## 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 $20 \mathrm{ft}(6.10 \mathrm{~m})$, 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 36 ft
- Push-button programmable without removing cover plate - adjustable time delays \& operating modes
- Dual technology (PDT) utilizes PIR/Microphonics ${ }^{\text {TM }}$ 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 ).
ceasured 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
$\underset{\text { WSall Switch Sensor }}{\text { WSA }}$
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


| WSXA Single Pole Example: WSXA MWO PDT D WH |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Series Option |  | Detection Mode |  | eldoLed |  |  | Dimming ${ }^{7}$ |  | Operating Mode ${ }^{3}$ |  |
| WSXA Wall Sw <br> Occupa <br> WSXA MWO WSXA <br> Operation <br>   | Sensor <br> and Daylighting) <br> Multi-way | [blank] Passive <br> Infrared (PIR) <br> PDT Dual <br>  <br> Technology <br>   |  |  | k] none <br> eldoLED Driver Compatibility |  | $\begin{aligned} & \text { [blank] } \\ & \hline \text { D } \\ & \hline \end{aligned}$ | On/Off <br> Dimming | [blank] Automatic on (default) or Vacancy <br> SA Manual On (default) or Automatic On <br> VA Vacancy <br> ASL Automatic Start Level 5VDC |  |
| Voltage | Color ${ }^{5}$ |  |  | Max Dim Level ${ }^{6,7}$ |  | Min Dim Level ${ }^{6,7}$ |  |  |  | Temp / Humidity |
| [blank] 120-277 VAC <br> 347347 VAC | WH White <br> IV Ivory <br> GY Gray | AL Light Almond <br> BK Black <br> RD Red |  | $\begin{array}{ll} \text { [blank] } & 10 \mathrm{VDC} \\ 9 \mathrm{H} & 9 \mathrm{VDC} \\ 8 \mathrm{H} & 8 \mathrm{VDC} \\ 7 \mathrm{H} & 7 \mathrm{VDC} \end{array}$ |  | [blank <br> 1V <br> 2 V <br> 3 V | $\begin{aligned} & 0 \mathrm{VDC} \\ & 1 \mathrm{VDC} \\ & 2 \mathrm{VDC} \\ & 3 \mathrm{VDC} \end{aligned}$ | $\begin{array}{ll} 4 \mathrm{~V} & 4 \mathrm{VDC} \\ 5 \mathrm{~V} & 5 \mathrm{VDC} \\ 6 \mathrm{~V} & 6 \mathrm{VDC} \end{array}$ |  | [blank] Standard <br> 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.


## Notes:

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

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



| Electrical | Input Ratings | $120-277 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ $347 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ (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 $\times 1.68^{\prime \prime} \mathrm{W} \times 1.63^{\prime \prime} \mathrm{D}(70 \mathrm{~mm} \times 43 \mathrm{~mm} \times 41 \mathrm{~mm})$ - does not include ground strap |
|  | Mounting | Single-Gang Box |
|  | Connection Type | Low-Voltage Leads, Line-Voltage Leads |
| Environmental | Warrantied Operating Temperature | $32^{\circ} \mathrm{F}$ to $140^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.$ to $\left.60^{\circ} \mathrm{C}\right)$ |
|  | Relative Humidity | Up to 90\%, Non-Condensing |
|  | Standards/ Ratings | RoHS |

## COVERAGE PATTERNS

- Small motion (e.g. hand movements)

TOP VIEW detection up to $20 \mathrm{ft}(6.10 \mathrm{~m}), \sim 625 \mathrm{ft} 2$

- Large motion (e.g. walking) detection greater than $36 \mathrm{ft}(10.97 \mathrm{~m}), \sim 2025 \mathrm{ft} 2$
- 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.



## 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


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



2 POLE CONFIGURATION


## GROUND ONLY

SINGLE RELAY, 120-277 VAC


SINGLE RELAY, 347 VAC


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


| WIRE COLOR KEY | Notes: <br> - All load controls act in unison |
| :---: | :---: |
| 120-277 VAC WIRING | - Black wires can be used interchangeably |
| BLK - Line Input | - Violet and pink wires are not present on devices without D option |
| BLK - Line Output | - Cap off violet and pink wires if dimming |
| VIO - Low Voltage Dim Output (0-10 VDC) | functionality is not being used |
| PNK - Low Voltage Common | Red Wire is not present on devices without MWO option |
| RED - Low Voltage Communication Wire | - Cap off red wire if Multi-Way functionality is not being used |
| 347 VAC WIRING (-347 Option) | - For ground Multi-Way Configurations ground must |
| Orange (ORN) wires replace black (BLK) wires |  |
| ***Some Pink wires may come as Gray | power must come from the same panel |

## 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)

***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
not being used option
- Cap off red wire if Multi-Way functionality is not
- For ground Multi-Way Configurations ground must come from same source power must come from the same panel
- Per NEC requirements, the 0-10V violet and pink wires must be installed as Class One.
- SPODMRA 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 $250 \mathrm{ft}(76 \mathrm{~m})$ 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

