

WDMX T500 MK2

Wireless DMX Transceiver

User manual



This manual contains important information.
Please read before operating fixture.



1. INTRODUCTION

Powered by Lumenradio, the WDMX T500 MK2 is the most reliable and affordable wireless DMX too on the market. Utilizing Cognitive Coexistence technology, the wireless system transmits or receives safe and reliable DMX data without any delay and interference. Ideal for rental, mobile show, event, club, DJ, etc. Please read this user manual carefully and thoroughly before operation.

1.1 Unpacking

The following items are included in the box:

- 1 x WDMX T500 MK2
- 1 x Power cable
- 1 x Mounting bracket
- 1 x User Manual

Carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Contact your supplier immediately and retain packing material for inspection if any part is missing or damaged.

1.2 Safety Instructions



Warning!!! To reduce the risk of fire, electric shock, or injury to persons, follow these important safety instructions:

- This product is intended for indoor use only!
- Please keep this User Guide for future consultation.
- Do not attempt to dismantle and/or modify the transmitter in any way.
- To prevent risk of fire or shock, do not expose fixture to rain or moisture.
- Make sure that the voltage and frequency of power supply match the power requirements of the transmitter/receiver.
- Make sure power cord is never crimped or damaged.
- The transmitter is only intended for installation, operation and maintenance by qualified personnel.

1.3 Features

- Supports CRMX and W-DMX G3 and W-DMX G4S
- Automated Cognitive Coexistence technology
- Worldwide license free 2.4 GHz frequency
- Transmit 512 channels (1 universe) of DMX data
- Maximum 16 universes of DMX in one area
- One-button-go for quick setup
- Point-to-point, point-to-multipoint or multipoint-to-multipoint operation

3.4 RDM function

Basically RDM takes up some amount of radio bandwidth. As default, all products come with RDM disable. To active RDM, use a Dongle tool and Configurator software from LumenRadio.

4. Specifications

- Frequency band: 2.4GHz
- DMX latency: <5ms
- Antenna type: 5dBi
- Transmission distance: approx. 500m
- IP rating: IP20
- Power supply: AC 100-240V 50/60Hz
- Power consumption: 10W max.
- Fuse: F1A/250V
- Dimension: 145mm x 100mm x 57mm
- Weight: 1.2 kg

FCC Notice

- 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.
- Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

IMPORTANT INFORMATION!

In order to optimize the recovery and recycling of the materials that old appliances contain and reduce the impact on human health and the environment, ensure that this product is recycled at the end of its life.



The WDMX T500 MK2 can be used as a Transmitter or a Receiver. Power on the unit and its TX/RX indicator shows now it is in TX or RX mode. You can switch between TX and RX easily by pressing the TX/RX switch button.

3.2 Linking the devices

Press and quickly release LINK button on the Transmitter. The Transmitter will scan for all unlinked receivers. The LINK indicators on both the Transmitter and Receiver(s) will flash rapidly for 5 seconds and then stay static on once linked up.

NOTE: There is no limited number of receivers that can link up with a transmitter - there can be an infinite number of receivers all paired with a single transmitter. You can add receivers at any time, even during operation. In an operational system, adding on an additional receiver will make the logged-in units revert to idle mode for 10 seconds; once the new units are linked up they will all start again together with the new unit.

Unlinking the devices

There are two ways to unlink the devices - individual unlink or group unlink.

Unlink one: press and hold the LINK on the Receiver for 5 seconds and LINK indicator turns off.

Unlink all: press and hold LINK button on a Transmitter for 5 seconds and then release, all paired and powered receivers will be unlinked from this Transmitter.

3.3 TX mode selection

To use this Transmitter together with Wireless Solution's Received of G3 or G4S, you need to select TX mode on a Transmitter unit.

1) Press FUNCTION button shortly 3 times, then press and hold the button for at least 3 seconds to enter TX mode selection. LED will blink in different patterns to indicate currently selected protocol.



One flash then a pause = W-DMX G3 mode is selected



Two flashes then a pause = W-DMX G4S mode is selected



Three flashes then a pause = CRMX mode is selected

IMPORTANT NOTE: The TX mode of Transmitter can't be higher than the Receiver's. Otherwise, there would be malfunction between Transmitter and Receiver.

1.4 Production Overview



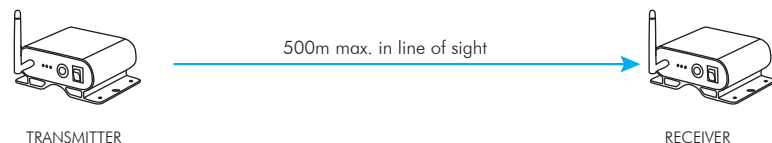
- ① Antenna
- ② Signal strength level indicators, Red = Link problem
- ③ TX/RX: switch between TX and TX without power off the unit.
- ④ TX/RX Lock and indicator: the indicator turns on when TX/TX switch is locked. Use a pin to lock or unlock TX/RX switch function.
- ⑤ LINK button
- ⑥ Interface LED indicators
 - LINK on Transmitter:
On=Normal operation, Fast flashing=Linking, Slow flashing =Unlinking
 - LINK on Receiver:
On=Linked with a Transmitter, Off =Unlinked
 - DATA on Transmitter:
On=DMX signal is present, Slow flashing =No DMX signal is present
 - DATA on Receiver:
On when it receives DMX signal from a Transmitter.
 - RDM: Flashes to RMD activity
 - MODE: indicates the radio mode.
- ⑦ PowerCon In
- ⑧ Fuse holder: F1A, 250V
- ⑨ DMX In
- ⑩ DMX Out

2. SETUP

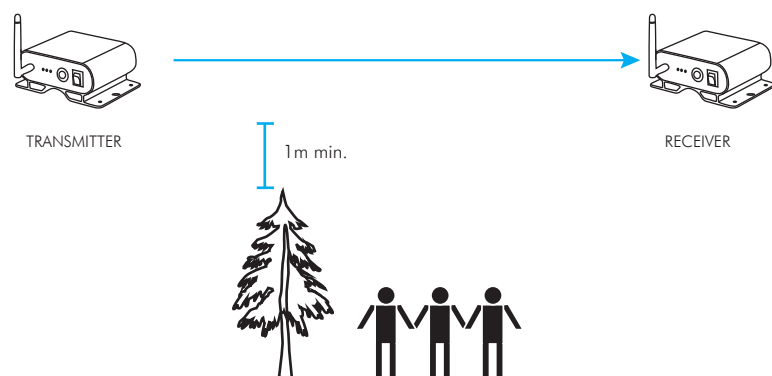
2.1 Placing Transmitter and Receiver

For successful linking and better performance, the following conditions should be fulfilled:

a. Distance between Transmitter and Receiver should not exceed 500m.



b. Position of Transmitter and Receiver should be 1m at least above crowds and trees.



2.2 Placing Transmitter and Receiver

The Wireless unit can be rack or truss mounted. A safety cable is required to secure the unit when it is mounted onto the truss.

2.3 System connection

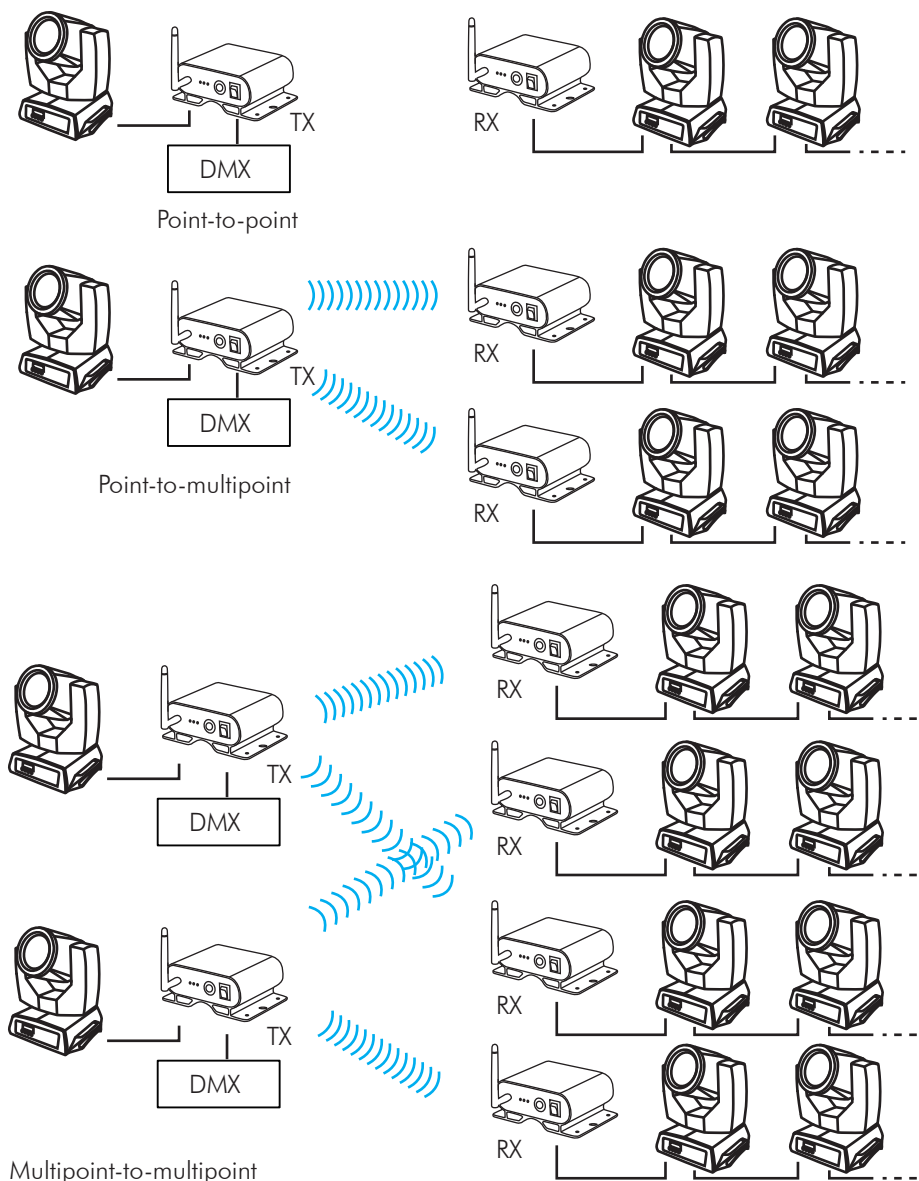
Use DMX cables to connect DMX IN of the TRANSCIEVER to DMX source and DMX OUT of RECEIVER to lighting equipments.

2.4 Power

The wireless system is designed to work on AC 100-240V 50/60Hz. Before applying power to a unit, make sure that the unit's input voltage matches the power source voltage.

2.5 Connections

The wireless units can be operated in point-to-point, point-to-multipoint or multipoint-to-multipoint.



Note: Maximum universes in coexistence: 16

3. OPERATION INSTRUCTIONS

3.1 Transmitter / Receiver