

How to Perform a Hearing Aid Listening Check with a Hearing Loss

Listening checks are quick, subjective assessments of how a hearing aid is functioning. Even listening checks performed by individuals with normal hearing will vary from person to person. The goal is to find a method that works best for you.

1) Cochlear Americas Users:

If you are a cochlear implant (CI) user wearing Cochlear Americas, plug a lapel microphone into the DAI port of the Cochlear Mini Mic 2+. Use double-belled tubing in order to couple the lapel microphone to the hearing aid (HA) receiver. Talk into the HA microphones like a normal listening mold and the sound should travel through the tubing, get picked up by the lapel microphone and sent up to the Mini Mic. The output is then transmitted wirelessly from the Mini Mic to the CI. Similar methods can be done with Advanced Bionics or MED-EL by substituting the Cochlear Mini Mic 2 with

Lapel Microphone ---



DAI port of Cochlear Mini Mic 2+ ---



Stethoset modification (double-belled tubing) ---



2) **CIC or ITC HA Users:**

Wearers of CIC or ITC hearing aids can use a device called a stethomate. The stethomate acts as a couple between an unamplified stethoscope and the hearing aid microphone. A picture of the stethomate is shown below:



3) **Remote Microphone Users:**

If you are a HA user that has a remote microphone, tape the end of a listening scope (stethoset) to the receiver of the remote microphone. Use the other end to connect to the HA on which you are performing a listening check. This should transmit the sound of the HA straight to your personal HAs.



4) **High Output HA Users:**

A quick remedy is to modify the tubing by cutting it **shorter**. By shortening the tubing distance, the amplified signal travels a shorter distance and preserves its output better. However, shortening the tubing distance may make it difficult to perform the Ling test if you cannot place the hearing aid in front of, closer, and/or further from your mouth. While this remedy should work well for high output hearing aids, it probably will not work as well for low output hearing aids and will ultimately depend on the severity of your own hearing loss.



5) **HA Users:**

This method works for some hearing aid users. The basic ingredients are:

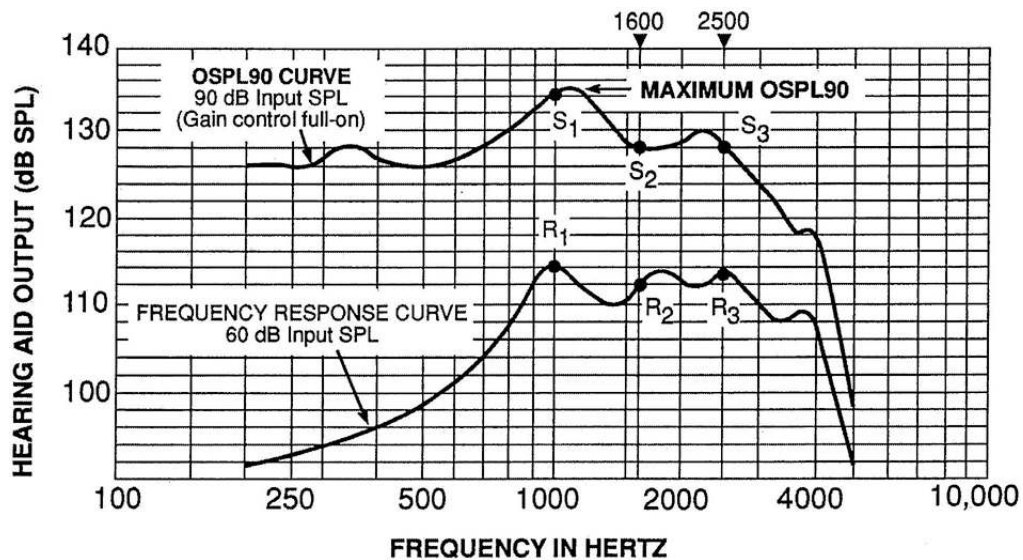
- A personal amplifier with small, round or cylindrical-shaped lapel microphone (i.e., assistive listening device)
- Two stethoscope tubes with the rubber bell on the end

One end of the rubber bell will go over the mouth of the lapel microphone, while the other rubber bell will be used to perform the listening checks on other hearing aids. The microphone is then connected to the input of the personal amplifier (see image below). The output of the personal amplifier, however, will require some thought on your part depending on the type and available features in your own hearing aid, and is not a one-size-fits-all solution. If you have a built-in telecoil, you could place headphones over your hearing aid, or use an ear-level induction silhouette. If you have Bluetooth capabilities, you may be able to connect the personal amplifier to the Bluetooth streamer.



6) **Anyone:**

Performing an electroacoustic analysis is one of the best ways to test the function of a hearing aid without doing an actual listening check. Running the hearing aid at **Full-On Gain** (average gain with 60 dB swept pure-tone input) or **OSPL90 Curve** (frequency response with 90 dB SPL swept pure tone input measured with the hearing aid set to full on) in a test box and comparing to **manufacturer specifications** will give you an objective measurement on if the device is providing expected gain.



References:

<http://www.amphl.org/audiology.php>

<https://law.resource.org/pub/us/cfr/ibr/002/ansi.s3.22.2003.html>