

# STANDARD RANGE 360° SENSOR RECESSED MOUNT • LINE VOLTAGE • DUAL TECHNOLOGY

### **KEY SPECS**

Lens Standard Range 360° Enclosure Recessed Mount Power Type Line Voltage Detection Dual Technology (PDT)

### **TYPICAL APPLICATIONS**

Restrooms with Stalls Classrooms (Multiple Sensors) Storage Rooms with Shelving

## **FEATURES**

30 sec. to 20 min Time Delay Self-contained Relay, no Power Pack required No Minimum Load Push-Button Programmable 100 hr. Lamp Burn-in Timer Green LED Indicator

### **PHYSICAL SPECS**

Size 4.40" (11.18 cm) square Weight 6 oz. Mounting Recessed into a 4" x 4" square junction box Color White

### **ELECTRICAL SPECS**

Load Rating (1 Phase Only) 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

#### **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
-LT Option
Circuit board is coated to be corrosion resistant to moisture and operate down to -4°F/20°C

# **OTHER**

UL and CUL Listed Title 24 Compliant 5 Year Warranty Made in the U.S.A.

# RMR-PDT SERIES



The *RMR-PDT Series* occupancy sensors combine the industry's leading Passive Infrared (PIR) technology with Microphonics<sup>™</sup> for awesome detection in areas with or without obstructions. These attractive sensors recess mount into 4" x 4" junction boxes and are perfect for classrooms or large restrooms. Simply install one *RMR-PDT* per switch and you're covered. Additionally, the *RMR-PDT* Series is line powered, therefore it requires no external Power Packs.

#### **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, a self-contained relay switches the lighting "On". The sensor is line powered and can switch a large range of line voltages. 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.

# **DAYLIGHTING CONTROL OPTIONS (-P & -ADC)**

For spaces with abundant natural light from windows or skylights, this series offers an On/Off Photocell (-P) option and an Automatic Dimming Control (-ADC) Photocell option. The -P option is ideal for public areas like vestibules, corridors, or restrooms; while the -ADC option is perfect for classrooms and private offices. As the daylight levels change in the room, both options insure that an adequate light level is maintained according to a programmable set-point value. The -P option provides two modes of operation; one simply inhibits the lights from turning on, while the other has full On/Off control of the lights. The -ADC option allows the sensor to control a dimmable ballast. It also provides a secondary dim time-out that enables the lights to go to a dim setting after one time-out and then turn fully off after a second time-out. **Note:** If both the -P and the -ADC options are selected the "Inhibit" mode of the -P option is not available.

# **ORDERING BLOCK**

# RMR-PDT-[DAYLIGHTING]-[VOLTAGE]-[TEMP/HUMIDITY]

DAYLIGHTING

VOLTAGE

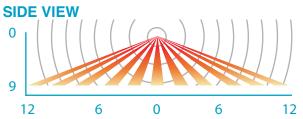
Blank = None
P = On/Off Photocell
-ADC = Auto Dimming Control Photocell
-P-ADC = On/Off & Dimming Photocell
-P-ADC = On/Off & Dimming Photocell

T105-001-P
Sensor Switch, Inc. 2007

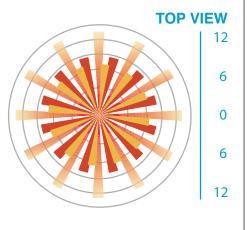
# **COVERAGE PATTERN**

# 9 STANDARD RANGE 360° LENS W/ MICROPHONICS™

- Best choice for small motion (e.g. hand movements) detection
- Viewing angle of 56° in a 360° conical shaped pattern
- Provides 12 ft radial coverage when mounted to standard 9 ft ceiling
- 8 to 15 ft mounting heights provide 10 to 20 ft radial coverage
- Microphonics<sup>™</sup> detects human activity up to 20 feet, but will detect farther in spaces with hard floors or areas with low background noise.



**Note:** Heat producing sources controlled by the sensor must not be in the view pattern of the sensor. If sensor cycles or appears to continually stay "On", move sensor or mask lens segments that view the source.



\*diagrams labeled in feet

# WIRING (DO NOT WIRE HOT)

# STANDARD WIRING

BLACK\* - Line Input

BLACK\* - Load Output

WHITE - Neutral

### **347 VAC OPTION**

Black wires are replaced w/ Red wires

# **AUTOMATIC DIMMING CONTROL OPTION**

VIOLET - Connect to Violet (Control) wire from 0-10 VDC Dimmable Ballast

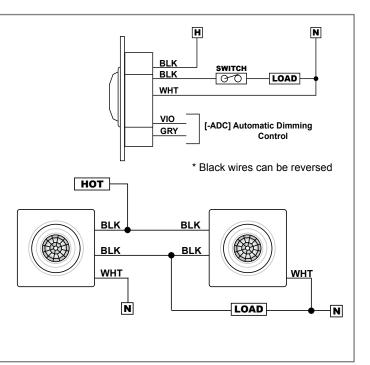
GRAY - Connect to Gray wire from ballast

### **SENSORS IN PARALLEL**

Sensors may be wired in parallel, however the maximum load ratings stay the same. Do not wire sensors with -P or -ADC option in parallel.

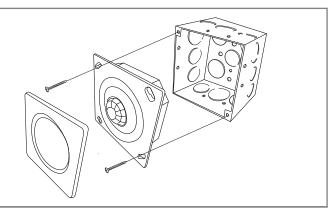
# **INITIAL POWER UP (3 MINUTE WARM-UP)**

The relay in the sensor is shipped in a latched closed position so that when power is initially applied the lights will come on. The sensor will then begin to "time out" after a 1-3 minute warm-up period. If the lights do not immediately turn on (initial installation only) the latching relay opened during shipment and will close after warm-up period is over.



# INSTALLATION

- The Recessed Mount enclosure is designed to fit inside a 4" square junction box (minimum box depth 2.125").
- Place the sensor along the entrance door wall to prevent it from viewing out into the hallway, ensuring the sensor can view the entire room from this position.
- Passive Infrared sensors detect motions crossing the beams much stronger than when entering the beams.
   The outer beams used for initial detection should be aligned for maximum coverage.
- Avoid locating sensor near HVAC air diffusers because the "noise" generated from air flow will decrease the sensitivity of the Microphonics™ sensor.





**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.