LCJ Sensor Installation

Revision History

15th July, 2008   Jason Pamphilis
- Updates based on Alpha 1.0 feedback

9th July, 2008 Brian Valenta
- Added revision history
- Updates based on 07.08.2008 review (see meeting minutes) – not complete

07.03.2008 Brian Valenta
- First draft

Important Notes

1. Use only high quality lithium batteries, size CR123, 3V. Do not use rechargeable batteries. Using improperly rated batteries could damage the sensor.
2. Clean control with a soft damp cloth only. Do not use any chemical cleaners.
3. The sensor is intended for indoor use only. Operate in ambient temperatures between 0 °C (32 °F) and 40 °C (104 °F) and 0-99% relative humidity condensing.
4. Do not paint controls.
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 home
   - Construction of walls separating system components
   - Electrical equipment located near system components
6. The range and performance of the Motion Sensor is highly dependent on line of sight. The occupant sensor must have an unobstructed view of the room. Do not mount behind or near tall cabinets, shelves, hanging fixtures, etc.

FCC Information

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 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.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Changes or modifications not expressly approved by Lutron Electronics Co. could void the user's authority to operate this equipment.

Operation is subject to the following: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Included Parts

1. One Sensor
2. Two Batteries
3. One Mounting Bracket
4. Two screws
5. Two Anchors
6. Temporary Mounting Material (putty or sticky tape)
7. Installation Sheet

Overview

<u>Pre-Installation (Required)</u>
Pre-Installation section covers energizing the sensor.

<u>System Setup (Required)</u>
System Setup section covers the steps to associate a sensor with a receiver.

<u>Sensor Placement</u>
Sensor Placement covers the rules for proper sensor placement.

<u>Motion Sensor Coverage Testing</u>
Motion Sensor Coverage Setup covers the steps to test the motion sense coverage area.
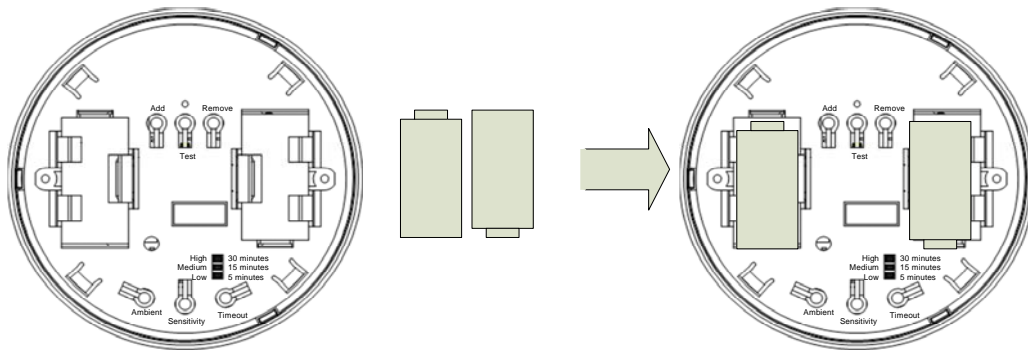
<u>Permanent Installation (Required)</u>
Permanent Installation covers the steps to securely mount the sensor.

Pre-Installation (Note: Not Applicable to Alpha 1)
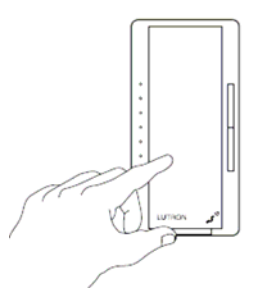IMPORTANT: Please read and perform these steps in order.
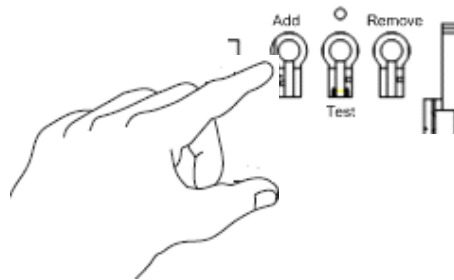1. Install the batteries.

Conditional
Install wall dimmer, Refer to MRF-600M-WH data sheet.

System Setup
1. Turn on the Dimmer.
2. Remove mounting plate. Have sensor in hand.
3. Press and hold the Dimmer's tap button during this entire step. The LEDs blink one at a time, from the bottom up to the top. After approximately 8 seconds, the LEDs will start to cycle slowly from top to bottom (setup mode). Continue to hold the tap button and go to step 4.
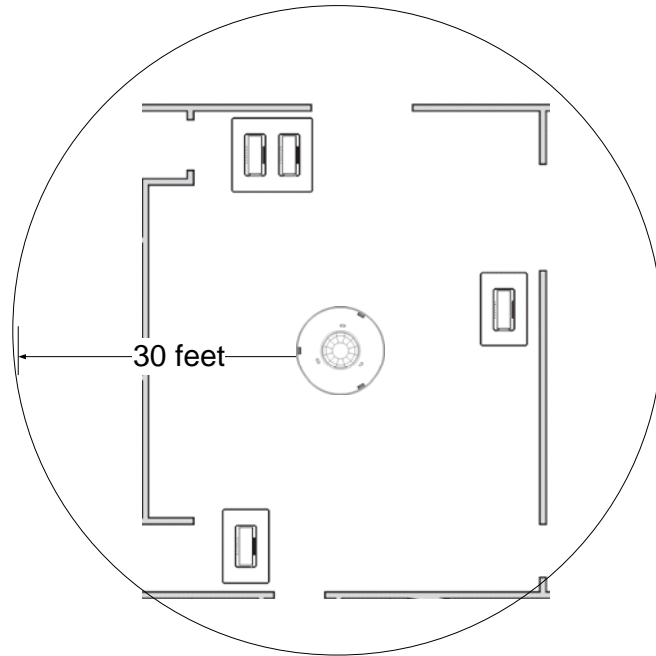
4. While observing the dimmer, press and hold the Sensor Add button until the dimmer's LEDs chase from top to bottom. As the Dimmer learns the Sensor, the LEDs on the Dimmer will cycle quickly from top to bottom. Release the Dimmer tap button to exit set-up mode, and then release the Sensor Add button.
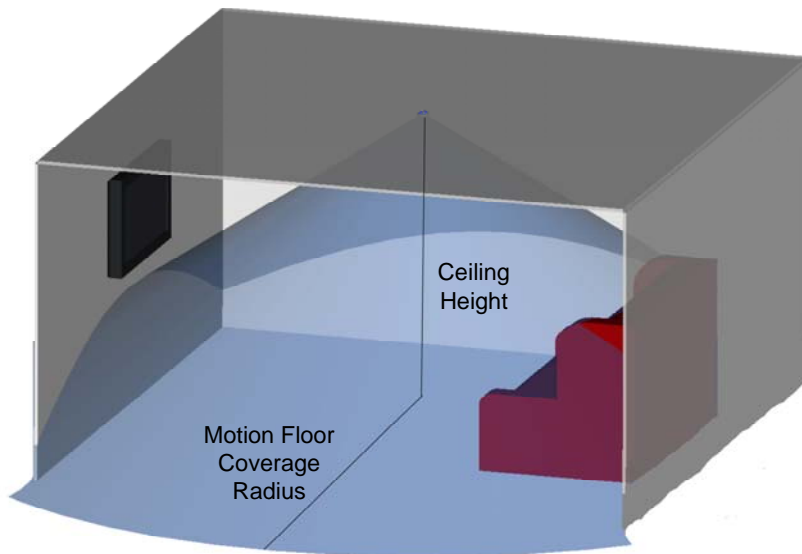
Sensor Placement
1. Find a suitable location to mount the sensor, taking into account the Sensor RF Coverage area and the Motion Floor Coverage area. Sensors must be within 30 feet of the receiving RF devices. Motion Floor Coverage is line of sight.
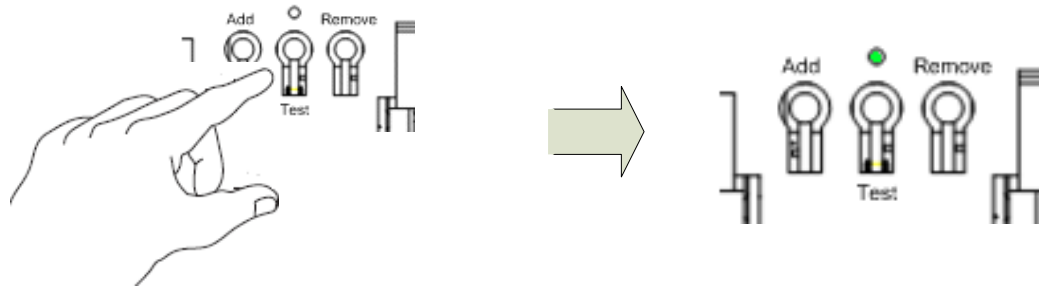
RF Coverage

30 feet

Motion Floor Coverage

Ceiling Height

Motion Floor Coverage Radius

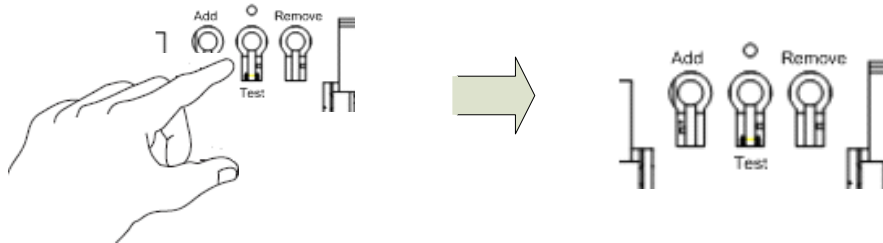| Ceiling Height (feet)	Motion Floor Coverage Radius (feet)
8	12
9	13.5
10	15
12	18

*Motion Floor Coverage indicates the area in which the LCJ sensor is capable of detecting motion.

Motion Sensor Coverage Testing
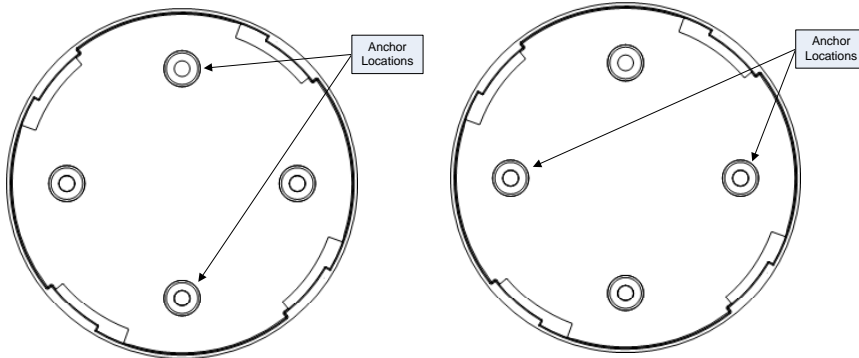1. Remove sensor from wall-mounting bracket.

2. Press test mode.
3. Replace wall-mounting bracket.
4. Adhere unit to ceiling.
5. Confirm the coverage area by walking in the Sensor space and observe the Lens LED state. The Lens LED in the on state signifies motion detected and the Lens LED in the off state signifies motion not detected.
6. Tweak the sensor coverage area by temporarily mounting in a different location if necessary and repeat this step as necessary.
7. Remove the sensor from Test Sensitivity Mode by pressing the Test button. Test LED will turn off. Note: Test Sensitivity Mode automatically exits 5 minutes after entering the mode.

8. Remove and discard "Temporary Mounting Material".

Permanent Installation
1. Note: Anchor usage is optional. Skip to the next step if not using anchors.
   1.1. Drill two 3/16-inch holes for the provided anchors using the mounting bracket as a template. The anchor holes should be across from each other.

   1.2. Install anchors.

2. Place mounting bracket flush against the wall with the smooth side against the wall and install the two provided screws using a hand screwdriver.

   NOTICE: Use of a hand screwdriver is recommended.

   NOTICE: Use of a power screwdriver is **NOT** recommended

3. Attach the Sensor to the mounting bracket by twisting in a clockwise direction until the Sensor and mounting bracket are attached.