

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)

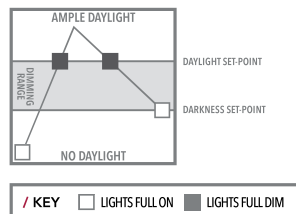
Our new WSXA MWO series allows for multi-location On/Off or 0-10 dimming up to 9 devices (2 device limit when neutral-less wiring used) on a single traveler.

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

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



Items marked by a **shaded background** qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.

*See ordering tree for details



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 WSWA 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 347 347 VAC	WH White IV Ivory GY Gray	AL Light Almond	[blank] 10 VDC	[blank] 0 VDC	[blank] Standard
		BK Black	9H 9 VDC	1V 1 VDC	LT Low Temp/ High Humidity
		RD Red	8H 8 VDC	2V 2 VDC	
			7H 7 VDC	3V 3 VDC	
				4V 4 VDC	
				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 250 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 347 347 VAC	[blank] Pole 1 Lights Pole 2 Fan	ASHRT Pole 1 Lights Pole 2 Fan, Minimum Fan Run Time per Ashrae 62.2	WH White	AL Lt. Almond	[blank] Standard
			IV Ivory	RD Red	LT Low Temp/ High Humidity
			GY Gray	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	

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

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

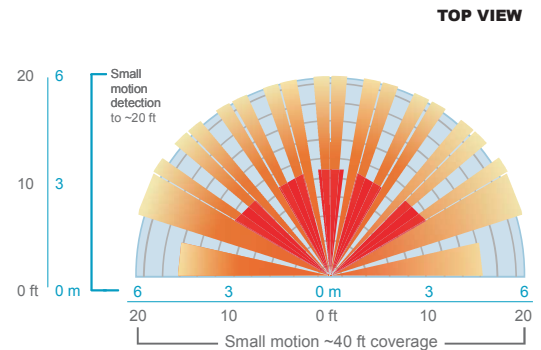
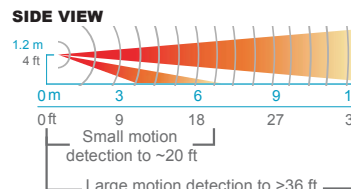
Warrantied Operating Temperature 32°F to 140°F (0°C to 60°C)

Relative Humidity Up to 90%, Non-Condensing

Standards/ Ratings RoHS

COVERAGE PATTERNS

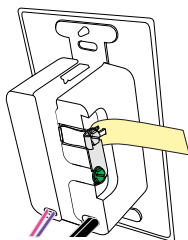
- Small motion (e.g. hand movements) detection up to 20 ft (6.10 m), ~625 ft²
- Large motion (e.g. walking) detection greater than 36 ft (10.97 m), ~2025 ft²
- Wall-to-wall PIR coverage
- Units with -PDT (Passive Dual Technology) option (also called Microphonics) provide overlapping detection of human 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



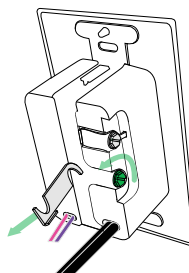
CONVERSION FROM GROUND ONLY (NO NEUTRAL) TO NEUTRAL WIRING

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.

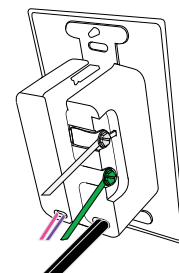
Step 1:
Remove Yellow
Label



Step 2:
Loosen Screws and
Remove Metal Link

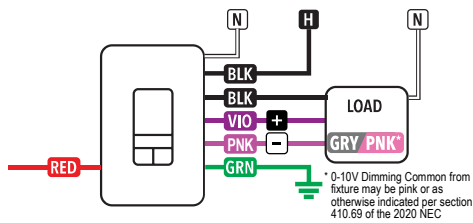


Step 3:
Connect Neutral to
Silver Screw and
Ground to Green
Screw

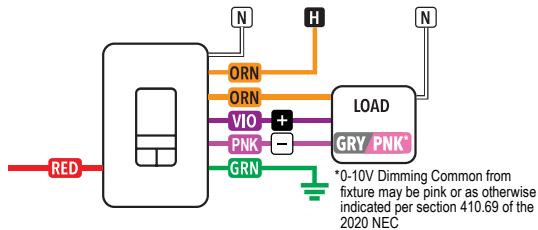


CONVERTIBLE NEUTRAL

SINGLE RELAY, 120-277 VAC

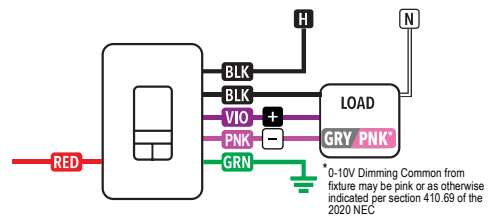


SINGLE RELAY, 347 VAC

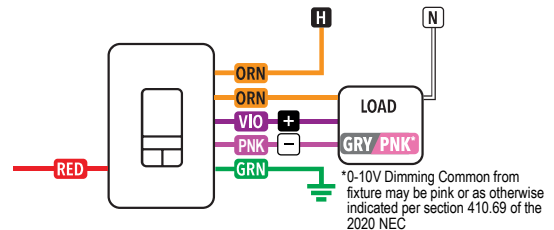


GROUND ONLY

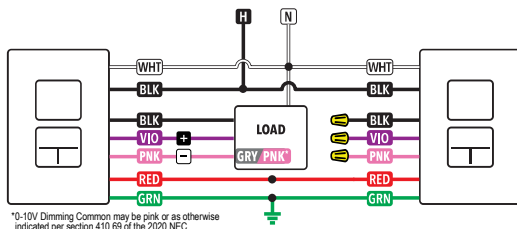
SINGLE RELAY, 120-277 VAC



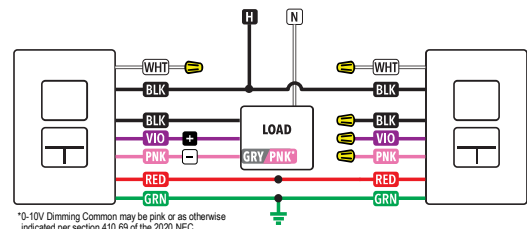
SINGLE RELAY, 347 VAC



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



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



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

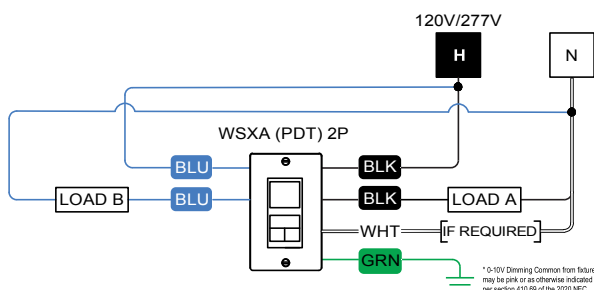
***Some Pink wires may come as Gray

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

2 POLE CONFIGURATION



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.
- For dual relay, both relays must be fed from the same circuit.