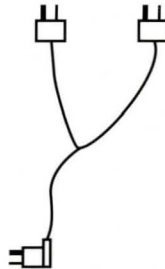
S cord



V cord



Y cord



One of the pins is thinner than the other. Accordingly, on the hearing aid too, one hole is smaller than the other. The thicker pin goes into the larger hole, and the thinner pin into the smaller hole. Do not unplug the cord unnecessarily, as the cord and the pins will begin to show signs of wear and tear.

Do not wind the cord tightly around the hearing aid, pull it, twist it or knot it, as this may cause the delicate wires to break. To check if the wire is damaged, gently twist the cord between your fingers, throughout the length of the cord. An intermittent sound indicates that the cord has been damaged. In such cases, replace the cord.

Cords often break at the plugs. Be careful when connecting the cord to the hearing aid or receiver and when disconnecting it. Grasp the cord by the hard plastic part at the end and pull. Clean the pins regularly with a small brush.

Receiver:

The receiver is the part that converts amplified electric signals to acoustic signals. Each hearing aid has a particular receiver that goes with it. Use only the type of receiver that is recommended for your hearing aid.



Connect the receiver properly to the cord, ensuring that the small and large pins of the cord are plugged into the corresponding sockets on the receiver. Do not drop or bang the receiver on hard surfaces. Keep it away from dust and moisture.

Remember to detach the receiver from the earmold while cleaning the earmold.

Do not detach the receiver from the earmold or the cord unless it is necessary. This might cause the washer on the receiver and the pins of the cord to become loose.

Whenever you give your hearing aid for repair or servicing, give the receiver along with it. Keep a spare receiver with you, so that you can benefit from continued use of the hearing aid.

Ear mold:



Ear mold

An earmold is generally made of acrylic or silicon material. It is custom-made to fit snugly into the ear. A separate earmold is made for each ear. These molds cannot be interchanged. It is important that earmold should fit well, otherwise it would be uncomfortable, and would also cause an unpleasant squeal.

The receiver of the hearing aid should fit firmly into the earmold. When disconnecting and connecting the hearing aid receiver to the earmold, make sure that the hearing aid is turned off and the volume is turned down.

To insert the earmold into the ear, grasp the earmold between your thumb and index finger, placing the canal of the earmold in the canal of the ear. Press the earmold gently into the ear, using a slight twisting motion. Pull the ear outwards and downwards, so that the helix of the earmold slips snugly into the helix of the ear.

For proper conduction of sound, the earmold should be clean and free of any obstructions in the sound bore. It should not be clogged with wax, dust, etc. Therefore, clean the earmold regularly. This can be done by blowing out any dirt blocking the passage for sound, cleaning the earmold with lukewarm water and soap, and then drying it thoroughly. Use a pipe cleaner or wire-pick to clear out any wax that may be blocking the passage.

Never clean or blow the earmold when it is still attached to the receiver.

Dry the earmold completely before attaching it back to the receiver.

If you are prone to heavy wax secretion in the canal, you should have your ears cleaned by a doctor as often as required. Even a thin layer of wax can cause distorted hearing.

Exercise caution while using earmolds in ears with ear discharge. Seek medical help immediately.

- Earmolds have to be made from impressions taken of the user's ears. Facilities that offer these services aren't always easily accessible, so the loss or breakage of the earmold must be strictly guarded against. All acids react with the material of the earmolds, so keep the mold away from acids.
- Take care that children do not put mud or sticks into the earmold for fun.
- In children, the canal shape and size changes as they grow. So it is necessary to have new earmolds made periodically. As canal shape and size change even in old age due to shrinkage, even geriatric hearing aid users need to have their earmolds remade.

If you have any questions/comments, or need any help, feel free to contact us

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