

# The Telecoil

## Connecting Directly to Sound

A telecoil can make a dramatic difference in your ability to hear clearly and understand dialogue.

Even with today's technology, the best hearing aids and cochlear implants can't separate the sounds you want to hear from background noise, or pick up all the sounds coming from a distant source like a stage or movie screen.

With a telecoil you can expand the functionality of your hearing aid or cochlear implant. A telecoil in a hearing aid functions as a wireless antenna that links into a sound system and delivers customized sound to the listener.

### What is a telecoil?

A telecoil is a small copper coil that is an option on most hearing aids and is built into cochlear implant processors. They are also known as t-coils and were originally used to boost the magnetic signals from the telephone handset. The telecoil is activated by a t-switch on the hearing aid or cochlear implant. All landline and some cell phones are designed by law to be used with a telecoil.

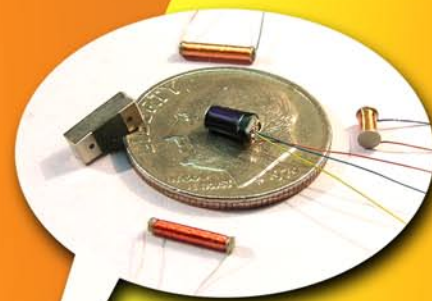
The telecoil can make a noticeable difference in your life when you combine it with hearing assistive technology. This pairing of technology bridges the physical space between you and the sound source. Hearing assistive technology connects the listener directly to the sound source while most background noise is eliminated.

### When would you use a telecoil?

Increasing the volume on your hearing aid or cochlear implant won't necessarily increase the clarity of what you hear. Hearing assistive technology combined with a telecoil can improve your understanding of dialogue at work, in a meeting, in the classroom, theaters, places of worship, tour buses, and other places. Some people use telecoils at home with the TV while keeping the TV volume low for the comfort of others.

Many public places are equipped with hearing assistive technology. With the implementation of the Americans with Disabilities Act of 1990, hearing assistive technology is increasingly available in public places.

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**The telecoil, a small copper wire, is located inside the hearing aid.**

## Get in the Hearing Loop

A Joint Project of the  
Hearing Loss Association  
of America and the  
American Academy  
of Audiology

## What is Hearing Assistive Technology? (HAT)

There are three types of wireless hearing assistive technology discussed here:

The **hearing loop** is a wire that circles a room and is connected to the sound system. The loop transmits the sound electromagnetically. The electromagnetic signal is then picked up by the telecoil in the hearing aid or cochlear implant. To use a hearing loop, one easily flips the t-switch on the hearing aid or cochlear implant. No additional receiver or equipment is needed. Using a telecoil and hearing loop together is seamless, cost-effective, unobtrusive, and you don't have to seek out and obtain special equipment.

An **infrared system** uses invisible light beams to carry sound from the source to a personal receiver. (The sound source must be in the line of sight.) Different types of attachments may be connected to the personal receiver such as a neckloop or a behind-the-ear silhouette inductor. The telecoil then picks up sound from the receiver via the attachment.

An **FM system** works similarly, but sound is conveyed through radio waves to a personal receiver.

## What other uses are there for telecoils?

Telecoils can improve hearing on hearing-aid-compatible phones and can be used with neckloops to replace headphones. A neckloop is similar to a hearing loop, except that it is worn around the neck and can be plugged into other audio devices (such as an MP3 player, computer, or FM or infrared receivers) to transmit the audio signal directly to the hearing aid telecoil, bypassing the need for headphones.

## How do you get a telecoil? Are they expensive?

Ask for a telecoil when you buy your hearing aids. A telecoil may add a small amount to the cost of your hearing aid but the benefits far outweigh the cost. Ask your audiologist or hearing instrument specialist to include a telecoil in your hearing aid and ask for advice on how to use it. Many models and styles of hearing aids and all cochlear implants can be fitted with telecoils. Telecoils can sometimes be added to your current hearing aid but it will cost less if you include it in your original purchase.

## Purchasing a Hearing Aid

Don't assume that your hearing aid will automatically come with a telecoil or that it will be recommended. Or, if a telecoil is present, don't assume it has been programmed to suit your individual needs. Today, approximately 65 percent of all hearing aids dispensed in the United States have telecoils. Yet, few consumers are told about them and know how to use them.

Use the Consumer Checklist published by the Hearing Loss Association of America when purchasing a hearing aid (available on [www.hearingloss.org](http://www.hearingloss.org) or in hard copy). This checklist includes asking about telecoils. Some states have laws that require audiologists and hearing instrument specialists to tell consumers about telecoils when purchasing hearing aids (as of January 2009, Arizona, Florida, and New York).

*Note: Automatic telecoils are available but work only with telephones, not hearing loops, so ask your audiologist or hearing instrument specialist to include a manually-operated telecoil in your hearing aid and ask for advice on how to use it.*

*This brochure is produced as part of "Get in the Hearing Loop," a national educational campaign to increase awareness about assistive listening technologies, especially hearing loops and telecoils, that are available to people with hearing loss. The project is a collaborative public awareness campaign developed by the Hearing Loss Association of America (HLAA) and the American Academy of Audiology.*

### Resource for People with Hearing Loss

The Hearing Loss Association of America is the nation's leading advocacy organization for the 36 million Americans with hearing loss. HLAA publishes *Hearing Loss Magazine*, holds annual conventions, produces the national Walk4Hearing™, hosts online learning with the Hearing Loss Academy, holds monthly webinars, and advocates for the rights of people with hearing loss. HLAA has more than 200 chapters and 14 state organizations.



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[www.hearingloss.org](http://www.hearingloss.org)

### Useful Links

[www.HowsYourHearing.org](http://www.HowsYourHearing.org)  
American Academy of Audiology  
*To find an audiologist in your area*

[www.hearingloop.org](http://www.hearingloop.org)  
*Nonprofit informational website on hearing loops*

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The David and Carol Myers Foundation  
and The Richard and Helen DeVos Foundation.

### HLAA Chapter Information

If meeting information has not been provided below,  
go to [www.hearingloss.org](http://www.hearingloss.org) for a chapter near you.

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