

DSW-302 Dual Technology Dual Relay Wall Switch Occupancy Sensor

High sensitivity and dense coverage for exceptional performance

Two relays for control of two separate lighting loads or circuits

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 Auto-ON to 50% operation for maximum energy savings

Product Overview

Description

The DSW-302 dual technology wall switch sensor turns lights ON and OFF based on occupancy and contains two relays for controlling two independent lighting loads or circuits. It combines the benefits of passive infrared (PIR) and ultrasonic detection technologies for high sensitivity to small and large movements. The DSW-302 replaces existing wall switches and fits a standard decorator wall plate.

Operation

Each of the DSW-302's relays can control a separate lighting load. By default, when the PIR sensor detects occupancy, relay 1 turns ON automatically. Remaining lighting must be turned on manually. Detection by either PIR or ultrasonic technology holds lights ON. When occupancy is no longer detected and the time delay elapses, lights automatically turn OFF. Dual ON/OFF buttons allow the user to turn on and off each of the loads manually. DIP switch settings allow for a variety of control options such as Auto-ON or Manual-ON for each relay, walk-through, and test mode. Multiple sensors may be used for control of one or more loads from up to four locations.

Features

- Complies with 2011 NEC requirements
- Zero-crossing on both relays for long relay life
- Vandal resistant lens combines precise coverage with durability
- 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
- Selectable audible alert for impending shutoff
- In automatic mode, sensor returns automatically to Auto-ON after lights are turned off manually; ideal for presentations

PROJECT
LOCATION/TYPE

Optional Neutral Connection

The DSW-302 sensor uses a patent pending Neutral Sense Technology. Any DSW-302 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-302 sensor is great for retrofit projects and has the flexibility for applications where one technology alone may not be sufficient. In addition, its dual relays allow bi-level switching or control of two loads. Applications include small and executive offices, small and medium conference rooms and lunch/break rooms. This sensor is also a perfect choice for ADA-compliant buildings due to lower mounting height requirements.

- Test mode allows quick and easy adjustments
- Four occupancy logic options to customize control to meet application needs
- Optional light level sensor holds secondary lights off when ambient lighting is above the preset level
- 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

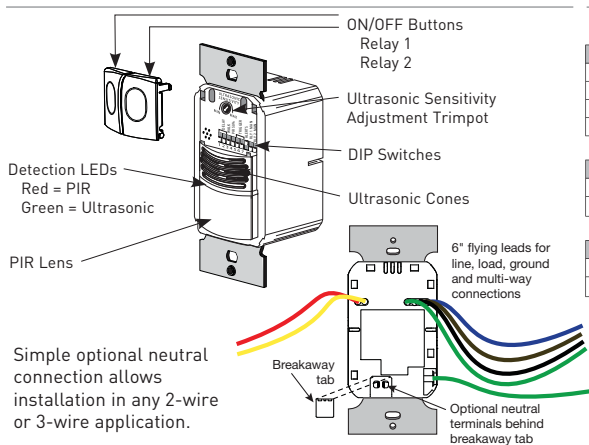


Specifications

- DSW-302: 120/277VAC; 50/60Hz, 1/6 hp @ 120VAC, 0-800W ballast, LED, and tungsten @ 277VAC, 0-1000W ballast and LED
- DSW-302-347: 347VAC; 50/60Hz, 1/6 hp; 0-1200W 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):
 - DSW-302: 4.1" x 1.58" x 1.39" (104.6mm x 40.3mm x 35.5mm)
 - DSW-302-347: 4.5" x 1.58" x 1.39" (114.36mm x 40.3mm x 35.5mm)
- UL and cUL listed
- Five year warranty

Controls & Settings

Product Controls & Neutral Option



DIP Switch Settings

Time Delay 1 2	Time Delay	Relay 1	Relay 2
Test/20 min	↓	ON	↓
5 minutes	↑	OFF	↑
15 minutes	↓	ON	↓
30 minutes	↑	OFF	↑
Walk-Through 3	Walk-Through	PIR Sensitivity	
Enabled	↑	Low	↑
Disabled	↓	High	↓
PIR Sensitivity 4	PIR Sensitivity	Trigger Mode 5 6	
Low, 50%	↑	Standard	Both
High	↓	Option A	PIR
↑ = ON ↓ = OFF		Option B	PIR
		Option C	Both

Audible Alert 7	Audible Alert
Enabled	↑
Disabled	↓
Relay 1 On Mode 8	Relay 1 On Mode
Manual On	↑
Auto On	↓
Relay 2 On Mode 9	Relay 2 On Mode
Manual On	↑
Auto On	↓

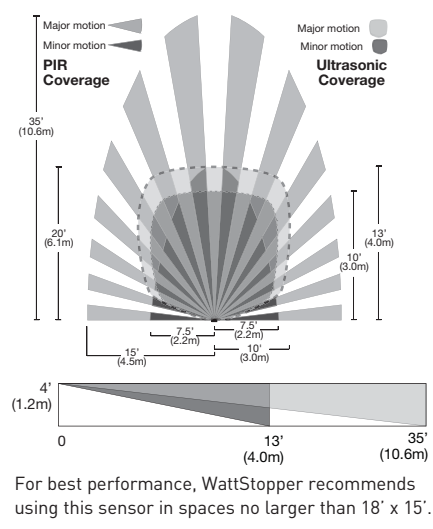
DSW-302 ONLY

Factory Settings:

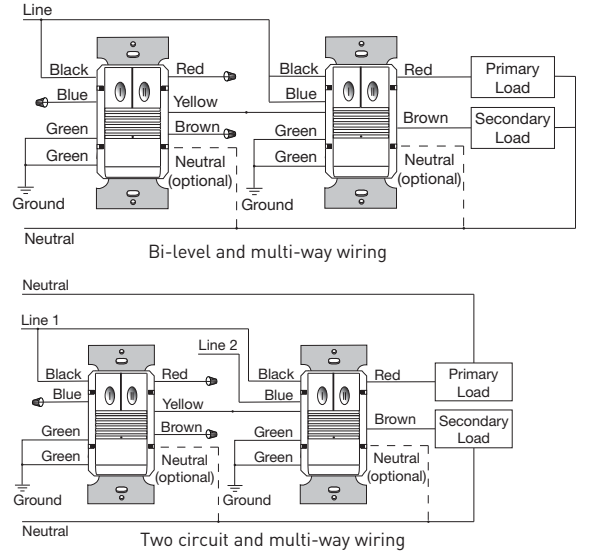
- ▲ All models
- ▲ DSW-301
- ▲ DSW-302

Coverage & Wiring

Coverage Pattern



Wiring Diagrams



Ordering Information

Catalog No.	Color	Voltage	Load Rating
<input type="checkbox"/> DSW-302-W	White	120VAC; 50/60Hz or 277VAC; 50/60Hz	@ 120VAC, 0-800W ballast, LED, tungsten, 1/6 hp or @ 277VAC 0-1000W ballast, LED, 1/6 hp
<input type="checkbox"/> DSW-302-LA	Lt. Almond		
<input type="checkbox"/> DSW-302-I	Ivory		
<input type="checkbox"/> DSW-302-G	Grey		
<input type="checkbox"/> DSW-302-B	Black		
<input type="checkbox"/> DSW-302-R	Red		
<input type="checkbox"/> DSW-302-347-W	White	347VAC; 50/60Hz	0-1200W ballast & LED, 1/6 hp
<input type="checkbox"/> DSW-302-347-LA	Lt. Almond		
<input type="checkbox"/> DSW-302-347-I	Ivory		
<input type="checkbox"/> DSW-302-347-G	Grey		
<input type="checkbox"/> DSW-302-347-B	Black		
<input type="checkbox"/> DSW-302-347-R	Red		