


MINI PRODUCT GUIDE



sensorswitch[®]



BETTER PERFORMANCE THROUGH **ADVANCED** **TECHNOLOGY**

- 
- 100% Digital Passive Infrared (PIR) Detection
 - Dual Technology Detection utilizing Microphonics
 - Contractor Friendly Wiring Features

MICROPHONICS™ TECHNOLOGY

Sets The New Standard For
Occupancy Detection In
Rooms With Obstructions

PASSIVE DUAL TECHNOLOGY [**PIR/MICROPHONICS™**]

- Sensors both see occupant motion and hear the sounds they make
- More effective than sensors using two technologies that only detect motion (e.g., Ultrasonic/PIR)
- Immune from conditions that typically cause false ons (e.g., persons walking by a space or non-occupant motion within a space)
- 100% acoustically passive - no high frequency transmissions, no potential for interference, & none of the headaches common with other technologies



KEY ENERGY CODE REQUIREMENTS

- ASHRAE/IES 90.1-2010 applies to any new construction projects and retrofit projects involving alteration of $\geq 10\%$ of connected lighting load.
- All lighting systems must be turned OFF when not in use*. Occupancy sensors are the easiest way to comply.
- Spaces must also have a lighting control device that is either: **Manual-On** or **Auto-On** to $\leq 50\%$ (via either Bi-Level Switching or Dimming*). Both of these methods necessitate a manual control.
- The following spaces require the installation of an occupancy sensor (or a timer switch) that turns lighting off within 30 minutes after the last occupant leaves the space:
 - All offices 250 ft² or less
 - Restrooms
 - Classrooms
 - Lecture halls
 - Conference and meeting rooms
 - Training rooms
 - Employee lunch & break rooms
 - All storage & supply rooms between 50-1000 ft²
 - Rooms used for document copying & printing
 - Dressing, locker, and fitting rooms
- Many enclosed spaces must have controls that reduce the power level by 30-70% in addition to turning off all lighting (this generally requires either control for Bi-Level Switching or Dimming)*.

**Note: exceptions apply, refer to code for all applicable details*



WALL SWITCH SENSORS

Quick & Easy Energy Savings

APPLICATIONS

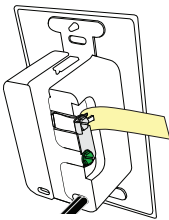
- **PIR** - Private Restrooms, Copy Rooms, Closets
- **DUAL TECH** - Private Office, Restroom with Stalls, Small Meeting Rooms

FEATURES

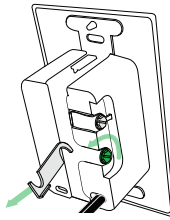
- Device accommodates powering over ground or neutral connection (patent pending); converts in seconds
- 100% digital PIR detection & photocell standard
- Small motion detection to 20 ft & large motion >36 ft
- Ruggedized assembly, vandal resistant lens standard
- Compatible w/ LEDs, Fluorescents, CFLs, & Incandescents
- Fully meets NEC 2011 Section 404.2C neutral requirements



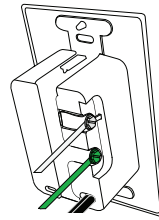
CONVERSION FROM GROUND ONLY (NO NEUTRAL) TO NEUTRAL WIRING:



STEP 1:
Remove yellow label.



STEP 2:
Loosen Screws &
Remove Metal Link.



STEP 3:
Connect Ground to Green Screw
& Neutral to Silver Screw.



SCAN QR CODE TO ACCESS DATASHEET WITH ADDITIONAL OPTIONS (E.G. COLOR, NIGHT LIGHT)

MODEL #	DESCRIPTION
WSX WH	PIR, Auto On (default) or Manual On
WSX VA	PIR, Manual On (Vacancy) Only
WSX PDT WH	Dual Tech, Auto On (default) or Manual On
WSX PDT VA	Dual Tech, Manual On (Vacancy) Only
WSX 2P WH	PIR, Dual Relay (Pole 1: Auto On; Pole 2: Manual On)
WSX PDT 2P WH	Dual Tech, Dual Relay (Pole 1: Auto On; Pole 2: Manual On)

LOW VOLTAGE SENSORS

Ideal for Spaces Requiring Multiple Sensors



APPLICATIONS

- Open Office, Classroom, Conference Room, Large Office, Corridor, Large Storage Area, Lobby
- Small motion sensors best for areas where people are stationary
- Large motion sensors best for areas with walking traffic
- Dual Tech detection required for areas with obstructions

FEATURES

- No sensitivity adjustments required - install and forget
- Simple push-button time delay adjustment - no tools required
- Utilizes power pack (**PP20**) to switch entire circuit
- Convenient mounting without junction boxes:
 - 360° ceiling enclosure (pictured above, left) surface mounts directly to ceiling tiles
 - 120° wide view enclosure (pictured above, right) directly mounts in a corner or to a wall

OPTIONS

- Low Voltage Auxiliary Relay
- Photocell Override
- 0-10 VDC Dimming
- Low Temp / High Humidity



SCAN QR CODE TO ACCESS DATASHEET WITH ADDITIONAL INFORMATION

MODEL #	DESCRIPTION	COVERAGE AREA*
CM 9	360° Small Motion, PIR, Ceiling Mount	~12 ft (3.66 m) radius (~500 ft ²)
CM PDT 9	360° Small Motion, Dual Tech, Ceiling Mount	
CM 10	360° Large Motion, PIR, Ceiling Mount	~24 ft (7.32 m) radius (~2000 ft ²)
CM PDT 10	360° Large Motion, Dual Tech, Ceiling Mount	
WV 16	120° Small Motion, PIR, Corner Mount	Small motion ~40 ft (12.19 m)
WV PDT 16	120° Small Motion, Dual Tech, Corner Mount	Large motion ~70 ft (21.34 m)
HW 13	Hallway, Large Motion, PIR, Wall Mount	~70 ft (21.34 m) when mounted at 7 ft (2.13m)

*AT 9 FT MOUNTING HEIGHT

POWER/RELAY PACKS

Provides Low Voltage Power & Switches Lighting

FEATURES

- Powers up to 14 low voltage sensors & wall stations
- Rated for 20A lighting or receptacle loads



SCAN QR CODE TO ACCESS DATASHEET WITH ALL ORDERING INFORMATION

MODEL #	DESCRIPTION
PP20	Power/Relay Pack (120/277 VAC)

DAYLIGHT CONTROLLERS

Maximize Energy Savings Through Daylight Harvesting



APPLICATIONS

- Meets daylight control code requirements for spaces with significant daylight contribution from windows or skylights

FEATURES

- Interfaces with low voltage sensors & wall controls
- Available in on/off or auto-dimming (0-10 VDC) versions
- Self-Calibrating - capable of finding optimum set-point
- Easy to Apply - deploy standalone or combine with occupancy sensors



SCAN QR CODE TO ACCESS DATASHEET WITH ALL ORDERING INFORMATION

MODEL #	DESCRIPTION
CM ADC	Dimming Photocell, Low Voltage, 0-10 VDC, Ceiling Mount
CMRB ADC	Dimming Photocell, Line Voltage, 0-10 VDC, Fixture Mount
CM PC	On/Off Photocell, Low Voltage, Ceiling Mount
CMR PC	On/Off Photocell, Line Voltage, Ceiling Mount

LOW VOLTAGE SWITCH

Interfaces with Sensors to Enable Full Code Compliance



APPLICATIONS

- Provides code-compliant manual control when applied with low voltage occupancy sensors and relay packs
- Alternative usage as override switch for auto-on applications

FEATURES

- Single gang enclosure with 1 or 2 on/off switches
- Soft-touch tactile control
- 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



SCAN QR CODE TO ACCESS DATASHEET WITH ADDITIONAL OPTIONS (E.G. COLOR)

MODEL #	DESCRIPTION
SPODM SA WH	Sensor Interface Switch – Manual On (default)
SPODM 2P WH	Dual Sensor Interface Switch – Switch 1 Manual On / Switch 2 Auto On
SPODM SA D WH	Sensor Interface Switch & 0-10 VDC Dimming Control - Manual On
SPODM WH	Sensor Interface Switch – Auto On (default)

FIXTURE MOUNT SENSORS

Interchangeable Lenses for Maximum Versatility

APPLICATIONS

- Warehouses, Distribution Centers, Gymnasiums, Industrial Spaces

FEATURES

- Integrated mounting bracket drops lens down 3" from chase nipple - no bracket accessory required
- Single or dual relay versions
- Power options for MVOLT/HVOLT & single/two-phase
- Photocell and 0-10 VDC dimming options
- Highly configurable ordering options



FOUR INTERCHANGEABLE LENSES



#6 LENS
High Mount

15 to 45 ft
(4.57 to 13.72 m)
mounting height



#10 LENS
Low Mount

7 to 15 ft
(2.13 to 4.57 m)
mounting height



#50 LENS
Aisleway

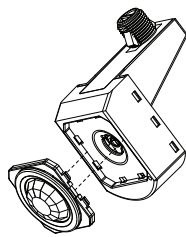
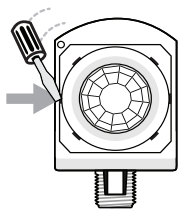
bidirectional
range of ~1.2 x
mounting height



#9 LENS
Small Motion

8 to 15 ft
(2.44 to 4.57 m)
mounting height

EASY LENS CHANGE



SCAN QR CODE TO ACCESS DATASHEET WITH ALL ORDERING INFORMATION



MODEL #	DESCRIPTION
LSXR 610	High Mount 360° Sensor with Accessory Low Bay Lens
LSXR 610 HL	High/Low Mount 360° Sensor with High/Low Dimming Control Option
LSXR 610 P	High/Low Mount 360° Sensor with On/Off Photocell Option
LSXR 610 ADC	High/Low Mount 360° Sensor with Auto Dimming Photocell Option
LSXR 610 2P	High/Low Mount 360° Sensor with Dual Relay Control

APPLICATION GUIDE

The below table lists recommended sensor solutions for common spaces. Information on the full line of Sensor Switch products is available in the full product catalog or online at sensorswitch.com.



SOLUTION OPTIONS	MODEL #
SMALL OFFICE/MEETING/BREAK ROOM	
WALL SWITCH SENSOR - MANUAL ON	WSX PDT VA WH
WALL SWITCH SENSOR W/ DUAL RELAYS (POLE 1 AUTO ON, POLE 2 MANUAL ON)	WSX PDT 2P WH
CEILING 360° SENSOR w/ TWO RELAY PACKS AND SWITCH	CM PDT 9, PP20 (QTY 2) & SPODM 2P WH
OPEN OFFICE	
CEILING 360° SENSOR w/ TWO RELAY PACKS & SWITCH	CM PDT 9 (~1 PER 30 X 30 FT AREA), PP20 (QTY 2) & SPODM 2P WH
CORRIDOR/HALLWAY	
SHORT STRAIGHT HALLWAYS - DUAL HALLWAY SENSORS	HW 13 (QTY 2) & PP20 (QTY 1) (OPTIONAL WV BR CEILING MOUNT BRACKET)
LONGER CORRIDORS WITH ALCOVES/VESTIBULES - CEILING 360° SENSOR	CM 10 (1 PER ~50 FT) & PP20 (1 PER CIRCUIT OR SWITCH LEG)
L-SHAPED - HALLWAY SENSOR & CEILING 360° SENSOR	HW 13, CM 10, & PP20
PRIVATE RESTROOM/CLOSET	
WALL SWITCH SENSOR	WSX WH
CEILING 360° SENSOR	CM 9 & PP20
PUBLIC RESTROOM	
WALL SWITCH SENSOR	WSX PDT WH
WALL SWITCH SENSOR w/ DUAL RELAYS FOR LIGHT & FAN	WSX PDT 2P WH
CEILING 360° SENSOR	CM PDT 9 & PP20
CLASSROOM	
WIDE VIEW SENSOR	WV PDT 16, PP20 (QTY 2), & SPODM 2P WH
CEILING 360° SENSOR	CM PDT 10, PP20 (QTY 2), & SPODM 2P WH



Form 1412.007

1.800.PASSIVE
www.sensorswitch.com