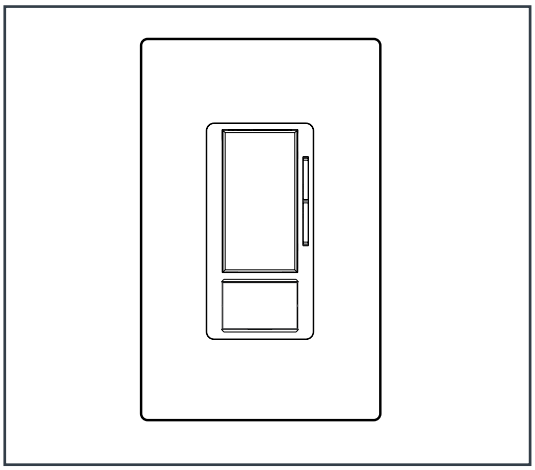
WALL SWITCH SENSOR WITH 0–10V DIMMING (WS OS I 10 XX)



APPLICATIONS

• Small offices • Conference rooms • Lounges • Classrooms

SPECIFICATIONS

ELECTRICAL	
Regulatory Approvals	• UL Listed to U.S. and Canadian safety requirements • Title 20/24 certified lighting control device - Complies with Title 20 and Title 24 Section 110.9
Operating Voltage	120 – 277 V ⏦ 50/60 Hz
Load Rating	• A 0–10 V ⎓ electronic fluorescent ballasts or LED drivers • Works with all ballasts and drivers that provide a current source compliant to IEC 60629 Annex E.2, and whose inrush current does not exceed NEMA410 standards for electronic ballast/driver loads of 8 A steady state current. • 50 mA max sink current • Controls up to 25 ballasts or drivers (IEC 60929 Annex E.2 requires the ballast/driver to limit the current draw 2.0 mA maximum)
ENVIRONMENTAL	
Ambient Operating Temperature	32°F to 104°F (0°C to 40°C)
Relative Humidity	0% to 90% non-condensing; indoor use only
OTHER	
Warranty	Limited Five-Year Warranty

OVERVIEW

Wall Switch Sensors with 0–10V Dimming are lighting controls with passive infrared sensors that automatically control the lights in an area. These sensors detect heat from occupants moving within an area to determine when the space is occupied.

FEATURES

- Controls 0–10V ⎓ electronic fluorescent ballasts or LED driver load types
- Passive infrared motion detection with exclusive Lutron XCT Technology for fine motion detection
- Up to 30ft x 30ft (9m x 9m) [900ft^2 (81m^2)] major motion coverage and 20ft x 20ft (6m x 6m) [400ft^2 (36m^2)] minor motion coverage. 180° sensor field-of-view
- Occupancy version can be set to auto-on/auto-off or manual-on/auto-off.
- Adjustable settings for auto-on light level (occupied level): 100%, 50%, last light level, or locked preset light level
- Vacancy version available to meet CA Title 24 requirements
- Adjustable timeout: 1, 5, **15***, or 30 minutes. Off warning fades light out over a 10 second period
- Adjustable sensitivity level: **High***, Med, Low, Min
- Features locked preset, Fade-to-On, and Fade-to-Off. Adjustable Fade-to-On/Fade-to-Off rate: 0.75, **2.5***, 5 or 15 seconds.
- On a single-tap, lights fade ON or OFF, on a double-tap, lights go to full ON.
- Light levels can be fine-tuned by pressing and holding the dimming rocker until the desired light level is reached
- Adaptive switching algorithm for extended relay life
- Smart ambient light detection (ALD)
- High-end trim (adjust maximum light level that can be achieved, for energy savings) and low-end trim (adjust minimum light level that can be dimmed down, to prevent flickering lights)
- Selectable dimming curve—linear or square law. Drivers exist with linear response and some exist with square law response. By providing a selectable dimming curve from the 0–10V Dimmer Sensor, the user is able to choose his/her preferred response for optimized dimming performance.
- Miswire and incompatible load alert. The user will receive a visual alert when the product's 0–10V ⎓ control wires are incorrectly connected or an incompatible load is detected. In these conditions, the product will still function as a switch.

*** Default factory settings shown in bold**

ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
632700XXX*	WS OS I 10 XX*	Wall switch occupancy sensor w/ 0–10V dimming 8AMP capacity; Auto-on/auto-off or manual-on/auto-off
632704XXX*	WS VS I 10 XX*	Wall switch vacancy sensor w/ 0–10V dimming 8AMP capacity; Manual-on/auto-off only

* Available in White (WHT/WH), Ivory (IV), and Light Almond (LA) Example: 632700WHT or WS OS I 10 WH

LOAD TYPE AND CAPACITY

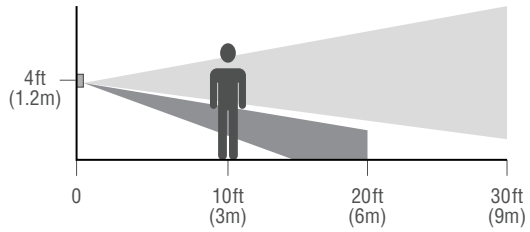
CONTROL	NEUTRAL CONNECTION	VACANCY ONLY	0–10V CURRENT	VOLTAGE/LOAD TYPE/MAXIMUM LOAD (ANYWHERE IN GANG)	MINIMUM LOAD	3-WAY WITH MECHANICAL SWITCH	MULTI-LOCATION WITH ACCESSORY SWITCH
WS OS I 10 XX	Optional	—	50 mA max sink	120–277V Electronic fluorescent ballast or LED drivers, 8 A	0 A	✓	✓
WS VS I 10 XX	Optional	✓	50 mA max sink	120V Fan 4.4 A (1/6 HP)	0 A	✓	✓

WALL SWITCH SENSOR WITH 0–10V DIMMING (WS OS I 10 XX)

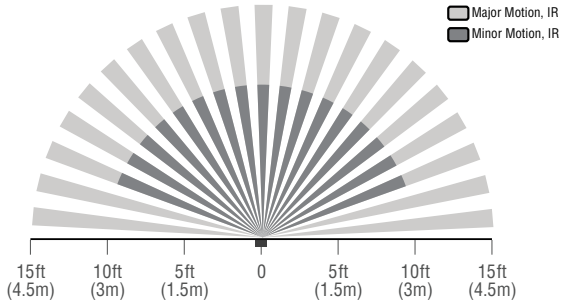
DIMMER SENSOR PLACEMENT AND OPERATION

The ability of the Dimmer Sensor to detect motion requires line-of-sight of room occupants. The Dimmer Sensor must have an unobstructed view of the room. Hot objects and moving air currents can affect the performance of the Dimmer Sensor. For best performance, it should be mounted at least 4ft (1.2m) away from HVAC vents and light bulbs. It is also reliant on a temperature difference between the ambient room temperature and that of room occupants. Warmer rooms may reduce the ability of the Dimmer Sensor to detect occupants.

VERTICAL BEAM DIAGRAM



HORIZONTAL BEAM DIAGRAM

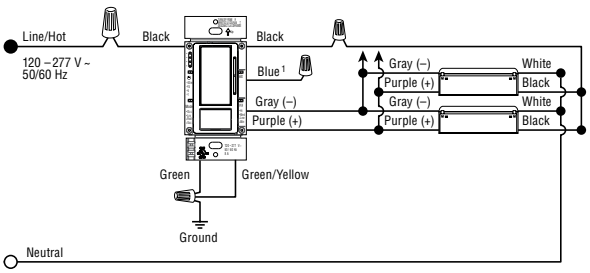


WIRING INSTALLATION DIAGRAMS

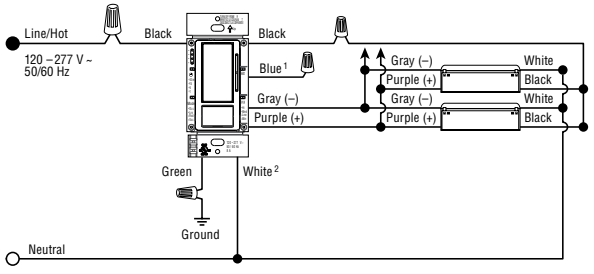
In order to function, the 0–10V Dimmer Sensor must either have the green/yellow wire connected to the ground, or, with the white sleeve covering the green/yellow wire, connect to neutral. Before installing wallplate, program all desired settings.

SINGLE-POLE INSTALLATION

Without Neutral



With Neutral

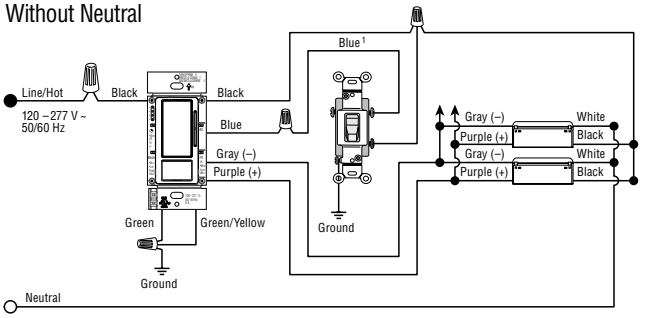


1 When using controls in single location installations, cap the blue wire. Do not connect the blue wire to any other wiring or to ground.

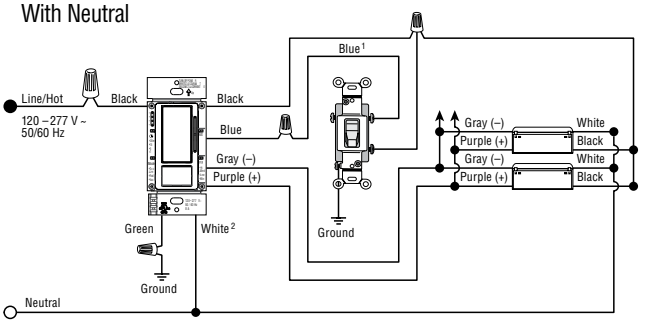
2 Green/Yellow wire covered by white sleeve connects to neutral.

3-WAY INSTALLATION* WITH STANDARD MECHANICAL SWITCH**

Without Neutral



With Neutral



* One Dimmer Sensor can be installed in any location.

** Important: Some rewiring of 3-way mechanical switch is required.

1 The length of the Blue wire (3-way wire) must not exceed 150 ft (45.72 m)

2 Green/Yellow wire covered by white sleeve connects to neutral.