Multi-Technology Ceiling 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’s multi-technology sensor combines the benefits of both PIR and U/S technologies for unrivaled performance and reliability.

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

HOW THE OSCxx-M AUTOMATICALLY ADAPTS

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

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.
- Custom off-white color matched for shaded ceilings
- 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
- 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
- Power base (OPB15) available for line voltage applications
- 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 ±0.005%.
- Device: rugged, high-impact, injection molded plastic, off-white. Color coded leads 6” (16.24 cm).
**PRODUCT DATA**

**SPECIFICATIONS**

**ELECTRICAL**

- **Frequency**
  - OSC05-M0W, OSC10-M0W: 40kHz
  - OSC20-M0W: 32kHz
- **Power Requirements**
  - 24 VDC, from OSPxx Power Pack or OPB15 Power Base
- **Power Consumption**
  - OSC05: 25mA, OSC10: 35mA, OSC20: 30mA

**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**
  - 32-104°F (0-40°C)
- **Relative Humidity**
  - 0-95% non-condensing, for indoor use only

**OTHER**

- **Mounting Height**
  - 8-12 feet
- **Listings**
  - CUL/US Certified, can be used to comply with 2016 Title 24, Part 6 occupancy sensing requirements
- **Warranty**
  - Limited Five-Year Warranty

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>CAT NO.</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>OSC05-M0W</td>
<td>Multi-Technology Ceiling Sensor, 500 sq. ft. of coverage</td>
</tr>
<tr>
<td>OSC10-M0W</td>
<td>Multi-Technology Ceiling Sensor, 1,000 sq. ft. of coverage</td>
</tr>
<tr>
<td>OSC20-M0W</td>
<td>Multi-Technology Ceiling Sensor, 2,000 sq. ft. of coverage</td>
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</tbody>
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NAFTA compliant and Made in USA models available

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