

# WLL-TX1

WLL-TX1 wireless transmitter

SOUNDTUBE  
ENTERTAINMENT



## Specifications: WLL-TX1

## Mounting hardware included

Power Requirements	32V, 3.75A
RF Band	2.4 GHz
Operating Range (full power)	150 ft indoors / 210 ft line of sight
Operating Range (low power)	50 ft indoors / 70 ft line of sight
Audio Frequency Response	20 Hz - 20 kHz
Amplifier Output Power	50w/ch @ 8 ohms 65w/ch@ 4ohms
Modulation	Digital
Dynamic Range	90dB
Height (SM = Height)	44.45 mm / 1.75 in
Diameter (SM = Width)	157.16 mm / 6.18 in
SM Depth (Including Bracket)	165.1 / 6.5 in
Weight	0.83 Kg / 1.85 lbs
Accessories Optional	Rack-Mount Adapter (AC-WLL-RMA)
Regulatory - CE	CE UL FCC CCC ec
Regulatory - RoHS	approved

## Key Features

- 3 RF channels to minimize interference from other devices
- Each channel contains 3 bands, alternating between them to preemptively counteract interference, keeping the signal clear and latency less than 20 ms.
- Uncompressed 2-channel audio for maximum fidelity
- Multiple receiver/amplifier units may be used with a single transmitter.
- Up to 12 receivers may be used for each transmitter. For more than 12, use an additional transmitter on another frequency.
- USB, stereo mini or 1/4" balanced input connections at the transmitter
- Push-On or 1/4" connections speaker level outputs at the receiver. Also includes stereo line output for connecting auxiliary audio components, such as ADA (Americans with Disabilities Act) adapters.
- Local Audio source at the receiver via stereo mini (mutes the wireless signal when connected)
- High/Low power selector switch on transmitter limits RF range where needed

## Description

The WLL-TX1 wireless transmitter unit transmits uncompressed stereo audio wirelessly for maximum fidelity. An additional 9 receivers (for a total of 10) may be ordered to accompany the included single transmitter. Two additional transmitters can be used with

separate frequencies with a total of up to 30 receiver units. Each transmitter/receiver contains 3 RF channels to minimize interference from other devices. Each channel contains 3 bands, alternating between them to preemptively counteract interference, keeping the signal clear and latency less than 20ms. Audio input options for the transmitter unit include USB, stereo mini or 1/4" balanced input connections at the transmitter. Each channel contains 3 bands, alternating between them to preemptively counteract interference, keeping the signal clear and latency less than 20ms. A High/Low power selector switch on transmitter limits RF range where needed.

## Applications

Designed to work with all SoundTube speakers (as well as other brands), the WLLTR-1p system enables the placement of speaker in locations where running speaker wire may be difficult or impossible. Utilizing uncompressed streaming digital audio over 2.4 GHz and requiring only AC power for operation, the SoundTube wireless system provides two 50W channels of audio.

## Receiver Amplification

The WLL-RX1p receiver utilizes the exact amplification system of the SA502 mini amplifier unit. For additional technical information on the built in amplification provided by the

WLL-RX1p, please refer to the SA502 technical data sheet

## Patented SoundTube Technologies

SoundTube and MSE Audio Group constantly develop new technologies that enhance audio product performance. SoundTube innovations are protected by multiple U.S. and international patents, which explicitly cover SoundTube dispersion, enclosure and dome technologies. MSE Audio Group actively defends its patents in order to protect SoundTube resellers and end users.

## Technical Data and Specification Tools

### Technical Data

SoundTube Entertainment strives to provide complete and effective technical information and data to dealers, engineers and designers. All data are available from SoundTube Entertainment or at [www.soundtube.com](http://www.soundtube.com). Technical data and downloads include: EASE™ data - 3-D polar plots. EASE™ Address - 2-D modeling for distributed systems Autodesk® Revit® software Tech Sheets - Technical information and architectural specs for system engineers SoundTubeSPEC™ - Proprietary speaker placement software

### Data Acquisition and

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### Verification

All data for SoundTube speakers are independently collected from and verified by NWAALabs (www.nwaalabs.com) using their proprietary MACH testing system. All data are collected and analyzed according to ASTM, ISO and AES standards using EASRA, TEF and MLSSA. Full balloon data including both phase and magnitude are compiled into a variety of formats including EASE 4.x, GLL and CLF.

### Architectural Specifications

The WLL-TR-1p wireless system shall consist of one WLL-TX1 transmitter and one WLL-RX1p receiver. Performance specifications of a typical WLL-TR-1p wireless system shall be as follows: Operating range at full power will reach 150 ft (45.7 meters) indoors and 210 ft (64 meters) line of sight. At low power, operating range will be reduced to 50 ft (15.2 meters) indoors or 70 ft (21.3 meters) line of sight. Dynamic range shall be 90 dB with an audio frequency ranging from 20 Hz - 20 kHz. The system will transmit in uncompressed audio signal over a 2.4 GHz RF Band with three selectable RF channels to minimize interference. Antennae impedance shall be 50 ohms. The WLL-TX1 transmitter unit housing material shall be constructed of powder coated metal. Power requirements for the unit will be a 5 v, 1.2 A power supply. Input options at the transmitter include USB,

stereo mini or 1/4" balanced input connections. Overall dimensions shall be no more than 44.45 mm (1.75 in.) in height by 157.16 mm (6.1875 in.) in width by 165.1 mm (6.5 in.) in depth. The unit shall include two removable antennae. The WLL-RX1p receiver unit housing material shall be constructed of powder coated metal. Power requirements for the unit will be a 32 v, 4.0 A power supply. Output options at the receiver include Push-On or 1/4" connections speaker level output. Latency 20 ms. Receiver amplifier power output shall be 50 w per channel at 8 ohms or 65 w per channel at 4 ohms. Stereo line output included at receiver for connecting auxiliary audio components. Receiver shall include a stereo mini jack to select local audio, muting wireless signal when connected. Overall dimensions shall be no more than 44.45 mm (1.75 in.) in height by 157.16 mm (6.1875 in.) in width by 165.1 mm (6.5 in.) in depth. The unit shall include two removable antennae. The system shall be the SoundTube WLL-TR-1p for both low- and high-impedance applications.

### SoundTube

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All SoundTube products come with a 5-year limited warranty.

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## Optional Accessories

**Rack-Mount Adapter (AC-WLL-RMA)**