DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR | DSW-301

High sensitivity and dense coverage for exceptional performance

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

Color-matched lens and low profile for appealing design

Optional neutral connection with break off tab to expose neutral terminals

120/277 VAC and 347 VAC models

Defaults to Manual-ON operation for maximum energy savings

Description

The DSW-301 dual technology wall switch sensor turns lights OFF and ON based on occupancy. It combines the benefits of passive infrared (PIR) and ultrasonic detection technologies. The DSW-301 replaces existing wall switches and fits behind a standard decorator wall plate.

Operation

Once the lights are ON, detection by either technology holds lights ON until occupancy is no longer detected and the time delay elapses. Factory default operation is for Manual-ON, so that users must turn lights on. DIP switch settings allow for a variety of control options including Auto-ON operation, walk-through and test mode. In Auto-ON mode, the DSW-301 can be programmed to turn lighting on when both the PIR and Ultrasonic technologies detect occupancy or when the PIR sensor detects occupancy.Additional DIP switch settings allow the user to choose which sensing technologies hold ON or retrigger the lighting. Multiple sensors may be used for control of one or more loads from up to four locations.

Optional Neutral Connection

The DSW-301 sensor uses a patent pending Neutral Sense Technology. Any DSW-301 sensor can be used for a two-wire or three wire application, either to work with existing wiring, or to meet local or national 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.

Applications

The DSW-301 sensor is great for retrofit projects and Wattstopper's dual technology has the flexibility to work in a variety of applications where one technology alone may not be sufficient. Common applications include small and executive offices, small and medium conference rooms, small classrooms and lunch/break rooms. In addition, dual technology sensors are the perfect choice for ADA-compliant buildings due to lower mounting height requirements.

Features

- Complies with 2011 NEC requirements
- Zero-crossing for long relay life
- Vandal resistant lens combines precise coverage with durability
- Selectable walk-through mode turns lights off three minutes after initial occupancy if no motion is detected after the first 30 seconds
- Test mode allows quick and easy adjustments
- Selectable audible alert for impending shutoff
- In automatic mode, sensor returns automatically to Auto-ON after lights are turned off manually; ideal for presentations
- Four occupancy logic options to customize control to meet application needs
- 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
- BAA/TAA-compliant models available

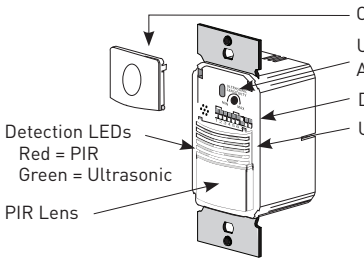
PROJECT		LOCATION/ TYPE	

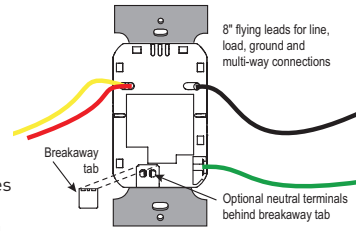
Specifications

- DSW-301: 120/277VAC; 50/60Hz, 1/4 hp
  @ 120VAC, 0-1000W ballast, LED, and tungsten
  @ 277VAC, 0-1200W ballast and LED
- DSW-301-347: 347VAC; 50/60Hz, 1/4 hp; 0-1500W ballast and LED
- Time delays: 5, 15 or 30 minutes, walk-through, test-mode/20 minutes
- Sensitivity adjustment: PIR (high/low), Ultrasonic (fully variable)
- Coverage: Major motion, PIR 35' x 30', Ultrasonic 20' x 20'
  Minor motion, PIR 20' x 15', Ultrasonic 15' x 15'
- Dimensions (L x W x D): 2.73" x 1.75" x 1.81" (69mm x 44mm x 46mm)
- UL and cUL listed
- Five year warranty

Controls & Settings

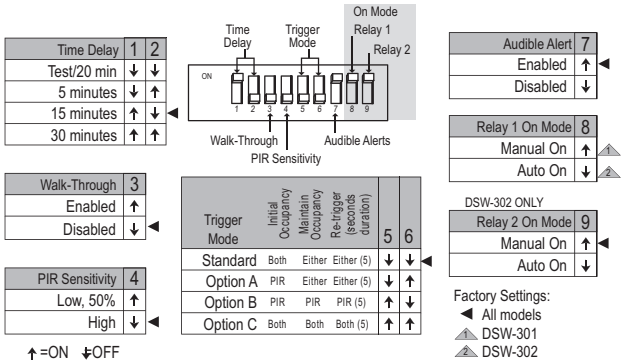
Product Controls & Neutral Option





Simple optional neutral connection allows installation in any 2-wire or 3-wire application. When used in a multi-way application, all devices in that space must be wired using the same method of either with neutral or without neutral.

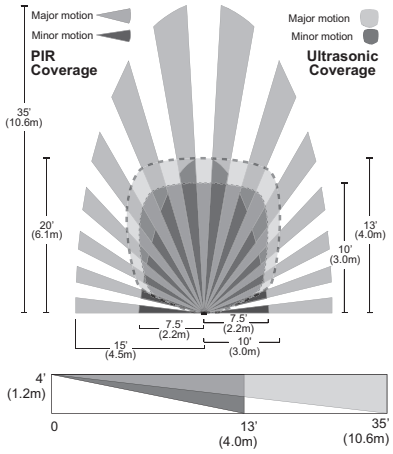
DIP Switch Settings



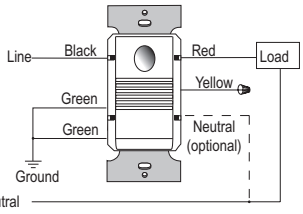
Coverage & Wiring

Coverage Pattern

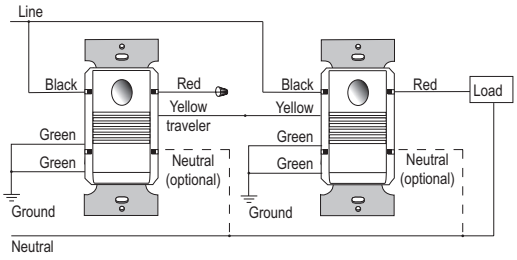
For best performance, Wattstopper recommends using this sensor in spaces no larger than 18' x 15'.



Wiring Diagrams



Multi-way wiring Note: All units should be on the same phase.



Ordering Information

Catalog #	Color	Voltage	Load Rating
☐ DSW-301-W	White	120VAC; 50/60Hz or 277VAC; 50/60Hz	@ 120VAC, 0-1000W ballast, LED, tungsten, 1/4 hp or @ 277VAC 0-1200W ballast, LED, 1/4 hp
☐ DSW-301-W-U	White		
☐ DSW-301-LA	Lt. Almond		
☐ DSW-301-I	Ivory		
☐ DSW-301-I-U	Ivory		
☐ DSW-301-G	Gray		
☐ DSW-301-B	Black		
☐ DSW-301-R	Red		
☐ DSW-301-347-W	White	347VAC; 50/60Hz	0-1500W ballast & LED, 1/4 hp
☐ DSW-301-347-LA	Lt. Almond		
☐ DSW-301-347-I	Ivory		
☐ DSW-301-347-G	Gray		
☐ DSW-301-347-B	Black		
☐ DSW-301-347-R	Red		

Order wall plate separately.

-U = BAA/TAA-compliant models available.
Product is compliant with Buy American Act and Trade Agreement Act

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