

## OVERVIEW

The **WSD** is a stylish, easy to install, and simple to use Wall Switch Decorator style Passive Infrared (PIR) sensor. It is ideal for private offices, copy rooms, closets, or any small enclosed space without obstructions. A user programmable time delay ensures that once the room is vacated the sensor will time out and turn off the lights. Additionally, the **WSD** sensor has several On Modes and Switch Modes that can be programmed using the front push-button. For rooms with obstructions, the Dual Technology **WSD PDT** Series sensor is recommended. Additionally, all **WSD** Family sensors have a patent-pending wiring method that enables them to function either with or without a neutral connection. **WSD** units come pre-configured for wiring without a neutral; however, if connection to neutral is required by code, contractors can convert the unit in seconds.

## FEATURES

- Compatible w/LEDs, electronic & magnetic ballasts, CFLs, & incandescents
- 100% passive detection, no potential for interference with other building systems
- Small motion detection to 20 ft
- Push-button programmable without removing cover plate - adjustable time delays & operating modes
- Dual technology (PDT) utilizes PIR/Microphonics detection (patented)
- Self-grounding mounting strap
- Device accommodates powering over ground or neutral connection (patent pending)
- Ultra low current leakage (<0.5 mA) when connected via ground
- Fully meets NEC 2011 Section 404.2C neutral requirements - no current leakage to ground when connected to neutral
- Line power and load wires are interchangeable - impossible to wire backwards (patented)

## Warranty

Five-year limited warranty. Complete warranty terms located at:

[www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://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.

**AcuityControls**

*Sensor Switch™*

*WSD Family*



**WSD  
WSD PDT**



**WSD 2P  
WSD PDT 2P**

## ORDERING INFORMATION



WSD SINGLE RELAY											
Series		Operating Mode <sup>1</sup>		Voltage		Color <sup>3</sup>			Temp / Humidity		
WSD	Passive Infrared (PIR)	[blank]	Auto-on (default) or vacancy	[blank]	120/277VAC	WH	White	AL	Lt. Almond	[blank]	Standard
WSD PDT	Dual Technology (PIR/Microphonics)	SA	Vacancy (default) or auto-on	347 <sup>2</sup>	347VAC	IV	Ivory	BK	Black	LT	Low Temp/ High Humidity
		VA	Vacancy only			GY	Gray				

WSD DUAL RELAY											
Series		Operating Mode <sup>1</sup>		Voltage		Color <sup>3</sup>			Temp / Humidity		
WSD 2P	Passive Infrared (PIR)	[blank]	Pole 1 auto-on	[blank]	120/277VAC	WH	White	AL	Lt. Almond	[blank]	Standard
WSD PDT 2P	Dual Technology (PIR/Microphonics)		Pole 2 vacancy	347 <sup>2</sup>	347VAC	IV	Ivory	BK	Black	LT	Low Temp/ High Humidity
		2SA	Both poles vacancy (default)			GY	Gray				

### Notes:

- 1 Operating Modes reprogrammable via push-button except for VA version
- 2 Wall plates included in white or ivory only for 347 VAC units
- 3 Matching wall plate provided for 120/277 VAC units

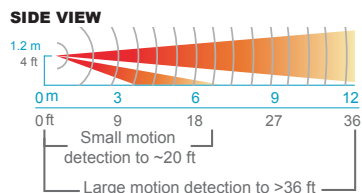
## SPECIFICATIONS

Size:	2.74"H x 1.68"W x 1.63"D (not including ground strap)
Weight:	5 oz
Mounting:	Single gang switch box
Mounting Height:	30-48 in
Maximum Load/ Pole:	(Relay) 800W @ 120VAC, 1200W @ 277VAC, 1500 W @ 347VAC
Minimum Load:	None
Motor Load:	1/4 HP
Frequency:	50/60Hz (timers are 1.2x for 50Hz)

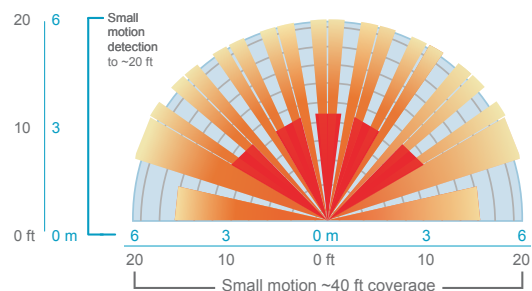
ROHS compliant

## COVERAGE PATTERNS

- Small motion (e.g., hand movements) detection up to 20 ft (6.10 m), ~625 ft<sup>2</sup>
- Large motion (e.g., walking) detection greater than 36 ft (10.97 m), ~2025 ft<sup>2</sup>
- 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.

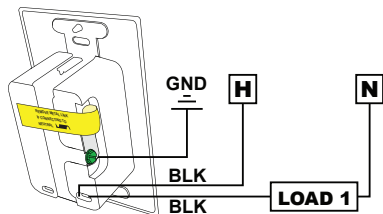


TOP VIEW



## WIRING TO GROUND (no NEUTRAL)

SINGLE RELAY



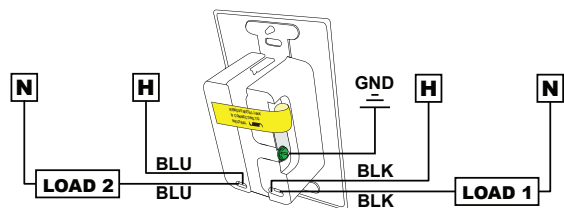
**WIRE COLOR KEY**

**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	

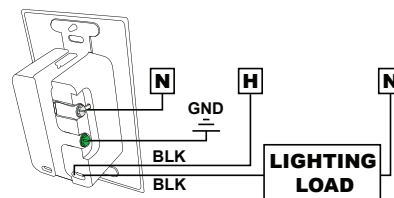
**347 VAC WIRING (-347 Option)**  
Red wires replace Black wires.

DUAL RELAY

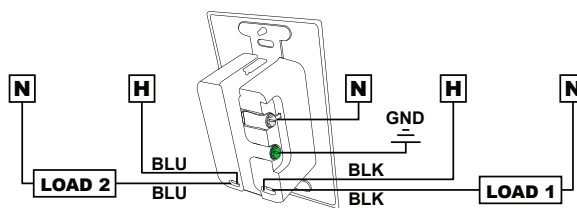


## WIRING TO NEUTRAL

SINGLE RELAY



DUAL RELAY



**Notes:**

- Unit will draw power from either line connection.
- When switching 277 VAC or 347 VAC on both relays, the line inputs must be of the same phase.