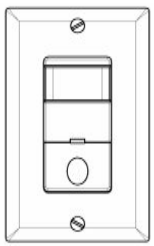
INSTALLATION INSTRUCTIONS

ENERLITES®

VCOS-W

OCCUPANCY / VACANCY (2-IN-1)
SENSOR SWITCH



SPECIFICATIONS

Voltage	120 VAC @ 60Hz
Incandescent	500W
Fluorescent/Ballast	500VA
Eletronic Ballast	150W
Motor	1/8Hp
Time Delay	15Sec to 30Mins
Operation Temperature	32 F--131 F

DESCRIPTION

The VCOS-W uses advanced passive infrared sensor to detect heat emitted motion. The sensor switch can turn on a load and keep it on as long as it detects motion. The sensor will automatically shut off the load at the end of the selected time delay. The countdown of the selected time delay starts after the last motion detected. The sensor is customizable with dials that can adjust ***Time Delay***, detection ***Range***, and a switch to change between ***Occupancy/ Vacancy*** modes.

COVERAGE

As illustrated in Figure 1, The VCOS-W 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.

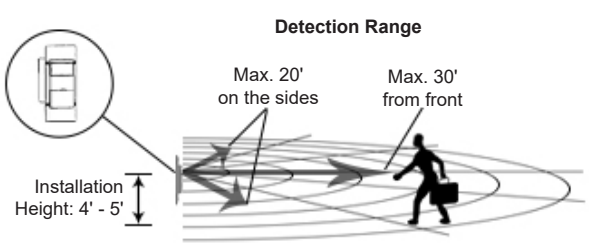


Figure 1

WARNING

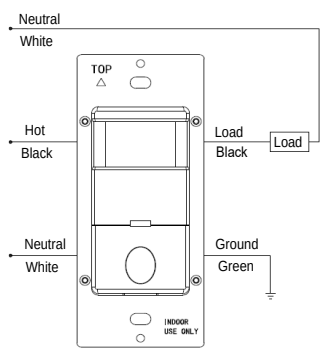
Turn the POWER OFF at the circuit breaker before installing the sensor

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.

WIRING DIRECTIONS

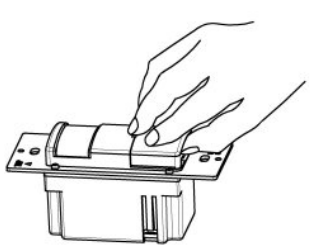
1. Connect BLACK wire from sensor to the LOAD wire.
2. Connect BLACK wire from sensor to the HOT wire.
3. Connect WHITE wire from sensor to the NEUTRAL wire. NEUTRAL WIRE IS REQUIRED.
4. Connect GREEN wire from sensor to the GROUND wire.



Wiring Diagram

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.



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.

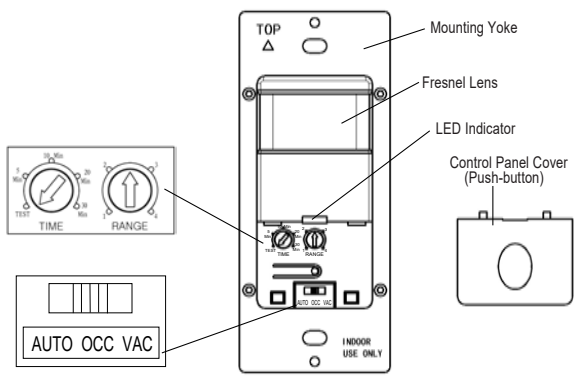


Figure 4

OPERATION

Mode Switch: AUTO/ OCCupancy/ VACancy

Mode	Position	Description	Push-button Function
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.

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.

OPERATION

Off/ Occupancy/ Vacancy Mode Switch

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

***OCC*upancy 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.

***VAC*ancy 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.

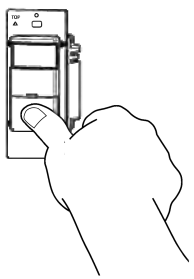


Figure 5

TROUBLESHOOTING

NOTE: There is a 1 minute warm-up time at initial power-up. The load may turn on/off several times.

The Load does not turn On. LED does not flash regardless of motion:

1. Push Manual On/Off Button, if the load turns On; verify that the Range dial is on high.
2. Check the wiring connections. Be sure the NEUTRAL wire is present.
3. Switch may be in VACancy mode. Select the OCC position on the Mode Switch if "Auto ON" is what's desired.

The Load does not turn On when LED indicator flashes and motion is detected:

1. Push Manual On/Off Button, if the load turns On; verify that the Range dial is on high.
2. Check the wiring connections. Be sure the LOAD wire is connected.
3. Switch may be in VACancy mode. Select the OCC position on the Mode Switch if "Auto ON" is what's desired.
4. Check the *Light* dial. The pointer indicates the light level the ambient light needs to drop to before the load is automatically turned on.

The Load does not turn Off:

1. Motion may be detected. The time delay constantly restarts its countdown after the last motion detected. To verify proper operation, turn the Time Delay Knob to 15s (Test Mode) and make sure there is no motion (no LED flashing). Tape may be used to cover the fresnel lens while testing.
2. Check for significant heat source emitting within six feet (two meters) such as high wattage light bulb, portable heaters or HAVC vents.
3. Check the wiring. Make sure the HOT and LOAD wires aren't reversed.

The Load turns on when its not desired:

1. Motion may be detected. The time delay constantly restarts its countdown after the last motion detected. To verify proper operation, turn the Time Delay Knob to 15s (Test Mode) and make sure there is no motion (no LED flashing). Tape may be used to cover the fresnel lens while testing.
2. Check for significant heat source emitting within six feet (two meters) such as high wattage light bulb, portable heaters or HAVC vents.
3. If Manual operation of push-button is desired, select VAC mode on the Mode Switch.
4. If the sensor is installed in a small room, turn the Range dial lower to avoid false or unwanted detection from open window or door.

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 Enerlites, 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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