LEVITON®

Multi-Technology Ceiling True White Occupancy Sensor

GENERAL 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 multi-technology sensors combine the benefits of both PIR and U/S technologies for unrivaled performance and reliability.

APPLICATIONS

- Cafeterias
- Computer rooms
- Day care centers
- Work spaces
- Offices with cubicles
- Restrooms
- Storage rooms
- Classrooms
- Conference rooms
- Filing rooms
- Open warehouses
- Open areas
- Stairwells
- Executive, open and private offices

FEATURES

- Self-adjusting: internal microprocessor continually analyzes, evaluates and adjusts the sensitivity and time delay. Performance is kept at a maximum and user complaints are eliminated.
- Fast, simple installation: easy ceiling mount, three wire connection (low voltage) and twist-lock sensor attachment for 360° rotation and flexibility
- Maximum reliability, low cost: digital circuitry uses a minimum of components
- Small motion sensitivity: the ultrasonic technology provides excellent small motion sensitivity
- Uses standard 3-wire 24VDC sesor wiring as found on Leviton GreenMAX® and EZ-MAX® Plus Relay Panels, IRC, OPP20 Power Packs and OPB15 Power Base
- Power Packs can be used to provide additional power for connecting multiple sensors to a single input
- Timer setting feature: automatic—30sec-30min. Test mode—6sec with auto exit programming.
- Non-volatile memory: learned and adjusted settings saved in protected memory are not lost during power outages
- Walk-through: provides increased energy savings by decreasing the time delay to 2.5min when someone momentarily walks through the monitored space
- Wide coverage: units from 500 to 2,000 sq. ft. available
- Ambient light recognition: a light sensor prevents lights from turning on when the room is adequately lit by natural light
- Ultrasonic (U/S) components: one or two U/S transducers and one or two narrow bandwidth receivers each 16mm in diameter. Frequency—Crystal controlled to ±.005%.
- Device: rugged, high-impact, injection molded plastic, true-white. Color-coded leads 6" (16.24 cm)

HOW THE OSCxx-MWW 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 Manufacturing Co., Inc. Global Headquarters
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PRODUCT DATA

DIP SWITCH SETTINGS			
SWITCH		**SWITCH FUNCTIONS**	**SWITCH SETTINGS**
	BANK A	**OFF**	**ON**
A1	N/A	**Multi-Tech**	Single Tech
A2	N/A	PIR	Ultrasonic
A3	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
B3	Test Mode	**OFF'ON'OFF**	Enter/Exit Test Mode
B4	LED Disable	**LEDs Enabled**	LEDs Disabled

*Bold items are factory defaults

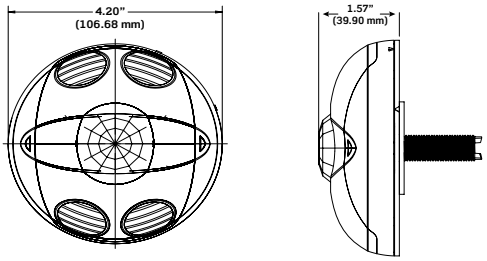
SPECIFICATIONS

ELECTRICAL	
Frequency	OSC05-MWW, OSC10-MWW: 40kHz
	OSC20-MWW: 32Khz
Power Requirements	24 VDC from GreenMAX or EZ-MAX Plus, IRC, OPP20 Power Pack or OPB15 Power Base
Power Consumption	OSC05: 25mA, OSC10: 35mA, OSC20: 30mA
Output	24 VDC active high logic control signal with short circuit protection
CONTROLS	
Ultrasonic Sensitivity	0-100%; green knob (factory setting: 50%)
Infrared Sensitivity	0-100%; red knob; (factory setting: 75%)
Light Sensor	20 to 3,000 Lux; blue knob; factory set at 100% (*grey wire required)
Time Delay	30sec-30min; black knob (factory setting: 10min)
INDICATORS	
Green LED	U/S motion technology
Red LED	Infrared motion technology
ENVIRONMENTAL	
Operating Temperature Range	32 to 104°F (0 to 40°C)
Relative Humidity	0-95% non-condensing, for indoor use only
OTHER	
Mounting Height	8-12 feet
Color	True White
Listings	CUL/US Certified, can be used to meet energy code requirements for ASHRAE Standard 90.1 and 2019 Title 24, Part 6 occupancy/vacancy sensing requirements
Warranty	Limited Five-Year Warranty

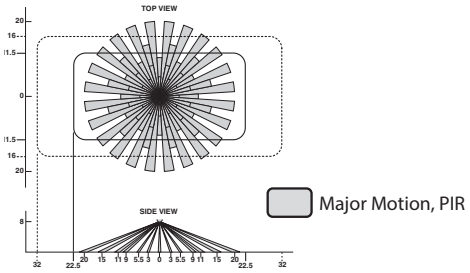
ORDERING INFORMATION

CAT NO.	DESCRIPTION
OSC05-MWW	Multi-Technology Ceiling Sensor, 500 sq. feet of coverage
OSC10-MWW	Multi-Technology Ceiling Sensor, 1,000 sq. feet of coverage
OSC20-MWW	Multi-Technology Ceiling Sensor, 2,000 sq. feet of coverage

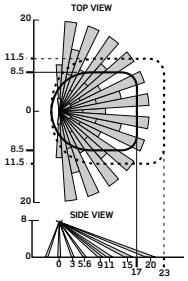
DIMENSIONS



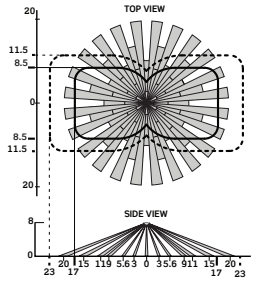
FIELD-OF-VIEW



OSC20-M, 2000 sq. ft.

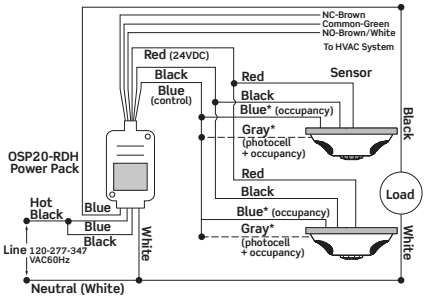


OSC05-M, 500 SQ. FT.

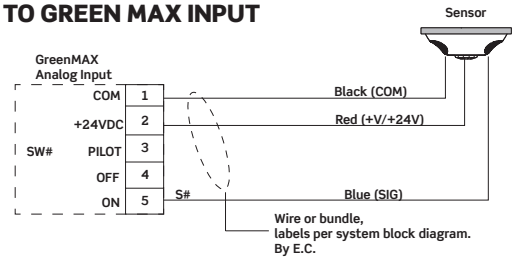


OSC10-M, 1000 SQ. FT.

PHYSICAL WIRING



OCCUPANCY SENSOR TERMINATED TO GREEN MAX INPUT



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