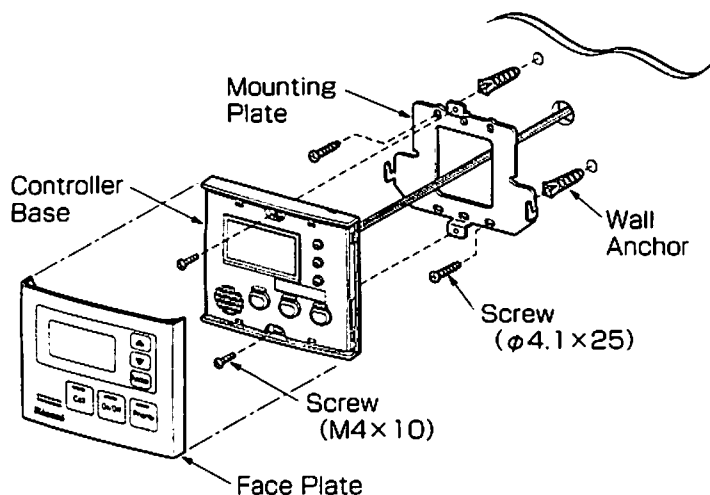




MC-100V-1US (Deluxe Controller) Installation Instructions



Tools Needed for Installation:

- Phillips screwdriver,
- Flathead screwdriver,
- Electric drill,
- 3/16-in drill bit,
- 3/4-in drill bit,

note: Wire nuts and spade connectors are not included with the controller.

Part Name	Form	Qty.
Controller		1
Mounting Plate		1
Screw (M4x10)		2
Screw (φ4.1x25)		2
Wall Anchor		2
Wire Clamp (Small)		1
Wire Clamp (Large)		1

Application Requirements

- The MC-100V -1US controller should be used in combination with the BC-100V-1US controller.
- Before resetting the controller always confirm all hot water taps are closed.

Location Considerations

- Due to verbal instructions from the MC-100V-1US, the controller should be located in an audible location.
- Position the MC-100V-1US in a location that is easily accessible by adults. Avoid locations that are easily accessible for children.
- Avoid locations that would submerge the controller under water.
- Avoid locations subject to direct sunlight. The controller can be difficult to read in direct sunlight.

Mounting The Controller



**Can cause electrical shock or equipment damage.
Disconnect power before wiring.**

1. Identify the most suitable position for the controller.
2. With a flat head screw driver, carefully remove the Face Plate from the controller base. (Fig.1)

3. Position and level the mounting plate.

4. Using a pencil, mark the mounting holes and the large square opening on the center of the plate. (Fig.2)
5. Remove the mounting plate from the wall. Drill two holes in the wall as marked. For drywall drill two 3/16-in. holes (other wall material may require alternate mounting details).
6. Gently tap the wall anchors (provided) into the drilled holes until flush with the wall.
7. Carefully drill a 3/4-in. hole in the center of the large square marked in step 4.. (Fig.2)

8. Using a phillips head screw driver, attach the mounting plate to the wall with the 4.1X25 screws. (Fig.3)

9. Run low voltage thermostat wire through the 3/4-in drilled hole. With spade connectors and a phillips head screw driver, attach the thermostat wire to the controlled base. (Fig.4)

10. Assemble the Controller Base to the Mounting Plate. Using a phillips head screw driver, attach the Controller Base to the Mounting Plate with the two M4X10 screws.

12. Push the face plate onto the controller base. (Fig.5)

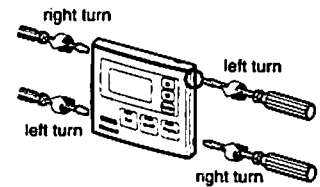


Fig.1: Face Plate Removal

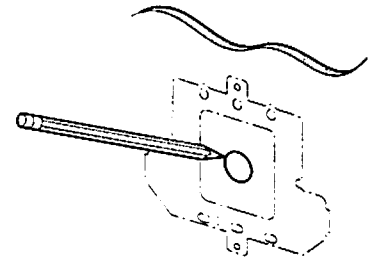


Fig.2: Hole Locations

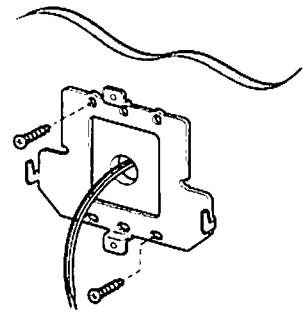


Fig.3: Mounting Plate Placement

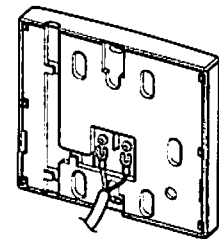
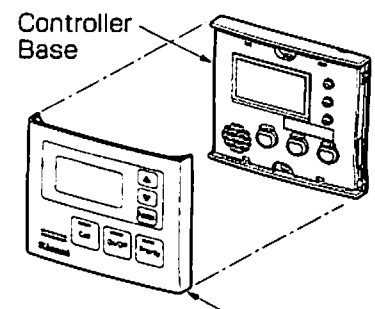


Fig.4: Cable Connection



Installing the Controller to a Switch Box

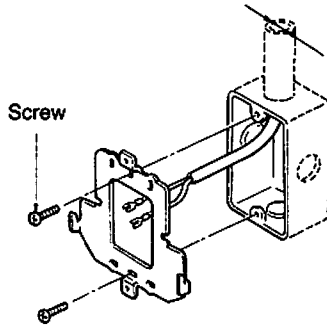


Fig.6

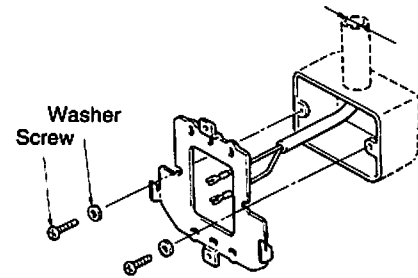


Fig.7

Continue installation steps 9 thru 12. (Fig.6 · Fig.7)

Wiring The Controller To The Water Heater



**Can cause electrical shock or equipment damage.
Disconnect power before wiring.**

1. With a #2 phillips head screw driver, remove the front cover of the water heater.
(Fig.1)

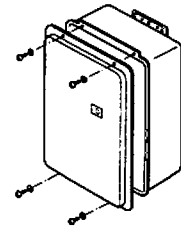
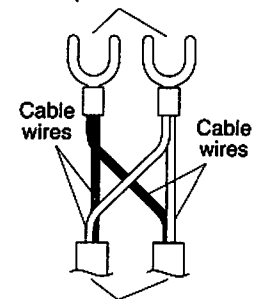


Fig.1: Removal of Front Cover

2. Connect one wire from each controller cable to a common spade connector.
(Fig.2)

New spade connectors



Remote control cable sheaths

Fig.2: Wire Connections

3. Thread the controller cable through the access hole at the base of the water heater. Connect the spade connectors to the terminals labeled "TERMINALS FOR CONTROLS". (Fig.3)

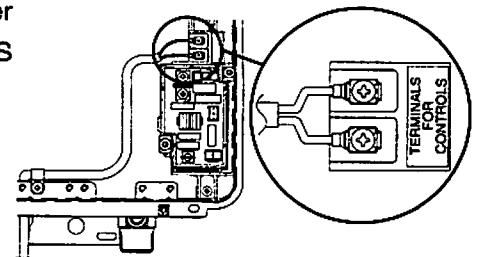


Fig.3: PCB Connection

note:

Polarity to the terminals is not important. Either wire can be connected to either terminal.

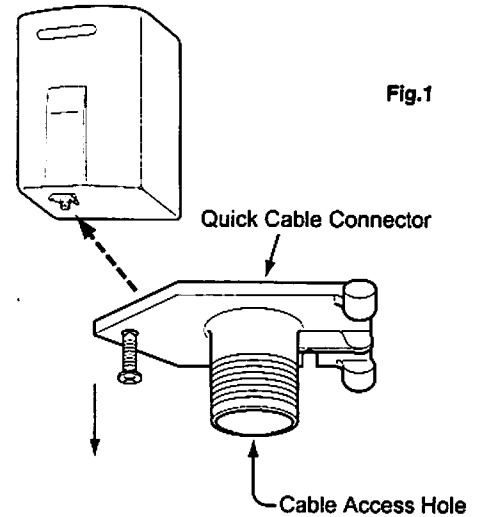
Wiring Multiple Controllers To the Water Heater



Can cause electrical shock or equipment damage.
Disconnect power before wiring.

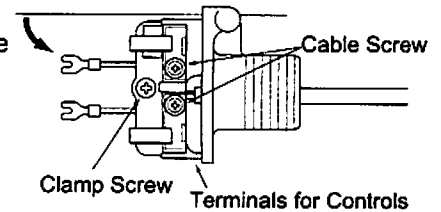
For Quick Cable Connector model.

1. Remove the screw on the "Quick Cable Connector". (Fig.1)

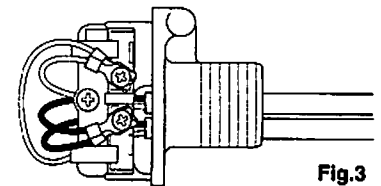


2. Rotate the "Quick Cable Connector" 90° counter clock wise to access the cable screws.

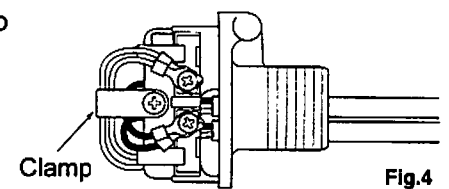
3. Insert wire cable through Cable Access Hole so that it can be accessed from the back. (Fig.2)



4. Loosen the two Cable Screws on Terminals for Controls and connect the cable accordingly. If installing more than one controller attach the cables in parallel by using one spade connector for each cable screw. (Fig.3)



5. Loosen the Clamp Screw and attach the wire to the terminal with the clamp provided with the remote control. (Fig.4)



6. Install cable connection as before. (Fig.5)

