Auracast™ Headphone Receiver

BA-HR1

INSTALLATION GUIDE

The BA-HR1 Auracast™ Headphone Receiver gives guests a simple way to listen to Auracast broadcast audio in public venues. It is designed to meet the volume and intelligibility requirements of ADA assistive listening standards, delivering clear, high-quality sound for every listener — with or without hearing loss.

Unlike many Auracast listening solutions, the receiver connects directly to Auracast broadcasts — no smartphone, app, assistive device, or complicated setup required. It automatically joins the strongest broadcast in range. Guests can step through up to 10 available channels, choose the audio stream they want, and adjust volume with simple controls. Moving to another listening area? A quick rescan finds the available broadcasts and reconnects in seconds.

Key Features

- Connects directly to Auracast broadcasts **— no smartphone or app**
- Automatically joins the strongest broadcast; scans **up to 10 channels**
- **More than 40 hours** of listening per charge at 60% volume
- **110 dB SPL** output at 1 kHz, never exceeding 118 dB SPL
- **Low latency (< 40 ms)** keeps audio in step with the live program

Package Contents



(1) BA-HR1 Auracast™ Headphone Receiver

USB-C charging cable and 3.5 mm audio cable not included.

Important Safety Information

⚠WARNING! Read these instructions before use. This receiver can produce sound levels above 110 dB SPL. Listening at high volume for long periods can permanently damage hearing.

Hearing Safety

- Turn the volume down before putting the headphones on, then raise it gradually to a comfortable level.
- Do not listen at high volume levels for long periods.
- Lower the volume or stop listening if you hear ringing or speech starts to sound muffled.
- Stay aware of your surroundings. Do not wear the headphones where you need to hear alarms, announcements, or traffic.

Battery Safety

- The headphones contain a rechargeable lithium-ion polymer battery. Do not crush, puncture, or disassemble the batteries, and keep them away from fire and temperatures above 60 °C (140 °F).
- Charge only from a 5 V USB power source. When using an external adapter, its output must not exceed 5 V / 3 A.
- To protect battery lifespan, fully charge at least once every 3 months. Battery life varies with usage patterns and environmental conditions.

General

- Keep the headphones away from rain, liquids, and moisture. Never immerse them.
- Use only within the operating temperature range of 0 °C to 40 °C (32 °F to 104 °F).
- There are no user-serviceable parts inside. Opening or servicing the headphones voids the warranty.

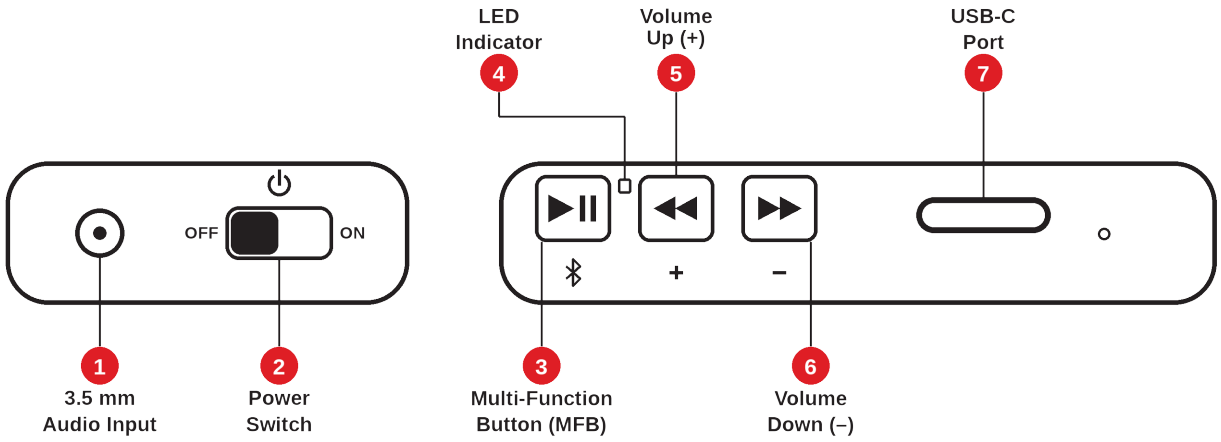
Recycling Instructions

Please Recycle

Help Williams AV protect the environment!

		Do not dispose of batteries or equipment in the trash. Please take the time to dispose of your equipment properly at an electronics recycling center.

Product Overview



NO.	ITEM	DESCRIPTION
1	3.5 mm Audio Input	Connect a wired audio source with a 3.5 mm audio cable (not included).
2	Power Switch	Slide to ON or OFF. At power-on, the battery level is announced as "High," "Low," or 10%–90% in 10% increments.
3	Multi-Function Button (MFB)	Next channel, rescan, and reset. See MFB Actions.
4	LED Indicator	Shows charging, battery, and broadcast status. See LED Indicator.
5	Volume Up (+)	Raises the listening level.
6	Volume Down (–)	Lowers the listening level.
7	USB-C Port	Charging, firmware updates, and channel programming (USB-C data not included).

MFB Actions

ACTION	RESULT
Press once	Go to the next channel
Press twice quickly (double-press)	Rescan for up to 10 available broadcasts
Press and hold for 12 seconds	Reset the headphones and clear all saved channels

LED Indicator

LED	MEANING
● Solid red	Charging
● Solid green	Fully charged
● Slow red blinking	Battery low
● Yellow blinking	Searching for a broadcast
● Solid yellow (5 seconds)	Broadcast joined

Guest Instructions

1. **Turn the receiver on.** Slide the power switch to ON. The receiver announces the battery level.

2. **Join a broadcast.** The receiver automatically joins the strongest Auracast broadcast in range. The LED blinks yellow while searching for broadcasts, then stays solid yellow for 5 seconds once joined.

3. **Choose a channel.** Press and hold the multi-function button (MFB) to seek to the next available.

4. **Rescan in new locations.** Double-press the MFB to rescan. The receiver finds up to 10 available broadcasts and reconnects in seconds.

5. **Set the volume.** Start with the volume low, then press volume up (+) or volume down (–) until speech is clear and comfortable.

6. **Listen to a wired source.** Connect a 3.5 mm audio cable from the source to the 3.5 mm audio input.

7. **Turn the receiver off.** Slide the power switch to OFF and recharge before the next use.

Charging Instructions

- Connect a USB-C cable from a 5 V USB power source to the USB-C port. The LED is solid red while charging and turns solid green when fully charged.
- Charge receivers fully before the first use.
- Fully charge receivers before each event.
- Fully charge receivers at least once every 3 months to protect battery life.
- Charging to 90% takes about 2 hours.

Venue Instructions

- Before handing out a receiver, turn it on and confirm that it joins the venue broadcast (solid yellow LED).
- Show guests the volume controls and how to use the multi-function button (MFB) to seek channels.
- When several broadcasts are running, tell guests how many channels are available and what each one carries.
- Clean the ear cushions and headband between uses.
- To clear saved channels, press and hold the MFB for 12 seconds.

Care & Cleaning

- Turn the headphones off and disconnect all cables before cleaning.
- Wipe the ear cushions, headband, and housing with a soft cloth lightly dampened with water and mild soap, or with an electronics-safe disinfecting wipe. Test any cleaner on a small, hidden area first.
- Do not use solvents, bleach, or abrasive cleaners, and do not spray liquid directly onto the headphones.
- Keep moisture out of the USB-C port, the 3.5 mm jack, and other openings.
- Let the headphones dry completely before the next use or charge.
- Store in a cool, dry place within the storage temperature range of -20 °C to 60 °C (-4 °F to 140 °F).
- For replacement parts, contact Williams AV.

Troubleshooting

SYMPTOM	POSSIBLE CAUSE	SUGGESTED SOLUTION
Headphones won't turn on	The battery is depleted	Charge with a USB-C cable from a 5 V USB power source. The LED is solid red while charging.
LED keeps blinking yellow; no broadcast joined	No Auracast broadcast in range, or the transmitter is off	Move closer to the transmitter and double-press the multi-function button (MFB) to rescan. Ask venue staff to confirm the broadcast is on.
Poor audio quality or dropouts	Out of broadcast range	Reduce the distance to the Auracast transmitter. Double-press the MFB to rescan for up to 10 available broadcasts.
Wrong program or language	Joined a different broadcast	Press and hold the MFB to seek to the correct channel.
LED shows broadcast joined, but no sound	Volume is too low	Press volume up (+).
LED blinks red slowly	The battery is low	Recharge the headphones.
LED doesn't turn red when charging	Faulty cable or power source	Try a different USB-C cable or a 5 V USB power source.
Buttons don't respond	The receiver needs a restart	Turn the receiver off and on. If the problem continues, press and hold the MFB for 12 seconds to reset (this clears saved channels).

If the problem persists, contact Williams AV Technical Support before returning or servicing the unit.

Specifications

BA-HR1

SPECIFICATION	VALUE
Type	Stereo headphones
Color	Black
Product Dimensions	8.7 × 5.7 × 2.9 in (220 × 145 × 75 mm)
Net Weight	6.9 oz (195 g)
Driver Size	40 mm
Frequency Response	20 Hz – 20 kHz (±3 dB, ref. 1 kHz)
Maximum Output	110 dB SPL @ 1 kHz (never exceeds 118 dB SPL)
Latency	< 40 ms
Wireless	Bluetooth® 5.4 LE Audio; Public Broadcast Profile (PBP) receiver for Auracast™ broadcast audio
Channel Scan	Up to 10 Auracast broadcasts
Wired Input	3.5 mm audio input
Controls	Power switch; Volume + / –; Multi-Function Button (next channel, rescan, reset)
USB-C Port	Charging (5 V DC, ~500 mA), firmware updates, channel programming

SPECIFICATION	VALUE
Battery	Rechargeable 3.7 V, 400 mAh lithium-ion polymer
Battery Life	More than 40 hours at 60% volume
Charging Time	Approx. 2 hours to 90%
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Certifications	FCC, ISED Canada, CE, UKCA, RCM, RoHS 3, WEEE
Warranty	1-year limited warranty

Compliance & Certifications

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

CAUTION! Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

Innovation, Science and Economic Development (ISED) Compliance Statement

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Cet équipement est conforme aux limites d'exposition de rayonnement d'IC RSS-102 déterminées pour un environnement non contrôlé. Son utilisation est soumise aux deux conditions suivantes:

1. Cet appareil ne doit pas causer d'interférences et
2. Il doit accepter toutes interférences reçues, y compris celles susceptibles d'avoir des effets indésirables sur son fonctionnement

Trademarks

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Limited Warranty

The BA-HR1 is covered by a 1-year limited factory warranty that begins on the date of purchase. Servicing or attempting to service the device voids the warranty.

For customer assistance, call 800.843.3544 toll-free in the U.S.A., or +1.952.943.2252 from outside the U.S.A.

If the headphones need service, your customer service representative will provide a Return Authorization (RA) number and shipping instructions. Pack the headphones carefully and send them to:

Williams AV
Attn: Repair Dept.
10300 Valley View Road
Eden Prairie, MN 55344 USA

Contact & Support

For additional support, specifications, or replacement parts, visit the Williams AV website or reach out using the contact information below.

https://williamsav.com/support/

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