



Best Practices in Hearing Loop Procurement

Hearing Loops are quickly becoming the hearing assistive listening system of choice for bringing clear sound to people with hearing loss. From schools and houses of worship to concert venues, assisted living facilities and municipal buildings, hearing loops are a consumer-preferred solution and the only system that is directly hearing-aid-compatible and will make your facility hearing friendly. This remarkable system will not only bring many of the 48 million Americans with hearing loss back to theaters, houses of worship and community activities, but is also a proven vehicle to build businesses.

Hearing loop systems are used worldwide, and most installers follow the international standard IEC 60118-4 as developed under the auspices of the IEC (International Electrotechnical Commission).

This standard defines the strength of the magnetic field, frequency response and methods of measuring these requirements. It also specifies the maximum levels for electromagnetic background noise.

Compliance with the IEC standard means a hearing aid user can walk into Westminster Abbey in London, the Gerald Ford Airport in Grand Rapids, Michigan or the Richard Rodgers Theatre in New York City and hear the sound directly, and at a comfortable level in their hearing aid equipped with a sensor called a telecoil or T-coil. Loop listener devices are available for those who don't have telecoils or don't use hearing aids. iPhone users can hear in the loop using the LoopBuds App and LoopBuds earphones.

This checklist is meant to give you guidance in the due diligence process as you procure a hearing loop for your facility by choosing the right installer. In some geographic areas of the country, it might not be possible to find highly experienced installers. It is therefore recommended you choose an installer who has been trained in IEC standard verification, has technical support from the supplier and is legally allowed to carry out the installation in your geographic area.



How knowledgeable and committed is the installer to hearing loop technology?

- Who trained or certified the installer and is the installer available to provide references?
- What design, installation and audio experience does the installer (or the supplier's technical support department) have with the type of building that needs looping?
- Will the installer provide a Certificate of Conformity and invite actual hearing aid users in the final testing?
- Does the installer offer information about hearing loops and the IEC standard on their website?
- Does the installer list loop installations on their website or on national websites? If not, why not?

Currently only two companies offer hearing loop certification: Contacta, Inc. and Listen Technologies. It is advisable that the purchaser insist on the IEC 60118-4 standard hearing loop installation in writing. This will not add to the cost of a loop installation but effectively guarantees a working system.

Buildings present many variables with regard to design and installation due to metal in the floors and ceilings. Electrical interference due to older, poorly installed wiring that might not meet the current electrical code could cause ground loops. This in turn causes a buzzing noise that a hearing aid or a loop device user can hear when they turn their telecoil on. This magnetic noise most likely was previously present in your facility but might not have been of concern until now.

Note: If your facility is required to provide an Assistive Listening System (ALS) under the Americans with Disabilities Act (ADA) and magnetic background noise is determined to be of excessive levels during a hearing loop site visit at your facility, be advised that the ADA requires 25 percent of the ALS receivers to be hearing aid telecoil compatible via personal neckloops and therefore magnetic background noise should always be investigated by a licensed electrician, even for the use of FM or Infrared systems.

Test Loop On-Site Visit

Hearing loop systems are venue specific and almost always require an on-site visit ahead of time to provide an accurate estimate of your installation cost. Most thorough site visits take two hours; more involved installations might require more time. Although some designs can be modeled on a computer, computer simulation cannot determine if magnetic background noise is present or what effects metal in your particular building has on the magnetic signal. While a computer design can be a starting point, the loop should never be installed purely based on the simulation. Your installer should be able to explain the on-site test results and what type of loop, e.g. a figure-8 perimeter loop or phased array, will be needed in your facility to meet the IEC standard and what is involved to hide the loop wire aesthetically.

Commissioning of the Hearing Loop

The IEC standard requires as the final test, that a hearing aid user, familiar with hearing loops verifies, while the hearing loop installer is still on the premises, that the loop signal is even in the seated area, sounds clear, experiences minimal magnetic background noise and that the subjective results are consistent with the IEC measurements. While you or someone from your staff can use a loop listening device or LoopBuds earphones you will not get the full quality listening experience that a person with hearing loss gets, listening with their own device tuned to their individual pattern of hearing loss. One loop listener device is usually provided free of charge, or at a nominal fee, with each installation.

Once the loop is active, it is important to make sure all those who use the sound system (speakers), as well as the end-users of the loop system (listeners), are informed of the working of the hearing loop. Once installed, hearing loops are easy to operate. That's why they are so popular. Make sure that those who provide the audio input or use the microphones in the venue have a basic understanding that only clearly spoken words directed closely into the microphone provide the signals that the end users need to understand the speech. The loop performance is based *and depends* on the microphone input.

Find out what areas, if any, are "out of the loop." For example: In many houses of worship aisles, the choir and balconies have no, or a diminished loop signal that way you can direct the hearing aid users or loop listeners to the appropriate locations.

Some loop installers offer news releases, bulletin inserts, loop signage and other useful handouts. Many are willing to coordinate a hearing loop commissioning or dedication by working closely with local audiologists, hearing care providers, members of the hearing loss community and/or the Hearing Loss

Association of America. And finally, please report your location to one of the national loop locators such as **aldlocator.com** and **loopfinder.com**. This way you will be sure to get the most from your investment.

- for information and to learn about loop advocacy initiatives around the country, go to **hearingloop.org**
- for consumer information about hearing loss and hearing loss advocacy visit the Hearing Loss Association of America website at **hearingloss.org**

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