

Aircast

— User Manual —

High Performance Auracast Audio Streamer



www.venucast.com

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1. OVERVIEW

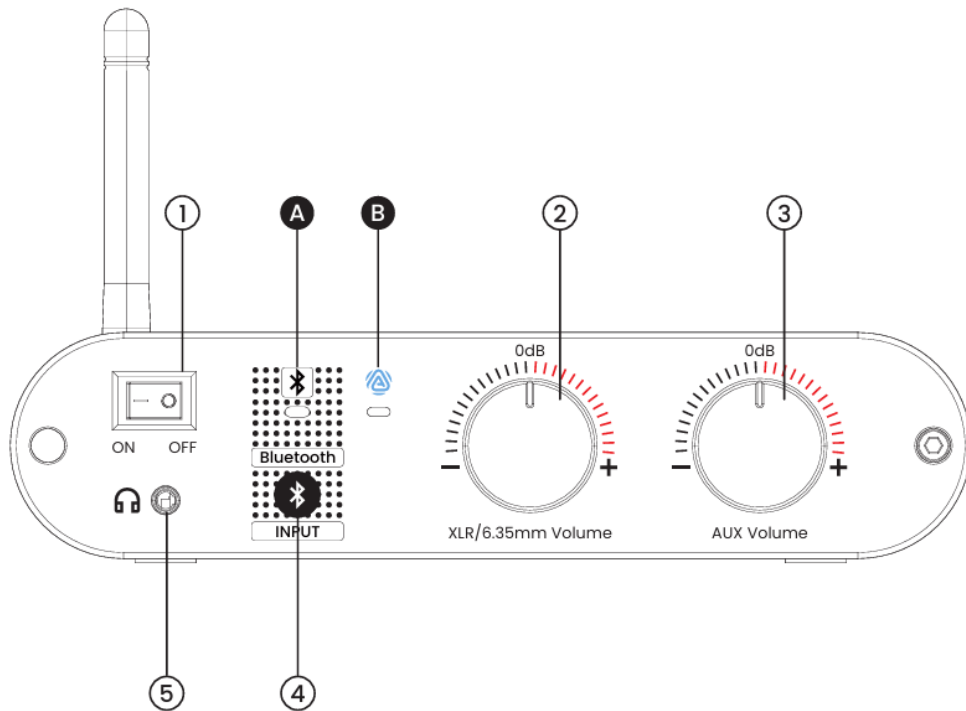
AirCast is a professional Auracast™ audio transmitter built to deliver clear, reliable audio to Auracast-enabled hearing aids, headphones and receivers.

Designed for churches, theaters, lecture halls and community venues, it combines long-range coverage, flexible audio inputs and powerful mixing capabilities to ensure every listener enjoys the best possible listening experience.

With easy setup and PC-based DFU management, AirCast allows firmware updates as well as device configuration such as renaming the broadcast, setting passwords, and managing system settings, making it simple to deploy, manage and scale your audio broadcast system.

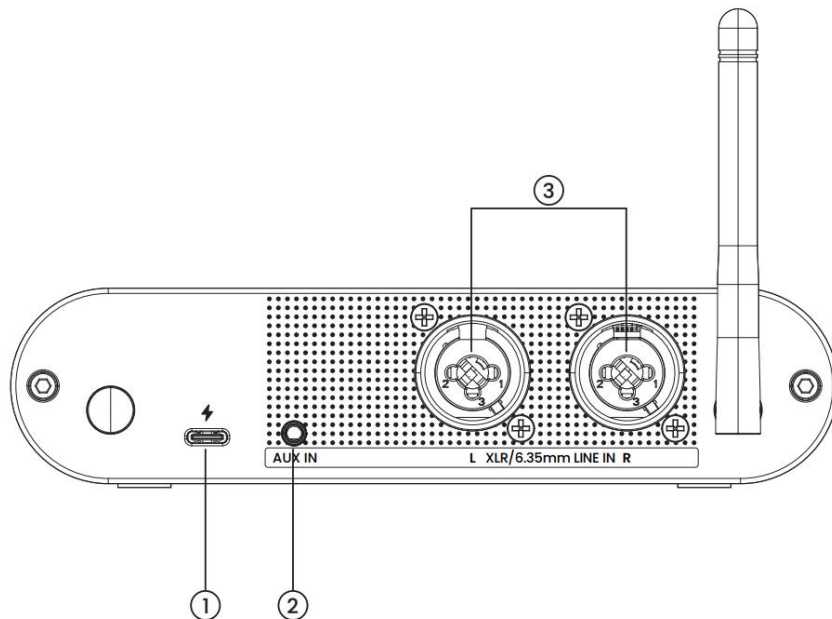
2. INTRODUCING THE AIRCAST

2.1. FRONT PANEL – BUTTONS & INDICATORS



- 1. Power Switch (ON / OFF)
- 2. XLR/6.35mm Input Gain Knob
- 3. AUX Input Gain Knob
- 4. Bluetooth Button
- 5. Headphone Monitor Output
- A. Bluetooth Indicator LED
- B. Auracast Indicator LED

2.2. REAR PANEL - CONNECTORS



1. USB Type-C (Power Input / DFU)
2. 3.5mm AUX IN (Line Level only)
3. XLR/6.35mm LINE IN (Balanced line level **only**)

3. QUICK START

3.1. Connect Audio Source

Connect an audio source via **XLR, 6.35 mm, AUX 3.5 mm**, or **Bluetooth**.

- XLR (balanced line-level only)
- Dual 6.35 mm TS (balanced line-level only)
- AUX 3.5 mm (unbalanced line-level)
- Bluetooth audio (phone, tablet, or computer)

Note:

- 1, All inputs can be used simultaneously. Audio from all active sources is mixed and broadcast together.
- 2, Keep Bluetooth devices within 30 m (100 ft) of the transmitter for stable connection.

3.2. Start Broadcasting

First, connect the USB power cable and power on the transmitter.

Auracast broadcasting starts automatically. The **Auracast LED** turns **solid white**.

Set both gain knobs to 0dB (medium) before playback.

3.3. Test the Broadcast

Play audio and check the broadcast using **Auracast hearing aids, receivers, or headphones**.

Venucast receivers and headphones will normally connect automatically when powered on.

For hearing aids, please refer to the connection guide below:

<https://venucast.com/hearing-aid-connection>

If needed, connect wired headphones to the **MONITOR** output for a local audio check.

3.4. Adjust Audio Gain

Adjust gain gradually from 0dB while checking the audio.



4. CONNECTION TOPOLOGY

AirCast operates as a standalone Auracast transmitter. The following diagram shows a common installation scenario.



5. CONFIGURATION (PC Tool – Coming Soon)

Advanced device configuration and firmware update via PC Tool will be available soon.

This tool will provide firmware update and basic system configuration functions for professional deployment use. Please refer to venucast.com for the latest updates and availability.

6. SPECIFICATIONS

Radio and Audio	
Bluetooth Version	v5.4
Bluetooth Profiles	Auracast Broadcast (PBP, TMAP)
Operating Mode	Auracast broadcast with LC3 codec; Bluetooth audio input supported
Maximum Output Power	+20dBm
Supported Audio Codecs	Bluetooth receiving: SBC; Auracast broadcast: LC3
Encryption / Password	Customized password access supported
Supported Formats	Stereo input
Sample Rate	24 kHz or 48 kHz; 16 kHz will be supported later
Audio Latency	Auracast LC3: 40-70 ms
Supported Receivers	Auracast-enabled hearing aids, headphones, earbuds, speakers, and receivers
Standard Bluetooth Headphones	Not supported as direct receivers unless Auracast-compatible or used with an Auracast receiver
Input, Range, and Broadcast	
Audio Input	XLR, 6.35 mm (Balanced), 3.5 mm AUX (unbalanced), Bluetooth
Input Level	Line Level, -10 dBu to +4 dBu
Operating Range to Receivers	Up to 500 ft / 150 m line-of-sight
Operating Range from Phone/PC	Up to 100 ft / approximately 30 m
Paired Devices / Listeners	One-to-many Auracast broadcast; unlimited compatible Auracast listeners
Mic + Background Audio	Supported when microphone/background audio are routed through a mixer or soundboard
System Management	PC Tool; QR access with name, password, and settings control
Power and Physical	
Input Voltage / Current	DC 5V / 1A
Power Supply	USB-C
Firmware Upgradable	Yes (DFU support)
Dimensions	6.7 x 4.3 x 1.5 in (170 x 110 x 37 mm)
Weight	1.7 lbs (800 g)

7. INSTALLATION

Recommended Placement

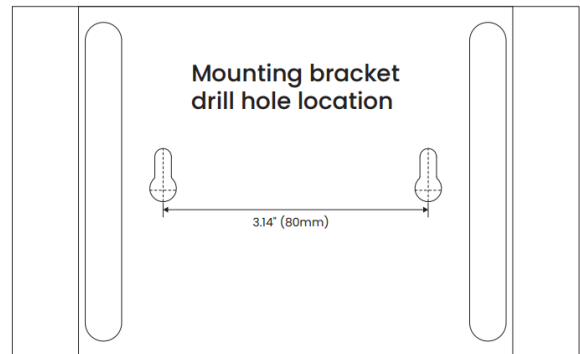
The transmitter should be **wall-mounted or placed on a table or stand at approximately 6–10 ft (1.8–3 m) height**, facing toward the audience area.

Ensure clear coverage of the intended listening zone with minimal obstruction.

Do not install in fully enclosed or metal-shielded locations.

Mounting Options

- Wall-mounted installation (recommended)
- Tabletop placement (stable flat surface)



8. ENHANCE YOUR SYSTEM

Enhance your Auracast system with recommended add-ons for different usage needs.

[FreeMic Duo](#)

Dual wireless microphone system for presentations, speeches, and guided use cases.

[AuraClip 10RX](#)

Multi-unit receiver charging and distribution dock for group listening setups.

[Aria Aura 4](#)

Premium Auracast-enabled headphones designed for long-wear comfort in public environments.

More Compatible Receivers

Explore the full range of compatible Auracast receivers, headphones, and hearing solutions:

[Universal Auracast Receivers for Assistive Listening | Venucast](#)