## SPECIFICATIONS

| Electrical | Input Ratings | $120-277 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ <br> $347 \mathrm{VAC}, 50 / 60 \mathrm{~Hz}$ (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 $<50 \mathrm{~mA}$ |  |  |  |
|  | Standards/ Ratings Energy Management Equipment, UL916 (E167435) |  |  |  |
| Mechanical | Dimensions | $2.74^{\prime \prime} \mathrm{H} \times 1.68^{\prime \prime} \mathrm{W} \times 1.63^{\prime \prime} \mathrm{D}(70 \mathrm{~mm} \times 43 \mathrm{~mm} \times 41 \mathrm{~mm})$ | Environmental |  |
|  | Mounting | Single-Gang Box | Warrantied Operating Temperature | $32^{\circ} \mathrm{F}$ to $140^{\circ} \mathrm{F}\left(0^{\circ} \mathrm{C}\right.$ to $\left.60^{\circ} \mathrm{C}\right)$ |
|  | Connection Type | Low-Voltage Leads, Line-Voltage Leads | Relative Humidity | Up to 90\%, Non-Condensing |
| WIRING |  |  | Standards/ Ratings |  |

## 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.


SINGLE RELAY, 120-277 VAC


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

| WIRE COLOR KEY |
| :--- | :--- |
| $\mathbf{1 2 0 - 2 7 7}$ VAC WIRING |
| BLK - Line Input |
| BLK - Line Output |
| VIO $\quad$ Low Voltage Dim Output (0-10 VDC) |
| PNK ${ }^{1}$ - Low Voltage Common (0-10VDC) |
| RED - Low Voltage Communication Wire |
| $\mathbf{3 4 7}$ VAC WIRING (-347 Option) |
| Orange (ORN) wires replace black (BLK) wires |

1. Some Pink wires may come as Gray

Ster 3 . Connect Neutral to Silver Screw and Ground to Green Screw


GROUND ONLY
SINGLE RELAY, 120-277 VAC


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


- 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.
- SPODMRA MWO paired with WSXA MWO will act accordingly with WSXA occupancy settings
- The 0-10V control wires must not exceed $250 \mathrm{ft}(76 \mathrm{~m})$ 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



# ふఆ囚ऽఠ『switch 

## OPERATIONAL SETTINGS

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

2 ＝Occupancy Time Delay
The length of time an occupancy sensor will keep the lights from dimming to low trim（S－Code 16）after it last detect occupancy

| $1-$ Test Mode＊＊ | $5-7.5 \mathrm{~min}$ | $9-17.5 \mathrm{~min}$ | $13-27.5 \mathrm{~min}$ |
| :--- | :--- | :--- | :--- |
| $2-30 \mathrm{sec}$ | $6-10.0 \mathrm{~min}^{*}$ | $10-20.0 \mathrm{~min}$ | $14-30.0 \mathrm{~min}$ |
| $3-2.5 \mathrm{~min}$ | $7-12.5 \mathrm{~min}$ | $11-22.5 \mathrm{~min}$ |  |
| $4-5.0 \mathrm{~min}$ | $8-15.0 \mathrm{~min}$ | $12-25.0 \mathrm{~min}$ |  |

＊＊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

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 $\mathrm{On}^{*}$

3 －Reduced Turn－On
2－Manual On

## 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

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．

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

## 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＊＊ | $5-8 \mathrm{fc}$ | $9-48 \mathrm{fc}$ | $13-128 \mathrm{fc}$ |
| :--- | :--- | :--- | :--- |
| $2-0.1 \mathrm{fc}$ | $6-16 \mathrm{fc}$ | $10-64 \mathrm{fc}$ | $14-192 \mathrm{fc}$ |
| $3-1 \mathrm{fc}$ | $7-24 \mathrm{fc}^{*}$ | $11-80 \mathrm{fc}$ | $15-256 \mathrm{fc}$ |
| $4-4 \mathrm{fc}$ | $8-32 \mathrm{fc}$ | $12-96 \mathrm{fc}$ |  |

## WARRANTY

5 －year limited warranty．Complete warranty terms located at
www．acuitybrands．com／CustomerResources／
Terms＿and＿conditions．aspx
$\underline{\mathbf{6}}=$ Daylight Set－Point
The ambient light level at which the sensor sets the lights to the Low Trim setting．

| $1-$ Set Now＊＊ | $5-8 \mathrm{fc}$ | $9-48 \mathrm{fc}$ | $13-128 \mathrm{fc}$ |
| :--- | :--- | :--- | :--- |
| $2-0.1 \mathrm{fc}$ | $6-16 \mathrm{fc}$ | $10-64 \mathrm{fc}^{*}$ | $14-192 \mathrm{fc}$ |
| $3-1 \mathrm{fc}$ | $7-24 \mathrm{fc}$ | $11-80 \mathrm{fc}$ | $15-256 \mathrm{fc}$ |
| $4-4 \mathrm{fc}$ | $8-32 \mathrm{fc}$ | $12-96 \mathrm{fc}$ |  |

＊＊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 i 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
$\underline{8}=$ 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．

| $1-0 \sec ^{*}$ | $5-7.5 \mathrm{~min}$ | $9-17.5 \mathrm{~min}$ |
| :--- | :--- | :--- |
| $2-30 \mathrm{sec}$ | $6-10 \mathrm{~min}$ | $10-20 \mathrm{~min}$ |
| $3-2.5$ min | $7-12.5$ min | $11-5 \mathrm{Stays}$ at dim（never off） |
| $4-5$ min | $8-15 \mathrm{~min}$ |  |

$9=$ 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 ${ }^{\text {Tm }}$ ）

The secondary method of occupancy detection that allows the sensor to hear occupants．
1－Normal＊4－Low
2－Off $\quad 5$－Phase Off（ $15-10-5 \mathrm{~min}$ ）
3 －Medium

## NOTE：

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

## ©AcuityBrands．

Expanding the boundaries of lighting ${ }^{\text {TM }}$

## 13 ＝Microphone Grace Period

| Time period after lig | utomatical | rrned off tha |
| :---: | :---: | :---: |
| 1－0 sec | 3－20 sec | 5－40 sec |
| 2－10 sec＊ | $4-30 \mathrm{sec}$ | 6－50 sec |
|  |  | 7－60 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．

$$
1-0 \mathrm{sec} \quad 3-15 \mathrm{sec}^{*}
$$

| $15=$ Dimming Range Max（High Trim） <br> $\overline{T h e}$ maximum output level of the sensor． |  |  |  |
| :---: | :---: | :---: | :---: |
| 1－OVDC | 5－3VDC | 9－7VDC | 13－10VDC＊ |
| 2－1VDC | 6－4VDC | 10－8VDC |  |
| 3－1．5VDC | 7－5VDC | 11－9VDC |  |
| 4－2VDC | 8－6VDC | 12－9．1 VD |  |

$16=$ Dimming Range Min（Low Trim）
The minimum output level of the sensor．

| 1－0VDC | $5-3 \mathrm{VDC}$ | $9-7 \mathrm{VDC}$ | $13-10 \mathrm{VDC}$ |
| :--- | :--- | :--- | :--- |
| 2－1 VDC |  | $6-4 \mathrm{VDC}$ | $10-8 \mathrm{VDC}$ |
| 3－1．5VDC＊＊ | $7-5 \mathrm{VDC}$ | $11-9 \mathrm{VDC}$ |  |
| 4－2VDC | $8-6 \mathrm{VDC}$ | $12-9.1 \mathrm{VDC}$ |  |

＊＊Default for EZ option

## 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．

| $1-5 \sec$ | $4-8 \mathrm{sec}$ | $7-15 \mathrm{sec}$ |
| :--- | :--- | :--- |
| $2-6 \mathrm{sec}$ | $5-9 \mathrm{sec}$ | $8-20 \mathrm{sec}$ |
| $3-7 \mathrm{sec}$ | $6-10 \sec ^{*}$ | $9-30 \mathrm{sec}$ |

## 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．

$$
\begin{array}{lll}
1-0 \mathrm{sec} & 4-20 \mathrm{sec} & 7-50 \mathrm{sec} \\
2-5 \mathrm{sec} & 5-30 \mathrm{sec}^{*} & 8-60 \mathrm{sec} \\
3-10 \mathrm{sec} & 6-40 \mathrm{sec} &
\end{array}
$$

## $19=$ Fade On Rate

Time required for light to reach preset level．
$1-0.75 \mathrm{sec}^{*} \quad 3-5 \mathrm{sec}$
2－2．5 sec $\quad 4-15 \mathrm{sec}$

## 20 ＝Fade Off Rate

Time required for light to turn Off．
1－0．75 sec $\quad 3-5 \mathrm{sec}$
2－ 2.5 sec $^{*} \quad 4-15 \mathrm{sec}$

## 21 ＝Start Level

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

| $1-10 \%$ | $4-40 \%$ | $7-70 \%$ | $10-100 \%{ }^{*}$ |
| :--- | :--- | :--- | :--- |

