

PW-100 Passive Infrared Wall Switch Sensor

High sensitivity and dense coverage for exceptional performance

Color-matched lens and low profile for appealing design



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

Part of a comprehensive line of PIR, Ultrasonic and Dual Technology wall switch sensors

PROJECT

LOCATION/TYPE

Product Overview

Description

The PW-100 passive infrared (PIR) wall switch sensor turns lights ON and OFF 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 turn lighting ON. 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 or Manual-ON operation, walk-through, and test modes.

Auto Set

With auto set enabled, the PW-100 continuously monitors the controlled space to identify usage patterns and automatically adjust the time delay for optimal energy efficiency. The sensor assigns short delays (as low as seven minutes) for times when the space is usually vacant, and longer delays (up to 30 minutes) for busier times. Auto set is also able to differentiate electrical noise from human motion for better performance.

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 Auto-ON or Manual-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
- Override mode allows sensor to operate as a service switch in the unlikely event of a failure
- 2-wire and 3-wire models available for applications with or without neutral wire
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- Qualifies for ARRA-funded public works projects

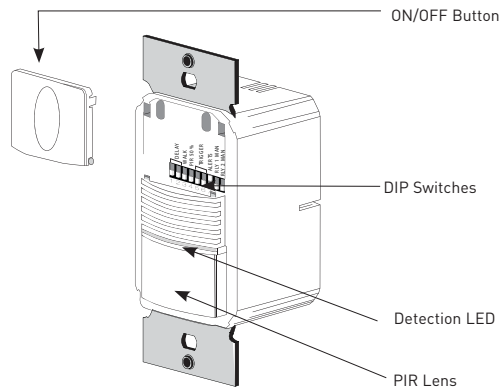


Specifications

- PW-100, PW-101: 120/230/277 VAC; 50/60 Hz @ 120 VAC, 0-800 W ballast or tungsten, 1/6 hp @ 230/277 VAC, 0-1200 W ballast
- PW-100-347: 347 VAC; 50/60Hz; 0-1500 W ballast
- Time delays: Auto set, fixed [5, 10, 15, 20, 25 or 30 minutes], walk-through, test-mode
- Coverage: Major motion 35' x 30' Minor motion 20' x 15'
- Sensitivity adjustment: PIR (high/low)
- 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



DIP Switch Settings

Time Delay	1	2	3
Auto/Test	↓	↓	↓
5 minutes	↓	↑	↓
10 minutes	↓	↓	↑
15 minutes	↓	↓	↑
20 minutes	↑	↓	↓
25 minutes	↑	↑	↓
30 minutes	↑	↑	↓
override	↑	↑	↓

Walk-Through	4
Disabled	↓
Enabled	↑

Visible Alert	6
Disabled	↓
Enabled	↑

PIR Sensitivity	5
High	↓
Low, 50%	↑

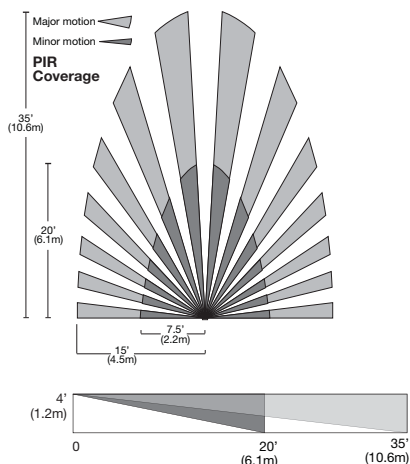
Relay 1 Mode	8
Auto On	↓
Manual On	↑

Audible Alert	7
Disabled	↓
Enabled	↑

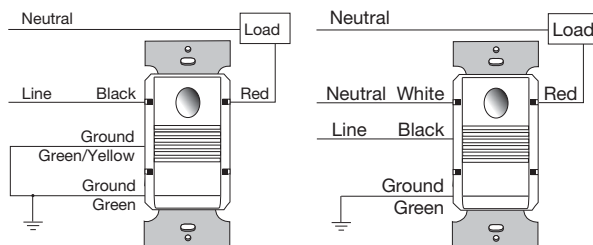
⬆=ON ⬇=OFF ⬅=Factory Setting

Coverage & Wiring

Coverage Pattern



Wiring Diagrams



Wiring for PW-100 with no neutral wire run to the switch box.

Wiring for PW-101 with a neutral connection in the switch box.

For best performance, WattStopper recommends using this sensor in spaces no larger than 15' x 12'.

Ordering Information

Catalog No.	Color	Voltage	Load Rating
<input type="checkbox"/> PW-100-W	White	120/230/277 VAC; 50/60 Hz 2-wire sensor; no neutral connection	@ 120 VAC, 0-800 W ballast or tungsten, 1/6 hp @ 230/277 VAC, 0-1200 W ballast
<input type="checkbox"/> PW-100-W-U			
<input type="checkbox"/> PW-100-W-FTA			
<input type="checkbox"/> PW-100-LA	Lt. Almond		
<input type="checkbox"/> PW-100-I	Ivory		
<input type="checkbox"/> PW-100-I-U			
<input type="checkbox"/> PW-100-I-FTA		120/230/277 VAC; 50/60 Hz 3-wire sensor; requires neutral connection	
<input type="checkbox"/> PW-100-G	Grey		
<input type="checkbox"/> PW-100-B	Black		
<input type="checkbox"/> PW-101-W	White		
<input type="checkbox"/> PW-101-LA	Lt. Almond		
<input type="checkbox"/> PW-101-I	Ivory		
<input type="checkbox"/> PW-101-G	Grey	347 VAC; 50/60 Hz	0-1500 W ballast
<input type="checkbox"/> PW-101-B	Black		
<input type="checkbox"/> PW-100-347-W	White		
<input type="checkbox"/> PW-100-347-LA	Lt. Almond		
<input type="checkbox"/> PW-100-347-I	Ivory		
<input type="checkbox"/> PW-100-347-G	Grey		
<input type="checkbox"/> PW-100-347-B	Black		

One ASP-211 single-gang cover plate included. Order ASP-422 for blank 2-gang cover plate, ASP-432 for 2-gang cover plate with switch option [specify color].