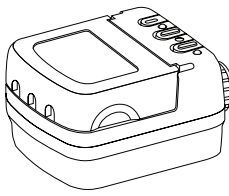


LMRC-102

Digital Lighting Management (DLM)

Dual Relay Room Controller



THIS UNIT IS PRE-SET FOR PLUG n' GO™ OPERATION, ADJUSTMENT IS OPTIONAL.

For full operational details, adjustment and more features of the product, see the DLM System Installation Guide provided with the LMRC-102 room controller, and also available at www.wattstopper.com

INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS, LOCAL AND NEC CODES.

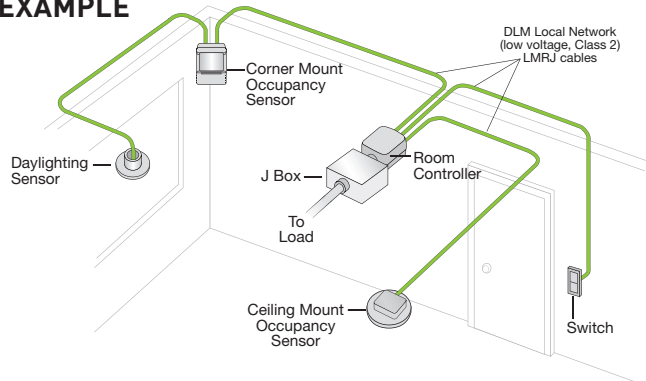
Wire connections shall be rated suitable for the wire size (lead and building wiring) employed.

For Class 2 DLM devices and device wiring:

- To be connected to a Class 2 power source only.
- Do not reclassify and install as Class 1, or Power and Lighting Wiring.
- WARNING:** Do not install to cover a junction box having Class 1, 3 or Power and Lighting Circuits.

Input Voltage120/230/277VAC, 50/60Hz
Load RequirementsNot to exceed 20A total
Each relay rated for up to:	
Incandescent 20A @ 120VAC
Ballast 20A @ 120/277VAC
Motor 1Hp @ 120/240VAC
Output150mA @ 24VDC
DLM Local Network Characteristics:	
Provides low voltage power over Cat 5e cable (LMRJ).	
Supports up to 24 communicating devices, including 4 LMRC-10x or LMPL-101 max per each DLM Local Network.	
Free topology up to 1,000ft of low voltage cable.	
Environment:	
Operating Temperature32° to 104°F [0° to 40°C]
Storage Temperature23° to 176°F [-5° to 80°C]
Relative Humidity5 to 95% (non condensing)
Patent Pending	

PLACEMENT EXAMPLE

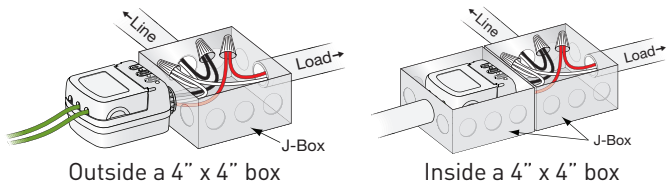


CAUTION: TURN THE POWER OFF AT THE CIRCUIT BREAKER BEFORE WIRING.

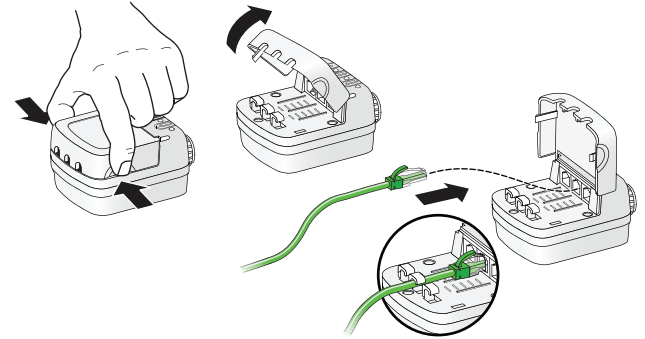
WARNING: TO CONNECT A COMPUTER TO THE DLM LOCAL NETWORK USE THE LMCI-100. NEVER CONNECT THE DLM LOCAL NETWORK TO AN ETHERNET PORT - IT MAY DAMAGE COMPUTERS AND OTHER CONNECTED EQUIPMENT.

MOUNTING THE CONTROLLER

The LMRC-102 room controller can either be mounted external to a junction box, placing it in the plenum space or mounted directly inside a 4" x 4" junction box.



ATTACHING CABLES

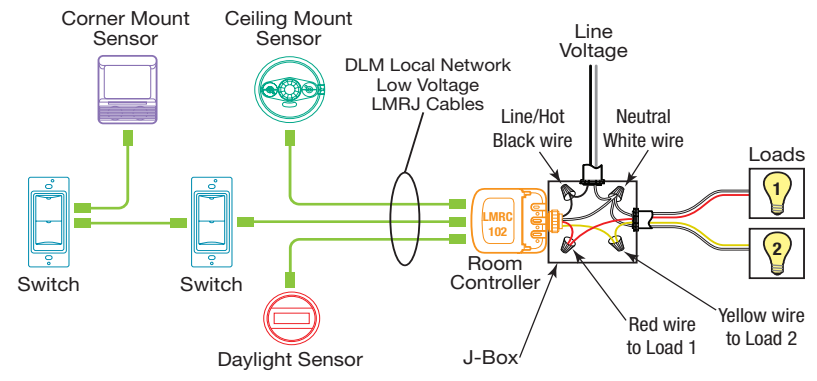


Remove rubber jack covers if using all 3 RJ45 receptacles. Leave covers in place for all unused receptacles.

CONNECTIVITY

The LMRC-102 communicates to all other DLM devices connected to the DLM Local Network. Connection drawings are for example only. The low voltage LMRJ cables can connect to any DLM device with an open RJ45 receptacle.

All line voltage wiring is #12 AWG. Each relay is rated for up to 20A, total load for LMRC-102 not to exceed 20A.



PLUG n' GO OPERATION (PnG)

Plug n' Go supports the most energy efficient control strategy. For example, if at least two loads, one switch and one occupancy sensor are connected to the DLM local network, the system operates load A as Automatic ON, Automatic OFF and load B as Manual-On, Automatic-Off.

See DLM device Quick Start Guides to determine how each device affects the PNG operation of the LMRC-102.

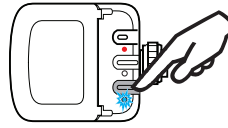
Load Control Arbitration

To take full advantage of automatic PnG configuration, review these simple rules about load control arbitration.

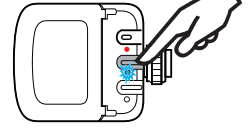
After the room controllers are connected to the DLM Local Network and powered up they automatically negotiate to determine which controller becomes the Master and the load numbers for each relay on the DLM Local Network.

The **Master** is the controller with the most load relays. If more than one controller has the most relays, the one with the highest serial number becomes the Master.

Load A ON/OFF button

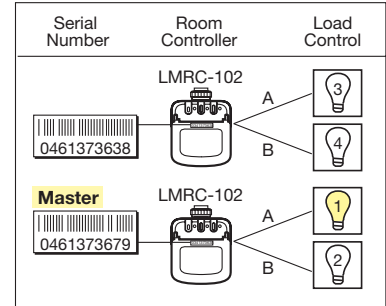


Load B ON/OFF button



Blue LED ON when load is ON

The LMRC-102 has two load relays. In a DLM local network with only LMRC-102 room controllers, the LMRC-102 with the highest serial number is the Master, carrying Load 1 and Load 2. The next highest serial number would have Load 3 and Load 4, and so forth.



UNIT ADJUSTMENT - PUSH n' LEARN (PnL)

Load Selection Procedure

A configuration button (Config) allows access to our patented Push n' Learn™ technology to change binding relationships between sensors, switches and loads.

Step 1: Enter Push n' Learn

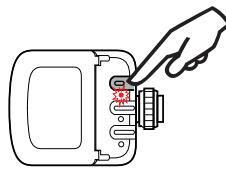
Press and hold the Config button (on any DLM device) for 3 seconds.

The red LED on the LMRC-102 begins to blink as does the red LED on ALL other communicating devices connected to the DLM Local Network.

The red LEDs continue to blink until you exit PnL mode.

All loads in the room turn OFF immediately after entering PnL, then one load will turn ON. This is Load #1, which is bound to switch button #1 and occupancy sensors as part of the Plug n' Go factory default setting.

All switch buttons and sensors that are bound to this load have their blue LED solid ON.



Config button & red LED

Step 2: Load selection

Press and release the Config button to step through the loads connected to the DLM Local Network. As each load turns ON note the devices (switch buttons and sensors) that are showing a bright solid blue LED. These devices are currently bound to the load that is ON. The blue LED on the room controller or plug load controller connected to the load is also lit.

- To **unbind** a switch button from a load, press the switch button while its blue LED is ON bright. The blue LED goes dim to indicate the button no longer controls the load that is currently ON.
- To **unbind** an occupancy sensor, press the up (▲) or down (▼) adjustment button while its blue LED is ON. The blue LED turns OFF to indicate the sensor no longer controls the load that is currently ON. Pressing the switch or up (▲) or down (▼) button again while the load is ON **rebinds** the load to the button or sensor and the blue LED illuminates brightly.

Step 3: Exit Push n' Learn

Press and hold the Config button until the red LED turns OFF, approximately 3 seconds.

TROUBLESHOOTING

Loads do not operate as expected.

LEDs on a switch or sensor don't light	<ol style="list-style-type: none"> 1. Check to see that the the device is connected to the DLM Local Network. 2. Check for 24VDC input to the device: Plug in a different DLM device at the device location. If the device does not power up, 24VDC is not present. <ul style="list-style-type: none"> • Check the high voltage connections to the room controller and/or plug load controller(s). • If high voltage connections are good and high voltage is present, recheck DLM Local Network connections between the device and the room controller and/or plug load controller(s).
The wrong lights and plug loads are controlled	<ol style="list-style-type: none"> 1. Configure the switch buttons and sensors to control the desired loads using the Push n' Learn adjustment procedure.
LEDs turn ON and OFF but load doesn't switch	<ol style="list-style-type: none"> 1. Make sure the DLM local network is not in PnL. 2. Check load connections to room controllers and/or plug load controllers.