PASSIVE INFRARED WALL SWITCH OCCUPANCY SENSOR | PW-100

High sensitivity and dense coverage for exceptional performance

No neutral wire required

Color-matched lens and low profile for appealing design

Selectable operation, walk-through, test and presentation modes for increased energy savings and convenience

Defaults to Manual-ON operation for maximum energy savings.

Description

The PW-100 passive infrared (PIR) wall switch sensor can turn lights OFF and ON based on occupancy. It is characterized by high sensitivity to small and large movements, appealing aesthetics, and a variety of features.

Operation

The PW-100 replaces existing wall switches and fits in a single gang junction box. It uses advanced PIR technology to detect occupancy and keep lighting ON when it is needed. Once the space is vacated and the time delay elapses, lights automatically turn OFF. DIP switch settings allow for a variety of control options such as Auto-ON operation, walk-through and test modes.

Manual-on Control

Factory default operation is for Manual-ON, so that users turn lights on only when needed. This control strategy is proven to save more energy than Auto-ON, and is in ASHRAE 90.1-2010. If desired, the PW-100 may be reconfigured to turn lights on automatically.

Applications

The PW-100 sensor is well suited for small, enclosed spaces with clear line of sight of the occupant. Common applications include small office, small conference room and lunch/break rooms.

Features

- Detection Signature Processing eliminates false triggers and provides immunity to RFI and EMI
- Zero-crossing for long relay life
- Vandal resistant lens combines precise coverage with durability
- Choice of Manual-ON or Auto-ON operation
- Selectable walk-through mode turns lights off three minutes after the room is initially occupied if no motion is detected after the first 30 seconds
- Test mode allows quick and easy adjustments

- Selectable audible and/or visual alerts for impending shutoff
- In automatic mode, sensor returns automatically to Auto-ON after lights are turned off manually; ideal for presentations
- LED indicates occupancy detection
- Optional light level sensing with simple setup
- Service mode allows sensor to operate as a service switch in the unlikely event of a failure
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- Compatible with decorator wall plates

PROJECT		LOCATION/ TYPE	

Specifications

- PW-100: 120/277 VAC; 50/60 Hz
  @ 120 VAC, 0-800 W ballast or tungsten,1/6 hp
  @ 277 VAC, 0-1200 W ballast
- Time delays: 5, 10, 15, 20, 25 or 30 minutes, walk-through, test-mode
- Sensitivity adjustment: PIR (high/low)

- Coverage: Major motion 35' x 30'
  Minor motion 20' x 15'
- Dimensions: 2.73" x 1.76" x 1.83" (69.3mm x 44.7mm x 46.5mm) L x W x D
- UL and cUL listed
- Five year warranty

Controls & Settings

Product Controls

ON/OFF Button

DIP Switches

Detection LED

PIR Lens
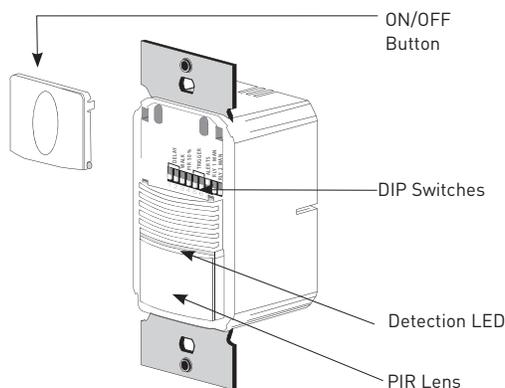
DIP Switch Settings

Time Delay	1	2	3
Test	↓	↓	↓
5 minutes	↓	↓	↑
10 minutes	↓	↑	↓
15 minutes	↓	↑	↑
20 minutes	↑	↓	↓ ◄
25 minutes	↑	↓	↑
30 minutes	↑	↑	↓
⊘ Service	↑	↑	↑

Walk-Through	4
Disabled	↓ ◄
Enabled	↑

⊘ Service bypasses occupancy & light level functions. Control the load manually using ON/OFF button.

PIR Sensitivity	5
High	↓ ◄
Low, 50%	↑

Visible Alert	6
Disabled	↓ ◄
Enabled	↑

Audible Alert	7
Disabled	↓
Enabled	↑ ◄

ON Mode	8
Auto On	↓ ◄
Manual On	↑

Switch 9 is not used

↑=ON ↓=OFF
◄=Factory Setting

Coverage & Wiring

Coverage Pattern

Major motion
Minor motion
PIR Coverage

35' (10.6m)
20' (6.1m)
7.5' (2.2m)
15' (4.5m)

4' (1.2m)
0
20' (6.1m)
35' (10.6m)

Wiring Diagrams

Neutral
Load
Line   Black   Red
Ground
Green/Yellow
Ground
Green
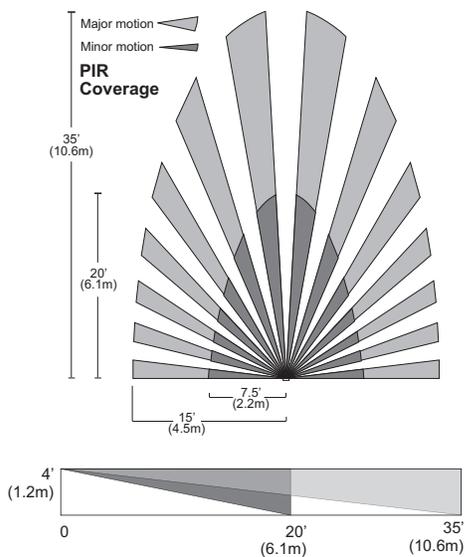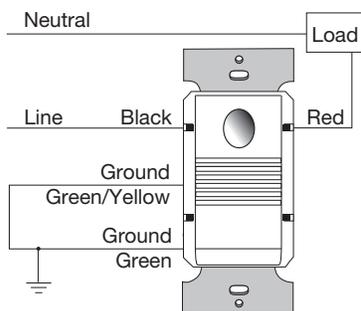
For best performance, WattStopper recommends using this sensor in spaces no larger than 15' x 12'.

Ordering Information

Catalog #	Color	Voltage	Load Rating
☐ PW-100-W	White	120/277 VAC; 50/60 Hz 2-wire sensor; no neutral connection	@ 120 VAC, 0-800 W ballast or tungsten, 1/6 hp @ 277 VAC, 0-1200 W ballast
☐ PW-100-LA	Lt. Almond		
☐ PW-100-I	Ivory		
☐ PW-100-G	Gray		
☐ PW-100-B	Black		
☐ PW-100-R	Red		

Order wall plate separately.