

## **WSD PDT VA**

# WALL SWITCH DECORATOR SENSOR LINE VOLTAGE • VACANCY • PASSIVE DUAL TECHNOLOGY (PDT)

### **SPECIFICATIONS**

#### **FEATURES**

Patented Dual Technology with PIR /
Microphonics™ Detection
Manual On Operation
Self-Contained Relay No Power Pack Needed
Interchangeable Hot & Load Wires Impossible to Wire Backwards
No Neutral Connection Required
Small Motion Detection to 20 ft (6.10 m)
Self-Grounding Mounting Strap
No Minimum Load
Push-Button Programmable w/o
Removing the Switch Plate
Adjustable Time Delay
Green LED Indicator

#### **PHYSICAL SPECS**

SIZE 4.2"H x 1.8"W x 1.5"D
(10.67cm x 4.57cm x 3.81cm)
WEIGHT 5 oz
MOUNTING Single Gang Switch Box
MOUNTING HEIGHT 30-48 in
(76.2-121.9 cm)
COLORS White, Ivory, Gray,
Light Almond, Black

#### **ELECTRICAL SPECS**

800 W @ 120 VAC 1200 W @ 277 VAC 1500 W @ 347 VAC MINIMUM LOAD None MOTOR LOAD 1/4 HP FREQUENCY 50/60 Hz (timers are 1.2x for 50 Hz)

#### **ENVIRONMENTAL SPECS**

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

#### OTHER

UL and CUL Listed Title 24 Compliant 5 Year Warranty Made in the U.S.A. The WSD PDT VA Series is a Wall Switch Decorator style, Dual Technology vacancy (Manual On) sensor. It is ideal for applications that require Manual On operation and where optional Automatic On control is either prohibited or not desired. It is also the ideal solution for situations where the sensor is located such that it can view outside the room, potentially causing the sensor to trigger when a person walks by. For sensors with Manual On operation (by default) and optional Automatic On operation, the WSD SA and WSD PDT SA Series sensors are recommended. For sensors that are Automatic On operation by default, the WSD and WSD PDT Series sensors are recommended.

#### **SENSOR OPERATION**

Passive Dual Technology (PDT) sensors 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. Once the push-button is pressed, a self-contained relay switches the connected lighting load on. The sensor is line powered and switches line voltage (see specifications). A 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. A 10 second grace period also allows the lights to be voice reactivated after shutting off. This sensor requires no field calibration or sensitivity adjustments.

#### **OPTIONS**

#### **VANDAL-RESISTANT LENS (V)**

- Ideal for high abuse or public areas, where occupants simply come and go
- · Decreases detection range by 50%

#### **INHIBIT PHOTOCELL (P)**

- · Auto set-point calibration
- Photocell prevents lights from turning on if adequate daylight is available, but does not turn lights off

#### 347 VAC (347)

- Allows sensor to be powered from and switch 347 VAC
- · Wall plate included

#### COLOR

- · White, Ivory, Gray, Lt. Almond, Black
- Wall plate provided
- Must be specified

#### LOW TEMP/HIGH HUMIDITY (LT)

- · Sensor is corrosion resistant
- Operates down to -4° F( -20°C)

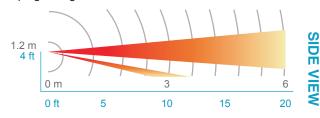
## ORDERING INFO WSD PDT VA [LENS] [PHOTOCELL] [VOLTAGE] [COLOR] [TEMP/HUMIDITY]

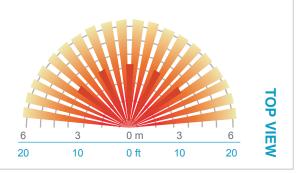
COLOR **TEMP/HUMIDITY LENS PHOTOCELL** VOLTAGE Blank = None WH = White Blank = None Blank = 120/277 VAC Blank = Standard V = Vandal P = Photocell 347 = 347 VACIV = Ivory LT = Low Temp Resistant GY = Grav AL = Lt. Almond BK = Black

#### **COVERAGE PATTERN**

#### WSD WALL SWITCH DECORATOR LENS W/ MICROPHONICS™

- 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
- Microphonics<sup>™</sup> 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





## **CONTROL MODES**

**MANUAL ON -** Requires pressing the push-button to turn lights on. Pressing the push-button again will turn lights out. Lights will also automatically turn off if time delay expires.

## **WIRING (DO NOT WIRE HOT)**

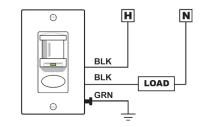
#### STANDARD WIRING

BLACK\* - Line Input
BLACK\* - Load Output

\*BLACK wires can be reversed
GREEN SCREW - Ground (required connection)

#### **347 VAC OPTION (347)**

Black wires are replaced w/ Red wires



Note: Connection to Ground required for sensor to function

#### **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 60 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.

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