

Highgaze BA-55T

Highgaze Bluetooth 5.4 Transmitter BA-55T Instruction Manual

Model: BA-55T

1. INTRODUCTION

The Highgaze Bluetooth 5.4 Transmitter BA-55T is designed to broadcast audio from a single source to multiple receiving devices simultaneously, utilizing advanced Bluetooth technologies such as Auracast, LC3, and aptX. This device facilitates real-time audio synchronization and supports both LE Audio and classic Bluetooth connections, making it suitable for various applications including gaming, presentations, and personal audio sharing.

2. PRODUCT FEATURES

- **Auracast Broadcast:** Enables audio transmission to any nearby Auracast-compatible receiving devices.
- **Real-Time Audio Sync:** Supports aptX classic, LL (Low Latency), HD, and adaptive codecs for synchronized audio.
- **LE Audio:** Facilitates audio streaming over Bluetooth Low Energy for enhanced sound quality and power efficiency.
- **Device Memory:** The transmitter can remember up to 8 paired devices.
- **Simultaneous Streaming:** LE unicast and Auracast can stream audio concurrently.
- **Wide Compatibility:** Designed for use with devices such as PS5, Nintendo Switch, iPhone (15, 16), and Android phones.
- **Operating Range:** Provides an operating range of up to 30 meters (approximately 98 feet).

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BA-25T



USB to USB-C is included



Bluetooth[®] 5.4 TRANSMITTER WIDE COMPATIBILITY WITH **AURACAST™ / LC3 / aptX™**

Figure 1: Highgaze Bluetooth 5.4 Transmitter BA-55T Product Packaging.

aptX:
Real Time Audio Sync with aptX classic/LL/HD/adaptive.

Auracast:
Auracast™ broadcast enables audio transmitters to broadcast audio to any nearby receiving devices.

LEA:
LE Audio making audio streaming over Bluetooth Low Energy possible.

BT:
Bluetooth that can connect with any regular headsets.

FEATURES:
The transmitter remembers up to 8 devices. (support 8 LE Bluetooth or 8 classic Bluetooth) LE unicast and Auracast can stream audio simultaneously.

HOW TO USE:
Double-click to enter pairing mode, BA-25T attempts to connect to nearest BT headsets. (Keep other devices away when pairing) If connecting to an LE device, please triple-click to enter Auracast mode during pairing. Press and hold for 6 seconds to reset BA-25T. Or 3 seconds to enter Gaming mode.

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FC RoHS RECYCLE
FCC ID: PANBA25T

MADE IN TAIWAN

Figure 2: Key Features and Basic Usage Instructions.

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Operating Range up to 30m

Connect your Bluetooth-enabled devices from every corner of your home, meeting room, office and more.

30m

Figure 3: Operating Range of the Transmitter.

3. SETUP AND PAIRING

Follow these steps to set up and pair your Highgaze Bluetooth 5.4 Transmitter BA-55T:

1. **Step 1: Plug in the Transmitter.** Insert the BA-55T transmitter into a compatible USB port on your device (e.g., PC, game console). If your device has a USB-C port, use the included USB to USB-C adapter.
2. **Step 2: Enter Pairing Mode.** Double-click the button on the transmitter to enter classic Bluetooth pairing mode. The BA-55T will attempt to connect to the nearest Bluetooth headset.
3. **Step 3: Auracast Mode (Optional).** If connecting to an LE Audio device, triple-click the button on the transmitter during pairing to enter Auracast mode.
4. **Step 4: Connect Earbuds/Headphones.** On your receiving device (e.g., smartphone, earbuds), ensure Bluetooth is enabled and initiate pairing. Select the BA-55T from the list of available devices.
5. **Step 5: Enable LE Audio Broadcast (if applicable).** If using a smartphone or other device to broadcast via LE Audio, navigate to your Bluetooth settings, select the connected earbuds, and toggle on the 'LE Audio' option to enhance sound quality and performance. You may then select 'Listen to Auracast broadcast' and choose the desired broadcast.

Your browser does not support the video tag.

Video 1: How to set up the Highgaze BA-25T (BA-55T) transmitter for Auracast broadcasting with a laptop and smartphone.

4. OPERATING MODES

The Highgaze BA-55T supports different operating modes for various audio transmission needs:

- **1-to-1 Classic Bluetooth Mode:** Connects the transmitter to a single Bluetooth headphone, speaker, or earbuds. This is the standard Bluetooth pairing method.
- **1-to-N Auracast Mode:** Allows the transmitter to broadcast audio from a single source to an unlimited number of Auracast-enabled receiving devices. To enable this function, receiving devices must support Auracast or use an extended MoreDo.

Button Functions:

- **Double-click:** Enters classic Bluetooth pairing mode.
- **Triple-click (during pairing):** Enters Auracast mode for LE Audio devices.
- **Press and hold for 6 seconds:** Resets the BA-55T to factory settings.
- **Press and hold for 3 seconds:** Enters Gaming mode.



Figure 4: Comparison of 1-to-1 Classic Bluetooth Mode and 1-to-N Auracast Mode.

5. MAINTENANCE

To ensure the longevity and optimal performance of your Highgaze Bluetooth 5.4 Transmitter BA-55T:

- Keep the device clean and free from dust. Use a soft, dry cloth for cleaning.
- Avoid exposing the transmitter to extreme temperatures, humidity, or direct sunlight.
- Do not attempt to disassemble or modify the device, as this will void the warranty.

6. TROUBLESHOOTING

If you encounter issues with your Highgaze Bluetooth 5.4 Transmitter BA-55T, refer to the following common problems and solutions:

- **Device Not Appearing for Pairing:** Ensure the transmitter is correctly plugged in and in the appropriate pairing mode (double-click for classic Bluetooth, triple-click for Auracast/LE Audio). Check that your receiving device's Bluetooth is enabled and actively scanning.
- **No Audio or Poor Quality Audio:** Verify that both the transmitter and receiving device are properly paired and connected. Check the volume levels on both devices. Ensure your receiving device supports the audio codecs (aptX, LC3) being transmitted for optimal quality.
- **Auracast Not Working:** Confirm that your receiving device is Auracast-enabled. Not all Bluetooth LE devices support Auracast. Ensure you have triple-clicked the transmitter button to enter Auracast mode during pairing.
- **Intermittent Connection:** Reduce the distance between the transmitter and the receiving device. Avoid physical obstructions and sources of interference (e.g., Wi-Fi routers, other Bluetooth devices).
- **Resetting the Device:** If the device is unresponsive or exhibiting unusual behavior, press and hold the button on the transmitter for 6 seconds to perform a factory reset.

Q1. What Transmitter is for?

A.

HIGHGAZE Audio Transmitter is to broadcast audio from a single source to an unlimited number of receiving devices without the need for traditional one-to-one Bluetooth pairing.

Think of it like a radio broadcast where any Auracast™ enabled device can pick up the audio within range.

Q2. The differences between LE Auracast™ and non LE Auracast™ mode?

A.

LE Auracast™ - Single audio source to unlimited BT receivers (LE Auracast™ support)

Non LE Auracast™ - Single audio source to only one BT receiver

Q3. Which devices will support Auracast™?

A.

Devices need Bluetooth LE Audio capability to support Auracast™.

Latest Android (No iPhone), wireless headphones, hearing aids, and audio systems will gradually support Auracast™.

(HIGHGAZE has tested with Samsung Galaxy S23/S24/S25 which One UI version 6.1 or higher. For headphones we've tested with Samsung Buds2 Pro and EarFun Air Pro4)

Figure 5: Frequently Asked Questions (FAQ).

Frequently Asked Questions (FAQ)

• **Q1. What is the Highgaze Transmitter for?**

A. The Highgaze Audio Transmitter broadcasts audio from a single source to an unlimited number of receiving devices without traditional one-to-one Bluetooth pairing. It functions like a radio broadcast where any Auracast-enabled device within range can pick up the audio.

• **Q2. What are the differences between LE Auracast and non-LE Auracast mode?**

A. **LE Auracast:** Single audio source to unlimited Bluetooth receivers (requires LE Auracast support).

Non-LE Auracast: Single audio source to only one Bluetooth receiver.

• **Q3. Which devices support Auracast?**

A. Devices need Bluetooth LE Audio capability to support Auracast. Latest Android devices (e.g., Samsung Galaxy S23/S24/S25 with One UI version 6.1 or higher) and compatible wireless headphones, hearing aids, and audio systems will gradually support Auracast. (Highgaze has tested with Samsung Galaxy S23/S24/S25 and EarFun Air Pro 4 headphones).

7. SPECIFICATIONS

Feature	Detail
Brand	Highgaze
Model Number	BA-55T
Hardware Interface	Bluetooth 5
Color	Black
Compatible Devices	PS5, Nintendo Switch, iPhone 15/16, Android
Data Link Protocol	Bluetooth
Manufacturer	HIGHGAZE

8. WARRANTY INFORMATION

This product comes with a 1-year warranty from the date of purchase. Please retain your proof of purchase for warranty claims. The warranty covers manufacturing defects but does not cover damage caused by misuse, accidents, unauthorized modifications, or normal wear and tear.

9. SUPPORT

For further assistance, technical support, or warranty inquiries, please contact Highgaze customer support:

- **Email:** supports@highgaze.com.tw
- **Website:** Visit the official Highgaze website for additional resources and product information.