

# DSW-100 Dual Technology Wall Switch Occupancy Sensor

High sensitivity and dense coverage for exceptional performance

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

Part of a comprehensive line of PIR, Ultrasonic and Dual Technology wall switch sensors

PROJECT
LOCATION/TYPE

## Product Overview

### Description

The DSW-100 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, and is characterized by high sensitivity to small and large movements. The DSW-100 replaces existing wall switches and fits behind a standard decorator wall plate.

### Operation

Once the lights are ON, detection by either PIR or ultrasonic technology holds lights ON until occupancy is no longer detected and the time delay elapses. 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-100 turns lighting on when the PIR sensor detects occupancy. Additional DIP switch settings allow the user to choose which sensing technologies hold ON or retrigger the lighting.

### Manual-on Control

Factory default operation is for Manual-ON mode, so that users turn light on only when needed. This control strategy is proven to save more energy than Auto-ON, and is required in ASHRAE 90.1-2010. Installers can easily reconfigure the DSW-100 to turn lights on automatically. In Auto-on, walk-through mode can increase energy savings by quickly turning lights off following occupancy of less than 30 seconds.

### Applications

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 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
- 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
- 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 give users the ability 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
- Compatible with decorator wall plates



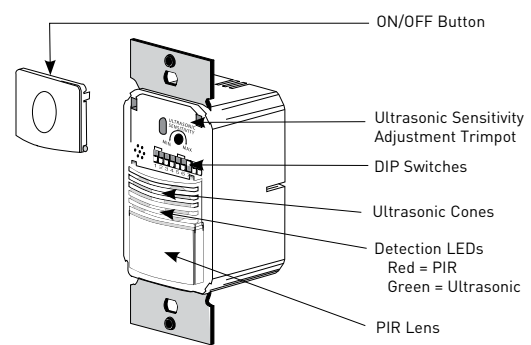
# Specifications

- 120/277 VAC; 50/60 Hz  
@ 120 VAC, 0-800 W ballast or tungsten, 1/6 hp  
@ 277 VAC, 0-1200 W ballast
- Time delays: 5, 15 or 30 minutes, walk-through, test-mode/20 minutes
- Coverage:  
Major motion, PIR 35' x 30', Ultrasonic 20' x 20'  
Minor motion, PIR 20' x 15', Ultrasonic 15' x 15'

- Sensitivity adjustment: PIR (high/low), Ultrasonic (fully variable)
- 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



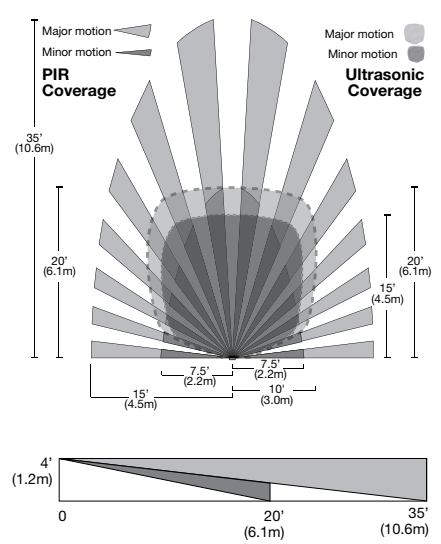
## DIP Switch Settings

<b>Time Delay</b> 1 2	Time Delay	Trigger Mode	On Mode	<b>Audible Alert</b> 7
Test/20 min ↓ ↓	ON	1	Relay 1 not used	Enabled ↑
5 minutes ↓ ↑	2	2		Disabled ↓
15 minutes ↑ ↓	3	3		
30 minutes ↑ ↑	4	4		
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↑ = ON ↓ = OFF  
◀ = Factory Settings

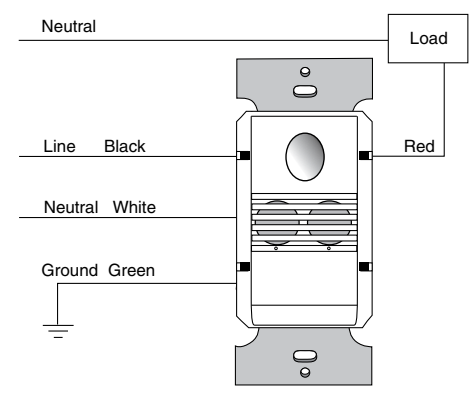
# Coverage & Wiring

## Coverage Pattern



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

## Wiring Diagram



# Ordering Information

Catalog No.	Color	Voltage	Load Rating
<input type="checkbox"/> DSW-100-W	White	120/277 VAC; 50/60 Hz	@ 120 VAC, 0-800 W ballast or tungsten, 1/6 hp @ 277 VAC, 0-1200 W ballast
<input type="checkbox"/> DSW-100-LA	Lt. Almond		
<input type="checkbox"/> DSW-100-I	Ivory		
<input type="checkbox"/> DSW-100-G	Grey		
<input type="checkbox"/> DSW-100-B	Black		

Order wall plate separately.