

# Multi-Technology Wall/Corner Occupancy Sensor



#### **BASIC OPERATION**

Occupancy sensors have two tasks: 1) Keeping the lights on while the room is occupied. 2) Saving energy by keeping the lights off while the room is unoccupied.

Passive infrared technology is an excellent and precise sensing of motion for turning the lights on, but lacks sensitivity for minor motion at distances. Ultrasonic (U/S) technology provides maximum sensitivity with continuous reflective high frequency waves. This is optimal for keeping the lights on.

The OSW12 combines the benefits of both PIR and U/S technologies for unrivaled performance and reliability.

# **APPLICATIONS**

- Cafeterias
- Conference rooms
- Day care centers
- Offices with cubicles
- Partitioned restrooms
- Open warehouses
- Classrooms
- Computer rooms
- Filing rooms
- Open areas
- Storage rooms
- Workspaces
- Executive, private and open offices

#### **FEATURES**

- Multi-Technology: By using both PIR and U/S signals, the sensor minimizes false triggering for high reliability.
- Flexible Base Mounting: supplied twist-and-lock base mount permits fast alignment. Supplied cover hides mounting hardware and wires. Can be used with raceways for hard surface installations. Adjustable canopy for wall or ceiling mount.
- Wide Coverage: over 1,200 sq. ft of coverage.
- Fast, Simple Installation: a single mounting post and three color coded wires make installation easy.
- Self-Adjusting: internal microprocessor continually analyzes, evaluates and adjusts sensitivity and time delay settings. Performance is kept at a maximum and user complaints are eliminated.

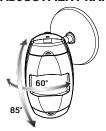
- Non-Volatile Memory: learned and adjusted settings saved in protected memory are not lost during power outages
- Timer Setting Feature: Automatic—30sec-30min Test mode—6sec with auto exit programming
- Ambient Light Recognition: a light sensor prevents lights from turning on when the room is adequately lit by natural light
- Walk-Through: provides increased energy savings by decreasing the time delay to 2.5min when someone momentarily walks through the monitored space
- Custom off-white color matched for shaded ceiling/ corner spaces and most common ceiling tiles
- Uses OSPxx Series Power Pack: Uses Class 2, 24 volt wiring, three wire connection (low voltage). Multiple sensors can control single or multiple power packs.
- Power base (OPB15) available for line voltage applications
- High Motion Sensitivity: the large lens area and multi-element lens design give excellent range and sensitivity
- Infrared Sensing: high sensitivity 9.8 micron detector dual element
- Device: high-impact housing and injection molded plastic. Color coded wire leads are 6" long (16.24 cm).
- Lens: 110° aperture, lens opening 2.2" x 1.47", 36 elements (72 zones) small motion range 31 ft, large motion 68 ft

#### **HOW THE OSW12-M AUTOMATICALLY ADAPTS**

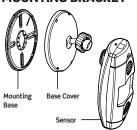
Condition	Example	Self-Adaptive Reaction
Timer Left In Test Mode - The sensor remains in an 6 sec. test mode.	An installer accidentally leaves the sensor in the 6 sec. timer test mode and the lights may go off or on every 6 sec.	The sensor automatically resets the timer to 10 min after 15 min of test mode.
False-On - The sensor incorrectly turns the lights on.	The sensor detects movement in the corridor or hall way and the room lights turn on.	After an initial movement is sensed, if another movement is not sensed within the timer setting then the delayed off time setting is automatically reduced.
False-Off - The sensor incorrectly turns the lights off.	The sensor does not detect movement because an occupant sits virtually motionless at a desk and the lights turn off.	If motion is sensed within a short period after the lights go off, then the current delayed off-time setting is increased.



# **ADJUSTMENT RANGE**



# **MOUNTING BRACKET**



DIP SWITCH SETTINGS				
SWITCH		SWITCH FUNCTIONS	SWITCH SETTINGS	
	BANK A	OFF	ON	
A1	N/A	Multi-Tech	Single Tech	
A2	N/A	PIR	Ultrasonic	
АЗ	Manual Mode	Auto Adapting Enabled	Auto Adapting Disabled	
A4	Walk-Thru Disable	Walk-Thru Enabled	Walk-Thru Disabled	
	BANK B			
B1	Override to On	Auto Mode	Lights forced On	
B2	Override to Off	Auto Mode	Lights forced Off	
ВЗ	Test Mode	OFF'ON'OFF	Enter/Exit Test Mode	
B4	LED Disable	LEDs Enabled	LEDs Disabled	

\*Bold items are factory defaults

# **SPECIFICATIONS**

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ELECTRICAL		
Power Requirements	24 VDC, 25 mA (.6W) from OSPxx Power Pack or OPB15 Power Base	
Power Consumption	25mA stand-by	
Output	24 VDC active high logic control signal with short circuit protection	
CONTROLS		
Ultrasonic (U/S) Sensitivity	0 to 100%: red knob (factory setting: 75%)	
Infrared Sensitivity	0 to 100%: green knob (factory setting: 50%)	
Light Sensor	Blue knob 20 to 3,000 Lux. Factory set at 100% (Grey wire required)	
Time Delay	30sec-30min; black knob (Factory setting: 10min)	
INDICATORS		
Red LED	Infrared motion technology	
Green LED	Ultrasonic (U/S) motion technology	
ENVIRONMENTAL		
Operating Temperature Range	32-104°F (0-40°C)	
Relative Humidity	0-95% non-condensing, for indoor use only	
OTHER		
Mounting Height	8-10 feet	
Listings	CUL/US Certified	
Energy Codes	Can be used to comply with IECC, ASHRAE 90.1, and 2019 Title 24, Part 6 occupancy sensing requirements	
Warranty	Limited Five-Year Warranty	

# **ORDERING INFORMATION**

CAT NO.	DESCRIPTION
OSW12-M0W	Multi-Technology Wall/Corner Occupancy Sensor

Made in USA with globally sourced components and NAFTA compliant models available.

# Leviton Manufacturing Co., Inc. Global Headquarters

201 North Service Road, Melville, NY 11747-3138 tel 800-323-8920 fax 800-832-9538 tech line (8:30AM-7:00PM ET Mon-Fri) 800-824-3005

# **Leviton Manufacturing Co., Inc. Lighting & Controls**

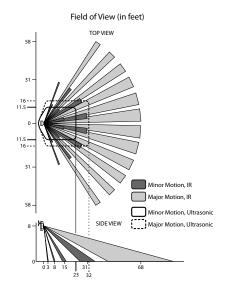
10385 SW Avery St., Tualatin, OR 97062 tel 800-736-6682 fax 503-404-5594 tech line (6:00AM-4:00PM PT Mon-Fri) 800-959-6004

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



# **DIMENSIONS** 4.67" (118.61mm) Long Range Lens 2.80 (71.12mm)

# **FIELD-OF-VIEW**



# **PHYSICAL WIRING**

