

Decora® Wall Switch Lev-Lok® PIR Occupancy Sensor



BASIC OPERATION

The MDS10-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.

LEV-LOK TECHNOLOGY

Lev-Lok's innovative design streamlines installation and reduces costs. In just two easy steps, the wiring device is securely attached to the wiring module. Place the wiring module over the device's connection pins and twist clockwise to lock. Replacement is just as easy—just turn counter-clockwise to unlock and remove. The module is keyed so that it cannot be installed incorrectly. This not only saves time during the initial installation, but makes maintenance applications quicker, safer and easier as well.

APPLICATIONS

Leviton's Cat. No. MDS10-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 MDS10-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.

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 compliment 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
- Lev-Lok makes installation and replacement simple with latch-and-lock system which streamlines installation and reduces costs
- The Lev-Lok wiring module is keyed so that it cannot be installed incorrectly, saving time during installation and making maintenance quicker, safer and easier
- 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 CEC Title 24 energy savings
- Red LED indicator light flashes when 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

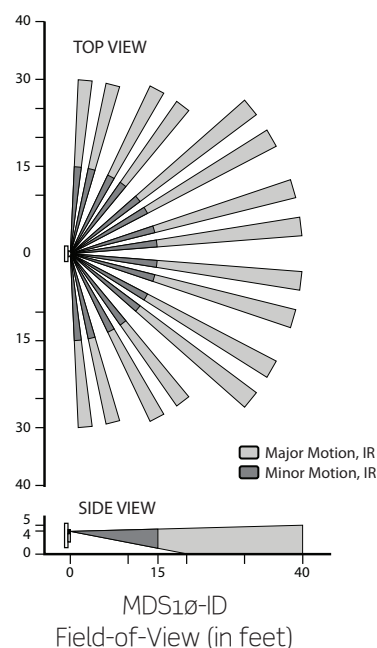
- Relay switches at the zero crossing point of the AC power curve to ensure maximum contact life and compatibility with electronic ballasts.
- Exclusive Leviton H.I.S. Circuitry. Specifically designed to handle today’s high inrush electronic ballast loads and offer unmatched durability and service.
- No neutral design is optional for retrofit applications.

INSTALLATION

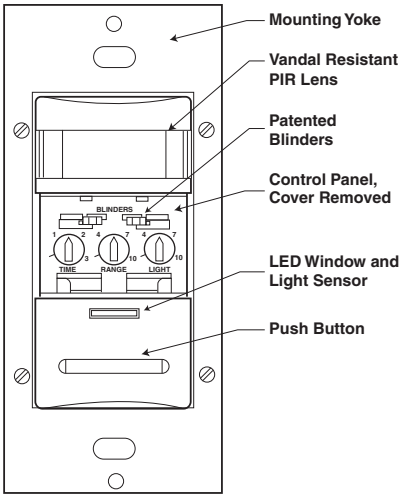
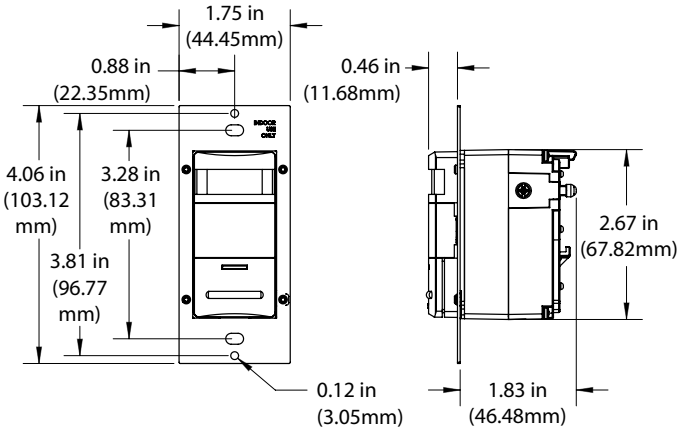
The MDS10-ID may replace a single-pole wall switch mounted in a standard wallbox. The unit must be properly grounded in order to operate. The unit’s integral blinders may be used to restrict the field-of-view to prevent unwanted detection of hallway traffic. It should be positioned at least 6 feet away from HVAC registers. Note that whenever the unit is powered up, it will take approximately one minute to begin normal operation.

FIELD-OF-VIEW

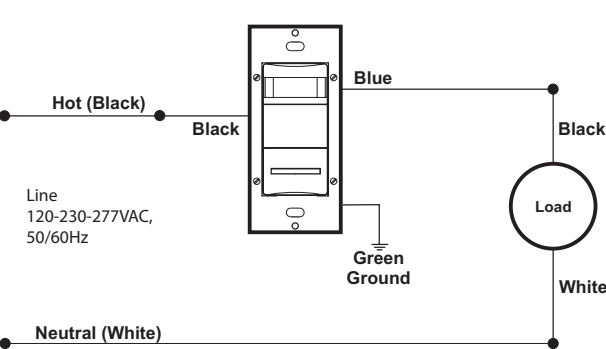
The MDS10-ID provides a 180° field-of-view with a maximum coverage area of approximately 2100 square feet. The maximum sensing distance in front of the sensor is 40 feet, and at each side is 30 feet. A “minor motion” zone detects relatively small body movements and allows the lights to stay ON even though 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.



DIMENSIONAL DIAGRAMS

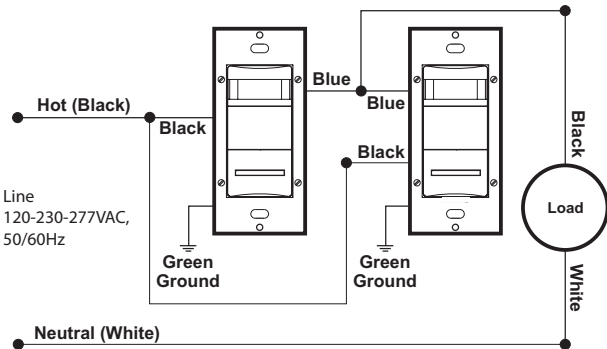


WIRING DIAGRAM



Note: Ground must be connected

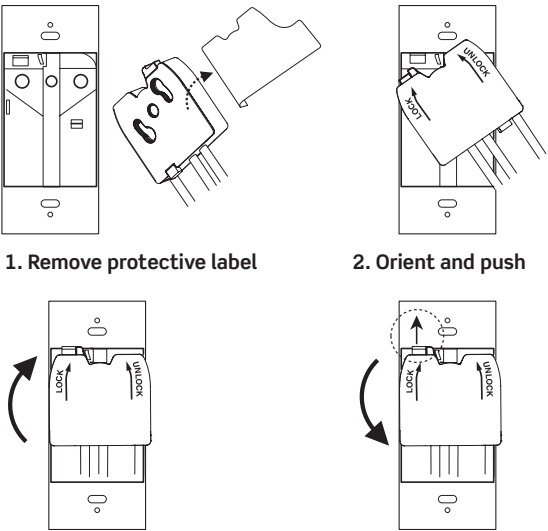
MDS10 Wall Switch Occupancy Sensor Wiring Diagram, Single Location Control



Note: Ground must be connected

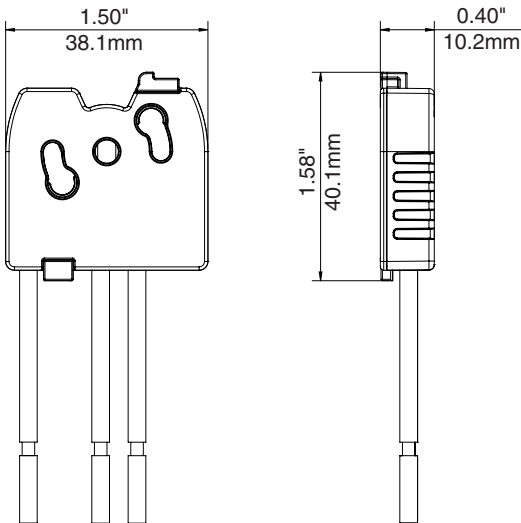
MDS10 Wall Switch Occupancy Sensor Wiring Diagram, Multi-Location Control

LEV-LOK DIAGRAM



3. Turn and lock flush 4. Push latch up and turn to release

LEV-LOK DIMENSIONS



MSPSW-XSx

ELECTRICAL	
Line Voltage	120-230-277 VAC
Power Consumption	120V - 100mW 277V - 250mW
Operational Frequency	50/60Hz
Load Rating	Fluorescent: 1200VA @ 120V-2700VA @ 277V Incandescent: 800W @ 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/cUL Listed, Complies with CEC Title 2.4, Complies with FCC Regulations, NOM
Warranty	Limited Five-Year Warranty

ORDERING INFORMATION

CAT. NO.*	DESCRIPTION
MDS10-ID	Lev-Lok PIR Wall Switch Occupancy Sensor
MSPSW-XSD	Separable Terminal Assemblies - Solid wire leads
MSPSW-XST	Separable Terminal Assemblies - Stranded wire leads

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

LEVITON SPECIFICATION SUBMITTAL

JOB NAME:	CATALOG NUMBERS:
JOB NUMBER:	

Leviton Manufacturing Co., Inc. Lighting & Energy Solutions

201 N. Service Rd. Melville, NY 11747-3138 Tech Line: 1-800-824-3005 Fax: 1-800-832-9538 www.leviton.com/les

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

© 2012 Leviton Manufacturing Co., Inc. All rights reserved. Subject to change without notice.