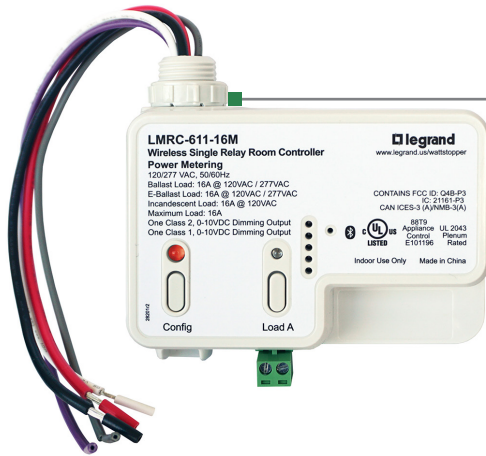


WIRELESS ON/OFF/0-10 VOLT DIMMING ROOM CONTROLLER | LMRC-611-16M



- 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!
- Plug n' Go™ automatic configuration with pre-programmed sequence of operations profiles in DLM Configuration App
- Uses IPV6 Mesh to establish secure network communication with all DLM wireless devices
- Plenum-rated wireless room controller with 0-10 volt dimming output
- Commissioning using DLM Configuration App
- Advanced real time metering of voltage and current (+/- 2% accuracy)

Description

The LMRC-611-16M is a wireless DLM room controller, part of the foundation of the NEW wireless Digital Lighting Management (DLM) system which includes occupancy sensors, daylighting controls, and switches for energy-efficient control, as well as wireless bridges and a border router to network rooms together. 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 secure 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 three options:

1. **DLM Configuration App available for iOS® or Android®.** Simply walk through the on screen prompts to connect the wireless DLM devices in the room and choose from Sequence of Operations profiles. Plug n' Go automatic configuration assigns all loads connected to dimming room controllers to the dimming switch upon system startup.
2. **Push-to-Pair** by pushing the "config" button on each wireless device in the room to pair them together.
3. **LMCS for networked projects.** Wattstopper LMCS software provides an easy method for commissioning the entire building and applying desired settings to devices on the network.

After commissioning, Plug n' Go automatically configures system components for the most energy-efficient operation. During commissioning, a pre-programmed sequence of operations



profile can be selected for different standard energy codes within the DLM Configuration App. 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.

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 or through LMCS.

When room controllers are connected only to wireless occupancy sensors, the system defaults to automatic on/off operation. If a wireless wall switch is added to a system with one load, the load defaults to manual-on/automatic-off operation. If there is a wall switch and multiple loads, load one turns on automatically, while additional loads default to manual-on control; all loads turn off automatically. At system startup, default dimming parameters are established including: levels for scene presets 1-4; fade times; and fade and ramp rates.

Applications

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. Built-in metering helps facility managers track building power usage for lighting or other loads. A wireless border router (LMBR-650) is required to expose DLM local network power measurement readings to the DLM Dashboard software or BAS.

PROJECT	LOCATION/ TYPE

Features

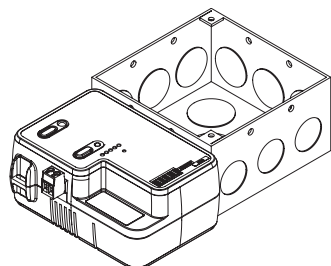
- Component of the NEW wireless Digital Lighting Management integrated control system
- Robust and reliable BACnet IPv6 Mesh Network based on open standards & protocols
- Industry leading wireless security, backed by Secure Commission and Secure Control technology
 - Device Validation: Trusted hardware chips prevent outside devices from connecting to the lighting control network.
 - Zero touch provisioning: Pre-loaded digital identity and security profile makes the system automatically secure.
 - Ongoing AES encryption: Communication between devices is protected by AES128 symmetric key encryption
- Three options for commissioning: the DLM Configuration App for iOS or Android, Push n' Learn, or LMCS for networked projects
- Firmware can easily be updated over the air using the DLM Configuration App (which communicates via Bluetooth low energy technology) or LMCS software.
- Built-in IPv6 Mesh/Bluetooth low energy technology antenna provides robust signal strength and reliable communication
- A fully networked DLM system, paired with RACCESS remote support, allows updates to be pushed to the entire building from the Wattstopper Remote Operations Center (ROC), avoiding downtime or service calls.
- IPv6 Mesh wireless standard delivers reliable, long range, low latency wireless communication that is scalable for a single room or entire buildings with thousands of rooms
- Push n' Learn™ functionality for personalization without the need for tools or a PC
- 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: Secure-factory provisioned trusted hardware with Legrand-private certificate chain and signed ECC keypair
- Wireless Encryption: AES 128-bit symmetric key, randomly generated per-PAN, shared via secure DTLS only
- Built-in Antenna: IPv6 Mesh and Bluetooth low energy
- Other
 - Compatible Border Router: Wattstopper LMBR-650
 - BACnet IPv6 capable
- 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

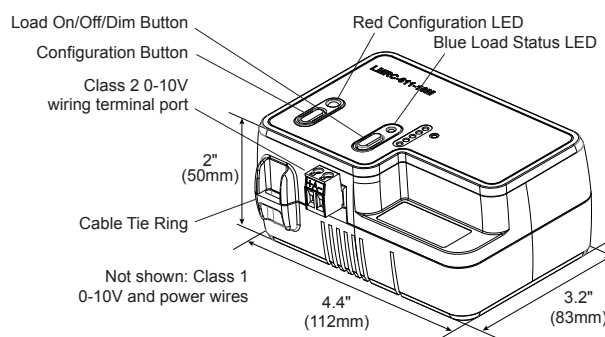
Mounting & Controls

Mounting



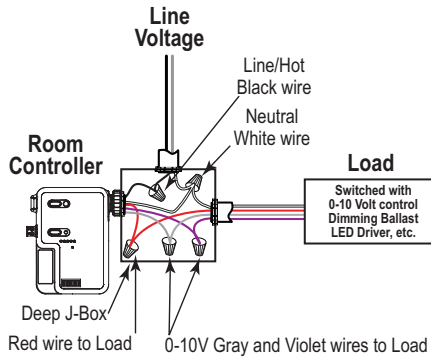
Mount to 1/2" KO on a deep J-box

Controls and Dimensions

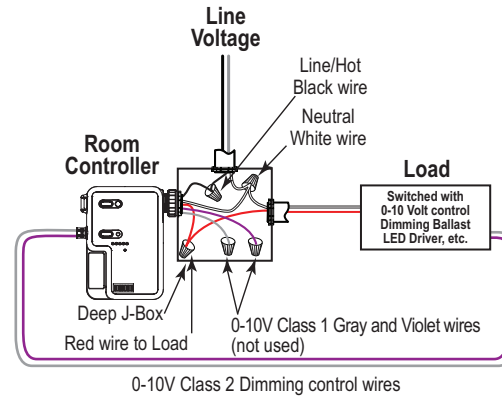


Wiring

Class 1 Dimming



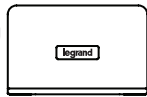
Class 2 Dimming



Wireless Connection

LMBR-650

For networking and managing rooms, floors, and building (optional)



--- IPv6 Mesh for **secure networking** of DLM rooms and devices over 6LoWPAN

LMRC-611-16M



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

Wireless Dimmer and/or Scene Switch



Wireless Sensor and/or Photosensor

DLM Configuration App on a mobile device



Distance Recommendations:

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

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

10' minimum and 100' maximum between LMBR-650 and LMRC-611MCC

Ordering Information

Catalog #	Description	Voltage	Total Rating
<input type="checkbox"/> 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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