

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

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

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: WSWA MWO PDT D WH				
Series Option		Detection Mode		eldoLED	Dimming ⁷		Operating Mode ³		
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 ² eldoLED Driver Compatibility	D	Dimming	SA	Manual On (default) or Automatic On	
							VA	Vacancy	
							ASL ^{3,4}	Automatic Start Level 5VDC	

Voltage		Color ⁵		Max Dim Level ^{6,7}		Min Dim Level ^{6,7}		Temp / Humidity	
[blank]	120-277 VAC	WH	White	[blank]	10 VDC	[blank]	0 VDC	[blank]	Standard
347	347 VAC	IV	Ivory	9H	9 VDC	1V	1 VDC	LT	Low Temp/ High Humidity
		GY	Gray	8H	8 VDC	2V	2 VDC		
		AL	Light Almond	7H	7 VDC	3V	3 VDC		
		BK	Black			4V	4 VDC		
		RD	Red			5V	5 VDC		
						6V	6 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: WSWA 2P FAN WH LT				
Series Option		Detection Mode		Poles	Fan ²		Operating Mode ³		
WSXA	Wall Switch Sensor (Occupancy and Daylighting)	[blank]	Passive Infrared(PIR)	2P ¹ 2 Poles	[blank]	No Fan	[blank]	Pole 1 auto-on	
		PDT	Passive Dual Technology		FAN	Fan Operation		Pole 2 Manual On	
							2SA	Both poles Manual On (default)	
							2VA	Both poles vacancy (only)	

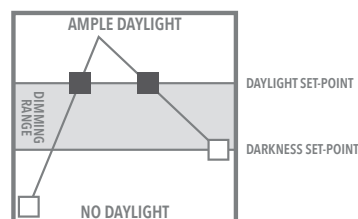
Voltage		Run Time ⁴		Color ⁵		Temp/Humidity	
[blank]	120-277 VAC	[blank]	Pole 1 Lights	WH	White	[blank]	Standard
347	347 VAC		Pole 2 Fan	IV	Ivory	LT	Low Temp/ High Humidity
		ASHRT	Pole 1 Lights	GY	Gray		
			Pole 2 Fan, Minimum Fan Run Time per Ashrae 62.2	AL	Lt. Almond		
				RD	Red		
				BK	Black		

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.

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).



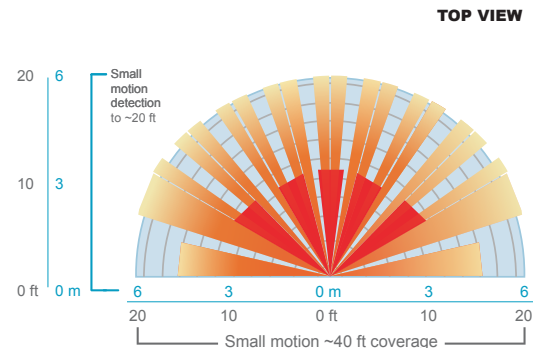
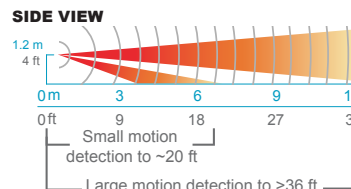
KEY □ LIGHTS FULL ON ■ LIGHTS FULL DIM

SPECIFICATIONS

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

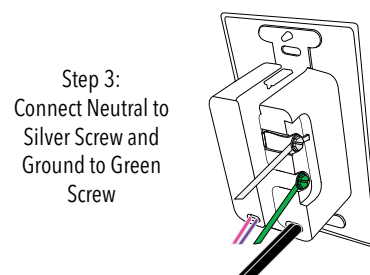
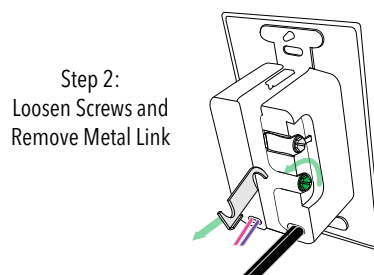
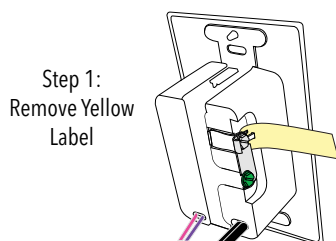
COVERAGE PATTERNS

- Small motion (e.g. hand movements) detection up to 20 ft (6.10 m), ~625 ft²
- Large motion (e.g. walking) detection greater than 36 ft (10.97 m), ~2025 ft²
- 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



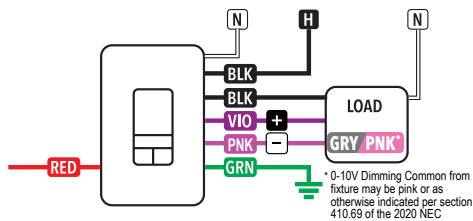
CONVERSION FROM GROUND ONLY (NO NEUTRAL) TO NEUTRAL WIRING

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.

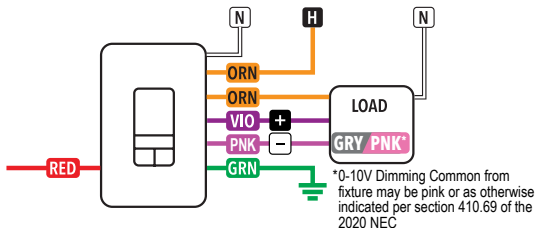


CONVERTIBLE NEUTRAL

SINGLE RELAY, 120-277 VAC

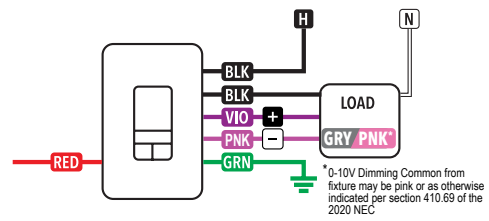


SINGLE RELAY, 347 VAC

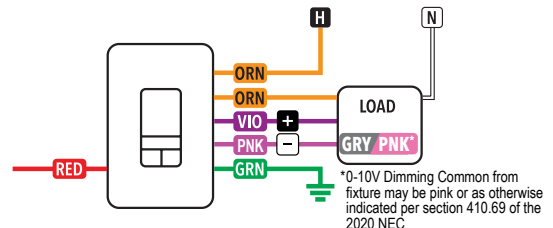


GROUND ONLY

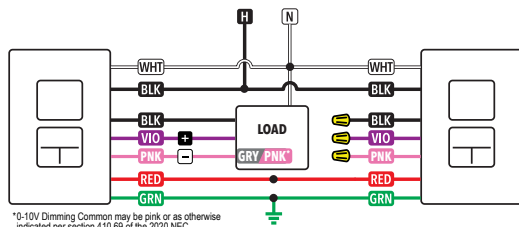
SINGLE RELAY, 120-277 VAC



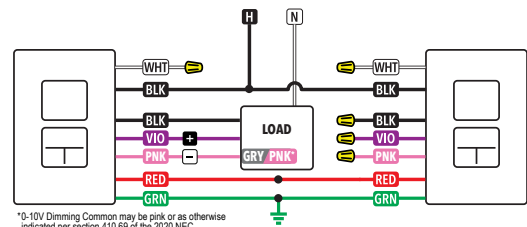
SINGLE RELAY, 347 VAC



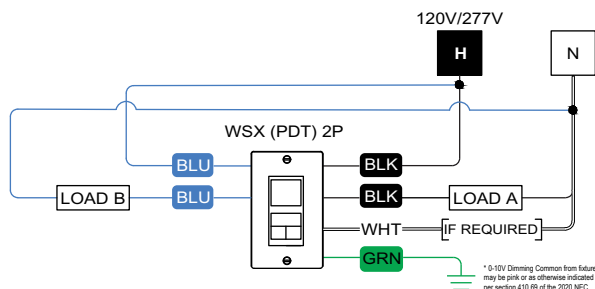
SINGLE RELAY, MULTI-WAY CONFIGURATION, 120-277 VAC



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