

Plyisty T160HS

Plyisty T160HS Bluetooth 5.1 Audio Amplifier Module User Manual

Model: T160HS

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Plyisty T160HS Bluetooth 5.1 Audio Amplifier Module. Please read this manual thoroughly before using the product to ensure proper function and safety. This module is designed for DIY speaker projects, offering powerful 2.0 channel stereo audio output with versatile input options.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Powerful Output:** Delivers 160W + 160W stereo audio output.
- **Bluetooth 5.1:** Advanced wireless connectivity for stable audio streaming.
- **Versatile Audio Inputs:** Supports Bluetooth, AUX (3.5mm), USB Flash Drive, and USB Sound Card input.
- **Tone Control:** Independent Treble and Bass adjustment knobs for sound customization.
- **Wide Power Supply:** Operates with a DC input voltage range of 13V to 36V.
- **High-Quality Chip:** Utilizes the TDA7498E chip for efficient and clear audio amplification.
- **Safety Protections:** Equipped with overheat, circuit, over-voltage, and under-voltage protection mechanisms.
- **Audio Formats (USB):** Supports WAV, FLAC, APE, and MP3.

2.2 Package Contents

- 1 x T160HS Amplifier Board
- 1 x Screwdriver
- 1 x Power Terminal



Figure 2.2: Included components: amplifier board, screwdriver, and power terminal.

2.3 Component Identification

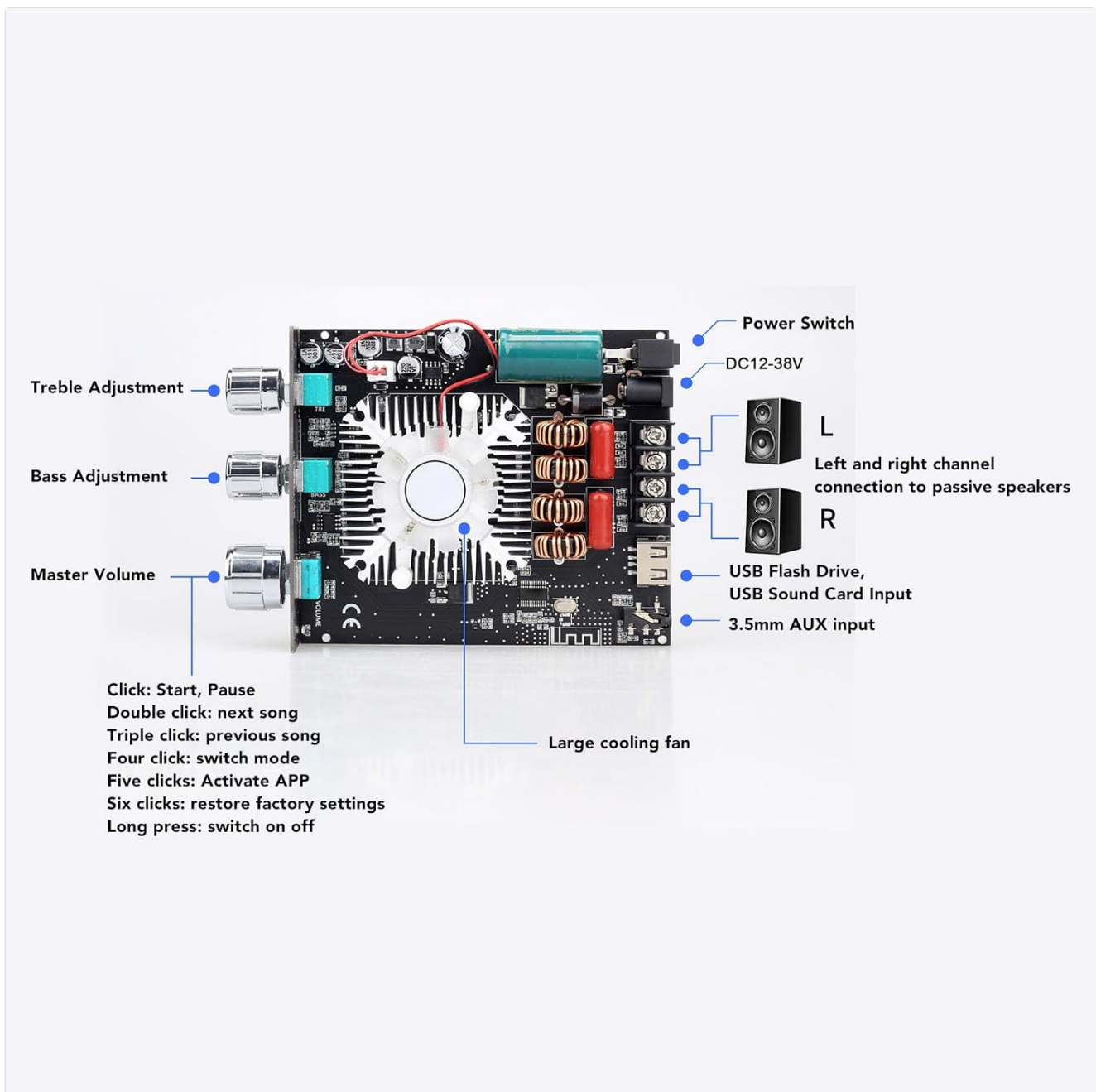


Figure 2.3: Front panel and internal component layout of the T160HS amplifier module.

Power Switch: ON/OFF toggle for the module.

DC 12-38V Power Input: Connect your DC power supply here.

Left and Right Channel Speaker Connection: Terminals for connecting passive speakers.

USB Flash Drive / USB Sound Card Input: For playing audio from USB storage or using the module as a USB sound card.

3.5mm AUX Input: For connecting external audio sources via a 3.5mm audio cable.

Treble Adjustment: Rotary knob to adjust high-frequency audio levels.

Bass Adjustment: Rotary knob to adjust low-frequency audio levels.

Master Volume: Rotary knob to control the overall audio output volume. This knob also functions as a multi-purpose button:

- **Click:** Start/Pause playback.
- **Double click:** Next song.
- **Triple click:** Previous song.

- **Four clicks:** Switch mode.
- **Five clicks:** Activate APP (if applicable).
- **Six clicks:** Restore factory settings.
- **Long press:** Switch ON/OFF.

Large Cooling Fan: Integrated fan for thermal management.

3. SETUP INSTRUCTIONS

Follow these steps to properly set up your T160HS amplifier module:

1. **Power Connection:** Connect a DC power supply (13V-36V) to the DC power input terminals. Ensure correct polarity. The included power terminal can be used for this connection.
2. **Speaker Connection:** Connect your passive speakers to the Left (L) and Right (R) channel speaker output terminals. Ensure correct positive (+) and negative (-) connections for each speaker.
3. **Initial Power On:** Ensure no AUX cable or USB drive is inserted initially. Toggle the power switch to the ON position. The blue indicator light will flash rapidly, indicating the amplifier is ready for connection.



Figure 3.1: Power and speaker connection points.

4. OPERATING INSTRUCTIONS

4.1 Bluetooth Playback

1. Ensure the amplifier is powered on and no AUX or USB device is connected. The blue indicator light will flash rapidly.
2. On your mobile device (smartphone, tablet, etc.), open the Bluetooth settings.
3. Search for Bluetooth devices and select "DAJUNGUO Audio" to connect.
4. Once connected, open your music player application on your device to begin audio playback through the amplifier.

4.2 AUX Playback

1. Ensure the amplifier is powered on and no USB device is connected. The blue indicator light will flash rapidly.
2. Insert a 3.5mm audio cable into the AUX input port on the amplifier and connect the other end to your audio source.
3. The blue indicator light will flash slowly, indicating that the amplifier is now operating in AUX input mode.
4. Begin audio playback from your connected device.

4.3 USB Playback (Flash Drive / Sound Card)

1. Ensure the amplifier is powered on and no AUX cable is connected. The blue indicator light will flash rapidly.
2. Insert a USB flash drive containing supported audio files (WAV, FLAC, APE, MP3) into the USB Audio input port. Alternatively, connect a device via USB to use the module as a USB sound card.
3. The blue indicator light will flash slowly, indicating playback from the USB source.
4. *Note:* For USB playback, it is recommended to use a dedicated system for optimal performance.

4.4 Tone and Volume Control

- **Volume Knob:** Rotate clockwise to increase volume, counter-clockwise to decrease. Use the click functions for playback control (Start/Pause, Next/Previous song, Mode switch, Factory reset, Power ON/OFF).
- **Treble Knob:** Adjusts the high-frequency response of the audio.
- **Bass Knob:** Adjusts the low-frequency response of the audio.

5. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the amplifier module. Do not use liquid cleaners or solvents.
- **Ventilation:** Ensure the cooling fan and ventilation slots are free from dust and obstructions to prevent overheating.
- **Storage:** When not in use for extended periods, store the module in a dry, dust-free environment.
- **Power Off:** Always power off the module before disconnecting speakers or power supply.

6. TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No sound output.	Power not connected or switched off. Speakers not connected correctly. Volume too low. Incorrect input mode selected. Audio source not playing.	Check power supply and switch. Verify speaker wiring (positive/negative). Increase master volume. Ensure correct input (BT, AUX, USB) is active. Check audio source playback.
Bluetooth connection fails.	Amplifier not in pairing mode. Incorrect device selected. Interference.	Ensure no AUX/USB is connected; blue light should flash rapidly. Select "DAJUNGUO Audio" from your device's Bluetooth list. Move closer to the amplifier or away from other wireless devices.
Distorted audio.	Volume too high (clipping). Poor audio source quality. Loose connections.	Reduce volume on amplifier and/or audio source. Try a different audio source. Check all cable connections.
Amplifier overheats.	Insufficient ventilation. Excessive load on speakers.	Ensure proper airflow around the module; clear fan/vents. Reduce volume or check speaker impedance compatibility.

7. SPECIFICATIONS

Feature	Detail
Model	T160HS
Brand	Plyisty
Chipset	TDA7498E
Output Power	160W + 160W (2.0 Channel Stereo)
Bluetooth Version	5.1
Audio Inputs	Bluetooth, AUX (3.5mm), USB Flash Drive, USB Sound Card
USB Audio Formats	WAV, FLAC, APE, MP3
Power Supply	DC 13V - 36V
Material	PCB, Aluminum Alloy
Safety Features	Overheat protection, Circuit protection, Over-voltage protection, Under-voltage protection
Product Dimensions (approx.)	14 x 11 x 5 cm

Feature	Detail
Product Weight (approx.)	264 grams
Manufacturer Model Number	Plyistyot7aupg02y

8. SAFETY INFORMATION

To ensure safe operation and prolong the lifespan of your amplifier module, please observe the following:

- Do not expose the module to moisture, water, or extreme temperatures.
- Ensure the power supply voltage is within the specified range (DC 13V-36V). Incorrect voltage can damage the device.
- Do not disassemble or modify the module. Refer all servicing to qualified personnel.
- Ensure proper ventilation to prevent overheating. Do not block the cooling fan or vents.
- Avoid short-circuiting the speaker output terminals.
- Keep out of reach of children.
- The module is equipped with multiple safeguards including overheat, circuit, over-voltage, and under-voltage protection. However, always operate within recommended parameters.

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided at the time of purchase or contact your retailer. Keep your proof of purchase for any warranty claims.