LMRC-100 Series Digital On/Off Room Controllers

Plenum-rated controllers with line voltage relay(s) and switching power supply

Components of Digital Lighting Management integrated control systems

Plug to other components using Cat 5e cables with RJ45 connectors eliminating wiring errors

Plug n' Go automatic configuration for maximum energy efficiency

Support energy saving manual-on and bi-level lighting control strategies

PROJECT
LOCATION/TYPE

Product Overview

Description

LMRC-100 Series Digital Room Controllers include one or two relay(s) for on/off control of a total of 20 amps, and a high-efficiency switching power supply. They are the foundation of a WattStopper Digital Lighting Management (DLM) system, and allow integration of occupancy sensors, daylighting sensors and switches for energy-efficient lighting control.

Operation

LMRC-100 Series Room Controllers operate on one 120 or 277 volt, 20 amp, feed and provide Class 2 power to sensors and switches via the DLM local network. Once powered up, Plug n' Go automatically configures system components for the most energy-efficient operation. The room controllers then switch lighting or motor loads on and off in response to input from the communicating devices. The DLM system may be reconfigured using Push n' Learn without the need for tools or a PC.

Plug n' Go Automatic Configuration

DLM room controllers manage Plug n' Go automatic system configuration, which establishes functionality based on the installed components. When room controllers are connected only to occupancy sensors, the system defaults to automatic on/off operation. If a 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.

Applications

LMRC-100 Series Room Controllers are ideal for single or multiple zone on/off lighting control applications. The LMRC-101 helps specifiers comply with basic ASHRAE 90.1 requirements, while the LMRC-102 is designed for bi-level switching in IECC, EPAct, California Title 24 or LEED projects. Both controllers are appropriate for applications in private offices, open offices, conference rooms, lunch rooms and break rooms in any commercial building.

Features

- Plug n' Go™ automatic configuration for quick installation and maximum energy savings
- Push n' Learn™ functionality for personalization without the need for tools or a PC
- Digital Lighting Management components plug together on a free-topology Cat 5e DLM local network
- On/Off button for each load

- LED indicates status of connected load
- 3 RJ45 ports with integral strain relief and hinged dust cover
- Zero-crossing circuitry for each relay for reliability and increased product life
- Attach to standard electrical box through ½" knockout; UL2043 plenum rated
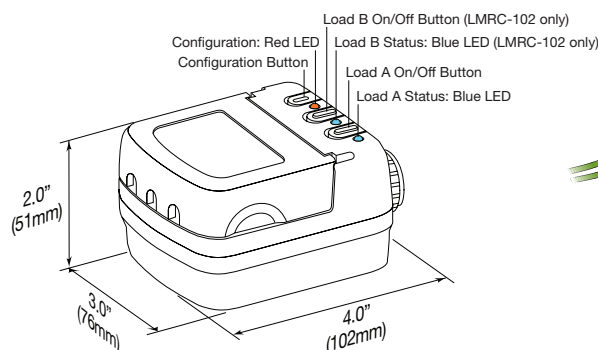- RoHS compliant

Specifications

- Input/ouput voltage: 120/277VAC, 50/60Hz
- Maximum 20A combined load per Room Controller; each relay rated for:
  - Ballast or incandescent: 20A
  - Motor load: 1Hp
- Class 2 output to DLM local network: 24VDC, 150mA across 3 RJ45 ports
- DLM local network parameters with LMRC-100 Series and/or LMPL-101 Room Controllers only:
  - Maximum current: 600mA
  - Category 5e cable, up to 1,000′
  - Maximum of 4 room controllers, controlling up to 8 loads
  - Up to 24 communicating devices
- Operating conditions: for indoor use only; 32-104°F (0-40°C); 5-95% RH, non-condensing
- UL (88T9) and cUL listed
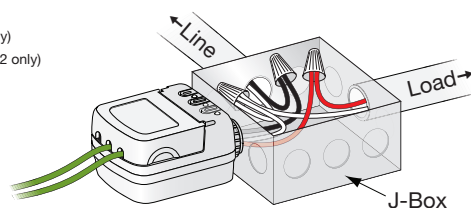- FCC part 15 compliant
- Five-year warranty

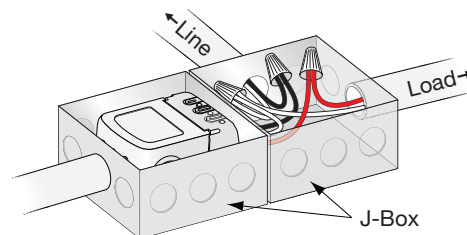## Controls & Mounting

Controls and Dimensions

Configuration: Red LED
Configuration Button
Load B On/Off Button (LMRC-102 only)
Load B Status: Blue LED (LMRC-102 only)
Load A On/Off Button
Load A Status: Blue LED

2.0" (51mm)
3.0" (76mm)
4.0" (102mm)

LMRC-100 Series Room Controllers include a 1/2″ (12.7mm) threaded nipple and locking ring.
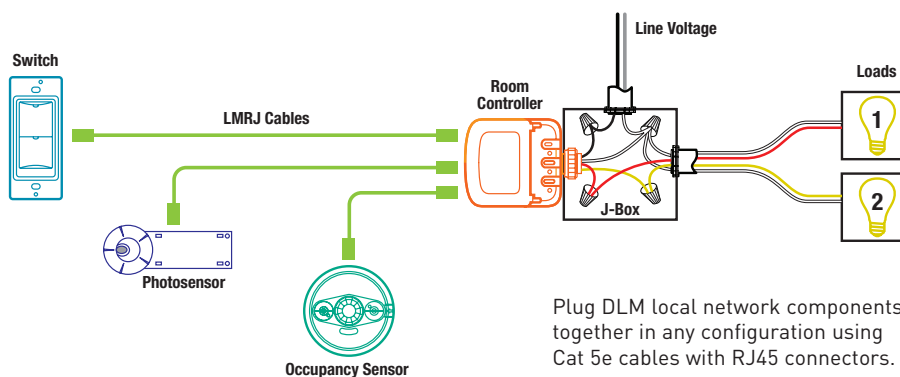
Mounting and Wiring

Line
Load
J-Box

Mounting outside a j-box (plenum space). Two LMRC Room Controllers may be mounted to the j-box.

Line
Load
J-Box

Mounting inside a j-box. Low voltage wiring is run to the LMRC Room Controller in conduit.

Connecting

Sample Connection Diagram for Bi-Level Control Using LMRC-102

Switch
LMRJ Cables
Photosensor
Occupancy Sensor
Line Voltage
Room Controller
J-Box
Loads
1
2

Plug DLM local network components together in any configuration using Cat 5e cables with RJ45 connectors.

Ordering Information

Catalog No.	Description	Voltage	Ballast(A)	Incan(A)	Motor	Class 2 Output
			Total Load Rating			
☐ LMRC-101	Single Relay Room Controller	120/277VAC 50/60Hz	20	20	1 Hp	24VDC 150mA
☐ LMRC-102	Dual Relay Room Controller					