Catalog Number: | Date: | Project:

OVERVIEW

The WSX 2P FAN is a Wall Switch Decorator style Passive Infrared (PIR) occupancy sensor that controls a lighting load and an exhaust fan. While similar in functionality to standard dual relay sensors, the WSX 2P FAN ASHRT sensor provides a minimum fan run-time setting so that air circulation requirements (such as ASHRAE 62. 2) can be met without sacrificing energy savings.

Utilizing two isolated power relays, the WSX 2P FAN is factory set to automatically turn both the lighting and fan load on when initial occupancy is detected. The settings of the WSX 2P FAN sensor can be programmed, without removing the switch plate, by entering simple command sequences via the push-buttons.

FEATURES

- PIR Occupancy Detection
- Two Self Contained Relays -No Power Packs needed
- Minimum Run-Time Setting for Fan if ASHRT option is selected -(Aggregate over 24 hr Period)
- Interchangeable Hot & Load Wires -Impossible to Wire Backwards
- Small Motion Detection to 20 ft (6.10 m)
- Self Grounding Mounting Strap
- No Neutral Required / No Minimum Load
- Adjustable Time Delay / Pole
- LampMaximizer® Minimum On Time (disabled by default)
- Push-Button Programmable w/o Removing the Switch Plate
- Labeled Buttons (Light / Fan)
- White LED Indicator
- Fully meets NEC 2017 Section 404.2C neutral requirements - no current leakage to ground when connected to neutral

sensorswitch®

WSX 2P FAN

Wall Switch Sensor with Fan



Warranty

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

Note: Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.

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ORDERING INFORMATION

WSX 2P FAN									Example: WSX 2P FAN WH LT
Series		**Voltage**		**Run Time**		**Color**		**Temp/Humidity**	
WSX 2P FAN	Passive infrared (PIR)	[blank]	120-277VAC	[blank]	Pole 1 Lights Pole 2 Fan	WH	White	[blank]	Standard
WSX PDT 2P FAN	Dual Technology (PIR/ Microphonics™)	347	347VAC	ASHRT	Pole 1 Lights Pole 2 Fan, Minimum Fan Run Time per Ashrae 62.2	IV	Ivory	LT	Low Temp/ High humidity
						GY	Gray		
						AL	Almond		

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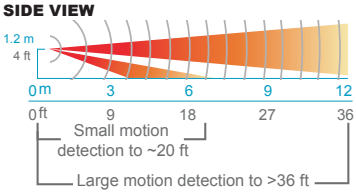
SPECIFICATIONS

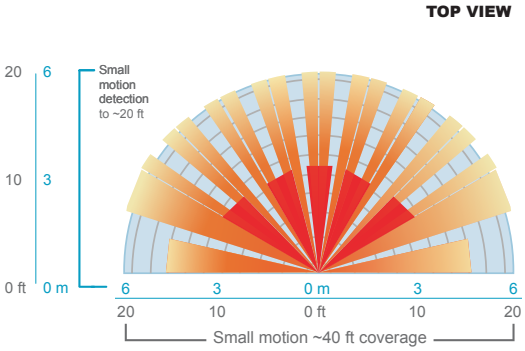
Electrical Specifications	**Input Ratings**	120-277VAC, 6.6A, 50/60 Hz 347VAC, 4.3A, 50/60 Hz
	Output Ratings	120VAC , 800W, 6.7A - Tungsten, Standard Ballast, Electronic Ballast 277VAC , 1200W, 4.3A - Tungsten, Standard Ballast, Electronic Ballast 347VAC, 1500W, 4.3A - Tungsten, Standard Ballast, Electronic Ballast 120/277/347VAC, 1/4 HP - Motor
	Relay Type	Latching
	Standards/ Ratings	Energy Management Equipment, UL916 (E167435)
Mechanical	**Dimensions**	2.74"H x 1.68"W x 1.63"D (70mm x 43mm x 41mm) - does not include ground strap
	Mounting	Single-Gang Box
	Connection Type	Line-Voltage Leads
Environmental	**Warrantied Operating Temperature**	32°F to 140°F (0°C to 60°C)
	Relative Humidity	Up to 90%, Non-Condensing
	Standards/ Ratings	RoHS
	General Standards/ Ratings	System Component to aid in compliance with Title 24, ASHRAE 62.2

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COVERAGE PATTERNS

- Small motion (e.g. hand movements) detection up to 20 ft (6.10 m)
- Large motion (e.g. walking) detection up to 50 ft (15.24 m)
- Wall-to-Wall coverage





CONTROL MODES

ON MODES (programmable per pole, i.e. Pole 1 = Lights, Pole 2 = Fan)

AUTOMATIC ON (default Pole 1 & 2) - Lights/fan come on when occupancy is detected.

MANUAL ON - Requires the occupant to manually turn on the lights/fan via the push-button.

REDUCED TURN ON - Sensor is initially set to only detect large motions, effectively ignoring any reflected PIR signals while still sensing occupants when they enter the room. Once on, the sensor returns to maximum sensitivity.

SWITCH MODES (programmable per pole)

PREDICTIVE OFF MODE (default Pole 1 & Pole 2) - This mode allows occupants to turn the lights/fan off via the switch without losing the convenience of having the lights/fan automatically turn on when they re-enter the room. Pressing the switch turns the lights/fan off and temporarily disables the occupancy detection in the sensor. After a short exit time delay, the occupancy detection reactivates and monitors for an additional grace period. If no occupancy is detected, the zone will remain in Automatic On operation. If occupancy is detected, the zone will go to a Permanent Off mode, requiring the switch to be pressed again in order to turn the lights/fan on and restore the sensor to Automatic On operation.

PERMANENT OFF - Pressing the switch turns the lights/fan and the sensor off. Lights/fan will not come on until switch is pressed again.

SWITCH DISABLE - Prevents user from manually turning off the lights/fan via the push-button. Button can still be utilized for programming.

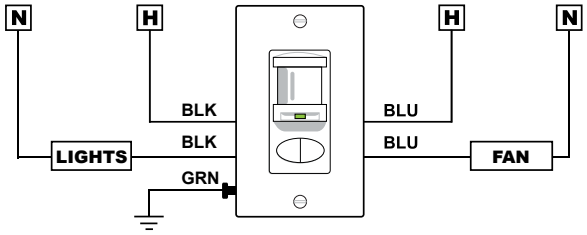
WIRING (DO NOT WIRE HOT)

STANDARD WIRING

BLACK* - Line Input (Hot) 1
BLACK* - Lighting Load Output } *BLACK wires can be reversed
BLUE** - Line Input (Hot) 2
BLUE** - Fan Output } **BLUE wires can be reversed
GREEN SCREW - Ground (required connection)

347 VAC OPTION (347)

Black wires are replaced w/ Red wires



Note: Connection to Ground required for sensor to funciton. Unit powers off BLK Hot (Line) Input

WARNING

Fire Hazard Caution: Maximum Lamps 1500 Watts, Type 347 VAC.

Warning: The units are intended to be installed by a qualified person with properly rated branch circuit protectors as per applicable local and national regulations (CEC, NEC). For dual relay, both relays must be fed from the same circuit.

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OVERVIEW

The WSX 2P FAN is a Wall Switch Decorator style Passive Infrared (PIR) occupancy sensor that controls a lighting load and an exhaust fan. While similar in functionality to standard dual relay sensors, the WSX 2P FAN ASHRT sensor provides a minimum fan run-time setting so that air circulation requirements (such as ASHRAE 62. 2) can be met without sacrificing energy savings.

Utilizing two isolated power relays, the WSX 2P FAN is factory set to automatically turn both the lighting and fan load on when initial occupancy is detected. The settings of the WSX 2P FAN sensor can be programmed, without removing the switch plate, by entering simple command sequences via the push-buttons.

FEATURES

- PIR Occupancy Detection
- Two Self Contained Relays -No Power Packs needed
- Minimum Run-Time Setting for Fan if ASHRT option is selected -(Aggregate over 24 hr Period)
- Interchangeable Hot & Load Wires -Impossible to Wire Backwards
- Small Motion Detection to 20 ft (6.10 m)
- Self Grounding Mounting Strap
- No Neutral Required / No Minimum Load
- Adjustable Time Delay / Pole
- LampMaximizer® Minimum On Time (disabled by default)
- Push-Button Programmable w/o Removing the Switch Plate
- Labeled Buttons (Light / Fan)
- White LED Indicator
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sensorswitch®

WSX 2P FAN

Wall Switch Sensor with Fan



Warranty

Five-year limited warranty. Complete warranty terms located at:
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Series		**Voltage**		**Run Time**		**Color**		**Temp/Humidity**	
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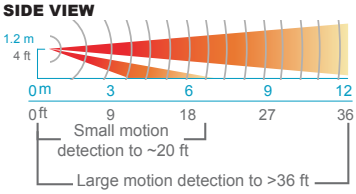
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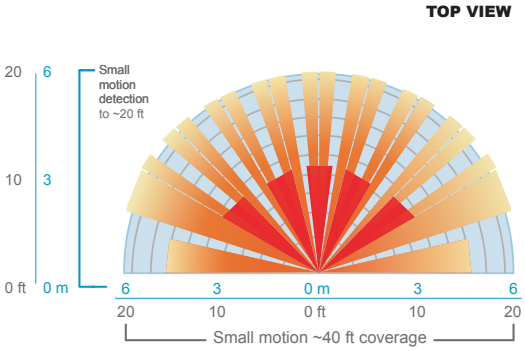
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	Relay Type	Latching
	Standards/ Ratings	Energy Management Equipment, UL916 (E167435)
Mechanical	**Dimensions**	2.74"H x 1.68"W x 1.63"D (70mm x 43mm x 41mm) - does not include ground strap
	Mounting	Single-Gang Box
	Connection Type	Line-Voltage Leads
Environmental	**Warrantied Operating Temperature**	32°F to 140°F (0°C to 60°C)
	Relative Humidity	Up to 90%, Non-Condensing
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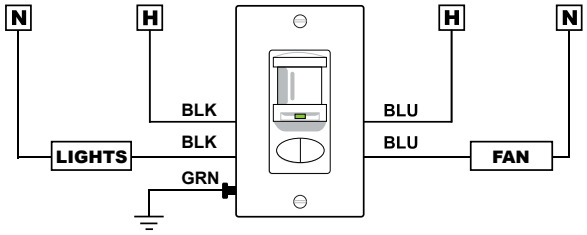
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