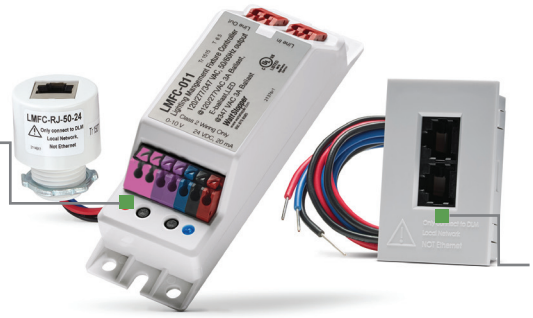
ON/OFF/0-10 VOLT DIMMING FIXTURE CONTROLLER

LMFC-011

Fixture-integrated controller with relay for On/Off/Dim control

Enables discrete control of individual lighting fixtures

Stores 16 scene preset levels



Plug n' Go™ automatic configuration for maximum energy efficiency

0-10 volt dimming control

Separate single- or dual-port RJ45 wiring whip mounts on fixture housing, and provides connectivity to DLM local network

DESCRIPTION

The LMFC-011 fixture controller mounts in individual lighting fixtures to give them connectivity to a Digital Lighting Management (DLM) system. The controller provides a 0-10 volt signal for control of dimmable loads including compatible LED drivers and electronic ballasts and connects to the DLM local network via a single- or dual-port RJ45 wiring whip (ordered separately). Each DLM local network can support up to 64 loads.

OPERATION

The fixture controller operates on 24VDC from the DLM local network, which must be powered by a device such as a zone controller, power booster or room controller. It works with 120/277/347VAC ballasts or drivers. Once powered up, Plug n' Go automatically configures DLM system components for the most energy-efficient operation. The fixture controllers then dim or switch lighting loads in response to input from the communicating devices. When a dimming input is received, the relay switches on when the dimmed level rises above zero, and off when it reaches zero, to coordinate control of power and the 0-10 volt signal to the load. Each controller stores up to 16 scene preset levels for each dimmed output.

PLUG N' GO AUTOMATIC CONFIGURATION

DLM controllers manage Plug n' Go automatic system configuration, which establishes functionality based on the installed components. When fixture 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. However, if an LMZC zone controller is present, all LMFC fixture controller loads default to automatic-on to 50%. 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

Fixture controllers are ideal for areas where the likelihood of reconfiguring the space is high, such as open offices and classrooms. For applications with a large number of fixture controllers, power for the DLM local network is generally supplied by a zone controller. For smaller spaces, power may be supplied by an LMPB power booster, a plug load controller or any DLM room controller.

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/Dim local override button for controlled load
- LED indicates status of each load
- Optional lamp burn in; 12 or 100 hours
- Zero-crossing circuitry for reliability and increased product life
- This product meets the materials restrictions of RoHS

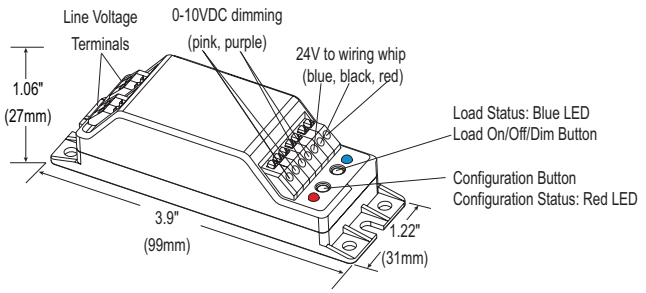
PROJECT		LOCATION/ TYPE	

SPECIFICATIONS

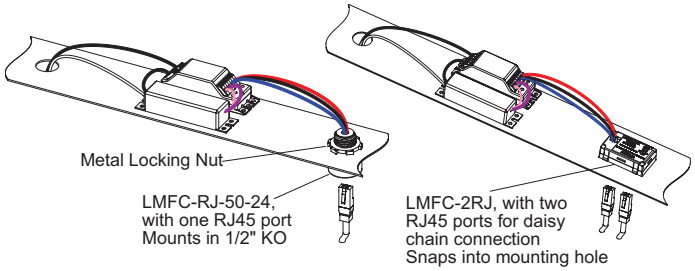
- Input voltage: 24VDC from DLM local network (requires powered load controller, power booster or relay panel)
- Current consumption: 7mA
- Connection to DLM local network: One RJ45 port (LMFC-RJ-50-24) or two RJ45 ports (LMFC-2RJ) and 24" leads for connection to terminals on LMFC-011
- Load Rating: 120/277/347VAC; 50/60Hz; maximum load 3A; mechanically latching relay rated for ballast, tungsten, E-ballast, CFL and LED
- Class 2 dimming control signal: 0-10VDC, sinks up to 3mA for control of compatible ballasts
- Operating conditions: for indoor use only; @120/277V: 32-158°F (0-70°C), @347V 32-131°F (0-55°C); 5-95% RH, non-condensing
- UL and cUL listed (E101196)
- FCC part 15 compliant
- Five year warranty

CONTROLS & MOUNTING

Controls and Dimensions



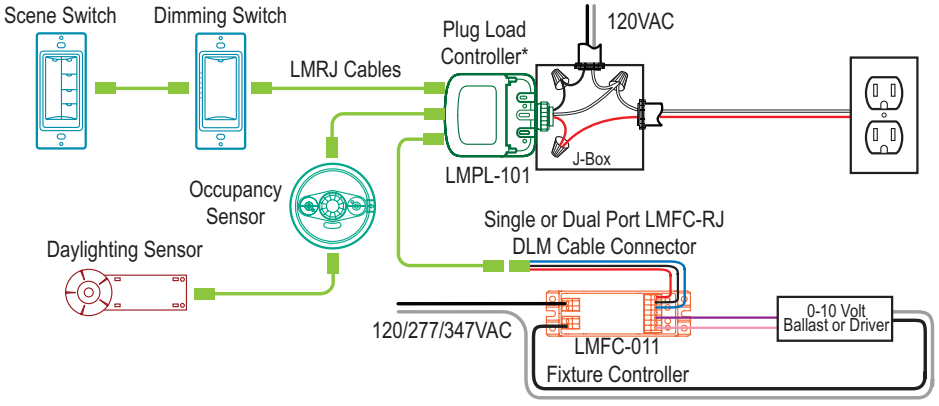
Mounting and Wiring



Note: Length of low voltage cable within the fixture must not exceed 24"

Sensor Parameter (for each dimmed output)	Default Setting	Available Options
High Trim	85%	1–100%
Low Trim	0%	0–99%
Preset on level	60%	1–100%
Scene 1-16 levels	1: 100%, 2: 75%, 3: 50%, 4: 25%, 5-16: 100%	All: 0–100%
Fade time	2 seconds	0 seconds – 18 hours
Lamp burn in time	0	0, 12 or 100 hours

SAMPLE CONNECTION DIAGRAM WITH DIMMING SWITCHES AND PLUG LOAD CONTROL



*Each DLM local network must include a zone controller, power booster, plug load controller, room controller or relay panel to supply low voltage power

ORDERING INFORMATION

Catalog #		Description	Input Voltage	Load Rating
☐	LMFC-011	0-10V dimming fixture controller with relay	24VDC	120/277/347VAC, 3A
☐	LMFC-RJ-50-24	DLM cable connector whip with one RJ45 port and 24" leads; fits 1/2" KO		
☐	LMFC-2RJ	DLM cable connector whip with two RJ45 ports and 24" leads; fits rectangular opening		

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