

Digital Lighting Management

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

Push n' Learn™ for simple personalization without sophisticated tools or expensive software

Plugs together using Cat 5e cable and RJ45 connectors eliminating wiring errors

Exclusive wireless tool for ladder-free configuration

First suite of digital room controllers, occupancy sensors, switches and more

Integrates plug load and lighting control



PROJECT
LOCATION/TYPE

Product Overview

Description

Digital Lighting Management (DLM) is an intelligent, distributed control system that automatically maximizes lighting energy efficiency. DLM includes room controllers, occupancy sensors, switches, daylighting sensors, plug load controls, interfaces and accessories that provide convenient, energy-saving control of dimmed and switched loads. System components plug together with Category 5e cables with RJ45 connectors.

Operation

Digital Lighting Management components operate on a free-topology DLM local network. Each DLM local network is managed by one or more room controllers that, upon startup, automatically configure system components for the most energy-efficient sequence of operation using Plug n' Go technology. Devices may be personalized using Push n' Learn pushbutton programming. DLM occupancy sensors and switches feature two-way infrared (IR) communication that enables personal control from handheld remotes, as well as optional remote configuration. A handheld wireless configuration tool can be used to view, modify and store system parameters.

Plug n' Go and Push n' Learn

Plug n' Go establishes default functionality based on the installed components. If a system consists of only a room controller and an occupancy sensor, it will default to auto-on/auto-off operation. If a system includes a single relay room controller, an occupancy sensor and a switch, it will default to manual-on/auto-off operation. A dual relay room controller, an occupancy sensor and a switch will default to bi-level auto-on/auto-off operation; relay 1 turns on automatically while relay 2 defaults to manual-on (both automatically shut off). Push n' Learn mode allows any load to be selected and assigned to any sensor(s), switch(es) and switch button(s). It also allows load parameters such as operating mode (manual- or auto-on), blink warning and daylighting setpoints to be modified.

Energy Savings Beyond Code

Digital Lighting Management has been engineered to meet and exceed energy codes, facilitate sustainable development and provide an unprecedented return on investment for both new construction and retrofit projects. Features, such as bi-level control, daylight harvesting, plug load control and dimming are provided by a range of room controllers, sensors and switches that control virtually all lighting sources in a wide variety of applications. DLM simplifies designing for ASHRAE 90.1, IECC, EAct, California Title 24 and LEED.

Features

- Sensors and switches include infrared (IR) transceiver for bi-directional communication
- On/off and dimming control options
- Handheld remotes for personal control
- Digital sensors feature easy-to-read LCD displays
- Includes self-calibrating daylighting sensors
- Components plug together in any configuration on a free-topology Category 5e DLM local network
- Boot loading capabilities for firmware upgrades
- All DLM products are RoHS compliant



Network Characteristics

WattStopper DLM Local Network Parameters

- Communication and power delivered via Cat 5e cables with RJ45 connectors
- 24VDC power provided by room controller(s)
- Room controllers provide cumulative current output; maximum network capacity 800mA
- Maximum of 4 LMRC-100 Series or LMPL-101 room controllers per DLM local network
- Free topology permits both star and daisy-chain connection patterns
- Up to 1,000 feet of cable per DLM local network
- Maximum of 300 feet between communicating devices
- Supports Plug n' Go and Push n' Learn patent pending technologies

When LMRC-100 Series and/or LMPL-101 Room Controllers are used:

- 150mA per room controller (maximum 4)
- Up to 24 communicating devices
- Up to 8 loads

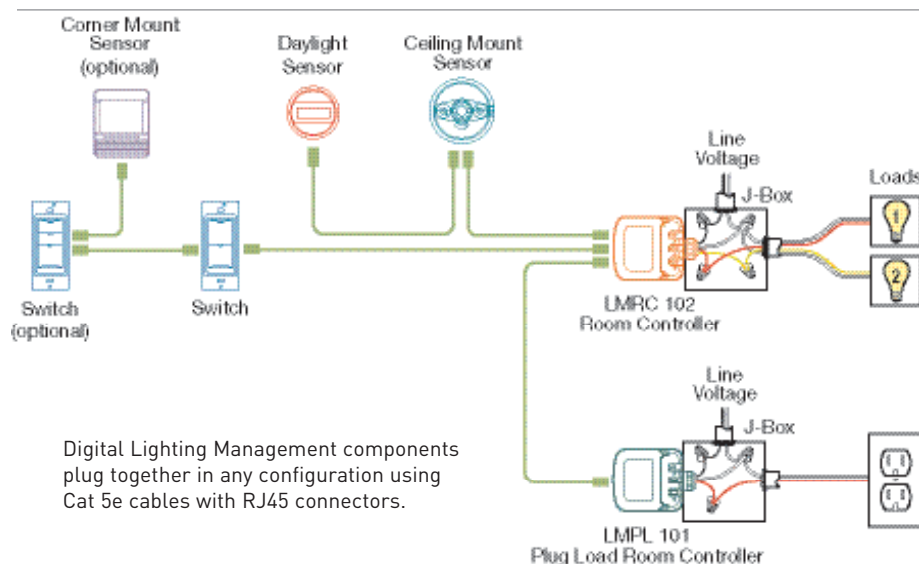
When LMRC-210 Series Room Controllers are used:

- Up to 250mA per room controller (output is limited if network is fully powered)
- Up to 48 communicating devices
- Up to 64 loads

note: LMRC-210 Series Room Controllers can be combined with up to 4 LMRC-100 Series and LMPL-101 Room Controllers on 1 DLM local network.

Connecting

DLM system with bi-level lighting, daylighting and plug load control



Digital Lighting Management components plug together in any configuration using Cat 5e cables with RJ45 connectors.

System Components

Room Controllers	
LMRC-101 Digital On/Off Room Controller with 1 relay	
LMRC-102 Digital On/Off Room Controller with 2 relays	
LMRC-211 Digital On/Off/0-10 Volt Dimming Room Controller with 1 relay and 1 0-10 volt dimming output	
LMRC-212 Digital On/Off/0-10 Volt Dimming Room Controller with 2 relays and 2 0-10 volt dimming outputs	
LMRC-213 Digital On/Off/0-10 Volt Dimming Room Controller with 3 relays and 3 0-10 volt dimming outputs	
LMPL-101 Digital Plug Load Room Controller	
Occupancy Sensors	Personal Controls
LMPX-100 Digital PIR Corner Mount Occupancy Sensor	LMSW-101 Digital 1-Button Wall Switch
LMPC-100 Digital PIR Ceiling Mount Occupancy Sensor	LMSW-102 Digital 2-Button Wall Switch
LMUC-100 Digital Ultrasonic Ceiling Mount Occupancy Sensor	LMSW-103 Digital 3-Button Wall Switch
LMDX-100 Digital Dual Technology Corner Mount Occupancy Sensor	LMSW-104 Digital 4-Button Wall Switch
LMDC-100 Digital Dual Technology Ceiling Mount Occupancy Sensor	LMSW-108 Digital 8-Button Wall Switch
	LMDM-101 Digital 1-Button Dimming Wall Switch
	LMSW-105 Digital 5-Button Scene Switch
	DLM Switch Button Kits and Switch Button Engraving
	LMRH-102 Digital 2-Button IR Remote Control
	LMRH-101 Digital Dimming IR Remote Control
	LMRH-105 Digital Scene IR Remote Control
Daylighting Sensors	Configuration Tools
LMLS-105 On/Off Photosensor	LMCT-100 Digital Wireless Configuration Tool
LMLS-305 0-10 Volt Dimming Photosensor	DLM Computer Interface Tools and Software
Interfaces and Accessories	
LMRJ Series Pre-Terminated Cables and Accessories (available in 6", 3', 10', 15', 25', 50', and 100' lengths, in plenum and non-plenum rated versions)	
LMIR-100 Digital IR Ceiling Mount Receiver	
LMRL-100 Isolated Relay Interface	
LMIO-101 Digital Input/Output Interface	