![AcuityControls — Sensor Switch™]

OVERVIEW

The WSX 2P FAN series wall switch occupancy sensor are designed specifically to control a lighting load and an exhaust fan. Pad printed fan and light buttons eliminate any end user confusion about button activation. While the WSX 2P FAN is similar in function-ality to standard dual relay sensors, the WSX 2P FAN ASHRT provides a minimum fan run-time setting so that air circulation and energy code requirements (as in ASHRAE 62.2) can be met. Both versions utilize two isolated power relays, and are set to automatically turn both the lighting and fan load on when initial occupancy is detected. Sensor settings can be programmed, without removing the switch plate, by entering simple command sequences via the push-buttons.

Learn how to program me.
Aprende a programarme.

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

Note: For the WSX 2P FAN series Pole 1 Auto On, Pole 2 Auto On

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 (default Pole 2)
2 Switch Disable
3 Predictive Mode
4 Predictive Mode with Expiration (default Pole 1)

2SA and NL options default: Both poles Override Off

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 (both poles)

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.

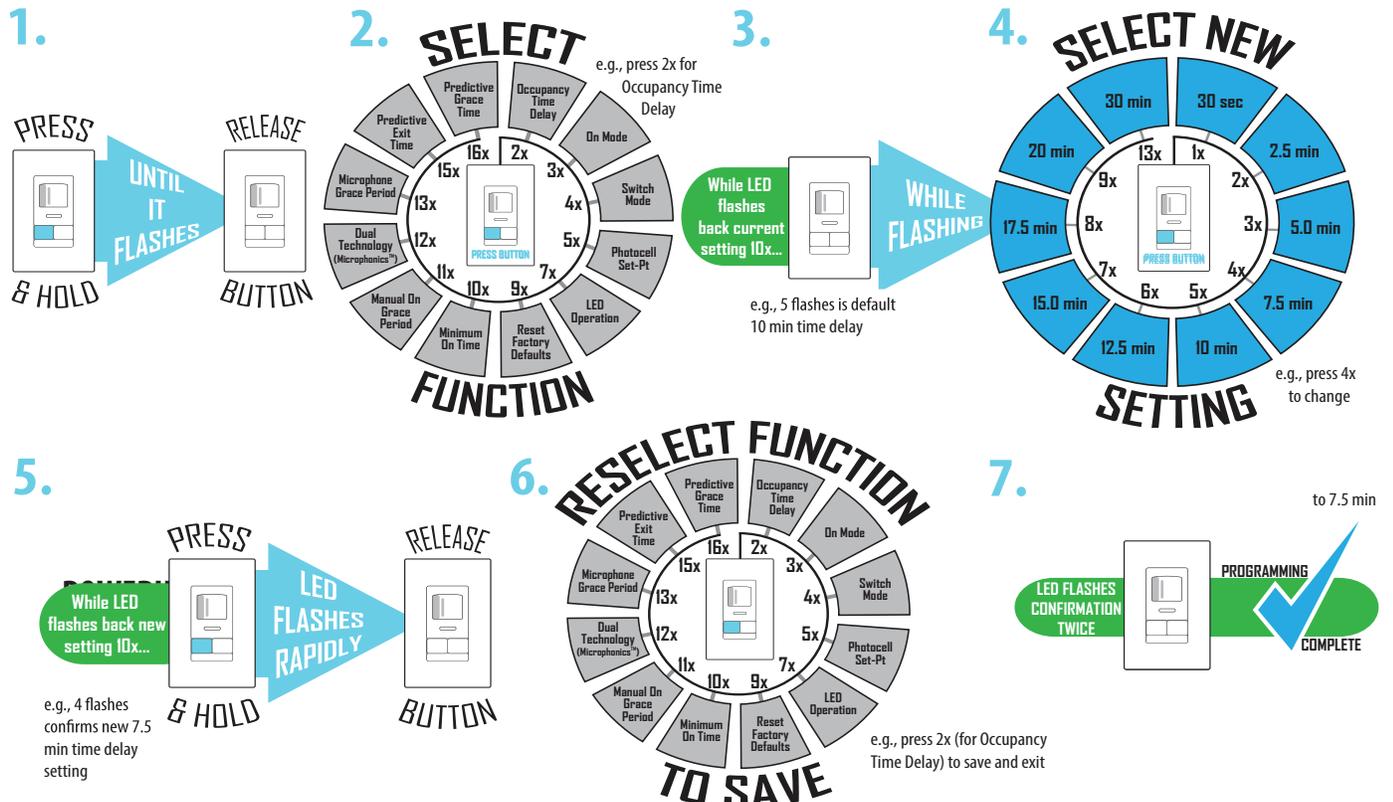|		
1 Normal∗	**3** Medium	**5** Phase Off
2 Off	**4** Low	(15-10-5 min)

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.

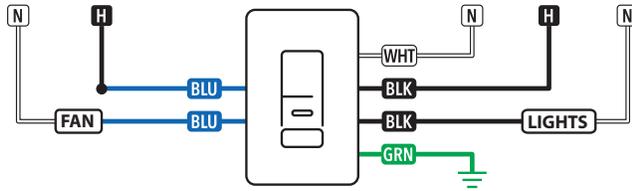|			
1 0 sec	**3** 10 sec	**5** 30 sec∗	**7** 50 sec
2 5 sec	**4** 20 sec	**6** 40 sec	**8** 60 sec

PROGRAMMING INSTRUCTIONS

Operational settings can be changed for either pole via the corresponding push-button using the sequence outlined below (note the example used is for changing occupancy time delay).
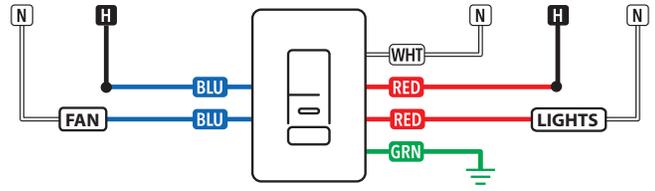
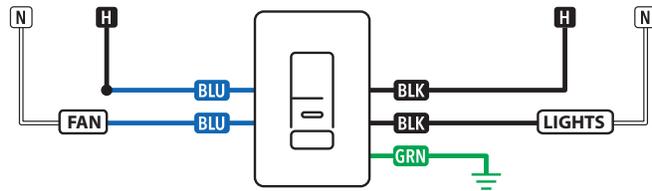**1.** PRESS UNTIL IT FLASHES & HOLD — RELEASE BUTTON

2. SELECT FUNCTION — e.g., press 2x for Occupancy Time Delay

(dial) Predictive Grace Time 16x · Occupancy Time Delay 2x · On Mode 3x · Switch Mode 4x · Photocell Set-Pt 5x · LED Operation 7x · Reset Factory Defaults 9x · Minimum On Time 10x · Manual On Grace Period 11x · Dual Technology (Microphonics™) 12x · Microphone Grace Period 13x · Predictive Exit Time 15x · PRESS BUTTON

3. While LED flashes back current setting 10x... WHILE FLASHING — e.g., 5 flashes is default 10 min time delay

4. SELECT NEW SETTING — e.g., press 4x to change

(dial) 30 sec 1x · 2.5 min 2x · 5.0 min 3x · 7.5 min 4x · 10 min 5x · 12.5 min 6x · 15.0 min 7x · 17.5 min 8x · 20 min 9x · 30 min 13x · PRESS BUTTON

5. While LED flashes back new setting 10x... PRESS & HOLD — LED FLASHES RAPIDLY — RELEASE BUTTON — e.g., 4 flashes confirms new 7.5 min time delay setting

6. RESELECT FUNCTION TO SAVE

(dial) Predictive Grace Time 16x · Occupancy Time Delay 2x · On Mode 3x · Switch Mode 4x · Photocell Set-Pt 5x · LED Operation 7x · Reset Factory Defaults 9x · Minimum On Time 10x · Manual On Grace Period 11x · Dual Technology (Microphonics™) 12x · Microphone Grace Period 13x · Predictive Exit Time 15x — e.g., press 2x (for Occupancy Time Delay) to save and exit

7. to 7.5 min — LED FLASHES CONFIRMATION TWICE — PROGRAMMING COMPLETE

WIRING DIAGRAMS

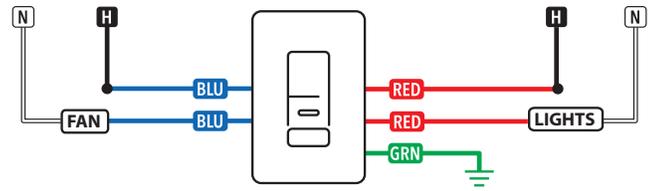## WSX 2P FAN 120/277 VAC with Neutral

WSX 2P FAN 347 VAC with Neutral

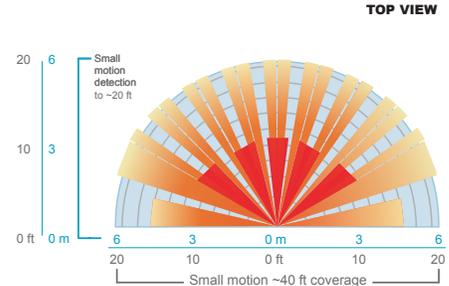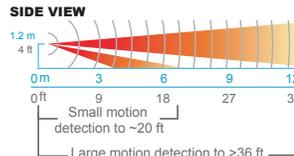## WSX 2P FAN 120/277 VAC without Neutral

WSX 2P FAN 347 VAC without Neutral

COVERAGE PATTERNS

- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m), ~625 ft^2
- Large motion (e.g., walking) detection greater than 36 ft (10.97 m), ~2025 ft^2
- Wall-to-Wall coverage
- Passive Dual Technology (Microphonics) provides 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.

TOP VIEW

TECHNICAL SUPPORT

PHONE: 800.535.2465   EMAIL: SSI-SUPPORT@ACUITYBRANDS.COM

AcuityBrands.

Expanding the boundaries of lighting™

READ AND FOLLOW ALL SAFETY INSTRUCTIONS!
SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER INSTALLATION

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Installation and service should be performed by a qualified licensed electrician.
- Maintenance should be performed by qualified person(s) familiar with the products' construction & operation & any hazards involved. Regular maintenance programs recommended.
- **DO NOT INSTALL DAMAGED PRODUCT!** This product has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.

⚠ **CAUTION: RISK OF PRODUCT DAMAGE**

√ Electrostatic Discharge (ESD): ESD can damage product(s). Personal grounding equipment should be worn during all installation or servicing of the unit.
√ Do not touch individual electrical components, as this can cause ESD and affect product performance.
√ Do not stretch or use cable sets that are too short or are of insufficient length.
√ Do not tamper with contacts.
√ Do not modify the product.
√ Do not change or alter internal wiring or installation circuitry.
√ Do not use product for anything other than its intended use.

WARNING - RISK OF ELECTRIC SHOCK

√ Disconnect or turn off power before installation or servicing.
√ Verify that supply voltage is correct by comparing it with the product information.
√ Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.
√ All wiring connections should be capped with UL approved recognized wire connectors.
√ All unused connector openings must be capped.

WARNING - RISK OF BURN or FIRE

√ Do not exceed maximum wattage, ratings, or published operation conditions of product.
√ Do not overload.
√ Follow all manufacturer's warnings, recommendations and restrictions to ensure proper operation of product.

CAUTION - RISK OF INJURY

√ Wear gloves and safety glasses at all times when installing, servicing or performing maintenance.