



B-CASTER | Data Sheet

Auracast™ Streamer for Assistive Listening and Hi-Fi Audio Streaming



Highlights:

- Dual purpose streaming – high quality audio streaming and assistive listening
- Low latency audio streaming (<40ms)
- Open or secure multi-channel audio streaming
- Superior RF ensuring wide-area coverage
- Power and audio cascading (Auracast™ and Wi-Fi)
- Fully compatible with Auracast™ end devices (hearing-aids, cochlear implants, hearables)
- Audio optimization: enhanced with DSP (AGC, LPF, HPF)



OVERVIEW

Bettear's B-CASTER Auracast™ streamer represents a breakthrough in audio streaming technology. It seamlessly broadcasts audio to Auracast™ enabled hearables, providing a customized listening experience for individuals with hearing impairments.

The B-CASTER can operate in a **plug-and-play (standalone) mode** – connecting directly to various audio interfaces and systems, such as audio consoles, microphones, audio processors, etc. It also supports **hybrid mode**, enabling seamless integration with other assistive listening solutions and streamers. This ensures full backward compatibility with traditional assistive listening solutions.

The B-CASTER is designed for easy integration into various settings and applications, such as theaters cultural halls, cinemas, classrooms, airports, trains and many others.

KEY FEATURES

1. POWERFULL CONTROLLABLE RF

With its high-end RF engineering, the B-CASTER delivers robust and reliable wireless coverage (up to 100m), even in challenging environments (indoors and outdoors).

2. CASCADABLE POWER (POE) AND AUDIO OVER ETHERNET

The B-CASTER streamer supports cascading PoE, allowing two units (two B-CASTERs or a B-CASTER and a Wi-Fi Access Point) to be daisy-chained. This feature simplifies installation and ensures efficient power and audio distribution across a network of devices.

3. REAL-TIME AUDIO STREAMING

The B-CASTER streamer delivers low-latency audio (<40ms) over Auracast™, providing crystal-clear sound directly to users' preferred listening devices—whether at live events, lectures, cinemas, or concerts.

4. COMPATIBILITY WITH AURACAST™ HEARABLES

Explicitly designed for Auracast™-enabled assistive listening devices and hearables, the B-CASTER ensures effortless connectivity and a seamless listening experience, delivering high-quality audio, tailored to individuals' preferences.

5. USER-FRIENDLY DESIGN

The B-CASTER combines advanced technology with an intuitive management interface, ensuring hassle-free configuration, operation, network connectivity, and deployment.

6. OPTIMAL AUDIO EXPERIENCE

For those seeking cutting-edge technology to enhance auditory accessibility, the B-CASTER is the ideal choice. It delivers exceptional sound quality by utilizing advanced DSP capabilities (AGC, LPF, HPF) making every listening moment more enjoyable.

8. WEB MANAGEMENT DASHBOARD

The web management dashboard allows administrators to configure the B-CASTER effortlessly. Features include Auracast™ broadcasting settings, audio settings secure stream settings, etc.

TYPICAL USE CASES

- Assistive Listening Auracast™ Streamer: ideal for cultural and educational venues.
- Hybrid-Mode Streaming: Combines Wi-Fi and Auracast™, or Induction Loops and Auracast™, to support phased adoption of assistive listening technologies.
- High-Quality Multi-Channel Auracast™ Streaming: Designed for public areas, including transportation hubs, leisure facilities, and sports arenas.

FRONT PANEL

1. PWR – Indicates whether the device is ON or OFF
2. CAST - Indicates that the Auracast™ broadcast is enabled
3. LAN1 – Interchangeably indicates connectivity on port LAN1, or signal presence on the IN1 audio port (configurable via the management web dashboard)
4. LAN2 – Interchangeably indicates connectivity on port LAN2, or signal presence on the IN2 audio port (configurable via the management web dashboard)



BACK PANEL

1. LAN1 – Supports power supply (PoE+ In), management and audio-over-Ethernet expansion
2. LAN2 – Expends the streaming network by connecting an additional B-CASTER or a Wi-Fi Access Point (15.4W PoE out)
3. Reset Button – Resets the device to factory settings
4. Microphone Stand Mount - 3/8" thread for secure mounting
5. Audio Inputs - Two balanced Terminal Block Inputs
6. DC In – 12V, 2.5A power input





PRODUCT-SPECIFIC BENEFITS

HYBRID-MODE USE CASE:

More than just a standalone streamer - Bettetear's B-CASTER can be integrated into complex assistive listening deployment. It streams high-quality, low latency audio to Auracast™ enabled devices (hearing aids, cochlear implants, and earphones/headphones) alongside Induction Loop, IR and Wi-Fi streaming systems.

IMPROVED USER EXPERIENCE:

Bettetear's B-CASTER can broadcast high-quality customized audio (Based on its DSP capabilities) to multiple users simultaneously, opening new possibilities for improved listening and assistive listening experiences in public spaces, cultural venues, sports arenas, and more.

CASCADABLE POE:

The B-CASTER unique power management circuitry enables network and power chaining between two B-CASTERS or a B-CASTER and a Wi-Fi Access Point, hence reducing the cabling complexity.

ORDERING OPTIONS

B-CASTER	B-CASTER, Ethernet switching disabled , LC3 sampling rates 16/24 Khz, Max TX Power 10dBm
B-CASTER-S	B-CASTER, Ethernet switching enabled (PoE and Audio) , LC3 sampling rates 16/24/48 Khz, MAX TX Power 10dBm
B-CASTER-20	B-CASTER, Ethernet switching disabled , LC3 sampling rates 16/24 Khz, Max TX Power 20dBm
B-CASTER-S-20	B-CASTER, Ethernet switching enabled (PoE and Audio) , LC3 sampling rates 16/24/48 Khz, MAX TX Power 20dBm
Colors	The B-CASTER can be ordered in Black or White

WARRANTY

Please visit www.bettetear.com for warranty and service information.

WARNING: Electrical Shock Hazard. No user-serviceable parts inside. Do not remove or open the cover to reduce the risk of electrical shock. Please contact Bettetear for assistance.

PRIVACY POLICY

Please visit www.bettetear.com for privacy policy information.

SUPPORT

Please visit www.bettetear.com and use info@bettetear.com or call +972-3-7778630