80556

360° High Bay Passive Infrared Fixture Mount Occupancy Sensor (Adapter, sold separately)



## SPECIFICATIONS

Voltage	120 /277VAC, 60Hz
Load requirement	
800VA	@ 120VAC Fluorescent Ballasts No Min
1200VA	@ 277VAC Fluorescent Ballasts No Min
Load Horsepower	1/6HP
Time Delay Adjustme	entFixed 15 seconds to 30 minutes
	ure32° to 131° F (0° to 55° C)
Humidity range	0%-90%RH, non-condensing
Coverage range	
High Bay mountin	g heights,,up to 30 ft mounting /360° field
Terminal Line	Black-Hot, White-Neutral, Red-Load

#### PHYSICAL SPECS

SIZE 3.55" Hx3.55" Wx1.57" D (9.02 cm x 9.02 cm x 4.0 cm) WEIGHT 5 oz MOUNTING 1/2 knockout

## **DESCRIPTION AND OPERATION**

The 80556 Occupancy sensor is designed to replace a standard light or fan switch. It is ideal for high mounted areas such as warehouses, manufacturing and other high ceiling applications.

## **Sensor Operation**

The sensor detects changes in the infrared energy given off by occupants as they move within the field-of-view. When occupancy is detected, a self-contained relay switches the connected lighting load on. The sensor is line powered and can switch line voltage. An internal timer, factory set at 15 seconds, keeps the lights on during brief periods of inactivity.

## Initial Power Up (30 seconds warm-up)

The sensor's relay is shipped in a latched closed position so the lights will come on upon initial power—up. The lights contacted with sensor will keep on working during the 30 seconds warm—up period, then the sensor begin to work. 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.

#### Coverage Area

- ——The High Bay 360 degree
- · Best choice for 15 to 30 ft (4.57m to 9.1m) mounting heights
- $\cdot$  15to 20 ft (4.57 to 6.1 m) radial coverage overlaps area lit by a typical high bay fixture ( refer to Fig1 % .

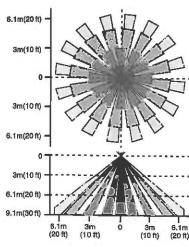


Fig1 Sensor Coverage Area

Windows, glass doors, and othertransparent barriers will obstruct the sensor's view and prevent detection.

Note: The coverage data is measured under the best temperature condition (20–25°C), and a higher temperature may not lead to an ideal coverage.

## **INSTALLATION & WIRING**



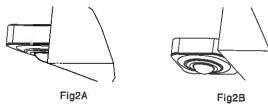
CAUTION FOR YOUR SAFETY: IF YOU ARE NOT SURE ABOUT ANY PART OF THESE INSTRUCTIONS, CONSULT A QUALIFIED ELECTRICIAN.

#### **Avoiding HVAC Turbulence**

When Heating, Ventilating or Air Conditioning (HVAC) registers turn on, they create turbulence which can cause the sensor to activate. It is important that the sensor and HAVC register be separated by at least 6'.

If the sensor's location give it a view of other rooms or hallways, lights will turned on when movements is detected in these adjacent areas. The sensor's detection zone may be restricted by masking a portion of the lens; or move sensor to eliminate detection through doorway.

NOTE: The Sensor's field-of-view may be partially obstructed by the Luminaries housing (refer to Fig2A). At higher mounting heights, the outer beams are not used. As long as the bottom of the sensor is mounted within 1" from the bottom of the luminaire, the field-of-view will not affected (refer to Fig2B)

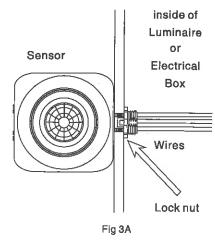


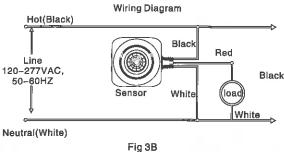
Sensor installation

- 1.Remove the lock-nut from the thread clockwise on to the threaded nipple into a half inch hole of the luminarie body or the electrical box.
- 2.Slide the lock-nut over the wires and thread clockwise on to the threaded nipple to secure the sensor firmly in place making sure the lens is orientated towards the area to be monitored(field-of-view).(refer to Fig3A)
- 3.Connect wire per Wiring Diagram as follows: BLACK lead to LINE(HOT); RED lead to LOAD; WHITE lead to NEUTRAL. Twist the existing wires together with the wire leads on 80556 sensor as indicated

below. Cap them securely using the wire nuts provided.(refer to Fig3B)

4.Restore power at circuit break or fuse





## Adapter Installation

1.Position one half of the Adapter body on the end of the luminaire to determine the appropriate mounting hole to be used on the Adapter that will position the sensor for optimum coverage. The bottom of the sensor should be at or below the luminaire body.(refer to Fig 2B)

- 2.Punch out the keyed hole of the Adapter half body to be mounted on the luminaire or electrical box. (refer to Fig 4B)
- 3. Thread the provided lock nut part way on the keyed threaded nipple and insert through the keyed hole from the inside of the Adapter half body and snap into the half inch hole of the luminaire or electrical box and tighten. (refer to Fig4A)
- 4. Punch out the non-keyed hole on the other Adapter body half and insert the wires and threaded nipple of the Sensor into the hole. Thread the provided lock nut on the nipple and the tighten positioning sensor towards the area to be motioned (refer to Figure 4B)

5.Feed the sensor wires through the keyed nipple attached to the luminaire or electrical box and connect wires per Wiring Diagram as follows: Twist the existing wires together with the wire leads on 80556 sensor as indicated above. Cap them securely using the wire nuts provided. (refer to Figure 3D)

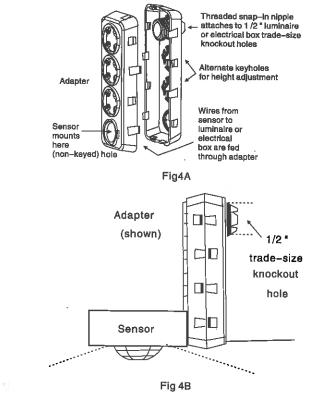
6.After wiring connections are completed, snap the two Adapter body halves together.

7.Restore power at circuit breaker or fuse.

#### INSTALLATION IS COMPLETE.

Note: To open the Adapter, user a small, flat blade screw driver R and carefully insert into slots and push tabs down while pulling the two halves apart.





#### **SENSOR ADJUSTMENT & PROGRAMMING**



Time delay Adjustment: When people leave, the load can still work within the set time period. It can be adjusted from 15 seconds up to 30 minutes. The left is minimum 15 seconds and the right is maximum 30 minutes.

The Time should be reduced only in heavy traffic areas such as hallways, kitchens, copier rooms, etc. to achieve maximum energy savings.

Keeps the time setting at a maximum in large rooms (over 400sf).

**Sensitivity Adjustment:** To decrease PIR detection range and sensitivity, rotate the knob CCW. The detection range can be adjusted from 100% down to 30%.

# TROUBLESHOOTING Lights Will Not Turn ON

- Circuit breaker or fuse is OFF: Turn the breaker ON. Ensure the lights being controlled are in working order (i.e., working bulbs, ballasts, etc.)
- Sensor is wired incorrectly or may be defective: Confirm that the sensor's wiring is done correctly and inspect visually for problems.
- Lens is dirty or obstructed: Inspect the lens visually and clean if necessary, or remove the obstruction.

#### **Lights Will Not Turn OFF**

- Make sure no motion is occurring in the coverage area until the 15 seconds (factory set) time delay expires.
- Sensor is wired incorrectly or may be defective: Confirm that the sensor's wiring is done correctly and inspect visually for problems.
- Sensor may be mounted too closely to an air conditioning or heating vent: Move the sensor or close the vent.
- The line voltage has dropped: Perform the necessary tests to ensure the line voltage has not dropped beneath 100V.

### Lights Turn OFF And ON Too Quickly

- Sensor may be mounted too closely to an air conditioning or heating vent: Move the sensor to another location or close the vent.
- · Time delay set improperly: Refer to Time delay Adjustment

