lumenradio
Creating Connectivity for a Better Tomorrow

INDOOR WIRELESS DMX

With groundbreaking patented Cognitive Coexistence technology, our CRMX™ technology for wireless DMX has become the de-facto wireless lighting control standard across the globe. Our Wireless DMX products offers unprecedented reliability and will give you the trust you need to control your fixtures wirelessly. Running on the unlicensed 2,4 GHz frequency all of our products can be used anywhere in the world.

CRMX Nova

Our CRMX Nova product serie is designed to meet the requirements of entertainment lighting; withstanding wear & tear of touring, rental and stage use.

CRMX NOVA FX RDM

RDM/ETHERNET FLEX PRODUCT

CRMX Nova FX RDM can be configured either as a transmitter or a receiver for one full DMX/RDM universe of up to 512 channels, making it ideal for rental applications. CRMX Nova FX RDM supports both wired and wireless RDM.

KEY FEATURES
- Single Universe Flex unit
- DMX512-A and RDM support
- Up to 1000 meter link range
- 5 ms latency
- Automated Cognitive Coexistence
- Forward Error Correction

CRMX NOVA TX2 RDM

RDM/ETHERNET TRANSMITTER

CRMX Nova TX2 RDM is a dual universe RDM enabled transmitter. Input can be provided by XLR or Ethernet inputs. CRMX Nova TX2 RDM supports both wired and wireless RDM.

KEY FEATURES
- DMX512-A and RDM support
- Up to 1000 meter link range
- 5 ms latency
- Automated Cognitive Coexistence
- Forward Error Correction

CRMX NOVA RX RDM

RDM RECEIVER

CRMX Nova RX RDM is a single universe RDM enabled receiver. It has support for one full DMX/RDM universe of up to 512 channels being transmitted by a CRMX transmitter. Connect a CRMX Nova RX RDM to any RDM enabled fixture to get wireless feedback from the fixture.

KEY FEATURES
- DMX512-A and RDM support
- Up to 1000 meter link range
- 5 ms latency
- Automated Cognitive Coexistence
- Forward Error Correction
- Compatible with W-DMX™ transmitters

MoonLite™

MoonLite™ is a brand new patent-pending wireless lighting control product with CRMX technology combined with Bluetooth connectivity and a built-in battery.

MOONLITE

DMX FLEX PRODUCT

MoonLite™ has the same reliable functionalities as all CRMX products but in a much smaller size. MoonLite™ enables tablet and phone based lighting control softwares to connect without the need for extra hardware. It's ideal for use at clubs, small stage events, in theaters and temporary events where wireless DMX connectivity is needed.

KEY FEATURES
- Wireless CRMX reciever/transmitter
- Bluetooth compatible with app
- Colour coded pairing
- Built-in battery

Specifications	CRMX Nova FX RDM (Flex reconfigurable)	CRMX Nova TX2 RDM (RDM transmitter)	CRMX Nova RX RDM (RDM receiver)	MoonLite
Model code (Order code)	IN-RFX1 (800-3001)	IN-RTX2 (800-2101)	IN-RRX1 (800-2001)	IN-MFX1 (800-2201)
Supported protocols				
USITT DMX-512 (1986 & 1990) and DMX512-A	Yes	Yes	Yes	Yes
Art-Net I, II & 3, ETCNet 2 & 3, Strand ShowNet, Streaming ACN, Pathport, KiNet V1 & V2	Yes, input any protocol and output any protocol	Yes, input any protocol	No	No
RDM ANSI E1.20	Yes	Yes	Yes	Yes
Works with CRMX SuperNova RDM Controller	Yes	Yes	Yes	Yes
Firmware upgrade	Ethernet/ Over the air	Ethernet/ Over the air	XLR/ Over the air	XLR/ Over the air/ Bluetooth
DMX interface				
Number of universes supported	1	2	1	1
Full DMX fidelity and frame integrity	Yes	Yes	Yes	Yes
Error correction and packet recovery	Yes	Yes	Yes	Yes
Frame synchronization	Less than 0.01 ms	Less than 0.01 ms	Less than 0.01 ms	Less than 0.01 ms
End-to-end DMX latency	Less than 5 ms	Less than 5 ms	Less than 5 ms	Less than 5 ms
Auto sensing of DMX frame rate and size	Yes	Yes	Yes	Yes
Supported DMX frame rates	0.8 – 7352 Hz Transmitter mode / 1 – 830 Hz[1] Receiver mode	0.8 – 7352 Hz	1 – 830 Hz[1]	0.8 – 7352 Hz Transmitter mode /1 – 830 Hz[1] Receiver mode
Number of DMX channels supported	0 – 512	0 – 1024	0 – 512	0 - 512
Loss of DMX input behavior	DMX output will go into high impedance state	Timeout after 1.25 s	DMX driver will go into high impedance state	DMX output will go into high impedance state
ESD protected interfaces	Yes	Yes	Yes	Yes
W-DMX™ G2/G3/G4/G4S Compatibility[2]	Yes, in receive mode	No	Yes	Yes, in receive mode
Power				
High voltage input	100-240VAC / 47-70Hz / 0.12A / 10W	100-240VAC / 47-70Hz / 0.25A / 22W	100-240VAC / 47-70Hz / 0.12A / 10W	No
Low voltage input	12VDC ±20% / 0.6A / 7.5W	12VDC ±20% / 1A / 12W	12VDC ±20% / 0.2A / 2.5W	5VDC / 0.5A / 2.5W
Power over Ethernet	Yes	Yes	No	No
Transient protected power inputs	Yes	Yes	Yes	Yes
RF characteristics				
Modes of operation	Transmitter, Receiver	Transmitter	Receiver	Transmitter, Receiver
Automated Cognitive Coexistence	Yes	Yes	Yes	Yes
Dynamic adaptive frequency hopping	Yes	Yes	Yes	Yes
Recoverable Radio Packet Error Rate	30%	30%	30%	30%
Operational frequency range	2402-2480 MHz	2402-2480 MHz	2402-2480 MHz	2402-2480 MHz
RF output in high power mode	300 mW (25 dBm)[3]	300 mW (25 dBm)[3]	300 mW (25 dBm)[3]	
RF output in normal power mode	100 mW (20 dBm)	100 mW (20 dBm)	100 mW (20 dBm)	100 mW (20 dBm)
RF output in low power mode	35 mW (15 dBm) or 10 mW (10 dBm)	35 mW (15dBm) or 10 mW (10 dBm)	35 mW (15 dBm) or 10 mW (10 dBm)	35 mW (15 dBm) or 10 mW (10 dBm)
RF modulation	GFSK	GFSK	GFSK	GFSK
Sensitivity at 0.1% Packet Error Rate	-96 dBm	-96 dBm	-96 dBm	-96 dBm
Tested link range (High power mode using standard antennas in free line-of-sight)	Up to 1000 m	Up to 1000 m	Up to 1000 m	Up to 300 m
Recovery time upon loss of radio link	Less than 1 s	N/A	Less than 1 s	Less than 1 s
Approvals				
FCC: 15.247&68 Class B; Canada ICES 003 CE; EN 301 489-1; EN 301 489-3; EN 300 328; SS-EN 61547:2009; EN 60 950; SRRC - China; ARIB STD-T66 - Japan	Yes	Yes	Yes	Yes
Environment				
Operating temperature range (ambient)	-20° C to +50° C -4° F to 122° F	-20° C to +50° C -4° F to 122° F	-20° C to +50° C -4° F to 122° F	-20° C to +50° C -4° F to 122° F
Humidity	0-90% non-condensing	0-90% non-condensing	0-90% non-condensing	0-90% non-condensing
Physical				
Enclosure	Anodized extruded aluminum	Anodized extruded aluminum	Anodized extruded aluminum	Plastic (ABS)
Dimensions (W x H x D) excluding antenna	110 x 44 x 160 mm 4.3" x 1.7" x 6.3"	220 x 44 x 125 mm 8.6" x 1.7" x 4.9"	110 x 44 x 160 mm 4.3" x 1.7" x 6.3"	100 x 50 x 26 mm 3.9" x 2.0" x 1.0"
Weight	0.8 kg, 1.8 lbs	0.9 kg, 2.0 lbs	0.7 kg, 1.5 lbs	0,135 kg 0.3 lbs
Connectors				
Antenna connector	RP-TNC female	RP-TNC female	RP-TNC female	N/A internal antenna
DMX connectors	1 XLR 5-pin female	2 XLR 5-pin male	1 XLR 5-pin female	2 XLR 5-pin; male and female
Ethernet connectors	1 RJ45	1 Neutrik® Ethercon™ RJ45		
DC input	Pluggable terminal strip, Phoenix® MSTB 2.5	Pluggable terminal strip, Phoenix® MSTB 2.5	Pluggable terminal strip, Phoenix® MSTB 2.5	USB Micro B
AC input	IEC 320-C14 Male	IEC 320-C14 Male	IEC 320-C14 Male	
Supplied accessories	AC power cord, DC power connector, 2 dBi RP-TNC antenna	AC power cord, DC power connector, 2 dBi RP-TNC antennas	AC power cord, DC power connector, 2 dBi RP-TNC antenna	Velcro

[1] Limited by the DMX512-A standard [2] Compatible with W-DMX™ transmitters on the 2.4 GHz band [3] Allowed in North America only

SRRC ARIB STD-T66

All CRMX products are covered by the United States Patent No. 7,432,803.

lumenradio
www.lumenradio.com