DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR

DSW-301/DSW-301M

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

120/240/240/277 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-301M version does not have Auto-ON capabilities and operates in Manual-ON mode only. All other specifications and settings to be identical to DSW-301.

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 (not available with DSW-301M), 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.

COMPATIBLE WITH 2 WIRE OR 3 WIRE CONNECTIONS

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. DSW-301 120/240/240/277v model uses a blue and white signal wire to connect to neutral or, in cases of retrofit or replacement when no neutral is present, can be connected to ground. The DSW-301-347 model has a plastic tab that 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 2017 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
- In automatic mode, (not available with DSW-301M) sensor returns automatically to Auto-ON after lights are turned off manually; ideal for presentations
- Test mode allows quick and easy adjustments
- Selectable audible alert for impending shutoff
- 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

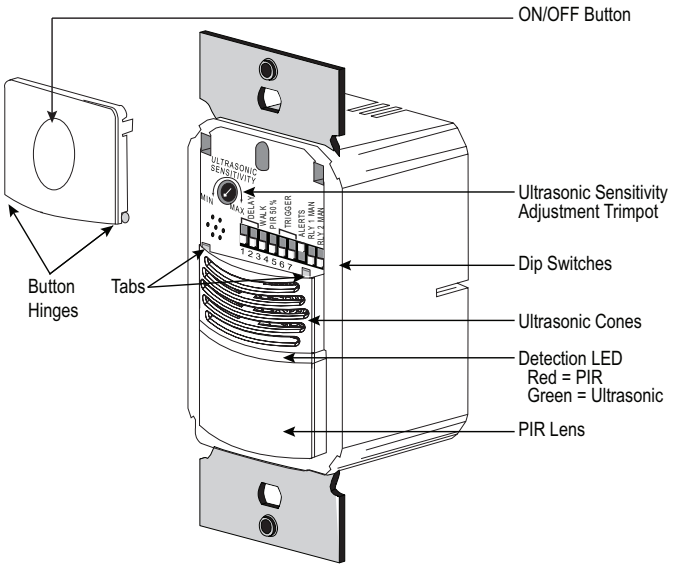
PROJECT		LOCATION/ TYPE	

SPECIFICATIONS

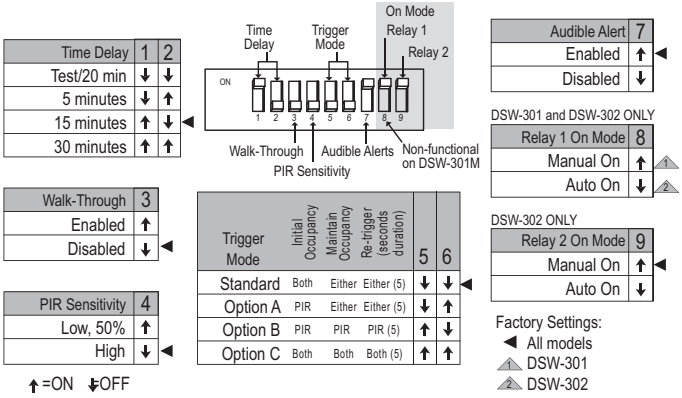
- DSW-301/301M: 120/240/240/277VAC; 50/60Hz, 1/4 hp
  - @ 120VAC, 0-1000W ballast, LED, and tungsten
  - @ 240/240/277VAC, 0-1200W ballast and LED
- DSW-301-347: 347VAC; 50/60Hz, 1/4 hp; 0-1500W ballast and LED
- Time delays: 5, 15 or 30 minutes, walk-through, test-mode/20 minutes
- Sensitivity adjustment: 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

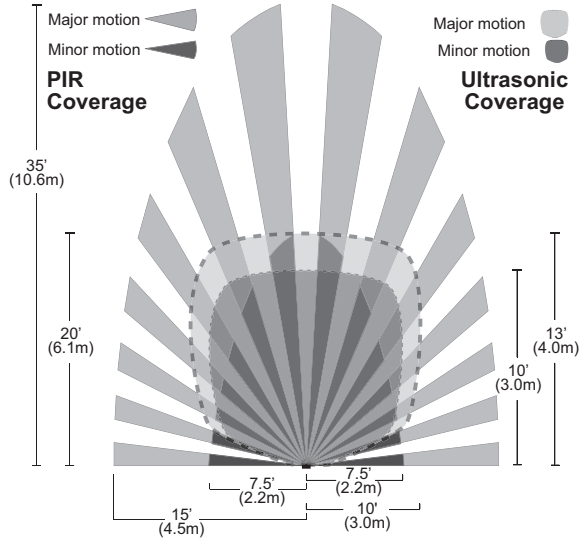
Product Controls

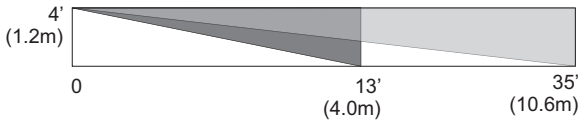


DIP Switch Settings



COVERAGE

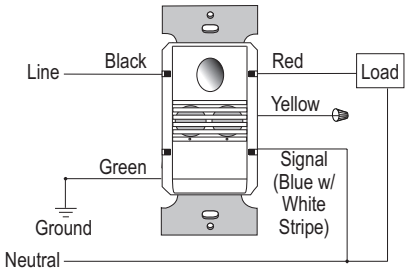




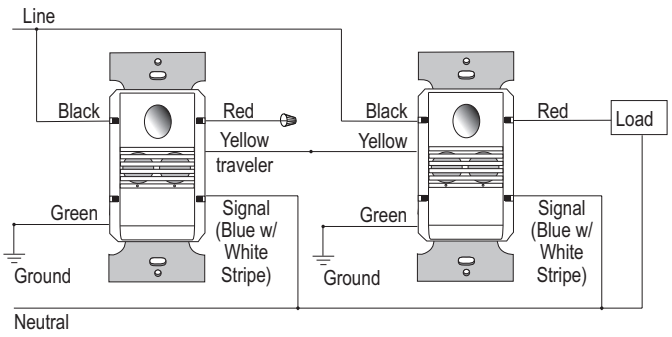
For best performance, Wattstopper recommends using this sensor in spaces no larger than 18′ x 15′.

WIRING

DSW-301/DSW-301M

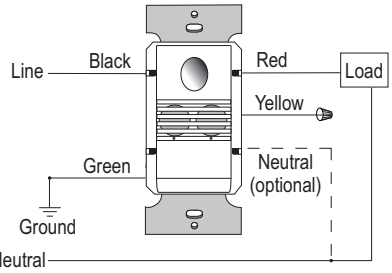


Signal wire connects to neutral. Signal wire can connect to ground in replacement or retrofit application

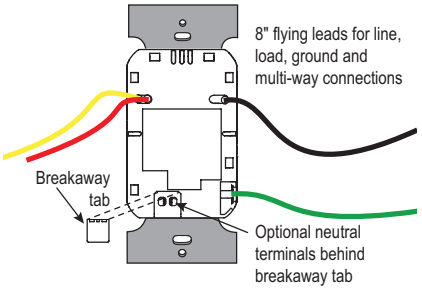


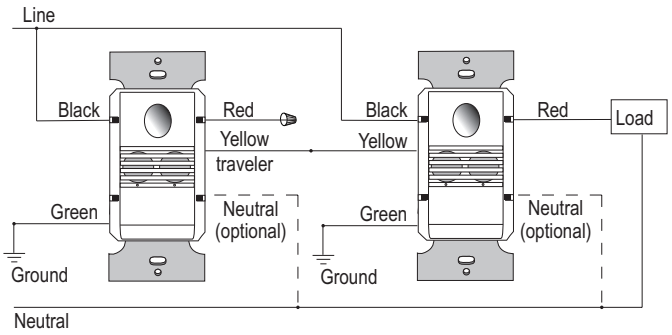
Multi-way Wiring
(up to 4 sensors)

DSW-301-347



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.





Multi-way Wiring
(up to 4 sensors)

Note: For multi-way wiring, All units should be on the same phase

ORDERING INFORMATION

Catalog #		Color	Voltage	Load Rating
☐	DSW-301-W	White	120VAC; 50/60Hz or 240/240/277VAC; 50/60Hz	@ 120VAC, 0-1000W ballast, LED, tungsten, 1/4 hp or @ 240/240/277VAC 0-1200W ballast, LED, 1/4 hp
☐	DSW-301M-W	White		
☐	DSW-301-W-U	White		
☐	DSW-301-LA	Light Almond		
☐	DSW-301-I	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

Order wall plate separately. -U = BAA/TAA-compliant models available. Product is compliant with Buy American Act and Trade Agreement Act 25984r5 Rev 04/2024