ODS10-I3 Decora® Wall Switch PIR Occupancy Sensor

ODS10-I3

APPLICATIONS

The ODS10-I3 is used to provide automatic lighting control for energy savings and convenience in a variety of commercial applications, including:

- Small offices
- Lounges
- Conference rooms
- Classrooms

The ODS10-ID can be used for automatic switching of LED, 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 347V wall box. The unit requires a ground connection.

BASIC OPERATION

The Leviton Decora® Wall Switch Passive Infrared (PIR) Occupancy Sensor (ODS10-I3) 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.

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 switch the lights OFF.

To ensure longer service life and compatibility with electronic ballasts, the device carefully times its switching contact opening and closing with zero crossing point of the AC power curve. This minimizes contact wear caused by in-rush currents from electronic ballasts.

PUSH-BUTTON MANUAL OVERRIDE CONTROL

For manual control, the ODS10-I3 features a convenient pushbutton switch. If the lights are OFF, pressing the button will turn lights ON and keep them ON for as long as the room is occupied. The lights will turn OFF once the room is vacant, after the delayed-OFF time expires. If the lights are ON, pressing the button will turn lights OFF and keep them OFF even if the room is occupied. This feature is particularly useful for slide or film presentations. The lights can be turned back ON by simply pressing the button. The unit will then return to normal operation. If the button is not pressed to turn the lights back ON and the unit does not detect any motion during the delayed-OFF time interval, the lights will remain OFF. The unit then returns to normal operation where the lights will remain OFF until it detects occupancy and automatically switches lights ON.

MANUAL-ON/AUTO-OFF MODE

In this mode, the unit will not turn lights ON automatically when motion is detected. Lights can only be turned ON by manually pressing the push-button. The lights will remain ON as long as the unit detects activity in the sensor zones. The ODS10-I3 will shut lights OFF automatically after the space becomes unoccupied and the delayed-OFF time expires. Lights can also be turned OFF manually at any time by pressing the push-button. This mode is ideal for areas where manual-ON switching is required but automatic-OFF switching is desired for energy savings.

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PRODUCT DATA

ODS10-I3

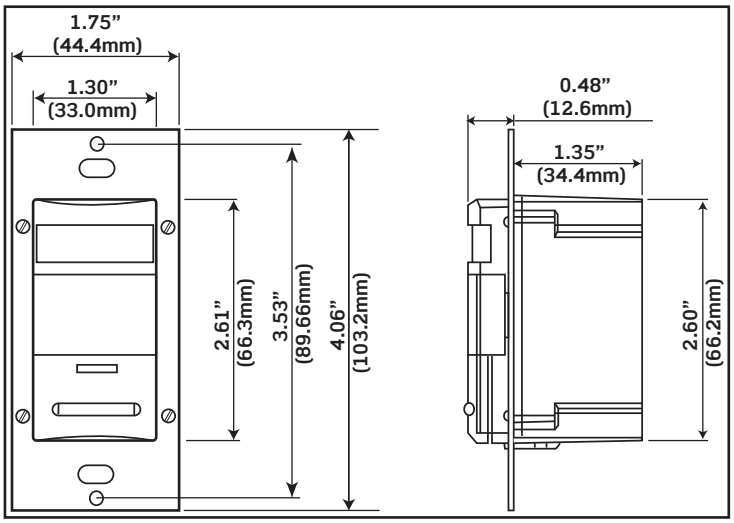
SPECIFICATIONS

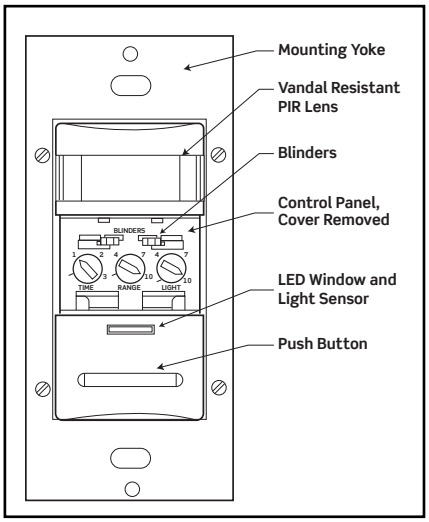
The ODS10-I3 is capable of detecting infrared emissions from human presence and responding by switching incandescent, low voltage and fluorescent lighting loads ON. If this unit does not detect movement after a pre-set period of time, it will respond by switching its assigned load OFF. The unit shall switch at the zero crossing point of the AC power curve to ensure maximum relay contact life and compatibility with electronic ballasts. The ODS10-I3 is equipped with a push button to provide manual-ON and manual-OFF switching. The ODS10-I3 features adjustable delayed-OFF time and ambient light override capabilities and sensitivity adjustment and integral sliding blinders to customize the horizontal field-of-view.

FEATURES AND BENEFITS

- Low-profile design eliminates obtrusive "scanning-device" look
- Elegant Decora styling compliments any interior
- Uses Decora wallplates and coordinates with popular Leviton Decora wiring devices
- 180° field-of-view provides approximately 2,100 square feet of coverage suitable for small offices, conference rooms, classrooms, lounges and a variety of commercial areas
- Convenient push-button provides manual-ON and manual-OFF switching at any time
- Segmented Fresnel lens provides optimum sensitivity and performance
- Designed with an extensive "small motion" area where slight body movements can be detected
- Horizontal field-of-view may be adjusted between 180° and 32° of arc by using integral blinders located on either side of the lens
- Customized adjustments such as delayed OFF time settings allows for maximum energy savings
- Adjustable ambient light override ranges from approximately 2FC (2 1.52 Lux) to 500FC (5381 Lux) prevent lights from automatically turning ON during periods of ample natural light and increases energy savings
- Manual-ON/Auto-OFF mode for installations where manual-ON switching is required but automatic-OFF switching is still desired for energy savings
- LED indicator light flashes when the sensor detects motion and verifies detection is still active
- 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
- Fits in a 347V wallbox and replaces single-pole wall switches
- cUL listing complies FCC regulations
- Limited 5-year warranty

DIMENSIONS





FIELD-OF-VIEW

The ODS10-ID 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. A “small-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.

ENHANCED ADJUSTMENT OPTIONS

The ODS10-I3 delivers optimum performance in a wide variety of commercial applications. There are optimal adjustments for sensitivity, ambient light override, delayed-OFF time and field-of-view. These adjustments will customize the performance to meet the needs of specific installations. To avoid tampering, all adjustments can only be accessed by removing the control panel cover. A small flathead screwdriver can be used to control knobs and the field-of-view binders are finger-tip operated. Controls are labeled as follows:

BLINDERS

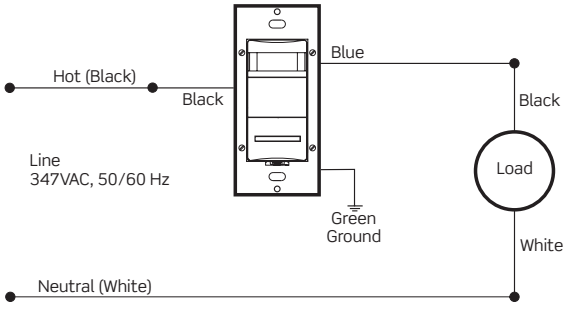
Integral sliding blinders on each side of the lens may be used to restrict the 180° field-of-view down to 32° preventing unwanted detection in areas such as hallways.

TIME

The delayed-OFF time is preset at 10 minutes with a choice of four delayed-OFF time settings available:

- 30-seconds (for walking test purposes only)
- 10 minutes
- 20 minutes
- 30 minutes

WIRING DIAGRAM



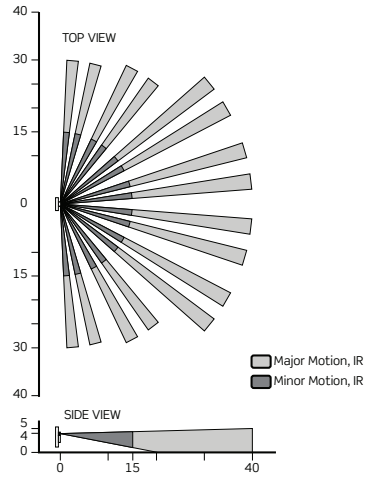
Note: Ground must be connected

RANGE

Reducing the coverage range allows the unit to ignore motion at the far end of the its range and avoid unnecessarily switching lights ON. The range can be adjusted from 100% to 36% of the total coverage area.

LIGHT

To maximize energy savings in some installations, the ambient light override feature will prevent the sensor from switching lights ON when there is ample natural sunlight, regardless of occupancy. This adjustment should be made when the ambient light is at the level where no artificial light is needed. The ODS10-I3 is factory preset without an ambient light override in effect. This means the unit will switch lights ON when it detects occupancy, regardless of the amount of natural light present.



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INSTALLATION

The ODS10-ID may replace a single-pole wall switch mounted in a 347V 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 4 feet away from HVAC registers. Note that whenever the unit is powered up, it will take approximately one minute to begin normal operation.

ELECTRICAL REQUIREMENTS	
Line Voltage	347V
Operational Frequency	6 Hz
Wire Designation	Line—Black , Load—Blue, Ground—Green
Load Rating	Incandescent and Fluorescent @ 347V, 10A, 3470 Watts/VA Motor: 1/4 HP
ENVIRONMENTAL	
Operating Temperature Range	0 to 50°C
Storage Temperature Range	-10 to 85°C
Relative Humidity	20% to 90% non-condensing
OTHER	
Listings	UL listed/CSA certified, complies with FCC regulations
Warranty	Limited Five-Year Warranty

ORDERING INFORMATION

CAT. NO.*	DESCRIPTION
ODS10-I3*	Decora Wall Switch Occupancy Sensor, 347V

*To indicate color, add suffix to the end of the catalog number. White (-W) , Ivory (-I)

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G-9954A/J16-aa
REV OCT 2016