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 RED 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. The NEUTRAL WIRE IS REQUIRED.
4. Connect GREEN wire from sensor to the GROUND wire.

Ultra sonic Sensitivity Dial
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.

Light dial
The sensor may be adjusted to operate at the desired level of ambient light.
- To do so, turn the dial to point the arrow toward the "--" sign for sensor to detect motion and operate during low light or no light. Point the arrow toward the "++" sign for sensor to operate when there's more light in the area or even during daylight.

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 2

PIR Lens
Mounting Yoke
Ultrasonic Cones
Detection LEDs
Red=PIR
Blue=Ultrasonic

FIGURE 4

ULTRASONIC
LIGHT

FIGURE 3

TOP

OFF OCC VAC

FIGURE 1

Detection Range
Ultrasonic: Max. 40’ in front and 20’ on sides
PIR: Max. 40’ in front and 20’ on sides

Installation Height: 4’ - 5’
The MWOS has 7 DIP switches under the cover. They are used to set sensitivity, time delay, trigger mode, walk through mode feature settings.

**DIP SWITCH SETTINGS**

**Time Delay**
- 15 Sec/Test
- 1 Minute
- 5 Minutes
- 10 Minutes
- 15 Minutes
- 20 Minutes
- 25 Minutes
- 30 Minutes

**Trigger Mode**
- Option 1: Both
- Option 2: PIR
- Option 3: US
- Option 4: Both

**Base PIR Sensitivity**: 50%, 100%

**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

- **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**

**Switch 1**

- 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".

**Switch 2**

- Time Delay: Switches 4, 5, 6

**Switch 3**

- Trigger Mode: Switches 2, 3

**Switch 4**

- Walk-through: Switch 7

**OFF**

- Left: Circuit is permanently opened. (switched off)

**OCC**

- Center: Occupancy Mode: Automatic On, Automatic Off after selected time delay.

**VAC**

- Right: Vacancy Mode: Manual On only, Automatic Off after selected time delay.

**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 Ultrasonic dial is on high and/or the PIR switch is set to 100%.
- 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 turns on when its not desired**: Motion may be detected. The time delay constantly restarts its countdown after the last motion detected.
- 1. Motion may be detected. The time delay constantly restarts its countdown after the last motion detected. To verify proper operation, set the Time Delay switches 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 HVAC vents. Check the wiring. Make sure the HOT and LOAD wires aren't reversed.

**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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