

LILM Series Lighting Integrator Panel Interiors (LILM8, LILM24, LILM48)

Compatible with Digital Lighting Management switches and occupancy sensors

HDR relays include switch for manual override even when panel is powered off

Integral user interface for setup and diagnostics



Scheduling via DLM Segment Manager or BAS interface

Stand alone or networked operation

Eight independent control channels

PROJECT
LOCATION/TYPE

Product Overview

Description

The LILM series panel provides simple network-capable lighting control enabling the automation of lighting functions throughout an entire facility. The HDR relays in the panel can respond directly to inputs from Digital Lighting Management (DLM) switches and occupancy sensors.

Operation

LILM panels each provide eight automation channels that can be assigned any combination of relays. Each channel can respond to unique schedules sent from the optional Segment Manager or directly from a BACnet-enabled building automation system. Individual relays, or groups of relays, can be controlled by DLM digital switches and occupancy sensors. Controls are assigned to relays using Push n' Learn or through simple menus on the integral user interface.

Networking

When multiple DLM local networks and one or more LILM panels are connected to a high speed digital DLM segment network for remote management, the Segment Manager automatically recognizes them and allows configuration with minimal additional setup.

Applications

LILM panels are ideal for applications that can benefit from the unique features and energy savings of the DLM system. They provide effective control of building exterior lighting as well as larger interior areas that are not suited for DLM distributed controls. Recommended applications include office building lobbies, corridors, loading docks, etc., and school gymnasiums, commons areas and hallways.

Features

- Standard single pole heavy duty relays
- Available in interiors sized for 8, 24, or 48 relays maximum
- Compatible with DLM occupancy sensors
- Two free-topology DLM Cat 5e local networks for switches and sensors
- Programmable DLM switches for control of relays or groups
- Provision for analog photocell for exterior lighting control
- Qualifies for use in ARRA-funded projects



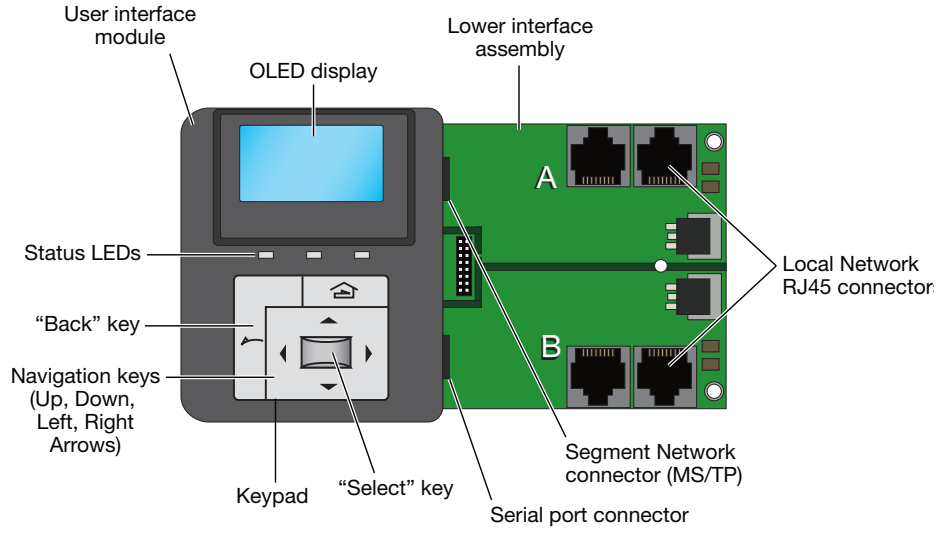
LILM Specifications

- Integral user interface for setup, status and diagnostic capabilities; 5 line by 32 character OLED display with backlight; 7 button keypad
- Class 2 connection to 2 independent DLM local network segments: 24VDC output, up to 250mA across 2 RJ45 ports per segment
- Free-topology DLM local network segments may include digital switches and sensors; Category 5e cable, up to 1,000' total per local network
- Digital network connection for inter panel connectivity and connection to DLM segment network
- Segment network parameters:
 - WattStopper LM-MSTP wire, or equivalent rated for BACnet MS/TP (RS485)
 - Linear topology; 4000' maximum per segment
 - Up to 127 nodes (LILM panel or DLM local network with LMBC-300 Network Bridge or LMRC-3xx Series Room Controller) per segment
- Automation channels: 8 per panel, provide global schedule and control functions; schedule requires LMSM segment manager or third party BAS
- UL and cUL listed
- One year warranty

See General LI (Lighting Integrator) Specifications section for interior mechanical and electrical specifications.

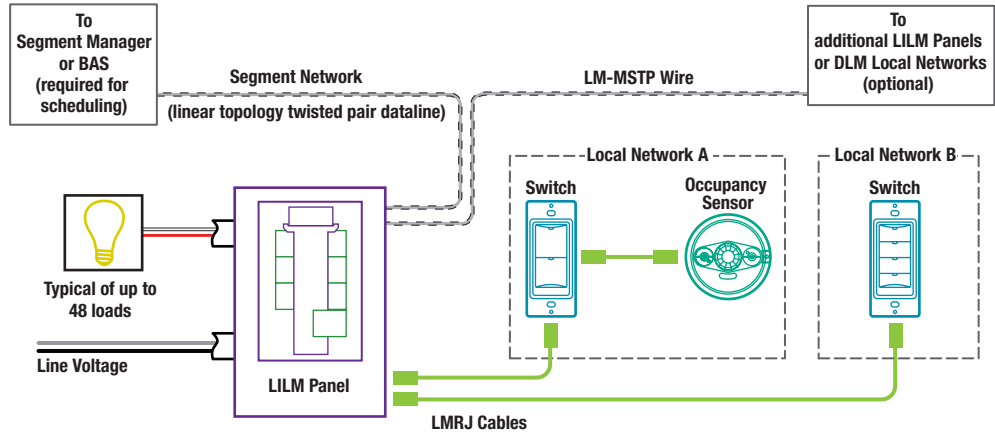
User Interface

LILM User Interface and DLM Local Network Connection Detail



Connecting

Sample Connection Diagram with DLM Switches and Sensor





General LI Information

Description

WattStopper's Lighting Integrator (LI) is a low voltage, relay based lighting control panel. Panel interiors are configured as 8, 24 or 48 relay capacity with the quantity of relays installed as called for on the order. The interior mounts into the appropriate enclosure. The LI panel enclosure and cover are shipped separately from the panel interior to facilitate project rough-in requirements.

Operation

LI relays are driven to a latched on or off position via a 24 volt DC pulse generated by the relay driver cards. A momentary pushbutton is provided for each relay to manually toggle the relay's state with each button press. An isolated contact in the relays provides positive status feedback to the relay driver circuits, which are annunciated by an LED associated with each relay. Removable color-coded terminal blocks allow connection of direct wired low voltage devices for remote control of relays.

- Interior provides complete isolation between line and low voltage when used with a compatible LENC series enclosure
- Individual plug-in, latching style single pole relays with isolated pilot/status contacts
- Integral push button override, status LED, and pilot light output per relay
- Two slots available for optional automation, networking and integration control cards

Operation (cont'd.)

Inputs can be wired to accommodate maintained or momentary three wire or two wire inputs. The switch input circuits are auto sensing and will automatically configure appropriately when WattStopper occupancy sensors are connected.

Smartwiring Direct Wired Switches

A unique WattStopper switching function, this simple button press interface allows any quantity of relays to be assigned quickly to each group switching channel for common on/off control or for pattern (scene) control. Each of the eight channels is provided with an override pushbutton, LED status indicator and terminals for connection of wall switches and occupancy sensors. An eight or 24 size panel can be ordered with one group switch card (8 channels), 48 size panels can have two group switch cards for a total of 16 channels (8 controllable by scheduling, eight by switching only).

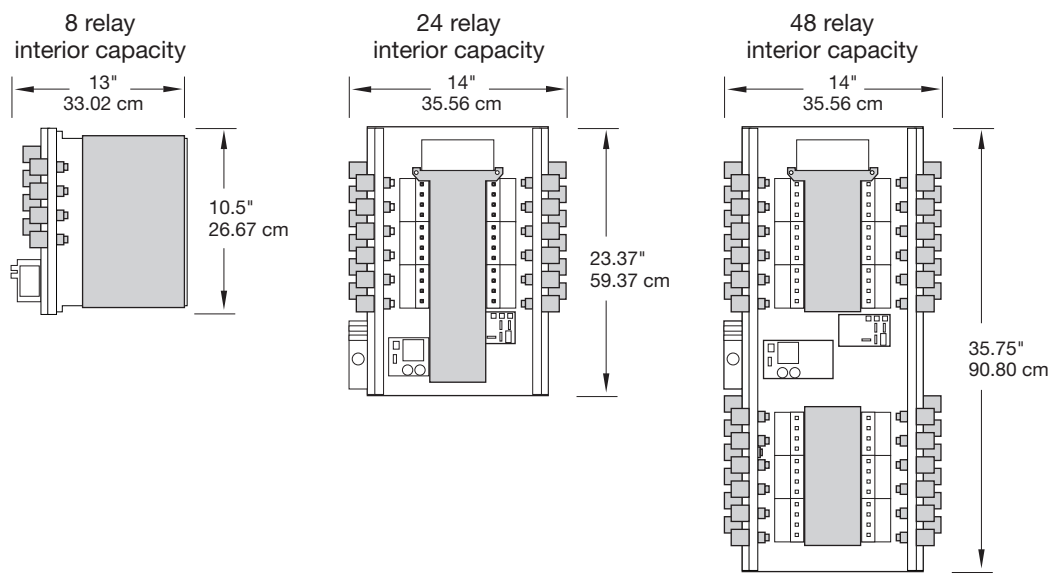
- Supports WattStopper low voltage occupancy sensors without need for separate sensor power packs
- Smartwiring feature allows grouping of relays for common control
- DIN rail mounting provided within the Class 2 section for mounting of optional accessories
- Control multi-pole circuits with optional contactors and compatible LENC enclosure
- Optional configuration available for use on emergency lighting circuits



General LI Specifications

- Interior capacity:
 - 8 SPST relays
 - 24 SPST relays
 - 48 SPST relays
- Input voltage options, 120/277V 60 Hz, 120/347V 60 Hz, 240V 50 Hz
- Low voltage switch inputs, removable terminal blocks with screw-less connection, configurable for three wire momentary, two wire momentary (toggle), and two wire maintained dry contact switches or WattStopper occupancy sensors.
- Accessory power available
 - LI8: 1000 MA @24VAC or 800 MA @ 24VDC
 - LI24 and LI48: 1400 MA @ 24VAC or 800 MA @ 24VDC
- Group switching, eight channels per installed group switching card. One card max per LI8 and LI24. Two cards max LI48.
- SCCR (short circuit current rating) 14,000 amps with HDR Heavy Duty Relay
- HDR relays:
 - Coil voltage, 24 VDC, pulse ON and pulse OFF
 - Mechanically latched contacts
 - 1/2" K.O. mounting, LV plug-connection, individually replaceable
 - Contact ratings:
 - 30 amps ballast @ 277V
 - 20 amps ballast @ 347V
 - 20 amps tungsten @ 120V
 - 30 amps resistive @ 347V
 - 1.5 HP @ 120V
 - Endurance: 300,000 mechanical cycles
- Pilot light output, 24 V rectified or 24VAC, other voltages configurable with external power supply
- Operating conditions: for indoor use only; 32-131°F (0-55°C); 5-95% RH, non-condensing
- One year warranty

Panel Interior Dimensions



Ordering Information

Interior Capacity	Installed Options				
	Voltage Options	Relay Count	Group Switch Card	Emergency Relays	Coil Voltage
<input type="checkbox"/> LILM8	<input type="checkbox"/> 115/277	___ HDR relays	___ GS cards (max	___ EM relay count	<input type="checkbox"/> 115
<input type="checkbox"/> LILM24	<input type="checkbox"/> 115/347	installed (max	1 in 8, 24, 2 in 48)	(Not available in 8-relay size	<input type="checkbox"/> 240
<input type="checkbox"/> LILM48	<input type="checkbox"/> 240	of interior		panels; max. of 24 in 24-relay	<input type="checkbox"/> 277
		capacity)		or 48-relay size interior)	<input type="checkbox"/> 347

Order enclosures for LILM panel interiors separately.