

## Hearing Loops Are A Big Help

One in eight people in the United States (13 percent, or 30 million) aged 12 years or older has hearing loss in both ears. Nearly 25 percent of those aged 65 to 74 and 50 percent of those who are 75 and older have disabling hearing loss.<sup>1</sup> Most programs offered by libraries require attendees to understand spoken presentations. Without hearing assistance, many attendees will not understand everything said to them.

Public venues and commercial facilities are required by the Americans with Disabilities Act (ADA) and other government mandates to provide equal access to individuals with hearing loss. Currently, there are three technology options for assistive listening systems:

- (1) infrared (IR),
- (2) frequency modulation (FM) – also known as radio frequency (RF), and
- (3) induction hearing loops.<sup>2</sup>

An induction hearing loop wirelessly transmits magnetic energy from a PA system or other sound system to telecoil sensors in hearing aids. It requires installing a wire loop or array of loops in a facility's floor or ceiling. The listener only needs to activate the T-coil in their hearing aids in order to hear the sound in a theater, auditorium, church, or at a ticket counter.<sup>3</sup> Many hearing aids now enable users with smartphones to activate their T-coils with an app.

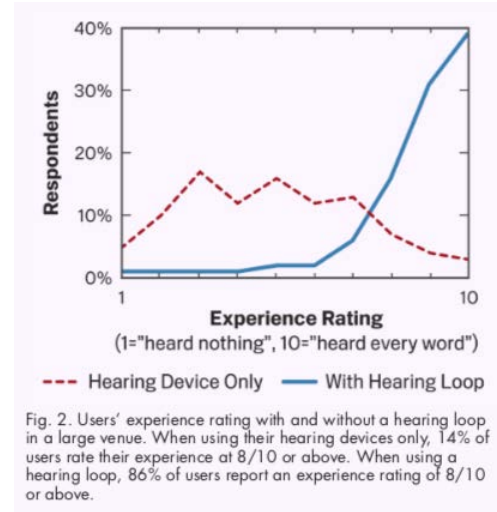
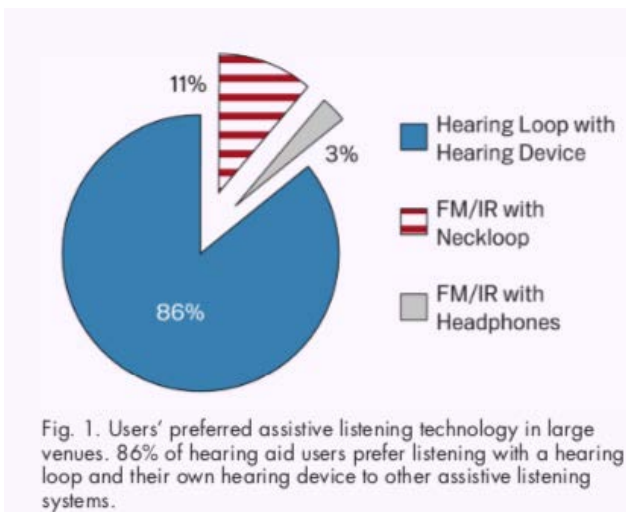
In general, for both IR and FM systems, the user is required to borrow a receiving device from the venue, which is either a headset or a body pack, where a user can plug in a headset or ear buds. ADA guidelines also require a percentage of the receivers to be hearing-aid compatible. This is ensured by providing neck loops that plug into the receiver and are worn around the user's neck to transmit a magnetic signal to the user's hearing device, utilizing its telecoil. In comparison to IR and FM systems, **hearing loops** offer tremendous advantages to both the venue and the patron.<sup>4</sup>

### User Benefits<sup>5</sup>

**Easy to Use:** To hear clearly, individuals simply switch their devices to the telecoil program and automatically receive clear customized sound. There is no need to arrive early, stand in line, or wait to return equipment after an event or meeting.

**Quality Sound:** A hearing loop sends sound directly to the telecoil receiver in a user's hearing device. The system eliminates most background noise and greatly improves understanding of speech and music because the sound received is customized by each user's unique hearing instrument. The result is superior speech reception (see Figures 1 & 2).

**Discreet:** Being able to hear well with a loop is inconspicuous; users do not stand out as being hard of hearing which encourages participation and inclusion.



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### Venue Benefits<sup>7</sup>

**Easy to Administer:** Because most users can connect to hearing loops directly, venues can reduce the assistive listening equipment needed for people without telecoil-enabled devices.

**Cost Effective:** Though more expensive up front, once installed, hearing loops require minimum maintenance. The headsets require constant attention (batteries, cleaning, replacement).

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1. <https://www.nidcd.nih.gov/health/statistics/quick-statistics-hearing>
2. <https://secure.aes.org/forum/pubs/journal/?elib=17587>
3. <http://www.hearingreview.com/2019/02/telecoils-hearing-loops-interview-juliette-sterkens-aud/>
4. <https://secure.aes.org/forum/pubs/journal/?elib=17587>
5. <https://www.hearingloss.org/hearing-help/technology/hat/hearing-loop-technology/>
6. Fig.1, Fig. 2: <https://secure.aes.org/forum/pubs/journal/?elib=17587>
7. <https://www.hearingloss.org/hearing-help/technology/hat/hearing-loop-technology/>