

SPECIFICATIONS

PHYSICAL SPECS

SIZE: 2.74"H x 1.68"W x 1.63"D (6.96 cm x 4.27 cm x 4.14 cm)
(not including ground strap)

WEIGHT: 5 oz

MOUNTING: Single Gang Switch Box

MOUNTING HEIGHT: 30-48 in (76.2-121.9 cm)

SILICONE FREE

ROHS COMPLIANT

ELECTRICAL SPECS

MAXIMUM LOAD (Single Phase)

800 W @ 120 VAC

1200 W @ 277 VAC

1500 W @ 347 VAC

MINIMUM LOAD: None

MOTOR LOAD: 1/4 HP

FREQUENCY: 50/60 Hz (timers are 1.2x for 50 Hz)

ENVIRONMENTAL SPECS

OPERATING TEMP

Standard: 14° to 122° F (-10° to 50° C)

LT Option (PIR): -40° to 122° F (-40° to 50° C)

LT Option (PDT): -4° to 122° F (-20° to 50° C)

RELATIVE HUMIDITY:

Standard: 20 to 75% non-condensing

LT Option: 20 to 90% non-condensing

(electronics coated for corrosion resistance)



BASE MODEL #s

WSX: Passive Infrared (PIR) Detection - Auto On

WSX SA: Passive Infrared (PIR) Detection - Manual On

WSX NL: Passive Infrared (PIR) Detection - Manual On

WSX PDT: Dual Technology (PIR + Microphonics) Detection - Auto On

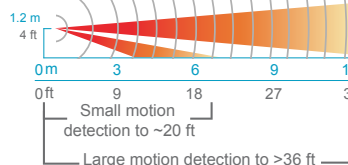
WSX PDT SA: Dual Technology (PIR + Microphonics) Detection - Manual On

WSX PDT NL: Dual Technology (PIR + Microphonics) Detection - Manual On

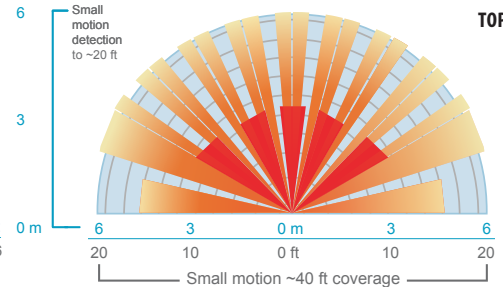
COVERAGE PATTERN

- 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.

SIDE VIEW



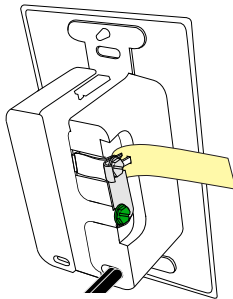
TOP VIEW



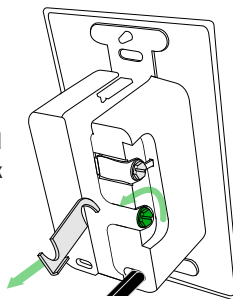
CONVERSION FROM GROUND ONLY (NO NEUTRAL) TO NEUTRAL WIRING

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.

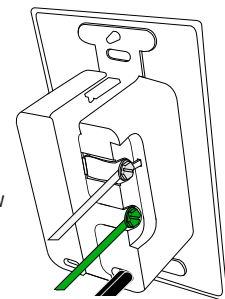
Step 1:
Remove Yellow
Label



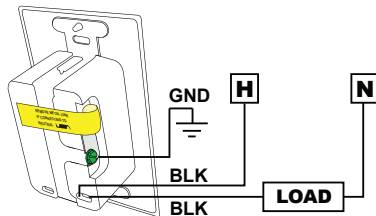
Step 2:
Loosen Screws and
Remove Metal Link



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



WIRING TO GROUND (NO NEUTRAL)



WIRE COLOR KEY

120/277 VAC WIRING

BLACK* - Line Input
BLACK* - Load Output } *BLACK wires can be reversed

347 VAC WIRING (-347 Option)

Red wires replace Black wires.

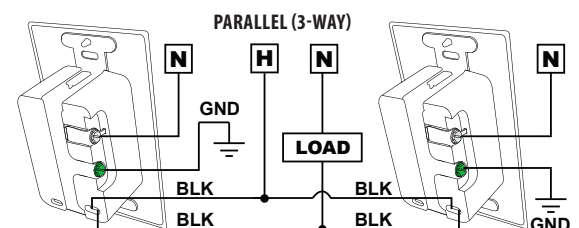
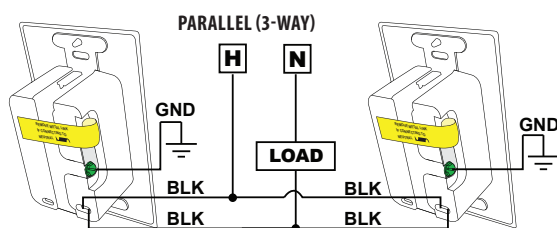
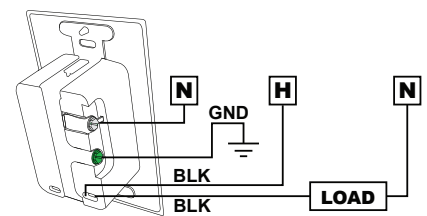
For additional wiring diagrams, scan QR CODE below or go to:

<http://bit.ly/12HaeEF>



NOTE: When wiring in parallel, both units must time out for lights to turn off. Disabling switch function is recommended (Function 4, Setting 2).

WIRING TO NEUTRAL



OPERATIONAL SETTINGS

NOTE: (*) Indicates factory default (unless otherwise marked)

2 = Occupancy Time Delay

Time sensor keeps lights on after last occupancy detection.

- | | | | |
|-----------|-------------|------------|-------------|
| 1 30 sec | 4 7.5 min | 7 15.0 min | 13 30.0 min |
| 2 2.5 min | 5 10.0 min* | 8 17.5 min | |
| 3 5.0 min | 6 12.5 min | 9 20.0 min | |

For additional time settings, contact technical support at 1.800.PASSIVE

3 = On Mode

Automatic On turns lights on when occupancy is detected. Manual On requires a button press to turn the lights on. Reduced Turn-On directs the sensor to only detect large motions, such as a person entering a room. Weaker signals, such as reflections from glass, are ignored. Once lights are on, the sensor returns to maximum sensitivity.

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

* Standard Factory Default

** Factory Default for -SA and -NL versions

4 = Switch Modes

These modes dictate switch functionality. Pressing the button in Override Off mode (setting 1) turns off and keeps lights off until pressed again. Disabling the Switch (setting 2) prevents the button from turning the lights on.

Predictive Mode (setting 3) automatically determines if a user has left the room after the lights are switched off. It does this by monitoring the space for a period after the button is pressed (Predictive Grace Time), following a certain delay (Predictive Exit Time). If occupancy is detected the device will disable auto-on and hold the lights off until manually switched. If no occupancy is detected the sensor instantly reverts to auto-on mode. (continued next column)

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

- | | |
|------------------------------------|--|
| 1 Override Off** | |
| 2 Switch Disable | |
| 3 Predictive Mode | |
| 4 Predictive Mode with Expiration* | |

* Standard Factory Default

** Factory Default for -SA and -NL versions

5 = Photocell Set-Point

The ambient light level at which the sensor prevents the lights from initially turning on. Once on, the lights will remain on until the occupancy time delay expires and turns them off.

- | | |
|-----------------|----------|
| 1 Disabled* | 6 4 fc |
| 2 Auto Setpoint | 7 8 fc |
| 3 0.5 fc | 8 16 fc |
| 4 1 fc | 9 32 fc |
| 5 2 fc | 10 64 fc |

Note: Sensor will be changed to Automatic On mode if photocell is enabled. Photocell not present in -NL versions. LED flashes while Auto-Setpoint mode is running.

7 = LED Operation

Indicates behavior of device's LED.

- | | |
|-------------------------|------------------|
| 1 Occupancy Indication* | 3 Disabled |
| 2 Relay Indication | 4 Override On*** |

*Standard Factory Default

*** Factory Default for -NL version

9 = Restore Factory Defaults

Returns all functions to original settings.

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

10 = Minimum On Time

Required initial time for lamps to be on after each switch on, regardless of occupancy status. Once met, lights resume following occupancy time delay.

- | | | |
|---------------------|----------|----------|
| 1 0 min (disabled)* | 3 30 min | 5 60 min |
| 2 15 min | 4 45 min | |

11 = Manual On Grace Period

Time period after lights automatically turn off that they can be reactivated by motion. (Manual On (Semi-Auto) mode only).

- | | | |
|---------|----------|-----------|
| 1 0 sec | 2 Unused | 3 15 sec* |
|---------|----------|-----------|

12 = Dual Technology (Microphonics™)

Relative responsiveness of Microphonics detection. Included in -PDT versions only.

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

13 = Microphone Grace Period

Time period after lights are automatically turned off that they can be voice reactivated. Included in -PDT versions only.

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

15 = Predictive Mode Exit Time

Time period after manually switching lights off for occupant to leave the space.

- | | | | | |
|---------|---------|-----------|----------|----------|
| 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 | |

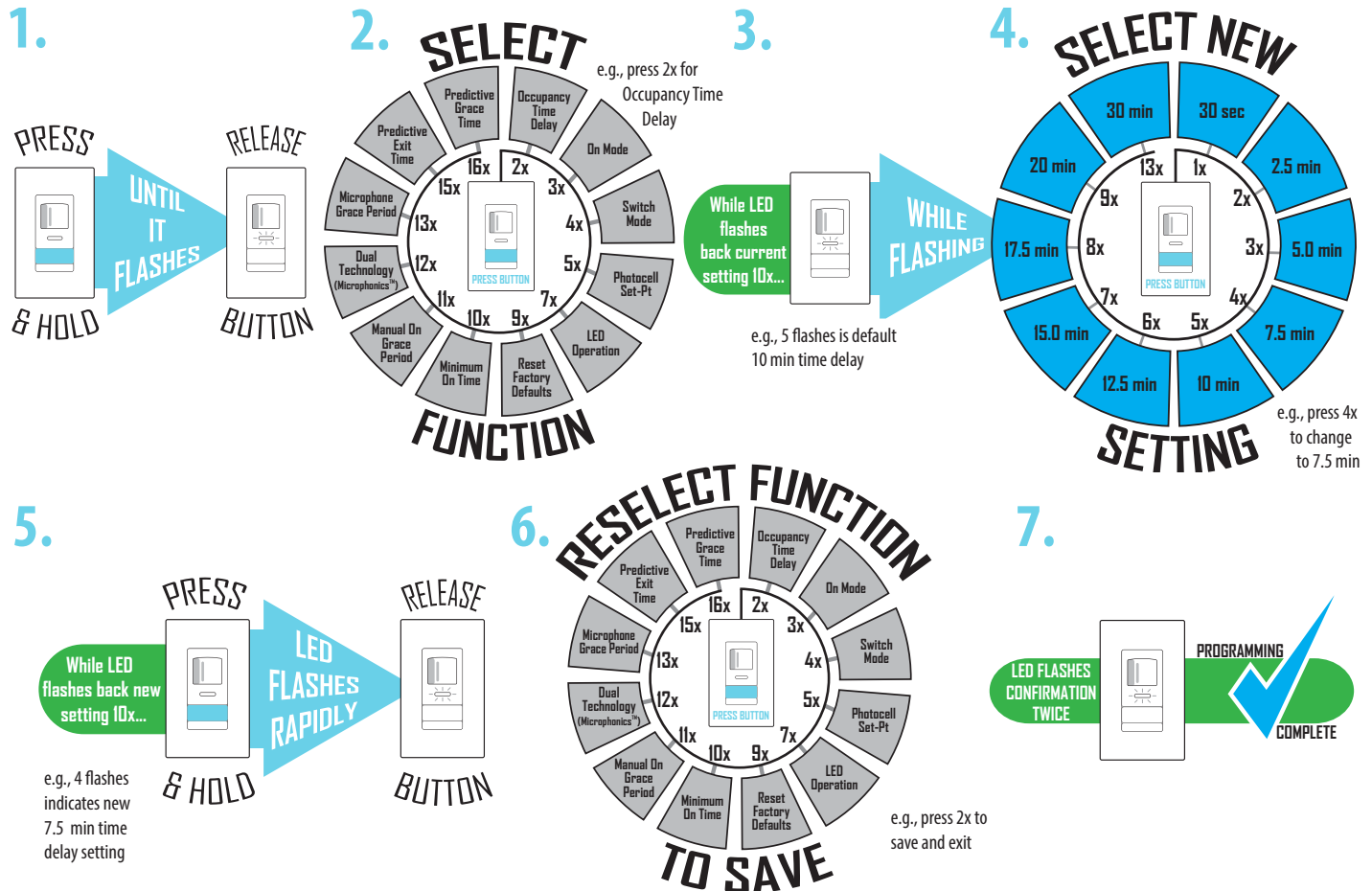
16 = Predictive Mode Grace Time

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

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

PROGRAMMING INSTRUCTIONS

Operational settings can be changed via the push-button sequence outlined below (note the example used is for changing occupancy time delay).



AcuityBrands.

Expanding the boundaries of lighting™

TITLE 20/24
ASSEMBLED in U.S.A.
5 YEAR WARRANTY

WARRANTY

5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Sheet#: IS-WSX-003