



## Enerlites MPC-52V10 360 Degree Line Voltage PIR Occupancy Ceiling Sensor Installation Guide

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## SPECIFICATIONS

**Incandescent:** 800W-120VAC, 60HZ

**Electronic Ballast:** 800VA-120VAC / 1200VA-277VAC, 60HZ

**Motor:** 1/4 HP ,120VAC, 60HZ

**Operating Temperature :** 32°to 131°F (0°to 55°C)

**Adjustable Light Level:** 10FC—150FC

**Adjustable Time Delay:** 15 sec.-30min.

**Sensitivity Adjustment:** 50% or 100% (DIP switch 1)

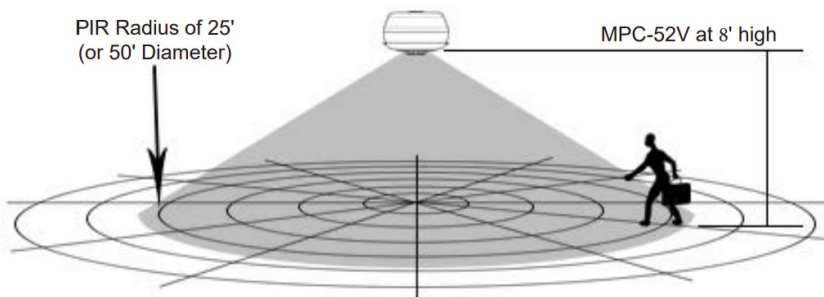
**Coverage:** Up to 800 ft<sup>2</sup>

## DESCRIPTION

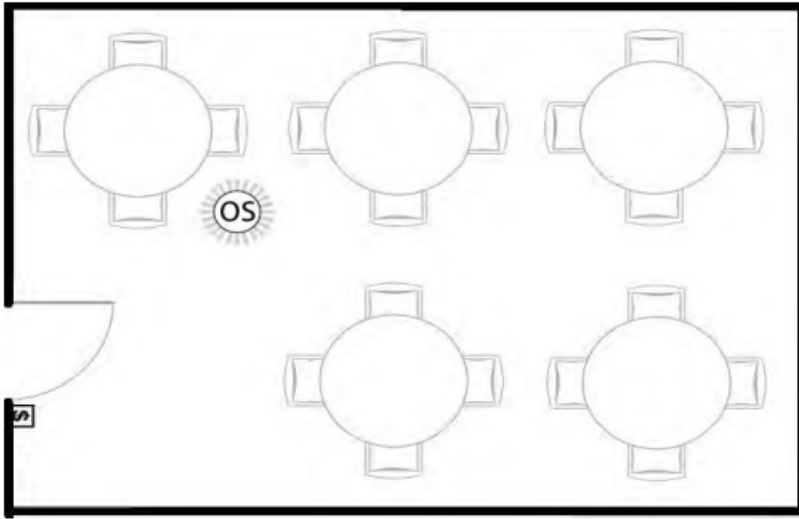
The MPC-52V10 360° occupancy sensor uses advanced PIR technology to turn on the lights when motion is detected and keep the lights on when movement is present. The sensor will automatically turn off the lights if no movement is detected within the amount of time selected in the time delay.

## COVERAGE

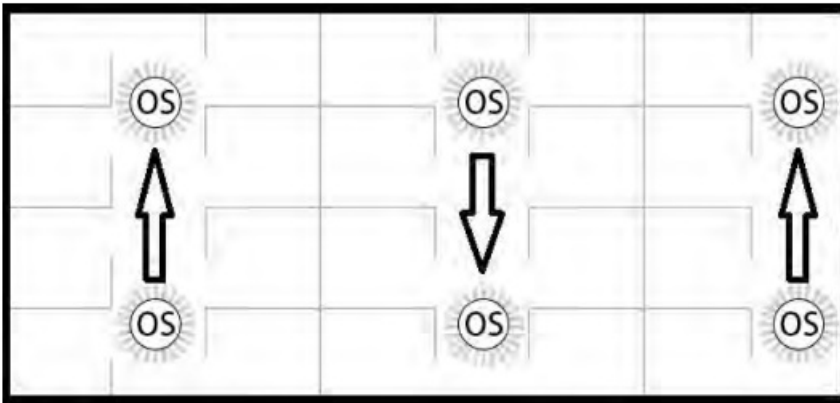
The MPC-52V10 provides a 360° coverage pattern. The coverage shown represents walking motion at a mounting height of 8 feet. For building spaces with lower levels of activity or with obstacles and barriers, coverage size may decrease.



**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-52V10 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-52V10 is usually in the walkways of an open office space (see Figure 2).



### Helpful hints:

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

### Open 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.

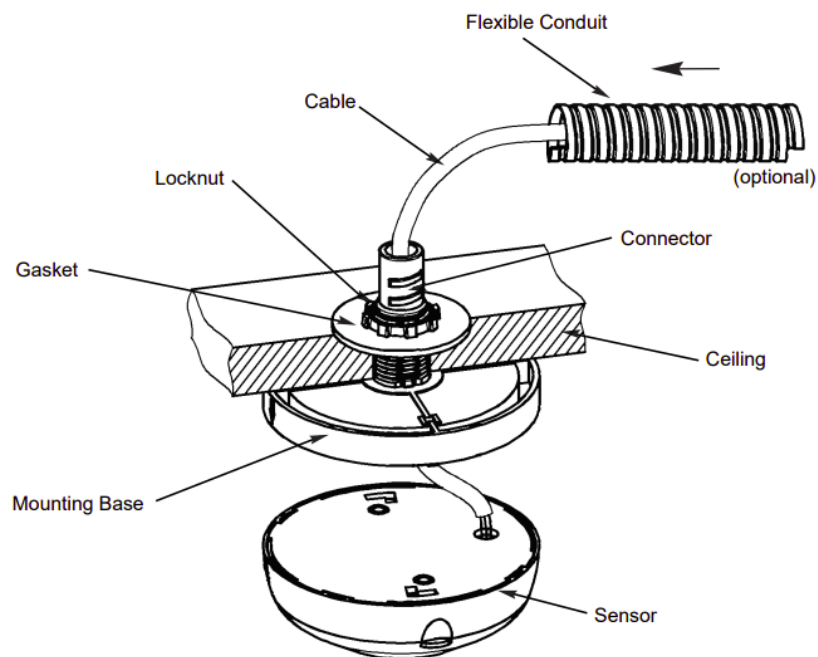
**B.** The sensors should cover the primary occupant's desk, the entrance and any other areas with heavy traffic.

### WARNING

Turn the POWER OFF at the circuit breaker before installing the sensor.

Read and understand these instructions before installing. This device is intended for installation in accordance with the National Electric Code and local regulations. It is recommended that a qualified electrician performs this installation. Make sure to turn off the circuit breaker or fuse(s) and make sure power is off before wiring the device. Use copper wires only.

The MPC-52V10 can be directly attached to the fixture or ceiling (See Figure 3 below)

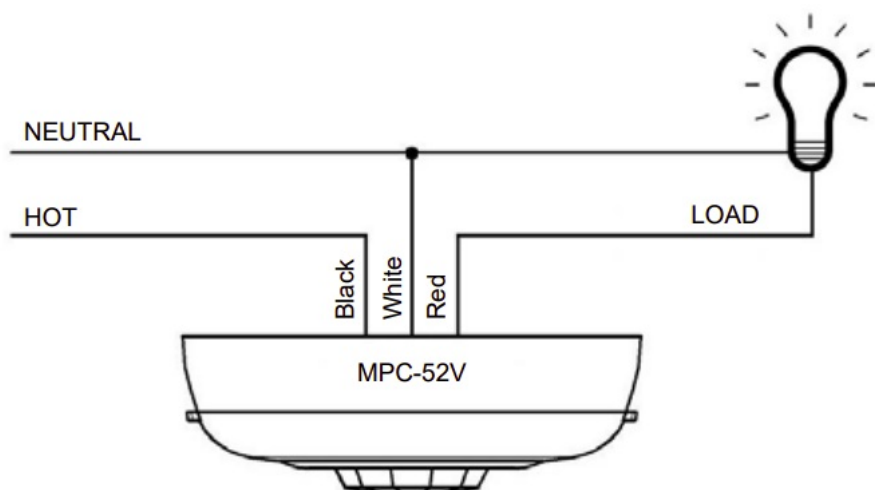


1. Cut a 7/8" round hole in the ceiling tile at the mounting location.
2. Attach the connector on the mounting base through the cutout.
3. Twist the locknut onto the connector until the mounting base is tight.
4. Pull the high voltage wires through the connector.
5. Follow the wiring diagram and connect 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 DIRECTION

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.



## LIGHT LEVEL ADJUSTMENT

The sensor may be adjusted to operate at the desired level of light under normal lighting conditions of the immediate area.

To do so, turn the dial to point the arrow toward the “-” sign for sensor to detect motion and operate during low light or no light. Point the arrow toward the “+” sign for sensor to operate when there’s more light in the area or even during daylight.



## SENSOR ADJUSTMENT

Note: The LED indicator flashes during the 60-second warm-up period when power is first applied.

If the sensor detects occupancy during the warm-up, the time delay will increase.

If no occupancy is detected during the warm-up, the light turns OFF after the initial 60-second warm-up period.

## DIP SWITCH SETTING

The MPC-52V10 has 4 DIP switches under the lens cover. They are used to set the sensitivity and time delay. This device is factory preset for quick installation and is ready to test once installed. After testing, adjust the DIP switches and Light dial to desired levels.

### Factory setting

Time Delay	2	3	4
Test/15 Seconds	↓	↓	↓
5 Minutes	↓	↓	↑
10 Minutes	↓	↓	↓
15 Minutes	↓	↑	↑
20 Minutes	↑	↓	↓
25 Minutes	↑	↓	↑
30 Minutes	↑	↑	↓

Sensitivity	1
100%	↑
50%	↓

### Sensitivity setting: DIP switch 1

50% -This setting will decrease the amount of area the sensor will cover to half the range. 100% -This setting will allow the sensor to utilize the maximum range. Maximum range of MPC-52V10 coverage is 1900 square feet.

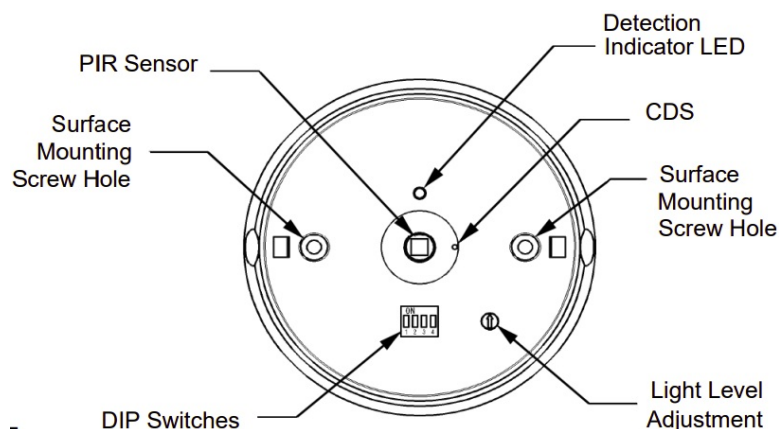
### Time delay: DIP switch 2,3,4

The time delay is set with Dip switches 2, 3 and 4, from 15 seconds to 30 minutes. When there is no movement detected by sensor, the lights will automatically turn off after the selected time delay has expired.

## TESTING OCCUPANCY SENSOR

**Note:** There is a 60- second warm-up period when power is first applied. Use a small screwdriver to open the front cover and make changes to the settings. The pre-set time delay is Test mode and light level is set at maximum.

Refer to Figure 5 and 6.



1. Ensure the PIR Activity is enabled, red LED flashes, and PIR Sensitivity is set to 100% (DIP switch 1 ON).
2. Ensure the Time Delay is set for Test Mode.
3. Ensure that the Light Level is at the maximum position (see" LIGHT LEVEL ADJUSTMENT").
4. Remain still. The red LED should not flash. The lights should turn off after 15 seconds. (If not, see "TROUBLESHOOTING.")
5. Move around in front of the coverage area. The lights should turn on automatically. When functional test is complete, set DIP Switches, Time Delay and Light Level to the desired settings, and put the front cover back on the sensor.

## **TROUBLESHOOTING**

### **LED does not blink:**

1. Make sure the sensor has power.
2. Check the location of the sensor and verify that the sensor can detect motion from human body. If not , the LED will not blink.
3. Check the wire connections and verify that the wires are secured with wire caps.
4. Make sure the HOT and NEUTRAL wires are not reversed.

### **Lights do not turn OFF automatically:**

1. If there is no motion from people or equipment in the sensor's view but the LED blinks, look for any nearby source of infrared energy (heat) in motion, such as turbulent air from a heating or cooling supply.
  - Mount the sensor so that it's lens is below the edge of the fixture and does not directly view the lamps.
  - Move the air supply away from the sensor, or move the sensor.
2. Verify the time delay settings in switches 2-4. The time delay can be set from 15 seconds to 30 minutes. Ensure that the time delay is set to the desired delay and that there is no movement within the sensor's view for that time period.
3. Check sensor wire connections, verify load and neutral wires are secure.

## **WARRANTY INFORMATION**

This device is warranted to be free of material and workmanship defects for 2 years from the date of purchase. Original receipt or proof of purchase from an authorized retailer must be presented upon warranty claim. ALL claims must be verified and approved by Energies, Inc. Warranties from other Enerlites products may vary. This warranty is nontransferable and does not cover normal wear and tear or any malfunction, failure, or defect resulting from misuse, abuse, neglect, alteration, modification, or improper installation. To the fullest extent permitted by the applicable state law, Enerlites shall not be liable to the purchaser or end user customer of Enerlites products for direct, indirect, incidental, or consequential damages even if Enerlites has been advised of the possibility of such damages. Enerlites' total liability under this or any other warranty, express or implied, is limited to repair, replacement or refund. Repair, replacement or refund are the sole and exclusive remedies for breach of warranty or any other legal theory.

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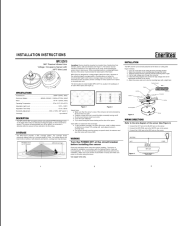
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## Documents / Resources

	<p><a href="#">Enerlites MPC-52V10 360 Degree Line Voltage PIR Occupancy Ceiling Sensor</a> [pdf] Installation Guide</p> <p>MPC-52V10, MPC-52V10 360 Degree Line Voltage PIR Occupancy Ceiling Sensor, 360 Degree Line Voltage PIR Occupancy Ceiling Sensor, Line Voltage PIR Occupancy Ceiling Sensor, Voltage PIR Occupancy Ceiling Sensor, PIR Occupancy Ceiling Sensor, Occupancy Ceiling Sensor, Ceiling Sensor, Sensor</p>
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## References

- [Homepage - Enerlites - Electrical Supplier](#)
- [User Manual](#)

[Manuals+.](#)