

DT VS 1

Dual Technology Vacancy Sensor



The DT VS 1 is a line voltage, single relay, Dual Technology (PIR & ultrasonic) vacancy (manual ON) sensor intended to control lighting in commercial spaces. The combination of both technologies enhances occupancy detection in difficult applications. DIP switch adjustable technology options to maintain the load ON with either or both technologies. The convenient “Switch Link” feature enables up to four sensors to link together for peer to peer grouping achieving expanded detection zones and multiway switching.

Applications

The typical application is for small offices, conference rooms and break rooms where vacancy control (manual ON only) is desired. For best performance use this sensor in enclosed spaces no larger than 20' x 16'.

Key Features:

- PIR & 40 kHz ultrasonic vacancy sensor
- Trigger mode settings enable what sensing technologies are used to keep the load ON
- Adjustable ultrasonic reach setting from 25% to 100%
- Line voltage lighting control (120/230/277 VAC, 50/60 Hz)
- 180° coverage pattern
- Mounts to a single-gang NEMA-style, standard switch box & decorator-style wall plate by others
- “Switch Link” communication allows for up to 4 sensors to be grouped together
- IQ Mode dynamically adjusts the ‘ON’ time delay by learning individual room occupancy

Project Name:	
Location:	
	
DT VS 1 Specifications	
Item No.	66222 DT VS 1-W (white) 66232 DT VS 1-LA (Light Almond) 54754 DT VS 1-BK (black) 54755 DT VS 1-GY (gray)
Voltage	120/230/277 VAC, 50/60 Hz
Mounting	single-gang NEMA-style switch box (standard switch box) & decorator-style wall plate by others
Load Rating	0-800 watts @ 120/230/277 VAC, 50/60 Hz tungsten, magnetic or electronic ballast • 1/6 hp 0-600 watts @ 120/230/277 VAC, 50/60 Hz CFL or LED electronic ballasts C ≤ 132 µF max.
Sensing Technology	40 kHz ultrasonic & passive infrared
Time Setting	IQ/Test, 5, 15, 30 minutes
Environment	IP20 rated, 0°C to +40°C, 32°F to +104°F
Ultrasonic Coverage at 1.2 m / 4 ft Mounting Height	minor motion: max. 8 x 8 m (64 sq.m.) max. 18 x 12 ft (216 sq.ft.) radially: max. 7 m (77 sq.m.) 24 ft (904 sq.ft.) tangentially: max. 7 m (77 sq.m.) 24 ft (904 sq.ft.)
PIR Coverage at 1.2 m / 4 ft Mounting Height	minor motion: max. 6.5 x 5.5 m (36 sq.m.) max. 21 x 18 ft (378 sq.ft.) radially: max. 7 m (77 sq.m.) 24 ft (904 sq.ft.) tangentially: max. 20 m (628 sq.m.) 54 ft (4,500 sq.ft.)
Dimensions	105 x 44.1 x 45.1 mm, 4.13 x 1.74 x 1.78 in, (LxWxD)
Warranty	5 years
Certifications	C-UL-US Listed, RoHS compliant, California Compliant

- Walk through mode option will switch the load OFF in 3 minutes if no additional detection occurs after the first 30 seconds
- Audible alert feature provides an audible warning that the load will shut-OFF in 10 seconds unless additional motion is detected
- Visible alert feature provides a momentary OFF/ON blink, warning that the load will shut OFF in 10 seconds unless additional motion is detected
- Re-trigger feature allows the load to turn back ON automatically if motion is detected within 30 seconds after it has automatically switched off the load

**DUAL
TECH**

Passive Infrared
Ultrasonic



21 Ft Minor Motion
54 Ft Tangential

**120 / 230 /
277 V**

Manual ON

**Vacancy
Sensor**

Manual ON Only



IQ/Test, 5, 15, 30 Min



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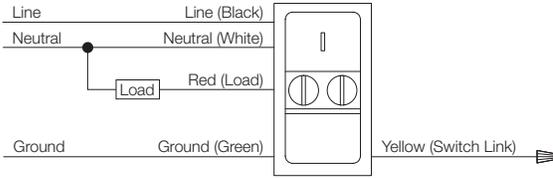
DT VS 1

Dual Technology Vacancy Sensor

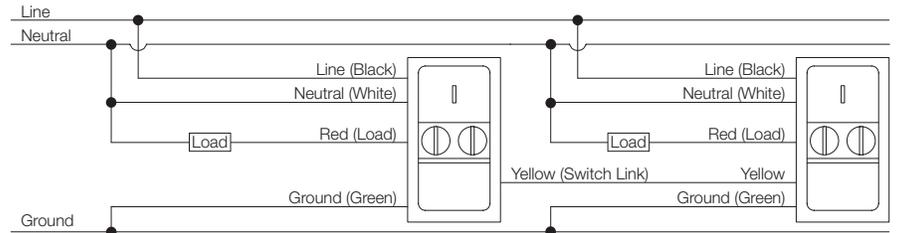


Wiring

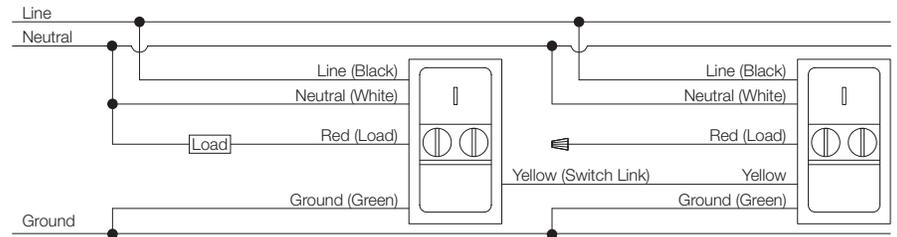
VS 1 Basic Wiring



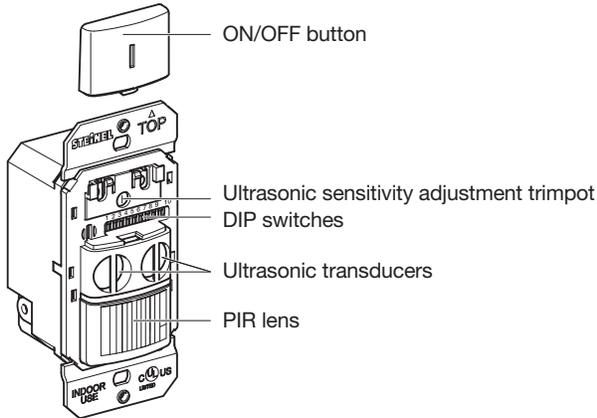
VS 1 (Master / Master) Three-way Wiring - up to maximum 4 sensors can be grouped via "Switch Link"



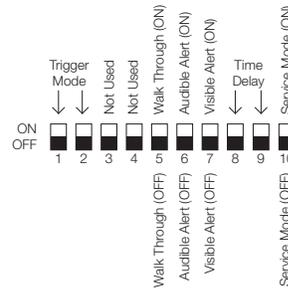
VS 1 (Master / Auxiliary) Three-way Wiring - up to maximum 4 sensors can be grouped via "Switch Link"



Component



Settings

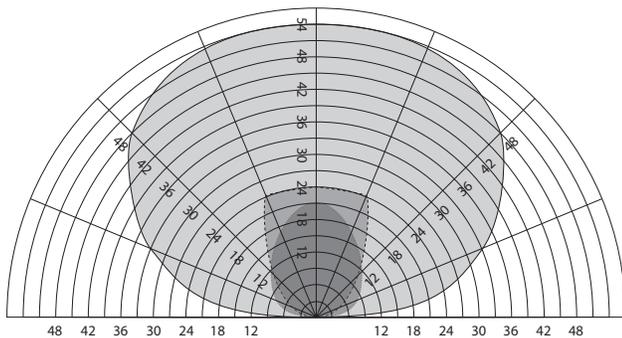


Trigger Mode	Maintain Occupancy	Retrigger Occupancy	1	2
Factory Setting	Either	Either	OFF	OFF
Option B	PIR	PIR	ON	OFF
Option C	Both	Both	ON	ON

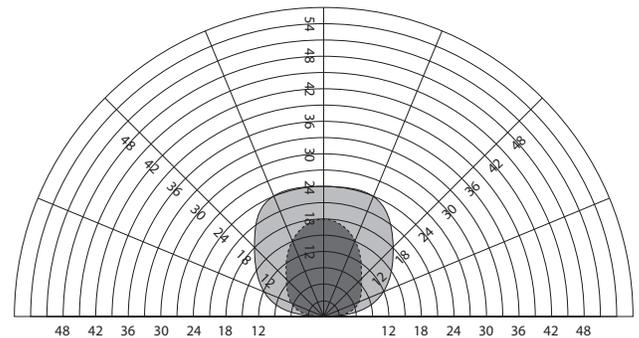
Time Delay	8	9
IQ / Test	OFF	OFF
5 Minutes	OFF	ON
15 Minutes	ON	OFF
30 Minutes	ON	ON



Coverage



— PIR Tangential Coverage
 PIR Radial Coverage
 PIR Minor Motion Coverage



— Ultrasonic Tangential and Radial Coverage
 Ultrasonic Minor Motion Coverage

The sensors ultrasonic sensitivity and reach is adjusted with a trim potentiometer (dial). The left stop is minimum 25% (counter clockwise) the right stop is maximum 100% (clockwise).