

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



MDS15

BASIC OPERATION

The Leviton Decora® Wall Switch Passive Infrared (PIR) Lev-Lok® Occupancy Sensor (MDS15) 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.

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.

Leviton Manufacturing Co., Inc. Global Headquarters

201 North Service Road, Melville, NY 11747-3138 **tech line** 800-824-3005 **fax** 800-832-9538
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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

The MDS15 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 MDS15 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.



MDS15

PRODUCT DATA

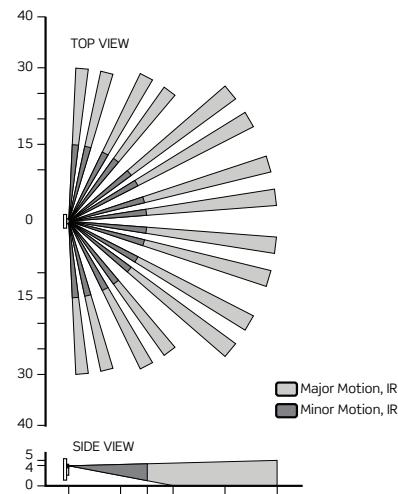
FEATURES

- 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 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 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
- 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
- Blinders—horizontal field-of-view may be adjusted between 180° and 60° of arc by using integral blenders 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
- 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 (5,000+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 High Inrush Stability (H.I.S.) Circuitry—specifically designed to handle today’s high inrush electronic ballast loads and offer unmatched durability and service.
- Relay switches at the zero crossing point of the AC power curve to ensure maximum contact life and compatibility with electronic ballasts
- No neutral design in optional for retrofit applications

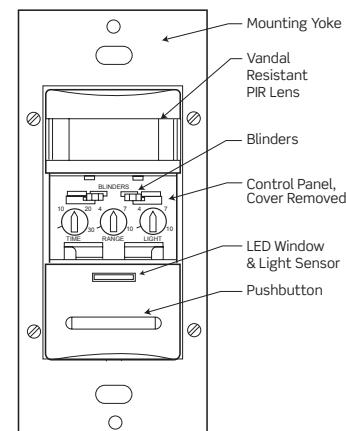
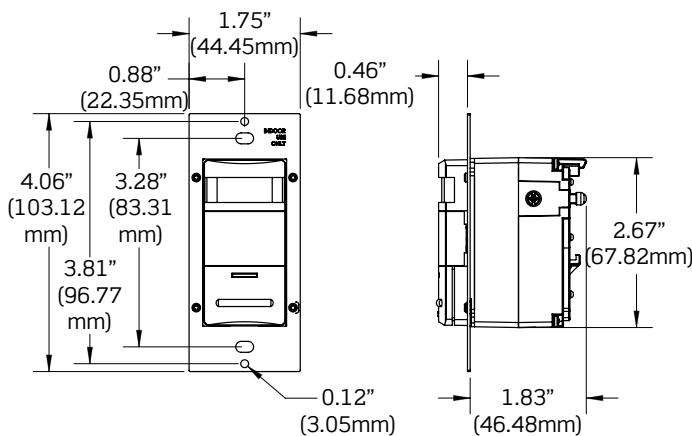
FIELD-OF-VIEW

The MDS15 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.

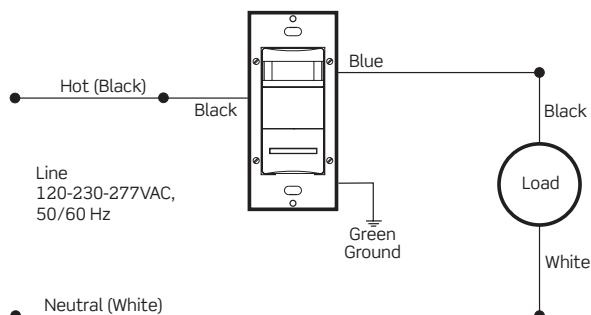


MDS15
Field-of-View (in feet)

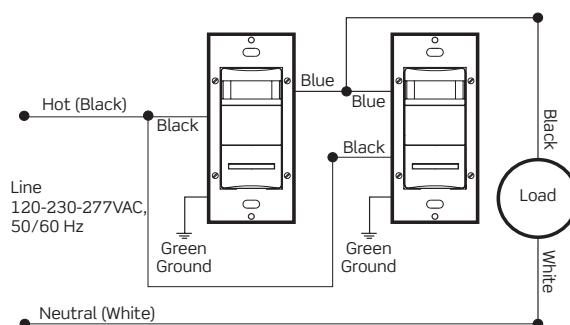
DIMENSIONAL DIAGRAMS



WIRING DIAGRAMS

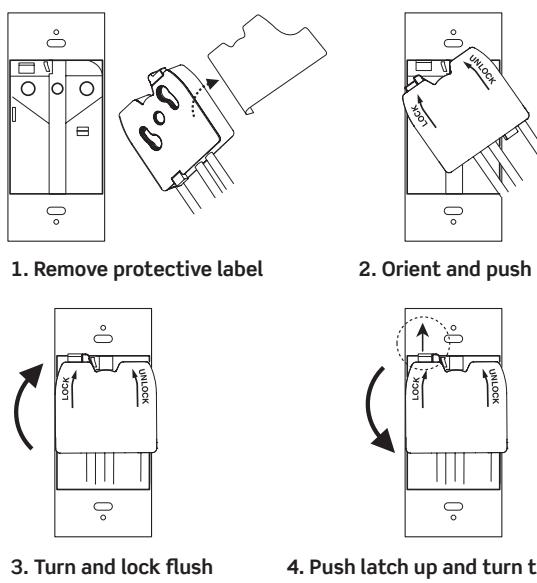


MDS15 Single Location Control

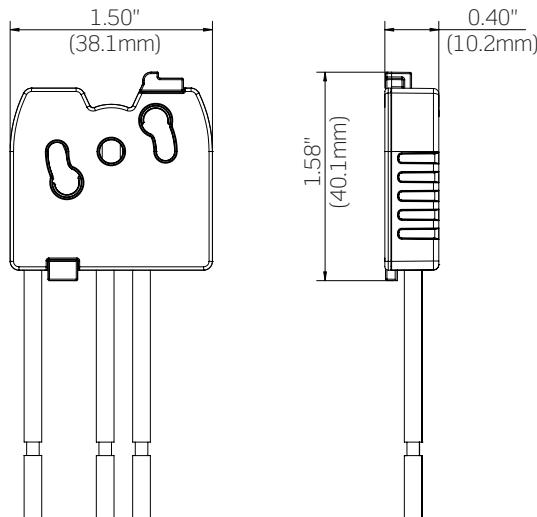


MDS15 Two-Location Control

LEV-LOK DIAGRAM



LEV-LOK DIMENSIONS



MSPSW-XSx

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PRODUCT DATA

INSTALLATION

The MDS15 is 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
Standby Power	120V - 120mW
Operational Frequency	277V - 280mW
Wire Designation	50/60 Hz
Load Rating	Line—Black, Load—Blue, Ground—Green, no neutral required
	Fluorescent: 120VA @ 120V; 2700VA @ 277V, Incandescent: 800W @ 120V, Motor 1/4HP @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/cUL listed, can be used to comply with ASHRAE 90.1 and 2016 Title 24, Part 6 occupancy sensing requirements, meets FCC regulations, NOM certified
Warranty	Limited Five-Year Warranty

ORDERING INFORMATION

CAT. NO.*	DESCRIPTION
MDS15-ID	Lev-Lok PIR Wall Switch Occupancy Sensor with Self-Adaptive Technology
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).

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Visit our Website at: www.leviton.com/sensors

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