

PROJECT NAME: \_\_\_\_\_ CAT. #: \_\_\_\_\_  
 NOTES: \_\_\_\_\_ FIXTURE SCHEDULE: \_\_\_\_\_

## SC Series - Standalone Controls

*Single Relay Pole Wall Switch  
Dual Tech PIR/Ultrasonic Sensor*

The SC Series wall switch sensor provides a simple and cost-effective standalone solution which utilizes dual technology PIR (Passive Infrared) and Ultrasonic to turn lights ON and OFF based on occupancy/vacancy. The vandal resistant lens provides major and minor detection movement coverage with a 180° sensor field-of-view. The sensor wall switch can be used to meet many of the Title 20/24, ASHRAE 90.1, and IECC code requirements.



### Features

- Compatible with most LED, Electronic and Magnetic ballasts, CFL, and Incandescent
- Used in commercial or residential applications
- Dual Technology PIR(Passive Infrared) and Ultrasonic
- Neutral Required
- Built-in OCC/VAC slide button offers Manual ON/OFF and Automatic ON/OFF control capability
- Auto mode includes “walk-through” sensing mode which increases energy savings by turning light “off” shortly after momentary occupancy
- Latching relay allows sensor to work at low power
- Relay switches at zero crossing point of the AC power curve to ensure maximum contact life
- Adjustable sensitivity settings
- Conforms to California Title 20/24, ASHRAE 90.1, and IECC code requirements.
- 5-year standard warranty

### Applications

- Office
- Hospitals
- Restrooms
- Schools
- Retail
- Hospitality

### Ordering Info

Model Number	Description	Order Code	UPC Code
SC-SWSDU-W	Single Relay Pole Wall Switch PIR/Ultrasonic Sensor	109301	767627039911

### Specifications

INPUT VOLTAGE	120/277VAC
OPERATIONAL FREQUENCY	50/60 Hz
SENSOR TECHNOLOGY	Dual Technology: PIR(Passive Infrared) and Ultrasonic 40kHz frequency
LOAD RATINGS	800W Incandescent, 800VA@120VAC, 1600VA@277VAC
MOTOR LOAD RATINGS	1/4 HP @ 120VAC
PIR SENSITIVITY	50% or 100% (Default 100%) via DIP switch
ULTRASONIC SENSITIVITY	Minimum to Maximum via trimpot
TRIGGER MODE	4 Options. Refer to Trigger Mode table below.
TIME DELAY	15 seconds (Test Mode) to 30 minutes. (Default 15 seconds)
WALK THROUGH	Disabled/Enabled setting via dip switch (Default Disabled)
LIGHT LEVEL ADJUSTMENT	Adjustable via trim pot (Default set to 100% Daylight)
OPERATING TEMPERATURE	32°F to 131°F (0°C to 55°C)
OPERATING HUMIDITY	0%-90% non-condensing
OPERATING ENVIRONMENT	Suitable for Dry Locations - Indoor Use Only
REGULATORY APPROVALS	UL Listed



5-year standard warranty (further details available at [www.maxlite.com/warranties](http://www.maxlite.com/warranties))

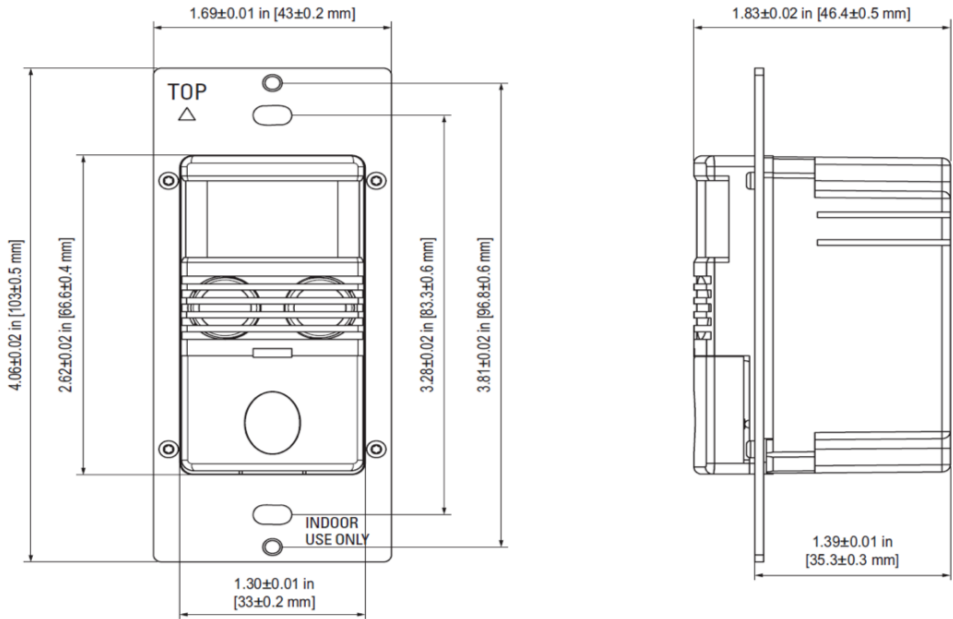
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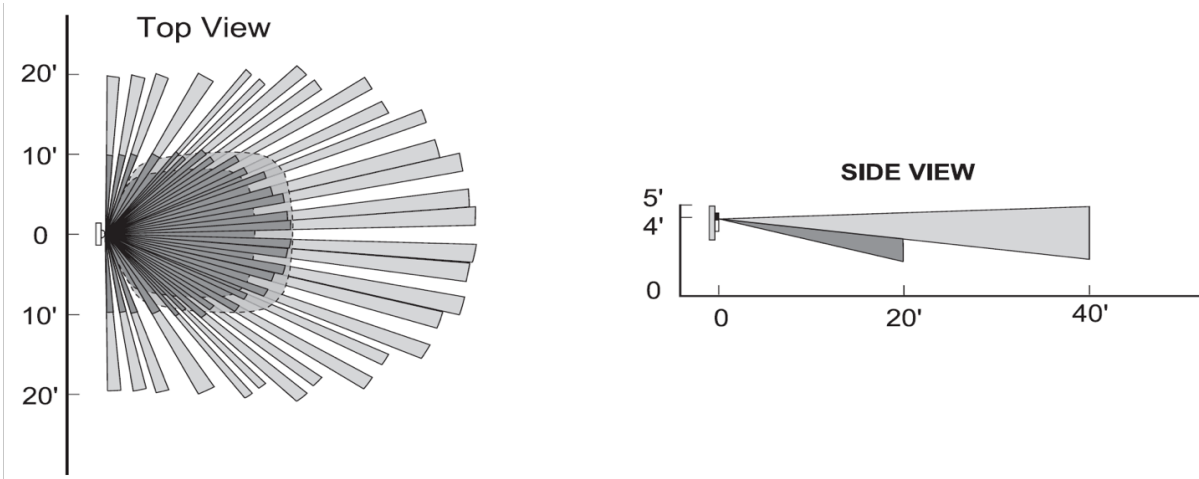
Specifications

MOUNTING	Single gang switch box
MOUNTING HEIGHT	48"
WEIGHT	4 oz

Dimensions



Coverage Pattern\*



\*For optimal performance, do not obstruct sensor's field of view  
\*Maintain distance of sensor at least 6ft away from any hot objects or air handling units. Significant heat sources can cause false detection  
\*Mask the PIR lens using opaque tape to block specific areas that are not desired to be sensed

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### Configuration

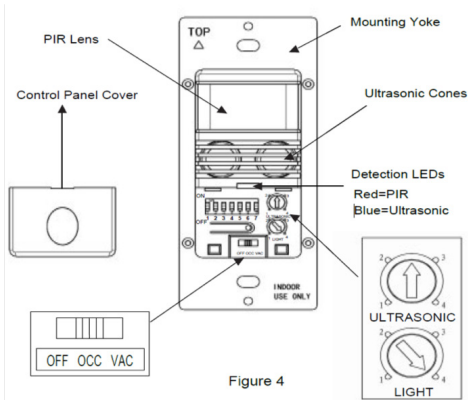


Figure 4

Position	Mode	Description
Left	(OFF) Off Mode	Circuit is permanently open. Switch disabled. Load will not react to the push button.
Center	(OCC) Occupancy	<b>Occupancy Mode:</b> Automatic ON/OFF, time delay programmed with Time Delay dipswitch setting (15 seconds - 30 minutes). See Time Delay table setting below
Right	(VAC) Vacancy	<b>Vacancy Mode:</b> Manual ON/ Automatic OFF, time delay programmed with Time Delay dipswitch setting (15 seconds - 30 minutes). See Time Delay table setting below

The SC-SWSDU-W has 7 DIP switches under the Control Panel cover. The DIP switches are used to set PIR sensitivity, time delay, trigger mode, and walk through feature settings:

PIR Sensitivity	1
50%	↓
100%	↑

**DEFAULT**

#### PIR Sensitivity setting: Switch 1

50%, sensor's coverage is smaller, just about half of the widest range. 100%, the maximum range of sensor's PIR coverage is 1200 square feet, see "coverage pattern".

Trigger Mode	Initial Trigger	Maintain Load Output	Re-Trigger	2	3
Option 1	BOTH	Either	Either	↓	↓
Option 2	PIR	PIR	PIR	↓	↑
Option 3	US	US	US	↑	↓
Option 4	BOTH	BOTH	BOTH	↑	↑

**DEFAULT**

#### Trigger Mode: Switches 2, 3

The sensor has 4 trigger options, set with DIP switches 2 and 3. In the trigger mode DIP switch setting table:

- **BOTH** requires motion detection by the PIR and Ultrasonic
- **Either** requires motion detection by only one technology
- **PIR** requires motion detection by PIR only
- **US** requires motion detection by Ultrasonic only

Time Delay	4	5	6
15 Sec/Test	↓	↓	↓
1 Minute	↓	↓	↑
5 Minutes	↓	↑	↓
10 Minutes	↓	↑	↑
15 Minutes	↑	↓	↓
20 Minutes	↑	↓	↑
25 Minutes	↑	↑	↓
30 Minutes	↑	↑	↑

**DEFAULT**

#### Time Delay: Switches 4, 5, 6

The sensor will hold the lights on as long as occupancy/vacancy is detected. The time delay countdown starts when no motion is detected. After no motion is detected for the length of the time delay, the sensor will turn the lights off automatically.

Walk Through	7
Disabled	↓
Enabled	↑

**DEFAULT**

#### Walk-through Mode: Switch 7

The load will automatically turn off after 180 seconds (3 minutes) if a brief occupancy moment happens within the first 30 seconds. If occupancy occurs for longer than 30 seconds, the load will remain ON for the duration of the time delay set on the switch.

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### Wiring Diagram

