

OVERVIEW

The Sensor Switch MSD 7 is a passive infrared (PIR) occupancy sensor designed to be easily embedded into luminaires. This "micro" sensor directly wires to 0-10 VDC dimmable LED drivers and fluorescent ballasts, providing occupancy based high/low dimming control. The MSD 7 provides excellent line of sight 360° PIR detection of both small motion and walking motion making it ideal for small rooms or offices without obstructions or areas with primarily walking motion (e.g. corridors, library stacks). For outdoor applications, the MSOD 7 ODP sensor provides both Motion and Daylight based control of a 0-10 VDC dimmable outdoor or wet location luminaire.

HIGH/LOW OCCUPANCY SENSOR OPERATION

The sensor indicates occupancy when changes in the infrared energy within its field-of-view are detected. Once occupancy is detected, the 0-10 VDC output will ramp up to its full bright setting. An internal time delay, factory set at 10 minutes, keeps the sensor in the occupied state (full bright) during brief periods of inactivity. The timer is adjustable, and is reset every time occupancy is re-detected. After the occupancy time delay expires, the sensor will dim the lights down to the user selected minimum dim level where it will stay until occupancy is re-detected.

FEATURES

- 100% Digital PIR Detection, Excellent RF Immunity
- 0-10 VDC Control Output
- Snap-in Style Embedded Mounting Compatible w/ 0-10 VDC Dimmable Ballasts and LED Drivers
- Adjustable Time Delays
- Programming Button Accessible w/o Opening Sensor
- Adjustable Time Delay, Max/Min Dim Levels, and Ramp Rates
- No Field Calibration or Sensitivity Adjustments Required
- Non-Volatile Settings Memory
- Convenient Test Mode
- Green LED Indicator
- Configurable using the SensorSwitch Mobile App

Warranty

Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Note: Actual performance may differ as a result of end-user environment and application. Specifications subject to change without notice



*MSD 7
MSD PDT 7
Indoor Embedded 360°
Motion Sensor*



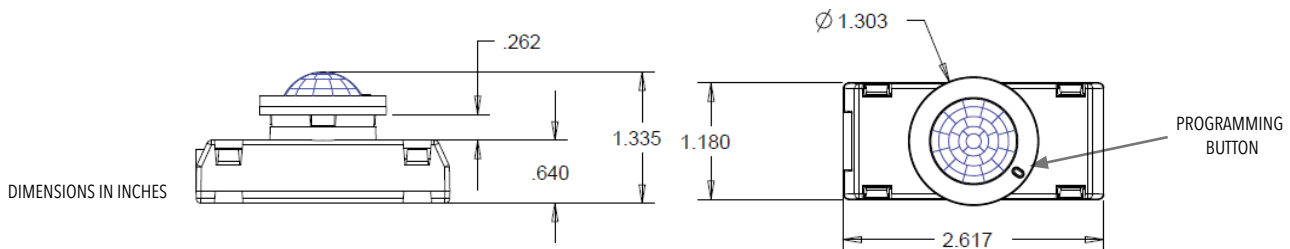
ORDERING INFORMATION

MSD (PDT) 7		Example: MSD 7 EZ ADC WH									
Series		eldoLED Compatibility		Automatic Dimming Control		Visible Light Programming		Color		Min Dim Level	
MSD 7	Indoor Embedded Occupancy Sensor	[blank]	None	[blank]	None	[blank]	None	WH	White	0V	~0 VDC
MSD PDT 7	Indoor Embedded Occupancy Sensor-Dual Technology	EZ ¹	eldoLED Driver Compatible	ADC	Integrated Dimming Control	VLP				1V	1 VDC
										2V	2 VDC
										3V	3 VDC
										4V	4 VDC
										5V	5 VDC

Notes

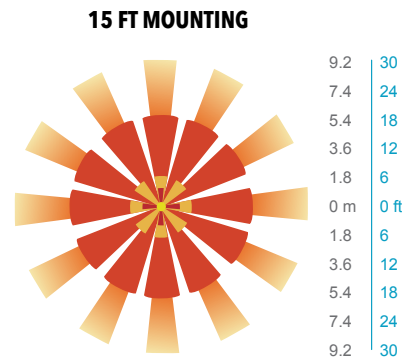
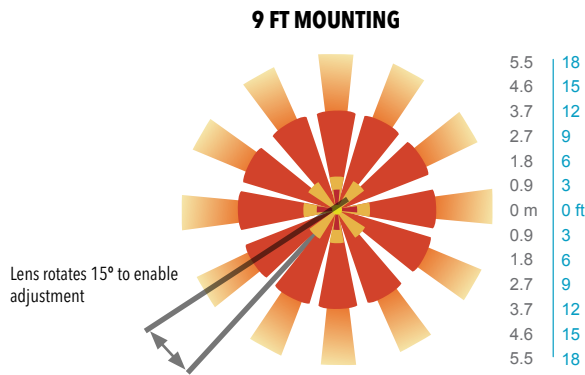
1. Min Dim Level default set to 1.5VDC for EZ option.

DETAILS



COVERAGE PATTERN

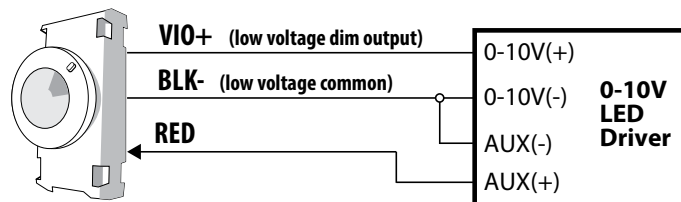
- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and 1.75x up to 20 ft (6.10 m).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- At the 7.5 ft (2.29 m) hanging height of a typical pendant or suspended mount fixture the sensor provides 10 ft (3.05 m) radial detection of small motion.
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor



WIRING

- RED** - 12-24 VDC Power Input
- VIOLET** - Low Voltage Dim Output (0-10 VDC)
- BLACK** - Low Voltage Common

Note: Do not connect the dimming wires of multiple sensors in parallel.



INSTALLATION

MOUNTING

- If not pre-installed, locate sensor body so that detector faces down through 1.125" hole in luminaire.
- Install gasket around detector on outside of luminaire.
- Align lens assembly legs with holes in sensor body and snap together (max material thickness 0.25").
- Apply foam spacer pads onto sensor body if needed to ensure snug fit with fixture.
- Assembly rotates 15° to enable coverage pattern adjustment after installation.
- To unsnap lens assembly, pry up under lip at spots on lens assembly denoted by arrows.

DIAGRAM 1. INSTALLATION EXAMPLE

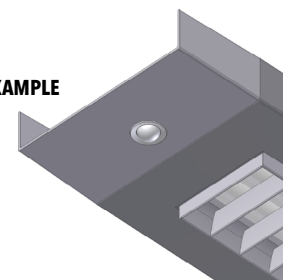
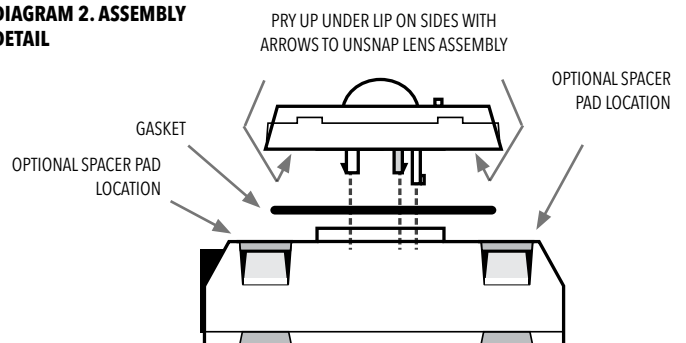


DIAGRAM 2. ASSEMBLY DETAIL



PROGRAMMING

Refer to included instruction card IC14.001 for default settings and directions on programming the sensor via the push-button (located in face of ring around lens).

SPECIFICATIONS

Electrical

Input Ratings	12-24VDC, 4mA, Class 2
Low Voltage Output Ratings	0-10VDC, 17mA max
Standards/ Ratings	Energy Management Equipment, UL916 (E167435)

Mechanical

Dimensions	2.62H" x 1.18W" x 1.34D" (67mm x 30mm x 34mm)
Mounting	Fixture Integrated Required hole size of 1.125" and material thickness of 0.25" max
Connection Type	Low Voltage Leads

Environmental

Warrantied Operating Temperature	-4°F to 140°F (-20°C to 60°C)
Relative Humidity	Up to 90%, Non-Condensing
Environment	Indoor
Standards/ Ratings	RoHS