

OAC-DT, MicroSet Dual Tech Ceiling Sensor Line Voltage



PIR
Activated



Ultrasonic
Activated



MicroSet
Self-Adjusting



California
Title 24
Compliant

- **MicroSet self-adjusting Time Delay and sensitivity**
- **Built-in light level sensor**
- **Units available for control of single or two separate loads**
- **Products tested to NEMA WD 7 - 2011 Occupancy Motion Sensors Standard**

Specifications:

Technology: Passive Infrared (PIR) and Ultrasonic (US)

Power Requirements:

120 to 347 VAC, 50/60 Hz - Neutral Required
120 VAC:

- Incandescent/Tungsten - 0 to 800W, 50/60 Hz
- Fluorescent/Ballast - 0 to 1200W, 50/60 Hz
- 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

347 VAC:

- Fluorescent/Ballast - 0 to 1500W, 50/60 Hz

Time Delays: Self-adjustable, 15 seconds/test (10 min. Auto), or Selectable 5, 15, 30 minutes

Coverage: 2000 sq. ft.

Light Level Sensing: 0 to 300 foot-candles

Operating Environment:

- Temperature: 32°F to 104°F (0°C to 40°C)
- Relative humidity: 20% to 90%, non-condensing
- For indoor use only

Housing: Durable, injection molded housing. Polycarbonate resin complies with UL 94V0.

Size: 4.5"H x 1.42"W (114.3mm x 36.068mm)


LED lamp: Green LED for Ultrasonic

Red LED for Passive Infrared

Warranty: Five year

FCC Compliant

cULus Listed

RoHS Compliant  **RoHS**

| | |
|-------------|------|
| Catalog # | Type |
| Project | |
| Comments | |
| Prepared by | Date |



Overview

The Dual Technology sensor's combination of Ultrasonic and Passive Infrared technologies offers the most complete sensing equipment available today. This pairing helps eliminate false activations or deactivations for additional energy savings. The OAC-DT sensors are also equipped with MicroSet self-adjusting technology which provides an adaptive and airflow tolerant technology, making them ideal for spaces which have increased airflow due to higher occupant levels. MicroSet self-adjusting Dual Technology sensors drastically simplify and reduce a contractor's installation and adjustment time period.

Technology

The MicroSet self-adjusting technology continuously monitors multiple sub-frequencies in the event that if a continuous Doppler shift occurs, such as those created by airflow from an air duct, the sensor will identify the noise as continuous and then block it out of view at a select sub-frequency. It will continue to monitor other sub-frequencies for human motion. This avoids false-activation, while still maintaining the high level of sensitivity that is necessary for sensing minor motion in a changing environment. Separate concurrent time delays for both Passive Infrared and Ultrasonic technologies avoid false activations or deactivations. In Automatic ON Mode, the lights turn ON when a person enters the room. When enabled, the daylighting feature prevents lights from turning ON when the room is adequately illuminated by natural light.

Applications

| | | |
|------------------|----------------|----------------------------|
| classrooms | common areas | hallways |
| conference rooms | computer rooms | other indoor office spaces |
| office spaces | break rooms | |

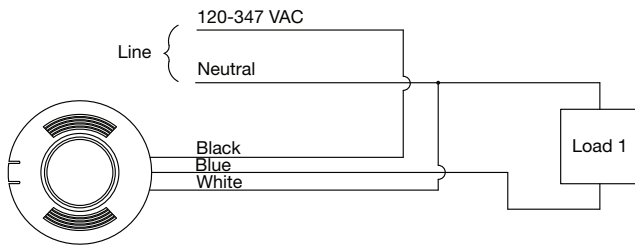
Ordering

| Catalog # | Recommended Room Size | Field of View | Frequency | Features |
|-----------------|-----------------------|----------------|-----------|------------------------------|
| OAC-DT-2000-MV | 2,000 sq.ft. | Two Way (360°) | 32 kHz | w/Daylight Sensor |
| OAC-DT-2000-DMV | 2,000 sq.ft. | Two Way (360°) | 32 kHz | Dual Relay w/Daylight Sensor |

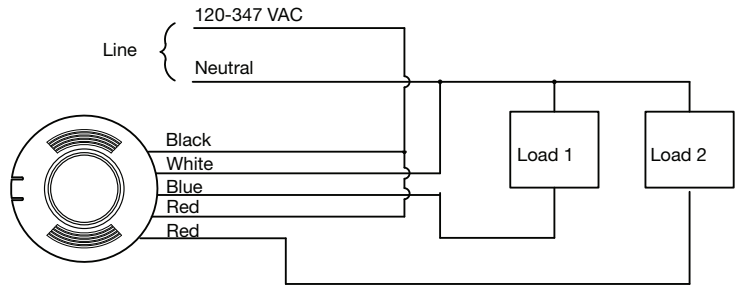
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Wiring Diagrams

One Sensor, One Load (-MV units)



One Sensor, Two Loads (-DMV units)

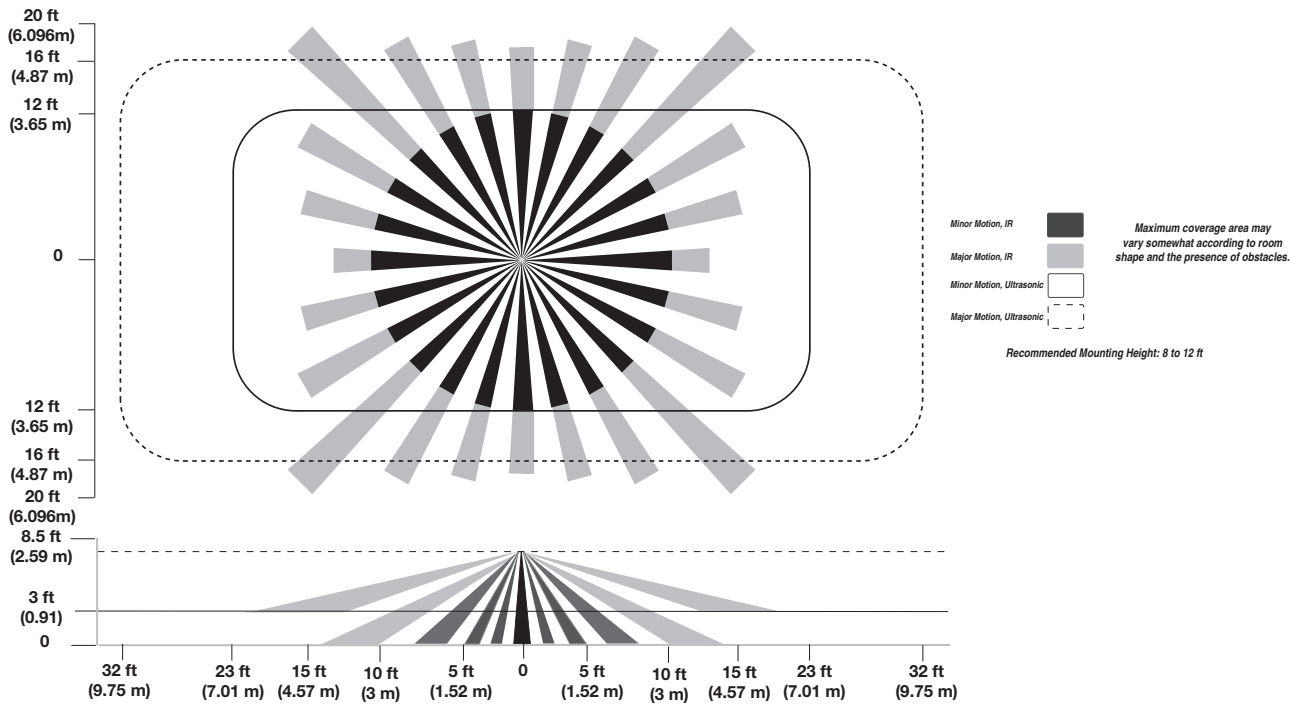


Red leads are non-polarity sensitive.

Coverage

OAC-DT-2000-MV/DMV

2,000 sq. ft.



Controls

DIP Switch Legend

| DIP Switch | Time Delay | | Not Used | | PIR Sensitivity | Walk-Through Mode | | LEDs | | Override | Not Used | Daylighting | Bathroom Mode | Relay Swap |
|------------|------------|---|----------|---|-----------------|-------------------|-----------|-----------|----------|----------|----------|---------------|---------------|------------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| Auto* | ▼ | ▼ | | | Full ▼ | Disable ▼ | Enable ▼ | Disable ▼ | Enable ▼ | | | Relay 2 ▼ | Disable ▼ | Disable ▼ |
| 5 Minutes | ▼ | ▲ | | | 50% ▲ | Enable ▲ | Disable ▲ | Enable ▲ | | | | Relay 1 & 2 ▲ | Enable ▲ | Enable ▲ |
| 15 Minutes | ▲ | ▼ | | | | | | | | | | | | |
| 30 Minutes | ▲ | ▲ | | | | | | | | | | | | |

(DMV model only) (DMV model only) (DMV model only)

*Self-Adjusts to 10 min. user mode

Default =

