

Installation Instructions

Please Read Before Installing

Wireless Wall-Mounted Occupancy Sensors

3 V⁼⁼ 14 μ A

180° Wall-Mount		Hallway Sensors		90° Corner-Mount	
LRF2-OWLB-P	434 MHz	LRF2-OHLB-P	434 MHz	LRF2-OKLB-P	434 MHz
ULRF2-OWLB-P	434 MHz	ULRF2-OHLB-P	434 MHz	ULRF2-OKLB-P	434 MHz
LRF2-VWLB-P	434 MHz	LRF2-VHLB-P	434 MHz	LRF2-VKLB-P	434 MHz
ULRF2-VWLB-P	434 MHz	ULRF2-VHLB-P	434 MHz	ULRF2-VKLB-P	434 MHz
LRF3-OWLB-P	868 MHz	LRF3-OHLB-P	868 MHz	LRF3-OKLB-P	868 MHz
LRF4-OWLB-P	868 MHz (*)	LRF4-OHLB-P	868 MHz (*)	LRF4-OKLB-P	868 MHz (*)
LRF5-OWLB-P	865 MHz	LRF5-OHLB-P	865 MHz	LRF5-OKLB-P	865 MHz
LRF7-OWLB-P	434 MHz (**)	LRF7-OHLB-P	434 MHz (**)	LRF7-OKLB-P	434 MHz (**)

* = China and Singapore
** = Hong Kong

Compatible Products: For a full list, visit www.lutron.com/occsensors

Product Description

Lutron wireless wall-mounted occupancy sensors are battery-powered, passive infrared (PIR) devices that automatically control lights via RF communication with a receiving device. These sensors detect the heat from people moving within an area to determine when the space is occupied. The sensors then transmit the appropriate commands to the associated receiving device to turn the lights on or off automatically, providing both convenience and exceptional energy savings.

Grace Period

In vacancy mode (*Auto-On, disabled*) there is a built-in 15 second vacancy grace period that begins when the lights are automatically turned off, during which the lights will automatically turn back on in response to motion. This grace period is provided as a safety and convenience feature in the event that the lights turn off while the room is still occupied, so that the user does not need to manually turn the lights back on. After 15 seconds, the grace period expires and the lights must be manually turned on.

NOTE: The lights can be manually turned off at any time by using the receiving device directly. If the lights are turned off manually, the room must be unoccupied for the duration of the sensor's timeout period before the lights will turn back on in response to occupancy.

Important Notes

- Clean sensor with a soft damp cloth only. DO NOT** use any chemical cleaners.
- The sensor is intended for indoor use only. Operate between 32 °F and 104 °F (0 °C and 40 °C).
- DO NOT** paint sensor.
- Use only high-quality lithium batteries, size CR123, 3 V⁼⁼ (ANSI-5018LC, IEC-CR17345). DO NOT use rechargeable batteries. Using improperly rated batteries could damage the sensor.

NOTICE: DO NOT disassemble, crush, puncture, drop on a hard surface, subject to high heat, place in water, incinerate, or alter batteries in any way. Please dispose of batteries in compliance with all applicable legal requirements. Your waste disposal provider may have information regarding any state or local restrictions on battery disposal.

CAUTION: Risk of Fire, Explosion, and Burns. Do not recharge, disassemble, heat above 200 °F (100 °C) or incinerate. This product contains a lithium battery. The battery in this device contains Perchlorate Material — special handling may apply. For more information visit www.dtsc.ca.gov/hazardouswaste/perchlorate

- The range and performance of the RF system is highly dependent on a variety of complex factors such as:
 - Distance between system components
 - Geometry of the building structure
 - Construction of walls separating system components
 - Electrical equipment located near system components

WARNING: Entrapment hazard. To avoid the risk of entrapment, serious injury, or death, these controls must not be used to control equipment which is not visible from every control location or which could create hazardous situations such as entrapment if operated accidentally. Examples of such equipment which must not be operated by these controls include (but are not limited to) motorized gates, garage doors, industrial doors, microwave ovens, heating pads, etc. It is the installer's responsibility to ensure that the equipment being controlled is visible from every control location and that only suitable equipment is connected to these controls. Failure to do so could result in serious injury or death.

Lutron Electronics hereby declares that LRF3-OHLB-P, LRF3-OWLB-P, and LRF3-OKLB-P are in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the DoC can be obtained by writing to: Lutron Electronics Co., Inc. 7200 Suter Road, Coopersburg, PA 18036 U.S.A.

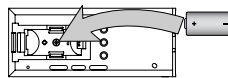
FCC/IC Information

Please visit: www.lutron.com/fcc-ic

TRA
REGISTERED NO:
ER0104397/13
DEALER NO:
0016561/08

1 Battery

Insert battery as shown.



2 Install Receiving Device

This sensor must be used in combination with a compatible receiving device. Please refer to the instruction sheet of the receiving device for installation and association procedures for your system.

3 Sensor Placement and Coverage

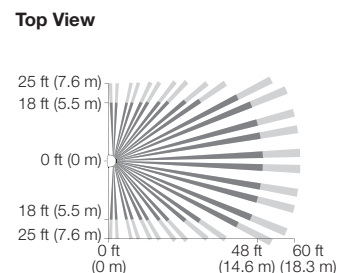
Before mounting the sensor, please note the following:

- The sensor should be mounted at 6 to 8 ft (1.8 to 2.4 m) from the floor. For smaller rooms we recommend mounting the sensor 6 ft (1.8 m) from the floor.
- If you cannot see the sensor, it cannot see you.** The sensor cannot see through glass.
- DO NOT** mount the sensor within 4 ft (1.2 m) of HVAC vents, halogen or incandescent light bulbs, microwave ovens, Wi-Fi routers, IOT cameras, or other non-Clear Connect wireless devices. When using Clear Connect—Type X lamps or fixtures, ensure sensor is mounted at a distance of 2 ft (0.6 m) or greater from the lamp or fixture.
- If there are walls or other barriers between the sensor and receiving device(s), the sensor should be located within 30 ft (9.1 m). If they are in direct line of sight, the sensor may be installed up to 60 ft (18.3 m) away from the associated device(s).
- Whenever possible, avoid placing the sensor in a location where it has a broad view outside the intended space.

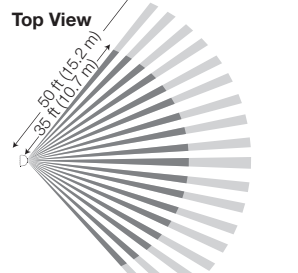
Important details about Corner-Mount and Hallway Sensors:

- Corner-Mount** – This sensor may either be mounted directly in a corner or on a wall, offset away from a corner if there are cabinets or other objects preventing mounting directly in the corner. This bracket may also be mounted in either of two vertical orientations, allowing the sensor to be mounted on either wall. See **Step 8** for more details.
- Hallway** – This sensor is designed to mount flat against a wall at the end of a hallway with a view down the length of the hall. It should not be mounted on either of the side walls of the hallway. For proper performance, the sensor should be centered within the hallway. Detection at longer distances is best for motion occurring at right angles to the sensor.

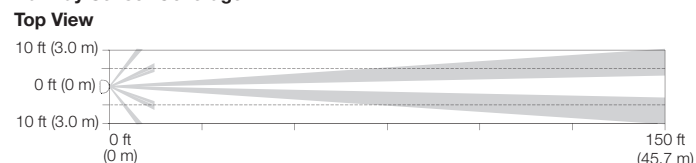
180° Wall-Mount Sensor Coverage



90° Corner-Mount Sensor Coverage



Hallway Sensor Coverage

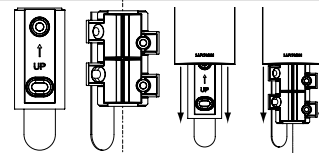


- Note:** Coverage patterns are for reference only. Coverage is **NOT** continuous. Only performing the sensor coverage test in **Step 5** will ensure that specific areas are optimally covered.

- For detailed coverage patterns, please visit www.lutron.com/occsensors**

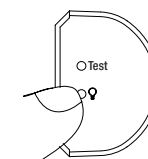
4 Temporary Mounting

A 3M™ Command™ adhesive strip is provided for temporarily mounting the sensor. The strip is not reusable and should not be used for permanently mounting the sensor.



5 Testing Sensor Coverage

- Press and release the "Test" button on the top of the sensor. The lens will glow briefly, indicating the test mode has been entered. There is a 90 second warm-up period after the battery is installed before test mode can be activated. If the "Test" button is pressed within 90 seconds of installing the battery the lens will flash rapidly until the warm-up is complete.
- Walk around the space while observing the lens. If the lens glows, motion is detected. If you are not satisfied with the sensor's performance, relocate the sensor and repeat the test.
- Press and release the "Test" button again to exit test mode. The sensor will automatically exit test mode after 15 minutes, or after 5 minutes if no motion is detected.
- If sensor detection is satisfactory during this test, perform the wireless communication test in Step 6.

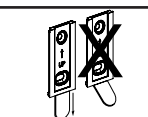


6 Testing Wireless Communication

To verify that the sensor is communicating properly with the associated receiving device(s), press and release the "Q" button multiple times to toggle the lights on and off. If the lights do not respond properly, refer to **Step 3** or the **Troubleshooting** guide which is provided on a separate sheet.

7 Removing Temporary Mounting Strip

Pull very slowly. **DO NOT** pull at an angle.

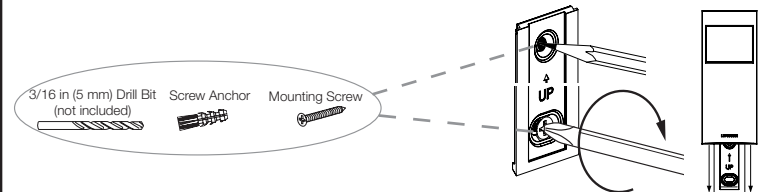


8 Permanent Mounting

The sensor is designed for installation on drywall or plaster surfaces.

180° Wall-Mount and Hallway Sensors

The 180° wall-mount and hallway sensors are designed to mount flat against a wall. Use the provided screws and drywall anchors



90° Corner-Mount Sensor

The corner-mount sensor is designed to be mounted in a corner or on a wall offset from a corner. This bracket may also be mounted in either of two vertical orientations, allowing the sensor to be mounted on either wall.

- Mounting Directly in a Corner**
Use the mounting bracket's two screw bosses "A" as shown above. Use the provided screws.

- Mounting Offset from a Corner**
Use the mounting bracket's screw slot/holes "B" as shown above. Use provided screws and drywall anchors.

9 Advanced Sensor Features

The sensor has several advanced set-up features. For the majority of installations, the default settings will provide the best performance and you will not need to utilize the advanced set-up.

The sensor has three adjustable advanced set-up modes: Timeout, Activity, and Auto-On.

Timeout: The sensor will turn the lights off if no motion occurs for the duration of the timeout period. The available timeout settings are: **1, 5, 15, and 30 minutes.** (Default: 15 minutes)

Advanced Sensor Features (continued)

Activity: The sensitivity of the sensor can be adjusted based on the expected level of activity within the room. There are three available activity settings: Low Activity, Medium Activity, and High Activity. (Default: Low Activity)

Low Activity: This is the most sensitive setting and is recommended for most applications.

Medium Activity*: This setting is slightly less sensitive than the Low Activity setting and can be used for spaces that experience normal activity.

High Activity*: This is the least sensitive setting and can be used for spaces that will generally only experience large motions, such as foot traffic.

*If the sensor is placed near external noise sources such as HVAC vents, it might turn the lights on without occupancy or keep lights on too long after vacancy. If this occurs, change the sensitivity to Medium or High Activity.

Auto-On: The automatic-on functionality of the sensor can be adjusted to control how the lights respond upon initial occupancy. There are two available settings: Enabled and Disabled. (Default: Enabled)

"Enabled": The lights will always turn on automatically on occupancy and automatically turn off after vacancy. Also known as occupancy mode.

"Disabled": The lights will not turn on automatically on occupancy, but will still turn off automatically after vacancy. The 15 second grace period described in the **Product Description** section is active in this mode. Also known as vacancy mode.

10 Advanced Feature Set-Up (optional)

The Advanced Feature set-up is accessed by using the buttons on the back of the sensor.

Check Setting: Press and release the button beneath the desired mode. An LED will illuminate briefly to indicate the current setting.

Change Setting: The setting for Timeout, Activity, and Auto-On can be changed using the standard procedure below. The procedure for selecting a 1 minute timeout is different and also described below.

Standard Modes

- Press and hold the desired button until the LED corresponding to the current setting begins flashing rapidly.

- Press and release the button to increment the mode to the next available setting.

- To save the selected setting, press and hold the button until the LED turns on solid.

1 Minute Timeout *

- Press and hold the timeout button for approximately 10 seconds until all 3 LEDs begin flashing rapidly.

- Press and hold the timeout button until all 3 LEDs turn on solid.

* Do not use this setting in areas that experience minor motion or extended occupancy, as the lights may turn off unexpectedly.

Limited Warranty

For warranty information, please see www.lutron.com/warranty

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