Sensor Switches

MODEL DWOS



Instruction Manual



WARNING

WARNING — TURN OFF THE CIRCUIT BREAKER BEFORE INSTALLATION.

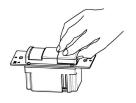
- 1. The SENSOR SWITCH is for INDOOR USE ONLY
- 2. Do not exceed electrical ratings

CAUTION

PLEASE READ INSTRUCTION BEFORE COMMECING INSTALLATION AND RETAIN FOR FUTURE REFERENCES. Electrical products can cause death or injury, or damage to property. If in any doubt about the installation or use of this product, consult a competent electrician.

INSTALLATION GUIDE

- Connect lead wires as shown in WIRING DIAGRAM (see fig.2): Black lead to Line (Hot), Red lead to Load wire, White lead to Neutral wire, Green lead to Ground
- 2. Gently position wires in wall box, attach sensor switch to the box
- 3. Mount device "TOP" up
- 4. Restore power at circuit breaker or fuse, wait ONE minute
- 5. Remove the small cover plate (see fig.1)
- 6. Locate the adjustment knobs on the control panel to perform test and adjustment (see fig.1)
- 7. Replace the small cover plate after testing and adjustment
- 8. Attach the wallplate





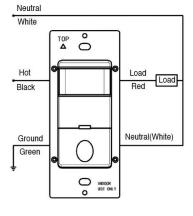


fig.2

OPERATION

The Sensor Switch is programmed independently for either Occupancy Mode or Vacancy Mode depending on the Band Switch position under the control panel cover. Some might call the Vacancy mode as "Manual On Occupancy Mode".

Manual ON/OFF Button

By Pushing the Control Panel Cover, the Load can be turned ON/OFF under either OCC or VAC mode (see fig.3)

Turning On the Load under Occupancy Mode

Load automatically turned ON when occupancy is detected

Turning On the Load under Vacancy Mode

Manual ON/OFF Button has to be pushed to turn ON the Load

Automatic Turning OFF the Load

Under either mode, the Sensor keeps the Load ON until no motion is detected plus the set time delay, then turns OFF automatically. Under VAC mode, the Load can turn ON automatically if motion is detected within the first 30 seconds

Manual Turning OFF the load

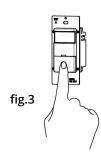
By Manual ON/OFF Button, the Load can be turned OFF under either OCC or VAC mode. Under OCC Mode, if you press manual ON/OFF button first, the sensor switch returns to normal until set-time finished

NOTE: For DWOS, there is night light behind the Fresnel Lens as follows:

OFF — The Night Light keeps on constantly

 ${\sf OCC}$ — The Night Light will not work

VAC — The Night Light will turn ON under occupancy when load is off. Conversely, the NIGHT LIGHT will turn OFF when load is ON



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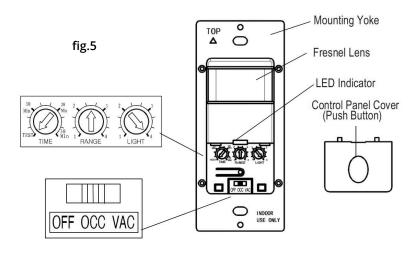
Instruction Manual

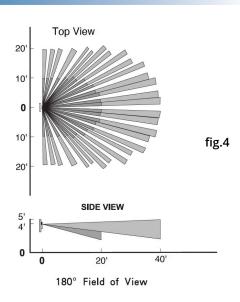
COVERAGE AREA

The Coverage range of the sensor switch is specified and illustrated in fig.4. Large objects and some transparent barriers like glass windows will obstruct the sensor's view and prevent detection, causing the light to turn OFF even though someone is still in the detection area.

Best: 320 sq.ft. Regular: 800 sq.ft. Maximum: 1200 sq.ft.

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.

Time Delay Knob

Default position: 15 sec (Test mode) Adjustable: 15 sec ~ 30 min (clockwise)

Sensor Sensitivity Range Knob

Default position: Center at 65%

Adjustable: 30% (Position 1) to 100% (Position 4) Note: Turn toward right for greater room space

Turn toward left to avoid false alert in smaller room

and near the door way or heat source

Ambient Light Level Knob

Default position: Daylight (100% at Position 4) Adjustable: Daylight to 30Lux (Counter clockwise)

Note: to avoid wasting energy by turning the light in daylight

TROUBLESHOOTING

For proper operation, the Sensor Switch has to consume power from Hot and Neutral. Therefore, a Secured Neutral Wiring is required.

Initial run

The Sensor Switch needs **initial run for one minute**. During the initial run, the load might be turned ON and OFF several times. The Time Delay knob is default set on 15 seconds, do not adjust it until initial run is finished and proper operation function confirmed.

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MODEL DWOS



Instruction Manual

TROUBLESHOOTING

The Load is out of control (frequently flashing)

- 1. It can take up to one minute for initial run
- 2. Check the wiring connections, especially the Neutral Wiring

The Load does not turn ON without LED flashing or LED flashing regardless of motion

- 1. Push Manual ON/OFF Button, if the load turns ON, verify that Sensitive Range is on high. If the Load does not turn ON, go to Step 2
- 2. Check the wiring connections, especially Hot Line and Neutral wiring

The Load does not turn ON while LED flashing with motion detected

- 1. Check to see if Ambient Light Level is enabled by covering the lens by hand
- 2. Push Manual ON/OFF Button, if the load turns ON, verify that Sensitivity Range is on high. If the Load does not turn ON, go to Step 3
- 3. Check the wiring connections, especially Hot Line and Neutral wiring

The Load does not turn OFF

- 1. There can be up to a 30 minutes time delay after the last motion detected. To verify proper operation, turn the Time Delay Knob to 15 seconds (Test Mode), make sure there is no motion (no LED flashing), the Load should turn OFF in 15 seconds
- 2. Check if there is any significant heat source mounted within six feet (two meters) that may cause false detection such as high wattage light bulb, portable heater, and HVAC device
- 3. Check the wiring connections, especially the Neutral wiring to the sensor switch

The Load turns ON when not desired

- 1. Switch from OCC to VAC mode
- 2. Mask the Sensor Switch's lens to eliminate unwanted coverage area
- 3. Turn the Sensitivity Level knob toward left to avoid false alert in smaller room and near the door way