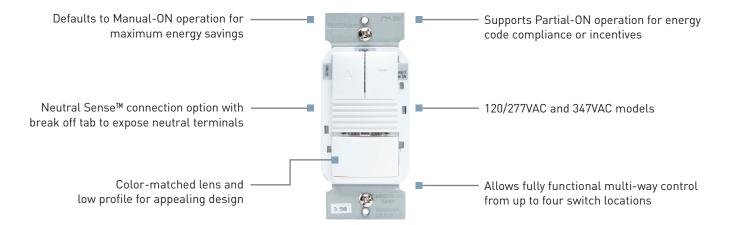


PASSIVE INFRARED 0-10 VOLT DIMMING WALL SWITCH OCCUPANCY SENSOR

PW-31



Description

The PW-311 passive infrared (PIR) dimming wall switch sensor can turn lights OFF and ON based on occupancy and allow the user to increase or decrease the lighting level. It works with 0-10 VDC dimming drivers and ballasts to control lighting loads including LEDs.

Operation

The PW-311 installs in a single gang junction box with or without neutral wiring. Factory default operation is for Manual-ON, so that users turn lights on only when needed. It uses PIR technology to detect occupancy. Once the space is vacated and the time delay elapses, lights automatically turn OFF. DIP switch settings enable a variety of control options such as Auto-ON operation, high and low trim, ramp up and fade down times, power loss mode, smart light level, walk-through and test modes. Multiple sensors may be used to dim a lighting load from up to four locations.

Partial-ON Option

When set for Automatic-ON operation, the PW-311 typically comes ON to the last non-zero light level for occupant comfort and convenience. However, this default setting may be changed to a fixed light level value of 50%, 75% or 100%. The dimmed level options (Preset On Level) support new state and federal energy code requirements.

Applications

The PW-311 sensor is ideal for enclosed spaces with clear line of sight of the occupant. Common applications include small offices, small conference rooms and lunch/break rooms. It can be used for a two-wire or three-wire installation, either to work with existing wiring, or to meet recent local or national electrical code requirements. An easy-to-break plastic tab covers neutral screw terminals. Once the sensor is connected to neutral it complies with all codes that restrict current leakage to ground.

Features

- Neutral Sense™ and optional neutral wiring simplifies 2011 NEC-compliant installation
- Vandal resistant lens combines precise coverage with durability
- Presentation mode may be deactivated to allow Auto-ON operation after 15 second time delay
- Optional Smart Light Level adapts ambient light hold off threshold to meet user needs
- 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 verification of coverage
- Selectable audible and/or visual alerts for impending shutoff
- LED indicates occupancy detection
- Service mode allows sensor to operate as a service switch in the unlikely event of a failure
- Zero-crossing for long relay life
- No derating required for multi-gang applications
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- Compatible with decorator wall plates
- This product meets the material restrictions of RoHS

PROJECT LOCATION/ TYPE



Specifications

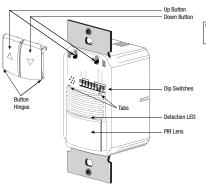
- PW-311: 120/277VAC; 50/60Hz
- PW-311-347: 347VAC; 50/60Hz
- Dimming control signal: 0-10VDC, sinks up to 50mA for control of compatible ballasts (12 if each sources 2mA); Class 1 wiring
- Time delays: 3, 5, 15 or 30 minutes, walk-through, test-mode
- Power up after power loss: On, Off or last state

- Coverage: Major motion 35' x 30' Minor motion 20' x 15'
- Sensitivity adjustment: PIR (high/low)
- Dimensions (L x W x D): 2.73" x 1.75" x 1.81" (69mm x 44mm x 46mm)
- UL and cUL listed (E101196)
- Five year warranty

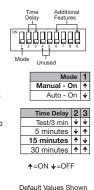
Installation and Wiring

Product Controls

Wiring Diagrams



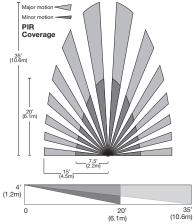
DIP Switch Settings



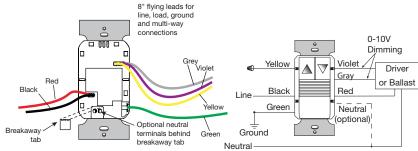
in **Bold**

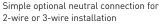
Additional Features 6 7 8 9 Green LED # of Blink High Trim ↓ ↑ ↓ ↑ 1=10V, 2=Manual Adjustment Low Trim ↓ ↑ ↑ ↓ 1=0V, 2=Manual Adjustment Ramp Up Time ★ ↑ ↑ 1=1, 2=2.5, 3=5, 4=10 seconds 1=Disable, 2=Enable, 3=Smart Light Level Power Loss Mode ↑ ↓ ↑ ↓ 1=Keep Last State, 2=Default On, 3=Default Off Presentation Mode ↑ ↓ ↑ ↑ 1=ON, 2=OFF Service Mode ↑ ↑ ↓ ↓ 1=0FF, 2=ON Non-Dim Mode ↑ ↑ ↑ ↓ 1=0FF, 2=0N Reset To Default ↑ ↑ ↑ ↑ Press and Hold Press and Hold UP o DOWN for 5 seconds

Coverage Patterns

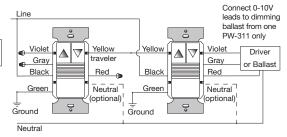


For best performance, Legrand recommends using this sensor in spaces no larger than 15' x 12'.





Note: Requires Class 1 wiring for 0-10V dimming.



Multi-way wiring

Ordering Information

0.1.1	0.1	W 11	1. 18.0
Catalog #	Color	Voltage	Load Rating
PW-311-W	White	120VAC; 50/60Hz or 277VAC; 50/60Hz	@ 120VAC: 0-1000W ballast, E-ballast, LED, tungsten; 1/4hp motor or @ 277VAC: 0-1200W ballast, E-ballast, LED; 1/4hp motor
PW-311-LA	Lt. Almond		
PW-311-I	Ivory		
PW-311-G	Grey		
PW-311-B	Black		
PW-311-R	Red		
DW-311-347-W	White	347VAC; 50/60Hz	0-1500W ballast, LED; 1/4hp motor
☐ PW-311-347-LA	Lt. Almond		
PW-311-347-I	lvory		
DW-311-347-G	Grey		
PW-311-347-B	Black		
PW-311-347-R	Red		