AirCast / TC570

Professional Auracast Transmitter | Product Data Sheet



Product Overview

AirCast TC570 connects to existing venue audio systems and broadcasts audio to multiple Auracast-enabled listening devices. Wired and Bluetooth sources can be mixed into one broadcast.

Key Features

Flexible Audio Inputs: Shared XLR / 6.35 mm channel, separate 3.5 mm AUX channel, and Bluetooth input.

Simultaneous Mixing: Mix wired and Bluetooth sources, with separate level controls for the two wired channels.

Long-Range Broadcast: Up to 150 m (high-power version) or 100 m (low-power version) in open-field conditions.*

Password Access: Protect broadcasts with a custom password.

USB-C Configuration: Configure broadcast settings and update firmware from a PC.

Monitoring & Mounting: 3.5 mm headphone monitoring; wall-mount accessories included. Rack-mount and tripod accessories optional.

*Actual range depends on the receiver and environment.

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Audio Connections & Controls

Audio Inputs & Mixing

Wired Inputs	XLR / 6.35 mm share one line-input channel; 6.35 mm is balanced. Separate 3.5 mm AUX input is unbalanced.
XLR / 6.35 mm Input Routing	Audio from L, R, or both inputs is mixed to mono and reproduced identically in both output channels.
Bluetooth Input	Wireless audio input from a phone, computer, or other Bluetooth source.
Mixing	Mix the XLR / 6.35 mm channel, AUX channel, and Bluetooth input simultaneously into one Auracast broadcast.
Wired Level Controls	Separate rotary level controls for the XLR / 6.35 mm and AUX channels. Range: -28 to +10 dB, with 0 dB marked on the panel. No mute at minimum.
Bluetooth Input Level	Controlled by the source device; no independent Bluetooth input volume control on the TC570.
Microphone Connection	Line-level inputs only. Microphones with mic-level output require an external mixer or microphone preamplifier. No phantom power.

Headphone Monitoring

Monitor Output	One 3.5 mm headphone output carrying the same audio mix as the Auracast broadcast. No separate line output.
Monitor Level	Follows input-level adjustments; no independent monitor volume control.
Supported Headphone Impedance	16-32 Ω.
Output Power	30 mW per channel into 16 Ω.

Controls & Indicators

Physical Controls	Power ON / OFF switch and Bluetooth button for pairing, reconnecting, and clearing Bluetooth pairing history.
Status Indicators	Bluetooth status LED and Auracast broadcast LED.

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Wireless, Broadcast & Configuration

Wireless Specifications

Bluetooth Version	5.4
Frequency Band	2.4 GHz ISM (2400-2483.5 MHz).
Bluetooth Profiles	Auracast Broadcast (PBP, TMAP).
Audio Codecs	Bluetooth input: SBC. Auracast broadcast: LC3.
Transmit Power	High-power version: +20 dBm. Low-power version: +10 dBm. Fixed per version; not user-adjustable.
Auracast Range	Up to 150 m for the high-power version or 100 m for the low-power version in open-field conditions. Actual range depends on the receiver, installation, obstructions, and wireless interference.
Bluetooth Input Range	Up to 100 ft (approximately 30 m) from the source device.

Auracast Broadcast & Audio

Broadcast Audio	One Auracast broadcast supporting simultaneous reception by multiple compatible listening devices.
Receiver Compatibility	Auracast-enabled hearing aids, headphones, earbuds, speakers, and receivers. Headphones without Auracast require a compatible Auracast receiver.
Sample Rate	16, 24, or 48 kHz. Factory default: 24 kHz.
Transmission Modes	Low Latency: prioritizes lower delay. Balanced: balances delay and reception reliability. High Reliability: prioritizes reception reliability (factory default).
Audio Latency	40-85 ms at 24 kHz: Low Latency 40 ms; Balanced 75 ms; High Reliability 85 ms. Reference values; actual latency varies with the input path and receiver.
Frequency Response	Target specifications - pending verification (±3 dB): 16 kHz sample rate: 50 Hz-7.5 kHz; 24 kHz: 50 Hz-11.0 kHz; 48 kHz: 50 Hz-22.5 kHz.

System Configuration & Firmware

PC Configuration	Connect via USB-C to set the broadcast name, password, sample rate, and transmission mode, and to update firmware.
Broadcast Information	QR code provides broadcast information.
Network Interfaces	No Ethernet management, Dante, or inter-device network audio.

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Power, Installation & Accessories

Power & Physical Specifications

Power	DC 5 V via USB-C; use a power source rated at least 1 A. Power adapter and cable included. PoE is not supported.
Dimensions	170 x 110 x 37 mm (6.7 x 4.3 x 1.5 in).
Net Weight	440 g (approximately 0.97 lb); main unit only, excluding accessories and packaging.
Enclosure	Aluminium alloy and ABS plastic; dark grey.
Mounting	Wall-mount accessories included. Rack-mount and tripod accessories optional; sold separately.

Environment & Compliance

Operating Temperature	-10 to +45 °C.
Storage Temperature	-40 to +70 °C.
Operating Humidity	0-95% RH, non-condensing.
Compliance	CE, FCC, RCM, IC, MIC
Bluetooth Qualification	Finished-product Bluetooth SIG qualification / listing (BQB).

Included Accessories

Item	Qty	Details
AirCast Transmitter	1	
XLR Female-to-Male Cable	2	1 m each.
3.5 mm TRS-to-TRS Cable	1	
USB Power Adapter	1	DC 5 V output; rated at least 1 A.
USB-A to USB-C Data Cable	1	3 m; power, PC configuration, and firmware updates.
Wall-Mount Accessories	1 set	2 screws (3 x 30 mm) and 2 wall anchors (6 x 30 mm).

Optional Accessories

Rack-Mount Accessories	Optional; sold separately.
Tripod Accessories	Optional; sold separately.

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