

Bloepum 00762885A1

Bloepum L1 2x220W&350W 2.1 Channel BT Digital Power Amplifier Board TPA3251D2 User Manual

Model: 00762885A1

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Bloepum L1 2x220W&350W 2.1 Channel BT Digital Power Amplifier Board. Please read this manual thoroughly before use to ensure proper functionality and safety.

2. SAFETY INFORMATION

- Ensure the power supply is within the specified range (DC15-36V, $\geq 8A$). Do not connect to AC power directly.
- Avoid exposing the device to moisture, water, or extreme temperatures.
- Do not disassemble or modify the amplifier board. Unauthorized modifications can lead to electric shock or damage.
- Keep the device away from children.
- Ensure proper ventilation to prevent overheating.
- The amplifier board includes protection mechanisms against input anti-reverse, over-temperature, over-current, short circuit, and overload. However, always handle with care.

3. PACKAGE CONTENTS

The package for the Bloepum L1 Amplifier Module (Type A: Without Karaoke Board) typically includes:

- 1 x Bloepum L1 Audio Amplifier Module
- Potentiometer leads (wire length 35cm, with 4 single link 10K potentiometers and 1 10K potentiometer with a button for main volume)
- User Manual

Note: Additional accessories may vary based on specific product bundles.

4. PRODUCT FEATURES AND HIGHLIGHTS

- **Amplifier Chip:** TPA3251D2 for low noise audio amplification.
- **Audio Output:** Left channel 220W + Right channel 220W + Subwoofer 350W.
- **Audio Input Options:** Bluetooth (BT), AUX, USB drive, PC sound card, and MIC.
- **Bluetooth Version:** 5.0 for stable wireless connection up to 15m.
- **Adaptive Power Supply:** DC15-36V, $\geq 8A$.
- **Adaptive Speaker:** Left and Right channels 50-200W (3-8 Ω); Subwoofer 50-300W (2-8 Ω).
- **Dual Volume Adjustment:** Independent control for background music (via multifunctional buttons) and MIC volume.
- **Protection Mechanisms:** Input anti-reverse, over-temperature, over-current, short circuit, and overload.
- **Characteristic Function:** Dual microphone input, supports EQ adjustment via upper computer software, and can be used independently as a 2.1 amplifier board.

220W+220W+350W

ZK-DAM L1
Lead type

High power microphone and audio all-in-one machine

Two TPA3251D2

- Two microphones, reverb effect adjustment
- PEQ balance, supporting EQ adjustment on the upper computer

Image: Bloepum L1 Amplifier Board with key features such as TPA3251D2 chips, dual microphone input, and main switch highlighted.

Product highlights

USB drives support formats: MP3\WAV\
SBC\WMA\AAC\APE\FLAC



Two TPA3151D2 chips

Equipped with a main switch



Karaoke board interface
Mountain View BP1048B2 chip, supports PC software EQ adjustment



Dual microphone input

Without inserting a karaoke board, it can be used independently as a 2.1-channel BT amplifier board

Image: Product highlights showing supported USB drive formats (MP3, WAV, SBC, WMA, AAC, APE, FLAC) and emphasizing its independent 2.1 channel Bluetooth amplifier board functionality.

5. SPECIFICATIONS

Parameter	Value
Model	L1
Amplifier Chip	TPA3251D2
Audio Output	L&R Channel 220W + Subwoofer 350W

Audio Input	BT + AUX + USB Drive + PC Sound Card + MIC
Bluetooth Version	5.0
Bluetooth Transmission Distance	15m
Adaptive Power Supply	DC15-36V, $\geq 8A$ (Do not connect to AC)
Adaptive Speaker (L&R)	50-200W, 3-8 Ω
Adaptive Speaker (Subwoofer)	50-300W, 2-8 Ω
Product Dimensions	103 x 110 x 23.7mm (Amplifier board)
Product Weight	287g (Net weight)
Material	Metal + Plastic

Product parameters

Model: ZK-DAM L1

Name: 220W+220W+350W microphone audio integrated machine
(Potentiometer lead out type)

Amplifier chip: TPA3251D2 BT version: 5.0

BT transmission distance: 15m

Audio input: BT+AUX+USB flash drive+PC sound card+MIC

Audio output: L&R channel 220W+subwoofer 350W

Adaptive power supply: DC15-36V, $\geq 8A$ (Do not connect to AC)

Adaptive speaker: L&R channel 50-200W, 3-8 Ω ;
Subwoofer 50-300W, 2-8 Ω

Dual volume adjustment :
1. Background music volume adjustment with multifunctional buttons (click pause, double-click next track, triple tap previous track, long press mode switch)
2. MIC volume adjustment

Protection mechanism: Input anti reverse, over temperature, over current, short circuit, overload.

Characteristic function: Dual microphone input, supports EQ adjustment on the upper computer, can be used independently as a 2.1 amplifier board without the microphone board, with multiple gameplay options.

Potentiometer parameters: The wire length is 35cm, with 4 single link 10K potentiometers for universal use, and 1 10K potentiometer with a button for main volume.

Product size: Amplifier board 103x110x23.7mm,
karaoke board 100x44x14.7mm

Image: Detailed product parameters for the Bloepum L1 amplifier board, including model, chip, power, input/output, and dimensions.

6. SETUP INSTRUCTIONS

6.1. Panel Assembly (If applicable)

If your amplifier board requires assembly of the control panel, follow these steps. This process typically involves soldering the potentiometer leads to the mainboard and securing the potentiometers to the panel.

Video: Demonstration of amplifier board panel installation, including soldering connections and securing components. While this video features a different model (S200HS-W), the general assembly principles are similar.

6.2. Speaker Connections

Connect your speakers to the appropriate terminals on the amplifier board. Ensure correct polarity (positive to positive, negative to negative) for optimal sound quality.

- **Left Channel Speaker:** Connects to L+ L- terminals.
- **Right Channel Speaker:** Connects to R+ R- terminals.
- **Subwoofer Channel:** Connects to S+ S- terminals.

Video: General demonstration of connecting speakers to an amplifier board. This video features a different model (S350HS), but the speaker connection process is similar.

6.3. Power Connection

Connect a DC15-36V, $\geq 8A$ power adapter to the amplifier board. Ensure the power adapter is suitable for the amplifier's requirements.

Video: General demonstration of connecting power and speakers to an amplifier board. This video features a different model (S600X), but the power connection process is similar.

7. OPERATING INSTRUCTIONS

7.1. Audio Input Modes

The Bloepum L1 supports multiple audio input modes:

- **Bluetooth (BT):** Pair your device (e.g., smartphone) with the amplifier via Bluetooth. The Bluetooth version is 5.0, offering a transmission distance of up to 15m.
- **AUX:** Connect an external audio source using an AUX cable.
- **USB Drive:** Insert a USB drive containing audio files (MP3, WAV, SBC, WMA, AAC, APE, FLAC).
- **PC Sound Card:** Connect to a PC via USB to use the amplifier as a sound card.
- **MIC:** Connect microphones for vocal input. The board supports dual microphone input.

Wireless microphone



Support wireless microphone(with receiver), capacitance microphone and dynamic microphone.

Two sets of receivers can be inserted at the same time, or a one-to-two wireless microphone can be selected.

It is recommended to use a wireless microphone with a receiver, with lower background noise.

Image: Illustration of a wireless microphone setup connected to the amplifier board, demonstrating its compatibility with wireless microphones (with receiver), capacitance microphones, and dynamic microphones.

Wired microphone



Two microphone inputs, reject the microphone.

Supports wired capacitor microphone and dynamic microphone.

Image: Illustration of a wired microphone setup connected to the amplifier board, highlighting its dual microphone input capability and support for wired capacitor and dynamic microphones.

7.2. Volume and Tone Adjustment

The amplifier board features multiple potentiometers for precise control:

- **Main Volume:** Controls the overall output volume.
- **Subwoofer Volume:** Adjusts the volume level of the subwoofer output.
- **L&R Channel Volume:** Adjusts the volume for the left and right stereo channels.
- **Treble/Bass:** Fine-tune the high and low frequencies for the L&R channels.
- **MIC Volume:** Adjusts the volume of the connected microphones.

7.3. Multifunction Button Operations

The background music volume adjustment knob also functions as a multifunction button:

- **Single Click:** Pause/Play.
- **Double Click:** Skip to the next track.
- **Triple Tap:** Skip to the previous track.
- **Long Press:** Switch input mode.

7.4. EQ Adjustment

The amplifier supports EQ adjustment on a connected upper computer, allowing for customized sound profiles.

8. MAINTENANCE

- Keep the amplifier board clean and free from dust. Use a soft, dry cloth for cleaning.
- Avoid placing heavy objects on the amplifier.
- Store the device in a cool, dry place when not in use for extended periods.

9. TROUBLESHOOTING

If you encounter any problems during use, please refer to the following common issues and solutions:

- **No Sound:**
 - Check all cable connections (power, speakers, audio input).
 - Ensure the power adapter meets the specifications (DC15-36V, $\geq 8A$).
 - Verify the selected input mode matches your audio source.
 - Adjust volume controls on both the amplifier and your audio source.
- **Bluetooth Connection Issues:**
 - Ensure the amplifier is in Bluetooth mode.
 - Check that your device's Bluetooth is enabled and within range (15m).
 - Forget the device on your smartphone/tablet and re-pair.
- **Distorted Sound:**
 - Reduce the volume on both the amplifier and the audio source.
 - Check speaker impedance and power ratings to ensure they are compatible.
 - Inspect speaker wires for any damage or loose connections.
- **No Microphone Input:**
 - Ensure microphones are correctly plugged into the dual microphone input.
 - Adjust the MIC volume control.

If problems persist, please contact customer support for assistance.

10. WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the documentation provided with your purchase or contact Bloepum customer service directly. We are committed to providing you with a 100% satisfactory experience.

