

## Passive Infrared Occupancy Sensor /Vacancy Sensor Wall Switch

Input:120~277VAC 50/60Hz

Max Output

Standard ballast - 300W@120V

600W@277V

Electronic Ballast/LED - 300W@120V

600W@277V

Tungsten/Incandescent - 600W@120V

1200W@277V

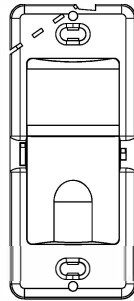
Motor - 1/2hp@120V

SW-PIR Sensor

(Occupancy Sensor/Vacancy Sensor)

Size:4.13\*1.75\*1.37"

Warranty:5years



### UNIT FEATURES AND DESCRIPTION

1. The wall sensor switch turns lighting or fan loads on and off based on occupancy and ambient light level. They are designed to replace a mechanical light switch. The switch operates with 120 to 277V AC line voltage.
2. The sensor uses passive infrared technology to sense human motion and defines it as occupancy. A red LED in the sensor blinks upon occupancy and then resets. It will blink again when it detects motion after the 2-second reset.
3. In Automatic ON & Automatic OFF mode( Occupancy ), the sensor turns on the load automatically when it detects occupancy. Once the space is vacant and the time delay elapses, it turns off the load automatically.
4. In Manual ON & Automatic OFF mode(Vacancy), the sensor turns on the load when you push the button. Once the space is vacant and the time delay elapses it turns off the load automatically.

### WARNINGS AND CAUTIONS

1. **CAUTION:** To avoid overheating and possible damage to this device and other equipment, **DO NOT** install to control a receptacle.
2. To be installed and/or used in accordance with appropriate electrical codes and regulations.
3. If you are unsure about any part of these instructions, consult an electrician.
4. Use this device with copper or copper clad wire only.
5. Do not use this product to control loads in excess of specified ratings, or it may cause death, injury or property damage.
6. The sensing switch requires an unobstructed view of room occupants to detect motion.
7. Hot objects or moving air currents can affect the performance of the sensing switch.
8. For indoor use only. Operate between 32 to 104 °F (0 to 40 °C).
9. Clean the sensor with a piece of soft damp cloth only. Do not use any chemical cleaners.

### AVERTISSEMENTS ET MISES EN GARDE

1. Attention: pour éviter la surchauffe et les dommages possibles à cet appareil et à d'autres équipements, ne pas installer pour contrôler un réceptacle.
2. Être installé et/ou utilisé conformément aux codes et règlements électriques appropriés.
3. Si vous n'êtes pas sûr d'une partie de ces instructions, consultez un électricien.
4. Use this device with copper or copper clad wire only.

5. N'employez pas ce produit pour commander des charges au-delà des cotes spécifiées, ou il peut causer la mort, des blessures ou des dommages matériels.
6. Le commutateur de détection exige une vue dégagée des occupants de la pièce pour détecter les mouvements.
7. Les objets chauds ou les courants d'air en mouvement peuvent influencer sur le rendement du commutateur de détection.
8. Pour usage intérieur seulement. Fonctionne entre 0 et 40 °C (32 à 104 °F).
9. Nettoyez le capteur avec un morceau de chiffon doux et humide seulement. N'utilisez aucun nettoyant chimique.

### MOUNTING LOCATION

The device responds to temperature changes and care should be taken when mounting the device. Do not mount directly above a heat source, in a location where hot or cold drafts will blow directly on the sensor, or where unintended motion (e.g., hallway traffic) will be within the sensor's field-of-view.

### TOOLS NEEDED FOR INSTALLATION

|                                |         |        |
|--------------------------------|---------|--------|
| Slotted / Phillips Screwdriver | Pliers  | Pencil |
| Electrical Tape                | Cutters | Ruler  |

### PREPARATION BEFORE INSTALLATION

#### 1. Turn OFF Power:

Turn power OFF at circuit breaker (or remove fuse).

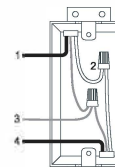
#### 2. Remove Wallplate and Switch:

Remove wall plate and switch mounting screws. Carefully remove the switch from the wall (do not remove wires).

#### 3. Identify the Type of Circuit:

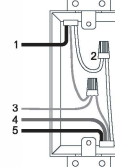
##### Single-Pole

1. Line (Hot)
2. Neutral
3. Ground
4. Load



##### Two Location Control

1. Line (Hot)
2. Neutral
3. Ground
4. Traveler (Blue)
5. Load



If the wiring in the wall box does not resemble any of these configurations, consult an electrician.

#### 4. Before Wiring the Device:

1. Make sure that the ends of wires from the wall box are straight (cut if necessary).
2. Remove 5/8" (1.6 cm) of insulation from each wire in the wall box.
3. Use wire connectors to join one 12 AWG supply wire with one or two 16 AWG or 18 AWG, or to join one 14 AWG supply wire with one to three 16 AWG or 18 AWG.

**NOTE: Three wire connectors provided in the product package are suitable for copper or copper clad wire only.**

For single-pole applications, go to Step 4A.

For two location control applications, go to Step 4B.

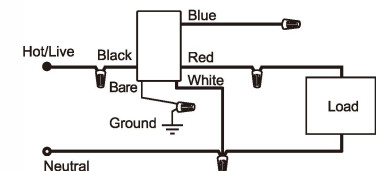
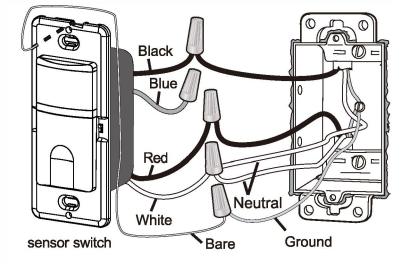
### 4A - INSTALLATION FOR SINGLE POLE

Connect wires per wiring diagram as follows:

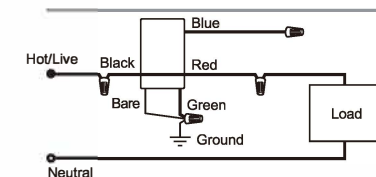
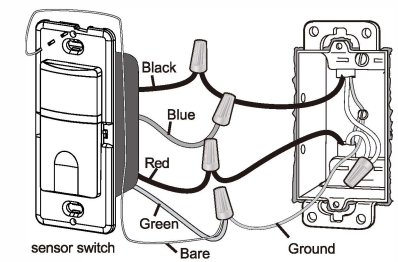
**Single pole (One location) - Existing switch will be replaced with a sensor switch.**

- 1A. when neutral connection is required, remove the green sleeve and connect the white wire to Neutral line. Connect bare copper wire of the device to green ground wire in the wall box.
- 1B. when neutral connection is not required, connect bare copper wire and green wire of the device to green ground wire in the box.
2. Connect Hot wire in the wall box to the Black wire of the device.
3. Connect Load wire(s) in the wall box to the Red wire of the device.
4. Blue wire is not used in a single-pole circuit. Cap blue wire.
5. Restore power at circuit breaker or fuse.
6. Wait 30 seconds for product booting for the first time, the device will turn on the loads automatically when it detects motion. Then keep the space vacant for 30 seconds, the device will turn off the loads automatically until the time delay elapses. Check the wiring again or consult an electrician if the loads do not turn on or off automatically.

#### With Neutral



#### Without Neutral



#### NOTE:

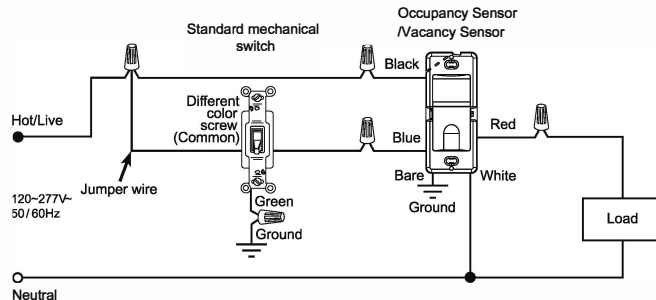
1. The hot (black wire) and load (red wire) must be correctly connected as stated above, otherwise the device will not function. If the light never turns on, then try to reverse the hot and load wiring of the sensor.
2. With the default setting, the device will turn on the loads automatically in any ambient light when it detects occupancy. Once the space is vacant and the time delay elapses after 10 seconds, it turns off the load automatically. For different settings, go to section PREPARATION FOR UNIT SETTING before mounting the wall plate.

### 4B-INSTALLATION FOR TWO LOCATION CONTROL

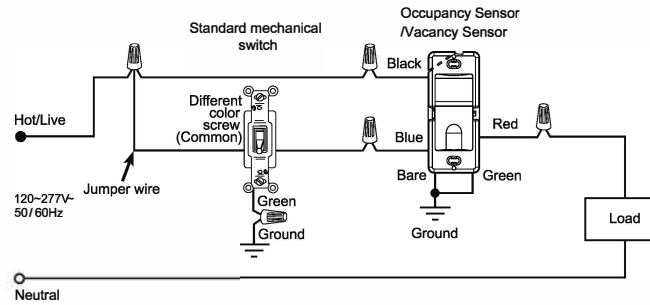
#### Connect wires per wiring diagram as follows:

- 1A. When neutral connection is required, remove the green sleeve and connect the white wire to Neutral line. Connect bare copper wire of the device to green ground wire in the wall box.
  - 1B. When neutral connection is not required, connect bare copper wire and green wire of the device to green ground wire in the box.
2. Connect Hot wire in the wall box to the black wire of the device.
  3. Connect Hot wire in the wall box to one end of the mechanical switch.
  4. Connect Load wire(s) in the wall box to the Red wire of the device.
  5. Connect traveler wire in the wall box to the blue wire of the device.
  6. Connect the traveler wire in the wall box to to another end of the mechanical switch.
  7. Restore power at circuit breaker or fuse.
  8. Wait 30 seconds for product booting for the first time, the device will turn on the loads automatically when it detects motion. Then keep the space vacant for 30 seconds, the device will turn off the loads automatically until the time delay elapses. Check the wiring again or consult an electrician if the loads do not turn on or off automatically.

#### With Neutral



#### Without Neutral

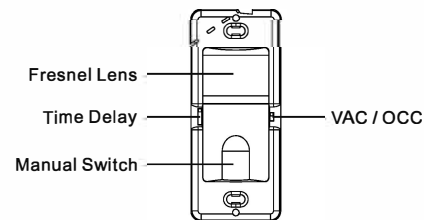


#### NOTE:

1. Mechanical switch and sensors can turn the light on/off
2. The hot (black wire) and load (red wire) must be correctly connected as stated above, otherwise the device will not function.
3. With the default setting, the device will turn on the loads automatically in any ambient light when it detects occupancy. Once the space is vacant and the time delay elapses after 30 seconds, it turns off the load automatically. For different settings, go to the section PREPARATION FOR UNIT SETTING before mounting the wall plate.

### PREPARATION FOR UNIT SETTING

1. Set the time delay by the dip switch on the left.
2. Set Automatic ON/OFF mode ( Occupancy ) or Manual ON Automatic OFF mode(Vacancy)by dip switch on the right side.



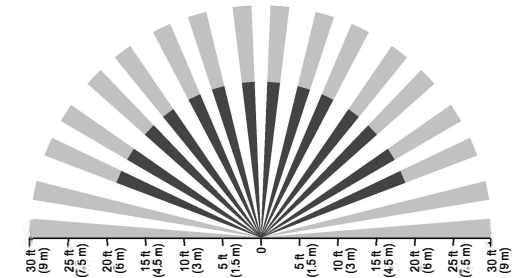
| TIME DELAY | NOTE                                                         |
|------------|--------------------------------------------------------------|
| 10s        | Test Mode: Automatically turn off the loads after 10 seconds |
| 3min       | Automatically turn off the loads after 3 minutes             |
| 10min      | Automatically turn off the loads after 10 minutes            |
| 20min      | Automatically turn off the loads after 20 minutes            |

| VAC / OCC | NOTE                                                                                     |
|-----------|------------------------------------------------------------------------------------------|
| VAC       | VAC Mode: Manual ON and Auto OFF when time delay elapses                                 |
| OCC       | OCC Mode: Automatically turn on the loads in any ambient light, including the bright day |

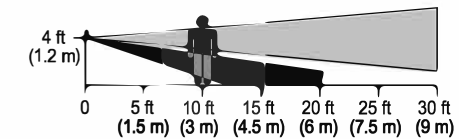
### COVERAGE PATTERNS

The sensor detects motion in areas up to 900 sq. ft. and up to 35 feet from the sensor. Ideally, the sensor is designed for small amounts of motion in space up to 300 sq. ft. The Fresnel lens on the sensor is a multiple segment viewing lens with a field of view of 180°. The sensor must have a clear view of the people in the space in order to detect occupancy. Obstructions, such as furniture blocking the sensor's lens, may prevent occupancy detection.

#### Horizontal Beam Diagram



#### Vertical Beam Diagram



### FIVE YEARS LIMITED WARRANTY

The warranty gives you specific rights and you may also have other rights, which vary in different states and countries. Our company warrants to the original consumer purchaser that this product is free of defects in materials and workmanship for 1 year from the purchase date. This warranty does not cover labor for removal or reinstallation of the product and is void on any product installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner. Our company excludes incidental or consequential damages for breach of any warranty on this product. Some jurisdictions may not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above exclusions or limitations may not apply to you.

**WARNINGS AND CAUTIONS**  
DO NOT INSTALL THE SENSOR IN A SPACE CONTROLLING A TOTAL LOAD THAT IS HIGHER THAN THE RATING OF THE DEVICE. EACH SENSOR WILL NEED TO SWITCH THE ENTIRE LOAD EVEN IF ADDITIONAL SENSORS ARE INSTALLED. RISK OF OVERLOAD, PRODUCT DAMAGE, SMOKE AND OR FIRE MAY RESULT.  
TURN THE POWER OFF AT THE CIRCUIT BREAKER BEFORE INSTALLING SENSORS.

