

BY309

Bluetooth 6.0 Audio Adapter



2-in-1 Receiver & Transmitter
Smart Dual Connection

Function Introduction

The BY309 is a Bluetooth Transmitter and Receiver. It works with speakers, headphones, computers and other devices equipped with a 3.5mm audio jack. Powered by Bluetooth 6.0 chip, it comes with a built-in antenna and built-in lithium battery.

The included 3.5mm audio port and dual 3.5mm adapter expand connection options. It is compatible with most in-car entertainment systems and TV audio output via AUX/RCA ports, making it an ideal Bluetooth transmitter.

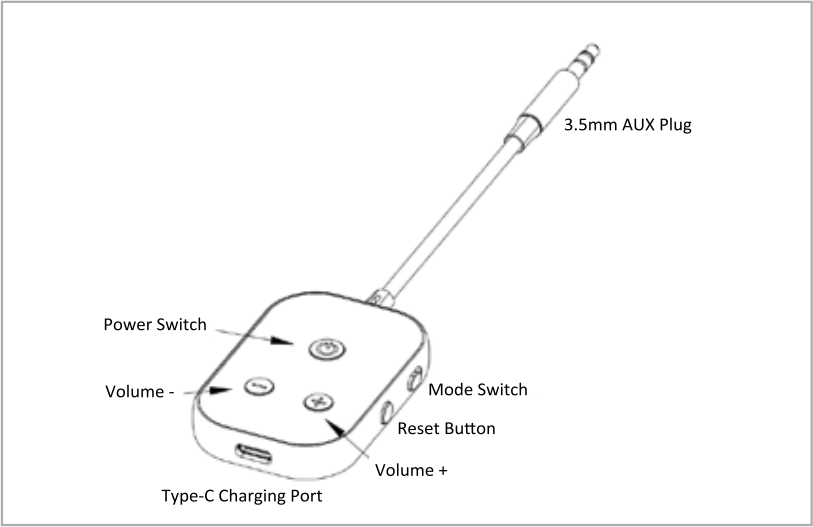
Product Electrical Specifications

	Item	Description	Remarks
1.	Solution	Bluetrum	
2.	Chip Model	BT8952U	
3.	Channel Mode	Stereo	
4.	Bluetooth Version	6.0	
5.	Modulation Mode	GFSK, $\pi/4$ -DQPSK, 8DPSK	
6.	Output Frequency	2.4–2.5 GHz	
7.	RF Power	+11dBm	
8.	Antenna Gain	1.75dBi	
9.	Effective Communication Distance	$\geq 10\text{m}$ (no obstruction)	
10.	Operating Temperature	$-15^{\circ}\text{C} \sim 50^{\circ}\text{C}$	
11.	Operating Humidity	$\geq 56\%\text{RH}$	
12.	Supported Protocols	HFP/HSP/SPP/HID/A2DP/AVDTP/AVCTP/AVRCP/GAVDP/RFCOMM	
13.	Audio Decoding	SBC, AAC	
14.	Communication Method	BT	
At 80% Volume			

	Item	Value	Reference
1.	Operating Voltage	3.5V–5V	4V
2.	Shutdown Standby Current	< 3.5–5uA	4.5uA
3.	Bluetooth RX - Power-on Standby Current	35.8mA	
4.	Bluetooth RX - Music Playback Current	37mA	
5.	Bluetooth RX - Call Current	40.3mA	
6.	Bluetooth TX - Power-on Standby Current	33–38mA	
7.	Bluetooth TX - Music Playback Current	40–47mA	

Product Operation Instructions

1: Interface & Button Description



Functions	1. Bluetooth RX Mode: Can be connected by one or two mobile phones simultaneously (or two other Bluetooth transmitting devices). Once connected, audio played on the phone will be output via the 3.5mm audio jack. It supports connection with two phones, but audio can only be received from one phone at a time. 2. Bluetooth TX Mode: Can connect to one or two speakers (or other Bluetooth receiving devices) at the same time. After successful connection, it receives audio data through the 3.5mm Line In port and transmits the audio data to two Bluetooth speakers simultaneously via Bluetooth.
4 Buttons	Volume+ Button: Short press to increase volume; long press for 2s to switch Bluetooth devices under RX mode. Volume- Button: Short press to decrease volume; long press for 2s to switch Bluetooth devices under RX mode. Power Button: Long press for 2s to power on; long press for 5s to power off; short press to play/pause; double-click to pair the second device. Reset Button: Long press for 8s to clear pairing records.
1 Slide Switch	Mode Switch: Slide up to switch to TX mode; slide down to switch to RX mode.
2 Status Indicators	Pairing Status: Lights flash alternately. Connection Status: When connected to 1 device, 1 indicator stays solid on. When connected to 2 devices, both indicators stay solid on.
4 Battery Indicators	Displays battery level after power-on: 1 light on for 25%, 2 lights on for 50%, 3 lights on for 75%, 4 lights on for 100%.

2: TX Mode (Transmit Mode) Instructions

- Slide the mode switch upward to set BY309 to TX transmit mode. Insert the 3.5mm AUX plug into the 3.5mm jack (audio output port) of your phone or computer, then play music or audio on your audio playback device.
- Status indicators A and B flash alternately to enter pairing mode. Turn on your Bluetooth speaker or other Bluetooth devices and wait for automatic connection.
- After connecting to one device, indicators A and B stop alternating flashing. Indicator A stays solid on and B turns off. Your Bluetooth speaker or other Bluetooth device will play music automatically.

- To connect a second playback device, double-click the power button. Indicators A and B flash alternately. Once paired successfully, both status indicators remain solid on, and the two Bluetooth speakers or other Bluetooth playback devices receive and play audio simultaneously.
- You may operate the function buttons on BY309 to adjust volume +/- and play/pause audio.

3: RX Mode (Receive Mode) Instructions

- Slide the mode switch downward to set BY309 to RX receive mode. Insert the 3.5mm AUX plug into your speaker or headphones (audio input port) and wait for audio/music input for playback.
- Status indicators A and B flash alternately to enter pairing mode. Search for “BY309” on Bluetooth playback devices such as mobile phones or computers and connect to it.
- After connecting to one mobile phone or computer, indicators A and B stop alternating flashing. Indicator A stays solid on and B turns off. Play music on your phone or computer, then your speaker or headphones (devices with audio input port) will play the music or audio.
- To connect a second playback device, double-click the power button. Indicators A and B flash alternately. Once connected successfully, both status indicators remain solid on. The unit can receive music played from either one of the two Bluetooth playback devices (mobile phone or computer).
- You may operate the function buttons on BY309 to adjust volume +/-, play/pause audio, and switch between Bluetooth playback devices.

Troubleshooting

1. Failed to pair between mobile phone and BY309?
Please confirm the Bluetooth receiver is powered on and in RX mode. Make sure you select the Bluetooth device named “BY309” on your phone. Tap the device name once it appears to complete pairing.
2. Cannot reconnect after unpairing successfully?
After unpairing, the device name may still show up in your phone’s Bluetooth list as cached data and will disappear after refresh. You may fail to reconnect even if you toggle your phone Bluetooth off and on.
Solution: Restart the Bluetooth receiver, then restart your phone’s Bluetooth and re-pair.

3. Why can't other phones or tablets search or connect after pairing with one phone?

The Bluetooth receiver will automatically reconnect to the last paired device by priority after powering on, which blocks new devices from connecting.

Solution: Turn off Bluetooth on the previously paired phone, then other phones or tablets can pair. If you cannot disable Bluetooth on the previously paired device (e.g. paired with another person's phone), restart the Bluetooth receiver to force disconnection, then start a new pairing.

4. Connection fails suddenly while pairing worked normally before?

This issue often occurs on iPhone. It may be caused by invalid old pairing records after the Bluetooth receiver is factory reset.

Solution: Tap the "!" icon next to the device name on iPhone, select "Forget This Device", then search Bluetooth again and re-pair.

Most Bluetooth pairing failures mentioned above can be resolved by three operations: restart the Bluetooth receiver, restart mobile Bluetooth, and forget the paired device.

FCC Warning:

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 equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 0cm between the radiator and your body.