

TYPICAL APPLICATIONS

- · Inboard/Outboard Switching
- · Multiple Load Control
- · Control Lights and Fan
- Private Offices
- · Restrooms with Stalls
- · Storage rooms with shelving

FEATURES

- Patented Dual Technology with PIR/Microphonics™ Detection
- Patented Bi-Polar Wiring: Interchangeable hot & load wires
- 2 Self Contained Relays, no Power Packs needed
- Replaces 2 Switches at once
- Small Motion Detection up to 20 ft
- · No Minimum Load
- Time Delay: 30 sec. to 20 minutes (each pole set independently)
- Green LED Activity 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 (per pole,1 phase only): 120 VAC @ 800 W 277 VAC @ 1200 W 347 VAC @ 1500 W (1 Phase)
- Frequency: 50/60 Hz (Timers are 1.2 x for 50 Hz)
- UL, CUL, CSA, & CA Title 24 Listed
- 5-Year Warranty
- Made In USA

LOW TEMP/HI HUMIDITY (-LT)

- Conformally coated Circuit Board is corrosion resistant from moisture
- •Operates down to -4° F(-20° C)

WSD-PDT-2P (2 Pole) Series

Programmable Edition!

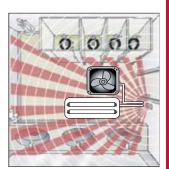
The WSD-PDT-2P Series is a Wall Switch Decorator style Passive Dual Technology (PDT) sensor designed to control inboard/outboard switching. Utilizing two isolated power relays, the WSD-PDT-2P provides: All On, Load A On only, Load B On only, or All Off control of two loads. The combination of Passive Infrared and patented Microphonics™ detection, allows this sensor to literally "See & Hear" its occupants. Although perfect



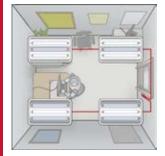
for rooms with lighting wired for A-B switching, the *WSD-PDT-2P* also can be used to control multiple load types and voltages (for example a restroom light and fan). Additionally, the *WSD-PDT-2P Series* sensors have several On Modes and Switch Modes that can be programmed using the front push-button.

SENSOR OPERATIONS

Sensors with Passive Dual Technology (PDT) first "See" motion using Passive Infrared (PIR) and then engage Microphonics™ to "Hear" sounds that indicate continued occupancy. This patented technology uses Automatic Gain Control (AGC) to dynamically self adapt a sensor to its environment by filtering out constant background noise and detecting only noises typical of human activity. When occupancy is detected, two separate self-contained relays switch the loads "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. If needed, a 10 second grace period also allows the lights to be voice reactivated after shutting off.



TWO POLES, TWO LEVELS OF CONTROL

Each of the WSD-PDT-2P's poles may be programmed separately. For example, the 1st pole can be set to automatically turn on upon occupancy (Auto On), while the 2nd pole is set to be manually turned on via the push button (Manual On). Another option is to set the 1st pole (for a load such as lights) at a 10 minute delay, and the 2nd pole (for a load such as an exhaust fan) at a 20 minute delay.

PHOTOCELL/BI-LEVEL DAYLIGHT OVERRIDE OPTION (WSD-PDT-2P-P)

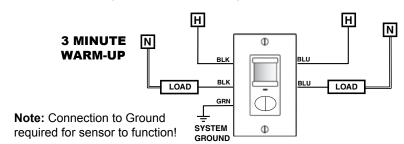
The WSD-PDT-2P sensor offers a Photocell Daylight Override option for both poles separately. Ideal for Automatic Bi-Level Lighting Control in public places with windows like vestibules, corridors, or bathrooms; this option inhibits the lights from turning on if there is sufficient daylight available. Once the sensor turns on each pole respectively, 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 data information.

Model # System: WSD-PDT-2P-[LENS]-[PHOTOCELL]-[VOLTAGE]-[COLOR*]-[TEMP/HUMIDITY]

SERIES # LENS **PHOTOCELL** VOLTAGE COLOR **TEMP/HUMIDITY** WSD-PDT-2P Blank = 14° to 85° F Blank = Standard Blank = No Photocell Blank = 120-277 VAC -I = Ivory -V = Vandal -W = White $-LT = -4^{\circ} \text{ to } 85^{\circ} \text{ F}$ -P = w/Photocell -3 = 347 VAC** Resistant -G = Gray

**347 VAC: Plate not provided -A = Almond

TYPICAL WIRING DIAGRAM (DO NOT WIRE HOT)



Note: For 347 VAC units: One Line wire (Black), Load wires are Red and Blue.

OPERATIONAL MODES (EACH POLE INDEPENDENTLY PROGRAMMABLE)

On Modes (*Default)

Automatic On* - The sensor automatically turns the lights on when the sensor detects occupancy. **Manual On (Semi-Automatic)** - The occupant must push the sensor's button to turn the lights on.

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.

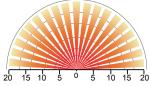
STANDARD vs. VANDAL RESISTANT LENS

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, where occupants simply come and go and make larger types of motions. Copy rooms, small public restrooms, storage or janitor's closets are ideal applications. A sensor with a Vandal Resistant lens will have its PIR detection range reduced by 50%, however the Microphonics™ range is not affected.

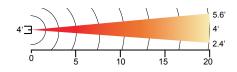
AREA OF COVERAGE:

The PIR collector beams view out horizontally in a wall-to-wall pattern. The beams will see out to 50 feet, however, their effectiveness in the *Standard* product is 20 feet for small hand or body motions and 10 feet for the *Vandal Resisitant* products. The Microphonics™ will detect normal human activity up to 20 feet, but will detect greater distances in spaces with hard floors or very quiet rooms with little or no background noise.





SIDE VIEW



WARNING

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

Attention: Risque d'incendie: Pauissance Maximales 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.

