Version 1.0 March 2025

lumenradio   **MoonLite²**

CHARGING

Your MoonLite² has a built-in battery to allow for true wireless operation. The battery can be recharged in two ways:

1. Via the USB-C connector.
2. In a dedicated charging case (sold separately).

MoonLite² can be charged from any standard USB port or charger that can supply 5V and minimum 500mA.

If the unit is charging from the USB-C port, the unit is still operational, which allows it to run directly from external power, for instance from a USB port on a fixture.

When MoonLite² is charging in its charging case, the unit is not operational. This is to reduce the risk of unwanted linking or unwanted RF emissions while charging.
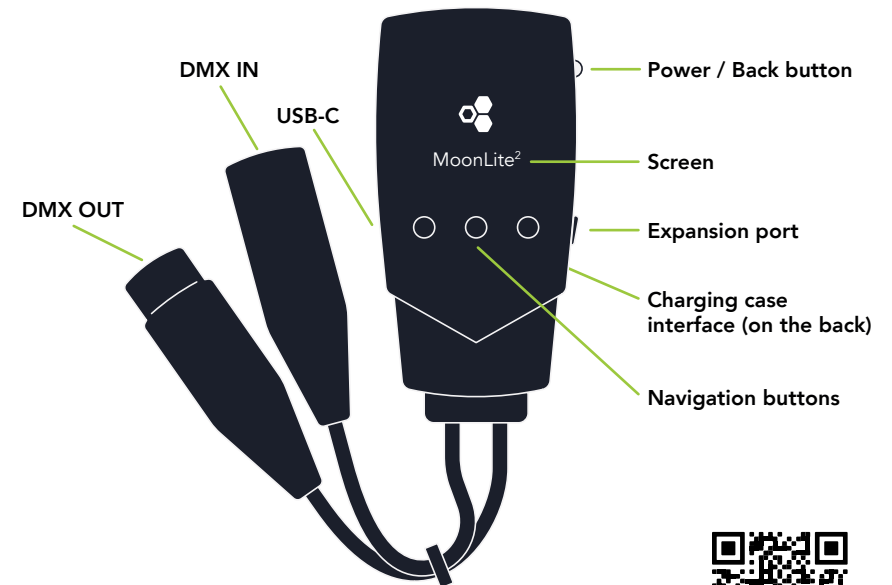
INTRODUCTION

Thank you for buying a LumenRadio MoonLite² product. This guide is intended to give you a quick start to experience all the benefits of being wireless with LumenRadio's CRMX system. For a more complete user guide, scan the QR code or visit our website.

The MoonLite² you just purchased is designed to give you the highest level of reliability on the market and is fully compatible with other CRMX products. Through this you can expand your wireless system with units from our other CRMX product lines as well as products from our partners. For the latest updates, please visit our website **www.lumenradio.com**.

We hope that you will enjoy the benefits and freedom that your new MoonLite² will give you.

SPECIFICATIONS

Power supply DC:	5 VDC +/- 10%
Max. current input (while charging):	500mA
Self-healing fuse:	Yes
IP rating:	IP 20
Dimensions (W x H x D) excl. cables:	47mm x 100mm x 25mm
Dimensions (W x H x D) incl. cables:	47mm x 275mm x 25mm
Weight:	160g
Antenna:	Integral antenna
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:	280 mW (North America), 100 mW (EU, etc)
Supported protocols:	DMX-512A (ANSI E1.11), RDM (ANSI E1.20)
Supported RF protocols (TX):	CRMX, W-DMX G3, G4S
Supported RF protocols (RX):	CRMX, CRMX², W-DMX G3, G4, G4S & G5

YOUR MOONLITE²

DMX IN
USB-C
DMX OUT
Power / Back button
Screen
Expansion port
Charging case interface (on the back)
Navigation buttons

LEGAL

CRMX and W-DMX are trademarks of LumenRadio AB.

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

This product makes use of US patents 7,432,803; 9,208,680; EU patents EP 2415317, EP 2803248, China patents CN 102369774, CN 104041189B and others.
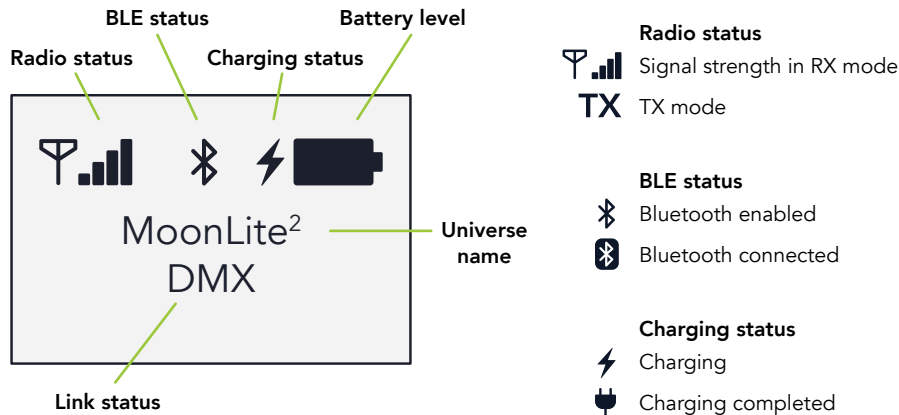

Scan for full user manual

POWER ON/OFF

Power on the device by pressing and holding the power button until the startup logo no longer appears on the home screen (approximately five (5) seconds).

To turn off the device, make sure you're in the home screen, then press and hold the power button until the device powers off (approximately five (5) seconds).

HOME SCREEN

Radio status

Signal strength in RX mode

TX mode

BLE status

Bluetooth enabled

Bluetooth connected

Charging status

Charging

Charging completed

LINKING AND UNLINKING

All CRMX systems must be linked to operate. Linking is the process of tying receiver(s) to the transmitter. After a receiver has been linked to a transmitter, it will stay linked until actively unlinked. Cycling power does not affect the linking.

Link receivers

To link receivers, follow these steps:

1. Power up the receivers you want to link.
2. Ensure the receivers are within range of the transmitter.
3. Ensure receivers are unlinked (check the receiver's status).
4. Select link from the Linking menu.
5. The linking status will now show on the display. Wait until linking has finished.

Unlink receivers

To unlink all receivers from a transmitter:

1. Ensure receivers are powered on and within range of the transmitter.
2. Select Unlink from the transmitter's Linking menu.
3. The unlinking status will now show on the display. Wait until unlinking has finished.

To unlink a specific receiver:

1. Ensure the receiver is powered on.
2. Select Unlink from the receiver's Linking menu.
3. The unlinking status will now show on the display. Wait until unlinking has finished.

BLUETOOTH SUPPORT

Your MoonLite² is compatible with Bluetooth Low Energy and can be configured and updated from LumenRadio's CRMX Toolbox² app that is available from Apple AppStore for iOS and Google Play for Android.

Turning Bluetooth on/off

For best performance, it is recommended to turn Bluetooth off on the device if it's not needed. (This is required when using older W-DMX receivers.)

Bluetooth can be turned on/off from the unit's Settings menu.

PIN code

To protect against undesired connections from other users, it is possible to set a PIN code for the Bluetooth interface. This can be done from the Toolbox² app or from the unit's Settings menu.

It is also possible to remove the PIN code from the unit's Settings menu. After the PIN code has been removed, it might be necessary to select Forget device from your phone's or tablet's Bluetooth menu.

CHANGE FLEX MODE

Your MoonLite² can operate as either receiver (RX) or transmitter (TX). The mode of operation is called Flex mode and can be changed from the unit's Settings menu, or from the Toolbox² app.

USING DIFFERENT PROTOCOLS

MoonLite² supports several protocols, such as CRMX and different generations of W-DMX. In receiver mode the unit will automatically change protocol at the time of linking to match the protocol of the transmitter it is being linked to. In transmitter mode, the user must select the desired protocol among the supported protocols.

Protocol is selected from the unit's Settings menu or from the Toolbox² app.

Supported protocols

	Receiver mode	Transmitter mode
CRMX Classic	X	X
CRMX²	X	
W-DMX G3	X	X
W-DMX G4	X	
W-DMX G4S	X	X
W-DMX G5	X	