c UL us
LISTED

Please read all instructions before installing

80548
180° PIR WALLBOX VACANCY& OCCUPANCY SENSOR, 2 POLE

Installation Instructions

SPECIFICATIONS

Voltage ----------120V/277VAC, 50-60Hz
Load requirement--120V 800VA fluorescent lamp Rapid Start
--------- 277V 1200VA fluorescent lamp Rapid Start
Load Horse Power----------1/6HP
Time Delay Adjustment---------- 15 Secs to 30 Mins
Operating Temperature --------32° to 131° F (0° to 55° C)
Operation humidity range---------- 95%RH, non-condensing
Coverage range----------180 Degrees
Tools Needed------- Insulated Screwdriver, Wire Strippers

DESCRIPTION AND OPERATION

The 80548 Wallbox Vacancy & Occupancy Passive Infrared (PIR) Sensor is designed to control two independent loads by utilizing two isolated power relays. It connects directly to 120/277V loads without the need for a power pack.
With two power relays, I /II switching, or controlling of two loads can be handled by one device.The operation mode of left load is fixed only for VAC mode(manual on, auto off) ,right load can switch to STANDBY(power off),OCC(auto on,auto off), or VAC mode(manual on, auto off).
The controlled lights will remain ON until no motion is detected and time delay has expired.
It is ideal for private offices,private bathroom(no stalls),storage rooms and any room needs multiple load control.
It is suitable for indoor use only.

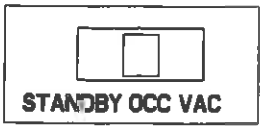
Warm Up

For the 80548, it usually needs 30 seconds to warm up sensor, and LED indicator will not blink until sensor starts to work.

LED Indicator

Work light. It operates by detecting heat generated energy. It will be opened, when a person occupied. It will be closed, when a person unoccupied.

Three Operation Modes



STANDBY	Left	Power OFF
OCC	Middle	Auto ON, Auto OFF with Auto set mode *
VAC	Right	Manual ON, Auto OFF

* Auto Set Mode
If the load is turned OFF manually, automatic-ON is re-enabled when no motion is detected for 1 minute. This prevents the load from being turned ON after it was deliberately turned OFF.

COVERAGE AREA

The 80548 has a maximum coverage range of 180 degrees and a coverage area of 720 square feet (67 square meters). The sensor must have a clear and unobstructed view of the coverage area. Objects blocking the sensor's lens may prevent detection thereby causing the light to turn off even though someone is in the area.

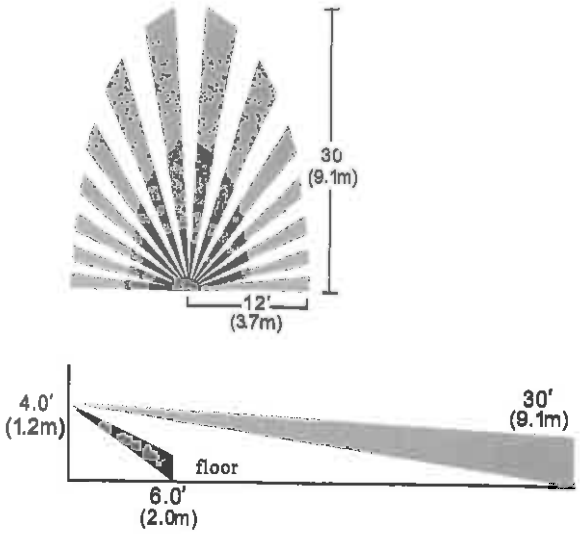


Fig.1: Sensor Coverage Area

Windows, glass doors, and other transparent barriers will obstruct the sensor's view and prevent detection.

Note: The coverage data is measured under the best temperature condition (20-25℃), and a higher temperature may not lead to an ideal coverage.

Avoiding HVAC Turbulence

When Heating, Ventilating or Air Conditioning (HVAC) registers and large wattage bulbs (greater than100w incandescent) turn on, they create turbulence which can cause the sensor to activate. It is important that the sensor and HAVC register be separated by at least 6'.

If the sensor's location gives it a view of other rooms or hallways,lights will turned on when movements is detected in these adjacent areas. Please move sensor to elimnate detection through doorway.

INSTALLATION & WIRING

1. Prepare the switch box.

After the power is turned off at the circuit breaker box, remove the existing wall plate and mounting screws. Pull the old switch out from the wall box if applicable.

2. Prepare the Wires.

Tag the wires currently connected to the existing switch, so that they can be identified later. Disconnect the wires.

3. Wire the sensor.

Wire in accordance with the appropriate wiring diagram shown on following. BLACK leads to LINE1(HOT); BROWN leads to LINE2(HOT); RED leads to LOAD1;BLUE leads to LOAD2;GREEN leads to GROUND. Twist the existing wires together with the wire leads on the 80548 sensor as indicated below. Cap them securely using the wire nuts provided (see Fig.3a).

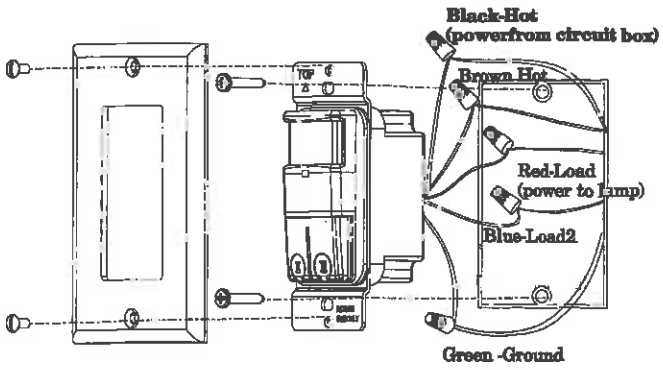


Fig.3a: Sensor orientation, wire connections and wall box assembly

4.Installing your Sensor - Single Location Application:

Note: The 80548 vacancy & occupancy sensor does not require a neutral connection in order to operate. It must have a ground connection. Use the ground wire in the electrical box for ground connection.

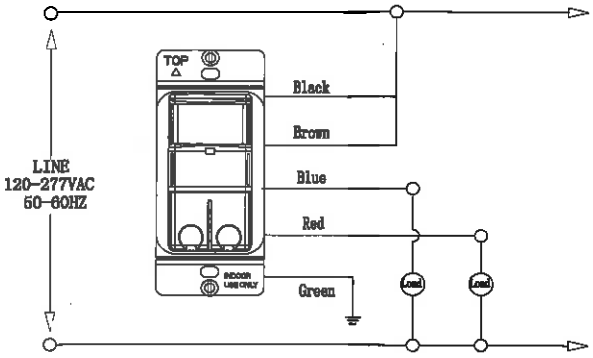


Fig.3b: wiring diagram for single location

5.Installing your Sensor-Two Location Wiring Application:

NOTE: Either sensor can turn the lights ON. Both sensors must time-out to OFF, or both manual buttons must be pressed for the lights to turn OFF.

NOTE: Both 80548 vacancy & occupancy sensors do not require a neutral connection in order to operate. It must have a ground connection. Use the ground wire in the electrical box for ground connection.

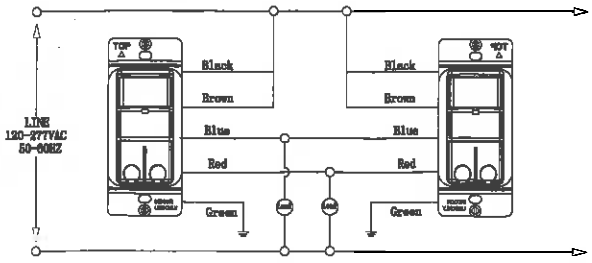


Fig. 3c: wiring diagram for two location

6. Put the sensor in the wall box.

Position the lens above the standby button (lens at top, button at bottom) and secure it to the wall box with the screws provided.

7. Attach the new cover plate.

Secure it to the wall box with the screws provided.

8. Restore power to the circuit.

Turn ON the breaker or replace the fuse.

INSTALLATION IS COMPLETE.

SENSOR ADJUSTMENT & PROGRAMMING

Remove the cover located below the sensor lens by inserting a small screwdriver into the notch located on the bottom of the cover. Gently lift screwdriver upward to unlatch cover (see Fig.4) .

Fig.4

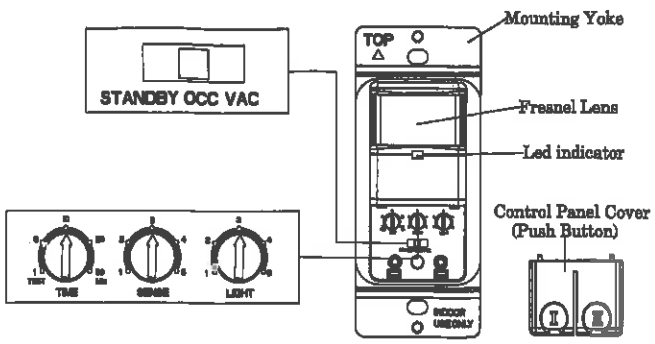


Fig.5

Time Delay Knob

Turn the adjustment on the left " TEST" fully counter clockwise to the minimum setting (15 seconds) while fully clockwise to the maximum setting (30 minutes), verify by turning lights on with pushbutton.

Sensor Sensitivity Range Knob

Default position: 75% (Position 3)
Adjustable: 50%(Position 1) to100%(Position 5)

The sensitivity adjustment is in the center and marked " SENSE" .Adjust the sensitivity setting to avoid unwanted detection such as hallway traffic or adjacent movement. Turning the setting counter clockwise will decrease sensitivity while turning it clockwise will increase it. Max sensitivity while turning it clockwise will increase it. Max sensitivity can be achieved by turning fully clockwise on Position 5.

Ambient Light Level Knob

Default position: Daylight (Position 5)
This light level is in the right and marked "LIGHT" ,it used to detect if other light source such as sunlight, are enough to illuminate the space without turning on the lights. If use of Ambient light level is desired, please turn the adjustment knob counter clockwise, and push the button to make sure the sensor start to work. If use of the light level is not desired, please leave it on the maximum setting (Position 5). This will allow the sensor to turn the light on and off regardless of ambient light conditions.

TROUBLESHOOTING

Load will not turn ON

Push standby button. The load should turn ON. If not:
- Check the light bulb and/or motor switch on the fan mechanism.
- Turn off power to the circuit then check wire connections.

Load will not turn OFF

- Make sure no motion is occurring in the coverage area until the set time period.
- Hot air currents and heat radiating devices can cause false detection. Make sure the sensor is at least 6 feet (2 meters) away from devices that are a significant heat source (e.g., heater, heater vent, high wattage light bulb).
- Push the ON/OFF button to the OFF. If load does not turn off, turn off power to the circuit then check wire connections.

Lights turn OFF and ON too quickly

- Sensor may be mounted too closely to an air conditioning or heating vent: Move the sensor to another location or close the vent.
- Time delay set improperly: Refer to **Time Delay Adjustment.**

c UL US LISTED