

General Information

This technical bulletin provides additional installation information on the current offering of remote controllers. Refer to the water heater Operation / Installation Manual for more details.

MC-91-1US	Included with water heater
MC-100V-1US *	Optional deluxe with clock and call feature
BC-100V -1US *	Optional deluxe with clock, bath fill, and call feature
MC-502RC-1US-MS	Transceiver and Wireless Controller
MC-502RC-1US-M	Transceiver for Wireless Controller
MC-502RC-1US-S	Wireless Controller

* The MC-100V-1US and BC-100V-1US are only available together in a kit.

Configurations

A maximum of 4 remote controllers, including wired and wireless, can be installed for a water heater or bank of water heaters. Controllers can only be wired in parallel. Controllers cannot be wired in series.

The 4 remote controllers can consist of multiple MC-91's or MC-502RC's but only 1 BC-100V and only 1 MC-100V.

Any one of the 4 types of controllers can be installed by itself and still operate the water heater. All functions will be available with the exception that the clock function on the BC-100V will only be available if an MC-100V is also connected.

NOTICE The bath fill function will not work properly if it is connected to multiple water heaters. The tub will overflow because the bath fill function is not able to measure the water volume when connected to multiple water heaters.

If 4 MC91's are installed, press the Priority and On/Off buttons on the fourth controller until a beep sounds.

The table below shows some of the possible combinations of controllers.

MC-91	+	MC-91	+	MC-91	+	MC-502RC
MC-91	+	MC-91	+	MC-502RC	+	MC-502RC
MC-91	+	MC-502RC	+	MC-502RC	+	MC-502RC
MC-91	+	MC-502RC	+	BC-100V	+	MC-100V
MC-91	+	MC-91	+	MC-502RC	+	BC-100V
MC-91	+	MC-502RC	+	MC-502RC	+	MC-100V

Cable Lengths and Size

The cable for the remote 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)