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› Leviton OSC10-M0W Ceiling Mount Occupancy Motion Sensor Instruction Manual

Leviton OSC10-M0W

Leviton OSC10-M0W Ceiling Mount Occupancy Motion Sensor Instruction Manual

Brand: Leviton

Model: OSC10-M0W

1. PRODUCT OVERVIEW

The Leviton OSC10-M0W is a sophisticated ceiling-mount occupancy sensor designed for automatic lighting control in various spaces, including cafeterias, classrooms, warehouses, and offices. It utilizes advanced multi-technology detection, combining Passive Infrared (PIR) and Ultrasonic (U/S) technologies to accurately detect occupancy and optimize energy savings by ensuring lights are only on when needed.

This self-adjusting motion detector is engineered for reliability and ease of use, providing intelligent lighting management without manual intervention. It requires a Leviton OSP-series power pack, which is sold separately, for operation.



Figure 1: Leviton OSC10-M0W Ceiling Mount Occupancy Motion Sensor.

2. KEY FEATURES

- **Multi-Technology Detection:** Combines Passive Infrared (PIR) for initial motion detection and Ultrasonic (U/S) for sustained occupancy sensing, ensuring accurate and reliable performance.
- **Wide Coverage:** Provides 360-degree coverage for areas up to 1,000 square feet, making it suitable for larger rooms.
- **Energy Efficiency:** Automatically turns lights on when a room is occupied and off when it's empty, significantly reducing energy consumption.
- **Ambient Light Recognition:** An internal photocell prevents lights from turning on if sufficient natural light is already available, further enhancing energy savings.
- **Self-Adjusting Microprocessor:** Constantly analyzes and adjusts sensitivity and time delay for optimal

performance in varying environments.

- **Configurable Timer:** Features an internal timer that can be set to automatic, 30 seconds, or 30 minutes for light shut-off delays.
- **Walk-Through Setting:** Decreases the time delay to two-and-a-half minutes when someone momentarily walks through an area, saving additional power.
- **Protected Memory:** Manual settings and learned adjustments are saved and retained even during power outages.
- **Compact and Discreet Design:** The small size ensures the installed sensor appears almost invisible.
- **Compliance:** cUL/US-certified and compliant with California Title 24 Energy Code and ASHRAE Standard 90.1 requirements.

3. SETUP AND INSTALLATION

The Leviton OSC10-M0W sensor is designed for easy ceiling mounting with only three low-voltage wire connections and a twist-lock sensor attachment. It operates on 24 Volts (DC) and requires a Leviton OSP-series power pack (sold separately) for proper functionality. Ensure the power pack is compatible with the OSC10-M0W model.

Important: Installation should be performed by a qualified electrician in accordance with all local and national electrical codes. Always turn off power at the circuit breaker before beginning any electrical work.

For detailed step-by-step installation instructions, wiring diagrams, and mounting guidelines, please refer to the official Installation Manual PDF:

[Download Installation Manual \(PDF\)](#)

Your browser does not support the video tag.

Video 1: An official Leviton video showcasing various energy-efficient lighting controls, including dimmers, timers, and occupancy sensors for residential and commercial applications. This video highlights the benefits of automated lighting in different environments like homes, offices, and warehouses, demonstrating how these products contribute to energy savings and convenience.

4. OPERATING INSTRUCTIONS

The OSC10-M0W sensor operates automatically once installed and configured. Its dual-technology approach ensures reliable lighting control:

- **Passive Infrared (PIR):** Primarily used for initial detection of new motion in a room, triggering the lights to turn on.
- **Ultrasonic (U/S):** Provides continuous detection of small movements, ensuring lights remain on as long as the room is occupied. This technology is highly sensitive and ideal for maintaining illumination even with minimal activity.

The internal microprocessor continuously monitors the environment and adjusts the sensor's sensitivity and time delay for optimal performance. The ambient light recognition feature prevents lights from activating if the room is already sufficiently lit by natural light, maximizing energy savings.

Timer Settings: The sensor's internal timer can be adjusted to control how long lights remain on after the last detected occupancy. Common settings include:

- **Automatic:** Sensor determines optimal shut-off time based on learned patterns.
- **30 Seconds:** Lights turn off quickly after occupancy ceases.
- **30 Minutes:** Provides a longer delay before lights turn off.

The "walk-through" setting is designed for areas with brief occupancy, reducing the time delay to approximately two-and-a-half minutes to conserve energy when individuals are just passing through.

5. MAINTENANCE

The Leviton OSC10-M0W occupancy sensor is designed for long-term, maintenance-free operation. To ensure continued optimal performance:

- **Cleaning:** Periodically wipe the sensor lens and housing with a soft, dry cloth to remove dust or debris that might obstruct detection. Do not use abrasive cleaners or solvents.
- **No User-Serviceable Parts:** The sensor contains no user-serviceable parts. Do not attempt to open or repair the unit. Refer to qualified personnel for any issues beyond basic cleaning.

6. TROUBLESHOOTING

If the sensor is not functioning as expected, consider the following common troubleshooting steps:

- **Lights Not Turning On:**
 - Verify that the power pack is correctly installed and receiving power.
 - Check all wiring connections to ensure they are secure and correct.
 - Ensure the ambient light recognition feature is not preventing activation due to excessive natural light.
 - Confirm the sensor's coverage area is not obstructed.
- **Lights Not Turning Off:**
 - Check for continuous motion within the sensor's detection zone (e.g., HVAC drafts, moving objects).
 - Adjust the time delay setting to a shorter duration if lights remain on too long.
 - Ensure the sensor lens is clean and free from obstructions.
- **False Triggers:**
 - Adjust the sensor's sensitivity settings (refer to the full installation manual for details).
 - Ensure the sensor is not exposed to direct air currents from HVAC vents or other sources of rapid temperature change.

For persistent issues or complex problems, consult the comprehensive installation manual or contact Leviton customer support.

7. SPECIFICATIONS

Attribute	Detail
Model Number	OSC10-M0W

Attribute	Detail
Brand	Leviton
Detection Technology	Multi-Technology (Passive Infrared / Ultrasonic)
Coverage Area	Up to 1,000 sq. ft. (360-degree pattern)
Maximum Range	17.89 Feet
Mounting Type	Ceiling Mount
Voltage	24 Volts (DC) - Requires OSP-series power pack
Frequency	40 KHz (Ultrasonic)
Operating Temperature	40°C (104°F)
Dimensions (Sensor)	4.2 inch Dia x 1.57 inch D
Color	Off-white
Certifications	UL, cUL, CSA, FCC, NOM
Compliance	California Title 24 Energy Code, ASHRAE Standard 90.1

8. WARRANTY AND SUPPORT

The Leviton OSC10-M0W Ceiling Mount Occupancy Motion Sensor is backed by a **Five-Year Limited Warranty** from the manufacturer. This warranty covers defects in materials and workmanship under normal use and service. For warranty claims, technical assistance, or further product information, please contact Leviton customer support directly. You can also visit the official Leviton brand store for additional resources and product offerings:

[Visit Leviton Brand Store](#)

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question