Installation Instructions

Model # OAC-P-0500-MV
Model # OAC-P-0500-DMV
Model # OAC-P-1500-MV
Model # OAC-P-1500-DMV

Passive Infrared Ceiling Mounted Line Voltage Occupancy Sensor

General Information

- Read all instructions on both sides of this sheet first
- Install in accordance with ALL local codes
- For indoor use only

Specifications

Power Requirements:
- 277 VAC:
  - Fluorescent/Ballast - 0 to 2700W, 50/60 Hz
  - Operating Environment:
    - Temperature: 32°F – 104°F (0°C – 40°C)
    - Relative Humidity: up to 90% non-condensing

Motor Load: ¼ HP @ 125 VAC

230 VAC:
- Fluorescent/Ballast - 0 to 1200W, 50/60 Hz

277 VAC:
- Fluorescent/Ballast - 0 to 2700W, 50/60 Hz

Location

The maximum coverage area may vary somewhat according to room shape and the presence of obstacles. Follow the coverage diagram concerning major and minor motion coverage. The sensor must have a clear view of the area to be controlled. The sensor will not “see” through glass. Mounting height should not exceed 12 feet. Optimum mounting height is 8 to 10 feet. Avoid pointing into hallways. Mounting at fixture height is most effective. To prevent false activation, the sensor should be mounted away from the air supply duct a minimum of four to six feet.

Coverage

The OAC-P Ceiling Mount Line Voltage Occupancy Sensor is a Passive Infrared (PIR) motion sensing lighting control, used for energy savings and convenience. The sensor includes self-adaptive technology that continually adjusts to conditions by adjusting sensitivity and time delay in real-time.

Description

The NEMA WD 7 Guide and robotic method were utilized to verify coverage patterns.

Installation

The OAC-P sensor can be mounted to a standard 2.125" deep x 4" octagon or 2.125" deep x 4" foursquare electrical boxes (foursquare box requires a two-gang mud ring).

Wiring

CAUTION: Before installing or performing any service on a Greengate system, the power MUST be turned OFF at the branch circuit breaker. According to NEC 240-83(d), if the branch circuit breaker is used as the main switch for a fluorescent lighting circuit, the circuit breaker should be marked “SWD”. All installations should be in compliance with the National Electric Code and all state and local codes.

NOTE REGARDING COMPACT FLUORESCENT LAMPS: The life of some compact fluorescent lamps (CFLs) is shortened by frequent automatic or manual switching. Check with CFL and ballast manufacturer to determine the effects of cycling.

1. Make sure power is turned OFF at the branch circuit breaker.
2. Wire units as shown in wiring diagrams per applicable voltage requirements. (Use twist-on wire connectors for all connections) CAP ALL UNUSED WIRE LEADS.
3. Mount unit to ceiling, junction box or round fixture with raceway.
4. Turn power back ON at the branch circuit breaker and wait 2 minutes for the unit to stabilize.
5. Make necessary adjustments. (See Checkout and Adjustments section)

One Sensor, One Switchpack

Manual or Automatic-On Control of Two Standard Switchpacks
Checkout and Adjustment

Checkout Procedure

1. Stand in different areas of the room and wave your hands.
2. If the Red LED does not turn ON, check for any obstructions.
3. Stand still six to eight feet away from the sensor for five seconds. LED should not turn ON.
4. If Red LED turns ON without motion or is constantly ON adjust PIR sensitivity to 50% by moving DIP Switch 5 up.

Self-Adjust

Sensor is shipped in the Self-Adjust Mode. This applies to time delay and PIR sensitivity. In preparation for the installation, the unit will time-out 15 seconds after the last motion detected. Coverage and sensitivity can be confirmed by watching the Red (PIR) indicator LEDs on the front of the sensor, while moving around the room.

1. Walk around the room and monitor LEDs. LEDs should only turn ON for ¼ second with each motion. (If LEDs do not turn ON, note LED and go to Installer Adjustments – Sensitivity Adjustment section)
2. Stand still six to eight feet away from the sensor for five seconds. LEDS should turn ON. If any LED turns ON, note LED and go to Installer Adjustments – Sensitivity Adjustment section
3. Walk outside the room and wait 15 seconds for the lights to turn OFF. (If lights do not turn OFF go to Installer Adjustments Section)
4. Re-enter the room to activate sensor. If lights do not turn ON go to Troubleshooting Section
5. If the unit remains in Test Mode for 10 minutes then automatically exit Test Mode and go for 10 minutes. Time Delay User Mode setting.

Note: If this feature is not needed, leave the light level at maximum (fully clockwise).

The Daylighting feature prevents the lights from turning ON when the room is adequately illuminated by natural light. If there is enough light in the room, regardless of occupancy, the sensor will hold the lights OFF. If there is not enough light in the room, the sensor will allow the lights to turn ON when occupied. However the lights will not turn OFF if the light level goes above the preset value as per the Daylight Potentiometer.

Daylight Adjustments

If this feature is not needed, leave the light level at maximum (fully clockwise).

1. Adjust PIR sensitivity to 50% by moving DIP Switch 5 up.
2. If the Red LED does not turn ON, check for any obstructions.
3. Stand still six to eight feet away from sensor for five seconds. LED should not turn ON.
4. If Red LED turns ON without motion or is constantly ON adjust PIR sensitivity to 50% by moving DIP Switch 5 up.

Field-of-view outside the space

1. Adjust PIR sensitivity to 50% by moving DIP Switch 5 up.
2. If the Red LED does not turn ON, check for any obstructions.
3. Stand still six to eight feet away from sensor for five seconds. LED should not turn ON.
4. If Red LED turns ON without motion or is constantly ON adjust PIR sensitivity to 50% by moving DIP Switch 5 up.

Daylight Flashing Speed

- LEDs will flash once per ¼ second
- LEDs will flash once per second

Duration

10 minutes
10 to 30 minutes

Troubleshooting

If lights will not still turn OFF, call Technical Services at 1-800-553-3879

Warranty and Limitation of Liability

Please refer to www.coopercontrol.com under the Legal section for our terms and conditions.

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