



Best Practices for Hearing Loop Installation

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 telecoil. 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 telecoil enabled earbuds and an app.

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.

Hire a Knowledgeable and Committed Hearing Loop Installer

- 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 s/he 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?

Two companies offer hearing loop certification: Contacta, Inc. and Listen Technologies.

It is advisable that the purchaser **insist on an 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 codes could cause interference, buzzing noises, that a hearing aid or loop device users can hear when they turn their telecoil on. This magnetic noise most likely was previously present in the 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 be hearing aid telecoil compatible via personal neckloops. 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. perimeter, figure-8, 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 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, sounds clear, experiences minimal magnetic background noise and that the subjective results are consistent with the IEC measurements. Note: While you or someone from your staff can verify that a hearing loop is actively working, you will not get the full quality listening experience as a person with a cochlear implant or telecoil enabled hearing aid. One loop listener device is usually provided to the venue free of charge, or at a nominal fee, with each installation.



For ADA guidelines **see section 219.3** as to the number of required receivers in [ADA Standards](#)

Optimizing the Hearing Loop Experience

Once installed, hearing loops are easy to operate; that's why they are so popular. To ensure the hearing loop investment and experience is optimized, please act on the following guidelines:

Loop performance depends on the microphone input.

- If possible, provide presenters with earset microphones which optimize sound transmission.
- Tell presenter(s) about the hearing loop and the need to hold the handheld microphone close to the mouth to properly activate the system, including when they turn their head.
- A good tip is to imagine that the microphone is tied to your mouth with an invisible string, wherever your mouth goes, the microphone must come with it.
- Make an announcement at the beginning of every presentation, service or meeting, to let people in the audience know that there is a hearing loop installed and that additional receivers with headphones are available if needed. If your venue has only specific areas that are looped, be sure to direct loop listeners to the appropriate locations.

Hearing Loop Dedication

Develop a marketing/PR strategy to announce the inauguration of the hearing loop. This can include news releases, bulletin inserts, and social media. Broaden your reach by coordinating with local audiologists, hearing care providers, and members of the hearing loss community.

Please list your venue on one of the national loop locators such as [LoopFinder.com](#) or [ALDlocator.com](#). This way you will be sure to get the most from your investment.

Additional information

Visit: [hearingloss.org](#)

Contact: Juliëtte Sterkens, AuD, HLAA Hearing Loop Advocate, jsterkens@hearingloss.org