

**OVERVIEW**

The WSXA Family of wall switch occupancy sensors provides simple and cost effective solutions for commercial and residential lighting control applications. All WSXA 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 restrooms, closets, copy rooms, or any other small enclosed space. Additionally, all WSXA Family sensors have a patent-pending wiring method that enables them to function either with or without a neutral connection. WSXA 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.

**MULTI-WAY (MWO)**

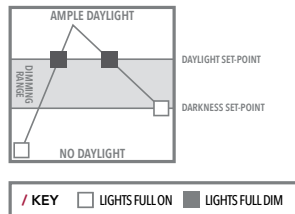
Our new WSXA MWO series allows for multi-location On/Off or 0-10 dimming up to 9 devices (2 device limit when neutral-less wiring used) on a single traveler.

**FEATURES**

- Single Pole devices can be programmed with Sensor Switch VLP app or traditional push button programming
- WSXA MWO can be used in conjunction with sPODMRA MWO
- Devices can be spaced up to 250 ft with MWO option
- MWO option support up to 9 additional MWO enabled devices (2 neutral-less) on a single traveler
- Compatible w/LEDs, electronic & magnetic ballasts, CFLs, & incandescents
- 100% passive detection, no potential for interference with other building systems
- Small motion detection up to 20 ft, Large motion detection up to 36ft
- Push-button programmable without removing cover plate - adjustable time delays & operating modes
- Dual technology (PDT) utilizes PIR/Microphonics™ detection (patented)
- Device accommodates powering over ground or neutral connection (patent pending)
- Fully meets NEC 2017 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
- New aesthetic with vandal resistant lens

**ADAPTIVE DAYLIGHT HARVESTING (ADH)**

With Sensor Switch's Adaptive Daylight Harvesting (ADH), automatic dimming has never been more reliable - even in a wall switch. It works by establishing two state change set-points; daylight and darkness. The light level in the space will then be automatically maintained by intelligently controlling the dim level of the electric light source. Set-points can be established using the "Set Now" option or programmed using desired light levels as measured in foot candles (fc).



**Warranty**

Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: [www.acuitybrands.com/support/warranty/terms-and-conditions](http://www.acuitybrands.com/support/warranty/terms-and-conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice.



*WSXA Series  
Wall Switch Sensor*



**WSXA/WSXA MWO  
On/Off  
Single Relay**



**WSXA D/WSXA MWO D  
On/Off/Dimming  
Single Relay**



**WSXA 2P FAN  
On/Off Dual Relay**



ORDERING INFORMATION

**WSXA Single Pole** Example: WSXA MWO PDT D WH

Series Option		Detection Mode		eldoLED		Dimming <sup>7</sup>		Operating Mode <sup>3</sup>	
WSXA	Wall Switch Sensor (Occupancy and Daylighting)	[blank]	Passive Infrared (PIR)	[blank]	none	[blank]	On/Off	[blank]	Automatic on (default) or Vacancy
WSXA MWO	WSXA with Multi-way Operation	PDT	Dual Technology	EZ <sup>2</sup>	eldoLED Driver Compatibility	D	Dimming	SA	Manual On (default) or Automatic On
								VA	Vacancy
								ASL <sup>3,4</sup>	Automatic Start Level 5VDC

Voltage		Color <sup>5</sup>		Max Dim Level <sup>6,7</sup>		Min Dim Level <sup>6,7</sup>		Temp / Humidity					
[blank]	120-277 VAC	WH	White	AL	Light Almond	[blank]	10 VDC	[blank]	0 VDC	4V	4 VDC	[blank]	Standard
347	347 VAC	IV	Ivory	BK	Black	9H	9 VDC	1V	1 VDC	5V	5 VDC	LT	Low Temp/ High Humidity
		GY	Gray	RD	Red	8H	8 VDC	2V	2 VDC	6V	6 VDC		
						7H	7 VDC	3V	3 VDC				

- Notes:**
- 1 Max Dim Level default set to 9.1VDC. Min Dim Level default set to 1.5VDC.
  - 2 EZ only available with D option.
  - 3 Operating Modes re-programmable via push-button except for VA version.
  - 4 Not available with EZ, Max Dim, or Min Dim Level. Also requires the D option.
  - 5 Matching wall plate provided for 120-277 VAC units.
  - 6 Only available with D option.
  - 7 Minimum order qty of 30 units for Max or Min Dim Level settings. Additional time may be required.

**WSXA 2P** Example: WSXA 2P FAN WH LT

Series Option		Detection Mode		Poles		Fan <sup>2</sup>		Operating Mode <sup>3</sup>	
WSXA	Wall Switch Sensor (Occupancy and Daylighting)	[blank]	Passive Infrared(PIR)	2P <sup>1</sup>	2 Poles	[blank]	No Fan	[blank]	Pole 1 auto-on
		PDT	Passive Dual Technology			FAN	Fan Operation	2SA	Both poles Manual On (default)
								2VA	Both poles vacancy (only)

Voltage		Run Time <sup>4</sup>		Color <sup>5</sup>		Temp/Humidity	
[blank]	120-277 VAC	[blank]	Pole 1 Lights	WH	White	[blank]	Standard
347	347 VAC		Pole 2 Fan	IV	Ivory	LT	Low Temp/ High Humidity
		ASHRT	Pole 1 Lights	GY	Gray		
			Pole 2 Fan, Minimum Fan Run Time per Ashrae 62.2	AL	Lt. Almond		
				RD	Red		
				BK	Black		

- Notes:**
- 1 2P does not have VLP functionality.
  - 2 If Fan Operation is selected Operating Mode must be blank.
  - 3 Operating Modes re-programmable via push-button except for VA version.
  - 4 Only available if 2P FAN is selected.
  - 5 Matching wall plate provided for 120-277VAC Units.

**SSW** Example: SSW 1GNG OCC WH

Series		Number of Gangs		Mount		Color	
SSW	Sealed Screwless Wall-Plate	1GNG	Single Gang	[blank]	Standard Wall Switch	WH	White
				OCC	Occ. Wall Switch	IV	Ivory
						RD	Red

**WALLP**

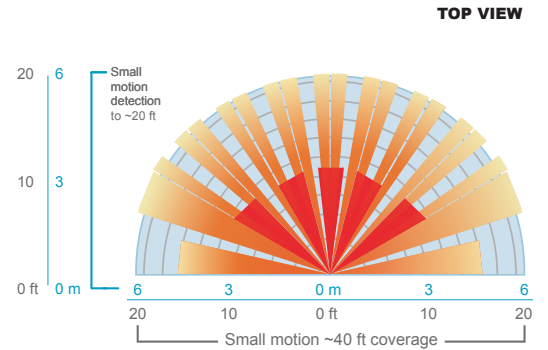
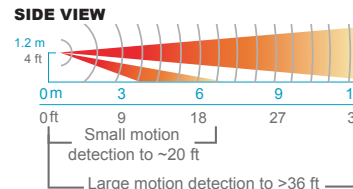
Series		Color		Multi-Pack Size	
WALLP1	Screwless Wall Plate Single Gang	WH	White	AL	Light Almond
		IV	Ivory	BK	Black
WALLP2	Screwless Wall Plate Dual Gang	GY	Gray	RD	Red
					M5 (5 Wall Plates)

## SPECIFICATIONS

<b>Electrical</b>	<b>Input Ratings</b>	120-277VAC, 50/60 Hz 347VAC, 50/60 Hz (with 347 option)
	<b>Output Ratings</b>	120VAC, 800W, 6.7A - Tungsten, Standard Ballast, Electronic Ballast 277VAC, 1200W, 4.3A - Tungsten, Standard Ballast, Electronic Ballast 347VAC, 1500W, 4.3A - Tungsten, Standard Ballast, Electronic Ballast 120/277/347VAC, 1/4 HP - Motor
	<b>Relay Type</b>	Latching
	<b>Low Voltage Output Ratings</b>	0-10VDC, Sinks <50mA
	<b>Standards/ Ratings</b>	Energy Management Equipment, UL916 (E167435)
<b>Mechanical</b>	<b>Dimensions</b>	2.74"H x 1.68"W x 1.63"D (70mm x 43mm x 41mm) - does not include ground strap
	<b>Mounting</b>	Single-Gang Box
	<b>Connection Type</b>	Low-Voltage Leads, Line-Voltage Leads
<b>Environmental</b>	<b>Warrantied Operating Temperature</b>	32°F to 140°F (0°C to 60°C)
	<b>Relative Humidity</b>	Up to 90%, Non-Condensing
	<b>Standards/ Ratings</b>	RoHS

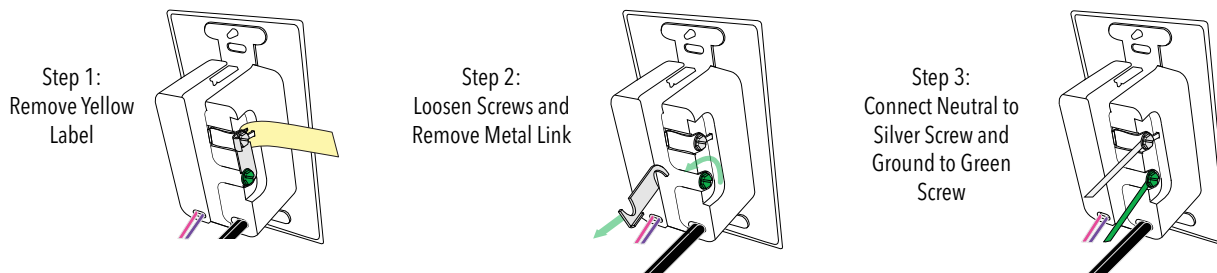
## COVERAGE PATTERNS

- 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 PIR coverage
- Units with -PDT (Passive Dual Technology) option (also called Microphonics) provide 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.
- Tested to NEMA WD 7-2011



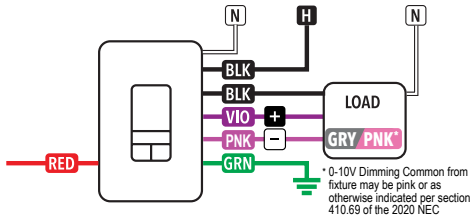
## CONVERSION FROM GROUND ONLY (NO NEUTRAL) TO NEUTRAL WIRING

This product is pre-configured for wiring without a neutral; however, if connection to neutral is required by code, the unit easily converts in seconds.

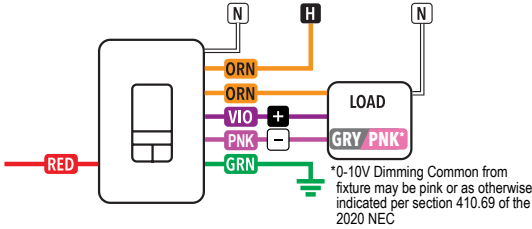


**CONVERTIBLE NEUTRAL**

**SINGLE RELAY, 120-277 VAC**

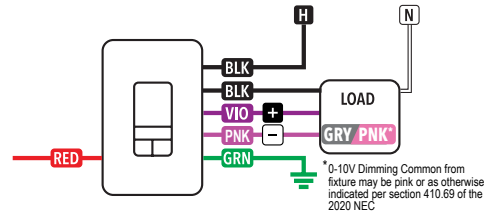


**SINGLE RELAY, 347 VAC**

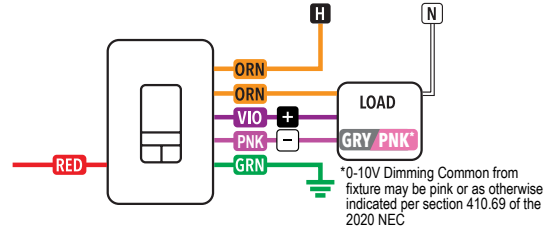


**GROUND ONLY**

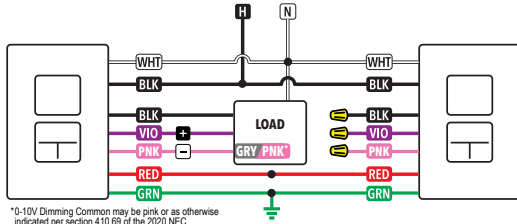
**SINGLE RELAY, 120-277 VAC**



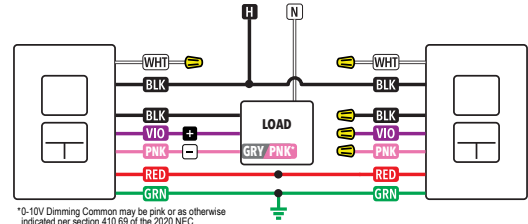
**SINGLE RELAY, 347 VAC**



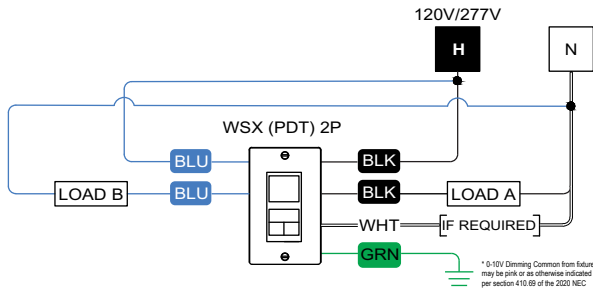
**SINGLE RELAY, MULTI-WAY CONFIGURATION, 120-277 VAC**



**SINGLE RELAY, MULTI-WAY CONFIGURATION, 120-277 VAC**



**2 POLE CONFIGURATION**



**WIRE COLOR KEY**

**120-277 VAC WIRING**

- BLK - Line Input
- BLK - Line Output
- VIO - Low Voltage Dim Output (0-10 VDC)
- PNK - Low Voltage Common
- RED - Low Voltage Communication Wire

**347 VAC WIRING (-347 Option)**

Orange (ORN) wires replace black (BLK) wires

\*\*\*Some Pink wires may come as Gray

**Notes:**

- All load controls act in unison
- Black wires can be used interchangeably
- Violet and pink wires are not present on devices without D option
- Cap off violet and pink wires if dimming functionality is not being used
- Red Wire is not present on devices without MWO option
- Cap off red wire if Multi-Way functionality is not being used
- For ground Multi-Way Configurations ground must come from same source
- For neutral conversion Multi-Way Configurations power must come from the same panel
- Per NEC requirements, the 0-10V violet and pink wires must be installed as Class One.
- SPDMRA MWO paired with WSXA MWO will act accordingly with WSXA occupancy settings
- The 0-10V control wires must not exceed 250 ft (76 m) in length and must be sized at no less than 20 AWG
- The Low Voltage Communication BUS must not exceed 250 ft (76 m) in length and must be sized at no less than 20 AWG
- Dimming wires from individual MWO devices should only connect with fixture/driver dimming wires and never to another MWO device