

Lutron LOS-CIR-450-WH

Lutron LOS-CIR-450-WH Infrared Ceiling Mount Occupancy Sensor Instruction Manual

Model: LOS-CIR-450-WH

Brand: Lutron

1. PRODUCT OVERVIEW

The Lutron LOS-CIR-450-WH is an infrared ceiling mount occupancy sensor designed to automatically control lighting based on human presence. It features intelligent, continually adapting Passive Infrared (PIR) sensing technology, providing reliable motion detection with high error immunity. The sensor covers an area of up to 450 square feet when mounted on an 8-foot ceiling. Its non-volatile memory ensures that settings are retained during power outages. This sensor can operate standalone or integrate with a Lutron system, allowing for options like turning lights off or dimming to a preset level when an area becomes unoccupied.



Image: Front view of the Lutron LOS-CIR-450-WH Infrared Ceiling Mount Occupancy Sensor, showing its circular white housing and central Fresnel lens.

2. SAFETY INFORMATION

- **WARNING:** Risk of Electric Shock. Turn off power at the circuit breaker or fuse box before installation or servicing.
- All wiring must comply with national and local electrical codes.
- Installation should be performed by a qualified electrician.
- Do not use this device with equipment that could cause injury if activated unexpectedly.

- Ensure the sensor is installed in a dry, indoor location.

3. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- Lutron LOS-CIR-450-WH Occupancy Sensor Unit
- Mounting Hardware (screws, anchors)
- Instruction Sheet

4. SETUP AND INSTALLATION

4.1. Before You Begin

- Turn off power at the circuit breaker or fuse box to the area where the sensor will be installed.
- Ensure you have the necessary tools: screwdriver, wire strippers, drill (if needed for mounting).
- Read all instructions thoroughly before proceeding.

4.2. Mounting the Sensor

The LOS-CIR-450-WH sensor is designed for ceiling mount applications and snap-locks to a ceiling-mounted cover plate (sold separately or included with specific kits).

1. Select an optimal mounting location on the ceiling, ensuring it provides the desired 450 sq. ft. coverage and is free from obstructions.
2. Install the appropriate ceiling-mounted cover plate according to its specific instructions.
3. Align the sensor unit with the cover plate and gently push it into place until it snap-locks securely.

4.3. Wiring Instructions

Wiring connections are critical for proper operation and safety. It is highly recommended that wiring be performed by a qualified electrician.

- Refer to the wiring diagram provided with your specific sensor unit and associated Lutron system components.
- Connect the sensor wires to the appropriate power and load wires as indicated in the diagram.
- Ensure all connections are secure and insulated.
- If integrating with a Lutron system, follow the system's specific wiring and configuration guidelines.

5. OPERATING INSTRUCTIONS

5.1. Initial Power-Up

After installation and wiring are complete, restore power at the circuit breaker. The sensor may undergo a brief calibration period. During this time, the connected lights might cycle on and off. Allow a few minutes for the sensor to stabilize.

5.2. Sensor Operation

The LOS-CIR-450-WH uses Passive Infrared (PIR) technology to detect changes in heat sensations from moving human bodies. The sensor employs a semiconductor detector behind a multizone optical lens to accurately identify motion. Non-moving objects emitting heat will not cause the system to activate. The built-in microprocessor continuously analyzes heat detections to optimize

its performance for the space.

5.3. Adjusting Settings

The sensor is designed to be intelligent and continually adapting. Specific adjustments for sensitivity, time delay, or light level thresholds may be available when the LOS-CIR-450-WH is integrated with a compatible Lutron system. Refer to your Lutron system's documentation for detailed instructions on configuring sensor settings. Settings saved in the sensor's non-volatile memory are retained even during power outages.

6. MAINTENANCE

- **Cleaning:** Periodically wipe the sensor lens and housing with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Obstructions:** Ensure the sensor's field of view remains clear of any new obstructions (e.g., tall furniture, decorations) that could interfere with motion detection.
- No user-serviceable parts are inside the sensor.

7. TROUBLESHOOTING

Problem	Possible Cause	Solution
Lights do not turn on with motion.	No power to sensor, incorrect wiring, sensor obstructed, sensitivity too low (if adjustable).	Verify power at circuit breaker. Check wiring connections. Ensure sensor lens is clear. Consult Lutron system documentation for sensitivity adjustments.
Lights remain on or turn on unexpectedly.	Constant motion in detection area, sensor detecting heat sources (e.g., HVAC vents), incorrect time-out settings (if adjustable).	Ensure no continuous motion. Relocate sensor away from heat sources. Consult Lutron system documentation for time-out adjustments.
Sensor does not integrate with Lutron system.	Incorrect wiring, system configuration error.	Verify wiring according to system diagrams. Refer to Lutron system installation and programming guides.

8. SPECIFICATIONS

Brand	Lutron
Model Number	LOS-CIR-450-WH
Color	WHITE
Power Source	Corded Electric
Item Weight	8 ounces
Maximum Range	8 Feet (detection height)
Mounting Type	Ceiling Mount
Coverage Area	450 sq. ft. (mounted on 8 ft. ceiling)

Compatible Devices	Lutron system
UPC	027557212397

9. WARRANTY AND SUPPORT

This Lutron product is covered by a manufacturer's warranty. Please refer to the warranty information included with your product packaging or visit the official Lutron website for details regarding warranty terms and conditions.

For technical assistance, troubleshooting, or further information, please visit the [Lutron Store](#) or the official Lutron support website.

ASK A QUESTION ABOUT THIS MANUAL

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

Email

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Details

Submit question