

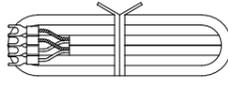
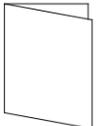
# Temperature Remote Controller: 9007603005 (TM-RE30)

## INSTALLATION INSTRUCTIONS

### FOR YOUR SAFETY

For installer and owners safety, please read these instructions very carefully before installation, and follow the instructions exactly. After installation, please give this manual to the owner.

### INCLUDED ACCESSORIES

Remote Controller	Screws	Remote controller cable*	Manual
 H4.7" W5.0" D0.87"			
Qty: 1	Qty: 2	Qty: 1	Qty: 1

\*No cable is included in the optional TM-RE30.

## INSTALLATION



CAUTION

### • This remote controller is NOT waterproof.

Do not install in high-temperature environments, steamy conditions (such as bathroom), outdoors, in direct sunshine, and/or where children can reach. Make sure the remote controller does not come into contact with water or oil.

### • Failure to follow precautions may cause malfunction or failure.

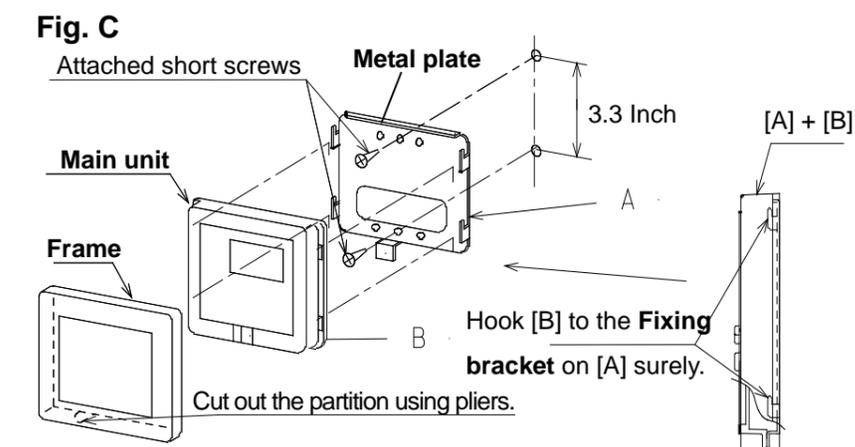
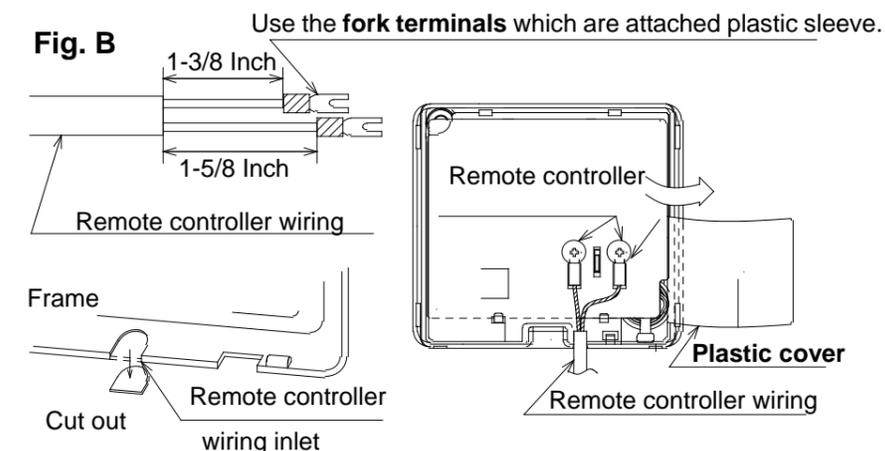
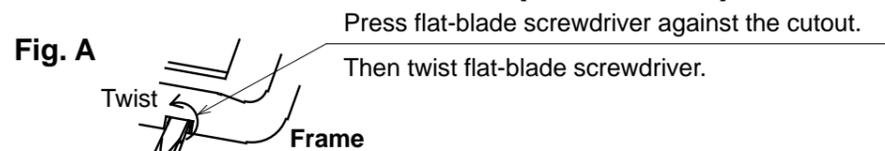
- Do not place the remote control wiring close to other wires from other products.
- Do not extend the remote control wiring more than 400 feet.
- Use of a conduit is recommended to protect remote control wiring, minimum 20 AWG wire (No polarity).

### <Water heaters and a multi-unit controller available for the remote controller>

Model numbers
510 model (T-D2-IN/OS) / 520 model (T-H2-DV/OS) / 320 model (T-H2S-DV/OS)
710 model (T-M32) / 910 model (T-M50) / 9007675005 (TM-MC01)

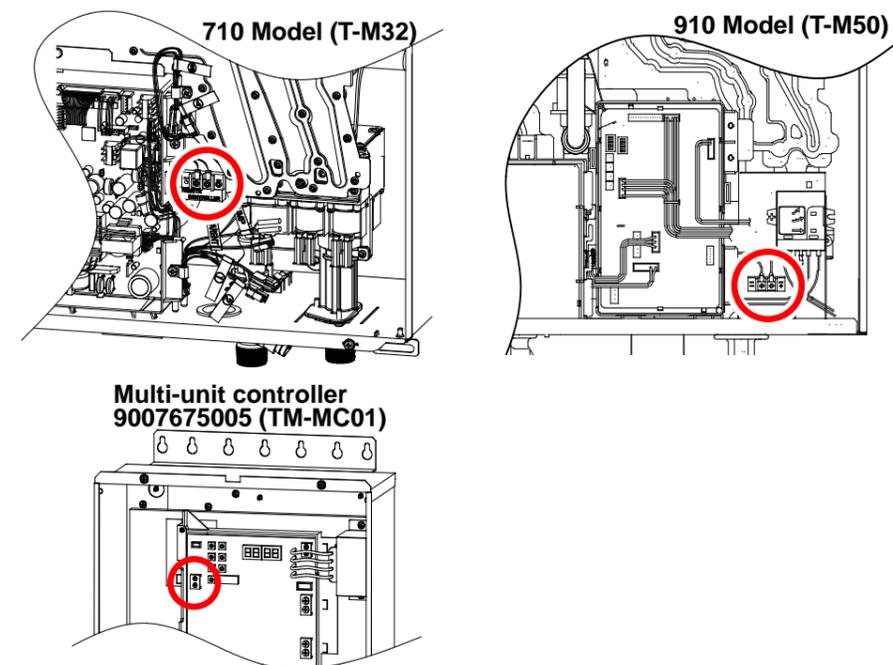
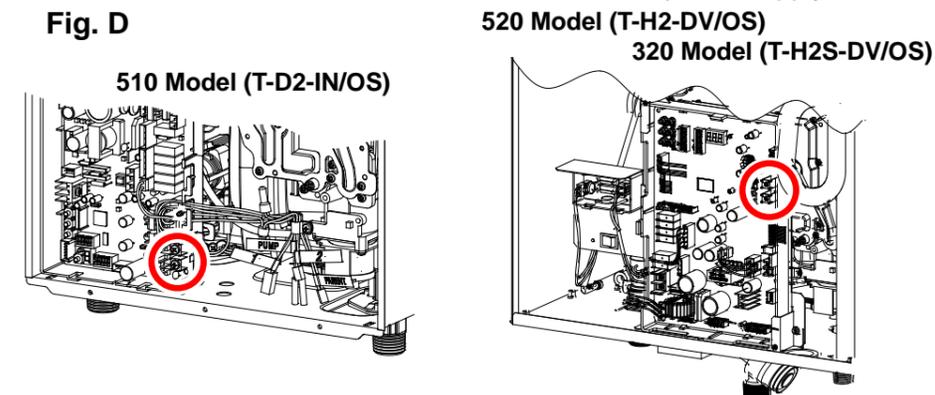
### <Remote Controller Wiring>

1. Take off the "Frame" from the remote controller by flat-blade screwdriver etc. (Fig. A)
2. Attach the "Metal plate" [A] on the wall with two attached screws.
3. If you use another cable, crimp the "Fork terminals" to the wires. (Fig. B)
4. Open the "Plastic cover", and then attach the "Fork terminal" to the connector base of the backside unit with two screws tight. (Cut out the partition using pliers. Insert the wiring into the grooves and through the partition.)
5. Close the "Plastic cover" and then hook the "Main unit" [B] to the "Fixing bracket" on the "Metal plate" [A]. (Fig. C)
6. Attach the "Frame" back onto the remote.



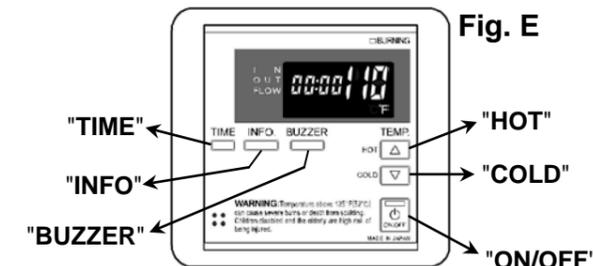
### <Connecting to the Water heater (or the Multi-unit controller)>

1. Turn off the 120VAC power supply to the unit (the water heater or the multi-unit controller).
2. Take off the front cover of the unit. There are 3 or 4 screws on the front cover.
3. Locate the remote terminals on the heater's computer board. Reference Fig. D.
4. Slide the remote wires through the hole on the bottom of the unit's casing.
5. Connect the remote wires with the remote terminals in the unit properly. (The terminals are not polarity sensitive.)
6. Place the front cover back on. Turn on the 120VAC power supply.



**CAUTION** Make sure the remote wires and the remote terminals are not shorted out, or the computer boards of the unit will be damaged.

### <Exterior view of the remote controller>



## OPERATION

### <Set temperature>

1. Turn on the 120VAC power supply to the water heater or the multi-unit controller.
2. Press the "ON/OFF" button on the remote to turn the remote controller on. It shows the time and set temperature on the display as shown in Fig. E.

### 3. a) For 510 model (T-D2-IN/OS)

Press the "HOT" button or the "COLD" button to set the temperature. You can set the temperature from 100 °F (37 °C) to 122 °F (50 °C).

### Increasing temperature from 122 °F (50 °C) to 140 °F (60 °C)

- Press the "HOT" button to set 122 °F (50 °C).
- Press and hold the "INFO" button and the "HOT" button for at least 3 seconds. The remote will emit a beep and change to 131 °F (55 °C).
- Press the "HOT" button to set up to 140 °F (60 °C).

### Increasing temperature above 140 °F (60 °C)

- Press the "HOT" button to set 140 °F (60 °C).
- Press and hold the "INFO" button and the "HOT" button for at least 3 seconds. The remote will emit a beep and change to 158 °F (70 °C) or 149 °F (65 °C) – under the high temperature mode. (Refer to next page.)
- Press the "HOT" button to set up to 167 °F (75 °C) or 176 °F (80 °C) – under the high temperature mode. (Refer to next page.)

### b) For 520 model (T-H2-DV/OS) / 320 model (T-H2S-DV/OS) / 710 model (T-M32) / 910 model (T-M50), and multi-unit controller 9007675005 (TM-MC01)

Press the "HOT" button or the "COLD" button to set the temperature. You can set the temperature from 100 °F (38 °C) to 120 °F (50 °C).

(Continued overleaf)

### <Set temperature> (continued)

#### Increasing temperature from 120 °F (50 °C) to 140 °F (60 °C)

- Press the "HOT" button to set 120 °F (50 °C).
- Press and hold the "INFO" button and the "HOT" button for at least 3 seconds. The remote will emit a beep and change to 125 °F (52 °C).
- Press the "HOT" button to set up to 140 °F (60 °C).

#### Increasing temperature above 140 °F (60 °C)

- Press the "HOT" button to set 140 °F (60 °C).
- Press and hold the "INFO" button and the "HOT" button for at least 3 seconds. The remote will emit a beep and change to 145 °F (63 °C).
- Press the "HOT" button to set up to 175 °F (80 °C) or 185 °F (85 °C) – under the high temperature mode. (Refer to the right portion.)



Temperature settings from the remote controller differ with the water heater models. See the tables below.

#### a) For 510 model (T-D2-IN/OS)

(Unit: °F)

100	102	104	106	108	110	111	113	115	117	122	131	140	158	167
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#### b) For 520, 320, 710 and 910, models

(T-H2-DV/OS, T-H2S-DV/OS, T-M32, and T-M50)

(Unit: °F)

100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175
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CAUTION

Temperature above 125 °F (52 °C) can cause severe burns or death from scalding. Children, disabled and the elderly are at high risk of being injured.

### <Set the time>

1. Press the "TIME" button, then press the "HOT" or the "COLD" button to set the clock time.
2. Press the "TIME" button again to save and exit.

**NOTE:** If you want to hide the clock time, press and hold the "TIME" button for 3 seconds or longer.

### <Buzzer operation and Error code>

If there is a problem with the unit, the remote controller will sound a buzzer and display the error code to inform you the source of the problem.

You can stop the buzzer by pressing the "BUZZER" button. **For details on the error code, refer to the water heater's Installation Manual.**

**NOTE:** If you want to disable the buzzer operation, press and hold the "BUZZER" button for 3 seconds or longer.

### <Information mode>

You can get some information about the water heater condition by pressing the "INFO" button.

During the information mode, the information will be rotated by pressing the "INFO" button as the example to the right shows:

Display example:



Inlet water temperature      Outlet water temperature      Water flow

### <Energy saving mode >

The remote controller has an energy saving mode. The backlight of the LCD in the remote controller will be turned off in five minutes after the water heater stops the operation for energy saving. Once the unit is working, the backlight of the LCD is turned back on during the operation.

## ADDITIONAL FEATURES

### <High Temperature mode>

To change the remote controller's mode from Default Temperature Mode to High Temperature Mode, please follow the procedures below:



CAUTION

DO NOT set temperature above 180°F if you use your water heater in a recirculation system. This will cause damage to the heater and void the warranty.

1. Turn off power to the remote controller by pressing the "ON/OFF" button.



Lamp is OFF to indicate that power is off

2. Simultaneously press and hold both the "HOT" and "COLD" buttons for at least 5 seconds. And then make sure "1" (or "0") is displayed on remote controller.

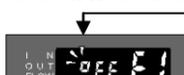
"1" is displayed for single unit. "0" is displayed for Easy-Link / Multi-Unit Systems



3. Press the "TIME" button. Make sure "OFF" and "F1" are displayed on remote controller.



4. Press the "INFO" button. After, make sure "OFF" blinks.



"OFF" blinks

5. Press the "HOT" button or the "COLD" button to set display to "on".



"ON" blinks

6. Simultaneously press both the "BUZZER" button and the "INFO" button to fix the setting.

7. Make sure display is no longer blinking.



Not blinking

8. Press the "ON/OFF" button to finish the setting.

9. Turn on power to the remote controller by pressing the "ON/OFF" button again.



Lamp is ON to indicate that power is on.

### <Temperatures available under the High Temperature Mode>

#### a) For 510 model (T-D2-IN/OS)

(Unit: °F)

100	102	104	106	108	110	111	113	122	131	140	149	158	167	H*
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\*The maximum set temperature with the remote controller

The remote shows "H" on the display at the maximum set temperature, which represents 176 °F.

#### b) For 520, 320, 710, and 910 models

(T-H2-DV/OS, T-H2S-DV/OS, T-M32, and T-M50)

(Unit: °F)

110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185
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### <Unit conversion mode>

The remote controller has a function that can change units of temperature and flow rate from "°F and GPM" to "°C and Liter / min", please follow the procedures below:

1. Turn off power to the remote controller by pressing the "ON/OFF" button.



Lamp is OFF to indicate that power is off

2. Simultaneously press and hold both the "HOT" and "COLD" buttons for at least 5 seconds. And then make sure "1" (or "0") is displayed on remote controller.

"1" is displayed for single unit. "0" is displayed for Easy-Link / Multi-Unit Systems



3. Press the "TIME" button. Make sure "OFF" and "F1" are displayed on remote controller.



4. Press the "HOT" button or the "COLD" button to set display to "F3".



5. Press the "INFO" button. After, make sure "°F" blinks.



"°F" blinks

6. Press the "HOT" button or the "COLD" button to set display to "°C".



"°C" blinks

7. Simultaneously press both the "BUZZER" button and the "INFO" button to fix the setting.

8. Make sure display is no longer blinking.



Not blinking

9. Press the "ON/OFF" button to finish the setting.

10. Turn on power to the remote controller by pressing the "ON/OFF" button again.



Lamp is ON to indicate that power is on.

If you have any questions, please call or write to the manufacturer listed on the rating plate of your water heater.