

RTX

Rev 1.0 · Sep 2026

Auracast™ Transceiver

The RTX is a versatile Auracast™ transceiver that switches between transmitter and receiver modes, making it suited to both tour guiding and assistive listening.

In receiver mode it serves people without Auracast™-enabled hearables, through headphones or a neck loop. Fully interoperable with Auracast™ transmitters and the CASTER series, with low-latency streaming under 40 ms.



AUDIO

Connection	3.5 mm TRRS jack — headset, headphones, neck loop or microphone; TRS and TRRS headphones supported	Latency	< 40 ms
Jack wiring	CTIA / AHJ — tip Left, ring 1 Right, ring 2 Ground, sleeve Mic	Max input voltage	0.707 Vrms
Frequency response	10 Hz – 22 kHz	SNR / THD+N	ADC 91 / -85 dB; DAC 95 / -82 dB
Sample rate	48 kHz	Headphone output	16–32 ohm recommended; 16–64 ohm compatible
Playback codec	LC3	Processing / DSP	Ducking — playback is attenuated automatically under a live Auracast™ stream

RADIO

Technology	Bluetooth® 5.3 Low Energy (Auracast™)	Modes	Transmitter or receiver, switched in Hive Central (DUPLEX, DUPLEX+)
Frequency range	2400 – 2482 MHz (2.4 GHz ISM band)	Secure broadcast	4–16-character password, AES128 — joined through B-PASS or SmartHive, not from the stream list
Codec	LC3 — 16 / 24 / 48 kHz as receiver; broadcasts at 24 kHz	NFC	Tap-to-Access on supported devices
TX power	Selectable 5 / 10 / 15 / 20 dBm from the device menu or SmartHive		

POWER & BATTERY

Battery	Lithium-polymer, 3.7 VDC, 1,400 mAh — user-replaceable under a removable cover	Charge time	Under 4 hours
Battery life	Receiver mode up to 16 h; transmitter mode up to 10 h, depending on TX power	Charging	USB-C — 5 VDC, 500 mA; or the SmartHive cradle
		Cradle contacts	4 pogo pins with a magnetic latch — charging and programming

REGULATORY

EU / UK	CE (RED) — EN 300 328, EN 301 489-1 / -17, EN 62368-1, EMF; UKCA	Japan	MIC 219-259225
USA / Canada	FCC ID 2BOBX-BRTX (Part 15.247); IC 33650-BRTX (RSS-247)	Australia / NZ	RCM — AS/NZS 4268, CISPR 32, 2772.2
		Environmental	RoHS, REACH, WEEE (Cat. VI)
		Battery transport	UN 38.3; MSDS



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LICENSING

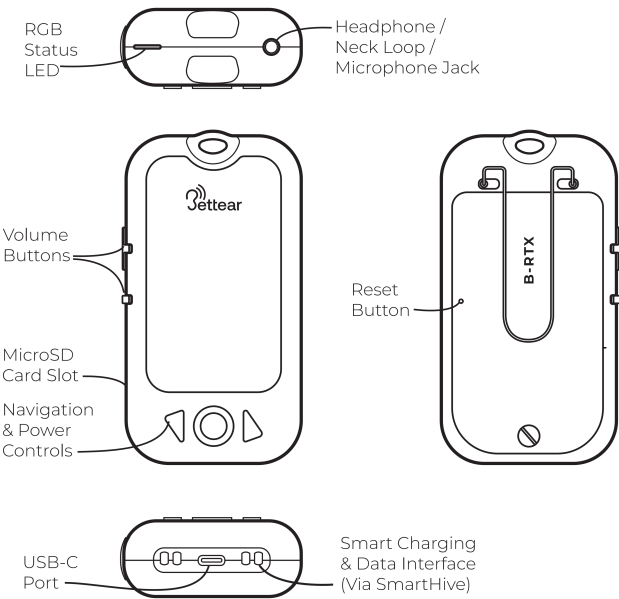
	Experience	Duplex	Duplex+
Receiver mode	•	•	•
Transmitter mode	—	•	•
Tap-to-Access (NFC)	•	•	•
MP3 streaming and playback	—	—	•
Timecode	—	—	•

Tap-to-Access is available on NFC-supported devices. DUPLEX and DUPLEX+ licenses can be applied to a unit at any time. Stream Lock ties a unit to one broadcast and List Lock filters the stream list to one deployment — both set from SmartHive with Hive Central.

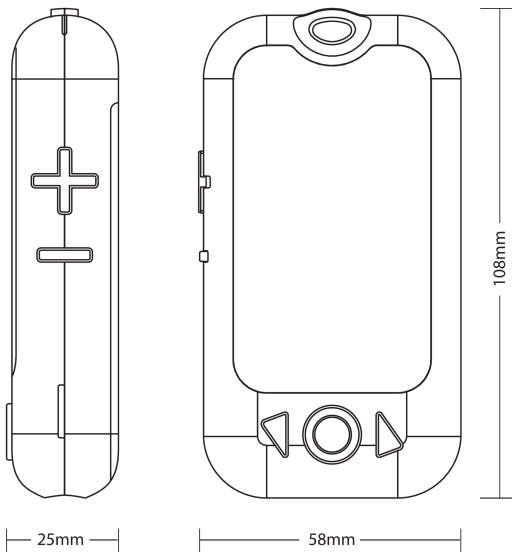
DISPLAY & INDICATORS

Display	2" TFT RGB, 240 × 320	Status LED	RGB indicator
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CONTROLS & INTERFACES



DIMENSIONS



PHYSICAL & IN THE BOX

Dimensions	108 × 58 × 25 mm	Supplied	RTX unit and a USB-C to USB-A charging cable
Weight	120 g (0.26 lbs); shipping 210 g (0.46 lbs)	Required	USB power adapter, 5 VDC / 500 mA — not included
Operating temp.	−10 °C to +43 °C (14 °F to 109.4 °F)	Add-ons	Belt clip
Storage temp.	−30 °C to +70 °C (−22 °F to 158 °F)	Compatible devices	CASTER series transmitters; B-PASS; SmartHive; Hive 4; Hive Central
Colors	Light grey, dark grey, blue		

