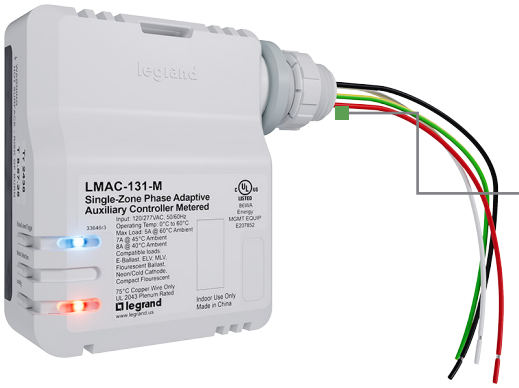
PHASE ADAPTIVE AUXILIARY CONTROLLER WITH METERING

LMAC-131-M

Plenum-rated controllers with line voltage phase dimming

Over-current protection: closes to prevent device damage in an over-current situation.

Advanced real time metering of voltage and current (+/- 3% accuracy)



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

Store 16 scene preset levels for each load

Knockout mounting for easy installation

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

RoHS

DESCRIPTION

The LMAC-131-M Auxiliary controller is capable of controlling phase dimmable loads including compatible LED drivers or electronic ballasts. This auxiliary controller is designed to work in conjunction with DLM room controllers, plug load controllers, and network power boosters and allows for integration of occupancy sensors, daylighting controls, and switches for energy-efficient control.

OPERATION

The LMAC-131-M controller operates on a single 120 or 277 volt feed and draws Class 2 power from the DLM room/plug load/zone controller or panel connected to the local network. Upon powering up, Plug n' Go automatically configures system components for the most energy-efficient operation. The DLM controller then dims or switches lighting loads in response to inputs from the communicating devices. The LMAC-131-M supports both forward and reverse phase dimming. It ships in automatic mode by default, automatically selecting the appropriate dimming type based on the connected load. The Mode button on the device allows for manual override if necessary. Additionally, it monitors the current draw of the total connected load. Each controller stores up to 16 scene preset levels for each dimmed output. The LMAC-131-M may be used emergency lighting applications when used in conjunction with an ELCU-200.

PLUG N' GO AUTOMATIC CONFIGURATION

DLM controllers manage Plug n' Go automatic system configuration, which establishes functionality based on the installed components. When DLM 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. 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 at any time using Push n' Learn™, allowing for tool-free personalization of the system.

APPLICATIONS

The LMAC-131-M is ideal for single zone on/off or dimming control applications such as private offices, open offices, conference rooms, and classrooms. Its built-in metering capability allows facility managers to monitor power consumption on total connected load. A wired or wireless network bridge (LMBC-300 or LMBC-650) is required to share power data with BAS or Segment Manager. This makes the LMAC-131-M an effective solution for energy tracking of phase dimmable loads.

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 to reduce wiring errors
- On/Off/Dim local override button
- LED indicates status of load
- Designed to automatically adapt to either reverse or forward phase dimming when in automatic mode
- Instantaneous current and voltage measurement of total connected load with +/- 3% accuracy on current reading
- Two RJ45 ports; molded cable tie ring for strain relief
- UL 2043 plenum rated
- This product meets the materials restrictions of RoHS

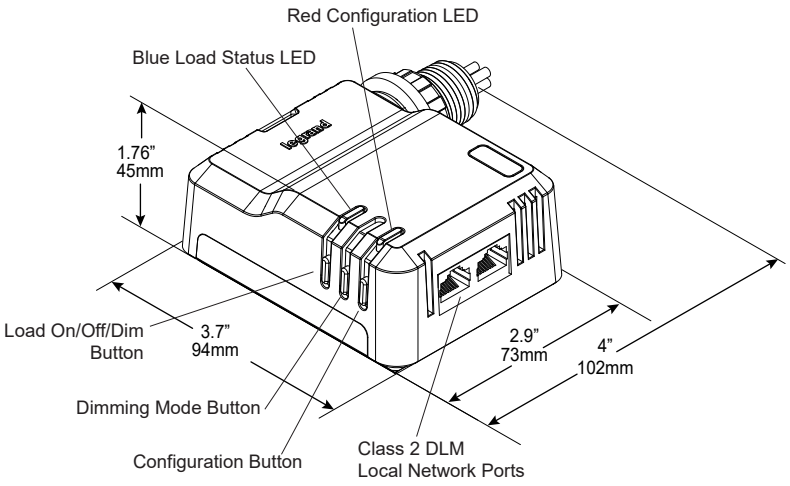
PROJECT		LOCATION/ TYPE	

SPECIFICATIONS

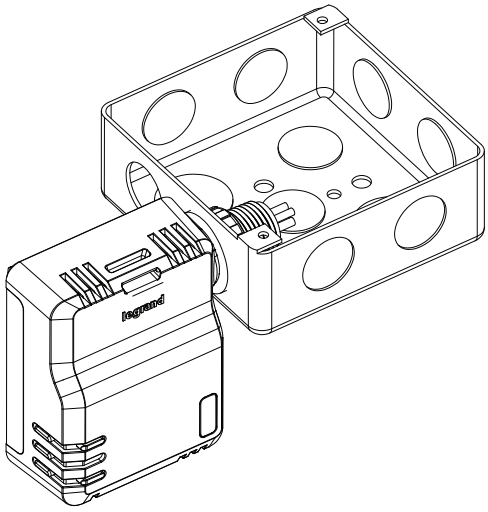
- Load Specifications:
  - Voltage: 120/277VAC; 50/60Hz
  - Max Load: 5A @ 60°C Ambient; 7A @ 45°C Ambient; 8A @ 40°C Ambient
  - Compatible Loads: E-Ballast, ELV, MLV Fluorescent Ballast, M-Ballast, LED, Tungsten/Incandescent, Neon/ Cold Cathode, Compact Fluorescent
- Device Specifications:
  - Voltage: 24VDC
  - Current Consumption: 8mA
  - Power Supply: LMRC, LMPL, LMCP, LMZC controller, or LMPB-100
- Compatible with LMCS Software v5.13 or later and DLM Configuration Tool (LMCT-100-2)
- 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: 32-140°F (0-60°C); 5-95% RH, non-condensing
- FCC part 15 compliant
- Five year warranty

CONTROLS & MOUNTING

Controls and Dimensions



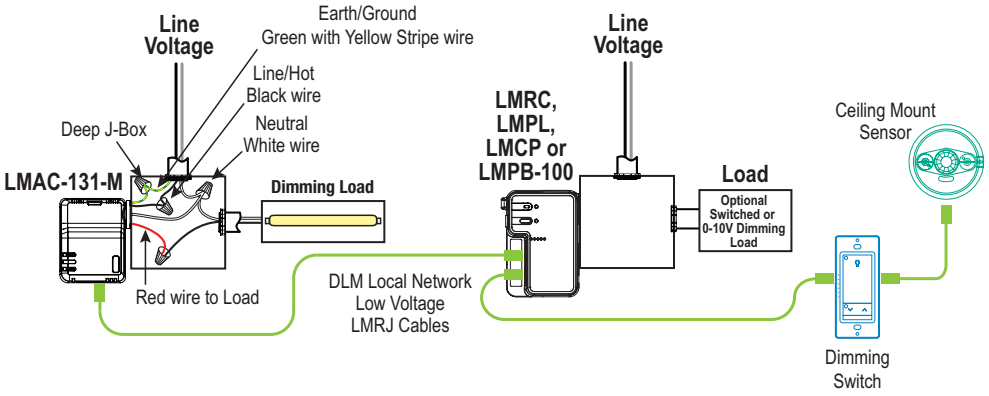
Mounting



Wattstopper recommends installing the LMAC-131-M vertically for optimal performance and to prevent sagging over time.

Load Parameter (for dimmed output)	Default Setting	Available Options
High Trim	100%	0–100%
Low Trim	0%	0–100%
Preset On Level	Use Last Level	1–100%, Use Last Level
Preset Level: Scenes 1-16	1: 100%, 2: 75%, 3: 50%, 4: 25%, 5-16: 100%	All: 0–100%
Preset Fade Rate	50%	0–100%
Lamp Burn-in Time	0	0–100 hours

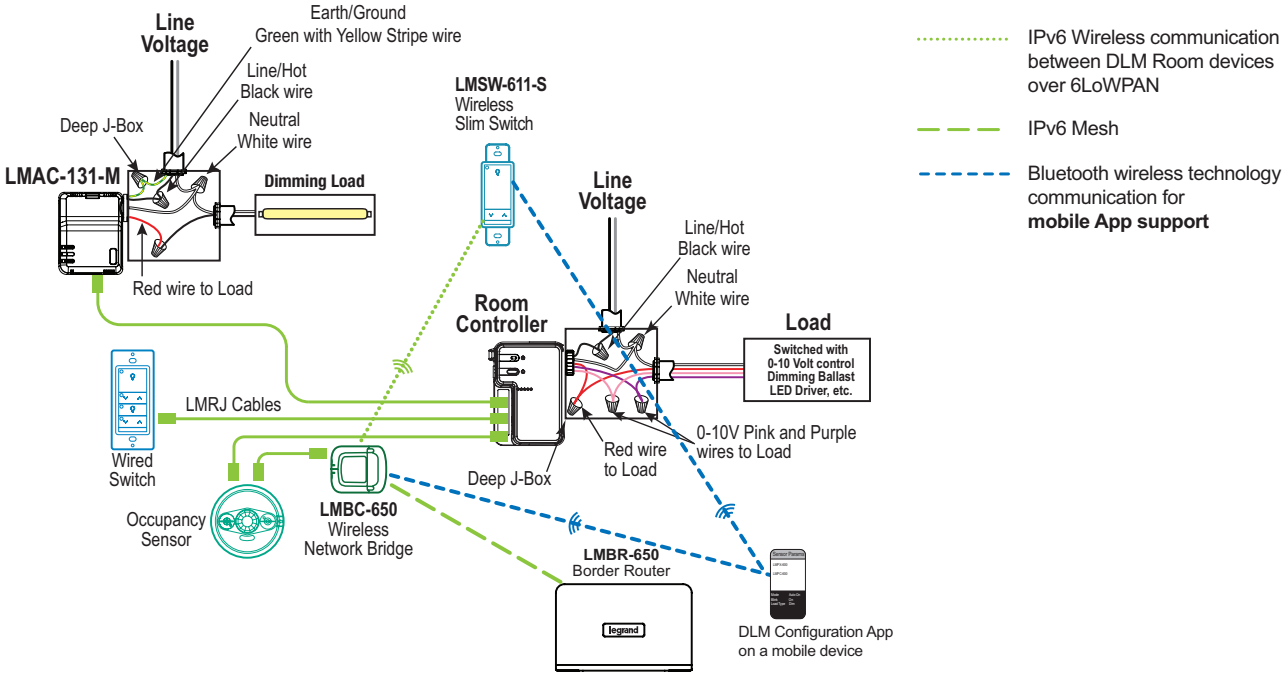
SAMPLE CONNECTION DIAGRAM FOR A WIRED ROOM



Wire Color	Function
Black	Line In
White	Neutral
Red	Load Switched/Dimmed Hot
Green w/ Yellow	Earth/Ground

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

SAMPLE CONNECTION DIAGRAM FOR A HYBRID ROOM WITH WIRED AND WIRELESS DEVICES



Note: For a single (non-networked) hybrid room, the LMBR-650 is not required.

Note: The DLM Config App can only connect with the LMBC-650 to update firmware or pair devices. You need an LMBR-650 and LMCS to commission a Hybrid room. For a single room, without an LMBR-650, LMCS can connect to the LMBC-650 via the LMCI.

ORDERING INFORMATION

Catalog #		Description	Voltage	Total Rating	Class 2 Input
☐	LMAC-131-M	Auxiliary Controller, Phase Dimming	120/277VAC	5A @ 60C 7A @ 45C 8A @ 40C	24VDC, 8mA
☐	LMCT-100-2	Digital Wireless Configuration Tool			

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