LEVITON®

Decora® Wall Switch PIR Occupancy Sensor

ODS10-ID

BASIC OPERATION

The ODS10-ID uses passive infrared (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.

LED READY™

OPTIMAL LED DESIGN

Exclusive LED High Inrush Stability (H.I.S.) circuitry designed to handle the high inrush electronic ballast loads of today's LED lighting and offer unmatched durability and service. Our true Zero-Cross Relay switches are at the zero crossing point of the AC power curve, ensuring maximum contactor life and compatibility with LED ballasts. Leviton Occupancy and Vacancy Sensors are the premiere choice for LED compatibility.

APPLICATIONS

Leviton's Cat. No. ODS10-ID Decora® Wall Switch Passive Infrared (PIR) Occupancy Sensor is used to provide automatic lighting control for energy savings and convenience in a variety of commercial applications including:

• Small offices
• Conference rooms
• Lounges
• Classrooms

The ODS10-ID can be used for automatic switching of incandescent lamps and fluorescent and low-voltage lighting with electronic or 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.
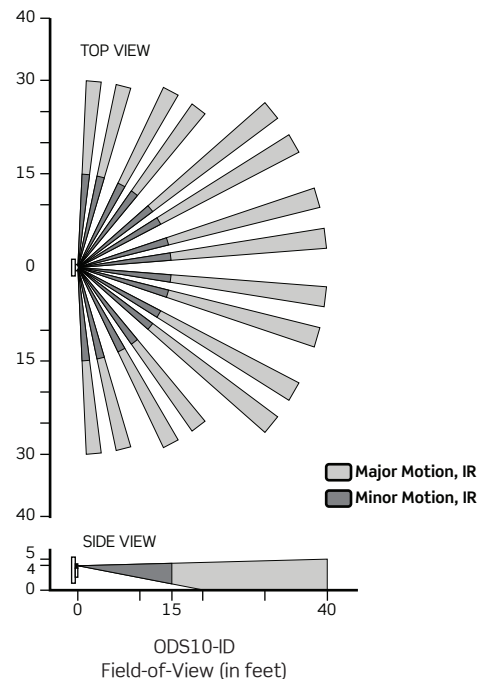
ODS10

PRODUCT DATA

FEATURES

- Fits in standard wallbox and replaces single-pole wall switch. 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 2100 square feet of coverage suitable for small offices, conference rooms, classrooms, lounges 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.
- Patented 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 CA Title 20/24 energy savings.
- To comply with CA Title 20, red LED indicator light flashes wh en sensor detects motion to verify detection is active.
- Time Delay adjustment for delayed-OFF time settings of 30 seconds (for walking test), 10 minutes, 20 minutes, and 30 minutes. Allows customized adjustments to maximize energy savings.
- Light Sensor Adjustable Ambient Light Override ranges from approximately 2 foot-candles (20 lux) to 500+ foot-candles (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.
- Vacancy confirmation - when the time out expires and the lights turn OFF a 30 second vacancy confirmation exists to turn the lights back ON.
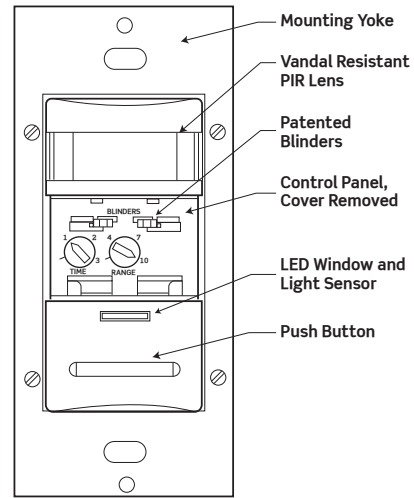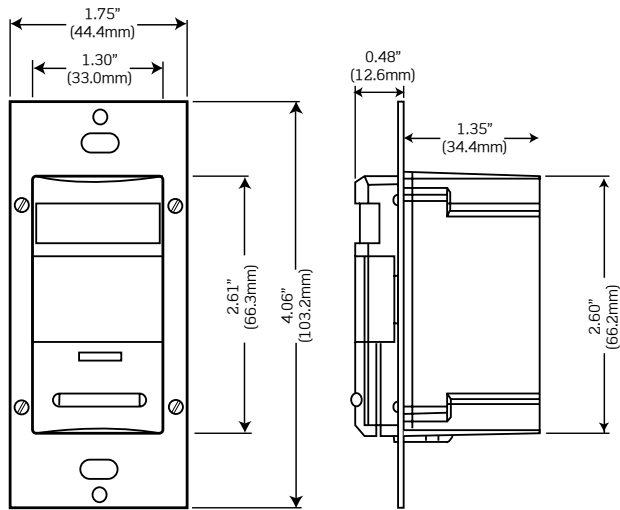- False detection circuitry.

- Presentation Mode feature for slide or film presentations allows push buttons to turn lights OFF and keep them OFF while the room is occupied.
- 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.
- Exclusive Leviton H.I.S. Circuitry. Specifically designed to handle today's high inrush electronic ballast loads and offer unmatched durability and service.
- No neutral design is optional for retrofit applications.
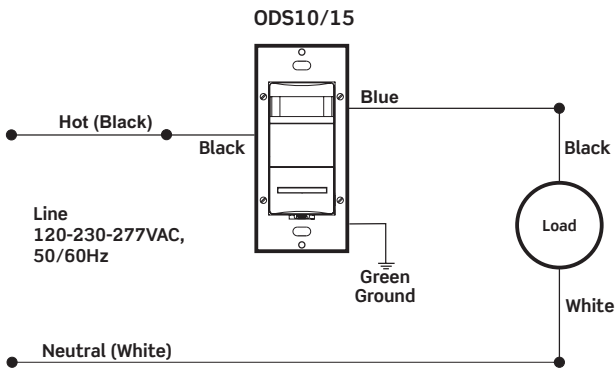
FIELD-OF-VIEW

The ODS10-ID provides a 180° field-of-view with a maximum coverage area of approximately 2100 square feet. The maximum sensing distance in front of the sensor is 40 feet, and at each side is 30 feet. A "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.

TOP VIEW

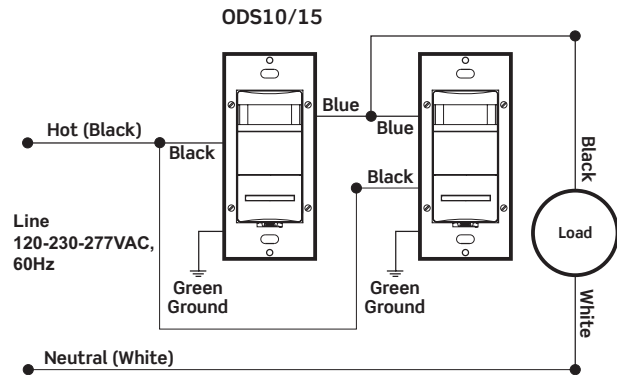Major Motion, IR
Minor Motion, IR

SIDE VIEW

ODS10-ID
Field-of-View (in feet)

DIMENSIONAL DIAGRAMS

1.75"
(44.4mm)

1.30"
(33.0mm)

0.48"
(12.6mm)

1.35"
(34.4mm)

2.61"
(66.3mm)

4.06"
(103.2mm)

2.60"
(66.2mm)

Mounting Yoke

Vandal Resistant
PIR Lens

Patented
Blinders

Control Panel,
Cover Removed

BLINDERS

TIME   RANGE

LED Window and
Light Sensor

Push Button

WIRING DIAGRAM

ODS10/15

Hot (Black)

Blue

Black

Black

Line
120-230-277VAC,
50/60Hz

Load

Green
Ground

White

Neutral (White)

Note: Ground must be connected

ODS10/15 Wall Switch Occupancy Sensor Wiring Diagram,
Single Location Control

ODS10/15

Hot (Black)

Blue

Blue

Black

Black

Line
120-230-277VAC,
60Hz

Black

Load

Green
Ground

Green
Ground

White

Neutral (White)

Note: Ground must be connected

ODS10/15 Wall Switch Occupancy Sensor Wiring Diagram,
Multi-Location Control

ODS10

Leviton Mfg. Co., Inc. Lighting & Energy Solutions

ODS10

INSTALLATION

The ODS10-ID 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. Note that whenever the unit is powered up, it will take approximately one minute to begin normal operation.

ELECTRICAL	
Line Voltage	120-230-277 VAC
Power Consumption	120V - 100mW 277V - 250mW
Operational Frequency	50/60Hz
Wire Designation	Line - Black, Load - Blue, Ground - Green No neutral required
Load Rating	Fluorescent: 1200VA @ 120V, 2700VA @ 277V Incandescent: 800W @ 120V Motor: 1/4 HP @ 120V
ENVIRONMENTAL	
Operating Temperature Range	32°F to 122°F (0°C to 50°C)
Storage Temperature Range	14°F to 185°F (-10°C to 85°C)
Relative Humidity	20% to 90% non-condensing
OTHER	
Listings	UL Listed/CSA Certified, CA Title 20/24, Compliant, Complies with FCC Regulations, NOM Certified
Warranty	Limited Five-Year Warranty

ORDERING INFORMATION

CAT. NO.*	DESCRIPTION
ODS10-ID	**Decora Wall Switch Occupancy Sensor**

To indicate color, add suffix to the end of the catalog number.
White (-W) , Ivory (-I), Light Almond (-T), Gray (-G), Ebony (-E), and Red (-R).
*NAFTA compliant and Made in USA models available.

Leviton Manufacturing Co., Inc. Global Headquarters
201 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 (6:00AM-4:00PM P.S.T. 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