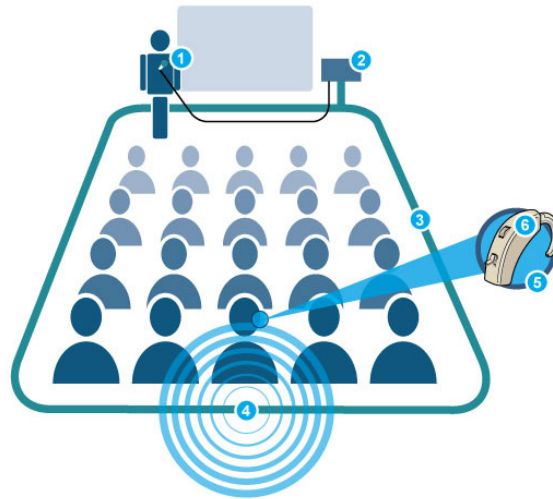


How Does a Hearing Loop Work?

A hearing loop system transmits an audio signal directly into hearing devices via a magnetic field, greatly reducing background noise.



1. **Audio Inputs**—either from an existing audio source such as a PA system or from a dedicated microphone(s).
2. **Induction Loop Amplifier**—audio inputs feed into the hearing loop amplifier.
3. **Hearing Loop**—the amplifier drives a current into a loop or series of loop wires.
4. **Magnetic Field**—as the current flows through the loop wire it creates a magnetic field in the required area—careful loop and amplifier design ensures that the vertical component of the field is even, free of dropouts and dead zones wherever the user might be.
5. **Telecoil**—a small copper coil known as a telecoil, built in most hearing aids, all cochlear implants, and some bone conductive devices and wireless hearing aid accessories, picks up the magnetic field signal.
6. **Hearing Device**—worn by a person with hearing loss, converts the magnetic signal into a high-quality audio signal programmed for the user’s own hearing loss and delivers it directly to the ear of the hearing device user.

Note: hearing loop receivers and headphones are available for people without hearing devices or hearing devices without a telecoil.