



STANDARD RANGE 360° SENSOR CEILING MOUNT • LINE VOLTAGE • DUAL TECHNOLOGY (PDT)

SPECIFICATIONS

FEATURES

- Patented Dual Technology with PIR/ Microphonics Detection
- 360° Coverage
- Self-Contained Relay Switches
- Line Voltage Load
- No Minimum Load Requirements
- Push-Button Programmable
- Adjustable Time Delay
- 100 Hr Lamp Burn-in Timer
- Green LED Indicator

PHYSICAL SPECS

- SIZE 4.55" Dia. (11.56 cm)
- 1.55" Deep (3.94 cm)
- WEIGHT 6 oz
- MOUNTING
- 3.5" Octagon Box
- Single Gang Handy Box
- COLOR White

ELECTRICAL SPECS

- MAXIMUM LOAD
- 800 W @ 120 VAC
- 1200 W @ 277 VAC
- 1500 W @ 347 VAC
- MINIMUM LOAD None
- MOTOR LOAD 1/4 HP
- FREQUENCY 50/60 Hz
- DIMMING LOAD
- Sinks / Sources < 20mA;
- ~40 Ballasts @ .5mA each

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 **CMR PDT 9** Series occupancy sensors combine the industry's leading Passive Infrared (PIR) technology with Microphonics™ for awesome detection in areas with or without obstructions. With an integrated line switching relay, the **CMR PDT 9** is perfect for applications where locating a power pack is difficult. These attractive sensors are perfect for classrooms, private offices, or large restrooms.

SENSOR OPERATION

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 connected lighting load 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 inactivity. 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. This state-of-the-art design requires no field calibration or sensitivity adjustments.

OPTIONS

OCCUPANCY CONTROLLED DIMMING (D)

- Provides dimming output to control 0-10 VDC dimmable ballasts
- Provides a second occupancy time-out period that enables the lights to go to a dim setting before turning off
- Adjustable max/min dim setting

PHOTOCELL (P)

- Auto set-point calibration
- Two selectable modes of operation
- On/Off mode: Photocell has full control during periods of occupancy
- Inhibit mode: Photocell can prevent lights from turning on if adequate daylight is available, but cannot turn lights off

PHOTOCELL w/ DIMMING (ADC)

- Photocell within sensor maintains total room light level by controlling levels of 0-10 VDC dimmable ballasts
- Photocell also has full on/off control during periods of occupancy
- Provides a second occupancy time-out period that enables the lights to go to a dim setting before turning off

347 VAC (347)

- Allows sensor to be powered from and switch 347 VAC

LOW TEMP/HIGH HUMIDITY (LT)

- Sensor is corrosion resistant to moisture
- Operates down to -4° F/ 20° C

ORDERING INFO CMR PDT 9 [DIMMING/PHOTOCELL] [VOLTAGE] [TEMP/HUMIDITY]

DIMMING / PHOTOCELL CHOOSE ONE ONLY

- Blank = None
- D = Occupancy Controlled Dimming
- P = Photocell
- ADC = Photocell w/ Dimming

VOLTAGE

- Blank = 120/277 VAC
- 347 = 347 VAC

TEMP/HUMIDITY

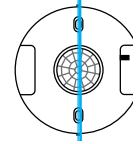
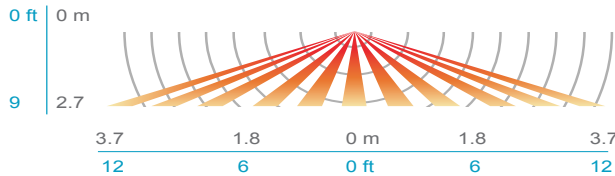
- Blank = Standard
- LT = Low Temp

COVERAGE PATTERN

9 STANDARD RANGE 360° LENS W/ MICROPHONICS™

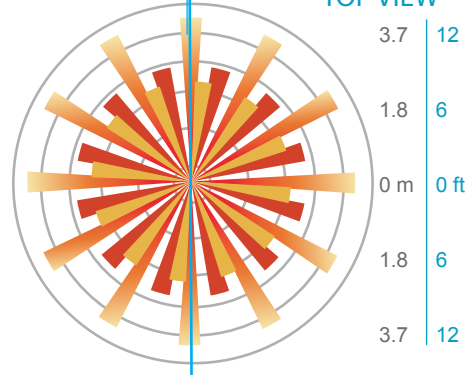
- Best choice for small motion (e.g. hand movements) detection
- Viewing angle of 56° in a 360° conical shaped pattern
- Provides 12 ft (3.66 m) radial coverage when mounted to standard 9 ft (2.74 m) ceiling
- 8 to 15 ft (2.44 to 4.57 m) mounting heights provide 10 to 20 ft (3.05 to 6.10 m) radial coverage
- Microphonics™ provides overlapping detection of human activity over the complete PIR coverage area. Advanced filtering is also utilized to prevent non-occupant noises from keeping the lights on.

SIDE VIEW



Note: Screw axis is aligned with a long detection segment

TOP VIEW



WIRING (DO NOT WIRE HOT)

STANDARD WIRING

- BLACK*** - Line Input
 - BLACK*** - Load Output
 - WHITE** - Neutral
- *BLACK wires can be reversed

347 VAC OPTION (347)

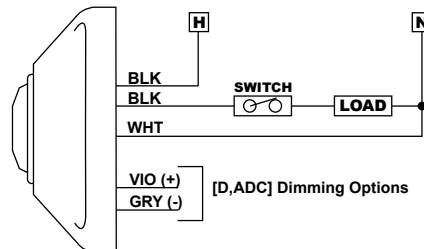
Black wires are replaced w/ Red wires

DIMMING OPTIONS (D, ADC)

- VIOLET** - Connect to Violet control wire from 0-10 VDC dimmable ballast
- GRAY** - Connect to Gray common wire from ballast

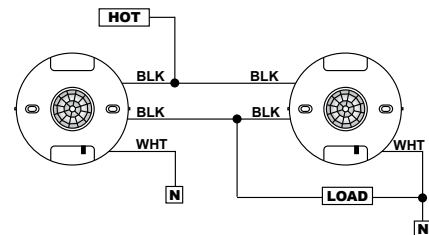
INITIAL POWER UP (3 MINUTE WARM-UP)

The sensor's relay is shipped in a latched closed position so the lights will come on upon initial power-up. After a 1-3 minute warm-up period, the sensor will begin to time out. 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.



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.

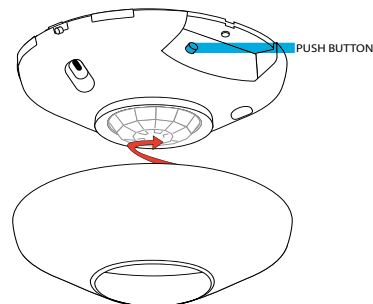


INSTALLATION

- Sensor's mounting holes align with 3.5" octagon or single gang handy box (screws not provided).
- Sensor will detect motions crossing segments more effectively than motions parallel to beams.
- For optimal detection, position sensor such that segments are crossed upon entrance and unable to view outside the space.
- For maximum Microphonics™ sensitivity avoid locating sensor near HVAC air diffusers.

PROGRAMMING

Refer to included instruction card for default settings and directions on programming the sensor via the push-button.



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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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