

## OVERVIEW

The **WSX** Family of wall switch occupancy sensors provides simple and cost effective solutions for commercial and residential lighting control applications. All **WSX** Family sensors have a stylish low profile appearance, soft-click buttons, and provide small motion detection up to 20 ft (6.10 m), making them perfect for private offices, private rest rooms, closets, copy rooms, or any other small enclosed space. Additionally, all **WSX** Family sensors have a patent-pending wiring method that enables them to function either with or without a neutral connection. **WSX** units come pre-configured for wiring without a neutral, however if connection to neutral is required by code, contractors can convert the unit in seconds.

## FEATURES

- Compatible w/LEDs, electronic & magnetic ballasts, CFLs, & incandescents
- 100% passive detection, no potential for interference with other building systems
- Small motion detection to 20 ft
- Push-button programmable without removing cover plate - adjustable time delays & operating modes
- Dual technology (PDT) utilizes PIR/Microphonics™ detection (patented)
- Self-grounding mounting strap
- Device accommodates powering over ground or neutral connection (patent pending)
- Ultra low current leakage (<0.5 mA) when connected via ground
- Fully meets NEC 2011 Section 404.2C neutral requirements - no current leakage to ground when connected to neutral
- Line power and load wires are interchangeable - impossible to wire backwards (patented)
- Integrated Photocell (disabled by default) prevents light from turning on if sufficient daylight is present - not available in Nightlight versions
- Vandal resistant lens

## Warranty

Five-year limited warranty. Complete warranty terms located at:

[www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**Note:** Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.

**AcuityControls™**

*Sensor Switch™*

## WSX Family



## ORDERING INFORMATION

WSX SINGLE RELAY				Example: WSX PDT WH
Series	Operating Mode <sup>1</sup>	Voltage	Color <sup>4</sup>	Temp / Humidity
WSX Passive infrared (PIR)	[blank] Auto-on (default) or vacancy	[blank] 120/277VAC	WH White AL Lt. Almond	[blank] Standard
WSX PDT Dual Technology (PIR/Microphonics™)	SA Vacancy (default) or auto-on	347 <sup>3</sup> 347VAC	IV Ivory BK Black	LT Low Temp/ High Humidity
	VA Vacancy only		GY Gray RD Red	
	NL <sup>2</sup> Nightlight			

WSX DUAL RELAY				Example: WSX 2P NL WH
Series	Operating Mode <sup>1</sup>	Voltage	Color <sup>4</sup>	Temp / Humidity
WSX 2P Passive infrared (PIR)	[blank] Pole 1 auto-on	[blank] 120/277VAC	WH White AL Lt. Almond	[blank] Standard
WSX PDT 2P Dual Technology (PIR/Microphonics™)	Pole 2 vacancy	347 <sup>3</sup> 347VAC	IV Ivory BK Black	LT Low Temp/ High Humidity
	2SA Both poles vacancy (default)		GY Gray RD Red	
	2VA Both poles vacancy (only)			
	NL <sup>2</sup> Nightlight			

### Notes:

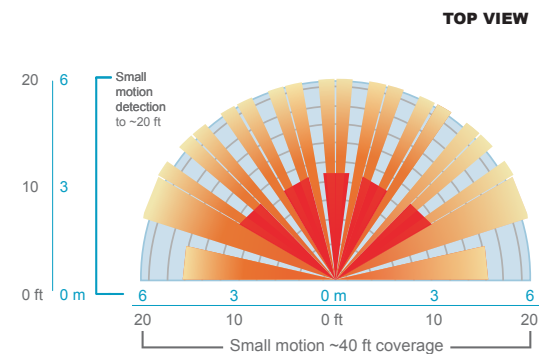
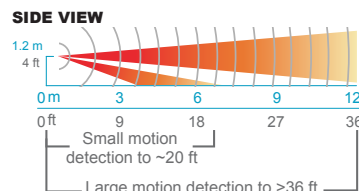
- 1 Operating Modes reprogrammable via push-button except for VA version
- 2 Units factory set to Vacancy (Manual On) Operating Mode
- 3 Wall plates included in white or ivory only for 347 VAC units
- 4 Matching wall plate provided for 120/277 VAC units

## SPECIFICATIONS

Size:	2.74"H x 1.68"W x 1.63"D (not including ground strap)
Weight:	5 oz
Mounting:	Single gang switch box
Mounting Height:	30-48 in
Maximum Load/Pole:	(Relay) 800W @ 120VAC, 1200W @ 277VAC, 1500W @ 347VAC
Minimum Load:	None
Motor Load:	1/4 HP
Frequency:	50/60 Hz (timers are 1.2x for 50Hz)

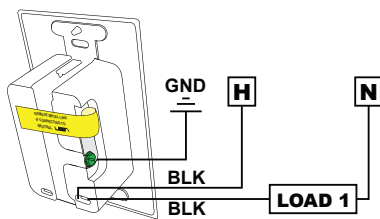
## COVERAGE PATTERNS

- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m), ~625 ft<sup>2</sup>
- Large motion (e.g., walking) detection greater than 36 ft (10.97 m), ~2025 ft<sup>2</sup>
- Wall-to-Wall coverage
- Passive Dual Technology (Microphonics) provides overlapping detection of human activity over the complete PIR coverage area. Advanced filtering is utilized to prevent non-occupant noises from keeping the lights on.



## WIRING TO GROUND (no NEUTRAL)

### SINGLE RELAY



### WIRE COLOR KEY

#### 120/277 VAC WIRING

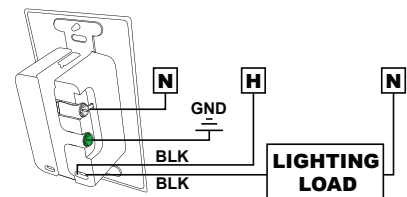
- |        |                 |                              |
|--------|-----------------|------------------------------|
| BLACK* | - Line 1 Input  | *BLACK wires can be reversed |
| BLACK* | - Load 1 Output |                              |
| BLUE*  | - Line 2 Input  | *BLUE wires can be reversed  |
| BLUE*  | - Load 2 Output |                              |

#### 347 VAC WIRING (-347 Option)

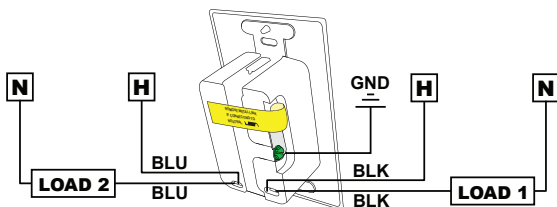
Red wires replace Black wires.

## WIRING TO NEUTRAL

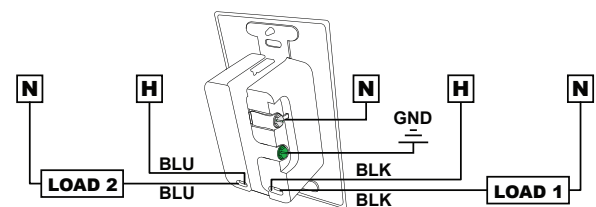
### SINGLE RELAY



### DUAL RELAY



### DUAL RELAY



### Notes:

- Unit will draw power from either line connection.
- When switching 277 VAC or 347 VAC on both relays, the line inputs must be of the same phase.