

# PASSIVE INFRARED LOW VOLTAGE WALL SWITCH OCCUPANCY SENSOR

PW-100-24

High sensitivity and dense coverage  
for exceptional performance

Low voltage input

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-100-24 passive infrared (PIR) low voltage 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

Factory default operation is for Manual-ON, so that users turn lights on only when needed. The PW-100-24 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.

## LOW VOLTAGE

Low voltage wall switch sensors can offer advantages over line voltage models. Using an isolated form-C relay output, the PW-100-24 sensor integrates seamlessly with VAV or other building systems for greater energy savings. Multiple PW-100-24 sensors can also be connected on a single circuit and can switch loads that exceed the rating of a standard line voltage switch. In addition, low voltage sensor installations do not require the use of conduits reducing installation costs and making relocation easier.

## APPLICATIONS

The PW-100-24 is the perfect choice for locations where line voltage wiring is not possible or for jurisdictions prohibiting the use of 277V switches. It is well suited for small enclosed spaces with clear line of sight of the occupant. Common applications include small offices, small conference rooms, 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
- LED indicates occupancy detection
- 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
- 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

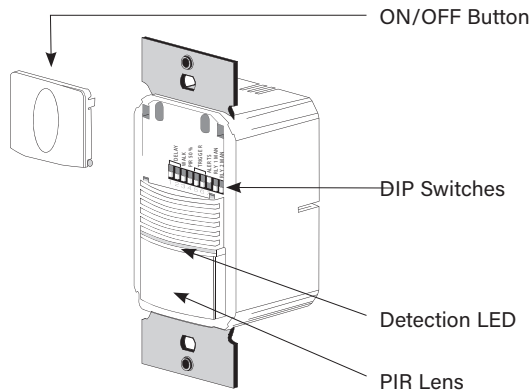
LOCATION/  
TYPE

## SPECIFICATIONS

- 18-24 VDC, 24 VAC and half-wave rectified AC
- Current consumption: 20 mA
- PW-100-24 contains single-pole, double-throw isolated relay rated for 1 A @ 30 VDC
- 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

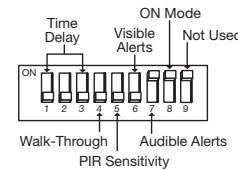


### DIP Switch Settings

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

Walk-Through	4
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	↑

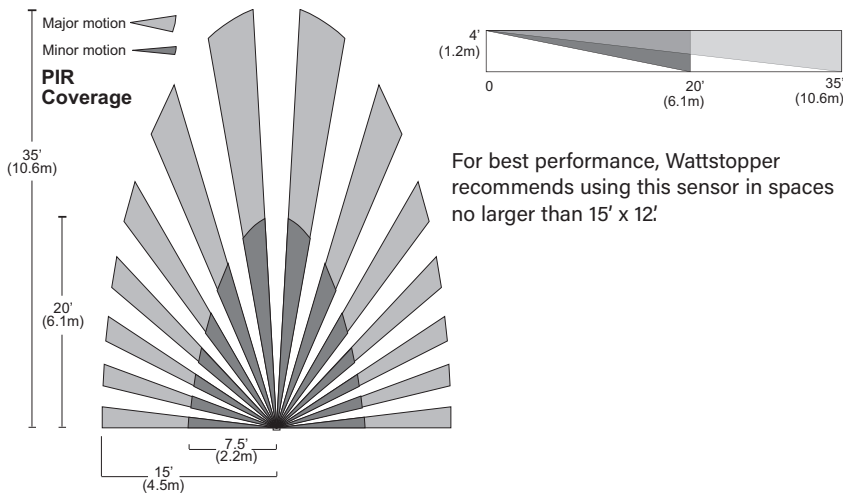
Switch 9 is not used

↑=ON ↓=OFF

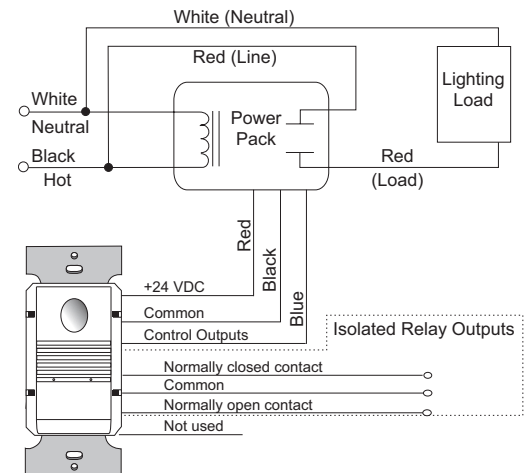
◀=Factory Setting

## COVERAGE & WIRING

### Coverage Pattern



### PW-100-24 Low Voltage Wiring



## ORDERING INFORMATION

Catalog #	Color	Voltage
<input type="checkbox"/> PW-100-24-W	White	18-24 VDC, 24 VAC and half-wave rectified AC
<input type="checkbox"/> PW-100-24-LA	Light Almond	
<input type="checkbox"/> PW-100-24-I	Ivory	
<input type="checkbox"/> PW-100-24-G	Gray	
<input type="checkbox"/> PW-100-24-B	Black	

Order wall plate separately.

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