

# Decora® Wall Switch PIR Occupancy Sensor with Self-Adaptive Technology



ODS15-IA/IN

## BASIC OPERATION

The Decora® Wall Switch Passive Infrared (PIR) Wall Switch Occupancy Sensor (ODS15-IA/IN) uses PIR detection technology to monitor a room for occupancy through a segmented Fresnel lens. This specialized lens divides the field-of-view into sensor zones. When a person passes into or out of a sensor zone, the sensor detects motion and switches the lights ON. The lights will remain ON as long as there is an occupant moving through the sensor zones.

A delayed-OFF time adjustment prevents the lights from switching OFF when the space is occupied. In order to keep the lights ON, a person must pass through a sensor zone at least once during the selected delayed-OFF time interval. An LED indicator blinks each time the unit detects activity in the sensor zones. When the space being monitored by the sensor is unoccupied for the length of time chosen as the delayed-OFF interval, the unit will beep 3 times. Ten seconds after the last warning beep, the unit will switch the lights OFF.

## APPLICATIONS

The ODS15-IA/IN is used to provide automatic lighting control for energy savings and convenience in a variety of commercial applications, including:

- Small offices
- Private Restrooms
- Storage areas
- Conference rooms
- Heavier loads
- Lounges
- Classrooms

The ODS15-IA/IN can be used for automatic switching of incandescent lamps and low-voltage lighting with electronic and magnetic ballasts. The unit also features a manual override switch that can be used to keep lights OFF while an area is occupied, which may be desired in conference rooms and other areas during slide or film presentations. The unit installs in place of a single-pole wall switch and fits in a standard wall box. The unit requires a ground connection.

ODS15



## PRODUCT DATA

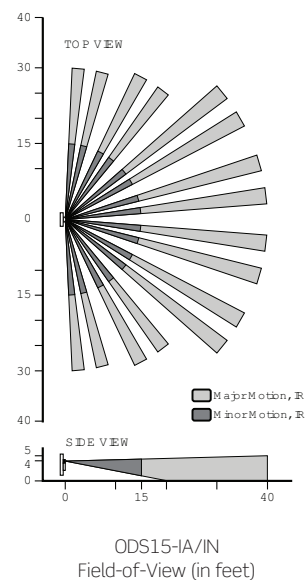
### FEATURES

- Fits in standard wallbox and replaces single-pole wall switch; ground connection required. Gangable with other units.
- Low-profile design eliminates obtrusive “scanning-device” look. Elegant Decora wallplates complement any interior for sleek aesthetics; uses Decora wallplates and coordinates with Leviton’s popular line of Decora wiring devices
- 180° field-of-view provides approximately 2,100 square feet of coverage suitable for small offices, conference rooms, class rooms, stock rooms, lounges, private restrooms and a variety of commercial areas
- Convenient pushbutton provides manual-ON/OFF light switching at any time
- Two dual element PIR sensors used to widen detection range
- Segmented Fresnel lens provides optimum sensitivity and performance. Designed with an extensive “minor motion” area where even slight body movements will be detected.
- Vandal resistant PIR lens
- Blinders — horizontal field-of-view may be adjusted between 180° and 60° of arc by using integral blinders located on either side of the lens. No masking tape required.
- Manual-ON/auto-OFF mode for installations where manual-ON switching is required but auto-OFF switching is still desired for Title 20 energy savings
- To comply with Title 20, red LED indicator light flashes when PIR sensor detects motion to verify detection is active.
- Time Delay — In adapting mode, the time delay can be configured from 30s (test mode), 5, 10, and 20 minutes. In non-adapting mode, the delay can be configured from 5, 10, 20, and 30 minutes.
- Light Sensor adjustable Ambient Light Override ranges from approximately 2FC (20LUX) to 500+FC (5000+LUX) to prevent lights from turning ON automatically during periods of ample natural light, increasing energy savings
- Light sensor enables the load hold-OFF feature once level has been set
- Self-adjusting delayed-OFF time interval compensates for real-time occupancy patterns, preventing unnecessary ON/OFF switching
- Exclusive Walk-Through feature provides increased energy savings by not leaving the lights ON for an extended period after only momentary occupancy.
- False detection circuitry
- Presentation Mode — feature for slide or film presentations allows pushbuttons to turn lights OFF and keep them OFF while the room is occupied

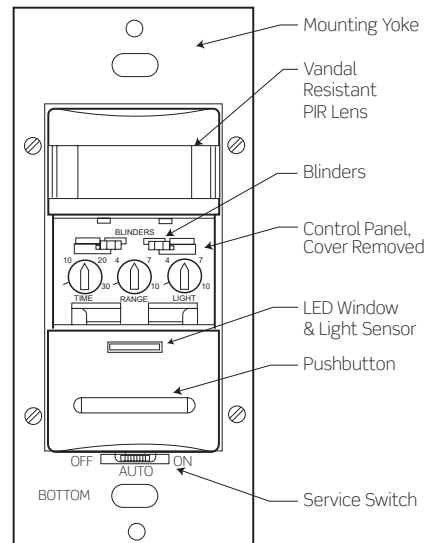
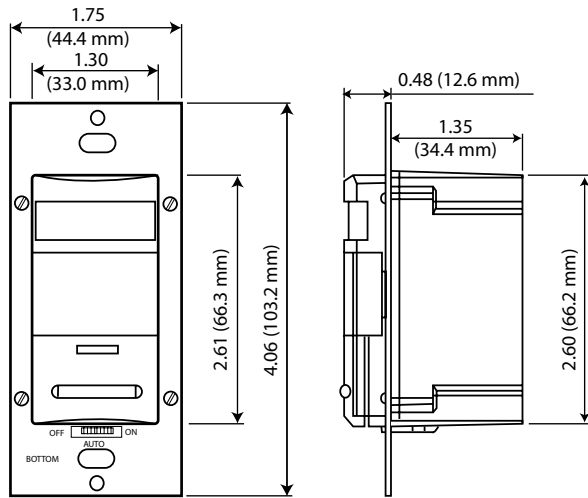
- Additional manual service switch provided for installer to force lights to hold-OFF or hold-ON during installation
- Beep Warn — unit beeps 3 times after delayed-OFF time expires, then waits 10 seconds before turning lights OFF
- Exclusive Leviton H.I.S. Circuitry. Specifically designed to handle today’s high inrush electronic ballast loads and offer unmatched durability and service
- One unit can be used for 120V through 277V lighting. Compatible with both electronic and magnetic ballasts.
- Relay switches at the zero crossing point of the AC power curve to ensure maximum contact life and compatibility with electronic ballasts

### FIELD-OF-VIEW

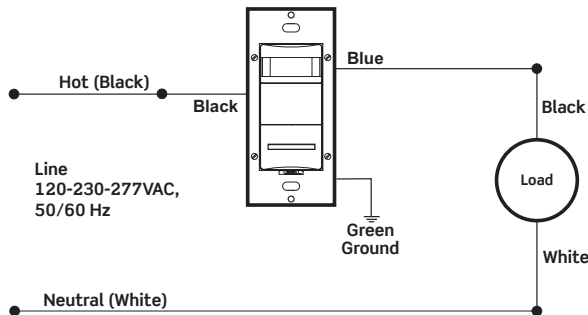
The ODS15-IA/IN provides a 180° field of view with a maximum coverage area of approximately 2,100 square feet. The maximum sensing distance in front of the sensor is 40 feet, and at each side is 30 feet. The “minor motion” zone detects relatively small body movements and allows the lights to stay ON even though a person may not be moving or walking around the room. The remainder of the field-of-view, the “major motion” zone, exhibits a lesser degree of sensitivity and requires larger movements.



**DIMENSIONAL DIAGRAMS**

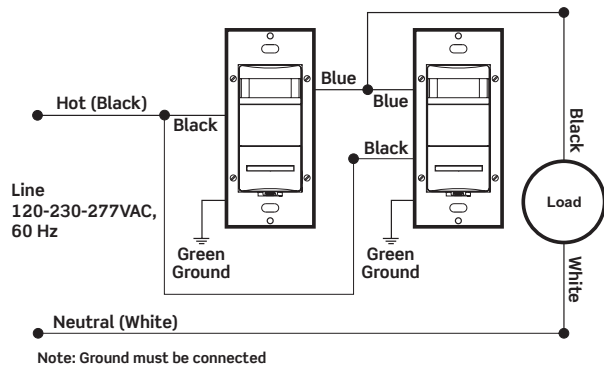


**WIRING DIAGRAMS**



Note: Ground must be connected

ODS15 Single Location Control



Note: Ground must be connected

ODS15 Two-Location Control

## PRODUCT DATA



### INSTALLATION

The ODS15-IA/IN are preset to deliver optimum performance in a wide variety of applications without requiring any adjustments during installation. Exclusive self-adjusting operating features will automatically compensate for real-time occupancy patterns to provide maximum convenience and energy savings. The unit may replace a single-pole wall switch mounted in a standard wallbox. The unit must be properly grounded in order to operate. The unit's integral blinders may be used to restrict the field-of-view to prevent unwanted detection of hallway traffic. It should be positioned at least 6 feet away from HVAC registers. The switch located under the push-button provides three operational setting: "ON" holds the lighting load ON (motion detection not active), "OFF" disconnects the lighting load from the power for relamping purposes, and "AUTO" activates automatic motion detection. Note that whenever the unit is powered up, it will take approximately 1 minute to begin normal operation.

### SPECIFICATIONS

ELECTRICAL	
Line Voltage	120-230-277 VAC
Power Consumption	120V - 120mW; 277V - 280mW
Operational Frequency	50/60 Hz
Wire Designation	Line—Black, Load—Blue, Ground—Green No Neutral Required
Load Rating	Fluorescent: 1800VA @ 120V 4000VA @ 277V Incandescent: 1800W @ 120V Motor: 1/4 HP @ 120V
ENVIRONMENTAL	
Operating Temperature Range	32-122°F (0-50°C)
Storage Temperature Range	14-185°F (-10-85°C)
Relative Humidity	20% to 90% non-condensing
OTHER	
Listings	UL Listed/CSA Certified, CA Title 20 and FCC compliant, NOM certified
Warranty	Limited Five-Year Warranty

### ORDERING INFORMATION

CAT. NO.*	DESCRIPTION
ODS15-IAT	Decora Wall Switch Occupancy Sensor, with self-adjusting features, Light Almond, Made in USA
ODS15-INE	Decora Wall Switch Occupancy Sensor, Manual ON/Auto OFF, color: black, NAFTA compliant

#### Leviton Manufacturing Co., Inc. Global Headquarters

20497 N. Service Rd. Melville, NY 11747-3138 Tech Line: 1-800-824-3005 Fax: 1-800-832-9538

#### Leviton Manufacturing Co., Inc. Lighting & Energy Solutions

20497 SW Teton Avenue, Tualatin, OR 97062 • Tel: 1-800-736-6682 • FAX: 503-404-5594 • Tech Line (6 AM - 4 PM Mon-Fri): 1-800-959-6004

#### Leviton Manufacturing of Canada, Ltd.

165 Hymus Boulevard, Pointe Claire, Quebec H9R 1E9 • Telephone: 1-800-469-7890 • FAX: 1-800-563-1853

#### Leviton S. de R.L. de C.V.

Lago Tana 43, Mexico DF, Mexico CP 11290 • Tel. (+52) 55-5082-1040 • FAX: (+52) 5386-1797 • www.leviton.com.mx

#### Visit our Website at: [www.leviton.com/les](http://www.leviton.com/les)

© 2015 Leviton Manufacturing Co., Inc. All rights reserved. Subject to change without notice.

G-8319C/G15-aa  
REV JUL 2015