

Commercial Grade

In-Wall Occupancy/Vacancy Sensor

Model #: MWOS



Description: This Multi-Technology Wall Switch Sensor combine advanced passive infrared (PIR) and ultrasonic technologies into one unit. The combined technologies helps eliminate false triggering even in difficult applications. Selectable operating modes allow the sensor to turn a load on, and hold it on as long as either or both technologies detect occupancy . After no movement is detected for the selected time delay, the lights switch off. A "walk-through" mode can turn lights off after only 3 minutes, if no activity is detected after 30 seconds following an occupancy detection.

This sensor also contains a light level sensor. If adequate daylight is present, the sensor holds the load OFF until light levels drop, even if the area is occupied.

Features:

- Integrated PIR and Ultrasonic sensor technology to detect very fine motion and provide accurate motion sensing
- Allows to choose triggering when both technologies detect motion or when only PIR detects motion
- Less false trigger, fast ON/OFF; commercial grade sensor for closet, garage, hotels, meeting room, work places
- Adjustable timeout from 15 seconds to 30 minutes; Walk-Through mode: 3 minutes if no activity after first 30 seconds

Specifications:

Voltage	120/277VAC,50/60Hz
Load Requirments:	
Incandescent.....	800W-120VAC,50/60Hz
Fluorescent.....	800VA-120VAC,1600VA-277VAC,50/60Hz
Resistive.....	800W-120VAC,50/60Hz
Motor	1/4HP-120VAC,50/60Hz
Adjustment Time Delay.....	5Sec to 30Mins
Walk-Through Mode.....	3 minutes if no activity after 30 sec.
Test Mode	5 sec. at initial power up or DIP switch reset
PIR Adjustment.....	High or Low (DIP switch)
Ultrasonic Adjustment	Minimum to Maximum (trimpot)
Light Level Adjustment.....	100 Lux --daylight(trimpot)
Operation Temperature.....	32° F--131° F

Testing & Code Compliance

- UL LISTED

Installation & wiring

1. Make sure that the power has been turned OFF at the circuit breaker.
2. Connect lead wires as WIRING DIAGRAM (see Figure 1): Black lead to Line(Hot), Red lead to Load wire, White lead to Neutral wire, Green lead to Ground.

Wiring Diagram:

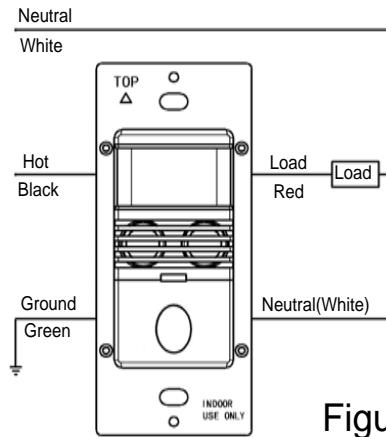
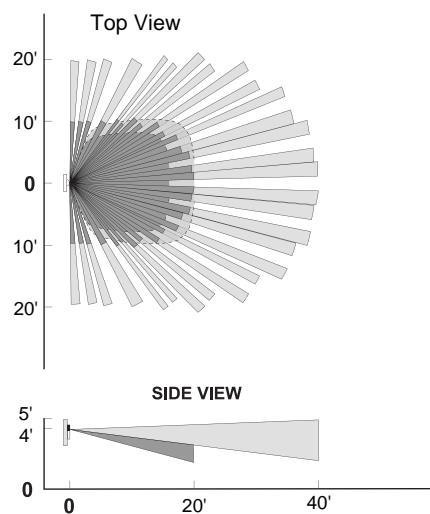


Figure 1

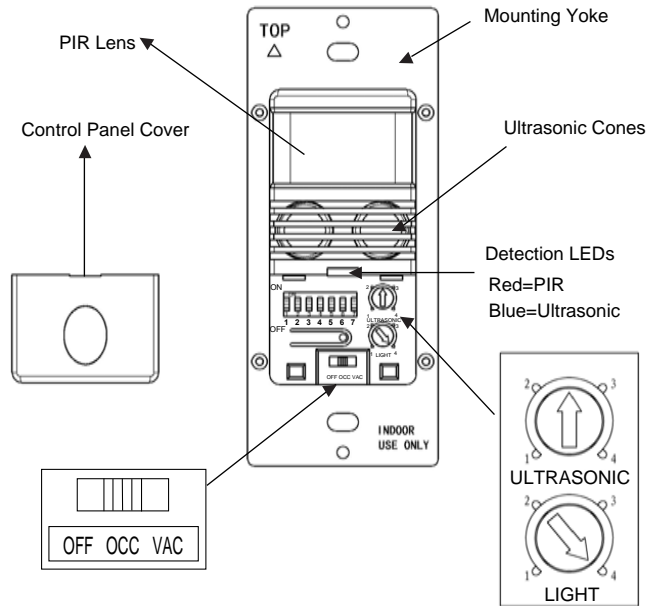
3. Mount device "TOP" up.
4. Gently position wires in wall box, attach sensor switch to the box.
5. Restore power at circuit breaker or fuse, wait *one* minute.
6. Remove the small cover plate.
7. Locate the adjustment trimpots on the control panel to perform test and adjustment.
8. Replace the small cover plate after testing and adjustment.

Coverage area



PIR Coverage: 1200 ft²
Ultrasonic Coverage: 400 ft²

Adjustment



Band switch prescription.

Mode	Position	Description	React to the push-button
OFF	Left	Circuit is permanently opened. (switched off)	None
OCC	Center	Occupancy Mode: Automatic On, automatic Off after set time delay.	Manually toggles On / Off the load.
VAC	Right	Vacancy Mode: Manual On only, automatic Off after set time delay.	Manually toggles On/Off the load.

DIP Switch Setting

The MWOS has 7 DIP switches under the cover. They are used to set sensitivity, time delay, trigger mode, walk through mode feature settings.

Trigger Mode	Initial Trigger	Maintain Load Output	Re-trigger	2	3
Option 1	Both	Either	Either	↓	↓
Option 2	PIR	PIR	PIR	↓	↑
Option 3	US	US	US	↑	↓
Option 4	Both	Both	Both	↑	↑

Sensitivity	1
50%	↓
100%	↑

Walk Through	7
Disabled	↓
Enabled	↑

Time Delay	4	5	6
5 Sec/Test	↓	↓	↓
30 Seconds	↓	↓	↑
5 Minutes	↓	↑	↓
10 Minutes	↓	↑	↑
15 Minutes	↑	↓	↓
20 Minutes	↑	↓	↑
25 Minutes	↑	↑	↓
30 Minutes	↑	↑	↑

↓=OFF ↑=ON ◀=Factory Setting