RadioDMX™

Wireless DMX Distribution System

Professional strength Wireless DMX Distribution with the reliability, range, flexibility and ease of use demanded by today's performances.

Interactive Technologies' RadioDMX wireless DMX distribution system represents the state-of-the-art in wireless control of professional stage lighting equipment. Using the RadioDMX system, lighting control networks can be seamlessly transmitted through the air. Such "cableless" transmission allows for the operation of lighting instruments in new and exciting locations and makes getting control signals to impractical or inconvenient places a snap.

Using the latest in Digital Spread Spectrum communications technology, the Plug-and-Play RadioDMX system provides wirelessly transmitted DMX signals with exceptional range, speed and worry-free operation. Utilizing an exceptionally fast 2.4 GHz transceiver and the power of multiple processors, RadioDMX produces the smoothest possible fades and great looking moving light effects.

RadioDMX offers many practical features for professional stage lighting and automation projects.

RadioDMX transmits and receives all 512 dimmers in a DMX data link. Multiple receivers may be placed in different locations to receive DMX signals from a single receiver. Up to 16 transmitters, each broadcasting a different DMX signal, can be used in the same area without interfering with each other. This feature allows wireless control of as many as 8192 dimmers.

RadioDMX can provide similar reliability and performance as hard-wired DMX data links, while also allowing lighting instruments to be controlled remotely without direct data cable connections. RadioDMX transmitters broadcast an airborne DMX data link to RadioDMX receivers. The receivers then recreate the transmitted data link, allowing multiple fixtures to be operated at a remote location.

The RadioDMX system is fully Plug-and-Play, requiring minimal (if any) setup by the end user. The easy to use LCD menu features full diagnostic status messages and onscreen help. RadioDMX systems are ready to operate immediately out of the box with the necessary certifications for usage nearly world-wide.

Features:

- 2.4 GHz Frequency Band
- Does not interfere with wireless microphones or two-way radios
- Range over 4 miles (6km) with optional antennas
- Unlimited receivers for each transmitter
- Use up to 16 transmitters for multiple DMX universes
- Transmit up to 8192 channels
- User selectable Transmit and Receive modes
- Plug-and-Play operation
- FCC and ETS compliance for worldwide use

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Professional Entertainment and Architectural Lighting Control Products

For additional product information and support:
www.interactive-online.com

Ordering Information:

RadioDMX

RD-2400	RadioDMX Transceiver

RadioDMX Package

RD-2400-INT	RadioDMX Package (RadioDMX, Power Supply & Antenna)

Accessories

RD-P30	RadioDMX Universal Input Power Supply
RD-P12D	RadioDMX 12VDC Battery/Mobile Power Supply
RD-RMS	RadioDMX Rack Mounting Shelf
RD-NEMA4X	RadioDMX NEMA 4X Weathertight Enclosure
RD-ATA2	RadioDMX Custom ATA Road Case

Antennas

R24-A200-S	2.4 GHz 2dB Right-Angle Whip Antenna (attach to back of unit or use 'SS' type cable)
R24-A210-N	2.4 GHz 9dB Omnidirectional Antenna (requires 'SN' type cable)
R24-A220-N	2.4 GHz 15dB Yagi Directional Antenna (requires 'SN' type cable)
R24-A230-N	2.4 GHz 9dB Corner Reflector Antenna (requires 'SN' type cable)

Extension Cables

R24-Cxx-SN	2.4 GHz Coax Patch Cable (Rev-SMA-Male to N-Male)*
R24-Cxx-SS	2.4 GHz Coax Patch Cable (Rev-SMA-Male to Rev-SMA-Female)*

*Note: Replace 'xx' with length in feet

*Note: Max. recommended length is 5 feet

Specifications:

Transmitter Mode

- DMX-512 Protocol:
  - Transmits all 512 dimmers in DMX data link
  - Any contiguous subset of dimmers may be chosen
  - Expansion to 8192 dimmers possible with 16 transmitters
- Lightwave Research Protocol:
  - Up to 32 fixtures may be transmitted
  - Supports Cyberlight®, Intellabeam®, Emulator® and Trackspot®
  - Expansion to 512 fixtures possible with 16 transmitters
- Automatically detects protocol being used
- Single receiver selection for point-to-point mode
- Broadcast selection for multipoint mode
- 16 different RadioDMX networks supported (allows multiple systems to be used in same area)
- Transmitted update rate is data dependant, typically 40/second
- Active sensing of receivers at the transmitting unit
- Remote transmitter enable

Receiver Mode

- Receive DMX data starting at any dimmer from 1 to 512
- Select 16 different RadioDMX networks from which to receive data
- 255 unique receiver IDs for identification at transmitter
- Advanced error detection avoids false outputs
- Automatically detects protocol being transmitted
- Selectable loss-of-signal actions:
  - Hold last scene
  - Stop output
  - Blackout
  - Yield to external source

Front Panel

- Large 16 character backlit LCD display
- Three button menu interface
- Automatic context-sensitive onscreen help
- Dual-color Status LED showing overall condition
- Automatic backlight shutoff for dark operation

Rear Panel

- 5-pin XLR DMX input and output connectors
- Reverse polarity SMA connector for antenna or extension cable
- LCD display contrast adjustment
- Power switch

RF Transceiver

- Worldwide license-free operation
- Complies with FCC Part 15.247 and ETS 300-328
- RF Frequency Range:
  - Global: 2401 - 2480 MHz (US/Europe)
  - France: 2448 - 2478 MHz
  - Spain: 2445 - 2475 MHz
  - Japan: 2475 - 2495 MHz
  - Canada: 2452 - 2478 MHz
- Up to 80 frequency-hopping channels
- Effective distance:
  - 3500' (1070m) line-of-sight outdoors
  - 500' (150m) to 1500' (450m) indoors and/or through obstacles
  - Greater than 4 miles (6km) with optional high-gain antennas
- Selectable 10mW, 100mW transmit power
- -95 dBm receiver sensitivity
- Point-to-point and multipoint topologies supported
- Steerable (diversity) antenna mode

Power Requirements

- 9 VDC @ 200mA
- 12-24 VDC with optional mobile power supply
- Class 2 Input

Dimensions

Length:	8.0" (203mm)
Width:	6.1" (155mm)
Height:	2.0" (51mm)
Weight:	34oz. (972g)

Environmental

- Operating Temperature -22°F to 158°F (-30°C to 70°C)
- 0 to 95% humidity, non-condensing

Note: In order to maintain the highest possible product quality, Interactive Technologies reserves the right to change specifications without notice. Some of the available functions may be altered over the life of the product and functions not described here may be added.

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