

EToSMBT V0.9 Hi-Fi Bluetooth Audio Receiver

◆ Premium Wireless Audio Streaming with High-Quality Sound & Stylish Design!

Upgrade your audio experience with this **ESP32-based Bluetooth A2DP Music Receiver**, designed for **audiophile-grade** sound quality. Equipped with a **PCM5102A 32-bit DAC**, a high-gain **external antenna**, a **0.96" OLED display**, and **functional control buttons**, this device is perfect for those who demand **crystal-clear wireless audio** with a sleek, modern aesthetic.

Housed in a **matte-finish acrylic front panel**, this receiver seamlessly integrates into **home audio systems**, **car audio setups**, and **DIY Hi-Fi projects**.

◆ Key Features & Benefits

🎵 32-Bit High-Resolution Audio Processing

- Uses **PCM5102A DAC** for superior **low-noise, high-fidelity** audio.
- Supports **24-bit/32-bit audio streaming** with a **dynamic range of up to 112dB**.
- Ultra-low THD+N ensures **pure and immersive sound**.

📶 Extended Bluetooth Range with High-Gain Antenna

- **External high-gain antenna** for **stable connections** and **longer range**.
- Ensures smooth streaming without dropouts, even in **large rooms** or **outdoor setups**.

📺 OLED Display for Real-Time Information

- **0.96" OLED screen** displays **song title, artist name, and connection status**.
- When metadata is unavailable, an **animated visualizer (emoji effect)** syncs with the music.
- Displays **battery status and connection alerts**.

🔘 Function Buttons for Easy Control

- **Play/Pause, Next, Previous** track controls.
- Volume adjustment without needing to access the phone.
- Supports **manual Bluetooth reconnect** when needed.

Premium Matte-Finish Acrylic Front Panel

- **Sleek, modern, and scratch-resistant** design.
- Enhances durability while maintaining a **luxurious appearance**.

Multiple Audio Output Options

- **Stereo RCA / 3.5mm AUX output** for compatibility with various audio systems.
- Supports **Class-D and Class-AB amplifiers**, including **TPA3116, TPA3255, and TDA7294**.

Stable & Efficient Power Management

- **Dedicated power connector for clean and stable power supply**.
- Uses high-quality **power filtering** to eliminate noise and interference.

Auto-Reconnect & Discoverability Mode

- **Auto-reconnects to the last paired device** for seamless playback.
- **Can switch to non-discoverable mode** after connection for security.

Technical Specifications

Feature	Specification
Microcontroller	ESP32 (Dual-core, Bluetooth 4.2, Wi-Fi)
Bluetooth Profile	A2DP (16-bit & 24-bit audio supported)
DAC Chip	PCM5102A (32-bit, 384kHz support)
Antenna	External high-gain antenna
Audio Output	Stereo RCA / 3.5mm AUX
OLED Display	0.96" screen (128x64 or 128x32 resolution)
Control Buttons	Play/Pause, Next, Previous, Volume Control
Power Input	Dedicated power connector (USB/5V)
Enclosure	Matte-finish acrylic front panel
Auto-Reconnect	Yes
Manual Reconnect	Yes
Discoverability Mode	Toggable
Audio Format Support	16-bit, 24-bit, 32-bit
Latency	Ultra-low latency for real-time playback

◆ Perfect for:

- ✓ **Audiophiles**—Enjoy **high-fidelity** wireless music streaming.
- ✓ **Home Audio Systems**—Upgrade **old wired systems** with Bluetooth.
- ✓ **Car Audio**—Add premium **wireless playback** to your vehicle.
- ✓ **DIY Audio Projects**—A great addition to **custom-built speakers and amplifiers**.

