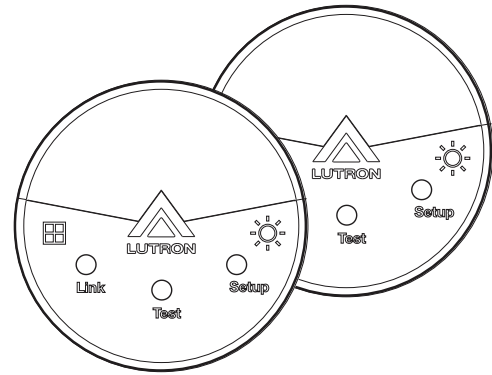


Radio Window sensor

(for regions other than North America)

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



MULLION MOUNT (pair)

Features

- Works in Quantum® systems with Hyperion™ solar-adaptive shading technology, opening shades during cloudy conditions or in response to shadows from neighboring buildings, and lowering them in overly bright conditions
- Operates in HomeWorks® QS systems, allowing for easily programmable light-level thresholds that trigger conditional logic events or system presets to control lights and/or shades
- Maximizes exterior views and occupant comfort
- Simple setup in Quantum® or HomeWorks® QS software
- Software enables the ability to adjust thresholds, timeouts and shade movement frequency
- Light range 0–107,000 Lux (0–10,000 fc)
- Uses Lutron's Clear Connect® technology
- Front accessible buttons make addressing easy
- Small form factor allows it to blend in with surroundings
- 7 - 10 year typical battery life reduces maintenance costs
- RoHS compliant
- Works with tinted and reflective glass surfaces
- Multiple mounting methods available for various surfaces

Job Name: Job Number:	Model Numbers:
--	-----------------------

Specifications

Regulatory

Lutron® Quality Systems Registered to ISO 9001:2008

Standards

LRF2-

- FCC certified (USA)
- IC certified (Canada)
- COFETEL (Mexico)

LRF3-

- CE Marked (European Union)

LRF4-

- SRRC Type Approved (Mainland China)
- iDA Registered (Singapore)

LRF7-

- FCC certified (Hong Kong)

Power/Performance

- Operating voltage: 3 V_{DC}
- Operating current: 7 µA
- Requires one CR 2450 lithium battery (included)
- 10-year power failure memory (settings are stored during power loss)

Environment

- Temperature: 54 °F to 122 °F (12 °C to 50 °C)
- For indoor use only
- Relative humidity: < 90% non-condensing

Communication

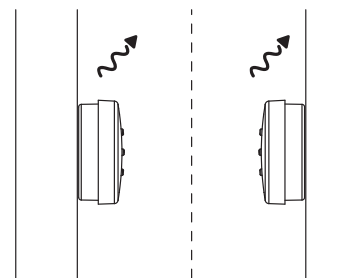
- Radio Window sensors communicate to a Quantum® or HomeWorks® QS system only through a QSM
- A QSM can receive signals from any combination of up to 10 Radio Window sensors (window mount counts as 1, mullion mount counts as 2), or Radio Power Savr™ daylight sensors
- In Quantum® systems, Radio Window sensors only provide data for the control of window shades on the same floor as where the sensors are mounted

Range

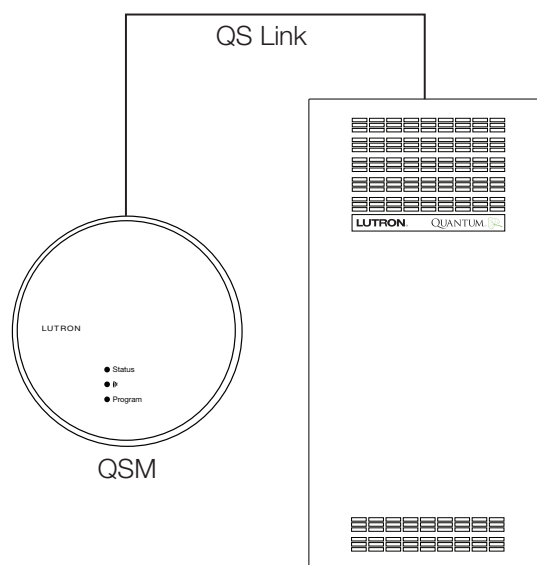
- QSM must be located within 60 ft (18 m) line of sight, or 30 ft (9 m) through walls of a sensor

NOTE: The 2 signals from a mullion mount sensor pair must be assigned to the same QSM

Configuration



Mullion Mount Sensor Pair



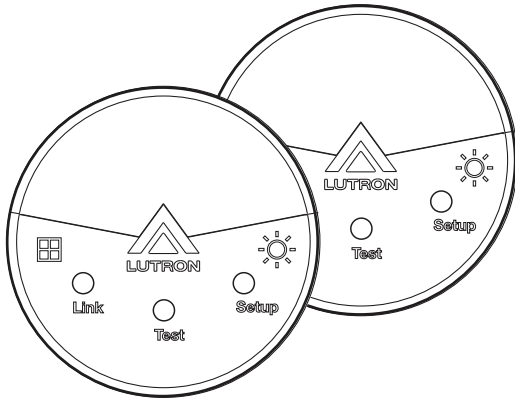
Quantum Hub

Compatible Systems

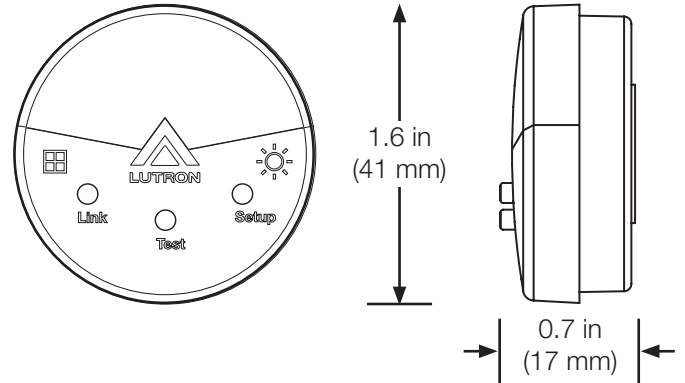
- For use with Quantum® or HomeWorks® QS systems only
- Contact Lutron at www.lutron.com for frequency or channel code compatibility with your particular geographic region, and for integrating with other Lutron shade and lighting products

Job Name:	Model Numbers:
Job Number:	

MULLION MOUNT (pair)

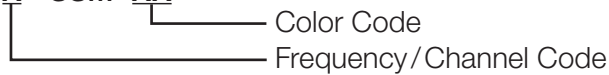


Dimensions



Model Number

LRFX - SSM -XX



Frequency/Channel Codes

- 2 = 431.0–437.0 MHz (US, Canada, Mexico)
- 3 = 868.125–869.850 MHz (Europe)
- 4 = 868.125–868.475 MHz (China and Singapore)
- 7 = 433.05–434.79 (Hong Kong)

Color Code

- WH = White
- BL = Black
- BZ = Bronze
- CLA = Gray

NOTE: Sensor lens is always white.



Custom colors are available and may result in additional lead time and cost.

Job Name:	Model Numbers:
Job Number:	

Planning Sensor Layout Based on Conditions

When determining sensor layout, **each floor of each facade must be individually evaluated and planned.** No single sensor layout approach will work for every building, and many buildings will require different sensor layouts for different façades on different floors. The following guidelines will help you plan sensor layout for each facade on each floor of your building.

Plan **ONE sensor*** per façade, per floor where either of the following conditions prevails:

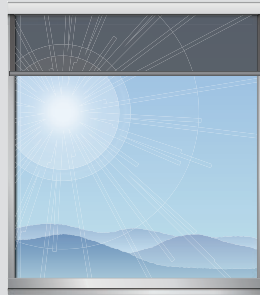
No exposure to direct or reflected sunlight...



Examples:

- Lower floors in a dense cityscape
- Windows with awnings, overhangs or side-blinds designed to eliminate all direct sunlight

No exposure to shadows...



Examples:

- Upper floors of a tall building
- Façades with no neighboring construction or shadow-casting objects

See *Façades with ONE Sensor* under **Planning Shade Alignment and Grouping** on the following page.

Plan **MULTIPLE sensors*** per façade, per floor where there is exposure to both direct sunlight and shadows:

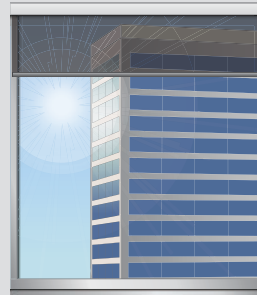
How many sensors are needed?

This is a performance decision. Sunlight and shadow conditions can vary greatly from building to building, floor to floor, and façade to façade. The information here is offered as a general guideline.

Fewer sensors ← → More sensors

For Typical Performance

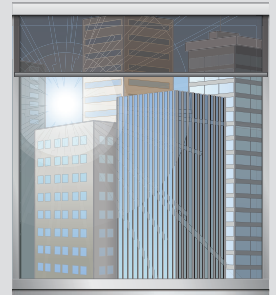
Place **one sensor*** every 30 linear feet of façade, or every 1-2 shade groups



Example: A single neighboring building of comparable size casts one wide shadow on this floor of this façade

For Highest Performance

Place **one sensor*** every 10 linear feet of façade, or every 1-2 windows



Example: Several neighboring buildings of various sizes cast shadows on this floor of this façade

See *Façades with MULTIPLE Sensors* under **Planning Shade Alignment and Grouping** on the following page.

*Sensor refers to a window-mount sensor or a mullion-mount sensor pair

NOTE: If more specific sensor placement assistance is needed, contact Lutron Shading Quotes for information about the availability of a shadow study.

Job Name:	Model Numbers:
Job Number:	

Planning Shade Alignment and Grouping

Façades with ONE sensor:



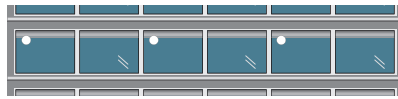
Alignment method: **Always Aligned**

What is it?

Shades in the same façade will all use the data from one sensor to always maintain alignment



Façades with MULTIPLE sensors:



Alignment option 1: **Smart Adaptive (recommended)**

What is it?

Exclusive Lutron® technology which enables shades in the same façade to share sensor data and intelligently adapt grouping to achieve the best possible balance of daylight autonomy and hembar alignment

Why choose it?

To achieve the best balance of daylight autonomy and exterior aesthetic



Alignment option 2: **Always Aligned**

What is it?

Shades in the same façade will share sensor data to always maintain alignment

Why choose it?

To prioritize exterior aesthetic above all else



Alignment option 3: **Independent**

What is it?

Shades in the same façade operate independently in response to individual sensor data

Why choose it?

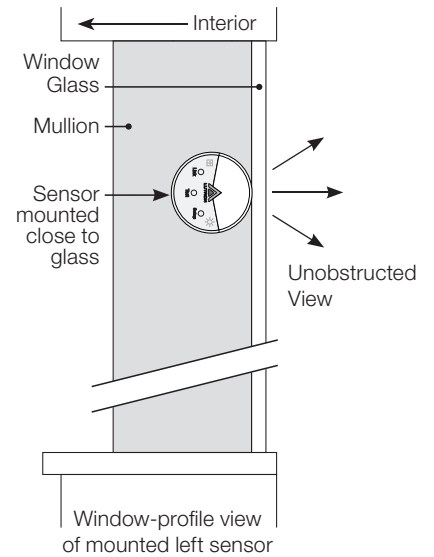
To prioritize daylight autonomy above all else



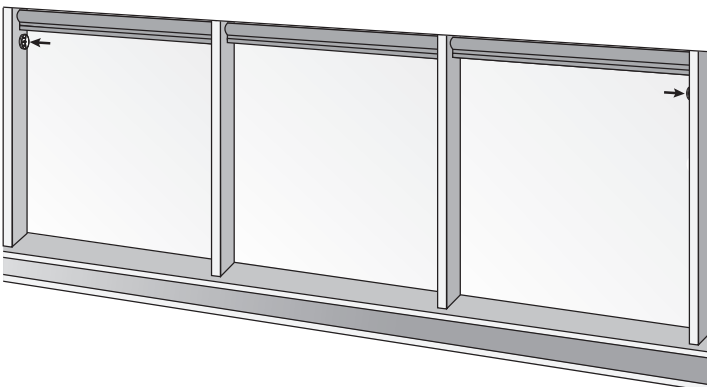
Job Name:	Model Numbers:
Job Number:	

Mounting on Mullion (LRFX-SSM-XX)

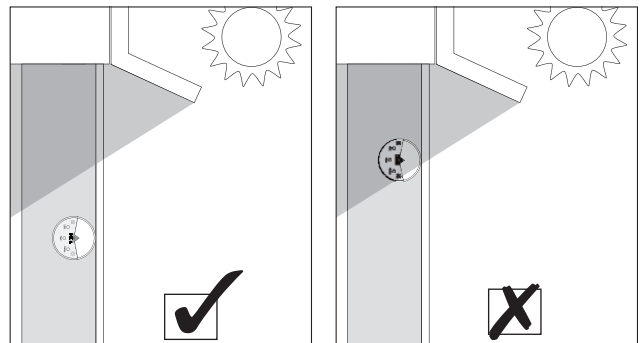
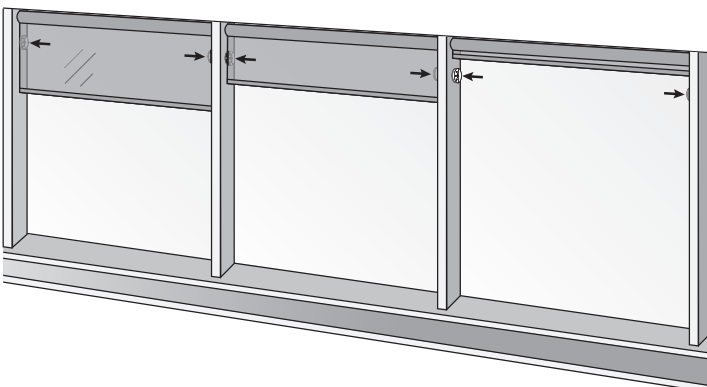
- Flush mount to window mullion near top of window, as close to the glass as possible, ensuring the exterior view is not obstructed
- Ensure the shade fabric does not come between the sensor and the window, and does not physically interfere with the sensor
- Mount to mullion using included double-sided adhesive (aluminum mullions only), or fasten to other mullion surface material using a #4 flat-head screw of appropriate length for the material thickness
- 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 object casting a shadow on the sensor
- Position the Radio Window sensor at a height that is accessible using a typical step ladder, (10 ft / 3 m or lower), in a location where it is unlikely to be touched, moved, or interfered with by the building's occupants
- Operating and performance specifications are based on mounting sensors on mullions at 90° to the window glass; contact Lutron prior to mounting on mullions at angles other than 90°



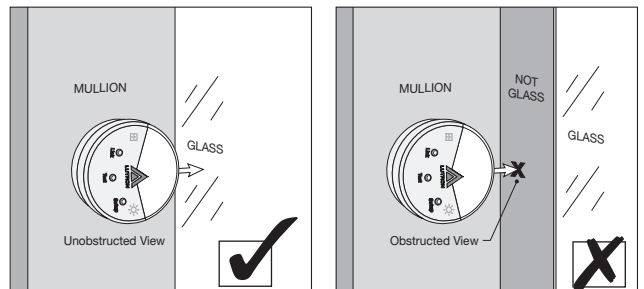
Controlling multiple shades with 1 sensor pair



Controlling 1 shade per sensor pair



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



Sensors must have an unobstructed view through the window glass; in locations where there is framing between the mullion and the glass, mullion-mount sensors cannot be used

Job Name:	Model Numbers:
Job Number:	