

LumenRadio  
W-DMX ORB  
Orb Wireless  
Solution



# LumenRadio W-DMX ORB Orb Wireless Solution Instruction Manual

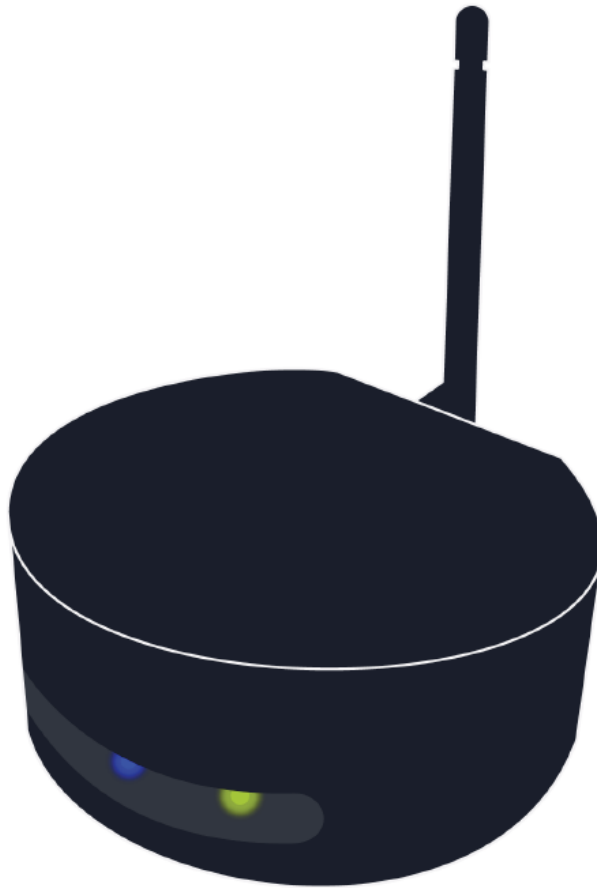
[Home](#) » [LumenRadio](#) » LumenRadio W-DMX ORB Orb Wireless Solution Instruction Manual 

## Contents

- 1 LumenRadio W-DMX ORB Orb Wireless Solution
- 2 YOUR WIRELESS DMX SYSTEM
- 3 BOX CONTENT
- 4 YOUR W-DMX ORB UNIT
- 5 INSTALLATION
- 6 LINK AND UNLINK
- 7 FIRMWARE UPDATE
- 8 WARRANTY AND SUPPORT
- 9 SPECIFICATIONS
- 10 Documents / Resources
  - 10.1 References



**LumenRadio W-DMX ORB Orb Wireless Solution**



## **GENERAL**

All personnel must acquaint themselves with the instructions in this leaflet before using this product. This product must not be used if damaged. For additional documentation for W-DMX Orb and instructional videos, scan the QR code on this leaflet, or visit [www.wirelessdmx.com](http://www.wirelessdmx.com)

## **APPLICATION AREA**

W-DMX Orb is a wireless lighting control device and is designed to be used indoors only. It is intended to be used by professional users.

## **YOUR WIRELESS DMX SYSTEM**

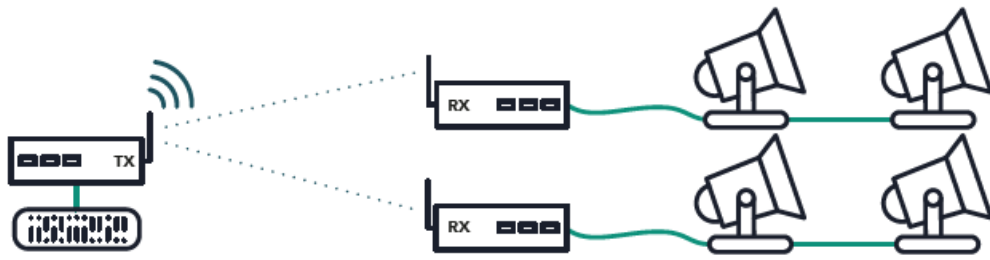
Welcome to the Wireless DMX family! We hope you enjoy your brand new devices – W-DMX products are known for it's ease of use, and we thrive on avid users like you who use our products.

But before you use, you must know: there are two main modes of operation, that with Orb comes in two different versions;

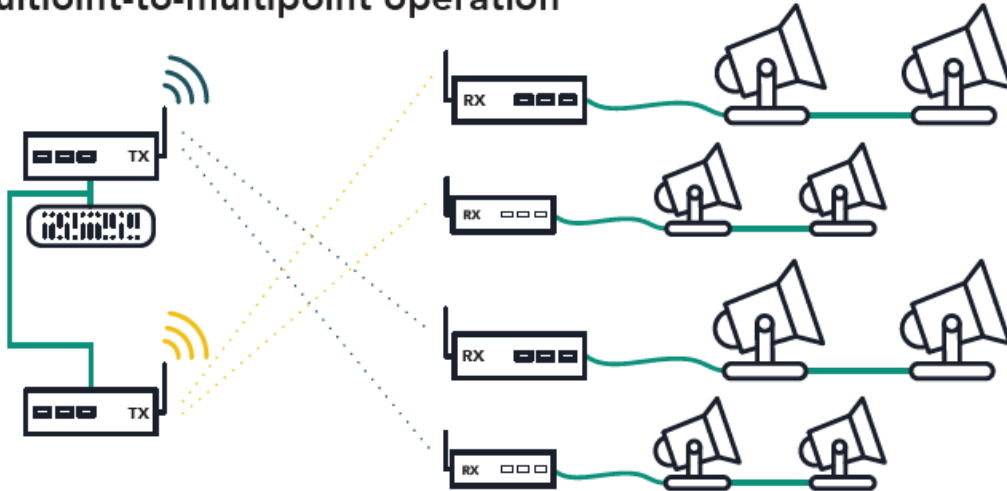
- Transmitter (TX) – it will transmit your wireless DMX data
- Receiver (RX) – it will receive your wireless DMX data

A transmitter can transmit to one or several receivers at a time, and it is possible to use multiple transmitters to transmit mul-tiple DMX universes.

## Point-to-multipoint operation



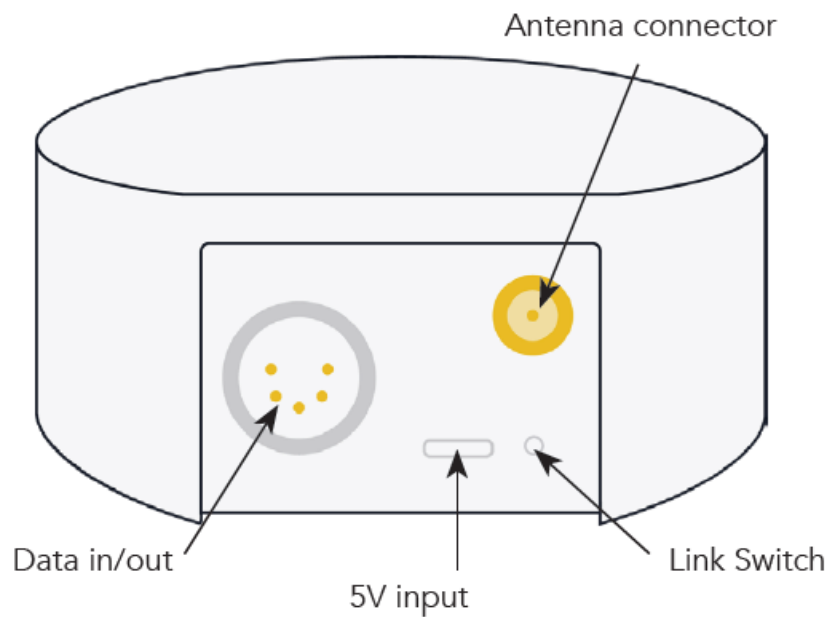
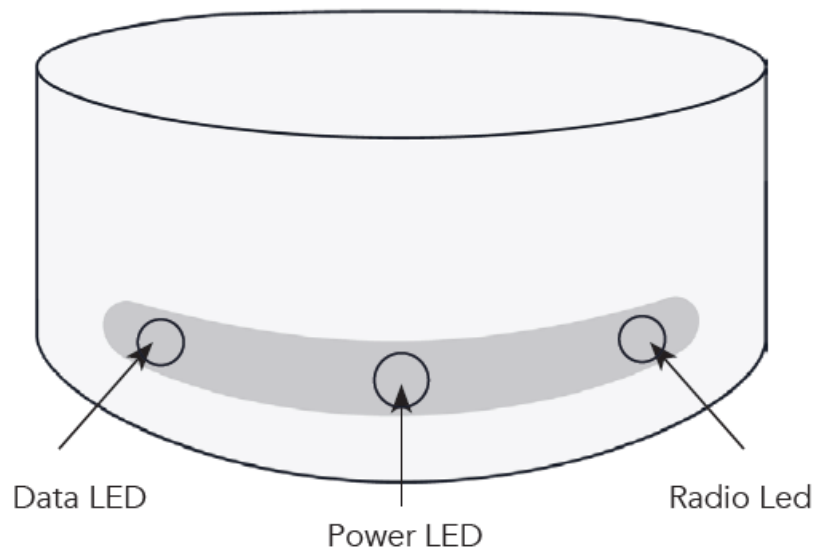
## Multipoint-to-multipoint operation



## BOX CONTENT

- 1 pc. W-DMX Orb unit (RX or TX)
- 1 pc. External power supply for world-wide use
- 1 pc. USB-C to USB-C cable for power
- 1 pc. RP-SMA 2dBi antenna
- 1 pc. Quick start instruction (this leaflet)

## YOUR W-DMX ORB UNIT



## INSTALLATION

Before you start using your W-DMX Orb unit, make sure the device does not have any visible damages. Also make sure the supplies power supply does not have any damages.

1. Connect the antenna
2. Plug in the supplied power supply using the supplied USB cable, and make sure the blue power LED lights up.
3. Connect data cable
4. Perform linking (see instructions on next page)

## LINK AND UNLINK

Before your wireless DMX system can transport data the TX and RXes needs to be linked together. After an RX is linked to a TX it will stay linked until actively unlinking it.

### To link:

1. Make sure the RXes you with to link is powered on, within range, and unlinked (see unlink instructions if needed).

2. Momentarily press the link switch on the TX unit.
3. Wait approx. 10 seconds while the TX is performing the linking procedure.
4. Now all receivers that was within range and not already linked to a TX will be linked to this TX.

#### To unlink one RX:

1. Press and hold the link switch on the RX you want to unlink for more than 3 seconds.
2. Check the Radio LED to verify that the RX is unlinked.

#### To unlink several RXes from a TX:

1. Make sure all RXes you wish to unlink is powered on and within range from the TX.
2. Press and hold the link switch on the TX for more than 3 seconds until the Radio LED on the TX starts to blink slowly.
3. Verify that all RXes became unlinked by checking the Radio LED.

**Note:** RXes that are either not powered or not within range from the TX when unlinking is performed will remain linked to the TX.

#### LEDS

##### Power LED



Power on



Update mode

##### Data LED



DMX present



No DMX present

##### Radio LED (TX)



Transmitting



Linking



Unlinking

##### Radio LED (RX)



> 70% signal



30–70% signal



< 30% signal



TX not found



Unlinked

#### FIRMWARE UPDATE

Firmware can be updated using the CRMX Toolbox2 app from LumenRadio. The app is available for both iOS and Android and can be downloaded from App Store or Google Play.

1. Press and hold the link switch for more than 10 seconds, until the unit indicates that it is in update mode.
2. Within 60 seconds, connect to the device using the app.
3. After connecting, select the “Update” option in the app.

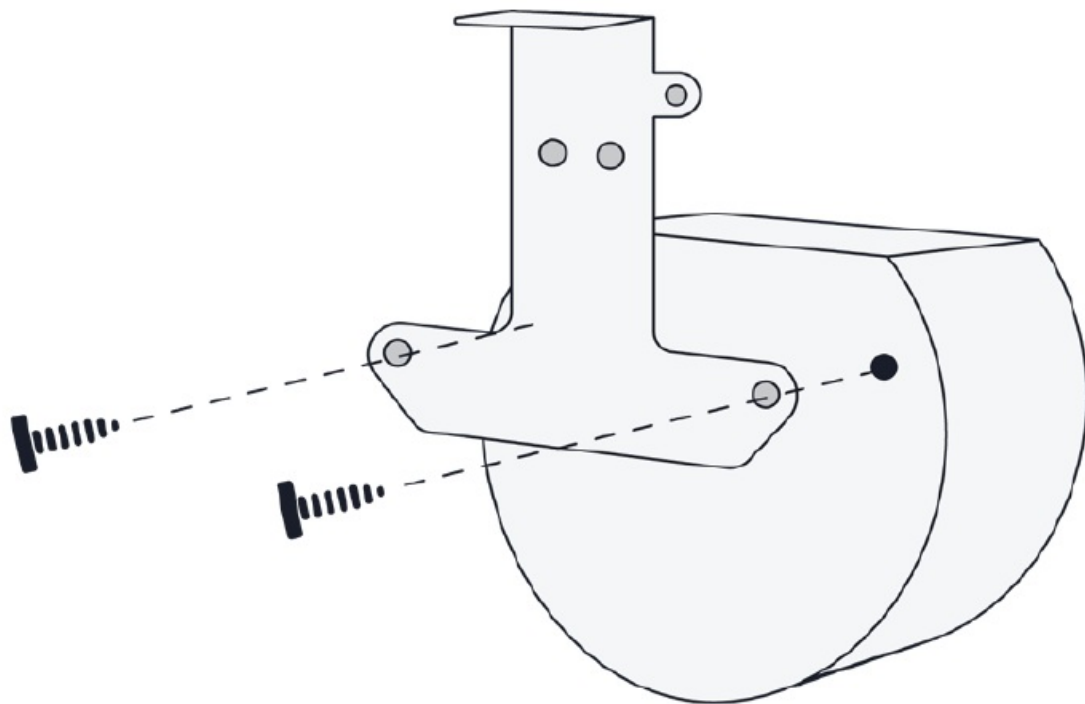
**Note:** The device will automatically leave update mode after 60 seconds if no connection has been made.

## RIGGING

Whenever you are going to rig your Orb unit in a truss or other-wise place it more than 2m above ground, the supplied truss mounting bracket must be used.

Fasten the bracket in a suitable truss clamp using an M10 or 3/8” bolt. The truss mounting bracket also allows for a safety wire to be used whenever necessary.

The truss mounting bracket shall be mounted according to the picture below.



## WARRANTY AND SUPPORT

All warranty claims or support topics for this product shall be directed to the local distributor/reseller. To find your local distributor, visit [www.wirelessdmx.com](http://www.wirelessdmx.com)

Warranty is deemed void if:

1. The product is modified, repaired or otherwise altered unless it has been directed by LumenRadio AB; or
2. The serial number on the product (the QR code) has been compromised.

## SPECIFICATIONS

- Power supply AC1: 100-240 VAC +/- 10% 50/60 Hz
- Power supply DC: 5 VDC +/- 10%
- Max. power consumption: 1W

- Self-healing fuse: Yes
- IP rating: IP 20
- Dimensions (W x H x D): 99 x 97 x 43 [mm]
- Weight: 190 g
- Antenna connector: RP-SMA
- Operating temp. range: -20 to +55 °C
- Storage temp. range: -30 to +80 °C
- Humidity: 0 – 90% non-condensing
- Frequency range: 2402 – 2480 MHz (ISM band)
- Max. RF output power: 35 mW
- Supported protocols: DMX-512A
- Supported RF protocols (TX): W-DMX G3
- Supported RF protocols (RX): CRMX, CRMX2 , W-DMX G3, G4, G4S & G5

<sup>1</sup>With external power supply only

## LEGAL

CRMX is a trademark of LumenRadio AB, W-DMX is a trade-mark of Wireless Solution Sweden AB.

Wireless Solution Sweden AB is a fully-owned subsidiary of LumenRadio AB.

DMX-512A refers to ANSI national standard developed and maintained by ESTA, Entertainment Services and Technology Association.

This product makes use of US patents 9,208,680; EU patents EP 2415317, EP 2803248, China patents CN 102369774, CN 104041189B and others.


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Orb Wireless DMX TX DMX512, W.DMX G3, W-DMX ORB Orb Wireless Solution, W-DMX ORB , Orb Wireless Solution, Wireless Solution

References

- [🏠 Home - Wireless Solution](#)
- [📖 User Manual](#)

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