

# Multi-Technology Wall/Corner Occupancy Sensor



## BASIC OPERATION

Occupancy sensors have two tasks: 1) Keeping the lights ON while the room is occupied, and 2) Saving energy by keeping the lights OFF while the room is unoccupied.

Passive Infrared (PIR) is an excellent and precise technology for initially 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.

Leviton's OSW12 sensor 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
- Executive, private and open offices
- Classrooms
- Computer rooms
- Filing rooms
- Open areas
- Storage rooms
- Workspaces

## 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 1200 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 (OPB 15) 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.

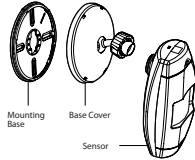
## Leviton Mfg. Co., Inc. Lighting & Energy Solutions

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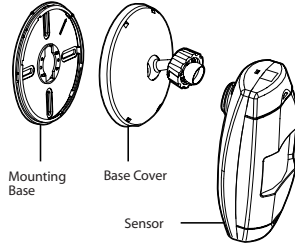
# PRODUCT DATA



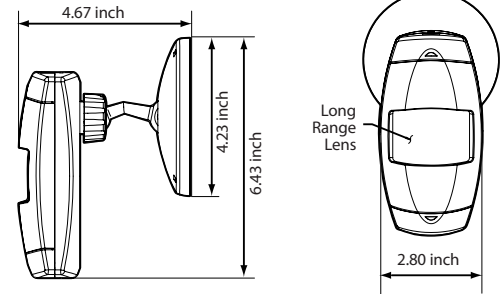
## ADJUSTMENT RANGE



## MOUNTING BRACKET



## DIMENSIONS



DIP SWITCH SETTINGS			
SWITCH	BANK A	SWITCH FUNCTIONS	SWITCH SETTINGS
	<b>OFF</b>	<b>ON</b>	
A1	N/A	<b>Multi-Tech</b>	Single Tech
A2	N/A	PIR	Ultrasonic
A3	Manual Mode	<b>Auto Adapting Enabled</b>	Auto Adapting Disabled
A4	Walk-Thru Disable	<b>Walk-Thru Enabled</b>	Walk-Thru Disabled
	<b>BANK B</b>		
B1	Override to On	<b>Auto Mode</b>	Lights forced On
B2	Override to Off	<b>Auto Mode</b>	Lights forced Off
B3	Test Mode	<b>OFF'ON'OFF</b>	Enter/Exit Test Mode
B4	LED Disable	<b>LEDs Enabled</b>	LEDs Disabled

\*Bold items are factory defaults

## SPECIFICATIONS

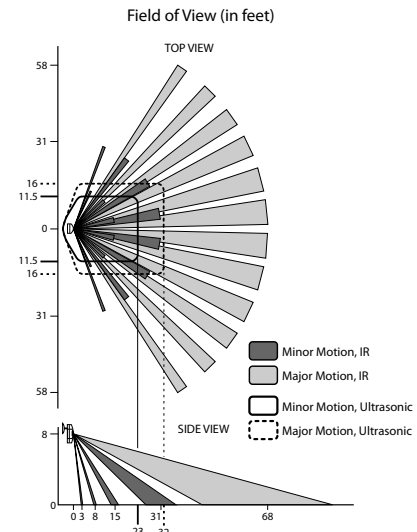
ELECTRICAL	
Power Requirements	24 VDC, 25 mA (.6W) from OSPxx Power Pack or OPB15 Power Base
Power Consumption	25mA Stand-by
Output	24 VDC active high logic control signal with short circuit protection
CONTROLS	
Ultrasonic (U/S) Sensitivity	0 to 100%: red knob (factory setting: 75%)
Infrared Sensitivity	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°F to 104°F (0°C to 40°C)
Relative Humidity	0% to 95% non-condensing, for indoor use only
OTHER	
Mounting Height	8-10 feet
Listings	CUL/US Certified, meets ASHRAE Standard 90.1 and CEC Title 24 requirements
Warranty	Limited Five-Year Warranty

## ORDERING INFORMATION

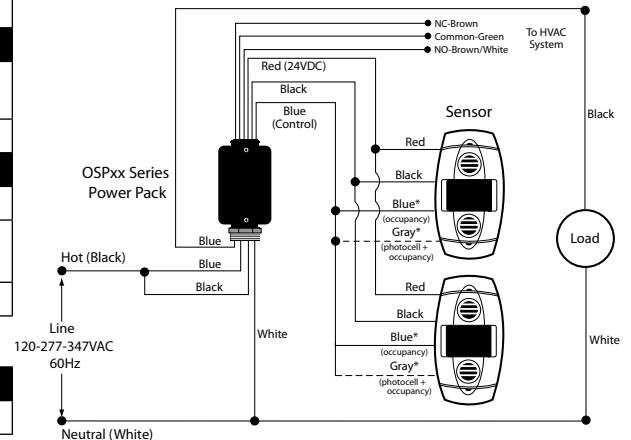
CAT NO.	DESCRIPTION
OSW12-MoW	Multi-Technology Wall/Corner Occupancy Sensor

NAFTA compliant and Made in USA models available

## FIELD-OF-VIEW



## PHYSICAL WIRING



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