AUDIO2.4-MI

Tittron.com Wireless Audio | **2.4G Stereo TX / RX** | **24Bit / 48kHz / 1-to-N Broadcast**

EN

Rev 1.0 | 2026-11-26



24Bit/48kHz	8-bit	1 → N	100 mS
STEREO AUDIO	ADDRESS CODE	BROADCAST RX	LATENCY

01 OVERVIEW

The AUDIO2.4-MI from Tittron.com is a high-fidelity wireless stereo audio transceiver integrating both wireless stereo transmitting and receiving functions in one unit. At the transmitter end, stereo line-level audio from the 3.5 mm stereo port is sampled and encoded by a 24-bit stereo audio ADC at 48 kHz, then transmitted as a digital signal over the 2.402-2.480 GHz ISM band. At the receiver end, the digital signal is verified and decoded before a 24-bit audio DAC restores it to stereo analog audio at the same 48 kHz rate for the 3.5 mm stereo output.



Tittron.com AUDIO2.4-MI
High-Fidelity Wireless Stereo Audio Transceiver

Since the 2.4 GHz band has limited channel resources and is shared with Bluetooth and Wi-Fi devices, too many transmitters operating in the same space are not recommended; no more than 10 transmitters within one coverage area are suggested to prevent channel congestion and degraded link stability.

To let multiple receivers lock onto their designated transmitter in a shared coverage area, the unit uses an **8-bit address code**. A receiver establishes a link only when its address code matches the transmitter's. Using a proprietary 2.4 GHz protocol and codec algorithm with broadcast transmission, the system supports one-to-many operation: within the transmitter's coverage area, an unlimited number of receivers can receive synchronously.

The AUDIO2.4-MI is powered by an external 5 V supply through its Type-C port, which is compatible with common Android phone Type-C cables and 5 V USB power adapters. It is widely used for wireless audio transmission and DIY speaker modification applications.

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01 IMPORTANT NOTES

Set the **same 8-bit address code** (D1-D8) on the transmitter and receiver. The receiver will only connect when its address code matches the transmitter's; otherwise no link is established.

Keep the number of active transmitters within one coverage area at or below **10** to avoid channel congestion caused by limited 2.4 GHz resources and shared Bluetooth / Wi-Fi spectrum.

Power the unit continuously through the Type-C port with a 5 V supply.

02 APPLICATIONS

- Wireless stereo audio from phones, computers and MP3 players to powered speakers
- DIY active speaker and home audio system modification
- One-to-many background music distribution within a single coverage area
- Wireless link from TV or PC to an existing amplifier or soundbar
- Temporary audio setup for classrooms, meeting rooms and exhibitions
- Replacing long analog audio cable runs where wiring is inconvenient
- Multi-speaker audio projects where synchronized reception is required
- Audio demonstration and education systems using 2.4 GHz wireless transport

03 KEY FEATURES

- 24-bit / 48 kHz stereo ADC and DAC for high-fidelity audio
- Proprietary 2.4 GHz protocol, broadcast mode
- 8-bit DIP address code, 256 combinations, prevents cross-links
- Broadcast one-to-many reception, unlimited receivers in range
- Transmitter / receiver mode selectable by DIP switch
- 3.5 mm stereo line input on TX, line output on RX
- Plug-and-play link with no pairing procedure required
- 100 ms low-latency wireless audio transmission

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01 SPECIFICATIONS

RF & TRANSMISSION

Frequency Range	2402 - 2480 MHz (ISM 2.4 GHz band)
RF Output Power	+8 dBm
Transmission Distance	Up to 20 m (open area)
Wireless Protocol	Proprietary 2.4 GHz, broadcast mode
Address Coding	8-bit DIP code, 256 combinations
Transmission Latency	100 mS
Recommended Transmitters per Area	Not more than 10

AUDIO PERFORMANCE

Sampling Resolution / Rate	24-bit / 48 kHz
Dynamic Range	104 dB
Signal-to-Noise Ratio	95 dB
Frequency Response	20 Hz - 20 kHz
Channels	2 channels (stereo)
Input / Output Signal Amplitude	≤ 2 Vpp

GENERAL

Dimensions	66 x 44 x 24 mm (antenna protrusion not included)
Net Weight	72 g
Operating Voltage	3.5 - 5 V
Operating Current	30 - 40 mA
Audio Interface	3.5 mm stereo jack (line input / line output)
Power Port	USB Type-C (5 V)