- ASSISTIVE LISTENING INFORMATION
- HOW DO THEY WORK
- TYPES OF TECHNOLOGY
- SYSTEMS

LISTEN TECHNOLOGIES

About Assistive Listening

www.listentech.com

Assistive Listening Information

Hearing loss is known as the invisible disability, because unlike other disabilities, it can't be seen. According to the World Health Organization (WHO), more than 5% of the world's population experience disruptive or severe hearing loss. That percentage is likely to grow due to exposure to noisy environments, improper use of personal audio devices, and other common causes.

Did You KNOW ?

360 MILLION people worldwide have hearing loss

HEARING LOSS AFFECTS PEOPLE OF ALL AGES

hearing loss is the 3rd most common physical condition

*March 2015, website: http://www.who.int/mediacentre/factsheets/fs300/en/

Assistive listening systems are not the same as amplifiers or hearing aids; while assistive listening systems and devices do amplify certain sounds for users who require them, they also reduce or eliminate background noise and provide focused, direct audio to the user's ear.

Often, a hearing aid or an implant is not enough. In such cases, there are technologies designed to help individuals fully engage, interact, and communicate in environments where excessive noise might otherwise interfere with their their ability to hear.

Assistive Listening Systems (ALS)

Globally, many countries have mandatory laws that ensure universal access for the hearing impaired. Assistive listening systems make certain that spaces and services requiring audible communication remain available to everyone and fulfill the requirements of the law.

How do they work?

Assistive Listening Systems (ALS) are comprised of several devices working together.

01

The audio source—whether an AV system, speaker/presenter microphone, or sound system is routed to a transmitter.

02

The transmitter receives and amplifies the incoming audio signal, then broadcasts it to any associated device/receivers in the area.

03

Receivers pick up the audio signal and send it directly to an earphone, ear speaker or neck loop lanyard worn by each user.

04

Each user can listen to the audio signal through earbuds, head-phones, or their t-coil-equipped hearing aid or cochlear implant.

Types of Assistive Listening Systems

RADIO FREQUENCY (RF)

Radio Frequency, commonly known as RF or FM systems, broadcast the audio of a performance or presentation to user-worn receivers.

- Large coverage area, and can be used inside and outside
- Affordable and cost-effective
- Simple to setup and use

INFRARED (IR)

Infrared or IR systems utilize infrared light to broadcast the selected audio signal to users who have IR receivers. Because IR systems are light-based, audio cannot be broadcast outside the designated space or room.

- Ideal for adjacent classrooms or meeting space
- Great for simultaneous broadcasts (multiple languages/interpretation)
- Secure, audio cannot be intercepted from outside the room

HEARING LOOP (ALSO CALLED INDUCTION LOOP)

Hearing Loop technology, also called induction loop, utilizes an electromagnetic field to broadcast the audio signal to any visitor or participant with a cochlear implant, telecoil (t-coil) equipped hearing aid, or loop receiver.

- The T-coil in equipped hearing aids, cochlear implants, or hearing loop receivers picks up the audio signal and delivers it directly the user.
- Eliminates the need for individuals with hearing loss to carry additional equipment
- Preferred by the hard of hearing community – is the most dignified and convenient solution

AUDIO VIA WI-FI

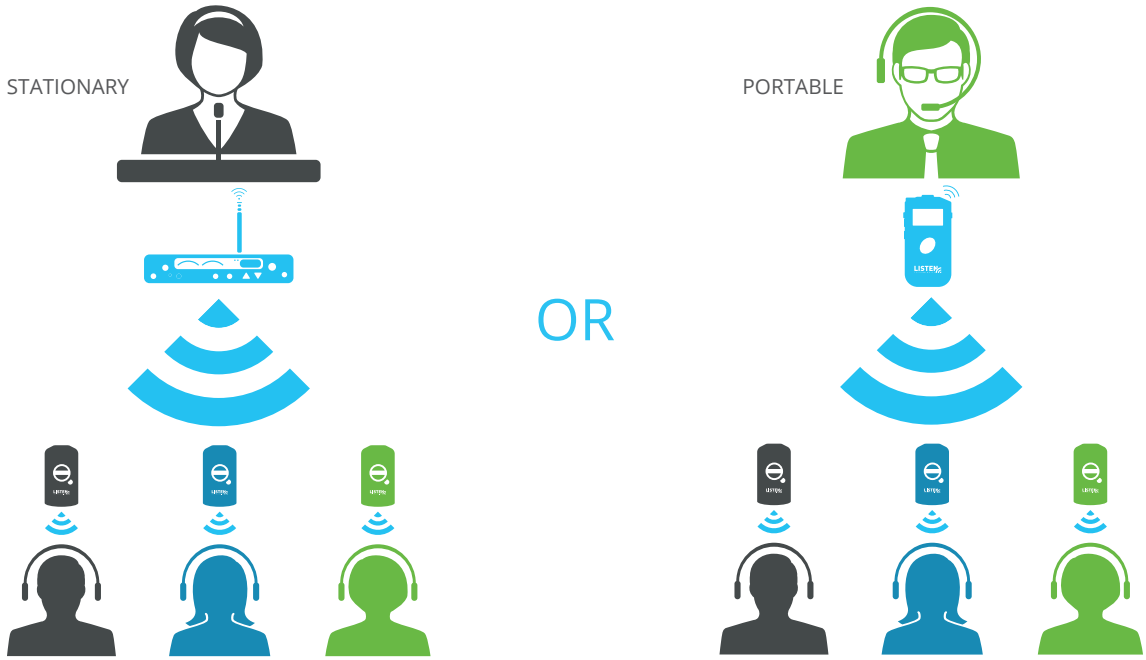
Wi-Fi audio distribution technology allows venues to stream multiple audio sources directly to guests' smartphones using the venue's network, offering a more personalized choice for assistive listening.

- Scalable to increase streaming channels or # of users
- Audio is received via FREE customizable app
- Guests can stream audio from smartphone directly to Bluetooth equipped hearing aids

*Note: Receivers (smartphones or tablets) must be available for use at venue to meet mandatory legislative compliance.

Assistive Listening Systems

RADIO FREQUENCY (RF)

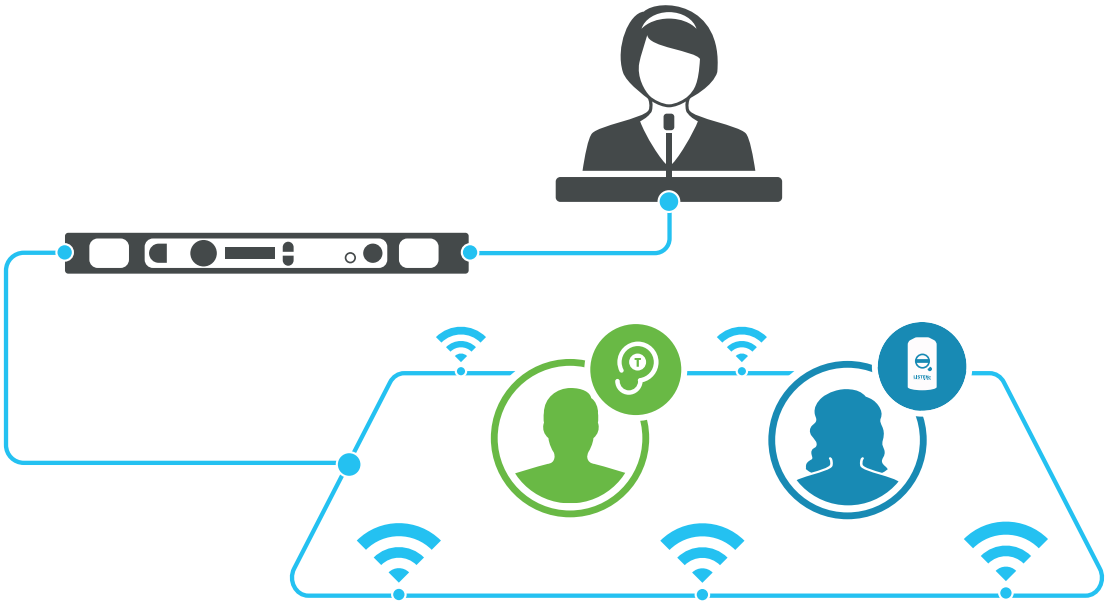


INFRARED (IR)

MORE SYSTEMS

Assistive Listening Systems (Continued)

HEARING LOOP (ALSO CALLED INDUCTION LOOP)



AUDIO VIA WI-FI