



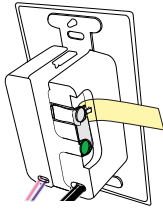
### WIRING

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

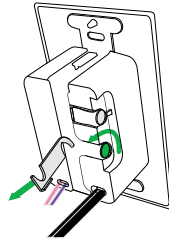
This product is pre-configured for wiring without a neutral; however, if connection to neutral is required by code, the unit easily converts in seconds.



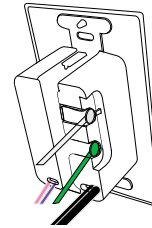
Step 1:  
Remove Yellow Label



Step 2:  
Loosen Screws and Remove Metal Link



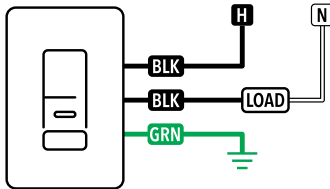
Step 3:  
Connect Neutral to Silver Screw and Ground to Green Screw



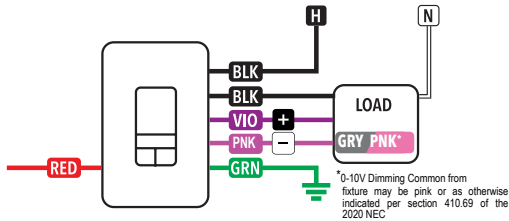
#### WARRANTY

5-year limited warranty. Complete warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

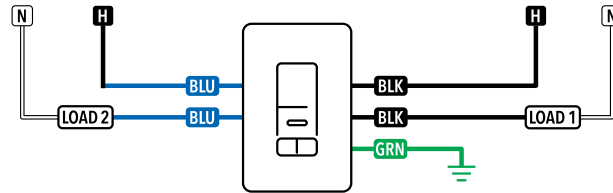
#### SINGLE RELAY, 120/277 VAC



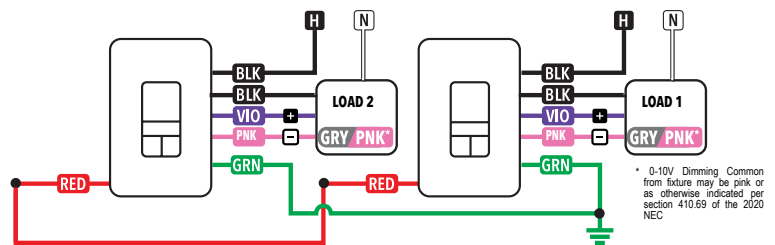
#### SINGLE RELAY, 120-277 VAC



#### DUAL RELAY, 120/277 VAC



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



## OPERATIONAL SETTINGS

#### WIRE COLOR KEY

##### 120-277 VAC WIRING

- BLK - Line Input
- BLK - Line Output
- BLU - Line Input (Pole2)
- BLU - Line Output (Pole2)
- VIO - Low Voltage Dim Output (0-10 VDC)
- PNK<sup>1</sup> - Low Voltage Common (0-10VDC)
- RED - Low Voltage Communication Wire

##### 347 VAC WIRING (-347 Option)

Orange (ORN) wires replace black (BLK) wires

Notes:  
1. Some Pink wires may come as Gray

- 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.
- 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 ft (76 m) in length and must be sized at no less than 20 AWG

#### 2 = Occupancy Time Delay

The length of time an occupancy sensor will keep the lights on after it last detects occupancy

1-30 sec	5-10.0 min*	9-20.0 min	13-30.0 min
2-2.5 min	6-12.5 min	10-22.5 min	
3-5.0 min	7-15.0 min	11-25.0 min	
4-7.5 min			

#### 2 = Occupancy Time Delay (MWO & D Devices)

The length of time an occupancy sensor will keep the lights from dimming to low trim (S-Code 16) after it last detects occupancy

1-Test Mode <sup>Ⓐ</sup>	5-7.5 min	9-17.5 min	13-27.5 min
2-30 sec	6-10.0 min*	10-20.0 min	14-30.0 min
3-2.5 min	7-12.5 min	11-22.5 min	
4-5.0 min	8-15.0 min	12-25.0 min	

<sup>Ⓐ</sup>Test mode sets Occupancy Time Delay to 30 seconds, and increases photocell transition rate in addition to disabling the microphone on units with Dual Technology.

#### 3 = On Mode

WSXA 2P models default: Pole 1 Auto On, Pole 2 Manual On.

##### Automatic On

Sensor automatically turns the lights on when it detects occupancy.

##### Manual On

Sensor requires pressing the button to turn the lights on.

##### Reduced Turn-On

Sensor is set to initially only detect large motions, effectively ignoring any reflected Passive Infrared (PIR) signals. Occupants will still be detected immediately when they enter the room as their PIR signal is large. Once lights are on, the sensor returns to maximum sensitivity.

1 - Automatic On*	2 - Manual On***	3 - Reduced Turn-On
-------------------	------------------	---------------------

Learn how to program me.  
Aprende a programarme.



#### 4 = Switch Modes

##### Switch Enable (Override Off)

Button will turn lights off and keep them off until pressed again. The lights will remain off until the button is pressed again, restoring the sensor to Automatic On mode.

##### Switch Disable

User is prevented from turning off the lights via the push-button.

##### Predictive Mode

Pressing the push-button switch overrides the lights off and temporarily disables the occupancy detection. After 10 seconds, the occupancy detection reactivates and monitors for an additional 30 seconds. If no occupancy is detected during this period, the sensor will revert to Automatic On operation. If occupancy is detected, the sensor will remain in Override Off mode and requires the switch to be pressed again in order to restore the sensor to Automatic On.

##### Predictive Mode with Expiration

If Predictive Mode with Expiration (setting 4) is enabled, once the sensor has disabled auto-on it will continue to monitor the space for 10 sec. When no occupancy is detected for a duration equal to the occupancy time delay plus 40 sec, the sensor will revert to auto-on mode.

1 - Switch Enable***	3 - Predictive Mode
2 - Switch Disable	4 - Predictive Mode with Expiration*



### OPERATIONAL SETTINGS

(Press and hold on to initiate programing "LED flashes", then input desired settings.)

**NOTE:**  
Underlined S-Codes are not available  
on non-dimming WSXA MWO

#### 5 = Darkness Set-Point / Inhibit Set-Point

The ambient light level at which the sensor sets the lights to the High Trim setting.

1 - Set Now <u>S2</u>	5 - 8 fc	9 - 48 fc	13 - 128 fc
2 - 0.1 fc	6 - 16 fc	10 - 64 fc	14 - 192 fc
3 - 1 fc	7 - 24 fc*	11 - 80 fc	15 - 256 fc
4 - 4 fc	8 - 32 fc	12 - 96 fc	

#### 6 = Daylight Set-Point

The ambient light level at which the sensor sets the lights to the Low Trim setting.

1 - Set Now <u>S2</u>	5 - 8 fc	9 - 48 fc	13 - 128 fc
2 - 0.1 fc	6 - 16 fc	10 - 64 fc*	14 - 192 fc
3 - 1 fc	7 - 24 fc	11 - 80 fc	15 - 256 fc
4 - 4 fc	8 - 32 fc	12 - 96 fc	

S2 Set Now will automatically select the Daylight Set-Point based on the current conditions in the room. Lights will go to full dim and sensor will rapid flash for 15 seconds allowing occupant to move out of direct view of sensor. Once the set-point selection is completed, the sensor will double-blink in confirmation.

#### 7 = Photocell Mode

##### Inhibit Only

Prevents lights from automatically coming on when light level is above the Inhibit Set-Point

##### Adaptive Daylight Harvesting

Dims lights from high trim to low trim setting according to Darkness and Daylight set-points.

1 - Disabled*	3 - Adaptive Daylight Harvesting	2 - Inhibit Only
---------------	----------------------------------	------------------

#### 8 = Dim to Off Occupancy Time Delay

After the Occupancy Time Delay (Function 2) has expired, this setting specifies the amount of time lights are held at Low Trim (Function 16) before turning off.

1 - 0 sec*	4 - 5 min	7 - 12.5 min	10 - 20 min
2 - 30 sec	5 - 7.5 min	8 - 15 min	11 - Stays at dim (never off)
3 - 2.5 min	6 - 10 min	9 - 17.5 min	

#### 9 = Restore Defaults

Returns all functions to original settings.

1 - Maintain Current*	2 - Restore Defaults
-----------------------	----------------------

#### 11 = LED Operation

Indicates behavior of device's LED.

1 - Occupancy Indication*	2 - Disabled
---------------------------	--------------

#### 12 = Dual Technology (Microphonics™)

The secondary method of occupancy detection that allows the sensor to hear occupants.

1 - Normal*	3 - Medium	5 - Phase Off (15-10-5 min)
2 - Off	4 - Low	

#### 13 = Microphone Grace Period

Time period after lights are automatically turned off that they can be voice reactivated.

1 - 0 sec	3 - 20 sec	5 - 40 sec	7 - 60 sec
2 - 10 sec*	4 - 30 sec	6 - 50 sec	

#### 14 = Manual On Grace Period

Time period after lights automatically turn off that they can be reactivated by motion. Applicable only when sensor is in Manual On (Semi Auto) mode.

1 - 0 sec	3 - 15 sec*
-----------	-------------

#### 15 = Dimming Range Max (High Trim)

The maximum output level of the sensor.

1 - 0 VDC	5 - 3 VDC	9 - 7 VDC	13 - 10 VDC*
2 - 1 VDC	6 - 4 VDC	10 - 8 VDC	
3 - 1.5 VDC	7 - 5 VDC	11 - 9 VDC	
4 - 2 VDC	8 - 6 VDC	12 - 9.1 VDC**	

#### 16 = Dimming Range Min (Low Trim)

The minimum output level of the sensor.

1 - 0 VDC	5 - 3 VDC	9 - 7 VDC	13 - 10 VDC
2 - 1 VDC*	6 - 4 VDC	10 - 8 VDC	
3 - 1.5 VDC**	7 - 5 VDC	11 - 9 VDC	
4 - 2 VDC	8 - 6 VDC	12 - 9.1 VDC	

#### 17 = Predictive Exit Time

Time period after manually switching lights off for occupant to leave the space. Applicable only when sensor is in Predictive Off mode.

1 - 5 sec	3 - 7 sec	5 - 9 sec	7 - 15 sec	9 - 30 sec
2 - 6 sec	4 - 8 sec	6 - 10 sec*	8 - 20 sec	

#### 18 = Predictive Grace Time

Time period after Predictive Exit Time that sensor rescans the room for remaining occupants.

Applicable only when sensor is in Predictive Off mode.

1 - 0 sec	4 - 20 sec	7 - 50 sec
2 - 5 sec	5 - 30 sec*	8 - 60 sec
3 - 10 sec	6 - 40 sec	

#### 19 = Fade On Rate

Time required for light to reach preset level.

1 - 0.75 sec*	2 - 2.5 sec	3 - 5 sec	4 - 15 sec
---------------	-------------	-----------	------------

#### 20 = Fade Off Rate

Time required for light to turn Off.

1 - 0.75 sec	2 - 2.5 sec*	3 - 5 sec	4 - 15 sec
--------------	--------------	-----------	------------

#### 21 = Start Level

Level of light output when occupancy is initially detected. Not applicable in Automatic Dimming Control (ADH) mode.

1 - 10%	4 - 40%	7 - 70%	10 - 100%*
2 - 20%	5 - 50%	8 - 80%	
3 - 30%	6 - 60%	9 - 90%	

\*Default Setting

\*\* Default Setting for -EZ option

\*\*\*Default Setting for -SA option

Learn how to program me.  
 Aprende a programarme.



### OPERATIONAL SETTING INSTRUCTIONS

PLEASE READ ALL 7 STEPS BEFORE PROGRAMMING

1. Enter programming mode by pressing & holding button until LED flashes rapidly. Release button.
2. Enter a specific programming function by pressing button the number of times as the desired function number from the tables on the following pages (e.g., press twice for function 2, Occupancy Time Delay).
3. The selected function's current setting will then be read out in a sequence of LED flashes (e.g., five flashes for 10 min). To change setting, proceed to step 4 before sequence repeats 10 times.
4. While the sensor is flashing back current setting, interrupt it by pressing button the number of times for the new desired setting as indicated in the particular function's detailed table (e.g., press seven times for 15 min). Sensor will begin to flash new setting as confirmation.
5. Next, while the sensor is flashing back new setting, interrupt it by pressing and holding button until LED flashes rapidly. Release button.
6. As final confirmation and activation of the new setting, re-enter the programming function number that was changed (e.g., press twice for function 2, Occupancy Time Delay).
7. LED will flash twice indicating acceptance of new setting. If two flashes are not seen, repeat 7 step process.

Note: To exit programming mode without saving or to change to a different function, wait for blink back sequence to repeat 10 times then return to step 1.

