# ENERLITES®

## 360° Passive Infrared
## Line Voltage Occupancy Sensor

### Model No: MPC-52V

### Description

The MPC-52V 360° passive infrared (PIR) occupancy sensors turn lighting systems on and off based on occupancy and ambient light levels. The light level feature keeps lights from turning on if the ambient light level is sufficient. The sensors can be configured to turn lighting on, and hold it on as long as the sensor detects occupancy. After no movement is detected for a specified time the lights are switched off.
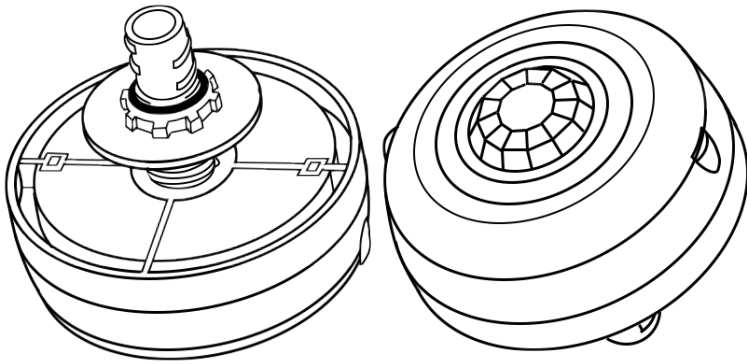
### Features

• 360 Field of view, 800 sq.ft.
• Passive Infrared Technology (PIR)
• Time Delay is adjustable from 15 seconds (test mode) to 30 minutes
• Simple, fast installation
• Adjustable sensitivity settings
• Light level is adjustable

### Specifications

| | |
|---|---|
| Incandescent | 800W-120VAC, 60H |
| Fluorescent | 800VA-120VAC |
| | 1200VA-277VAC, 60HZ |
| LED | 150W |
| Motor | 1/4 HP , 120VAC, 60HZ |
| Operating Temperature | 32° to 131°F (0° to 55°C) |
| Adjustable Light Level | 10FC—150FC |
| Adjustment Time Delay | 15 Sec. to 30 Min. |
| Sensitivity Adjustment | 50% or 100% (DIP switch 1) |
| Coverage | Up to 800 ft² |
| Lead Power Cable | 4 feet |
| Standards and Certifications | UL Listed |
| Warranty | 2 years |

### Testing and Code Compliance

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**Location:** Device should be mounted in a location free of obstruction from furniture, plants, walls and vibration (see Figure 1). The sensor must be mounted a minimum of 4 ft. away from any air vents. Avoid mounting the sensor close to heat source. When mounting directly to a ceiling light fixture, the lens of the sensor must be below the lowest point of the fixture.

MPC-52V is designed for a ceiling height of about 8-10 feet. Because of the umbrella shaped coverage pattern, mounting above or below the recommended height could reduce coverage range and sensitivity. It is not necessary to have occupancy sensor coverage on every square inch of space in any particular room.

The best location to install multiple MPC-52V is usually in the walkways of an open office space (see Figure 2).



**Figure 1**          **Figure 2**

Helpful hints:
   a. Make sure that the sensor's view of the entrance will not be blocked by the door when it is open.
   b. Program a longer time out to avoid the lights constantly turning on/off.
   c. Do not mount sensors close to air vents.
   d. Cover the main walkways.
   e. Try to avoid having the sensor looking out the door of the space

Open Office or Classroom Area Coverage:
   a. To get complete coverage in an open office area, install multiple sensors so that there is at least 15% overlap with each adjacent sensor's coverage area.
   b. The sensors should cover the primary occupant's desk, the entrance and any other areas with heavy traffic.

## COVERAGE

The MPC-52V provides a 360° coverage pattern. The coverage shown represents walking motion at a mounting height of 8 feet. For building spaces with lower levels of activity or with obstacles and barriers, coverage size may decrease.



PIR Radius of 22'
(or 44' Diameter)

MPC-52V at 8' high
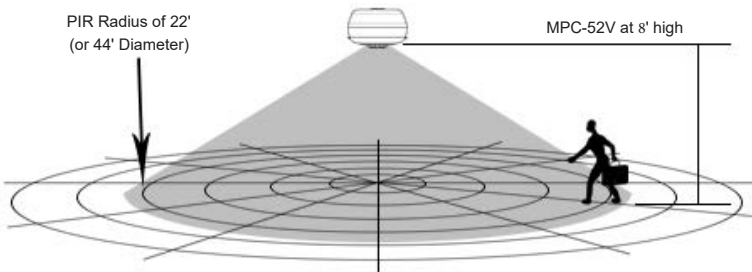
## INSTALLATION

The MPC-52V can be directly attached to the fixture or ceiling (See Figure 3 below).

1. Cut a 7/8" round hole in the ceiling tile at the mounting location.
2. Attach the connector on the mounting base through the cutout.
3. Twist the locknut onto the connector until the mounting base is tight.
4. Pull the high voltage wires through the connector.
5. Follow the wiring diagram and connect the high voltage wires to the appropriate terminals on the sensor.
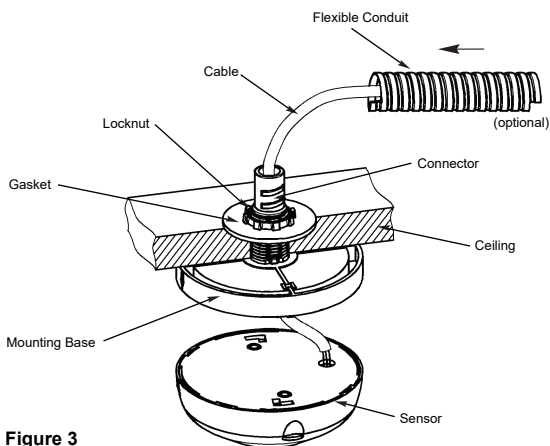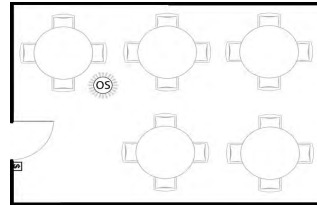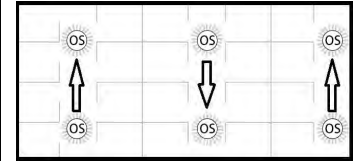6. Attach the sensor and lock it onto the mounting base with a slight twist.

## WIRING DIRECTIONS

### Refer to the wire diagram of the sensor (See Figure 4)

1. Connect the HOT wire to the BLACK wire on the sensor.
2. Connect the NEUTRAL wire to the WHITE wire on the sensor.
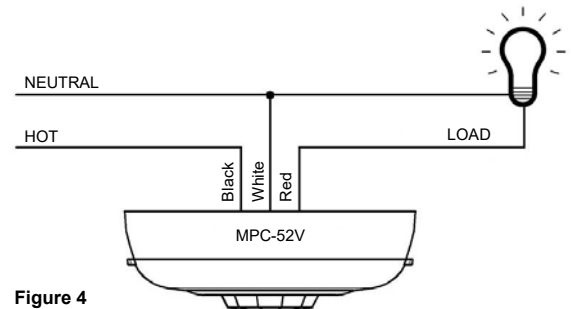3. Connect the LOAD wire to the RED wire on the sensor.



Flexible Conduit
Cable
Locknut
Gasket
(optional)
Connector
Ceiling
Mounting Base
Sensor

**Figure 3**



NEUTRAL
HOT
LOAD
Black
White
Red
MPC-52V

**Figure 4**

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