

MTX-2500™
2.4GHz Wireless
Video/Audio Transmitter



Operating Instructions

Trango Systems, Inc.

FCC ID: NCYMTX2500MP (Canada pending)

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) this device may not cause harmful interference
and (2) this device must accept any interference received,
including interference that may cause undesired operation.

□

M-MTX_A.p65

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The MTX-2500™

Wireless Video/Audio Transmitter

Congratulations on choosing the MTX-2500 video/audio transmitter from Trango Systems. When unpacking the unit, verify that the following items are present:

- MTX-2500 transmitter
- attached omnidirectional antenna
- combination input cable with connectors for power (nine-volt battery) and audio (RCA)

If any items are missing, notify your sales representative. If an item appears to be damaged from shipment, replace it in its packing material and notify the shipper.

Important! Intentional or unintentional changes or modifications to this transmitter not expressly approved by the party responsible for compliance, must not be made. Any such modifications could void the user's authority to operate the equipment and will void the manufacturer's warranty.

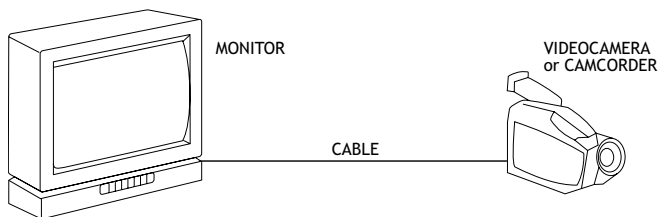
System Description

The MTX-2500 is a miniature wireless video/audio transmitter designed for transmitting composite NTSC or PAL video and audio signals simultaneously using 2.4GHz wireless technology.

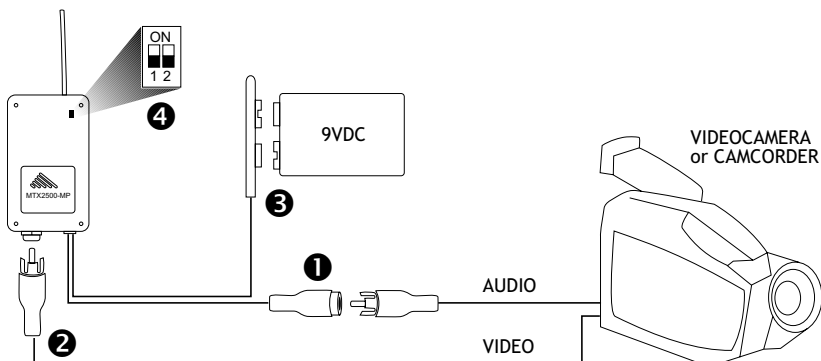
The system is ideal for short range transmission where small size, mobility, and low current consumption are required. Due to the nature of radio frequency (RF) transmission characteristics, the unit will perform best while stationary, and not moving. A moving transmitter will cause noticeable intermittent interference at the receiver, and this is normal.

Setup Guide

- 1 Prior to connecting the MTX-2500, verify proper operation of video source and monitor/video recorder using a directly connected cable.



- 2 Connect the power/audio cable to the MTX-2500 and attach a nine-volt battery. Note: the unit will operate between 6 and 13.8 volts DC, if you desire to use a different power source.



- 3 Connect the video and audio sources to the RCA inputs as shown.

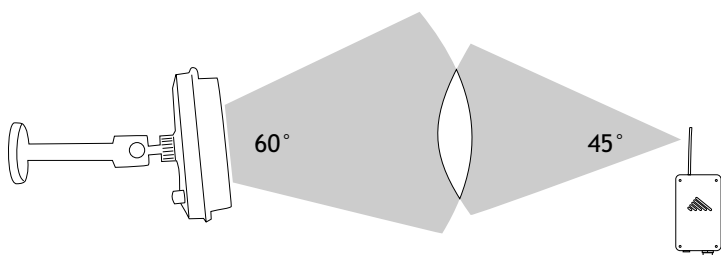
① **Audio input.** Designed to mate to a standard male RCA connector, the audio input jack accepts $1V_{pp}$ audio input and is terminated with $47K\Omega$ line configuration. A preamplifier must be used to connect a microphone to this input.

② **Video input.** Designed to mate to a standard male RCA connector, this input accepts $1V_{pp}$ video in both NTSC and PAL formats. This input is terminated with 75Ω . RCA-to-BNC adapters are available for use with some cameras and VCRs.

③ **Power.** Nine-volt battery connector. Alternatively, a voltage between 6 and 13.8 volts DC may be applied. The nominal current draw is 95 milliamperes. For alternative battery sources, the user may clip the supplied battery lead; special care must be used to ensure that

the leads for positive and negative voltages are attached correctly, otherwise the unit will not function.

④ **Channel DIP switch.** This switch controls the transmitter channel. Remember to change the receiver (either Eagle PLUS™ or Stingray™) channel as well, since it is not automatically changed when the transmitter channel is changed.



- 4 Move and adjust the orientation of the MTX-2500 and receiver until the best picture is obtained. The best picture will be obtained when orienting the MTX-2500 within the receiver antenna beam width, unobstructed, as shown.

Receiver Operation

See your Stingray or Eagle PLUS documentation for proper use of video receivers from Trango Systems, Inc.

Operational Hints

The MTX-2500 is factory-configured for operation on channel 1. The standard transmitter is supplied with an omnidirectional (or 360°) antenna that allows the receiver to be located in any direction relative to the transmitter within a 45° beamwidth vertically. To obtain the best picture quality and transmission distance, the following rules of thumb should be followed:

- Place the transmitter and receiver antennas above human and mechanical traffic but away from metallic objects.
- Keep the transmission path as open as possible. Objects such as walls, ceilings, and metallic objects near the transmission path can reflect signals and may reduce the transmission distance.

- If operating more than one system in an area, set the channels as far apart as possible on each system (i.e. system A uses channel 1, system B uses channel 4).

Transmission Range

The system is designed to operate up to three hundred feet in most office environments, and two thousand feet line-of-sight. Buildings with thick steel-reinforced or concrete inner walls will reduce the maximum obtainable range.

Service

If the unit ever needs repair service, contact your Trango Systems, Inc., dealer for return authorization and shipping instructions.

FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with these instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one of more of the following measures:

- Reorient the receiving antenna.
- Increase the separation between the affected equipment and the receiver.
- Connect the affected equipment to an outlet on a different circuit from that which the receiver is connected to.
- Consult the dealer and/or experienced radio/TV technician for help.

Troubleshooting

Interference. If interference such as lines in the pictures are observed, changing the channels may cure the problem. Also, AC generators in close proximity to the transmitter or receiver may cause lines in the picture. Move the unit away from the source of the interference. Note: microwave ovens may interfere with this product.

No Picture. Check that the transmit and receive channels are set the same. Verify all connectors are tight.

Poor Picture Quality. Raise transmitter and receiver antennas above ground and away from obstacles and traffic, including foot traffic.

Video Too Dark. Make sure that any monitors and other peripheral equipment connected to the video source are set to high impedance termination since the MTX-2500 transmitter has a built-in 75Ω termination.

Video Too Bright. Make sure that the receiver video output line is terminated with 75Ω .

Please contact our Technical Support staff at 1-858-653-3900.

Specifications

Radio Section

Frequencies:

Channel 1: 2413 MHz

Channel 2: 2432 MHz

Channel 3: 2451 MHz

Channel 4: 2470 MHz

RF Output Power: $9\text{dBm} \pm 1\text{dB}$ EIRP with omni antenna. Meets FCC 15.249 radiated field strength of 50 mV/m at 3m.

Video Section

Input Level: $1V_{pp}$ per NTSC/PAL standard

Input Impedance: 75Ω unbalanced

Audio Section

Input Level: $1 V_{pp}$ nominal

Input Impedance: $47k\Omega$

Power Section

Input Voltage: 6–13.8 Vdc range, reverse voltage protected

Current Consumption: $95 \pm 5\text{mA}$ typical

Max. Ripple Input: $1 V_{pp}$

Mechanical

Size: $1.15''\text{W} \times 2.15''\text{L} \times 0.64''\text{H}$

Weight: 1.2 oz

Environmental

Operating Temp.: -30° to 70°C

Storage: -30° to 85°C

Trango Systems technical support
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