

Model: MWOS

Commercial Grade Occupancy/Vacancy Sensor



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 day-light 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
- Vacancy mode have two tasks: keeping the lights ON while the space is occupied and turning the lights OFF when unoccupied.

Testing & Code Compliance

UL/CUL Listed
Title 24 Compliant

Color Swatches



Specification Submittal

Specifications

Rating	120/277 VAC, 60Hz
Incandescent	800VA @ 120VAC
Electronic Ballast	600VA @120VAC; 1385VA @277VAC
Time Delay	Test mode 15S - 30 minutes
Motor	1/4 HP @ 120VAC
Operation Temperature	0°C--40°C
Warranty	5 Years

Performance Specifications

Sensor Technology	Multi-Technology: PIR/Ultrasonic
Switch Type	Single Pole
Coverage	PIR-1200 Sq. Ft - Ultrasonic-400 Sq. Ft
Pattern	180°
Neutral Wire	Required

Application

- Public restrooms
- School restrooms
- Recreational rooms
- Mechanical rooms

Vacancy Application

- Private and executives offices
- Conference rooms
- Storage Areas
- Classrooms
- Restrooms
- Lounges
- Training areas

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DIP SWITCH SETTINGS

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

↓ =OFF ↑ =ON ◀ =Factory Setting

PIR Sensitivity	1
50%	↓
100%	↑

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	↑	↑

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

Walk Through	7
Disabled	↓
Enabled	↑

PIR Sensitivity setting: Switch 1

50%, sensor's coverage about 600 square feet. **100%**, the maximum range of sensor's PIR coverage is 1200 square feet, see "coverage pattern".

Trigger Mode: Switches 2, 3

The sensor has 4 trigger options. Use DIP switches 2 & 3 and follow the chart above for "Trigger Mode":

- **Both:** requires motion detection by the PIR and the Ultrasonic.
- **Either:** requires motion detection by only one technology (whichever detects motion first).
- **PIR:** requires motion detection only by the PIR.
- **US:** requires motion detection only by the Ultrasonic.

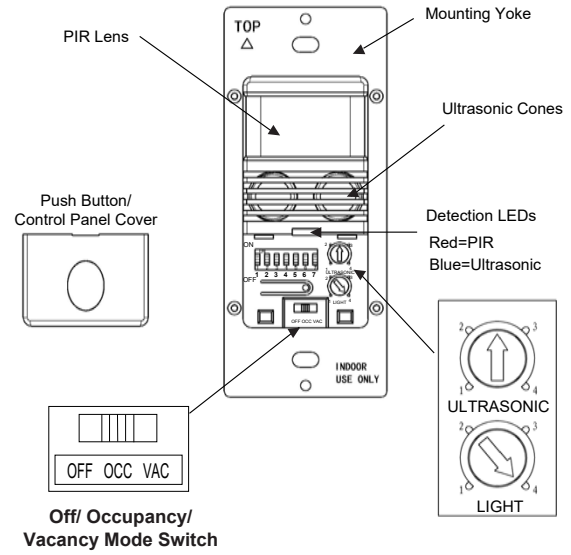
Time Delay: Switches 4, 5, 6

The sensor will hold the lights on as long as occupancy is detected based on the trigger mode selected. The time delay countdown starts when no motion is detected and the sensor will turn the lights off when the time expires.

Walk-through mode: Switch 7

If no motion is detected within the first 30 seconds after the initial detection, the sensor will turn the lights off in three minutes. If motion continues beyond the first 30 seconds, the selected time delay applies.

OPERATION



Mode	Position	Description	Push-Button Function
OFF	Left	Circuit is permanently opened. (switched off)	None
OCC	Center	Occupancy Mode: Automatic On, Automatic Off after selected time delay.	Manually toggles On / Off the load.
VAC	Right	Vacancy Mode: Manual On only, Automatic Off after selected time delay.	Manually toggles On/Off the load.

The OFF position: Switch is turned off and will not detect motion. The push button will not function.

OCCupancy position: The load will automatically turn on when motion is detected and automatically turn off when the selected time delay has expired. The push button may be used to manually turn ON/OFF the load and time delay will also take effect.

VACancy position: The load will turn on ONLY when the push button is used and automatically turn off when the selected time delay has expired. The push button may be used to manually turn ON/OFF the load and time delay will also take effect. If the time delay has expired and the load turns off, the load will turn on again automatically if motion is detected within 30 seconds.

Specification Submittal

Job Name:

Job Number:

Models: