



Wireless DMX (WDMX) Transmitter & Receivers



WDMXXLRTX

WDMXXLRRXA

WDMXXLRRXB

WDMX5LRTX

WDMX5LRRXA

WDMX5LRRXB

CRMXXLRTX

CRMXXLRRXA

CRMXXLRRXB

CRMX5LRTX

CRMX5LRRXA

CRMX5LRRXB

USER MANUAL

For your safety, please read this user manual carefully before use.

Event Lighting reserves the right to revise the manual at any time. Information and specifications within this manual are subject to change without notice. Event Lighting assumes no liability or responsibility for any errors or omissions. Please consult Event Lighting for any clarification or information regarding this item.

WARNING

- Do not open this device, there are no user serviceable parts inside. Risk of electric shock.
- Do not operate this device, or connect this device to power, within 50cm of any flammable material.
- Do not operate this device outdoors where excessive dust, heat, water, or humidity may affect it.
- Do not operate this device if the housing or cables appear damaged.
- Do not operate this device at temperatures higher than 40°C (104°F).
- Only connect this device to a grounded and protected circuit.
- Stop using this device immediately if a serious operating problem becomes apparent.

Generic Battery Care Guide

SPECIFIC FOR WDMXXLRXB AND WDMX5LRXB UNITS

This guide contains general information regarding the care and maintenance of battery-powered products. For detailed instructions and specifications, please consult your product's user manual. Failure to follow the guidelines in this guide may affect your product's warranty. The determination of misuse is at the sole discretion of Event Lighting and its distributors.

Charging:

- **Power Off:** Always switch off the fixture before charging.
- **Full Charge:** Charge the battery to full capacity before initial use and regularly before each use for optimal performance. Charging time varies by model (typically 4-6 hours).
- **Avoid overcharging:** Once the unit has reached 100% charge, remove the unit from power.
- **Charging Case (if applicable):** When using a charging case, ensure this is used in a room with proper ventilation and avoid charging units once they have reached full charge.
- **Use During Charging:** Do not operate the fixture while charging.

Battery Care:

- **Over-Discharge Protection:** Your fixture likely has built-in protection to prevent over-discharge. The light will turn off at a low voltage threshold.
- **Mains Power Operation (if applicable):** Some fixtures can operate on mains power while charging. Please ensure your fixture can operate in this mode before use. If applicable, avoid prolonged use in this mode.
- **Ambient Operating Temperature:** Make yourself aware of the unit's ambient operating temperature and ensure the unit is not operated in excess of this temperature.
- **Storage:** For long-term storage, charge the battery to approximately 80% and periodically cycle the battery (fully discharge and recharge) at least monthly.
- **Lifespan:** Battery lifespan depends on usage, charging habits, and storage.

General Information:

- **Refer to Product Manual:** This guide is general. Always consult your product's user manual for specific operating instructions, safety precautions, troubleshooting tips, and warranty information.
- **Safety:** Do not disassemble, modify, or expose the fixture or battery to extreme conditions. Dispose of batteries responsibly.

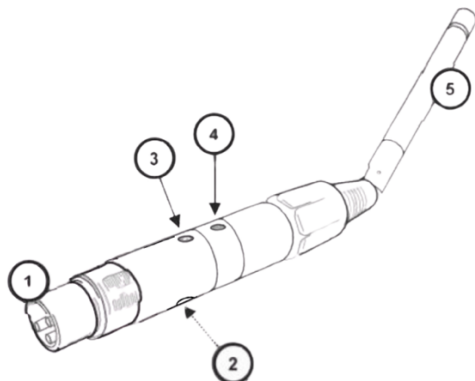
For More information, please refer to our [Generic Battery Care Document](#).

Scan the QR Code to view the Generic Battery Care page on the Event Lighting Website.



PRODUCT OVERVIEW

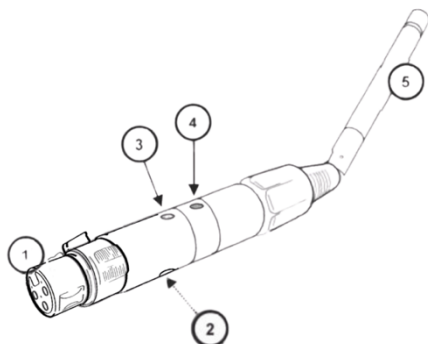
Receiver



WDMXXLRTX | CRMXXLRTX | WDMX5XLRTX | CRMX5XLRTX

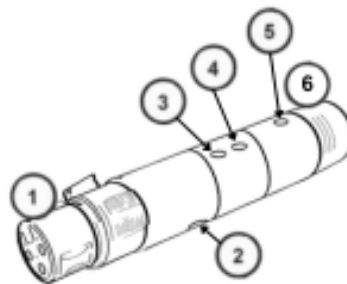
1. Input / Output (3 Pin)
2. Power Connection
(White power cable for Receiver and Black for the transmitter as supplied, Battery Receiver Unit also has a black cable)
3. Button
4. Light Indicator
5. Antenna

Transmitters



**WDMXXLRRXA | CRMXXLRRXA
WDMX5LRRXA | CRMX5LRRXA**

1. Input / Output
(3-Pin Connector for WDMXXLRRXA,
5-Pin Connector for WDMX5LRRXA)
2. Power Connection
3. Button
4. Light Indicator
5. Antenna



**WDMXXLRRXB | CRMXXLRRXB
WDMX5LRRXB | CRMX5LRRXB**

1. Input / Output
(3-Pin Connector for WDMXXLRRXB,
5-Pin Connector for WDMX5LRRXB)
2. Charging Port
3. Power Switch
4. Button
5. Battery Level Indicator
6. LED Antenna

INTRODUCTION

Wireless DMX is the ideal solution for fast setups, temporary installations, touring and production duties or places where you are physically unable to run DMX cables. Event Lighting brings a range of Wireless DMX devices to the market. There are 3 x models:

1. WDMXXLRTX / CRMXXLRTX / WDMX5XLRTX / CRMX5XLRTX – This unit operates as a transmitter
2. WDMXXLRRXA / CRMXXLRRXA / WDMX5XLRRXA / CRMX5XLRRXA / WDMXXLRRXB / CRMXXLRRXB / WDMX5XLRRXB / CRMX5XLRRXB – This unit operates as a receiver

Plug and Go Just plug in the transmitter and receiver, then select the transmission or receiver mode via a single button. A coloured LED indicator light will let you know transmission and receiver status. Grouping is just as easy.

The range of transmission will vary depending on the environment and tests should be run to see actual coverage area, Table 1 shows an indication of the Maximum coverage. A loss of around 30dBm is experienced when transmitting through a brick wall. Other walls and floors of varying materials will have a different loss.

COVERAGE AREA (TABLE 1)

Transmitter	Receiver	Line of sight MAX*	Through a single brick wall*
WDMXXLRTX	WDMXXLRRXA	200m	30m
WDMXXLRTX	WDMXXLRRXB	200m**	30m**
WDMXXLRTX	WDMX5XLRRXA	200m	30m
WDMXXLRTX	WDMX5XLRRXB	200m**	30m**
CRMXXLRTX	CRMXXLRRXA	200m	30m
CRMXXLRTX	CRMXXLRRXB	200m**	30m**
CRMXXLRTX	CRMX5XLRRXA	200m	30m
CRMXXLRTX	CRMX5XLRRXB	200m**	30m**

*Distance is given as measured in ideal RF conditions. Actual distance will vary depending on your environment

** Battery units do not have an external antenna and as such may not be capable of these distances in areas without ideal RF conditions.

SETUP MODE

Setup

To enter the setup mode, press and hold the button whilst powering up. Once the device powers up, the unit will be in 'setup mode'.

The light will be lit a specific colour to indicate the protocol being used for the transmission as shown in Table 2 for Powered units, and Table 3 for Battery Units (See Below).

Pressing the button will cycle through the colours and once you want to set the protocol pressing the button for more than 1s will save the protocol.

The transmitters, receivers and transceivers will remember the protocol used even after a power

cycle with their built in memory chip.

Powered Units Protocols (TABLE2)

Colour	Protocol
Red	ELDMX Transmit and receive
Green	W-DMX Receive
Blue	W-DMX G3 Transmit

Battery Units Protocols (TABLE3)

Colour	Protocol
Red	ELDMX Protocol
Green	W-DMX Receive Protocol
Yellow	GZ Protocol

USE MODE

Changing Channel Group

Pressing the Button will show you the current channel group being used and pressing it again will cycle through the groups. The colour of the light will indicate the group as shown in Table 4.

Status Indicators (TABLE4)

Protocol	Action	Description
ELDMX Protocol	Solid Colour (Red, Green, Blue, Yellow, Cyan, Magenta (and White))	1 of the 6 (or 7) colour groups
	Flashing Red	Transmitting DMX
	Flashing Green	Receiving DMX
W-DMX Receive Protocol	White	No connection
	Red	Deleting Connection
	Red Fast Flash	Connection Lost
	Green Fast Flash	Connecting to Transmitter
	Green Slow Flash	Connected but no DMX signal
	Green	Connected with DMX signal
W-DMX Transmit	Red	Deleting All Receivers
	Blue Fast Flash	Connecting with the receivers
	Blue Slow Flash	No DMX input
	Blue	Transmitting DMX

W-DMX Mode

Transmitters

Pressing the button momentarily will connect to all unconnected receivers in the coverage area. Pressing the button for more than 3s will disconnect all receivers in the coverage area.

Receivers

Pressing the button for more than 3s will disconnect the device with a transmitter.

NOTE: The receiver will not connect with a new transmitter unless it is disconnected first.

CRMX

This information is relevant to the following models:

CRMXXLRTX | CRMX5XLRTX | CRMXXLRRXA | CRMX5XLRRXA | CRMXXLRRXB | CRMX5XLRRXB

CRMX Transmitters only transmit CRMX signals to be picked up by CRMX receivers.

CRMX Receivers are able to receive both CRMX and WDMX transmitted signals from CRMX or WDMX transmitter models.

Please refer to the status indicator table (Table 4 as seen above) – “W-DMX Receive Protocol” will receive WDMX or CRMX signals on CRMX units.

Please note: WDMX unit can only transmit and receive WDMX signals.

Battery Level Indicator Status

1) While Charging:

1. **Red:** Less than 40%
2. **Flashing Green:** Between 40% and 70%
3. **Flashing Blue:** Between 70% and 100%
4. **Blue:** 100% Charged (full charge)

2) While running but not charging: *(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.)*

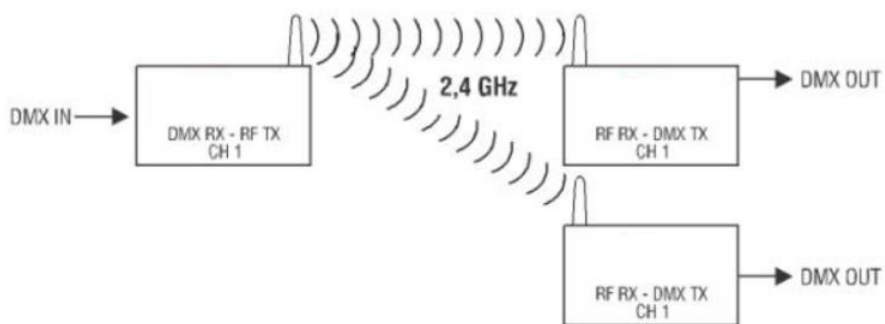
1. **Blue:** Between 70% and 100%
2. **Green:** Between 40% and 70%
3. **Red:** Between 10% and 40%
4. **Flashing Red:** 10% or Lower (low battery)

COMMON APPLICATIONS

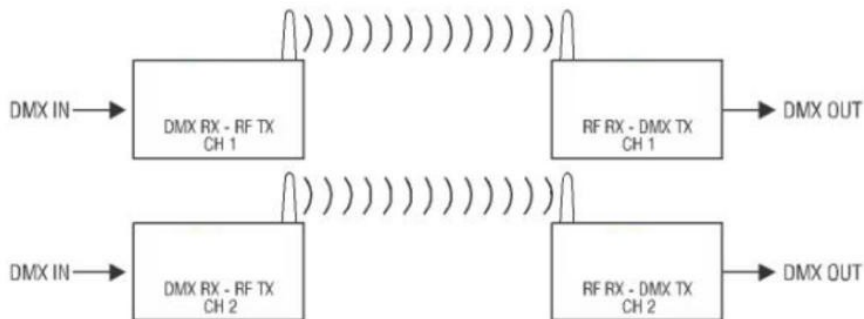
One to One



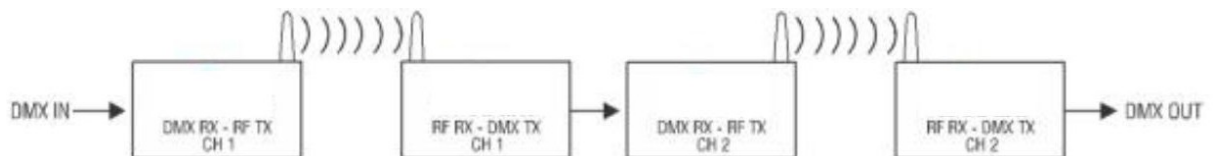
One to Many



Many* to Many (*6 channel groups maximum in WIDMX)



Repeater (*6 channel groups maximum in WIDMX)



TECHNICAL SPECIFICATIONS

General Specifications

- Maximum Transmission power: 22dBm
- Receiver Sensitivity:
 - -110dBm (WDMXXLRTX, CRMXXLRTX, WDMX5XLRTX and CRMX5XLRTX)
 - -102dBm (WDMXXLRRXA, CRMXXLRRXA, WDMX5XLRRXA and CRMX5XLRRXA)
 - -94dBm (WDMXXLRRXB, CRMXXLRRXB, WDMX5XLRRXB and CRMX5XLRRXB)
- Band: 2.402Ghz – 2.480Ghz, ISM, 79 channels
- Spread Spectrum: FHSS, 1100 hops/s
- Modulation GFSK
- Channel Groups: 6 in ELDMX mode
- Protocols: ELDMX, WDMX G3/G4, CRMX*
*CRMX ONLY AVAILABLE ON CRMX MODELS
- Connection:
 - 3-Pin XLR (WDMXXLRTX, CRMXXLRTX, WDMXXLRRXA, CRMXXLRRXA, WDMXXLRRXB and CRMXXLRRXB)
 - 5-Pin XLR (WDMX5XLRTX, CRMX5XLRTX, WDMX5XLRRXA, CRMX5XLRRXA, WDMX5XLRRXB and CRMX5XLRRXB)
- Automatic Reboot Trigger: Built-in WDT (watchdog timer)

Dimensions

- Size: 85x18x18mm (antenna is additional 40mm – total 125mm)
- Weight: 110 g

Environmental Limits

- Operating Temperature: -40 ~ 85 °C
- Storage Temperature: -65 ~ 150 °C
- Ambient Relative Humidity: 5 to 95% (non-condensing)

Power Requirements

- Power supply: 5VDC

Battery Units Charging Specifications

- Battery Type: Rechargeable Lithium Battery
- Charging input: 500 mA@5V DC
- Charging time: 90% @ 50 minutes, 70 minutes full charge Discharge time: 20 hours max.