

# Passive Infrared Wideview Occupancy Sensor with Isolated Relay



## BASIC OPERATION

The OSWWV-RIW is a low-voltage infrared occupancy sensor that works with the OSPxx Series power pack, or other Class 2 power supplies, to automatically control lighting. By sensing moving infrared heat sources, the sensor automatically turns the lights ON during occupancy, maintains lights-ON and, after a time delay, turns the lights OFF when the space is vacated.

The sensor uses a wide view (110 degrees) lens which detects large body motions over 50 ft. away. Smaller motions such as hand movement can be detected up to 34 feet. Additionally, the sensor is designed with an isolated relay contact, enabling the sensor to interface with other systems (example: BAS, HVAC, or any dry-contact capable device or system).

The mounting base, provided with the sensor, allows quick and easy mounting in corners, on walls or on ceilings using the “twist-and-lock” feature.

## APPLICATIONS

- Cafeterias
- Hallways
- Warehouses
- Parking garages
- Large open areas
- Conference rooms

## FEATURES

- Isolated Relay: Supports HVAC or other Class 2 low voltage signals.
- Supports both 24V AC/DC power supplies.
- Fast, Simple Installation: Easy base mount, color coded wires and twist-lock sensor attachment.

- 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 2,500 sq. ft. of coverage at 8 foot ceiling height with 110 degree aperture.
- Custom white color matched for most common day-light harvesting architecture.
- Self-Adjusting: Internal microprocessor continually analyzes, evaluates and adjusts the infrared sensitivity and time delay. 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 – 4sec with auto exit programming.
- Walk-Through: Provides increased energy savings by decreasing the time delay to 2.5min when someone momentarily walks through the monitored space.
- 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.
- High Motion Sensitivity: The large lens area and multi-element lens design give excellent range and sensitivity.
- Infrared Sensing: High sensitivity 9.8 micron sensor dual element, semiconductor type.
- Lens: 110° aperture, lens opening 2.2” x 1.47”, 36 elements (72 zones) small motion range 31 ft, large motion 68 ft.
- Device: High-impact, injection molded plastic. Color coded wire leads are 6” long (16.24 cm).

## HOW THE OSWWV-RIW AUTOMATICALLY ADAPTS

Condition	Example	Adaptive Reaction
Timer Left In Test Mode - The sensor remains in a 4 sec. test mode.	An installer accidentally leaves the sensor in the 4 sec. timer test mode and the lights may go off or on every 4 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 hallway 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 by 25%. Minimum time delay of 5 minutes.
False-Off - The sensor incorrectly turns the lights off.	The sensor does not detect movement because an occupant sits virtually motionless 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 by 50%. Maximum time delay is 30 minutes.

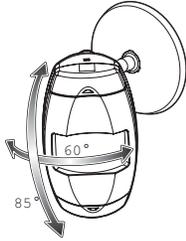
## Leviton Mfg. Co., Inc. Lighting & Energy Solutions

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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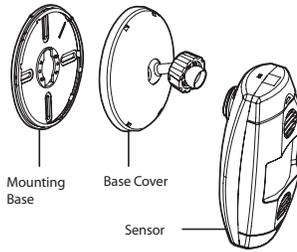
# PRODUCT DATA



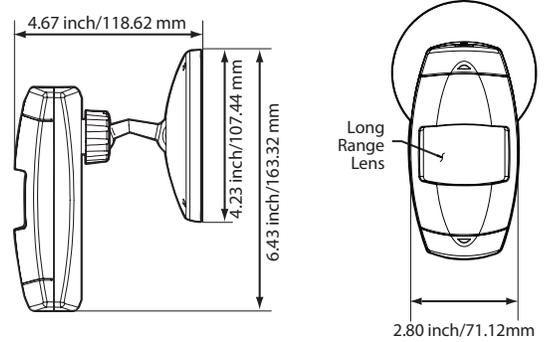
## ADJUSTMENT RANGE



## MOUNTING BRACKET



## DIMENSIONS



DIP SWITCH SETTINGS			
SWITCH	BANK A	SWITCH FUNCTIONS	SWITCH SETTINGS
A1	N/A	OFF	ON
A2	N/A	N/A	N/A
A3	Manual Mode	<b>Auto Adapting Enabled</b>	Auto Adapting Disabled
A4	Walk-Thru Disable	Walk-Thru Enabled	<b>Walk-Thru Disabled</b>
<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

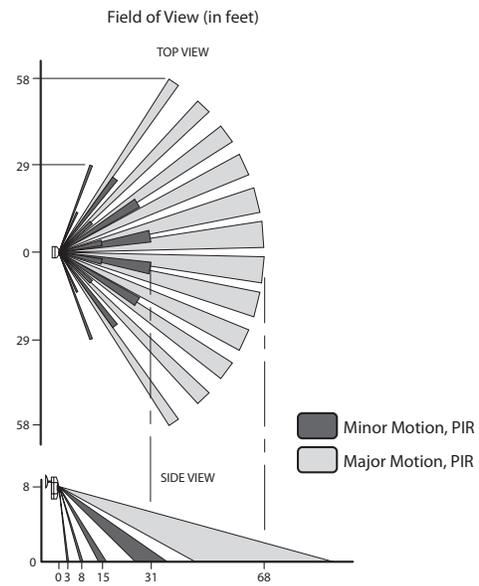
NOTE: Bold switch functions and switch settings indicate factory defaults

## SPECIFICATIONS

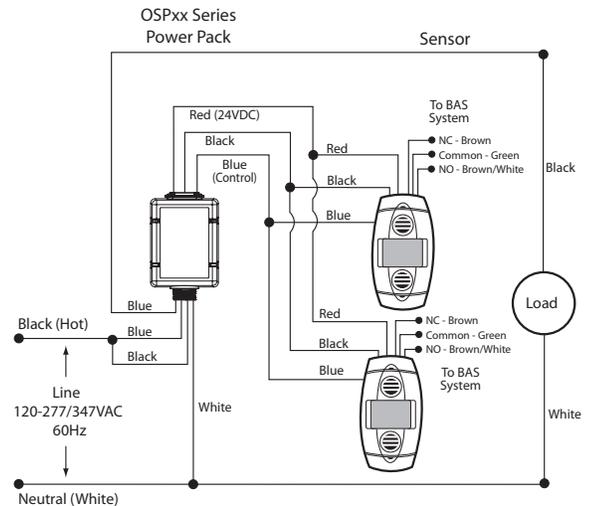
ELECTRICAL	
Power Requirements	15-28 VAC/DC, from OSPxx Power Pack or other Class 2 power supplies
Isolated Relay	1A @ 30VAC/VDC
Power Consumption	15mA DC, 30mA AC
Output	24 VDC active high logic control signal with short circuit protection.
CONTROLS	
Infrared Sensitivity	0 to 100%: red knob (factory setting: 75%)
Time Delay	30sec-30min; black knob (Factory setting: 10min)
INDICATORS	
Red LED	Infrared 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
OSWWV-RIW	Passive Infrared Wideview Occupancy Sensor

NAFTA compliant and Made in USA models available with Isolated Relay

## FIELD-OF-VIEW



## PHYSICAL WIRING



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