WIRELESS DIMMING ROOM CONTROLLER

LMRC-611-16M



- Built-in IPv6 Mesh and Bluetooth[®] low energy technology antenna provides robust signal strength and reliable communication
- Quick and easy KO mounting and wireless installation—no
 Cat 5e cables!
- Uses IPV6 Mesh to establish network communication with all DLM wireless devices
- Plenum-rated wireless room controller with 0-10 volt dimming output
- Commissioning using DLM Configuration App and Plug n' Go automatic configuration



DESCRIPTION

The LMRC-611-16M is a wireless DLM room controller, part of the wireless Digital Lighting Management (DLM) system which includes occupancy sensors, daylighting controls, and switches for energy-efficient room control. The LMRC-611-16M includes one relay to switch a total of 16 amps, a high-efficiency switching power supply, and both Class 1 and Class 2 0–10 volt outputs for control of dimmable loads including compatible LED drivers and electronic ballasts.

OPERATION

The LMRC-611-16M room controller is wired to a single 120 or 277 volt circuit. It communicates via a self formed wireless IPv6 mesh network to sensors and switches in DLM local network. Once installed it forms a wireless mesh network by automatically connecting to the edge DLM devices in the room (wireless DLM switches and sensors) drastically reducing installation time and eliminating wiring errors. Plug n' Go commissioning is then accomplished through one of two options:

- DLM Configuration App available for iOS* or Android*. Simply walk through the on screen prompts to connect and configure wireless DLM devices in the room. Plug n' Go automatic configuration assigns all loads connected to dimming room controllers to the dimming switch upon system startup.
- Push-to-Pair Press the "config" button on each wireless device in the room to pair them together.

After commissioning, Plug n' Go automatically configures system components for the most energy-efficient operation. The room controller then dims or switches lighting or motor loads in response to input from the communicating devices. When a dimming input is received, the relay switches on automatically when the dimmed level rises above zero, and off when it reaches zero. It also monitors the current and voltage of the connected load. Each room controller stores up to 16 scene preset levels for its dimmed output.

APPLICATIONS

LOCATION/

TYPE

LMRC-611-16M room controllers are ideal for single or multiple zone on/off or dimming control applications including private offices, open offices, conference rooms and classrooms.

PLUG N' GO AUTOMATIC CONFIGURATION

DLM room controllers manage Plug n' Go automatic system configuration, which establishes functionality based on the installed components. Each LMRC-611-16M includes a Bluetooth low energy technology radio to communicate with the DLM Configuration App on the installer's mobile device, instead of configuring settings using the LMCT-100 IR remote. Dimming and system parameters may also be customized using Push n' Learn.

When room controllers are connected, the system defaults to automatic on/off operation. At system startup, default dimming parameters are established including: levels for scene presets 1-4; fade times; and fade and ramp rates.

PROJECT

L1 legrand

FEATURES

- Component of the wireless Digital Lighting Management integrated control system
- Robust and reliable BACnet IPv6 Mesh Network based on open standards & protocols
- Device Validation: Trusted hardware chips prevent outside devices from connecting to the lighting control network
- Zero touch provisioning: Pre-loaded digital identity and security profile increases system security level
- Ongoing AES encryption: Communication between devices is protected by AES128 symmetric key encryption
- Multiple options for commissioning: the DLM Configuration
 App for iOS or Android, Push n' Learn
- Firmware can easily be updated over the air using the DLM Configuration App via Bluetooth low energy technology
- Push n' Learn[™] functionality for personalization without the need for tools or a PC

- Built-in IPv6 Mesh/Bluetooth low energy technology antenna provides robust signal strength and reliable communication
- IPv6 Mesh wireless standard delivers reliable, long range, low latency wireless communication that is scalable for a single room with up to 48 loads or devices
- On/Off/Dim local override button for each load
- Blue LED for load status
- 0-10V signal opens on loss of LMRC power
- Instantaneous current and voltage measurement of connected load
- Zero-crossing circuitry for each relay for reliability and increased product life
- UL 2043 plenum rated
- The product meets the materials restrictions of RoHS

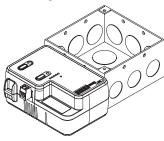
SPECIFICATIONS

- Input Voltage: 120/277VAC, 50/60Hz
- Load Requirements:
 - Incandescent: 16A @ 120VAC
 - Ballast and E-ballast: 16A @ 120/277VAC
- Class 1 & 2 Dimming Output, 0-10V sinks up to 50mA per channel
- Connection to DLM Network: Wireless IPv6 Mesh
- Wireless Standards supported:
 - IPv6 Mesh (6LoWPAN / 802.15.4 / 2.4GHz), range up to 100 ft.
 - Bluetooth low energy (802.15.4 / 2.4GHz), range up to 30 ft.
- Device Security: -Factory provisioned trusted hardware

- Built-in Antenna: IPv6 Mesh and Bluetooth low energy
- Wireless Encryption: Wireless Encryption: AES 128-bit symmetric key
- DLM local network parameters:
 - Up to 48 loads
 - Up to 48 communicating devices
- Operating conditions: for indoor use only; @120/277V: 32-131°F (0-55°C); 5-95% RH, non-condensing
- UL and cUL listed (E101196)
- FCC part 15 compliant
- · Five year warranty

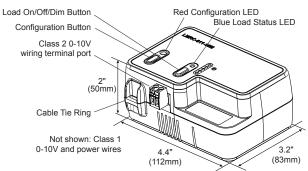
MOUNTING & CONTROLS

Mounting



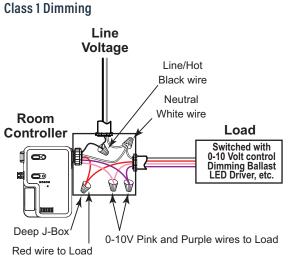
Mount to 1/2" KO on a deep J-box

Controls and Dimensions



WATTSTOPPER®

WIRING



NOTE: Per UL, the 0-10V negative dimming wire color has been changed from gray to pink.

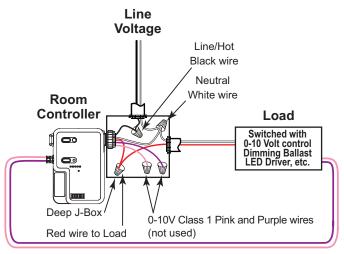
WIRELESS CONNECTION



IPv6 Wireless communication between DLM Room devices over 6LoWPAN

Bluetooth low energy communication for **mobile App support**

Class 2 Dimming



0-10V Class 2 Dimming control wires

Distance Recommendations:

30' max between LMRC-611-16M and mobile device

60' max. between LMRC-611-16M and battery device

6" minimum and 100' maximum between any LMRC-6xx, LMPL-6xx load controller

ORDERING INFORMATION

Catalog #		Description	Voltage	Total Rating
	LMRC-611-16M	1 Relay Wireless Room Controller, 0-10V dimming, with metering	120/277VAC	16A ballast, E-ballast or incandescent

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28351r4 Rev 04/24