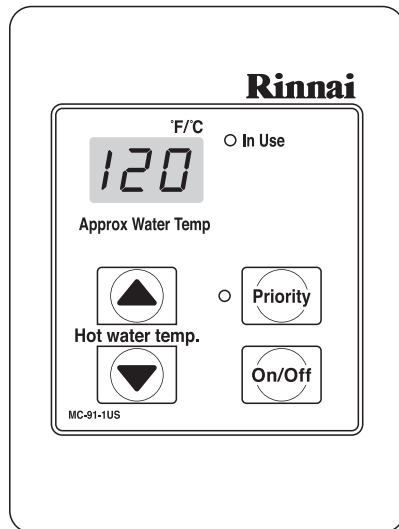


GENERAL CONTROLLER INFORMATION

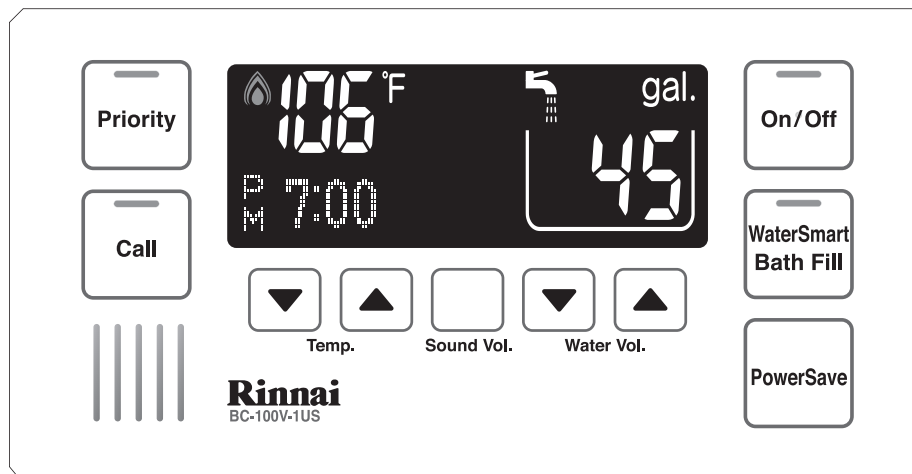
REMOTE CONTROLLERS IDENTIFICATION



MC-91-1US (comes with the unit)



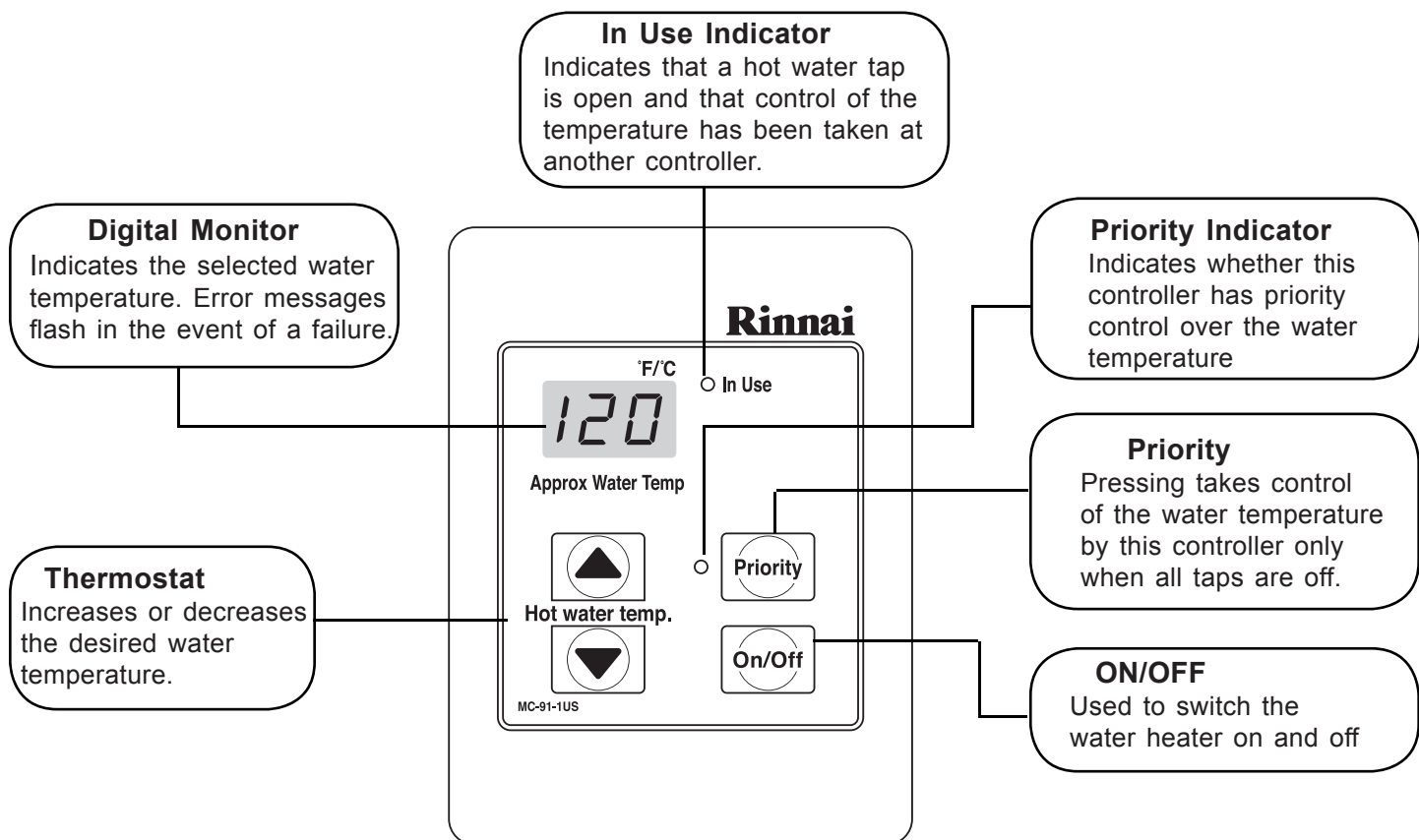
MC-100V-1US (optional)



BC-100V-1US (optional)

The controller(s) for the Rinnai Water Heater allow the customer to control the functions of the water heater and to diagnose certain fault conditions

REMOTE CONTROLLER OPERATION



DIAGNOSTIC USE OF CONTROLLER

1. **To Display Maintenance Codes:** Press 'On/Off' button. To sequence through stored maintenance codes, press 'On/Off' followed by the ▲ thermostat button.
2. **To Display Water Flow through water heater:** Press ▲ thermostat button, hold for 2 seconds and simultaneously press 'On/Off' button.
3. **To display Outlet Water Temperature:** Press ▼ 'thermostat button', hold for 2 seconds and simultaneously press 'On/Off' button.

TO CHANGE TEMPERATURES FROM °F to °C

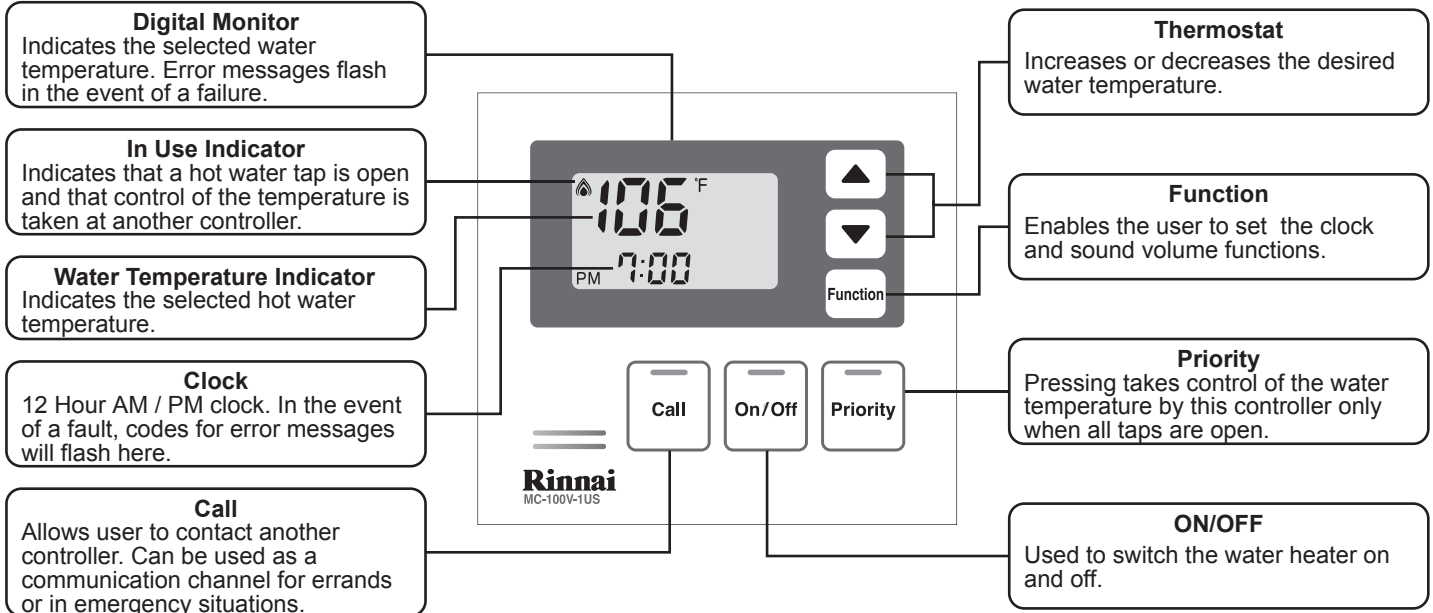
1. Press and hold 'On/Off' button for 5 seconds while water heater is OFF.
2. To change back from °C to °F, please repeat step 1.

MUTE

To eliminate the beeping sound, press and hold ▲ and ▼ button simultaneously until a 'beep' is heard (approximately 5 seconds).

DELUXE CONTROLLER

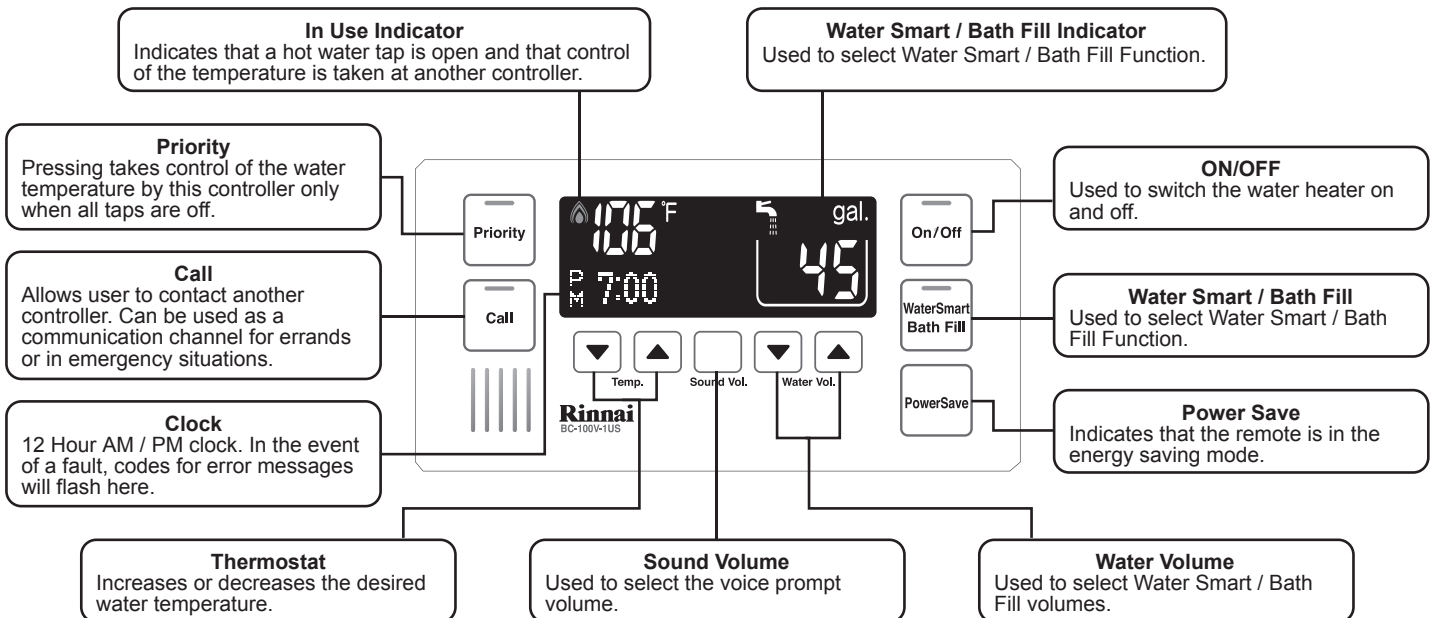
ABOUT THE DELUXE CONTROLLER (MC-100V-1US)



With power interruption, water heater will automatically default to the ON position to provide hot water.

DELUXE BATHROOM CONTROLLER

ABOUT THE THE DELUXE BATHROOM CONTROLLER (BC-100V-1US)



DELUXE CONTROLLER

Setting The Sound Volume

To do this, press the 'Function' Button, the default voice prompt sound volume is medium, each subsequent press of the ▲ and ▼ Button will cycle through the available volume settings in the following order: High Voice - Off Voice (beep) - Off Sound (no beep) - Low Voice - Medium Voice.

Setting The Clock (MC-100V Deluxe Controller ONLY)

The clock is a 12 hour AM/PM style display. To set the time, press the 'Function' Button twice within 10 seconds. Press the ▲ and ▼ Buttons to adjust the time. When you get close to the time you wish to set, press the button intermittently to avoid going further than the desired time.

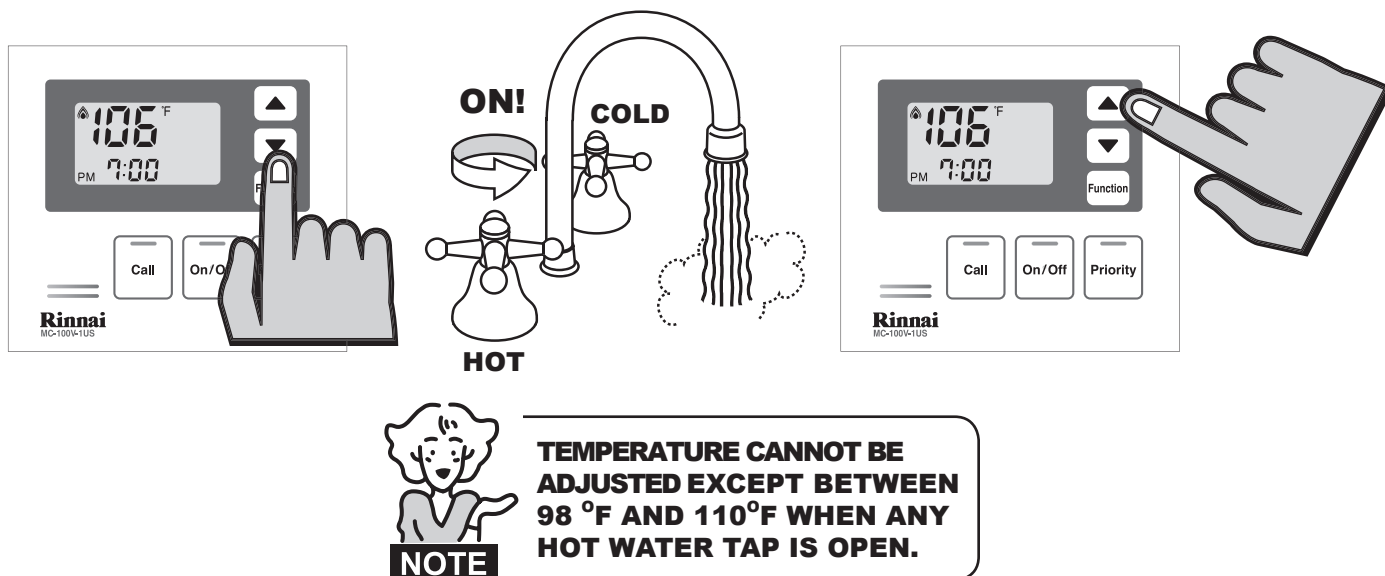
Press the 'Function' Button again to complete setting the clock and return to normal operation.

Adjusting Temperature

Simply press the ▲ or ▼ buttons until the required temperature is displayed on the Digital Monitor.

To Operate the hot water unit, open any hot water tap. This will automatically light the burner providing hot water. The red flame of the water heater 'In Use Indicator' 🔥 will illuminate on the Controller.

Once the hot water is running, if the set temperature is either too hot or cold, press the ▲ or ▼ buttons until the desired temperature is reached.

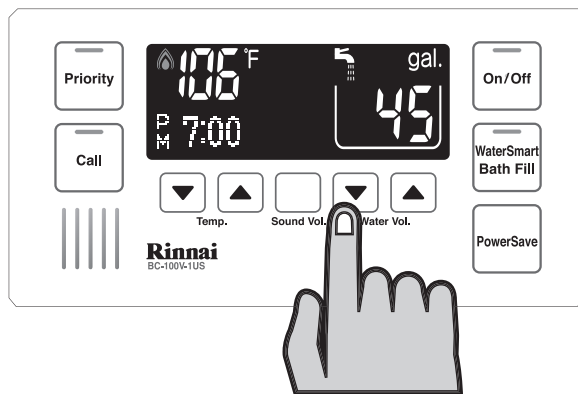


DELUXE BATHROOM CONTROLLER

Setting the Sound Volume

The voice prompt sound volume for all Deluxe Controller(s) can be set individually. To do this, press the 'Sound Vol.' button. The default voice prompt sound volume is medium, each subsequent press of the 'Sound Vol.' will cycle through the available volume settings in the following order: High Voice - Off Voice (beep) - Off Sound (no beep) - Low Voice - Medium Voice.

Press the 'Sound Vol.' again to complete setting of the sound volume and return to normal operation.

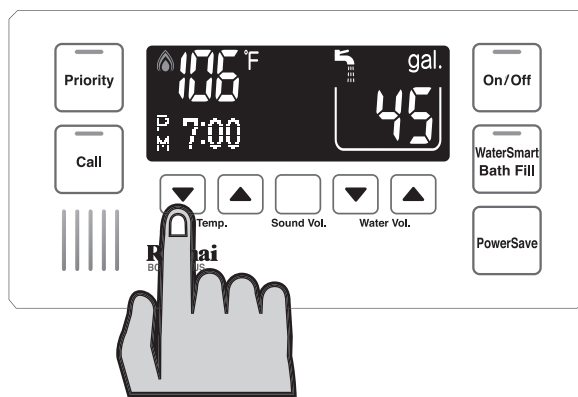


Adjusting Temperature

Simply press the 'Hot water temp.' ▲ or ▼ buttons until the required temperature is displayed on the Digital Monitor.

To Operate the hot water unit, open any hot water tap. This will automatically light the burner providing hot water. The red flame of the water heater 'In Use Indicator' 🔥 will illuminate on the Temperature Controller.

Once the hot water is running, if the set temperature is either too hot or cold, press the 'hot water temp. ▲ or ▼ buttons until the desired temperature is reached.



TEMPERATURE CANNOT BE ADJUSTED EXCEPT BETWEEN 98°F AND 110°F WHEN ANY HOT WATER TAP IS OPEN.

NOTE



CHECK WATER TEMPERATURE BEFORE USE.

A parent should always check the temperature before a child is placed in contact with hot water.



Each time a button is pressed, a 'beep' will sound. The 'beep' sound and the 'bath fill complete' buzzer can be muted by pressing the Temperature Controller Up and Down buttons simultaneously for more than 3 seconds. To return to original settings, repeat this step.

Avoid getting water in the speaker as this may cause damage.

DELUXE BATHROOM CONTROLLER



IT IS THE CUSTOMERS RESPONSIBILITY TO MONITOR THE BATH FILL REMOTE CONTROLLER FUNCTIONS.

OPERATING THE WATER SMART / BATH FILL BUTTON

The 'Water Smart / Bath Fill' button allows a preset water volume and temperature to be selected and run automatically.

Initial Settings

When you press the 'Water Smart / Bath Fill' button, a Shower / Bath Volume will appear on the indicator. When a deluxe bathroom controller(s) is first turned on, the default shower / bath fill volume is set to 25 gallons. The shower / bath volume can be lowered to a minimum of 10 gallons or raised to a maximum of 120 gallons.



Programming shower / Bath Volume and Temperature

With the system on, select a Deluxe Bathroom controller(s) and ensure that it currently has priority. If it does not have priority, press the 'Priority' button once and the 'Priority' button will

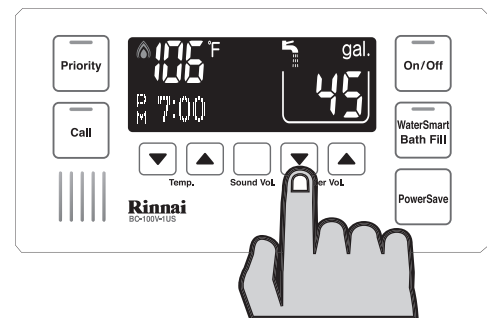
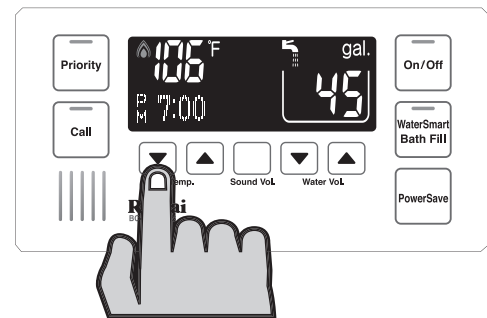
To select the desired delivery temperature, use the 'Temp.' ▲ or ▼ buttons.

The selected temperature will be displayed on the bathroom controller monitor and will remain as the default temperature until it is changed.

To select the volume of water to be used by the shower / bath, use the 'Water Vol.' ▲ or ▼ buttons.

The selected volume is displayed at the Right of the controller monitor numerically.

When filling a bath for the first time, it is recommended that a low bath fill volume such as 25 gallons or lower (if available) be used. During any subsequent bath fills, the volume can then be adjusted to suit your known bath volume and / or desired fill level.



Be careful not to overfill the bath, an average bath volume is 60 gallons. It is recommended that when filling a bath for the first time you should:

- Remain by the bath during the filling process.
- Use a low bath fill volume such as 25 gallons or less.

'Water Smart / Bath Fill' button is unavailable with the MSA Controller System.

DELUXE BATHROOM CONTROLLER

Using Water Smart/ Bath Fill

Press 'Water Smart / Bath Fill' button once. The 'Water Smart / Bath Fill' button will illuminate and a tone will sound. The 'Bath' indicator will also be displayed in the kitchen Controller monitor (Deluxe Models ONLY).

The voice prompt will say "The hot water system is ready. Open the hot water tap".

Open the hot water tap for the relevant shower or bath.

The 'In Use' indicator  will illuminate at all Deluxe Temperature Controller(s) and the shower will run or the bath will start to fill.

To Stop Water Smart / Bath Fill Operation

If you wish to stop the water flow whilst the 'Water Smart / Bath Fill' button is in operation, simply press the 'Water Smart / bath Fill' button. The 'Water Smart / Bath Fill' button will flash and the voice prompt will say "Hot water is not available. Turn off all hot water taps, and push the Bath Fill button". Follow the voice prompt instructions.

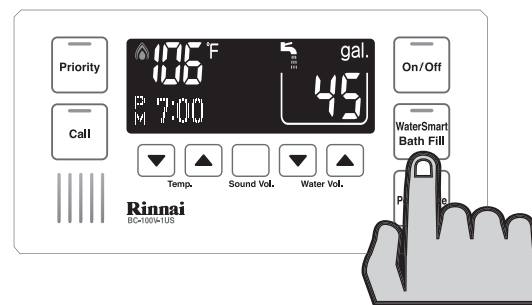
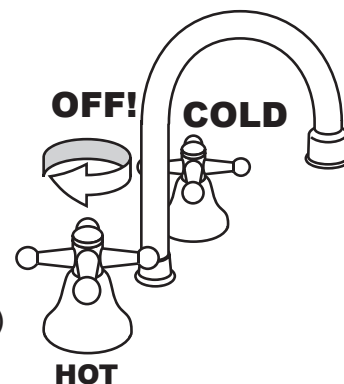
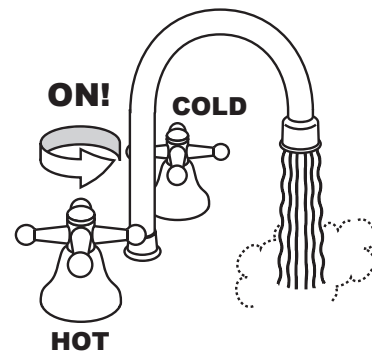
When Water Smart / Bath Fill Operations Finishes

Once the Water Smart / Bath fill operation finishes, the following events will occur:

1. The flow from the shower / bath hot water tap will cease.
2. The 'Water Smart / Bath Fill' button will flash.
3. The Kitchen Controller 'Bath' indicator will flash (Deluxe Models)
4. A tone will sound.
5. The voice prompt will say "Bath fill is complete. Turn off the bath hot water tap, and push the Bath fill button."

Follow the voice prompts instructions. Note that the hot water unit will not allow hot water to flow from any fixture until the 'Water Smart / Bath Fill' button has been changed.

6. The 'Water Smart / Bath Fill' button light on the Bathroom Controller and the 'Bath' indicator on the Kitchen Controller monitor will go out.



COMBINING CONTROLLERS AND DELUXE CONTROLLERS

Controller and Deluxe Controller can be combined and will function as described in other sections of this manual. Refer to the table on page 18