

Induction Loop Systems: Help for Hearing Aids

The development of modern digital hearing aids has introduced wonderful new possibilities to help hearing-impaired people. Fittings and set-ups are easier, amplification is powerful and handling has become more convenient. It is safe to say that the hearing aid has been the most important tool for hard-of-hearing people for decades and will be so for the foreseeable future.

However, there are numerous situations where a hearing aid is not sufficient for all listening needs and where an additional system may be needed. Wherever there is a high background noise or a long distance to the signal source, the signal-to-noise ratio runs too low and problems in hearing become evident. In places like churches, concert halls, theaters, cinemas, conference rooms, school classrooms, work situations, and sometimes even in homes, it can be hard to hear with only the assistance of hearing aids.

There are three types of transmission technologies that can assist in these situations: infrared (IR), radio (FM) and induction loop systems. All three are based on the same concept—to move the signal source closer to the hearing-impaired person. All three transmit the signal wirelessly, and all three need a receiver at the other end.

An induction loop system, in which an area is surrounded by a sound-transmitting wire, offers many benefits to the wearer of a hearing aid equipped with a telecoil (T-coil). In effect, the wire transmits sound to the T-coil, which then becomes a built-in receiver in the hearing aid. The T-coil doesn't consume any extra power while it produces high-quality sound and reduces disturbing background noise. Because the sound is transmitted directly to the hearing aid, T-coil users are able to hear in any looped environment, with no need to reveal their impairment to strangers, ask for help, deal with the embarrassment and possible health hazards of borrowing or renting a conspicuous receiver, or sit in "special" seats or areas.

In many European countries, induction loop systems have been used extensively for many years, and most hearing-impaired people are used to this service as they move around in society. In addition to helping people hear in large public gathering areas, induction looping can help people hear in a variety of temporary situations where



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it's hard even for someone with normal hearing to hear, such as at the cash register in the grocery store, the information counter in the museum, the reception desk in the hotel lobby, or the ticket booth at the ball game. For people with a hearing loss, background noise and glass shields can make it almost impossible to hear at critical information points. In these temporary types of situations, it is not feasible to hand out receivers, so the loop system can be of even greater importance and might be the difference between hearing nothing or almost everything.

In the United States, induction loop systems haven't gained wide popularity due to ignorance, fear of interference with other systems and old buying habits. However, with more information becoming available on how to plan, install, set up, and use induc-

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tion loop systems and how everyone can benefit by using them, this might change. One way to find out more about induction looping is to ask your audiologist, who will be able to tell you if your hearing aid has a T-coil or if you are eligible to wear one that does. If your hearing aid does have a T-coil, your audiologist may have an induction loop system in his/her office or know of nearby public places where you can try hearing via induction loop transmission. Your audiologist also may be able to install or recommend someone to install a loop system in your home. Find out for yourself what the system can do while you are watching TV or listening to music and then imagine the countless situations where a loop system could make a significant difference in your life.

Induction looping often makes people happier with their hearing aids because they have access to high-quality sound everywhere—at home, in school, at work, and in their community. **\$**

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