



Commercial Grade Occupancy/Vacancy Sensor

Model No: DWOS-J

Description

The passive infrared sensors work by detecting the difference between heat emitted from the human body in motion and the background space. The sensor switch can turn a load on and hold it as long as the sensor detects occupancy. After no motion is detected for the set time delay, the load turned off automatically. This product has one relay (equal to Single Pole Switch), also includes adjustable Ambient Light Level.

Features

- Turn lights ON/OFF automatically (Occupancy Mode)
- Manual ON / automatically OFF (Vacancy Mode)
- Time delay is adjustable from 15 seconds (test mode) to 30 minutes
- Secured ground wire required
- Zero Crossing for long relay life
- Adjustable sensitivity settings
- Light level is adjustable

Specifications

Voltage	120/277Vac, 60 Hz
Incandescent	800W
Fluorescent	120VAC/800VA, 277VAC/1600VA
LED/CFL	150W
Motor	1/4 HP
Time delay	15 Sec to 30 Mins
Light level	30 Lux – Daylight
Operating Temperature	32 F to 131 F

Testing & Code Compliance



Coverage

As illustrated in Figure 1, The DWOS-J has a 180° detection range with a maximum distance of 30' detection in front of the sensor and 20' on the sides. For maximum results, the sensor must be properly installed between the height of 4' to 5' and away from obstructions such as walls, furniture and transparent barriers like Low-E glass.

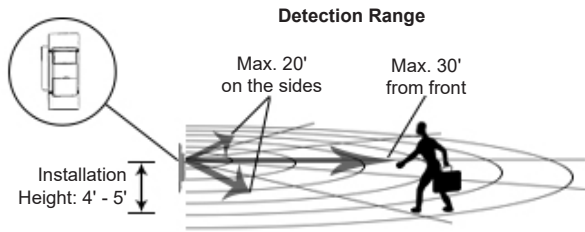
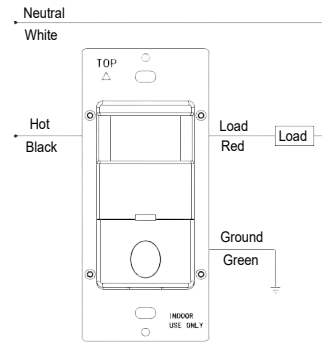


Figure 1



Wiring Diagram Figure 2

ADJUSTMENT

The control panel cover is also the push button on the switch. Remove the push-button cover plate by prying from the bottom of the push-button and pulling outward.

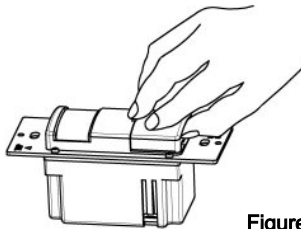


Figure 3

Time dial

This dial adjusts the time delay. Default position: 15 Seconds (Test mode) Adjustable: from 15 Seconds to 30 Minutes (clockwise)

Range dial

This dial adjusts the detection range. Default position: Center at 65% Adjustable: 30% (Position 1) to 100% (Position 4). Note: Use the greater setting for larger coverage area.

OPERATION

Mode Switch: AUTO/ OCCupancy/ VACancy

Mode	Position	Description	Push-Button Function
AUTO	Left	Auto Set Occupancy Mode: Automatic On ,Automatic Off after digital auto set delay time, including walk-through Mode	Manually toggles On / Off the load.
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.

Manual ON/OFF Button: In AUTO, OCC, or VAC mode, The push button may be used to manually turn ON/OFF the load and time delay will take effect. There is a 5 seconds reset delay after each push of the button to trigger the ON/OFF.

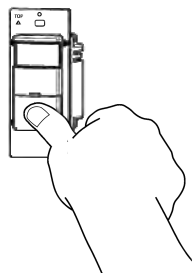


Figure 5

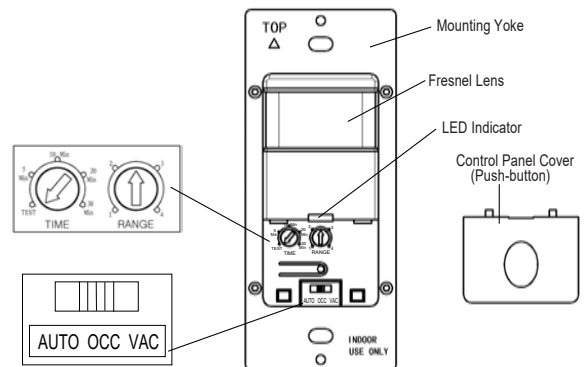


Figure 4

AUTO Mode: To use this mode, the Time Delay must not be in Test Mode. In AUTO Mode, the sensor automatically sets the time delay between 7 to 30 minutes based on occupancy patterns. When the ambient light level is reached, the Load will automatically turn ON when motion is detected and automatically turn OFF when the selected time delay has expired.

- **Walk-Through Feature:** A "Walk-Through" is when motion is detected for a brief moment of 30 seconds and not again for 2.5 minutes. When a "Walk-Through" is detected, the Load is automatically turned OFF after 2.5 minutes. If motion is detected after the initial 30 seconds, the automatic time delay starts.

OCCupancy position: When the ambient light level is reached, the Load will automatically turn ON when motion is detected and automatically turn OFF when the selected time delay has expired.

VACancy position: The Load will turn ON ONLY when the push button is used and automatically turns OFF when the selected time delay has expired. 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.