

ARRAROWN ZK-1002T

ARRAROWN ZK-1002T Bluetooth Amplifier Board User Manual

Model: ZK-1002T

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your ARRAROWN ZK-1002T Bluetooth Amplifier Board. This 2.0 channel stereo amplifier module features 100W+100W output, Bluetooth 5.0 connectivity, AUX input, and independent treble and bass controls. Please read this manual thoroughly before use to ensure proper function and longevity of the product.

2. PRODUCT FEATURES

- **Audio Power Amplifier Board:** ZK-1002T with 100W+100W power output and Bluetooth 5.0 wireless connection.
- **Versatile Inputs:** Supports both Bluetooth and AUX audio inputs.
- **2.0 Channel Stereo Output:** Delivers clear stereo sound with minimal distortion.
- **Treble and Bass Control:** Independent adjustment buttons for customized sound.
- **APP Control:** Additional functions available via a dedicated application.
- **Enhanced Sound Quality:** Features a powerful audio chip, AM interference suppression, shielded power inductance, and low-noise operational amplifier.
- **Protective Functions:** Includes over-voltage, under-voltage, over-heat, and short-circuit protection, housed in a protective case.

3. PACKAGE CONTENTS

The following items are included in your package:

- ZK-1002T Bluetooth Amplifier Module
- Protective Panel
- Screws for assembly
- Screwdriver

Note: A power cord and power supply (DC 9-24V adapter) are not included and must be purchased separately.

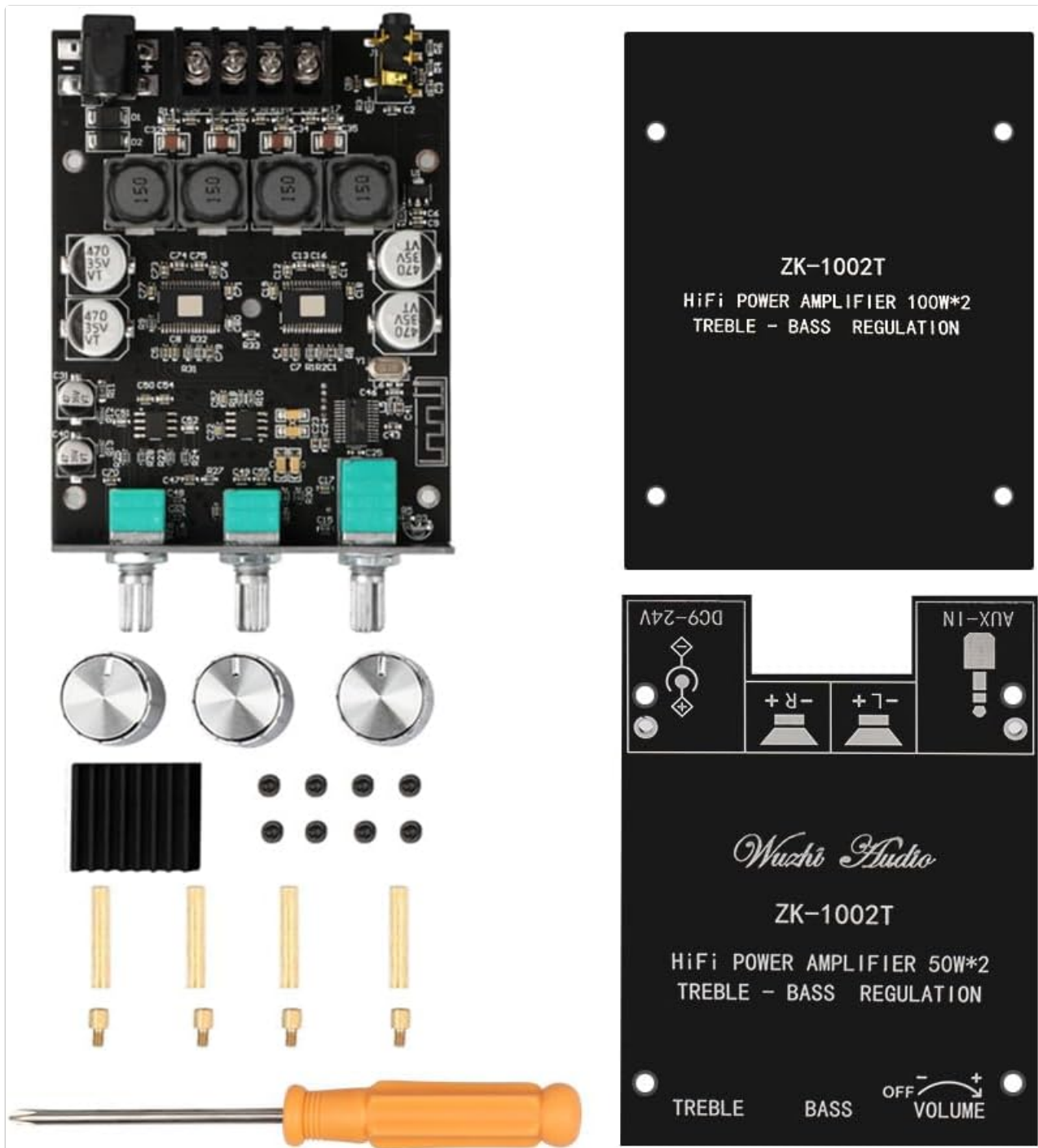


Figure 3.1: Contents of the ZK-1002T package. This image displays the amplifier board, a protective top panel, various screws, standoffs, and a small screwdriver, illustrating all components provided for assembly.

4. SETUP AND ASSEMBLY

Follow these steps to assemble and connect your amplifier board:

1. **Attach Protective Panel:** Use the provided screws and standoffs to attach the protective panel to the amplifier board. Ensure all connections remain accessible.
2. **Connect Speakers:** Connect your passive speakers to the "Left channel output" and "Right channel output" terminals. Ensure correct polarity (+ and -).
3. **Connect Power Supply:** Connect a DC 9-24V power adapter to the "Power input" terminal. Ensure the power adapter's polarity matches the board's requirements (center negative for some models, verify if not explicitly stated). The ZK-1002T typically uses a standard DC jack.

4. Choose Audio Input:

- **Bluetooth:** Power on the device. The amplifier will enter Bluetooth pairing mode.
- **AUX Input:** Connect an audio source (e.g., smartphone, MP3 player) to the "AUX input" jack using a 3.5mm audio cable. *Note: When using AUX mode, ensure any active Bluetooth connection to the module has been disconnected.*

With independent volume, treble and bass adjustment buttons

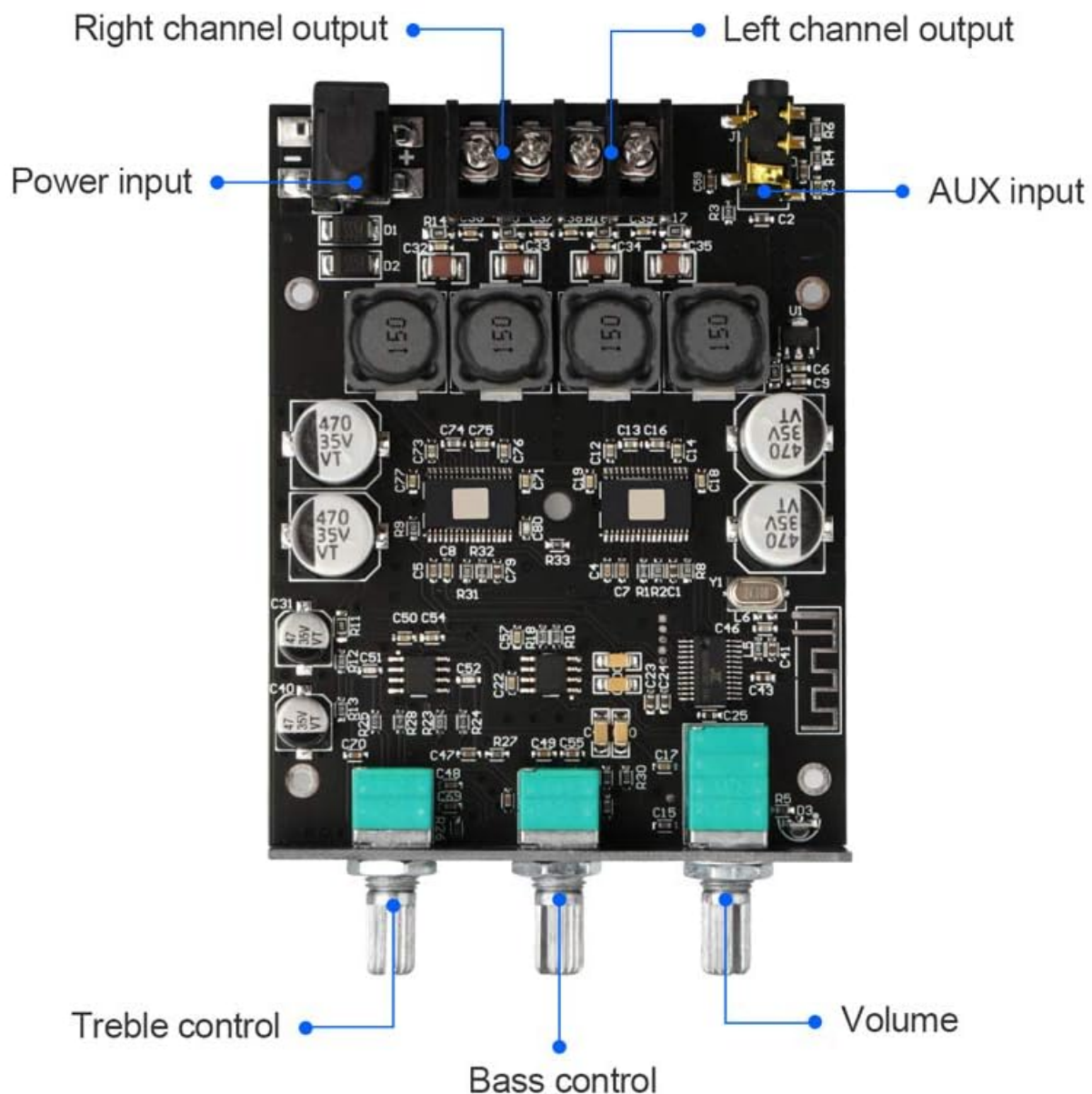
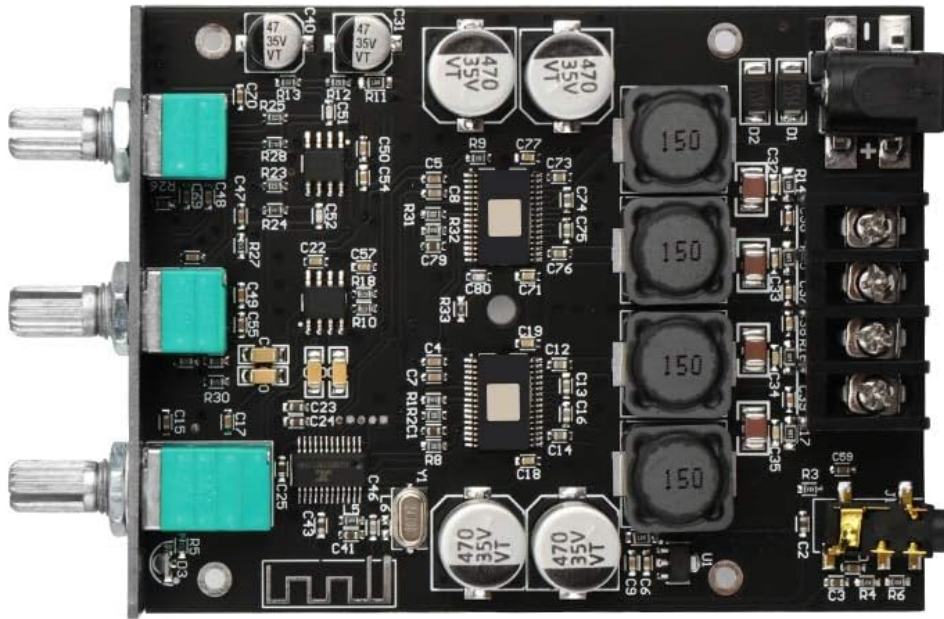


Figure 4.1: ZK-1002T Amplifier Board connection points. This image clearly labels the power input, AUX input, left and right speaker outputs, and the three control knobs for treble, bass, and volume.

With high-quality sound experience, you will enjoy a more perfect sound quality experience.



Treble & Bass Control



DUAL TPA3116D2 CHIP



Large Heat Sink

Figure 4.2: Detailed view of the ZK-1002T Amplifier Board. This image provides another perspective of the board, highlighting the various input/output ports and control knobs for easy identification during setup.

5. OPERATING INSTRUCTIONS

- 1. Power On/Off:** Rotate the Volume knob clockwise to turn the amplifier on. Rotate counter-clockwise until it clicks to turn off.
- 2. Bluetooth Pairing:**
 - Once powered on, the amplifier will automatically enter Bluetooth pairing mode.
 - On your audio device (e.g., smartphone), search for Bluetooth devices and select "ZK-1002T" (or similar name) to connect.
 - A confirmation sound will indicate a successful connection.
- 3. AUX Input Usage:**
 - Connect your audio source to the AUX input jack.
 - Ensure no Bluetooth device is actively connected to the amplifier. If a Bluetooth device is connected,

disconnect it to enable AUX input.

4. **Adjusting Volume:** Use the large Volume knob to control the overall output volume.
5. **Adjusting Treble and Bass:** Use the dedicated Treble and Bass control knobs to fine-tune your audio output according to your preference.
6. **APP Control:** Download the official application (if available) to access additional features and controls for the amplifier. Follow the app's instructions for pairing and usage.



Figure 5.1: Example usage scenario. This image illustrates the amplifier board integrated into a home audio setup, connected to speakers and controlled wirelessly via a smartphone, demonstrating its application for enjoying music.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No sound output.	Power not connected or insufficient. Speakers not connected correctly. Incorrect input mode (Bluetooth/AUX). Volume too low.	Ensure DC 9-24V power supply is connected and functional. Check speaker wire connections and polarity. If using AUX, ensure Bluetooth is disconnected. If using Bluetooth, ensure device is paired. Increase volume on the amplifier and audio source.
Bluetooth not connecting.	Amplifier not in pairing mode. Device too far from amplifier. Interference.	Power cycle the amplifier to re-enter pairing mode. Move your audio device closer to the amplifier. Ensure no other Bluetooth devices are interfering.
Sound distortion.	Volume too high (clipping). Poor quality audio source. Speaker impedance mismatch.	Reduce volume on amplifier and audio source. Try a different audio source or cable. Ensure speakers are compatible with amplifier output.
APP control not working.	App not properly installed or paired. Compatibility issues.	Ensure the app is correctly installed and the amplifier is paired via Bluetooth to your phone. Check for app updates or device compatibility information.

7. SPECIFICATIONS

Feature	Detail
Model	ZK-1002T
Brand	ARRAROWN
Output Power	100W + 100W (200 Watts Max)
Number of Channels	2.0 (Stereo)
Bluetooth Version	5.0
Input Voltage	DC 9-24V
Audio Inputs	Bluetooth, AUX (3.5mm)
Controls	Volume, Treble, Bass
Protection Mechanisms	Over-voltage, Under-voltage, Over-heat, Short-circuit
Material	Plastic
Mounting Type	Freestanding
Dimensions (Approx.)	112mm (4.4in) x 70mm (2.75in) x 20mm (0.78in)

Protection Mechanism



Figure 7.1: ZK-1002T Dimensions and Protection Features. This image displays the physical dimensions of the amplifier board (length, width, height) and icons representing its built-in safety features: over-voltage, under-voltage, over-heat, short-circuit, and DC detection protection.

100W+100W Bluetooth Subwoofer Amplifier Board

BT+AUX audio input, two-channel stereo output

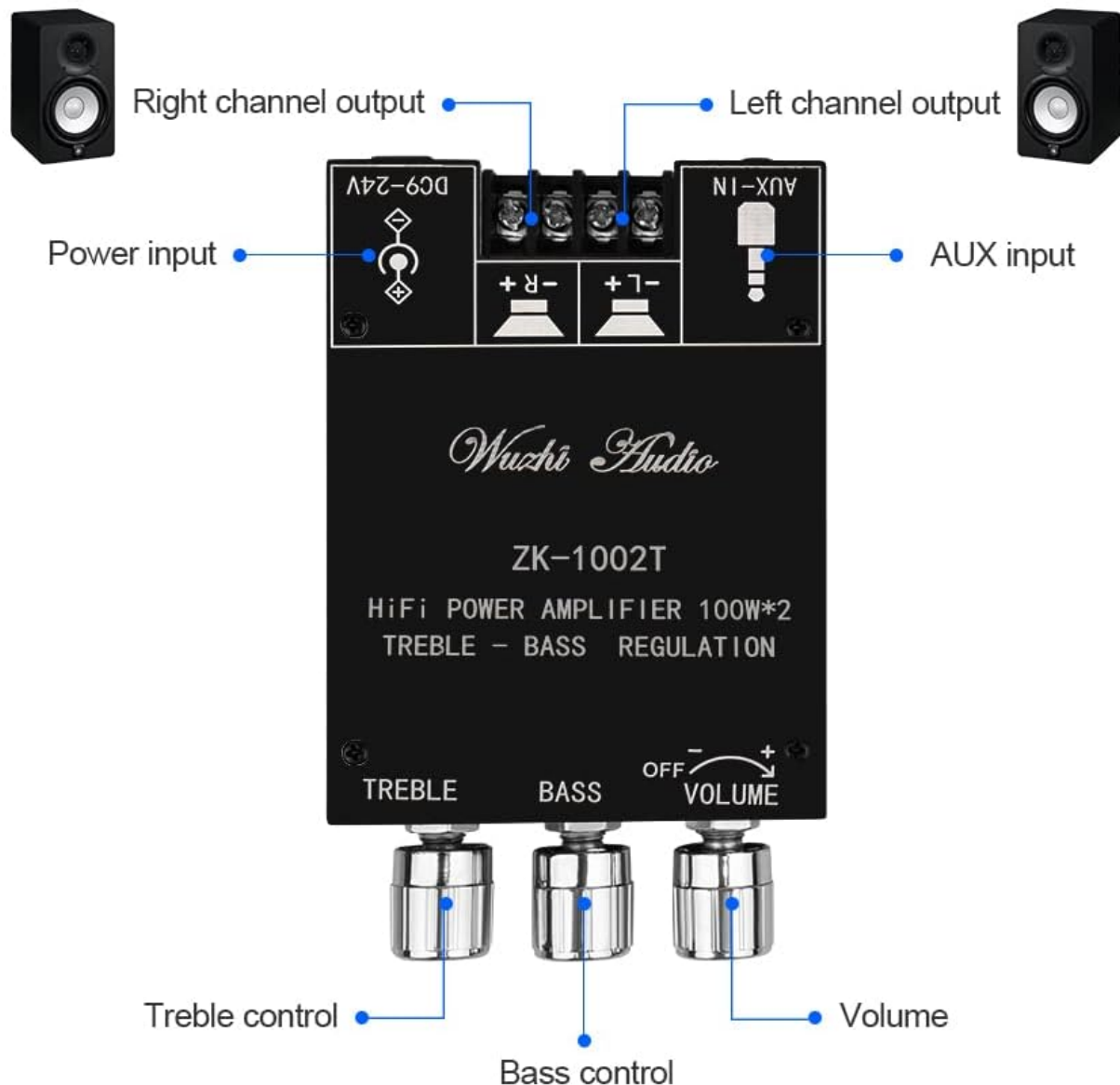


Figure 7.2: Internal Components and Controls. This image provides a closer look at the amplifier board's key components, including the treble and bass control knobs, the dual TPA3116D amplifier chips, and the large heat sink designed for efficient heat dissipation.

8. MAINTENANCE

To ensure optimal performance and longevity of your ZK-1002T amplifier board, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to gently wipe the surface of the amplifier board. Avoid using liquid cleaners or solvents, as they may damage the electronic components.
- **Environment:** Operate the amplifier in a clean, dry environment, away from excessive dust, moisture, and direct sunlight.
- **Ventilation:** Ensure adequate airflow around the amplifier to prevent overheating, especially during prolonged use at high volumes.
- **Connections:** Periodically check all cable connections (power, speakers, AUX) to ensure they are secure and free from corrosion.

9. WARRANTY AND SUPPORT

The ARRAROWN ZK-1002T Bluetooth Amplifier Board comes with a **2-Year Warranty** from the date of purchase. This warranty covers manufacturing defects and malfunctions under normal use.

For technical support, troubleshooting assistance, or warranty claims, please contact ARRAROWN customer service through the retailer where you purchased the product or visit the official ARRAROWN store page on Amazon:

[ARRAROWN Store](#).

Please retain your proof of purchase for warranty validation.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question