



What is Auracast™ broadcast audio?

Auracast™ broadcast audio is an expanded Bluetooth® technology. Classic Bluetooth®, used broadly by nearly everyone today, allows transmission from one-to-one. Auracast broadcast audio differs from Classic Bluetooth in that it allows transmission from one-to-many.

Auracast broadcast audio can be used in two ways:

- **Auracast broadcast audio for Audio Sharing** (no live sound). Sports bars TV, sharing audio with friends and family.
- **Auracast broadcast audio used as an Assistive Listening System (ALS)** (live sound). Auracast broadcast audio has the potential to be used as an assistive listening system, but it is unknown if and when various products will be ADA-compliant.

Is Auracast broadcast audio used as an Assistive Listening System currently available?

- No.

What do users need to be able to use any ALS today and in the future?

- **Purchase hearing instruments* now with both telecoil and Auracast broadcast audio capability.** Years from now, when consumers have both telecoil and Auracast broadcast technologies, they can go anywhere and use either an existing or a new system. Alternatively, separate receivers may be available to receive the ALS broadcast.

What is needed for Auracast broadcast audio used as an ALS to be available and usable?

To become widely available at scale, it will probably take a decade:

- **Any ALS installation employing Auracast broadcast audio should meet the requirements of the International Electrotechnical Commission (IEC) 60118-17 Standard.** The standard, which is scheduled to be released in December 2027, will include latency limits, sound quality, connectivity requirements, and more.
- **Auracast broadcast audio ALS transmitters need to be compliant with the IEC 60118-17 Standard.** Whilst some manufacturers are very early in developing new Auracast broadcast audio ALS products, until IEC 60118-17 is published, it cannot be known if these will meet its requirements and be compliant.
- **Owner/operators consider purchasing a replacement ALS.**
 - No site owner/operator will be required to change systems.
 - Eventually, Auracast broadcast audio used as an ALS will be another option. Each current and future ALS has its own strengths and weaknesses.
 - All assistive listening systems (hearing loops, FM systems, IR systems, and future Auracast broadcast audio used as an ALS) can and will coexist for years.
 - It is expected that Auracast broadcast audio used as an ALS can be added to and operate alongside a hearing loop installation.
 - Buyer beware. New products must meet all ADA 2010 Standards, 706 Assistive Listening System requirements.

What is needed for Auracast broadcast audio used as an ALS to be available and usable? (cont.)

- **Critical Direct Hearing Instrument Connections are required.** At this time, there is no known capability to address ease of use. Current designs for Auracast broadcast audio used as an ALS require intermediary devices such as smartphones, smartwatches, hearing aid remotes, or special receivers. Intermediary devices add complexity for individuals with limited dexterity, limited cognitive abilities, or who may not be technologically savvy. In addition, the connection between the intermediary device and the hearing instruments may use Bluetooth, which adds additional latency (delay).
- **Hearing instruments must be Auracast broadcast audio capable.** Few are currently Auracast broadcast audio capable, but manufacturers are beginning to develop new ones.
- **Enough time for users to purchase new hearing instruments.** The typical user's hearing instrument life cycle is 5 to 7+ years.
- **Users will need an updated or upgraded smartphone with built-in Bluetooth Low Energy (LE) Audio.**
- **Practical, reputable third-party proof-of-concept studies are required.** Auracast broadcast audio used as an ALS technology needs to work well for all people with hearing loss, with and without hearing instruments, and with and without a smartphone.
- **Compatibility with Public Address (PA) systems.** At this stage, it is not known how Auracast broadcast audio used as an ALS will connect with PA and paging systems, such as in airports or shopping malls, and how the necessary zoning and broadcast selection will operate.
- **Use of Auracast broadcast audio as an ALS at service desks and help points.** At this stage, it is not known how Auracast broadcast audio used as an ALS will provide coverage for this type of one-to-one communication, how the desired transmissions can be selected, and how privacy will be ensured.
- **Dedicated ALS stream.** At this stage, it is not clear whether Auracast broadcast audio will provide a dedicated ALS stream and, if provided, whether such a broadcast stream will connect to hearing instruments with minimal interaction required by the listener.
- **Informed users.** Currently, not all users with hearing loss know about ALS.

For more information, visit <https://www.hearingloop.org/auracast>

*Hearing instruments: hearing aids, cochlear implants, and bone conductive devices.

About the Center for Hearing Access

A nonprofit with a national mission *to pursue the understanding and adoption of those principles, practices, designs, and technologies that best realize a world in which seamless and simple hearing access is available to everyone with hearing loss so they can participate fully across all aspects of daily life.*

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