

FOSA DC 5V/12V Bluetooth 5.0 Audio Decoder Board

FOSA DC 5V/12V Bluetooth 5.0 Audio Decoder Board: User Manual

Model: DC 5V/12V Bluetooth 5.0 Audio Decoder Board

1. INTRODUCTION

Thank you for choosing the FOSA DC 5V/12V Bluetooth 5.0 Audio Decoder Board. This module is designed to provide versatile audio playback capabilities, including Bluetooth 5.0 connectivity, USB, SD card, AUX input, and FM radio functionality. It supports various lossless audio formats such as MP3, WMA, WAV, FLAC, and APE, and features a colorful spectrum display. This manual will guide you through the installation, operation, and maintenance of your audio decoder board.

2. SAFETY INFORMATION

- **Power Supply:** Ensure the power supply is within the specified DC 5V to 12V range. Incorrect voltage can damage the device.
- **Wiring:** Exercise caution when connecting wires. Incorrect wiring can lead to short circuits or malfunction. If unsure, consult a qualified technician.
- **Environment:** Avoid exposing the board to moisture, extreme temperatures, or direct sunlight.
- **Interference:** This device may cause or receive interference with other electronic devices. Keep it away from sensitive equipment.
- **Disassembly:** Do not attempt to disassemble or modify the board. This may void the warranty and cause damage.

3. PRODUCT OVERVIEW

The FOSA Audio Decoder Board offers a compact solution for integrating advanced audio features into various projects. Key features include:

- Bluetooth 5.0 for stable wireless audio streaming and hands-free calling.
- Support for USB flash drives and SD cards for local music playback.
- AUX input for connecting external audio devices.
- Integrated FM radio tuner.

- Lossless audio format support: MP3, WMA, WAV, FLAC, APE.
- 4-color spectrum display for visual feedback.
- Power-off memory function for track and volume settings.

3.1 Components

The package typically includes the audio decoder board, a remote control, and necessary wiring harnesses.



Image 1: FOSA DC 5V/12V Bluetooth 5.0 Audio Decoder Board with remote control and wiring harnesses.

Support Bluetooth version 5.0
and hands-free calling



Image 2: Close-up of the FOSA Bluetooth 5.0 Audio Decoder Board highlighting Bluetooth 5.0 and hands-free calling support.

Support AUX, FM, USB, SD

Support USB/SD card/Bluetooth/FM switching



Image 3: The FOSA Audio Decoder Board showing support for AUX, FM, USB, and SD card inputs.

4-color spectrum display

Support MP3/WMA/WAV/FLAC/APE format music



Image 4: The FOSA Audio Decoder Board displaying its 4-color spectrum feature during music playback.

4. SETUP INSTRUCTIONS

Careful wiring is crucial for proper function. Refer to the connection points on the back of the board.

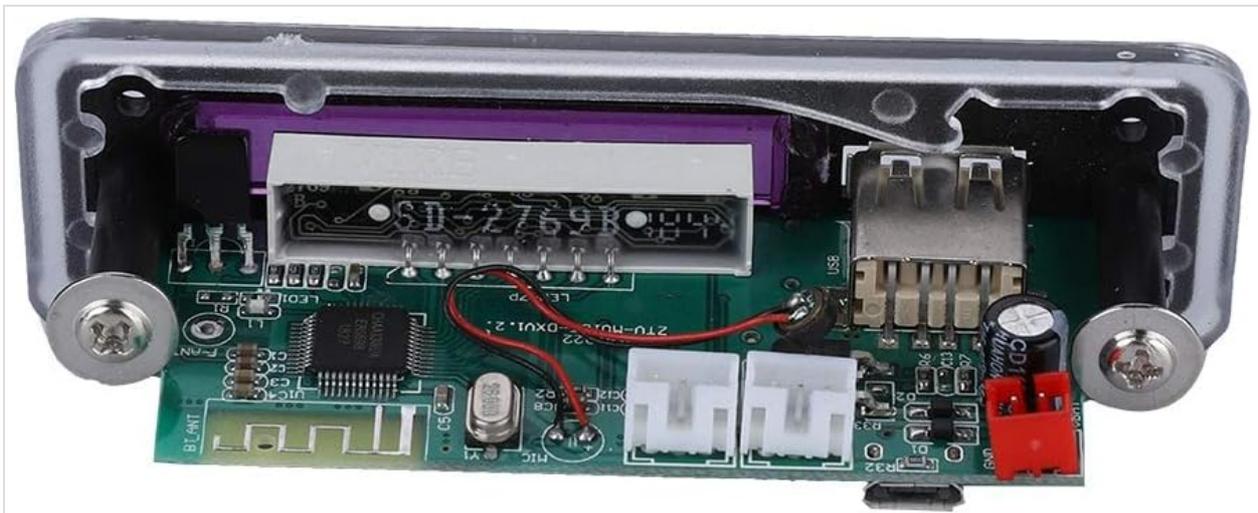


Image 5: Rear view of the FOSA Audio Decoder Board, showing internal components and connection points.

4.1 Power Connection

1. Identify the power input connector on the board. This is typically a 2-pin connector.
2. Connect the red wire of the provided power cable to the positive (+) terminal of your DC 5V or 12V power source.
3. Connect the black wire of the power cable to the negative (-) terminal (ground) of your power source.
4. Ensure the connections are secure and insulated to prevent short circuits.

4.2 Audio Output Connection

1. Locate the audio output connector on the board (often a multi-pin connector for Left, Right, and Ground).
2. Connect the audio output wires to your amplifier or active speakers. Typically, there will be Left Audio Out, Right Audio Out, and a common Ground.
3. Ensure correct polarity and channel assignment.

4.3 FM Antenna Connection

- Connect a suitable FM antenna wire to the designated FM antenna port on the board. A simple insulated wire can often serve as an antenna.

5. OPERATING INSTRUCTIONS

5.1 Power On/Off

- Once wired, apply power to the board. The display should light up.
- Use the power button on the remote or the board (if available) to toggle power.

5.2 Mode Selection

- Press the 'MODE' button on the board or remote to cycle through available input sources: Bluetooth, USB, SD, AUX, FM Radio.

5.3 Bluetooth Operation

1. Switch the mode to 'Bluetooth'. The display will indicate Bluetooth mode, and the device will enter pairing mode.
2. On your mobile device, search for Bluetooth devices and select the one corresponding to the decoder board (e.g., 'BT-SPEAKER').
3. Once paired, you can stream audio from your device.
4. Use the remote or board buttons for play/pause, next/previous track, and volume control.
5. For hands-free calling, accept calls on your paired device. Audio will route through the board.

5.4 USB/SD Card Playback

1. Insert a USB flash drive or SD card containing audio files into the respective slot.
2. Switch the mode to 'USB' or 'SD'. The board will automatically detect and begin playing audio files.
3. Use the remote or board buttons for play/pause, next/previous track, and volume control.



Image 6: The FOSA Audio Decoder Board with a USB drive inserted, demonstrating USB playback capability.

5.5 FM Radio Operation

1. Switch the mode to 'FM Radio'.
2. Press the 'Play/Pause' button (or a dedicated scan button) to initiate an automatic station scan. The board will save detected stations.
3. Use the 'Next/Previous' track buttons to navigate through saved FM stations.
4. Adjust volume using the 'VOL+' and 'VOL-' buttons.

5.6 Volume Control

- Use the 'VOL+' and 'VOL-' buttons on the board or remote to adjust the output volume.

6. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the surface of the board. Do not use liquid cleaners or solvents.
- **Storage:** When not in use for extended periods, store the board in a dry, dust-free environment.
- **Connections:** Periodically check all wiring connections to ensure they remain secure.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
No power/Display off	Incorrect power connection; Power supply issue; Damaged board	Check power wiring (5V/12V, polarity); Test power supply; Contact support if board is damaged.
No sound output	Incorrect audio output wiring; Volume too low; Amplifier/speaker issue; Incorrect mode selected	Verify audio output connections; Increase volume; Check amplifier/speakers; Ensure correct input mode.
Bluetooth not pairing	Not in Bluetooth mode; Device too far; Interference; Already paired to another device	Switch to Bluetooth mode; Move device closer; Reduce interference; Disconnect from other devices.

Problem	Possible Cause	Solution
USB/SD card not playing	Incorrect format; Corrupted files; Card/drive not inserted correctly; Unsupported capacity	Ensure files are MP3/WMA/WAV/FLAC/APE; Reformat card/drive; Reinsert card/drive; Check maximum supported capacity.
Poor FM reception	Weak antenna signal; No antenna connected; Environmental interference	Connect an antenna; Adjust antenna position; Rescan stations; Minimize local interference.

8. SPECIFICATIONS

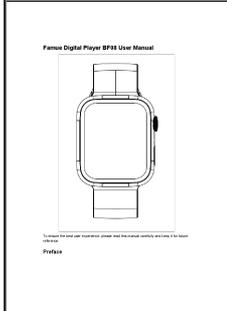
- **Power Input:** DC 5V / 12V
- **Bluetooth Version:** 5.0
- **Supported Audio Formats:** MP3, WMA, WAV, FLAC, APE
- **Input Sources:** Bluetooth, USB, SD Card, AUX, FM Radio
- **Display:** 4-color spectrum display
- **Special Features:** Hands-free calling, Power-off memory function
- **Product Dimensions:** 3.66 x 1.18 x 1.22 inches (approximately 9.3 x 3.0 x 3.1 cm)
- **Item Weight:** 2.08 ounces (approximately 59 grams)
- **Material:** Silver (referring to the board's finish/components)

9. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the FOSA official website or contact your retailer. Keep your purchase receipt as proof of purchase.

Related Documents - DC 5V/12V Bluetooth 5.0 Audio Decoder Board

<p>User Manual Model: J9 Mini Projector</p> 	<p>J9 Mini Projector User Manual - Setup, Operation, and Specifications</p> <p>Detailed user manual for the FOSA J9 Mini Projector. Covers safety guidelines, unpacking, control locations, remote functions, power supply, basic operations, connectivity options (HDMI, AV, USB, Micro SD), user interface, playback, image/audio/time settings, and technical specifications.</p>
<p>User Manual</p> 	<p>User Manual for Occkic MP3 Player with Bluetooth 5.0</p> <p>Comprehensive user manual for the Occkic MP3 player, detailing its functions, operations, supported audio formats, connectivity, and troubleshooting guide. Learn how to use your portable audio device effectively.</p>

 <p>The image shows the cover of the JOLIKE MP3 Player User Manual. It features the JOLIKE logo at the top, followed by the title 'User Manual MP3 Player'. Below the title, there is a small image of the MP3 player and some introductory text.</p>	<p>JOLIKE MP3 Player User Manual</p> <p>Comprehensive user manual for the JOLIKE MP3 Player, detailing its features, operations, and specifications. Learn how to enjoy music, videos, FM radio, and e-books with this portable device.</p>
 <p>The image shows the cover of the P2 Pro Bluetooth Speaker Specifications and Usage Guide. It features a small image of the speaker and a table of specifications.</p>	<p>P2 Pro Bluetooth Speaker: Specifications and Usage Guide</p> <p>Detailed specifications, key functions, and usage directions for the P2 Pro Bluetooth Speaker, including wireless connectivity, music playback, and charging information.</p>
 <p>The image shows the cover of the FiiO X5 Complete User Manual. It features a small image of the FiiO X5 music player and the title 'X5 Complete User Manual'.</p>	<p>FiiO X5 User Manual: High-Resolution Lossless Music Player Guide</p> <p>Comprehensive user manual for the FiiO X5 high-resolution lossless music player. Learn about features, operation, firmware updates, troubleshooting, and FAQs.</p>
 <p>The image shows the cover of the Famue Digital Player BF08 User Manual. It features a small image of the digital player and the title 'Famue Digital Player BF08 User Manual'.</p>	<p>Famue BF08 Digital Player: User Manual and Specifications</p> <p>This user manual provides detailed information on the Famue BF08 Digital Player, including features, operation instructions, specifications, and warranty information.</p>