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› DAJUNGUO S600X 2.1 Channel Amplifier Board Instruction Manual

DAJUNGUO S600X

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MODEL: S600X

1. Introduction

Thank you for choosing the DAJUNGUO S600X 2.1 Channel Amplifier Board. This high-performance audio amplifier is designed to deliver powerful and clear sound for your home audio setup. Featuring dual TPA3255 chips, Bluetooth 5.2 connectivity, and multiple input options, it offers versatility and robust performance. Please read this manual carefully to ensure proper installation and operation.



Figure 1: DAJUNGUO S600X 2.1 Channel Amplifier Board

2. Safety Information

- Ensure the power supply voltage is within the specified range (DC 19-51V) to prevent damage.
- Do not expose the device to moisture, water, or extreme temperatures.
- Avoid short-circuiting the output terminals.
- Keep the device away from flammable materials.
- Do not attempt to disassemble or repair the unit yourself. Contact qualified personnel for service.
- Ensure proper ventilation to prevent overheating.

3. Product Features

- **Multiple Input Methods:** Supports Bluetooth, AUX (3.5mm), USB flash drive, and USB sound card inputs, compatible with various devices like mobile phones, televisions, and laptops.
- **Dual TPA3255 Chip:** Equipped with two TPA3255 chips for stereo 2.1 channel output, delivering a maximum power of $300W * 2 + 600W$.

- **Wide Voltage Input:** Operates with a DC input range of 19-51V.
- **Upgraded DC Socket:** Features a gold-plated high-current shielded DC socket (5.5 * 2.5mm) designed to prevent sparks during power connection.
- **Comprehensive Protection:** Includes short-circuit protection, over-current protection, over-heat protection, and anti-reverse protection to ensure safe operation.



Dual TPA3255 Chip

High performance, low power consumption, high-definition sound quality

Left/right channel gain adjustment

Gain = R/10K
with R factory default set to 15k

Subwoofer gain adjustment

Gain = R/10K
with R factory default set to 68K

Upgraded Terminal

Compatible with a wider range of cable sizes

Figure 2: Dual TPA3255 Chip and Upgraded Terminal

4. Setup

4.1 Power Connection

Connect a DC power supply (19-51V, 10A or above recommended) to the gold-plated DC socket on the amplifier board. Ensure correct polarity (+/-) to avoid damage. The upgraded socket is designed to prevent sparks.

4.2 Speaker Connections

Connect your speakers to the appropriate terminals:

- **Left & Right (L&R) Speakers:** Connect passive speakers with an impedance of 4-8Ω.

- **Subwoofer:** Connect a passive subwoofer with an impedance of 2-8Ω.

4.3 Audio Input

The S600X supports multiple audio input methods:

- **Bluetooth Input:** Pair your device via Bluetooth 5.2.
- **AUX Input:** Use a 3.5mm audio cable to connect to devices like mobile phones, TVs, or laptops.
- **USB Flash Drive Input:** Insert a USB flash drive (FAT32 format, ≤32GB) containing audio files.
- **USB Sound Card:** Connect via USB to a computer to use the amplifier as an external sound card.

Dual TPA3255CHIP

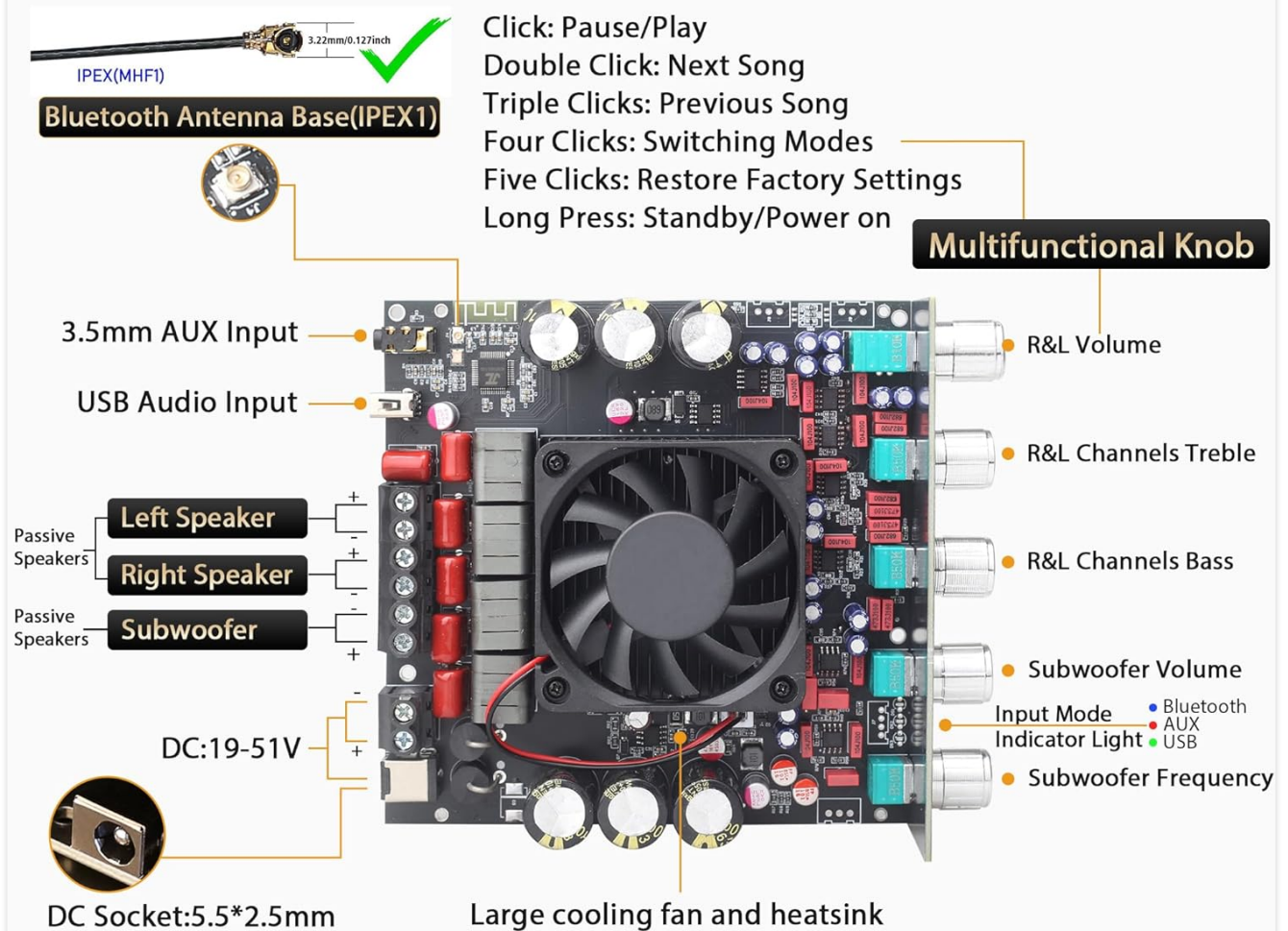


Figure 3: Connections and Controls Overview

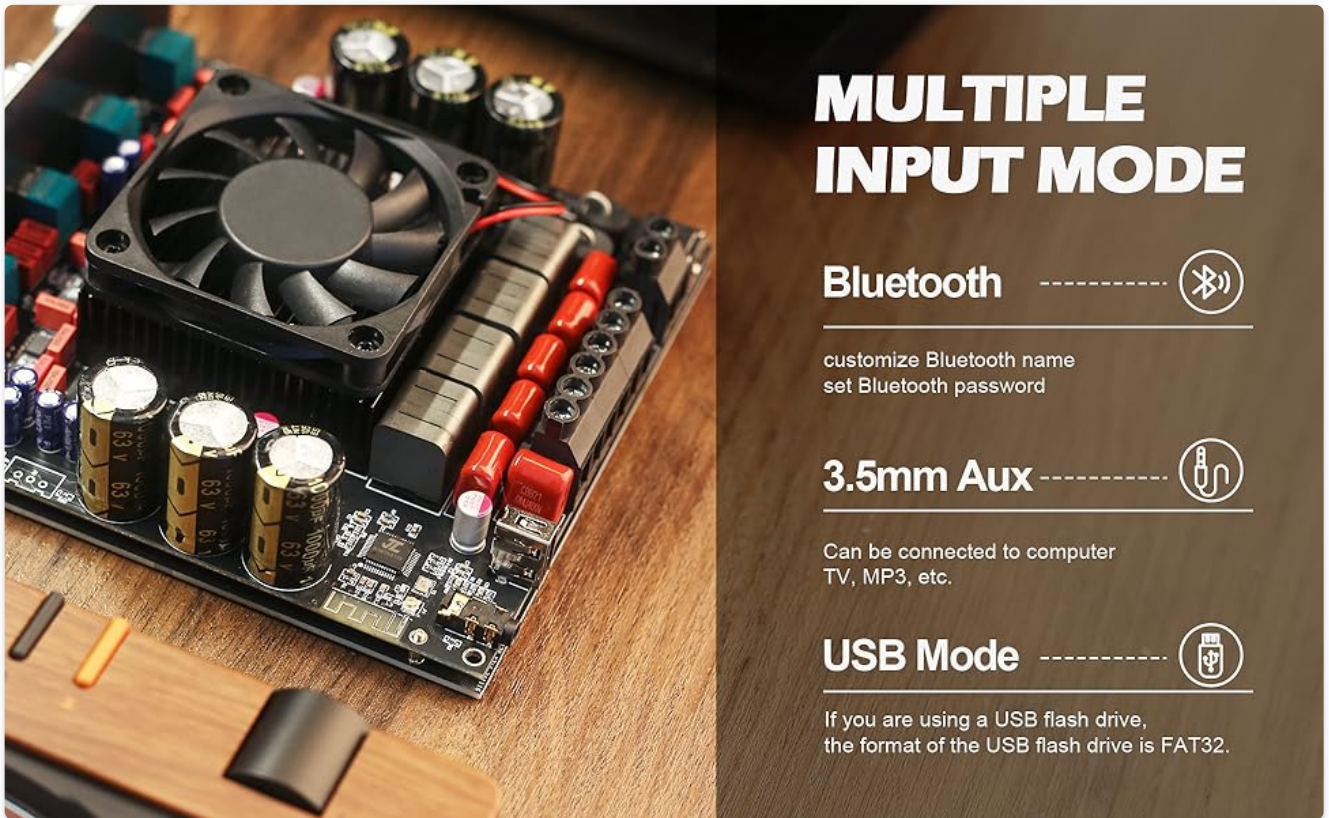


Figure 4: Multiple Input Methods

4.4 Bluetooth Antenna (Optional)

For optimal Bluetooth range and stability, an external IPEX(MHF1) antenna can be connected. This needs to be purchased separately.

Available antenna specifications (need to be purchased separately)



Figure 5: Available Antenna Specifications

5. Operating Instructions

5.1 Power On/Off

Long press the multifunctional knob to power the unit on or off.

5.2 Input Selection

Press the multifunctional knob four times to cycle through the input modes (Bluetooth, AUX, USB). The input mode indicator light (USB, AUX, Bluetooth) will illuminate accordingly.

5.3 Volume and Tone Controls

Adjust the following knobs to customize your audio experience:

- **SUB-FREQ:** Adjusts the subwoofer crossover frequency.
- **SUB-VOL:** Controls the subwoofer volume.
- **L&R BASS:** Adjusts the bass level for the left and right channels.

- **L&R TREBLE:** Adjusts the treble level for the left and right channels.
- **L&R VOL:** Controls the overall volume for the left and right channels.

5.4 Multifunctional Knob Operations

The central knob provides quick control over playback and settings:

- **Click:** Play / Pause
- **Two Clicks:** Next Song
- **Three Clicks:** Previous Song
- **Four Clicks:** Switch Mode (Input)
- **Five Clicks:** Factory Reset
- **Long Press:** Power ON / OFF

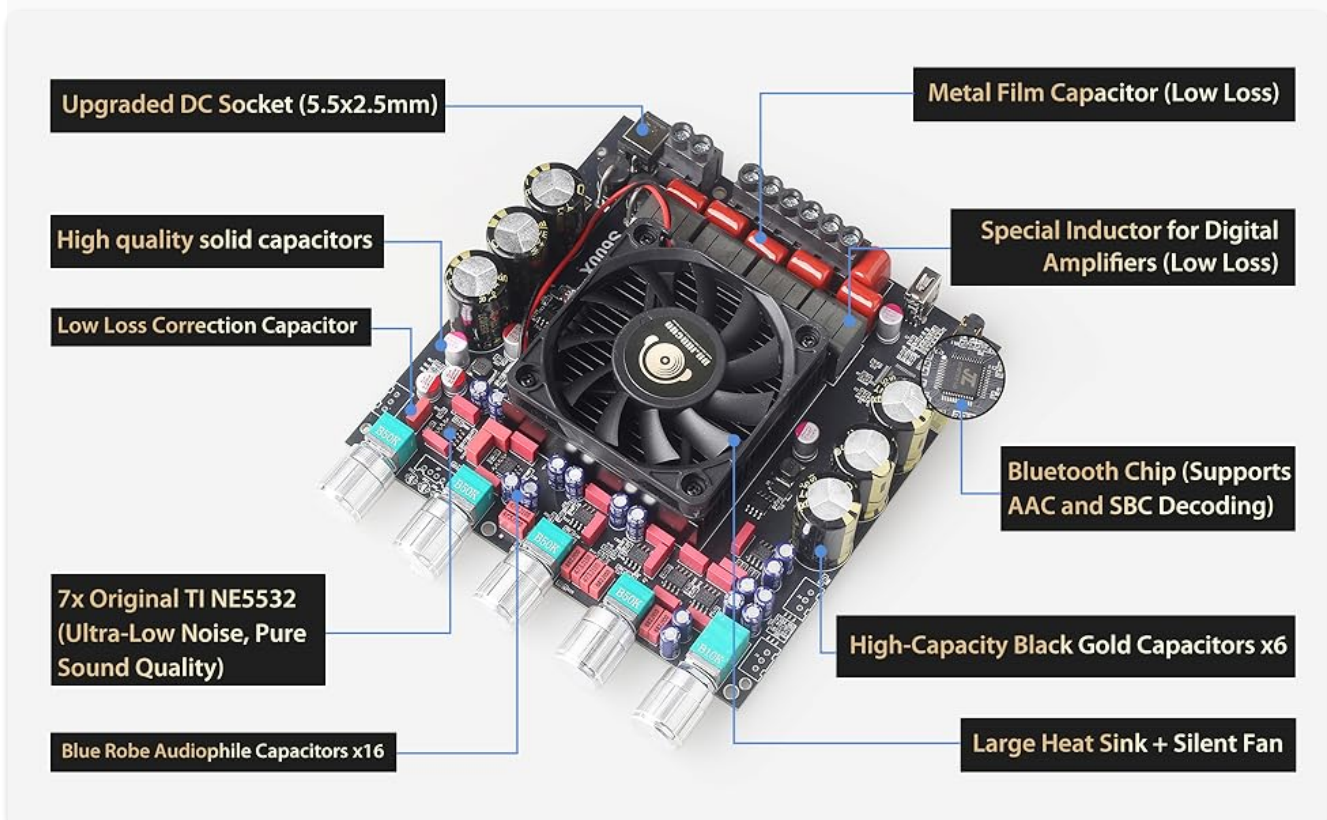


Figure 6: Multifunctional Knob and Input Indicators

6. Maintenance

- Keep the amplifier board clean and free from dust. Use a soft, dry cloth for cleaning.
- Ensure adequate airflow around the unit to prevent overheating. Do not block the cooling fan.
- Avoid placing heavy objects on the amplifier board.
- Store in a cool, dry place when not in use for extended periods.

7. Troubleshooting

- **No Power:** Check if the DC power supply is correctly connected and providing the required voltage (19-51V). Ensure the power adapter is functional.
- **No Sound Output:** Verify all speaker connections are secure. Check the audio input source and ensure the correct input mode is selected. Adjust volume levels.
- **Distorted Sound:** Reduce the volume. Check if the speaker impedance matches the amplifier's specifications.

Ensure the power supply is sufficient and stable.

- **Bluetooth Connection Issues:** Ensure the amplifier is in Bluetooth mode and your device's Bluetooth is enabled. Try forgetting the device on your phone and re-pairing.
- **Unit Shuts Down Unexpectedly:** This may indicate activation of the protection functions (over-current, over-heat, short-circuit). Reduce the load, check for short circuits in wiring, and ensure proper ventilation.

8. Specifications

Feature	Specification
Audio Input	Bluetooth + AUX + USB
Input Voltage	DC 19-51V / 10A or Above
Chip	Dual TPA3255 Chip
Bluetooth Version	5.2
USB Decoding Format	WAV FLAC APE MP3
Adapted Speaker (L&R)	4-8Ω
Adapted Speaker (Subwoofer)	2-8Ω
Output Power (L&R Channels)	≤300W
Output Power (Subwoofer)	≤600W
Product Size	4.92 * 4.84 * 1.69 inches (125 * 123 * 43mm)
Product Weight	490g
Bluetooth Audio Decoding	AAC, SBC

8.1 Power Output Comparison Table (@1kHz)

Power Output Comparison Table(@1khz)

DC Voltage	Channel	Speaker Impedance	Power Output
24V	R & L	8Ω	30W+30W
		4Ω	70W+70W
	Subwoofer	8Ω	30W
		4Ω	70W
		2Ω	150W
36V	R & L	8Ω	80W+80W
		4Ω	160+160W
	Subwoofer	8Ω	80W
		4Ω	160W
		2Ω	350W
50V	R & L	8Ω	160W+160W
		4Ω	300W+300W
	Subwoofer	8Ω	160W
		4Ω	300W
		2Ω	600W

Figure 7: Power Output Comparison

9. Product Videos

9.1 Reliable 2.1 Channel Amplifier

This video demonstrates the reliable performance of the 2.1 channel amplifier, highlighting its clear and balanced sound output.

9.2 Speaker Setup Demonstration

Watch this video to see a completed speaker setup using the S600X amplifier board, showcasing its integration into an audio system.

9.3 Amplifier Performance Overview

This video highlights the amplifier's performance, demonstrating how it exceeded user expectations in an audio setup.

9.4 Powerful Audio Output

A brief video showcasing the powerful audio capabilities of the S600X amplifier board.

9.5 User Satisfaction with Amplifier

This video illustrates user satisfaction with the S600X amplifier, demonstrating its effective performance in an audio setup.

10. Warranty and Support

The DAJUNGUO S600X Amplifier Board comes with a manufacturer's warranty. For specific warranty details, please refer to the product packaging or contact your retailer. If you encounter any issues or have questions regarding the product, please contact DAJUNGUO customer service. We are committed to providing 7*24 hours after-sales service to ensure customer satisfaction.

