Rinnai

Control-R™

Connect for smarter hot water.

Part # RWMTS01

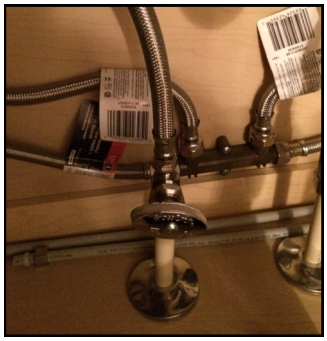
Control-R™ Temperature Sensor Installation Instructions

This document provides instructions on installing the Rinnai Control-R™ Temperature Sensor. The Control-R™ Temperature Sensor works with the Control-R™ Module to operate the Rinnai Tankless Water Heater recirculation system. The recirculation system will deactivate after five minutes from initiation or when the water has reached the set temperature. The Temperature 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, select a location to install the Temperature Sensor. The sensor is designed to be strapped directly to a metal surface, such as copper piping or shutoff valve (see right), with the supplied adhesive strip and cable tie.
- DO NOT install the Temperature Sensor to plastic, PVC, PEX or CPVC piping; heat does not transfer well through these types of pipes which may cause the sensor to not function properly.
- The Temperature 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 Temperature Sensor.



Package Contents

- Temperature Sensor Transmitter with Sensor Wire Harness and Screws
- Battery*
- Adhesive Strip and Plastic Cable Tie (pre-assembled)

* The Temperature Sensor uses a 3.7V 2600mAh Lithium-Thionyl Chloride Battery (not rechargeable). Battery life is up to 5 years, depending on transmission intervals.

Instructions

You Will Need:

- Temperature Sensor
- Control-R™ Module
- Phillips screwdriver (customer-supplied)

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

1. Rotate the Temperature Sensor transmitter front cover and install the battery. (keep the front cover open and proceed to the next step)

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

   IMPORTANT: You have 5 minutes to pair the Temperature 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 Temperature Sensor LED light flashes once every 5 seconds to indicate the Temperature Sensor is not paired with the Control-R™ Module. To enter Pairing Mode, press and hold the "Connect" button on the Temperature Sensor PCB until the LED double-flashes. Then, release the button.
   - When the Temperature Sensor successfully pairs with the Control-R™ Module, the Temperature 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 Temperature Sensor is now paired with the Control-R™ Module.

Connect button on Control-R™ Module

Connect button on Temperature Sensor Transmitter

3. Rotate the front cover to close the Temperature Sensor Transmitter. Use a Phillips screwdriver to secure the three remaining screws to the front cover.
4. Temperature Sensor pairing is complete.

5. Select a location to install the Temperature Sensor Transmitter (read the **Installation Requirements** section above before selecting a location).

6. Install the Temperature Sensor Transmitter by mounting the flat portion of the sensor securely against the selected location (copper pipe, shutoff valve, etc.). The adhesive strip should fit firmly around the location. When the sensor is in the correct location, tighten the plastic cable tie to secure the sensor in place.

Restore Factory Settings

To restore the Temperature Sensor settings to a fresh state:

1. Remove the Temperature Sensor battery.
2. Press and hold the "Connect" button on the Temperature Sensor PCB while reinserting the battery.
3. When the battery is inserted, release the "Connect" button. The Temperature Sensor LED will turn on.
4. When the Temperature Sensor resets successfully, the LED will turn off.
5. The LED will begin to flash every 1 second to show the Temperature 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

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