

# Installation of Temperature Controller

## **WARNING**

Turn the power off. Do not attempt to connect the temperature controllers with the power on. Although the controller is a low voltage device, there is 120 volt potential next to the temperature controller connections inside the unit.

Do not connect the temperature controller to the 120VAC terminals provided for the optional solenoid drain valves.

Indoor models have their controller built into the front panel. Additional controllers can be installed.

## Controller Location

- The controller should be out of reach of small children.
- Avoid locations where the controller may become hot (near the oven or radiant heater).
- Avoid locations in direct sunlight. The digital display may be difficult to read in direct sunlight.
- Avoid locations where the temperature controller could be splashed with liquids.
- Do not install in locations where it can be adjusted by the public.

## Cable Lengths and Sizes

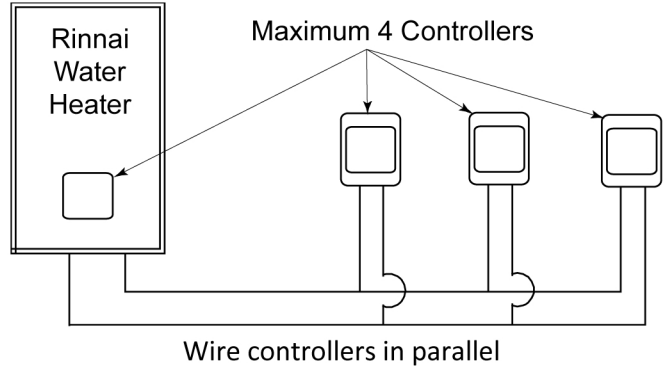
The cable for the temperature controller should be a non-polarized two-core cable with a minimum gauge of 22 AWG. The maximum cable length from each controller to the water heater depends on the total number of wired controllers connected to the water heater.

Number of Wired Controllers	Maximum Cable Length for each Controller to Water Heater
1	328 ft (100 m)
2	164 ft (50 m)
3 or 4*	65 ft (20 m)

\* Only 3 additional controllers can be wired to the indoor water heater.

## Configurations

A maximum of 4 temperature controllers can be installed for a water heater or bank of water heaters. This includes the controller built into an indoor water heater. Controllers can only be wired in parallel. Controllers cannot be wired in series.



The 4 temperature controllers can consist of multiple MC-91-2 or MCC-91-2 but only one BC-100V and only one MC-100V.

*(MC-91-1 should not be installed on a unit that already has an MC-91-2 connected.)*

The clock function on the BC-100V will only be available if an MC-100V is also connected.

If 4 MC-91-2's are installed, simultaneously press the Priority and On/Off buttons on the fourth controller until a beep sounds.