

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 to 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: WSXA 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 347 347 VAC	WH White IV Ivory GY Gray AL Light Almond BK Black RD Red	[blank] 10 VDC 9H 9 VDC 8H 8 VDC 7H 7 VDC	[blank] 0 VDC 1V 1 VDC 2V 2 VDC 3V 3 VDC 4V 4 VDC 5V 5 VDC 6V 6 VDC	[blank] Standard LT Low Temp/ High Humidity

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

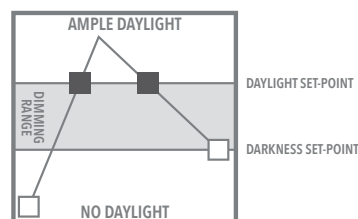
Voltage	Run Time ⁴	Color ⁵	Temp/Humidity
[blank] 120-277 VAC 347 347 VAC	[blank] Pole 1 Lights Pole 2 Fan ASHRT Pole 1 Lights Pole 2 Fan, Minimum Fan Run Time per Ashrae 62.2	WH White IV Ivory GY Gray AL Lt. Almond RD Red BK Black	[blank] Standard LT Low Temp/ High Humidity

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).



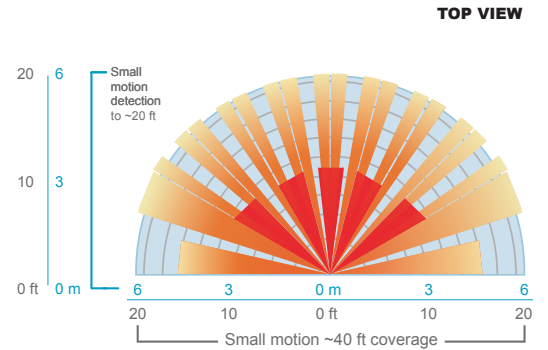
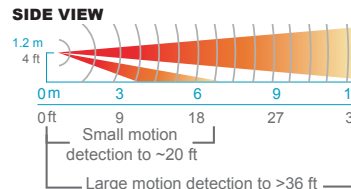
/ KEY	□ LIGHTS FULL ON	■ LIGHTS FULL DIM
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SPECIFICATIONS

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

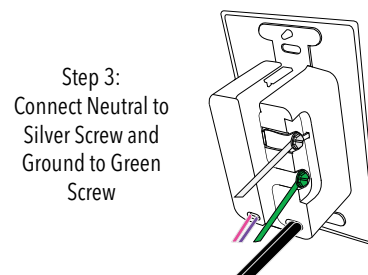
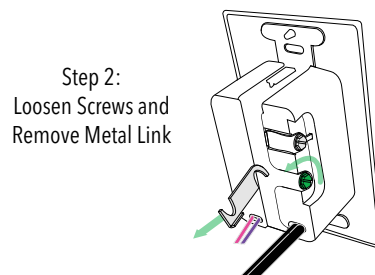
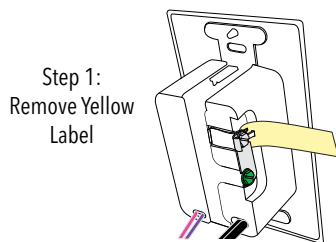
COVERAGE PATTERNS

- 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



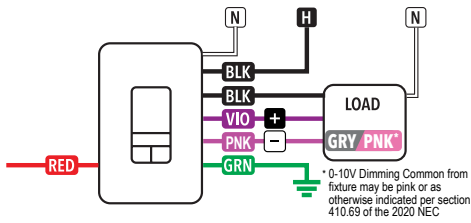
CONVERSION FROM GROUND ONLY (NO NEUTRAL) TO NEUTRAL WIRING

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.

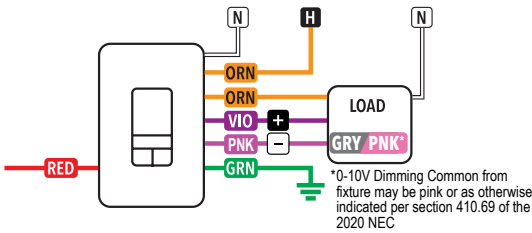


CONVERTIBLE NEUTRAL

SINGLE RELAY, 120-277 VAC

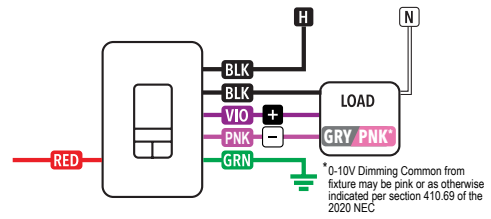


SINGLE RELAY, 347 VAC

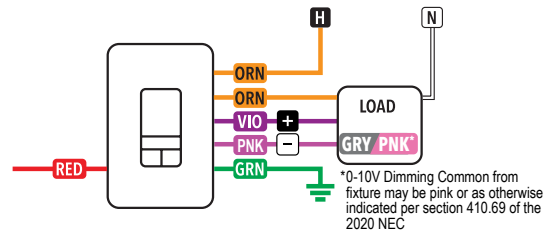


GROUND ONLY

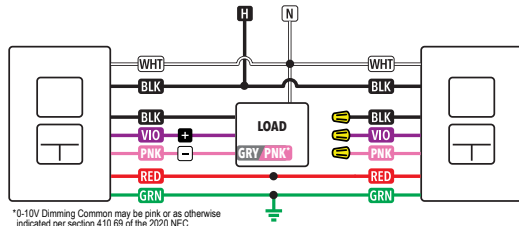
SINGLE RELAY, 120-277 VAC



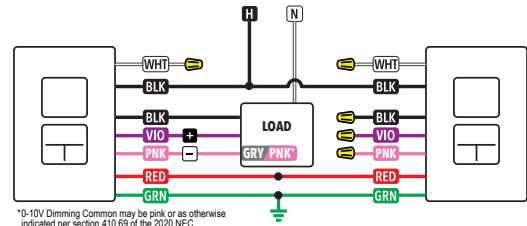
SINGLE RELAY, 347 VAC



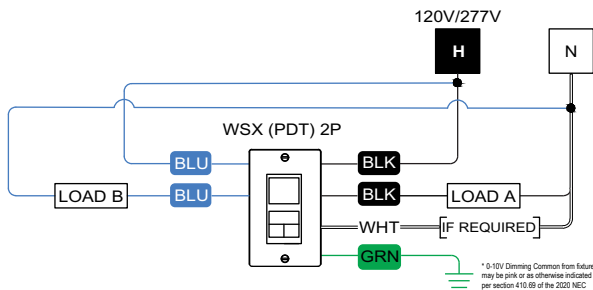
SINGLE RELAY, MULTI-WAY CONFIGURATION, 120-277 VAC



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