

AUGUESLD XY-S350H

XY-S350H 2.1 Channel Bluetooth Power Amplifier Board

User Manual

1. INTRODUCTION

Thank you for choosing the AUGUESLD XY-S350H 2.1 Channel Bluetooth Power Amplifier Board. This high-fidelity audio amplifier utilizes two TPA3251 chips, delivering a powerful output of 220W for each stereo channel and 350W for the subwoofer channel. It supports a wide voltage input range of 18V-36V and offers versatile audio input options including Bluetooth, AUX, USB flash disk, and USB sound card. This manual provides detailed instructions for setup, operation, maintenance, and troubleshooting to ensure optimal performance and longevity of your device.

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the amplifier board. Failure to do so may result in injury or damage to the device.

- **Power Supply:** Ensure the input voltage is within the specified range of 18V-36V DC. Using an incorrect voltage can damage the board.
- **Ventilation:** Ensure adequate ventilation around the amplifier board to prevent overheating. The integrated fan and heatsink require proper airflow.
- **Connections:** Always power off the device before making or changing any connections (speakers, power, audio input).
- **Short Circuits:** Avoid short circuits between terminals. Ensure all wiring is secure and insulated.
- **Environment:** Do not expose the device to water, moisture, or extreme temperatures. Operate in a clean, dry environment.
- **Protection Features:** The XY-S350H includes multiple protection mechanisms such as short circuit protection, undervoltage protection, overvoltage protection, and clipping protection. While these features enhance safety, proper operation is still crucial.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- XY-S350H Bluetooth Amplifier Board x1

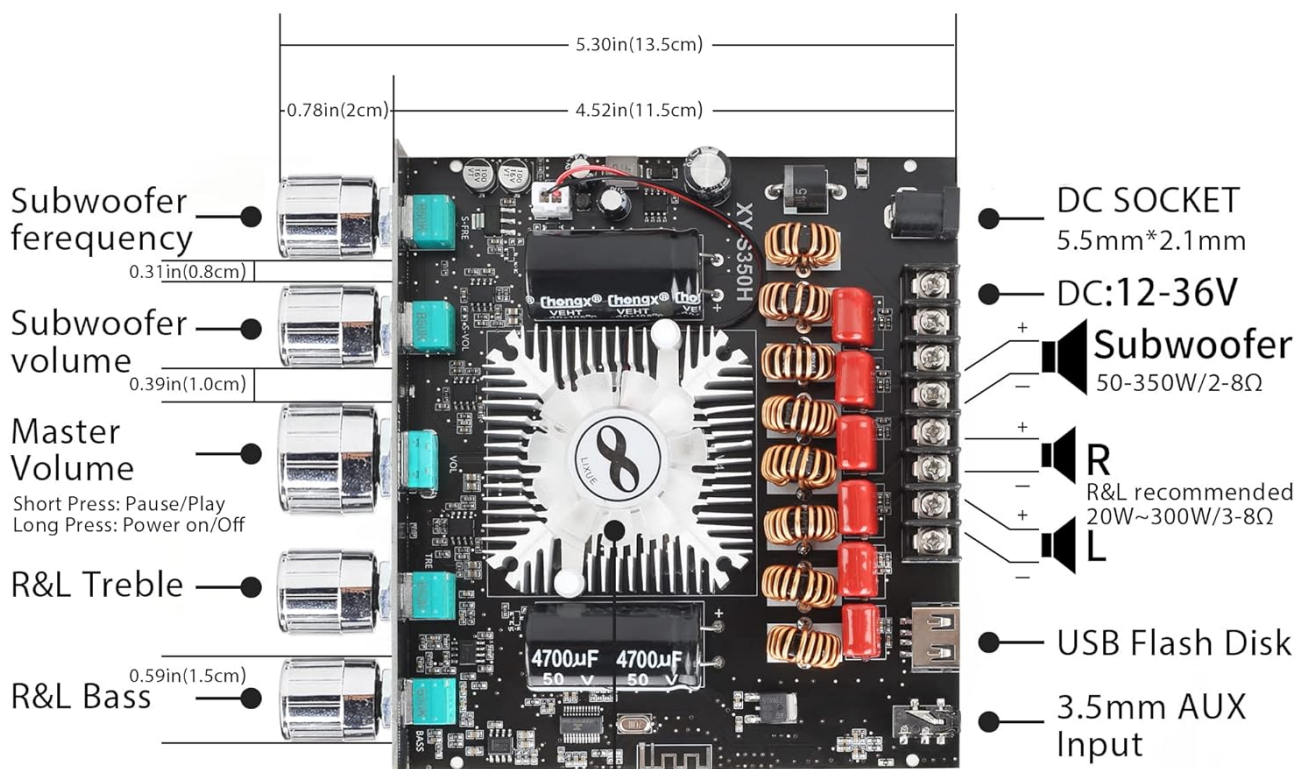
- Protective Shell Set x1
- Screwdriver x1
- Knobs x5
- User Manual x1



Image: Contents of the XY-S350H package. This image displays the amplifier board, a set of protective casing components, a small screwdriver, and five control knobs, illustrating what is included in the product box.

4. PRODUCT OVERVIEW

Familiarize yourself with the various components and controls of the XY-S350H amplifier board.



LONG-LIFE ULTRA SILENT FAN

(Locked rotor, no burning, no noise)

Image: Labeled diagram of the XY-S350H amplifier board. This diagram highlights key connection points and controls, including the DC socket, R&L speaker outputs, subwoofer output, USB Flash Disk port, 3.5mm AUX Input, and the various control knobs for subwoofer frequency, subwoofer volume, master volume, R&L treble, and R&L bass.

Controls and Ports:

- **DC Socket (5.5mm*2.1mm):** Power input (12-36V DC).
- **R&L Speaker Outputs:** Connect your right and left channel speakers.
- **Subwoofer Output:** Connect your subwoofer.
- **USB Flash Disk:** For playing audio files directly from a USB drive.
- **3.5mm AUX Input:** For connecting external audio sources via a 3.5mm audio cable.
- **Subwoofer Frequency Knob:** Adjusts the cutoff frequency for the subwoofer output.
- **Subwoofer Volume Knob:** Controls the volume level of the subwoofer.
- **Master Volume Knob:** Controls the overall volume. Short press for pause/play, long press for power on/off.
- **R&L Treble Knob:** Adjusts the high-frequency response for the right and left channels.
- **R&L Bass Knob:** Adjusts the low-frequency response for the right and left channels.

5. SETUP

5.1 Power Supply Connection

Connect a DC power adapter (18V-36V, above 10A recommended) to the DC socket. Ensure the polarity is correct if wiring directly. The amplifier requires a minimum of 18V to function.



Image: A warning graphic emphasizing that the amplifier requires an input voltage of ABOVE 18V to operate correctly. This is a critical setup requirement.

5.2 Speaker Connection

Connect your speakers to the appropriate terminals:

- **Left and Right Channel Speakers:** Connect 3-8 Ω full-range speakers with a power rating of 20W-300W.
- **Subwoofer:** Connect a 2-8 Ω subwoofer with a power rating of 50W-350W. For optimal performance, a subwoofer with a frequency range of 20Hz-200Hz is recommended.

Note on Impedance: If connecting multiple speakers in parallel, ensure the combined impedance for the left and right channels remains above 3 Ω , and for the subwoofer, above 2 Ω . Incorrect impedance can trigger overcurrent protection.

5.3 Audio Input Connection

The XY-S350H supports multiple audio input methods:

- **Bluetooth:** Power on the device, enable Bluetooth on your source device (e.g., smartphone), and select "XY-S350H" from the list of available devices to pair.
- **AUX Input:** Connect an audio source (e.g., CD player, computer) to the 3.5mm AUX input jack using a 3.5mm audio cable.

- **USB Flash Disk/USB Sound Card:** Insert a USB flash drive with audio files into the USB port, or connect a device that functions as a USB sound card.

6. OPERATING INSTRUCTIONS

6.1 Power On/Off

To power on or off the amplifier board, long press the Master Volume knob.

6.2 Volume and Tone Control

Adjust the sound output using the following knobs:

- **Master Volume:** Rotate to adjust the overall output volume.
- **R&L Treble:** Rotate to increase or decrease the high-frequency response of the main stereo channels.
- **R&L Bass:** Rotate to increase or decrease the low-frequency response of the main stereo channels.
- **Subwoofer Volume:** Rotate to adjust the volume level of the subwoofer independently.
- **Subwoofer Frequency:** Rotate to set the crossover frequency for the subwoofer, determining which low frequencies are sent to the subwoofer.

6.3 Bluetooth Operation and APP Control

The XY-S350H supports Bluetooth 5.1 for wireless audio streaming and can be controlled via a dedicated mobile application.

Support Custom Bluetooth Name

Can be Controlled by APP



1. Modify the bluetooth name
2. Set a connection password
3. Turn off/on beeps

Image: A smartphone displaying the Bluetooth control application interface. The app allows users to modify the Bluetooth name, set a connection password, and turn on/off prompt tones, providing enhanced control over the amplifier's Bluetooth functionality.

Using the APP, you can:

- Modify the Bluetooth name of the amplifier.
- Set a connection password for enhanced security.
- Customize or disable prompt tones.



Image: A graphic demonstrating how the mobile application resolves common issues such as confusing Bluetooth names or signal hijacking. It shows multiple amplifier units and how the app allows easy customization of Bluetooth names and passwords for clear identification and secure connections.

6.4 Other Audio Inputs

When using AUX or USB inputs, ensure no Bluetooth device is actively connected, as the amplifier prioritizes Bluetooth when available.

7. MAINTENANCE

Proper maintenance ensures the longevity and performance of your amplifier board.

- **Cleaning:** Use a soft, dry cloth to clean the surface of the board. Do not use liquid cleaners or solvents.
- **Dust Removal:** Periodically inspect for dust accumulation, especially around the heatsink and fan. Use compressed air to gently remove dust.
- **Ventilation:** Ensure the amplifier is always operated in a well-ventilated area. Do not block the air vents or fan.
- **Storage:** When not in use for extended periods, store the amplifier in a cool, dry place away from direct sunlight and extreme temperatures.



Image: A close-up view of the amplifier's air cooling system. This image highlights the large-area aluminum alloy special-shaped heatsink and the fan, with blue arrows indicating the direction of airflow, demonstrating how the system reduces temperature and ensures full power operation.

8. TROUBLESHOOTING

If you encounter issues with your XY-S350H amplifier board, refer to the table below for common problems and solutions.

Problem	Possible Cause	Solution
No power/Device not turning on	Incorrect or insufficient power supply voltage; Loose power connection.	Ensure power supply is 18V-36V DC and provides sufficient current. Check all power connections are secure. Long press Master Volume knob to power on.

Problem	Possible Cause	Solution
No sound output	Incorrect audio input selected; Loose speaker connections; Volume too low; Muted source.	Verify the correct audio input source is active. Check speaker wiring and ensure connections are secure. Increase Master Volume. Check source device is not muted.
Sound distortion	Volume too high; Speaker impedance mismatch; Power supply insufficient.	Reduce volume. Ensure speaker impedance is within recommended range (3-8Ω for R&L, 2-8Ω for subwoofer). Use a power supply with adequate current capacity.
Bluetooth connection issues	Device too far; Interference; Amplifier already paired to another device.	Ensure source device is within Bluetooth range. Reduce interference from other wireless devices. Disconnect from other Bluetooth devices or reset amplifier's Bluetooth. Use the APP to manage Bluetooth settings.
Subwoofer not working	Subwoofer volume too low; Incorrect frequency setting; Loose connection.	Increase Subwoofer Volume. Adjust Subwoofer Frequency knob. Check subwoofer connection.

If the problem persists after trying these solutions, please refer to the Warranty and Support section for further assistance.

9. SPECIFICATIONS

Detailed technical specifications for the XY-S350H amplifier board:

Feature	Specification
Model Number	XY-S350H
Amplifier Chip	TPA3251 (x2)
Audio Channels	2.1 Channel
Power Output (L&R)	220W x 2 (PMPO)
Power Output (Subwoofer)	350W (PMPO)
Input Voltage	18V-36V DC (Recommended >10A)
Bluetooth Version	5.1
Audio Inputs	Bluetooth, AUX (3.5mm), USB Flash Disk, USB Sound Card
Frequency Range	20Hz - 20KHz
Speaker Impedance (L&R)	3-8Ω (Recommended)
Speaker Impedance (Subwoofer)	2-8Ω (Recommended)

Feature	Specification
Protection Mechanisms	Short circuit, Undervoltage, Overvoltage, Clipping
Product Dimensions (L x W x H)	5.11 x 4.56 x 1.06 inches (135mm x 130mm x 27mm)
Item Weight	13.4 ounces

220W+220W+350W TPA3251 HIFI CHIP 2.1 CHANNEL



Power Supply : DC18-36V/above 10A

Bluetooth Version : 5.1

Audio Channel : 2.1 channel

Audio Input : Bluetooth+AUX+U Flash disk+USB sound card

Audio Output : Left and right channels + subwoofer

Frequency Range : 20HZ--20KHZ

Volume Adjustment : High-end encoder knob adjustment, smooth feel

L&R channel maximum output power :

220W/3Ω--36VDC;175W/4Ω--36VDC;100W/8Ω--36VDC

Subwoofer maximum output power :

355W/2Ω--36VDC;250W/3Ω--36VDC;195W/4Ω--36VDC

Protection mechanism : Overvoltage, undervoltage, clipping, short circuit, overheating, etc.

Unique Function : Support control through APP, support custom bluetooth name, bluetooth password, and set on/off prompt tone.

Product Size : 5.31in*5.11in*1.06in(135mm*130mm*27mm)

Image: A technical diagram illustrating the precise dimensions of the XY-S350H amplifier board, including length, width, and height measurements in both inches and centimeters.

10. WARRANTY AND SUPPORT

AUGUESLD is committed to customer satisfaction. If you have any questions about the product, or if you experience any quality-related issues, please do not hesitate to contact our customer service team. We offer 7*24 hours after-sales service to provide you with a satisfactory resolution.

Please refer to your purchase platform or product packaging for specific warranty terms and contact information.