

AcuityControls[™]

Sensor Switch[™]

/ Lighting Controls
Product Catalog



It's not just smarter. It's easier.

Acuity Controls is advanced lighting controls technology, service and support from a single expert source. We offer one of the industry's most extensive product portfolios for indoor and outdoor applications, single rooms to campuses to municipalities. Our product solutions include occupancy and photosensors, panels, switches, fixture-level and wireless controls.



Printed on Recycled Paper



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The Sensor Switch product line from Acuity Controls provides an innovative, high quality and cost-effective controls solution for every application. Our occupancy sensors and photocell products are easy to install and easy to use.

Performance You Can Count On!

- Our Passive Dual Technology (PIR/Microphonics™) looks and listens for occupants ensuring reliable detection
- Reversible line and load wires make Sensor Switch products easy to install
- Reliable-circuit protection tested for over 400,000 switching cycles
- Continuous coverage patterns for a breadth of applications meeting your every need
- 5-year limited product warranty
- Sensor Switch products aid in ensuring buildings meet applicable energy codes (Title 24, ASHRAE and IECC)



BENEFITS

Energy Savings

The Sensor Switch offering of occupancy and daylight sensors are designed to optimize energy savings and enable sustainability. Our broad product offering provides solutions for applications requiring energy code compliance. Using innovative detection technologies that maximize energy savings we save you more!

Reliable Performance

Sensor Switch is a leader in lighting control innovation, continuously developing technologies to enhance performance of our occupancy sensors and photocells providing trusted quality and reliability. We offer a broad selection of occupancy and daylight sensors to meet every application.

Ease of Installation

Sensor Switch products are easy to install due to our patented features; reversible line and load wires (Miswire Protection), simple push button programming and our Convertible Neutral for Wall Switches! These powerful features save install time and eliminate extra costs on the job site!

INNOVATING SENSOR TECHNOLOGY

Sensor Switch is dedicated to providing innovative sensor technologies for applications requiring compliance to energy codes.

MICROPHONICS™

Microphonics technology utilizes a microphone inside the sensor to “hear” sounds indicating occupancy. This technology is perfect for rooms with obstructions where traditional PIR sensors cannot “see” the room occupant. Microphonics is superior as it provides better detection performance, requires less power, and does not transmit sound waves into the space, eliminating potential for interference.

MISWIRE PROTECTION

Sensor Switch developed reversible line and load connections resulting in products that are impossible to wire backwards. This patented feature eliminates potential jobsite delays due to miswiring.

CONVERTIBLE NEUTRAL

This is patent-pending technology allows a Sensor Switch Wall Switch occupancy sensor (WSX & WSD) to convert from a no neutral connection to a neutral and ground connection in seconds! If your application requires the use of a neutral connection, simply remove the ground link and wire per code, making installation quick and easy. One sensor does it all!

SELF-CALIBRATING DAYLIGHT CONTROLS

All photocontrols have an automatic set-point calibration mode regardless of time-of-day or daylight conditions improving installation time!



The Encyclopedia of Sensor Switch

SENSORPEDIA

This guide is intended to assist with choosing the appropriate Sensor Switch occupancy sensor for your space and application.

Each character or group of characters in a Sensor Switch model number indicates a specific feature or option for that particular sensor. The sections of this guide describe the choices available for each of the feature categories.

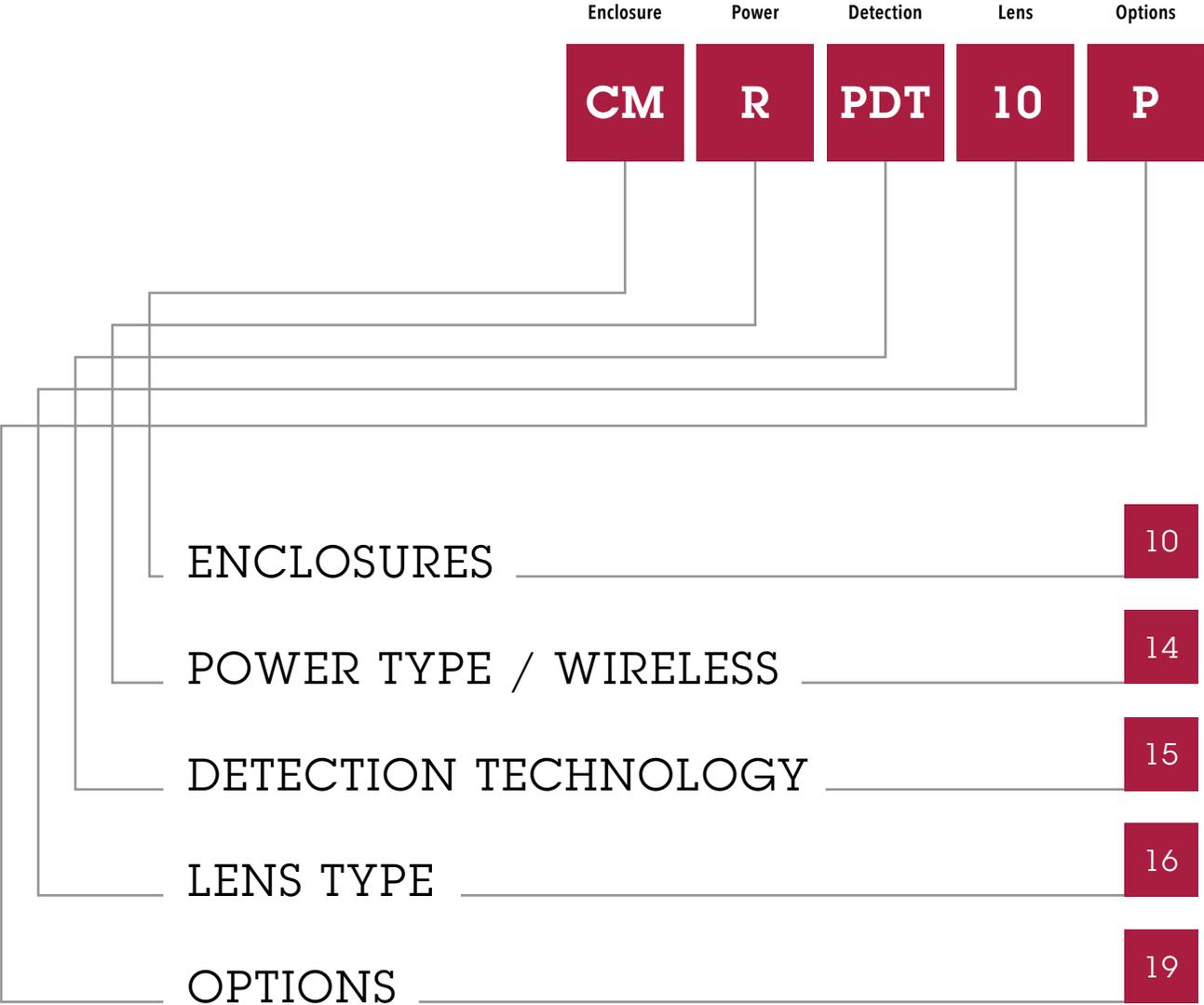
By dividing up any Sensor Switch occupancy sensor model number into the parts described in this guide, the sensor's full functionality can be determined. This guide will also better enable you to build your own model numbers by choosing from each category the features and options your project requires.



PRODUCT NAMING CONVENTION GUIDE

The product model numbers (i.e., CM 9) provide details on the particular product; such as, mounting type, power information, lens type etc. By understanding the product naming convention this will help you select the product that is correct for your application.

The example below shows the categories that make up the model number **CMR PDT 10 P**.





ENCLOSURES

Sensor Switch occupancy sensors come in a variety of different enclosure styles that are both functional and attractive while still being easy to install. The enclosure style for most sensors is indicated by the first few letters in their model number.

COLOR CHOICES



BLACK* LIGHT ALMOND* WHITE IVORY* GRAY* RED*

*Not available for all enclosures

WSX

Wall Switch WSX, WSX NL

Physical Specs (not including mounting strap):

H:	2.74" (6.96 cm)
W:	1.68" (4.27 cm)
D:	1.63" (4.14 cm)
Weight:	5 oz
Mounting:	Single Gang Switch Box
Color:	White, Gray, Black, Red, Ivory, Light Almond



WSD

Wall Switch WSD, SSD¹

Physical Specs (not including mounting strap):

H:	2.74" (6.96 cm)
W:	1.68" (4.27 cm)
D:	1.63" (4.14 cm)
Weight:	5 oz
Mounting:	Single Gang Switch Box
Color:	White, Gray, Black, Red, Ivory, Light Almond



¹ Available in White and Ivory only.

SPODM

Wireless Wall Switch SPODMR WR

Physical Specs (not including mounting strap):

H:	2.74" (6.96 cm)
W:	1.68" (4.27 cm)
D:	1.63" (4.14 cm)
Weight:	5 oz
Mounting:	Single Gang Switch Box
Color:	White, Gray, Black, Ivory, Light Almond



LWS

Large Area Wall Switch LWS, LWSH

Physical Specs (not including mounting strap):

H:	4.96" (12.60 cm)
W:	3.10" (7.87 cm)
D:	1.70" (4.32 cm)
Weight:	7 oz
Mounting:	Single Gang Switch Box
Color:	White, Ivory



CM

Wireless Ceiling Mount CM XX WR

Physical Specs:

Diameter: 4.50" (11.56 cm)

Depth: 2.39" (6.07 cm)

Weight: 6 oz

Mounting: Ceiling Surface
3.5" Octagon Box
Single Gang Handy Box

Color: White



CM

Ceiling Mount CM

Physical Specs:

Diameter: 4.55" (11.56 cm)

Depth: 1.55" (3.94 cm)

Weight: 6 oz

Mounting: Ceiling Tile Surface
(Low Voltage)
3.5" Octagon Box
Single Gang Handy Box

Color: White



RM

Recessed Ceiling Mount RM

Physical Specs:

Width: 4.60" (square) (11.68 cm)

Weight: 6 oz

Mounting: 4 x 4 square junction box
with or without two-gang
mudring; directly to ceiling
tile through 2.65" (6.7 cm)
square opening

Color: White



WV

Wall / Corner Mount WV, HW

Physical Specs:

H: 3.00" (7.62 cm)

W: 3.60" (9.14 cm)

D: 1.75" (4.45 cm)

Weight: 4 oz

Mounting: Directly to Corner or to
Ceiling using WV BR Bracket

Color: White



WVR

Wall / Corner Mount WVR², HWR³

HWR

Physical Specs:

H: 4.96" (12.60 cm)

W: 3.10" (7.87 cm)

D: 1.70" (4.32 cm)

Weight: 7 oz

Mounting: Single Gang Handy Box

Color: White, Ivory

² WVR is the Line Voltage Enclosure of the WV³ HWR is the Line Voltage Enclosure of the HW

LSXR

Fixture Mount Interchangeable Lens Enclosures

LSXR

Physical Specs:

H:	3.75" (9.50 cm)
W:	2.50" (6.40 cm)
D:	4.00" (10.20 cm)
Weight:	6 oz
Mounting:	1/2" Knockout (7/8" hole)
Color:	White



CMB

Fixture Mount Single Lens Enclosure (Indoor)

CMB, HMB

Physical Specs:

H:	3.63" (9.22 cm)
W:	3.63" (9.22 cm)
D:	1.50" (3.81 cm)
Weight:	6 oz
Mounting:	1/2" Knockout in Fixture or Junction Box
Color:	White



FB3

Fixture Mounting Bracket (Indoor)

FB3

Physical Specs:

H:	5.00" (12.70 cm)
W:	2.00" (5.08 cm)
D:	1.35" (3.43 cm)
Weight:	2.52 oz each (excluding nuts)
Mounting:	1/2" Knockout in Fixture or Junction Box
Color:	White



SBO

Fixture/Pole Mount Single Lens Enclosure (Outdoor / Wet Location)

SBO

Physical Specs:

H:	3.35" (8.51 cm) or 4.88" (12.40 cm)
W:	4.40" (11.18 cm)
D:	4.00" (10.16 cm)
Weight:	9 oz
Mounting:	1/2" Knockout (7/8" hole)
Color:	White, Black, Dark Bronze



SB

**Embedded Small Box
(Indoor)****SB**

Physical Specs:

H: 3.40" (8.64 cm)

W: 3.40" (8.64 cm)

D: 1.40" (3.56 cm)

Weight: 6 oz

Mounting: 2.65" Square Opening
in Fixture
(minimum depth 1.50")

Color: White, Black



SBG

**Embedded Small Box
(Outdoor)****SBG**

Physical Specs:

H: 3.35" (8.51 cm)

W: 4.40" (11.18 cm)

D: 4.00" (10.16 cm)

Weight: 9 oz

Mounting: 1/2" Knockout (7/8" hole)

Color: White, Black



SF

**Snap-Fit
(Indoor)****SF, SFD**

Physical Specs:

H: 2.25" (5.72 cm)

W: 1.38" (3.51 cm)

D: 0.82" (2.08 cm)

Weight: 4 oz

Mounting: Snaps into 2-3/16" H
x 1-5/16" W x 1" D
cavity in fixture

Color: White



SFOD

**Snap-Fit
(Outdoor / Wet Location)****SFOD, SFOR**

Physical Specs:

H: 2.25" (5.71 cm)

W: 1.38" (3.51 cm)

D: 0.82" (2.08 cm)

Weight: 4 oz

Mounting: Snaps into 2-3/16" H
x 1-5/16" W x 1" D
cavity in fixture

Color: White, Black



MSD

**Embedded
Micro Enclosure
(Indoor)****MSD, ES**

Physical Specs:

H: 1.34" (3.40 cm)

W: 2.60" (6.65 cm)

D: 1.18" (2.99 cm)

Weight: 3 oz

Mounting: Required Hole Size
1.125"
Material Thickness
0.25" max

Color: White



MSOD

**Embedded
Micro Enclosure
(Outdoor / Wet Location)****MSOD**

Physical Specs:

H: 1.34" (3.40 cm)

W: 2.60" (6.65 cm)

D: 1.18" (2.99 cm)

Weight: 3 oz

Mounting: Required Hole Size
1.125"
Material Thickness
0.25" max

Color: White, Black





POWER TYPE

This category specifies how a sensor is powered, as well as its switching capabilities. By default, sensors are powered by low voltage and require a power pack to switch a circuit; therefore, no special characters need to be added to the model number.

In contrast, line voltage sensors are powered by and can switch line voltage without a power pack. Line voltage model numbers have the letter "R" inserted with the enclosure designation (e.g., **CMR**).

R

Line Voltage

- Sensors contain line voltage switching relays
- Ideal for retrofit applications with concrete or inaccessible ceilings
- Interchangeable line & load wires (Sensor Switch patented)
- Impossible to wire backwards
- Sensors capable of switching two poles independently are indicated by adding 2P to the model number (e.g., **CMR 6 2P**)
- Sensors capable of simultaneously switching two phases (e.g., 208, 240, or 480 VAC) are indicated by adding 208 or 480 to the model number (e.g., **CMR 6 480**)

LV

Low Voltage

- Powered via power pack or other low voltage source
- Used with a power pack to enable complete 20 Amp circuits to be switched
- Enables multiple sensors to be used together to cover space
- Allows sensor mounting without a junction box and utilizes convenient low voltage wiring (e.g., **CM 6 2P**)

WR

Wireless / Battery

- Wireless sensor is powered by a lithium battery (e.g., **CM 9 WR**); Ideal for renovation applications that are difficult to wire through the walls
- 10 year battery life (at default sensor settings)
- AA Lithium (1.5V) Battery
- Wireless communicates to wireless wall switch (e.g., **SPODMR WR**)

DETECTION TECHNOLOGY

PIR & PDT

This category specifies the detection technologies employed by Sensor Switch. There are two types of detection technologies, Passive Infrared and Passive Dual Technology. All sensors utilize PIR technology by default.

MICROPHONICS™
+ PASSIVE INFRARED

PDT PASSIVE DUAL TECHNOLOGY

Passive Infrared Technology (PIR)

- PIR sensors detect changes in the infrared energy given off by occupants as they move within the field-of-view of the sensor
- The sensor “sees” the heat given off by the human body as it moves in and out of the beams, and triggers the occupancy mode
- The sensors are fine-tuned to detect small motions even at great distances, while still preventing false trips
- All Sensor Switch sensors have PIR technology

Passive Dual Technology (PDT)

- PDT is the combination of two detection technologies, PIR and Microphonics™
- The sensor will first “see” motion using Passive Infrared, and then engages the Microphonics™ to “hear” sounds that indicate continued occupancy
- Patented by Sensor Switch, Passive Dual Technology using PIR and Microphonics is superior to alternatively used ultrasonic technology
 - Better and more reliable occupancy detection performance
 - Requires less power
 - Does not transmit sound waves into the space, eliminating potential for interference
- The PDT suffix after the enclosure model number adds Microphonics™ detection to the sensor



LENS TYPE

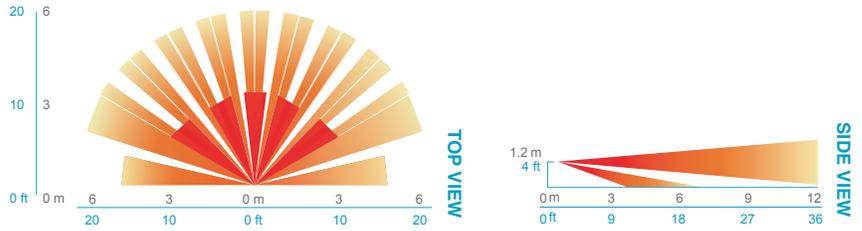
PASSIVE INFRARED

It is important to select a lens type with a PIR coverage pattern that accommodates the space's area requirements, but also its application. The following pages diagram the PIR coverage pattern of each lens style and describe the applications for which they are best suited.

WSX

Wall Switch Lens

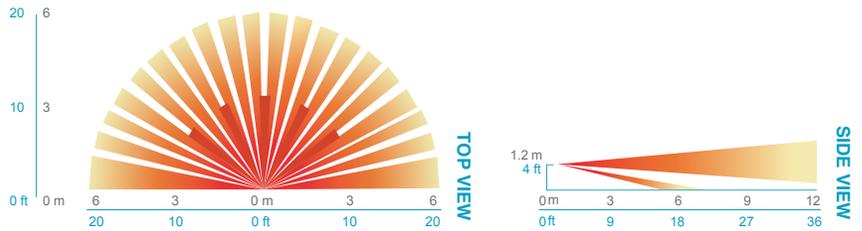
- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m), ~625 sq ft
- Large motion (e.g., walking) detection greater than 36 ft (10.97 m), ~2025 sq ft
- Wall-to-Wall coverage



WSD

Wall Switch Lens

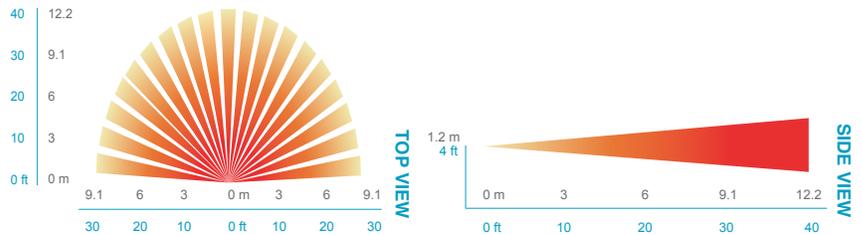
- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m)
- Large motion (e.g., walking) detection up to 50 ft (15.24 m)
- Wall-to-Wall coverage



LWS

Large Area Wall Switch Lens

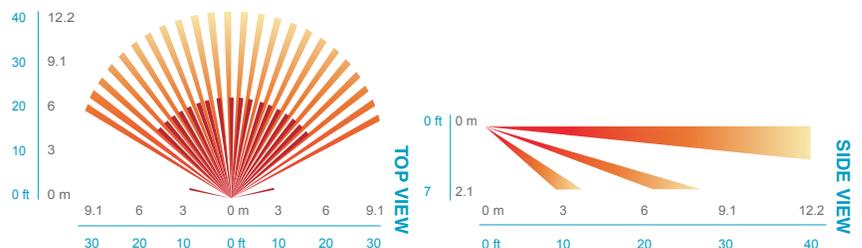
- Small motion (e.g., hand movements) detection up to 40 ft (12.19 m)
- Wall-to-Wall coverage
- 30 to 48 in (76.20 to 121.92 cm) high mounting



LWSH

Large Area High Mount Wall Switch Lens

- Small motion (e.g., hand movements) detection up to 40 ft (12.19 m)
- Wall-to-Wall coverage
- 48 to 84 in (121.92 to 213.36 cm) high mounting

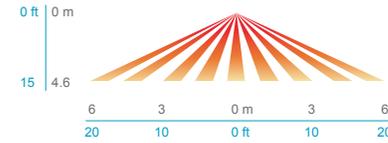


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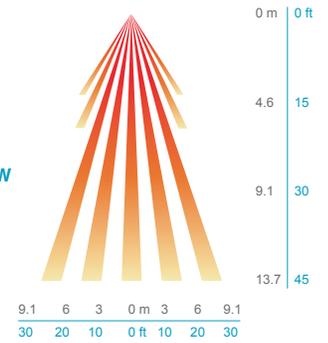
High Bay 360° Lens

- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g., walking) up to a 35 ft (10.76 m) mounting height
- Excellent detection of extra large motion (e.g., forklifts) up to a 45 ft (13.72 m) mounting height

LOW VIEW



HIGH VIEW

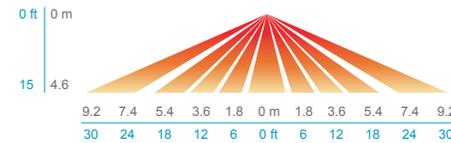


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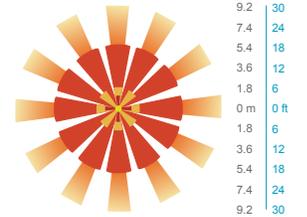
Mini-Low Bay 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m)
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than walking directly at sensor

SIDE VIEW



TOP VIEW

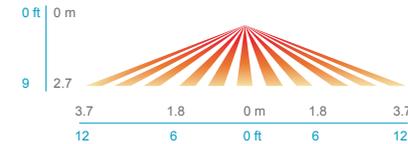


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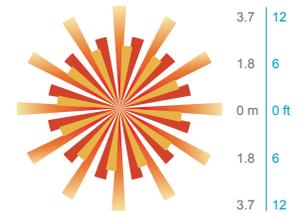
Small Motion / Standard Range 360° Lens

- Best choice for small motion (e.g., hand movements) detection
- Viewing angle of 56° in a 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage

SIDE VIEW



TOP VIEW

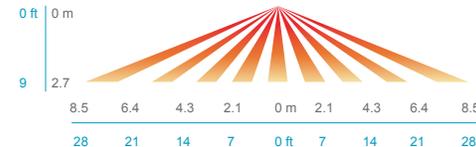


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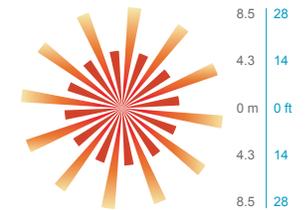
Large Motion / Extended Range 360° Lens

- Best choice for large motion (e.g., walking) detection
- Viewing angle of 67° in a 360° conical shaped pattern
- Provides 28 ft (8.53 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage

SIDE VIEW



TOP VIEW

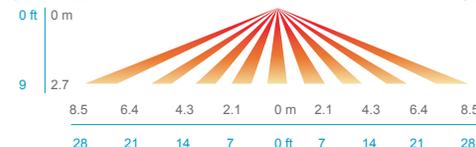


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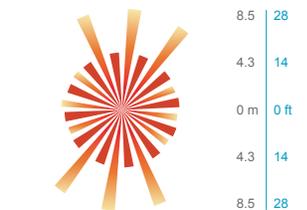
Bi-Directional Hallway Lens

- Best choice for large motion (e.g., walking) detection
- Viewing angle of 67° for hallway applications
- Provides 28 ft (8.53 m) of coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) hallway coverage

SIDE VIEW



TOP VIEW

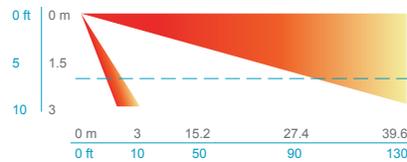


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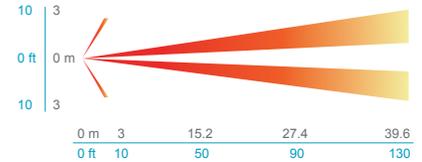
End-of-Hallway Lens

- Large motion (e.g., walking) detection up to 130 ft (39.62 m)
- Designed for 7 ft (2.13 m) high mounting at end of hall

SIDE VIEW



TOP VIEW

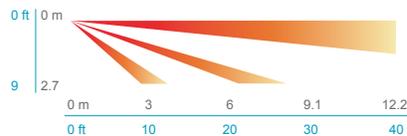


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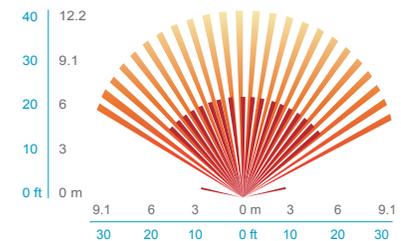
Wide View 120° Lens

- Small motion (e.g., hand movements) detection up to 40 ft (12.19 m)
- Large motion (e.g., walking) detection up to 70 ft (21.34 m)
- Designed for 8 to 10 ft (2.44 to 3.05 m) high mounting in room corner

SIDE VIEW



TOP VIEW

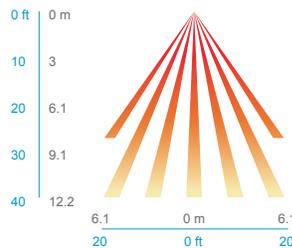


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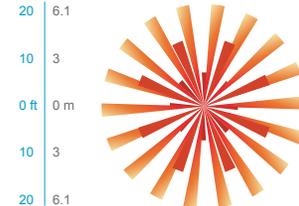
Universal 360° Lens

- Provides excellent detection of large motion (e.g., walking) when mounted between 15 to 40 ft (4.57 to 12.19 m)
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Recommended for fixtures that have a 1:1 spacing to mounting height ratio or less (e.g., fixtures 30' on center or less @ a 30' mounting height).

SIDE VIEW



TOP VIEW

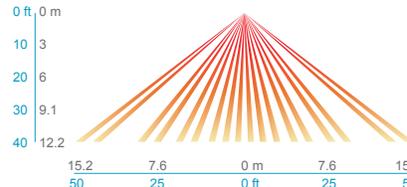


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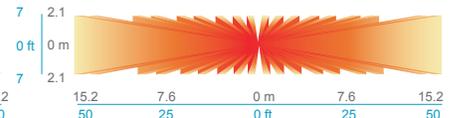
High Bay Bi-Directional Aisleway Lens

- Provides 50° bi-directional and 10° wide coverage pattern
- 1.2x mounting height equals approximate detection range in either direction
- Typical 40 ft (12.19 m) mounting detects 50 ft (15.24 m) in either direction

SIDE VIEW



TOP VIEW



OPTIONS

The previous sections of this guide define the portion of the model number referred to as a sensor's series number. Following this series number, there may be additional characters in the model number that define the optional features included on the sensor. This section describes each option and its model number character suffix.

The datasheet for each sensor series lists its available options.

2P AO & 2P AOP 2P AO 2P AOP

Alternating Off Relays

- Sequence of operation where both relays close during periods of occupancy, but only one opens during vacancy
- The relay left closed alternates in order to promote even lamp wear
- 2P AOP version also includes switching photocontrol

2P-SZ 2P SZ

Single Pole Switching Photocontrol

- Occupancy controls one pole only
- Switching photocontrol controls other pole

347 347

347 VAC

- Allows sensor to be powered by and switch 347 VAC
- Used primarily in Canada

ADC ADC

Photocontrol w/ Auto Dimming

- Photocontrol within sensor maintains total room light level by controlling levels of 0-10 VDC dimmable ballasts
- Photocontrol also has full on/off control during periods of occupancy
- Provides a second occupancy time-out period that enables the lights to go to a dim setting before turning off

ANL ANL

Combination Dimming & Switching Photocontrol w/ High/Low Occupancy Operation

- Provides maximum energy savings by first dimming down, then switching off, lighting during periods of sufficient daylight contribution from windows or skylights
- During unoccupied periods without sufficient daylight lights are dropped to low dim setting, insuring minimum light levels are maintained at night
- Controls 0-10V dimmable fluorescent ballasts and LED drivers

D D

Occupancy Controlled Dimming

- Provides dimming output to control 0-10 VDC dimmable ballasts
- Provides a second occupancy time-out period that enables the lights to go to a dim setting before turning off
- Adjustable max/min dim setting
- When using multiple low voltage sensors, only one sensor per zone needs to have dimming output

DZ DZ

Dual Zone Photocontrol

- Provides more advanced daylighting control for 2-Pole line voltage occupancy sensors
- Single shared set-point is used for both poles

Stepped Dimming (DUO) Mode

- Ideal for A/B (also called inboard/outboard) switching applications
- Determines the necessary on/off combination of the two poles in order to maintain adequate lighting

Percentage Offset (Dual Zone) Mode

- Ideal for classrooms with individually controlled parallel rows of lights
- Uses a relative set-point for the second pole, which is a percentage of the first pole's set-point

HL HL

High/Low Occupancy Operation

- Provides high/low control of a 0-10V dimmable fixture
- Lights are reduced to an energy saving minimum dim level after expiration of occupancy time delay
- If relay is wired, lights will switch off after a second time delay

HVOLT HVOLT

347-480 VAC

- Allows sensor to be powered by and switch 347 through 480 VAC
- Used primarily in Fixture Mount Sensors
- Used only in Single Pole Devices

LT LT

Low Temperature / High Humidity

- During manufacturing, the circuit board goes through a conformal coating process, making it corrosion resistant from moisture
- Enables operating temperatures down to -40° F (-40° C) for PIR sensors and -4° F (-20° C) for PDT sensors
- Ideal for cold storage applications or bath/shower rooms with condensing steam

P P

Photocontrol

- Features auto set-point calibration
- Fully digital, all settings in foot-candles

On/Off mode

- Photocontrol has full control during periods of occupancy
- Recommended for public areas, such as vestibules, corridors, or restrooms

Inhibit mode

- Photocontrol can prevent lights from turning on if adequate daylight is available, but cannot turn lights off
- Recommended for areas where people work (private and open offices)

R R

Isolated Low Voltage Relay

- Enables low voltage sensors to interface with a building management system
- Provides dry contact closure via an SPDT, 1 Amp, 40 Volt relay
- The relay is energized when ALL connected sensors register unoccupied
- When using multiple sensors, only one sensor per zone needs to have a relay

Note: Sensor must have power at all times for the relay to function.



PRODUCT SELECTION GUIDE

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WSX FAMILY

Wall Switch Sensor



Overview

The WSX Family of wall switch occupancy sensors provides simple and cost effective solutions for commercial and residential lighting control applications. All WSX Family sensors have a stylish low profile appearance, soft-click buttons, and provide small motion detection up to 20 ft (6.10 m), making them perfect for private offices, private rest rooms, closets, copy rooms, or any other small enclosed space. Additionally, all WSX Family sensors have a patent pending wiring method that enables them to function either with or without a neutral connection. WSX units come pre-configured for wiring without a neutral; however, if connection to neutral is required by code, contractors can convert the unit in seconds.

All WSX Family sensors utilize 100% digital Passive Infrared (PIR) detection. Dual Technology (PDT option) versions add Microphonics™ detection and are recommended for offices and rooms with obstructions. Additional versions include units with dual relays - perfect for bi-level applications, and units with an integrated night light - perfect for restrooms and residential applications.

Features

- Passive Dual Technology (PDT) utilizes PIR/Microphonics™ detection
- Miswire protection, reversible line & load connections
- Convertible neutral
- Digital PIR detection - excellent RF immunity
- Ruggedized assembly, vandal resistant lens standard
- 100% passive detection, no potential for interference with other building systems
- Fully meets NEC 2011 Section 404.2C neutral requirements - no current leakage to ground when connected to neutral
- Compatible w/ LEDs, electronic & magnetic ballasts, CFLs, & incandescents
- Photocontrol standard (disabled by default)
- Push-button programmable without removing cover plate - adjustable time delays & operating modes
- White LED status Indicator

ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.74" H x 1.68" W x 1.63" D (6.96 cm x 4.27 cm x 4.14 cm) (not including ground strap) WEIGHT: 5 oz MOUNTING: Single gang switch box MOUNTING HEIGHT: 30-48" (76.2-121.9 cm)	MAXIMUM LOAD/POLE (RELAY): 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MINIMUM LOAD: None MOTOR LOAD: 1/4 Hp FREQUENCY: 50/60 Hz WIRING DIAGRAM(S): See Figure # 1, 2, 3, 4 on Page 82	OPERATING TEMP: Standard: 14° to 122°F (-10° to 50°C) LT Option (PIR): -40° to 122°F (-40° to 50°C) LT Option (PDT): -4° to 122°F (-20° to 50°C) RELATIVE HUMIDITY: Standard: 20 to 75% non-condensing LT Option: 20 to 90% non-condensing (electronics coated for corrosion resistance) ROHS COMPLIANT

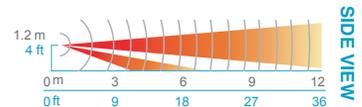
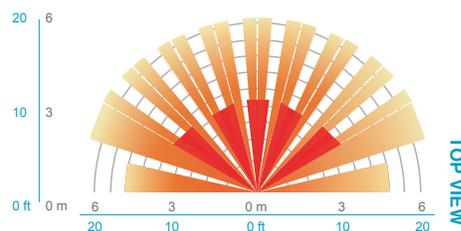


COVERAGE PATTERN

WSX

Wall Switch Lens

- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m), ~625 sq ft
- Large motion (e.g., walking) detection greater than 36 ft (10.97 m), ~2025 sq ft
- Wall-to-Wall coverage
- Passive Dual Technology (Microphonics™) provides overlapping detection of human activity over the complete PIR coverage area; advanced filtering is utilized to prevent non-occupant noises from keeping the lights on



OPTION INFORMATION

347

347 Voltage

- Allows sensor to be powered from and switch 347 VAC
- Cover plate for 347 VAC sensors included

LT

Low Temp/High Humidity

- Required for cold/humid areas
- Sensor electronics are coated for corrosion resistance
- Operates down to -40°F/C (-4°F/-20°C for PDT)

2P

Dual Relay

- Ideal for bi-level switched rooms or restroom with light & fan
- Includes two isolated relays, Pole 1 defaulted to Auto On, Pole 2 to Vacancy
- Enables separate time delay per pole - programmed via each pole's push-button
- UL Listed to switch different loads per pole - e.g. 277 VAC lights on Pole 1 and 120 VAC fan on Pole 2

NL

Night Light

- Ideal for bathrooms (hotel/hospital) or residential applications
- Ultra low power White LED night light (24/7 operation)
- Capable of powering over Ground (no Neutral required)
- Manual On/Auto off operation of lights (default)
- Available with Single or Dual Relays

SINGLE RELAY		Specifications subject to change.		Example: WSX PDT WH					
Series		Operating mode ¹		Voltage		Color ³		Temp/Humidity	
WSX	Passive Infrared (PIR)	(blank)	Auto-On (default) or Vacancy	(blank)	120/277 VAC	WH	White	(blank)	Standard
WSX PDT	Dual Technology (PIR/Microphonics™)	SA	Vacancy (default) or Auto-On	347	347 VAC ²	IV	Ivory	LT	Low Temp/ High Humidity
		VA	Vacancy only			GY	Gray		
						AL	Light Almond		
						BK	Black		
						RD	Red		

DUAL RELAY		Specifications subject to change.		Example: WSX 2P 2SA 347 WH LT					
Series		Operating mode ¹		Voltage		Color ³		Temp/Humidity	
WSX 2P	Passive Infrared (PIR)	(blank)	Pole 1 Auto-On Pole 2 Vacancy (default)	(blank)	120/277 VAC	WH	White	(blank)	Standard
WSX PDT 2P	Dual Technology (PIR/Microphonics™)	2SA	Both Poles Vacancy (default) or Auto-On	347	347 VAC ²	IV	Ivory	LT	Low Temp/ High Humidity
		2VA	Both Poles Vacancy only			GY	Gray		
						AL	Light Almond		
						BK	Black		
						RD	Red		



NIGHT LIGHT		Specifications subject to change.		Example: WSX PDT NL WH					
Series ⁴		Voltage		Color ³		Temp/Humidity			
WSX NL	Passive Infrared (PIR)	(blank)	120/277 VAC	WH	White	(blank)	Standard		
WSX PDT NL	Dual Technology (PIR/Microphonics™)	347	347 VAC ²	IV	Ivory	LT	Low Temp/ High Humidity		
WSX 2P NL	Dual Relay, Passive Infrared (PIR)			GY	Gray				
WSX PDT 2P NL	Dual Relay, Dual Technology (PIR/Microphonics™)			AL	Light Almond				
				BK	Black				
				RD	Red				

Notes

1. Operating modes reprogrammable via push-button except for VA version
2. Wall plates included in white or ivory only for 347 VAC units
3. Matching wall plate provided for 120/277 VAC units
4. Units factory set to Vacancy (Manual On) Operating mode

WSD FAMILY

Wall Switch Sensor



Overview

The WSD wall switch sensor is a reliable work horse with powerful Passive Infrared (PIR) detection technology as well as optional Passive Dual Technology. This line of wall switch sensors are perfect for private offices, copy rooms, closets, or any small enclosed space without obstructions. All of Sensor Switch's wall switch occupancy sensors are easy to install, and simple to use. Additionally, the WSD sensor has several On Modes and Switch Modes that can be programmed using the front push-button. For rooms with obstructions, the Dual Technology WSD PDT Series sensor is recommended. Additionally, all WSD Family sensors have a patent pending wiring method that enables them to function either with or without a neutral connection. WSD units come pre-configured for wiring without a neutral; however, if connection to neutral is required by code, contractors can convert the unit in seconds.

Features

- Passive Dual Technology (PDT) utilizes PIR/ Microphonics™ detection
- Miswire protection, reversible line & load connections
- Convertible neutral
- Digital PIR detection - excellent RF immunity
- Small motion detection to 20 ft
- Self-grounding mounting strap
- Photocontrol standard (disabled by default)
- Compatible w/ LEDs, electronic & magnetic ballasts, CFLs, & incandescents
- Push-button programmable without removing cover plate - adjustable time delays & operating modes
- Green LED status Indicator

ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.74" H x 1.68" W x 1.63" D (6.96 cm x 4.27 cm x 4.14 cm) (not including ground strap) WEIGHT: 5 oz MOUNTING: Single gang switch box MOUNTING HEIGHT: 30-48" (76.2-121.9 cm)	MAXIMUM LOAD/POLE (RELAY): 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MINIMUM LOAD: None MOTOR LOAD: 1/4 Hp FREQUENCY: 50/60 Hz WIRING DIAGRAM(S): See Figure # 1, 2, 3, 4 on Page 82	OPERATING TEMP: Standard: 14° to 122°F (-10° to 50°C) LT Option (PIR): -40° to 122°F (-40° to 50°C) LT Option (PDT): -4° to 122°F (-20° to 50°C) RELATIVE HUMIDITY: Standard: 20 to 75% non-condensing LT Option: 20 to 90% non-condensing (electronics coated for corrosion resistance) ROHS COMPLIANT

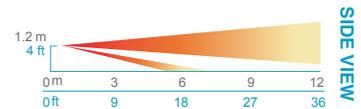
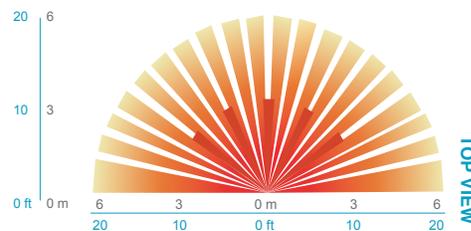


COVERAGE PATTERN

WSD

Wall Switch Lens

- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m)
- Large motion (e.g., walking) detection up to 50 ft (15.24 m)
- Wall-to-Wall coverage



OPTION INFORMATION

347

347 Voltage

- Allows sensor to be powered from and switch 347 VAC
- Cover plate for 347 VAC sensors included

LT

Low Temp/High Humidity

- Required for cold/humid areas
- Sensor electronics are coated for corrosion resistance
- Operates down to -40°F/C (-4°F/-20°C for PDT)

2P

Dual Relay

- Ideal for bi-level switched rooms or restroom with light & fan
- Includes two isolated relays, Pole 1 defaulted to Auto On, Pole 2 to Vacancy
- Enables separate time delay per pole - programmed via each pole's push-button
- UL Listed to switch different loads per pole - e.g. 277 VAC lights on Pole 1 and 120 VAC fan on Pole 2

SINGLE RELAY

Specifications subject to change.

Example: WSD PDT WH

Series		Operating mode ¹		Voltage		Color ³		Temp/Humidity	
WSD	Passive Infrared (PIR)	(blank)	Auto-On (default) or Vacancy	(blank)	120/277 VAC	WH	White	(blank)	Standard
WSD PDT	Dual Technology (PIR/Microphonics™)	SA	Vacancy (default) or Auto-On	347	347 VAC ²	IV	Ivory	LT	Low Temp/High Humidity
		VA	Vacancy only			GY	Gray		
						AL	Light Almond		
						BK	Black		

DUAL RELAY

Specifications subject to change.

Example: WSD PDT 2P 2SA WH

Series		Operating mode ¹		Voltage		Color ³		Temp/Humidity	
WSD 2P	Passive Infrared (PIR)	(blank)	Pole 1 Auto-On	(blank)	120/277 VAC	WH	White	(blank)	Standard
WSD PDT 2P	Dual Technology (PIR/Microphonics™)		Pole 2 Vacancy (default)	347	347 VAC ²	IV	Ivory	LT	Low Temp/High Humidity
		2SA	Both Poles Vacancy (default) or Auto On			GY	Gray		
						AL	Light Almond		
						BK	Black		

Notes

1. Operating modes reprogrammable via push-button except for VA version
2. Wall plates included in white or ivory only for 347 VAC units
3. Matching wall plate provided for 120/277 VAC units

PRODUCT INFORMATION

SSD

Wall Switch Sensor



*Cover Plate Not Included

Overview

The SSD is a cost effective wall switch sensor with powerful Passive Infrared (PIR) detection technology. The wall switch sensor is easy to install and simple to use. It is ideal for private offices, copy rooms, closets, or any small enclosed space without obstructions. A user programmable time delay ensures that once the room is vacated the sensor will time out and turn off the lights.

Sensor Operation

SSD sensors detect changes in the Passive Infrared (PIR) energy given off by occupants as they move within the field-of-view. Once occupancy is detected, an internal relay switches on the connected lighting load. In an SSD VA (Vacancy/Manual On) sensor, the unit's push button must first be pressed to initiate the lights on. After the lights are turned on, an internal timer keeps them on during brief periods of inactivity. Once the time delay has expired, lights are turned off automatically. The default time delay is 10 minutes - chosen in order to maximize energy savings while preventing false-offs. This timer is programmable from 30 seconds to 30 minutes, and is reset every time occupancy is re-detected. Patented LampMaximizer® technology is also present in these sensors, providing an additional minimum on time (disabled by default) to be utilized if desired.

Features

- Miswire protection, reversible line & load connections
- PIR detection - excellent RF immunity
- Small motion detection to 20 ft
- Self-grounding mounting strap
- No neutral connection required
- No minimum load and no current leakage to load
- Compatible w/ Electronic & Magnetic Ballasts, CFLs, & Incandescents
- Push-button programmable without removing cover plate - adjustable time delays & operating modes
- Integrated LampMaximizer® minimum on time (patented) provides increased
- Fluorescent lamp life - disabled by default
- Non-volatile settings memory
- Green LED status Indicator

ADDITIONAL INFORMATION For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.74"H x 1.68"W x 1.63"D (6.96 cm x 4.27 cm x 4.14 cm) (not including ground strap) WEIGHT: 5 oz MOUNTING: Single Gang Switch Box MOUNTING HEIGHT: 30-48 in (76.2-121.9 cm)	MAXIMUM LOAD 800 W @ 120 VAC 1200 W @ 277 VAC Fluorescent/Incandescent loads only MINIMUM LOAD: None MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz (timers are 1.2x for 50 Hz) WIRING DIAGRAM(S): See Figure # 5 on Page 83	OPERATING TEMP 14° to 122° F (-10° to 50° C) RELATIVE HUMIDITY: 20 to 75% non-condensing ROHS COMPLIANT

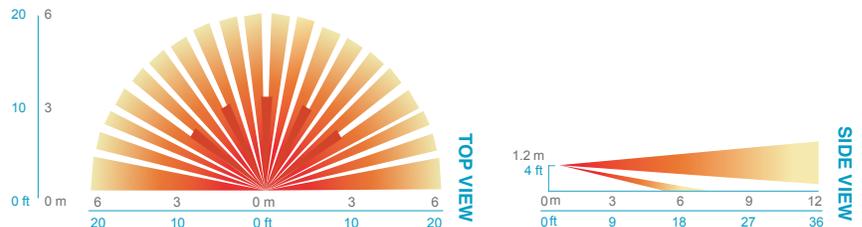


COVERAGE PATTERN

SSD

Wall Switch Lens

- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m)
- Large motion (e.g., walking) detection up to 50 ft (15.24 m)
- Wall-to-Wall coverage



ORDERING INFORMATION Specifications subject to change.

Example: SSD WH

Series	Operating Mode ¹	Voltage	Color ²
SSD	Passive Infrared (PIR)		
	(blank) Auto On (default) or Vacancy	(blank) 120/277 VAC	WH White
	SA Vacancy (default) or Auto On	120 120 VAC only	IV Ivory
	VA Vacancy only		

Notes:

1. Operating Modes reprogrammable via push-button except for VA version
2. Cover Plate Not Included

Overview

The WSD LV Series is a low voltage wall switch occupancy sensor that is stylish, easy to install, and simple to use. Ideal for private offices, copy rooms, closets, or any small enclosed space without obstructions, the WSD LV uses the industry's best Passive Infrared (PIR) technology to achieve excellent small motion detection up to 20 ft. A user programmable time delay ensures that once the room is vacated the sensor will time out and turn off the lights. WSD LV sensors also have additional On Modes and Switch Modes that are all fully programmable using the front push-button. For rooms with obstructions the WSD PDT LV should be considered.

Sensor Operation

The sensor detects changes in the infrared energy given off by occupants as they move within the field-of-view. When

occupancy is detected, a self-contained relay switches the connected lighting load on. The sensor is line powered and can switch a range of line voltages. An internal timer, factory set at 10 minutes, keeps the lights on during brief periods of inactivity. This timer is push-button programmable from 30 seconds to 20 minutes, and is reset every time occupancy is re-detected. This state-of-the-art design requires no field calibration or sensitivity adjustments.

Features

- PIR Occupancy Detection - excellent RF immunity
- Small Motion Detection up to 20 ft (6.10m)
- 30 sec to 20 min Time Delay
- Push-Button Programmable
- Green LED status Indicator

WSD LV
Wall Switch Sensor



OPERATIONAL MODES

On Modes (Default)

Automatic On - The sensor automatically turns the lights on when the sensor detects occupancy.

Reduced Turn-On - The sensor is set to initially only detect large motions, effectively ignoring any reflected PIR signals while still sensing occupants when they enter the room. Once on, the sensor returns to maximum sensitivity.

Switch Modes (Default)

Predictive Off - Pressing the switch overrides the lights off and temporarily disables the occupancy detection. After an exit time delay (default 10 seconds) the occupancy detection reactivates and monitors for an additional grace period time (default 5 seconds). If no occupancy is detected during this period, the sensor will revert to Automatic On operation. If occupancy is detected, the sensor will remain in Permanent Off mode requiring the switch to be pressed again in order to restore the sensor to Automatic On.

Permanent Off - Pressing the push-button switch will turn the lights off. The lights will remain off regardless of occupancy until the switch is pressed again, restoring the sensor to Automatic On mode.

Switch Disable - Prevents user from manually turning off the lights via the push-button.

ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

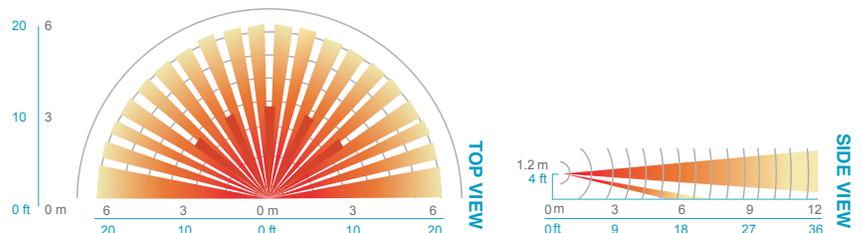
SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.74"H x 1.68"W x 1.63"D (6.96cm x 4.27cm x 4.14cm) WEIGHT: 5 oz MOUNTING: Single Gang Switch Box MOUNTING HEIGHT: 30-48 in (76.2 - 121.9 cm) COLORS: White, Ivory, Gray, Lt. Almond, Black	MAXIMUM LOAD: 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MINIMUM LOAD: None MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz WIRING DIAGRAM(S): See Figure # 7 on Page 83	OPERATING TEMP: 14° to 160° F (-10° to 71° C) STORAGE TEMP: -14° to 160° F (-26° to 71° C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT

COVERAGE PATTERN

WSD

Wall Switch Lens

- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m)
- Large motion (e.g., walking) detection up to 50 ft (15.24 m)
- Wall-to-Wall coverage
- Passive Dual Technology (Microphonics™) provides overlapping detection of human activity over the complete PIR coverage area; advanced filtering is utilized to prevent non-occupant noises from keeping the lights on



OPTION INFORMATION

R

Low Voltage Relay

- Enables sensors to interface with other systems (e.g. BMS, lighting panels)
- Provides dry contact closure via a SPDT, 1 amp, 30 volt relay (resistive loads only)

LT

Low Temp/High Humidity

- Required for cold/humid areas
- Sensor electronics are coated for corrosion resistance
- Operates down to -40°F/C (-4°F/-20°C for PDT)



ORDERING INFORMATION

Specifications subject to change.

Example: WSD LV R WH LT

Series	Relay	Color	Temp/Humidity
WSD LV	Passive Infrared (PIR)	WH White	(blank) Standard
WSD PDT LV	Dual Technology (PDT)	AL Light Almond	LT Low Temp/High Humidity
	R Low Voltage Relay	IV Ivory	
		BK Black	
		GY Gray	

LWS(H)

Large Area Wall Switch Sensor



Overview

Large Area Wall Switch sensors are ideal products to use when retrofitting classrooms, large storage centers or open spaces where a coverage pattern larger than a decorator sensor's is needed, and where installing a low voltage system is cost prohibitive. The LWS Series sensors surface mount at standard switch height, while the LWSH Series sensors surface mount from 4 to 7 ft (1.22 to 2.13 m). All styles are available with either Passive Infrared (PIR) detection or Dual Technology (PIR/Microphonics™) detection for rooms with obstructions. The LWS and LWSH Series are line powered and available with one or two poles.

Features

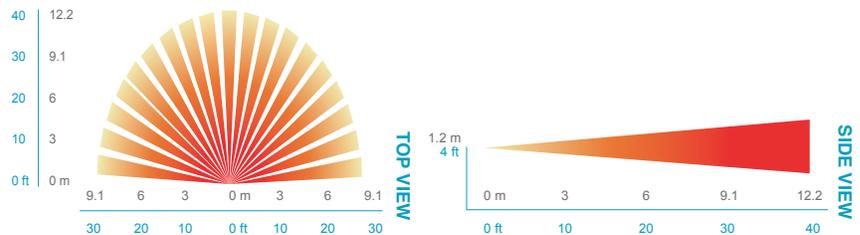
- Miswire protection, reversible line & load connections
- Small Motion detection up to 40 ft (12.19 m)
- Self-Contained Relay(s), No Power Pack(s) Required
- 3-Way & 4-Way Switching Compatible
- No Minimum Load
- Adjustable Time Delay
- Green LED status Indicator

COVERAGE PATTERN

LWS

Large Area Wall Switch Lens

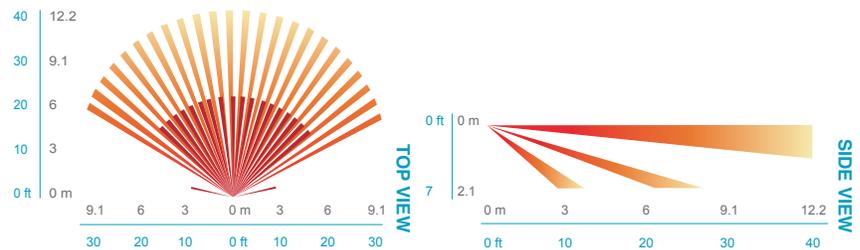
- Small motion (e.g., hand movements) detection up to 40 ft (12.19 m)
- Wall-to-Wall coverage
- 30 to 48 in (76.20 to 121.92 cm) high mounting
- Passive Dual Technology (Microphonics™) provides overlapping detection of human activity over the complete PIR coverage area; advanced filtering is utilized to prevent non-occupant noises from keeping the lights on



LWSH

Large Area High Mount Wall Switch Lens

- Small motion (e.g., hand movements) detection up to 40 ft (12.19 m)
- Wall-to-Wall coverage
- 48 to 84 in (121.92 to 213.36 cm) high mounting
- Passive Dual Technology (Microphonics™) provides overlapping detection of human activity over the complete PIR coverage area; advanced filtering is utilized to prevent non-occupant noises from keeping the lights on



ADDITIONAL INFORMATION For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
ENCLOSURE: Surface Mount SIZE: 4.96"H x 3.10"W x 1.70" D (12.60 cm x 7.87 cm x 4.32 cm) WEIGHT: 7 oz MOUNTING: Single Gang Switch Box MOUNTING HEIGHT: LWS: 30-48" (76.2-121.92 cm) LWSH: 48-84" (121.92-213.36 cm) COLOR: White, Ivory	MAX LOAD / POLE: (1 Phase Only) 13 Amps @ 120-347 VAC FREQUENCY: 50/60 Hz Timers are 1.2 x for 50 Hz MOTOR LOAD: 1/4 HP each pole WIRING DIAGRAM(S): See Figure # 15 & 16 on Page 86	OPERATING TEMP: 14° to 85° F (-10° to 29° C) STORAGE TEMP: -14° to 160° F (-26° to 71° C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT (non-Photocontrol versions)



OPTION INFORMATION

347

347 Voltage

- Allows sensor to be powered and switch 347 VAC

ORDERING INFORMATION Specifications subject to change.

Example: LSW 2P WH

Series	# of Poles	Voltage	Color
LWS Passive Infrared (PIR)	(blank) 1-Pole	(blank) 120/277 VAC	WH White
LWS PDT Dual Technology (PDT)	2P 2-Pole	347 347 VAC	IV Ivory
LWSH Passive Infrared (PIR)			
LWSH PDT Dual Technology (PDT)			

OPTIONAL WALL PLATES For additional product information, visit www.acuitycontrols.com.

The **WS BPX** plate comes with the 2-pole models. Others can be ordered separately.



WS SPX I/W



WS SPX3 I/W



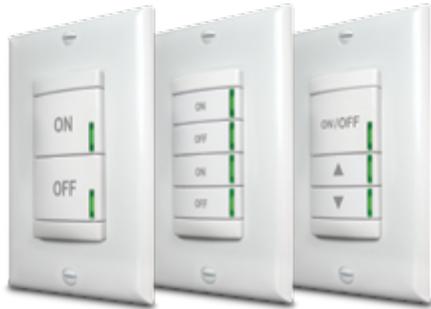
WS BPX I/W



WS BPX3 I/W

SWITCHPOD

Sensor Interface Switch



Overview

The Push-Button SwitchPod (SPODM) Series of low voltage wall stations interface with Sensor Switch occupancy sensors and power packs in order to implement a wide range of single and bi-level switching applications. These switch devices provide an elegant and cost-effective way of deploying bi-level lighting control that meet energy and building codes without having to source special sensors or power packs.

SwitchPods are all single gang decorator style devices available as single or dual switch units. Versions are also available that work in 3-way applications and/or have a 0-10 VDC dimming output. Units defaulted to dual manual-on operation are also available. For digital solutions to bi-level lighting applications, nLight Enabled wall stations (WallPods), power packs, and sensors are necessary.

Features

- Used with standard occupancy sensors for manual-on applications
- Alternative usage as override switch for auto-on applications
- Single gang decorator style enclosure with 1 or 2 on/off switches
- Finger-touch control
- Programmable without removing switch plate
- Optional dual manual-on operation
- 3X option enables unit for multi-way configurations (i.e., 3-way, 4-way, etc.)
- Optional 0-10 VDC dimming control

ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.74" H x 1.68" W x 1.63" D (6.96 cm x 4.27 cm x 4.14 cm) (not including ground strap) WEIGHT: 2 oz MOUNTING: Single gang switch box or low voltage ring	OPERATING VOLTAGE: 12-24 VAC/VDC CURRENT DRAW: 5 mA DIMMING LOAD: 0-10 VDC, Sinks < 20 mA; ~40 Ballasts / Drivers @ 0.5 mA each RECOMMENDED POWER PACK: PP20 WIRING DIAGRAM(S): See Figure # 35, 36, 37, 38 on Page 92 - 93	OPERATING TEMP: Standard: 14° to 122°F (-10° to 50°C) LT Option: -40° to 122°F (-40° to 50°C) RELATIVE HUMIDITY: Standard: 20 to 75% non-condensing LT Option: 20 to 90% non-condensing ROHS COMPLIANT



ORDERING INFORMATION

Specifications subject to change.

Example: SPODM WH

Series	Dimming ¹	# of Switches/Default on Operation	Multi-way ¹	Color	Temp/Humidity
SPODM Sensor Interface Switch	(blank) None	(blank) 1 Switch/Auto On	(blank) None	WH White	(blank) Standard
	D Dimming Operation (0-10VDC)	SA 1 Switch/Manual On	3X Multi-way (e.g. 3-way)	IV Ivory	LT Low Temp/ High Humidity
		2P 2 Switches (Switch 1 Manual/Switch 2 Auto)		GY Gray	
		2P 2SA 2 Switches (both Manual)		AL Light Almond	
				BK Black	

Notes

1. Not available with 2 switch (2P) versions

Overview

The PTS 60 and PTS 720 Series preset timer switches provide a simple to use and simple to apply lighting control alternative to wall switch occupancy sensors. These elegant decorator style wall stations each provide six preset countdown timer selections as well as an on/off push-button. The PTS 60 and PTS 720 units are powered from 120/277 VAC (optional 347 VAC) and are intended to switch a line voltage lighting load or small motor load (see specifications). Additionally, the PTS 60 and PTS 720 can be applied without requiring a neutral wiring connection, making them ideal for retrofit applications.

Features

- Miswire protection, reversible line & load connections
- No neutral connection required
- No minimum load requirement
- Self-contained relay
- Fixed or adjustable preset times
- Optional audible timeout warning at 45, 30, and 15 sec
- Optional flicker timeout warning at 2 and 1 min
- Continuous led flash for last 30 sec of button's time setting
- Green LED time Indicators

PRESET TIMER SWITCHES



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.74" H x 1.68" W x 1.63" D (6.96 cm x 4.27 cm x 4.14 cm) (not including ground strap) WEIGHT: 5 oz MOUNTING: Single Gang Switch Box	MAXIMUM LOAD ¹ : 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MINIMUM LOAD: None MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz WIRING DIAGRAM(S): See Figure # 6 on Page 83	OPERATING TEMP: Standard: 14° to 122°F (-10° to 50°C) LT Option: -40° to 122°F (-40° to 50°C) RELATIVE HUMIDITY: Standard: 20 to 75% non-condensing LT Option: 20 to 90% non-condensing ROHS COMPLIANT



ORDERING INFORMATION

Specifications subject to change.

Example: PTS 60 WH

Series	Time Scale	Voltage	Color	Temp/Humidity
PTS Preset Timer Switch	60 60 min. max	(blank) 120/277 VAC	WH White	(blank) Standard
	720 720 min. max	347 347 VAC	IV Ivory GY Gray AL LightAlmond BK Black	LT Low Temp/High Humidity

Notes

1. Load specifications for fluorescent and incandescent lighting only
See data sheet for LED specifications

PRODUCT INFORMATION

WIRELESS PRODUCTS

Occupancy Sensors



Overview

Sensor Switch's CM (PDT) xx WR Series of wireless occupancy sensors provide both Passive Infrared (PIR) and Microphonics™ Dual Technology detection options. These battery operated sensors (with an estimated 10 year battery life) utilize RDT Wireless technology. They are designed to work with the SPODMR WR Series wall switch or other RDT Wireless devices to control a space's lighting.

Features

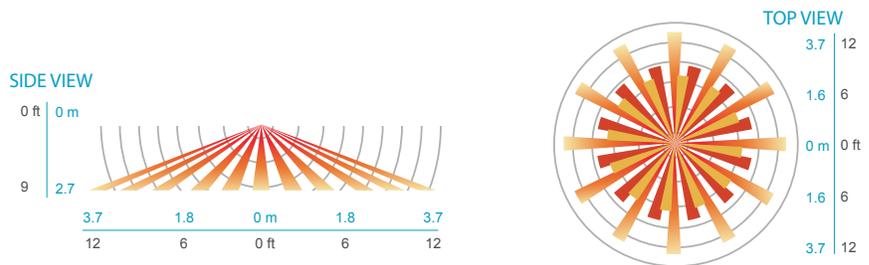
- Passive Dual Technology (PDT) utilizes PIR/ Microphonics™ detection
- 100% wireless operation
- RDT™ 902 MHz compliant
- 10-year battery life (at defaults)
- 360° coverage pattern
- Digital PIR detection - excellent RF immunity
- Simple push-button pairing

COVERAGE PATTERN

9

Small Motion / Standard Range 360° Lens

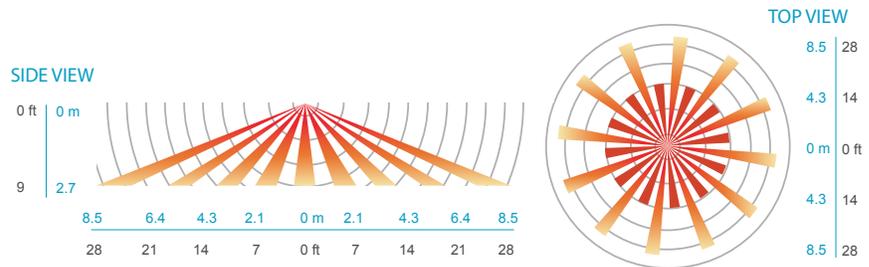
- Best choice for small motion (e.g. hand movements) detection
- 360° conical shaped pattern
- Provides ~12 ft (3.66 m) radial coverage (~500 ft²) when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide ~10 to 20 ft (3.05 to 6.10 m) radial coverage
- Passive Dual Technology (Microphonics™) provides overlapping detection of human activity over the complete PIR coverage area; advanced filtering is utilized to prevent non-occupant noises from keeping the lights on



10

Large Motion / Extended Range 360° Lens

- Best choice for large motion detection (e.g. walking)
- 360° conical shaped pattern
- Provides ~24 ft (7.32 m) radial coverage (~2000 ft²) when mounted at 9 ft (2.74 m)
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide ~16 to 36 ft (4.88 to 10.97 m) radial coverage
- Detection range improves when walking across beams compared to into beams
- Passive Dual Technology (Microphonics™) provides overlapping detection of human activity over the complete PIR coverage area; advanced filtering is utilized to prevent non-occupant noises from keeping the lights on



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL		ENVIRONMENTAL	
SIZE: 4.5" Diameter (11.56 cm), 2.39" Deep (6.07 cm)	WEIGHT: 6 oz	OPERATING TEMP: CM xx WR: -4° to 122° (-20° to 50° C) CM PDT xx WR: 25° to 122°F (-4° to 50° C)	RELATIVE HUMIDITY: Standard: 20 to 90% non-condensing
MOUNTING: Ceiling Surface, 3.5" Octagon Box, Single Gang Handy Box	COLOR: White		
BATTERY TYPE: AA Lithium (1.5V)	EXPECTED BATTERY LIFE: ~10 years (at factory defaults)		

ORDERING INFORMATION

Specifications subject to change.

Example: CM PDT 9 WR

Series	Detection	Coverage	Wireless Technology
CM Ceiling mount sensor	(blank) Passive Infrared (PIR) PDT Dual Tech (PIR/Microphonics™)	9 Small motion 360° 10 Large motion 360°	WR RDT™ Wireless

Overview

The SPODMR WR is a stylish, easy to install, and simple to use wall switch for use with paired CM (PDT) xx WR occupancy sensors or other RDT™ Wireless relay modules, kinetic switches, or plug-load controllers. Once wired, a few button pushes is all it takes to pair the switch to the desired sensors.

Features

- Miswire protection, reversible line & load connections
- Neutral wire required-no current leakage to load
- Adjustable time delays
- Auto-On or Manual-On modes
- Simple push-button pairing
- 2 Green LED status Indicators

WIRELESS PRODUCTS
Switch & Load Controller



ADDITIONAL INFORMATION For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.74" H x 1.68"W x 1.63"D (6.96 cm x 4.27 cm x 4.14 cm) WEIGHT: 5 oz MOUNTING: Single gang switch box	MAXIMUM LOAD ¹ : 800 W @ 120 VAC/1200 W @ 277 VAC (Fluorescent/Incandescent) See data sheet for LED specs 1A @ 24 VAC/VDC MINIMUM LOAD: None MOTOR LOAD: 1/4HP LOAD FREQUENCY: 50/60 Hz WIRING DIAGRAM(S): See Figure # 1 on Page 82	OPERATING TEMP: (-20° to 50° C) RELATIVE HUMIDITY: 20-75% non-condensing WIRELESS FREQUENCY: 902 MHz (RDT™) ROHS COMPLIANT

Notes

1. Load specifications for fluorescent and incandescent lighting only
See data sheet for LED specifications



This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules.

ORDERING INFORMATION Specifications subject to change.

Example: SPODMR WR WH

Series	Operating Mode	Color	Kit
SPODMR WR Wall switch	(blank) Auto on	WH White	(blank) None
	SA Manual on	IV Ivory	K1 Includes CM 9 WR
		GY Gray	K2 Includes CM 10 WR
		AL Light Almond	K3 Includes CM PDT 9 WR
		BK Black	K4 Includes CM PDT 10 WR

CEILING MOUNT

Sensors



Overview

Ceiling mount sensors are offered in a multitude of configurations which address many applications. Lens options include large motion extended range, small motion standard range and bi-directional for hallways. Available in low voltage and line voltage models, these sensors are capable of covering an entire private office or small room by themselves. Multiple low voltage sensors can also work together to supply the ideal solution for oddly shaped rooms or large open office areas. A line voltage sensor provides one relay for a single-level control, while the 2-pole version provides a second relay for an additional level of control. For rooms with obstructions, these sensors are also offered with Dual Technology, which adds Microphonics™ detection to the Passive Infrared (PIR) detection.

Features (All)

- 30 sec to 30 min time delay
- Digital PIR detection - excellent RF immunity
- Push-button programmable
- Minimum On-Timer (LampMaximizer®)
- Convenient test mode
- Green LED status Indicator

Features (Line voltage)

- Self-contained relay(s)
- No minimum load
- Miswire protection, reversible line & load connections

ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL - LOW VOLTAGE	ELECTRICAL - LINE VOLTAGE	ENVIRONMENTAL
<p>SIZE: 4.55" diameter (11.56 cm) 1.55" deep (3.94 cm)</p> <p>WEIGHT: 6 oz</p> <p>MOUNTING: 3.5" octagon box, or single gang handy box</p> <p>COLOR: Matte White</p>	<p>OPERATING VOLTAGE: 12-24 VAC/VDC</p> <p>RECOMMENDED POWER PACK: PP20</p> <p>CURRENT DRAW: Standard, 4 mA w/ R option, 16 mA</p> <p>WIRING DIAGRAM(S): See Figure # 8 on Page 84</p>	<p>LOAD RATING: 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC</p> <p>MOTOR LOAD: 1/4 HP</p> <p>FREQUENCY: 50/60 Hz</p> <p>WIRING DIAGRAM(S): See Figure # 9 & 10 on Page 84</p>	<p>OPERATING TEMP: 14° to 160° F (-10° to 71° C)</p> <p>STORAGE TEMP: -14° to 160° F (-26° to 71° C)</p> <p>RELATIVE HUMIDITY: 20 to 90% non-condensing</p> <p>ROHS COMPLIANT</p>

OPTION INFORMATION

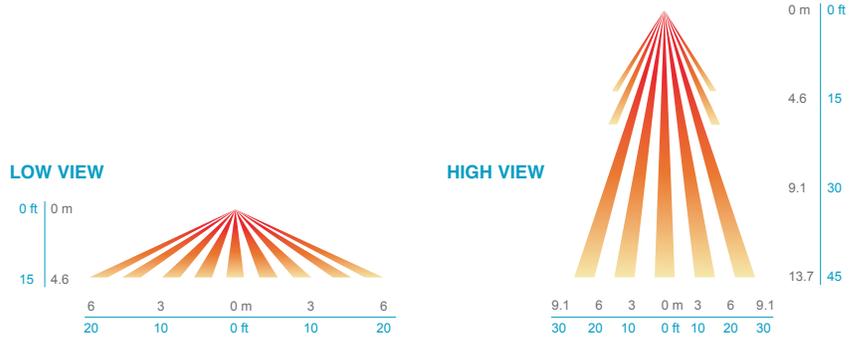
- | | | | |
|---|--|---|---|
| <p>R Low Voltage Relay</p> <ul style="list-style-type: none"> • Enables sensors to interface with other systems (e.g. BMS, lighting panels) • Provides dry contact closure via a SPDT, 1 amp, 30 volt relay (resistive loads only) | <p>ADC Automatic Dimming Control Photocontrol</p> <ul style="list-style-type: none"> • Photocontrol within sensor maintains total room light level by controlling levels of 0-10 VDC dimmable ballasts/drivers • Photocontrol also has full on/off control during periods of occupancy • Provides a second occupancy time-out period that enables lights to go a dim setting before turning off | <p>DZ Dual Zone Photocontrol</p> <ul style="list-style-type: none"> • Provides more advanced control than P option • DUO operation: Determines necessary on/off combination of poles in inboard/outboard applications • Percentage offset operation: Uses relative set-point for second pole in dual zone applications | <p>D Occupancy Controlled Dimming</p> <ul style="list-style-type: none"> • Provides dimming output to control 0-10 VDC dimmable ballasts/drivers • Provides a second occupancy time-out period that enables lights to go to a dim setting before turning off • Sinks <20mA; ~40 ballast/drivers • Adjustable max/min dim setting |
| <p>P Photocontrol</p> <ul style="list-style-type: none"> • Auto set-point calibration • On/off mode: Full on/off control of lighting during periods of occupancy with adequate daylight • Inhibit mode: Prevents lights from turning on if adequate daylight is available, but does not turn lights off • 2-pole units operate in inhibit mode only | <p>LT Low Temp/High Humidity</p> <ul style="list-style-type: none"> • Sensor electronics are coated for corrosion resistance • Operates down to -40° F/C (-4° F/-20° C for PDT) | <p>347 347 Voltage</p> <ul style="list-style-type: none"> • Allows sensor to be powered and switch 347 VAC | |

COVERAGE PATTERN

6

High Bay 360° Lens

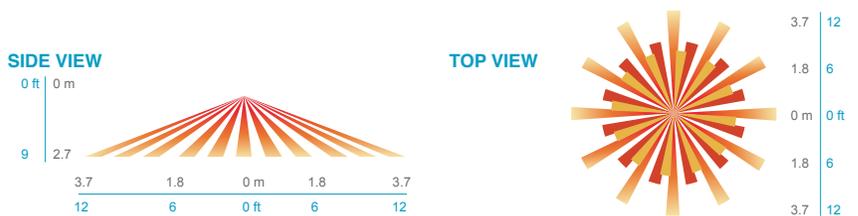
- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g., walking) up to a 35 ft (10.76 m) mounting height
- Excellent detection of extra large motion (e.g., forklifts) up to a 45 ft (13.72 m) mounting height



9

Small Motion / Standard Range 360° Lens

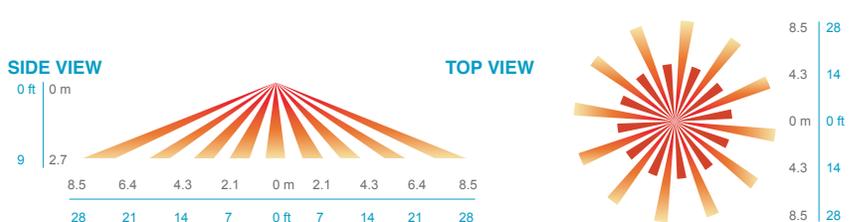
- Best choice for small motion (e.g., hand movements) detection
- Viewing angle of 56° in a 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage



10

Large Motion / Extended Range 360° Lens

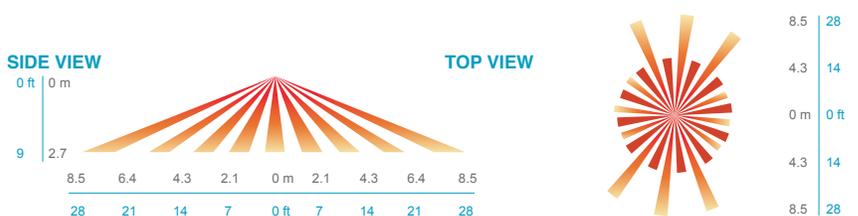
- Best choice for large motion (e.g., walking) detection
- Viewing angle of 67° in a 360° conical shaped pattern
- Provides 28 ft (8.53 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage



11

Bi-Directional Hallway Lens

- Best choice for large motion (e.g., walking) detection
- Viewing angle of 67° for hallway applications
- Provides 28 ft (8.53 m) of coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) hallway coverage



KEY SPECS			
SERIES	COVERAGE PATTERN	DETECTION	POWER TYPE
CM 6	High Bay 360° Lens	PIR	Low 12-24
CM 9	Small Motion/Standard Range 360° 9 Lens	PIR	Low 12-24
CM PDT 9	Small Motion/Standard Range 360° 9 Lens	Dual technology (PDT)	Low 12-24
CM 10	Large Motion/Extended Range 360° 10 Lens	PIR	Low 12-24
CM PDT 10	Large Motion/Extended Range 360° 10 Lens	Dual technology (PDT)	Low 12-24
CM 11	Bi-Directional Hallway Lens	PIR	Low 12-24
CM PDT 11	Bi-Directional Hallway Lens	Dual technology (PDT)	Low 12-24
CMR 6	High Bay 360° Lens	PIR	Line 120/277
CMR 9	Small Motion/Standard Range 360° 9 Lens	PIR	Line 120/277
CMR PDT 9	Small Motion/Standard Range 360° 9 Lens	Dual technology (PDT)	Line 120/277
CMR 10	Large Motion/Extended Range 360° 10 Lens	PIR	Line 120/277
CMR PDT 10	Large Motion/Extended Range 360° 10 Lens	Dual technology (PDT)	Line 120/277
CMR 6 2P	High Bay 360° Lens	PIR	Line 120/277
CMR 9 2P	Small Motion/Standard Range 360° 9 Lens	PIR	Line 120/277
CMR PDT 9 2P	Small Motion/Standard Range 360° 9 Lens	Dual technology (PDT)	Line 120/277
CMR 10 2P	Large Motion/Extended Range 360° 10 Lens	PIR	Line 120/277
CMR PDT 10 2P	Large Motion/Extended Range 360° 10 Lens	Dual technology (PDT)	Line 120/277



LOW VOLTAGE		Specifications subject to change.		Example: CM 9 R P LT	
Series	Relay	Dimming/Photocontrol Choose One Only		Temp/Humidity	
CM 6	(blank) None	(blank) None	(blank) None	(blank) Standard	(blank) Standard
CM 9	R Low Voltage Relay	D Occupancy Controlled High/Low Dimming	P Photocontrol	LT Low Temp/High Humidity	LT Low Temp/High Humidity
CM PDT 9		P Photocontrol			
CM 10		ADC Photocontrol with Dimming			
CM PDT 10					
CM 11					
CM PDT 11					

LINE VOLTAGE		Specifications subject to change.		Example: CMR 9 P 347 LT	
Series	Dimming/Photocontrol Choose One Only		Voltage		Temp/Humidity
CMR 6	(blank) None	(blank) None	(blank) 120/277 VAC	(blank) Standard	(blank) Standard
CMR 9	D Occupancy Controlled High/Low Dimming	P Photocontrol	347 347 VAC	LT Low Temp/High Humidity	LT Low Temp/High Humidity
CMR PDT 9	P Photocontrol				
CMR 10	ADC Photocontrol with Dimming				
CMR PDT 10					

2-POLE, LINE VOLTAGE		Specifications subject to change.		Example: CMR 9 2P DZ LT	
Series	Dimming/Photocontrol Choose One Only		Voltage		Temp/Humidity
CMR 6 2P	(blank) None	(blank) None	(blank) 120/277 VAC	(blank) Standard	(blank) Standard
CMR 9 2P	P Photocontrol (inhibit only)	DZ Dual Zone Photocontrol	347 347 VAC	LT Low Temp/High Humidity	LT Low Temp/High Humidity
CMR PDT 9 2P	DZ Dual Zone Photocontrol				
CMR 10 2P					
CMR PDT 10 2P					



PRODUCT INFORMATION

CEILING MOUNT DAYLIGHT CONTROLS

Switching & Dimming Sensors



Overview

On/off Photocontrol and dimming sensors provide intelligent control of lighting for indoor daylight applications. Ideal for spaces with windows, such as vestibules, corridors, classrooms or offices, the sensors work by monitoring daylight conditions in a room, then controlling the lighting to ensure that adequate lighting levels are maintained.

Low voltage sensors are powered with 12-24 VAC/VDC. On/off Photocontrol sensors operate with a power pack (Model # PP20), enabling complete 20 Amp circuits to be controlled. Dimming Photocontrol sensors are capable of controlling any 0-10 VDC dimmable ballast or driver. Line voltage versions are also available that integrate a line switching relay and/or power off the line.

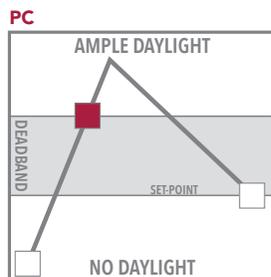
Features

- Works as stand-alone unit or with occupancy sensors
- Auto set-point calibration
- Push-button programmable
- 100 hr. lamp burn-in timer
- Fully digital control
- Green LED status Indicator

SOLUTION TYPES

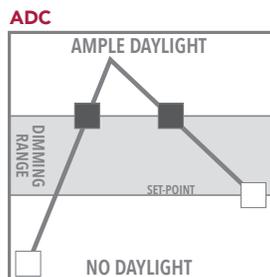
PC

Automatic On/Off Switching



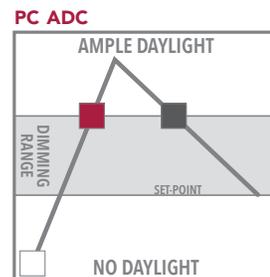
ADC

Automatic Dimming Control



PC ADC

Combination On/Off & Dimming Control



KEY □ LIGHTS FULL ON ■ LIGHTS OFF ■ LIGHTS FULL DIM

SPECIFICATIONS

PHYSICAL	ELECTRICAL - LOW VOLTAGE	ELECTRICAL - LINE VOLTAGE	ENVIRONMENTAL
<p>SIZE: 4.55" diameter (11.56 cm) 1.55" deep (3.94 cm)</p> <p>WEIGHT: 6 oz</p> <p>MOUNTING: 3.5" octagon box, or single gang handy box</p> <p>COLOR: White</p>	<p>OPERATING VOLTAGE: 12-24 VAC/VDC</p> <p>RECOMMENDED POWER PACK: PP20</p> <p>CURRENT DRAW: Standard, 4 mA</p> <p>DIMMING LOAD: Sinks up to 20 mA or 40 ballasts/ drivers @ .5 mA each (0-10 VDC dimmable ballasts/drivers only)</p> <p>WIRING DIAGRAM(S): See Figure # 22 - 28 on Page 88 - 89</p>	<p>LOAD RATING: 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC</p> <p>MOTOR LOAD: 1/4 HP</p> <p>DIMMING LOAD: Sinks up to 20 mA or 40 ballasts/ drivers @ .5 mA each (0-10 VDC dimmable ballasts/drivers only)</p> <p>WIRING DIAGRAM(S): See Figure # 22 - 28 on Page 88 - 89</p>	<p>OPERATING TEMP: 14° to 160° F (-10° to 71° C)</p> <p>STORAGE TEMP: -14° to 160° F (-26° to 71° C)</p> <p>RELATIVE HUMIDITY: 20 to 90% non-condensing</p> <p>ROHS COMPLIANT</p>

OPTION INFORMATION

DZ Dual Zone

- Provide second output that can control an additional zone of lighting

Stepped Dimming (Duo) Operation (PC Only)

- Ideal for A/B (also called inboard/outboard) switching applications
- Determines the necessary on/off combination of the two poles in order to maintain adequate lighting

Percentage Offset Operation

- Ideal for classrooms with individually controlled parallel rows of lights
- PC** sensors use a relative set-point for the second pole that is a percentage of the first pole's set-point
- ADC** sensors enable control of an additional 0-10 VDC dimmable ballast or driver at a selected level (voltage) higher than that of the primary zone

347 347 VAC

- Allows sensor to be powered from and switch 347 VAC

LT Low Temp/High Humidity

- Sensor electronics are coated for corrosion resistance
- Operates down to -40°F/C

KEY SPECS			
SERIES	ENCLOSURE	CONTROL TYPE	POWER TYPE [VDC/VAC]
CM PC	Ceiling mount	On/off	Low 12-24
CM ADC	Ceiling mount	Dimming	Low 12-24
CM PC ADC	Ceiling mount	On/off & dimming	Low 12-24
CMR PC	Ceiling mount	On/off	Line 120/277
CMR ADC	Ceiling mount	Dimming	Line 120/277
CMR PC ADC	Ceiling mount	On/off & dimming	Line 120/277



LOW VOLTAGE		Example: CM PC DZ LT	
Series	Dual Zone	Temp/Humidity	
CM PC	(blank) Single Zone	(blank) Standard	
CM ADC	DZ Dual Zone	LT Low Temp/High Humidity	
CM PC ADC			

LINE VOLTAGE		Example: CMR PC DZ LT	
Series	Dual Zone	Voltage ¹	Temp/Humidity
CMR PC	(blank) None	(blank) 120/277 VAC	(blank) Standard
CMR ADC	DZ Dual zone ²	208 208/240 VAC ²	LT Low Temp/High Humidity
CMR PC ADC		347 347 VAC	
		480 480 VAC ²	

Notes
1. 480 and 208 option not available w/dual zone (DZ)
2. CMR PC Only

PRODUCT INFORMATION

RECESSED MOUNT

Sensors



Overview

Recessed mount sensors offer the reliable functionality of the standard ceiling mount with an architectural aesthetic. Recessed mount sensors are designed to fit inside a standard junction box making installation quick and easy. Lens options include large motion extended range and small motion standard range. Available in low voltage and line voltage models, these sensors are capable of covering an entire private office or small room by themselves. Multiple low voltage sensors can also work together to supply the ideal solution for oddly shaped rooms or large open office areas. A line voltage sensor provides one relay for a single-level control, while the 2-pole version provides a second relay for an additional level of control. For rooms with obstructions, these sensors are also offered with Dual Technology, which adds Microphonics™ detection to the Passive Infrared (PIR) detection.

Features (All)

- 30 sec to 30 min time delay
- Digital PIR detection - excellent RF immunity
- Push-button programmable
- Minimum On-Timer (LampMaximizer®)
- Convenient test mode
- Green LED Status Indicator

Features (Line voltage)

- Miswire protection, reversible line & load connections
- Self-contained relay(s)
- No minimum load

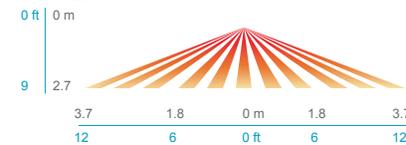
COVERAGE PATTERN

9

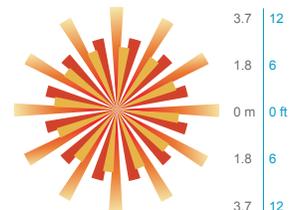
Small Motion / Standard Range 360° Lens

- Best choice for small motion (e.g., hand movements) detection
- Viewing angle of 56° in a 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage
- Passive Dual Technology (Microphonics™) provides overlapping detection of human activity over the complete PIR coverage area; advanced filtering is utilized to prevent non-occupant noises from keeping the lights on

SIDE VIEW



TOP VIEW

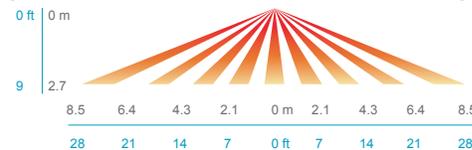


10

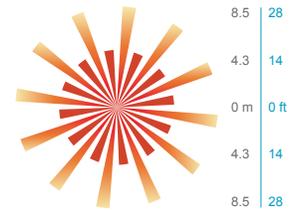
Large Motion / Extended Range 360° Lens

- Best choice for large motion (e.g., walking) detection
- Viewing angle of 67° in a 360° conical shaped pattern
- Provides 28 ft (8.53 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage
- Passive Dual Technology (Microphonics™) provides overlapping detection of human activity over the complete PIR coverage area; advanced filtering is utilized to prevent non-occupant noises from keeping the lights on

SIDE VIEW



TOP VIEW



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL - LOW VOLTAGE	ELECTRICAL - LINE VOLTAGE	ENVIRONMENTAL
SIZE: 4.40" square (11.18 cm) WEIGHT: 6 oz MOUNTING: 4 x 4 square junction box with or without two-gang mudring; directly to ceiling tile through 2.65 (6.7 cm) square opening COLOR: White	OPERATING VOLTAGE: 12-24 VAC/VDC RECOMMENDED POWER PACK: PP20 CURRENT DRAW: Standard, 4 mA w/ R option, 16 mA WIRING DIAGRAM(S): See Figure # 8 on Page 84	LOAD RATING: 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz WIRING DIAGRAM(S): See Figure # 9 & 10 on Page 84	OPERATING TEMP: 14° to 160° F (-10° to 71° C) STORAGE TEMP: -14° to 160° F (-26° to 71° C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT

KEY SPECS			
SERIES	COVERAGE PATTERN	DETECTION	POWER TYPE
RM 9	Small Motion/Standard Range 360° 9 Lens	PIR	Low 12-24
RM PDT 9	Small Motion/Standard Range 360° 9 Lens	Dual technology (PDT)	Low 12-24
RM 10	Large Motion/Extended Range 360° 10 Lens	PIR	Low 12-24
RM PDT 10	Large Motion/Extended Range 360° 10 Lens	Dual technology (PDT)	Low 12-24
RMR 9	Small Motion/Standard Range 360° 9 Lens	PIR	Line 120/277
RMR PDT 9	Small Motion/Standard Range 360° 9 Lens	Dual technology (PDT)	Line 120/277
RMR 10	Large Motion/Extended Range 360° 10 Lens	PIR	Line 120/277
RMR PDT 10	Large Motion/Extended Range 360° 10 Lens	Dual technology (PDT)	Line 120/277
RMR 9 2P	Small Motion/Standard Range 360° 9 Lens	PIR	Line 120/277
RMR PDT 9 2P	Small Motion/Standard Range 360° 9 Lens	Dual technology (PDT)	Line 120/277
RMR 10 2P	Large Motion/Extended Range 360° 10 Lens	PIR	Line 120/277
RMR PDT 10 2P	Large Motion/Extended Range 360° 10 Lens	Dual technology (PDT)	Line 120/277



OPTION INFORMATION

<p>R Low Voltage Relay</p> <ul style="list-style-type: none"> Enables sensors to interface with other systems (e.g. BMS, lighting panels) Provides dry contact closure via a SPDT, 1 amp, 30 volt relay (resistive loads only) 	<p>ADC Automatic Dimming Control Photocontrol</p> <ul style="list-style-type: none"> Photocontrol within sensor maintains total room light level by controlling levels of 0-10 VDC dimmable ballasts/drivers Photocontrol also has full on/off control during periods of occupancy Provides a second occupancy time-out period that enables lights to go a dim setting before turning off 	<p>DZ Dual Zone Photocontrol</p> <ul style="list-style-type: none"> Provides more advanced control than P option DUO operation: Determines necessary on/off combination of poles in inboard/outboard applications Percentage offset operation: Uses relative set-point for second pole in dual zone applications 	<p>D Occupancy Controlled Dimming</p> <ul style="list-style-type: none"> Provides dimming output to control 0-10 VDC dimmable ballasts/drivers Provides a second occupancy time-out period that enables lights to go to a dim setting before turning off Sinks <20mA; ~40 ballast/drivers Adjustable max/min dim setting
<p>P Photocontrol</p> <ul style="list-style-type: none"> Auto set-point calibration On/off mode: Full on/off control of lighting during periods of occupancy with adequate daylight Inhibit mode: Prevents lights from turning on if adequate daylight is available, but does not turn lights off 2-pole units operate in inhibit mode only 	<p>LT Low Temp/High Humidity</p> <ul style="list-style-type: none"> Sensor electronics are coated for corrosion resistance Operates down to -40° F/C (-4° F/-20° C for PDT) 		
		<p>347 347 Voltage</p> <ul style="list-style-type: none"> Allows sensor to be powered and switch 347 VAC 	

LOW VOLTAGE	Specifications subject to change.		Example: RM 9 R P LT		
Series	Relay		Dimming/Photocontrol Choose One Only		Temp/Humidity
RM 9	(blank)	None	(blank)	None	(blank) Standard
RM PDT 9	R	Low Voltage Relay	D	Occupancy Controlled High/Low Dimming	LT Low Temp/High Humidity
RM 10			P	Photocontrol	
RM PDT 10			ADC	Photocontrol with Dimming	

LINE VOLTAGE	Specifications subject to change.		Example: RMR 9 P 347 LT		
Series	Dimming/Photocontrol Choose One Only		Voltage		Temp/Humidity
RMR 9	(blank)	None	(blank)	120/277 VAC	(blank) Standard
RMR PDT 9	D	Occupancy Controlled High/Low Dimming	347	347 VAC	LT Low Temp/High Humidity
RMR 10	P	Photocontrol			
RMR PDT 10	ADC	Photocontrol with Dimming			

2-POLE, LINE VOLTAGE	Specifications subject to change.		Example: RMR 9 2P DZ LT		
Series	Dimming/Photocontrol Choose One Only		Voltage		Temp/Humidity
RMR 9 2P	(blank)	None	(blank)	120/277 VAC	(blank) Standard
RMR PDT 9 2P	P	Photocontrol (inhibit only)	347	347 VAC	LT Low Temp/High Humidity
RMR 10 2P	DZ	Dual Zone Photocontrol			
RMR PDT 10 2P					

PRODUCT INFORMATION

RECESSED MOUNT DAYLIGHT CONTROLS

Switching & Dimming Sensors



Overview

On/off Photocontrol and dimming sensors provide intelligent control of lighting for indoor daylight applications. Ideal for spaces with windows, such as vestibules, corridors, classrooms or offices, the sensors work by monitoring daylight conditions in a room, then controlling the lighting to ensure that adequate lighting levels are maintained.

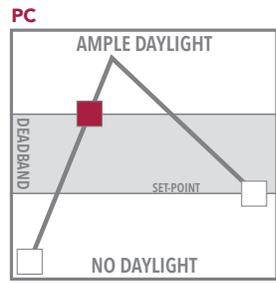
Low voltage sensors are powered with 12-24 VAC/VDC. On/off Photocontrol sensors operate with a power pack (Model # PP20), enabling complete 20 Amp circuits to be controlled. Dimming Photocontrol sensors are capable of controlling any 0-10 VDC dimmable ballast or driver. Line voltage versions are also available that integrate a line switching relay and/or power off the line.

Features

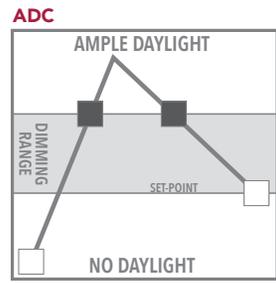
- Works as stand-alone unit or with occupancy sensors
- Auto set-point calibration
- Push-button programmable
- 100 hr. lamp burn-in timer
- Fully digital control
- Green LED status Indicator

SOLUTION TYPES

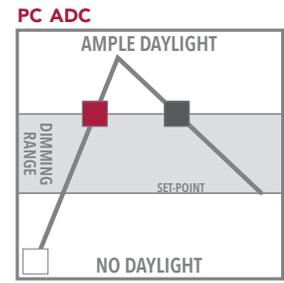
PC Automatic On/Off Switching



ADC Automatic Dimming Control



PC ADC Combination On/Off & Dimming Control



KEY □ LIGHTS FULL ON ■ LIGHTS OFF ■ LIGHTS FULL DIM

SPECIFICATIONS

PHYSICAL	ELECTRICAL - LOW VOLTAGE	ELECTRICAL - LINE VOLTAGE	ENVIRONMENTAL
SIZE: 4.40" square (11.18 cm) WEIGHT: 6 oz MOUNTING: 4 x 4 square junction box with or without two-gang mudring; directly to ceiling tile through 2.65 (6.7 cm) square opening COLOR: White	OPERATING VOLTAGE: 12-24 VAC/VDC RECOMMENDED POWER PACK: PP20 CURRENT DRAW: Standard, 4 mA DIMMING LOAD: Sinks up to 20 mA or 40 ballasts/drivers @ .5 mA each (0-10 VDC dimmable ballasts/drivers only) WIRING DIAGRAM(S): See Figure # 22 - 28 on Page 88 - 89	LOAD RATING: 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MOTOR LOAD: 1/4 HP DIMMING LOAD: Sinks up to 20 mA or 40 ballasts/drivers @ .5 mA each (0-10 VDC dimmable ballasts/drivers only) WIRING DIAGRAM(S): See Figure # 22 - 28 on Page 88 - 89	OPERATING TEMP: 14° to 160° F (-10° to 71° C) STORAGE TEMP: -14° to 160° F (-26° to 71° C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT

KEY SPECS			
SERIES	ENCLOSURE	CONTROL TYPE	POWER TYPE [VDC/VAC]
RM PC	Recessed mount	On/off	Low 12-24
RM ADC	Recessed mount	Dimming	Low 12-24
RM PC ADC	Recessed mount	On/off & dimming	Low 12-24
RMR PC	Recessed mount	On/off	Line 120/277
RMR ADC	Recessed mount	Dimming	Line 120/277
RMR PC ADC	Recessed mount	On/off & dimming	Line 120/277



OPTION INFORMATION

- DZ Dual Zone**
- Provides second output that can control an additional zone of lighting
- Stepped Dimming (Duo) Operation (PC Only)**
- Ideal for A/B (also called inboard/outboard) switching applications
 - Determines the necessary on/off combination of the two poles in order to maintain adequate lighting
- Percentage Offset Operation**
- Ideal for classrooms with individually controlled parallel rows of lights
 - PC sensors use a relative set-point for the second pole that is a percentage of the first pole's set-point
 - ADC sensors enable control of an additional 0-10 VDC dimmable ballast or driver at a selected level (voltage) higher than that of the primary zone

- 347 347 VAC**
- Allows sensor to be powered from and switch 347 VAC

- LT Low Temp/High Humidity**
- Sensor electronics are coated for corrosion resistance
 - Operates down to -40°F/C

LOW VOLTAGE **Example: RM PC DZ LT**

Series	Dual Zone	Temp/Humidity
RM PC	(blank) Single Zone	(blank) Standard
RM ADC	DZ Dual Zone	LT Low Temp/High Humidity
RM PC ADC		

LINE VOLTAGE **Example: RMR PC DZ LT**

Series	Dual Zone	Voltage	Temp/Humidity
RMR PC	(blank) None	(blank) 120/277 VAC	(blank) Standard
RMR ADC	DZ Dual zone ¹	347 347 VAC	LT Low Temp/High Humidity
RMR PC ADC			

Notes
1. RMR PC Only

PRODUCT INFORMATION

FIXTURE MOUNT Sensors



6 High Bay 360°

Overview

Fixture mount sensors provide passive infrared occupancy detection that overlap the areas lit by a luminaire. Fixture mount sensors are designed to mount directly to the end of a light fixture through an extended ½ inch chase nipple. Lens options include large motion extended range, small motion standard range, bi-directional for hallways and high bay. Low voltage sensors are used in conjunction with power packs, which contain a relay, and are ideal when multiple sensors are needed. Line voltage versions have an integrated relay making it an effective solution when controlling an entire circuit with a single sensor. Furthermore 2P (two pole) line voltage versions provide a second relay for an additional level of control. Options including PDT (Passive Dual Technology), integrated photocell, dimming control, low temp/humidity and 347 voltage are also available.

Features (All)

- 30 sec to 30 min time delay
- Digital PIR detection - excellent RF immunity
- Push-button programmable
- Minimum On-Timer (LampMaximizer®)
- Convenient test mode
- Green LED status Indicator

Features (Line voltage)

- Miswire protection, reversible line & load connections
- Self-contained relay(s)
- No minimum load

AVAILABLE LENSES



50 High Bay
Bi-Directional Aisleway



10 Large Motion /
Extended Range 360°



HMB 10 High Bay End-of-Aisle



9 Small Motion /
Standard Range 360°

ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL - LOW VOLTAGE	ELECTRICAL - LINE VOLTAGE	ENVIRONMENTAL
<p>SIZE: 3.63" H x 3.63" W x 1.50" D (9.22 cm x 9.22 cm x 3.81 cm)</p> <p>WEIGHT: 6 oz</p> <p>MOUNTING: .5" knockout</p> <p>COLOR: White</p>	<p>OPERATING VOLTAGE: 12-24 VAC/VDC</p> <p>RECOMMENDED POWER PACK: PP20</p> <p>CURRENT DRAW: Standard, 4 mA w/ R option, 16 mA</p> <p>WIRING DIAGRAM(S): See Figure # 11 on Page 85</p>	<p>LOAD RATING: 800 W @ 120 VAC 1000 W @ 208 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC 2160 W @ 480 VAC</p> <p>MOTOR LOAD: 1/4 HP</p> <p>FREQUENCY: 50/60 Hz</p> <p>WIRING DIAGRAM(S): See Figure # 12, 13 on Page 85</p>	<p>OPERATING TEMP: 14° to 160° F (-10° to 71° C)</p> <p>STORAGE TEMP: -14° to 160° F (-26° to 71° C)</p> <p>RELATIVE HUMIDITY: 20 to 90% non-condensing</p> <p>ROHS COMPLIANT</p>

OPTION INFORMATION

R Low Voltage Relay

- Enables sensors to interface with other systems (e.g. BMS, lighting panels)
- Provides dry contact closure via a SPDT, 1 amp, 30 volt relay (resistive loads only)

P Photocontrol

- Auto set-point calibration
- On/off mode: Full on/off control of lighting during periods of occupancy with adequate daylight
- Inhibit mode: Prevents lights from turning on if adequate daylight is available, but does not turn lights off
- 2-pole units operate in inhibit mode only

ADC Automatic Dimming Control
Photocontrol

- Photocontrol within sensor maintains total room light level by controlling levels of 0-10 VDC dimmable ballasts/drivers
- Photocontrol also has full on/off control during periods of occupancy
- Provides a second occupancy time-out period that enables lights to go a dim setting before turning off

LT Low Temp/High Humidity

- Sensor electronics are coated for corrosion resistance
- Operates down to -40° F/C (-4° F/-20° C for PDT)

DZ Dual Zone Photocontrol

- Provides more advanced control than P option
- DUO operation: Determines necessary on/off combination of poles in inboard/outboard applications
- Percentage offset operation: Uses relative set-point for second pole in dual zone applications

D Occupancy Controlled Dimming

- Provides dimming output to control 0-10 VDC dimmable ballasts/drivers
- Provides a second occupancy time-out period that enables lights to go to a dim setting before turning off
- Sinks <20mA; ~40 ballast/drivers
- Adjustable max/min dim setting

347 347 Voltage

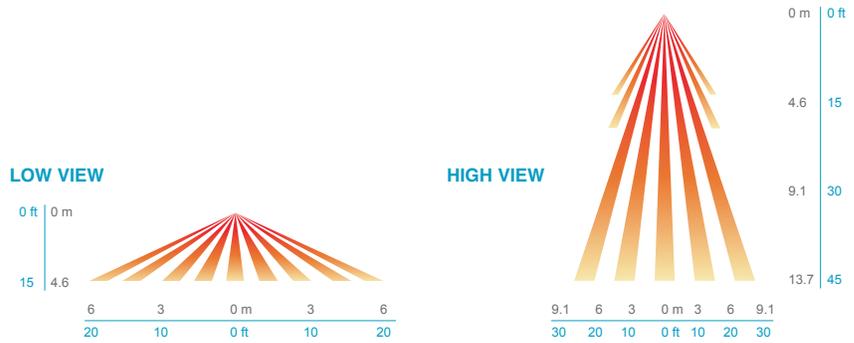
- Allows sensor to be powered and switch 347 VAC

COVERAGE PATTERN

6

High Bay 360° Lens

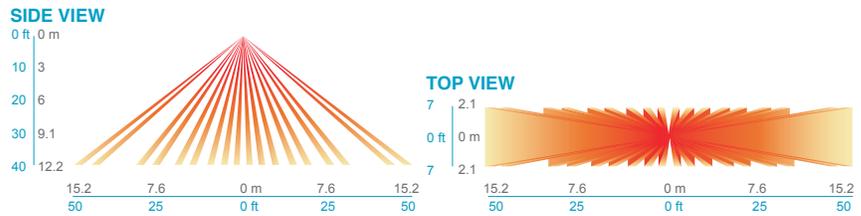
- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g., walking) up to a 35 ft (10.76 m) mounting height
- Excellent detection of extra large motion (e.g., forklifts) up to a 45 ft (13.72 m) mounting height



50

High Bay Bi-Directional Aisleway Lens

- Provides 50° bi-directional and 10° wide coverage pattern
- 1.2x mounting height equals approximate detection range in either direction
- Typical 40 ft (12.19 m) mounting height detects 50 ft (15.24 m) in either direction



10

Large Motion / Extended Range 360° Lens

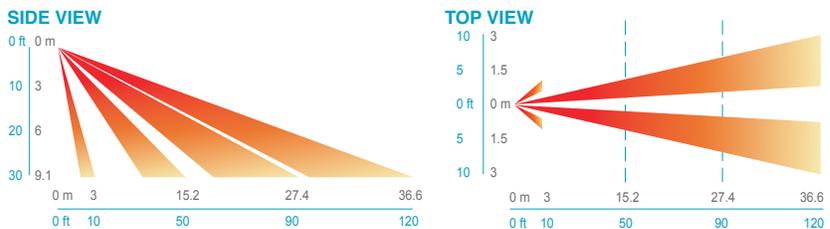
- Best choice for large motion (e.g., walking) detection
- Viewing angle of 67° in a 360° conical shaped pattern
- Provides 28 ft (8.53 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage



HMB 10

High Bay End-of-Aisle

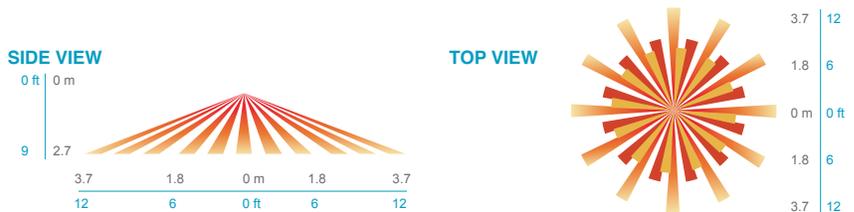
- Detects motion from the end of an aisle up to 110 ft (33.53 m) long
- Designed to mount 30 ft (9.14 m) high and 10 ft (3.05 m) back from end-of-aisle
- Sensors should always be applied in pairs facing each other from either end of an aisle



9

Small Motion / Standard Range 360° Lens

- Best choice for small motion (e.g., hand movements) detection
- Viewing angle of 56° in a 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage



PRODUCT INFORMATION

Fixture Mount Sensors

LOW VOLTAGE		Specifications subject to change.				Example: CMB 9 R P LT	
Series	Relay	Dimming/Photocontrol Choose One Only		Temp/Humidity			
CMB 9	(blank) None	(blank) None	(blank) None	(blank) Standard	(blank) Standard		
CMB PDT 9	R Low Voltage Relay	D Occupancy Controlled High/Low Dimming	D Occupancy Controlled High/Low Dimming	LT Low Temp/High Humidity	LT Low Temp/High Humidity		
CMB 10		P Photocontrol	P Photocontrol				
CMB PDT 10		ADC Photocontrol with Dimming	ADC Photocontrol with Dimming				

LOW VOLTAGE		Specifications subject to change.				Example: CMB 6 R P LT	
Series	Relay	Dimming ¹	Photocontrol ²	Temp/Humidity			
CMB 6	(blank) None	(blank) None	(blank) None	(blank) Standard	(blank) Standard		
CMB 50	R Low voltage relay	D Occupancy controlled high/low dimming	P Photocontrol	LT Low Temp/High Humidity	LT Low Temp/High Humidity		
HMB 10							

Notes
1. CMB 6 only
2. Not available for HMB 10

LINE VOLTAGE		Specifications subject to change.				Example: CMRB 6 LT	
Series	Photocontrol/Dimming (choose one only)		Voltage ³		Temp/Humidity		
CMRB 6	(blank) None	(blank) None	(blank) 120/277 VAC	(blank) Standard	(blank) Standard		
CMRB 6 208	D Occupancy controlled high/low dimming ¹	D Occupancy controlled high/low dimming ¹	347 347 VAC	LT Low Temp/High Humidity	LT Low Temp/High Humidity		
CMRB 6 480	P Switching Photocontrol ^{1,2}	P Switching Photocontrol ^{1,2}					
CMRB 50	ADC Photocontrol with Dimming ²	ADC Photocontrol with Dimming ²					
CMRB 50 208							
CMRB 50 480							
HMRB 10							
HMRB 10 208							
HMRB 10 480							

Notes
1. Only available for CMRB 6 series
2. Not available on HMRB 10 XX series
3. Not available with "208 or "480" series

LINE VOLTAGE		Specifications subject to change.				Example: CMRB 9 P 347 LT	
Series	Dimming/Photocontrol Choose One Only		Voltage		Temp/Humidity		
CMRB 9	(blank) None	(blank) None	(blank) 120/277 VAC	(blank) Standard	(blank) Standard		
CMRB PDT 9	D Occupancy Controlled High/Low Dimming	D Occupancy Controlled High/Low Dimming	347 347 VAC	LT Low Temp/High Humidity	LT Low Temp/High Humidity		
CMRB 10	P Photocontrol	P Photocontrol					
CMRB PDT 10	ADC Photocontrol with Dimming	ADC Photocontrol with Dimming					

2-POLE, LINE VOLTAGE		Specifications subject to change.				Example: CMRB 6 2P P LT	
Series	Photocontrol ¹		Voltage		Temp/Humidity		
CMRB 6 2P	(blank) None	(blank) None	(blank) 120/277 VAC	(blank) Standard	(blank) Standard		
CMRB 50 2P	P Photocontrol	P Photocontrol	347 ¹ 347 VAC	LT Low Temp/High Humidity	LT Low Temp/High Humidity		
HMRB 10 2P							

Notes
1. Not available with HMRB 10 2P series

2-POLE, LINE VOLTAGE		Specifications subject to change.				Example: CMRB 9 2P DZ LT	
Series	Dimming/Photocontrol Choose One Only		Voltage		Temp/Humidity		
CMRB 9 2P	(blank) None	(blank) None	(blank) 120/277 VAC	(blank) Standard	(blank) Standard		
CMRB PDT 9 2P	P Photocontrol (inhibit only)	P Photocontrol (inhibit only)	347 347 VAC	LT Low Temp/High Humidity	LT Low Temp/High Humidity		
CMRB 10 2P	DZ Dual Zone Photocontrol	DZ Dual Zone Photocontrol					
CMRB PDT 10 2P							



PRODUCT INFORMATION

FIXTURE MOUNT DAYLIGHT CONTROLS

Switching & Dimming Sensors



Overview

On/off Photocontrol and dimming sensors provide intelligent control of lighting for indoor daylight applications. Ideal for spaces with windows, such as vestibules, corridors, classrooms or offices. The sensors work by monitoring daylight conditions in a room, then controlling the lighting to ensure that adequate lighting levels are maintained.

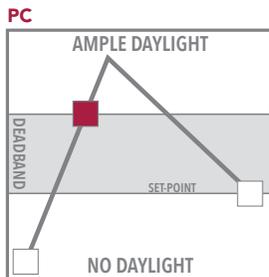
Low voltage sensors are powered with 12-24 VAC/VDC. On/off Photocontrol sensors operate with a power pack (Model # PP20), enabling complete 20 Amp circuits to be controlled. Dimming Photocontrol sensors are capable of controlling any 0-10 VDC dimmable ballast or driver. Line voltage versions are also available that integrate a line switching relay and/or power off the line.

Features

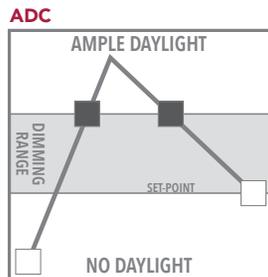
- Works as stand-alone unit or with occupancy sensors
- Auto set-point calibration
- Push-button programmable
- 100 hr. lamp burn-in timer
- Fully digital control
- Green LED status Indicator

SOLUTION TYPES

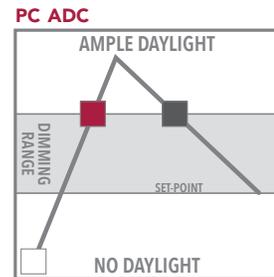
PC Automatic On/Off Switching



ADC Automatic Dimming Control



PC ADC Combination On/Off & Dimming Control



KEY □ LIGHTS FULL ON ■ LIGHTS OFF ■ LIGHTS FULL DIM

SPECIFICATIONS

PHYSICAL	ELECTRICAL - LOW VOLTAGE	ELECTRICAL - LINE VOLTAGE	ENVIRONMENTAL
SIZE: 3.63" H x 3.63" W x 1.50" D (9.22 cm x 9.22 cm x 3.81 cm) WEIGHT: 6 oz MOUNTING: .5" knockout COLOR: White	OPERATING VOLTAGE: 12-24 VAC/VDC RECOMMENDED POWER PACK: PP20 CURRENT DRAW: Standard, 4 mA DIMMING LOAD: Sinks up to 20 mA or 40 ballasts/ drivers @ .5 mA each (0-10 VDC dimmable ballasts/drivers only) WIRING DIAGRAM(S): See Figure # 22 - 28 on Page 88 - 89	LOAD RATING: 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MOTOR LOAD: 1/4 HP DIMMING LOAD: Sinks up to 20 mA or 40 ballasts/ drivers @ .5 mA each (0-10 VDC dimmable ballasts/drivers only) WIRING DIAGRAM(S): See Figure # 22 - 28 on Page 88 - 89	OPERATING TEMP: 14° to 160° F (-10° to 71° C) STORAGE TEMP: -14° to 160° F (-26° to 71° C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT

KEY SPECS			
SERIES	ENCLOSURE	CONTROL TYPE	POWER TYPE [VDC/VAC]
CMB PC	Fixture mount box	On/off	Low 12-24
CMB ADC	Fixture mount box	Dimming	Low 12-24
CMB PC ADC	Fixture mount box	On/off & dimming	Low 12-24
CMRB PC	Fixture mount box	On/off	Line 120/277
CMRB ADC	Fixture mount box	Dimming	Line 120/277
CMRB PC ADC	Fixture mount box	On/off & dimming	Line 120/277



OPTION INFORMATION

- DZ Dual Zone**
- Provides second output that can control an additional zone of lighting
- Stepped Dimming (Duo) Operation (PC Only)**
- Ideal for A/B (also called inboard/outboard) switching applications
 - Determines the necessary on/off combination of the two poles in order to maintain adequate lighting
- Percentage Offset Operation**
- Ideal for classrooms with individually controlled parallel rows of lights
 - PC sensors use a relative set-point for the second pole that is a percentage of the first pole's set-point
 - ADC sensors enable control of an additional 0-10 VDC dimmable ballast or driver at a selected level (voltage) higher than that of the primary zone

- 347 347 VAC**
- Allows sensor to be powered from and switch 347 VAC

- LT Low Temp/High Humidity**
- Sensor electronics are coated for corrosion resistance
 - Operates down to -40°F/C

LOW VOLTAGE **Example: CMB PC DZ LT**

Series	Dual Zone	Temp/Humidity
CMB PC	(blank) Single Zone	(blank) Standard
CMB ADC	DZ Dual Zone	LT Low Temp/High Humidity
CMB PC ADC		

LINE VOLTAGE **Example: CMRB PC DZ LT**

Series	Dual Zone	Voltage ¹	Temp/Humidity
CMRB PC	(blank) None	(blank) 120/277 VAC	(blank) Standard
CMRB ADC	DZ Dual zone ²	208 208/240 VAC ²	LT Low Temp/High Humidity
CMRB PC ADC		347 347 VAC	
		480 480 VAC ²	

- Notes**
- 480 and 208 option not available w/dual zone (DZ)
 - CMRB PC Only

PRODUCT INFORMATION

Fixture Mount Interchangeable Lens Sensors

FIXTURE MOUNT INTERCHANGEABLE LENS

Sensors



Overview

The LSXR Family of fixture mount occupancy sensors provides reliable and versatile solutions for commercial and industrial lighting control applications. All LSXR Family sensors utilize passive infrared (PIR) detection and feature interchangeable lenses, providing flexibility for multiple mounting height and coverage pattern requirements.

All LSXR Family sensors utilize digital Passive Infrared (PIR) detection and power from / switch line voltage. Available options include dual relays, HVOLT powering, and an integrated switching / dimming Photocontrol.

Features

- Four interchangeable lenses - High Bay 360° (6 Lens), High Bay Bi-Directional Aisleway (50 Lens), Large Motion / Extended Range 360° (10 Lens), Small Motion / Standard Range 360° (9 Lens)
- Integrated mounting bracket drops lens down 3" from chase nipple - no bracket accessory required
- Digital PIR detection - excellent RF immunity
- Single or dual relay versions - designed with robust protection from the harsh switching requirements of T5 fluorescent and LED loads
- Powers from single or two-phase line connections
- Miswire protection, reversible line & load connections
- Push-button programmable
- Convenient test mode
- Minimum on Timer (LampMaximizer®)

AVAILABLE LENSES



6 High Bay 360°



50 High Bay Bi-Directional Aisleway



10 Large Motion / Extended Range 360°



9 Small Motion / Standard Range 360°

ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE (w/ Mounting Flange): 3.75" H x 2.50" W x 4.00" D (9.5 cm x 6.4 cm x 10.2 cm) WEIGHT: 6 oz MOUNTING: 1/2 knockout (7/8" hole) on fixture MINIMUM LOAD: None COLOR: White FREQUENCY: 50/60 Hz	MAXIMUM LOAD/POLE (RELAY): 800 W @ 120 VAC 1000 W @ 208 VAC 1200 W @ 240/277 VAC 1500 W @ 347 VAC 2160 W @ 480 VAC MINIMUM LOAD: None MOTOR LOAD: 1/4 Hp FREQUENCY: 50/60 Hz DIMMING LOAD: Sinks < 20 mA (~ 40 LED driver/ballast @ 0.5 per) 0-10 VDC dimmable ballasts or LED drivers only WIRING DIAGRAM(S): See Figure # 18, 19, 20, 21 on Page 87	OPERATING TEMP: Standard: 14° to 122°F (-10° to 50°C) LT Option: -40° to 122°F (-40° to 50°C) RELATIVE HUMIDITY: Standard: 20 to 75% non-condensing LT Option: 20 to 90% non-condensing (electronics coated for corrosion resistance) ROHS COMPLIANT



AVAILABLE OPTIONS

HL High/Low Occupancy Operation

- Provides high/low control of a 0-10V dimmable fixture
- Lights are reduced to an energy saving minimum dim level after expiration of occupancy time delay
- If relay is wired, lights will switch off after a second time delay

2P AO 2P AOP Alternating Off Relays

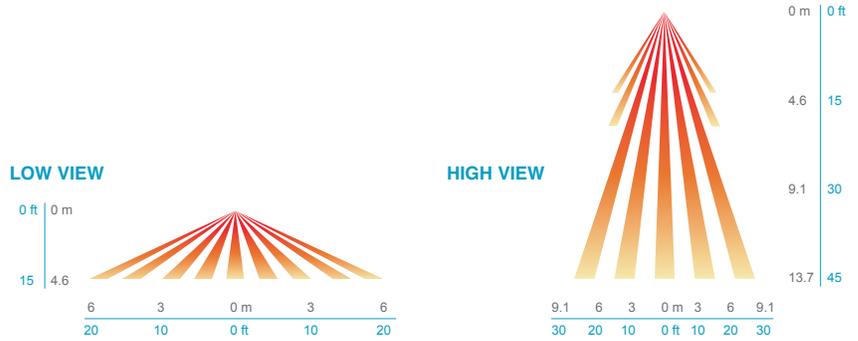
- Sequence of operation where both relays close during periods of occupancy, but only one opens during vacancy
- The relay left closed alternates in order to promote even lamp wear
- 2P AOP version also includes switching photocontrol

COVERAGE PATTERN

6

High Bay 360° Lens

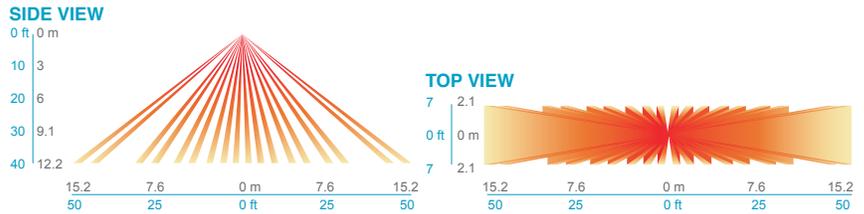
- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g., walking) up to a 35 ft (10.76 m) mounting height
- Excellent detection of extra large motion (e.g., forklifts) up to a 45 ft (13.72 m) mounting height



50

High Bay Bi-Directional Aisleway Lens

- Provides 50° bi-directional and 10° wide coverage pattern
- 1.2x mounting height equals approximate detection range in either direction
- Typical 40 ft (12.19 m) mounting height detects 50 ft (15.24 m) in either direction



10

Large Motion / Extended Range 360° Lens

- Best choice for large motion (e.g., walking) detection
- Viewing angle of 67° in a 360° conical shaped pattern
- Provides 28 ft (8.53 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage



9

Small Motion / Standard Range 360° Lens

- Best choice for small motion (e.g., hand movements) detection
- Viewing angle of 56° in a 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage



PRODUCT INFORMATION

Fixture Mount Interchangeable Lens Sensors: Single Relay

SINGLE RELAY		Specifications subject to change.				Example: LSXR 6 HL LT	
Series	Lens Option			Dimming/Photocontrol		Voltage	
LSXR Passive Infrared Indoor Occupancy Sensor	<u>Single Lens</u>			<u>Multi-Lens</u>		(blank) None	(blank) 120-277 VAC (MVOLT)
	(blank)	No Lens		610	High Bay 360° / Large Motion / Extended Range 360°	HL High/Low Occupancy Operation	HVOLT 347-480 VAC
	6	High Bay 360°		650	High Bay 360° / High Bay Bi-Directional Aisleway	P Photocontrol	
	50	High Bay Bi-Directional Aisleway			ADC Photocontrol with Dimming		
	10	Large Motion / Extended Range 360°		3PK	High Bay 360° / Small Motion / Standard Range 360° / High Bay Bi-Directional Aisleway	ANL Combination Dimming & Switching Photocontrol w/ High/Low Occupancy Operation	
9	Small Motion / Standard Range 360°		4PK	All Lenses			

Max Dim Level*	Min Dim Level*	Lead Length*	Temp/Humidity	Default Time Delay*	Pack Qty
(blank) 10 VDC	(blank) Min	(blank) 8"	(blank) None	(blank) 10 min (w/15 min minimum on time)	(blank) Single
9H 9 VDC	1V 1 VDC	42L 42"	LT Low Temp/ High Humidity	5M 5 min (LED only)	J100 100-Pack
8H 8 VDC	2V 2 VDC			15M 15 min	
7H 7 VDC	3V 3 VDC			20M 20 min	
	4V 4 VDC			30M 30 min	
	5V 5 VDC				
	6V 6 VDC				

*Option available in 100-Pack quantities only (add J100 option)

PRODUCT INFORMATION

Fixture Mount Interchangeable Lens Sensors: Dual Relay

DUAL RELAY		Specifications subject to change.				Example: LSXR 610 2P AO J100		
Series	Lens Option			2P	Operating Mode		Voltage	
LSXR Passive Infrared Indoor Occupancy Sensor	<u>Single Lens</u>			<u>Multi-Lens</u>		2P Dual Relay	(blank) None	(blank) 120/277 VAC
	(blank)	No Lens		610	High Bay 360° / Large Motion / Extended Range 360°	AO Alternating Off Relays (promotes even lamp wear)	347 347 VAC	
	6	High Bay 360°		650	High Bay 360° / High Bay Bi-Directional Aisleway	AOP Alternating Off Relays with Photocell		
	50	High Bay Bi-Directional Aisleway			3PK	High Bay 360° / Small Motion / Standard Range 360° / High Bay Bi-Directional Aisleway		P Photocontrol On/Off-both Poles (single set-point)
	10	Large Motion / Extended Range 360°				SZ Photocontrol On/Off (Pole 1 only)		
9	Small Motion / Standard Range 360°		4PK	All Lenses	DZ Photocontrol On/Off-both Poles (dual set-point)			

Lead Length*	Temp/Humidity	Default Time Delay*	Pack Qty
(blank) 8"	(blank) None	(blank) 10 min (w/15 min minimum on time)	(blank) Single
42L 42"	LT Low Temp/High Humidity	5M 5 min (LED only)	J100 100-Pack
		15M 15 min	
		20M 20 min	
		30M 30 min	

*Option available in 100-Pack quantities only (add J100 option)

PRODUCT INFORMATION

Fixture Mount Interchangeable Lens Sensors: Accessory Lenses

ACCESSORY LENSES		Specifications subject to change.		Example: LENS 6 J10	
Series	Len Type	Pack Quantity			
LENS	6	High Bay 360°		(blank)	Single
	50	High Bay Bi-Directional Aisleway		J10	10-pack
	10	Large Motion / Extended Range 360°		J100	100-pack
	9	Small Motion / Standard Range 360°			



PRODUCT INFORMATION

FIXTURE MOUNT INTERCHANGEABLE LENS DAYLIGHT CONTROL

Switching & Dimming Sensors



Overview

On/off photocontrol and dimming sensors provide intelligent control of lighting for indoor daylight applications ideal for spaces with windows, such as vestibules, corridors, classrooms or offices, the sensors work by monitoring daylight conditions in a room, then controlling the lighting to ensure that adequate lighting levels are maintained.

Line voltage sensors integrate a line switching relay and/or power off the line. Dimming photocontrol sensors are capable of controlling any 0-10 VDC dimmable ballast or driver.

Features

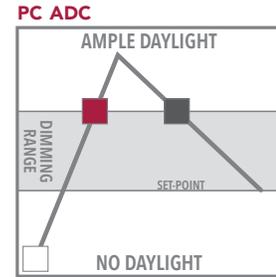
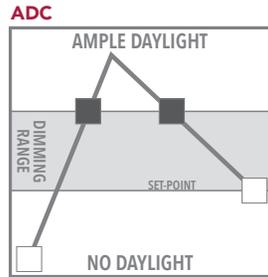
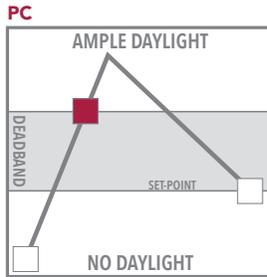
- Integrated mounting bracket drops lens down 3" from chase nipple - no bracket accessory required
- Single or dual relay versions - designed with robust protection from the harsh switching requirements of T5 fluorescent and LED loads
- Powers from single or two-phase line connections
- Miswire protection, reversible line & load connections
- Photocontrol and 0-10 VDC dimming options
- Push-button programmable
- Convenient test mode
- Minimum on Timer (LampMaximizer®)

SOLUTION TYPES

PC Automatic On/Off Switching

ADC Automatic Dimming Control

PC ADC Combination On/Off & Dimming Control



ADDITIONAL INFORMATION For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
<p>SIZE (w/ Mounting Flange): 3.75" H x 2.50" W x 4.00" D (9.5 cm x 6.4 cm x 10.2 cm)</p> <p>WEIGHT: 6 oz</p> <p>MOUNTING: 1/2 knockout (7/8" hole) on fixture</p> <p>MINIMUM LOAD: None</p> <p>COLOR: White</p> <p>FREQUENCY: 50/60 Hz</p>	<p>MAXIMUM LOAD/POLE (RELAY): 800 W @ 120 VAC 1000 W @ 208 VAC 1200 W @ 240/277 VAC 1500 W @ 347 VAC 2160 W @ 480 VAC</p> <p>MINIMUM LOAD: None</p> <p>MOTOR LOAD: 1/4 Hp</p> <p>FREQUENCY: 50/60 Hz</p> <p>DIMMING LOAD: Sinks < 20 mA (~ 40 LED driver/ballast @ 0.5 per) 0-10 VDC dimmable ballasts or LED drivers only</p> <p>WIRING DIAGRAM(S): See Figure # 18, 19, 20, 21 on Page 87</p>	<p>OPERATING TEMP: Standard: 14° to 122°F (-10° to 50°C) LT Option: -40° to 122°F (-40° to 50°C)</p> <p>RELATIVE HUMIDITY: Standard: 20 to 75% non-condensing LT Option: 20 to 90% non-condensing (electronics coated for corrosion resistance)</p> <p>ROHS COMPLIANT</p>



AVAILABLE OPTIONS**

LT **Low Temp/High Humidity**

- Sensor electronics are coated for corrosion resistance
- Operates down to -40° F/20°C (-4° F/20° C for PDT)

HVOLT **347 - 480 VAC**

- Allows sensor to be powered from and switch 347-480 VAC

**For options and detailed information on wiring and sequence of operation visit <http://bit.ly/1KNm1Lg>

SINGLE RELAY Specifications subject to change.

Series	Voltage
LSXR PC	(blank) 120-277 VAC (MVOLT)
LSXR ADC	HVOLT 347-480 VAC
LSXR PCADC	

Example: change to: LSXR PC HVOLT 9H J100

Max Dim Level*		Min Dim Level*		Lead Length*		Temp/Humidity		Pack Qty	
(blank)	10 VDC	(blank)	0VDC	(blank)	8"	(blank)	None	(blank)	Single
9H	9 VDC	1V	1 VDC	42L	42"	LT	Low Temp/ High Humidity	J100	100-Pack
8H	8 VDC	2V	2 VDC						
7H	7 VDC	3V	3 VDC						
		4V	4 VDC						
		5V	5 VDC						
		6V	6 VDC						

*Option available in 100-Pack quantities only (add J100 option)

WIDE VIEW & HALLWAY

Sensors

Overview (Line voltage)

Line voltage wide view and hallway sensors are ideal for retrofit applications. Line voltage sensors are powered by and directly switch line voltage; therefore, no power packs are needed. Additionally, these sensors do not require a neutral, making wiring directly off local switches a convenient option. Together, these features make them perfect for retrofit applications, where running new wiring is difficult.

For rooms with obstructions, wide view sensors are available with dual technology, which adds Microphonics™ detection to the Passive Infrared (PIR) detection. For rooms that need independent control of two circuits, 2-pole units are available.

Features (Line voltage)

- Passive Dual Technology (PDT) utilizes PIR/Microphonics™ detection
- Miswire protection, reversible line and load connections
- 30 sec to 30 min time delay
- Digital PIR detection - excellent RF immunity
- Self-contained relay(s)
- No power pack(s) needed
- No minimum load
- Green LED status indicator

Overview (Low voltage)

Low voltage wide view sensors are designed to mount in a corner and detect small motions up to 40 ft (12.19m) away and larger motions up to 70 ft (21.34 m) away. This makes them ideal for 30 x 30 ft (9.14 x 9.14 m) classrooms or corridors up to 70 ft (12.19 m) long. Low voltage hallway units detect occupants entering a hallway up to 130 ft (39.64 m) away.

The enclosure's convenient tilting feature enables the sensor to be mounted at any height from 8 to 10 ft (2.44 to 3.05 m). When corner or wall mounting is not possible, the WV-BR ceiling bracket accessory can be used to mount the sensor to the ceiling.

These sensors can be used in combination with other low voltage sensors to cover oddly shaped rooms. For rooms with obstructions, wide view sensors are available with dual technology, which adds Microphonics™ detection to the Passive Infrared (PIR) detection.

Features (Low voltage)

- Passive Dual Technology (PDT) utilizes PIR/Microphonics™ detection
- 30 sec to 30 min time delay
- Digital PIR detection - excellent RF immunity
- Push-button programmable
- Minimum On Timer (LampMaximizer®)
- Convenient test mode
- Green LED status Indicator

ENCLOSURES



SPECIFICATIONS		
PHYSICAL	ELECTRICAL - LOW VOLTAGE	ENVIRONMENTAL
SIZE: 3.00" H x 3.60" W x 1.75" D (7.62 cm x 9.14 cm x 4.45 cm) WEIGHT: 4 oz MOUNTING: Directly to corner or to ceiling using WV-BR bracket COLOR: White	OPERATING VOLTAGE: 12-24 VAC/VDC RECOMMENDED POWER PACK: PP20 CURRENT DRAW: Standard, 4 mA WIRING DIAGRAM(S): See Figure # 14 on Page 86	OPERATING TEMP: 14° to 160° F (-10° to 71° C) STORAGE TEMP: -14° to 160° F (-26° to 71° C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT

SPECIFICATIONS		
PHYSICAL	ELECTRICAL - LINE VOLTAGE	ENVIRONMENTAL
SIZE: 4.96" H x 3.10" W x 1.70" D (12.60 cm x 7.87 cm x 4.32 cm) WEIGHT: 7 oz MOUNTING: Single gang handy or wiremold corner box #V5719 COLOR: White, Ivory	LOAD RATING: 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz WIRING DIAGRAM(S): See Figure # 15-17 on Page 86	OPERATING TEMP: 14° to 85° F (-10° to 29° C) STORAGE TEMP: -14° to 85° F (-26° to 29° C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT

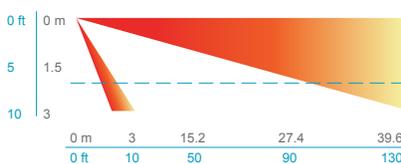
COVERAGE PATTERNS

13

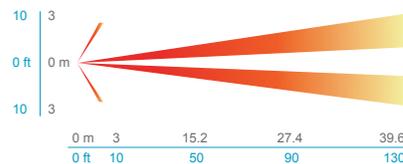
End-of-Hallway Lens

- Large motion (e.g., walking) detection up to 130 ft (39.62 m)
- Designed for 7 ft (2.13 m) high mounting at end of hall

SIDE VIEW



TOP VIEW

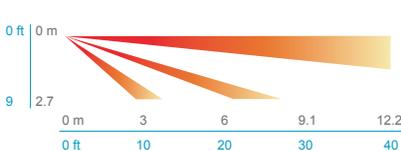


16

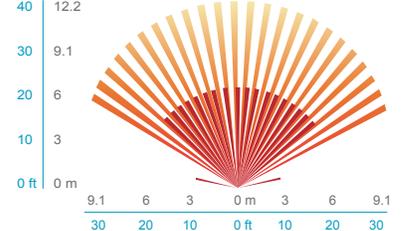
Wide View 120° Lens

- Small motion (e.g., hand movements) detection up to 40 ft (12.19 m)
- Large motion (e.g., walking) detection up to 70 ft (21.34 m)
- Designed for 8 to 10 ft (2.44 to 3.05 m) high mounting in room corner

SIDE VIEW



TOP VIEW



PRODUCT INFORMATION

Wide View & Hallway Sensor: Low Voltage

Electrical Specs
Operating Voltage
 12-24 VDC/VAC
Recommended Power Supply
PP20
Current Draw 4 mA
 w/ R option 16 mA
Wiring Diagram(s)
 See Figure # 14, 15, 16, 17 on Page 86

KEY SPECS			
SERIES	ENCLOSURE	DETECTION	POWER TYPE [VDC/VAC]
WV 16	120° Wide view	PIR	12-24
WV PDT 16	120° Wide view	Dual Technology	12-24
HW13	Hallway	PIR	12-24

OPTION INFORMATION

- R Low Voltage Relay**
- Enables low voltage sensors to interface with other systems (e.g. BMS, lighting panels)
 - Provides dry contact closure via a SPDT, 1 amp, 30 volt relay (resistive loads only)
- LT Low Temp/High Humidity**
- Sensor electronics are coated for corrosion resistance
 - Operates down to -40° F/20°C (-4° F/20° C for PDT)

- P Photocontrol**
- Auto set-point calibration
 - On/off mode: Full on/off control of lighting during periods of occupancy with adequate daylight
 - Inhibit mode: Prevents lights from turning on if adequate daylight is available, but does not turn lights off

- KIT Ceiling Mount Bracket**
- Includes ceiling mountable bracket, an alternative to wall mounting
 - Bracket (shown on right) also sold separately (model # WV BR)
- 

LOW VOLTAGE	Specifications subject to change.						Example: WV PDT 16 R P LT
Series	Relay		Photocontrol		Temp/Humidity		Bracket Kit
WV 16	(blank)	None	(blank)	None	(blank)	Standard	(blank) Sensor only
WV PDT 16	R	Low Voltage Relay	P	Photocontrol	LT	Low Temp/High Humidity	KIT Sensor and WV BR bracket
HW13							

PRODUCT INFORMATION

Wide View & Hallway Sensor: Line Voltage

Electrical Specs
Load Rating
 13 Amps @ 120-347 VAC
Motor Load 1/4 Hp
Frequency 50/60 Hz
Wiring Diagram(s)
 See Figure # 14, 15, 16, 17 on Page 86

KEY SPECS			
SERIES	ENCLOSURE	DETECTION	POWER TYPE (VAC)
WVR 16	120° Wide view	PIR	120/277
WVR PDT 16	120° Wide view	Dual Technology	120/277
HWR13	Hallway	PIR	120/277



OPTION INFORMATION

- 2P Dual Relay (Available for WVR Models Only)**
- Provides a second line voltage switching relay
- SN No Switch (Available for HWR13 Only)**
- Sensor available without switch

- 347 347 VAC**
- Allows sensor to be powered from and switch 347 VAC

- LT Low Temp/High Humidity**
- Sensor is corrosion-resistant to moisture
 - Operates down to -40° F/C (-4° F/20° C for PDT)

WIDE VIEW, LINE VOLTAGE	Specifications subject to change.						Example: WVR 16 WH LT
Series	Poles		Voltage		Color		Temp/Humidity
WVR 16	(blank)	1-pole	(blank)	120/277 VAC	WH	White	(blank) Standard
WVR PDT 16	2P	2-pole	347	347 VAC	IV	Ivory	LT ¹ Low Temp/High Humidity

Notes
 1. LT option not available for WVR PDT 16

HALLWAY, LINE VOLTAGE	Specifications subject to change.						Example: HWR13 347 WH
Series	Switch		Voltage		Color		
HWR13	(blank)	w/ Switch	(blank)	120/277 VAC	WH	White	
	SN	No Switch	347	347 VAC	IV	Ivory	

OUTDOOR

Pole/Fixture Mount Motion Sensors

Overview

The SBOR xx ODP and SBO xx ODP Series sensors provide both motion and daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire. Designed to mount directly through a 1/2" knockout (7/8" hole) in a light fixture or pole, the SBOR xx ODP can both directly switch and dim its connected lighting load. The low voltage SBO xx ODP version requires a power pack to switch. Both versions are tuned for walking size motion while preventing false tripping from the environment. All units also have an integrated Photocontrol that switches lights off during daytime periods when there is sufficient daylight.

For non-dimming outdoor motion sensor applications the SBOR xx OEX and SBO xx OEX Series sensors are recommended.

Features (All)

- Miswire protection, reversible line & load connections
- Digital PIR detection - excellent RF immunity
- Self-contained relay for switching
- Gasketed for outdoor operation
- Enables fixture or pole mounting
- Multiple sensor body and bracket configurations available
- Adjustable time delays
- Programming button accessible without opening sensor or removing gaskets

Features (-ODP versions only)

- Photocontrol controls relay (on/off)
- Motion sensor controls dimming output (0-10 VDC)
- Compatible w/ 0-10 VDC dimmable ballasts and LED drivers
- Adjustable max/min dim levels and ramp rates

ENCLOSURES



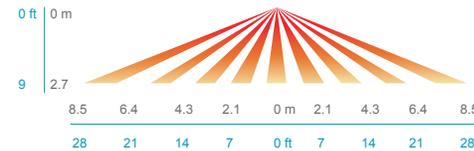
APPLICATION/COVERAGE

10

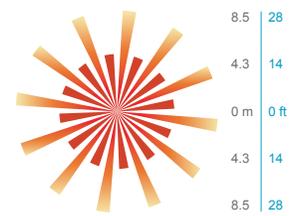
Large Motion / Extended Range 360° Lens

- Best choice for large motion (e.g., walking) detection
- Viewing angle of 67° in a 360° conical shaped pattern
- Provides 28 ft (8.53 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 7 to 15 ft (2.13 to 4.57 m) mounting heights provide 16 to 36 ft (4.88 to 10.97 m) radial coverage

SIDE VIEW



TOP VIEW

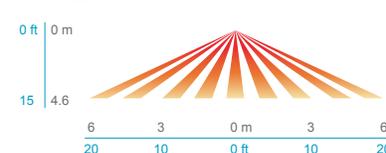


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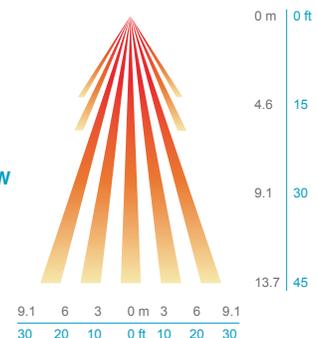
High Bay 360° Lens

- Best choice for 15 to 45 ft (4.57 to 13.72 m) mounting heights
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Excellent detection of large motion (e.g., walking) up to a 35 ft (10.76 m) mounting height
- Excellent detection of extra large motion (e.g., forklifts) up to a 45 ft (13.72 m) mounting height

LOW VIEW



HIGH VIEW



SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 3.35" H or 4.88" H x 4.40" W x 4.00" D (8.51 cm or 12.40 cm x 11.18 cm x 10.16 cm) WEIGHT: 9 oz MOUNTING: 1/2" knockout (7/8" hole) COLOR: White, Black, or Dark Bronze	MAXIMUM SWITCHING LOAD: 800 W @ 120 VAC 1000 W @ 208 VAC 1200 W @ 240 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC 2160 W @ 480 VAC MINIMUM LOAD: None MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz DIMMING LOAD: Sinks < 20 mA (0-10 VDC LED Drivers / Ballasts) WIRING DIAGRAM(S): See Figure # 11,12, 13 on Page 85	OPERATING TEMP: -40° to 160° F (-40° to 71° C) IP66 RATED ROHS COMPLIANT



LINE VOLTAGE		Specifications subject to change.		Example: SBOR 10 ODP EB3 BK 3V								
Series	Lens/Mounting Height	Dimming/Photocontrol		Voltage		Body / Bracket		Color		Min Dim Level ¹		
SBOR	10 Low Mount (8-15 ft)	OEX	None	(blank)	120/277 VAC (MVOLT)	(blank)	Short extension, low back	WH	White	0V	0VDC	
		OEXD	Motion Controlled High/Low Dimming	HVOLT	347-480 VAC	EB1	Short extension, high back	BK	Black	1V	1VDC	
	6 High Mount (15-30 ft)	OEX P	Photocontrol (On/Off)				EB2	Long extension, low back	BZ	Dark Bronze	2V	2VDC
		ODP	Combination Motion Controlled Dimming and Photocontrol				EB3	Long extension, high back			3V	3VDC
										4V	4VDC	
										5V	5VDC	

Notes
 1. Required for D or ODP options

SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 3.35" H or 4.88" H x 4.40" W x 4.00" D (8.51 cm or 12.40 cm x 11.18 cm x 10.16 cm) WEIGHT: 9 oz MOUNTING: 1/2" knockout (7/8" hole) COLOR: White, Black, or Dark Bronze	OPERATING VOLTAGE: 12-24 VAC/VDC CURRENT DRAW: 4 mA RECOMMENDED POWER PACK: PP20 / MP20 / MP5 480 DIMMING LOAD: Sinks < 20 mA (0-10 VDC LED Drivers / Ballasts) WIRING DIAGRAM(S): See Figure # 11,12, 13 on Page 85	OPERATING TEMP: -40° to 160° F (-40° to 71° C) IP66 RATED ROHS COMPLIANT



LOW VOLTAGE		Specifications subject to change.		Example: SBO 10 ODP BK 3V							
Series	Lens/Mounting Height	Dimming/Photocontrol		Body / Bracket		Color		Min Dim Level ¹			
SBO	10 Low Mount (8-15 ft)	OEX	None	(blank)	Short extension, low back	WH	White	0V	0VDC		
		OEXD	Motion Controlled High/Low Dimming	EB1	Short extension, high back	BK	Black	1V	1VDC		
	6 High Mount (15-30 ft)	OEX P	Photocontrol (On/Off)				BZ	Dark Bronze	2V	2VDC	
		ODP	Combination Motion Controlled Dimming and Photocontrol				EB2	Long extension, low back	3V	3VDC	
						EB3	Long extension, high back	4V	4VDC		
								5V	5VDC		

Notes
 1. Required for D or ODP options

POWER PACKS

& Secondary Packs

Overview

Power packs are the heart of the low voltage sensor system. A power pack may transform Class I high voltage (120-277 VAC or 347 VAC) to Class II 15 VDC for powering remote sensors. A power pack also switches the lighting load on and off using its internal relay. Class II wire leads connect to 18 AWG or smaller low voltage cable running to the sensors, making installation easy and clean. Power packs also have an elongated mounting nipple that allows them to be mounted either directly through a ½ inch knockout into a junction box, or inside an adjacent box for meeting specific local code requirements in ceiling plenums.

There are several different types of power packs, each with a unique combination of features. The most versatile power pack is the **PP20**, which utilizes a patented relay contact protection and can power up to 14 sensors. Multi-circuit control can be handled by multiple **PP20s**, 2-pole power packs (**PP20 2P**), or combination power pack and secondary pack (**SP20**) configurations.

ENCLOSURES



SINGLE POLE UNITS

SIZE	H: 3.00" (7.62 cm)
	W: 2.25" (5.72 cm)
	D: 1.88" (4.78 cm)
WEIGHT	6 oz
MOUNTING	.5" knockout
COLOR	Black

Plenum Rated



2-POLE UNITS

SIZE	H: 4.13" (10.49 cm)
	W: 3.00" (7.62 cm)
	D: 1.88" (4.78 cm)
WEIGHT	6 oz
MOUNTING	.5" knockout
COLOR	Black

Plenum Rated

POWERING CAPACITY

A power pack's transformer can supply up to 150 mA of power @15 VDC. Each relay requires 40 mA during the On state. Low voltage remote sensors typically require 3 mA when detecting occupants, and 0.15 mA when in standby. Therefore, each transformer can handle up to 3 relays (including the relay(s) inside the power pack). For example, one **PP20** can power its relay (40 mA) and 110 mA of external devices. Because of the ultra low current design of the sensors, up to 14 or more sensors can be connected to a single power pack. If multiple power packs are used together, an additional 110 mA is available.

POWER SPECS

SERIES	SENSORS	SENSORS w/ R OPTION ¹
[1] PP20 (or MP20)	14	8
[1] PP20 2P	7	6
[1] PP20 w/SP20 (or MP20 w/ MSP20)	7	6
[1] PP20 2P w/ SP20	5	5

Notes

Table information reflects usage with 120/277 or 347 VAC power

1. The "R" option for sensors adds an isolated low voltage auxiliary relay. Only one sensor with this option is typically needed per room

SECONDARY PACK VS. POWER PACK

A secondary pack (also called an auxiliary relay) contains the same switching relay as a normal power pack, though it does not contain the transformer. Secondary packs can be used in applications where power is supplied from another power pack. Secondary packs are available with (**SP20** version) and without (**MSP20** version) relay contact protection.

A power supply contains the same transformer as a power pack, though it does not contain a relay. Power supplies are ideal for supplying power to devices, such as the **CM ADC**, which does not need to switch line voltage.

OPTION INFORMATION

347 347 VAC

- Allows power pack to be powered from and/or switch 347 VAC

LT Low Temp/High Humidity

- Power Pack electronics are coated for corrosion resistance
- Operates down to -40°F/C

Electrical Specs

Wiring Diagram(s)

See Figure # 29, 30, 31, 32, 33, 34, on Page 90-91

KEY SPECS					
SERIES	RELAY CONTACT PROTECTION	TRANSFORMER	# OF POLES (RELAYS)	SWITCHING LOAD	RELAY TYPE
PP20	Yes	Yes	1	20A / 1 HP	Electrically Held
PP20 2P	Yes	Yes	2	20A / 1 HP	Electrically Held
SP20	Yes	No	1	20A / 1 HP	Electrically Held
PP 2PAR	Yes	Yes	2	20A / 1 HP	Alternating Electrically Held
MP20	No	Yes	1	20A / 1 HP	Electrically Held
MSP20	No	No	1	20A / 1 HP	Electrically Held
PP20 SH	Yes	Yes	1	20A / 1 HP	Electrically Held
PP 2PM	Yes	Yes	2	20A / 1 HP	Momentary
MP5 480	No	Yes	2	5A / 0.25HP	Electrically Held



ORDERING INFORMATION

Specifications subject to change.

Example: PP20 347 LT

Series	Voltage ¹	Temp/Humidity
PP20	(blank) 120/277 VAC	(blank) Standard
PP20 2P	347 347 VAC	LT Low Temp/High Humidity
SP20		
MP20		
MSP20		
PP20 SH		
PP 2PM		
PP 2PAR		
MP5 480		

Notes

1. 347 option only available on PP20, SP20, and MP20

MICRO ENCLOSURE

Indoor



Overview

The Sensor Switch MSD 7 is a passive infrared (PIR) occupancy sensor designed to be easily embedded into luminaires. This "micro" sensor directly wires to 0-10 VDC dimmable LED drivers and fluorescent ballasts, providing occupancy based high/low dimming control. The MSD 7 provides excellent line of sight 360° PIR detection of both small motion and walking motion making it ideal for small rooms or offices without obstructions or areas with primarily walking motion (e.g. corridors, library stacks). For outdoor applications, the MSOD 7 ODP sensor provides both Motion and Daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire.

High/low occupancy sensor operation

The sensor indicates occupancy when changes in the infrared energy within its field-of-view are detected. Once occupancy is detected, the 0-10 VDC output will ramp up to its full bright setting. An internal time delay, factory set at 10 minutes, keeps the sensor in the occupied state (full bright) during brief periods of inactivity. The timer is adjustable, and is reset every time occupancy is re-detected. After the occupancy time delay expires, the sensor will dim the lights down to the user selected minimum dim level where it will stay until occupancy is re-detected.

Automatic dimming Photocontrol (optional)

During periods of occupancy but no daylight, the sensor will raise the dim level to its full bright setting (default 10 VDC). As daylight increases and begins to contribute to the overall light level of the room, the sensor starts dimming the ballast/driver proportionally. At the point when sufficient daylight is present to maintain the set-point without any contribution from the lights, the sensor will hold the ballast/driver at its minimum dim level setting. When daylight levels fall below the set-point again, the sensor will start increasing the brightness of the ballast/driver in order to raise the overall light level. Finally, at the point when all daylight contribution is gone, the ballast/driver will again be at its full bright level (default 10 VDC).

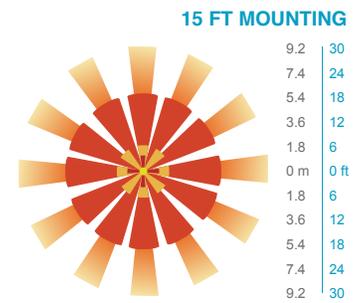
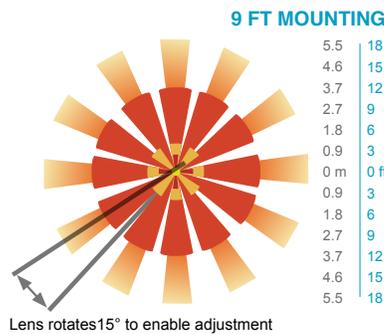
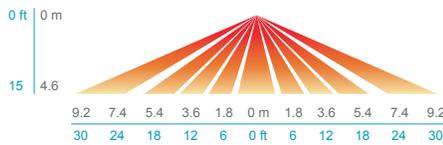
Light level set-point

The dimming Photocontrol functions by comparing the amount of daylight available with a defined acceptable lighting level called the set-point. The sensor can find its optimum set-point via the Automatic Set-Point Programming mode. In this mode, the sensor takes light readings at full bright and full dim in order to determine how much artificial light it is controlling. It then sets the minimum light level to be equal to this amount. It is assumed that the space is adequately lit by design, however, if this is not the case the set-point may be easily adjusted to the occupant's preferences. All modes and settings are entered digitally via a push button sequence. Once programmed, the exact value of the set-point (in foot candles) can be read out from the sensor via a series of LED flashes.

COVERAGE PATTERNS

Micro Enclosure (Indoor)

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m).
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m).
- At the 7.5 ft (2.29 m) hanging height of a typical pendant or suspended mount fixture the sensor provides 10 ft (3.05 m) radial detection of small motion.
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor.



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

PHYSICAL	SPECIFICATIONS		ENVIRONMENTAL
	ELECTRICAL		
SIZE: 1.34"H x 2.60"W x 1.18"D (3.40 cm x 6.65 cm x 2.99 cm) SENSOR WEIGHT: 3 oz SENSOR MOUNTING: Required Hole Size 1.125" Material Thickness 0.25" max	OPERATING VOLTAGE: 12 - 24 VDC CURRENT DRAW: Standard, 4 mA DIMMING LOAD: Sinks < 20 mA; ~40 ballasts / LED drivers (0-10 VDC) WIRING DIAGRAM(S): See Figure # 41 on Page 93	OPERATING TEMP: 14° to 160°F (-10° to 71°C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT	

ORDERING INFORMATION

Specifications subject to change.

Example: MSD 7 WH 0V

Series	Automatic Dimming Control	Min Dim Level*
MSD 7 Indoor Micro Sensor	(Blank) None	0V 0VDC 3V 3VDC
	ADC Integrated Dimming Photocontrol	1V 1VDC 4V 4VDC
		2V 2VDC 5V 5VDC

*Level after occupancy time delay expires

Overview

The MSOD 7 ODP Series sensor provides both Motion and Daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The unit's integrated Photocontrol enables additional energy savings during daytime periods when there is sufficient daylight. The MSD 7 sensor is recommended for indoor embedded applications.



MICRO ENCLOSURE

Outdoor

ADDITIONAL INFORMATION

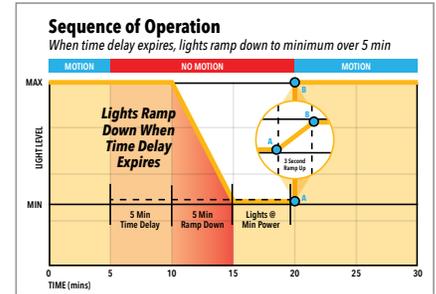
For additional product information, visit www.acuitycontrols.com.

Sequence Of Operation - Motion

For outdoor applications, where safety is of primary concern, the MSOD 7 ODP Series sensor is factory set to start dimming the lights once the motion time delay expires. Set to 5 min by default, this time delay is followed by a 5 min ramp down period where the lights slowly drop to the minimum dim level. Utilizing a long ramp down rate eliminates noticeable drops in light level. If motion is detected at any time during the ramp down period or when at the minimum dim level, the sensor will quickly ramp the lights back up to maximum level (default 100%) over a 3 sec (default) period. This ramp up period is intended to quickly return the lighting to full bright without distracting occupants with a sudden jump in the space's light level. The time delays, ramp rates, and max/min dim levels are user adjustable via the accessible push-button.

Sequence Of Operation - Daylight

To prevent lights from day-burning, the MSOD 7 ODP Series sensor will dim lighting completely to a ~0 VDC control level during periods of sufficient daylight. Ideally the MSOD 7 ODP is used with an LED driver that interprets this ~0 VDC control level as an off or sleep mode signal. Providing this type of Photocontrol control eliminates the need for astronomical or time clocks. Additionally, the sensor's closed loop Photocontrol adjusts its calibration after every cycle to accommodate visual changes to the space in which they are installed (for example different color cars in a parking garage reflecting light differently). The Photocontrol operation can also be configured to just dim lights to the specified minimum dim level (i.e. the level used after motion time delay expires) instead of to 0 VDC. The default setpoint of the Photocontrol is set to 200fc so that slight light level changes will not effect operation.



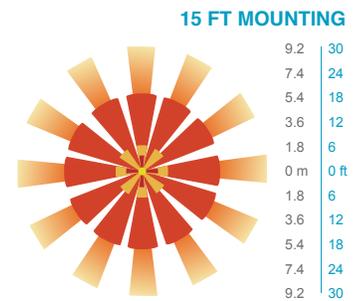
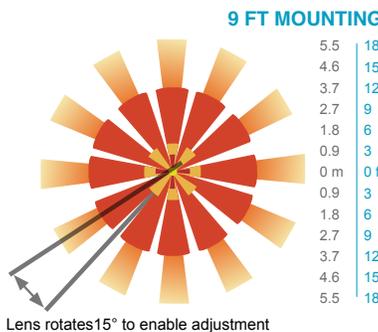
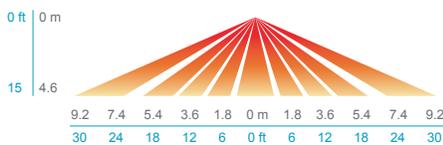
COVERAGE PATTERNS

Micro Enclosure (Outdoor)

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m).
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m).

- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m).

- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor.



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

PHYSICAL		ELECTRICAL		ENVIRONMENTAL	
SIZE: 1.34"H x 2.60"W x 1.18"D (3.40 cm x 6.65 cm x 2.99 cm) SENSOR WEIGHT: 3 oz SENSOR MOUNTING: Required Hole Size 1.125" Material Thickness 0.25" max		OPERATING VOLTAGE: 12 - 24 VDC CURRENT DRAW: Standard, 4 mA DIMMING LOAD: Sinks < 20 mA; 0-10 VDC LED Drivers / Ballasts WIRING DIAGRAM(S): See Figure # 41 on Page 93		OPERATING TEMP: -40° to 160° F (-40° to 71° C) RELATIVE HUMIDITY: 20 to 90% non-condensing IP65 RATED: When embedded in wet location luminaire ROHS COMPLIANT	

ORDERING INFORMATION

Specifications subject to change.

Example: MSOD 7 ODP BK 2V

Series	Color	Min Dim Level*			
MSOD 7 ODP Outdoor Micro Sensor	WH White	0V	0 VDC	3V	3 VDC
	BK Black	1V	1 VDC	4V	4 VDC
		2V	2 VDC	5V	5 VDC

*Level after motion time delay expires

SNAP-FIT

360° Sensor



Overview

The Snap-Fit sensor is a compact line voltage sensor that snaps directly into a small cavity in a fixture. The sensor utilizes Passive Infrared (PIR) detection to detect motion from occupants within its 360° coverage pattern that overlaps that of most HID, T-5, or T-8 fixtures used in warehouse applications.

Features

- Convenient Snap-in Mounting
- 360° Coverage Pattern
- Self-Contained Relay - No Power Pack Required
- No Minimum Load
- User Adjustable Time Delay
- Push-Button Programmable
- Interchangeable Line & Load Wires - Impossible to Wire Backwards
- 100 hr Lamp Burn-in Timer
- Green LED Status Indicator

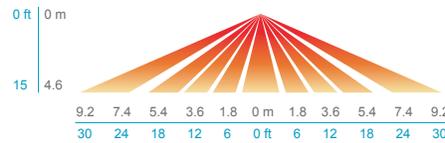
COVERAGE PATTERNS

7

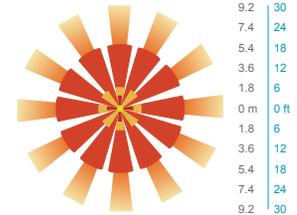
Mini-Low Bay 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m)
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than walking directly at sensor

SIDE VIEW



TOP VIEW

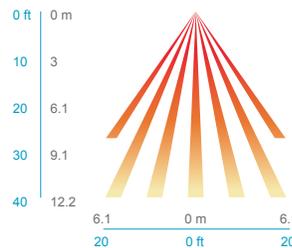


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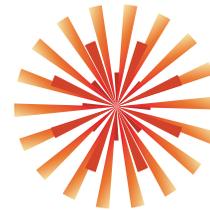
Universal 360° Lens

- Provides excellent detection of large motion (e.g., walking) when mounted between 15 to 40 ft (4.57 to 12.19 m)
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Recommended for fixtures that have a 1:1 spacing to mounting height ratio or less (e.g., fixtures 30' on center or less @ a 30' mounting height).

SIDE VIEW



TOP VIEW



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.25" H x 1.38" W x 0.82" D (5.72 cm x 3.51 cm x 2.08 cm) WEIGHT: 4 oz MOUNTING: Snaps into 2 3/16" H x 1 5/16" W x 1" D cavity in fixture	MAX LOAD: 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz Timers are 1.2x for 50 Hz WIRING DIAGRAM(S): See Figure # 39 on Page 93	OPERATING TEMP: 14° to 160° F (-10° to 71° C) STORAGE TEMP: -14° to 160° F (-26° to 71° C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT



ORDERING INFORMATION

Specifications subject to change.

Example: SFR 7 347 LT

Series	Voltage	Temp/Humidity
SFR 7 Snap-Fit Mini-Low Bay	(blank) 120/277 VAC	(blank) Standard
SFR 30 Snap-Fit Universal	347 347 VAC	LT Low Temp/High Humidity

Overview

The SFD 30 Universal 360° Snap Fit sensor is a compact low voltage sensor that snaps directly into a small cavity in a fixture. This sensor directly wires to 0-10 VDC dimmable LED drivers and fluorescent ballasts, providing occupancy based high/low dimming control. The SFD 30 provides excellent line of sight 360° PIR detection of large motion making it ideal for small rooms or offices without obstructions or areas with primarily walking motion (e.g. corridors, library stacks). For outdoor applications, the SFOD 30 ODP sensor provides both Motion and Daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire.

The SFD 7 Low Bay Snap Fit sensor is a compact low voltage sensor that snaps directly into a small cavity in a fixture. This sensor directly wires to 0-10 VDC dimmable LED drivers and fluorescent ballasts, providing occupancy based high/low dimming control. For motion detection, the sensors utilize 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. For outdoor applications, the SFOD 7 ODP sensor provides both Motion and Daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire.

Features

- Digital PIR Detection - Excellent RF Immunity
- 0-10 VDC Control Output
- Snap-in Style Embedded Mounting
- Compatible w/ 0-10 VDC Dimmable Ballasts and LED Drivers
- Adjustable Time Delays
- Programming Button Accessible w/o Opening Sensor
- Adjustable Time Delay, Max/Min Dim Levels, and Ramp Rates
- No Field Calibration or Sensitivity Adjustments Required
- Non-Volatile Settings Memory
- Convenient Test Mode
- Green LED Status Indicator

SNAP-FIT
Indoor Low Bay & Universal 360°
Dimming Sensors



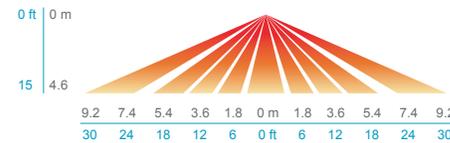
COVERAGE PATTERNS

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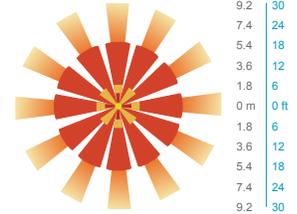
Mini-Low Bay 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m)
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than walking directly at sensor

SIDE VIEW



TOP VIEW

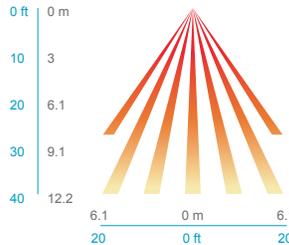


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Universal 360° Lens

- Provides excellent detection of large motion (e.g., walking) when mounted between 15 to 40 ft (4.57 to 12.19 m)
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Recommended for fixtures that have a 1:1 spacing to mounting height ratio or less (e.g., fixtures 30' on center or less @ a 30' mounting height).

SIDE VIEW



TOP VIEW



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.25" H x 1.38" W x 0.82" D (5.72 cm x 3.51 cm x 2.08 cm) WEIGHT: 4 oz MOUNTING: Snaps into 2 3/16" H x 1 5/16" W x 1" D cavity in fixture	OPERATING VOLTAGE: 12 - 24 VDC CURRENT DRAW: Standard, 4 mA DIMMING LOAD: Sinks < 20 mA; ~40 ballasts / LED drivers (0-10 VDC) WIRING DIAGRAM(S): See Figure # 40 on Page 93	OPERATING TEMP: 14° to 160° F (-10° to 71° C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT

ORDERING INFORMATION

Specifications subject to change.

Example: SFD 30 ADC WH 1V

Series	Automatic Dimming Control	Color	Minimum Dim Level ¹
SFD 7 Dimming Snap-Fit Mini-Low Bay	(blank) None	WH White	0V ~0 VDC 3V 3 VDC
SFD 30 Dimming Snap-Fit Universal	ADC Integrated Dimming Photocontrol		1V 1 VDC 4V 4 VDC
			2V 2 VDC 5V 5 VDC

Notes

1. Level after occupancy time delay expires

SNAP-FIT

360° Outdoor/Wet Location Sensor



Overview

The SFOD xx ODP sensors provide both Motion and Daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire. It can both dim and turn on/off its connected lighting. For motion detection, the sensors utilize Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The SFOD xx ODP's integrated Photocontrol enables additional energy savings during daytime periods when there is sufficient daylight.

Features

- Digital PIR Detection - Excellent RF Immunity
- Integrated Photocontrol
- 0-10 VDC Output for Dimming
- Gasketed Sensor for Outdoor Operation
- Snap-in Style Embedded Mounting
- Compatible w/ 0-10 VDC Dimmable Ballasts and LED Drivers
- Adjustable Time Delays, Max/Min Dim Levels, and Ramp Rates
- Programming Button Accessible w/o Opening Sensor or Removing Gasketing for Outdoor/Wet locations
- No Field Calibration or Sensitivity Adjustments Required
- Non-Volatile Settings Memory
- Convenient Test Mode
- Green LED Status Indicator

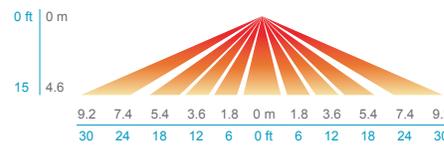
COVERAGE PATTERNS

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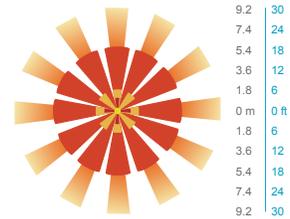
Mini-Low Bay 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m)
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than walking directly at sensor

SIDE VIEW



TOP VIEW

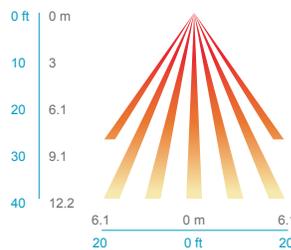


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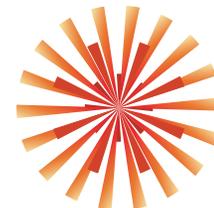
Universal 360° Lens

- Provides excellent detection of large motion (e.g., walking) when mounted between 15 to 40 ft (4.57 to 12.19 m)
- 15 to 20 ft (4.57 to 6.10 m) radial coverage overlaps area lit by a typical high bay fixture
- Recommended for fixtures that have a 1:1 spacing to mounting height ratio or less (e.g., fixtures 30' on center or less @ a 30' mounting height).

SIDE VIEW



TOP VIEW



ADDITIONAL INFORMATION

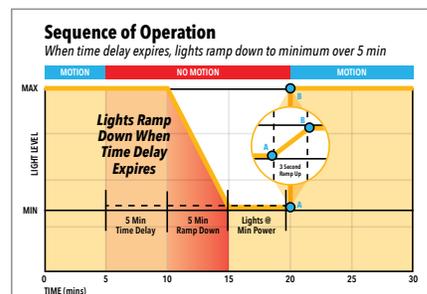
For additional product information, visit www.acuitycontrols.com.

Sequence Of Operation - Motion

For outdoor applications, where safety is of primary concern, the SFOD xx ODP Series sensor is factory set to start dimming the lights once the motion time delay expires. Set to 5 min by default, this time delay is followed by a 5 min ramp down period where the lights slowly drop to the minimum dim level. Utilizing a long ramp down rate eliminates noticeable drops in light level. If motion is detected at any time during the ramp down period or when at the minimum dim level, the sensor will quickly ramp the lights back up to maximum level (default 100%) over a 3 sec (default) period. This ramp up period is intended to quickly return the lighting to full bright without distracting occupants with a sudden jump in the space's light level. The time delays, ramp rates, and max/min dim levels are user adjustable via the accessible push-button.

Sequence Of Operation - Daylight

To prevent lights from day-burning, the SFOD xx ODP Series sensor will dim lighting completely to a ~0 VDC control level during periods of sufficient daylight. Ideally the SFOD xx ODP is used with an LED driver that interprets this ~0 VDC control level as an off or sleep mode signal. Providing this type of Photocontrol control eliminates the need for astronomical or time clocks. Additionally, the sensor's closed loop Photocontrol adjusts its calibration after every cycle to accommodate visual changes to the space in which they are installed (for example different color cars in a parking garage reflecting light differently). The Photocontrol operation can also be configured to just dim lights to the specified minimum dim level (i.e. the level used after motion time delay expires) instead of to 0 VDC. The default setpoint of the Photocontrol is set to 200 fc so that slight light level changes will not effect operation.



ADDITIONAL INFORMATION For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.25" H x 1.38" W x 0.82" D (5.715 cm x 3.51 cm x 2.08 cm) WEIGHT: 4 oz. MOUNTING: Snaps into 2 3/16" H x 1 5/16" W x 1" D cavity in fixture	OPERATING VOLTAGE: 12 VDC CURRENT DRAW: Standard, 4 mA DIMMING LOAD: Sinks < 20 mA; 0-10 VDC LED Drivers / Ballasts WIRING DIAGRAM(S): See Figure # 40 on Page 93	OPERATING TEMP: -40° to 160° F (-40° to 71° C) IP65 RATED: When embedded in wet location luminaire ROHS COMPLIANT

ORDERING INFORMATION Specifications subject to change.

Example: SFOD 7 ODP BK 1V

Series		Color	Min Dim Level ¹
SFOD 7 ODP	Outdoor Dimming Snap-Fit Mini-Low Bay	WH White	0V 0VDC
SFOD 30 ODP	Outdoor Dimming Snap-Fit Universal	BK Black	1V 1VDC
			2V 2VDC
			3V 3VDC
			4V 4VDC
			5V 5VDC

Notes

1. Level after occupancy time delay expires

SNAP-FIT

Low Voltage Daylight Sensor



Overview

The SFD ADC Series Automatic Dimming Control Photocontrol sensor provides continuous dimming control of 0-10 VDC dimmable ballasts or LED drivers for daylight harvesting applications. Ideal for spaces with windows like classrooms, vestibules, corridors, offices, or bathrooms; the SFD ADC works to maintain a constant overall room lighting level by controlling the connected 0-10 VDC dimmable ballast / LED driver(s) to increase or decrease their fixtures' light output level accordingly. The SFD ADC snap fit sensor is designed to be easily embedded into luminaires. The SFD 7 sensor is recommended for indoor motion control. For outdoor applications, the SFOD 7 ODP sensor provides both Motion and Daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire.

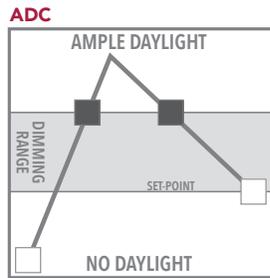
Features

- Automatically Dims 0-10 VDC Ballasts/Drivers as Daylight Changes
- Auto Set-Point Calibration Mode
- Digital Set-Point Control
- Adjustable High & Low Trim
- Push-Button Programmable
- 100 hr Lamp Burn-in Timer
- Green LED Status Indicator

SOLUTION TYPES

ADC Automatic Dimming Control

KEY LIGHTS FULL ON LIGHTS OFF LIGHTS FULL DIM



ADDITIONAL INFORMATION For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: 2.25" H x 1.38" W x 0.82" D (5.715 cm x 3.51 cm x 2.08 cm) WEIGHT: 4 oz MOUNTING: Snaps into 2 3/16" H x 1 5/16" W x 1" D cavity in fixture	OPERATING VOLTAGE: 12 VDC CURRENT DRAW: Standard, 4 mA DIMMING LOAD: Sinks < 20 mA; 0-10 VDC LED Drivers / Ballasts WIRING DIAGRAM(S): See Figure # 40 on Page 93	OPERATING TEMP: -40° to 160° F (-40° to 71° C) RELATIVE HUMIDITY: 20 TO 75% Non-Condensing ROHS COMPLIANT

ORDERING INFORMATION Specifications subject to change.

Example: SFD ADC WH 3V

Series	Min Dim Level
SFD ADC WH Daylight Dimming Snap-Fit	0V 0VDC
	1V 1VDC
	2V 2VDC
	3V 3VDC
	4V 4VDC
	5V 5VDC

Overview

The Small Box (SB) Series utilizes an enclosure that can be internally mounted in lighting fixtures. SB series sensors accommodate several lens types, can utilize Passive Infrared (PIR) or Dual Technology (PDT) detection, and can be low or line voltage (Single or 2-Pole).

Features

- Digital PIR Detection - Excellent RF Immunity
- User Adjustable Time Delays
- Push-Button Programmable
- Convenient Test Mode
- 100 hr Lamp Burn-in Timer
- Green LED Status Indicator

LampMaximizer® Technology

- Protects Lamp Life while Maximizing Energy Savings
- Minimum On Timer (15 min default)
- Occupancy Time Delay (10 min default)
- LampMaximizer+ Mode - Optimizes Lamp Life & Energy Savings (disabled by default)
- Switch Counter (in 1000's)
- Total Lamp On Time (in khrs)

EMBEDDED
Small Box Sensors



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL - LOW VOLTAGE	ELECTRICAL - LINE VOLTAGE	ENVIRONMENTAL
SIZE: (w/ mounting flange) 3.40" H x 3.40" W x 1.40" D (8.64 cm x 8.64 cm x 3.56 cm) WEIGHT: 6 oz MOUNTING: 2.65" square opening in fixture (minimum depth 1.50")	OPERATING VOLTAGE: 12-24 VAC/VDC RECOMMENDED POWER PACK: PP20 CURRENT DRAW: Standard, 4 mA w/ R option, 16 mA DIMMING LOAD: Sinks < 20mA; ~40 Ballasts @ .5mA each WIRING DIAGRAM(S): See Figure # 8 on Page 84 (without relay option)	MAX LOAD / POLE: 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC 5 Amps @ 208/240 VAC 5 Amps @ 480 VAC MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz DIMMING LOAD: Sinks < 20mA; ~40 Ballasts @ .5 mA each WIRING DIAGRAM(S): See Figure # 9 on Page 84 & # 42 on Page 93	OPERATING TEMP: 14° to 160° F (-10° to 71° C) STORAGE TEMP: -14° to 160° F (-26° to 71° C) RELATIVE HUMIDITY: 20 to 90% non-condensing ROHS COMPLIANT



KEY SPECS

SERIES	LENS TYPE	DETECTION	POWER TYPE	OPTIONS
SB 9	STANDARD RANGE 360°	PIR	12-24 VDC/VAC	R, D, P, ADC, LT
SB PDT 9	STANDARD RANGE 360°	PDT	12-24 VDC/VAC	R, D, P, ADC, LT
SBR 9	STANDARD RANGE 360°	PIR	120/277 VAC	D, P, ADC, 347, LT
SBR PDT 9	STANDARD RANGE 360°	PDT	120/277 VAC	D, P, ADC, 347, LT
SBR 9 2P	STANDARD RANGE 360°	PIR	120/277 VAC / Pole	P, DZ, 347, LT
SBR PDT 9 2P*	STANDARD RANGE 360°	PDT	120/277 VAC / Pole	P, DZ, 347, LT
SB 10	EXTENDED RANGE 360°	PIR	12-24 VDC/VAC	R, D, P, ADC, LT
SB PDT 10	EXTENDED RANGE 360°	PDT	12-24 VDC/VAC	R, D, P, ADC, LT
SBR 10	EXTENDED RANGE 360°	PIR	120/277 VAC	D, P, ADC, 347, LT
SBR PDT 10	EXTENDED RANGE 360°	PDT	120/277 VAC	D, P, ADC, 347, LT
SBR 10 2P*	EXTENDED RANGE 360°	PIR	120/277 VAC / Pole	P, DZ, 347, LT
SBR PDT 10 2P*	EXTENDED RANGE 360°	PDT	120/277 VAC / Pole	P, DZ, 347, LT
SB 6	HIGH BAY 360°	PIR	12-24 VDC/VAC	R, P, D, LT
SBR 6	HIGH BAY 360°	PIR	120/277 VAC	D, P, 347, LT
SBR 6 2P*	HIGH BAY 360°	PIR	120/277 VAC / Pole	P, 347, LT
SB 50	HIGH BAY AISLEWAY	PIR	12-24 VDC/VAC	R, D, LT
SBR 50	HIGH BAY AISLEWAY	PIR	120/277 VAC	D, 347, LT
SBR 50 2P*	HIGH BAY AISLEWAY	PIR	120/277 VAC / Pole	347, LT

* LampMaximizer+ features not available

Note: For detailed option descriptions see page corresponding to Recessed Mount (RM) version of each SB Series sensor

ORDERING INFORMATION

Specifications subject to change.

Example: SB 10 D LT

Series

See Above Key Specs

Options

See Above Key Specs

EMBEDDED

Outdoor Small Box Photocontrol Sensors



Overview

The SBGR PC Series of on/off outdoor rated Photocontrol sensors provides intelligent control of lighting for daylight harvesting applications. Designed to recess mount into a 2.65" (6.73 cm) square opening in a fixture, the sensors work by monitoring daylight conditions, then controlling connected lighting so as to insure that adequate lighting levels are maintained. The SBGR PC provides on/off style Photocontrol control; turning off the lights when sufficient daylight is present and turning them on when additional lighting is necessary. The SBGR PC Series sensors are line powered and can switch loads directly without the need for a power pack.

Features

- Auto Set-Point Calibration Mode
- Compatible w/ LEDs, Electronic & Magnetic Ballasts, CFLs, & Incandescents
- Self-Contained Relay(s), No Power Pack Needed
- Gasketed for use in Wet Location Luminaire
- Digital Set-Point Control
- Interchangeable Hot & Load Wires, Impossible to Wire in Reverse
- Push-Button Programmable
- Adjustable Transition Delays
- 100 hr Lamp Burn-in Timer
- Green LED Status Indicator

OPTION INFORMATION

DZ

Dual Zone

- Provide second output that can control an additional zone of lighting

Stepped Dimming (Duo) Operation (PC Only)

- Ideal for A/B (also called inboard/outboard) switching applications
- Determines the necessary on/off combination of the two poles in order to maintain adequate lighting

Percentage Offset Operation

- Ideal for classrooms with individually controlled parallel rows of lights
- **PC** sensors use a relative set-point for the second pole that is a percentage of the first pole's set-point

HVOLT

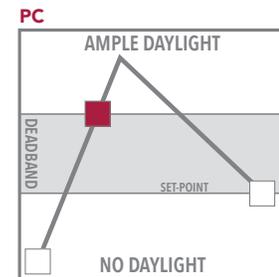
347 - 480 VAC

- Allows sensor to be powered from and switch 347-480 VAC

SOLUTION TYPES

PC

Automatic On/Off Switching



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: (w/ MOUNTING FLANGE) 3.40" H x 3.40" W x 1.40" D (8.64 cm x 8.64 cm x 3.56 cm) WEIGHT: 6 oz MOUNTING: 2.65" (6.73 cm) square opening in fixture (minimum depth 1.50" (3.8 cm))	MAXIMUM LOAD: 800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MINIMUM LOAD: None MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz DIMMING LOAD: Sinks < 20mA; ~40 Ballasts @ .5 mA each WIRING DIAGRAM(S): See Figure # 39 on Page 93	OPERATING TEMP: 14° to 160° F (-10° to 71° C) IP65 RATED: When embedded in wet location luminaire ROHS COMPLIANT



ORDERING INFORMATION

Specifications subject to change.

Example: SBGR PC DZ WH

Series	Dual Zone ¹	Voltage	Color
SBGR PC Embedded Small Box Photocontrol	(blank) Single Zone DZ Dual Zone	(blank) 120/277 VAC HVOLT 347 - 480 VAC	WH White BK Black

Notes

1. Not available with HVOLT

Overview

The Small Box (SB) Series utilizes an enclosure that can be internally mounted in lighting fixtures. SB series sensors accommodate several lens types, can utilize Passive Infrared (PIR) or Dual Technology (PDT) detection, and can be low or line voltage (Single or 2-Pole).

Features

- Digital PIR Detection - Excellent RF Immunity
- User Adjustable Time Delays
- Push-Button Programmable
- Convenient Test Mode
- 100 hr Lamp Burn-in Timer
- Green LED Status Indicator

LampMaximizer® Technology

- Protects Lamp Life while Maximizing Energy Savings
- Minimum On Timer (15 min default)
- Occupancy Time Delay (10 min default)
- LampMaximizer+ Mode - Optimizes Lamp Life & Energy Savings (disabled by default)
- Switch Counter (in 1000's)
- Total Lamp On Time (in khrs)
- Not available with OEX option

EMBEDDED
Small Box Sensors



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL - LINE VOLTAGE - SINGLE POLE	ELECTRICAL - LINE VOLTAGE - 2 POLE	ENVIRONMENTAL
<p>SIZE: (w/ mounting flange) 3.40" H x 3.40" W x 1.40" D (8.64 cm x 8.64 cm x 3.56 cm)</p> <p>WEIGHT: 6 oz</p> <p>MOUNTING: 2.65" square opening in fixture minimum depth 1.50"(3.8 cm)</p>	<p>MAX LOAD / POLE:</p> <p>800 W @ 120 VAC 1000 W @ 208 VAC 1200 W @ 240 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC 2160 W @ 480 VAC</p> <p>MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz DIMMING LOAD: Sinks < 20mA; (0-10 VDC LED Drivers / Ballasts)</p> <p>WIRING DIAGRAM(S): See Figure # 9 on Page 84</p>	<p>MAX LOAD / POLE: (1 Phase Only)</p> <p>800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC</p> <p>MOTOR LOAD: 1/4 HP FREQUENCY: 50/60 Hz</p> <p>WIRING DIAGRAM(S): See Figure # 42 on Page 93</p>	<p>OPERATING TEMP: 14° to 160° F (-10° to 71° C)</p> <p>RELATIVE HUMIDITY: 20 to 90% non-condensing</p> <p>IP65 RATED: When embedded in wet location luminaire</p> <p>ROHS COMPLIANT</p>



KEY SPECS

SERIES	COVERAGE PATTERN	DETECTION	POWER TYPE
SBGR 9	STANDARD RANGE 360°	PIR	120/277 VAC
SBGR 9 2P	STANDARD RANGE 360°	PIR	120/277 VAC / Pole
SBGR PDT 9	STANDARD RANGE 360°	PDT	120/277 VAC
SBGR 10	EXTENDED RANGE 360°	PIR	120/277 VAC
SBGR 10 2P	EXTENDED RANGE 360°	PIR	120/277 VAC / Pole
SBGR PDT 10	EXTENDED RANGE 360°	PDT	120/277 VAC
SBGR 6	HIGH BAY 360°	PIR	120/277 VAC
SBGR 6 2P	HIGH BAY 360°	PIR	120/277 VAC / Pole

ORDERING INFORMATION

Specifications subject to change.

Example: SBGR 9 OEX WH

Series	Detection Type		Dimming/Photocontrol		Voltage		Color		Minimum Dim Level ³	
SBGR 6	(Blank)	Indoor PIR	(Blank)	None	(Blank)	120/277 VAC	WH	White	0V	0VDC
SBGR 9	OEX ¹	Outdoor PIR	D	Occupancy Controlled High/Low Dimming	HVOLT	347-480 VAC	BK	Black	1V	1VDC
SBGR PDT 9			P	Photocontrol					2V	2VDC
SBGR 10			ADC ²	Photocontrol with Dimming					3V	3VDC
SBGR PDT 10									4V	4VDC
									5V	5VDC

Notes

1. Not available with Passive Dual Technology (PDT)
2. Not available with Outdoor PIR (OEX)
3. Required for D option

ORDERING INFORMATION

Specifications subject to change.

Example: SBGR 6 2P OEX WH

Series	Detection Type		Dimming/Photocontrol		Voltage		Color	
SBGR 6 2P	(Blank)	Indoor PIR	(Blank)	None	(Blank)	120/277 VAC	WH	White
SBGR 9 2P	OEX	Outdoor PIR	P	Photocontrol	347	347 VAC	BK	Black
SBGR 10 2P			DZ	Dual Zone Photocontrol				

EMBEDDED

Small Box Sensors



Overview

The SBG xx Series outdoor rated sensor provides 360° Passive Infrared motion detection. The SBG xx sensor recess mounts into a 2.65" (6.7 cm) square opening in a wet location luminaire. The unit's optional integrated Photocontrol enables additional energy savings during daytime periods when there is sufficient daylight.

Features

- Digital PIR Detection - Excellent RF Immunity
- Gasketed for use in a Wet Location Luminaire
- Push-Button Programmable
- Non-Volatile Settings Memory
- Adjustable Time Delays
- Convenient Test Mode
- Optional 0-10 VDC Dimming Output
- Green LED Status Indicator

LampMaximizer® Technology

- Protects Lamp Life while Maximizing Energy Savings
- Minimum On Timer (15 min default)
- Occ. Time Delay (10 min default)
- LampMaximizer+ Mode - Optimizes Lamp Life & Energy Savings (disabled by default)
- Switch Counter (in 1000's)
- Total Lamp On Time (in khrs)
- Not available with OEX option

OPTION INFORMATION

OEX

Outdoor PIR

- Adjusts PIR for outdoor motion detection
- Eliminates false ons caused by environmental factors (e.g. wind)

D

Occupancy Controlled Dimming

- Provides dimming outputs to control 0-10 VDC dimmable ballasts
- Provides a second occupancy timeout period that enables the lights to go to a dim setting before turning off
- Adjustable max/min dim setting

P

Photocontrol

- Auto Set-point calibration
- On/off mode: Full on/off control of lighting during periods of occupancy with adequate daylight
- Inhibit mode: Prevents lights from turning on if adequate daylight is available, but does not turn lights off

ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS

PHYSICAL	ELECTRICAL	ENVIRONMENTAL
SIZE: (w/ MOUNTING FLANGE) 3.40" H x 3.40" W x 1.40" D (8.64 cm x 8.64 cm x 3.56 cm) WEIGHT: 6 oz MOUNTING: 2.65" (6.73 cm) square opening in fixture (minimum depth 1.50" (3.8 cm))	OPERATING VOLTAGE: 12-24 VAC/VDC CURRENT DRAW: 4 mA RECOMMENDED POWER PACK: PP20 or MP20 DIMMING LOAD: Sinks < 20 mA (0-10 VDC LED Drivers / Ballasts) WIRING DIAGRAM(S): See Figure # 8 on Page 84 (without relay option)	OPERATING TEMP: -40° to 160° F (-40° to 71° C) IP65 RATED: When embedded in wet location luminaire ROHS COMPLIANT



ORDERING INFORMATION

Specifications subject to change.

Example: SBG 6 OEX D WH 1V

Series	Detection Type	Dimming / Photocontrol ¹	Color	Minimum Dim Level ²
SBG 6	(blank) Indoor PIR	(blank) None	WH White	0V 0 VDC
SBG 10	OEX Outdoor PIR	D Occupancy Controlled High/Low Dimming	BK Black	1V 1 VDC
		P Photocontrol		2V 2 VDC
				3V 3 VDC
				4V 4 VDC
				5V 5 VDC

Notes

1. Dimming & Photocontrol not available together in this model family, see SBG xx ODP datasheet for alternate solution
2. Required for D option

EMBEDDED

Small Box Sensors

Overview

The SBGR xx ODP Series sensors provide both Motion and Daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire. The SBGR xx ODP can both switch and dim its connected lighting. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The unit's integrated Photocontrol enables additional energy savings during daytime periods when there is sufficient daylight.

Features

- Digital PIR Detection - Excellent RF Immunity
- Integrated Photocontrol
- Self-Contained Relay for Switching
- 0-10 VDC Output for Dimming
- Gasketed for use in Wet Location Luminaire
- Compatible w/ 0-10 VDC Dimmable Ballasts and LED Drivers
- Interchangeable Hot & Load Wires, Impossible to Wire in Reverse
- Adjustable Time Delays, Max/Min Dim Levels, and Ramp Rates
- Programming Button Accessible w/o Opening Sensor or Removing Gaskets
- No Field Calibration or Sensitivity Adjustments Required
- Non-Volatile Settings Memory
- Convenient Test Mode
- Green LED Status Indicator



ADDITIONAL INFORMATION

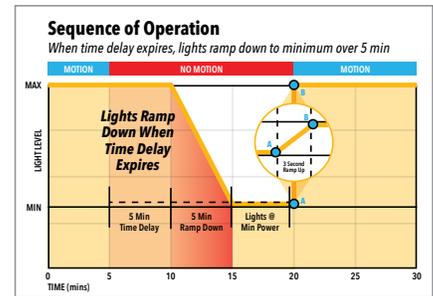
For additional product information, visit www.acuitycontrols.com.

Sequence Of Operation - Motion

For outdoor applications, where occupant safety is of primary concern, the SBGR xx ODP Series sensors are factory set to start dimming the lights once the motion time delay expires. Set to 5 min by default, this time delay is followed by a 5 min ramp down period where the lights slowly drop to the minimum dim level. Utilizing a long ramp down rate eliminates noticeable drops in light level. If motion is detected at any time during the ramp down period or when at the minimum dim level, the sensor will quickly ramp the lights back up to maximum level (default 100%) over a 3 sec (default) period. This ramp up period is intended to quickly return the lighting to full bright without distracting occupants with a sudden jump in the space's light level. The time delays, ramp rates, and max/min dim levels are user adjustable via the accessible push-button. See luminaire specifications for corresponding power level at minimum dim level.

Sequence Of Operation - Daylight

To prevent lights from day-burning, the SBGR xx ODP Series sensor will switch lighting completely off during periods of sufficient daylight. Providing on/off Photocontrol control eliminates the need for astronomical or time clocks. Additionally, the sensor's closed loop Photocontrol adjusts its calibration after every cycle to accommodate visual changes to the space in which they are installed (for example different color cars in a parking garage reflecting light differently). The Photocontrol operation can also be set to dim lights to the minimum level instead of turning them off.



ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

SPECIFICATIONS		
PHYSICAL	ELECTRICAL	ENVIRONMENTAL
<p>SIZE: (w/ MOUNTING FLANGE) 3.40" H x 3.40" W x 1.40" D (8.64 cm x 8.64 cm x 3.56 cm)</p> <p>WEIGHT: 6 oz</p> <p>MOUNTING: 2.65" (6.73 cm) square opening in fixture (minimum depth 1.50" (3.8 cm))</p>	<p>OPERATING VOLTAGE: 12-24 VAC/VDC</p> <p>CURRENT DRAW: 4 mA</p> <p>RECOMMENDED POWER PACK: PP20 or MP20</p> <p>DIMMING LOAD: Sinks < 20 mA (0-10 VDC LED Drivers / Ballasts)</p> <p>WIRING DIAGRAM(S): See Figure # 9 on Page 84</p>	<p>OPERATING TEMP: -40° to 160° F (-40° to 71° C)</p> <p>IP65 RATED: When embedded in wet location luminaire</p> <p>ROHS COMPLIANT</p>



ORDERING INFORMATION

Specifications subject to change.

Example: SBGR 6 ODP WH 3V

Series	Voltage	Color	Minimum Dim Level
SBGR 6 ODP	(blank) 120/277 VAC (MVOLT)	WH White	0V 0 VDC
SBGR 10 ODP	HVOLT 347 - 480 VAC	BK Black	1V 1 VDC
			2V 2 VDC
			3V 3 VDC
			4V 4 VDC
			5V 5 VDC

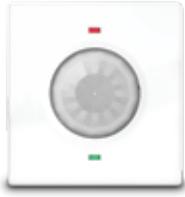


SPECIALTY PRODUCTS

- 76 DATALOGGER
- 78 WIRE GUARDS
- 79 MASKING LABELS
- 79 BALLAST DISCRIMINATOR

DATA LOGGER

Monitoring System



Overview

The Data Logger Monitoring System models facility lighting and occupancy patterns. Primarily used to quantify potential energy savings from occupancy sensor projects, this powerful tool is essential for performance contractors, lighting retrofitters, and facility managers when calculating Return on Investment (ROI) and payback estimates.

Setting New Standards in Monitoring

Much like our occupancy sensors, Sensor Switch's Data Logger Monitoring System utilizes innovative technology, surpassing all similar systems available. Its features are both unique and necessary to perform thorough ROI and payback analysis. Data Loggers units can be leased on a per project basis at no charge, or purchased by qualified customers. Subscription access to the Data Logger Software Analysis Suite is also available to customers in good standing and at no charge. To request or purchase Data Loggers, contact your local Acuity Brands sales representative or email: datalogger@sensorswitch.com.

ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

Device Features

While light monitors have been around for years, the Data Logger surpasses all predecessors with several new easy-to-use features that assure more useful results.

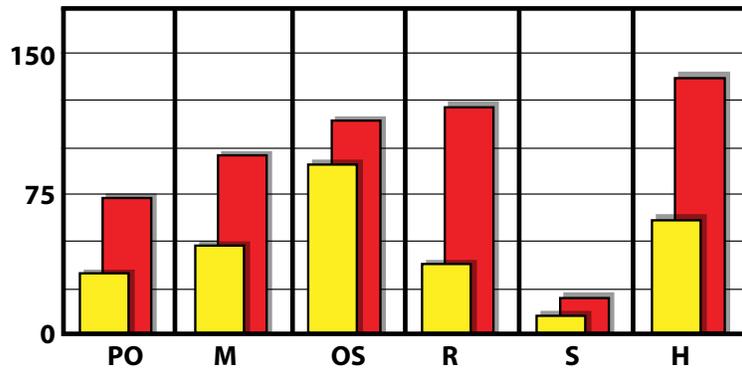
- Combination occupancy sensor & light monitoring device
- Distinguishes between natural and artificial light sources
- Multiple loggers can be used together to monitor large spaces
- Installs in seconds; push-button operation
- Data points are recorded every two minutes

Energy Savings Analysis

The Data Logger's information is downloaded into sophisticated software that analyzes the data and generates customized reports.

- Each Data Logger is assigned an Area Type
- Software averages information from Data Loggers of similar Area Types
- "Lights On vs. Occupancy" activity per area presented in 24 hour timelines
- Total energy usage calculated from user-entered lighting loads
- User-adjustable "virtual" occupancy sensor time delay settings
- Analysis of "Savings vs. Time Delay Setting" on sensors

Hours per Week for Each Area Type

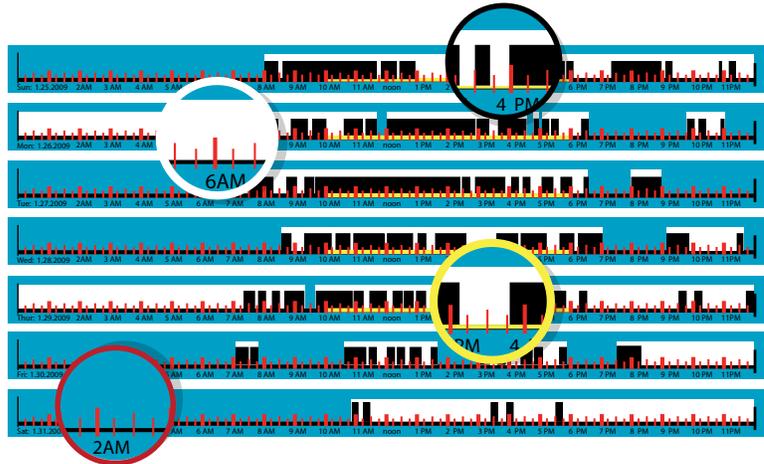


ADDITIONAL INFORMATION

For additional product information, visit www.acuitycontrols.com.

System Highlights

- Data Logger units record activity of a building's lighting, as well as its occupants
- Data Logger software analyzes information and generates customized reports
- Customized reports quantify potential energy savings from occupancy
- Data is presented in "Lights On vs. Occupancy" timeline
- Customized reports quantify potential energy savings from occupancy sensor projects
- Use of system is provided to qualified customers at no charge



- Red lines represent time intervals
- White bars represent when the lights are on
- Yellow lines represent peak billing hours
- Black bars represent occupancy in the room

Customized Reports

- Savings calculated using up to 4 Time-of-Day Billing Rates
- Total potential savings summaries presented in easy-to-read charts & graphs

Area Type Averages				Normalized Weekly Lights On					Normalized Weekly Occupied					
Area Type	Qty	Watts	Peak	Off	Shldr1	Shldr2	Total	Peak	Off	Shldr1	Shldr2	Total	% sav	
Private Office	PO	2	320	26.88	20.87	0.00	0.00	47.76	22.76	3.61	0.00	0.00	26.37	44.79%
Meeting Room	M	3	1387	33.75	59.12	0.00	0.00	92.88	21.95	22.14	0.00	0.00	44.09	52.53%
Open Space	OS	2	10600	39.99	70.45	0.00	0.00	110.44	39.96	45.12	0.00	0.00	85.08	22.96%
Restroom	R	3	213	30.62	87.56	0.00	0.00	118.18	20.90	17.65	0.00	0.00	38.55	67.38%
Storage	S	2	240	5.33	15.52	0.00	0.00	20.85	0.78	7.27	0.00	0.00	8.04	61.44%
Hallway	H	2	880	39.62	98.08	0.00	0.00	137.70	26.32	27.66	0.00	0.00	53.98	60.80%
Building Average			28880	37.99	68.87		0.00	106.86	35.08	38.59		0.00	73.67	31.06%

ORDERING INFORMATION

Specifications subject to change.

Example: LQDM 6 KIT

Model#

LQDM 6 KIT

Kit containing: 45 data logger devices, 1 hard sided carrying case, 3M double sided tape strips, field monitoring forms, DL6 Software Guide and Installation Guidelines

WIRE GUARDS

for Occupancy Sensors

Overview

These super tough wire guards are extremely effective in reducing malfunctions and high maintenance costs in areas where abuse is severe. These units are cages constructed of sturdy 9-gauge steel wire coated with heavy duty polyester. These durable, easy-to-install devices help prevent vandalism and accidental damage without significantly effecting the sensor's view pattern or coverage range.

Features

- 9-Gauge Coated Steel Wire
- Easy Installation and Removal
- Paintable
- CSFM and MEA approved
- UL Listed
- LED Status Indicator on Sensor Remains Visible

SPECIFICATIONS

PHYSICAL

CEILING WIRE GUARD

SIZE: 7.00" Diameter, 3.25" High

WALL WIRE GUARD

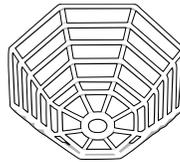
SIZE: 4.00"W x 6.25"H x 2.25"D

CORNER WIRE GUARD

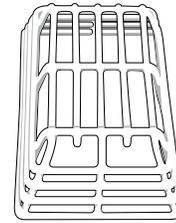
SIZE: 5.38"W x 7.75"H x 5.63"D

BRACKET WIRE GUARD

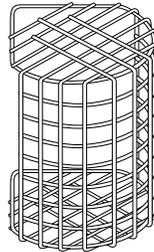
SIZE: 8.00"W x 8.00"H x 8.00"D



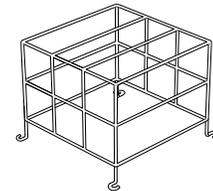
WG1



WG2



WG3



WG4

ORDERING INFORMATION

Specifications subject to change.

Example: WG1

Model#

WG1	Ceiling Mounted Sensor Wire Guard
WG2	Wall Mounted Sensor Wire Guard
WG3	Corner Mounted Sensor Wire Guard
WG4	Bracket Mounted Sensor Wire Guard

PRODUCT INFORMATION

High Bay 360° Masking Labels

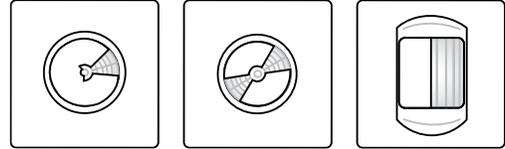
Overview

These labels (included) enable masking off a portion of the view pattern for end-of-aisle applications or trimming the sensor's side viewing to create a rectangular pattern for center-of-aisle viewing only.

Note: Masking labels not included with wet location sensors

MASKING LABELS

High Bay 360° &
High Bay Bi-directional Aisleway



PRODUCT INFORMATION

Ballast Discriminator

Overview

The BD1 Ballast Discriminator is the ideal tool to quickly determine your retrofit opportunities by distinguishing between magnetic and electronic ballasts. Simply point the discriminator at the light fixture, then press and hold the button until the LED lights. If the LED lights green, the ballast is electronic; if the LED lights orange, the ballast is magnetic. A must for every lighting retrofitter.

BALLAST DISCRIMINATOR



ORDERING INFORMATION

Specifications subject to change.

Example: BD1

Model#

BD1 Ballast Discriminator - Handheld Tool



WIRING DIAGRAMS

- 82** WALL SWITCH OCCUPANCY SENSORS
- 84** CEILING MOUNT OCCUPANCY SENSORS
- 86** WALL MOUNT OCCUPANCY SENSORS
- 87** FIXTURE MOUNT OCCUPANCY SENSORS
- 88** DAYLIGHT CONTROL OCCUPANCY SENSORS
- 90** POWER PACKS & SECONDARY PACKS
- 91** SPECIALTY POWER PACKS
- 92** WALLPODS
- 93** EMBEDDED OCCUPANCY SENSORS

WALL SWITCH OCCUPANCY SENSORS

FIG. 1
WALL SWITCH - 1-POLE NEUTRAL/GROUND

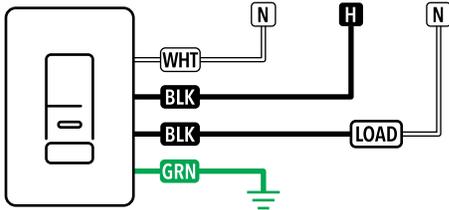


FIG. 2
WALL SWITCH - 1-POLE GROUND

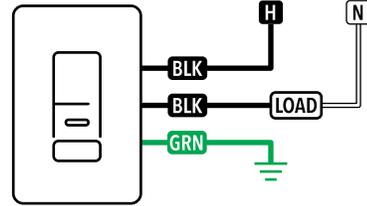


FIG. 3
WALL SWITCH - 2-POLE NEUTRAL/GROUND

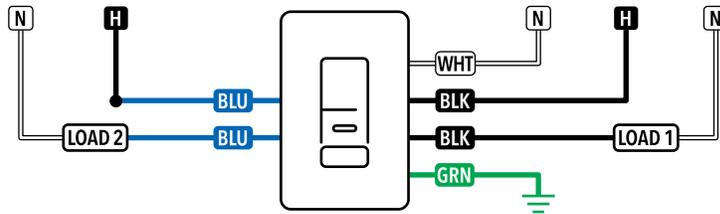


FIG. 4
WALL SWITCH - 2-POLE GROUND

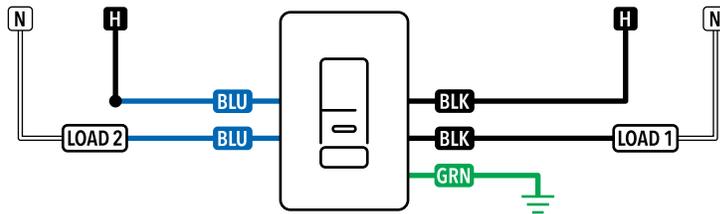


FIG. 5
SSD 120

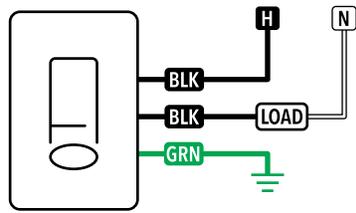


FIG. 6
PRESET TIMER SWITCH

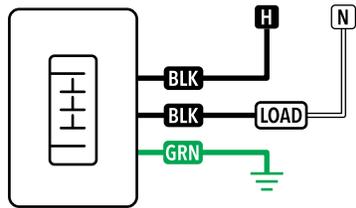
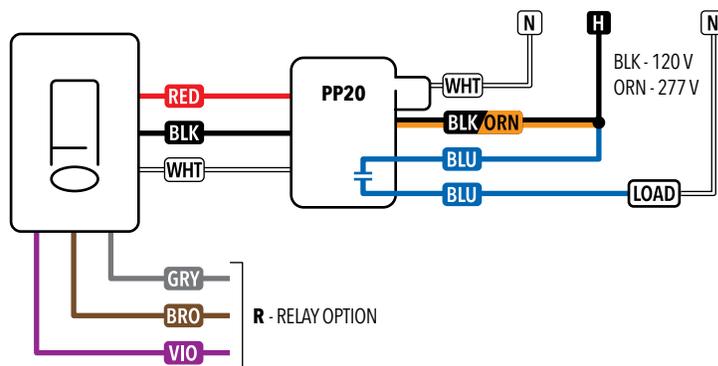


FIG. 7
WALL SWITCHES: LOW VOLTAGE



CEILING MOUNT OCCUPANCY SENSORS

FIG. 8
LOW VOLTAGE STANDARD & EXTENDED RANGE SENSORS

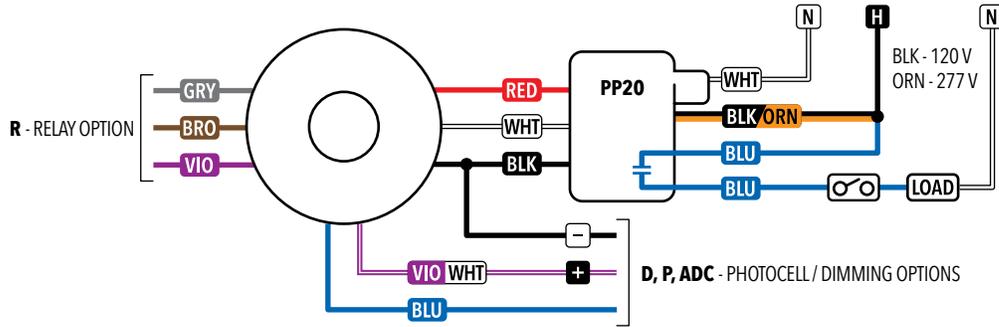


FIG. 9
LINE VOLTAGE STANDARD & EXTENDED RANGE SENSORS

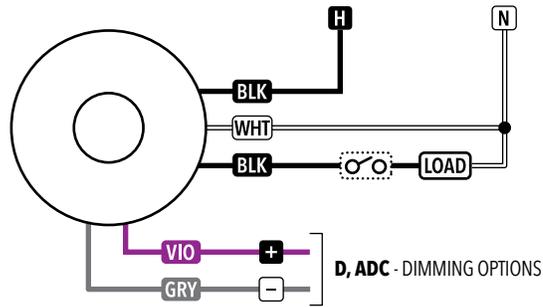


FIG. 10
LINE VOLTAGE 2-POLE STANDARD RANGE, EXTENDED RANGE, & HIGH BAY SENSORS

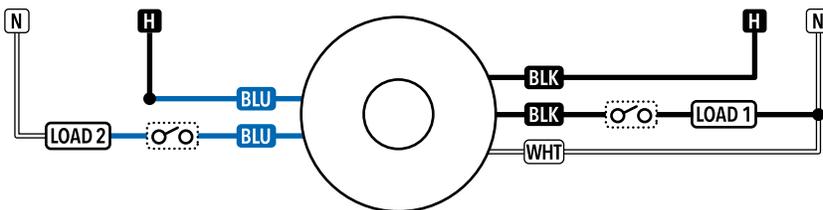


FIG. 11
LOW VOLTAGE CEILING & FIXTURE MOUNT SENSORS

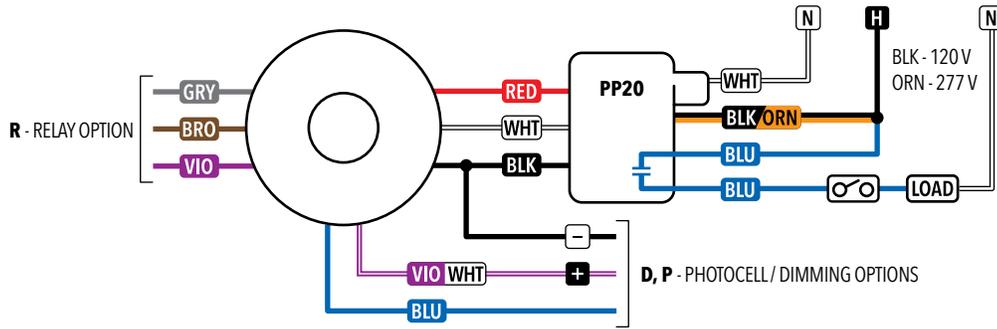


FIG. 12
LINE VOLTAGE HIGH BAY CEILING, RECESSED & FIXTURE MOUNT SENSORS

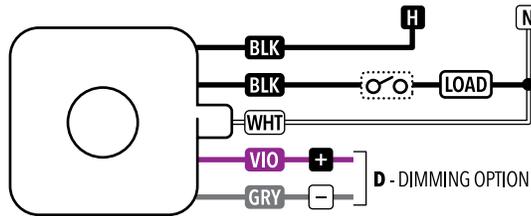
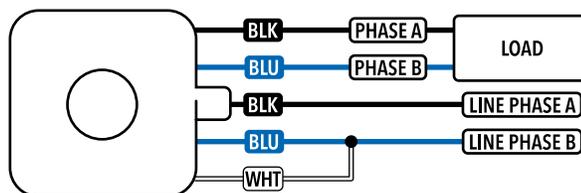


FIG. 13
LINE VOLTAGE 208/240, or 480 VAC HIGH BAY SENSORS*



* Applies only to CMR/CMRB occupancy sensors.

WALL MOUNT OCCUPANCY SENSORS

FIG. 14
LOW VOLTAGE WIDE VIEW & HALLWAY SENSORS

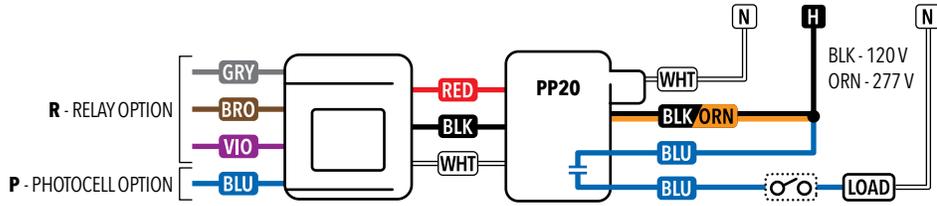


FIG. 15
LINE VOLTAGE WIDE VIEW & LARGE AREA WALL SWITCH SENSORS: SINGLE POLE

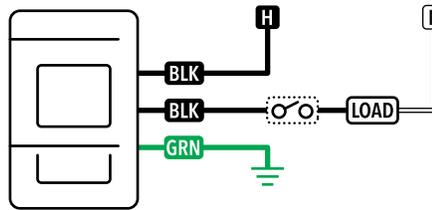


FIG. 16
LINE VOLTAGE WIDE VIEW & LARGE AREA WALL SWITCH SENSORS: 2-POLE

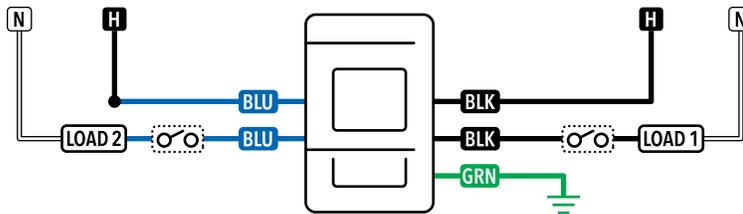
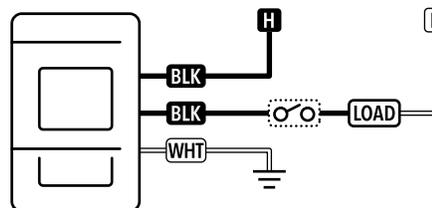


FIG. 17
LINE VOLTAGE HALLWAY SENSORS



INTERCHANGEABLE LENS OCCUPANCY SENSORS

FIG. 18

LINE VOLTAGE INTERCHANGEABLE LENS FIXTURE MOUNT

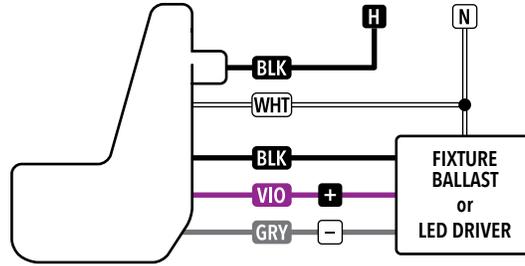


FIG. 19

LINE VOLTAGE INTERCHANGEABLE LENS FIXTURE MOUNT: 2-POLE

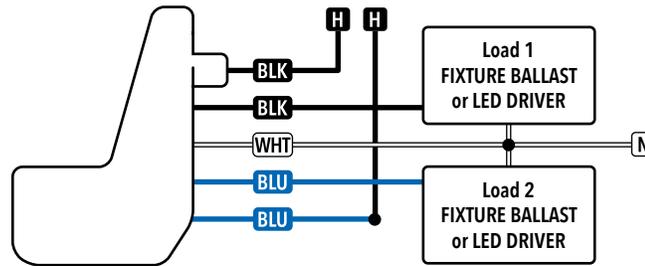


FIG. 20

LINE VOLTAGE INTERCHANGEABLE LENS FIXTURE MOUNT: 2P W/ SINGLE ZONE ON/OFF PHOTOCONTROL

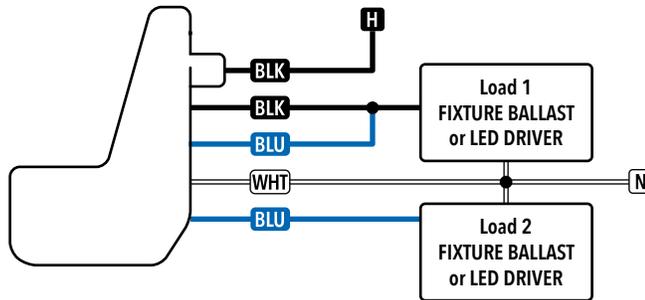
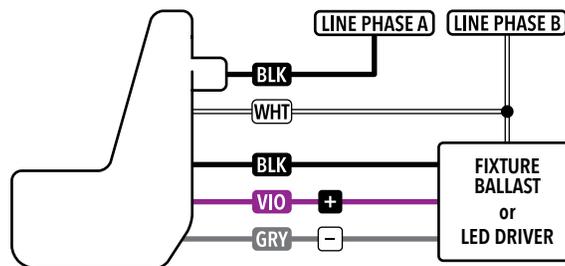


FIG. 21

LINE VOLTAGE INTERCHANGEABLE LENS FIXTURE MOUNT: 2-PHASE



DAYLIGHT CONTROL OCCUPANCY SENSORS

FIG. 22

LOW VOLTAGE ON/OFF PHOTOCONTROLS

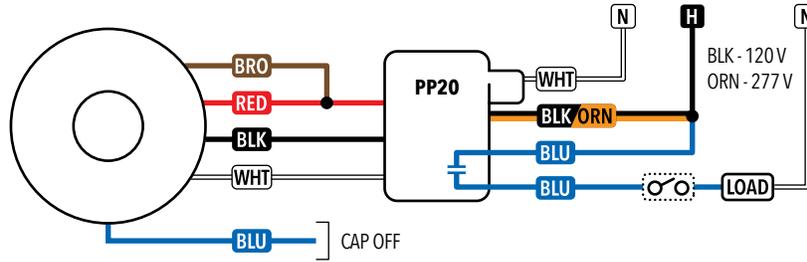


FIG. 23

LOW VOLTAGE ON/OFF PHOTOCONTROL W/ LOW VOLTAGE OCCUPANCY SENSORS

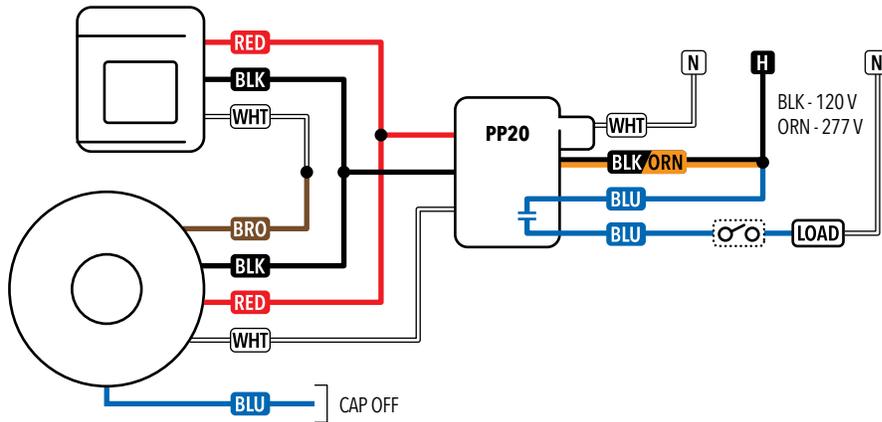


FIG. 24

LINE VOLTAGE AUTO DIMMING PHOTOCONTROLS

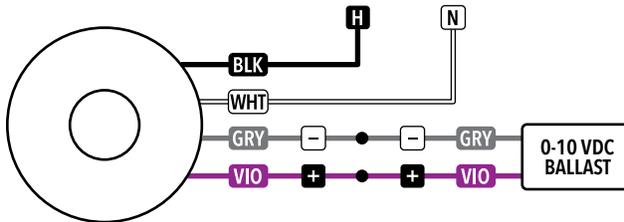


FIG. 25

LINE VOLTAGE ON/OFF PHOTOCONTROLS

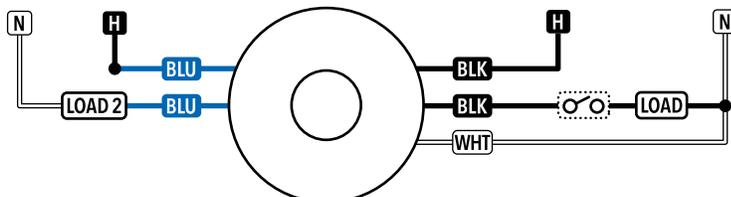


FIG. 26
LOW VOLTAGE AUTOMATIC DIMMING PHOTOCONTROLS

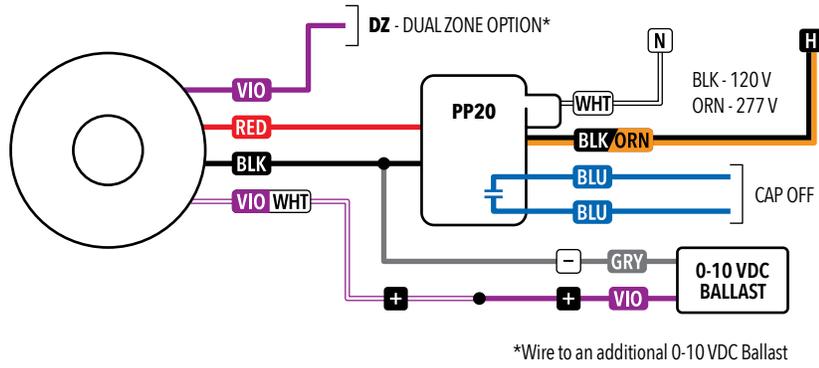


FIG. 27
LOW VOLTAGE ON/OFF & AUTOMATIC DIMMING PHOTOCONTROLS

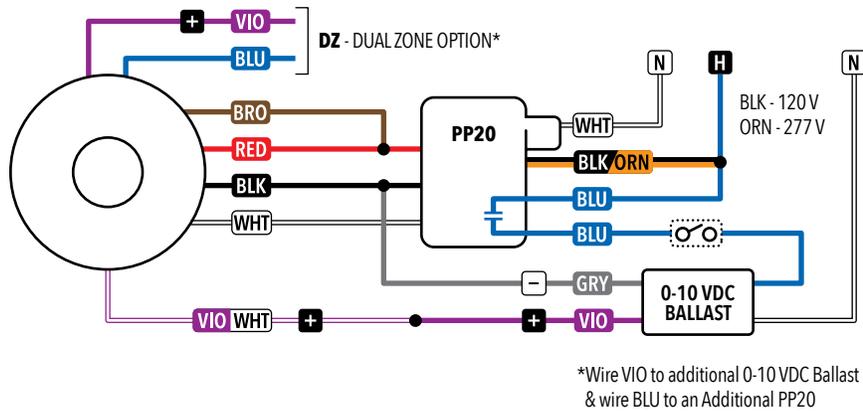
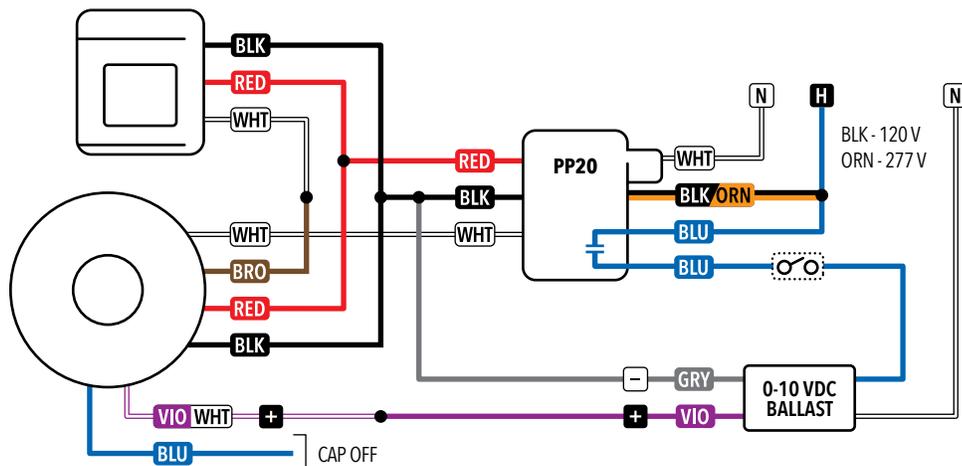


FIG. 28
LOW VOLTAGE ON/OFF & AUTOMATIC DIMMING PHOTOCONTROL W/ LOW VOLTAGE OCCUPANCY SENSORS



POWER PACKS & SECONDARY PACKS

FIG. 29
MULTIPLE SENSORS
CONTROLLING ONE
CIRCUIT

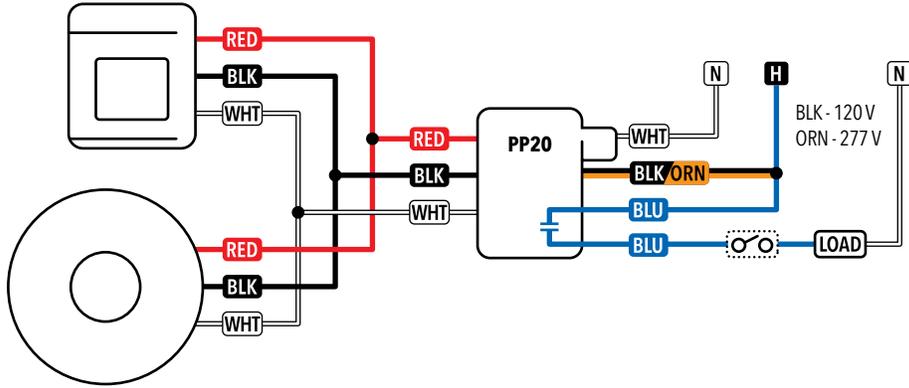


FIG. 30
ONE SENSOR
CONTROLLING
TWO CIRCUITS

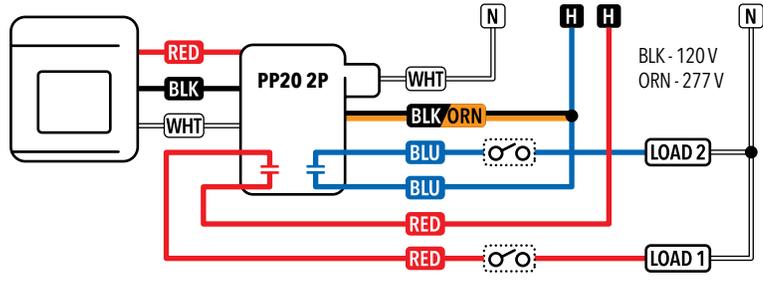


FIG. 31
WIRING MULTIPLE
POWER PACKS
TOGETHER

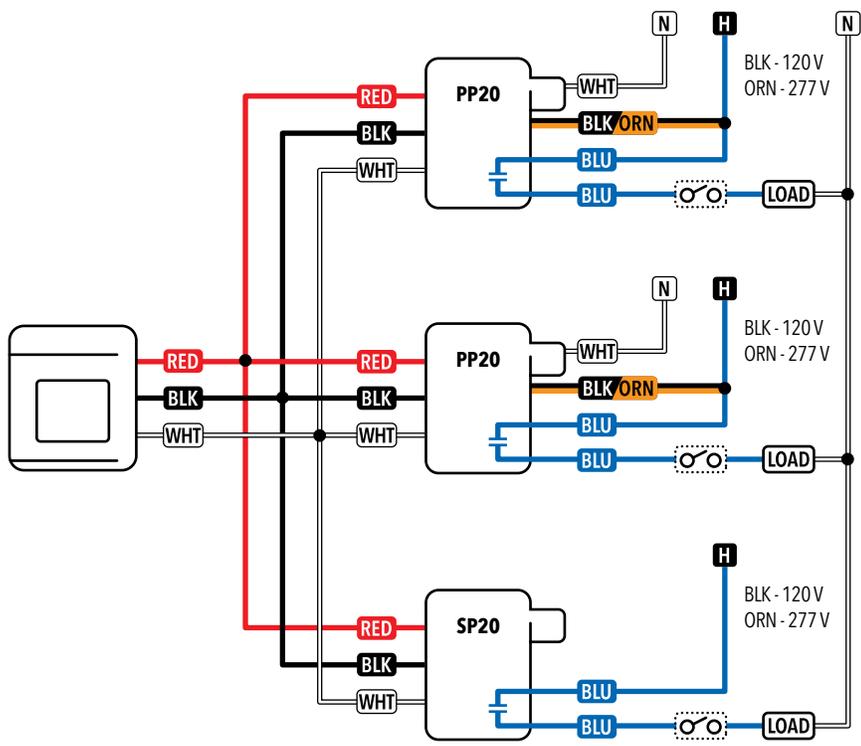
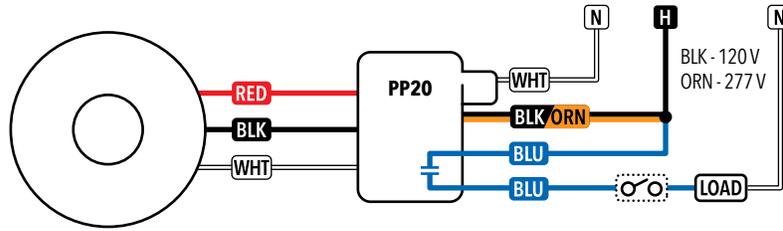


FIG. 32
ONE SENSOR
CONTROLLING
ONE CIRCUIT



SPECIALTY POWER PACKS

FIG. 33
MOMENTARY
POWER PACK
(PP 2PM)

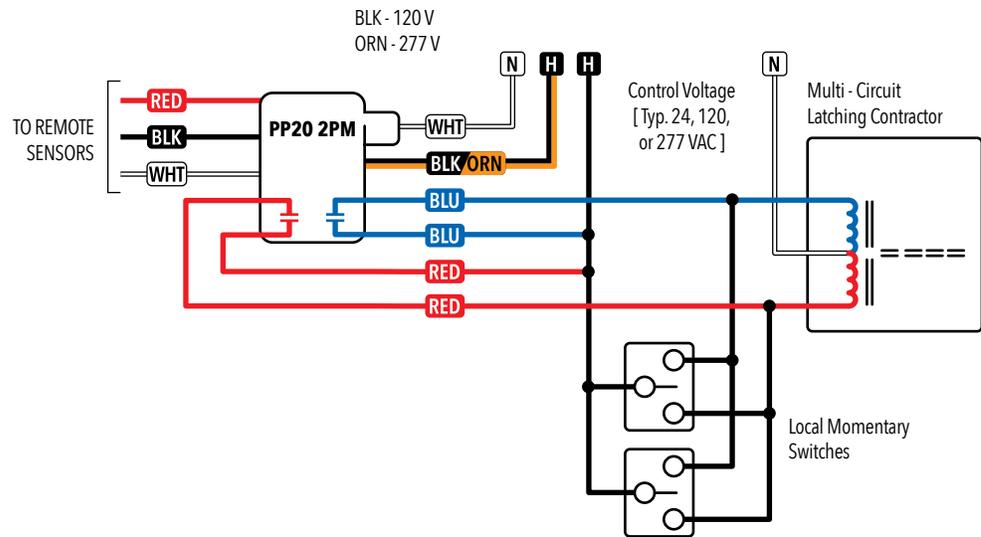


FIG. 34
ALTERNATING OFF RELAY
POWER PACK (PP 2PAR)

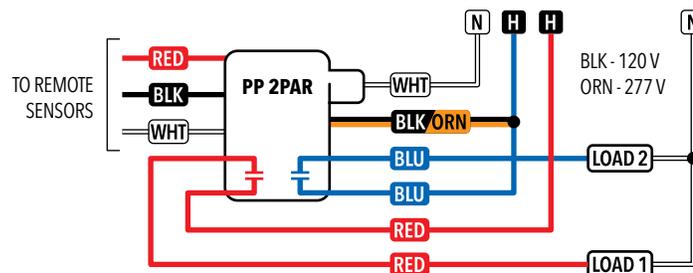


FIG. 35

BI-LEVEL (AUTO-ON / MANUAL ON) SOLUTION W/ OCCUPANCY SENSOR: SINGLE GANG

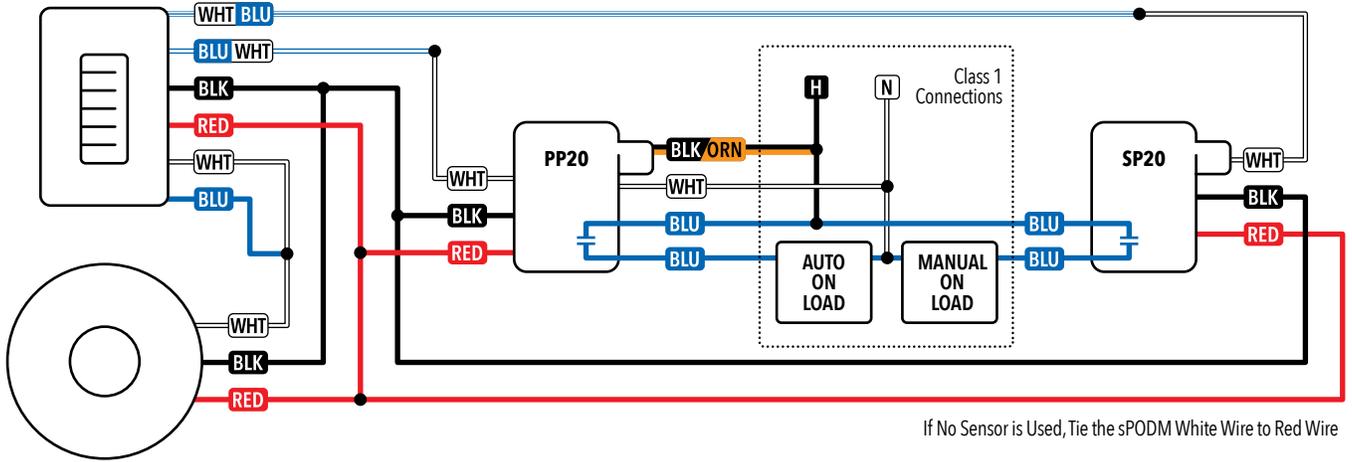


FIG. 36

MANUAL ON/DIMMING W/ OCCUPANCY SENSOR

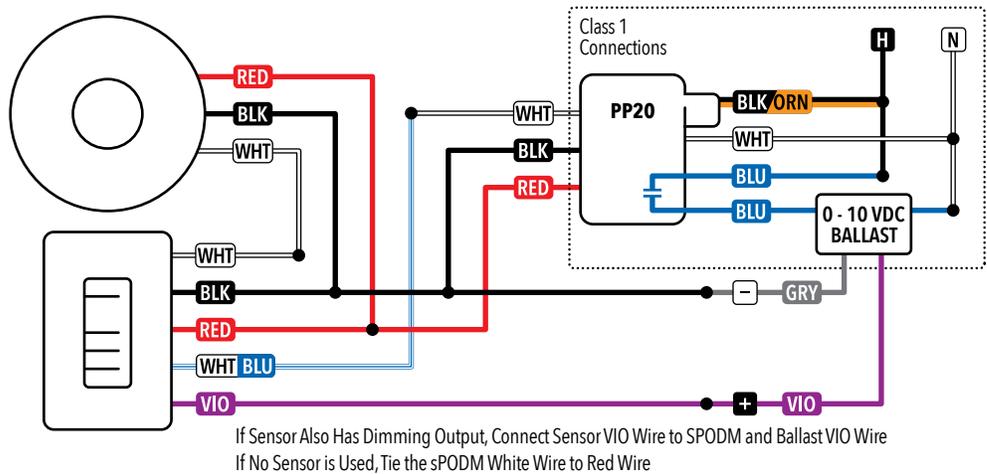
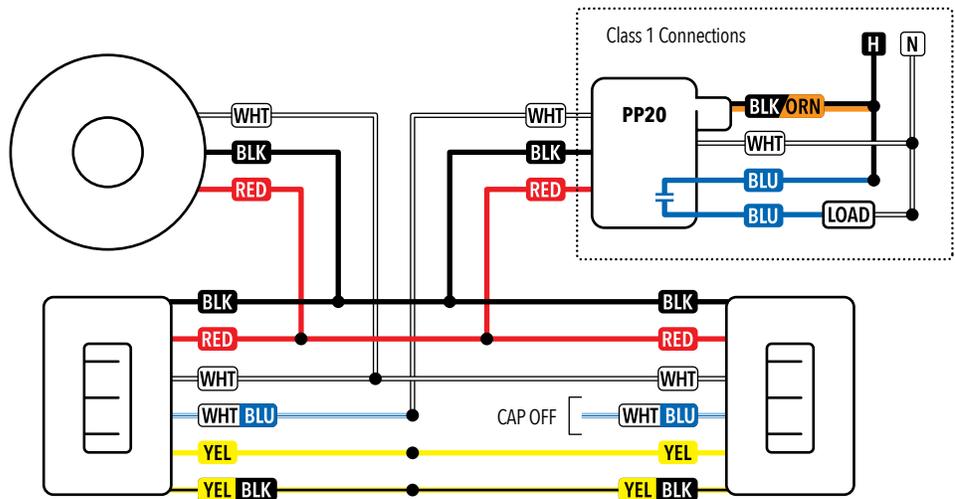


FIG. 37

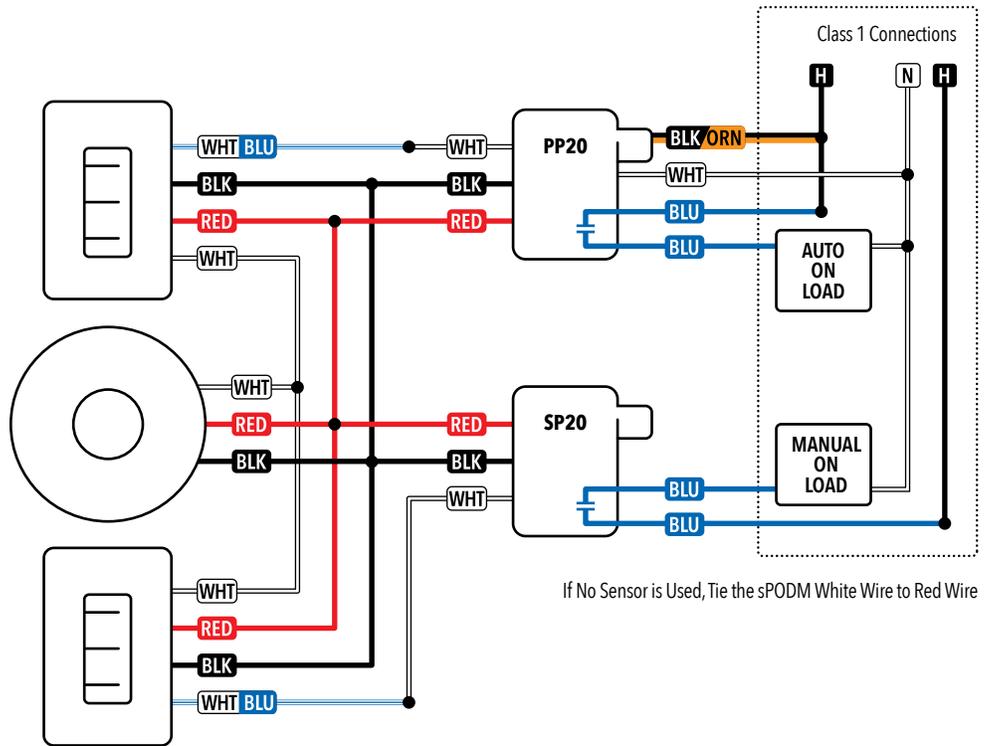
3-WAY MANUAL ON SOLUTION W/ OCCUPANCY SENSOR: SINGLE GANG



If No Sensor is Used, Tie the sPDM White Wire to Red Wire

FIG. 38

**BI-LEVEL
(AUTO-ON / MANUAL ON)
SOLUTION W/
OCCUPANCY SENSOR:
TWO-GANG**



EMBEDDED OCCUPANCY SENSORS

FIG. 39

LINE VOLTAGE SNAP FIT SENSORS

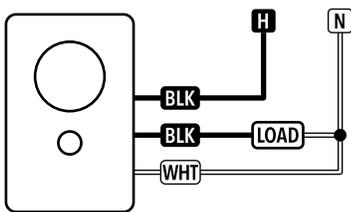


FIG. 40

LOW VOLTAGE HIGH/LOW OPERATION SNAP-FIT SENSORS

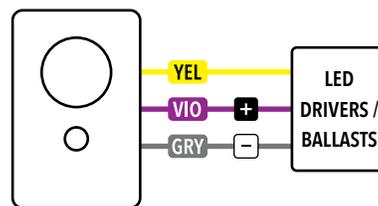


FIG. 41

**LOW VOLTAGE HIGH/LOW
OPERATION EMBEDDED SENSORS**

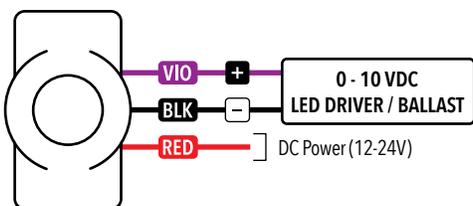
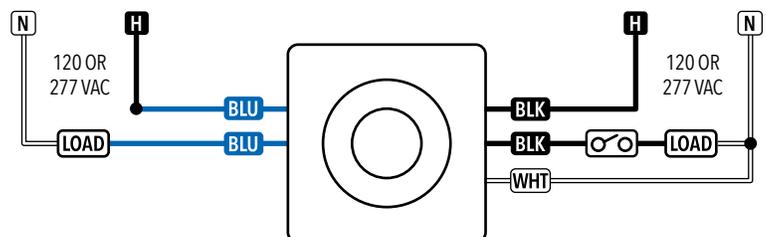


FIG. 42

LINE VOLTAGE 2-POLE EMBEDDED SMALL BOX SENSORS





/ PRODUCT INDEX

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38 CM PC ADC
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