

Radio Window™ sensor

Installation Instructions
Please Read Before Installing

English

Wireless Battery-Powered Mullion-Mount Sensor Pair

LRF2-SSM-SM 3 V--- 7 µA 434 MHz



Product Description

Lutron's Radio Frequency enabled Radio Window sensor enhances the performance of Hyperion™ solar-adaptive shading systems by working at the window level to communicate current exterior light conditions to the Quantum® Total Light Management System, enabling Hyperion™ to respond appropriately, improve occupant comfort, and enhance the system's energy saving potential. The sensor maximizes natural daylight, available views, and occupant comfort when shadows are cast on buildings as well as when dark cloudy or bright sunny weather conditions prevail. The battery powered sensor features easy installation and low maintenance costs.

Technical Assistance

U.S.A. and Canada (24 hrs / 7 days)
1.800.523.9466 Fax +1.610.282.6311

Mexico 8am – 8pm ET
+1.888.235.2910

Other countries 8am – 8pm ET
+1.610.282.3800 www.lutron.com

Important Notes

- These sensors are part of a system and cannot be used to control a load or shade without a compatible Lutron Quantum® Total Light Management System with Hyperion™ solar-adaptive technology. Refer to the instruction sheets of the receiving devices for installation information on setup and testing of these sensors.
- Clean sensors with a soft damp cloth only. DO NOT** use any chemical cleaners.
- For indoor use only. Operate between 54 °F and 122 °F (12 °C and 50 °C).
- DO NOT** paint sensors.
- 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 this product must not be used to control equipment which could create hazardous situations, such as entrapment, if operated accidentally. Examples of equipment which must not be controlled with this product include (but are not limited to) motorized gates, garage doors, industrial doors, etc. Accidental operation of the above equipment with this product could result in serious injury or death.

FCC/ IC Information

This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation. Modifications not expressly approved by Lutron Electronics Co., Inc. could void the user's authority to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

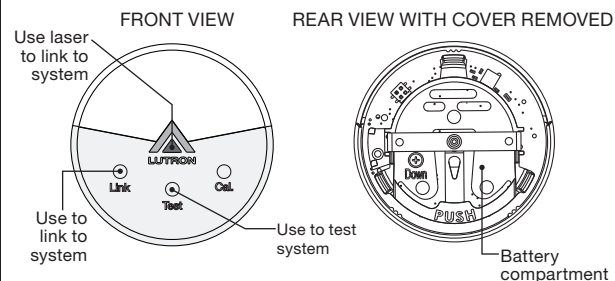
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Consult the dealer or an experienced radio/TV technician for help.

Getting Started

How it works:

Hyperion™ solar-adaptive shading technology automatically positions shades based on the position of the sun.

Battery powered photo sensors report the measured amount of natural light incident on a facade to Quantum® using Lutron Clear Connect® RF Technology.



A Install Batteries

NOTE: Before setting up the sensors, the corresponding Lutron Quantum® Total Light Management System should be installed. Refer to that product's installation instructions.

Use only high-quality lithium batteries, one (1) size CR2450, 3 V--- (ANSI-5029LC, IEC-CR2450). **DO NOT** use size CR2032, or rechargeable batteries. Using improperly rated batteries could damage the sensors.

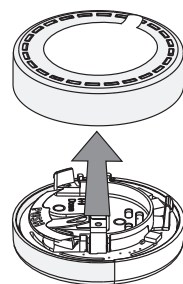
NOTICE: DO NOT disassemble, crush, puncture, or incinerate batteries. **DO NOT** dispose of batteries in normal household waste. Please recycle, take to a proper battery disposal facility, or contact your local waste disposal provider regarding local restrictions on the disposal or recycling of batteries.

WARNING: HEALTH HAZARD. May result in serious injury or death if battery is swallowed. Keep out of reach of children.

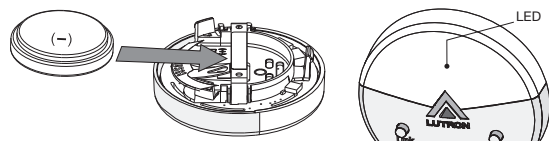
CALIFORNIA RESIDENTS:

The batteries in these devices contain Perchlorate Material—special handling may apply. For more information visit www.dtsc.ca.gov/hazardouswaste/perchlorate.

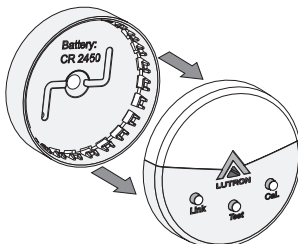
- Remove a sensor's back cover by pulling it straight off.



- Insert battery with the negative side up. When done correctly, the sensor powers up, indicated by a flashing LED.



- Reinstall the back cover.

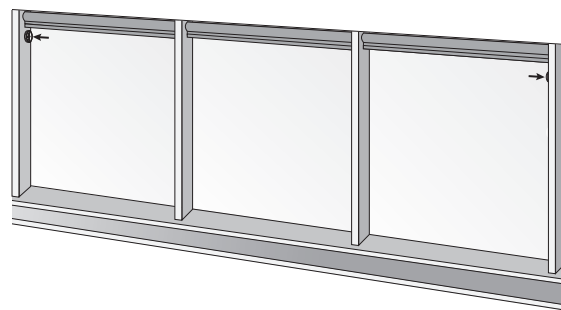


- Repeat steps 1 - 3 to install the battery in the other sensor.

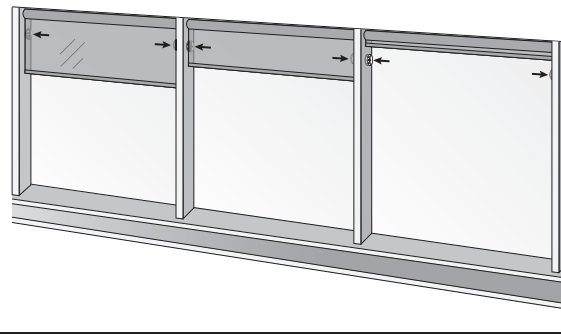
B Sensor Placement

The Radio Window Sensors are designed to be affixed directly to opposing mullions or window frame members on each side of the window group to be controlled (may be one window or multiple windows).

Controlling multiple shades with 1 sensor pair

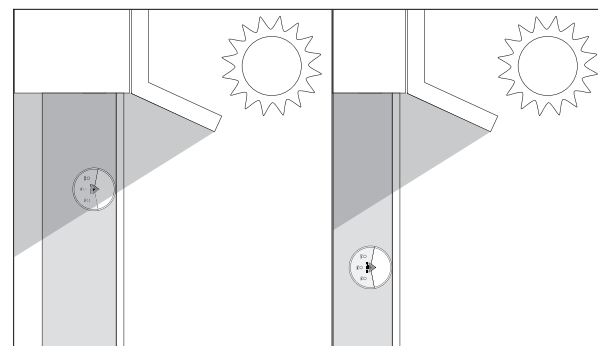
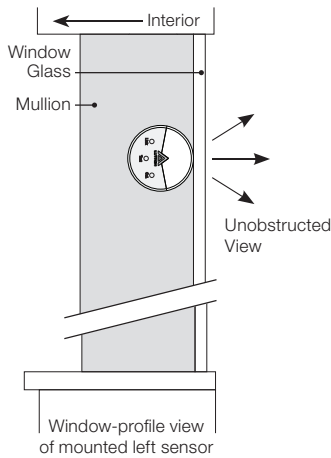


Controlling 1 shade per sensor pair



Orientation and Location

- Flush mount to window mullion near top of window, ensuring the exterior view is not obstructed.
- Ensure the shade fabric does not come between the sensor and the window, and does not physically interfere with the sensor.
- Mount sensors on opposite mullions of each shade group.
- Ensure the arrow points directly toward the window glass.
- DO NOT** position the Radio Window™ sensor on a skylight, near an indirect lighting fixture, or below any window feature casting a shadow on the sensor.
- Operating and performance specifications are based on mounting sensors at 90° to the window glass; contact Lutron prior to mounting on mullions at other angles.



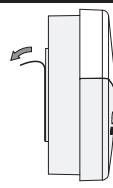
Choose mounting locations where the exterior view is unobstructed, and fixed building features, window louvers, etc., do not cast persistent shadows

C Mounting the Sensors

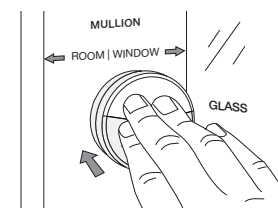
- Prepare the mounting surface using multi-surface cleaner and a clean, lint-free cloth. **DO NOT** use furniture wax or polish. Ensure the surface is completely dry before proceeding.



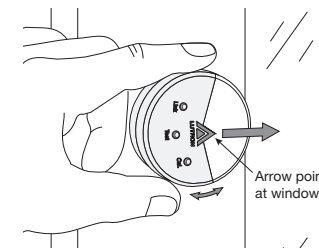
- First, read all the remaining steps and notes in this section. Then, peel off the protective adhesive liner on the back of the sensor and proceed immediately to step 3.



- Press the sensor firmly to the mounting surface, holding for a minimum of 5 seconds.



- The arrow on the front of each sensor must point directly at the window glass. After mounting, sensors may be rotated to achieve the correct orientation.



- Repeat steps 1 - 3 to mount the other sensor on the other side of the window or window group, as shown under section B. Sensor Placement.

D Sensor Setup

NOTE: These sensors are part of a system and cannot be used to control a load or shade without a compatible Lutron Quantum® Total Light Management System with Hyperion™ Solar Adaptive Technology. Refer to the instruction sheets of the receiving devices for information on setup and testing of these sensors.

E Troubleshooting

Symptom	Possible Causes	Solution
Sensor does not stick to mounting surface	Surface not clean Adhesive exposed to dirt or debris	Refer to section B. Sensor Placement
Sensor does not stay attached to back cover	Sensor and back cover not properly aligned Debris or foreign object inside back cover	Refer to section A. Install Batteries, Step 3 Clear debris or foreign object from back cover, and refer to section A. Install Batteries, Step 3
Sensor(s) will not assign	One or both batteries dead or incorrectly installed Quantum® not compatible with sensor(s)	Refer to section A. Install Batteries Use the latest compatible version of Quantum® (2.7 or higher)
Shades allow too much sunlight into the space	Sensor(s) mounted in persistent shadow	Refer to section B. Sensor Placement
	Arrow on sensor(s) not pointing toward the window	Refer to section C. Mounting the Sensors, Step 3
	System threshold(s) out of adjustment Shade "visor position" out of adjustment	Adjust settings in Quantum® Hyperion™ wizard
Shades do not respond to outside conditions	Shade under manual control	Clear manual override in Quantum®
	Sensor(s) missing or incorrectly installed	Check for presence of sensors; locate and/or reinstall if necessary
	One or both batteries dead or incorrectly installed Sensor(s) not in range of Quantum® system Sensor(s) not assigned to shade(s)	Refer to section A. Install Batteries Reposition sensor(s) within range of receiving device Check and correct sensor assignment in Quantum®
Shades move too often	System timeout settings out of adjustment	Adjust to longer timeouts in Quantum® Hyperion™ wizard
Shades don't move often enough		Adjust to shorter timeouts in Quantum® Hyperion™ wizard

Limited Warranty

(Valid only in U.S.A., Canada, Puerto Rico, and the Caribbean.)

Lutron will, at its option, repair or replace any unit that is defective in materials or manufacture within one year after purchase. For warranty service, return unit to place of purchase or mail to Lutron at 7200 Suter Rd., Coopersburg, PA 18036-1299, postage pre-paid.

THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES, AND THE IMPLIED WARRANTY OF MERCHANTABILITY IS LIMITED TO ONE YEAR FROM PURCHASE. THIS WARRANTY DOES NOT COVER THE COST OF INSTALLATION, REMOVAL OR REINSTALLATION, OR DAMAGE RESULTING FROM MISUSE, ABUSE, OR DAMAGE FROM IMPROPER WIRING OR INSTALLATION. THIS WARRANTY DOES NOT COVER INCIDENTAL OR CONSEQUENTIAL DAMAGES. LUTRON'S LIABILITY ON ANY CLAIM FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE MANUFACTURE, SALE, INSTALLATION, DELIVERY, OR USE OF THE UNIT SHALL NEVER EXCEED THE PURCHASE PRICE OF THE UNIT.

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