

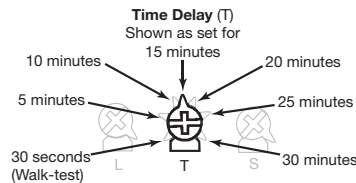
## SENSOR ADJUSTMENT

**⚠ DO NOT OVERTURN TRIMPOTS WHEN ADJUSTING THE SENSOR!**

- To test unit operation, press the ON/OFF button to turn the load on.
- Remove the button cover to access the adjustment controls. Use a small, flat blade screwdriver to press down the locking tab at the top of the button, then gently pry it off.
  - Set the time delay to the "walk test" position (fully counterclockwise).
  - Leave the room. The load should go off after 30 seconds.
- To test sensitivity:
  - Make no motion for 3 seconds.
  - Wave your hand sideways in front of the sensor at a distance of approximately 12". The LED blinks when movement is detected. Typically, the sensitivity should be at maximum (fully clockwise).
- Set the light level when the controlled light would normally be turned off due to the presence of sufficient daylight or other electric light. [If this feature is not needed, leave the light level at maximum (fully clockwise)].
  - Set the Time Delay to at least 5 minutes. This takes the sensor out of Walk-test mode, and enables the light level feature.
  - Set the Light Level to 50% (12 o'clock position) which is approximately 100fc. Let the sensor time out so lights are off. Enter the space and lights should remain off.
  - Make sure your body does not cast a shadow on the sensor, and adjust the light level trimpot clockwise in small increments.
  - After each adjustment, wait 5-10 seconds to see if the lights turn on. Repeat until the lights turn on. At this setting the load connected to the sensor will not turn on if light levels are above the current illumination.

**Note:** Users can override this function by placing their hand in front of the sensor to block incoming light. The load will then remain on until the space is unoccupied or the light level rises above the setpoint and the time delay expires.

- Reset the time delay to the desired setting. The time delay can be set from 30 seconds (see Walk-test feature, light level feature is disabled) to 30 minutes in 5-minute increments.



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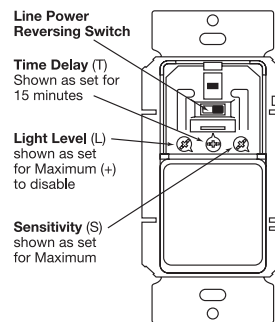
## TROUBLESHOOTING

### Load will not turn on:

- LED does not flash:
  - If the sensor fails to operate after the initial warm-up period, use a small flat blade screwdriver to pry off button and slide the line power reversing switch to the opposite position. This will re-initiate the warm-up period.
  - Check the sensitivity for proper configuration.
  - Check all wire connections. Verify the ground wire is tightly secured.
- LED does flash:
  - Press the ON/OFF button. If load does not turn on, check all wire connections and verify the load wire is tightly secured.
  - Check the light level trimpot. Turn it fully clockwise.
- If load still does not turn on, call 800.223.4185 for technical support.

### Load will not turn off:

- The time delay can be set for 30 seconds (Walk Test), 5, 10, 15, 20, 25, or 30 minutes. Ensure that the time delay is set to the desired delay and that there is no movement within the sensor's view for that time period.
- To quickly test the unit for proper operation, turn the time delay to minimum (fully counterclockwise) and move out of the sensor's view. Load should turn off after 30 seconds.
- If load still does not turn off, call 800.223.4185 for technical support.



### Sensing motion outside desired area:

- Opaque adhesive tape is included with the sensor and can be used to limit the detection areas. See Masking the Lens.
- Adjust sensitivity counterclockwise to reduce excessive sensitivity.

## WARRANTY INFORMATION

Pass & Seymour/Legrand warrants its products to be free of defects in materials and workmanship for a period of five (5) years. There are no obligations or liabilities on the part of Pass & Seymour/Legrand for consequential damages arising out of, or in connection with, the use or performance of this product or other indirect damages with respect to loss of property, revenue or profit, or cost of removal, installation or reinstallation.

# PTWSP-250

## PlugTail™ Passive Infrared Wall Switch

### Occupancy Sensor



## SPECIFICATIONS

PTWSP-250 Voltages .....	120 or 277VAC, 60Hz
Load Requirements	
@ 120VAC, 60Hz .....	0-800W ballast & tungsten, 1/6 hp
@ 277VAC, 60Hz .....	0-1200W ballast
Time Delay Adjustment .....	30 seconds - 30 minutes
Sensitivity Adjustment .....	Minimum-Maximum
Light Level Adjustment .....	10 - 200 + FC

**Pass & Seymour**



P.O. Box 4822, Syracuse, NY 13221-4822  
 Technical Support: 800.223.4185  
[www.legrand.us](http://www.legrand.us)  
 340914

Please Recycle



**Pass & Seymour**



Installation Instructions

Call 800.223.4185 for Technical Support

## UNIT DESCRIPTION AND OPERATION

The PTWSP-250 Wall Switch Occupancy Sensors turn lighting or fan loads on and off based on occupancy and ambient light level. They are designed to replace a standard light switch. The PTWSP-250 operates with 120 or 277VAC line voltage.

The sensor uses passive infrared technology to sense human motion, and defines it as occupancy. A green LED on the sensor blinks upon occupancy and then resets. It will blink again when it detects motion after the 2-second reset.

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.

If adequate ambient light is already present in the area, the sensor will hold off the load it controls. When the light drops below a field selectable level and the sensor detects occupancy, the sensor turns on the load. Once turned on, the load remains on until the space is vacant or the light level rises above the setpoint and the time delay expires.

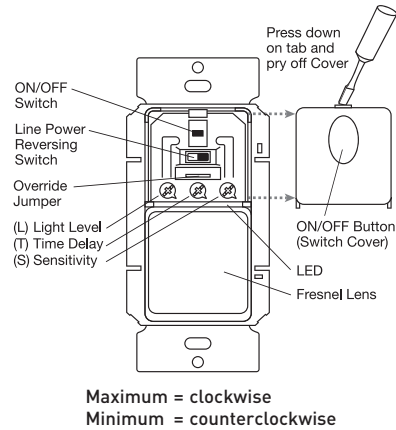
**Manual Operation:** The occupant can press the ON/OFF button to turn the load on and off. When the load is turned off or on manually, it stays off or on as long as the sensor detects motion. After no motion is detected for the length of the time delay, the sensor goes back to automatic operation. If the load was on, it turns off. The next time the sensor detects occupancy and the ambient light is lower than the set level, the sensor automatically turns on the load.

### Walk-test feature:

When the Time Delay trimpot is in the fully counterclockwise position, the sensor has a 30 second time delay and the Light Level function is disabled. This allows you to quickly check the sensor coverage area.

### Override function:

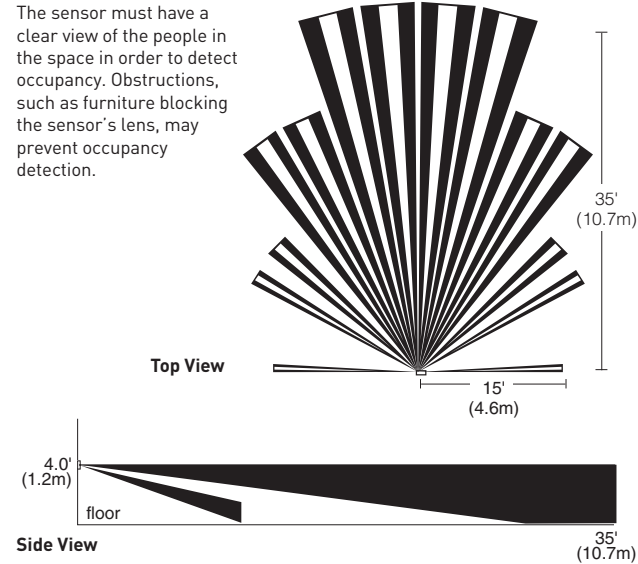
In the event of unit failure or if it is necessary to leave the load on, remove the Override Jumper plug. This disables all automatic on and off functions and the load can only be operated using the ON/OFF button.



## COVERAGE PATTERNS

The PTWSP-250 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 spaces up to 300 sq. ft. The Fresnel lens on the sensor is a multiple segment viewing lens with a field of view of 180°.

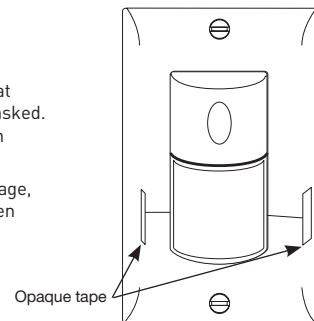
The sensor must have a clear view of the people in the space in order to detect occupancy. Obstructions, such as furniture blocking the sensor's lens, may prevent occupancy detection.



### Masking the lens

Opaque adhesive tape is supplied so that sections of the sensor's view can be masked. This allows you to eliminate coverage in unwanted areas.

Since masking removes bands of coverage, remember to take this into account when troubleshooting coverage problems.



## INSTALLATION

**CAUTION**

**Turn the power off at the circuit breaker before installing the sensor.**

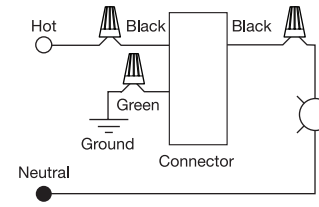
1. If PTS Series Connector already exists in wall junction box, verify connector is wired as stated below:

Black Wire (Connector)	To	Line Hot Wire (Branch Circuit Wiring)
Black Wire (Connector)	To	Load Wire (Branch Circuit Wiring)
Green Wire (Connector)	To	Ground Wire or Ground System (Branch Circuit Wiring)

If this is a new installation and there is no existing PTS Series Connector in the wall junction box, then wire according to the diagram below.

**Note:** Connector must be installed per NEC and shall be performed by a qualified electrician.

Use only P&S PST Series™ Connector. Do not connect or disconnect under load.



2. Snap connector into PTWSP-250 device as shown.
3. Verify connector security and engagement.
4. Attach the sensor to the wall by mounting it in the wall box with the two mounting screws provided.
5. Turn on power at the circuit breaker.

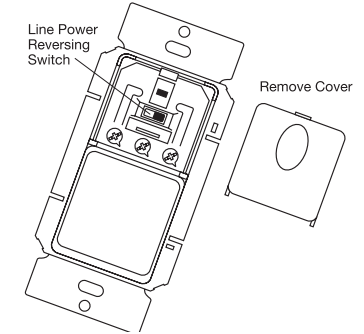
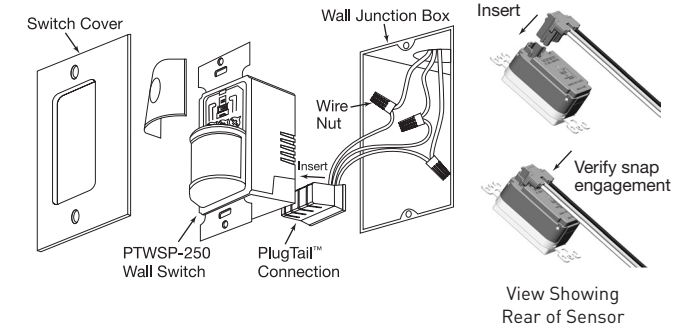
**There is an initial warm-up period after installation.** It may take up to a minute before the load turns on due to a sensor warm-up period during initial power-up (this occurs during installation only). The load turns on after the warm-up period ends if the sensor detects motion.

If the sensor fails to operate after the initial warm-up period, use a small flat blade screwdriver to pry off button and slide the line power reversing switch to the opposite position. This will re-initiate the warm-up period.

### Rapid successive pressing of the ON/OFF button causes a delay in function.

A single press of the button causes an immediate response. If the button is pressed again within 2 seconds, the switch ignores it. Wait at least two seconds between button presses.

6. Test the sensor using the procedure in the Sensor Adjustments section.
7. Replace wall switch cover plate.



REV	DESCRIPTION	INT:	REV. DATE	APPROVED
1	PTWSP-250 InstSheet	ML	17 Jan 11	

**TITLE BOX PAGE ONLY.  
DO NOT MAKE FILM • DO NOT PRINT**

**MATERIAL:** White 80g/m sq  
Uncoated, prefer recycled stock

**INK:** Black


**PRINT:** 2 sided

**FLAT (cut) SIZE:** 16"W x 6" H

**FOLDED SIZE:** 4"W x 6" H



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<b>QA</b>								
		Title: PTWSP-250 Installation Instructions						
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