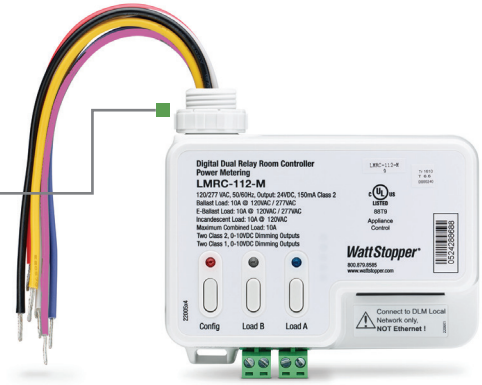
ON/OFF/0-10 VOLT DIMMING ROOM CONTROLLERS

LMRC-112/LMRC-112-M

Plenum-rated controllers with line voltage relays and 0-10 volt dimming outputs

Knockout mounting for easy installation; Class 1 and/or Class 2 connection for 0-10V wiring

Available with or without metering (+/- 2% accuracy)



Plug n' Go™ automatic configuration for quick installation and maximum energy efficiency

Store 16 scene preset levels for each load

Support energy saving manual-on, partial-on and dimming control strategies

DESCRIPTION

LMRC-112 room controllers include two relays to switch a total of 10 amps, a high-efficiency switching power supply and dual 0-10 volt outputs per relay for control of dimmable loads including compatible LED drivers or electronic ballasts. They are the foundation of a Digital Lighting Management (DLM) system, and allow integration of occupancy sensors, daylighting controls and switches for energy-efficient control.

OPERATION

LMRC-112 room controllers operate on one 120 or 277 volt, 10 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 dim or switch lighting or motor loads in response to input from the communicating devices. The relay turns on when the dimming level rises above zero and turns off when it returns to zero, coordinating power control with the 0–10V signal to the load. They also monitor the current draw of the total connected load. Each room controller stores up to 16 scene preset levels for each dimmed output. Additionally, the LMCT-100-2 wireless configuration tool can be used for load configuration.

Room controllers include circuity to open their 0-10V signal on loss of LMRC's power, so any separately powered ballast or driver connected to those 0-10V wires will go to full brightness.

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. At system startup, default dimming parameters are established including: levels for scene presets 1-4; fade times; and fade and ramp rates. Dimming and system parameters may be customized using Push n' Learn.

APPLICATIONS

LMRC-112 room controllers are ideal for multiple zone dimming control applications including private offices, open offices, conference rooms and classrooms. Metering models help facility managers who want to track building power usage for lighting or other loads. A network bridge (LMBC-300) is required to expose DLM local network power measurement readings to a segment manager or BAS.

FEATURES

- 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/Dim local override button for each load
- LED indicates status of each load
- 0-10V signal opens on loss of LMRC power
- Optional lamp burn in; 12 or 100 hours
- Optional instantaneous current and voltage measurement of total connected load
- 2 RJ45 ports; molded cable tie ring for strain relief
- Zero-crossing circuitry for each relay for reliability and increased product life
- UL 2043 plenum rated
- This product meets the materials restrictions of RoHS
- BAA/TAA-compliant models available

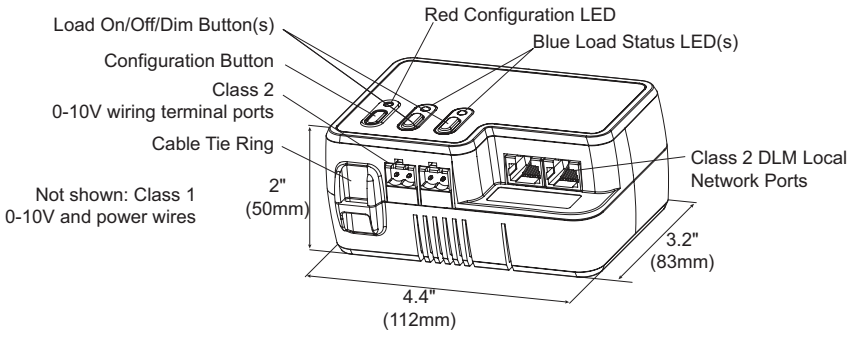
PROJECT		LOCATION/ TYPE	

SPECIFICATIONS

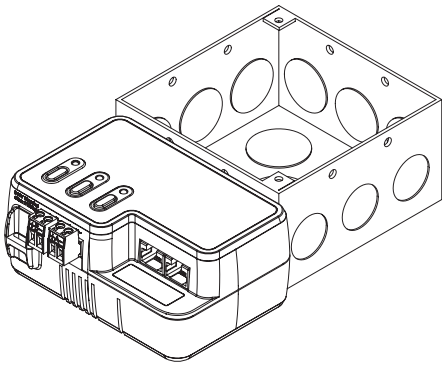
- Voltage: 120/277VAC; 50/60Hz
- Maximum 10A combined load per Room Controller; each relay rated for 10A ballast, E-ballast or incandescent
- Galvanically isolated Class 1 pigtails and Class 2 terminals for 0-10VDC signal; sinks up to 50mA per output (Class 1/ Class 2) per channel for control of compatible ballasts (25 if each sources 2mA)
- Class 2 output to DLM local network: 24VDC, 150mA across 2 RJ45 ports
- Metering capability in LMRC-112-M provides power monitoring within 2% of the true value.
- DLM local network parameters:
  - Maximum current: 800mA
  - Maximum cable (Cat5e): 150′ per intelligent device on local DLM network, up to 1,000′ max.
  - Up to 64 loads
  - Communicating Device Limitation:
    When all power supplies are 10X-Series: 24 Devices.
    When other power supplies are present: 48 Devices.
  - Maximum of (5) 10X-Series power supplies (LMRC-10X, LMPL-101, LMPB-100) per local network.
- Operating conditions: for indoor use only; @120/277V: 32-131°F (0-55°C); 5-95% RH, non-condensing
- UL and cUL listed (E101196), Complementary Listed to Emergency Lighting Equipment (UL924)
- FCC part 15 compliant
- Five year warranty

CONTROLS & MOUNTING

Controls and Dimensions



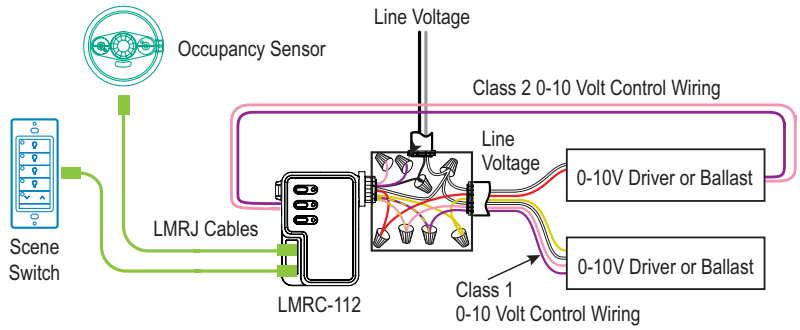
Mounting



Mount to 1/2″ KO on a deep J-box

Load Parameter (for each dimmed output)	Default Setting	Available Options
High trim	85%	1-100%
Low trim	0%	0-99%
Preset On Level	50%	0-100%
Preset level: Scenes 1-16	1: 100%, 2: 75%, 3: 50%, 4: 25%, 5-16: 100%	All: 0-100%
Preset fade time	2 seconds	0 seconds – 18 hours
Lamp burn in time	0	0, 12 or 100 hours

SAMPLE CONNECTION DIAGRAM WITH CLASS 1 & CLASS 2 DIMMING CONTROL WIRING



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

Wire Color	Function
Black	Line In
White	Neutral
Red	Load A Switched Hot
Yellow	Load B Switched Hot
Purple	Load A 0-10V (+)
Pink	Load A 0-10V (–)
Purple/Yellow	Load B 0-10V (+)
Pink/Yellow	Load B 0-10V (–)

NOTE: Per UL, starting in 2021, the 0-10V negative dimming wire color has been changed from gray to pink.

ORDERING INFORMATION

Catalog #		Description	Voltage	Total Rating	Class 2 Outputs
☐	LMRC-112	2 Relay Room Controller, 0-10V dimming	120/277VAC	10A ballast, E-ballast or incandescent	24VDC, 150mA and 0-10VDC (0-10VDC signal also provided as Class 1)
☐	LMRC-112-U	2 Relay Room Controller, 0-10V dimming, BAA/TAA compliant*			
☐	LMRC-112-M	2 Relay Room Controller, 0-10V dimming, with metering,			
☐	LMRC-112-M-U	2 Relay Room Controller, 0-10V dimming, with metering, BAA/TAA compliant*			
☐	LMCT-100-2	Digital Wireless Configuration Tool			

*Product is compliant with Buy American Act and Trade Agreement Act

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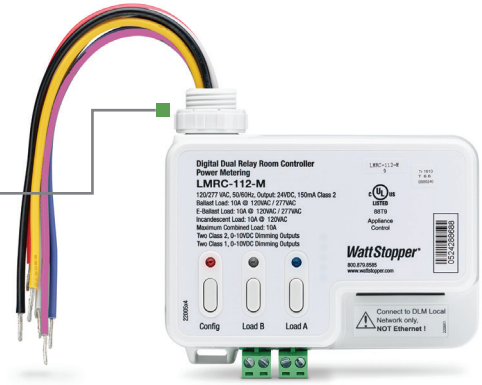
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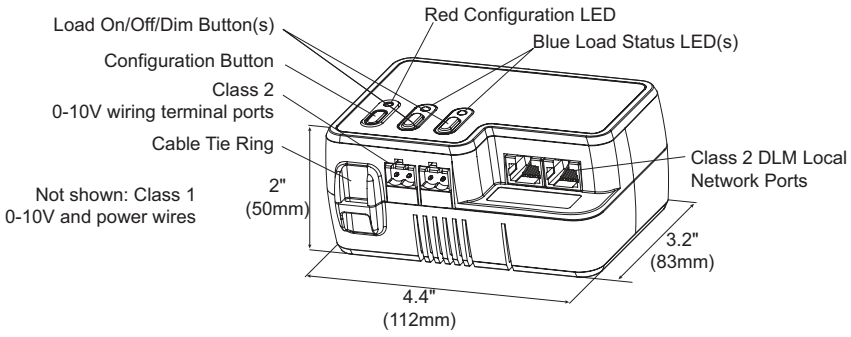
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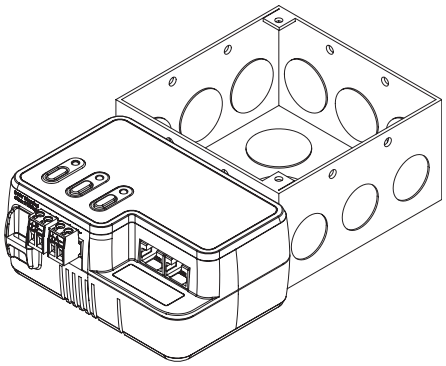
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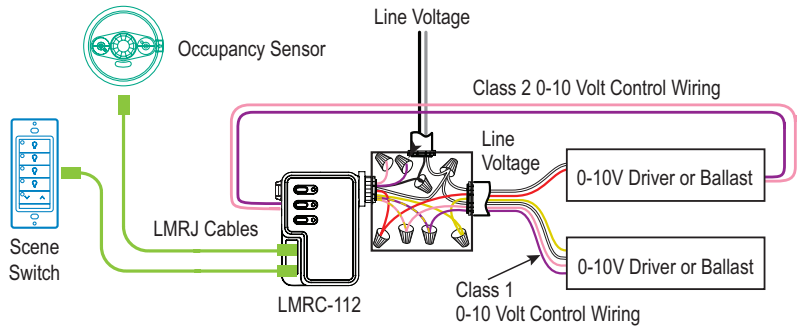
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☐	LMCT-100-2	Digital Wireless Configuration Tool			

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