Rinnai.

Control-R™
Connect for smarter hot water.

Control-R™ Motion Sensor Installation Instructions

This document provides instructions on installing the Rinnai Control-R™ Motion Sensor.

The Control-R™ Motion Sensor works with the Control-R™ Module to operate the Rinnai Tankless Water Heater recirculation system. The Motion Sensor mounts near the point of use (such as a kitchen faucet or bathroom sink) and activates the recirculation system with the detection of motion. The recirculation system will deactivate after five minutes from initiation or when the water has reached the set temperature. The Motion Sensor is only compatible with Rinnai Tankless Water Heaters featuring Rinnai Circ-Logic™. Follow all instructions carefully to ensure proper performance.

NOTE: If the recirculating pump has recently been active and the recirculation loop is still warm, there may be a delay in pump activation. To minimize any delay in pump activation, set the Rinnai Tankless Water Heater to Comfort Mode. Refer to the "Recirculation Mode" section in the Tankless Water Heater Installation and Operation Manual for more information on Comfort Mode.

Installation Requirements

- Prior to installation, determine the best location for the Motion Sensor. Rinnai recommends installing the Motion Sensor near a water fixture that will have a great deal of use. A site survey is recommended prior to installation.
- The Motion Sensor detects full body movement up to 39 feet and limb movement up to 16 feet away from the sensor. The sensing angle is 110°.
- The Motion Sensor should be corner mounted on a wall between 6 to 9 feet above floor level and in an area with a clear line of sight to the space.
- The Motion Sensor provides a wireless transmission of data to Rinnai's Control-R™ Module. The Control-R™ Module must be installed and functioning properly before installing the Motion Sensor. The Motion Sensor must not be mounted behind any obstructing objects that could harm the wireless signal strength.
- Make sure to install the Motion Sensor in the correct orientation (see below):

Package Contents

A. Motion Sensor
B. Wall Mounting Bracket
C. Wall Positioning Joint
D. Battery*

A   B   C   D
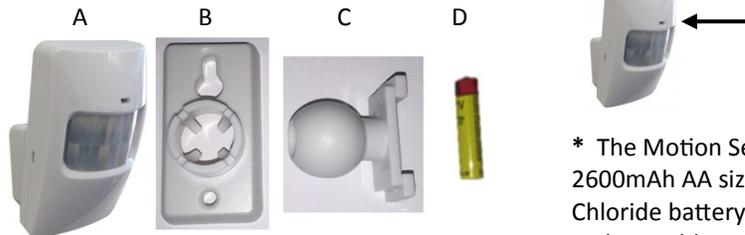
* The Motion Sensor uses a 3.7V 2600mAh AA size Lithium-Thionyl Chloride battery; the battery is not rechargeable. Battery life is up to 1.5 years, depending on transmission intervals.

Instructions

You Will Need:
- Motion Sensor
- Control-R™ Module
- Phillips screwdriver (customer-supplied)

**IMPORTANT:** Read the **Installation Requirements** section above prior to installing the Motion Sensor.

1. Using a Phillips screwdriver, remove the screw located on the center of the Motion Sensor. Remove the front cover.
2. Insert the battery.

3. Pair the Motion Sensor with the Control-R™ Module (called Pairing Mode) by following the steps below.

IMPORTANT: You have 5 minutes to pair the Motion Sensor with the Control-R™ Module before Pairing Mode times out. If Pairing Mode times out, you must repeat the steps below.

- On the Control-R™ Module, press and hold down the "Connect" button until the LED turns green. Then, release the button.
- The Motion Sensor LED light flashes once every 5 seconds to indicate the Motion Sensor is not paired with the Control-R™ Module. To enter Pairing Mode, press and hold the "Connect" button on the Motion Sensor PCB until the LED double-flashes. Then, release the button.
- When the Motion Sensor successfully pairs with the Control-R™ Module, the Motion Sensor LED will remain on for approximately 5 seconds and then turn off. The Control-R™ Module LED flashes green and then returns to the previous mode (Blue = connected to Internet; Red = not connected to Internet). A small delay is normal when the module is flashing green and returning to its original mode.
- The Motion Sensor is now paired with the Control-R™ Module.

LED

Connect button on Control-R™ Module.

Connect button on Motion Sensor PCB.
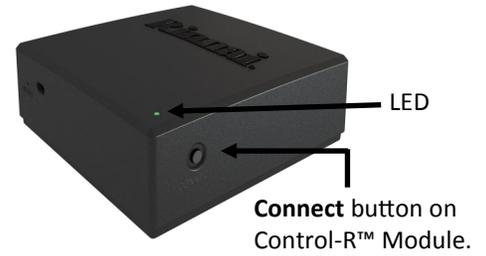
4. Replace the Motion Sensor front cover by tightening the screw.
5. Select the Motion Sensor location. Read the **Installation Requirements** section above prior to selecting a location.
6. Install the wall mount bracket in the selected location using the two supplied screws. Next, install the positioning joint into the wall mount bracket.
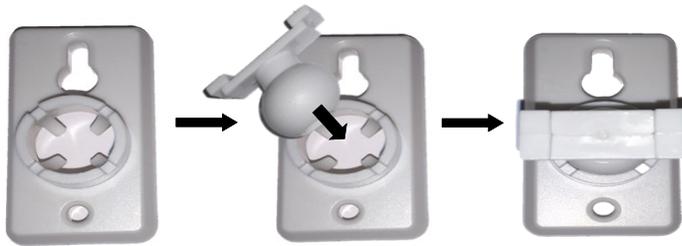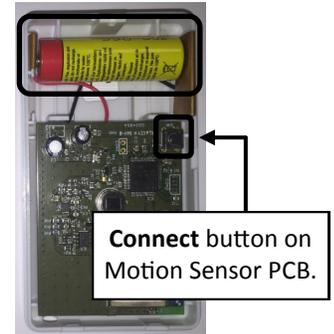
7. Slide the Motion Sensor down onto the wall mount assembly ensuring the sensor is in the correct orientation.
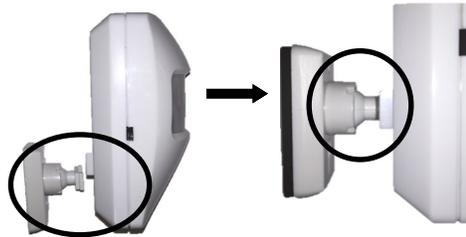
8. Control-R™ Motion Sensor pairing and installation is complete.

Restore Factory Settings

To restore the Motion Sensor settings to a fresh state:

1. Remove the Motion Sensor battery.
2. Press and hold the "Connect" button on the Motion Sensor PCB while reinserting the battery.
3. When the battery is inserted, release the "Connect" button. The Motion Sensor LED will turn on.
4. When the Motion Sensor resets successfully, the LED will turn off.
5. The LED will begin to flash every 1 second to show the Motion Sensor is in an idle state and is ready to be joined to a network.

Connect button
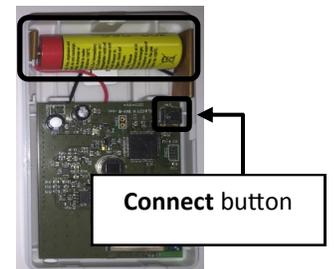
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:
(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION