Hubbell Building Automation

Energy Saving **Lighting Controls**

Product Catalog

Wireless Distributed Lighting Controls

Lighting Control Panels

Occupancy | Vacancy Sensors

Daylight Harvesting

High Bay Lighting Controls

hubbell-automation.com

HUBBELL

Hubbell Building Automation

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On the Cover:
Hubbell Building Automation's award-winning line of energy saving lighting switches.

See Index on page 205 for a complete listing of products.

Specifications Subject to Change Without Notification.

Product photography throughout the Hubbell Building Automation product catalog, except where noted, including cover photography by Jesse Knish Photography – Austin, Texas USA. Product Catalog design production by Matt Whitehead Design – Austin, Texas USA.

Innovation.

Hubbell Building Automation is the leading developer of groundbreaking technologies in wireless lighting controls, HID and fluorescent controls, occupancy|vacancy sensors and lighting control panels. With over 30 years of lighting control experience, HBA provides complete energy-saving solutions.

All HBA products come with a 5-year limited warranty.

A Name You Can Trust – Hubbell

Hubbell Building Automation, a subsidiary of Hubbell Incorporated (A Delaware Corporation), manufactures a complete suite of energy-saving lighting control solutions.

A Name You Can Trust - Hubbell

Founded in 1888 by Harvey Hubbell II, Hubbell Inc. has been a long-time contributor to new product design and manufacturing innovation. In 1896, Hubbell invented the world's first lighting control device: the pull chain switch.

More than 100 years later, Hubbell Building Automation, headquartered in Austin, Texas, continues a tradition of innovation with the development of a vast array of energy-saving lighting controls.

Wireless Lighting Controls

Hubbell proudly introduces **wiHUBB™** indoor and outdoor wireless lighting controls. While installation of wired systems is often complicated and costly, Hubbell Building Automation's **wiHUBB** features a future-proof design including a self-healing wireless mesh network. Many wireless-enabled fixtures are available through our family of quality brands under the umbrella of Hubbell.

wiHUBB provides efficient solutions for energy savings and sustainability by automatically and effectively turning lights on when an area is occupied and off when it is vacant.

Innovative Occupancy Sensors

Traditional occupancy|vacancy sensors need adjustments throughout the year:

- As seasons change
- When airflow is modified
- If furniture layout or occupancy patterns change

When these sensors are not constantly monitored and adjusted, energy savings objectives are not met.

HBA introduced the industry's first self-adapting sensor in response. HBA's patented **IntelliDAPT®** technology is the key to maximizing energy savings—from open offices to the manufacturing floor, digital microprocessor technology makes all sensor adjustment decisions. Smart software monitors the controlled area, and makes sensitivity and timer adjustments automatically. Occupancy|vacancy sensors with **IntelliDAPT** provide maintenance-free "install-and-forget" operations.

Integrated Networked Lighting Controls

Lighting control system and device capabilities have evolved to suit the needs of buildings of all ages.

Hubbell Building Automation's innovative **CX Commercial Lighting Panel** offers expanded programming options to increase energy conservation, and can save up to 50% in labor and materials when used in place of conventional time clock and contactor combinations.

The **LX Series** delivers networked lighting controls with rich functionality, an easy-to-use graphical user interface for local and remote system management, and unmatched integration support for other building systems and network protocols.

For further information about Hubbell Building Automation, visit Hubbell-automation.com or contact us directly at (888) 698-3242 or (512) 450-1100.

WIH-OM
wiHUBB On-Fixture Module

Hubbell Building Automation

Energy Conservation.

Hubbell Building Automation offers a broad range of occupancy|vacancy sensors and lighting controls that meet the latest energy efficiency codes and standards.

Energy Conservation

Energy conservation has become a significant global movement, with nations, states, and local municipalities creating new codes and standards of efficiency for both commercial and residential buildings. These codes and standards include:

- **LEED®** (Leadership in Energy and Environmental Design) certification in new and renovated facilities through the U.S. Green Building Council (USGBC) promotes sustainable building design.
- **California Energy Commission's** (CEC) Title 24 program enforces stringent standards and regulations to reduce energy consumption, including automatic lighting control and shut-off .
- **ASHRAE/IESNA 90.1** energy efficiency code requires interior lighting in buildings larger than 5000 sq. ft. to be controlled with automatic devices.
- **IECC®** (International Energy Conservation Code) compliance requires automatic shut-off of lighting which is now adopted by most states in some form.

As energy concerns increase, the "greening" of commercial and residential buildings will continue through stringent standards and energy conservation initiatives like the **EPA's ENERGY STAR** program, or the 2030 Challenge which aims to reduce energy use by 50% before 2030.

CX16 and CX24
CX Series Commecial Lighting Control panels.

HBA Occupancy Sensors Play a Key Role

In the U.S., lighting consumes 22% of electricity and represents $40 billion a year in energy costs. Hubbell Building Automation's Occupancy Sensors save energy and provide sustainability by automatically and effectively turning lights on when a room is occupied and off when a room is vacant. In a typical office building, where lighting accounts for 35 to 45% of energy use, HBA Occupancy Sensors have the potential to reduce wasted lighting by 13 to 90% for a significant return on investment (ROI).

Backed by HBA Service and Support

HBA Occupancy Sensors are backed by Hubbell Building Automation's sustainability initiative and superior service with support including:

- Valuable online ROI worksheet for calculating energy savings
- Product selection guide for choosing the right HBA Occupancy Sensor and technology
- Online specification assistance through HBAControls.com, AutoCAD drawings, templates and documentation
- Comprehensive design assistance for deploying occupancy sensors in a variety of applications
- Highly knowledgeable network of specification professionals and trained, dedicated sales staff
- A commitment to safeguard the environment through environmental stewardship, innovative products and efficient operations

For more information about Hubbell Building Automation's sustainability initiative and access to our complete suite of on-line tools, visit our website at ***hubbell-automation.com****.*

Hubbell Building Automation

Support, Service and Quotations.

HBA's Business Services group provides thorough answers to your questions and ensures the best service: You get a staff member equipped with in-house resources because our products are designed and manufactured under the same roof.

Business Services

HBA's Business Services group is available daily from 8am to 6pm CST.

Customer Service

Get a personalized level of service:

- Detailed product knowledge
- Fast and accurate order entry
- Timely order acknowledgements
- Order management from initial ordering to shipping

Technical Services

HBA's technical services include quotations, factory-certified occupancy sensor layouts, technical phone support, application support, and technical documentation.

Quotations

HBA's Quotations Group coordinates with the Technical Services Group to provide detailed drawings and accurate quotations, working with you to ensure all needs of your project are fulfilled. Get detailed submittal packages, necessary product documentation and project-specific information.

Factory-Certified Layouts

We guarantee the type and placement of each control on every drawing. Send electronic AutoCAD files and we'll create a factory-certified layout and a competitive layout with a detailed Bill of Materials. If you would like hard copies, we create professional paper drawings in any size specification upon request.

CONTACT INFORMATION

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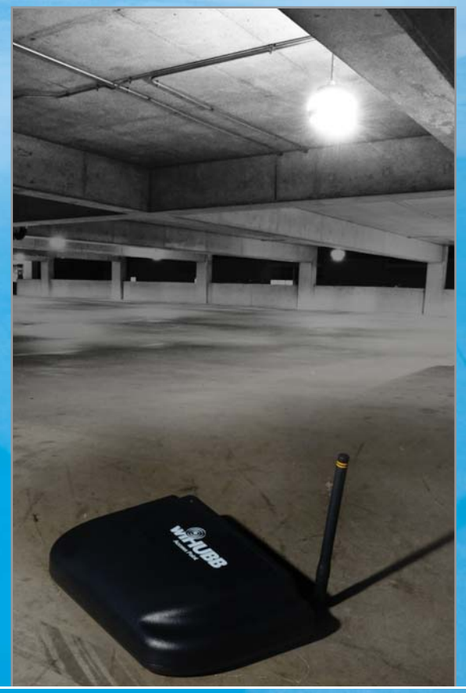
Hubbell Building Automation

Wireless Control.

It's a simple concept:
Turn lights off, save energy.
But how much can we rely on others to switch unused lights off?

Bridge the gap with HBA's wiHUBB wireless distributed lighting controls.



Wireless Lighting Controls

In the U.S., lighting consumes 22% of electricity and represents $40 billion a year in energy costs. In a typical office building, lighting accounts for 35-45% of energy use. **wiHUBB™**, HBA's wireless distributed lighting control system can reduce wasted lighting energy by 13-90% for a significant return on investment.

The **wiHUBB** system wirelessly controls indoor and outdoor applications including area/site lighting, parking garage lighting, and interior facility lighting. It is simple to install and configure, and provides a virtually unlimited wireless network size that can grow and change with your building's needs.

With **wiHUBB**, it's easy to control, configure and reconfigure individual devices or groups of devices over-the-air with the click of a mouse. All devices within the **wiHUBB** mesh network are peers that act as repeaters by forwarding messages to devices that may be out of range from the device originating the message.

While installation of wired systems can be complicated and expensive, **wiHUBB** is simple to use, requiring minimal installation time and wiring costs. **wiHUBB's future proof design** features a self-organizing and self-healing wireless mesh network. It requires no special software or physical addressing of devices and can be accessed from your local network or the Internet using any standard browser.

Easy to Retrofit

Add **wiHUBB** wireless controls to existing lighting systems without having to rewire or change existing circuits.

Flexibility

Configure and control individual devices or groups of devices—including indoor and outdoor lighting fixtures, occupancy sensors, daylight sensors and switch stations— over the air with the click of a mouse.

Savings

Reduce lighting-based energy waste by 13-90% when **wiHUBB** automatically and intelligently turns lights on when a space is occupied, and off when the space is not.

Pictured above - wiHUBB Smart Pack.

For more information on wiHUBB, please see the following HBA publications available online at hubbell-automation.com or simply scan the QRcode at the top of this page.

wiHUBB™ Wireless Distributed Lighting Controls

Quick Reference Guide

wiHUBB Access Point

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WIH-AP wiHUBB Access Point

wiHUBB Smart Pack

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WIH-SP-1R-1277 wiHUBB Smart Pack 1 SPST Output, 120/277VAC
WIH-SP-1RD-1277 wiHUBB Smart Pack 1 SPST Output, 0-10VDC Dimming, 120/277VAC
WIH-SP-2R-1277 wiHUBB Smart Pack 2 SPST Outputs, 120/277VAC
WIH-SP-2RD-1277 wiHUBB Smart Pack 2 SPST Outputs, 0-10VDC Dimming, 120/277VAC

wiHUBB Ceiling and Wall Mount Occupancy Sensors

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WIH-OS-OMDT2 Ceiling Mount, PIR and Ultrasonic, 2000 Sq. Ft.
WIH-OS-OMDT2R Ceiling Mount, PIR and Ultrasonic, 2000 Sq. Ft., Form C Relay
WIH-OS-OMDT1 Ceiling Mount, PIR and Ultrasonic, 1000 Sq. Ft.
WIH-OS-OMDT1R Ceiling Mount, PIR and Ultrasonic, 1000 Sq. Ft., Form C Relay
WIH-OS-OMDT5 Ceiling Mount, PIR and Ultrasonic, 500 Sq. Ft.
WIH-OS-OMDT5R Ceiling Mount, PIR and Ultrasonic, 500 Sq. Ft., Form C Relay
WIH-OS-OMUS2 Ceiling Mount, Ultrasonic, 2000 Sq. Ft.
WIH-OS-OMUS2R Ceiling Mount, Ultrasonic, 2000 Sq. Ft., Form C Relay
WIH-OS-OMUS1 Ceiling Mount, Ultrasonic, 1000 Sq. Ft.
WIH-OS-OMUS1R Ceiling Mount, Ultrasonic, 1000 Sq. Ft., Form C Relay
WIH-OS-OMUS5 Ceiling Mount, Ultrasonic, 500 Sq. Ft.
WIH-OS-OMUS5R Ceiling Mount, Ultrasonic, 500 Sq. Ft., Form C Relay
WIH-OS-OMIR Ceiling Mount, Passive Infrared, 450 Sq. Ft.
WIH-OS-OMIRR Ceiling Mount, Passive Infrared, 450 Sq. Ft., Form C Relay
WIH-OS-OMIRL Ceiling Mount, Passive Infrared, 1500 Sq. Ft.
WIH-OS-OMIRLR Ceiling Mount, Passive Infrared, 1500 Sq. Ft., Form C Relay
WIH-OS-OMIDIA Ceiling Mount, PIR and Acoustic, 450 Sq. Ft.
WIH-OS-OMIDIAR Ceiling Mount, PIR and Acoustic, 450 Sq. Ft., Form C Relay
WIH-OS-LODT Wall Mount, PIR and Ultrasonic, 1600 Sq. Ft.
WIH-OS-LODTR Wall Mount, PIR and Ultrasonic, 1600 Sq. Ft., Form C Relay
WIH-OS-LOIRWV Wall Mount, Passive Infrared, 2500 Sq. Ft.
WIH-OS-LOIRWVR Wall Mount, Passive Infrared, 2500 Sq. Ft., Form C Relay
WIH-OS-LOIRHB Wall Mount, Passive Infrared, 50' at 30' Height
WIH-OS-LOIRHBR Wall Mount, Passive Infrared, 50' at 30' Height, Form C Relay
WIH-OS-LODIA Wall Mount, PIR and Acoustic, 1600 Sq. Ft.
WIH-OS-LODIAR Wall Mount, PIR and Acoustic, 1600 Sq. Ft., Form C Relay

wiHUBB Switch Stations

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WIH-SW-OO ON/OFF Switch, White
WIH-SW-GAV General – A/V Mode Switch, White
WIH-SW-HLO High/Low/Off Switch, White
WIH-SW-ORLO On/Raise/Lower/Off Switch, White
WIH-SW-RL Raise/Lower Switch, White
WIH-SW-TO Timed On Switch, White
WIH-SW-PRESET Preset Switch (4-button), White

wiHUBB Daylight Sensor

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WIH-DS wiHUBB Daylight Sensor

wiHUBB In-Fixture Module

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WIH-IM-1R-1277 1 SPST Output (Antenna not included), 120/277VAC
WIH-IM-1R-347 1 SPST Output (Antenna not included), 347VAC
WIH-IM-1RD-1277 1 SPST Output, 0-10VDC Dimming Output (Antenna not included), 120/277VAC
WIH-IM-1RD-347 1 SPST Output, 0-10VDC Dimming Output (Antenna not included), 347VAC
WIH-IM-1RA-1277 1 SPST Output, Articulating Antenna, 120/277VAC
WIH-IM-1RA-347 1 SPST Output, Articulating Antenna, 347VAC
WIH-IM-1RDA-347 1 SPST Output, 0-10VDC Dimming Output, Articulating Antenna, 347VAC
WIH-IM-1RDA-1277 1 SPST Output, 0-10VDC Dimming Output, Articulating Antenna, 120/277VAC
WIH-IM-1RDA-347 1 SPST Output, 0-10VDC Dimming Output, Articulating Antenna, 347VAC
WIH-IM-1RF-1277 1 SPST Output, Fixed Antenna with 24" Extension Cable, 120/277VAC
WIH-IM-1RF-347 1 SPST Output, Fixed Antenna with 24" Extension Cable, 347VAC
WIH-IM-1RDF-1277 1 SPST Output, 0-10VDC Dimming Output, Fixed Antenna with 24" Extension Cable, 120/277VAC
WIH-IM-1RDF-347 1 SPST Output, 0-10VDC Dimming Output, Fixed Antenna with 24" Extension Cable, 347VAC
WIH-IM-2R-1277 2 SPST Outputs (Antenna not included), 120/277VAC
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WIH-IM-2RDA-1277 2 SPST Outputs, 0-10VDC Dimming Output, Articulating Antenna, 120/277VAC
WIH-IM-2RDA-347 2 SPST Outputs, 0-10VDC Dimming Output, Articulating Antenna, 347VAC
WIH-IM-2RF-1277 2 SPST Outputs, Fixed Antenna with 24" Extension Cable, 120/277VAC
WIH-IM-2RF-347 2 SPST Outputs, Fixed Antenna with 24" Extension Cable, 347VAC
WIH-IM-2RDF-1277 2 SPST Outputs, 0-10VDC Dimming Output, Fixed Antenna with 24" Extension Cable, 120/277VAC
WIH-IM-2RDF-347 2 SPST Outputs, 0-10VDC Dimming Output, Fixed Antenna with 24" Extension Cable, 347VAC

wiHUBB On-Fixture Module

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WIH-OM-UNV 120-347VAC, 50/60Hz

Hubbell Building Automation

Unified Control.

Interior and exterior lighting can account for 40% of all energy costs on a property. Recover as much as 25-50% of that cost in the first six months of implementing HBA's LX networked lighting control system.

LX Networked Lighting Controls

LX is a network of expandable and modular relay panels, sensors and switches. Take control of your lighting near or far with its intuitive programming interface, touchscreen tablet and remote access via LAN and Internet.

Connect to any point on the topology-free, polarity-insensitive, 2-wire LON communication network with our LonMark® certified architecture. Install sensors and switches "plug-and-play" for endless possibilities in control and savings.

Save Time

LX control panels are simple to install and use. The **LX series** utilizes LonMark® certified architecture so sensors and switches can be installed plug-and-play by connecting to any point on the topology-free, polarity-insensitive 2-wire communication network.

Inprove the ease of owning and using lighting

- Unique handheld touchscreen GUI
- Robust and reliable 20 Amp mechanically-latching relays
- Multiple size enclosures available (4, 8, 16, 32, and 48 relays)
- Powered, topology-free, polarity-insensitive, 2-wire communication
- LonMark® certified
- Seamless integration with major building protocols, such as LON, BACNET® and MODBUS®
- Feature-rich scheduling functions
- 365-day time clock
- Automatic daylight savings time and leap year compensation
- Built-in astronomical time clock for sunrise and sunset programming
- UL and cUL listed

Flexibility

The **LX networked lighting controls** use a handheld touchscreen GUI interface that keeps up with the constant progression of lighting control systems.

LX4, LX8, LX16, LX32, LX48
LX Lighting Control Panels

LX Networked Lighting Control Panels

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LX Lighting Control Panels 4, 8, 16, 32, 48 Relays

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LX8 up to 8 Relays
LX16 up to 16 Relays
LX32 up to 32 Relays
LX48 up to 48 Relays

LX Relays

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LXRL1 LX Relay, Single Pole, 120/277/347VAC
LXRL2 LX Relay, Double Pole, 208/240/480VAC

LXBC Breaker Control Panels 12, 18, 30, 42 Breaker/Relays

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LXBC11LB Panels
LXBC11CB Panels
LXBC12LB Panels
LXBC12CB Panels
LXBC14LB Panels
LXBC14CB Panels
LXBC21LB Panels
LXBC22LB Panels
LXBC22CB Panels
LXBC24LB Panels
LXBC24CB Panels

LXBR Circuit Breaker Relays/Circuit Breakers

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LXBR "C" Series
20A-30A, 1P or 2P
Controlled Circuit Breaker/Relay
LXBR "N" Series
20A, 3P, Non-Controlled Circuit breaker
15A - 100A, 1P, 2P or 3P

LX Touch Tablet Graphical User Interface

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LXTB LX Touch Screen Tablet

LXJENEsys Network Interface Components

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LXJNSYS LX JENEsys Controller with Management Software
LXJNSYS2LON LX JENEsys Controller with Management Software
LXJNSYS2BACNETIP LX JENEsys Controller with Management Software, BACNET IP Integration Support
LXJNSYS2BACNETMSTP
LX JENEsys Controller with Management Software, BACNET MS/TP Integration Support
LXJNSYS3BACNETMSTP
LX JENEsys Controller with Management Software, BACNET MS/TP Integration Support
LXJNSYS2MODBUS LX JENEsys Controller with Management Software, MODBUS Integration Support
LXJNCOM56KM1 LX JENEsys 56kbps Modem for LX JENEsys Controller

LX Networked Switch Stations

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LXSW1LP 1 Button
LXSW2LP 2 Buttons
LXSW3LP 3 Buttons
LXSW4LP 4 Buttons
LXSW5LP 5 Buttons
LXSW6LP 6 Buttons
LXSW1FT 1 Button
LXSW2FT 2 Buttons
LXSW3FT 3 Buttons
LXSW4FT 4 Buttons
LXSW5FT 5 Buttons
LXSW6FT 6 Buttons

LX Keyed Switch Station

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LXKEY1LP LX Keyed Switch Station, Link Power Version

LX Occupancy Sensor Featuring IntelliDAPT

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LXOMDT2000FT LX Intelligent Ultrasonic and PIR Occupancy Sensor, FT-10
LXOMDT2000LP LX Intelligent Ultrasonic and PIR Occupancy Sensor, Link Power

LX Photo Sensor Control Module and Sensors

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LXPSCMLP LX Photo Sensor Control Module – Link Power
LXPSCMFT LX Photo Sensor Control Module – FT
LXPSPCI LX Photo Sensor Photocell Indoor
LXPSPCO LX Photo Sensor Photocell Outdoor
LXPSPCS LX Photo Sensor Photocell Skylight/Atrium

LX Dry Contact Interface Modules

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LXDCIMFT LX Dry Contact Interface Module

LX Sentry Switch

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LXS05T 5A 120/240/277VAC
LXS05DW 5A 120/240/277VAC
LXS05DI 5A 120/240/277VAC
LXS05T3 5A 120/240/277VAC
LXS05T3W 5A 120/240/277VAC
LXS05T3I 5A 120/240/277VAC
LXS20T 20A 120/240/277VAC
LXS20DW 20A 120/240/277VAC
LXS20DI 20A 120/240/277VAC
LXS20T3 20A 120/240/277VAC
LXS20T3W 20A120/240/277VAC
LXS20T3I 20A 120/240/277VAC

LX Link Power Module

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LXLPM2 LX Link Power Module, 120VAC

LX Router/Repeater

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LXRRM LX Router/Repeater Module

LX Power Supply

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LXPWRSPLY LX Power Supply

LX Terminator

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LXTERMINATOR LX Free Topology Bus Terminator

LX Enclosure for DIN Rail Modules

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LXENDM LX Enclosure for DIN Rail Device Modules

LXUL924

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LXUL924BR1 LX UL924 Enclosed Relay 20 Amp SPDT with 24 VAC/DC/120 VAC Coil
LXUL924BR2 LX UL924 Enclosed Relay 20 Amp SPDT with 24 VAC/DC/ 208-277 VAC Coil

Hubbell Building Automation

Clean, easy control.

The CX Panels can save up to 50% in labor and materials when used in place of conventional time clock and contactor combinations.

CX Commercial Lighting Controls

CX Commercial Lighting Control Panels replace costly and labor-intensive conventional time clocks and contactors to provide feature-rich and cost-effective lighting control for maximum energy savings.

The **CX panel's** LCD user interface is located in the door and utilizes simple and intuitive scrolling menus to program, check status or update the panel. The easy-to-use pre-programmed Scenarios Menu makes project commissioning simple and fast.

CX utilizes an astronomical clock rather than roof-mounted photocells. This increases cost savings, improves reliability and lowers maintenance.

Save Time.

- Easy-to-follow, intuitive programming user interface
- All inputs are software assignable to any HBA low-voltage input device including switches, motion sensors and photocells.

Save Energy.

- Meets ASHRAE 90.1, IEEC, California (CEC) Title 24 energy codes.
- **CX panels** contribute to LEED certification requirements

Save Money.

- Save up to 50% in parts and labor cost over conventional timeclock and contactor systems
- Expanded programming options lowers energy consumption
- Astronomical clock eliminates need for roof-mounted photocells

Increase Control.

- Create scenarios for easy-to-use control combinations
- Customize customer-centric control solutions with priorities and masking

Pictured above - CX24 and CX08 panels.

For more information on CX Commercial Lighting Control panels , please see the following HBA publications available online at hubbell-automation.com or simply scan the QR code at the top of this page.

CX Commercial Lighting Control Panels

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CX Commercial Lighting Control Panels 4 and 8 Relays

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4-Relay Stand Alone Panels

CX042S042NN
CX042S043LN
CX042S04TNN
CX042S00SPN
CX043S043LN
CX043S00SPN

8-Relay Master and Secondary Panels

CX082S082NM
CX082S083LM
CX082S08TNM
CX082S00SPM
CX083S083LM
CX083S00SPM
CX082S00SPS
CX082S082NS
CX082S083LS
CX082S08TNS
CX083S00SPS
CX083S083LS

CX Commercial Lighting Control Panels 16 and 24 Relays

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CX162S00SPM
CX162S00SPS
CX162S162NM
CX162S162NS
CX162S163LM
CX162S163LS
CX162S16TNM
CX16261TNS
CX163S00SPM
CX163S00SPS
CX163S163LM
CX163S163LS
CX242S00SPM
CX242S00SPS
CX242S242NM
CX242S242NS
CX242S243LM
CX242S243LS
CX242S24TNM

CXR Relays

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CXR2N 20A 1-Pole Electrically Held N/O 120-277V 12KSCCR@277VAC
CXR2C 20A 1-Pole Electrically Held N/C 120-277V 14SCCR @ 277VAC
CXR3L 30A 1-Pole Latching 120-277-347V 18KSCCR @ 277VAC, 14KSCCR@347VAC
CXRTN 20A 2-Pole Elecrically Held N/O 480V 14KSCCR @ 480VAC
CXRTC 20A 2-Pole Elecrically Held N/C 480V 14KSCCR @ 480VAC

CX Panel Photocells

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LUXSTATLS Indoor
LUXSTATLO Outdoor

CX Motion Sensors

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Consult hubbell-automation.com for detailed catalog numbers, specifications and application guidelines.

CX Panel Low Voltage Switches

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LVSM1NP Momentary, 1 Button, No Pilot
LVSM1PL Momentary, 1 Button, w/Pilot LED
LVSM2NP Momentary, 2 Button, No Pilot
LVSM2PL Momentary, 2 Button, w/Pilot LED
LVSM3NP Momentary, 3 Button, No Pilot
LVSM3PL Momentary, 3 Button, w/Pilot LED
LVSM4NP Momentary, 4 Button, No Pilot
LVSM4PL Momentary, 4 Button, w/Pilot LED

The CX panel User Interface
LCD Display / Keypad allows access to all programming, system status, and manual controls.

Hubbell Building Automation

Conquer High-Output Fluorescents.

22% of electricity use in the U.S. comes from lighting, representing $30 billion in annual energy costs.

WASP2 can reduce your lighting energy waste by 13-90%.

High Bay Lighting Controls

Hubbell Building Automation's Fluorescent High Bay sensors reduce energy waste by automatically and effectively turning lights on when a room is occupied and off when a room is vacant.

The **HBA WASP2** Fluorescent High Bay Occupancy Sensor features a daylight sensor for increased energy savings, and is specifically designed for ON/OFF control of high bay fluorescent fixtures in warehouses, distribution centers and similar facilities.

WASP2 is an intelligent, microprocessor-based Passive Infrared (PIR) occupancy sensor designed for T5, T5HO, and T8 fluorescent fixtures. **WASP2** contains zero arc point switching, minimizing relay contact wear from high inrush loads.

WASP2 meets the latest energy efficiency codes and standards, including ASHRAE/IESNA 90.1 and CEC's Title 24, and can provide LEED (Leadership in Energy and Environmental Design) points in categories including Sustainable Sites, Energy and Atmosphere, Indoor Environmental Quality and Innovative Design Process.

Savings.

WASP2 decreases energy consumption by 50% during periods of no occupancy.

Flexibility.

WASP2 supports mounting heights up to 45 feet and features multiple outputs, mounting options and lens options. Additionally, low-temperature (-40°C), water-tight and outdoor versions are available.

Control.

WASP2 features ON/OFF, stepped dimming and daylight harvesting control. **WASP2** also improves lamp life by utilizing HBA's unique Smart Cycling™ technology, ensuring all lamps receive the same number of switching cycles.

WASP2

2011 PROGRESS Report SELECTION

HUBBELL

High Bay Lighting Controls
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HBA WASP2
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WSPEM24V
HBA WASP2 Fl. High Bay Sensor with Daylighting, End Mnt, 24VDC (Power Pack Required), Form C Relay

WSPEMUNV HBA WASP2 Fl. High Bay Sensor with Daylighting, End Mnt, 1 SPST Output, 120/277/347VAC

WSPEMUNV2R
HBA WASP2 Fl. High Bay Sensor with Daylighting, End Mnt, 2 SPST Outputs, 120/277/347VAC

WSPEM208
HBA WASP2 Fl. High Bay Sensor with Daylighting, End Mnt, 1 DPST Output, 208/240VAC

WSPEM480
HBA WASP2 Fl. High Bay Sensor with Daylighting, End Mnt, 1 DPST Output, 480VAC

WSPEM24VLTWT
HBA WASP2 Fl. High Bay Sensor with Daylighting, End Mnt, 24VDC (Power Pack Required), Form C Relay, Low Temp, Water Tight

WSPEMUNVLTWT
HBA WASP2 Fl. High Bay Sensor with Daylighting, End Mnt, 1 SPST Output, 120/277/347VAC, Low Temp, Water Tight

WSPEMUNV2RLTWT
HBA WASP2 Fl. High Bay Sensor with Daylighting, End Mnt, 2 SPST Outputs, 120/277/347VAC, Low Temp, Water Tight

HBA WASP2 *(continued)*
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WSPEM208LTWT
HBA WASP2 Fl. High Bay Sensor with Daylighting, End Mnt, 1 DPST Output, 208/240VAC, Low Temp, Water Tight

WSPEM480LTWT
HBA WASP2 Fl. High Bay Sensor with Daylighting, End Mnt, 1 DPST Output, 480VAC, Low Temp, Water Tight

WSPSM24V
HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 24VDC (Power Pack Required), Form C Relay

WSPSMUNV
HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 1 SPST Output, 120/277/347VAC

WSPSMUNV2R
HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 2 SPST Outputs, 120/277/347VAC

WSPSM208
HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 1 DPST Output, 208/240VAC

WSPSM480
HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 1 DPST Output, 480VAC

WSPSM24VLTWT
HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 24VDC (Power Pack Required), Form C Relay, Low Temp, Water Tight

WSPSMUNVLTWT
HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 1 SPST Output, 120/277/347VAC, Low Temp, Water Tight

HBA WASP2 *(continued)*
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WSPSMUNV2RLTWT
HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 2 SPST Outputs, 120/277/347VAC, Low Temp, Water Tight

WSPSM208LTWT
HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 1 DPST Output, 208/240VAC, Low Temp, Water Tight

WSPSM480LTWT
HBA WASP2 Fl. High Bay Sensor with Daylighting, Surface Mnt, 1 DPST Output, 480VAC, Low Temp, Water Tight

WSPLENS360
HBA WASP2 Fl. High Bay Sensor Lens, 360 Degree Coverage Area

WSPLENSAISLE
HBA WASP2 Fl. High Bay Sensor Lens, Aisle Coverage Area

WSPLENSHALF
HBA WASP2 Fl. High Bay Sensor Lens, 180 Degree Coverage Area

WSPLENSHAISLE
HBA WASP2 Fl. High Bay Sensor Lens, Half Aisle Coverage Area

WSPLENS360LTWT
HBA WASP2 Fl. High Bay Sensor Lens, 360 Degree Coverage Area, Low Temp, Water Tight

WSPLENSAISLELTWT
HBA WASP2 Fl. High Bay Sensor Lens, Aisle Coverage Area, Low Temp, Water Tight

HBA WASP2 *(continued)*
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WSPLENSHALFLTWT
HBA WASP2 Fl. High Bay Sensor Lens, 180 Degree Coverage Area, Low Temp, Water Tight

WSPLENSHAISLELTWT
HBA WASP2 Fl. High Bay Sensor Lens, Half Aisle Coverage Area, Low Temp, Water Tight

WSPADAPTOR
HBA WASP Fluorescent High Bay Sensor Mounting Extension Adaptor

Hubbell Building Automation

Let the sun be your light source.

Harvest the most abundant energy source around: daylight. Daylight harvesting can decrease lighting by 75%.

Daylight Harvesting

The U.S. Department of Energy lists lighting as the most significant use of electricity in commercial buildings. On average, lighting uses more power than cooling, ventilation and refrigeration combined. The easiest route to energy savings is to shed lighting loads.

Daylighting controls like HBA's newest **Zone5 Harvesting System** impact budgets by harnessing the sun's power to reduce energy consumption. HBA's solutions for daylighting control include dimming, stepped dimming, and switching systems.

Dimming systems continuously adjust light output by signaling dimming ballasts, and stepped dimming offers the advantages of full-range dimming without the expense of dimming ballasts. Lamps are either fully turned off or partially turned off, depending on natural light levels.

Switching systems turn lighting OFF or ON in accordance with available natural light. With a lower initial cost than dimming systems, switching systems are most often recommended for warehouses, storage areas, atriums, lobbies and parking facilities, where non-stationary tasks are performed.

HBA introduces the **Zone5 Daylight Harvesting System**, which combines all three daylighting approaches and controls tailored to the specific and demanding needs of daylight harvesting applications.

The **Zone5 Control Module** accurately analyzes and interprets signals from the plug-and-play occupancy sensors, daylight sensors and low-voltage lighting control switches.

Save Money.

Cut lighting costs by up to 75%. Master Off and Row Off functions can contribute to additional energy savings when users turn the lights off ahead of the occupancy sensor detecting that the room is empty.

Save time.

Zone5 controls are plug-and-play, eliminating wiring labor costs.

User-friendly programming.

SD Card interface provides a simple way to commission, log, verify and update the **Zone5** system. Control parameters can be copied to the card from one **Zone5 Control Module** to another, HBA website template page, email from specifier, or **Zone5** PC-based template builder.

Intuitive, easy-to-use LCD menu.

The two-line LCD interface is intuitive, easy-to-use and interactive. The interface allows users to quickly change system settings or monitor system diagnostics in real time.

Flexibility.

All **Zone5** switches can be ganged together to form custom switch stations, maximizing flexibility in multi-use rooms. Color-coded plug-and-play jumper cables are available to be ordered separately, making installation effortless.

zone5

Pictured at left, Z5-CM – Zone5 Control Module and above left, Z5-DS – Zone5 Daylight Sensor
For more information on Zone5 Daylight Harvesting System, please see the following HBA publication available online at hubbell-automation.com or simply scan the QR code at the top of this page.

Daylight Harvesting
Quick Reference Guide

Z5-CM
HBA Zone5 Control Module
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Z5-CM
Zone5 Control Module

Z5-OS
HBA Zone5 Ceiling and Wall Mount Occupancy Sensors
Page 119

Z5-OS-OMDT2000RP
Zone5 Occupancy Sensor, Ceiling Mount, PIR and Ultrasonic, Form C Relay, 2000Sq. Ft.

Z5-OS-LODTRP
Zone5 Occupancy Sensor, Wall Mount, PIR and Ultrasonic, Form C Relay, 1600 Sq. Ft.

Z5-DS
HBA Zone5 Daylight Sensor
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Z5-DS
Zone5 Daylight Sensor

Z5-SW
HBA Zone5 Low Voltage Wall Switches
Page 123

Z5-SW-GAV
Zone5 General-A/V Mode Switch
Z5-SW-AVD
Zone5 General-A/V Dimming Switch
Z5-SW-ST Zone5 Study Time Switch
Z5-SW-WB Zone5 Whiteboard Switch
Z5-SW-MC Zone5 Master ON/OFF Switch
Z5-SW-RCR1
Zone5 Row 1 Control Switch
Z5-SW-RCR2
Zone5 Row 2 Control Switch
Z5-SW-RCR3
Zone5 Row 3 Control Switch
Z5-SW-RCR4
Zone5 Row 4 Control Switch

LUXSTATOCM1Z
Luxstat Single Zone ON/OFF Control Module
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LUXSTATOCM1Z120
Luxstat Single Zone ON/OFF Control Module, 120VAC
LUXSTATOCM1Z277
Luxstat Single Zone ON/OFF Control Module, 277VAC

LUXSTATDNCM
Luxstat Day/Night Control Module with Clock
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LUXSTATDNCM120
Luxstat Day/Night Control Module with Clock, 120VAC, DIN Rail Mount
LUXSTATDNCM277
Luxstat Day/Night Control Module with Clock, 277VAC, DIN Rail Mount

LUXSTATLS
Luxstat Light Sensor
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LUXSTATLS
Luxstat Light Sensor - Indoor
LUXSTATLSO
Luxstat Light Sensor – Outdoor

LUXSTATSW
Low Voltage Wall Switches for Luxstat
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LUXSTATSW4IV 4-Button Wall Switch
LUXSTATSW4WH 4-Button Wall Switch
LUXSTATSW2AUTOIV
2-Button Wall Switch
LUXSTATSW2AUTOWH
2-Button Wall Switch
LUXSTATSW2DIMIV
2-Button Wall Switch
LUXSTATSW2DIMWH
2-Button Wall Switch
LUXSTATSW1IV 1-Button Wall Switch
LUXSTATSW1WH 1-Button Wall Switch

DLC7
Continuous Dimming Control
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DLC7
Single Zone Continuous Dimming Control

DLCPCI/DLCPCO DLCPCA/DLCPCS
Photocell Sensors
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DLCPCI/DLCPCO DLCPCA/DLCPCS
Photocell Sensors

DLCPCC
Photocell Controller
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DLCPCC
Photocell Controller

Hubbell Building Automation

Control energy costs.

IntelliDAPT® technology comes standard in many of HBA's Occupancy|Vacancy sensors, enabling automatic sensitivity and timing adjustments for true install-and-forget operation.

Occupancy | Vacancy Sensors

The Right Technology for the Right Application.
IntelliDAPT® IntelliDAPT comes standard in HBA's OMNI, LightOWL and LightHAWK sensors and switches. It works in conjunction with Passive Infrared, Ultrasonic and Dual technology Products.

Passive Infrared Technology

Passive infrared (PIR) technology detects the movement of heat emitted from the human body contrasted against the ambient temperature of the background space. These sensors use a segmented lens to divide the coverage area into zones. Movement between zones is then interpreted as occupancy. PIR sensors require an unobstructed line-of-sight for occupancy detection and work best in small, enclosed spaces with high levels of occupant movement.

Benefits:

- Long-range detection
- Reliable triggering
- Cost-efficient

Ultrasonic Technology

Ultrasonic (US) technology senses occupancy by bouncing sound waves (32 kHz or 40 kHz) off of objects to detect frequency shifts between emitted and reflected sound waves. Movement causes a shift in frequency, which the sensor interprets as occupancy. US occupancy|vacancy sensors do not require an unobstructed line-of-sight and are excellent at detecting minor motions such as typing and filing. US technology sensors are ideal for hallways or a restroom with stalls.

Benefits:

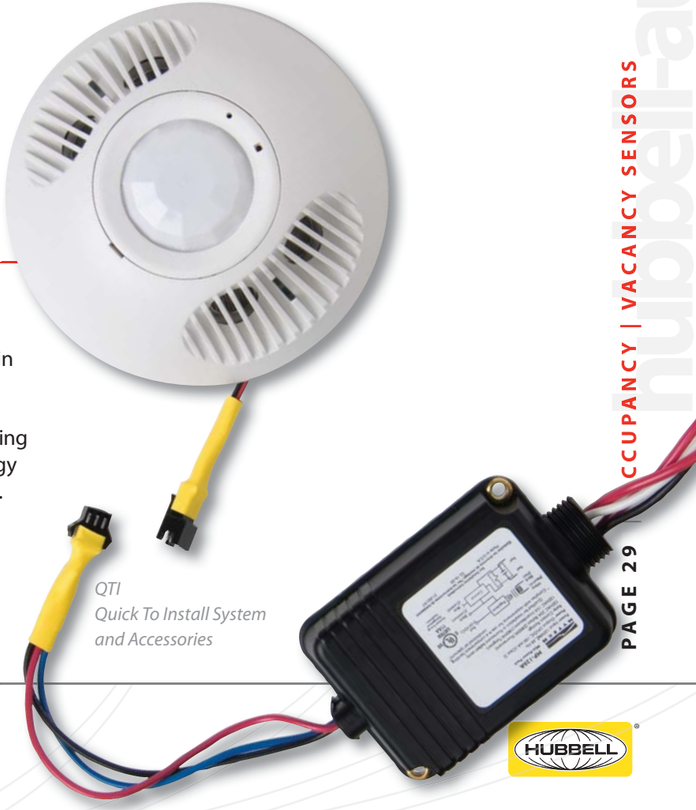
- Excellent Minor motion detection
- Sees around obstructions
- Cost-efficient

Dual Technology

Dual technology occupancy|vacancy sensors offer the best performance for most applications. The combined use of passive infrared (PIR) and ultrasonic (US) minimizes the risk of false triggering: lights will only turn on when both technologies detect occupancy, and will remain on so long as one continues to detect occupancy.

Benefits:

- Track occupancy with two sensing methods
- Minimizes false triggering
- Consistent, reliable operation



QTI
Quick To Install System and Accessories

Occupancy | Vacancy Sensors

Quick Reference Guide

LightHAWK LHMTS *Page 141*

LHMTS1 Ultrasonic and PIR Wall Switch Sensor
LHMTS0 Ultrasonic and PIR Wall Switch Sensor

LightHAWK LHMTD *Page 143*

LHMTD2 Ultrasonic and PIR Dual Circuit Wall Switch Sensor
LHMTD0 Ultrasonic and PIR Dual Circuit Wall Switch Sensor

LightHAWK LHUSS *Page 145*

LHUSS1 Ultrasonic Wall Switch Sensor
LHUSS0 Ultrasonic Wall Switch Sensor

LightHAWK LHUSD *Page 147*

LHUSD2 Ultrasonic Dual Circuit Wall Switch Sensor
LHUSD0 Ultrasonic Dual Circuit Wall Switch Sensor

LightHAWK LHIRS *Page 149*

LHIRS1 Passive Infrared Wall Switch Sensor
LHIRS0 Passive Infrared Wall Switch Sensor

LightHAWK LHIRD *Page 151*

LHIRD2 Passive Infrared Dual Circuit Wall Switch Sensor
LHIRD0 Passive Infrared Dual Circuit Wall Switch Sensor

RWSOSCFL | Residential Wall Switch Sensors *Page 153*

RWSOSCFL120IV Residential Occupancy Sensor for Incandescent and CFL Lighting
RWSOSCFL120WH Residential Occupancy Sensor for Incandescent and CFL Lighting

RWSVSCFL | Residential Wall Switch Sensors *Page 155*

RWSVSCFL120IV Residential Vacancy Sensor for Incandescent and CFL Lighting
RWSVSCFL120WH Residential Vacancy Sensor for Incandescent and CFL Lighting

RWSOSINC | Residential Wall Switch Sensors *Page 157*

RWSOSINC120 Residential Occupancy Sensor for Incandescent Lighting
RWSOSDINC120 Residential Occupancy Sensor with Dimmer for Incandescent Lighting

RWSVSINC | Residential Wall Switch Sensors *Page 159*

RWSVSINC120 Residential Vacancy Sensor for Incandescent Lighting
RWSVSDINC120 Residential Vacancy Sensor with Dimmer for Incandescent Lighting

IWSZP3P *Page 161*

IWSZP3PW Passive Infrared Wall Switch Sensor
IWSZP3PI Passive Infrared Wall Switch Sensor

IWSZPM *Page 163*

IWSZPMW Passive Infrared Wall Switch Sensor
IWSZPMI Passive Infrared Wall Switch Sensor

TD200 *Page 165*

TD200 Digital Programmable Timer

LVS | Low Voltage Switches *Page 167*

LVSM1NP Momentary, 1 button
LVSM2NP Momentary, 2 button
LVSM1PL Momentary, 1 button, w/Pilot LED
LVSM2PL Momentary, 2 button, w/Pilot LED

OMNI OMNIDT | OMNIDTRP *Page 169*

OMNIDT500 Dual Technology Ultrasonic and Passive Infrared Ceiling Sensor
OMNIDT500RP Dual Technology Ultrasonic and Passive Infrared Ceiling Sensor
OMNIDT1000 Dual Technology Ultrasonic and Passive Infrared Ceiling Sensor
OMNIDT1000RP Dual Technology Ultrasonic and Passive Infrared Ceiling Sensor
OMNIDT2000 Dual Technology Ultrasonic and Passive Infrared Ceiling Sensor
OMNIDT2000RP Dual Technology Ultrasonic and Passive Infrared Ceiling Sensor

OMNI OMNIUS | OMNIUSRP *Page 171*

OMNIUS500 Ultrasonic Ceiling Sensor
OMNIUS500RP Ultrasonic Ceiling Sensor
OMNIUS1000 Ultrasonic Ceiling Sensor
OMNIUS1000RP Ultrasonic Ceiling Sensor
OMNIUS2000 Ultrasonic Ceiling Sensor
OMNIUS2000RP Ultrasonic Ceiling Sensor

OMNI OMNIIR | OMNIIRP *Page 173*

OMNIIR Passive Infrared Ceiling Sensor
OMNIIRRP Passive Infrared Ceiling Sensor
OMNIIRL Passive Infrared Ceiling Sensor
OMNIIRLRP Passive Infrared Ceiling Sensor

OMNI OMNIDIA | OMNIDIARP *Page 175*

OMNIDIA Dual Technology Acoustic and Passive Infrared Ceiling Sensor
OMNIDIARP Dual Technology Acoustic and Passive Infrared Ceiling Sensor

PIR1000H *Page 177*

PIR1000H Passive Infrared Ceiling Sensor for Hallway Applications

CUI5002000P *Page 179*

CUI5002000P120 Dual Technology Ultrasonic and Passive Infrared Line Voltage Ceiling Sensor
CUI5002000P277 Dual Technology Ultrasonic and Passive Infrared Line Voltage Ceiling Sensor

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C5002000P120 Ultrasonic Line Voltage Ceiling Sensor
C5002000P277 Ultrasonic Line Voltage Ceiling Sensor

C8001500P *Page 183*

C8001500P120 Ultrasonic Line Voltage Ceiling Sensor
C8001500P277 Ultrasonic Line Voltage Ceiling Sensor

PIR10 *Page 185*

PIR10P Passive Infrared Line Voltage Ceiling Sensor
PIR10EMS Passive Infrared Low Voltage Ceiling Sensor

LightOWL LODT | LODTRP *Page 187*

LODT Ultrasonic and Passive Infrared Wall and Ceiling Sensor
LODTRP Ultrasonic and Passive Infrared Wall and Ceiling Sensor

LightOWL LOIRWV | LOIRWVRP *Page 189*

LOIRWV Passive Infrared Wall and Ceiling Sensor
LOIRWVRP Passive Infrared Wall and Ceiling Sensor

LightOWL LODIA | LODIARP *Page 191*

LODIA Passive Infrared and Acoustic Wall and Ceiling Sensor
LODIARP Passive Infrared and Acoustic Wall and Ceiling Sensor

UVPP *Page 195*

UVPP Universal Voltage Power Pack

UVPPM *Page 197*

UVPPM Universal Voltage Power Pack with Manual ON/OFF

Quick to Install System *Page 199*

CAB10 10' Plenum rated
CAB20 20' Plenum rated
S1M2F Splitter 1 male, 2 female

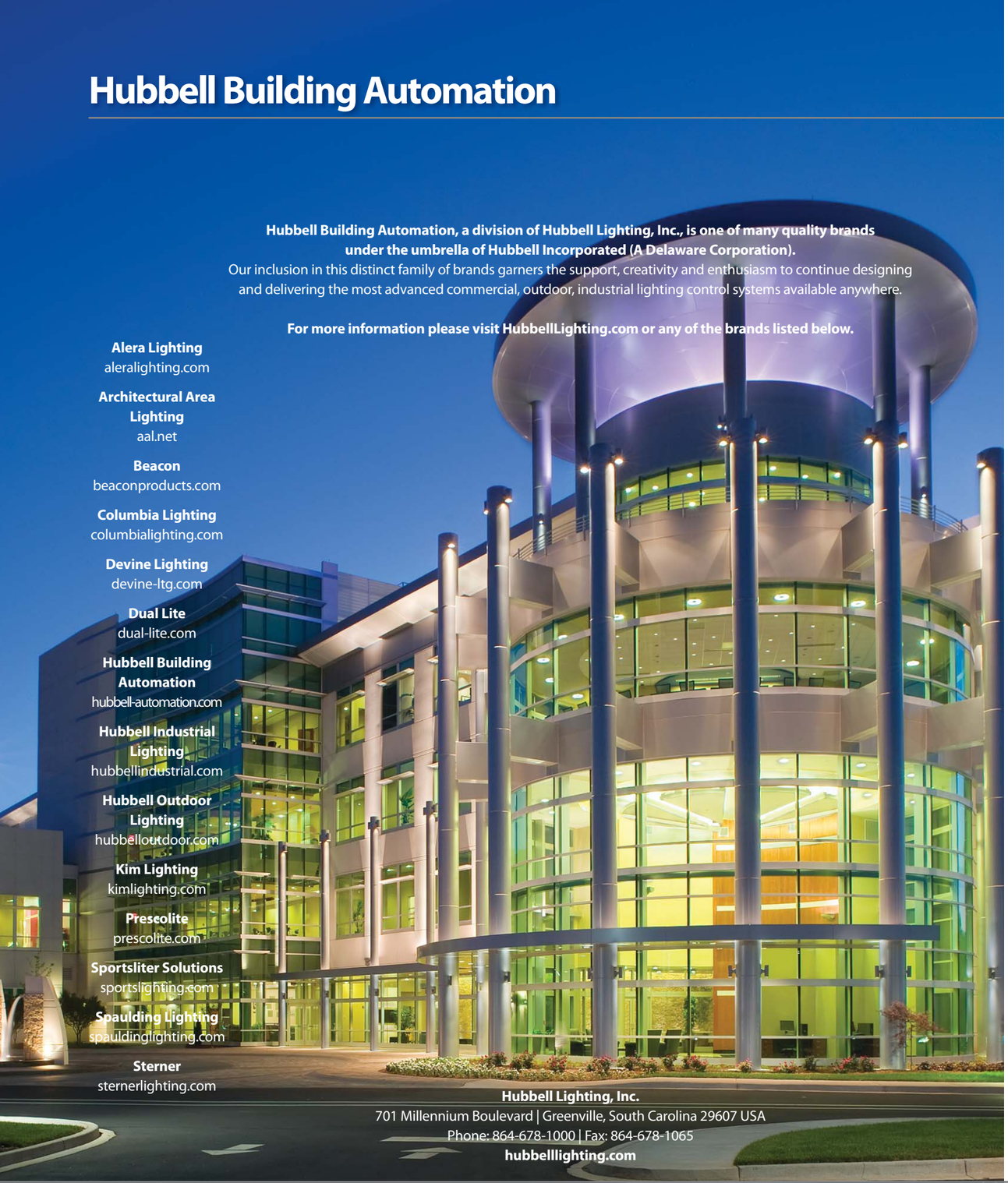
RRU *Page 201*

RRU120
RRU277

RR1SPDTC *Page 203*

RR2SPDTC
RR2SPDTC120
RR2SPDTC270

Hubbell Building Automation



Hubbell Building Automation, a division of Hubbell Lighting, Inc., is one of many quality brands under the umbrella of Hubbell Incorporated (A Delaware Corporation).
Our inclusion in this distinct family of brands garners the support, creativity and enthusiasm to continue designing and delivering the most advanced commercial, outdoor, industrial lighting control systems available anywhere.

For more information please visit HubbellLighting.com or any of the brands listed below.

Alera Lighting
aleralighting.com

Architectural Area Lighting
aal.net

Beacon
beaconproducts.com

Columbia Lighting
columbialighting.com

Devine Lighting
devine-ltg.com

Dual Lite
dual-lite.com

Hubbell Building Automation
hubbell-automation.com

Hubbell Industrial Lighting
hubbellindustrial.com

Hubbell Outdoor Lighting
hubbelloutdoor.com

Kim Lighting
kimlighting.com

Prescolite
prescolite.com

Sportsliter Solutions
sportslighting.com

Spaulding Lighting
spauldinglighting.com

Sterner
sternerlighting.com

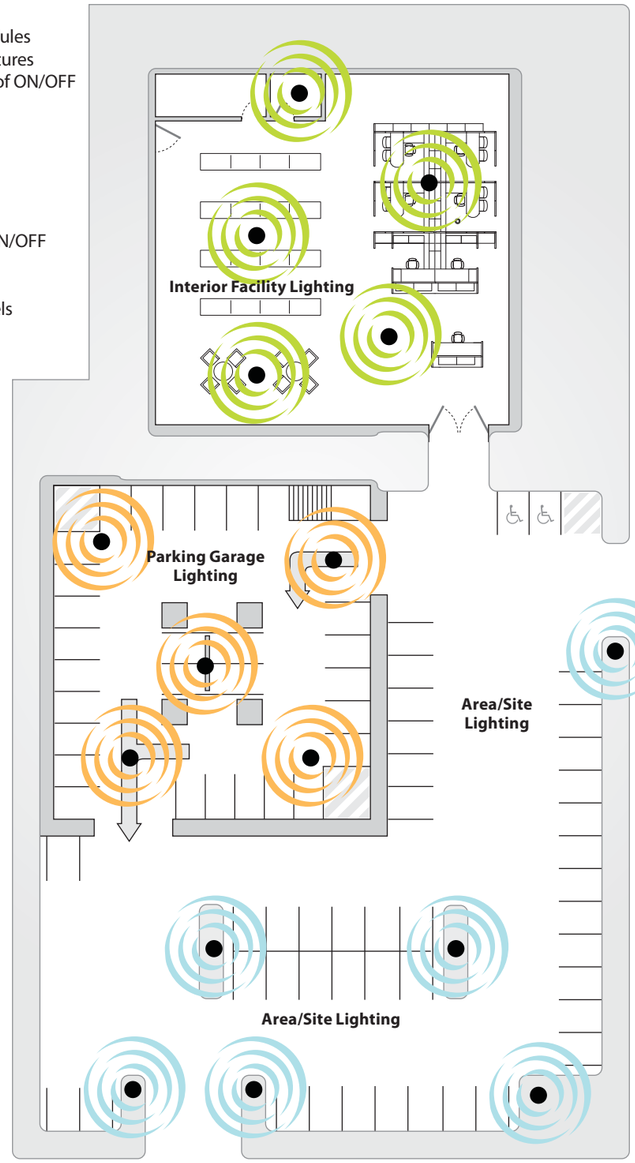
Hubbell Lighting, Inc.
701 Millennium Boulevard | Greenville, South Carolina 29607 USA
Phone: 864-678-1000 | Fax: 864-678-1065
hubbelllighting.com

wiHUBB™ APPLICATIONS

AREA/SITE LIGHTING
- In-Fixture or On-Fixture Modules installed in or on lighting fixtures
- Access Point for scheduling of ON/OFF and dimmed levels
- Demand Response ready

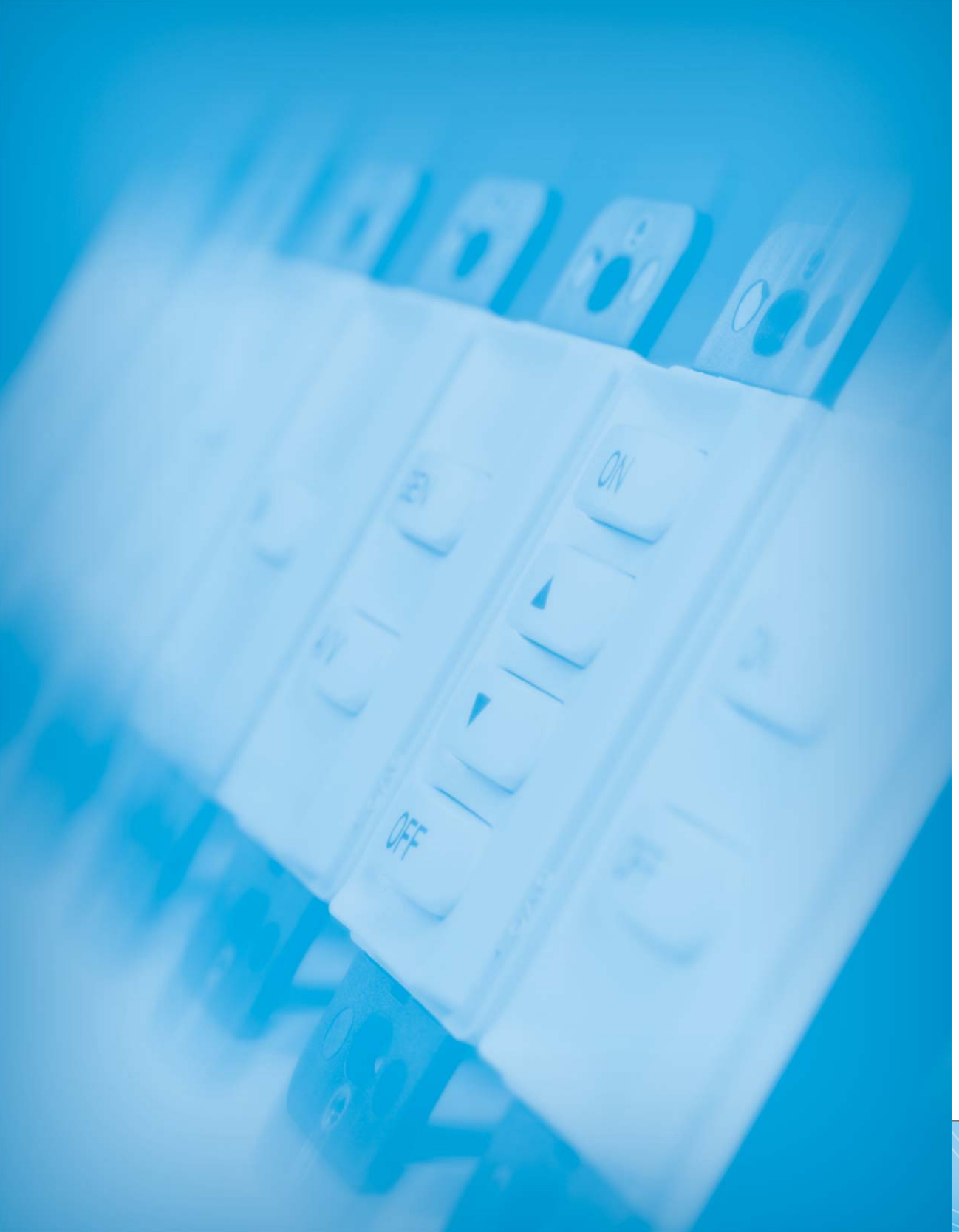
PARKING GARAGE LIGHTING
- In-Fixture Modules installed in lighting fixtures
- Time-based scheduling of ON/OFF and dimming levels
- Access Point for scheduling of ON/OFF and dimmed levels
- Demand Response ready

INTERIOR FACILITY LIGHTING
- In-Fixture Modules installed in lighting fixtures
- Smart Pack installed controlling lighting circuits
- Access Point for scheduling and device management
- Switch Stations for Manual ON/OFF control
- Occupancy|Vacancy sensors for Auto/Manual ON, Auto OFF control
- Daylight sensor for daylight harvesting applications



wiHUBB™ Wireless Distributed Lighting Controls

Table of Contents



WIH-AP
wiHUBB™ Access Point

KEY FEATURES

- Web-based commissioning and monitoring of the wiHUBB lighting control system
- Integrated web server provides connection via standard web browsers
- Easy system access from the local network or Internet
- Intuitive and easy-to-use Graphical User Interface (GUI)
- Ability to schedule wiHUBB-enabled devices or groups of devices
- Provides ON/OFF and dimming control of wiHUBB-enabled devices and groups of devices
- Robust and reliable 900Mhz wireless self-organizing and self-healing mesh network

WIH-AP

SPECIFICATIONS

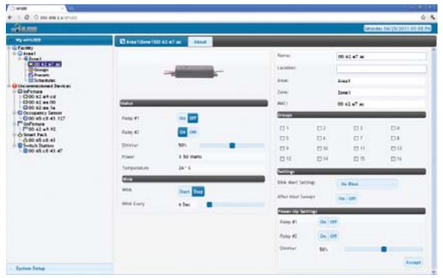
Power Requirements	• 120VAC with plug-in power supply (included)
RF Frequency	• 902 - 928MHz • Wireless Peer-To-Peer, Self-Organizing and Self-Healing Mesh Network • Advanced Encryption Standard AES-128 Security • Spread Spectrum Frequency Hopping
RF Range	• Supported distance between wireless devices: 100 meters (328 feet) • Maximum Transmission Output Power: +20 dBm • Maximum Receive Sensitivity: -118 dBm
Operating Environment	• Operating Temperature: 0°C to 40°C • Relative humidity (non-condensing): 0 – 95%
Construction	• Housing: Flame retardant ABS plastic, UL flame rating of 94-5VA
Size and Weight	• Size: 5.00"L x 7.50"W x 1.75"H • Weight: 6 oz
Color	• Black
Mounting	• Surface or wall mount (mounting screws provided)
Patents	• Patent(s) Pending
Certifications	• FCC Certified • IC Approved

ORDERING INFORMATION

MODEL / DESCRIPTION	
WIH-AP	wiHUBB Access Point

SCREEN CAPTURES

Device Settings



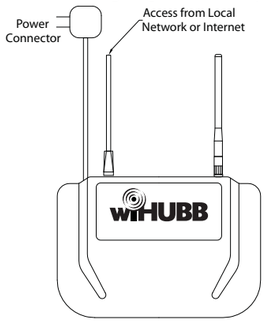
Group Management

Preset Management

Scheduling

WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

WIH-SP

wiHUBB™ Smart Pack

WIH-SP-2RD-1277

KEY FEATURES

- Single or dual relay versions for ON/OFF or High/Low control
- Optional 0 – 10VDC interface for full range dimming control
- Plug-and-play support for wiHUBB occupancy sensors, daylight sensors and switch stations
- Device intelligently and automatically responds to sensors and switches in the most energy- efficient manner
- Schedules are held in the devices themselves – no need for a master scheduling device
- Monitors, measures, and records energy consumption and runtime data

SPECIFICATIONS

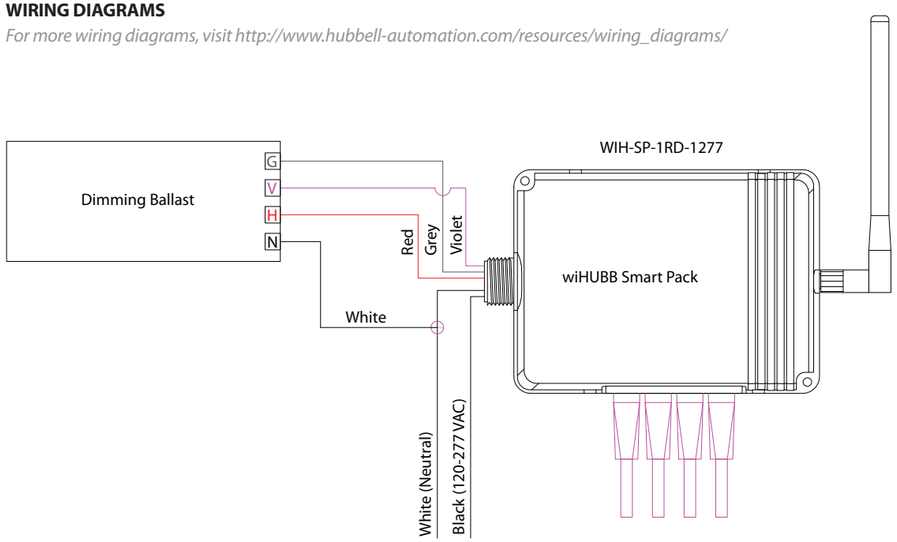
Electrical Ratings	• Input: 120/277VAC, 20A Max, 60Hz • Output*: 20A, Tungsten, 120VAC only; 20A, Magnetic Ballast; 16A, Electronic Ballast 1 H.P. Motor @120V, 3/4 H.P. @277V *For (2) relay models the maximum combined output of both relays: 20A Low Voltage Ports: • Class 2 • 24VDC, 150mA MAX (all outputs combined)
Optional Dimming Interface	• 0-10VDC, 30mA output • For use with low-voltage, two-wire dimming ballast and LED drivers.
RF Frequency	• 902 - 928MHz • Wireless Peer-To-Peer, Self-Organizing and Self-Healing Mesh Network • Advanced Encryption Standard AES-128 Security • Spread Spectrum Frequency Hopping
RF Range	• Supported distance between wireless devices: 100 meters (328 feet) • Maximum Transmission Output Power: +20 dBm • Maximum Receive Sensitivity: -118 dBm
Operating Environment	• Operating Temperature: 0°C to +40°C; Relative humidity (non-condensing): 0 – 95%
Construction	• Housing: GSM UL Rated 94 HB Plastic
Plenum rated	• Complies with requirements for use in a plenum area; Plenum rated for external junction box mounting
Size and Weight	• Size: 5.75"L x 3.85"W x 1.30"H • Weight: 4 oz
Color	• Gray
Mounting	• Mounts directly to an external junction box through an extended ½" chase nipple.
Patents	• Patent(s) Pending
Certifications	• Conforms with UL916 and Certified to CAN/CSA C22.2 No. 205-M1983; FCC Certified; IC Approved

ORDERING INFORMATION

MODEL	OUTPUT	INPUT VOLTAGE
WIH-SP	**1R** 1 SPST Output **1RD** 1 SPST Output, 0-10VDC Dimming Output **2R** 2 SPST Outputs **2RD** 2 SPST Outputs, 0-10VDC Dimming Output	**1277** 120/277VAC

WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

WIH-OS

wiHUBB™ Ceiling and Wall Mount Occupancy Sensors

WIH-OS-LODT

WIH-OS-OMDT2

KEY FEATURES

- IntelliDAPT® self-adaptive technology – no manual adjustment required
- All-digital passive infrared, ultrasonic, acoustic and dual technology models available
- Non-volatile memory for sensor settings
- Coverage range: 500 sq. ft. to 2,000 sq. ft. (based on model)
- Optional Isolated Form C relay with NO/NC outputs
- Plug-and-play integration with wiHUBB Smart Pack

SPECIFICATIONS

IntelliDAPT	• Auto reset from test setting • Self-adjusting timer • Self-adjusting ultrasonic and passive infrared thresholds • Automatic false-on, false-off corrections
LED Indicators	• Red: motion detected by Passive Infrared sensing technology • Green: motion detected by Ultrasonic sensing technology
Timer Timeout	• Automatic mode: 8-30 min. (self-adjusts based on occupancy) • Test mode: 8 seconds (for an easy check at installation)
Ultrasonic Output	• Maximum amount of radiation output allowed: 115dB @ 1 ft. from source • Frequency: 32.768kHz or 40kHz (based on model)
Passive Infrared	• Dual element pyrometer and 12 element cylindrical rugged lens
Form C Relay	• Relay: NO + NC contacts, SPDT, 500 mA rated @ 24VDC, three wire, isolated relay
Coverage	• Ceiling mount sensor: 500 sq. ft. (Major motion) / 250 sq. ft. (Minor motion) to 2000 sq. ft. (Major motion) / 1000 sq. ft. (Minor motion) –(based on model) • Wall mount sensor: 1600 sq. ft. (Major motion) / 800 sq. ft. (Minor motion)
Power Requirements	• Powered by wiHUBB Smart Pack SmartPORT using plenum rated SmartPORT plug-and-play cables (ordered separately)
Operating environment	• Indoor use only • Operating Temperature: 0°C to +40°C • Relative humidity (non-condensing): 0 – 95%
Construction	• Casing – rugged, high-impact, injection-molded plastic KJB ABS Cycolac (UV-945VA) flame class rating, UV inhibitors; Quick to Install Connectors
Size and weight	• Size: 4.5″ diameter, 1.5″ height (114 mm diameter, 38mm height) • Weight: 5.0 oz (142g)
Color	• Off White
Mounting	• Mounting base provided • Recommended MAX mounting height: 12 ft.
Patents	• U.S. Patents: 6151529, 5946209, 5699243, 5640143, 6415205, 6078253, D404326, 6222191, 5986357, 6759954 • Patent(s) Pending
Certifications	• UL and cUL listed

WIH-OS

wiHUBB™ Ceiling Mount and Wall Mount Occupancy Sensors

ORDERING INFORMATION

Occupancy Sensors

MODEL
WIH-OS

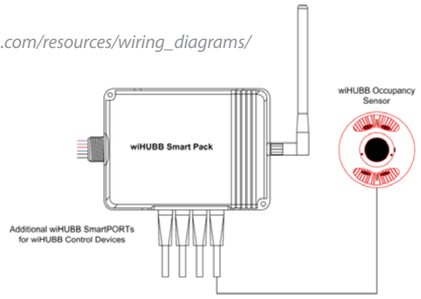
SENSOR TYPE	
OMDT2	Ceiling Mount, PIR and Ultrasonic, 2000 Sq. Ft.
OMDT2R	RCeiling Mount, PIR and Ultrasonic, 2000 Sq. Ft., Form C Relay
OMDT1	Ceiling Mount, PIR and Ultrasonic, 1000 Sq. Ft.
OMDT1R	Ceiling Mount, PIR and Ultrasonic, 1000 Sq. Ft., Form C Relay
OMDT5	Ceiling Mount, PIR and Ultrasonic, 500 Sq. Ft.
OMDT5R	Ceiling Mount, PIR and Ultrasonic, 500 Sq. Ft., Form C Relay
OMUS2	Ceiling Mount, Ultrasonic, 2000 Sq. Ft.
OMUS2R	Ceiling Mount, Ultrasonic, 2000 Sq. Ft., Form C Relay
OMUS1	Ceiling Mount, Ultrasonic, 1000 Sq. Ft.
OMUS1R	Ceiling Mount, Ultrasonic, 1000 Sq. Ft., Form C Relay
OMUS5	Ceiling Mount, Ultrasonic, 500 Sq. Ft.
OMUS5R	Ceiling Mount, Ultrasonic, 500 Sq. Ft., Form C Relay
OMIR	Ceiling Mount, Passive Infrared, 450 Sq. Ft.
OMIRR	Ceiling Mount, Passive Infrared, 450 Sq. Ft., Form C Relay
OMIRL	Ceiling Mount, Passive Infrared, 1500 Sq. Ft.
OMIRLR	Ceiling Mount, Passive Infrared, 1500 Sq. Ft., Form C Relay
OMDIA	Ceiling Mount, PIR and Acoustic, 450 Sq. Ft.
OMDIAR	Ceiling Mount, PIR and Acoustic, 450 Sq. Ft., Form C Relay
LODT	Wall Mount, PIR and Ultrasonic, 1600 Sq. Ft.
LODTR	Wall Mount, PIR and Ultrasonic, 1600 Sq. Ft., Form C Relay
LOIRWV	Wall Mount, Passive Infrared, 2500 Sq. Ft.
LOIRWVR	Wall Mount, Passive Infrared, 2500 Sq. Ft., Form C Relay
LOIRHB	Wall Mount, Passive Infrared, 50' at 30' Height
LOIRHBR	Wall Mount, Passive Infrared, 50' at 30' Height, Form C Relay
LODIA	Wall Mount, PIR and Acoustic, 1600 Sq. Ft.
LODIAR	Wall Mount, PIR and Acoustic, 1600 Sq. Ft., Form C Relay

Cables

MODEL / DESCRIPTION	
WIH-CAB-50F-WH	SmartPORT Cable, 50ft, White – for Occupancy Sensors
WIH-CAB-100F-WH	SmartPORT Cable, 100ft, White – for Occupancy Sensors

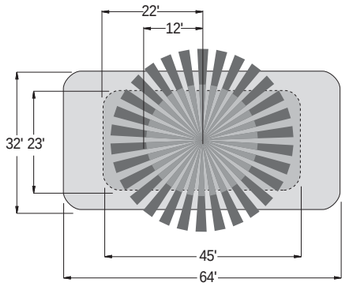
WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/

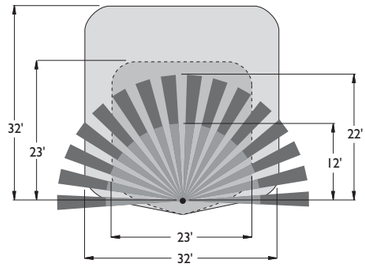


NOTES

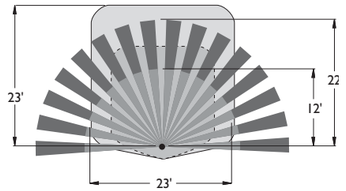
RANGE DIAGRAMS



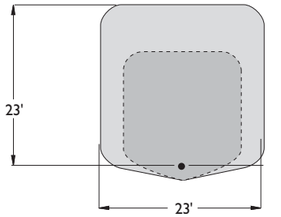
WIH-OS-OMDT2 Ceiling Mount Sensor



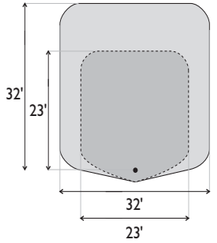
WIH-OS-OMDT1 Ceiling Mount Sensor



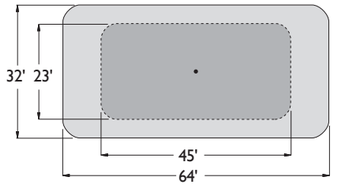
WIH-OS-OMDT5 Ceiling Mount Sensor



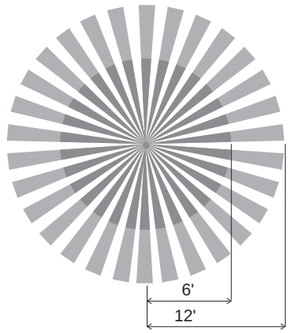
WIH-OS-OMUS5 Ceiling Mount Sensor



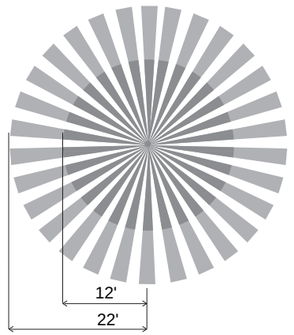
WIH-OS-OMUS1 Ceiling Mount Sensor



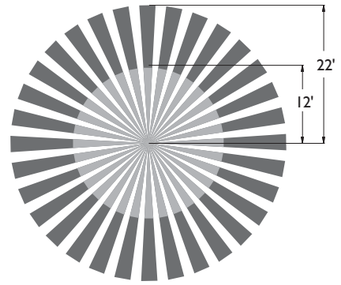
WIH-OS-OMUS2 Ceiling Mount Sensor



WIH-OS-OMIR Ceiling Mount Sensor

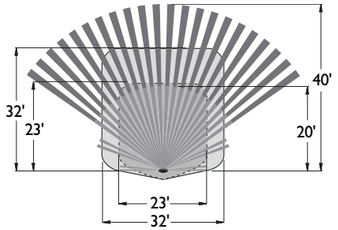


WIH-OS-OMIRL Ceiling Mount Sensor

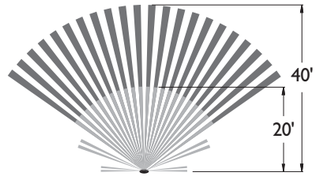


WIH-OS-OMDIA Ceiling Mount Sensor

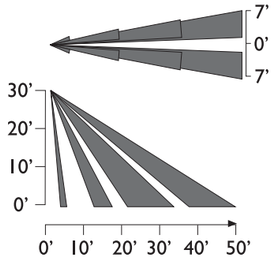
WIH-OS RANGE DIAGRAMS *continued*



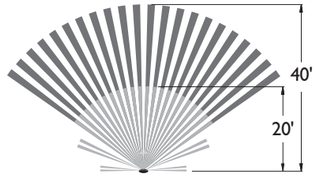
WIH-OS-LODT
Wall Mount Sensor



WIH-OS-LOIRWV
Wall Mount Sensor



WIH-OS-LOIRHB
Wall Mount Sensor



WIH-OS-LODIA
Wall Mount Sensor

NOTES

WIH-SW
wiHUBB™ Switch Stations

KEY FEATURES

- Attractive, architecturally-pleasing decorator style design
- Multiple switch options available
- All switches mount to standard single or multi-gang wall boxes
- Plug-and-play integration with wiHUBB Smart Pack

WIH-SW-OO *WIH-SW-HLO* *WIH-SW-ORLO* *WIH-SW-PRESET* *WIH-SW-GAV* *WIH-SW-RL* *WIH-SW-TO*

SPECIFICATIONS

Power Requirements	• Powered by wiHUBB Smart Pack SmartPORT using plenum rated SmartPORT plug-and-play cables (ordered separately)
Operating environment	• Indoor use only • Operating Temperature: 0°C to +40°C • Relative humidity (non-condensing): 0 – 95%
Construction	• Housing – Rugged, high impact, injection molded plastic
Size & Weight	• Size: 4.2" L x 1.6"W x 1.4" D • Weight: 1.6 oz
Color	• White
Mounting	• Switches may be mounted individually in a single gang switch box or ganged together in a multi-gang switch box • Decorator-style wall plates available separately
Patents	• Patent(s) Pending

ORDERING INFORMATION

MODEL	SWITCH TYPE	COLOR
WIH-SW	**OO** ON/OFF Switch	**WH** White
	HLO High/Low/Off Switch	
	ORLO On/Raise/Lower/Off Switch	
	PRESET Preset/Scene Switch (4-button)	
	GAV General – A/V Mode Switch	
	RL Raise/Lower Switch	
	TO Timed On Switch	

WIH-SW ORDERING INFORMATION continued

SWITCH CABLES

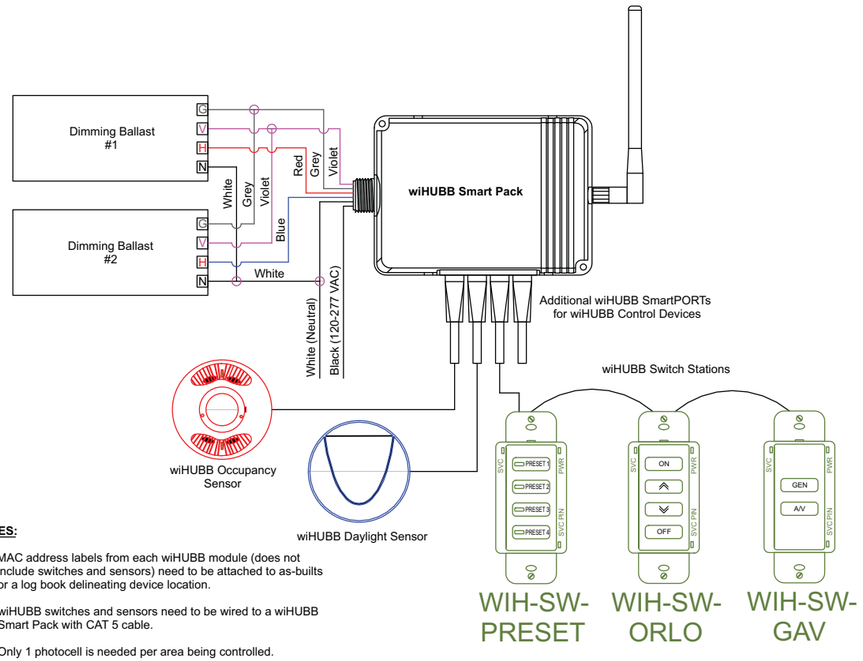
MODEL/DESCRIPTION	
WIH-CAB-50F-BL	Cable, 50ft, Blue for Switches
WIH-CAB-100F-BL	Cable, 50ft, Blue for Switches
WIH-CAB-3IN-BL	Jumper Cable for Switches

DECORATOR STYLE WALL PLATES

MODEL	SWITCH TYPE	COLOR
WIH-WP	**1G** Wall Switch Plate, Decorator Style, 1-gang	**WH** White
	2G Wall Switch Plate, Decorator Style, 2-gang	
	3G Wall Switch Plate, Decorator Style, 3-gang	
	4G Wall Switch Plate, Decorator Style, 4-gang	
	5G Wall Switch Plate, Decorator Style, 5-gang	

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES:

1. MAC address labels from each wiHUBB module (does not include switches and sensors) need to be attached to as-builts or a log book delineating device location.
2. wiHUBB switches and sensors need to be wired to a wiHUBB Smart Pack with CAT 5 cable.
3. Only 1 photocell is needed per area being controlled.

WIH-DS
wiHUBB™ Daylight Sensor

KEY FEATURES

- Open loop operation
- Mounts vertically or horizontally
- Architecturally attractive design
- Plug-and-play integration with wiHUBB Smart Pack

WIH-DS

SPECIFICATIONS

Electrical	• Three jumper-selectable foot candle ranges: 3-300fc; 30-3,000fc; 60-6,000fc • Powered by wiHUBB Smart Pack SmartPORT using plenum rated SmartPORT plug- and- play cables (ordered separately)
Operating environment	• Indoor use only • Operating Temperature: 0°C to +40°C • Relative humidity (non-condensing): 0 – 95%
Construction	• Protective hard plastic cover and housing
Dimension	• 2' diameter x 1.2" height (50.8 diameter x 30.5mm height)
Patents	• Patent(s) Pending

ORDERING INFORMATION

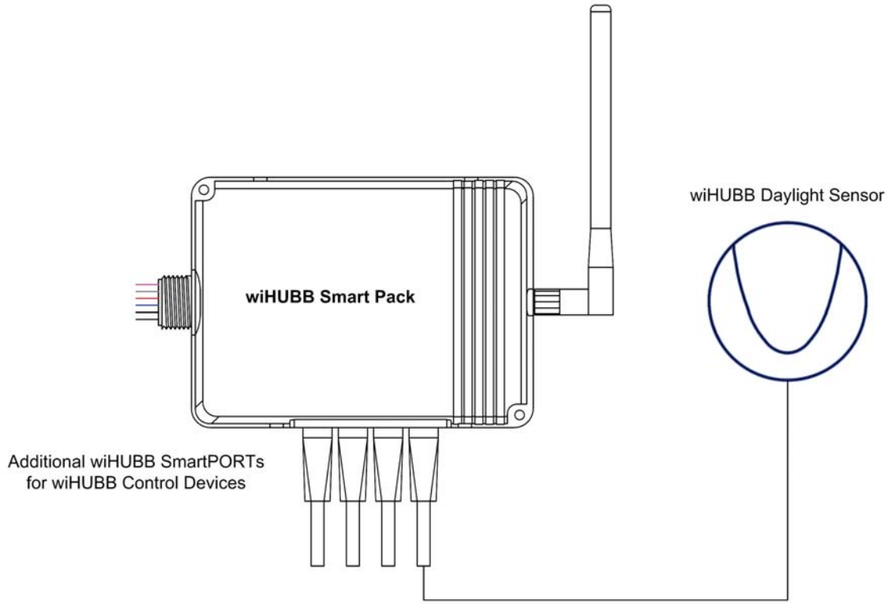
MODEL / DESCRIPTION	
WIH-DS	wiHUBB Daylight Sensor

Daylight Sensor Cables

MODEL / DESCRIPTION	
WIH-CAB-50F-GN	SmartPORT Cable, 50ft, Green - for Daylight Sensor
WIH-CAB-100F-GN	SmartPORT Cable, 100ft, Green - for Daylight Sensor

WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

WIH-IM

wiHUBB™ In-Fixture Module

KEY FEATURES

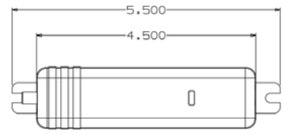
- Single or dual relay versions for ON/OFF or High/Low control
- Optional 0 – 10VDC interface for full range dimming control
- Device intelligently and automatically responds to sensors and switches in the most energy-efficient manner
- Schedules are held in the devices themselves – no need for a master scheduling device
- Retains data during power outages
- Future-proof design – firmware updateable over the air
- Multiple antenna options available

WIH-IM-2RD-1277

SPECIFICATIONS

Electrical Ratings (-1277 version)	• Input: 120-277VAC, 10A Max, 60Hz • Output: 10A, Tungsten, 120VAC only 10A, Magnetic Ballast 5A, Electronic Ballast (max each relay) ¼ H.P. Motor, 120 & 277VAC For (2) relay models the maximum combined output of both relays: 10A
Electrical Ratings (-347 version)	• Input: 347VAC, 10A Max, 60Hz • Output: 10A, Ballast For (2) relay models the maximum combined output of both relays: 10A
Optional Dimming Interface	• 0-10VDC, 30mA output • For use with low-voltage, two-wire dimming ballast and LED drivers.
RF Frequency	• 902 - 928MHz • Wireless Peer-To-Peer, Self-Organizing and Self-Healing Mesh Network • Advanced Encryption Standard AES-128 Security • Spread Spectrum Frequency Hopping
RF Range	• Supported distance between wireless devices: 100 meters (328 feet) • Maximum Transmission Output Power: +20 dBm • Maximum Receive Sensitivity: -118 dBm
Operating Environment	• Operating Temperature: -40°C to +90°C • Relative humidity (non-condensing): 0 – 95%
Construction	• Housing: GSM UL Rated 94 HB Plastic
Size and Weight	• Size: 5.50"L x 1.27"W x 1.08"H • Weight: 4 oz
Color	• Gray
Mounting	• Mounts inside fixture ballast cavity or housing • Optional mounting adaptor available (p/n WIH-IM-ADAPTER) for external junction box mounting
Patents	• Patent(s) Pending
Certifications	• Conforms with UL916 and Certified to CAN/CSA C22.2 No. 205-M1983; FCC Certified; IC Approved

DIMENSIONAL DRAWINGS



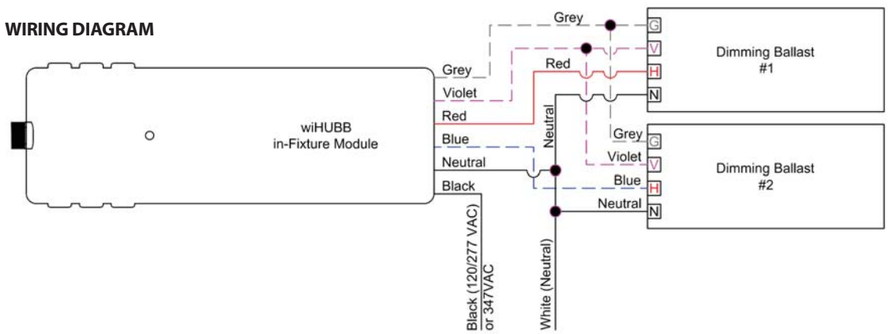
ORDERING INFORMATION

MODEL	OUTPUT	INPUT VOLTAGE
WIH-IM	**1R** 1 SPST Output (Antenna not included)	**1277** 120/277VAC
	1RD 1 SPST Output, 0-10VDC Dimming Output (Antenna not included)	**347** 347VAC
	1RA 1 SPST Output, Articulating Antenna	
	1RDA 1 SPST Output, 0-10VDC Dimming Output, Articulating Antenna	
	1RF 1 SPST Output, Fixed Antenna with 24" Extension Cable	
	1RDF 1 SPST Output, 0-10VDC Dimming Output, Fixed Antenna with 24" Extension Cable	
	2R 2 SPST Outputs (Antenna not included)	
	2RD 2 SPST Outputs, 0-10VDC Dimming Output (Antenna not included)	
	2RA 2 SPST Outputs, Articulating Antenna	
	2RDA 2 SPST Outputs, 0-10VDC Dimming Output, Articulating Antenna	
	2RF 2 SPST Outputs, Fixed Antenna with 24" Extension Cable	
	2RDF 2 SPST Outputs, 0-10VDC Dimming Output, Fixed Antenna with 24" Extension Cable	

ACCESSORY

MODEL	ACCESSORY
WIH-IM	**ADAPTER** In-Fixture Module J-Box Mounting Adapter

WIRING DIAGRAM



WIH-OM
wiHUBB™ On-Fixture Module

WIH-OM-UNV

KEY FEATURES

- ON/OFF outdoor lighting control
- Compatible with all lighting loads including LED drivers
- Integrated daylight sensor
- Schedules are held in the devices themselves –no need for a master scheduling device
- Retains data during power outages
- Robust & reliable 900MHz wireless self-organizing and self-healing mesh network

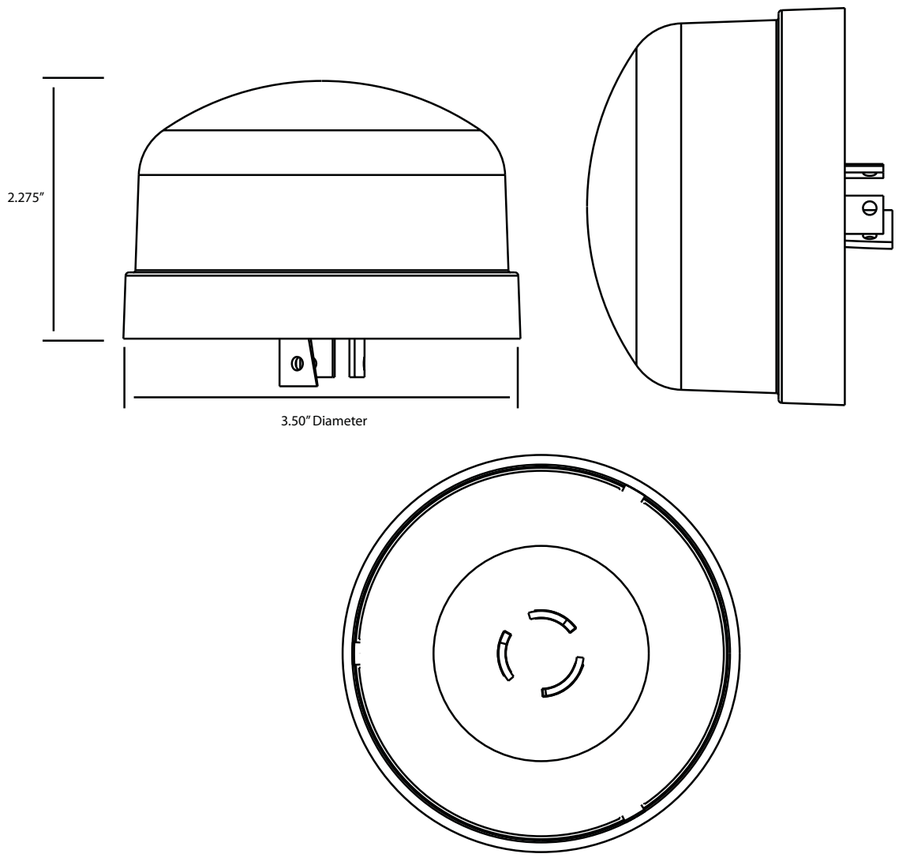
SPECIFICATIONS

Electrical Ratings	• Input: 120-347VAC, 50/60Hz • Output: 20A, Tungsten, 120VAC only 20A, Magnetic and Electronic Ballast
RF Frequency	• 902 - 928MHz • Wireless Peer-To-Peer, Self-Organizing and Self-Healing Mesh Network • Advanced Encryption Standard AES-128 Security • Spread Spectrum Frequency Hopping
RF Range	• Supported distance between wireless devices: 100 meters (328 feet) • Maximum Transmission Output Power: +20 dBm • Maximum Receive Sensitivity: -118 dBm
Daylight Sensor	• 0.5 FC – 50 FC
Operating Environment	• Operating Temperature: -40°C to +90°C
Construction	• Housing: GSM UL Rated 94 HB Plastic
Size and Weight	• Size: 3.50"D x 2.275"H • Weight: 4 oz
Color	• Smoked Plastic Housing
Mounting	• Standard twist lock photo-sensor receptacle
Patents	• Patent(s) Pending
Certifications	• Conforms with UL916 and Certified to CAN/CSA C22.2 No. 61010-1-04 • FCC Certified • IC Approved

ORDERING INFORMATION

MODEL	INPUT VOLTAGE
WIH-OM	**UNV** 120-347VAC, 50/60Hz

DIMENSIONAL DIAGRAM



NOTES

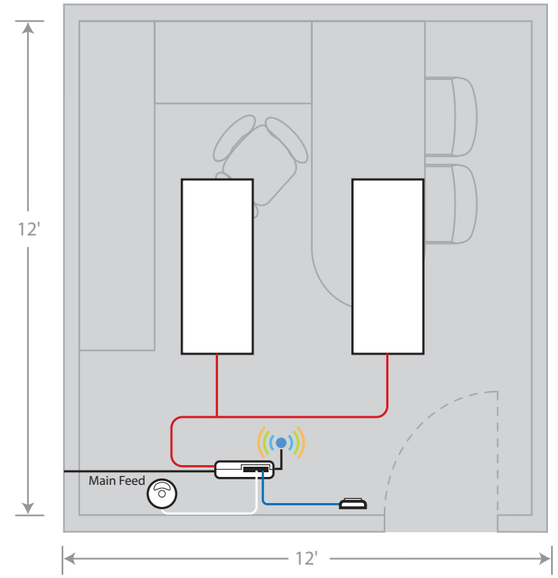
WIH-AP
wiHUBB™ Applications

wiHUBB DESIGN GUIDE

For more wiHUBB Design Applications, please see HBA's wiHUBB Wireless Distributed Lighting Controls Application Guide.

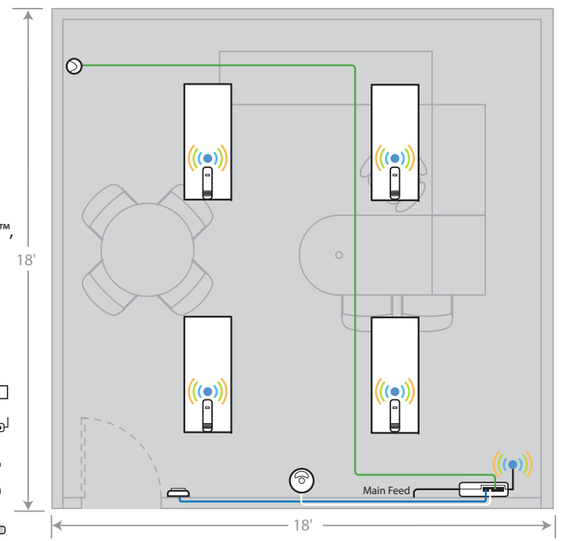
Typical layout / coverage Small Office Design
Control Strategies:
- Automatic Shut-Off
- Individual Space Control

Recommended Technology:
- wiHUBB Single Relay Smart Pack
- wiHUBB Dual Technology Occupancy Sensors with IntelliDAPT™, 500 Sq. Ft. Coverage
- wiHUBB ON/OFF Switch

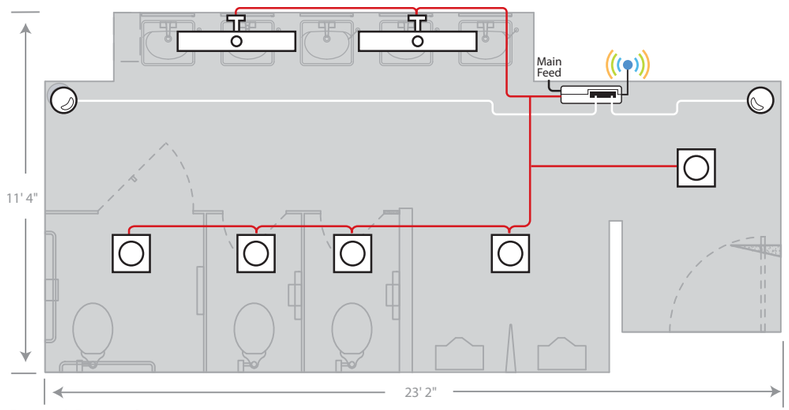


Typical layout / coverage Large Office Design
Control Strategies
- Automatic Shut-Off
- Multi-Level Lighting Control
- Daylighting Control

Recommended Technology:
- wiHUBB Access Point
- wiHUBB Single Relay Smart Pack
- wiHUBB Dual Technology Occupancy Sensor with IntelliDAPT™, 1000 Sq. Ft. Coverage
- wiHUBB Daylight Sensor
- wiHUBB High/Low/Off Switch
- wiHUBB-Enabled Fixtures



Typical layout / coverage Large Restroom Design



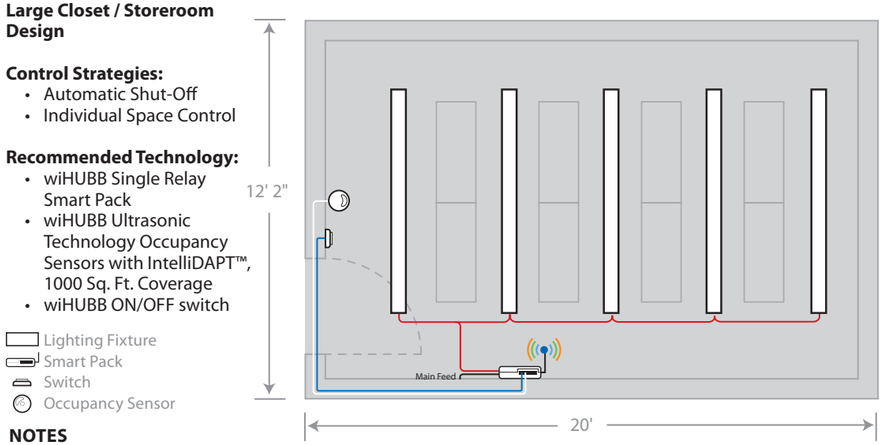
Control Strategies:
- Automatic Shut-Off

Recommended Technology:
- wiHUBB Single Relay Smart Pack
- wiHUBB Ultrasonic Technology Occupancy Sensors with IntelliDAPT™, 500 Sq. Ft. Coverage

Typical layout / coverage Large Closet / Storeroom Design

Control Strategies:
- Automatic Shut-Off
- Individual Space Control

Recommended Technology:
- wiHUBB Single Relay Smart Pack
- wiHUBB Ultrasonic Technology Occupancy Sensors with IntelliDAPT™, 1000 Sq. Ft. Coverage
- wiHUBB ON/OFF switch



NOTES

Lighting Control Panels

Table of Contents

LX
Lighting Control Panels
4, 8, 16, 32 and 48 Relays

NOTE: LXTB Graphic User Interface not included. Order Seperately.

KEY FEATURES

- Unique handheld touchscreen graphical user interface (GUI) (Order Seperately)
- Robust and reliable 20 Amp mechanically latching-relays
- Multiple size enclosures available (4, 8, 16, 32, and 48 relays)
- Topology-free, polarity-insensitive, 2-wire communication
- LonMark® certified
- 365-day time clock
- Automatic Daylight Savings Time and leap-year compensation
- Built-in astronomical time clock for sunrise and sunset programming

SPECIFICATIONS

Programming and configuration	• Programmable via the LX Touch Tablet or LX JENEsys™
Physical	• NEMA 1 enclosure—designed for quick and easy installation • Pre-drilled mounting holes for easy mounting either to the uni-strut framing or directly to wall, KOs provided on top and bottom • Removable interior sub panel • 4, 8, 16, 32, and 48 relay enclosures with hinged locking door
Electrical	• 120/277/347 VAC multi-tap transformer • 120, 277, and 347 VAC 20 Amp Single Pole Relays • 208, 240, and 480 VAC 20 Amp Double Pole Relays
Operating environment	• Location: interior space • Operating temperature: 0°–50°C (32°–112°F) • Relative humidity (non-condensing): 10%–90%
Certifications	• UL and cUL listed (UL 508, 916 and UL 924) • LonMark 3.3 Certified

ORDERING INFORMATION

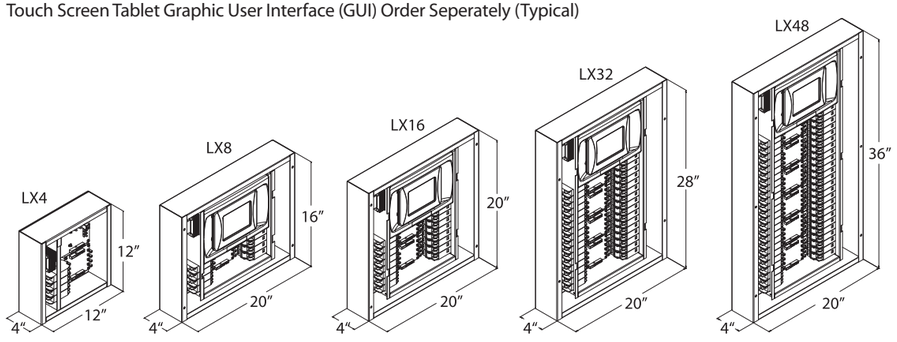
MODEL	RELAY CAPACITY	NUMBER OF SINGLE POLE RELAYS	NUMBER OF DOUBLE POLE RELAYS
LXIN LX Relay Panel Interiors	4 8 16 32 48	00-48* (Depending on Size)	00-24* (Depending on Size)

***NOTE:** Number of poles cannot exceed the relay panel size.
Example: A LX Series Relay Panel is comprised of 2 separate part numbers, 1 for the interior and 1 for the enclosure — they must be the same size.

MODEL	SIZE	TRIM
LXEN		
LXEN LX Relay Panel Enclosure	4 8 16 32 48	**F** Flush **S** Surface

DIMENSIONAL INFORMATION

Touch Screen Tablet Graphic User Interface (GUI) Order Seperately (Typical)

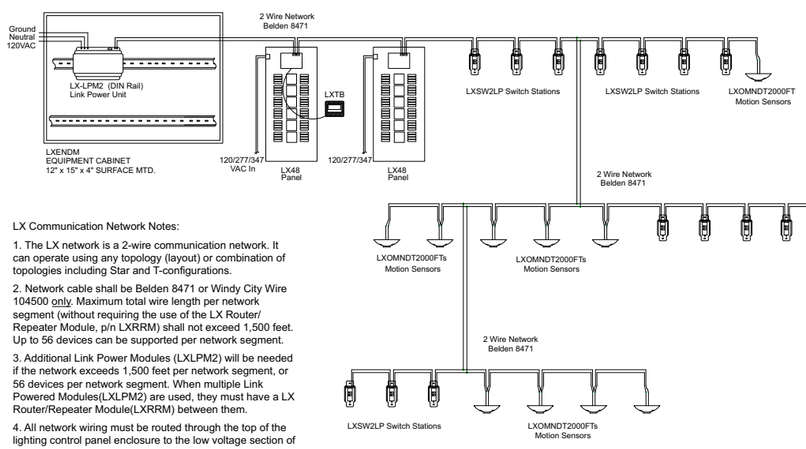


WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/

Typical LX Relay Panel System

All Network Segments
Note: Each network segment shall not exceed 56 devices (panels, switches, sensors) or 1500 ft of wire. The quanity of panels, switches, and sensors shown is to illustrate conceptual wiring scheme only. The actual connection and number of devices will be determined by actual locations on the plans.



LX Communication Network Notes:

1. The LX network is a 2-wire communication network. It can operate using any topology (layout) or combination of topologies including Star and T-configurations.
2. Network cable shall be Belden 8471 or Windy City Wire 104500 only. Maximum total wire length per network segment (without requiring the use of the LX Router/Repeater Module, p/n LXRRM) shall not exceed 1,500 feet. Up to 56 devices can be supported per network segment.
3. Additional Link Power Modules (LXLPM2) will be needed if the network exceeds 1,500 feet per network segment, or 56 devices per network segment. When multiple Link Powered Modules(LXLPM2) are used, they must have a LX Router/Repeater Module(LXRRM) between them.
4. All network wiring must be routed through the top of the lighting control panel enclosure to the low voltage section of the interior.
5. Do not use shielded cable.

NOTES

LXRL
LX Relays

KEY FEATURES

- Robust and reliable mechanically-latching relay
- Suitable for high in-rush loads up to 2,000 Amps
- 14,000 Amp SCCR @277VAC
- 120, 277 & 347 VAC Single Pole
- 208, 240 & 480 VAC Double Pole
- Built-in manual override lever & ON/OFF indicator
- True relay status

SPECIFICATIONS

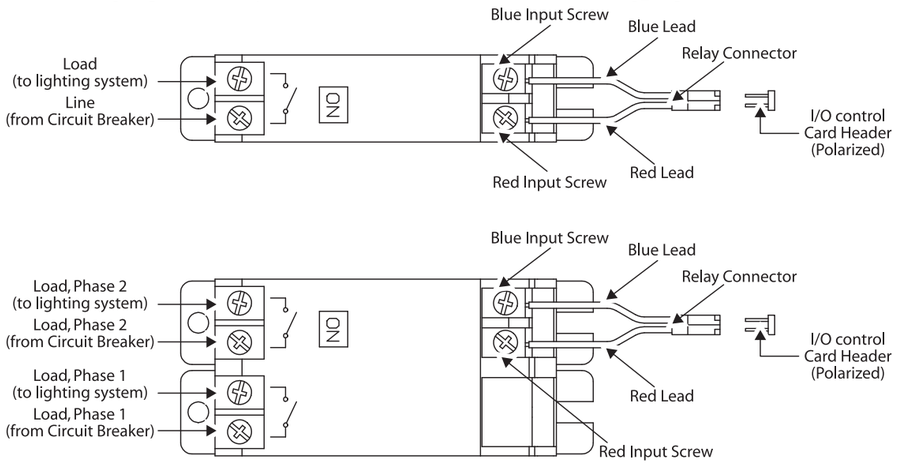
Physical	• Mechanically-held latching relay • Mounts in LX panel to supplied mounting bracket • Built-in manual override lever & ON/OFF indicator on each relay • Toolless insertion and removal of relay
Electrical	• UL Endurance Test 150k Operations at 20A, 300VAC 60k Operations @20A, 300 VAC • UL endurance test Mechanical - 120k operations at 20A, 300VAC • 14,000 Amp SCCR (Short Circuit Current Rating) @ 277VAC* • 20 Amp Single Pole – 120, 277 & 347 VAC • 20 Amp Double Pole – 208, 240 & 480 VAC • ½HP@110-125VAC, 1 ½HP@220-277VAC
Operating environment	• Location: Interior space • Operating temperature: 0° to 50°C (32° to 122°F) • Relative Humidity: 10% to 90% non-condensing
Certifications	• UL & cUL Listed (UL 508)

ORDERING INFORMATION

MODEL	
LXRL1	LX Relay, Single Pole, 120/277/347VAC
LXRL2	LX Relay, Double Pole, 208/240/480VAC

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

LXBC

LXBC Breaker Control Panels
12, 18, 30, 42 Breaker|Relays

NOTE: Touch Screen Graphic User Interface (GUI) not included. Order Seperately.

KEY FEATURES

- Unique, handheld touchscreen graphical user interface (GUI) (Order Separately)
- Robust and reliable 20 and 30 Amp mechanically latching circuit breaker/relays
- Multiple size enclosures available (12, 18, 30, and 42 spaces)
- 100 AMP, 225 AMP or 400 AMP bussing Main Lugs or Main Circuit Breaker
- 120/208V, 3PH, 4W or 277/480V, 3PH, 4W
- Topology-free, polarity-insensitive, 2-wire communication
- 365-day time clock
- Automatic Daylight Savings Time and leap year compensation
- Built-in astonomical time clock for sunrise and sunset programming

SPECIFICATIONS

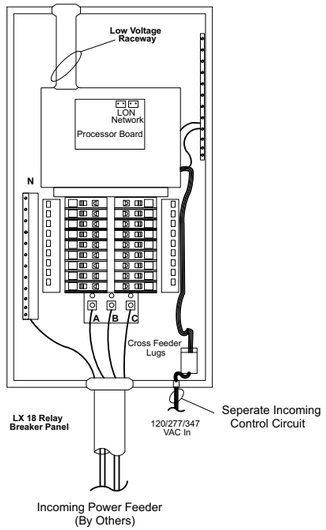
Programming and configuration	• Programmable via the LX Touch Tablet or LX JENEsys™
Physical	• NEMA 1 enclosure, surface or flush mount • KOs provided on top and bottom • 12, 18, 30, and 42 space enclosures with hinged locking door
Electrical	• 120 VAC input control voltage at terminal block • 20 Amp and 30 Amp 1-pole and 2-pole Circuit Breaker/Relays • Non-Control circuit breakers 15A – 100A, 1,2, and 3-pole • 100 AMP, 225 AMP or 400 AMP Lugs Only or Main Circuit Breaker, CU/AL Lugs Bottom Feed only, Top Feed is not available. • 120/208V, 3PH, 4W or 277/480V, 3PH, 4W system voltage, 14KAIC @277/480V, 65KAIC Series Rated with main CB
Operating environment for NEMA 1 rated equipment	• Location: interior space • Operating temperature: 0°–50° C (32°–112° F) • Relative humidity (non-condensing): 10%–90%
Certifications	• UL listed (UL 916) • LonMark 3.3 Certified

ORDERING INFORMATION

LXBC			B		H	
MODEL	**SYSTEM VOLTAGE**	**MAINS**	**FEED**	**BREAKER RELAY SPACES**	**COMMUNICATIONS**	**ENCLOSURE**
LXBC LX Breaker Control Panel	**1** 120/208, 3 Phase, 4 Wire **2** 277/480, 3 Phase, 4 Wire	**IL** 100 Amp Main Lugs Only **IC** 100 Amp Main Circuit Breaker **2L** 225 Amp Main Lugs Only **2C** 225 Amp Main Circuit Breaker **4L** 400 Amp Main Lugs Only **4C** 400 Amp Main Circuit Breaker	**B** Bottom Feed Only (Top Feed is not available)	**12** 12 Spaces **18** 18 Spaces **30** 30 Spaces **42** 42 Spaces NOTE: 42 space is available in 225A and 400A main size only.	**H** HBA LX-Lon	**1S** NEMA 1 Surface **1F** NEMA 1 Flush

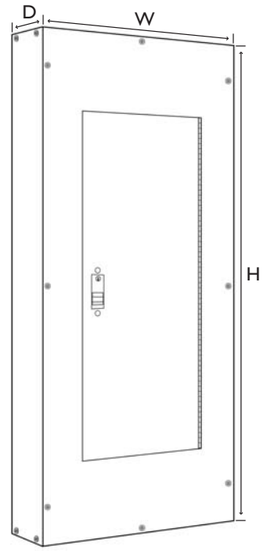
WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



PRODUCT DIMENSIONS

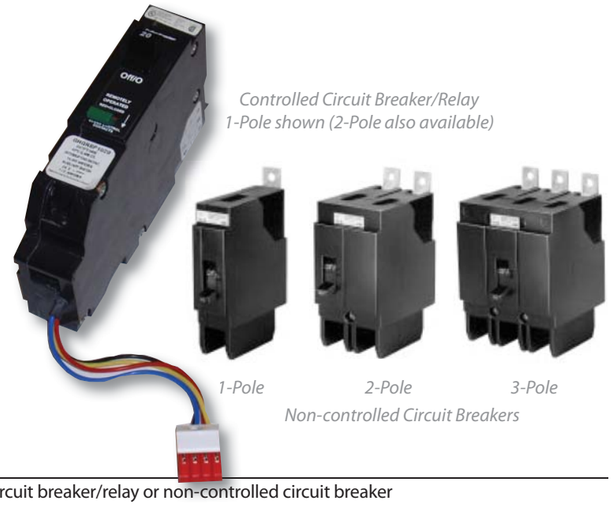
			H	W	D
12 Breaker Panel	100 amp	Main Lugs Only	33"	20"	5.75"
		Main Breaker	36"	20"	5.75"
18 Breaker Panel	100 amp	Main Lugs Only	36"	20"	5.75"
		Main Breaker	42"	20"	5.75"
30 Breaker Panel	100 amp	Main Lugs Only	42"	20"	5.75"
		Main Breaker	48"	20"	5.75"
	225 amp	Main Lugs Only	45"	20"	5.75"
		Main Breaker	51"	20"	5.75"
42 Breaker Panel	225 amp	Main Lugs Only	51"	20"	5.75"
		Main Breaker	57"	20"	5.75"
	400 amp	Main Lugs Only	57"	20"	5.75"
		Main Breaker	69"	20"	5.75"



NOTES

LXBR

Circuit Breaker | Relays and Circuit Breakers for LXBC



Controlled Circuit Breaker/Relay
1-Pole shown (2-Pole also available)

1-Pole *2-Pole* *3-Pole*
Non-controlled Circuit Breakers

KEY FEATURES

- Robust and reliable 20 and 30 Amp mechanically-latching Circuit Breaker/Relays
- Circuit Breaker/Relays are available in 1-pole to 277V and 2-pole to 480V
- Non-controlled Circuit Breakers are available in 1-pole to 277V and 2-pole or 3-pole to 480V
- All devices are rated for switching duty (SWD)
- 14,000 Amp interrupting capacity (AIC)
- Built-in ON/OFF indicator lever
- True relay status

SPECIFICATIONS

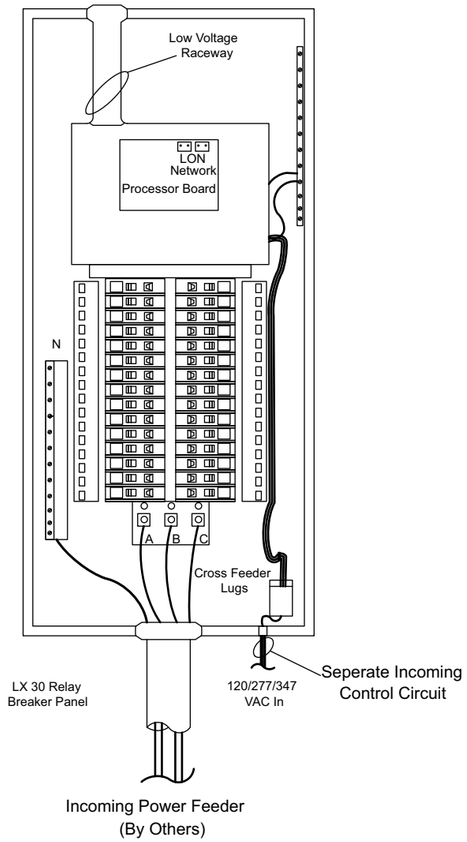
Physical	• Mechanically-held latching circuit breaker/relay or non-controlled circuit breaker • Mounts in LXBC panel bus with bolt into pre-drilled and tapped hole • Built-in ON/OFF indicator lever on each circuit breaker/relay • Power to panel must be disconnected for insertion and removal of devices
Electrical	• 600 VAC 20 Amp and 30 Amp Single and Double Pole Circuit Breaker/Relays • Non-Control circuit breakers 15A – 60A, 1,2, and 3-pole • 14KAIC @277/480V, 65KAIC Series Rated with main CB • Circuit Breaker Relays – Maximum duty cycle of 6 Open/Close cycles per minute
Operating environment for NEMA 1 rated equipment	• Location: interior space • Operating temperature: 0°–50° C (32°–112° F) • Relative humidity (non-condensing): 10%–90%
Certifications	• UL listed (UL 489)

ORDERING INFORMATION

LXBR			
MODEL	**NO. OF POLES**	**AMP RATING**	**CONTROL**
LXBR LX Breaker Relay or Breaker	**1** 1-Pole **2** 2-Pole **3** 3-Pole	**15** 15 Amp **20** 20 Amp **30** 30 Amp **40** 40 Amp **50** 50 Amp **60** 60 Amp **70** 70 Amp **80** 80 Amp **90** 90 Amp **100** 100 Amp	**C** Controlled **N** Non-Controlled NOTE: Controlled Breaker/Relays are available in 20A and 30A 1-Pole and 2-Pole ONLY.

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

LXTB

Touch Tablet Graphical User Interface

LonMark 3.3

KEY FEATURES

- Portable handheld touchscreen
- Graphical user interface (GUI)
- Context-sensitive help
- Quarter VGA display (320 x 240 pixels)
- High-contrast backlit LCD screen
- Programmable security codes

LXTB

SPECIFICATIONS

Programming and configuration	• Device used to program the functionality of other LX lighting control system devices • Can program security codes
Physical	• Handheld device • Quarter VGA display (320 x 240 pixels)
Electrical	• 5 VDC power—supplied from the LX panel
Operating environment	• Location: interior space • Operating temperature: 0°–50°C (32°–122°F) • Relative humidity (non-condensing): 10%–90%
Tablet Dimensions	• 7.5″W x 6″H x 1″D

ORDERING INFORMATION

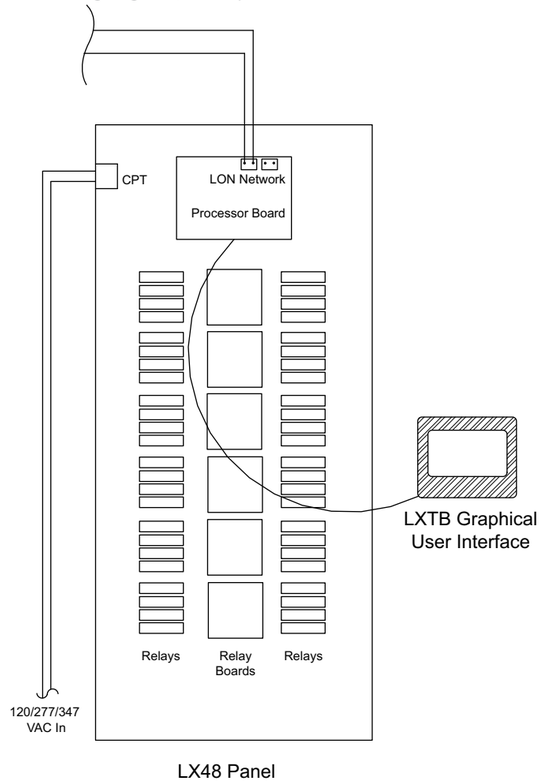
LXTB

MODEL

LXTB LX Touch Screen Tablet

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



LX48 Panel

Notes:

LXTB Graphical User Interface Tablet connects to any LX Panel with RJ45 Cat 5E Cable included with tablet.

NOTES

LXJNSYS

LXJENEsys™ Network Interface Components

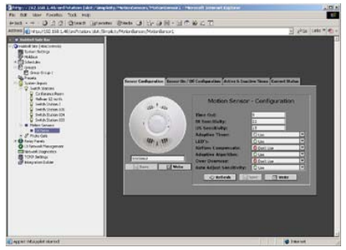
LXJNSYS

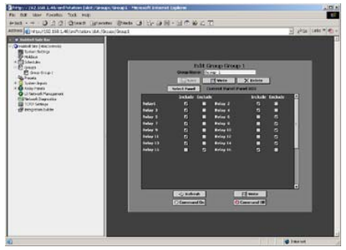
KEY FEATURES

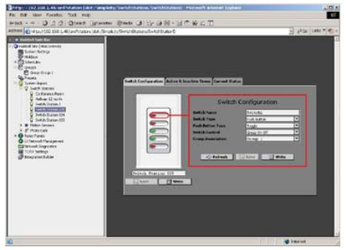
- **Programming Interface:**
  - Real-time programming and monitoring of the LX lighting control system through your PC
  - No software required—built-in web server provides connection via any Internet Explorer®-compatible browser
  - Graphical User Interface (GUI) makes programming both intuitive and simple
  - Local or remote access via the local network or Internet
  - Can connect multiple users at once
  - Sophisticated user account/password manager

- **System Integration:**
  - Integrates LX lighting control systems and Building Automation Systems (BAS)
  - Integrates with LonWorks ®, BACnet™ (IP and MSTP), and Modbus™ standards
  - Automatically generates all required control points and documentation for integration with the selected protocol
  - Powered by NiagaraAX Framework®
  - Maximum of 127 Integration Point per Network Jenesys™ Device (Consult HBA for requirements for larger networks.)

INTERFACE SCREEN SHOTS





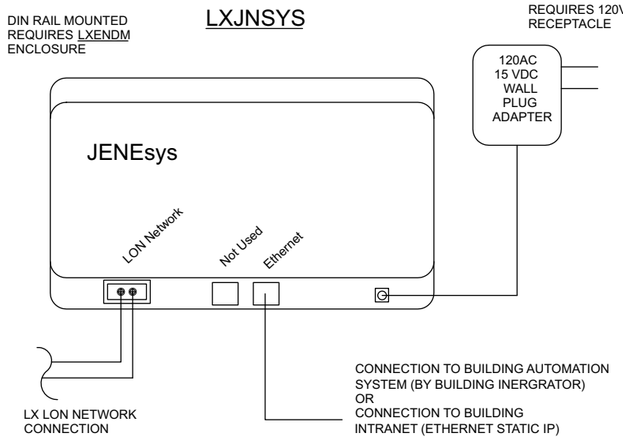


ORDERING INFORMATION

MODEL	
LXJNSYS	LX JENEsys Controller with Management Software, LON Network Module and Power Supply
LXJNSYS2LON	LX JENEsys Controller with Management Software, LON Integration Support, LON Network Modules and Power Supply
LXJNSYS2BACNETIP	LX JENEsys Controller with Management Software, BACNET IP Integration Support, LON Network Module and Power Supply
LXJNSYS2BACNETMSTP	LX JENEsys Controller with Management Software, BACNET MS/TP Integration Support, LON Network Module and Power Supply
LXJNSYS2MODBUS	LX JENEsys Controller with Management Software, MODBUS Integration Support, LON Network Module and Power Supply
LXJNCOM56KM1*	LX JENEsys 56Kps Modem for LX JENEsys Controller

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



APPLICATION NOTES

- The LX JENEsys device is used to allow the end-user remote access to the LX Networked Lighting Control System. A connection to the building's local network is required. The device contains a user-settable static IP for this connection.
- The LX JENEsys requires a 120 VAC 15 or 20 Amp receptacle for connection of the included power supply.
- All versions of the LX JENEsys contain the on-board web server for remote access.
- Each LX JENEsys device is Building Automation System specific. The integration system standard needs to be determined in order to obtain the correct device prior to ordering.

NOTES

LXSW

LX Networked Switch Stations

LonMark 3.3

KEY FEATURES

- Attractive, architecturally-pleasing design
- Flexible programming of switch functionality
- Programmable active and inactive times
- Topology-free, polarity-insensitive, 2-wire communication
- FT-10 and LPT-10 versions available
- LonMark® certified
- 1–6 buttons with or without pilot
- Mounts to standard single-gang box

LXSW1 *LXSW2* *LXSW3* *LXSW4* *LXSW5* *LXSW6*

SPECIFICATIONS

Network interface	• FTT-10 or LPT-10
Programming and configuration	• Programmable over a network using the LX Touch Tablet or any other LX programming device
Physical	• Injection-molded switch plate and switches • Fits standard (Decorator style) wall switch plates (not included) • Mounts to standard electrical gang box
Electrical	• LPT-10 version: powered from Link Power Module • FTT-10 version: 24 volts AC or DC; .5Amps required
Operating environment	• Location: interior space • Operating temperature: 0°–50°C (32°–122°F) • Relative humidity (non-condensing): 10%–90%
Capacities	• 1–6 buttons
Certifications	• LonMark 3.3 certified

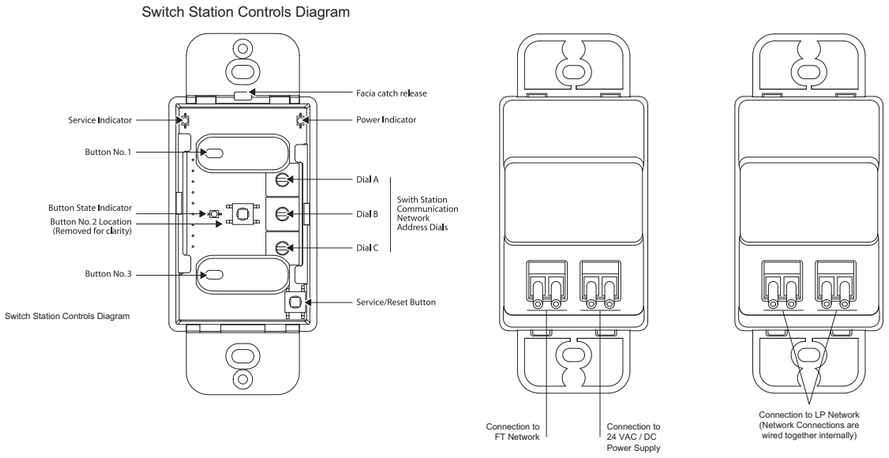
ORDERING INFORMATION

MODEL	NO. OF BUTTONS	NETWORK INTERFACE	COLOR
LXSW	1	LP	**W** White
	2	FT	**I** Ivory
	3		
	4		
	5		
	6		

EXAMPLE:
White 4 Button FT Switch Station: LXSW4FTW

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

LXKEY

LX Keyed Switch Station

LXKEY

KEY FEATURES

- Stainless steel face plate with barrel-lock mechanism and pilot light
- Flexible programming of switch functionality
- Programmable Active & Inactive times
- Topology-Free, Polarity-Insensitive, 2-wire communication
- Mounts in standard single-gang box

SPECIFICATIONS

Network Interface	• LPT-10
Programming / Configuration	• Programmed over network using the LX Touch Tablet or any other LX programming device
Physical	• Stainless steel faceplate • Barrel-style locking switch mechanism • Mounts to standard electrical single gang box (multiple gang version are not available)
Electrical	• LPT-10: Powered from Link Power Module
Operating environment	• Location: Interior space • Operating temperature: 0° to 50°C (32° to 122°F) • Relative Humidity: 10% to 90% non-condensing

ORDERING INFORMATION

MODEL	NETWORK INTERFACE	COLOR
LXKEY[1]	LP	Blank Stainless Steel[2]

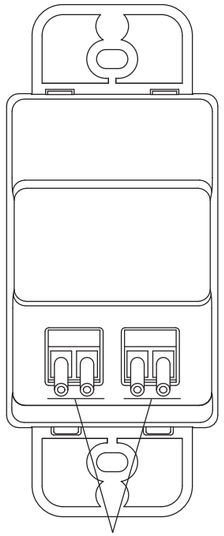
NOTES:

1. LXKEY is available with 1 keyswitch only and "LP" Link Power only.
2. LXKEY available in Stainless Steel only (not available in white or ivory).

WIRING DIAGRAM

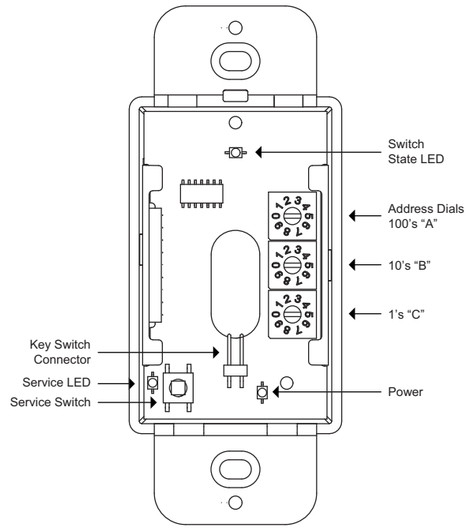
For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/

Switch Station Wiring Diagram



LP Version
(view of back)

Switch Station Control Diagram



NOTES

LXOMNDT

LX Occupancy Sensor Featuring IntelliDAPT®

LonMark 3.3

LXOMDT2000

KEY FEATURES

- FT-10 and LPT-10 versions available
- Topology-free, polarity-insensitive, 2-wire communication
- IntelliDAPT self-adaptive technology – no manual adjustment required
- All-Digital, dual-technology (Ultrasonic [US] and passive infrared [PIR]) sensor
- Sensors can be adjusted remotely from LX Touch Screen Tablet
- Non-volatile memory for sensor settings
- 2000 square feet coverage
- LonMark® 3.3 certified; UL and cUL listed

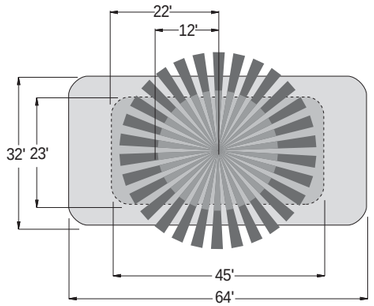
SPECIFICATIONS

Network Interface	• FTT-10 or LPT-10
IntelliDAPT	• Auto reset from test setting • Self-adjusting timer • Self-adjusting ultrasonic and passive infrared thresholds • Automatic false-on/false-off corrections
LED lamp	• Red—infrared motion • Green—ultrasonic motion
Timer timeout	• Automatic mode: 8-30 min. (self-adjusts based on occupancy) • Manual Mode: 2-30 min. • Test mode: 8 seconds (for an easy check at installation)
Ultrasonic output	• 32kHz
Passive infrared	• Dual element pyrometer; 12-element cylandrical rugged lens
Programming and configuration	• LX mode—programmed over network using the LX Touch Tablet, JENEsys™
Coverage	• 2,000 square feet
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0% to 95%
Construction	• Housing—rugged, high-impact, injection-molded plastic KJB ABS Cycolac (UL-945VA) flame class rating, UV inhibitors • Color coded leads are 6" long
Size and weight	• Size: 4.5" diameter, 1.5" height (114 mm diameter, 38mm height) • Weight: 5.0 oz (142g)
Color	• Off-white
Mounting	• Mounting base provided with sensor • Recommended MAX Mounting height: 12ft

ORDERING INFORMATION

LX		
MODEL	**DEVICE TYPE**	**NETWORK INTERFACE**
LX	OMDT 2000	LP FT

RANGE DIAGRAM



NOTES

LXPSCM

LX Photo Sensor Control Module and Sensors

LONMARK 3.3

LXPSCM

KEY FEATURES

- Turns lighting on and off based on available natural light
- Network-based photosensor control module
- Real-time foot-candle levels transmitted over a network on demand to a tablet
- 3 available sensor heads—Indoor, Outdoor, and Skylight/Atrium
- 0–1,000 foot-candle range with 1 foot-candle resolution
- 6 programmable on and off set points
- Programmable active and inactive times
- Topology-free, polarity-insensitive, 2-wire communication
- Mounts to standard DIN Rail

SPECIFICATIONS

Network interface	• FTT-10 or LPT-10
Programmable functionality	• Each on and off set point can be programmed to control a single relay, group of relays, or preset scene • Active and inactive times
Programming and configuration	• Programmable over a network using the LX Touch Tablet or via the LX Photo Sensor Control Module
Capacities	• 6 programmable on and off set points with adjustable deadband
Network modes	• LX Lighting Control System • LON-based networks (Set Address to "000")
Photocell ranges	• 0–1,000 foot-candle range with 1 foot-candle resolution
Electrical	• LXPSCMLP: Powered from the Link Power network • LXPSCMFT: 16–30 Volts AC or DC; .5 Amps required
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0% –95%
Size and weight	• Size: 6.25" x 3.75" x 1.5" • Weight: 6.0 oz
Color	• Photo Sensor Modules—black • Photo Sensor Photocells—white
Mounting	• Mounts to a 35mm DIN rail
Certifications	• LonMark 3.3 certified

ORDERING INFORMATION

LX		
MODEL	**DEVICE TYPE**	**NETWORK INTERFACE**
LX	PSCM	LP[1] FT

LXPSPC	
DEVICE TYPE	**PHOTOCELL TYPE**
LXPSPC Photocell Head	**I** Indoor **O** Outdoor **S** Skylight/Atrium

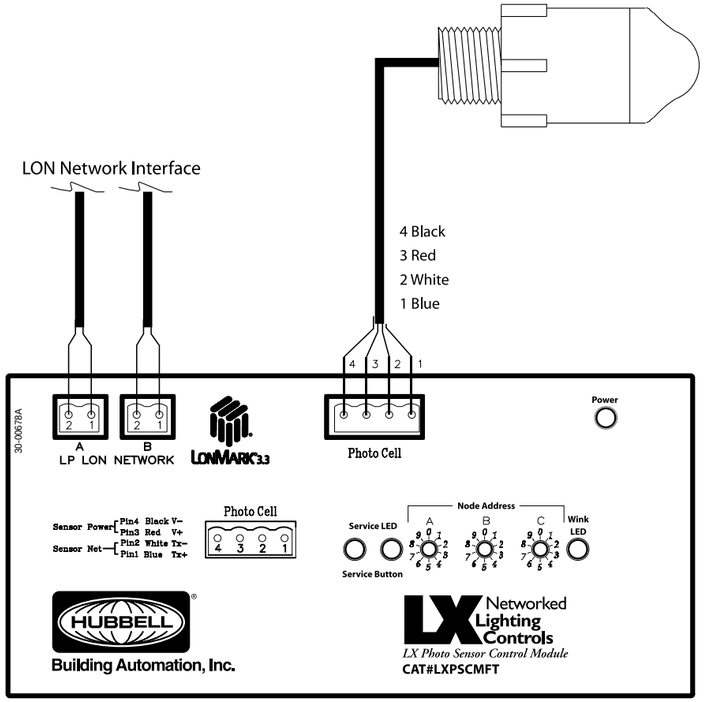
NOTE:
1. FT only.

ADDITIONAL PRODUCT VIEWS

LXPSPCO *LXPSPCI* *LXPCPCS*

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

LXDCIM

LX Dry Contact Interface Module

LONMARK 3.3

KEY FEATURES

- Programmable interface for dry contact devices
- Flexible programming of switch functionality
- 6 individual dry contact inputs with or without pilots
- Accommodates 2- and 3-wire devices (momentary or maintained)
- Programmable active and inactive times
- Topology-free, polarity-insensitive, 2-wire communication
- LonMark® certified
- Mounts to standard DIN rail

LXDCIM

SPECIFICATIONS

Network interface	• FTT-10
Programmable functionality	• Maintained contact switch input: - toggle, on only, off only • Momentary contact switch input: - push button toggle, on only, off only • Preset • Timed on
Programming and configuration	• Programmable over a network using the LX Touch Tablet or via the LX Dry Contact Interface Module
Capacities	• Maximum of 6 momentary or maintained switches (2- or 3-wire)
Network modes	• LX Lighting Control System • LON-based networks
Electrical	• 16–30 Volts AC or DC; .5 Amps required
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
Size and weight	• Size: 6.25" x 3.75" x 1.5" • Weight: 6.0 oz
Color	• Black
Mounting	• Mounts to a 35mm DIN rail
Certifications	• LonMark 3.3 certified

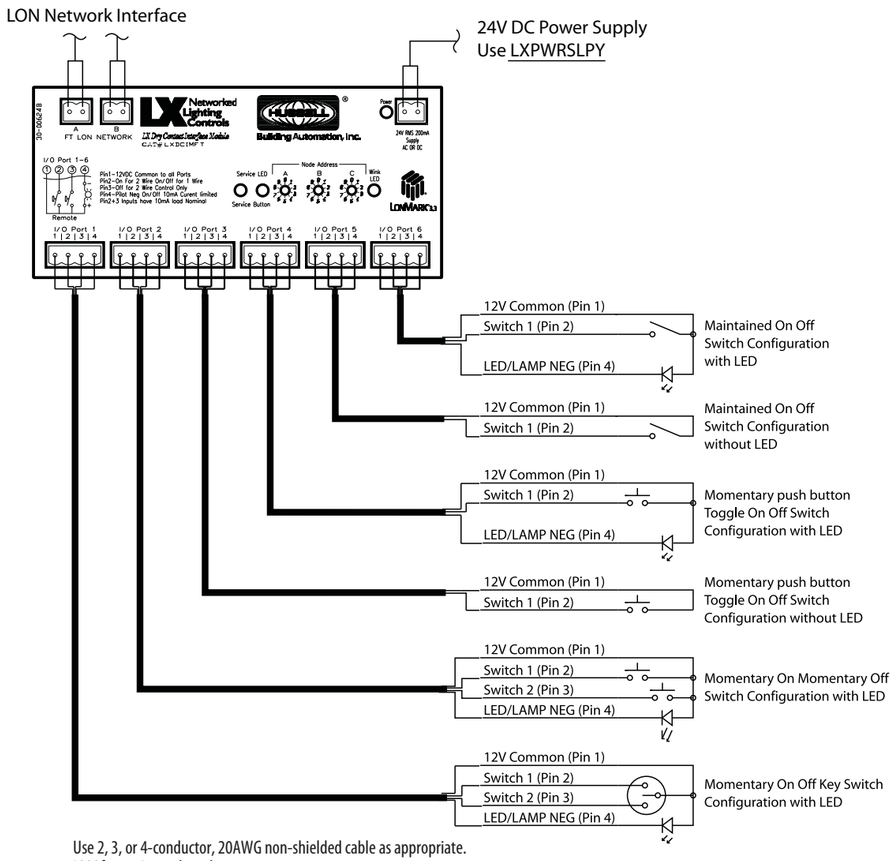
ORDERING INFORMATION

LX		
MODEL	DEVICE TYPE	NETWORK INTERFACE
LX	DCIM[1]	FT

NOTE:
1. FT only.

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



Use 2, 3, or 4-conductor, 20AWG non-shielded cable as appropriate.
1000ft. maximum length.

NOTES

LXS
LX Sentry Switch

LXST *LXSD*

KEY FEATURES

- Standard wall switch ON/OFF operation
- Toggle or Decorator style
- Mechanically switches to OFF position when power is interrupted for 5 seconds
- Locator light illuminates switch when lights are off
- UL and cUL listed
- Switches operate between specific load ranges listed below

SPECIFICATIONS

Load requirements	• LXS05—0.2A minimum; 5.0A maximum • LXS20—1.0A minimum; 20.0A maximum
Power requirement	• 120, 240, or 277 VAC • No neutral required
Connections	• 2-wire connection; SPST • 3-wire connection; SPDT—three-way
Certifications	• UL and cUL listed
Mounting	• Single-gang NEMA style switch box • Standard or Decorator style wall plate (not included)

ORDERING INFORMATION

LXS

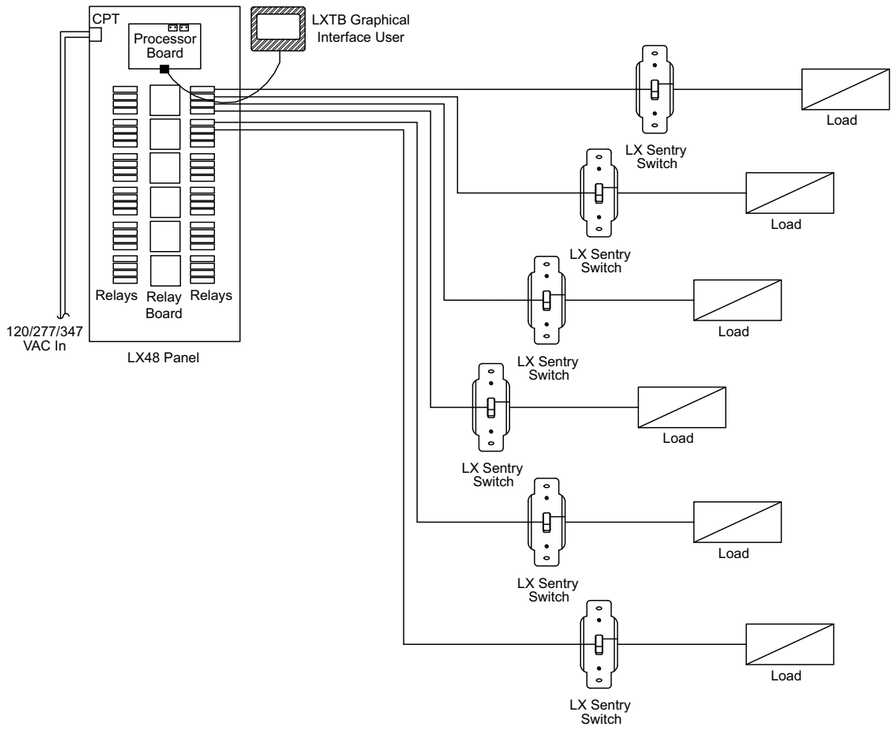
MODEL	SWITCH AMPS	TYPE	COLOR
LXS	**05** 5 Amp	**T** Toggle, SP5T[1]	**Blank** No Color
	20 20 Amp	**T3** Toggle, DP5T - Three way[1]	**W** White
		D Designer Series, SP5T[2]	**I** Ivory
		D3 Designer Series, DP5T - Three way[2]	

NOTES:

1. Not available in white or ivory.
2. Available in white or ivory only.

WIRING DIAGRAM

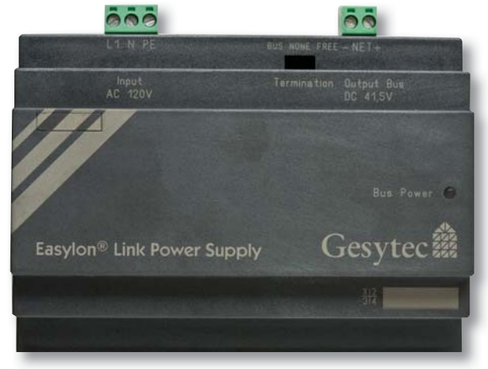
For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

LXLPM2

LX Link Power Module



LXLPM2

KEY FEATURES

- Power supply for LX Series Link Power-based devices
- Short-circuit and overcurrent monitoring
- Bus termination by switch
- DIN rail mount

SPECIFICATIONS

Power supply	• Rated input voltage: 120 VAC (85-132V) • Rated frequency: 50/60 Hz • Rated input current: 0.7A
Output to bus	• Output voltage: 41.5V; +/-2.2% • Residual ripple: <80mV at 10 kHz (200mV at f>200kHz) • Output current: 1A (supports approximately 56 LX Series devices) (For larger networks, an additional LX Link Power Module and LX Router/Repeater Module can be added to expand the LX network) • Overload protection: typical at 1.6A; permanent short circuit proof with pulsing "try of restart"
Connectors	• Screw terminal
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
EMC	• Emission: EN61,000-6-3; class B; EN50090-2-2 • Immunity: EN61,000-4-2/3/4/5/6; class A
Dimensions	• 4.96" x 2.28" x 3.54"

ORDERING INFORMATION

MODEL

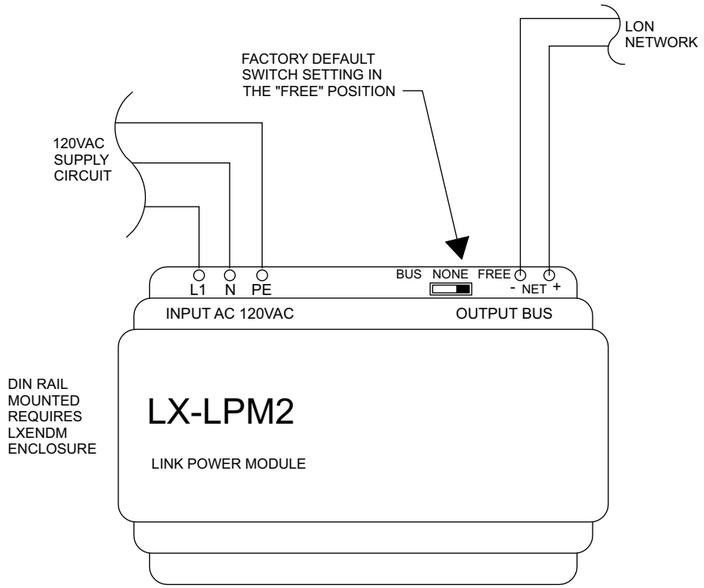
LXLPM2 LX Link Power Module

APPLICATION NOTES

- The LXLPM2 Link Power Module is used to provide power over the 2-wire LX Network for a maximum of 56 devices OR 1500 feet of cable. This device is DIN rail mounted and includes a network termination device.
- The LXLPM2 requires a 120 VAC hardwire connection and can be placed anywhere in the network segment.
- LX Relay or LXBC Breaker Relay panel networks without any devices do not require a LXLPM2 Link Power Module.
- When using a Link Power Module to supply power for devices, the devices should be specified with the "LP" option.
- When networks grow larger than 56 devices or 1500 feet of cable then additional Link Power Modules will be required. When additional LXLPM2 modules are connected they require an LXRRM repeater to separate each powered segment.
- The LXRRM Repeater performs the function of isolating the separate power supplies while allowing network data to be transmitted through the repeater.
- The LXRRM Repeater requires 24VAC input power that can be provided with a LXPWRSLPY Power Module. The LXPWRSLPY requires a 120 VAC hardwire connection.

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES:

1. EACH LXLPM2 LINK POWER MODULE CAN SUPPLY POWER FOR UP TO 56 DEVICES OR 1,500 FT OF CABLE PER NETWORK.
2. ADDITIONAL SEGMENTS REQUIRE ONE LINK POWER EACH.
3. LXRRM REPEATERS ARE REQUIRED BETWEEN SEGMENTS.
4. SEGMENTS CAN ONLY HAVE ONE LINK POWER SUPPLY CONNECTED.
5. LINK POWER CAN BE CONNECTED AT ANY LOCATION ON THE SEGMENT.

NOTES

LXRRM

LX Router|Repeater

LONMARK 3.3

LXRRM

KEY FEATURES

- Repeater for LX Series networks
- Screw terminal wiring connections
- 16–30 VAC or VDC operation
- LonMark® certified
- UL listed

SPECIFICATIONS

Processor	• 2 Neuron 3150® Chips; 10MHz
Service function	• Recessed service switch and service (wink) LED. • Dual tear-off barcode Neuron ID self-adhesive tag
Channel type	• TP/FT-10 to TP/FT-10
Input power	• 16–30 VAC or DC @ 24VA • Requires a separate power supply (the LXPWRSPLY)
Mounting	• DIN Rail
Operating environment	• -40°–185°F (-40°–85°C) • Relative humidity (non-condensing): 10%–95%
Dimensions	• 3.9″ x 6.3″ x 1.0″ (10cm x 10cm x 2.5cm)
Certifications	• UL 916; FCC A; CE Mark

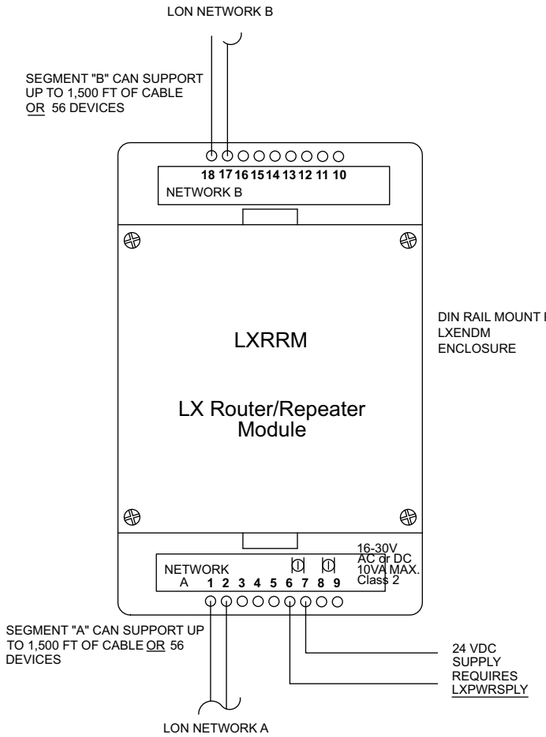
ORDERING INFORMATION

MODEL

LXRRM LX Repeater

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

LXPWRSPLY

LX Power Supply

LXPWRSPLY

KEY FEATURES

- Universal AC input 120 VAC (100–240V); line and nuetral single phase only
- DIN rail mountable: TS35/7.5; TS35/15
- Protection: short circuit, overload, and overvoltage
- LED indicator for power on
- UL listed

SPECIFICATIONS

AC input voltage range	• 120 VAC (100–240V), 50-60HZ • Line and Nuetral Single Phase only
Output	• 24V; 0–1.5A
Tolerance:	• +/-1%
Efficiency	• 83%
DC adjustment range	• Rated output voltage: +/-10%
Overload protection	• 105%–160% constant current limiting; auto-recovery
Overvoltage protection	• Rated output voltage: 115%–135%
Setup; rise; hold-up time	• 100ms, 70ms, 100ms at full load and 132VAC
Withstand voltage	• I/P-O/P:3KVAC
Connection	• I/P: 2 poles • O/P: 4 poles screw DIN terminal
Dimensions	• 3.0" x 3.5" x 2.5"
Operating environment	• -4°–122°F (-20°–50°C) @100% load • 140° F (60° C) @ 80% load
Certifications	• UL60950-1; TUV EN60950-1
EMC	• EN55022 class B; EN61,000-3-2,3; EN61,000-6-2; EN61,000-4-2,3,4,5,6,8,11; ENV50204; EN61204-3

ORDERING INFORMATION

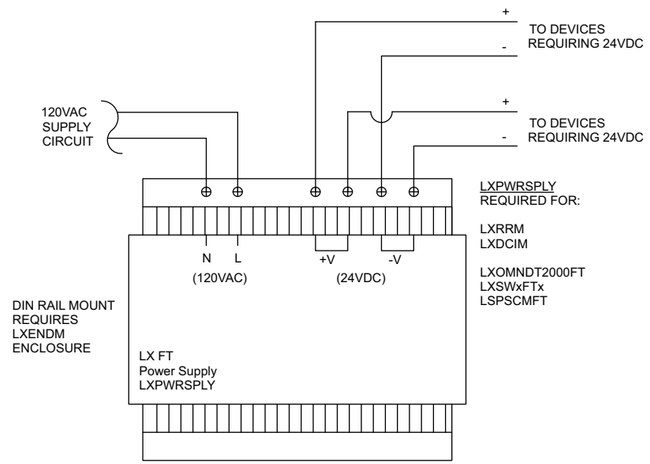
MODEL
LXPWRSPLY LX Power Supply

APPLICATION NOTES

- The LXPWRSLPY Power Supply is used to provide 24 VAC power "FT" style LX Network devices. The maximum recommended number of devices for each power supply is 4 within a maximum wire distance of 50 feet. This device is DIN rail mounted.
- The LXPWRSLPY requires a 120 VAC hardwire connection.
- The LXPWRSLPY is also used to supply power to the LXRRM Repeater.
- All LX network segments require termination. The LXTERMINATOR provides network termination when LXLPM2 Link Power Modules are not in use.
- The LXENDM DIN Rail Enclosure is a convenient way to mount various DIN Rail mounting network devices such as LXLPM2 or LXDCIM.

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

LXTERMINATOR

LX Terminator

KEY FEATURES

- LX network segment terminator
- DIN Rail Mounting

LXTERMINATOR

SPECIFICATIONS

Network interface	• Screw terminal connector
Operating environment	• 32°–140°F (0°–60°C) • Relative humidity (non-condensing): 5%–95%

ORDERING INFORMATION

MODEL

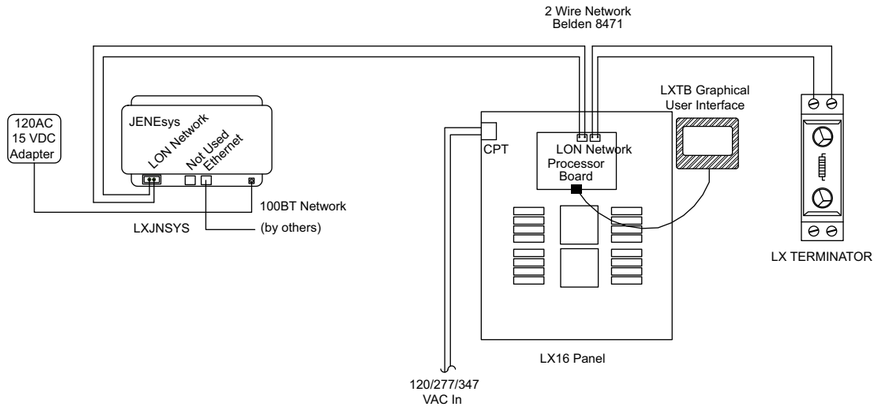
LXTERMINATOR LX Free Topology Bus Terminator

APPLICATION NOTE

- All LX network segments require termination. The LXTERMINATOR provides network termination when LXLPM2 Link Power Modules are not in use.

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



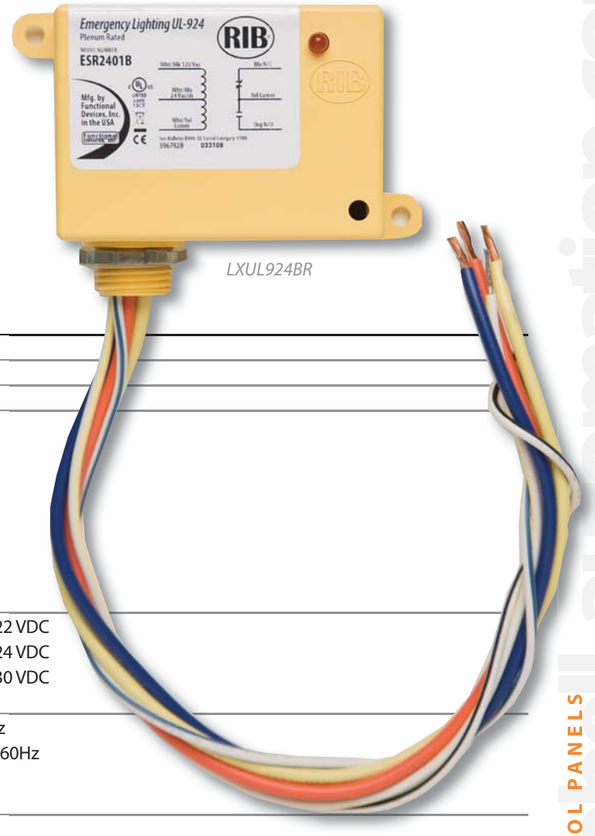
NOTES

LXUL924

UL924 Enclosed 20 Amp SPDT Bypass Relays

KEY FEATURES

- 20 Amp 120/277 VAC SPDT Relay
- Available with either 24 VAC/DC/120 VAC Coil or 24 VAC/DC/208-277 VAC Coil
- LED status indicator
- N/O isolated contacts
- UL and cUL listed



LXUL924BR

SPECIFICATIONS

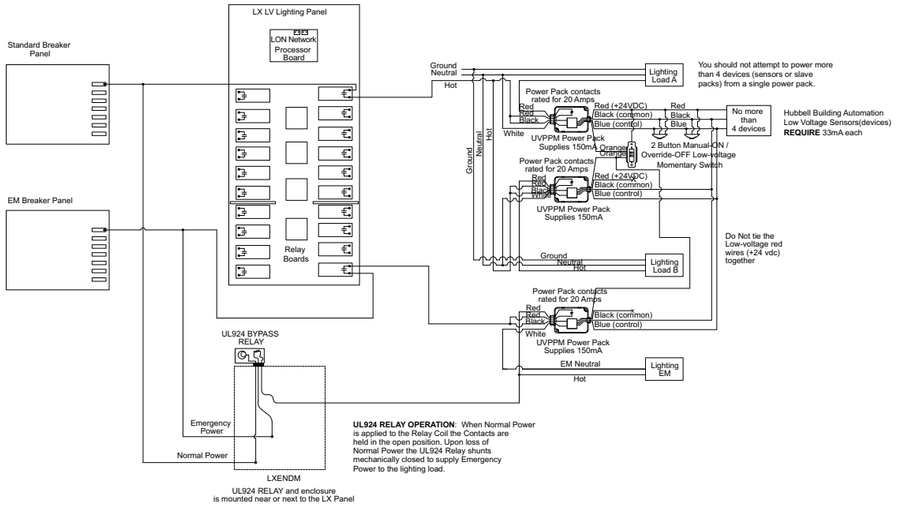
# Relays & Contact Type	• One (1) SPST Continuous Duty Coil	
Expected Relay Life	• 10 million cycles minimum mechanical	
Gold Flash	• No	
Contact Ratings	• 20 Amp Resistive @ 277 VAC • 20 Amp Ballast N/O @ 120/277 VAC • 10 Amp Ballast N/C @ 120/277 VAC • 10 Amp Tungsten @ 120 VAC • 770 VA Pilot Duty @ 120 VAC • 1110 VA Pilot Duty @ 277 VAC • 2 HP @ 277 VAC • 1 HP @ 120 VAC	
Coil Current	• 45 mA @ 18 VAC • 75 mA @ 24 VAC • 42 mA @ 120 VAC • 62 mA @ 208-277 VAC	30 mA @ 22 VDC 32 mA @ 24 VDC 42 mA @ 30 VDC
Coil Voltage Input	• LX924BR1: 24 VAC/DC, 120 VAC; 50-60Hz • LX924BR2: 24 VAC/DC, 208-277 VAC; 50-60Hz • Drop Out = 2.1 VAC / 3.8 VDC • Pull In = 18 VAC / 22 VDC	
Operating environment	• -30° to 140°F	
Dimensions	• 2.3" x 3.2" x 1.8" with 0.5 " NPT nipple	
Housing Rating	• Plenum, NEMA 1	
Wires	• 16", 600V Rated	
Certifications	• UL and cUL Listed, UL924, UL916, UL864, California State Fire Marshal, CE	

ORDERING INFORMATION

MODEL	
LXUL924BR1	LX UL924 Enclosed Relay 20 Amp SPDT with 24 VAC/DC/120 VAC Coil
LXUL924BR2	LX UL924 Enclosed Relay 20 Amp SPDT with 24 VAC/DC/208-277 VAC Coil

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

LXENDM

LX Enclosure for DIN Rail Modules

LXUL924BR

KEY FEATURES

- NEMA 1 rated metal enclosure
- Screw-mount cover
- Includes 2 DIN rails

SPECIFICATIONS

Dimensions	• 12″ x 15″ x 4″
NEMA 1 rated	• Provides a degree of protection for people against contact with the enclosed devices • Provides a degree of protection for the enclosed devices against falling dirt

ORDERING INFORMATION

MODEL
LXENDM LX Enclosure for DIN Rail Device Modules

APPLICATION NOTE

- The LXENDM DIN Rail Enclosure is a convenient way to mount various DIN Rail mounting network devices such as LXLPM2 or LXDCIM.

NOTES

LXWRDV

Panel Wire Way Divider Accessory Kit

KEY FEATURES

- Provides physical code-gauge steel separation between different voltages or sources that share the same relay panel
- Field-installed
- Can be mounted at any location
- Fits between relays – no loss of relay spaces
- For use with LX Series Lighting Control Panels (Except 4 relay LX panels)

SPECIFICATIONS

Each Kit Includes:	• 2 ea - Wire Way Divider Plates • 2 ea - Stainless Steel mounting Screws • Installation Instructions
Operating environment	• Indoor use only
Size & Weight	• Size: 4.25″W x 3.25″L • Weight: 3.0 oz
Color	• ANSI 61 Gray Polyester Powder Coat
Certifications	• For use with LX Series UL and cUL Listed LXIN and LXEN network lighting control panels (except LXEN04)

ORDERING INFORMATION

MODEL	
LXWRDV	Wireway Divider Kit for LX Series Relay Panels

NOTES

LXSW CUSTOM BUTTONS

Custom Engraved LX Switch Station Buttons

LX Series Networked Switch Stations are available with custom laser-engraved button labeling. These are ideal for public areas, conference rooms and other locations where visitors or infrequent occupants may be unfamiliar with the lighting controls.

ORDERING INFORMATION

For each individual switch station, please indicate with your order the text for each button and if the button will have an LED light-pipe. We suggest a spreadsheet format for large orders.

Engraved buttons are a custom item and we recommend that you call your HBA customer service representative when ordering to ensure your required lettering and specifications can conform to the engraver's requirements.

The engraved buttons will not come pre-installed on the switch stations. At your request, the buttons can come in a large unsorted bag, or they can be packaged in small bags to accompany the switch station with which they were ordered.

TYPE SPECIFICATION

- Font: Arial Narrow
- Size: 9 point
- Color: Charcoal Grey
- Durability: Permanent Laser Engraving
- Character Limit: 1 or 2 lines of text 10 characters including spaces per line for buttons with light pipe and 14 characters / line for buttons without light pipe

Product Pictured is full scale (1:1).

NOTES

LX Network Cable | Plenum Rated

Plenum Rated Windy City Wire 104500 Cable

KEY FEATURES

- Interconnects LX Lighting Control Panels and LX network devices
- Cable carries both power and data in a single twisted pair
- Windy City Wire #104500 - twisted pair #16 tinned copper
- Single cable type connects to all types of LX network devices
- Echelon Guideline Compliant for LON networks
- Available in 100 ft and 500 ft reels

SPECIFICATIONS

Description	• 1 pair - 16 AWG stranded tinned copper conductors, PVC Insulation, unshielded twisted pair (UTP), PVC jacket
Shielding	• Unshielded
Overall Nominal Diameter	• 0.182 inches
Plenum Rating	• Plenum Rated
Operating Temperature Range	• 0°C to +75°C (Indoor use only)
Maximum Pulling Tension	• 61 lbs
Minimum Bend Radius	• 5.1 inches
Color	• Pair Color - Black/White, Outer Jacket - White
Certifications	• NEC (UL) Subject 444 Type CL2P/CMP, CSA (cUL)
Flame Test	• NFPA 262 Steiner Tunnel Test
Warranty	• One year

ORDERING INFORMATION

MODEL	
LX104500CBL100	LX Cable Windy City 104500 Plenum Rated 100 ft Reel
LX104500CBL500	LX Cable Windy City 104500 Plenum Rated 500 ft Reel

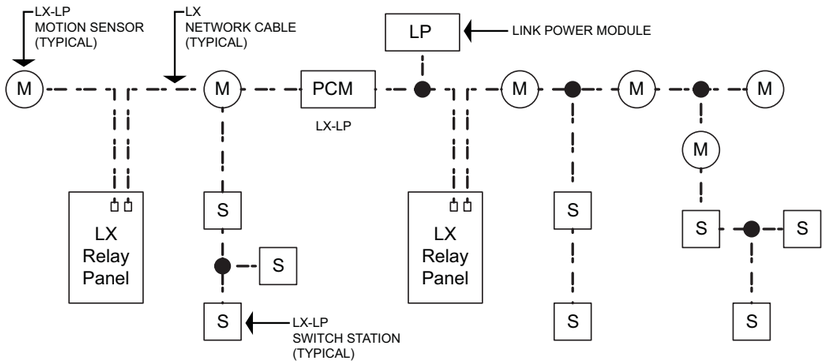
LX SYSTEM NETWORK CABLE REQUIREMENTS

Hubbell Building Automation's LX Lighting Control System requires the use of Belden #8471 cable for Riser Rated applications OR Windy City Wire #104500. for Plenum Rated applications. These are the ONLY cables that can be used for network wiring with the LX System.

The use of substitute cables based on similar physical characteristics is not allowed and will **VOID any HBA warranty** for the LX system or any LX component connected to the substitute cable.

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



TYPICAL SEGMENT = MAXIMUM 56 DEVICES OR MAXIMUM 1,500FT

INSTALLATION NOTES

1. DO NOT exceed 1500 feet of cable OR connect more than 56 devices per network segment.
2. Each network segment using LP style devices requires an LXLPM2 Link Power Module for device power. Each additional segment requires an additional LXLPM2 Link Power Module and an LXRRM Repeater for data transmission between segments.
3. Each network segment existing of panels only or that use FT style devices only require termination with LXTERMINATOR instead of LXLPM2 Link Power Module.
4. Run cable and connect network with the shortest distances possible. The most efficient network is wired similar to branch circuit outlets.
5. When using twist-on wire connectors with network cable use no more than three wires per connector.
6. The use of T-taps to minimize cable length is encouraged. Daisy chain topology is allowed, but most often increases overall cable length.
7. DO NOT homerun all devices individually, or leave spare cable at ceiling mounted devices. If devices need to be relocated, cables can be extended with twist-on wire connectors.
8. DO NOT mix plenum and NON-plenum cables on the same segment.
9. Keep 12" minimum from line voltage, do nut run in the same raceway with line voltage.

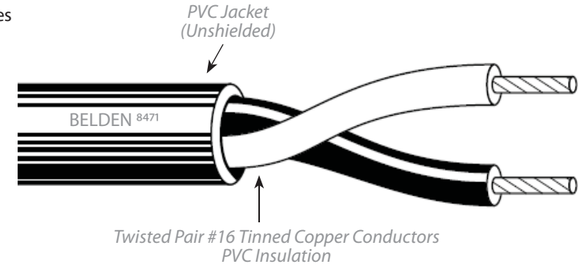
NOTES

LX Network Cable | Riser Rated

Riser Rated Belden 8471 Cable

KEY FEATURES

- Interconnects LX Lighting Control Panels and LX network devices
- Cable carries both power and data in a single twisted pair
- Belden #8471 - twisted pair #16 tinned copper
- Single cable type connects to all types of LX network devices
- Echelon Guideline Compliant for LON networks
- Available in 100 ft and 500 ft reels
- Riser Rated
- Connects to terminal blocks or with twist on connectors
- UL and cUL Listed



SPECIFICATIONS

Description	• 1 pair - 16 AWG stranded tinned copper conductors, PVC Insulation, unshielded twisted pair (UTP), PVC jacket
Shielding	• Unshielded
Overall Nominal Diameter	• 0.274 inches
Plenum Rating	• Not Plenum Rated
Operating Temperature Range	• -20°C to +80°C (Indoor use only)
Maximum Pulling Tension	• 61 lbs
Minimum Bend Radius	• 5.1 inches
Color	• Pair Color - Black/White, Outer Jacket - Gray
Certifications	• NEC (UL) CMG, CEC/C (UL) CMG,
Flame Test	• UL Flame Test – UL1685 FT4 Loading, C (UL) Flame Test FT4
Warranty	• One year

ORDERING INFORMATION

MODEL	
LX8471CBL100*	LX Cable Belden 8471 Riser Rated 100 ft Reel
LX8471CBL500*	LX Cable Belden 8471 Riser Rated 500 ft Reel

*All sales are final, no returns are allowed.

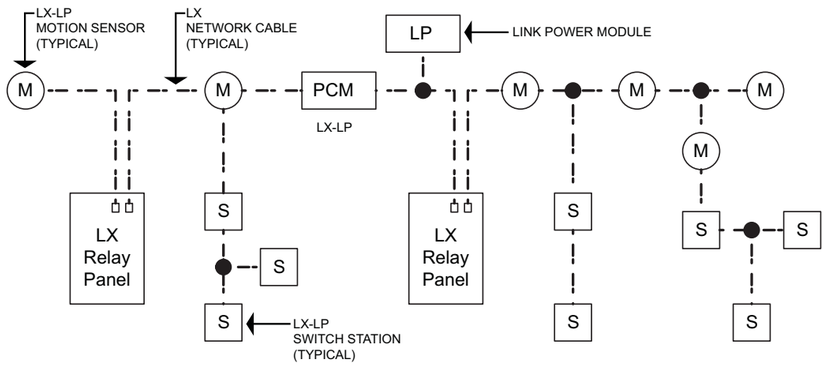
LX SYSTEM NETWORK CABLE REQUIREMENTS

Hubbell Building Automation's LX Lighting Control System requires the use of Belden #8471 cable for Riser Rated applications OR Windy City Wire #104500 for Plenum Rated applications. These are the ONLY cables that can be used for network wiring with the LX System.

The use of substitute cables based on similar physical characteristics is not allowed and will **VOID any HBA warranty** for the LX system or any LX component connected to the substitute cable.

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



TYPICAL SEGMENT = MAXIMUM 56 DEVICES OR MAXIMUM 1,500FT

INSTALLATION NOTES

1. DO NOT exceed 1500 feet of cable OR connect more than 56 devices per network segment.
2. Each network segment using LP style devices requires an LXLPM2 Link Power Module for device power. Each additional segment requires an additional LXLPM2 Link Power Module and an LXRRM Repeater for data transmission between segments.
3. Each network segment existing of panels only or that use FT style devices only require termination with LXTERMINATOR instead of LXLPM2 Link Power Module.
4. Run cable and connect network with the shortest distances possible. The most efficient network is wired similar to branch circuit outlets.
5. When using twist-on wire connectors with network cable use no more than three wires per connector.
6. The use of T-taps to minimize cable length is encouraged. Daisy chain topology is allowed, but most often increases overall cable length.
7. DO NOT homerun all devices individually, or leave spare cable at ceiling mounted devices. If devices need to be relocated, cables can be extended with twist-on wire connectors.
8. DO NOT mix plenum and NON-plenum cables on the same segment.
9. Keep 12" minimum from line voltage, do nut run in the same raceway with line voltage.

NOTES

CX04

CX Series Lighting Control Panel 4-Relays

CX4

KEY FEATURES

- Relay panel size – 4 relay spaces
- Five types of relays – 20A/1P and 20A/2P, N/O, N/C and 30A/P latching
- LCD user interface with keypad
- 365 day programming with 64 schedules
- Astronomical and real time clock
- 6 Programmable dry contact inputs for 4 relay panel
- Selectable pre-programmed scenarios
- Programmable inputs accept low voltage switches, photocells, or motion sensors
- Program uploads via removable SD memory card

SPECIFICATIONS

Programming and configuration	• Programmable via user interface mounted on door • Fully programmable by users with door closed and locked
Physical	• NEMA 1 surface enclosure • Pre-drilled mounting holes for mounting to wall, KOs provided on top and bottom • 4 relay enclosures with hinged locking door
Electrical input	• 120/208/240/277VAC Standard, 120/277/347 Optional
Relays	• 120 and 277 VAC 20 Amp Single Pole Relays (14K SCCR) • 120 and 277 VAC 30 Amp Single Pole Relays (18K SCCR) • 347 VAC, 20A, IP Relay (14K SCCR) • 208, 240, and 480 VAC 20 Amp Double Pole Relays(14K SCCR)
Operating environment	• Location: interior space • Operating temperature: 0°–50°C (32°–112°F) • Relative humidity (non-condensing): 10%–90%
Certifications	• Listed to UL916, UL924 and cUL

ORDERING INFORMATION

CX	04		S			N
MODEL	**SPACES**	**INPUT VOLTAGE**	**ENCLOSURE**	**RELAY QUANTITY**	**RELAY TYPE**	**OPTIONS**
CX CX Lighting Control Panel	**04** 4 Relay Spaces	**2** 120/277V Dual Tap **3** 120/347V Dual Tap	**S** NEMA 1 Surface	**00** No Relays - Spaces Only (See Note 3) **04** 4 Relays Installed(See Note 2)	**SP** Space Only **2N** 20A Electrically Held N/O 120-277V **2C** 20A Electrically Held N/C (120-277V) **3L** Latching 120-277-347V (See Note 4) **TN** 20A Electrically Held N/O 480V (See Note 1) **TC** 20A Electrically Held N/C 480V (See Note 1)	**N** Stand Alone Panel

NOTES:

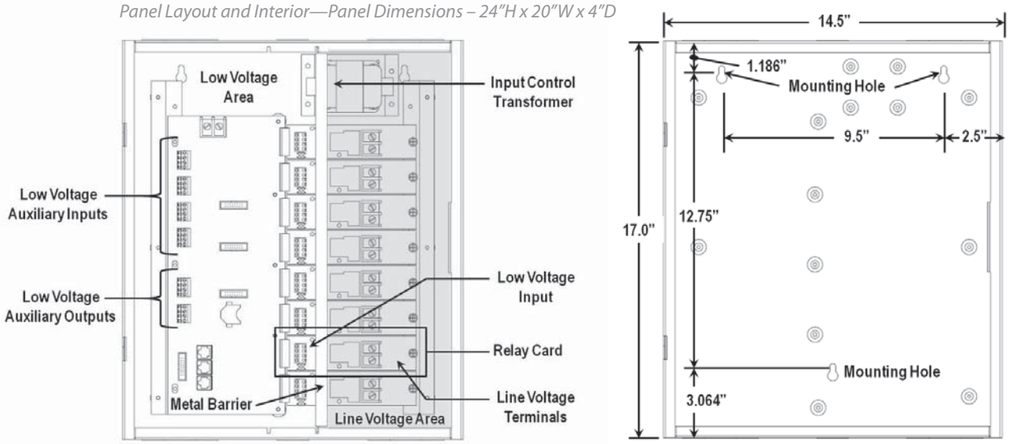
1. 2-Pole relays take the same amount of space as 1-Pole relays.
2. Installed relays must be all of the same type. Relay Type TC and 2C not available in fully populate panels
3. "00" option has no relays, all must be installed in the field.
4. 3L relay rated 30A at 120-277VAC, 20A at 347VAC.

Example: CX42S42NN

4-Relay CX Stand Alone Panel with 4-20A / IP electrically held N/O relays, surface enclosure, 120 - 277 input power, Stand Alone Panel

DIMENSIONAL INFORMATION

Panel Layout and Interior—Panel Dimensions – 24"H x 20"W x 4"D



CX Panels Programming Capabilities

The easy to use and understand color LCD Display has been designed based on input styles of commonly used devices such as cell phones.

Color LCD Display – Allows for most programming to be completed in a single screen. Right side scroll bars appear when more choices are available than are currently visible.

Function Keys – These keys provide programming choices in various screens. Key labels appear on-screen when keys are available.

Alpha-Numeric Keypad – This keypad is used to populate names and numeric values while programming. Tap/Scroll operation is similar to that used for cell phones.

Escape Key – This key takes the user to the previous screen. Warning prompts when changes have been made but not saved.

Help Key – This key will bring up help screens in specific locations driven by the field that is highlighted.

Navigation Keys – Allows user to navigate Up/Down/Right/Left/ Toggle through editable fields to select program choices.

Enter Key – Use this key to make selections.

CX08

CX Series Lighting Control Panel 8-Relays

CX8

KEY FEATURES

- Relay panel size – 8 relay spaces
- Five types of relays – 20A/1P and 20A/2P, N/O, N/C and 30A/P latching
- LCD user interface with keypad
- 365 day programming with 64 schedules
- 12 Programmable dry contact inputs for 8 relay panel
- Selectable pre-programmed scenarios
- Programmable inputs accept low voltage switches, photocells, or motion sensors
- Two-low voltage dry contact output relays
- Program uploads via removable SD memory card

SPECIFICATIONS

Programming and configuration	• Programmable via user interface mounted on door • Fully programmable by users with door closed and locked
Physical	• NEMA 1 surface enclosure • Pre-drilled mounting holes for mounting to wall, KOs provided on top and bottom • 8 relay enclosures with hinged locking door
Electrical input	• 120/208/240/277VAC Standard, 120/277/347 Optional
Relays	• 120 and 277 VAC 20 Amp Single Pole Relays (14K SCCR) • 120 and 277 VAC 30 Amp Single Pole Relays (18K SCCR) • 347 VAC, 20A, IP Relay (14K SCCR) • 208, 240, and 480 VAC 20 Amp Double Pole Relays(14K SCCR)
Operating environment	• Location: interior space • Operating temperature: 0°–50°C (32°–112°F) • Relative humidity (non-condensing): 10%–90%
Certifications	• Listed to UL916, UL924 and cUL

ORDERING INFORMATION

MODEL	SPACES	INPUT VOLTAGE	ENCLOSURE	RELAY QUANTITY	RELAY TYPE	OPTIONS
CX	08		S			
CX CX Lighting Control Panel	08 8 Relay Spaces	**2** 120/277V Dual Tap **3** 120/347V Dual Tap	**S** NEMA 1 Surface	**00** No Relays - Spaces Only (See Note 1) **08** 8 Relays Installed (See Note 2)	**SP** Space Only **2N** 20A Electrically Held N/O 120-277V **2C** 20A Electrically Held N/C (120-277V) **3L** Latching 120-277-347V (See Note 5) **TN** 20A Electrically Held N/O 480V (See Note 3) **TC** 20A Electrically Held N/C 480V (See Note 3)	**M** Master Panel **S** Secondary Panel (See Note 4)

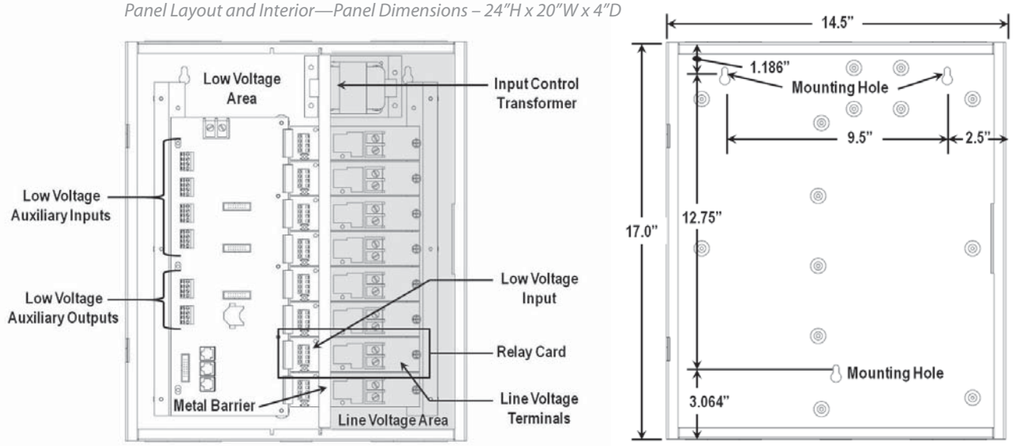
NOTES:

1. "00" option has no relays, all must be installed in the field.
2. Installed relays must be all of the same type. Relay Type TC and 2C not available in fully populate panels.
3. 2-Pole relays take the same amount of space as 1-Pole relays.
4. Secondary panel includes two (2) master/secondary panel interface cards.
5. 3L relay rated 30A at 120-277VAC, 20A at 347VAC.

Example: CX82S82NM
8-Relay CX Stand Alone Panel with 8-20A / IP electrically held N/O relays, surface enclosure, 120 - 277 input power, Master Panel

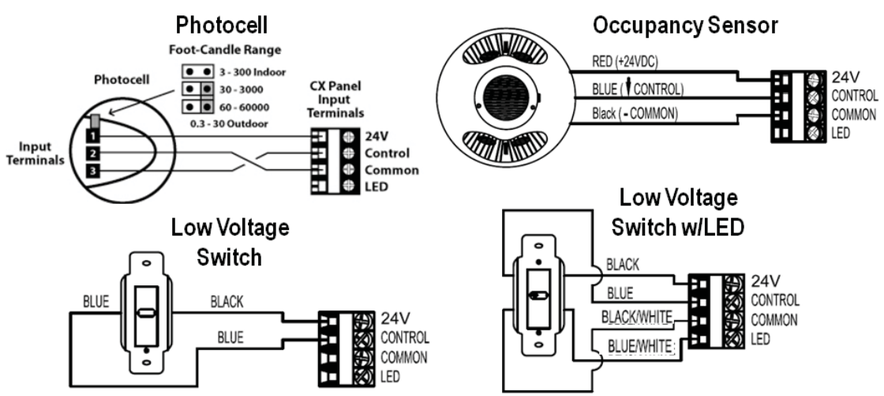
DIMENSIONAL INFORMATION

Panel Layout and Interior—Panel Dimensions – 24"H x 20"W x 4"D



WIRING DIAGRAMS

Low Voltage Device



NOTES

CX16 and CX24

CX Series Commercial Lighting Control Panels 16- and 24-Relays

CX24 and CX16

KEY FEATURES

- Two relay panel sizes – 16 and 24 relay spaces
- Five types of relays – 20A/1P and 20A/2P, N/O, N/C and 30A/P latching
- LCD user interface with keypad
- 20 Programmable dry contact inputs for 16 relay panel, 30 for 24 relay panel
- Programmable inputs accept low voltage switches, photocells, or motion sensors
- Two low-voltage dry contact output relays on 16 relay panel, three for 24 relay panel
- Program uploads via removable SD memory card

SPECIFICATIONS

Programming and configuration	• Programmable via user interface mounted on door • Fully programmable by users with door closed and locked
Physical	• NEMA 1 surface enclosure • Pre-drilled mounting holes for mounting to wall, KOs provided on top and bottom • 16 and 24 relay enclosures with hinged locking door
Electrical input	• 120/208/240/277VAC Standard, 120/277/347 Optional
Relays	• 120 and 277 VAC 20 Amp Single Pole Relays (14K SCCR) • 120 and 277 VAC 30 Amp Single Pole Relays (18K SCCR) • 347 VAC, 20A, IP Relay (14K SCCR) • 208, 240, and 480 VAC 20 Amp Double Pole Relays(14K SCCR)
Operating environment	• Location: interior space • Operating temperature: 0°–50°C (32°–112°F) • Relative humidity (non-condensing): 10%–90%
Certifications	• Listed to UL916, UL924 and cUL

ORDERING INFORMATION

CX			S			
MODEL	**SPACES**	**INPUT VOLTAGE**	**ENCLOSURE**	**RELAY QUANTITY**	**RELAY TYPE**	**OPTIONS**
CX CX Lighting Control Panel	**16** 16 Relay Spaces **24** 24 Relay Spaces	**2** 120/277V Universal **3** 120/347V Universal	**S** NEMA 1 Surface	**00** No Relays - Spaces Only (See Note 3) **16** 16 Relays Installed (See Note 2) **24** 24 Relays Installed (See Note 2)	**SP** Space Only **2N** 20A Electrically Held N/O 120-277V **2C** 20A Electrically Held N/C (120-277V) **3L** Latching 120-277-347V (See Note 5) **TN** 20A Electrically Held N/O 480V (See Note 1) **TC** 20A Electrically Held N/C 480V (See Note 1)	**M** Master Panel **S** Secondary Panel (See Note 4)

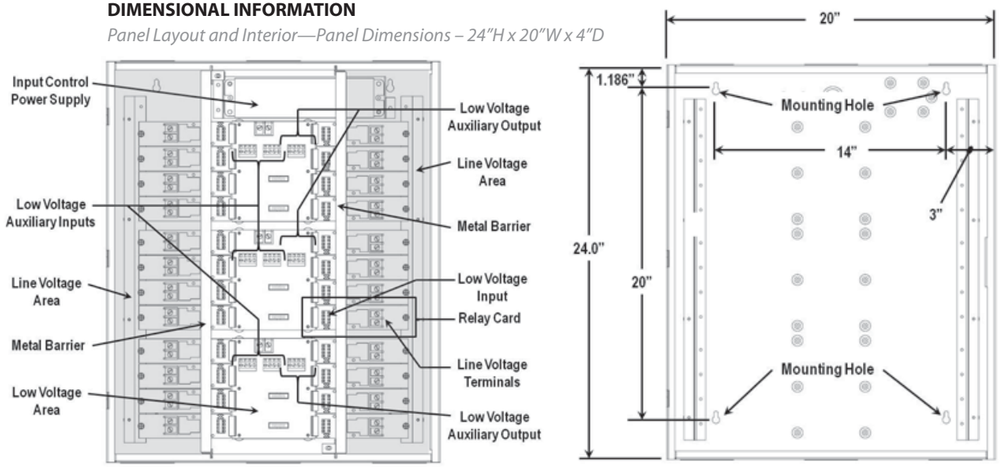
NOTES:

1. 2-Pole relays take the same amount of space as 1-Pole relays.
2. Installed relays must be all of the same type. Relay Type TC and 2C not available in fully populate panels
3. "00" option has no relays, all must be installed in the field.
4. Secondary panel includes (2) master/secondary panel interface cards.
5. 3L relay rated 30A at 120-277VAC, 20A at 347VAC

Example: CX162S162NM
16-Relay CX Master Panel with 16-20A / IP electrically held N/O relays, surface enclosure, 120 - 277 input power, Master Panel

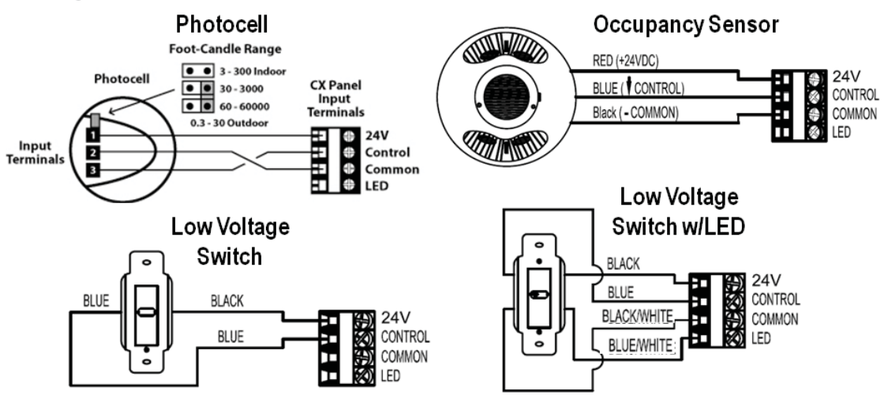
DIMENSIONAL INFORMATION

Panel Layout and Interior—Panel Dimensions – 24"H x 20"W x 4"D



WIRING DIAGRAMS

Low Voltage Device



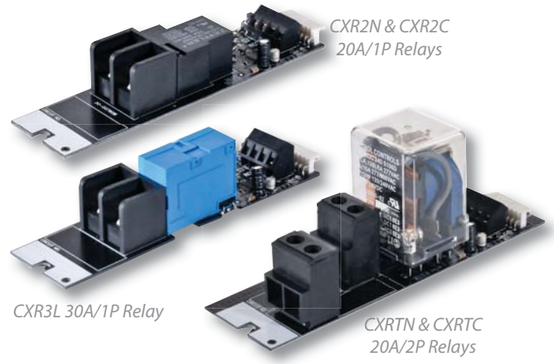
NOTES

CXR

CX Series Lighting Control Panel Relays

KEY FEATURES

- Relays are mounted to individual relay cards
- Five types of relays – 20A/1P and 20A/2P, N/O, N/C (14K SCCR) and 30A 1P latching (18K SCCR)
- Smart Relay card self-identifies type automatically to panel
- Each relay includes 1 programmable input for low voltage switches, photocells, or motion sensors
- Panels are ordered fully populated with the same relay type or with space only for field installation of relay combinations
- Relay cards include a plugging connector to panel motherboard and a single screw to secure it to the panel enclosure
- Relay cards include a manual override control button and LED status indication



SPECIFICATIONS

Physical	• Mounts inside NEMA 1 surface panel enclosure • Pre-drilled mounting hole for securing relay cards • Individual relay cards – 1P and 2P are equal in size
Operating environment	• Location: interior space • Operating temperature: 0°–50°C (32°–112°F) • Relative humidity (non-condensing): 10%–90%
Certifications	• UL Certified to UL 916, UL 924 and cUL

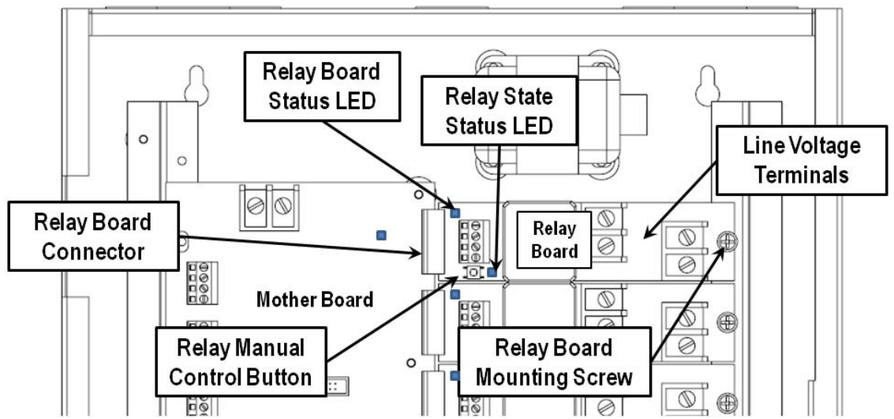
ORDERING INFORMATION

CXR	
MODEL	RELAY TYPE

RELAY TYPE

- **2N** 20A 1-Pole Electrically Held N/O 120-277V 14KSCCR @ 277VAC
- **2C** 20A 1-Pole Electrically Held N/C 120-277V 14KSCCR @ 277 VAC
- **3L** 30A 1-Pole Latching 120-277-347V 18KSCCR @ 277VAC, 14KSCCR @ 347VAC
- **TN** 20A 2-Pole Electrically Held N/O 480V 14KSCCR @ 480VAC
- **TC** 20A 2-Pole Electrically Held N/C 480V 14KSCCR @ 480VAC

DIMENSIONAL INFORMATION
Relay Location and Mounting
Relay Card Dimensions – 5.5″L x 1.625″W



Relay Specifications

Characteristics			Load Ratings				SCCR
Type	Poles	VAC	Tungsten	Fluor. Ballest	HID Ballast	Motor Rating	Rating
CXR2N Elect Held, NO	1	120	15A	20A	20A	1 HP	14K Amps
		277	N/A	20A	20A	3/4 HP	
CXR2C Elect Held, NC	1	120	15A	20A	20A	1 HP	14K Amps
		277	N/A	20A	20A	3/4 HP	
CXR3L Latching	1	120	20A	30A	30A	1HP	18K Amps
		277	N/A	30A	30A	N/A	
		347	N/A	20A	20A	N/A	14K Amps
CXRTN Elect Held, NO	2	480	N/A	20A	20A	2 HP	14K Amps
CXRTC Elect Held, NC	2	480	N/A	20A	20A	2 HP	14K Amps

NOTES

CX Panel Accessories
Photocells, Motion Sensors and Switches

Photocells

Photocells
The CX Panels support direct connection to HBA Low Voltage Photocells.

Features
- Open Loop photosensor
- Foot-candle range: 0.3–6,000 fc
- Indoor and outdoor versions
- Mounts vertically and horizontally
- Architecturally attractive design
- UL and cUL listed

ORDERING INFORMATION

PHOTOCELL TYPE	
LUXSTATLS	Indoor
LUXSTATLSO	Outdoor

Motion Sensors
OMNI™
LightOWL™

Motion Sensors
The CX Panels support direct connection to HBA Omni™ Series Stand Alone Motion Sensors featuring IntelliDAPT®.

The ceiling mount OMNI™ series and wall mount LightOWL™ series sensors can be used with the CX Panel inputs without the use of power packs.

Consult hubbell-automation.com for detailed catalog numbers, specifications and application guidelines.

Low Voltage Switches

Low Voltage Switches
The CX Panels support direct connection to HBA LVS Series Low Voltage momentary contact switches. These switches are available with or without LED indication.

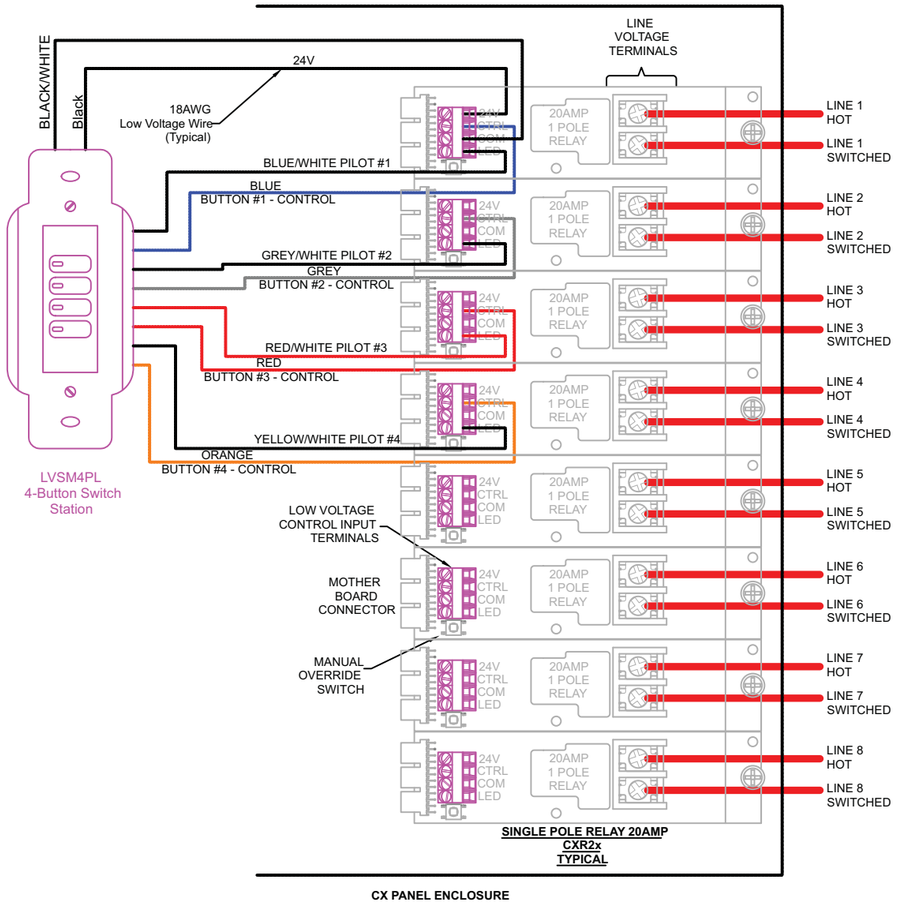
NOTE: Add WH for White or IV for Ivory finish at the end of the part number.

ORDERING INFORMATION

RELAY TYPE	
LVSM1NP	Momentary, 1 Button, No Pilot
LVSM1PL	Momentary, 1 Button, w/Pilot LED
LVSM2NP	Momentary, 2 Buttons, No Pilot
LVSM2PL	Momentary, 2 Button, w/Pilot LEDs
LVSM3NP	Momentary, 3 Buttons, No Pilot
LVSM3PL	Momentary, 3 Buttons, w/Pilot LEDs
LVSM4NP	Momentary, 4 Buttons, No Pilot
LVSM4PL	Momentary , 4 Buttons, w/Pilot LEDs

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

High Bay Lighting Controls

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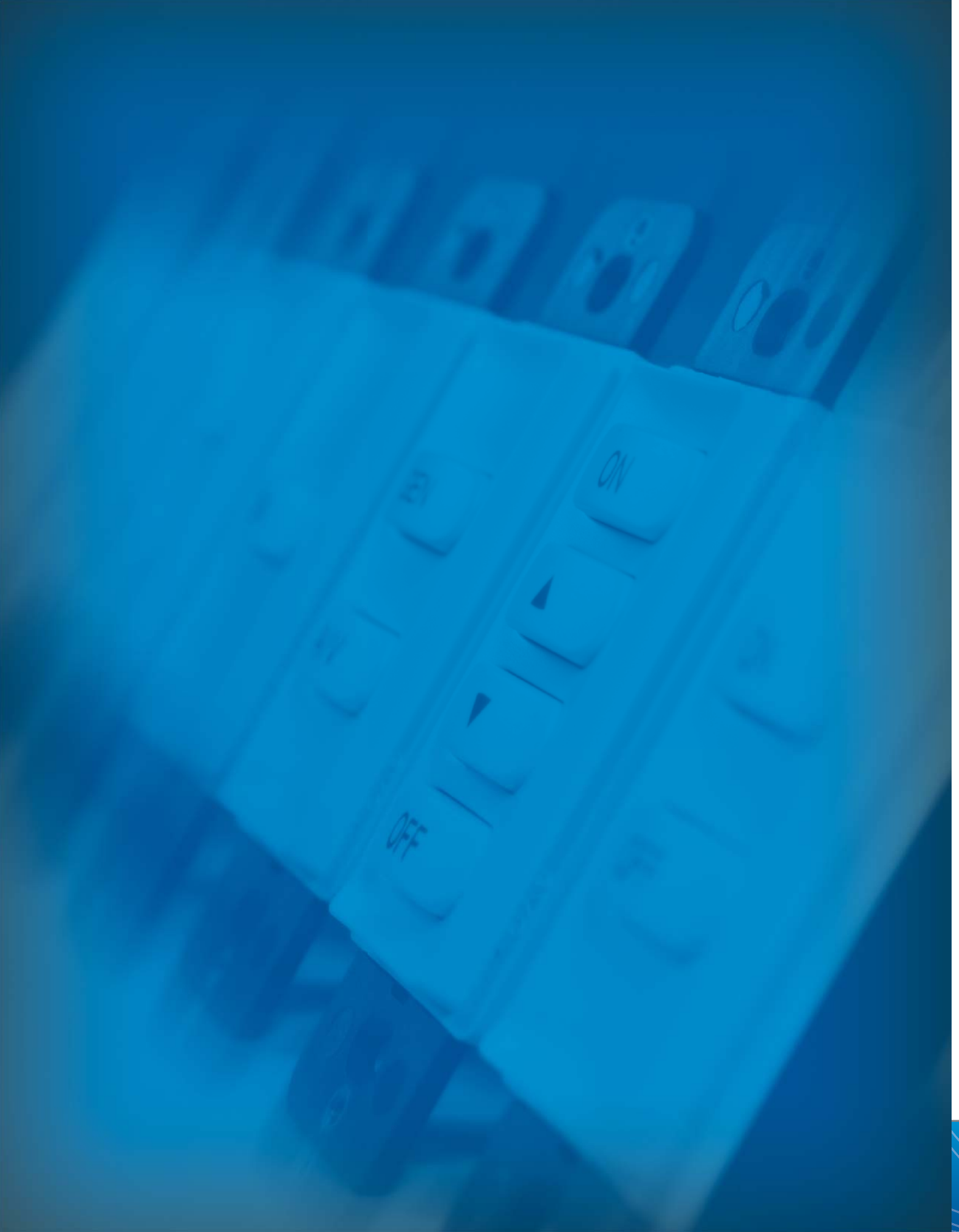
WASP2



WSP

HBA WASP2™ Fluorescent High Bay Occupancy Sensor

WASP2 End Mount Sensor with lens

KEY FEATURES

- Digital Passive Infrared (PIR) sensor
- Supports mounting heights up to 45 ft.
- Multiple (single and dual) output versions
- Unique Smart Cycling™ for improved lamp life
- Interchangeable area and aisle lens options
- Low voltage and line voltage (120/277/347VAC, 208/480VAC, 480VAC) models available
- Low-temperature (-40°C)/water-tight versions available

SPECIFICATIONS

Power Requirements	• Line Voltage sensors: 120/277/347VAC, 208/240VAC, 480VAC, 60 Hz • Low Voltage sensors: 24VDC (uses UVPP or MP-Series power pack – not included)
Load Ratings	• 120VAC: 0-800W ballast or 0-600W tungsten, 60Hz
(Line voltage sensors)	• 277VAC: 0-1200W ballast • 347VAC: 0-1500W ballast • 208/240VAC: 0-1200W ballast • 480VAC: 0-2400W ballast • ¼ HP motor load @ 120VAC, 1/6HP @ 347VAC
Output (Low voltage sensors)	• 24VDC active high-logic control signal • Relay: N/O + N/C contacts; 500mA rated @ 24VDC; three wire isolated relay
User Interface	• (1) Twelve pin dip switch
Timer Timeouts	• Primary: 8-second test mode - 4, 8, 16 and 30 minute timeouts • Secondary: Can be disabled (switches off with primary timer) - 30, 60 and 90 minute timeouts
Passive Infrared	• Dual element pyrometer and spherical Fresnel lens designed for robust detection of a walking person.*
Daylight Sensor	• Range: 30 – 2500FC • End mount sensor: Downward and upward looking daylight sensors (Direction selectable via dip switch) • Surface mount sensor: Downward looking daylight sensor only
Interchangeable Lens Options	• Lens options: 360° area lens, aisle lens, 180° area lens, half aisle lens and Coverage (Lenses sold separately – not included with sensor module) • All lenses provide 1.4:1 coverage up to 30ft., 1.1:1 coverage from 30 – 45ft.
Operating environment	• Standard version: Indoor use only; Operating temperature: 32° to 149°F (0° to 65°C); Relative humidity (non-condensing): 0% to 95% • Low-temperature/Water-tight version: Indoor use only; Operating temperature: -40° to 149°F (-40° to 65°C)
Construction	• Sensor Module and Lens Assembly – high impact, injection-molded plastic
Size & Weight	• Size: 4.0″ Diameter x 1.5″ Height • Weight: 7 oz.
Color	• White
Mounting	• End mount sensor: Mounts directly to end of fixture through extended ½″ chase nipple. For deeper body fixtures, an optional Extender Adapter (available separately) positions the sensor flush or below the bottom of the reflector for a full field-of-view. • Surface mount sensor: Mounts directly to fixture or j-box via (2) 1.25″ stainless steel screws and locking nuts
Certifications	• Conforms to UL STD 508, UL STD 244A - Conforms to IP65 (Low-temperature/Water-tight version)

**When used with program start ballast, a 1-2 second delay from occupancy detection to lamp turn-on may be experienced.*

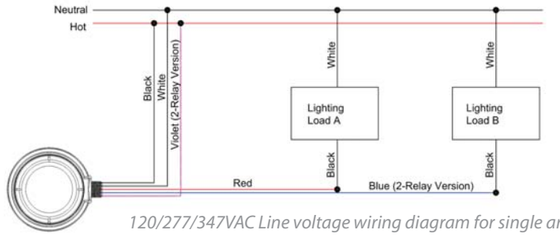
ORDERING INFORMATION

MODEL	MOUNTING	INPUT VOLTAGE / OUTPUTS	LOW-TEMP / WATER-TIGHT
WSP	**EM** End Mount	**UNV** 120/277/347VAC	**Blank** Standard Version
	SM Surface Mount	**UNV2R** 120/277/347VAC (2 Outputs)	**LTWT** Low-Temp/Water Tight
		208 208/240VAC	
		480 480VAC	
		24V 24VDC (Low Voltage)	

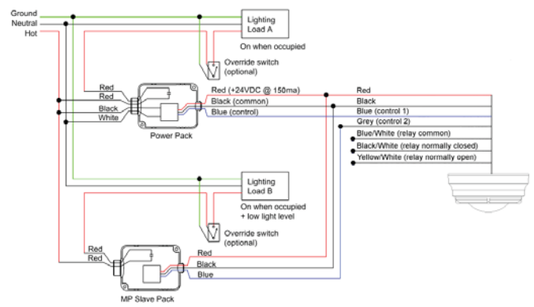
MODEL	COVERAGE	LOW-TEMP / WATER-TIGHT
WSPLENS	**360** 360° Area Lens	**Blank** Standard Version
	AISLE Aisle Lens	**LTWT** Low-Temp/Water-Tight (For use with LTWT sensor module)
	HALF 180° Area Lens	
	HAISLE Half Aisle Lens	

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



120/277/347VAC Line voltage wiring diagram for single and dual relay sensors (Single Phase Only).



Low voltage sensor wiring diagram.

NOTES

Daylight Harvesting

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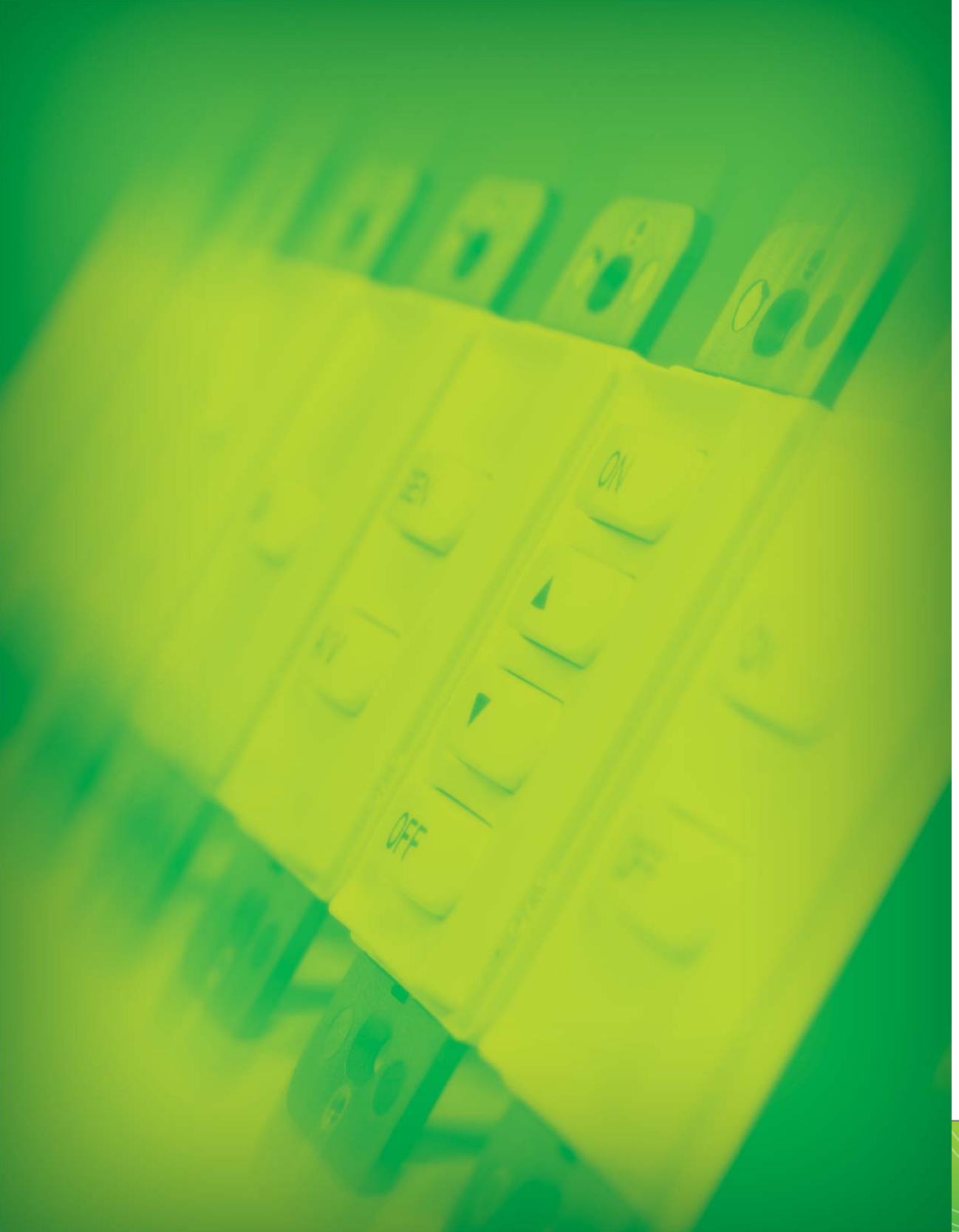


Z5-CM
Zone5 Control Module

Z5-CM

KEY FEATURES

- Supports up to 4 zones of lighting control
- Daylight switching, stepped dimming or continuous dimming – per zone
- Controls both General and A/V lighting
- Whiteboard lighting control
- Intuitive menu-driven LCD user interface
- Seamless integration with Zone5 sensors and lighting control switches
- SD card interface for saving and loading system settings
- Event logging
- Contractor-friendly, color coded plug and play installation
- UL and cUL listed

SPECIFICATIONS

User Interface	• 2-line LCD display • 4 navigational buttons • SD Card interface – used for system settings, logging and firmware updates
Daylight Harvesting Options	• For each zone • Switched • Stepped dimming • Full range dimming • None
Color Coded Low Voltage Ports	• Uses standard RJ45 connectors • Plenum rated, low voltage system cabling (sold separately) • Blue – lighting control • Yellow – master and row control • Orange - 0-10v dimming • White – occupancy sensor • Green – daylight sensor
Demand Response	• Dry contact input

Electrical	• Each Zone (1-4)
	  • 1 relay: general lighting
	  • 1 relay: A/V lighting
	• Dimming: 0-10VDC, capable of controlling up to 50 low voltage, 2-wire, 0-10v dimming ballasts
	• Additional relay for whiteboard lighting
	• Switched output per relay
	  • 15A tungsten (120v only,) 20A magnetic ballast, 16A electronic ballast
	  • Maximum combined output not to exceed 20A

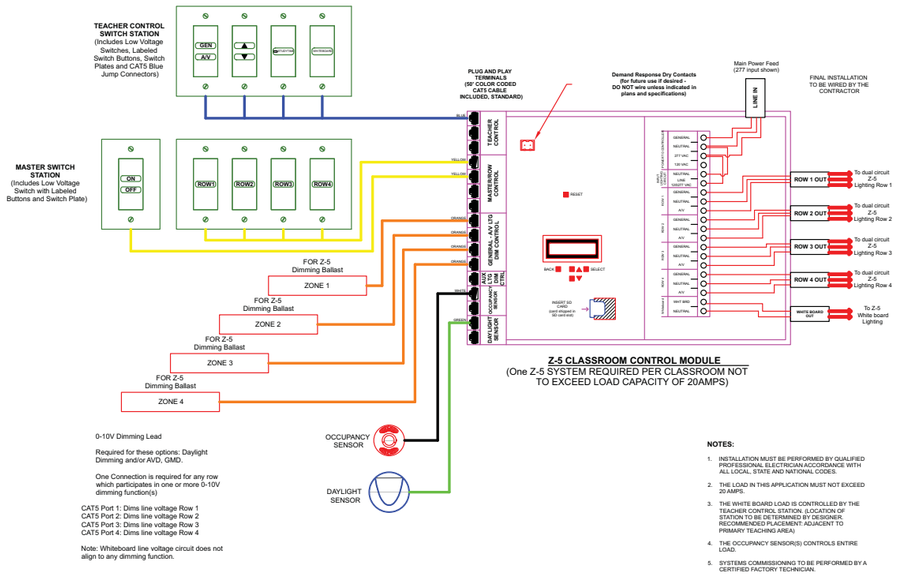
Dimension	• 15"W x 12"H x 4"D (385mm x 310mm x 110mm)
Weight	• 20.75 lbs

ORDERING INFORMATION

MODEL	
Z5-CM	Zone5 Control Module

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



Z-5 CLASSROOM CONTROL MODULE
(One Z-5 SYSTEM REQUIRED PER CLASSROOM NOT TO EXCEED LOAD CAPACITY OF 20AMPS)

NOTES:

1. INSTALLATION MUST BE PERFORMED BY QUALIFIED PROFESSIONAL ELECTRICIAN ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES.
2. THE LOAD IN THIS APPLICATION MUST NOT EXCEED 20 AMPS.
3. THE WHITE BOARD LOAD IS CONTROLLED BY THE TEACHER CONTROL STATION. (LOCATION OF STATION TO BE DETERMINED BY DESIGNER. RECOMMENDED PLACEMENT: ADJACENT TO PRIMARY TEACHING AREA)
4. THE OCCUPANCY SENSOR(S) CONTROLS ENTIRE LOAD.
5. SYSTEMS COMMISSIONING TO BE PERFORMED BY A CERTIFIED FACTORY TECHNICIAN.

NOTES

Z5-OS

Zone5 Ceiling and Wall Mount Occupancy Sensors

Z5-OS-OMDT

KEY FEATURES

- Occupancy Sensors for Zone5 Daylight Harvesting System
- IntelliDAPT® self-adaptive technology – no manual adjustment required
- All-digital dual technology (ultrasonic [US] and passive infrared [PIR]) sensor
- Non-volatile memory for sensor settings
- 1,600 and 2,000 square-foot coverage area
- Form C relay with N/O + N/C outputs
- Color coded, plug and play installation
- UL and cUL listed

SPECIFICATIONS

IntelliDAPT	• Auto reset from test setting • Self-adjusting timer • Self-adjusting ultrasonic and passive infrared thresholds • Automatic false-on/ false-off corrections
LED lamp	• Red – infrared motion • Green – ultrasonic motion
Timer timeout	• Automatic mode: 8 – 30 min. (self adjusts based on occupancy) • Test mode: 8 seconds (for an easy check at installation)
Ultrasonic (US) output	• Operating frequency: 32 kHz
Passive infrared (PIR)	• Dual-element pyrometer and 12-element cylindrical rugged lens
Form C relay	• Relay: N/O + N/C contacts; SPDT; 500 mA rated @ 24VDC; three-wire isolated relay
Coverage	• Ceiling mount sensor: 2,000 square feet • Wall mount sensor: 1,600 square feet
Power Requirements	• 24VDC, 33mA Power and 24VDC active high-logic output control signal provided through Zone5 low voltage color coded (white) plug-and-play cable (ordered separately)
Operating environment	• Indoor use only • Operating temperature: 32° - 104°F (0°-40°C) • Relative humidity (non-condensing): 0%-95%
Construction	• Casing – rugged, high-impact, injection-molded plastic KJB ABS Cycolac (UV-945VA) flame class rating, UV inhibitors • Quick to Install Connectors
Size and weight	• Size: 4.5″ diameter, 1.5″ height (114 mm diameter, 38mm height) • Weight: 5.0 oz (142g)
Color	• Off white
Mounting	• Mounting base provided • Recommended MAX mounting height: 12 ft.

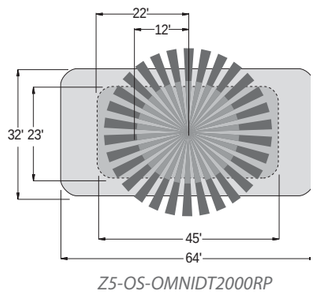
ORDERING INFORMATION

MODEL	
Z5-OS-OMDT2000RP	Zone5 Occupancy Sensor, Ceiling Mount, PIR and Ultrasonic, Form C Relay, 2000 Sq. Ft.
Z5-OS-LODTRP	Zone5 Occupancy Sensor, Wall Mount, PIR and Ultrasonic, Form C Relay, 1600 Sq. Ft.

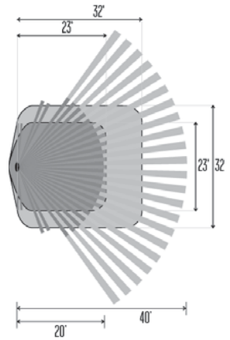
HBA ZONE5 CEILING AND WALL MOUNT OCCUPANCY SENSORS | RANGE DIAGRAMS

Z5-OS-OMNIDT2000RP

Z5-OS-LODTRP



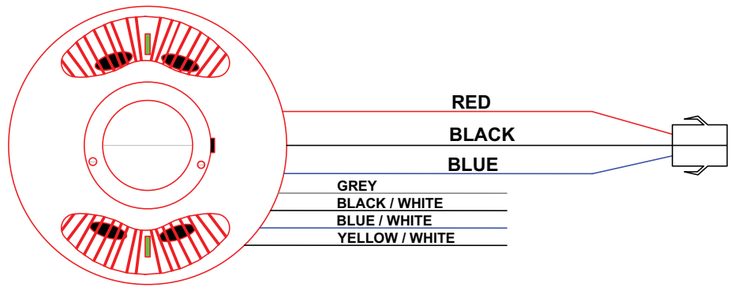
Z5-OS-OMNIDT2000RP

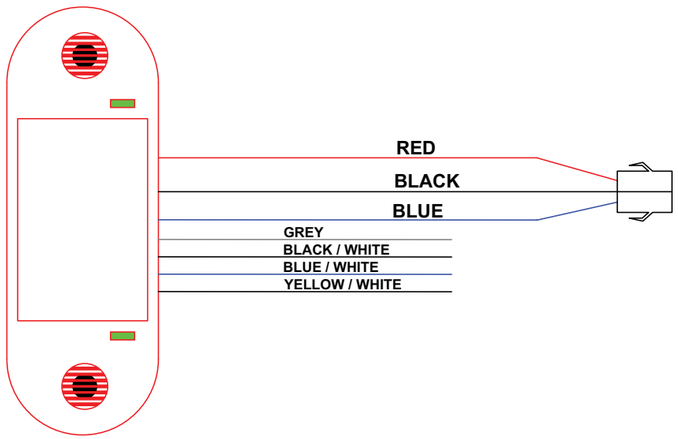


Z5-OS-LODTRP

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/





Z5-DS
Zone5 Daylight Sensor

Z5-DS

KEY FEATURES

- Daylight sensor for Zone5 Daylight Harvesting System
- Open loop operation
- Foot-candle range: 3-6,000 fc
- Mounts vertically or horizontally
- Architecturally attractive design
- Color coded, plug-and-play installation
- UL and cUL listed

SPECIFICATIONS

Electrical	• Three jumper-selectable foot candle ranges: 3-300fc; 30-3,000fc; 60-6,000fc • 24VDC Power provided through Zone5 low voltage color coded (green) plug and play cable (ordered separately)
Construction	• Protective hard plastic cover and housing
Dimension	• 2' diameter x 1.2" height (50.8 diameter x 30.5mm height)
Certifications	• UL and cUL listed

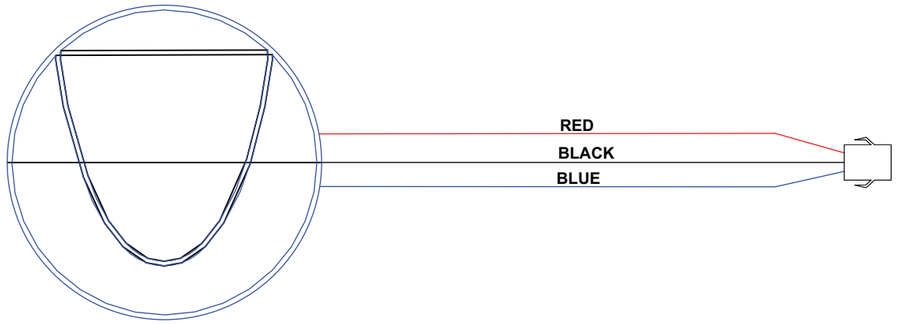
ORDERING INFORMATION

MODEL

Z5-DS Zone5 Daylight Sensor

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

Z5-SW
Zone5 Low Voltage Wall Switches

Z5-SW-GAV-ST

KEY FEATURES

- Supports up to 4 zones of lighting control
- Attractive, architecturally pleasing design
- General – A/V lighting control with optional dimming control
- Whiteboard lighting control
- Master and individual row ON/OFF control
- Color-coded, plug and play installation
- All switches mount to standard single or multi-gang wall boxes
- Multi-gang wall plates available

SPECIFICATIONS

Power Requirements	• Each switch: 100mA @ 30VDC Max – Provided by Zone5 low voltage color coded plug-and-play cable (ordered separately) • Master/Row control switches: Use with yellow cable • Lighting Control Switches: Use with blue cable
Operating environment	• Indoor use only • Operating temperature: 32°–122°F (0°-50°C) • Relative humidity (non-condensing): 10%-90%
Construction	• Housing – Rugged, high-impact, injection-molded plastic
Size & Weight	• Size: 4.2″ L x 1.6″ W x 1.4″ D • Weight: 1.6 oz
Color	• White
Mounting	• Switches may be mounted individually in a single gang switch box or ganged together in a multi-gang switch box NOTE: When ganging multiple switches make sure the switches are of the same color-coded type. Decorator-style wall plates available separately

ORDERING INFORMATION

MODEL	
Z5-SW-GAV	Zone5 General-A/V Mode Switch
Z5-SW-AVD	Zone5 General-A/V Dimming Switch
Z5-SW-ST	Zone5 Study Time Switch
Z5-SW-WB	Zone5 Whiteboard Switch
Z5-SW-MC	Zone5 Master ON/OFF Switch
Z5-SW-RCR1	Zone5 Row 1 Control Switch
Z5-SW-RCR2	Zone5 Row 2 Control Switch
Z5-SW-RCR3	Zone5 Row 3 Control Switch
Z5-SW-RCR4	Zone5 Row 4 Control Switch

NOTES

LUXSTATOCM1Z

Luxstat Single Zone ON|OFF Control Module

LUXSTATOCMIZ

KEY FEATURES

- Open Loop ON/OFF Daylight Harvesting control
- Pushbutton programming
- LCD display provides Real Time light level readings
- 3 to 3000 FC Range
- Single-zone switching
- Adjustable OFF delay
- Integration with occupancy sensors and manual override controls
- DIN rail mounting
- California Title 24 compliant

SPECIFICATIONS

Electrical (Input)	• LUXSTATOCM1Z120: 120V • LUXSTATOCM1Z277: 277V • Max Load: 40mA • Power Consumption: Approximately 2W • Signal from Light Sensor: 0-10V

Electrical (Output)	• Relay Contact: NO, m10A
	• Load:
	  • Incandescent Lamps - 1200W
	  • Fluorescent - 620VA
	  • Halogen Incandescent - 500W
	• Secondary Voltage: 24VDC

Programmable Features	• FC Range:
	  • 0.3-30 FC
	  • 3-300 FC
	  • 30-3000 FC
	• Setting Range
	  • 0.3-27 FC
	  • 3-270 FC
	  • 30-2700 FC
	• OFF delay: 0-60 Minutes

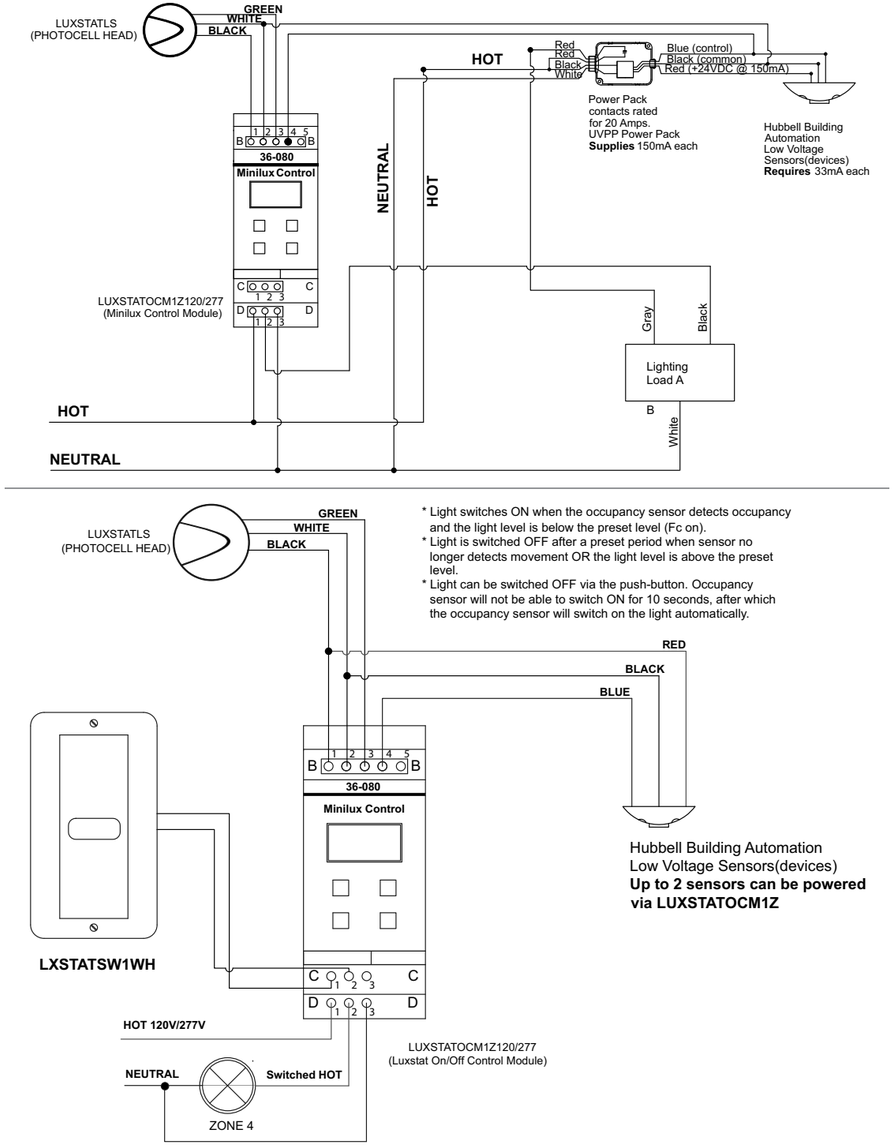
Dimensions	• 3.5″ x 2.81″ x 2.5″ (98mm x 71mm x 64mm) LxWxD
Operating Environment	• Operating Temperature 41°F - 122°F (+5°C - +50°C)
Mounting	• DIN Rail
Accessories	• Indoor Light Sensor - LUXSTATLS • Outdoor Light Sensor - LUXSTATLSO • LUXSTAT 1-Button Momentary Switch - LUXSTATSW1WHor LUXSTATSW1IV
Certifications	• UL Listed

ORDERING INFORMATION

MODEL	
LUXSTATOCM1Z120	Luxstat Single Zone ON/OFF Control Module, 120VAC
LUXSTATOCM1Z277	Luxstat Single Zone ON/OFF Control Module, 277VAC

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



LUXSTATDNCM

Luxstat Day|Night Control Module with Clock

LUXSTATDNCM

KEY FEATURES

- Open Loop ON/OFF daylight harvesting control
- Integrated clock for night blocking
- Pushbutton programming
- DIN rail mounting

SPECIFICATIONS

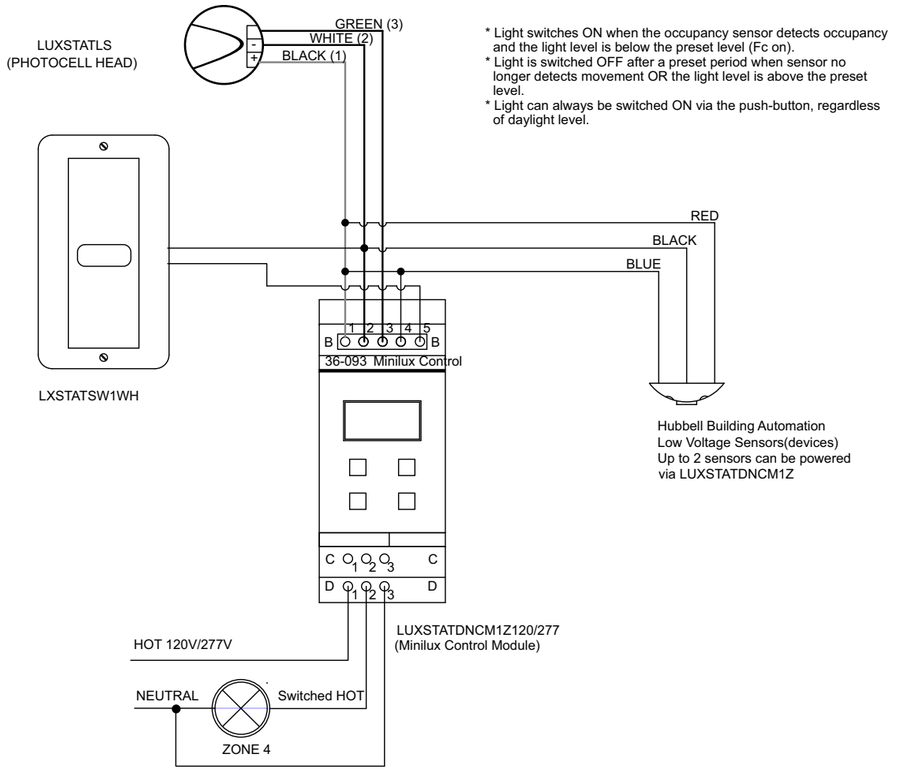
Electrical (Input)	• LUXSTATDNCM120: 120VAC • LUXSTATDNCM277: 277VAC • Load: Max 40mA • Power Consumption: Approximately 2W • Signal from Light Sensor: 0-10V
Electrical (Output)	• Relay Contact: N/O, m10A • Load: Incandescent Lamps – 1200W Fluorescent – 620VA Halogen Incandescent – 500W • Secondary Voltage: 24VDC
Performance	• Fc Range: 0.3 – 30Fc • Adjustment range for Fc on: 1 – 30Fc
Adjustment range for Fc off:	• Minimum: 10% of Fc on, but not less than 0.3 Fc • Maximum: 70% of Fc on but not more than 9 Fc • Tolerance of Fc range: +-10% • Backup for clock: > 2 hours, when the unit has been connected at least 5 minutes
Operating Environment	• Temperature range: 41°F – 122°F (+5°C – +50°C)
Mounting	• DIN Rail
Accessories	• Outdoor Light Sensor – LUXSTATLSO
Certifications	• UL and CE Listed

ORDERING INFORMATION

MODEL	
LUXSTATDNCM120	Luxstat Day/Night Control Module with Clock, 120VAC, DIN Rail Mount
LUXSTATDNCM277	Luxstat Day/Night Control Module with Clock, 277VAC, DIN Rail Mount

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

LUXSTATLS

Luxstat Light Sensor

LUXSTATLS

KEY FEATURES

- Open Loop photosensor
- Foot-candle range: 3–6,000 fc
- Provides daylight levels to Luxstat daylight harvesting control modules
- Indoor and outdoor versions
- Mounts vertically and horizontally
- Architecturally attractive design
- UL and cUL listed
- California Title 24 compliant

SPECIFICATIONS

Electrical	• Three jumper-selectable foot candle ranges: 3–300fc; 30–3,000fc; 60–6,000fc • Low-voltage Class 2 device • Protective hard-plastic cover • 3-conductor 22 AWG twisted cable—equal to Belden 8443 • Maximum wire length: 250 feet (76.2m)
Dimension	• 2″ diameter x 1.2″ height (50.8 diameter x 30.5mm height)
Certifications	• UL and cUL listed

ORDERING INFORMATION

MODEL	
LUXSTATLS	Luxstat Light Sensor - Indoor
LUXSTATLSO	Luxstat Light Sensor - Outdoor

NOTES

LUXSTATSW

Luxstat Low Voltage Wall Switches

KEY FEATURES

- Attractive, architecturally pleasing design
- Multiple button configurations available
- Manual ON/OFF control
- Low voltage operation; Class 2 device
- Mounts to standard single-gang box

LUXSTATSW4 *LUXSTAT2AUTO* *LUXSTAT2DIM* *LUXSTATSW1*

SPECIFICATIONS

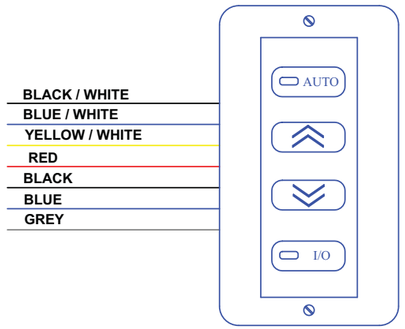
Electrical Ratings	• Each switch: 100mA @ 30VDC Max • Each pilot LED: 18-30VDC, internal 2.2kohm, ½ Watt resistor
Operating environment	• Indoor use only • Operating temperature: 32° – 122°F (0° - 50°C) • Relative humidity (non-condensing): 10%-90%
Construction	• Housing – Rugged, high impact, injection molded plastic • Color-coded leads
Size & Weight	• Size: 4.87" dia., 2.44" deep (123.7 mm dia., 62mm deep) • Weight: 3.0 oz
Color	• White, Ivory
Mounting	• Single-gang NEMA-style switch box (standard switch box) • Decorator-style wall plate not included

ORDERING INFORMATION

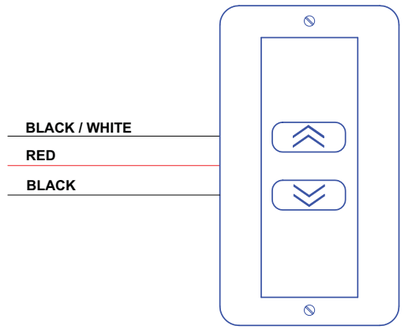
MODEL	COLOR
LUXSTATSW4	WH White
LUXSTATSW2 AUTO	IV Ivory
LUXSTATSW2 DIM	
LUXSTAT SW1	

WIRING DIAGRAM

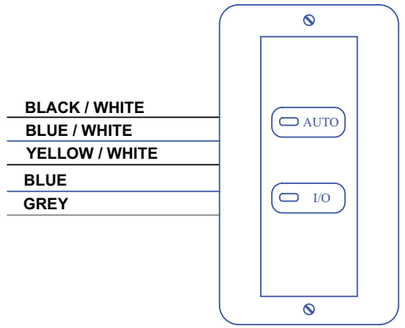
For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



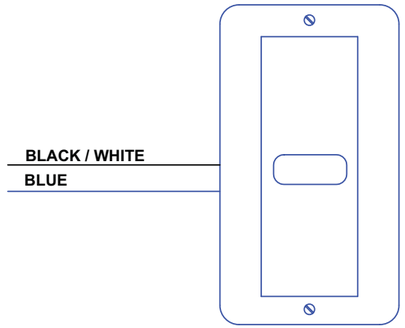
LUXSTATSW4WH



LUXSTATSW2DIM



LUXSTATSW2AUTO



LUXSTATSW1

NOTES

DLC7
Continuous Dimming Control

KEY FEATURES

- Controls 2-wire 0–10V dimming ballasts
- Light-sensitivity range of 0–500 foot-candles
- Selectable 3- or 8-second dimming rate
- Multiple calibration options
- Low-profile design

DLC7

SPECIFICATIONS

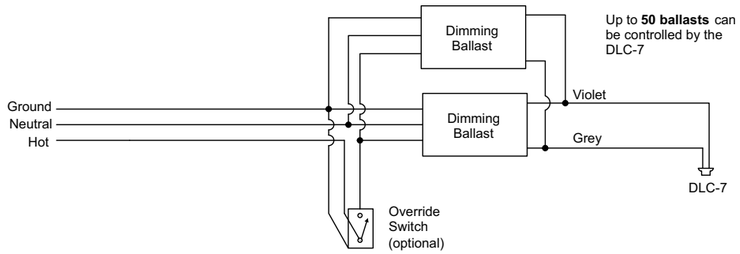
Accuracy	• +/-1% @ 70°F (21°C); • Derated to +/-5% when above 120°F or below 50°F (18° –49°C)
Supported ballasts	• Capable of controlling up to 80 Advance Mark VII ballasts,
Operating environment	• -13°F to +140°F (-11°C–60°C)
Sensitivity ranges	• 0–500 foot-candles
Adjustment range	• 7–140 foot-candles
Input voltage	• 10 VDC (9 supplied by ballast)
Output voltage	• 1VDC (light)–10 VDC (dark)
Wire leads	• 22 gauge - Gray and violet to the Advance ballast - Blue and black for remote calibration dial - White-green 2-wire loop cut for 3-second delay. Leave intact for 8-second delay to ballast
Sensor type	• Blue enhanced photodiode
Size	• Base diameter: 2.00″ Sensor diameter: 1.29″ Height: 1.23″
Mounting	• Mounting hole: 3/8″ Mounting medium: 3M™ double adhesive tape
Construction	• Sensor housing meets flame-retardant requirements of UL standard 94HB

ORDERING INFORMATION

MODEL	
DCL7	Continuous Dimming Control

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

DLCPCI | DLCPCO | DLCPCA | DLCPCS

Photocell Sensors

KEY FEATURES

- Multiple sensor options available
- Interfaces with Energy Management Systems

SPECIFICATIONS

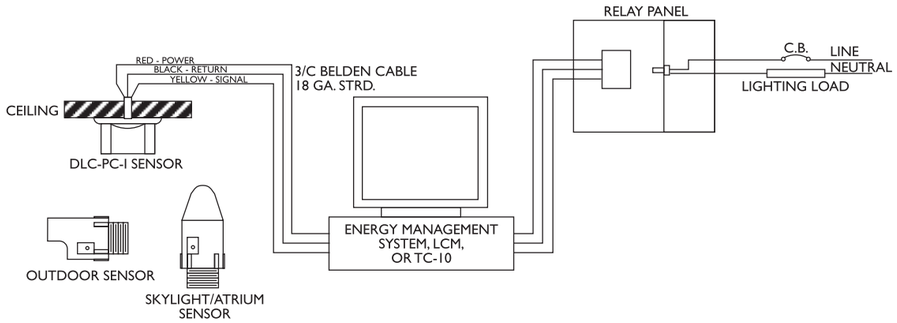
Accuracy	• +/-1% @ 70°F (21°C Derated to +/-5% when above 120°F or at 50°F (18° –49°C)	
Operating environment	• -13°F to +140°F (-11°C–60°C)	
Sensor Type	• Blue enhanced photo diode	
Sensor Ranges	• Housing	Minimum Adjustable Maximum
	DLCPCI	Indoor 5-750FC
	DLCPCO	Outdoor 5-750FC
	DLCPCA	Atruim 200-2,500FC
	DLCPCS	Skylight 1,000-7,500FC
Input voltage	• 24 VDC	
Output Voltage	• 10 VDC full output	
Output Offset	• 0 VDC or 1 VDC - total darkness	
Wiring	• Three conductor 18-gauge standard cable Red: Pos. DC input Black: DC common Yellow: Output to EMS	

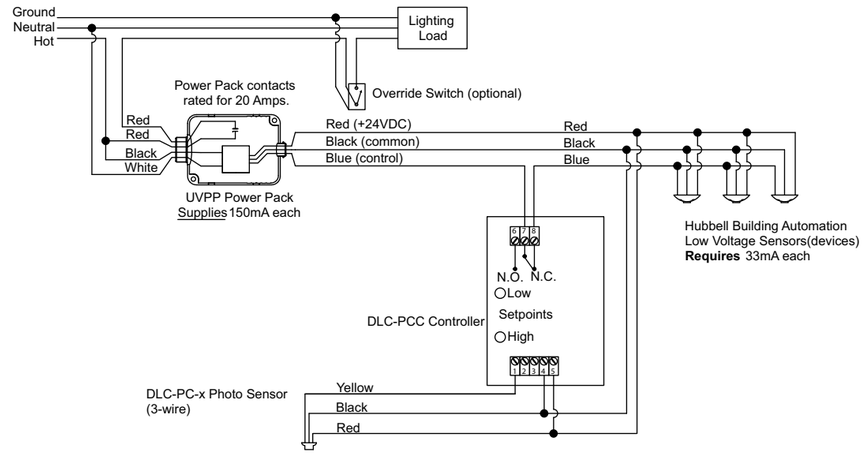
ORDERING INFORMATION

MODEL	
DLCPCI	Indoor Photocell Sensor, 5FC - 750FC
DLCPCO	Outdoor Photocell Sensor, 5FC - 750FC
DLCPCA	Atrium Photocell Sensor, 200FC - 2500FC
DLCPCS	Skylight Photocell Sensor, 1000FC - 7500FC

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/





NOTES:

1. DO NOT attempt to power more than 4 devices (sensors or slave packs) from a single power pack.

2. When using 3-wire sensor, operation of DLC-PCC is reversed from labeling on unit. Use N.C. connection and setpoints as shown.

NOTES

DLCPCC
Photocell Controller

DLCPCC

KEY FEATURES

- Adjustable ON/OFF set points
- Dual power unit input: 24 VAC or 24 VDC
- Flexible control options
- Input time delay
- Two set points available for separate on and off levels

SPECIFICATIONS

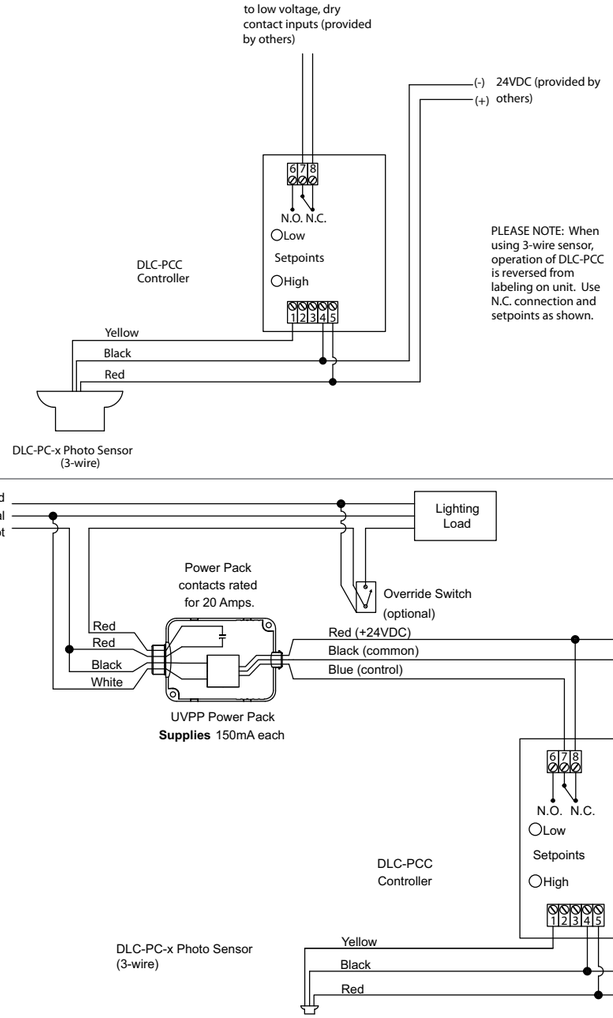
Accuracy	• +/- 1 percent at 70°F (21°C) Derated +/- 5 percent above 120°F or below 0°F (49°F / -18°C)
Sensor Type	• CD S Photoconductive 2 wire
Power Requirements	• 24 VAC or 24 VDC standard
Dead Band	• Adjustable: 5-95%
Indicators	• Red High and Low LEDs
Input Delay	• Standard 30-second sensor (removable for adjustment)
Control Inputs	• Photoconductive Sensor Calibration / Simulator (for optional DLCSIMM)
Output	• Standard form C SPDT relay 10A resistive
Operating environment	• Operating Temp: -13°F to 140°F (-11°C to 60°C) • Indoor use only
Construction	• Sensor is mounted on a wall switch faceplate
Size & Weight	• 4.75" height x 2.5" width x 1.5"depth
Color	• White

ORDERING INFORMATION

MODEL
DLCPCC Photocell Controller

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



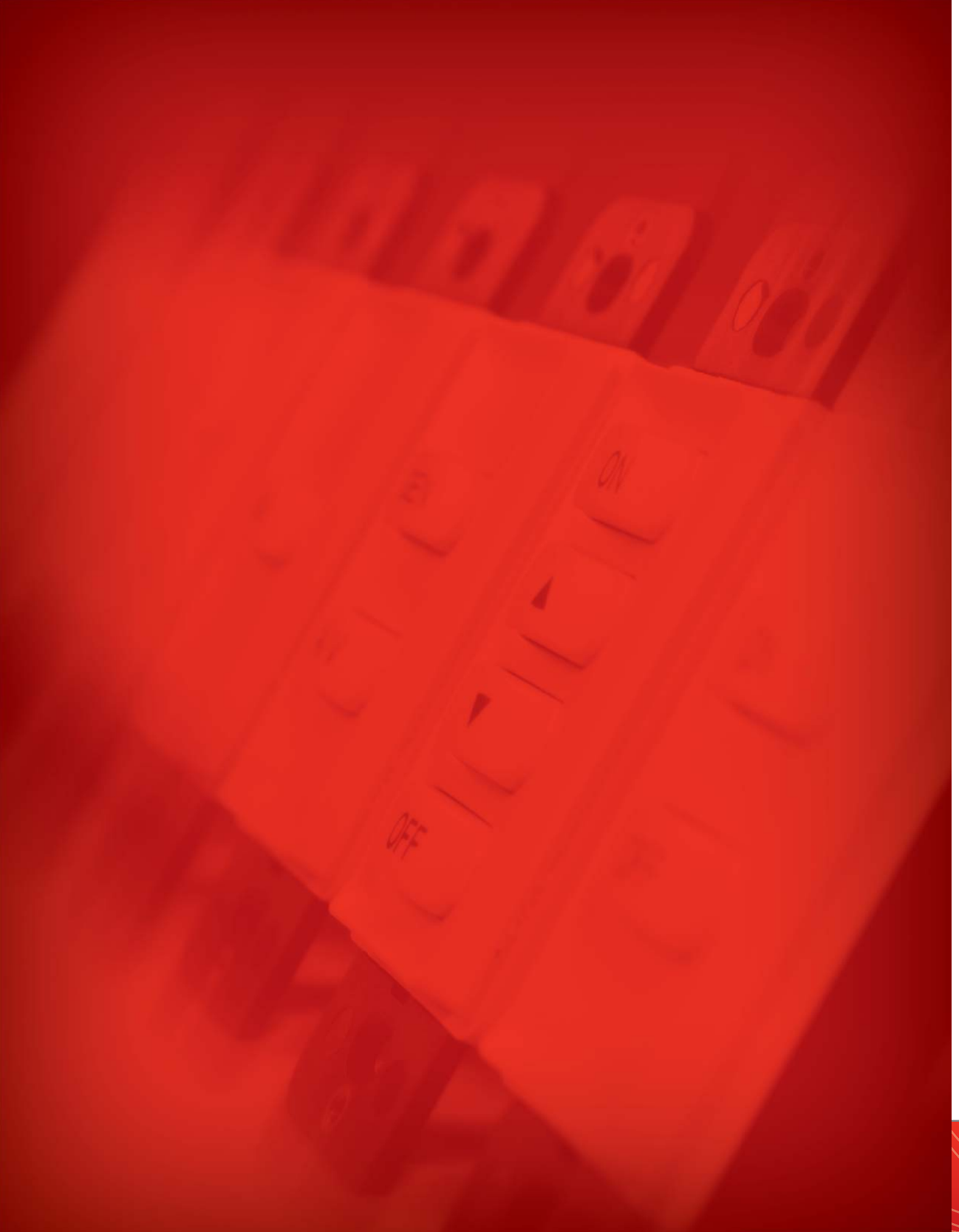
NOTES:

1. DO NOT attempt to power more than 4 devices (sensors or slave packs) from a single power pack.

2. When using 3-wire sensor, operation of DLC-PCC is reversed from labeling on unit. Use N.C. connection and setpoints as shown.

Occupancy | Vacancy Sensors

Table of Contents



LHMTS

LightHawk™ Multi-Technology Wall Switch Sensor featuring IntelliDAPT®

LHMTS1 *LHMTS0*

KEY FEATURES

- All-digital dual technology (ultrasonic [US] and passive infrared [PIR]) sensor
- IntelliDAPT self-adaptive technology—no manual adjustment required
- Auto-on and manual-on operating modes (depending on model)
- 1,000 square-foot, 180° coverage area
- Built-in photocell with SuperSaver™ mode
- RhinoTuff™ lens
- California Title 24 compliant

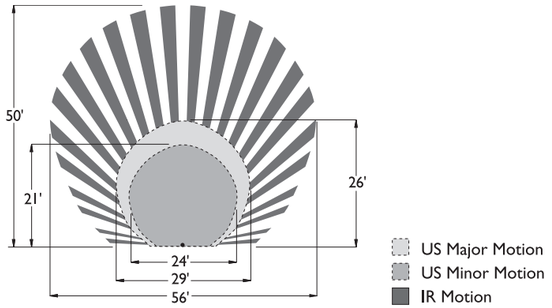
SPECIFICATIONS

IntelliDAPT technology	• Self-adjusting timer • Self-adjusting ultrasonic (US) and passive infrared (PIR) sensitivity • Automatic false-on/false-off corrections • No manual adjustments required
Timer timeout	• Auto mode: 4–30 minutes; self-adjusts based on occupancy • Fixed mode: 4, 8, 15, and 30 minutes • Test mode: 5 seconds
Ultrasonic (US) output	• 40kHz output
Passive infrared (PIR)	• Dual-element pyrometer and 12-element cylindrical RhinoTuff lens
Photocell	• Natural light override range: 10–500 foot-candles
Coverage	• 1,000 square-foot, 180° coverage area
Power requirements	• 120/277 VAC; 50/60Hz
Electrical ratings	• 120 VAC: 800W Incandescent; 1,000W Fluorescent; 1/6 HP • 277 VAC: 1,800W Fluorescent; 1/6 HP
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0–95%
Construction	• Casing—high-impact injection-molded plastic (UL-94-5V) • Impact-resistant lens • Color-coded leads are 6″ long
Size and weight	• Size: 4.2″ x 1.8″ x 2.1″; .37″ extension • Weight: 2.9 oz
Color	• White; Ivory; Light Almond; Gray; Black
Mounting	• Single-gang NEMA-style switch box (average switch box) • Decorator-style wall plate not included
Certifications	• ETL, UL, and cUL listed

ORDERING INFORMATION

LH	MT	S		
MODEL	**TECHNOLOGY**	**CONTROL**	**NO. OF BUTTONS**	**BUTTONS**
LH LightHAWK™	**MT** Multitech	**S** Single Circuit	**1** **0**	**W** White **I** Ivory **A** Light Almond **G** Gray **B** Black

RANGE DIAGRAM



WIRING DIAGRAM

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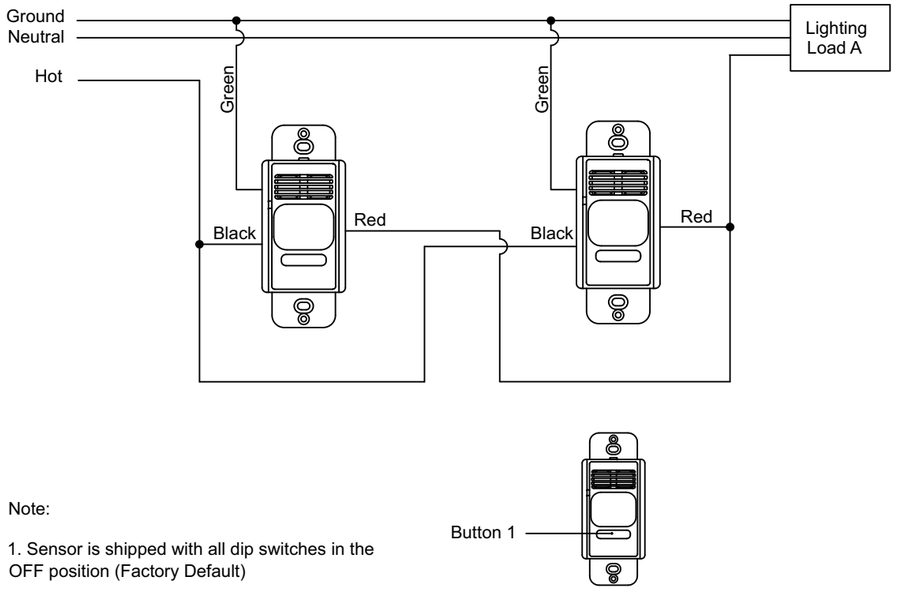


Note:

1. Sensor is shipped with all dip switches in the OFF position (Factory Default)

NOTES

LHMTD

LightHawk™ Multi-Technology Dual Circuit Wall Switch Sensor featuring IntelliDAPT®

KEY FEATURES

- All-digital dual technology (ultrasonic [US] and passive infrared [PIR]) sensor
- IntelliDAPT self-adaptive technology—no manual adjustment required
- Dual 120/277 VAC operation
- No minimum load requirement
- California Title 24 compliant

LHMTD2 *LHMTD0*

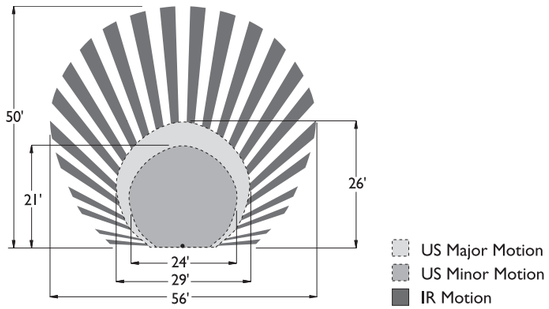
SPECIFICATIONS

Timer timeout	• Auto mode: 4–30 minutes (self-adjusts based on occupancy) • Fixed mode: 4, 8, 15, and 30 minutes • Test mode: 5 seconds
Ultrasonic (US) output	• 40kHz output
Passive infrared (PIR)	• Dual-element pyrometer and 12-element cylindrical RhinoTuff lens
Photocell	• Natural light override range: 10–500 foot-candles
Coverage	• 1,000 square-foot, 180° coverage area
Power requirements	• 120/277 VAC, 50/60Hz
Electrical ratings	• 120VAC: 800W Incandescent; 1,000W Fluorescent; 1/6 HP • 277VAC: 1,800W Fluorescent; 1/6 HP
Load requirements	• None
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0–95%
Construction	• Casing—high-impact injection-molded plastic (UL-94-5V) • Impact-resistant lens • Color-coded leads are 6″ long
Size and weight	• Size: 4.2″ x 1.8″ x 2.1″; .37″ extension • Weight: 2.9 oz
Color	• White; Ivory; Light Almond; Gray; Black
Mounting	• Single-gang NEMA-style switch box (average switch box) • Decorator-style wall plate not included
Certifications	• ETL, UL, and cUL listed

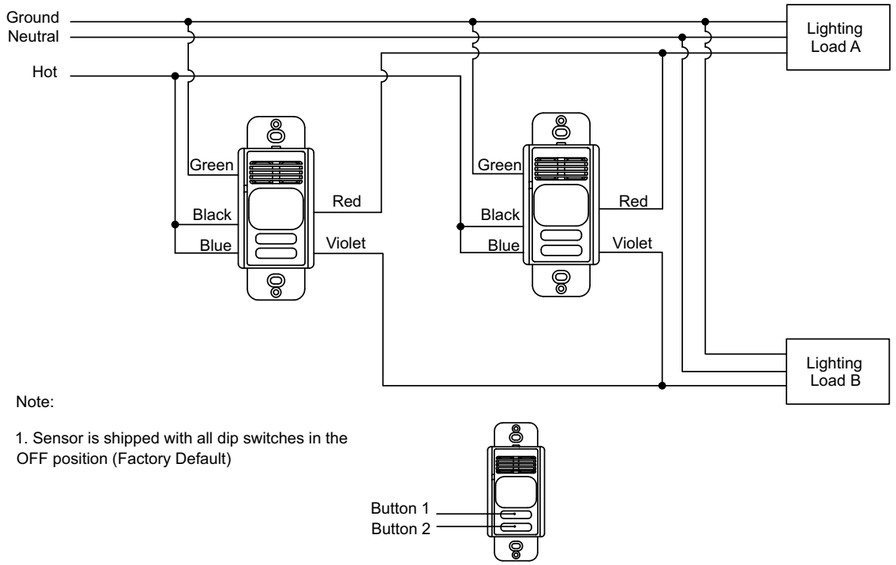
ORDERING INFORMATION

LH	MT	D		
MODEL	**TECHNOLOGY**	**CONTROL**	**NO. OF BUTTONS**	**BUTTONS**
LH LightHAWK™	**MT** Multitech	**D** Dual Circuit	**2** **0**	**W** White **I** Ivory **A** Light Almond **G** Gray **B** Black

RANGE DIAGRAM



WIRING DIAGRAM



Note:

1. Sensor is shipped with all dip switches in the OFF position (Factory Default)

NOTES

LHUSS

LightHawk™ Ultrasonic Wall Switch Sensor featuring IntelliDAPT®

LHUSS1 *LHUSS0*

KEY FEATURES

- All-digital ultrasonic (US) sensor
- IntelliDAPT self-adaptive technology—no manual adjustment required
- 2 relays for two-level switching or dual-circuit control
- Auto-on and manual-on operating modes (depending on model)
- 400 square-foot, 180° coverage area
- Built-in photocell with SuperSaver™ mode
- California Title 24 compliant

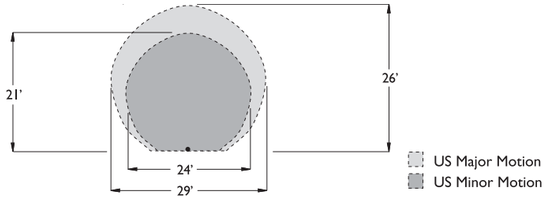
SPECIFICATIONS

IntelliDAPT technology	• Self-adjusting timer • Self-adjusting ultrasonic (US) sensitivity • Automatic false-on/false-off corrections • No manual adjustments required
Timer timeout	• Auto mode: 4–30 minutes; self-adjusts based on occupancy • Fixed mode: 4, 8, 15, and 30 minutes • Test mode: 5 seconds
Ultrasonic (US) output	• 40kHz output
Photocell	• Natural-light override range: 10–500 foot-candles
Coverage	• 400 square-foot, 180° coverage area
Power requirements	• 120/277VAC; 50/60Hz
Electrical ratings	• 120VAC: 800W Incandescent; 1,000W Fluorescent; 1/6 HP • 277VAC: 1,800W Fluorescent; 1/6 HP
Load requirements	• No minimum load
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0–95%
Construction	• Casing—high-impact injection-molded plastic (UL-94-5V) • Color-coded leads are 6″ long
Size and weight	• Size: 4.2″ x 1.8″ x 2.1″; .37″ extension • Weight: 2.9 oz
Color	• White; Ivory; Light Almond; Gray; Black
Mounting	• Single-gang NEMA-style switch box (average switch box) • (Decorator-style wall plate not included)
Certifications	• ETL, UL, and cUL listed

ORDERING INFORMATION

LH	US	S		
MODEL	**TECHNOLOGY**	**CONTROL**	**NO. OF BUTTONS**	**BUTTONS**
LH LightHAWK™	**US** Ultrasonic	**S** Single Circuit	**2** **0**	**W** White **I** Ivory **A** Light Almond **G** Gray **B** Black

RANGE DIAGRAM



WIRING DIAGRAM

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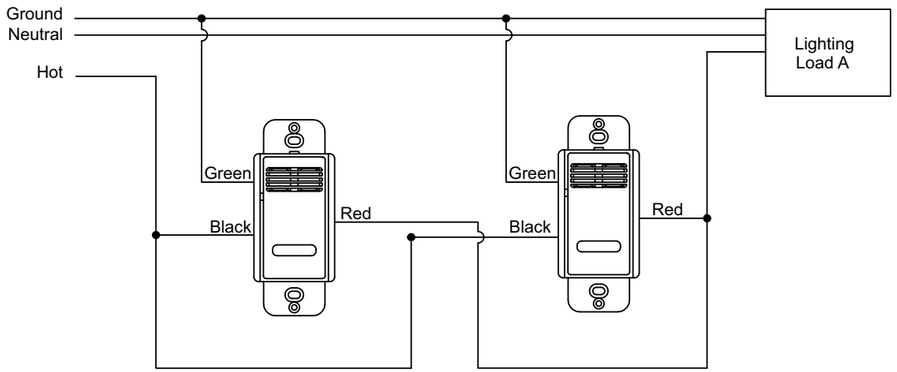
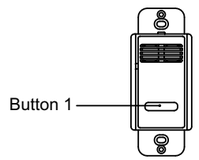




Note:

1. Sensor is shipped with all dip switches in the OFF position (Factory Default)

NOTES

LHUSD

LightHawk™ Ultrasonic Dual Circuit Wall Switch Sensor featuring IntelliDAPT®

KEY FEATURES

- All-digital ultrasonic (US) sensor
- IntelliDAPT self-adaptive technology—no manual adjustment required
- 2 relays for two-level switching or dual-circuit control
- Auto-on and manual-on operating modes (depending on model)
- 400 square-foot, 180° coverage area
- Built-in photocell with SuperSaver™ mode
- California Title 24 compliant

LHUSD2

LHUSD0

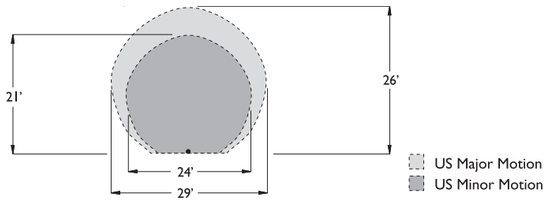
SPECIFICATIONS

IntelliDAPT technology	• Self-adjusting timer • Self-adjusting ultrasonic (US) sensitivity • Automatic false-on/false-off corrections • No manual adjustments required
Timer timeout	• Auto mode: 4–30 minutes; self-adjusts based on occupancy • Fixed mode: 4, 8, 15, and 30 minutes • Test mode: 5 seconds
Ultrasonic (US) output	• 40kHz output
Photocell	• Natural light override range: 10–500 foot-candles
Coverage	• 400 square-foot, 180° coverage area
Power requirements	• 120/277 VAC; 50/60Hz
Electrical ratings	• 120VAC: 800W Incandescent; 1,000W Fluorescent; 1/6 HP • 277VAC: 1,800W Fluorescent; 1/6 HP
Load requirements	• None
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0–95%
Construction	• Casing—high-impact injection-molded plastic (UL-94-5V) • Color-coded leads are 6″ long
Size and weight	• Size: 4.2″ x 1.8″ x 2.1″; .37″ extension • Weight: 2.9 oz
Color	• White; Ivory; Light Almond; Gray; Black
Mounting	• Single-gang NEMA-style switch box (average switch box) • Decorator-style wall plate not included
Certifications	• ETL, UL, and cUL listed

ORDERING INFORMATION

LH	US	D		
MODEL	**TECHNOLOGY**	**CONTROL**	**NO. OF BUTTONS**	**BUTTONS**
LH LightHAWK™	**US** Ultrasonic	D Dual Circuit	**2** **0**	**W** White **I** Ivory **A** Light Almond **G** Gray **B** Black

RANGE DIAGRAM



WIRING DIAGRAM

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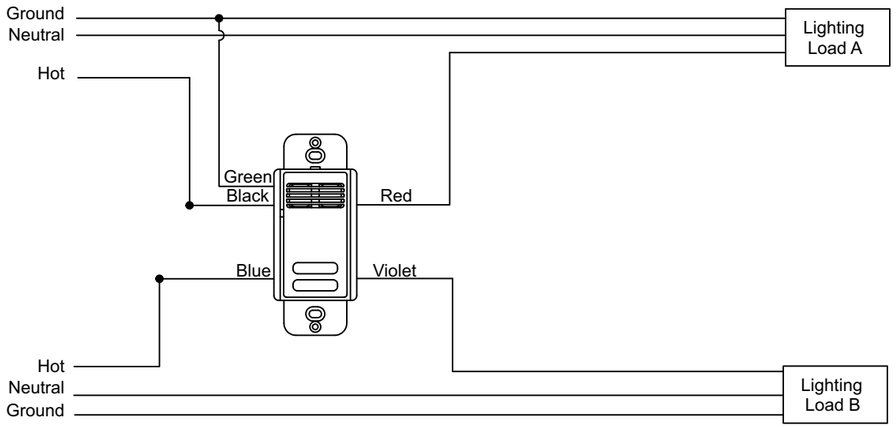
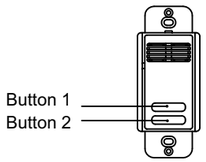


Notes:

1. If only controlling 1 load, use Black, Red, and Green wires
2. Black and Red wires operate through Button 1
3. Blue and Violet wires operate through Button 2



NOTES

LHIRS

LightHawk™ Passive Infrared Wall Switch Sensor featuring IntelliDAPT®

LHIRS1 *LHIRS0*

KEY FEATURES

- All-digital passive infrared (PIR) sensor
- IntelliDAPT self-adaptive technology
- Auto-on and manual-on operating modes (depending on model)
- 1,000 square-foot, 180° coverage area
- Built-in photocell with SuperSaver™ mode
- RhinoTuff™ lens
- Dual 120/277 VAC operation
- No minimum load requirement
- Zero Arc Point Switching
- California Title 24 compliant

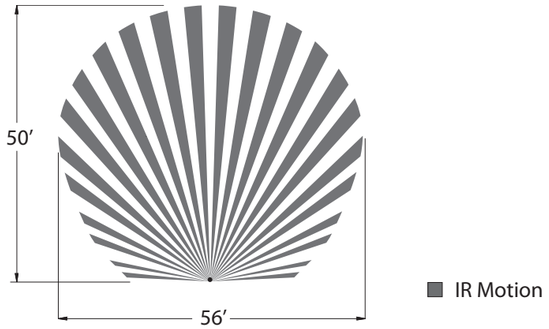
SPECIFICATIONS

IntelliDAPT technology	• Self-adjusting timer • Self-adjusting passive infrared (PIR) sensitivity • Automatic false-on/false-off corrections • No manual adjustments required
Timer timeout	• Auto mode: 4–30 minutes (self-adjusts based on occupancy) • Fixed mode: 4, 8, 15, and 30 minutes • Test mode: 5 seconds
Passive infrared (PIR)	• Dual-element pyrometer and 12-element cylindrical RhinoTuff lens
Photocell	• Natural light override range: 10–500 foot-candles
Coverage	• 1,000 square-foot, 180° coverage area
Power requirements	• 120/277 VAC; 50/60Hz
Electrical ratings	• 120 VAC: 800W Incandescent; 1,000W Fluorescent; 1/6 HP • 277 VAC: 1,800W Fluorescent; 1/6 HP
Load requirements	• None
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—high-impact injection-molded plastic (UL-94-5V) • Impact-resistant lens • Color-coded leads are 6" long
Size and weight	• Size: 4.2" x 1.8" x 2.1"; .37" extension • Weight: 2.9 oz
Color	• White; Ivory; Light Almond; Gray; Black
Mounting	• Single-gang NEMA-style switch box (average switch box) • Decorator-style wall plate not included
Certifications	• ETL, UL, and cUL Listed

ORDERING INFORMATION

LH	IR	S		
MODEL	**TECHNOLOGY**	**CONTROL**	**NO. OF BUTTONS**	**BUTTONS**
LH LightHAWK™	**IR** Passive Infrared	**S** Single Circuit	**1** **0**	**W** White **I** Ivory **A** Light Almond **G** Gray **B** Black

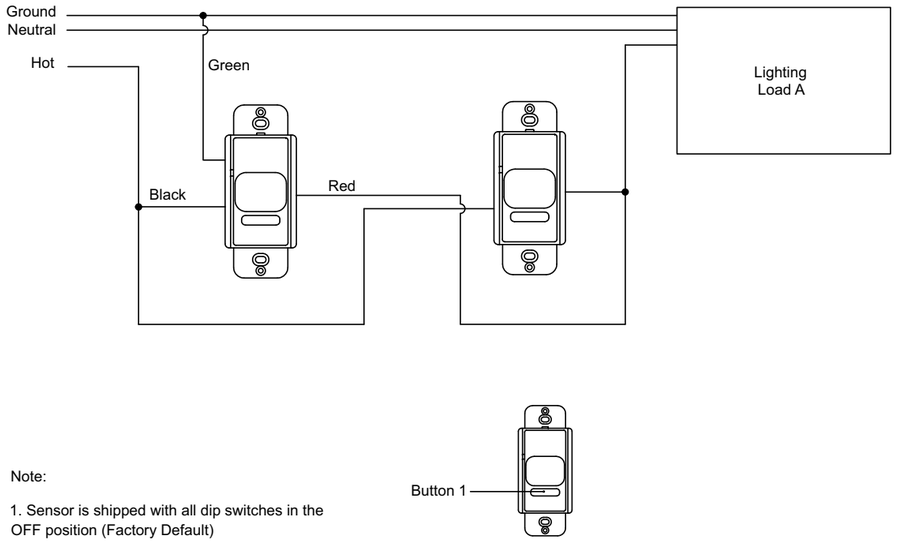
RANGE DIAGRAM



IR Motion

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



Note:

1. Sensor is shipped with all dip switches in the OFF position (Factory Default)

NOTES

LHIRD

LightHawk™ Passive Infrared Dual Circuit Wall Switch Sensor featuring IntelliDAPT®

LHIRS1 *LHIRS0*

KEY FEATURES

- All-digital passive infrared (PIR) sensor
- Auto-on and manual-on operating modes (depending on model)
- 1,000 square-foot, 180° coverage area
- No minimum load requirement
- California Title 24 compliant

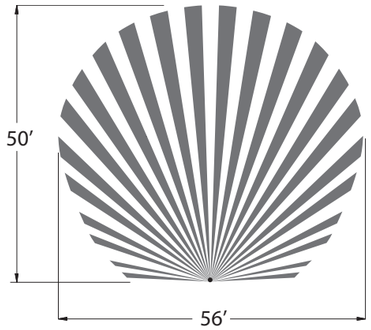
SPECIFICATIONS

IntelliDAPT technology	• Self-adjusting timer • Self-adjusting passive infrared (PIR) sensitivity • Automatic false-on/false-off corrections • No manual adjustments required
Timer timeout	• Auto mode: 4–30 minutes; self-adjusts based on occupancy • Fixed mode: 4, 8, 15, and 30 minutes • Test mode: 5 seconds
Passive infrared (PIR)	• Dual-element pyrometer and 12-element cylindrical RhinoTuff lens
Photocell	• Natural light override range: 10–500 foot-candles
Coverage	• 1,000 square-foot, 180° coverage area
Power requirements	• 120/277 VAC; 50/60Hz
Electrical ratings	• 120VAC: 800W Incandescent; 1,000W Fluorescent; 1/6 HP • 277VAC: 1,800W Fluorescent; 1/6 HP
Load requirements	• None
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—high-impact injection-molded plastic (UL-94-5V) • Impact-resistant lens • Color-coded leads are 6″ long
Size and weight	• Size: 4.2″ x 1.8″ x 2.1″; .37″ extension • Weight: 2.9 oz
Color	• White; Ivory; Light Almond; Gray; Black
Mounting	• Single-gang NEMA-style switch box (average switch box) • Decorator-style wall plate not included
Certifications	• ETL, UL, and cUL listed

ORDERING INFORMATION

LH	IR	D		
MODEL	**TECHNOLOGY**	**CONTROL**	**NO. OF BUTTONS**	**BUTTONS**
LH LightHAWK™	**IR** Passive Infrared	**D** Dual Circuit	**2** **0**	**W** White **I** Ivory **A** Light Almond **G** Gray **B** Black

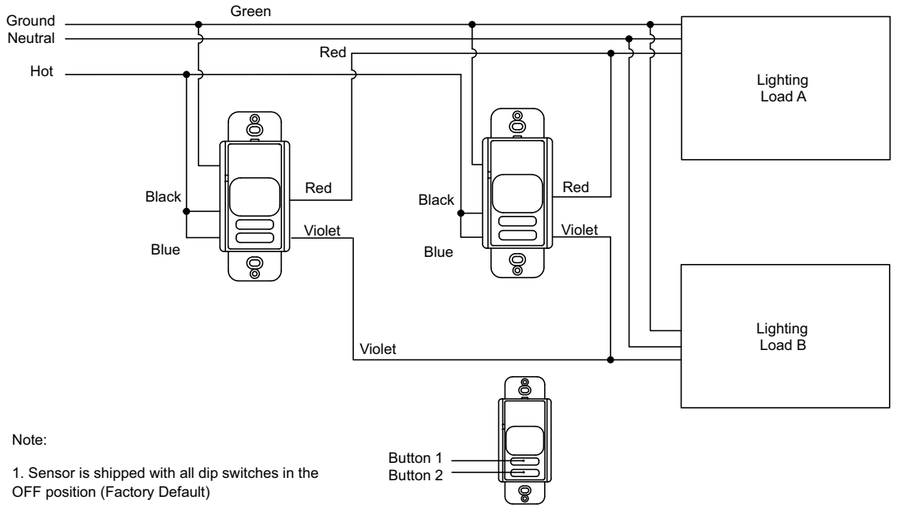
RANGE DIAGRAM



■ IR Motion

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



Note:

1. Sensor is shipped with all dip switches in the OFF position (Factory Default)

NOTES

RWSOSCFL

Residential Occupancy Sensor for Incandescent and CFL Lighting

RWSOSCFL120

KEY FEATURES

- Title 24 compliant—manual-on/auto-off operation
- Zero Arc Point Switching
- No minimum load requirement
- Adjustable time delay and sensitivity
- Walk test indicator
- 900 square-feet, 180° coverage area
- UL and cUL listed

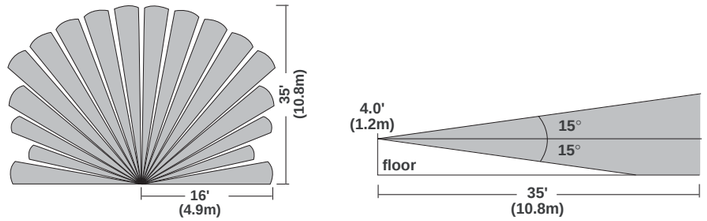
SPECIFICATIONS

Timer timeout	• Fully adjustable: 30 seconds–30 minutes
Sensitivity	• Fully adjustable: 20%–100%
Passive infrared (PIR)	• Multi-segment infrared (IR) Fresnel lens
Coverage	• 900 square-foot, 180° coverage area
Power requirements	• 120 VAC; 60 Hz
Electrical ratings	• 120 VAC: 800W Incandescent; 1,000W Fluorescent
Load requirements	• None
Operating environment	• Indoor use only • Operating temperature: 32°–122°F (0°–50°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—high-impact injection-molded • Color-coded leads are 6″ long
Size and weight	• Size: 4.5″ x 2.75″ x 1.625″ • Weight: 2.9 oz
Color	• Ivory; White
Mounting	• Single-gang NEMA-style switch box (average switch box) • Decorator-style wall plate included
Certifications	• UL and cUL listed

ORDERING INFORMATION

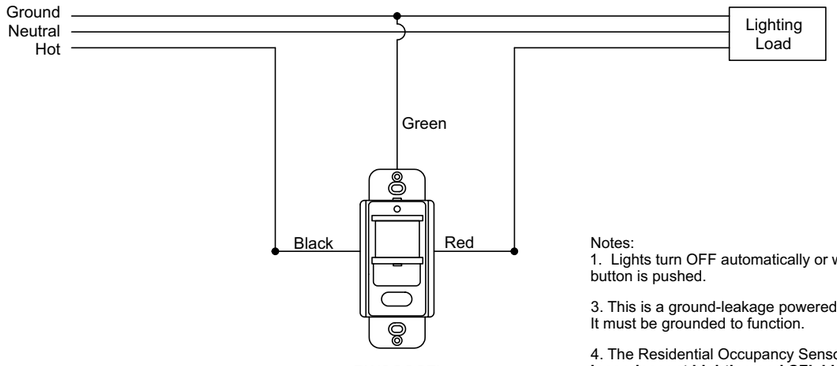
RWS	OS	CFL	120V	
MODEL	**TYPE**	**CONTROL**	**VOLTAGE**	**COLOR**
RWS	**OS** Occupancy Sensor	**CFL** Compact Fluorescent & Incandescent	**120V**	**WH** White **IV** Ivory

RANGE DIAGRAM



WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/

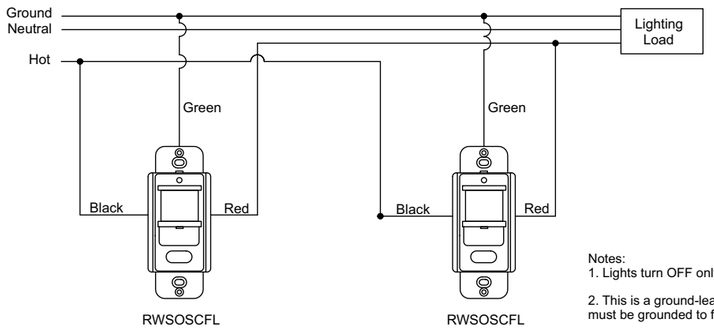


RWSOSCFL

Notes:
1. Lights turn OFF automatically or when button is pushed.

3. This is a ground-leakage powered sensor. It must be grounded to function.

4. The Residential Occupancy Sensor is for **Incandescent Lighting and CFL Lighting**.



RWSOSCFL RWSOSCFL

Sensors connected in parallel loops

Notes:
1. Lights turn OFF only after BOTH sensors time out.

2. This is a ground-leakage powered sensor. It must be grounded to function.

3. The Residential Occupancy Sensor is for **Incandescent Lighting and CFL Lighting.**

RWSVSCFL

Residential Vacancy Sensor for Incandescent and CFL Lighting

RWSVSCFL120

KEY FEATURES

- Auto-on/auto-off operation
- Zero Arc Point Switching
- No minimum load requirement
- Adjustable time delay and sensitivity
- Built-in photocell for daylight control
- Walk test indicator
- 900 square-foot, 180° coverage area
- UL and cUL listed
- California Title 24 compliant

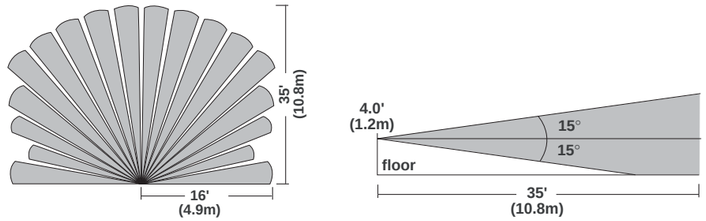
SPECIFICATIONS

Timer timeout	• Fully adjustable: 30 seconds–30 minutes
Sensitivity	• Fully adjustable: 20%–100%
Passive infrared (PIR)	• Multi-segment infrared (IR) Fresnel lens
Photocell	• Natural light override range: 5–200 foot-candles (50–2000 lux)
Coverage	• 900 square-foot, 180° coverage area
Power requirements	• 120 VAC; 60 Hz
Electrical ratings	• 120 VAC: 800W Incandescent; 1,000W Fluorescent
Load requirements	• None
Operating environment	• Indoor use only • Operating temperature: 32°–122°F (0°–50°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—high-impact injection-molded plastic • Color-coded leads are 6″ long
Size and weight	• Size: 4.5″ x 2.75″ x 1.625″ • Weight: 2.9 oz
Color	• Ivory; White
Mounting	• Single-gang NEMA-style switch box (average switch box) • Decorator-style wall plate included
Certifications	• UL and cUL listed

ORDERING INFORMATION

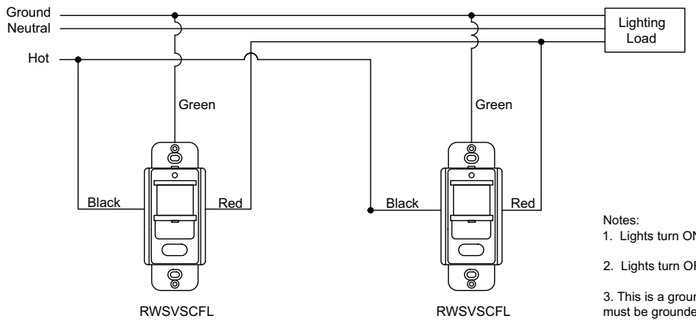
RWS	VS	CFL	120V	
MODEL	**TYPE**	**CONTROL**	**VOLTAGE**	**COLOR**
RWS	**VS** Vacancy Sensor	**CFL** Compact Fluorescent & Incandescent	**120V**	**WH** White **IV** Ivory

RANGE DIAGRAM



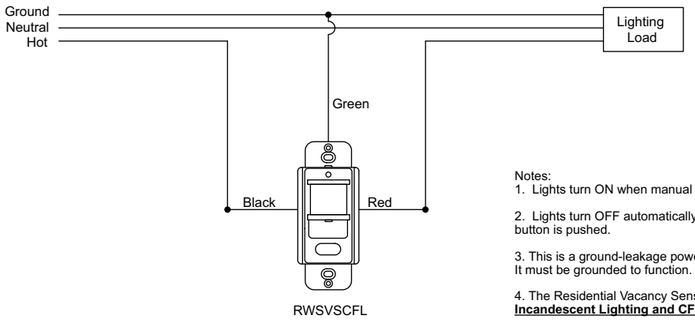
WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



Sensors connected in parallel loops

Notes:
1. Lights turn ON when manual button is pushed.
2. Lights turn OFF only after BOTH sensors time out.
3. This is a ground-leakage powered sensor. It must be grounded to function.
4. The Residential Vacancy Sensor is for **Incandescent Lighting and CFL Lighting.**



Notes:
1. Lights turn ON when manual button is pushed.
2. Lights turn OFF automatically or when button is pushed.
3. This is a ground-leakage powered sensor. It must be grounded to function.
4. The Residential Vacancy Sensor is for **Incandescent Lighting and CFL Lighting.**

RWSOSINC

Residential Occupancy Sensors for Incandescent Lighting

KEY FEATURES

- Patent Pending Alert-to-OFF notification
- Manual dimming control option available
- Zero Arc Point Switching
- Adjustable time delay
- Walk test indicator
- 800 square-foot., 180° coverage area
- UL and cUL listed
- California Title 24 compliant

RWSOSINC *RWSOSINCD*

SPECIFICATIONS

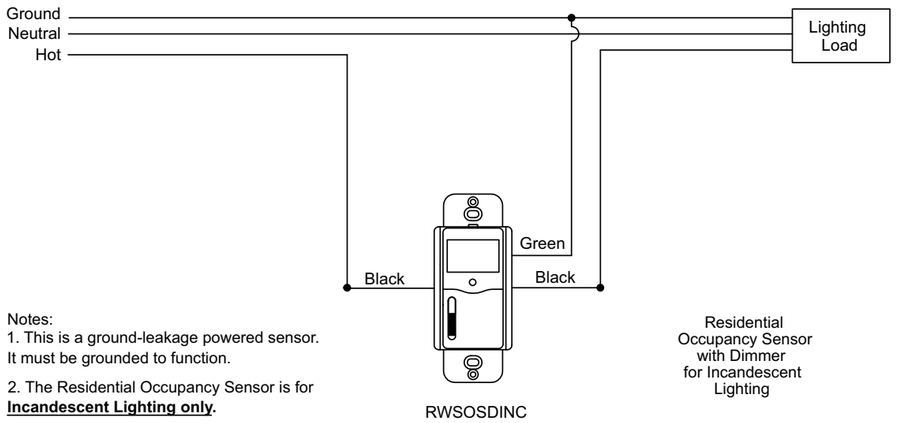
Timer timeout	• Fully adjustable: 30 seconds–30 minutes
Passive infrared (PIR)	• Multi-segment infrared (IR) Fresnel lens
Photocell	• Natural light override range: 5–200 foot-candles (50–2,000 lux)
Coverage	• 800 square-foot., 180° coverage area
Power requirements	• 120 VA;, 60 Hz
Electrical ratings	• 120 VAC: 500W Incandescent only (do not use with fluorescent or compact fluorescent lamps)
Load requirements	• 25W minimum; 500W maximum
Operating environment	• Indoor use only • Operating temperature: 32°–122°F (0°–50°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—high-impact injection-molded plastic • Color-coded leads are 6″ long
Size and weight	• Size: 4.5″ x 2.75″ x 1.625″ • Weight: 2.9 oz
Color	• Almond; Ivory; Light Almond; White
Mounting	• Single-gang NEMA-style switch box (average switch box) • Decorator-style wall plate not included
Certifications	• UL and cUL listed

ORDERING INFORMATION

RWS	OS		INC	120V	
MODEL	**TYPE**	**DIMMING**	**LIGHTING**	**VOLTAGE**	**COLOR**
RWS	**OS** Occupancy Sensor	**Blank** No Dimming **D** Dimming	**INC** Incandescent Only	**120V**	**WH** White **IV** Ivory **LA** Lt. Almond **AL** Almond

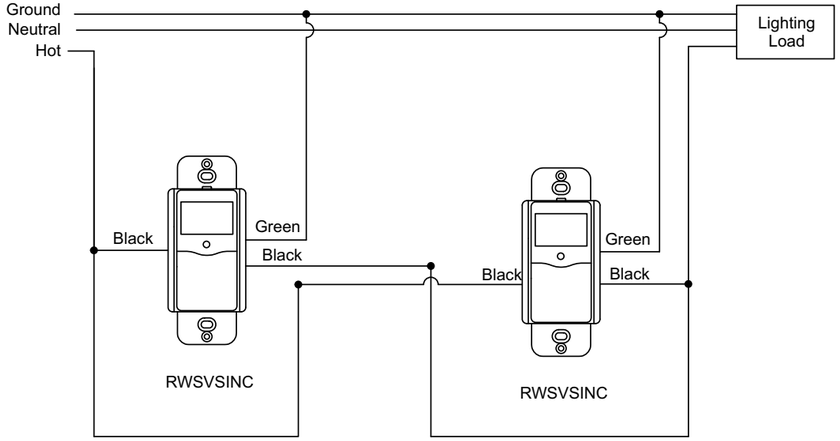
WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



Notes:
1. This is a ground-leakage powered sensor. It must be grounded to function.

2. The Residential Occupancy Sensor is for **Incandescent Lighting only**.



Sensors connected in parallel loops

NOTES

RWSVSINC

Residential Vacancy Sensor for Incandescent Lighting

RWSVSINC *RWSVSINCD*

KEY FEATURES

- Title 24 compliant—manual-on/auto-off operation
- Patent Pending Alert-to-OFF notification
- Manual dimming control option available
- Zero Arc Point Switching
- Adjustable time delay
- Walk test indicator
- 800 square-foot, 180° coverage area
- UL and cUL listed
- California Title 24 compliant

SPECIFICATIONS

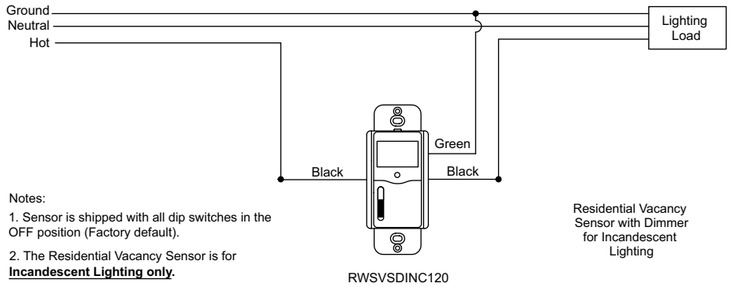
Timer timeout	• Fully adjustable: 30 seconds–30 minutes
Passive infrared (PIR)	• Multi-segment infrared (IR) Fresnel lens
Coverage	• 800 square-foot, 180° coverage area
Power requirements	• 120 VAC; 60 Hz
Electrical ratings	• 120 VAC: 500W Incandescent only (Do not use with fluorescent or compact fluoresent lamps.)
Load requirements	• 25W minimum; 500W maximum
Operating environment	• Indoor use only • Operating temperature: 32°–122°F (0°–50°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—high-impact injection-molded plastic • Color-coded leads are 6″ long
Size and weight	• Size: 4.5″ x 2.75″ x 1.625″ • Weight: 2.9 oz
Color	• Almond; Ivory; Light Almond; White
Mounting	• Single-gang NEMA-style switch box (average switch box) • Decorator-style wall plate not included
Certifications	• UL and cUL listed

ORDERING INFORMATION

RWS	VS		INC	120V	
MODEL	**TYPE**	**DIMMING**	**LIGHTING**	**VOLTAGE**	**COLOR**
RWS	**VS** Vacancy Sensor	**Blank** No Dimming **D** Dimming	**INC** Incandescent Only	**120V**	**WH** White **IV** Ivory **LA** Lt. Almond **AL** Almond

WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/

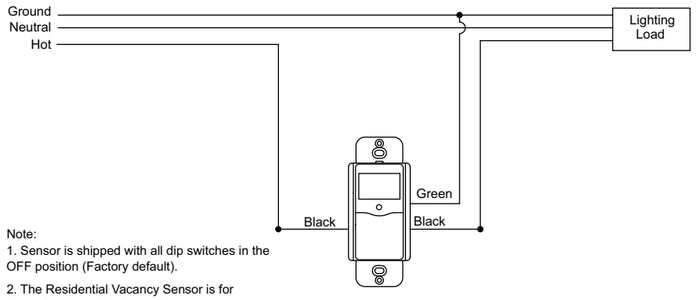


Notes:

1. Sensor is shipped with all dip switches in the OFF position (Factory default).
2. The Residential Vacancy Sensor is for **Incandescent Lighting only**.

Residential Vacancy Sensor with Dimmer for Incandescent Lighting

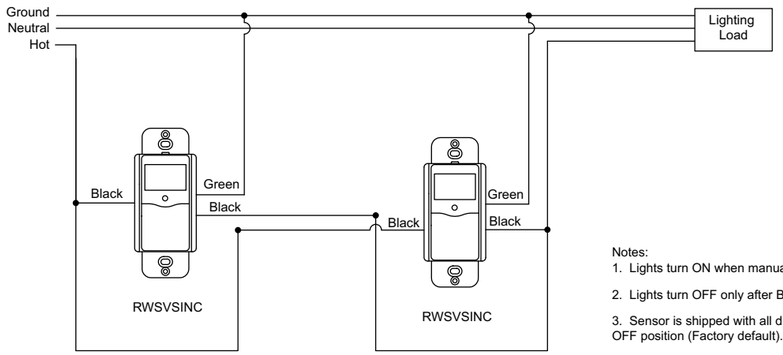
RWSVSDINC120



Note:

1. Sensor is shipped with all dip switches in the OFF position (Factory default).
2. The Residential Vacancy Sensor is for **Incandescent Lighting only**.

RWSVSINC120



Sensors connected in parallel loops

Notes:

1. Lights turn ON when manual button is pushed.
2. Lights turn OFF only after BOTH sensors time out.
3. Sensor is shipped with all dip switches in the OFF position (Factory default).
4. The Residential Vacancy Sensor is for **Incandescent Lighting Only**.

IWSZP3P

Automatic Passive Infrared Wall Switch Sensor

IWSZP3P

KEY FEATURES

- Zero Arc Point Switching
- No minimum load requirement
- Adjustable time delay and sensitivity
- Built-in photocell
- Walk test indicator
- Dual 120/277 VAC operation
- UL and cUL listed

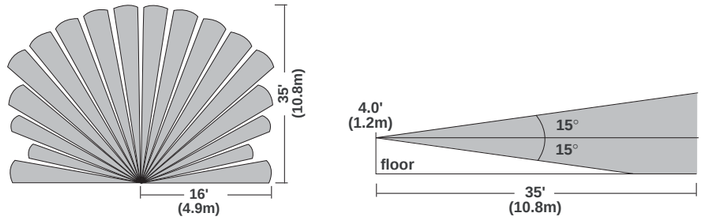
SPECIFICATIONS

Timer Timeout	• Fully adjustable from 30 seconds to 30 minutes
Sensitivity	• Fully adjustable from 20% to 100%
Passive Infrared	• Multi-segment IR Fresnel lens
Photocell	• Adjustable ambient light override ranges from approximately 5 foot-candles (50 lux) to 200 foot-candles (2000 lux)
Coverage	• 900 sq. ft., 180 degrees
Power Requirements	• 120 or 277 VAC, 60 Hz
Electrical Ratings	• 120 VAC: 800W Incandescent, 1000W Fluoresent, 1/6 HP • 277 VAC: 1800W Fluoresent, 1/6 HP
Load Requirements	• No minimum load
Operating environment	• Indoor use only • Operating temperature: 32º – 122º F (0º to 50º C) 0% to 95% relative humidity, non-condensing
Construction	• Housing – high-impact, injection-molded plastic • Color-coded leads are 6″ long
Size & Weight	• Size: 4.5″ x 2.75″ x 1.625″ • Weight: 2.9 oz
Color	• White
Mounting	• Single gang NEMA style switch box, decorator style wall plate
Certifications	• UL and cUL Listed

ORDERING INFORMATION

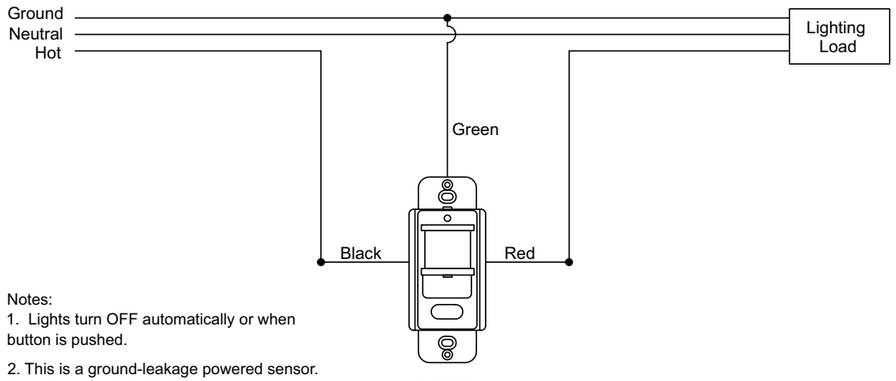
IWSZP	3P	
MODEL	**CONTROL**	**COLOR**
IWSZP	**3P** Auto On/Auto Off	**W** White **I** Ivory

RANGE DIAGRAM



WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



IWSZPM

Notes:
1. Lights turn OFF automatically or when button is pushed.
2. This is a ground-leakage powered sensor. It must be grounded to function.

NOTES

IWSZPM

Manual ON|Automatic OFF Passive Infred Wall Switch Sensor

IWSZPM

KEY FEATURES

- Title 24 compliant manual-on/auto-off operation
- Zero Arc Point Switching
- No minimum load requirement
- Adjustable time delay and sensitivity
- Walk test indicator
- Dual 120/277 VAC operation
- UL and cUL listed
- California Title 24 compliant

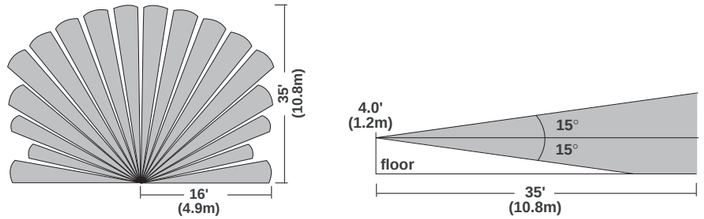
SPECIFICATIONS

Timer timeout	• Fully adjustable: 30 seconds–30 minutes
Sensitivity	• Fully adjustable: 20–100%
Passive infrared	• Multi-segment infrared (IR) Fresnel lens
Coverage	• 900 square feet; 180 degrees
Power requirements	• 120 or 277 VAC; 60 Hz
Electrical ratings	• 120 VAC: 800W Incandescent; 1000W Fluoresent; 1/6 HP • 277 VAC: 1800W Fluoresent; 1/6 HP
Load requirements	• None
Operating environment	• Indoor use only • Operating temperature: 32º–122º F (0º–50º C) 0%–95% relative humidity; non-condensing
Construction	• Casing—high-impact injection-molded plastic • Color-coded leads are 6″ long
Size & weight	• Size: 4.5″ x 2.75″ x 1.625″ • Weight: 2.9 oz
Color	• White
Mounting	• Single-gang NEMA-style switch box (average switch box) • (Decorator-style wall plate not included)
Certifications	• UL and cUL Listed

ORDERING INFORMATION

IWSZP	M	
MODEL	**CONTROL**	**COLOR**
IWSZP	**M** Manual On/Auto Off	**W** White **I** Ivory

RANGE DIAGRAM



WIRING DIAGRAM

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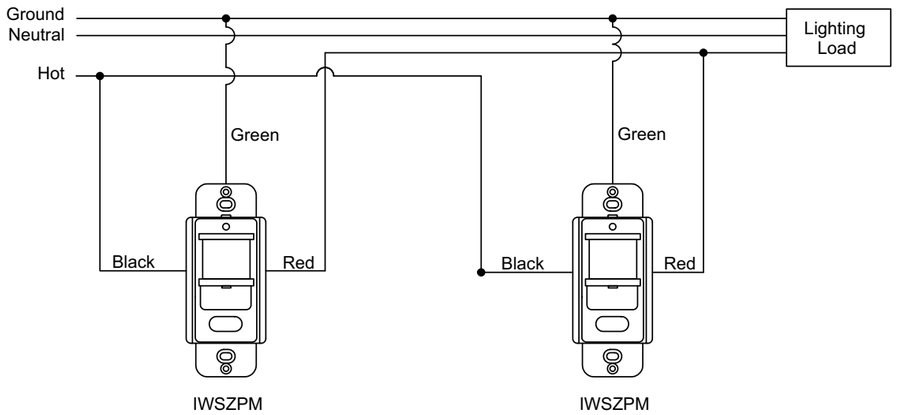
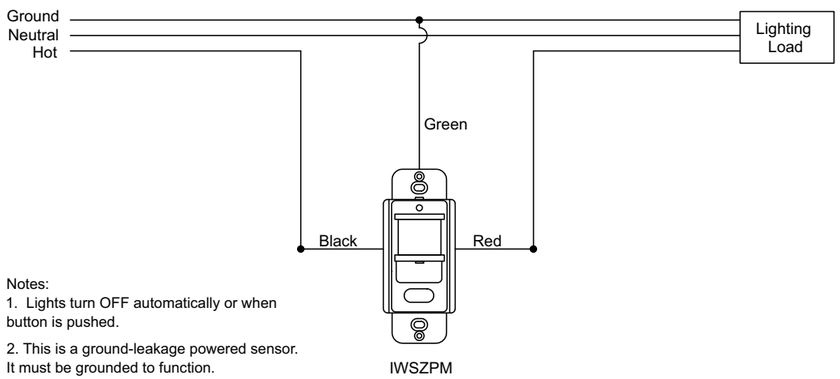


Sensors connected in parallel loops



Notes:
1. Lights turn OFF automatically or when button is pushed.
2. This is a ground-leakage powered sensor. It must be grounded to function.

TD200
Digital Programmable Time

TD200

KEY FEATURES

- Supports multiple timer intervals
- Dip switch control of features
- Manual scroll-up for overrides
- Visual and audio turnoff warning
- Zero Arc Point Switching
- UL and cUL listed

SPECIFICATIONS

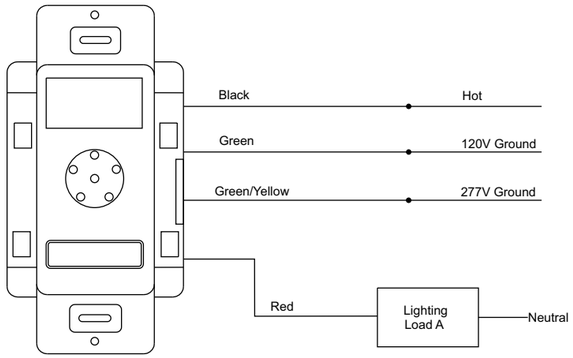
Timer timeout	• A turnoff timer can be programmed for the following times: - 5, 15, or 30 minutes - 1, 3, 6, 9, or 12 hours
Power requirements	• 120 or 277 VAC; 60 Hz
Electrical ratings	• 120 VAC: - 800W Tungsten - 800W Fluorescent - 1/6 HP Motor - 240VA Pilot Duty • 277 VAC: - 1200W Fluorescent
Load requirements	• None
Operating environment	• Indoor use only • Operating temperature: 32°–122°F (0°–50°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—high-impact injection-molded plastic
Size and weight	• Size: 3.28″ x 1.72″ x 1.42″ • Weight: 2.9 oz
Color	• White
Mounting	• Single-gang NEMA-style switch box (average switch box) • Decorator-style wall plate not included
Certifications	• UL and cUL listed

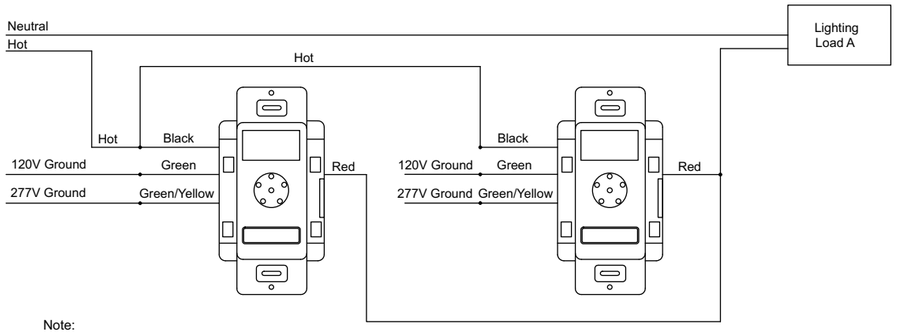
ORDERING INFORMATION

MODEL
TD200 Digital Programmable Timer

WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/





Note:

1. Sensor is shipped with all dip switches in the OFF position (Factory Default)

NOTES

LVS

LV Series—Low Voltage Switches

KEY FEATURES

- Attractive, architecturally pleasing design
- Momentary and latching versions available
- 1-4 buttons with or without LED
- Mounts to standard single-gang box
- California Title 24 compliant

FOR USE WITH

- HBA Low Voltage Occupancy Sensors
- LX Networked Lighting Controls
- HBA Daylighting Controls

LVSM1NP *LVSM1PL* *LVSM2NP* *LVSM2PL*

SPECIFICATIONS

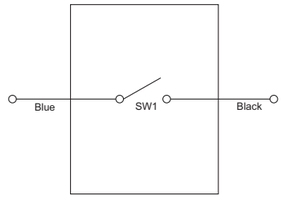
Each Kit Includes:	• 2 ea - Wire Way Divider Plates • 2 ea – Stainless Steel mounting Screws • Installation Instructions
Operating environment	• Indoor use only
Size & Weight	• Size: 4.25”W x 3.25”L • Weight: 3.0 oz
Color	• ANSI 61 Gray Polyester Powder Coat
Certifications	• For use with LX Series UL and cUL Listed LXIN and LXEN network lighting control panels

ORDERING INFORMATION

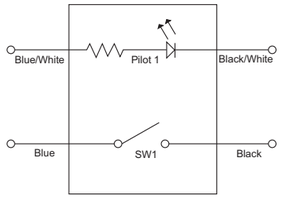
MODEL	
LVSM1NPIV	Low Voltage Switch, Momentary, 1 Button, No Pilot, Ivory
LVSM1NPWH	Low Voltage Switch, Momentary, 1 Button, No Pilot, White
LVSM1PLIV	Low Voltage Switch, Momentary, 1 Button, w/Pilot LED, Ivory
LVSM1PLWH	Low Voltage Switch, Momentary, 1 Button, w/Pilot LED, White
LVSM2NPIV	Low Voltage Switch, Momentary, 2 Button, No Pilot, Ivory
LVSM2NPWH	Low Voltage Switch, Momentary, 2 Button, No Pilot, White
LVSM2PLIV	Low Voltage Switch, Momentary, 2 Button, w/Pilot LED’s, Ivory
LVSM2PLWH	Low Voltage Switch, Momentary, 2 Button, w/Pilot LED’s, White
LVSL1NPIV	Low Voltage Switch, Latching, 1 Button, No Pilot, Ivory
LVSL1NPWH	Low Voltage Switch, Latching, 1 Button, No Pilot, White
LVSL1PLIV	Low Voltage Switch, Latching, 1 Button, w/Pilot LED, Ivory
LVSL1PLWH	Low Voltage Switch, Latching, 1 Button, w/Pilot LED, White
LVSL2NPIV	Low Voltage Switch, Latching, 2 Button, No Pilot, Ivory
LVSL2NPWH	Low Voltage Switch, Latching, 2 Button, No Pilot, White
LVSL2PLIV	Low Voltage Switch, Latching, 2 Button, w/Pilot LED’s, Ivory
LVSL2PLWH	Low Voltage Switch, Latching, 2 Button, w/Pilot LED’s, White

WIRING DIAGRAMS

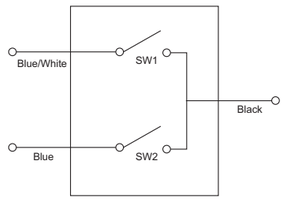
For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



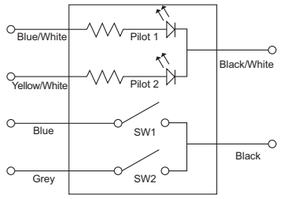
Wiring Diagram A - LVS 1-Button Latching or Momentary Switch, No Pilot



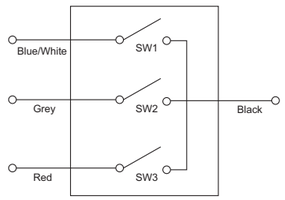
Wiring Diagram B - LVS 1-Button Latching or Momentary Switch, with Pilot LED*



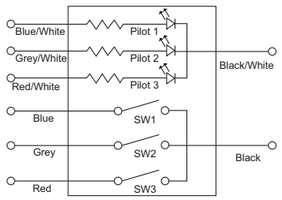
Wiring Diagram C - LVS 2-Button Latching or Momentary Switch, No Pilot



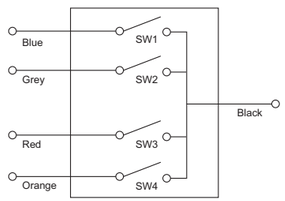
Wiring Diagram D - LVS 2-Button Latching or Momentary Switch, with Pilot LEDs*



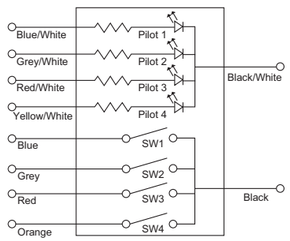
Wiring Diagram E - LVS 3-Button Latching or Momentary Switch, No Pilot



Wiring Diagram F - LVS 3-Button Latching or Momentary Switch, with Pilot LEDs*



Wiring Diagram G - LVS 4-Button Latching or Momentary Switch, No Pilot



Wiring Diagram H - LVS 4-Button Latching or Momentary Switch, with Pilot LEDs*

*Note Pilot Polarity Marks

OMNIDT | OMNIDTRP

OMNI™ Dual Technology Ultrasonic and Passive Infrared Ceiling Sensor featuring IntelliDAPT®

KEY FEATURES

- IntelliDAPT self-adaptive technology—no manual adjustment required
- All-digital dual technology (ultrasonic [US] and passive infrared [PIR]) sensor
- Non-volatile memory for sensor settings
- 500–2,000 square-foot coverage area (depending on model)
- UL and cUL listed

OMNIDT2000

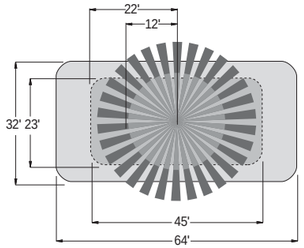
SPECIFICATIONS

IntelliDAPT	• Auto reset from test setting • Self-adjusting timer • Self-adjusting ultrasonic and passive infrared thresholds • Automatic false-on/false-off corrections
LED lamp	• Red—infrared motion • Green—ultrasonic motion
Timer timeout	• Automatic mode: 8–30 min. (self-adjusts based on occupancy) • Test mode: 8 seconds (for an easy check at installation)
Ultrasonic (US) output	• OMNIDT500: 40kHz output • OMNIDT1000 and OMNIDT2000: 32kHz
Passive infrared (PIR)	• Dual-element pyrometer and 12-element cylindrical rugged lens
RP option	• Relay and photocell included • Relay: N/O + N/C contacts; SPDT; 500 mA rated @ 24VDC; three-wire isolated relay • Photocell: adjustable natural-light override ranges from 0 to 100 foot-candles (0–1,000 lux)
Coverage	• 500–2,000 square feet (depending on model)
Power requirements	• 24 VDC, 33 mA (uses UVPP and MP-Series power pack—not included)
Output	• 24 VDC active high-logic control signal with short circuit protection and optional dry contact (*see*: RP Option)
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—rugged, high-impact, injection-molded plastic KJB ABS Cycolac (UL-945VA) flame class rating, UV inhibitors • Color-coded leads are 6″ long
Size and weight	• Size: 4.5″ diameter, 1.5″ height (114 mm diameter, 38mm height) • Weight: 5.0 oz (142g)
Mounting	• Mounting base provided • Recommended MAX Mounting height: 12ft.

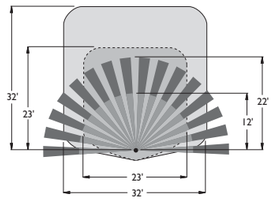
ORDERING INFORMATION

OMNI	DT			
MODEL	**TECHNOLOGY**	**COVERAGE**	**RELAY / PHOTOCELL OPTION**	**QTI**
OMNI	**DT** Dual Technology	**500** 500 sq. ft. **1000** 1,000 sq. ft. **2000** 2,000 sq. ft.	**RP** Relay & Photocell **Blank** No Option	**QTI** Quick to Install **Blank** No QTI

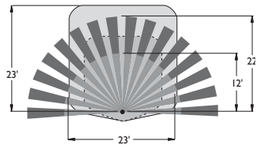
RANGE DIAGRAMS



DT2000



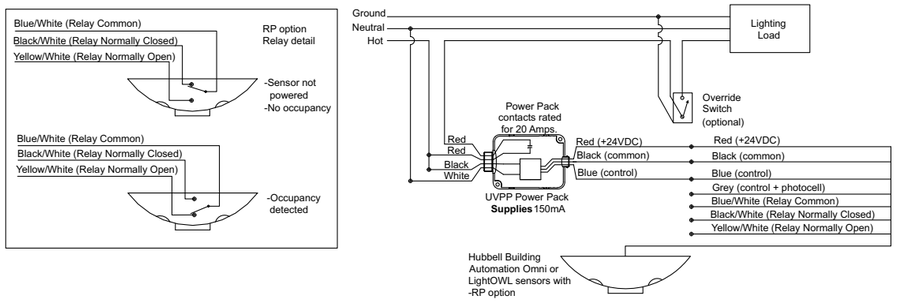
DT1000

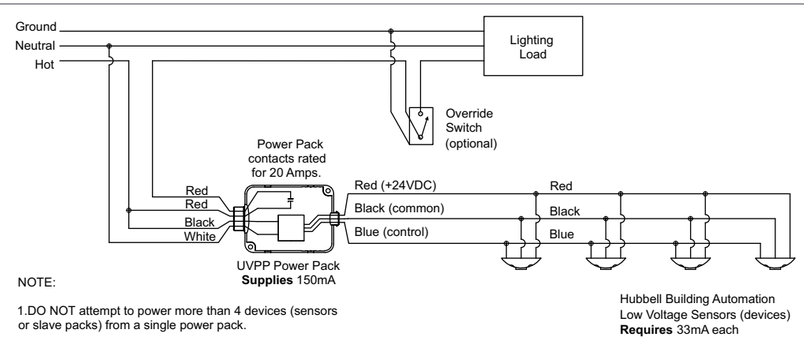


DT500

WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/





NOTE:

1.DO NOT attempt to power more than 4 devices (sensors or slave packs) from a single power pack.

NOTES

OMNIUS | OMNIUSRP

OMNI™ Ultrasonic Ceiling Sensor featuring IntelliDAPT®

OMNIUS500

KEY FEATURES

- IntelliDAPT self-adaptive technology—no manual adjustment required
- All-digital ultrasonic (US) technology
- Non-volatile memory for sensor settings
- 500–2,000 square-foot coverage area (depending on model)
- California Title 24 compliant
- UL and cUL listed

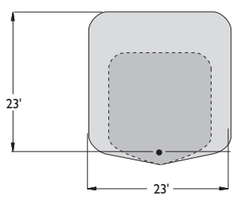
SPECIFICATIONS

IntelliDAPT	• Auto reset from test setting • Self-adjusting timer • Self-adjusting ultrasonic thresholds • Automatic false-on/false-off corrections
LED lamp	• Green—ultrasonic motion
Timer timeout	• Automatic mode: 8–30 min. (self-adjusts based on occupancy) • Test mode: 8 seconds (for an easy check at installation)
Ultrasonic (US) output	• OMNIUS500: 40kHz output • OMNIUS1000 and OMNIUS2000: 32kHz output
RP option	• Relay and photocell included • Relay: N/O + N/C contacts; SPDT; 500 mA rated @ 24VDC; three-wire isolated relay • Photocell: adjustable natural-light override ranges from 0 to 100 foot-candles (0–1,000 lux)
Coverage	• 500–2,000 square feet (depending on model)
Power requirements	• 24 VDC, 33 mA (uses UVPP and MP-Series power pack—not included)
Output	• 24 VDC active high-logic control signal with short circuit protection and optional dry contact (*see*: RP Option)
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—rugged, high-impact, injection-molded plastic KJB ABS Cycolac (UL-945VA) flame class rating, UV inhibitors • Color-coded leads are 6″ long
Size and weight	• Size: 4.5″ diameter, 1.5″ height (114 mm diameter, 38mm height) • Weight: 5.0 oz (142g)
Color	• Off-white
Mounting	• Mounting base provided • Recommended MAX mounting height: 12ft.

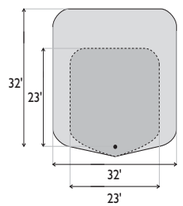
ORDERING INFORMATION

OMNI	US			
MODEL	**TECHNOLOGY**	**COVERAGE**	**RELAY / PHOTOCELL OPTION**	**QTI**
OMNI	**US** Ultrasonic	**500** 500 sq. ft. **1000** 1,000 sq. ft. **2000** 2,000 sq. ft.	**RP** Relay & Photocell **Blank** No Option	**QTI** Quick to Install **Blank** No QTI

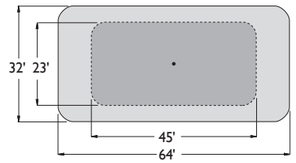
RANGE DIAGRAMS



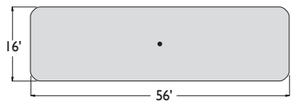
OMNIUS500



OMNIUS1000



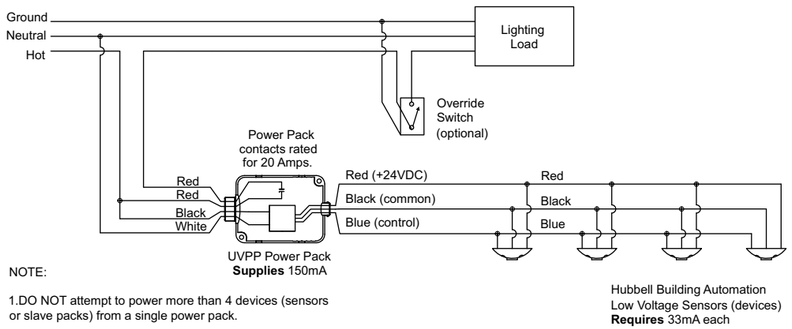
OMNIUS2000

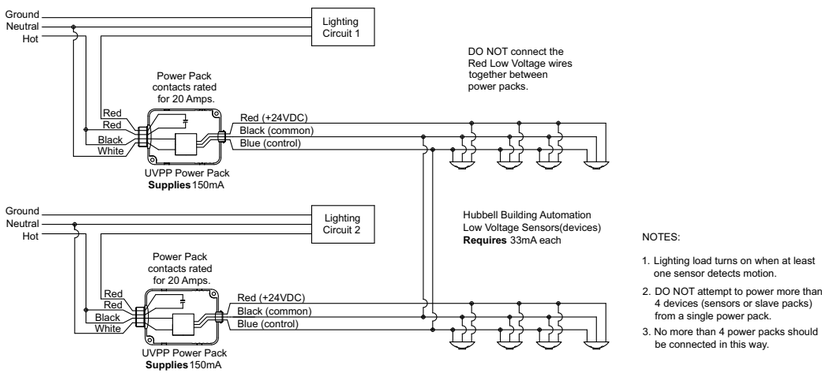


OMNIUS2000 - Hallway

WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/





OMNIIR | OMNIIRPR

OMNI™ Passive Infrared Ceiling Sensor featuring IntelliDAPT®

KEY FEATURES

- IntelliDAPT self-adaptive technology—no manual adjustment required
- All-digital passive infrared (PIR) sensor
- Non-volatile memory for sensor settings
- 450–1,500 square-foot coverage area (depending on model)
- UL and cUL listed

OMNIIR

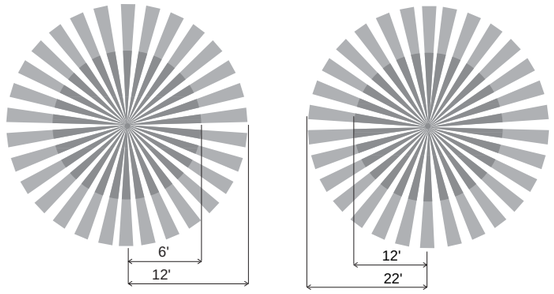
SPECIFICATIONS

IntelliDAPT	• Auto reset from test setting • Self-adjusting timer • Self-adjusting passive infrared thresholds • Automatic false-on/false-off corrections
LED lamp	• Red—infrared motion
Timer timeout	• Automatic mode: 8–30 min. (self-adjusts based on occupancy) • Test mode: 8 seconds (for an easy check at installation)
Passive infrared (PIR)	• Dual-element pyrometer and 12-element cylindrical rugged lens
RP option	• Relay and photocell included • Relay: N/O + N/C contacts; SPDT; 500 mA rated @ 24VDC; three-wire isolated relay • Photocell: adjustable natural-light override ranges from 0 to 100 foot-candles (0–1,000 lux)
Coverage	• 450–1,500 square feet (depending on model)
Power requirements	• 24 VDC, 33 mA (uses UVPP and MP-Series power pack—not included)
Output	• 24 VDC active high-logic control signal with short circuit protection and optional dry contact (*see*: RP Option)
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—rugged, high-impact, injection-molded plastic KJB ABS Cycolac (UL-945VA) flame class rating, UV inhibitors • Color-coded leads are 6″ long
Size and weight	• Size: 4.5″ diameter, 1.5″ height (114 mm diameter, 38mm height) • Weight: 5.0 oz (142g)
Color	• Off-white
Mounting	• Mounting base provided • Recommended MAX mounting height: 12ft.

ORDERING INFORMATION

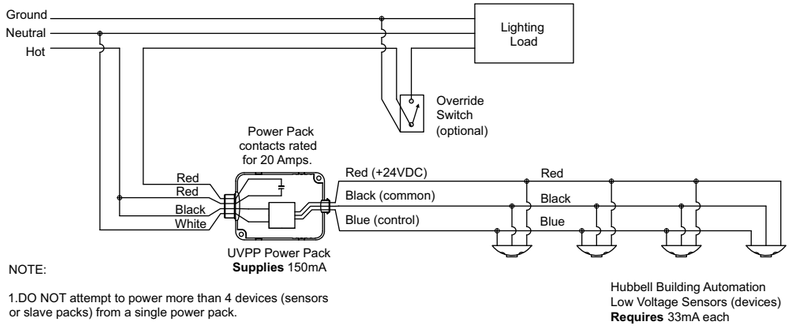
OMNI	IR			
MODEL	**TECHNOLOGY**	**COVERAGE**	**RELAY / PHOTOCELL OPTION**	**QTI**
OMNI	**IR** Passive Infrared	**L** Long Range IR, 1,500 sq. ft. **Blank** 450 sq. ft.	**RP** Relay & Photocell **Blank** No Option	**QTI** Quick to Install **Blank** No QTI

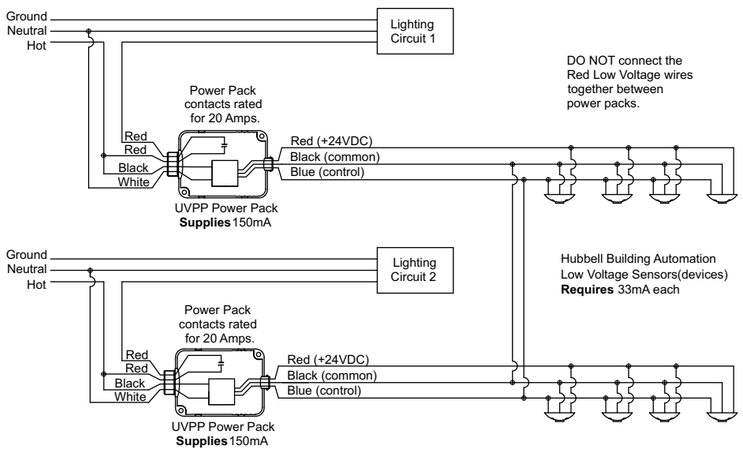
RANGE DIAGRAMS



WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/





OMNIDIA | OMNIDIAPR

OMNI™ Dual Technology Acoustic and Passive Infrared Ceiling Sensor featuring IntelliDAPT®

KEY FEATURES

- IntelliDAPT self-adaptive technology—no manual adjustment required
- All-digital dual technology (acoustic and passive infrared [PIR]) sensor
- 450 square-foot coverage
- California Title 24 compliant
- UL and cUL listed

OMNIDIA

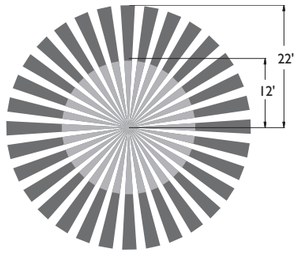
SPECIFICATIONS

IntelliDAPT	• Auto reset from test setting • Self-adjusting timer • Self-adjusting passive infrared and acoustic thresholds • Automatic false-on/false-off corrections
LED lamp	• Red—infrared motion • Green—acoustic detection
Timer timeout	• Automatic mode: 8–30 min. (self-adjusts based on occupancy) • Test mode: 8 seconds (for an easy check at installation)
Passive infrared (PIR)	• Dual-element pyrometer and 12-element cylindrical rugged lens
RP option	• Relay and photocell included • Relay: N/O + N/C contacts; SPDT; 500 mA rated @ 24VDC; three-wire isolated relay • Photocell: adjustable natural-light override ranges from 0 to 100 foot-candles (0–1,000 lux)
Coverage	• 450 square feet
Power requirements	• 24 VDC, 33 mA (uses UVPP and MP-Series power pack—not included)
Output	• 24 VDC active high-logic control signal with short circuit protection and optional dry contact (*see*: RP Option)
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—rugged, high-impact, injection-molded plastic KJB ABS Cycolac (UL-945VA) flame class rating, UV inhibitors • Color-coded leads are 6″ long
Size and weight	• Size: 4.5″ diameter, 1.5″ height (114 mm diameter, 38mm height) • Weight: 5.0 oz (142g)
Color	• Off-white
Mounting	• Mounting base provided • Recommended MAX mounting height: 12ft.

ORDERING INFORMATION

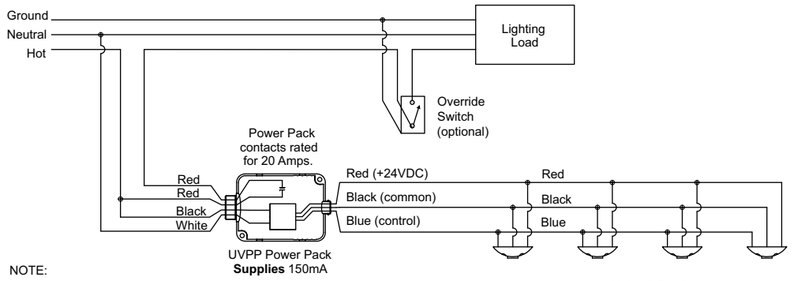
OMNI	DIA		
MODEL	**TECHNOLOGY**	**RELAY/PHOTOCELL OPTION**	**QTI**
OMNI	**DIA** Dual Technology Acoustic & Passive Infrared	**RP** Relay & Photocell **Blank** No Option	**QTI** Quick to Install **Blank** No QTI

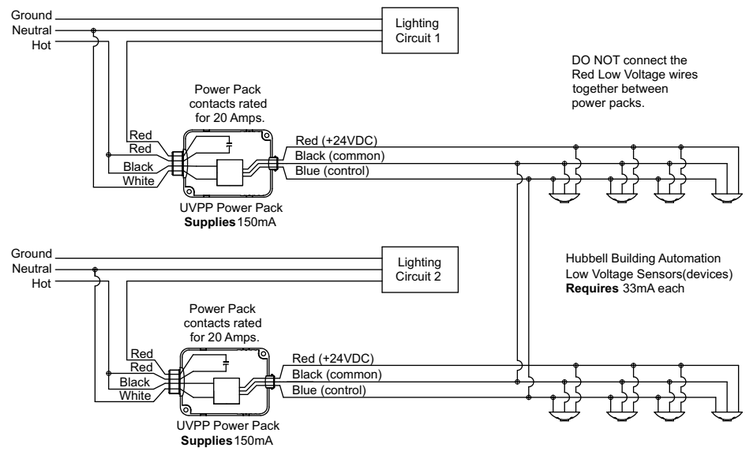
RANGE DIAGRAM



WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/





PIR1000H

Passive Infrared Ceiling Sensor for Hallway Applications

KEY FEATURES

- 16' x 80' linear feet of coverage
- LED walk test indicator
- 30 second – 30 minute time delay
- UL and cUL listed
- California Title 24 compliant

PIR1000H

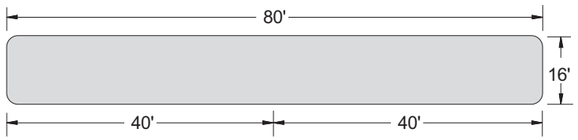
SPECIFICATIONS

Sensitivity	• Fully adjustable: 0% - 100%
Timer Timeout	• Fully adjustable: 30 sec. to 30 min.
Passive Infrared	• Multi-segmented, high-density Fresnel™ IR lens
LED Lamp	• Walk test indicator • Red – Infrared motion
Coverage	• 16' x 80' linear feet
Power Requirements	• 24VDC (uses UVPP power pack – not included)
Output	• 24 VDC active high logic control signal
Operating environment	• Indoor use only • Operating temperature: 0°F – 100°F (-18°C – 38°C)
Construction	• Housing – Rugged, high impact, injection molded plastic • Color-coded leads
Size & Weight	• Size: 4.72" L x 2.76" W x "1.10" D (119.8mm L x 70.0mm W x 27.9mm D) • Weight: 3.0 oz
Color	• White
Mounting	• Sensors may be mounted using a single gang mud ring attached to a 4-inch square electrical box • Recommended MAX mounting height: 10 Ft.

ORDERING INFORMATION

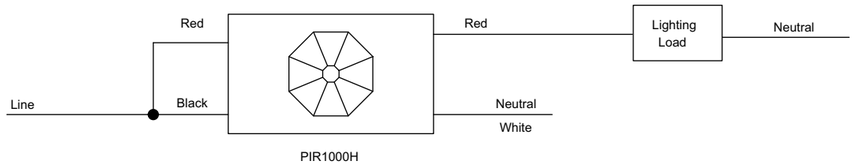
MODEL	
PIR1000H	Passive Infrared Ceiling Sensor for Hallway Applications, White 16' x 80' Linear ft.

RANGE DIAGRAM



WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



Note:

This diagram is for any line voltage sensor.

NOTES

CUI5002000P

Dual Technology and Passive Infrared Line Voltage Ceiling Mount Sensor

CUI5002000P

KEY FEATURES

- Self-contained power supply
- 2000 sq. ft. coverage
- 5 Programming options
- Adjustable time delay
- Adjustable sensitivity
- California Title 24 compliant

SPECIFICATIONS

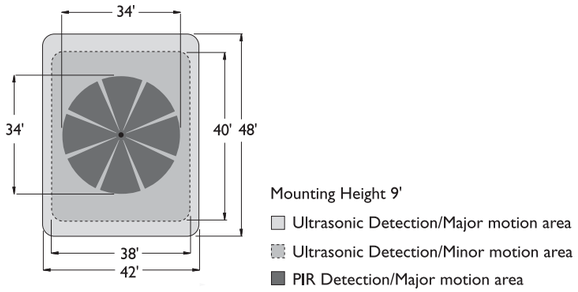
Sensitivity	• Fully adjustable: 0% - 100%
Timer Timeout	• Fully adjustable: 30 sec. to 30 min.
Ultrasonic output	• Operating frequency: 32.7kHz
Passive Infrared	• Multi-segmented, high-density Fresnel™ IR lens
LED Lamp	• Walk test indicator • Red – Infrared motion, Green – Ultrasonic motion
Coverage	• 360° • Up to 2000 sq. ft.
Power Requirements	• CUI5002000P120 – 120 VAC, 50/60 Hz • CUI5002000P277 – 277 VAC, 50/60 Hz
Electrical Ratings	• CUI5002000P120 – 2400 watts @ 120 VAC 50/60 Hz • CUI5002000P277 – 5000 watts @ 277 VAC 50/60 Hz
Output	• 24 VDC active high logic control signal
Operating environment	• Indoor use only • Operating temperature: 32° – 122°F (0° to 50°C)
Construction	• Housing – Rugged, high-impact, injection-molded plastic • Color-coded leads
Size & Weight	• Size: 4.87" dia., 2.44" deep (123.7 mm dia., 62mm deep) • Weight: 3.0 oz
Color	• White
Mounting	• Sensors may be mounted using a single gang mud ring attached to a 4-inch square electrical box • Recommended MAX mounting height: 9 Ft.
Certifications	• UL and cUL Listed

ORDERING INFORMATION

MODEL	
CUI5002000P	Dual Technology Ultrasonic & Passive Infrared Line Voltage Ceiling Sensor

VOLTAGE	
120	120V
277	277V

RANGE DIAGRAM

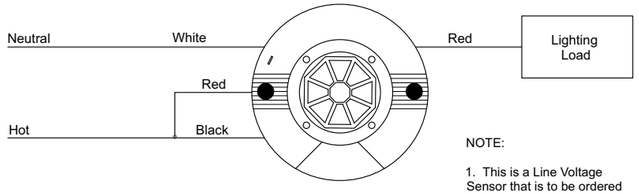


Mounting Height 9'

- Ultrasonic Detection/Major motion area
- Ultrasonic Detection/Minor motion area
- PIR Detection/Major motion area

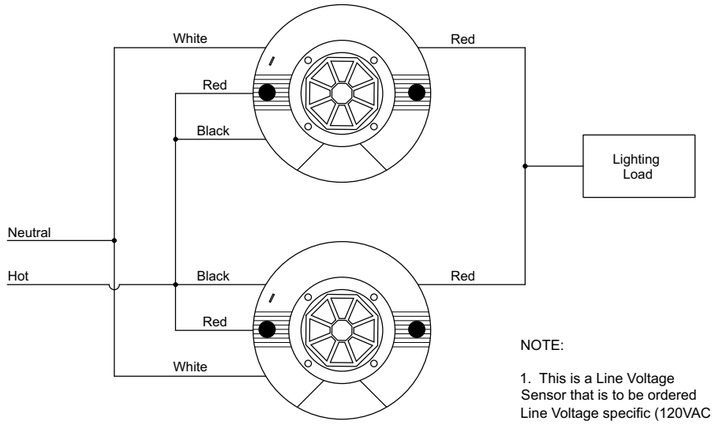
WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTE:

1. This is a Line Voltage Sensor that is to be ordered Line Voltage specific (120VAC or 277VAC).



NOTE:

1. This is a Line Voltage Sensor that is to be ordered Line Voltage specific (120VAC or 277VAC).

NOTES

C5002000P

Ultrasonic Line Voltage Ceiling Mount Sensor

C5002000P

KEY FEATURES

- Self-contained power supply
- 2,000 square-foot coverage
- Adjustable time delay
- Adjustable sensitivity
- California Title 24 compliant

SPECIFICATIONS

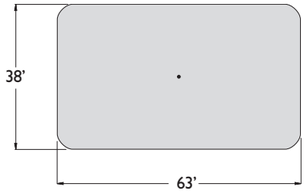
Sensitivity	• Fully adjustable: 0% –00%
Timer timeout	• Fully adjustable: 30 seconds–30 minutes
Ultrasonic output	• Operating frequency: 32.7kHz
LED lamp	• Walk test indicator (a blinking light indicates the sensor is working)
Coverage	• 2,000 square feet
Power requirements	• C5002000P120: 120 VAC; 50/60 Hz • C5002000P277: 277 VAC; 50/60 Hz
Electrical ratings	• C5002000P120: 2400 watts @ 120 VAC; 50/60 Hz • C5002000P277: 5000 watts @ 277 VAC; 50/60 Hz
Operating environment	• Indoor use only • Operating temperature: 32°–122°F (0°–50°C)
Construction	• Casing—rugged, high-impact, injection-molded plastic • Color-coded leads
Size and weight	• Size: 5.0″ x 2.87″ x 1.37″ (127.5 mm x 73.0 mm x 35.0 mm) • Weight: 3.0 oz
Color	• White
Mounting	• Sensors can be mounted using a single-gang mud ring attached to a 4-inch square electrical box • Recommended MAX mounting height: 10ft.
Certifications	• UL and cUL listed

ORDERING INFORMATION

MODEL	
C5002000P	Ultrasonic Line Voltage Sensor, 2,000 ft.

VOLTAGE	
120	120V
277	277V

RANGE DIAGRAM



WIRING DIAGRAMS

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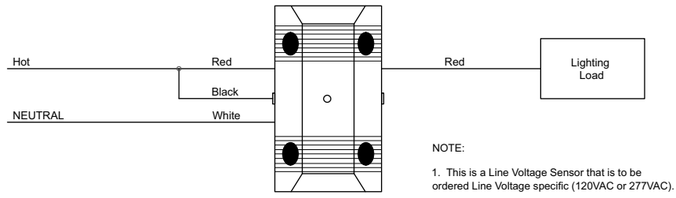
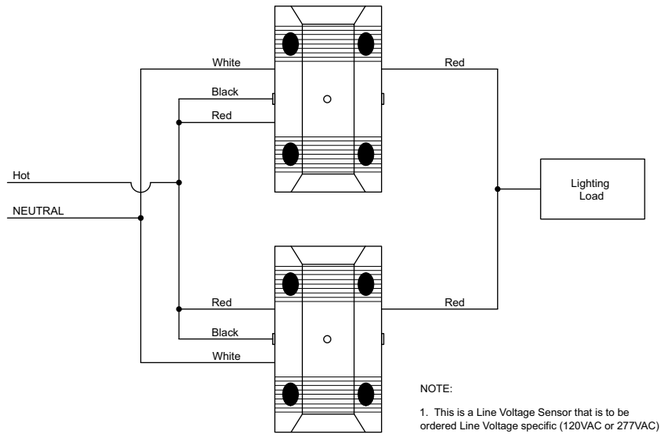




NOTES

C8001500P

Ultrasonic Line Voltage Ceiling Mount Sensor

C8001500P

KEY FEATURES

- Self-contained power supply
- 1,500 square-foot coverage
- Adjustable time delay
- Adjustable sensitivity
- California Title 24 compliant

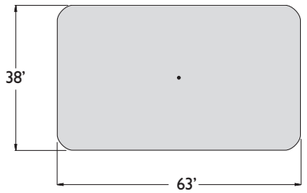
SPECIFICATIONS

Sensitivity	• Fully adjustable: 0%–100%
Timer timeout	• Fully adjustable: 30 seconds–30 minutes
Ultrasonic output	• Operating frequency: 32.7kHz
LED lamp	• Walk test indicator (a blinking light indicates the sensor is working)
Coverage	• 1,500 square feet
Power requirements	• C8001500P120: 120 VAC; 50/60 Hz • C8001500P277: 277 VAC; 50/60 Hz
Electrical ratings	• C8001500P120: 2,400 watts @ 120 VAC; 50/60 Hz • C8001500P277: 5,000 watts @ 277 VAC; 50/60 Hz
Operating environment	• Indoor use only • Operating temperature: 32°–122°F (0°–50°C)
Construction	• Casing—rugged, high-impact, injection-molded plastic • Color-coded leads
Size and weight	• Size: 4.87″ diameter, 1.65″ height (123.7 mm diameter, 41.9 mm height) • Weight: 3.0 oz
Color	• White
Mounting	• Sensors can be mounted using a single-gang mud ring attached to a 4-inch square electrical box • Recommended MAX mounting height: 10ft.
Certifications	• UL and cUL Listed

ORDERING INFORMATION

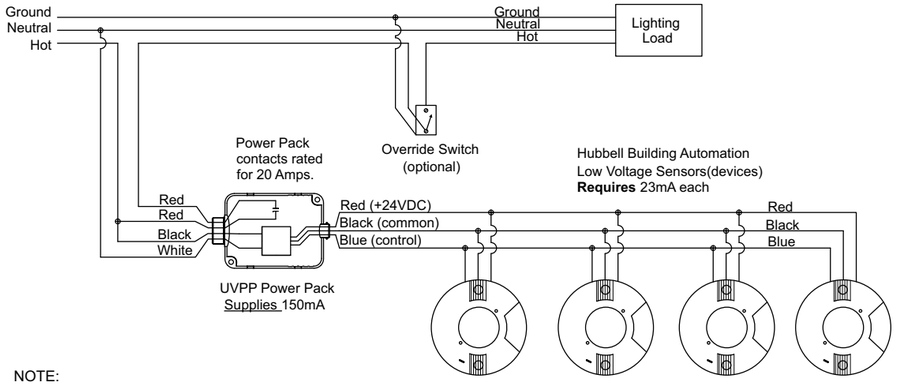
MODEL		VOLTAGE	
C8001500P	Ultrasonic Line Voltage Sensor, 1,500 ft.	120	120V
		277	277V

RANGE DIAGRAM



WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTE:

1.DO NOT attempt to power more than 4 devices (sensors or slave packs) from a single power pack.

NOTES

PIR10

Low Profile Passive Infrared Ceiling Sensor

PIR10

KEY FEATURES

- Low-profile design
- Integral photocell control
- Auxiliary relay version available
- 1,500 square-foot, 360° coverage area
- California Title 24 compliant

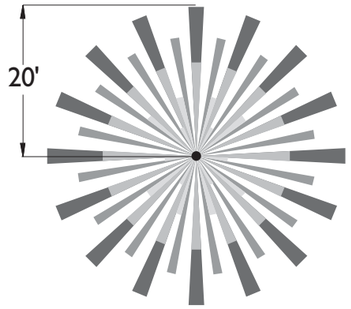
SPECIFICATIONS

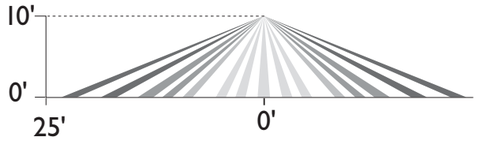
Sensitivity	• Fully adjustable: 20% –100%
Timer timeout	• Fully adjustable: 30 seconds–30 minutes
LED lamp	• Walk test indicator (blinking light indicates the sensor is working)
Integral photocell	• Natural-light override range: 5–200 foot-candles (5–200 lux)
Auxiliary relay	• SPDT; 1 A rated @ 24VDC (Model PIR10EMS only)
Coverage	• 360° coverage area • 1,500 square feet @ 10′ mounting height
Power requirements	• PIR10P: 120–347 VAC • PIR10EMS: 24 VDC, 10 mA (uses MP-Series power pack—not included)
Output	• 24 VDC active high-logic control signal with short-circuit protection and optional dry contact (*see*: RP Option)
Operating environment	• Indoor use only • Operating temperature: 32°–131°F (0°–55°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Housing – Rugged, high-impact, injection-molded plastic KJB • ABS Cycolac (UL-945VA) flame class rating, UV inhibitors • Color-coded leads are 6″ long
Size and weight	• Size: 4.0″ diameter, 1.9″ height (101 mm diameter, 48mm height) • Weight: 3.0 oz
Color	• White
Mounting	• Metal mounting ring provided (PIR10EMS only) • PIR10 sensors can be mounted using a 3-0 round mud ring • attached to a 4″ square electrical box • Recommended MAX mounting height: 10ft.
Certifications	• UL and cUL listed

ORDERING INFORMATION

MODEL	
PIR10P	Passive Infrared Line Voltage Ceiling Sensor
PIR10EMS	Passive Infrared Low Voltage Sensor with Aux. Relay

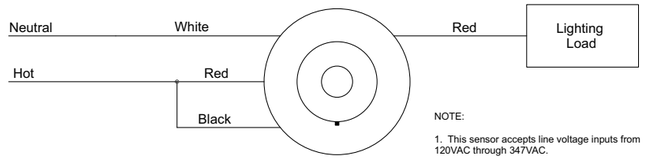
RANGE DIAGRAMS





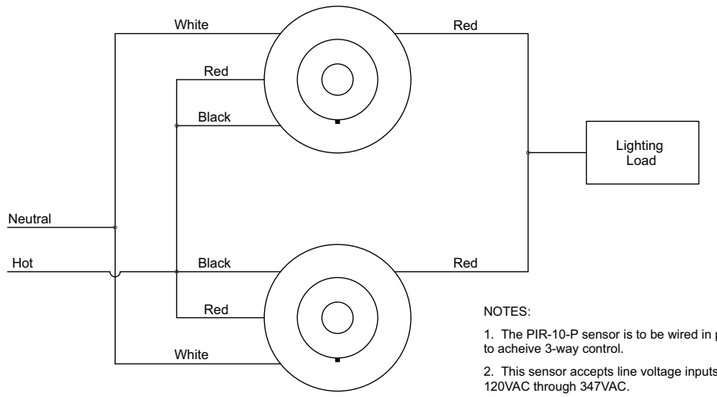
WIRING DIAGRAMS

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTE:

1. This sensor accepts line voltage inputs from 120VAC through 347VAC.



NOTES:

1. The PIR-10-P sensor is to be wired in parallel to acheive 3-way control.
2. This sensor accepts line voltage inputs from 120VAC through 347VAC.

NOTES

LODT | LODTRP

LightOWL™ Dual Technology Ultrasonic and PIR Sensor featuring IntelliDAPT™

LODT

KEY FEATURES

- IntelliDAPT self-adaptive technology—no manual adjustment required
- All-digital dual technology (ultrasonic [US] and passive infrared [PIR]) sensor
- Non-volatile memory for sensor settings
- 1,600 square-foot coverage area
- Optional relay and photocell control
- California Title 24 compliant
- UL and cUL listed

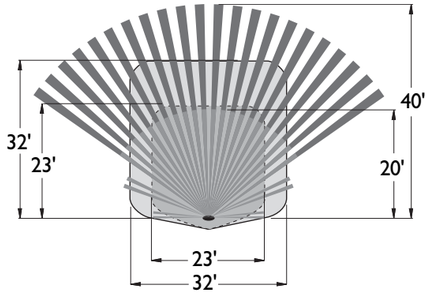
SPECIFICATIONS

IntelliDAPT technology	• Auto reset from test setting • Self-adjusting timer • Self-adjusting ultrasonic and passive infrared thresholds • Automatic false-on/false-off corrections
LED lamps	• Red – infrared motion • Green – ultrasonic motion
Timer timeout	• Automatic mode: 8–30 minutes (self-adjusts based on occupancy) • Test mode: 8 seconds (for an easy check at installation)
Ultrasonic (US) output	• Operating frequency: 32kHz
RP option	• Relay and photocell included • Relay: N/O + N/C contacts; SPDT; 500 mA rated @ 24 VDC; three-wire isolated relay • Photocell: adjustable natural-light override ranges from 0 to 100 foot-candles (0–1,000 lux) • Factory set at 3,000 lux (disable photocell)
Coverage	• 1,600 square feet
Power requirements	• 24 VDC, 33 mA (uses UVPP and MP-Series power pack—not included)
Output	• 24 VDC active high-logic control signal with short circuit protection and optional dry contact (*see*: RP Option)
Operating environment	• Indoor use only • Operating temperature: 32° –104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing—rugged, high-impact, injection-molded plastic KJB ABS Cycolac (UL-945VA) • Color-coded leads are 6″ long
Size and weight	• Size: 6.58″ x 3.63″ x 3.72″ • Weight: 5.0 oz (142g)
Color	• Off-white
Mounting	• Mounting base provided • Recommended MAX mounting height: 12ft.

ORDERING INFORMATION

LO	DT		
MODEL	**TECHNOLOGY**	**RELAY / PHOTOCELL OPTION**	**QTI**
LO	**DT** Dual Technology Ultrasonic & Passive Infrared	**RP** Relay Photocell **Blank** No Relay Photocell	**QTI** Quick to Install **Blank** No QTI

RANGE DIAGRAM



WIRING DIAGRAM

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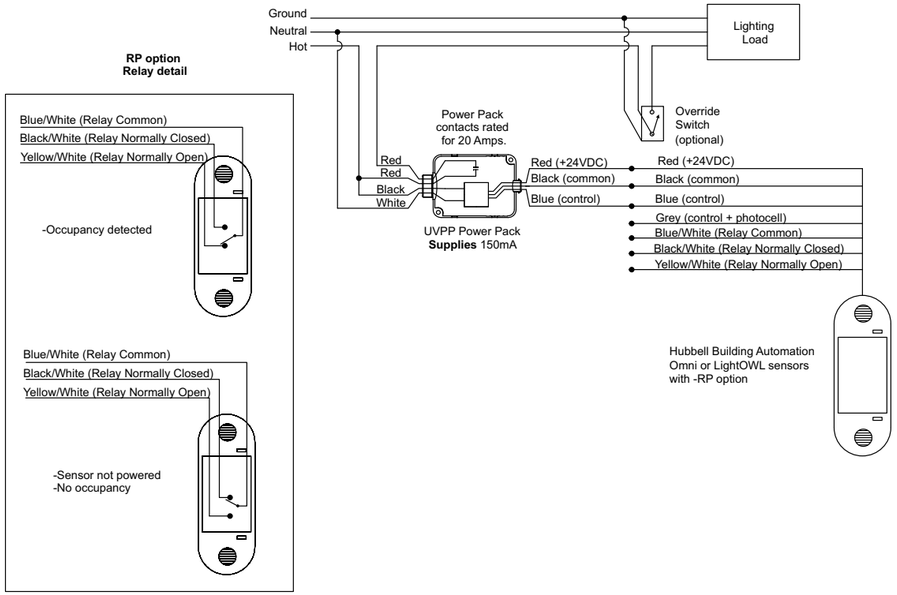


NOTES

LOIR

LightOWL™ Passive Infrared Sensor featuring IntelliDAPT™

LOIR

KEY FEATURES

- IntelliDAPT self-adaptive technology—no manual adjustment required
- All-digital passive infrared (PIR) sensor
- Non-volatile memory for sensor settings
- 1,600 square-foot coverage area
- California Title 24 compliant
- UL and cUL listed

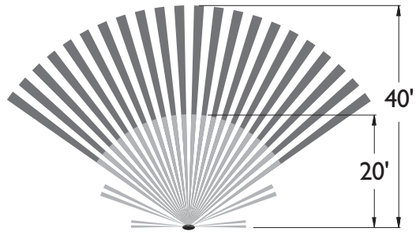
SPECIFICATIONS

IntelliDAPT technology	• Auto reset from test setting • Self-adjusting timer • Self-adjusting passive infrared thresholds • Automatic false-on/false-off corrections
LED lamp	• Red—infrared motion
Timer timeout	• Automatic mode: 8–30 minutes (self-adjusts based on occupancy) • Test mode: 8 seconds (for an easy check at installation)
RP option	• Relay and photocell included • Relay: N/O + N/C contacts; SPDT; 500 mA rated @ 24 VDC; three-wire isolated relay • Photocell: adjustable natural-light override ranges from 2 to 300 foot-candles (20–3000 lux)
Coverage	• LOIRWV (Wide View): 1,600 square feet • LOIRHB (High Bay): 50′ @ 30′ height
Power requirements	• 24 VDC, 33 mA (uses UVPP and MP-Series power pack—not included)
Output	• 24 VDC active high-logic control signal with short circuit protection and optional dry contact (*see:* RP Option)
Operating environment	• Indoor use only • Operating temperature: 32°–104° F (0°–40° C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing – rugged, high-impact, injection-molded plastic KJB ABS Cycolac (UL-945VA) flame class rating, UV inhibitors • Color-coded leads are 6″ long
Size and weight	• Size: 6.58″ x 3.63″ x 3.72″ • Weight: 5.0 oz (142g)
Color	• Off-white
Mounting	• Mounting base provided • Recommended MAX mounting height: 12ft.

ORDERING INFORMATION

LO	IRWV		
MODEL	**TECHNOLOGY**	**RELAY / PHOTOCELL OPTION**	**QTI**
LO	**IRWV** Passive Infrared Wide View	**RP** Relay Photocell **Blank** No Relay Photocell	**QTI** Quick to Install **Blank** No QTI

RANGE DIAGRAM



WIRING DIAGRAM

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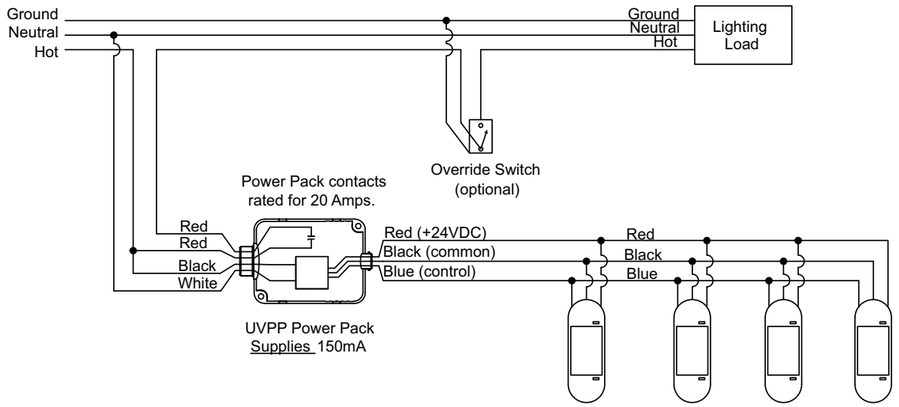


NOTE:

1. DO NOT attempt to power more than 4 devices (sensors or slave packs) from a single power pack.

NOTES

LODIA | LODIARP

LightOWL™ Dual Technology Passive Infrared and Acoustic Sensor featuring IntelliDAPT™

LODIA

KEY FEATURES

- IntelliDAPT self-adaptive technology—no manual adjustment required
- All-digital dual technology (passive infrared [PIR] and acoustic) sensor
- Non-volatile memory for sensor settings
- 1,600 square-foot coverage area
- Optional relay and photocell control
- California Title 24 compliant
- UL and cUL listed

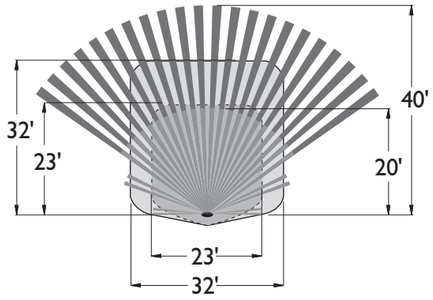
SPECIFICATIONS

IntelliDAPT technology	• Auto reset from test setting • Self-adjusting timer • Self-adjusting passive infrared and acoustic thresholds • Automatic false-on/false-off corrections
LED lamp	• Red—infrared motion • Green—acoustic detection
Timer timeout	• Automatic mode: 8–30 minutes (self-adjusts based on occupancy) • Test mode: 8 seconds (for an easy check at installation)
Passive infrared (PIR)	• Dual-element pyrometer and 12-element cylindrical rugged lens
RP option	• Relay and photocell included • Relay: N/O + N/C contacts; SPDT; 500 mA rated @ 24 VDC; three-wire isolated relay • Photocell: adjustable natural-light override ranges from 0 to 100 foot-candles (0–1,000 lux)
Coverage	• 1,600 square feet
Power requirements	• 24 VDC, 33 mA (uses UVPP and MP-Series power pack—not included)
Output	• 24 VDC active high-logic control signal with short circuit protection and optional dry contact (*see*: RP Option)
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
Construction	• Casing – Rugged, high-impact, injection-molded plastic KJB ABS Cycolac (UL-945VA) flame class rating, UV inhibitors • Color-coded leads are 6″ long
Size and weight	• Size: 6.58″ x 3.63″ x 3.72″ • Weight: 5.0 oz (142g)
Color	• Off-white
Mounting	• Mounting base provided • Recommended MAX mounting height: 12ft.

ORDERING INFORMATION

LO	DIA		
MODEL	**TECHNOLOGY**	**RELAY / PHOTOCELL OPTION**	**QTI**
LO	**DIA** Passive Infrared and Acoustic	**RP** Relay Photocell **Blank** No Relay Photocell	**QTI** Quick to Install **Blank** No QTI

RANGE DIAGRAM



WIRING DIAGRAM

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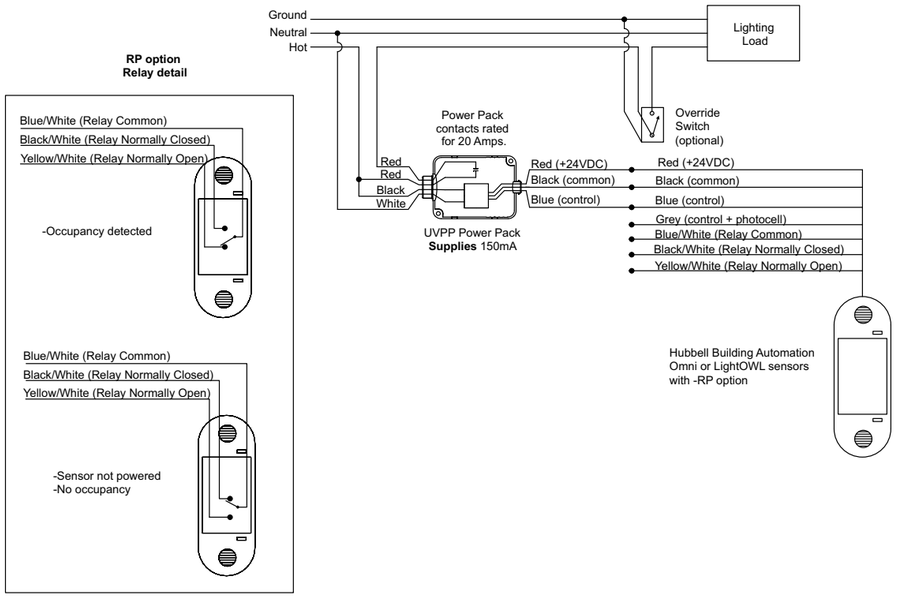


NOTES

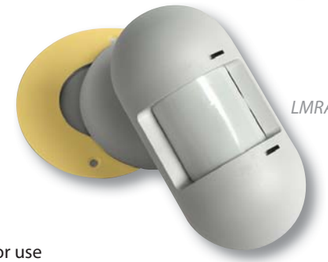
Accessories

Ceiling and Wall Mount Occupancy Sensors

ACAK (Shown with LightOWL mounting arm.)

ACAK — ACOUSTIC CEILING MOUNTING KIT
for ceiling and wall mount sensors used with acoustic ceiling tile. ACAK uses integral cutting teeth for quicker installation.
Color: White.

LMRA — LIGHTOWL MUD RING ADAPTER
A LightOWL goof ring for covering oversized holes.
Color: White.



LMRA

HCRA — HARD CEILING RACEWAY ADAPTER
for OMNI™ sensors. The HCRA is compatible with Hubbell™ and Wiremold™ raceway. The HCRA has knockout raceway holes for quick and clean installation.
Color: White.

OPE – OMNI Protective Enclosure
The OPE is a NEMA Type 4X enclosure specifically designed for use with HBA's OMNIIR ceiling mount occupancy sensor. Designed to provide protection from foreign materials and water, the enclosure is acceptable for use in a variety of environments including applications in the pharmaceutical and food preparation industries.
Size: 6.5″ dia., 2″ height.
Color: White.

HCRA

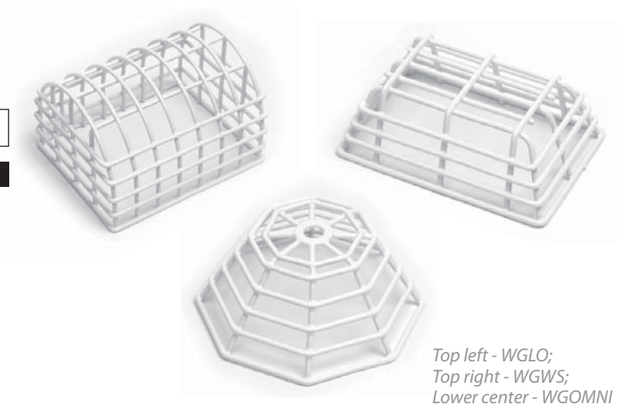
OPE

Wire guards are heavy-duty coated wire guards for sensors to protect from destructive strikes. Mounting clips are included.
Color: White.

WGWS – Wall mount wire guard for wall switches, 6.25″H x 4.0″W x 2.25″D
WGOMNI – Ceiling mount guard for OMNI sensors, 7.0″W x 3.25″D (circular guard)
WGLO – Wall mount wire guard for LightOWL sensors, 7.0″H x 5.75″W x 4.5″D

ORDERING INFORMATION

ACCESSORIES	
OPE	OMNI Protective Enclosure
TD200	Digital Programmable Timer
WGNS	Wire Guard for Wall Switches
WGOMNI	Ceiling Mount Guard for OMNI Sensors
WGLO	Wire Guard for LightOWL Sensors



Top left - WGLO;
Top right - WGWS;
Lower center - WGOMNI

NOTES

UVPP
Universal Voltage Power Pack

UVPP

KEY FEATURES
- Universal voltage (100–277 VAC; 50/60Hz)
- Automatic voltage detection
- Electrical load switching capablity: maximum of 20 Amps
- Regulated 24 VDC current; 150mA output; short circuit protected
- Zero Arc Point Switching
- Plenum rated
- Mounts: inside or outside a junction box; inside a fluorescent ballast cavity
- Available with exclusive Quick-to-Install (QTI) connector

SPECIFICATIONS

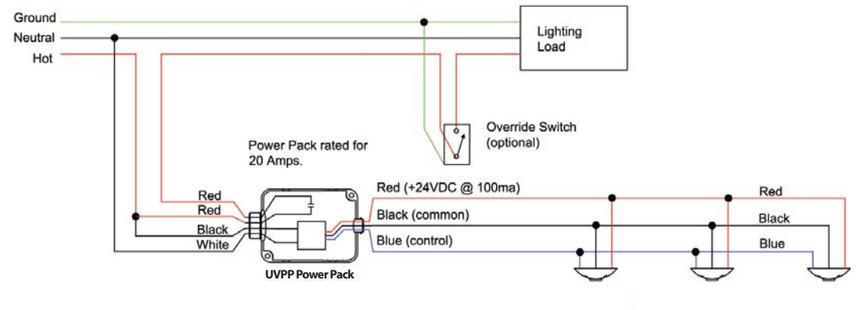
Power requirements	• 100–277 VAC; 50/60Hz • Single phase only
Output	• 24 VDC; 150mA nominal, isolated, and regulated
Relay contact rating	• 20A: 120 VAC Incandescent • 20A: 120 or 277 VAC Ballast • 1HP: 120 or 277 VAC Motor Load
Construction	• High-impact UL 94-5V plastic
Plenum rated	• Complies with requirements for use in a plenum area • Plenum rated for external junction box mounting
Operating environment	• Indoor use only • Operating temperature: 32°–104°F (0°–40°C) • Relative humidity (non-condensing): 0%–95%
Size	• 3.69″ x 2.33″ x 1.36″
Color	• Black
Certifications	• UL and cUL listed

ORDERING INFORMATION

MODEL	
UVPP	Universal Voltage Power Pack
UVPPQTI	Universal Voltage Power Pack with QTI Connector
UVPP	Universal Voltage Power Pack
UVPPQTI	Universal Voltage Power Pack with QTI Connector
UVPP	Universal Voltage Power Pack
UVPPQTI	Universal Voltage Power Pack with QTI Connector
UVPP	Universal Voltage Power Pack
UVPPQTI	Universal Voltage Power Pack with QTI Connector

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTES

UVPPM

Universal Voltage Power Pack with Manual ON|OFF Control

KEY FEATURES

- Manual ON/OFF support
- Universal voltage (100 to 277VAC, 50/60Hz)
- Automatic voltage detection
- Capable of switching up to 20 Amps of electrical load
- Regulated 24VDC current, 150mA output, short circuit protected

UVPPM

SPECIFICATIONS

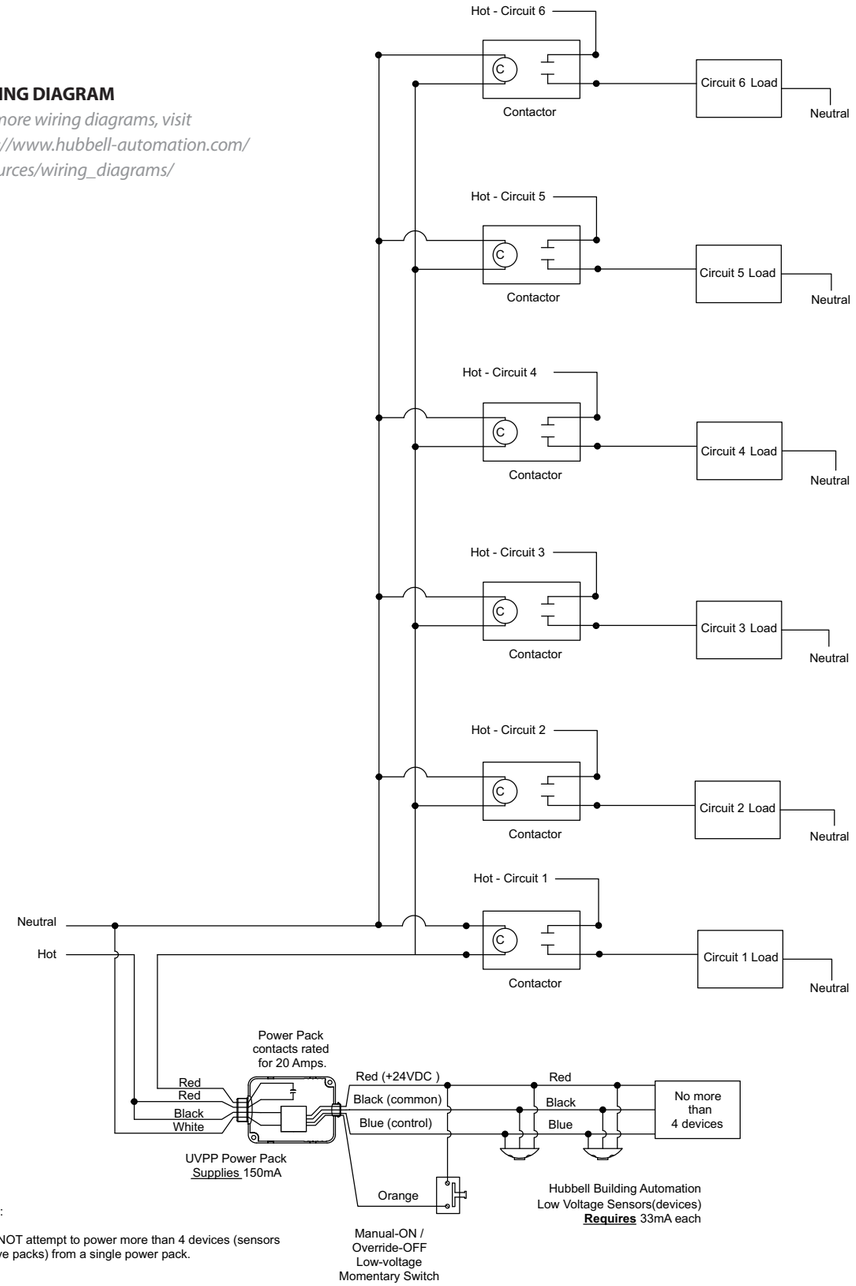
Power Requirements	• 100-277VAC, 50/60Hz
Output	• 24VDC, 150mA nominal, isolated and regulated
Relay Contact Rating	• 20A, 120VAC Incandescent • 20A, 120 or 277VAC Ballast • 1HP, 120 or 277VAC Motor Load
Construction	• High-impact, UL 94-5V plastic
Plenum Rated	• Complies with requirements for use in a compartment handling conditioned air (plenum) • Plenum rated for external junction box mounting
Operating environment	• Indoor use only • Operating temperature: 32°– 104°F (0°– 40°C) • 0% to 95% relative humidity, non-condensing
Size	• 3.69"L x 2.33"W x 1.36"H
Color	• Black
Certifications	• UL and cUL Listed

ORDERING INFORMATION

MODEL	
UVPPM	Universal Voltage Power Pack with Manual ON/OFF Control

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



NOTE:

1.DO NOT attempt to power more than 4 devices (sensors or slave packs) from a single power pack.

QTI

QTI™—Quick To Install System and Accessories

KEY FEATURES

- Dramatically reduce installation cost
- Easy to install; fast and efficient
- Completely removable and reusable if necessary
- UL-approved plenum cable in accordance with NEC Article 725
- Eliminates need for large spools of cable for installation of plenum cable runs
- Reduces possibility of transposing wires as in conventional splicing wire terminations

ORDERING INFORMATION

MODEL	
CAB10	10' Plenum rated QTI Cable
CAB20	20' Plenum rated QTI Cable
S1M2F	QTI Splitter 1 male, 2 female

NOTES

RRU
Line Voltage Auxiliary Relays

RRU

KEY FEATURES

- 120 or 277VAC models available
- 20 Amp switching capacity
- N/O isolated contact

SPECIFICATIONS

Electrical Ratings	• RRU120 – 2400 watts @ 120 VAC 50/60 Hz, 1 HP • RRU277 – 5000 watts @ 277 VAC 50/60 Hz, 1.5 HP
Operating environment	• Indoor use only
Size & Weight	• Size: 2.75″W x 4.5″L x 1.10″D • Weight: 3.0 oz
Color	• White
Certifications	• UL and cUL Listed

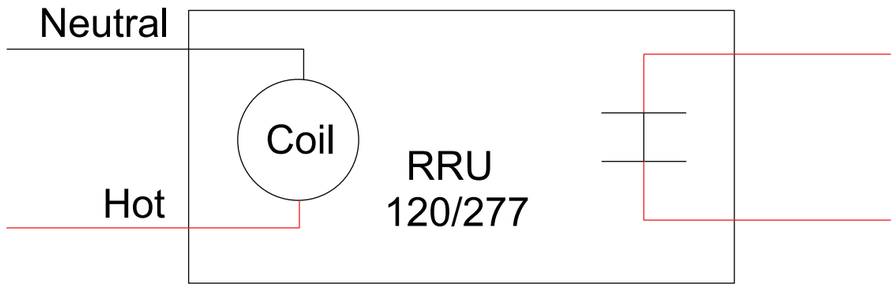
ORDERING INFORMATION

MODEL

RRU120 Auxiliary Relay for 120V Line Voltage Sensors
RRU277 Auxiliary Relay for 277V Line Voltage Sensors

WIRING DIAGRAM

For more wiring diagrams, visit http://www.hubbell-automation.com/resources/wiring_diagrams/



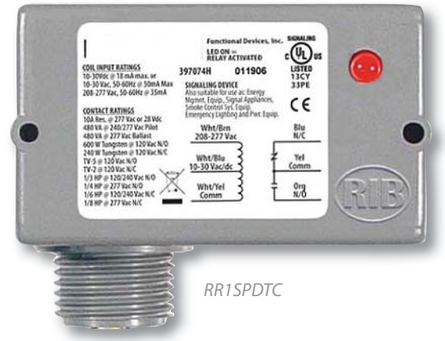
NOTES

RR1SPDTC

Enclosed 10 Amp SPDT Relays

KEY FEATURES

- 10 Amp SPDT Relay
- Available with either 10-30 VAC/DC/120 VAC Coil or 10-30 VAC/DC/208-277 VAC Coil
- LED status indicator
- N/O and N/C isolated contacts



RR1SPDTC

SPECIFICATIONS

# Relays & Contact Type	• One (1) SPDT Continuous Duty Coil	
Expected Relay Life	• 10 million cycles minimum mechanical	
Gold Flash	• Yes	
Contact Ratings	• 10 Amp resistive @ 120-277 VAC	• 240 Watt Tungsten @ 120 VAC N/C
	• 10 Amp resistive @ 28 VDC	• 1/3 HP for N/O @ 120-240 VAC
	• 480 VA Pilot Duty @ 240-277 VAC	• 1/6 HP for N/C @ 120-240 VAC
	• 480 VA Ballast @ 277 VAC	• 1/4 HP for N/O @ 277 VAC
	• 600 Watt Tungsten @ 120 VAC N/O	• 1/8 HP for N/C @ 277 VAC
Coil Current	• 30 mA @ 10 VAC	12 mA @ 10 VDC
	• 32 mA @ 12 VAC	14 mA @ 12 VDC
	• 42 mA @ 24 VAC	16 mA @ 24 VDC
	• 50 mA @ 30 VAC	18 mA @ 30 VDC
	• 25 mA @ 120 VAC	
Coil Voltage Input	• RR1SPDTC120: 10-30 VAC/DC, 120 VAC; 50-60Hz	
	• RR1SPDTC277: 10-30 VAC/DC, 208-277 VAC; 50-60Hz	
Operating environment	• -30 to 140°F	
Housing Rating	• Plenum, NEMA 1	
Wires	• 16", 600V Rated	
Certifications	• UL and cUL Listed, UL916, UL864	

ORDERING INFORMATION

MODEL	
RR1SPDTC120	Enclosed Relay 10 Amp SPDT with 10-30 VAC/DC/ 120 VAC Coil
RR1SPDTC277	Enclosed Relay 10 Amp SPDT with 10-30 VAC/DC/ 208-277 VAC Coil

WIRING DIAGRAM

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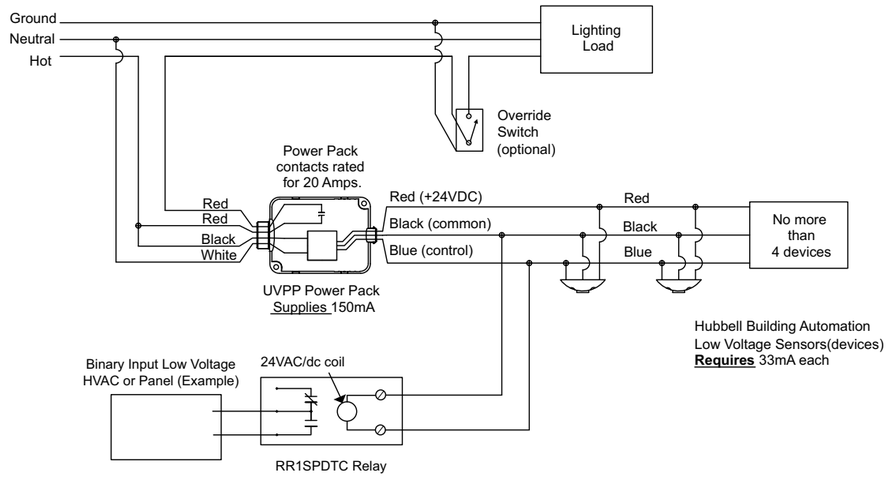

NOTE:

1.DO NOT attempt to power more than 4 devices (sensors or slave packs) from a single power pack.

NOTES

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HUBBELL BUILDING AUTOMATION

The leader in building controls for complete energy-saving solutions.

WIRELESS LIGHTING CONTROLS

HBA's wiHUBB™ Wireless Lighting Control System provides indoor and outdoor wireless controls. The use of wireless controls offers significant benefits over traditional wired solutions for both existing buildings and new construction. wiHUBB devices communicate through the air utilizing radio frequency (RF) waves, eliminating the need for expensive, dedicated control communications wiring.

LIGHTING CONTROL PANELS

NETWORKED SYSTEMS AND COMMERCIAL CONTROL

LX Networked Lighting Control – Multiple panels systems with intelligent devices that provide broad programming capabilities, interface to users via LAN/Internet or touch screen tablet and communications to Building Automation Systems.

CX Commercial Control – Master and secondary panels up to 24 relays per panel with simple easy to use programming and connections to a wide variety of low voltage devices.

OCCUPANCY | VACANCY SENSORS

HBA occupancy sensors meet a wide range of applications. Ceiling and wall-mounted sensors are available with the most advanced sensing technologies on the market today. HBA offers passive infrared and ultrasonic sensors as well as a dual technology version. HBA occupancy sensors provide simple installation, easy setup, and reliable maintenance free operation.

DAYLIGHT HARVESTING

HBA's suite of Daylight Harvesting controls provides the ideal solution to save energy by taking advantage of natural daylight. Daylight Harvesting systems consist of two basic types, dimmed and switched. Dimming control varies the artificial light output over a wide range to maintain the desired light level. Switching controls turn individual lamps off or on as required.

HIGH BAY LIGHTING CONTROLS

HBA delivers energy saving controls for most high bay lighting applications using HID and high-output fluorescent fixtures. The LightBAT uses passive infrared sensing for bi-level HID switching for up to 50 feet mounting heights. The HBA WASP offered in a wide variety of versions controls T5HO and T8 fixtures up to 45 feet high.

HUBBELL – A Name You Can Trust

Founded in 1888 by Harvey Hubbell II, Hubbell Inc. has been a long time contributor to new product design and manufacturing innovation. In 1896, Hubbell invented the world's first lighting control device, the pull chain switch. Over 120 years later, Hubbell Building Automation, headquartered in Austin, Texas continues this tradition of innovation with the development of a vast array of innovative energy saving lighting controls.

HUBBELL® Building Automation, Inc.

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