

Many public places are equipped with Assistive Listening Devices (ALDs) and some are looped. Ask if loops can be installed in your place of worship, senior center, or assisted living center. You can also purchase personal ALDs for your home or to use at work.

Contact your hearing healthcare professional to learn more about telecoils, Assistive Listening Devices, and looping.



## Notes

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## Telecoils & You



This document was produced by the Arizona Commission for the Deaf and the Hard of Hearing using State funds.



## The Telecoil: small technology, big benefits

Magnetic coupling technology, known as telecoil, t-coil, audio switch or t-switch, has been available for hearing aids since the 1930's, and for cochlear implant processors since their inception. Telecoils may be included in, or added to, a hearing aid and are present in all cochlear implant processors. Manual telecoils can be activated by the user via a switch. Some telecoils are automatic. In general, very small hearing aids cannot accommodate a telecoil due to space limitations.

Manual and automatic telecoils enable users easy access to telephones, and manual telecoils provide access to other electronic audio equipment – including tablets, digital music, radios, CD players, MP3 players, assistive listening devices and systems in theaters, and public address systems.

Induction equipment, like neckloops, allow hearing aid and cochlear implant users with manual telecoils to receive signals directly from phones or electronic audio equipment. Background noise is virtually eliminated which allows the user to hear more clearly.

This is especially helpful for the user in large areas with public address systems like meeting rooms, airports, and worship facilities. Neckloops are required to be provided under the ADA.

Initially provided on hearing aids to help the user hear better on the telephone, telecoils allow users to talk on the phone without feedback (whistling) from their hearing aids. The Telecommunications Act of 1996 required all land-line phones to be compatible with telecoils. A similar requirement for cordless and cell phones ensures that 100% of these phones are telecoil compatible.

Many consumers – especially first-time hearing aid users – are unaware of the potential benefits of telecoil technology. They often fail to inquire about telecoils and how to properly use them. Ask your hearing healthcare professional if your hearing aid has a telecoil, if one can be added and how to use it.

There are more than 1,100,000 people with hearing loss in Arizona, and as the Baby Boomer generation ages, that number is expected to rise. Telecoil technology will continue to impact and benefit more and more people.

## Assistive Listening Devices

Increasing the volume on your hearing aid may increase both what you want to hear and what you do not want to hear. An Assistive Listening Device (ALD) combined with the telecoil in your hearing aid may improve your understanding of speech and music.

The telecoil can also make a noticeable difference in your social and professional life. Combining a telecoil with an ALD lets you fully experience movies, concerts, plays, museums, tour buses, churches, and lecture halls.

With the implementation of the Americans with Disabilities Act of 1990, ALDs are increasingly available in many public places.

An ALD bridges the physical space between the listener and the sound source. An ALD connects the listener directly to the sound system, while most background noises are eliminated. There are three types of wireless assistive listening systems: audio induction loop, infrared and FM systems.



The **audio induction loop** is a wire that encircles a room and is connected to the sound system. A loop can also be a neckloop, or inside a counter-top box, in a clipboard, or even in taxi cabs and RV's. The loop transmits the sound electromagnetically. The electromagnetic signal is then picked up by the telecoil. Receivers are used by people who do not have telecoils. An **infrared system** uses invisible light beams to carry sound from the source to the receiver. The telecoil then picks up sound from the neckloop or silhouette. An **FM system** works similarly, but sound is conveyed through radio waves to the receiver. Some infrared and FM receivers allow connection of a neckloop or silhouette.

