PMSW27 Series Occupancy PIR Motion Sensor Auto Switch Wall Mount

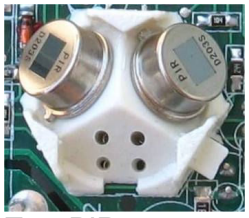
Applications:
- Intermittent use areas
- Offices
- Storage rooms
- Restrooms
- Study rooms
- Conference rooms
- Display/show areas
- Warehouses
- Hallways/corridors
- Lobbies

Features:
- Long life, low maintenance
- SMD technology design
- Automatic operation
- Integrated PIR sensor unit
- Relay output
- 2 dual-element PIR sensors
- 270° coverage
- Adjustable ON-Time
- Adjustable daylight mode
- Adjustable sensitivity

Onstate occupancy passive infrared (PIR) motion sensors automatically shut off power to lights when the room is not occupied to provide energy savings. It could be used to meet local energy use standards and requirements. The PMSW27 uses two high sensitivity sensors and a multi-level, high-density Fresnel lens to provide overlapping 270° coverage while reducing no-sensing zones for reliable, consistent operation. It features relay output, adjustable delay time, adjustable sensitivity and daylight OFF level to suit multiple applications. The PMSW27 triggers the relay to turn on the lights once motion is detected and will reset the ON-time every time it detects motion for continuous operation. Onstate occupancy motion sensors have a short payback period (less than a year) and provide long-term energy savings.

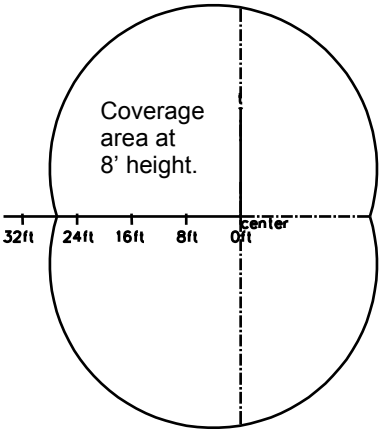
Specifications:

Power: 120VAC, 6W Max.
24VDC (20-28V), 1W Max.
Load Control: Relay (NO), works with inductive loads.
1200W @ 120VAC, 15A @ 24VDC.
Daylight ON mode: Adjustable, <15Lux to daylight
ON-Time: Adjustable, Min: 10 seconds. Max: 9 minutes
Sensitivity: Adjustable, min-max
Detection: up to 40ft radius, 270 degrees
Temperature: -10°C to +40°C
Installation Height: 5-12 ft.
Environment: Dry, non-condensing location
Status Indicator: Green/Orange LED, motion detect.
Dimension: 4.65" (D) x 2.25" (H)
Weight: 0.5lb (220g)
Mounting: Wall mount, electrical box
Wiring: 3 wires (120V), 4 wires (24V)
Warranty: 2 years



Two PIR sensors

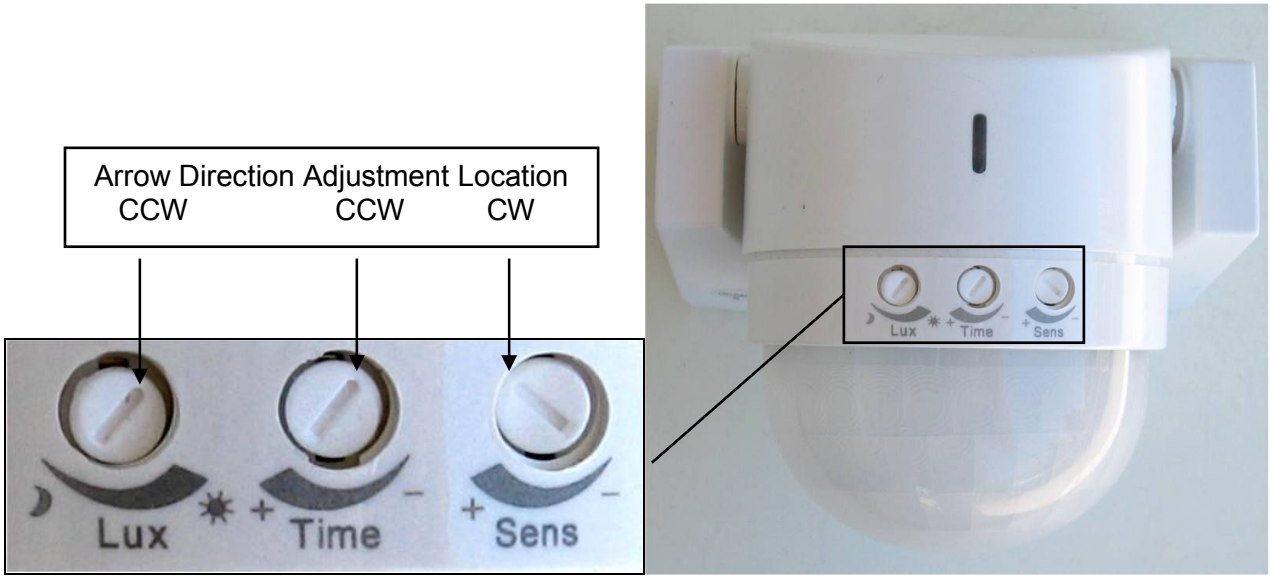
Relay output



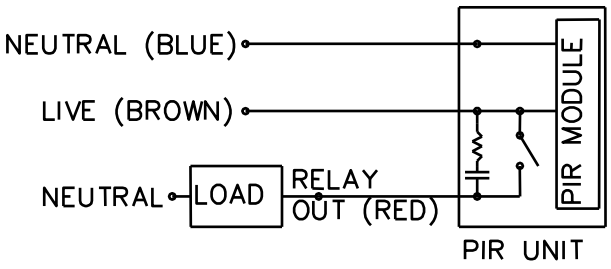
Part Coding: PMSW27x-y
x= voltage. S=120VAC (standard), L=24VDC (low voltage)
24V model can be used with Leviton occupancy sensor power packs. Also works for 24V LED lights for automatic control. Other low voltage models available.
y=options. 2=AUTO (Automatic).

PMSW27 Motion Sensor Functions:

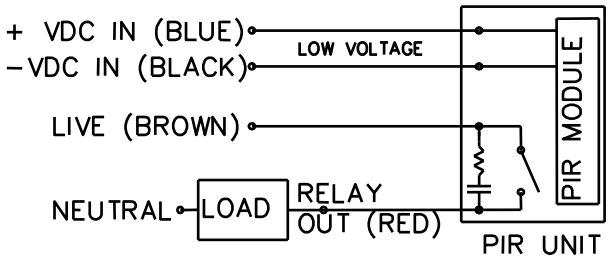
Function:	Description
Daylight mode light level (*Lux*)	The *Lux* function sets the light level for daylight mode. The relay will stay off in daylight mode. The PIR unit will operate normally again once the ambient light level is below the light level setting. Clockwise direction (moon side) will decrease the light level for daylight mode. Counter-clockwise direction (sun side) with require brighter light for daylight mode. If the adjustment is full clockwise (sun side), the PIR unit will always be active.
ON-Time (*Time*)	Once motion is detected, the output relay turns on and the delay off timer starts. If there is no motion detected within the preset delay time, the timer will not reset and the relay will turn off the lights. Rotate to – side to decrease delay time and to + side to increase delay time.
Sensor sensitivity (*Sens*)	The *Sens* function sets the sensitivity of the PIR unit to sense motion. Rotate to – side to decrease overall sensitivity and decrease detection range and to + side to increase sensitivity.
LED activity	Power and activity status indicator. The LED stays green during standby. Once there motion is detected, the LED turns orange and flashes a few times.



PIR motion sensor adjustment controls.



120VAC wiring



24VDC wiring

Installation Instructions

CAUTION
ELECTRIC SHOCK HAZARD.
USE PROPER SAFETY PRECAUTIONS.

Please carefully read through the installation instructions prior to installation.

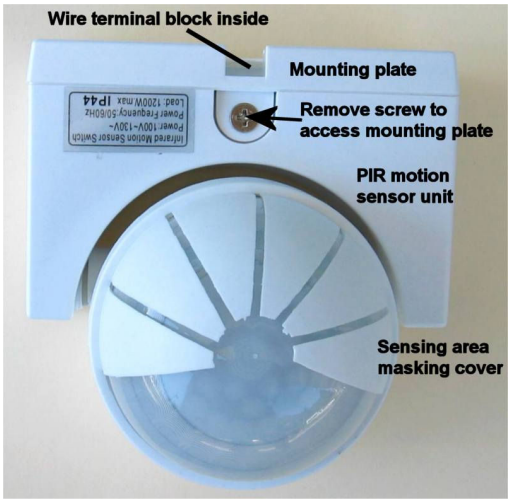
NOTES:

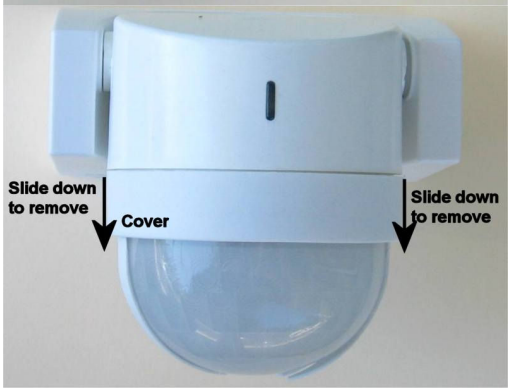
1. Should be installed by qualified personnel.
2. Follow applicable local electrical codes.
3. DO NOT install near fans, HVAC air vents, or transient warm/cold objects or sources.

Parts included:
- 1x Occupancy PIR motion sensor
- mounting screws/hardware
- label sticker

Parts required:
- 1x single-gang electrical box
- 1x electrical box cover plate with hole
- tools and general electrical hardware

1. Determine mounting location on the wall. The PIR sensor can only sense direct light-of-sight.
2. Shut off power source. Install power cable to mounting location.
3. An electrical box may be required to meet local electrical codes. Install box and power cable.
4. Remove the screw on the bottom side of the PIR unit to remove mounting plate. Flip plate to open.
5. The mounting hole spacing on the PIR unit mounting plate is ~3.28" (single-gang box spacing). The electrical box cover may not have matching holes. Use mounting plate as template for mounting holes. Drill 3/16" holes or 6-32 thread holes on cover plate. Protect cover hole with suitable wire protection (grommet).
6. Connect power/load wires to terminal black. Extend wires if necessary. Live (power) = brown. Neutral to blue and load neutral. Connect relay out (red) to load live. The 24VDC model has blue/black power input and brown/red relay output control.
7. Use the cable clamp on the back of the PIR unit to hold the cables in if necessary strip. The PIR unit snaps onto the mounting plate top first. Close and tighten with screw.
8. Remove cover protecting the lens to access adjustment controls. Apply power. Test and adjust. Trim and rotate cover to set masking areas. Test and adjust.





Testing:

1. Rotate the *TIME* adjustment to full counter-clockwise (- side).
2. Rotate the *PHOTO* adjustment to full clockwise (sun side).
3. Apply power to PIR unit. The LED will flash and the relay may not turn until 10s later. After a warm-up delay of 60s, the lights should be off.
4. Move within the sensor range for activation then move away. The lights should turn on and off within 15s. The LED should flash to indicate motion. Adjust the sensitivity (*SENS*) to set the desired detection range. Use the white sticker provided for area masking. Slowly rotate the *TIME* adjustment clockwise for the desired ON-time. Rotate the *PHOTO* adjustment for daylight mode light level setting. A 1/8 turn from full clockwise (sun side) sets the light level for a lobby to maintain average lighting levels.

Trouble Shooting:

Load does not turn on:

1. If the relay clicks on and makes a sound, check load wiring and load.
2. Check LED activity status. Normal standby is LED lit green. If it does not detect motion or flashes at close range, check power and wiring.
3. If the LED flashes and the relay is off, check *Lux* adjustment. Re-adjust if necessary.
4. If the PIR unit operates normally and the load (light) is functioning, the PIR unit may require servicing. Please contact Onstate Technologies.

Low sensitivity to movement:

1. Person may be out-of-range. Increase PIR sensitivity (*Sens*).
2. Check for objects blocking the detection area. Make sure the sensing area is not masked.
3. Motion detection is highest when the person is moving across the sensor. Sensitivity is lower when the person is moving directly towards the sensor.
4. A high ambient temperature decrease sensitivity. Reduce ambient temperature if possible.
5. The mounting height affects detection area. Increase height if necessary.

Load does not shut off:

1. Check wiring.
2. Check if the LED flashes orange. It may detect motion from objects or other heat sources.
3. Check On-Time. It may be set for long delay time.
4. If the relay does not shut off after extended no motion detected, the relay or PIR module may be damaged. Shut off power for more than 12s to reset the PIR unit. If operation does not return to normal, please contact Onstate Technologies. The PIR unit may require servicing.

Warranty:

Onstate Technologies PMSW27 Series products have a warranty of two (2) years to be free of defects in materials and workmanship. All products are sold as-is. Onstate technologies assumes no liabilities or obligations due to consequential damages caused by the product directly or indirectly with respect to loss of property, revenue, or cost of removal, installation or reinstallation. Modifications or improper use will void warranty.

Thank you for choosing Onstate Technologies