TEMPERATURE CONTROL – STANDARD

STANDARD CONTROLLER FUNCTIONS

If one or more controllers are installed, at least one must be on for the water heater to operate. If all controllers are off, the water heater will only deliver cold water.

on / off button –   This button must be pressed once to turn on the controller.

A controller cannot be turned on if water is flowing from a hot tap.

To turn off a controller, press the on / off button once. The light will go out.

A controller can be turned off whilst water is flowing.

on / off operating light – The light in the on / off button will glow when the controller is turned on.

The light will go out when the controller is turned off.

priority light –   This light will glow on a controller when that controller has priority.

The Bathroom controller(s), if they are turned on, have priority over the Kitchen controller.

Priority means that controller has control of the water heater temperature setting.

The water temperature setting can only be adjusted by the controller that has priority.

in use light –   This light will glow on all controllers, whether they are on or off, when hot water is flowing, regardless of which controller has priority.

display panel –   The current temperature setting is displayed on all controllers (whether hot water is flowing or not), when any controller is on.

If all controllers are off, then the display remains blank.

The water volume can also be displayed on the Kitchen controller. The x10*l* symbol glows when the water volume is displayed.

⋀ (up button) –   The up button increases the temperature setting.

Refer to "Temperature Adjustment – Standard Controller" on page 15.

⋁ (down button) –   The down button decreases the temperature setting.

Refer to "Temperature Adjustment – Standard Controller" on page 15.

water volume button (Kitchen controller only) – This feature enables an alarm to sound when a set volume of water has flowed through the water heater.

Refer to "Water Volume Function – Standard Controller" on page 20.

water volume operating light – The light in the water volume button will glow when the water volume button is pressed and the water volume mode is turned on.

The light will go out when the water volume button is pressed and the water volume mode is turned off.

water volume symbol – The x10*l* symbol below the display panel glows when the water volume mode is turned on and the water volume is displayed.

STANDARD CONTROLLER
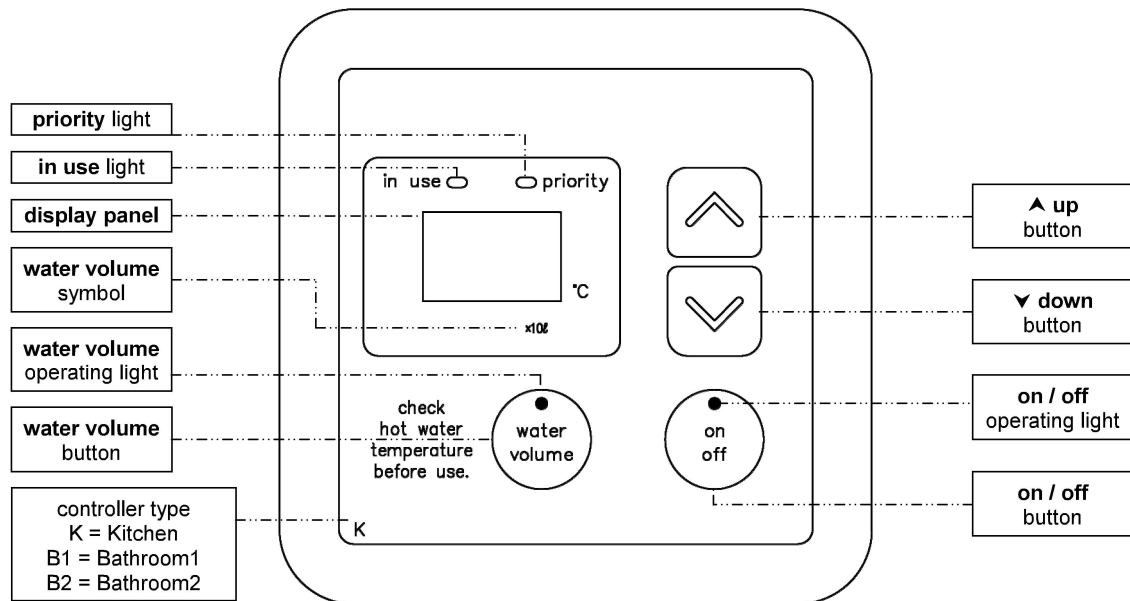
Note: water volume button, **water volume** operating light and **water volume** symbol are on the Kitchen controller only.

SILENCING A CONTROLLER – STANDARD

The controller emits a sound whenever a button is pressed. This sound can be turned off to provide silent operation.

To turn off the sound:

- Press the on / off button, to deactivate the controller (on / off light is off).

- Press and hold the up (ᴧ) button.

- Press the on / off button, whilst the up (ᴧ) button is pressed.

The sound for the controller is deactivated. Repeat this procedure on the other controllers if you wish to deactivate their sound. To restore the sound, repeat this procedure.

TEMPERATURE SETTINGS – STANDARD CONTROLLER

The temperature settings of each type of controller are:

- Bathroom1 & 2   37°C to 46°C (in 1°C increments), 48°C*, 50°C

- Kitchen   37°C to 46°C (in 1°C increments), 48°C*, 50°C, 55°C, 60°C

           * limited to 48°C on an 876 series model.

Temperature settings

37	38	39	40	41	42	43	44	45	46	48	50	55	60
warm				average hot shower					hot			very hot	

The installation of a Bathroom controller(s) only (i.e. no Kitchen controller) limits the temperature setting of the water heater to a maximum of:

- 874 series   50°C

- 876 series   48°C

regardless of the preset outlet temperature setting of the water heater.

The installation of a Kitchen controller will allow a maximum temperature setting of:

- 874 series   60°C

- 876 series   48°C

regardless of the preset outlet temperature setting of the water heater.

If controllers are not installed, the water heater defaults to the preset outlet temperature setting. This may be up to:

- 874 series   70°C

- 876 series   48°C

On a building fitted with a temperature limiting device such as a tempering valve and where an 874 series water heater is installed without a separate untempered hot water line to the kitchen, laundry or other non-ablution area, although the Kitchen controller will be able to display temperatures above 50°C and the water leaving the water heater will be at the set temperature, the maximum water temperature which can be delivered to the hot water outlets in these locations is determined by the temperature setting of the temperature limiting device. This is usually 50°C.

On a building fitted with a temperature limiting device set to 50°C, to enable the delivery of water temperatures above 50°C to the kitchen, laundry or other non-ablution area, separate untempered pipe work must be installed from the water heater to the hot water outlets in these locations.

TEMPERATURE ADJUSTMENT – STANDARD CONTROLLER

- A controller must be on and have priority to be able to adjust the temperature setting.

- The temperature adjustment is made by pressing the up (▲) button or down (▼) button.

- The maximum temperature setting for the controllers are:

	Kitchen	Bathroom
874 series	60°C	50°C
876 series	48°C	48°C

- Each press of the up (▲) button will increase the temperature setting by one increment.

- Pressing and holding the up (▲) button will scroll the temperature setting up to a maximum 43°C if there is hot water flowing or 45°C if there is no hot water flowing.

- From the 45°C setting, the up (▲) button must be pressed once for each increase in temperature increment.

- The temperature setting cannot be increased above 43°C whilst hot water is flowing.

- The minimum temperature setting for each type of controller is 37°C.

- Each press of the down (▼) button will decrease the temperature setting by one temperature increment.

- Pressing and holding the down (▼) button will scroll down the temperature setting.

- The temperature setting can be decreased from any temperature setting whether the hot water is flowing or not.

KITCHEN CONTROLLER – STANDARD

The Kitchen controller allows the user to select the temperature setting for the hot water to be used in the kitchen and laundry. It has a minimum temperature setting of 37°C and a maximum temperature setting of:

- 874 series   60°C

- 876 series   48°C

The Kitchen controller does not have priority if a Bathroom controller is on.

Notes on the Kitchen controller:

- The controller cannot be turned on whilst a hot tap is open.

- The Kitchen controller must be on and have priority in order to adjust the temperature setting on the Kitchen controller.

- The Bathroom controller(s) can be turned off from the Kitchen controller.

  - Press and hold the on / off button on the Kitchen controller for three seconds.

    This turns off all the controllers and the displays go blank.

    If hot water is flowing from a hot tap, it will go cold.
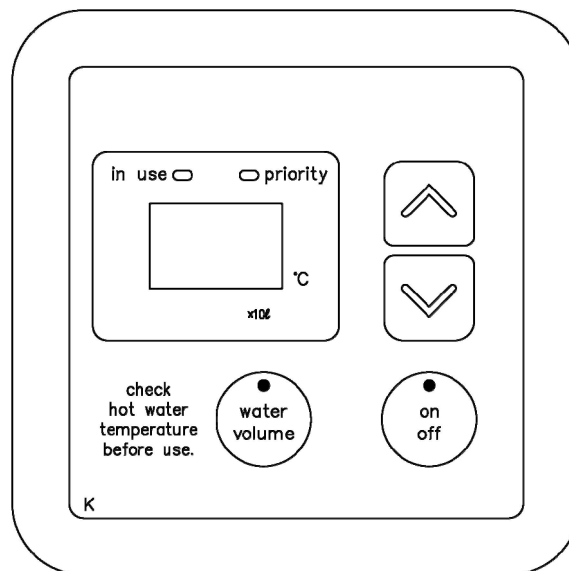
Kitchen Controller

To operate the Kitchen controller:

1. **Turn off the Bathroom controller(s)**

   ▪ If a temperature setting is displayed and the priority light is not glowing, it is necessary to turn off the Bathroom controller(s) to gain priority.

   ▪ Refer to the notes on the Kitchen controller on page 16.

2. **Turn on the Kitchen controller**

   ▪ Press the on / off button.

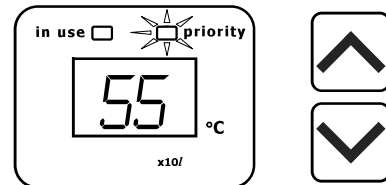   The on / off operating light and the priority light will both glow.

     The previous Kitchen controller temperature setting will be displayed on the temperature display panel.
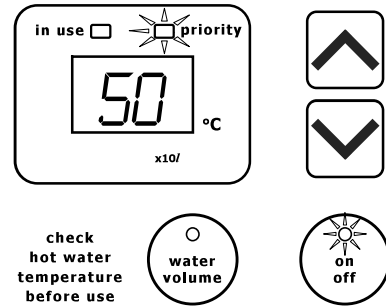
3. **Select the temperature setting**

   ▪ Press the up (▲) button or down (▼) button.

   ▪ Refer to "Temperature Adjustment – Standard Controller" on page 15.

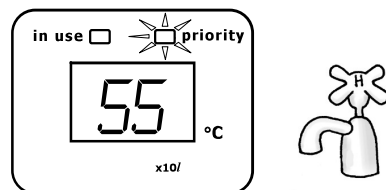   The selected temperature setting will be displayed on all controllers.

4. **Open the hot tap.**

     The in use light will glow on all controllers.
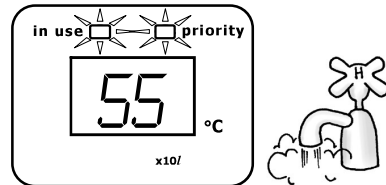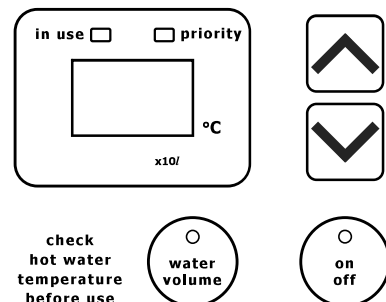
5. **Close the hot tap.**

     The in use light will go out on all controllers, if no other hot tap is open.

6. **Turn off the Kitchen controller**

   ▪ Press the on / off button.

     The priority light and on / off operating light will go out and the temperature display will go blank.

Important: Turn off the Kitchen controller after hot water usage is finished in the kitchen and / or laundry. Refer to **Important** note for Bathroom controllers on page 18.

BATHROOM CONTROLLERS – STANDARD

The Bathroom controller(s) allows the user to select the temperature setting for the hot water to be used in the bathroom. They have a minimum temperature setting of 37°C and a maximum temperature setting of:

- 874 series   50°C

- 876 series   48°C

The Bathroom controllers operate in tandem. Whenever an operation is selected on one Bathroom controller, it is also set on the other Bathroom controller. The Bathroom controllers automatically have priority if they are on.

Important: It is important to turn on the Bathroom controller before opening a hot tap in the bathroom (priority is automatically gained). If the Bathroom controller is not on and the Kitchen controller is on (has priority), then it is possible to receive water at a temperature higher than expected from a hot tap in the bathroom. This temperature could be up to:

- 874 series   50°C if a temperature limiting device is installed in the hot pipe to the bathroom or up to 60°C if a temperature limiting device is not installed.

- 876 series   48°C

Notes on the Bathroom controllers:

- The controller cannot be turned on whilst a hot tap is open.

- When a Bathroom controller is turned on, it gains priority from the Kitchen controller.

- The Bathroom controller must be on in order to adjust the temperature setting on the Bathroom controller.

- The Kitchen controller can be turned off from a Bathroom controller.

  - Press and hold the on / off button on a Bathroom controller for three seconds.

    This turns off all the controllers and the displays go blank.

    If hot water is flowing from a hot tap, it will go cold.

- ⚠ **Warning:** It is advised to leave the Bathroom controller on after hot water usage is finished in the bathroom. **Turning off a controller in one bathroom will also turn off the controller in the other bathroom.** The Kitchen controller will gain priority if it is on and the temperature setting can be up to:

  - 874 series   60°C

  - 876 series   48°C

    If a hot tap is open in another bathroom, the water will be delivered at this temperature.
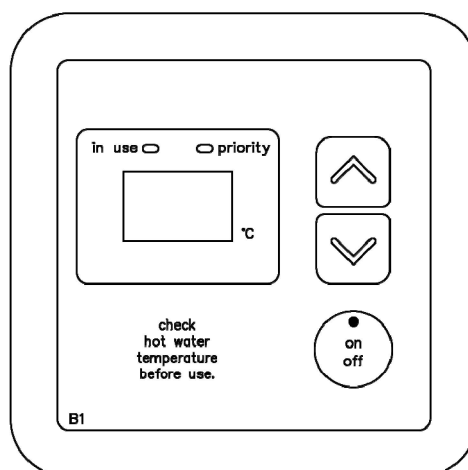
Bathroom Controller

To operate a Bathroom controller:

1. **Turn off the Kitchen controller**

    ▪   If a temperature setting is displayed and the priority light is not glowing, it is advised to turn off the Kitchen controller.
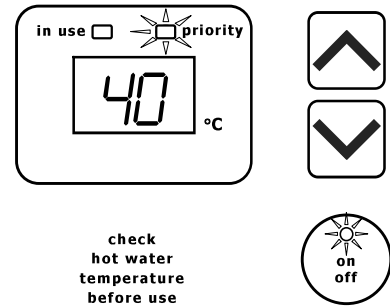
        Refer to the notes on the Bathroom controllers on page 18.

2. **Turn on the Bathroom controller**

    ▪   Press the on / off button.

   The on / off operating light and the priority light will both glow.

        The previous Bathroom controller temperature setting will be displayed on the temperature display panel.
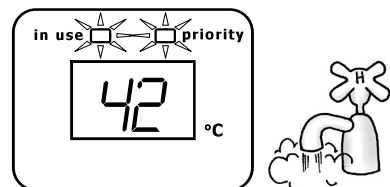
3. **Select the temperature setting**

    ▪   Press the up (▲) button or down (▼) button.

    ▪   Refer to "Temperature Adjustment – Standard Controller" on page 15.

        The selected temperature setting will be displayed on all controllers.
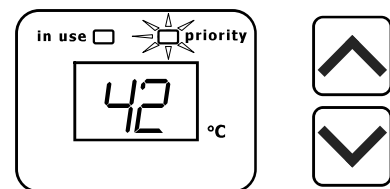
4. **Open the hot tap**

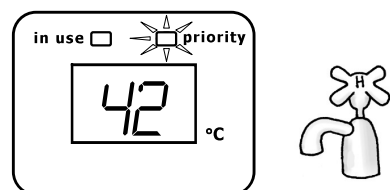   The in use light will glow on all controllers.

5. **Close the hot tap**

        The in use light will go out on all controllers, if no other hot tap is open.

        It is advised not to turn off the Bathroom controller(s).

    ▪   Refer to the **warning** in the notes on page 18.

WATER VOLUME FUNCTION – STANDARD CONTROLLER

The water volume function is designed to warn, by a beeping sound, that a certain volume of water has been delivered from the water heater. **It does not stop either the flow of or the heating of water.** This function is particularly useful if a bath is being filled, or measuring the water consumed by the use of a shower.

The water volume function can only be set by the Kitchen controller. Refer to the notes on the water volume function on page 21.
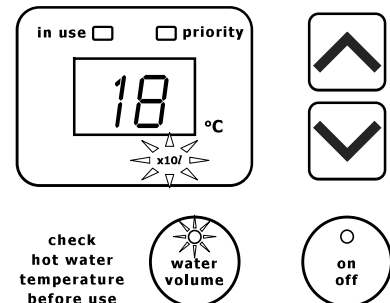
To operate the water volume alarm:

1. **Turn on the water volume alarm**

   ■ Press the water volume button.

   The water volume operating light will glow.

   The current set water volume (in litres divided by 10) will be displayed and the x10*l* indicator will also glow.

   E.g. the factory preset water volume of 180 litres is shown as 18 x10*l*.

2. **Adjust the water volume setting (if necessary)**

   ■ To adjust the water volume setting, press the up (▲) button to increase the water volume or the down (▼) button to decrease the water volume.

   Each press of the up (▲) button or down (▼) button will change the water volume setting by 10 litres.

   Pressing the up (▲) button or down (▼) button continuously will scroll the water volume setting.

   Fifteen seconds after the water volume has been selected, the water volume operating light will start to flash and the selected water volume is set.
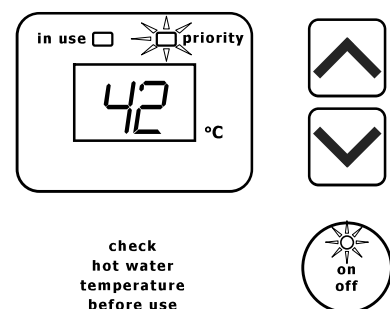
   The water volume operating light will continue to flash until the alarm sounds.

   A maximum of 500 litres (50 and x10*l* displayed) and a minimum of 10 litres (1 and x10*l* displayed) can be set with the water volume alarm.
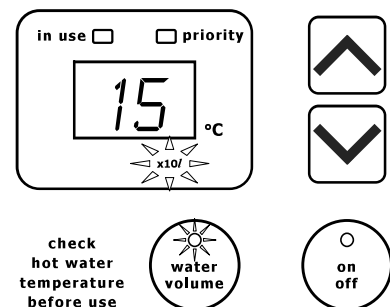
3. **Set the water temperature**

   ■ Turn on the controller for the room where the hot water is to be used.

   ■ Gain priority (if using the Kitchen controller).

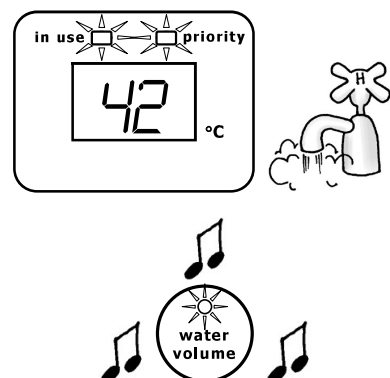   ■ Select the temperature setting.

4. **Open the hot tap**

   The in use light will glow on all controllers.

   Measurement of the water flow at the water heater will commence when a hot tap is open and the water volume operating light is flashing.

   The alarm will sound when the set volume of water has passed through the water heater.
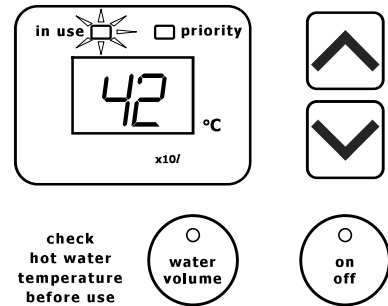
5. Turn off the alarm

- Press the water volume button to turn off the alarm.

  The water volume operating light goes out and 0 x10*l* is displayed momentarily on the controller.

  The temperature setting of the controller with priority is then displayed.
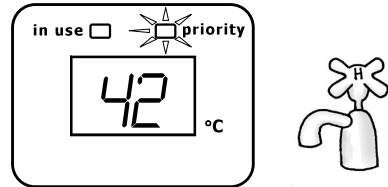
6. Close the hot tap

If it is a Bathroom controller which is in use and has priority, then it is advised to leave the controller on.

- Refer to the **warning** in the notes on page 18.

If it is the Kitchen controller which is in use and has priority, then it is advised to turn the controller off.

- Refer to **Important** note for Bathroom controllers on page 18.

Notes on the water volume function:

- The water volume can only be set by the Kitchen controller.

- The Kitchen controller does not require priority nor to be on in order to set the water volume function.

- The water volume function can be set whilst a hot tap is open.

- The water volume alarm will only sound from the Kitchen controller.

- The water volume alarm will still sound if the Kitchen controller has been silenced (refer to "Silencing A Controller" on page 13).

- The factory preset water volume is 180 litres.

- If a hot tap is not opened for one hour after the new water volume has been set, then the setting will be automatically cancelled. The water volume resets to the previously set water volume (or the factory preset water volume if no water volume has previously been set).

- To display the remaining water volume while water is being drawn, press the water volume button. After a few seconds, the display returns to the temperature setting.

- To turn off the water volume function before the alarm sounds, press the water volume button twice.

- The water volume is measured as the water flows through the water heater. Therefore if more than one hot tap is open, the alarm will respond to the total water volume drawn from all taps and the expected water volume from the first tap will be decreased.

- If the hot tap is closed before the set water volume flows through the water heater and the water volume button is left on, then the alarm will sound when the remaining water volume is consumed during a later operation. To prevent the alarm from sounding, press the water volume button twice to turn it off.