LEVITON®

Decora® Wall Switch Multi-Technology Occupancy Sensor

BASIC OPERATION

Occupancy sensors have two tasks: keeping the lights ON while the space is occupied and turning the lights OFF when unoccupied.

PIR is used to turn the lights ON; U/S and PIR are used to keep the lights ON. Passive Infrared (PIR) is an extremely reliable, low cost technology for detecting line-of-sight motion. In some applications, PIR can be susceptible to physical interference resulting in False OFFs. Ultrasonic (U/S) is an active (always scanning) technology which uses very sensitive reflective waves to continually monitor a room. Due to this high sensitivity, U/S can be susceptible to False ONs.

APPLICATIONS

Leviton's OSSMT Multi-Technology Decora Wall Switch Occupancy Sensor is used to provide automatic lighting control for energy savings and convenience in a variety of commercial applications:

- Retrofit
- Private and executive offices
- Conference rooms
- Storage areas
- Restrooms
- Classrooms
- Lounges
- Training areas
- Multi-location switching (similar to 3-way)

SELF-ADAPTIVE TECHNOLOGY

Designed for "install and forget" use, the OSSMT automatically analyzes room conditions and adapts to errors or changing environment.

HOW THE OSSMT AUTOMATICALLY ADAPTS

CONDITION	EXAMPLE	ADAPTIVE REACTION
False-ON: Sensor incorrectly turns the lights ON.	The sensor detects movement in the corridor or hallway and the room light turns ON.	After an initial movement is sensed, if another movement is not sensed within the timer setting the delayed off-time setting is automatically reduced.
False-OFF: Sensor incorrectly turns the lights OFF.	The sensor does not detect movement because an occupant is virtually motionless and the lights turn OFF.	If motion is detected shortly after the lights go OFF, the current delayed off-time setting is increased.

Leviton Mfg. 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

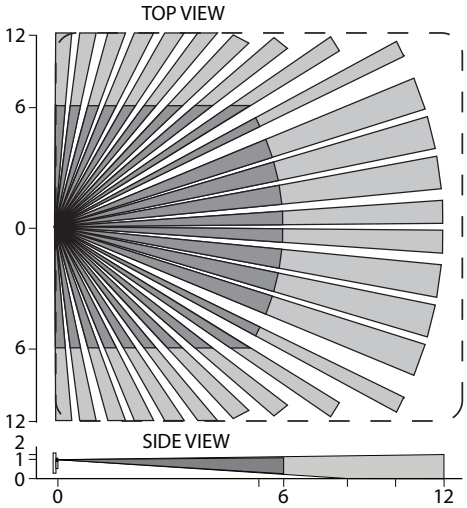
PRODUCT DATA

FEATURES

- Fast, simple Installation: Fits in a standard wall box and replaces a single-pole wall-switch; neutral and no neutral options available.
- Convenient Pushbutton provides manual-ON/OFF light switching at any time.
- 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: Adjustable horizontal field-of-view (PIR may be adjusted between 180° and 60° of arc by using integral blinders located on either side of the lens). No masking 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 sensor detects motion to verify detection is active. Green flashes for ultrasonic, red flashes for PIR.
- Time: The delayed OFF time is preset at 30 minutes in the Auto Adapting mode. A choice of four delayed-OFF time settings are available: 30-seconds (for walking test purposes only), 10, 20, and 30 minutes for fixed time and auto adapting. The LED will flash when the adjusting knob is set to the indicated time value.
- Ambient Light Recognition: Integrated light sensor prevents lights from turning on when the room is adequately illuminated by natural light.
- Self-Adaptive Technology: Callbacks for adjustment are eliminated. Time delay and sensitivity settings are continually adjusted to occupant patterns of use in auto adapt mode.
- Exclusive Walk-through Feature provides increased energy savings by not leaving the lights ON for an extended period after only momentary occupancy.
- Vacancy Confirmation: When the time out expires and the relays turn OFF, a 30 second (OSSMT-G) or 40 second (OSSMT-M) vacancy confirmation exists to turn the relays back on.
- False detection circuitry.
- Small Motion Sensitivity (U/S): Ultrasonic technology provides excellent minor motion sensitivity.
- Ability to disable U/S (OSSMT-M). For added flexbility, OSSMT-G has the ability to disable both PIR and U/S.
- Presentation Mode feature: For slide or film presentations, allows pushbuttons to turn lights OFF and keep them OFF while the room is occupied.
- Exclusive Leviton H.I.S. Circuitry. Specifically designed to handle today's high inrush electronic ballast loads and offer unmatched durability and service.

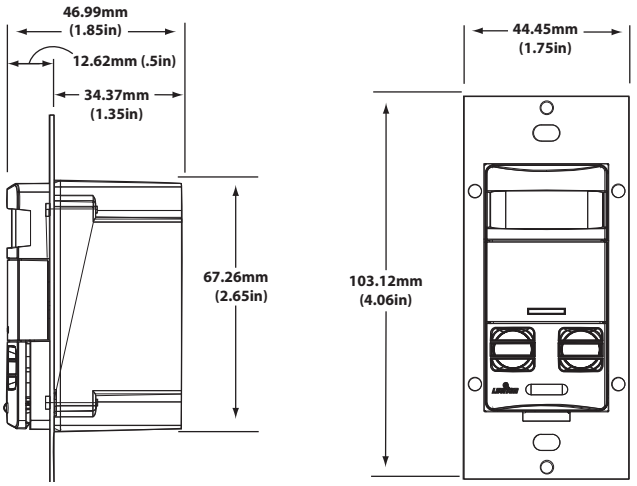
FIELD-OF-VIEW

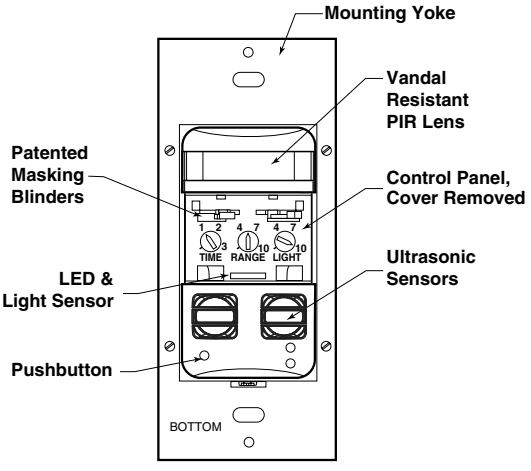
The OSSMT provides a 180° field-of-view with a maximum coverage area of approximately 223m². The maximum sensing distance in front of the sensor is 12 meters, and side to side is 9 meters. The "minor motion" zone detects relatively small body movements and allows the lights to stay ON even though a person 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.



OSSMT Field of View (in meters)

DIMENSIONAL DIAGRAMS

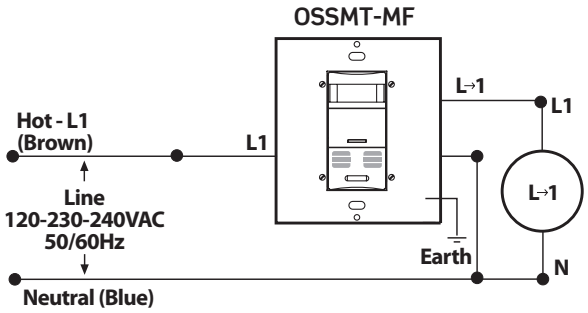




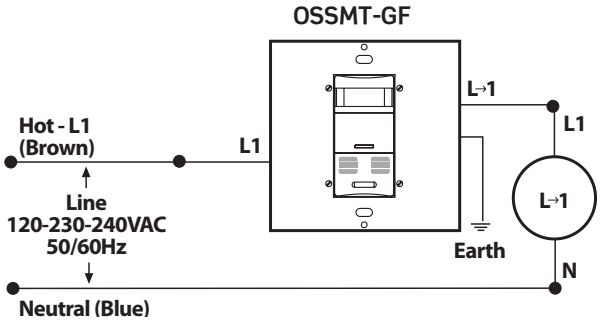
INSTALLATION

The OSSMT 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 wall box. The OSSMT-M must have a neutral and be properly grounded in order to operate. The OSSMT-G does not require a neutral for installation. The unit's integral blinders may be used to restrict the field of view to prevent unwanted detection of traffic. It should be positioned at least 2 meters away from HVAC registers. Note that whenever the unit is powered up, it will take approximately 1 minute to begin normal operation.

WIRING DIAGRAM



OSSMT-MF Wall Switch Occupancy Sensor Wiring Diagram, Single Location Control



Note: Ground wire must be connected.

OSSMT-GD Wall Switch Occupancy Sensor Wiring Diagram, Single Location Control

SPECIFICATIONS

ELECTRICAL			
Line Voltage	120, 208, 230, 240VAC		
Power Consumption		**U/S & PIR**	**PIR only**
OSSMT-MD	120V 277V 347V	390mW 480mW 500mW	190mW 270mW 350mW
OSSMT-GD	120V 277V	110mW 340mW	70mW 310mW
Operational Frequency	50/60Hz		
Ultrasonic Operating Frequency	40kHz		
Wire Designation	L1 - Line - Brown; N - Neutral - Blue; L→ - Load; ⏚ - Earth		
Load Rating	6A-6AX 250V~ 720-1440W/VA, 120-240V ☼ ▭ Ⓜ		

ENVIRONMENTAL	
Operating Temperature Range	0°C to 40°C
Storage Temperature Range	-10°C to 85°C
Relative Humidity	20% to 90% non-condensing

OTHER	
Listings	CE
Warranty	Limited Five-Year Warranty

ORDERING INFORMATION

CAT. NO. *	DESCRIPTION
OSSMT-MFx	Multi-Technology Wall Switch Occupancy Sensor
OSSMT-GFx	No Neutral, Multi-Technology Wall Switch Occupancy Sensor

* Replace x with (W) White, (I) Light Almond, or Ebony (-E)

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LEVITON®

OSSMT 3X3

LEVITON SPECIFICATION SUBMITTAL	
JOB NAME:	CATALOG NUMBERS:
JOB NUMBER:	

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