# LC-512R-BAT

Wireless DMX512 Receiver (Lithium Battery)

- Built-in rechargeable lithium battery, plug and play
- FHSS with 79 Channels, interference-free operation.
- 32-bit ARM Processor, DMA transfer without delay
- Standard DMX512 3-pin XLR, Through XLR power supply design
- One-touch operation with a Tri-color status indicator
- Built-in Wireless Solution Compatibility Mode
- Automatically learning of various parameters of controller, just like DMX transfer via cable



• Group Mode, easy plug-and-play operation; Pairing Mode, supports more transmitter universes

## **Overview**

WIDMX LC-512R-BAT is unique in its use of advance radio technologies that are also used in military communication and mobile phones. That is 2.4GHz ISM Band (license-free worldwide) and GFSK Modulation (more efficient transitions). Its user-friendly operation that simplifies all the complex communication protocols makes it possible for the users to just plug and play.

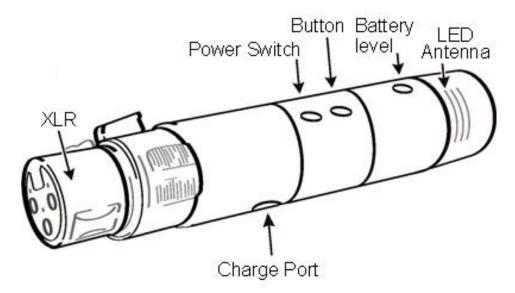
## Multiple Communication Protocol, There are no upgrading troubles

WIDMX LC-512R-BAT is now compatible with the world's leading wireless communication protocols like the Sweden's protocol or the GZ protocols. There are no upgrading troubles.

#### Application

 Stage lighting applies to the Grand Variety Show, Gymnasium, Temporary Set-up Stage, TV Station, Centers Conference, Theaters, Opera, Theme Parks, Dance Halls, and Bars, or any lighting equipment with standard DMX512 XLR etc.

## **Appearance**



## **Description of Status Indicator**

1) In the Set-up mode, different colors mean different communication protocols:

- 1. Red ----- WIDMX Protocol
- 2. Green ----- W-DMX Receive Protocol
- 3. Yellow ------ Guangzhou(GZ) Protocol

#### 2) In the User mode, Description of Status Indicator:

Protocol	Action	Status Description
WIDMX or GZ Protocol	Red, Green, Blue, Yellow,	6 / 7 Different Wireless
	Cyan, Purple (, White)	Groups
	Flashing Red	Transmitting DMX Signal
	Flashing Green	Receiving DMX Signal
W-DMX Receive Protocol	White	Connection is not
		Established
	Red	Deleting Connection
	Red(Fast-Flash)	Connection is Lost
	Green(Fast-Flash)	Connecting to Transmitter
	Green(Slow-Flash)	Connected, Without DMX Signal
	Green	Connected, Receiving DMX Signal

## **Description of the Battery Level Indicator Status**

- 1) In Charging:
  - 1. Red ------ Level < 40%
  - 2. Flashing Green ------ 40% <= Level <70%
  - 3. Flashing Blue ----- 70% <= Level <100%
  - 4. Blue ------ Level = 100% (full charge)

2) In Discharge: (Except for low battery, the battery level display will go out after 5 seconds. Press the button to display the battery level again for 5 seconds.)

1.	Blue	70% <= Level
2.	Green	40% <= Level <70%
3.	Red	10% <= Level <40%
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4. Flashing Red ----- Level < 10% (low battery)

# **Operation Guide**

## 1. Set-up mode:

Press and hold the button before you power up. When you see status indicator turns into the white light, release the button to enter the Set-up mode. In this mode you can select different transmission protocols. Each time you press the button, you would see the status indicator changes in follow order: red, green, blue and yellow. Choose one of the protocols, then press and hold the button (> 1S), when you see the white light, release it to enter the use mode.

#### 2. Use mode:

1) Powered up and enter the Use mode;

2) If it is in Set-up mode, press and hold the button (> 1S) until you see the white light, then release it to enter the Use mode.

# 2.1. In WIDMX protocol or GZ protocol, you could select different DMX Group:

1) The first time when you press the button, it will not change the color but show you the group that you are in.

2) If you press it again it will switch to other group.

## 2.2. In W-DMX Receive protocol:

Press and hold (> 3S) the receiver's button until the indicator turns white. The device would disconnect with the transmitter.

## **Specifications**

#### **Form Factor**

Type: stand-alone installation Size: 85 x 18 x 18 mm Weight: 110 g **System Information** CPU: 32-bit ARM Core (Cortex-M4) **Radio Parameters** Range: 600 meters (line-of-sight) Frequency: 2.402 - 2.480GHz, ISM, 79 channels Spread Spectrum: FHSS, 1100 hops / sec Modulation: GFSK Maximum Transmit Power: 23dBm Receiver Sensitivity: -94dBm

#### **DMX Signal Interface**

3-pin female XLR Environmental Limits Operating Temperature: -40 ~ 85 °C Storage Temperature: -65 ~ 150 °C Ambient Relative Humidity: 5 to 95% (non-condensing) Power Requirements Charging input: 500 mA@5V DC Charging time: 90% @ 50 minutes, 70 minutes full charge Discharge time: 20 hours max. Reliability Automatic Reboot Trigger: Built-in WDT (watchdog timer)

#### Warranty

Warranty: Five-Year Limited Warranty