

### TYPICAL APPLICATIONS

- Private Offices
- Conference Rooms
- Individual Bathrooms w/o stalls
- Janitor Closets
- Hallways & Stairwells

### FEATURES

- PIR Occupancy Detection
- Self Contained Relay, no Power Pack needed
- Patented Bi-Polar Wiring: Interchangeable Hot & Load wires
- Small Motion Detection up to 20 ft.
- Intrinsically Grounded
- No Minimum Load
- Push-Button Programmable
- Time Delay: 30 sec. to 20 minutes
- Three-Way & Multi-Level Switching
- Green LED Status Indicator

### AVAILABLE OPTIONS

- Vandal-Resistant Lens (-V)
- Photocell Daylight Override (-P)
- Low Temp/Hi Humidity (-LT)

### SPECIFICATIONS

- Size: 4.2"H x 1.8"W x 1.5"D (10.67cm x 4.57cm x 3.81cm)
- Sensor Weight: 5 Ounces
- Colors: Ivory, White, Gray, Almond
- Mounting Height: 30 to 48 inches
- Relative Humidity: 20 to 90% non-condensing
- Operating Temp: 14° to 85° F (-10° to 29° C)
- Storage Temp: -14° to 160° F (-26° to 71° C)
- Load Rating (1 phase only):  
120 VAC @ 800 W  
277 VAC @ 1200 W  
347 VAC @ 1500 W
- Frequency: 50/60 Hz (Timers are 1.2 x for 50 Hz)
- UL, CUL, & CSA Listed
- CA Title 24 Compliant
- 5 Year Warranty
- Made in U.S.A

### LOW TEMP/HI HUMIDITY (-LT)

- Conformally coated Circuit Board is corrosion resistant from moisture
- Operates down to -40° F (-40° C)

## WSD SERIES

### Programmable Edition!



The *WSD Series* is a stylish, easy to install, and simple to use Wall Switch Decorator style Passive Infrared (PIR) sensor. 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. Additionally, the *WSD Series* sensors have several On Modes and Switch Modes that can be programmed using the front push-button. For rooms with obstructions the WSD-PDT should be considered.

### SENSOR OPERATIONS

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 lighting "On". The sensor is line powered and can switch line voltage (see specifications). An internal timer, factory set at 10 minutes, keeps the lights "On" during brief periods of no activity. 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 sensor requires no manual sensitivity adjustments.

### 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.

### PHOTOCELL DAYLIGHT OVERRIDE OPTION (WSD-P)

The *WSD* offers a Photocell Daylight Override option (-P) for spaces with abundant natural light. Ideal for public places with windows like vestibules, corridors, or bathrooms; this option inhibits the lights from turning on if there is sufficient daylight available. Once the lights turn on, however, the photocell function is disabled until the sensor's occupancy timer expires and turns the lights off. For more information on daylighting control, see the CM-PC-ADC technical datasheet.

### Model Numbering System: WSD-[LENS]-[PHOTOCELL]-[VOLTAGE]-[COLOR\*]-[TEMP/HUMIDITY]

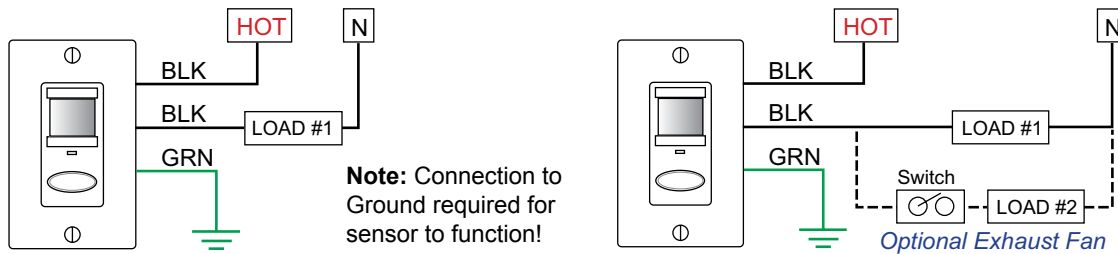
SERIES #	LENS	PHOTOCELL	VOLTAGE	COLOR	TEMP/HUMIDITY
WSD	Blank = Standard -V = Vandal Resistant	Blank = No Photocell -P = w/Photocell	Blank = 120-277 VAC -3 = 347 VAC**	-I = Ivory -W = White -G = Gray -A = Almond	Blank = 14° to 85° F -LT = -40° to 85° F

\*\*347 VAC: Plate not provided

\*Must specify color

T059-003-P

**TYPICAL WIRING DIAGRAM (DO NOT WIRE HOT)**



**Note:** Black wires are replaced with Red wires for 347 VAC.

**WIRING TO A LIGHT AND A FAN**

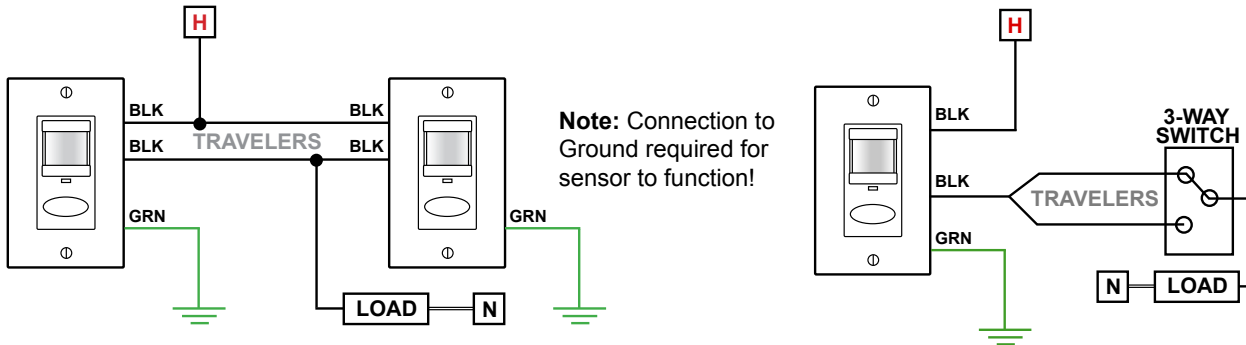
One of the sensor's Black wires connects to the Hot (Line) power feed. The sensor's other Black wire connects to the Light and the Toggle Switch controlling the Exhaust Fan. The sensor's Green wire connects to Ground. When the sensor is in the Occupied Mode, the Exhaust Fan may be overridden "Off" by the Toggle Switch.

**Note:** Standard 2-gang plate not included



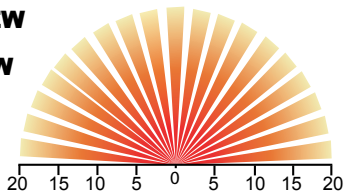
**WIRING FOR 3-WAY SWITCHING**

Travelers are used to wire sensors in parallel. If only one sensor is needed to view space, 3-way switch is non-functional.

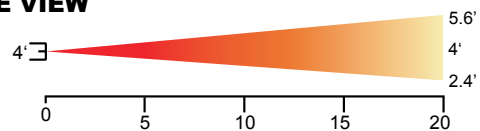


**FIELD OF VIEW**

**TOP VIEW**



**SIDE VIEW**



**STANDARD vs. VANDAL RESISTANT LENS**

The Standard lens provides maximum PIR detection sensing small movements up to 20 feet, and large motions up to 50 feet. This lens should be used in typical offices or rooms where occupants work for extended periods of time. The Vandal Resistant lens should be used in high abuse or public areas (copy rooms, small public restrooms, storage closets), where occupants simply come and go and make larger types of motions. A sensor with a Vandal Resistant lens will have its PIR detection range reduced by 50%.

**WARNING**

**Fire Hazard Caution:** Maximum Lamps 1500 Watts, Type 347 VAC.

**Attention:** Risque d'incendie : Pauissance Maxemales Des Lampes 1500 Watts, Type 347 VAC.

**Warning:** The units are intended to be installed by a qualified person with properly rated branch circuit protectors as per applicable local and national regulations (CEC, NEC).

**WARRANTY:** Sensor Switch, Inc. warrants these products to be free of defects in manufacture and workmanship for a period of sixty months. Sensor Switch, Inc., upon prompt notice of such defect will, at its option, provide a Returned Material Authorization number and repair or replace returned product.

**LIMITATIONS AND EXCLUSIONS:** This Warranty is in full lieu of all other representation and expressed and implied warranties (including the implied warranties of merchantability and fitness for use) and under no circumstances shall Sensor Switch, Inc. be liable for any incidental or consequential property damages or losses.



**SENSOR SWITCH, INC.**

900 Northrop Rd., Wallingford, CT 06492  
 (203) 265-2842 info@sensorswitch.com  
 www.sensorswitch.com

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