



sensorswitch WSXA Occupancy Motion Sensor Switch User Guide

[Home](#) » [sensorswitch](#) » sensorswitch WSXA Occupancy Motion Sensor Switch User Guide 

sensorswitch

Quick Recommendation Guide

Contents

- [1 Typical Applications](#)
- [2 Wiring Diagrams](#)
- [3 Documents / Resources](#)
 - [3.1 References](#)
- [4 Related Posts](#)

Typical Applications



Occupancy Sensor
WSXA



Occ Sensor with Dimming
WSXA D



Wall Switch with Dimming
SPODMRA D



Ceiling Mount Sensor
CM



Wide View Sensor
WV



Fixture Mount Sensor
LSXR

Private Offices		(Typical Energy Savings: 30% – 50%)
Up to 15'x15' Without Obstructions	WSXA** / WSXA D**	Sensor must have visibility to desktop activity
Up to 15'x15' With Obstructions	WSXA PDT** / WSXA PDT D**	Small rooms without direct line of sight (also required if occupant has back to sensor)
Up to 20'x20'	CM PDT 9*	Place within visual sight of main entry door
0-10V Dimming	WSXA PDT D** or SPODMRA D**	LED dimming control with or without motion sensor
Conference Rooms		(Typical Energy Savings: 30% – 50%) †
Up to 15'x15'	WSXA PDT** / WSXA PDT D**	Sensor will detect both motion and sound
Up to 20'x20'	CM PDT 9*	Place within visual sight of main entry door
Up to 30'x30'	WV PDT 16*	Place sensor in corner along entrance wall
Classrooms		(Typical Energy Savings: 40% – 60%) †
Up to 30'x30'	WV PDT 16*	Place sensor in corner along entrance wall
Greater than 30'x30'	Multiple WV PDT 16* or CM PDT 10*	Place sensors in opposite corners
Open Office Areas		(Typical Energy Savings: 20% -40%) †
8'-10' Mounting Height	Multiple CM PDT 9*	Place sensors on 25' – 30' centers and cover all entrances

Restrooms		(Typical Energy Savings: 50% – 80%) †
Private	WSXA **	For rooms without obstructions
Private with Fan	WSXA 2P: FAN	No obstructions, relay 1 controls lights, relay 2 is f or fan
Up to 4 Stalls	WSXA PDT**	For rooms with obstructions
4 to 7 Stalls	CM PDT 9*	Place within visual sight of the main entry door
More than 7 Stalls	Multiple CM PDT 9*	Contact your Acuity Sales Representative for assistance
Corridors		(Typical Energy Savings: 20% – 60%) †
9' Mounting Height	CM 10*	Place sensors 50' on center
12' Mounting Height	CM 10*	Place sensors 60' on center
Gymnasiums		(Typical Energy Savings: 20% – 50%) †
25' Mounting Height	LSXR 6	Place sensors on 40' centers and cover all entrances
Warehouses		(Typical Energy Savings: 20% – 50%) †
360°, 15' – 45' Mounting Height	LSXR 6	1 sensor per fixture
Aisle Control	LSXR 50	Coverage spans multiple fixtures

* Requires power pack(s). † Results typical; actual savings may differ.

** Multi-way (3-way) configurations are available – look for “MWO” on the spec sheet!

*** For 347 VAC applications, please add 347 to product nomenclature

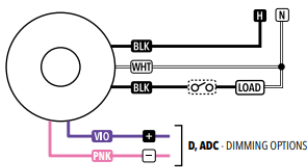


Visible Light Programming, learn more at <https://sensorswitch.acuitybrands.com/overview/vlp>

Wiring Diagrams

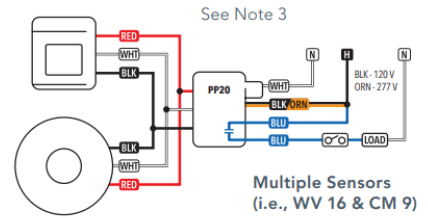
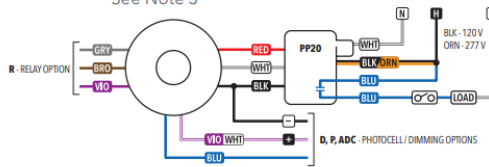
LINE VOLTAGE SENSOR

(i.e., CMR 9)



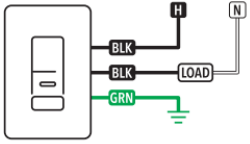
LOW VOLTAGE

Single Sensor (i.e., CM 9)
See Note 3



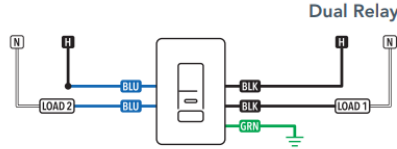
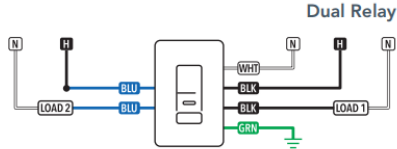
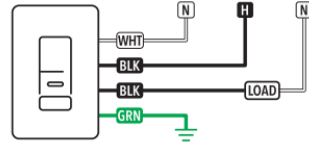
WIRING TO GROUND (NO NEUTRAL)

Wall Switch Sensor Single Relay



WIRING TO NEUTRAL

Wall Switch Sensor Single Relay



Wire Color Key for Wiring to Ground or Wiring to Neutral

120/277 VAC Wiring

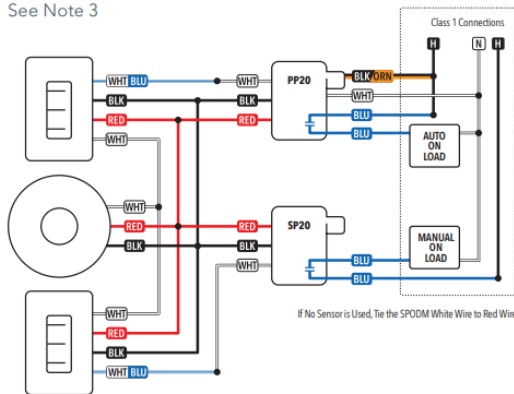
Black*	Line 1 Input	Black Wires can be reversed
Black*	Load 1 Output	
Blue*	Line 2 Input	Blue Wires can be reversed
Blue*	Load 2 Output	

Notes:

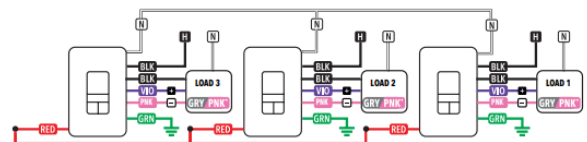
- Unit will draw power from either line connection.
- When switching loads on both relays (2P version), the line inputs must be on the same phase.
- Substitute PP20 with PP16X for 347 VAC applications

BI-LEVEL (AUTO-ON/MANUAL ON) SOLUTION WITH CEILING SENSOR: 2-GANG

See Note 3

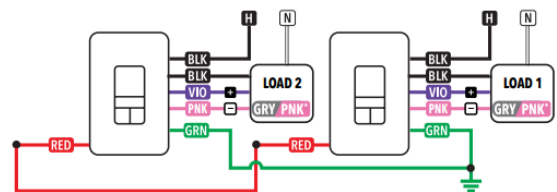


SINGLE RELAY, MULTI-WAY CONFIGURATION, 120-277, 347 VAC



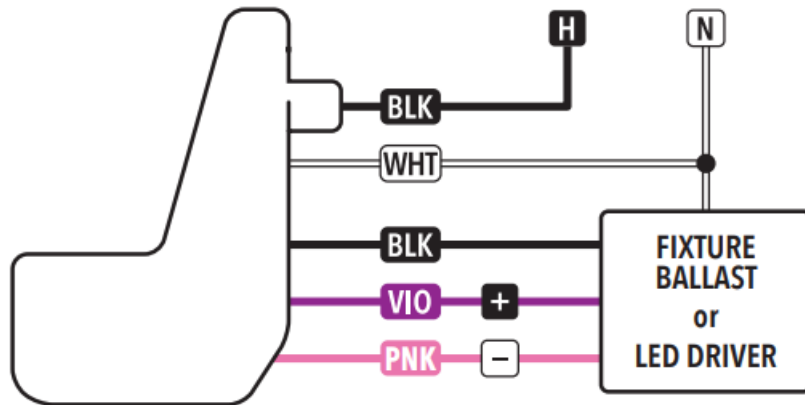
Note: up to 9 devices with neutral

SINGLE RELAY, MULTI-WAY CONFIGURATION, 120-277, 347 VAC



Note: up to 2 devices without a neutral (neutral-less)

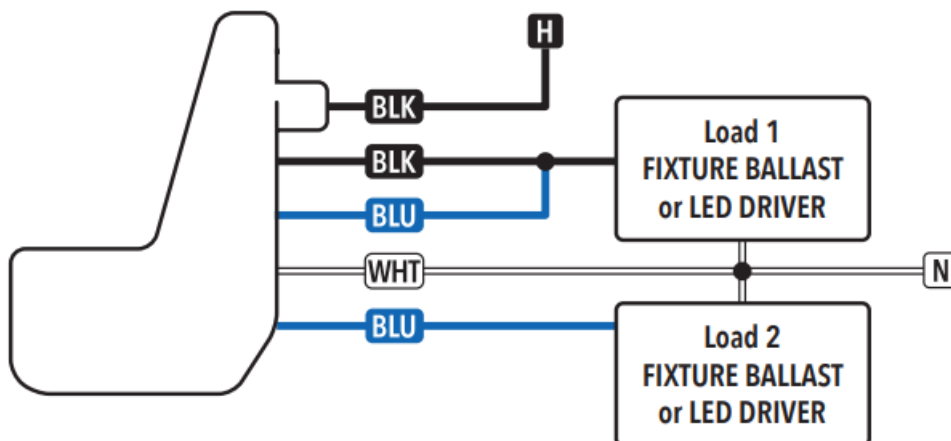
LINE VOLTAGE – SINGLE RELAY (I.E., LSXR XX)



Notes

1. Black wires can be reversed
2. Wire is red for HVOLT version (required for 347 VAC)
3. Disconnect and cap black output wire going to driver/ballast if switching fixture is not required.

LINE VOLTAGE – DUAL RELAY (I.E., LSXR XX 2P)



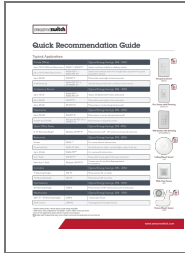
Notes

1. Black wires can be reversed.
2. Blue wires can be reversed.
3. Wire is red 347 VAC version.
4. Red wires can be reversed.



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Documents / Resources



[sensorswitch WSXA Occupancy Motion Sensor Switch](#) [pdf] User Guide
WSXA, WSXA D, WSXA PDT, WSXA PDT D, CM PDT 9, CM PDT 10, WV PDT 16, SPODMRA
D, SPODMRD, LSXR 6, LSXR 50, WSXA Occupancy Motion Sensor Switch, Occupancy Motio
n Sensor Switch

References

- [!\[\]\(9bf097d682561b2ffd12d57a40ca73b1_img.jpg\) Acuity Brands | Lighting, Controls, and Building Management Solutions](#)
- [!\[\]\(51d3868eac81c232f6ef399d2bd16077_img.jpg\) SensorSwitch | Lighting Controls](#)
- [!\[\]\(a2c132b99b4fcf21fd2bcbbdcf2be642_img.jpg\) SensorSwitch VLP Mobile App | Sensor Programming](#)