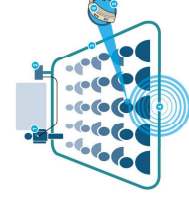


HEARING LOOPS AND TELECOILS (T-COILS)



HOW IT WORKS

Sound is transmitted from a sound source, for example a person speaking, through a microphone or music from a sound system to an induction loop driver. The driver converts the source to a magnetic field via a wire loop, which is picked up wirelessly by the T-coil in a hearing aid or cochlear implant. This is converted back into an audio signal within the hearing aid.

For more information on how loops and T-coils work together see <https://ihlma.org/>

HOW TO ACCESS

Look for hearing loop signs. Switch to the 'T' or 'M' setting on the hearing aid(s), cochlear implant or bone conduction device.

USER EXPERIENCE

- Hearing aid wearers must know how to access the T-coil setting(s) on their device
- Adequate signage must communicate a loop system is available
- Many people prefer loops as they are directly compatible with their own hearing assist devices

EQUIPMENT PERFORMANCE STANDARDS

- A correctly installed system is inherently compliant with IEC 60118-4
- A suitable loop driver will always be compliant with IEC 62489-1

ACCESSIBILITY STANDARDS

- Fully compliant per ADA Standard 219
- BS 8300 Design of an accessible and inclusive built environment
- EN-17210 Accessibility and usability of the built environment

APPLICATIONS

- Classrooms and courtrooms
- Conference and meeting rooms
- Auditoriums and theatres
- Houses of worship
- Arenas and stadiums
- Museums and theme parks
- Hotels and hospitality
- Hospitals, retirement and nursing homes
- TV and home theatre lounges
- Service counters in: banks, retail stores, food stores, airport, bus and train hubs
- Taxis, buses, trains
- Ticket machines, ATMs, automatic check outs, door entry, lifts / elevators and intercom systems

ADVANTAGES (OPERATORS)

- Minimal time and capital overhead for facility providing assistance to T-coil users
- Non T-coil users can use loop receivers with headsets
- Can be used outdoors
- Well suited for walk up / walk through (transient) locations
- Have sound quality standard (IEC60118-4) for installations
- More options for integration in various applications and OEM

ADVANTAGES (END USERS)

- T-coil users receive sound invisibly, simply and directly to their own hearing aid:
 - Maintains privacy/discretion
 - No hygiene concerns
 - No latency due to end-to-end analogue transmission

LIMITATIONS

- T-coils can pick up electromagnetic interference – avoidable with an IEC60118-4 compliant installation
- Sound privacy requires appropriate loop design
- Installation can be complex
- Metal content in building structure can cause signal loss - resolved by effective loop layout design.

