

PASSIVE INFRARED MULTI-WAY WALL SWITCH OCCUPANCY SENSOR WITH NIGHTLIGHT

PW-103N

High sensitivity and dense coverage for exceptional performance

Optional nightlight with choice of three colors and two light levels

Color-matched lens and low profile for appealing design



Allows multi-way control from one of up to four control locations

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-103N passive infrared (PIR) multi-way wall switch sensor can turn lights OFF and ON based on occupancy. It provides high sensitivity to small and large movements, appealing aesthetics, a field selectable nightlight and a variety of features.

OPERATION

The PW-103N 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 control options including Auto-ON operation, walk-through and test modes. The PW-103N has an LED nightlight that can be set to high or low intensity and to amber, white or blue, or to off. Multiple PW-103N sensors may be used for control of one or more loads from up to four locations.

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
- Field selectable high or low intensity amber, white or blue nightlight
- 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

MULTI-WAY CONTROL

The PW-103N offers true multi-way functionality. When connected sensors are in Manual-ON mode (default), an occupant must press the ON/OFF button of one of the sensors to turn the load ON. When sensors are in Auto-ON mode, the load will automatically turn ON when occupancy is detected by one of the sensors. Lights will remain ON as long as occupancy is detected. The last sensor to detect occupancy will turn the load OFF after the time delay has elapsed. In either operating mode, an occupant may turn the load OFF manually.

APPLICATIONS

The PW-103N sensor is well suited for spaces with multiple doorways or switch locations, or spaces that would benefit from nightlighting. Common applications include private offices, small conference rooms, lunch/break rooms, individual restrooms and hotel guest bathrooms.

PROJECT

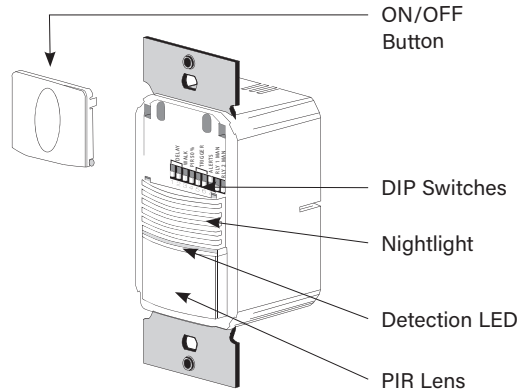
LOCATION/
TYPE

SPECIFICATIONS

- PW-103N: 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
- 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

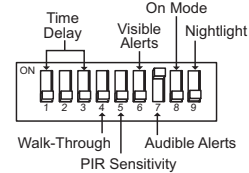


DIP Switch Settings

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

Walk-Through	4
Enabled	↑
Disabled	↓

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



PIR Sensitivity	5
Low, 50%	↑
High	↓

Visible Alert	6
Enabled	↑
Disabled	↓

Audible Alert	7
Enabled	↑
Disabled	↓

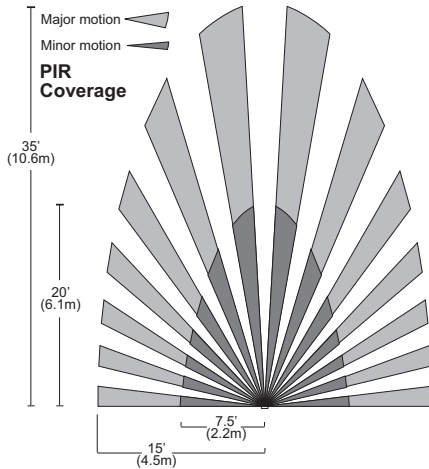
On Mode	8
Manual On	↑
Auto On	↓

Nightlight	9
Enabled	↑
Disabled	↓

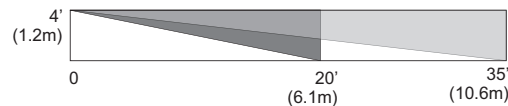
↑=ON ↓=OFF ◀=Factory Setting

COVERAGE & WIRING

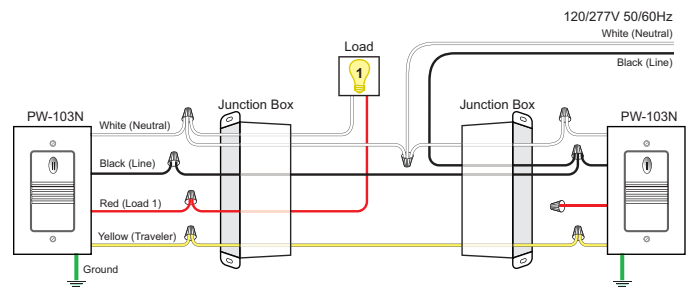
Coverage Pattern



For best performance in single location applications, Wattstopper recommends using this sensor in spaces no larger than 15' x 12'. In multi-way applications, each connected sensor expands the coverage area.



Multi-way Wiring Diagram



ORDERING INFORMATION

Catalog #	Color	Voltage	Load Rating
<input type="checkbox"/> PW-103N-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
<input type="checkbox"/> PW-103N-LA	Light Almond		
<input type="checkbox"/> PW-103N-I	Ivory		
<input type="checkbox"/> PW-103N-G	Gray		
<input type="checkbox"/> PW-103N-B	Black		

Order wall plate separately.

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