

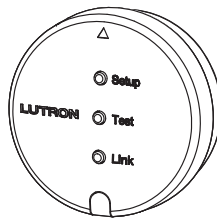
# Radio Window sensor

Installation Instructions  
Please Read Before Installing

English

## Wireless Battery-Powered Window Mount Sensor

LRF2-SSW 3 V 7 μA 434 MHz



### Product Description

Lutron's Radio Frequency enabled Radio Window sensor enhances the performance of the Quantum® Total Light Management and HomeWorks® QS Total Home Control systems by working at the window level to communicate current exterior light conditions. The battery powered sensor features easy installation, inconspicuous aesthetic profile, and low maintenance costs.

### Environment

• Temperature: 54 °F to 122 °F (12 °C to 50 °C)

• For indoor use only

• Relative humidity: < 90% non-condensing

### Important Notes

1. Radio Window sensors operate as part of a system and cannot be used to control a load or shade without a compatible Quantum® Total Light Management System or HomeWorks® QS Total Home Control System installed. Refer to the instruction provided with the receiving devices for information on setup and testing of sensors.

2. **Clean sensors with a soft damp cloth only. DO NOT** use any chemical cleaners.

3. For indoor use only. Operate between 54 °F and 122 °F (12 °C and 50 °C).

4. **DO NOT** paint sensors.

5. 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.

### CE Information

(For model number LRF3-SSM-xx)

Lutron Electronics hereby declares that the models listed above 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.

### IDA Compliance Information

(For model numbers LRF4-SSM-xx)

Complies with  
IDA standards  
DA 103083

### 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.

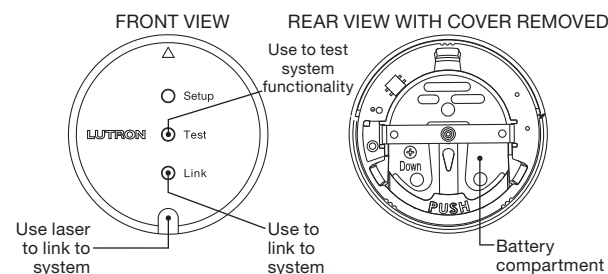
**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can 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:

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 Quantum® Total Light Management System or HomeWorks® QS Total Home Control System must be installed. Refer to that product's installation instructions.

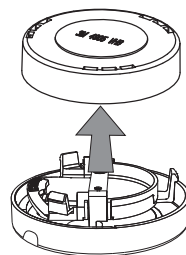
Use only high-quality lithium batteries, one (1) size CR2450, 3 V (ANSI-5029LC, IEC-CR2450). **DO NOT** use size CR2032, or rechargeable batteries. Using improperly rated batteries could damage the sensors.

**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.

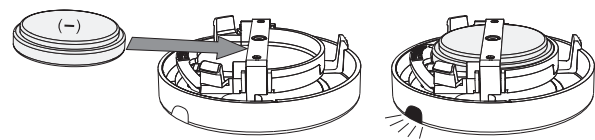
**WARNING: CHOKING HAZARD.** May result in serious injury or death if battery is swallowed. Keep out of reach of children.

**CALIFORNIA RESIDENTS:** The batteries in these devices contain Perchlorate Material—special handling may apply. For more information visit [www.dtsc.ca.gov/hazardouswaste/perchlorate](http://www.dtsc.ca.gov/hazardouswaste/perchlorate).

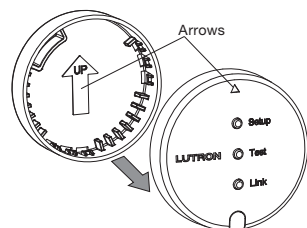
1. Remove the sensor's back cover by pulling it straight off.



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



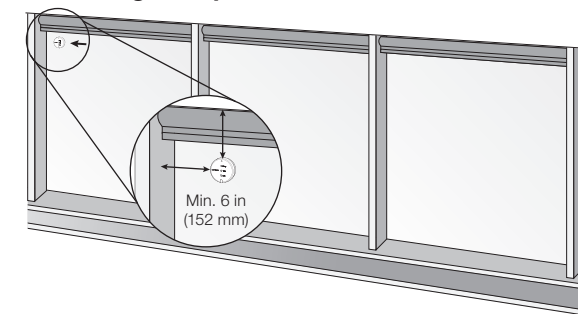
3. Align the arrow on the inside of the back cover with the arrow on the front of the sensor and reinstall the back cover.



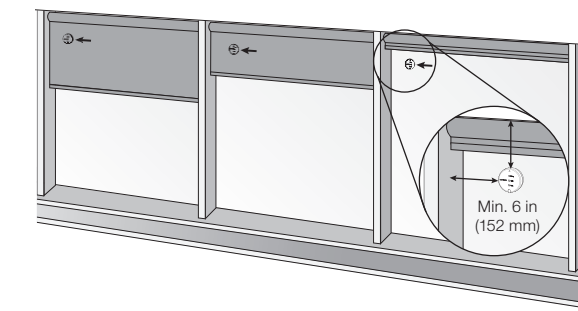
## B Sensor Placement

The Radio Window Sensor is designed to be affixed directly to the window glass of the window group to be controlled (may be one window or multiple windows). Suggested locations are shown below. Sensors may be relocated along the window (group) to optimize shadow detection.

### Controlling multiple shades with 1 sensor



### Controlling 1 shade per sensor



### Sensor Location

• Mount to the window glass near top of the window, ensuring the exterior view is not obstructed.

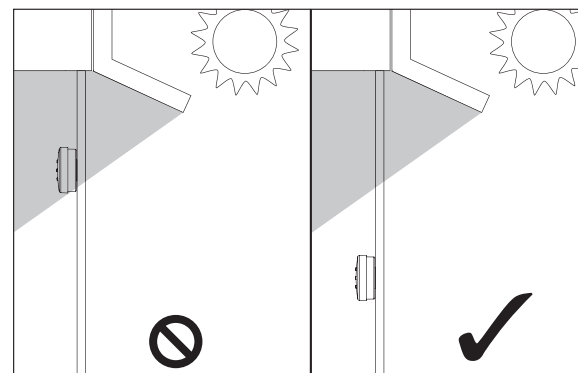
• Ensure shade fabric does not physically interfere with the sensor.

• Mount sensor at least 6 in (152 mm) away from window framing and other large metal objects. Metal objects will affect the sensor's RF performance.

• Sensors must be located within 60 ft (18 m) line of sight, or 30 ft (9 m) through walls of the QSM.

• **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.

• **DO NOT** mount sensor in locations where it will be subjected to liquid ingress, including high humidity environments with the possibility of surface condensation. (Includes but is not limited to locations with condensing humidity and locations exposed to cleaning spray.)



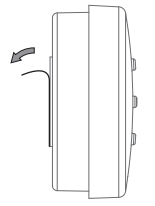
Choose mounting locations where the exterior view is unobstructed, and fixed building features, window louvers, etc., do not cast persistent shadows

## C Sensor Mounting

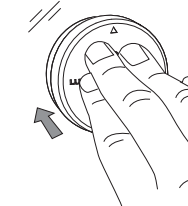
1. Prepare the window glass surface using glass cleaner and a clean, lint-free cloth. Ensure the surface is completely dry before proceeding.



2. 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.



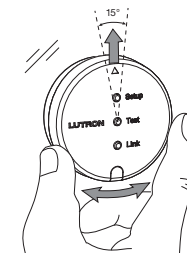
3. With the arrow on the front of the sensor pointing straight up, press the sensor firmly to the window surface, holding for a minimum of 5 seconds.



**IMPORTANT:** The factory-applied mounting adhesive is positioned to allow the sensor to operate properly. **DO NOT** apply any other type of adhesive. Application of additional tape or liquid bonding agents will obstruct the sensor's view and/or cause permanent damage.

**NOTE:** If relocation or repositioning results in poor adhesion, replace the sensor's back cover with Lutron Part Number: "RSS-REP-BCA"

4. The arrow on the front of the sensor must point straight up. After mounting there is approximately 15° of adjustment available to help achieve true vertical orientation.



## D Sensor Setup

Radio Window sensors operate as part of a system and cannot be used to control a load or shade without a compatible Quantum® Total Light Management System or HomeWorks® QS Total Home Control System installed. Refer to the instruction provided with the receiving devices for information on setup and testing of sensors.

## E Troubleshooting

Symptom	Possible Causes	Solution
Sensor does not stick to window glass	Glass not clean	Add mounting screw. Refer to section C, Sensor Mounting
	Adhesive exposed to dirt or debris	
Sensor does not stay attached to back cover	Sensor and back cover not properly aligned	Refer to section A. Install Batteries, Step 3
	Debris or foreign object inside back cover	Clear debris or foreign object from back cover, and refer to section A. Install Batteries, Step 3
Sensor will not assign	Battery dead or incorrectly installed	Refer to section A. Install Battery
	Quantum® not compatible with sensor	Use the latest compatible version of Quantum® (2.7 or higher)
	HomeWorks® not compatible with sensor	Ensure HomeWorks® installation is up to date
Shades allow too much sunlight into the space	Sensor mounted in persistent shadow	Refer to section B. Sensor Placement
	Arrow on sensor not pointing straight up	Refer to section C. Mounting the Sensors, Step 4
	System threshold(s) out of adjustment	Adjust settings in Quantum® Hyperion™ wizard or HomeWorks® QS
	Shade "visor position" out of adjustment	
	Shade under manual control	Clear manual override in system software
Shades do not respond to outside conditions	Sensor missing or incorrectly installed	Check for presence of sensor; locate and/or reinstall if necessary
	Battery dead or incorrectly installed	Refer to section A. Install Batteries
	Sensor not in range of system receiving device	Reposition sensor within range of receiving device
Shades move too often	System timeout settings out of adjustment	Check and correct sensor assignment in Quantum® or HomeWorks® QS
		Adjust to longer timeouts in Quantum® Hyperion™ wizard or HomeWorks® QS
Shades don't move often enough		Adjust to shorter timeouts in Quantum® Hyperion™ wizard or HomeWorks® QS

For complete warranty information, please see: <http://www.lutron.com/TechnicalDocumentLibrary/Window Systems Warranty.pdf>

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