



# Lighting Integrator Automation Level Interior (LIA8, LIA24, LIA48)

Add on modules provide automation features

HDR relays provide manual overrides even when panel is powered off

Eight independent control channels



Scheduling via network clock or BMS interface

Standalone or networked operation

|               |
|---------------|
| PROJECT       |
| LOCATION/TYPE |

## Product Overview

### Description

WattStopper's Lighting Integrator Automation (LIA) level panel provides a simple network enabling automation of lighting functions throughout an entire facility. A selection of function-specific automation modules can be specified to add control features such as scheduling, photocell control, remote override, telephone override, or BAS integration on an as-needed basis.

### Operation

LIA panels provide eight channels for manual control of lighting or implementation of unique pre-programmed automation scenarios. These scenarios, implemented through functional automation modules, include: Scheduled ON/OFF, Manual ON/Scheduled OFF, Manual ON/AS-100 Sweep OFF, Astro ON/Astro OFF, Astro ON/Scheduled OFF, Photocell ON/OFF, and Photocell ON/Scheduled OFF. Dataline switches connect to the panels using a local four-wire dataline and provide manual and afterhours override control.

### Smartwiring

Lighting Integrator provides a unique and flexible means for grouping relays into channels for common control and scheduling. Using a simple button-press user interface called Smartwiring, the user can quickly include or exclude relays from the channels within a panel (requires group switching card). Similarly, smartwiring can be used to group relays or channels for common control by buttons on dataline switches. Relay groups can also be created or adjusted via the plug-in clock/programmer.

### Applications

Automation level Lighting Integrator, along with the desired function-specific automation modules, are ideal for small to medium size projects that require networking of up to 12 panels. Applications include office buildings, schools, retail, warehouses and any other application that requires a basic level of lighting automation without the need for a PC and software.

## Features

- Standard single pole heavy duty relays
- Available in interiors sized for 8, 24, or 48 relays maximum
- DIN rail in Class 2 compartment for mounting function-specific automation modules
- Compatible with AS-100 automatic switches for sweep-based automatic shutoff
- Direct wired switch inputs configure automatically for use with WattStopper occupancy sensors
- Direct wired switch inputs are compatible with three-wire or two-wire momentary or maintained contacts
- Programmable dataline switches for control of relays or channels
- Provision for integral Lightsaver daylighting controls
- Qualifies for use in ARRA-funded projects

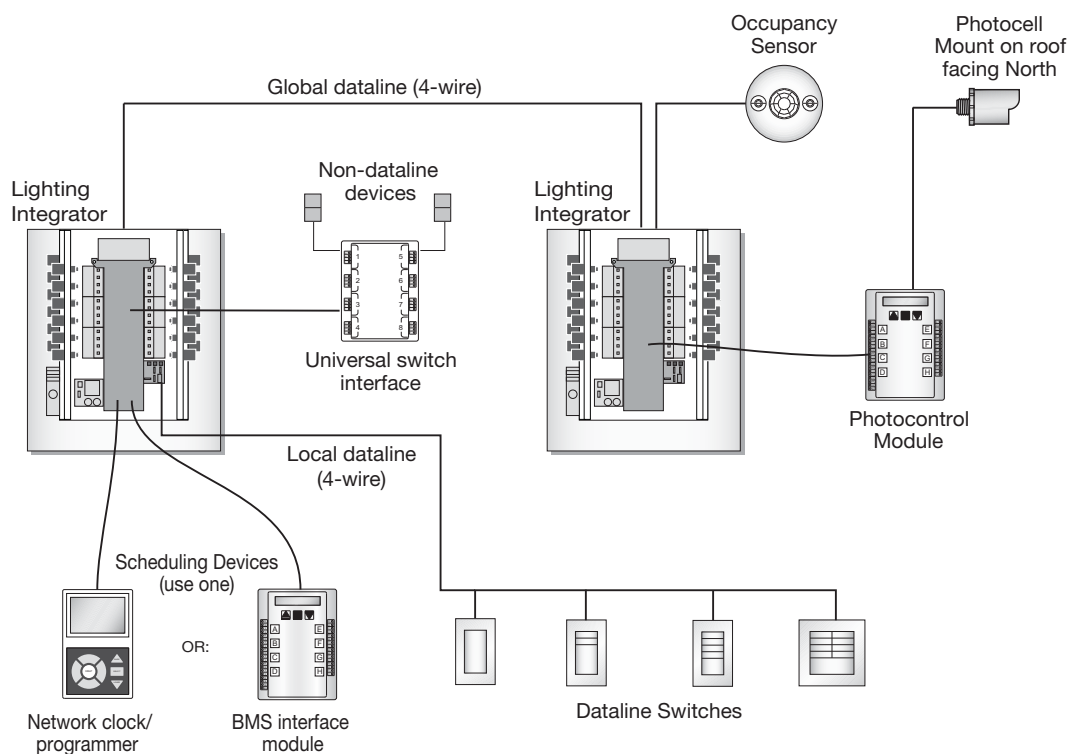


## LIA Specifications

- Interior configurations provide up to 8, 24, or 48 relays each
- Standard relay, individually replaceable Watt Stopper HDR series, latching SPST, meets new NEMA electronic ballast requirements, 14,000 Amps SCCR, with integral manual override (other relay types available)
- Digital global dataline, one pair twisted, open topology allows linear, star and T network configurations for panels, 1500' max length free topology (8000' linear topology)
- Local dataline, two pair twisted, open topology allows linear, star and T configurations, 63 HDLS series switch addresses available per dataline, 1500' max length
- Automation channels: 8 per panel, provide global schedule and control functions
- Direct wire switch inputs, one each per relay and group switch channel, automatically configure for occupancy sensor operation
- Pilot light output per relay and group switch channel, configurable for any Class 2 voltage
- UL, CUL listed, one year warranty

## LIA System Layout

### LI Automation Panel System Layout





## 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

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).

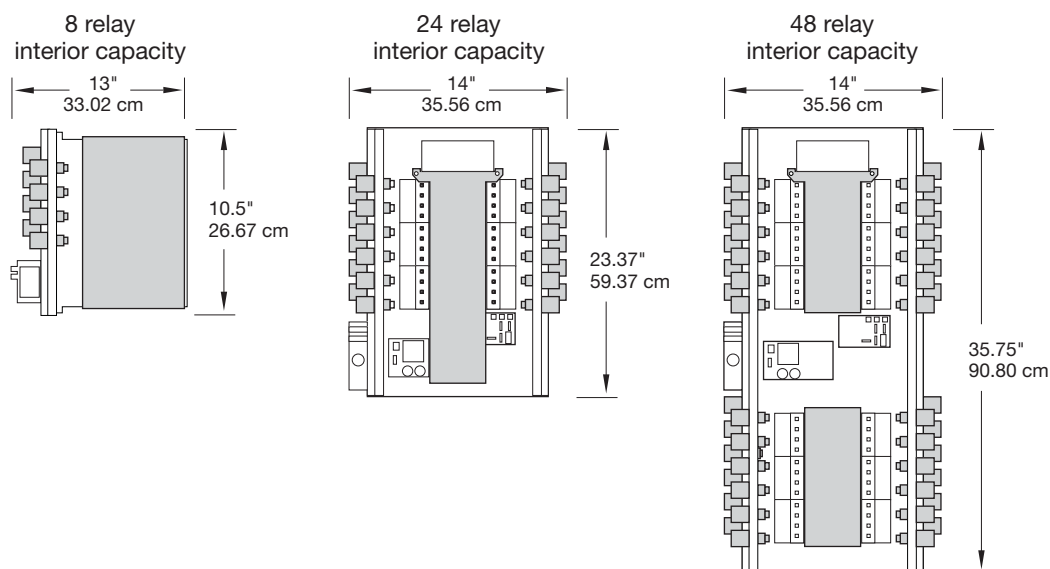
- Supports WattStopper low voltage occupancy sensors without need for separate sensor power packs
- Smartwiring feature allows grouping of relays for common control
- DIN rail mounting provided within the Class 2 section for mounting of optional accessories
- Control multi-pole circuits with optional 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
- 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"/> LIA8  | <input type="checkbox"/> 115/277 | <input type="checkbox"/> HDR relays installed (max of interior capacity) | <input type="checkbox"/> GS cards (max 1 in 8, 24, 2 in 48) | <input type="checkbox"/> EM relay count (Not available in 8-relay size panels; max. of 24 in 24-relay or 48-relay size interior) | <input type="checkbox"/> 115 |
| <input type="checkbox"/> LIA24 | <input type="checkbox"/> 115/347 |  |   |  | <input type="checkbox"/> 240 |
| <input type="checkbox"/> LIA48 | <input type="checkbox"/> 240     |  |   |  | <input type="checkbox"/> 277 |
|                                |                                  |  |   |  | <input type="checkbox"/> 347 |