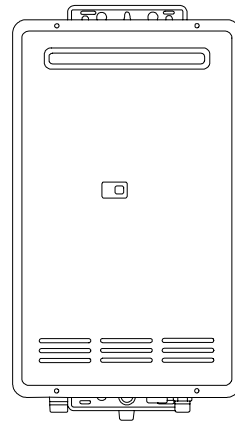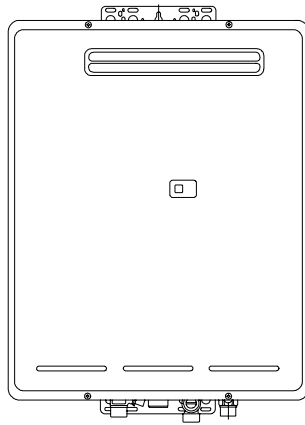# How to use your Water Heater

Rinnai ∞ INFINITY

Infinity 18
Infinity 20
Infinity 22
Infinity 24
Infinity 32

Your installer is responsible for correct installation. Installation instructions are located in a pouch attached to the inside front panel of the water heater.

Temperature Control Operation

24 Hour Service
In metropolitan areas

Melb 1800 632 386
Syd/Can (02) 9729 0468
Adel (08) 8345 5185
Perth (08) 9324 4145
Qld 1800 255 655

Rinnai **Australia has a service and spare parts network in all states.**

Our Service network personnel are fully trained and equipped to give the best service on your Rinnai appliance. If your appliance needs service, please ring one of the service contact numbers on the back of this booklet. Rinnai recommend that this appliance should be serviced every 3 years.

This appliance shall be installed in accordance with:
- Manufacturer's Installation Instructions.
- Current AS3500.4
- Current AS3000
- Local Water Authority Regulations.
- Local Gas Fitting Regulations.
- Municipal Building Codes.
- AS5601 / AG601 Gas Installations.
- Any other relevant Statutory Regulations.

This Infinity must be installed correctly by an authorized person. The installation of gas, water, and electricity must conform to local regulations.

The installation must also comply with the instructions supplied by Rinnai.

Your heater has been approved by the Australian Gas Association
A.G.A. Approval Number shown on Data plate.

Please keep this instruction booklet in a safe place for future reference.

All dimensions referred to in these instructions are in millimeters, unless otherwise specified.

N10378

Certified Product

WaterMark
AS3498 Lic W208
Standards Australia

The Australian Gas Association
Proudly a member of the AGA
All of our gas products are
AGA tested and approved

Quality System

Quality Endorsed Company
ISO 9002 Lic 4983
Standards Australia

Distributed and Serviced in Australia under a
Quality system certified as complying with ISO
9002 by Standards Australia Quality Assurance
Services

# CONTENTS

FEATURES AND BENEFITS

- The Rinnai Infinity NEVER RUNS OUT of hot water. Whilst electricity, water and gas supplies are connected, hot water is available whenever hot water taps are open.

- Built into the main micro-processor is the facility to LIMIT THE MAXIMUM TEMPERATURE of the hot water supplied. The water temperature may be limited to various maximum temperatures. This is particularly useful when the hot water unit is installed where young children or the infirm may be using the hot water. The Infinity is delivered with a preset temperature of 55°C. If required, the temperature limits can be changed by an authorised person. For further information, please contact Rinnai.

- The Rinnai Infinity is a power flued appliance. This makes it COMPACT, saving both floor and wall space.

- The temperature of outgoing hot water is CONSTANTLY MONITORED by a BUILT-IN SENSOR. If the temperature of the outgoing hot water rises to more than 3°C above the selected temperature shown on the Digital Monitor (or the pre-set limit when Temperature Controllers are fitted) the outgoing hot water temperature falls to that shown on the Digital Monitor (or the pre-set limit).

- The burner lights automatically when the hot water tap is opened, and goes out when the tap is closed. IGNITION IS ELECTRONIC, so there is no pilot light. When the hot water tap is off, no gas is used.

- 'Deluxe' or 'Standard' Temperature Controllers are available as an optional extra. Depending on the models chosen, these offer the following additional features:

    - Bath fill function

    - Voice Prompting

    - Localised Temperature Controllers for up to one kitchen and two bathrooms

    - Clock

- Temperatures selected at the controls are retained in the SYSTEM MEMORY.

- Operating NOISE LEVEL IS VERY LOW.

- ERROR MESSAGES ARE DISPLAYED on the Temperature Controllers, assisting with service.

SAFETY POINTS

Always check water temperature by hand before entering the shower or bath.

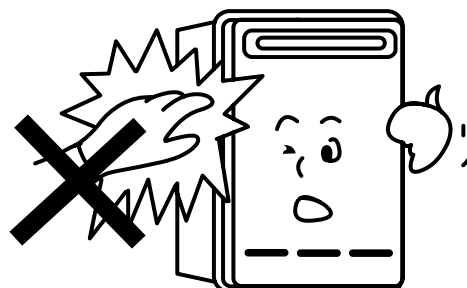At low water flows, the hot water unit may go out without warning.
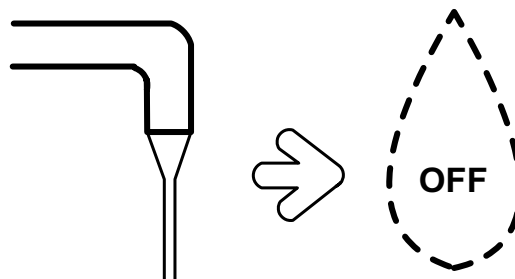
If freezing conditions are expected, turn off water and gas, and drain all water from the appliance.

Water Off
↓
Gas Off
↓
Drain Water

If power and the automatic frost protection are connected, freezing will be prevented. ("K" Series only)

DRAIN
FILTER
WATER
GAS
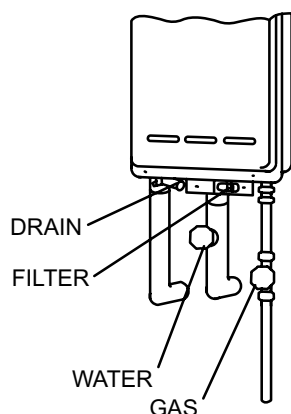
Do not touch cover or insert objects into the unit.

On cold days steam may be discharged from the flue outlet. This is normal with a high efficiency appliance and does not indicate a fault.

Keep flammable materials, trees, shrubs etc. away from the flue outlet.

Do not spray water directly into the flue terminal.
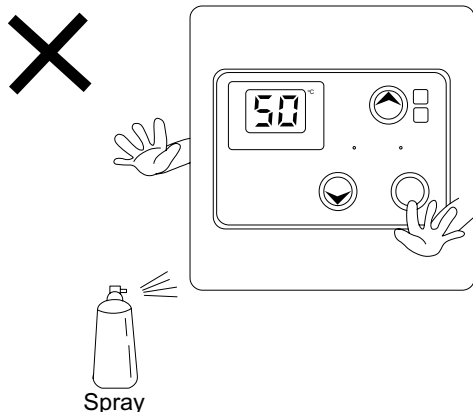
The hot water unit controls the water temperature automatically. To do this it sometimes needs to change the water flow accordingly. The water flow from the hot water tap may vary after the selected temperature at the Temperature Controller is altered. The water flow may also vary from summer to winter, as incoming water temperatures differ.
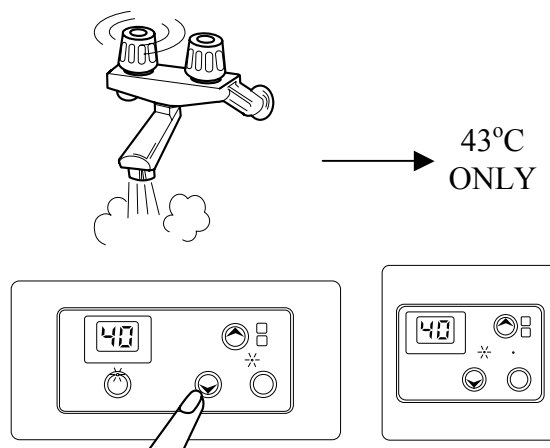

48°C   55°C
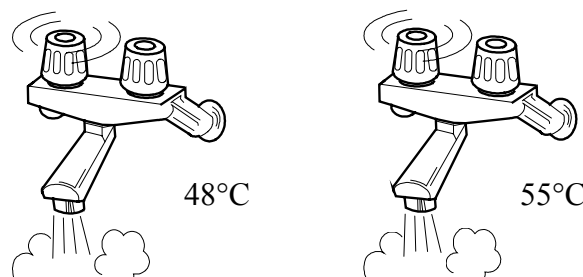
SAFETY POINTS

Do not clean the Temperature Controller with solvents. Use a soft damp cloth.

Spray

When the hot water tap is open, and hot water is flowing, the water temperature can only be increased to a maximum of 43°C on the Temperature Controller with priority.

43ºC ONLY

Depending on the weather conditions and the length of the pipe between the hot water unit and the tap in use, there may be a variation between the temperatures displayed at the Temperature Controller(s) and the temperature of the water at the tap.

48°C
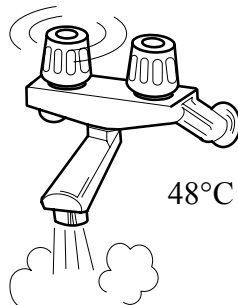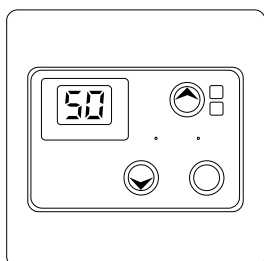
There is no need to turn the Temperature Controller(s) off after use. However, if you prefer to turn the Temperature Controller(s) off, selected temperatures will be stored in the system memory at all times whilst mains power remains connected.
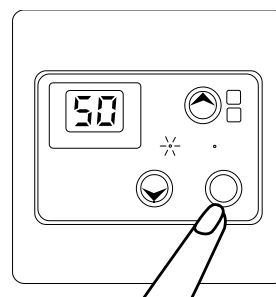
If a temperature is higher than 50°C, and has been selected at the Kitchen Controller and then priority of temperature selection is transferred to a Bathroom Controller and back again, the temperature on the Kitchen Controller will drop to 50°C. This is a safety feature.
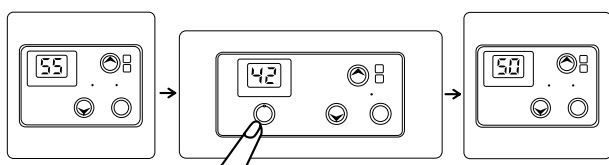
Do not push the ON/OFF button on the Kitchen Controller after having transferred priority of temperature selection to the Bathroom Controller as the system will no longer heat the water.

Turn OFF then ON.
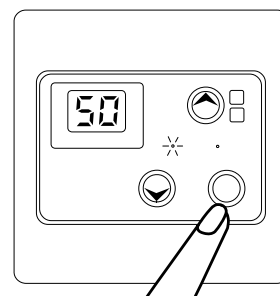
WARNING
Someone may be about to enter a shower or fill the bath.

WARNING ABOUT HOT WATER

Excessively hot water is dangerous, especially for young children and the infirm. The Infinity allows you to control the temperature of your hot water to safe levels.

DANGER

HOT

BURN

Water temperatures over 50°C can cause severe burns instantly or death from scalds.

Children, disabled, and the elderly are at highest risk of being scalded.

Feel water before bathing or showering.

Burns from hot water taps can result in very severe injuries to young children.
Hot water at 65°C (the average hot water temperature in Australia) can severely burn a child in less than half a second. At 50°C it takes five minutes.

Burns can occur when children are exposed directly to hot water or when they are placed into a bath which is too hot.

DO

Do stay with children whenever they are in the bathroom. (Take the phone off the hook).
Do take them out of the bathroom if you need to answer the phone or door.
Do test the temperature of the water with your elbow before placing your child in the bath.
Do make sure that the tap is turned off tightly.
Do consider setting your Infinity at a maximum temp. of 50°C.
(Contact Rinnai Australia)
Do install a child proof tap cover OR,
Do install a child resistant tap.

DON'T

Don't leave a toddler in the care of another small child. The older child may not have set the water temperature to a safe level.

- **Consider child-resistant taps or inexpensive tap covers**, both of which prevent a small hand being able to turn on the tap.

- **Consider reducing the temperature of the water coming from the hot water tap to 50°C.**
  This approach can be extremely valuable because it requires a one time action for a long-term reduction in the risk of scalds.
  This type of automatic protection is important during times when a parent or carer has been distracted.

The Infinity has no pilot light and when installed without Temperature Controllers, the Infinity will operate automatically as soon as a hot water tap is opened.

The burner ignites with electronic ignition and the flame extinguishes as soon as water flowing through the appliance stops.

Simply, open a hot water tap.

HOT   COLD

55°C
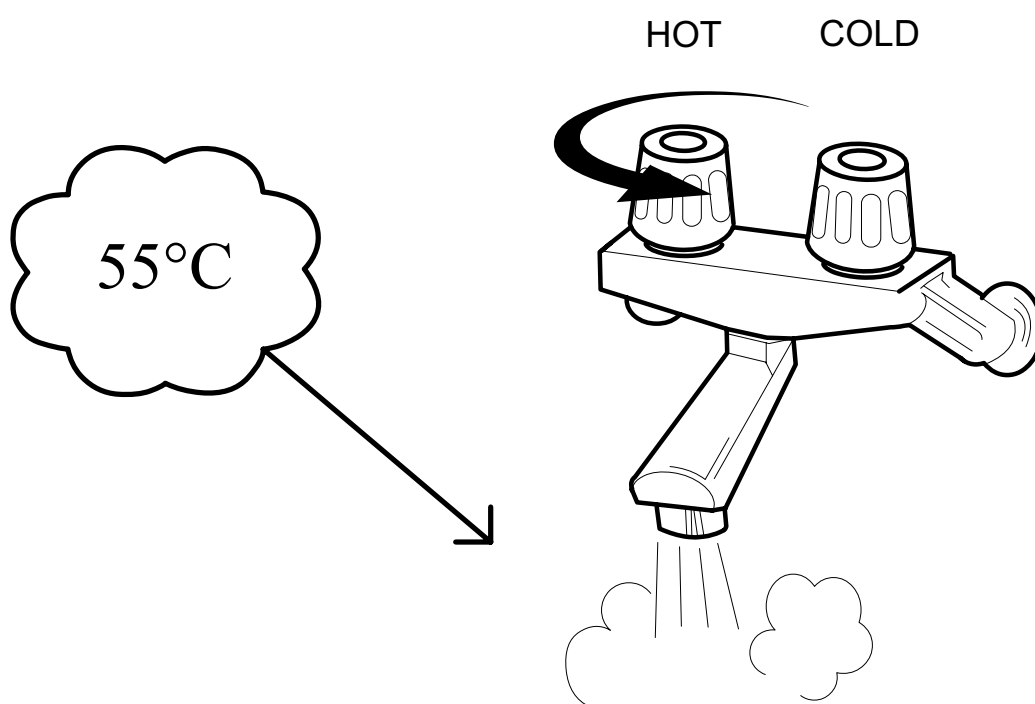
NOTE

The Infinity is factory pre-set to 55°C. If you require greater control over the temperature of your hot water, contact Rinnai about our temperature controllers to allow precise digital temperature control in the range 37°C ~ 55°C.

NOTE

Controllers can be easily fitted at any time after installation.

TEMPERATURE CONTROLLERS

The purpose of the Temperature Controllers is to enable the user to have complete control over the hot water unit. Used correctly, the hot water unit will supply hot water at the temperature selected, even when the water flow is varied, or when more than one tap is used. Adjustments to the operation of your hot water unit can be made with any of the Temperature Controllers. Each Temperature Controller can be individually programmed.

Various water temperatures (°C) can be selected as follows:

Kitchen Controller:

37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 50, 55°C

Bathroom Controller

Hot Water Delivery: 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 50°C

Bath fill Delivery: 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48°C

If a temperature between 43°C and 50°C is selected on a Deluxe Bathroom Controller and this temperature is then decreased to below 43°C and increased again whilst the water is running, the maximum selectable temperature will become 43°C. This provides additional safety for the consumer.

Suggested temperatures are:

Kitchen 50°C
Shower 42°C
Bath fill 40°C

These temperatures are suggested starting points for selection. You may find higher or lower temperatures are more comfortable. Maintaining lower temperatures helps to save energy. To obtain water temperatures lower than 37°C simply add cold water.

Temperature Controllers are an optional extra. 'Standard' and 'Deluxe' Temperature Controllers can be fitted. Standard Controllers allow temperature selection only. Deluxe Controllers have temperature selection, bath fill and clock functions.

Temperature Controllers allow the temperature to be set from various locations. The temperature selected will be available to all outlets.

Controller Options

Model	Deluxe Temperature Controllers	Standard Temperature Controllers
Infinity 18 Infinity 20 Infinity 22 Infinity 24	MC-70-1A, BC-70-1A, BSC-45-3A (Only one Bathroom Controller with 'Bath fill' function can be used with this range of water heaters.)	MC-33-3A, BC-45-3A, BSC-45-3A
Infinity 32	MC-70-1A, BC-70-1A, BC-70-1A	MC-33-3A, BC-45-3A, BSC-45-3A

STANDARD TEMPERATURE CONTROLLER

Standard Kitchen Temperature Controller (MC-33-3A)

Temperature Controllers are not required to operate the unit, they are a feature that provides control over water temperature. Rinnai Infinity water heaters can be operated with 1, 2, 3 or no Temperature Controllers.

DIGITAL MONITOR
Indicates the temperature selected. Error message flashes in the event of a fault.

ON INDICATOR
Indicates which temperature controller is in control of adjusting water temperature.

OPERATION INDICATOR
Indicates that a hot water tap is open (in any location).

Rinnai INFINITY

ºC

APPROX WATER TEMP

TEMPERATURE CONTROL

● ON

IN USE

HOTTER

COOLER

ON/OFF

MC - 33 - 3A

MC-33-3A
Identifies this remote control as for use in the Kitchen.*

THERMOSTAT
To alter the temperature of the water.

ON / OFF
Power switch to operate.

* This Temperature Controller is also suitable for installation in laundry areas.
Use this control in installations where only one controller is required.

STANDARD TEMPERATURE CONTROLLER

Standard Bathroom Temperature Controller (BC-45-3A / BSC-45-3A)
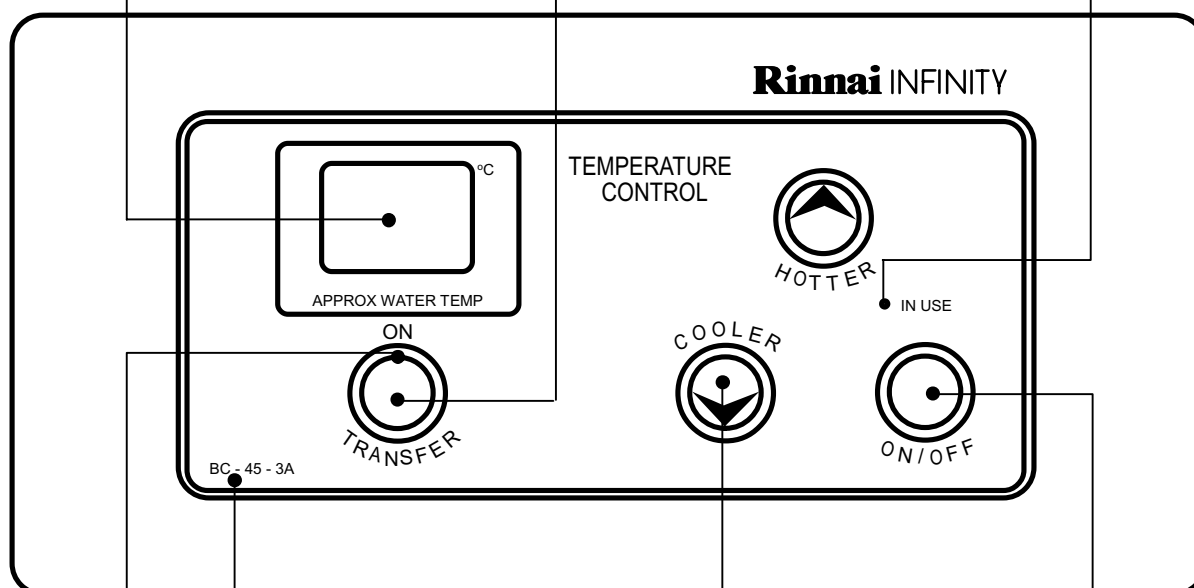
DIGITAL MONITOR
Indicates the temperature selected. Error code flashes in the event of a fault.

TRANSFER
Alternates the control of temperature selection between Kitchen and Bathroom controller.

OPERATION INDICATOR
Indicates that a hot water tap is open (in any location).

Rinnai INFINITY

°C

TEMPERATURE CONTROL

HOTTER

APPROX WATER TEMP

ON

IN USE

COOLER

TRANSFER

ON/OFF

BC - 45 - 3A

ON INDICATOR
Indicates which temperature controller is in control of adjusting water temperature.

THERMOSTAT
To alter the temperature of the water.

ON / OFF
Power switch to operate.

BC-45-3A
Identifies this remote control as for use in the bathroom.*

* A third Temperature Controller identified as BSC-45-3A is available for use in a second bathroom or ensuite.
This Temperature Controller is identical in appearance to the one shown on this page.
Do not use this control in installations with only one control.
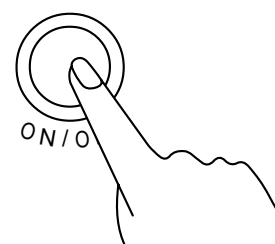Contact Rinnai for further details.

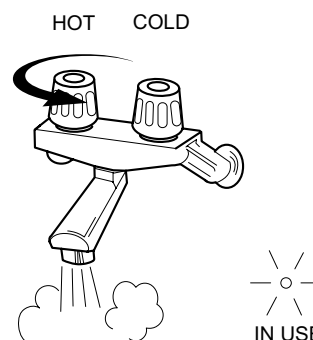## Using the Infinity with 1 Standard Temperature Controller

Press the ON/OFF button on the Temperature Controller.
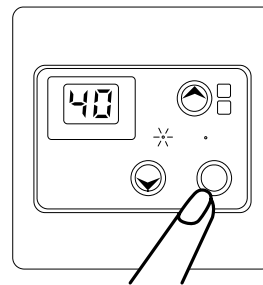
1 The yellow ON indicator will glow on the Temperature Controller. This indicates that the hot water unit is ready to supply hot water when a tap is open.
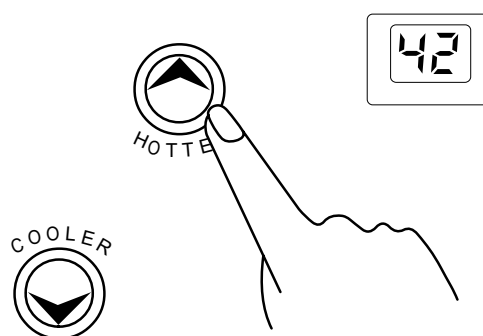
ON

2 To operate the hot water unit, simply turn any hot water tap on. This will automatically light the burner providing hot water. The red **IN USE** indicator will glow on the Temperature Controller.

HOT   COLD

IN USE

3 **Adjusting Temperature**

Simply press the HOTTER ∧ or COOLER ∨ button until the required temperature is displayed on the Digital Monitor.

HOTTER

COOLER

NOTE
When any hot water tap is open, temperature cannot be adjusted except between 37°C and 43°C.

NOTE
CHECK WATER TEMPERATURE BEFORE ENTERING SHOWER OR BATH.
Always test the water temperature in bath before a child gets in. This is best done by the parent placing their elbow in the water.
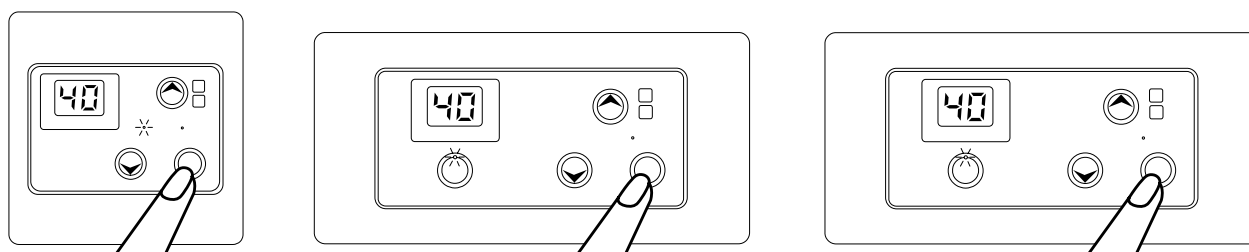
Using the Infinity with 2 or 3 Standard Temperature Controllers

To TURN ON your hot water system when the Temperature Controllers are connected, press the ON/OFF button on any Temperature Controller.

Using 2 Standard Temperature Controllers
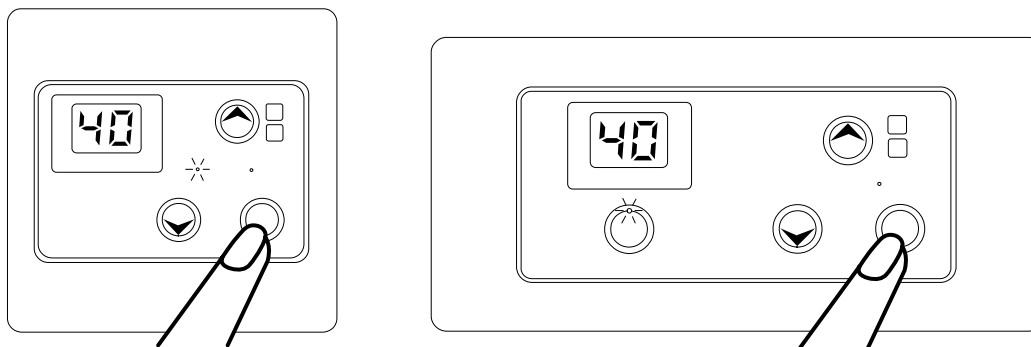
Using 3 Standard Temperature Controllers

See page 11 for details on operating and adjusting water temperature with the Temperature Controllers.

Each Temperature Controller is capable of storing a separate temperature selection in the system memory.

The Transfer function enables priority temperature selection to be switched between the controllers. See page 13 for details on how to use the Transfer function.

The temperature displayed on the digital monitor is the temperature hot water will be supplied at throughout the house.

OPERATION WITH STANDARD TEMPERATURE CONTROLLERS

The Transfer button on the Bathroom Controller enables you to select and lock the preferred temperature for shower or bath water. When locked in, this selected temperature cannot be overridden by any other controller.

1️⃣ To transfer priority of water temperature selection to the Bathroom Controller, simply press the **TRANSFER** button on the Bathroom Controller.

The ON indicator on the Bathroom Controller will glow to indicate that priority of water temperature selection has been transferred to the Bathroom Controller.
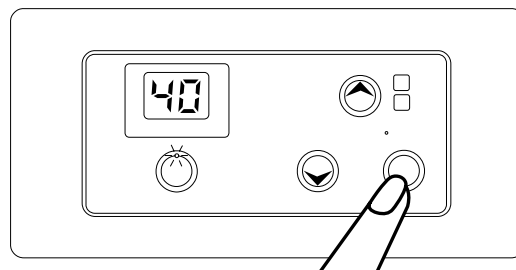

2️⃣ The water temperature can now be selected using the Bathroom Controller. The maximum temperature which can be selected at the Bathroom Controller is 50°C (whilst there is no water running). This is to help reduce the risk of burns from hot water.

A different temperature can be stored in the system memory of the Bathroom and Kitchen Controllers.

3️⃣ To transfer priority of water temperature selection back to the Kitchen Controller, simply press the **TRANSFER** button again.

The temperature displayed will then return to the temperature which was previously selected at the Kitchen Controller, or 50°C, whichever is lower.
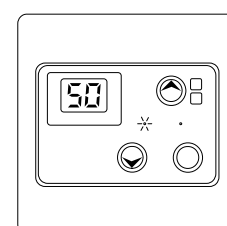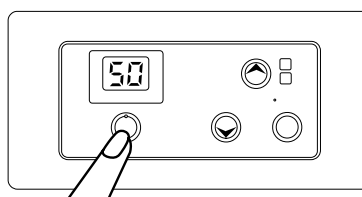
The ON indicator on the Kitchen Controller will glow to indicate priority control of water temperature selection.

NOTE

Priority temperature selection cannot be transferred when a hot water tap is open.
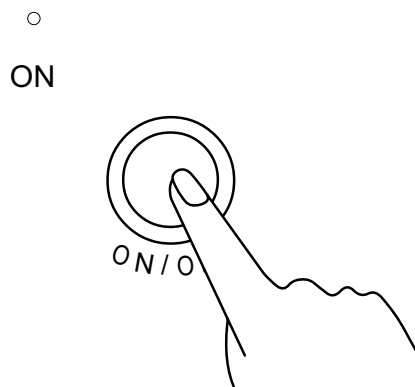
To TURN OFF your hot water system

Simply press the ON/OFF button on any Temperature Controller (where fitted). This will shut the Infinity down completely including the Temperature Controller digital displays.

The ON indicator will go out.

If hot water taps are opened when the Infinity is OFF, cold water will flow from the taps.

ON

Additional SAFETY features

Whilst the hot water tap is open, the following safety features apply.

- Temperature selection cannot be transferred.

- Water temperature can only be adjusted between 37°C and 43°C.

- The Kitchen and Bathroom Control cannot be turned ON.
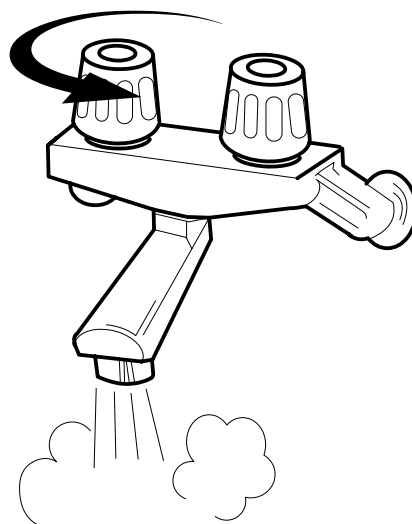
NOTE

The temperature of outgoing hot water is constantly monitored by a built-in sensor. If the temperature of the outgoing hot water rises to more than 3°C above the selected temperature shown on the Digital Monitor or the pre-set limit when Temperature Controllers are not fitted, the burner will automatically go out. The red operation indicator will also go out. The burner will ignite again once the outgoing hot water temperature falls to that shown on the Digital Monitor (or the pre-set limit).

DELUXE TEMPERATURE CONTROLLER

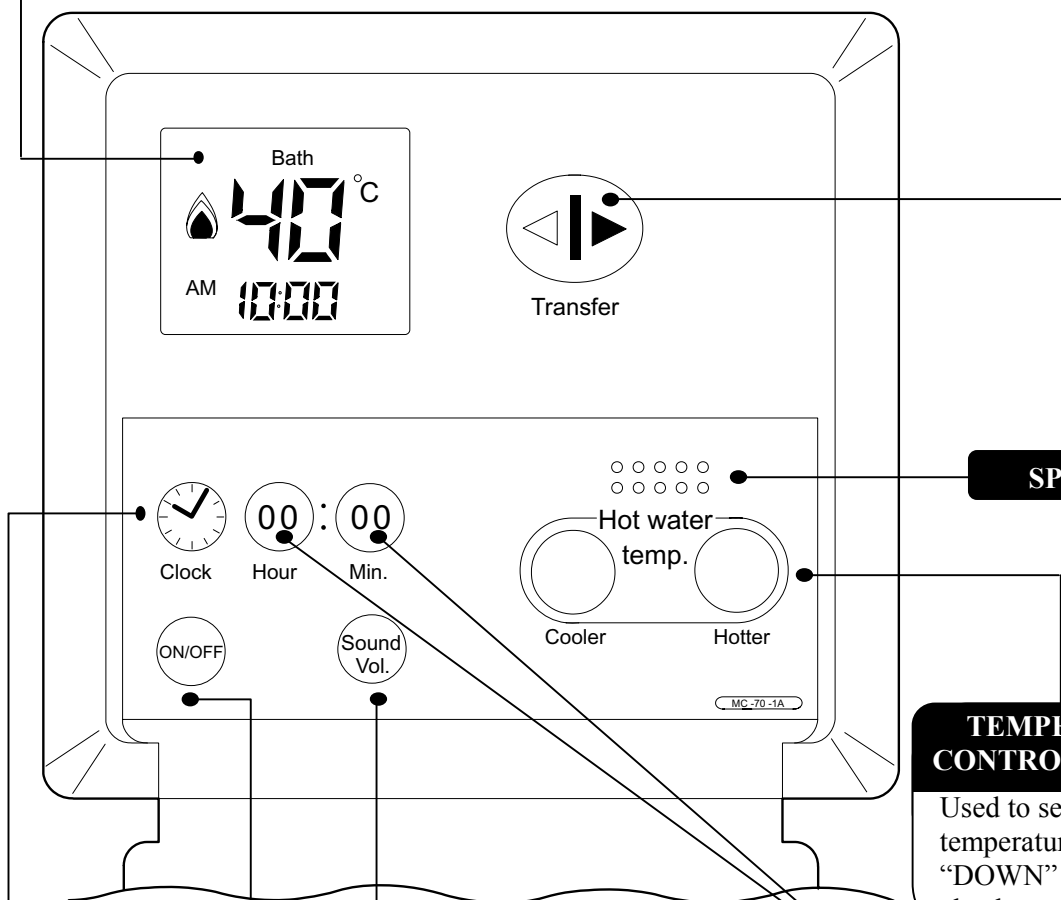## Deluxe Kitchen Temperature Controller (MC-70-1A)

This temperature controller is installed in the kitchen. Each button confirms its operation with a beep and / or voice.

DIGITAL MONITOR

Indicates the water temperature, mode of operation, and clock.

TRANSFER BUTTON (Green)

Used to transfer priority between the temperature controllers.

Bath

⬦40 °C

AM 10:00

Transfer

SPEAKER

Clock   Hour : Min.

Hot water temp.

Cooler   Hotter

ON/OFF   Sound Vol.

MC -70 -1A

TEMPERATURE CONTROL BUTTONS

Used to select water temperature. "UP" / "DOWN" buttons are also located on the lid.

CLOCK BUTTON

Used to select the clock function.

SOUND VOLUME

Used to change the voice volume.

HOUR/MIN. BUTTONS

Used to select the hours and minutes of the clock.

ON/OFF BUTTON

Used to switch temperature controllers on and off.

CAUTION   Be careful not to get water in the speaker as it may cause damage.

DELUXE TEMPERATURE CONTROLLER

Deluxe Kitchen Temperature Controller Monitor
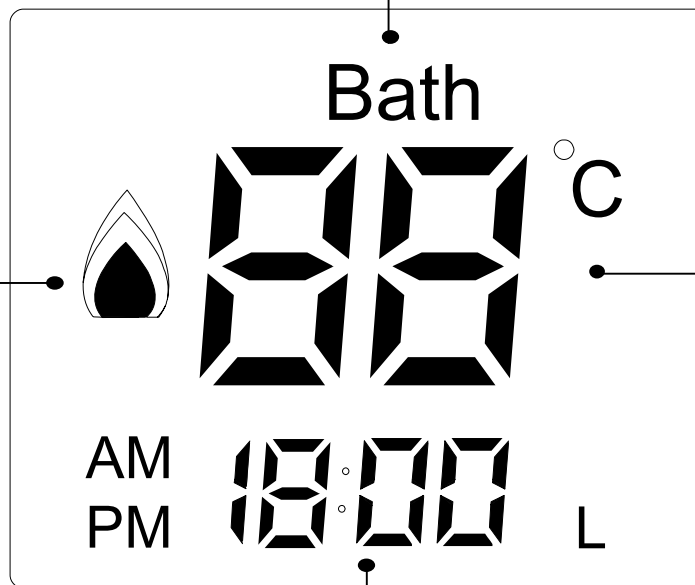
COMBUSTION INDICATOR (Red)
Shows when hot water is used.

BATH FILL INDICATOR (Green)
Indicates the bath is filling.

HOT WATER TEMP. INDICATOR
Indicates hot water or bath fill temperature selected.

Bath

°C

AM
PM

L

CLOCK

ERROR INDICATOR
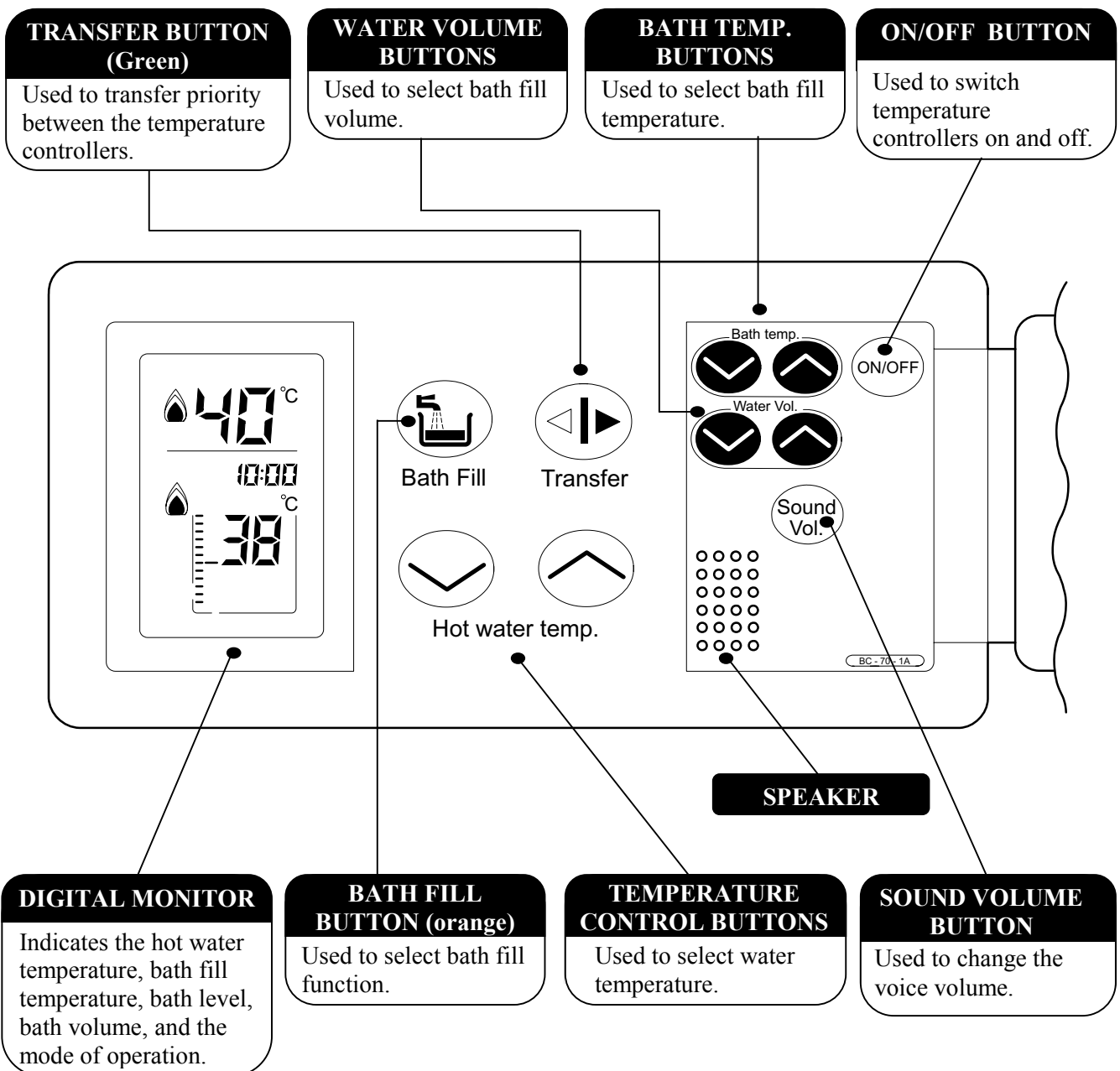Flashes an error code if there is a fault.

NOTE

- 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. This can be done for each Temperature Controller.
  To return to original settings, repeat this step.

DELUXE TEMPERATURE CONTROLLER
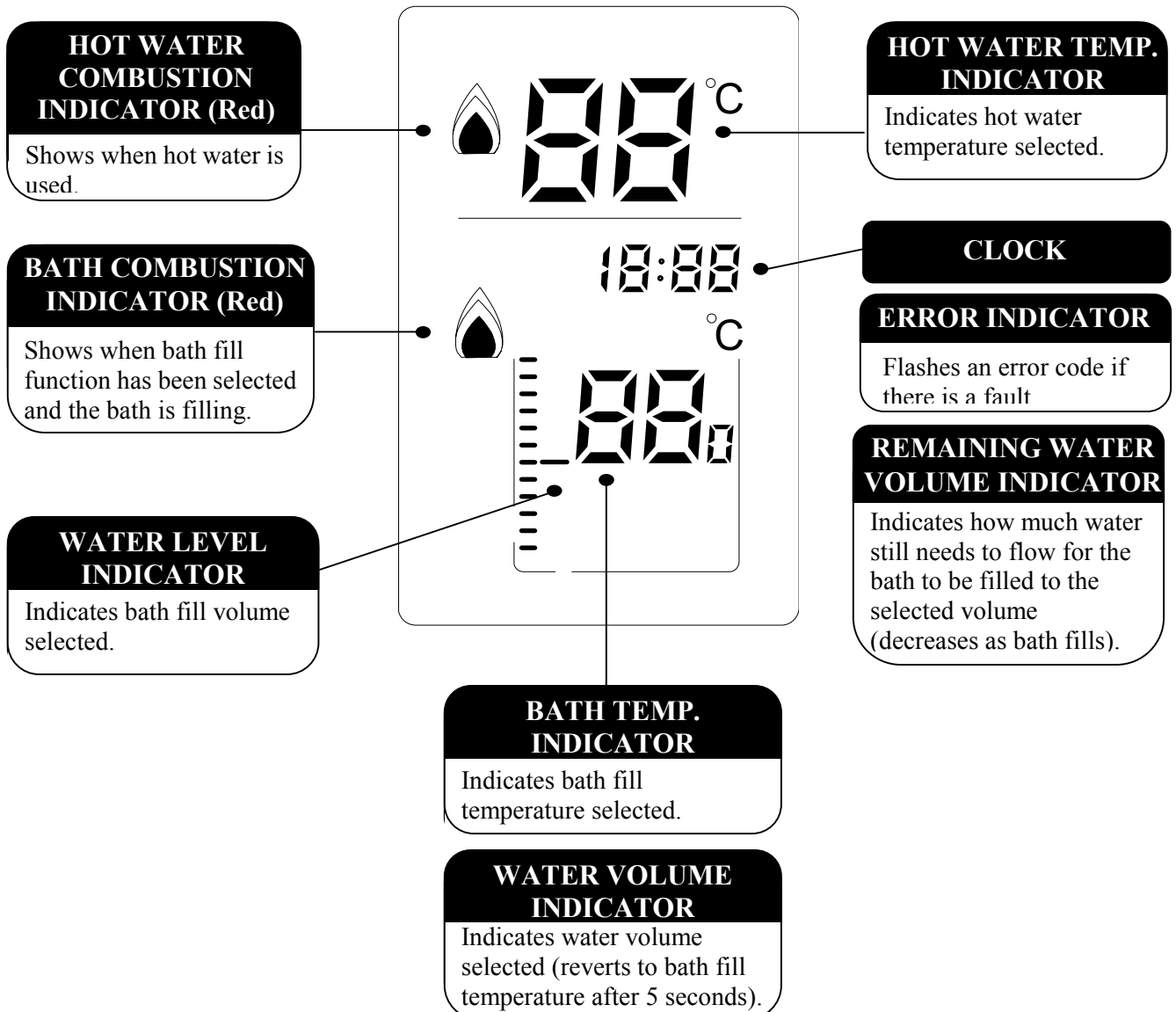
Deluxe Bathroom Temperature Controller (BC-70-1A)

This temperature controller is installed in the bathroom. Each button confirms its operation with a beep and / or voice.

TRANSFER BUTTON (Green)
Used to transfer priority between the temperature controllers.

WATER VOLUME BUTTONS
Used to select bath fill volume.

BATH TEMP. BUTTONS
Used to select bath fill temperature.

ON/OFF BUTTON
Used to switch temperature controllers on and off.

40 ℃
10:00
℃
38

Bath Fill

Transfer

Bath temp.

Water Vol.

ON/OFF

Sound Vol.

Hot water temp.

BC-70-1A

SPEAKER

DIGITAL MONITOR
Indicates the hot water temperature, bath fill temperature, bath level, bath volume, and the mode of operation.

BATH FILL BUTTON (orange)
Used to select bath fill function.

TEMPERATURE CONTROL BUTTONS
Used to select water temperature.

SOUND VOLUME BUTTON
Used to change the voice volume.

CAUTION
Be careful not to get water in the speaker as it may cause damage.

DELUXE TEMPERATURE CONTROLLER

Deluxe Bathroom Temperature Controller Monitor

HOT WATER COMBUSTION INDICATOR (Red)

Shows when hot water is used.

BATH COMBUSTION INDICATOR (Red)

Shows when bath fill function has been selected and the bath is filling.

WATER LEVEL INDICATOR

Indicates bath fill volume selected.

HOT WATER TEMP. INDICATOR

Indicates hot water temperature selected.

CLOCK

ERROR INDICATOR

Flashes an error code if there is a fault

REMAINING WATER VOLUME INDICATOR

Indicates how much water still needs to flow for the bath to be filled to the selected volume (decreases as bath fills).

BATH TEMP. INDICATOR

Indicates bath fill temperature selected.

WATER VOLUME INDICATOR

Indicates water volume selected (reverts to bath fill temperature after 5 seconds).

NOTE

- 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. This can be done for each Temperature Controller.
 To return to original settings, repeat this step.

OPERATION WITH DELUXE TEMPERATURE CONTROLLERS

Using the Infinity with 1 Deluxe Temperature Controller

When one Temperature Controller is required, the kitchen model must be used (MC-70-1A).

Switching the system ON

The hot water system and controller can be switched on and off pressing the 'ON/OFF' button as shown.
When the system is turned on, the monitor will be lit. During normal operation the system is left on.
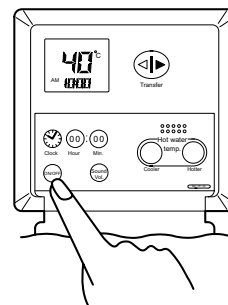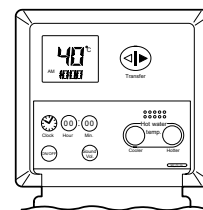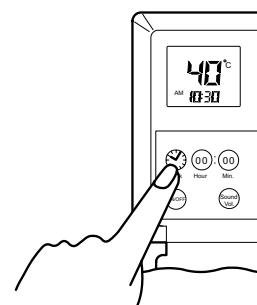
Setting the Clock

The clock is of the 12 hour AM/PM type.

1. Press the 'Clock' button. The digital monitor will flash AM 12:00.

2. Set the time using the 'Hour' and 'Min.' buttons. The time is displayed on the monitor as the buttons are pressed.

   The numbers on the monitor will continuously change if you keep the buttons depressed. When you get close to the desired time, press the button intermittently.

3. Press the 'Clock' button again to activate the clock.

NOTE
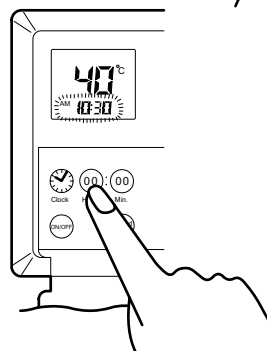
The time is always displayed regardless of whether the Temperature Controller is turned ON or OFF. The clock may need to be reset after a power failure.
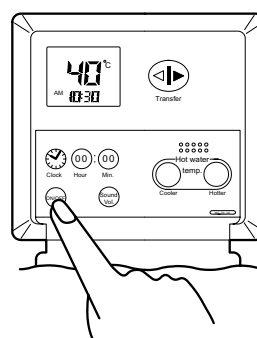
Setting the Sound Volume

The 'Sound Vol.' Button located behind the flip panel is **not used** when one Kitchen Controller is connected.
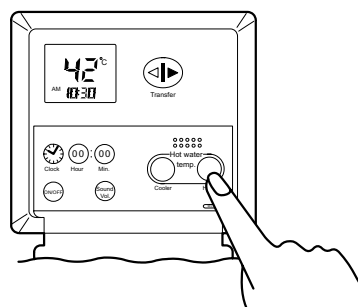
Using Hot Water

The hot water delivery temperature can be controlled from the Kitchen Controller (MC-70-1A).
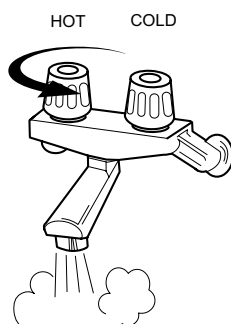

1️⃣ Ensure the system is switched ON. If not, press the 'ON/OFF' button behind the flip panel once. The 'Transfer' button will light up.

2️⃣ Select the desired temperature using the 'Hot water temp.' buttons. The selected temperature will be displayed on the controller monitor.

3️⃣ Open the hot water tap. The hot water unit will activate and the red combustion symbol will light up on the monitor.
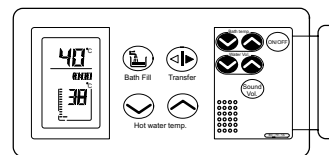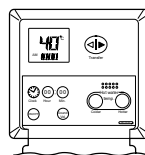

**CHECK WATER TEMPERATURE BEFORE USE.**

CAUTION

Using the Infinity with 2 Deluxe Temperature Controllers

When 2 Temperature Controllers are used, they must be models MC-70-1A (Kitchen) and BC-70-1A (Bathroom).

Switching the System ON

The hot water system and both controllers can be switched on and off from either controllers by pressing the 'ON/OFF' button as shown. When the system is turned on, the monitor will be lit. During normal operation the system is left on.
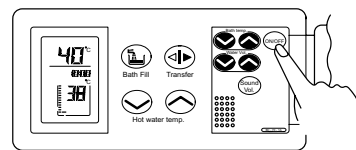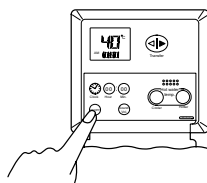
Setting the Clock

The clock is of the 12 hour AM/PM type and is set on the Kitchen Controller (MC-70-1A).

1. Press the 'Clock' button. The digital monitor will flash AM 12:00.
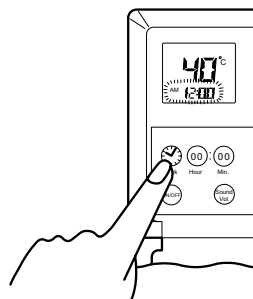
2. Set the time using the 'Hour' and 'Min.' buttons. The time is displayed on the monitor as the buttons are pressed. The numbers on the monitor will continuously change if you keep the buttons depressed. When you get close to the desired time, press the button intermittently.
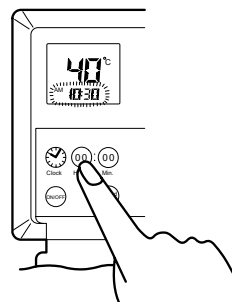
3. Press the 'Clock' button again to activate the clock.
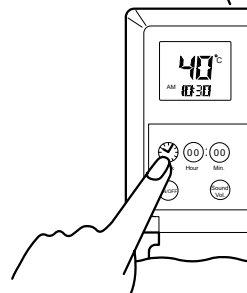
NOTE

The time displayed on the Kitchen Controller is automatically displayed on all Bathroom Controller(s) when the Bathroom Controller(s) are ON. If the controllers are OFF, the time is only displayed on the Kitchen Controller. The clock may need to be reset after a power failure.

Setting the Sound Volume

The sound volume for all Temperature Controllers can be set individually. Note that this can be done with the Temperature Controllers switched off.

Press the 'Sound Vol.' Button located behind the flip panel.
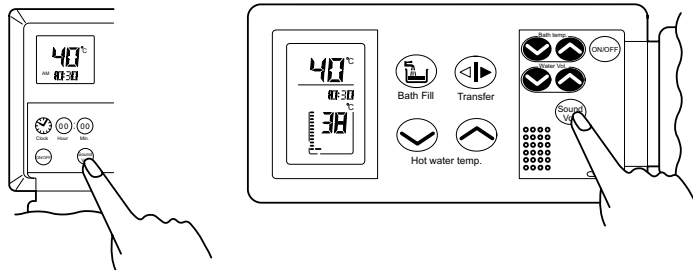
The volume will change as follows:

Voice Volume	
Initial Setting	Medium
Press Once	High
Press Again	Off
Press Again	Low

Using Hot Water

The hot water delivery temperature can be controlled from either the Kitchen Controller (MC-70-1A) or the Bathroom Controller (BC-70-1A).

Deluxe Kitchen Controller

1 Ensure the system is switched on. When the system is ON, the monitors will be lit. ensure the 'Transfer' button is lit. If not, press the 'Transfer' button once.

2 Select the desired temperature using the 'Hot water temp.' buttons. The selected temperature will be displayed on both the Kitchen and Bathroom Controllers at the top of each monitor.

3 Open the hot water tap. The hot water unit will activate and the red combustion symbol will light on both the kitchen and bathroom monitors.
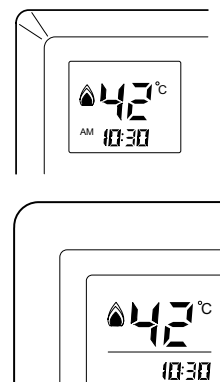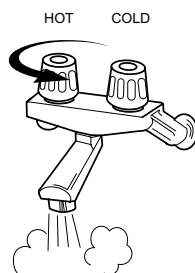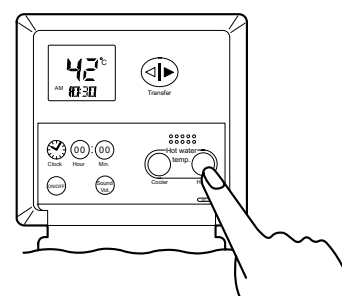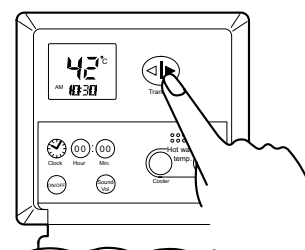
HOT   COLD

CHECK WATER TEMPERATURE BEFORE USE.

CAUTION

Deluxe Bathroom Controller

1 Ensure the system is switched ON. When the system is ON, the monitors will be lit. Ensure the 'Transfer' button is lit. If not, press the 'Transfer' button once.

2 Select the desired temperature using the 'Hot water temp.' buttons. The selected temperature will be displayed at the top of all controller monitors.

3 Open the hot water tap. The hot water unit will activate and the red combustion symbol will light on both bathroom and kitchen monitors.

CHECK WATER TEMPERATURE BEFORE USE.

CAUTION
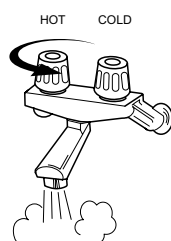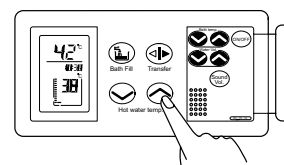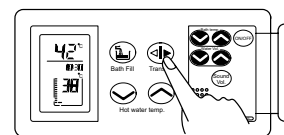
Bath Fill Function

The 'Bath fill' function enables a bath to be filled to the desired level at the desired temperature automatically.

There are 2 steps to perform :

Step 1. Program the bath volume and temperature into the Bathroom Controller(s) (BC-70-1A/BSC-70-1A).
Step 2. Activate the automatic 'Bath fill' function and follow the voice prompts.

CAUTION

When using the 'Bath fill' function for the first few times, it is recommended that you are present during the filling process.

Step 1 - Programming the bath volume and temperature

When the controllers are first turned on, the default bath fill temperature is 40°C and the bath volume is 100 litres (indicated by the first level marker at the bottom of the monitor). The bath volume can then be changed up to a maximum of 400 litres in 20 (or 50) litre increments. These settings are displayed at the bottom of the Bathroom Controller monitor and can be changed by the user as described below.
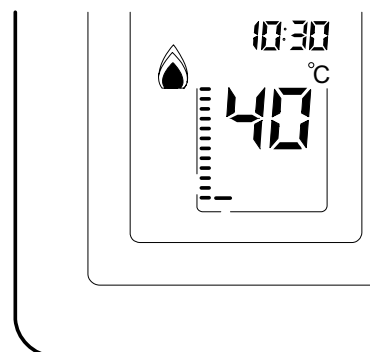
(a) Ensure the system is switched ON. When the system is ON, the monitors will be lit. Ensure the 'Transfer' button is lit. If not, press the 'Transfer' button once.

(b) Select the desired temperature using the 'Bath temp.' buttons located behind the flip panel. The selected temperature will be displayed on the bottom of the bathroom controller monitor and will remain until it is next changed.
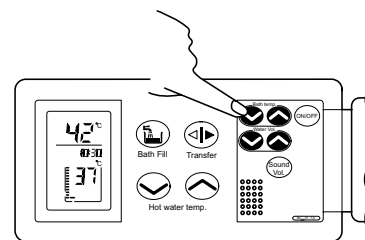
(c) Select the desired bath volume using the 'Water Vol.' Buttons located behind the flip panel. The selected volume will be displayed at the bottom of the bathroom controller monitor numerically, and graphically by the long bar against the level markers. During the first bath fill, it is recommended that the lowest bath fill volume of 100 litres is used. During subsequent bath fills this can be increased depending on the volume of your bath and the desired level.

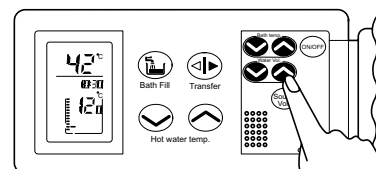The relationship between bath volume in litres and the position of the long bar against the level markers is as follows.

Eg. 120 litres – denoted numerically and by the second level marker from the bottom of the monitor, as shown below.

Volume (L)	Position of long bar
400	12
350	12
300	11
280	10
260	9
240	8
220	7
200	6
180	5
160	4
140	3
120	2
100	1
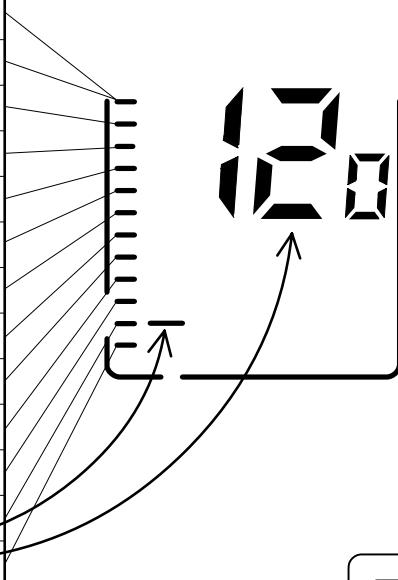
Remember that the bath level markers on the display are not a true representation of your bath. ie. the 'half-way' mark on the monitor is not necessarily the 'half-way' mark on your bath. The average bath size is 160 litres. Be careful not to overfill the bath!

NOTE

(d) After approx. 5 seconds, the numeric volume displayed will revert to the bath fill temperature previously set. The long bar on the level markers will remain.

Step 2 – Activate the automatic bath fill function and follow the voice prompts.

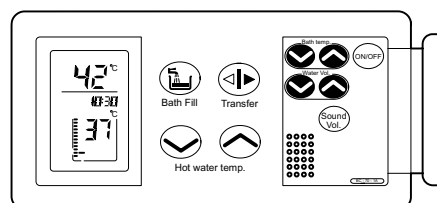(a) Ensure the system is switched on. When the system is ON, the monitors will be lit. Ensure the 'Transfer' button is lit. If not, press the 'Transfer' button once.

(b) Press 'Bath fill' button. The 'Bath fill' button will light up and the buzzer will sound. The 'Bath' indicator on the Kitchen Controller monitor will light up. The voice will say "The hot water system is ready. Open the hot water tap."

(c) Open the hot water tap for the bath. The combustion indicator on all Temperature Controller will light up and the bath will start to fill.
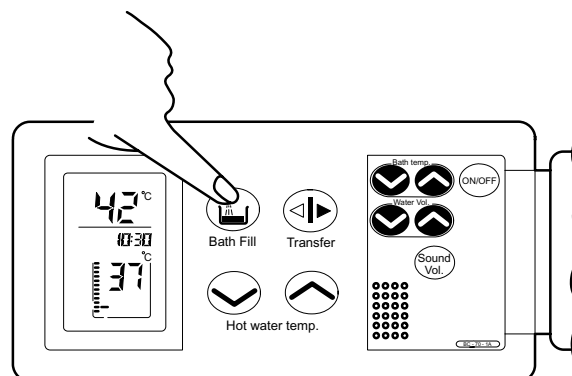
> **NOTE**
>
> During bath fill, the time display on the Bathroom Controller will slow the remaining bath fill volume and will 'count down' as the bath is filled.

If you wish to stop the water flow whilst the bath fill function is in operation, simply press the 'Bath fill' button. The 'Bath fill' button will flash and the voice will say "Turn off all hot water taps and press the 'Bath fill' button". Follow these instructions.

(d) When the bath is filled to the programmed volume and temperature (see 'Step 1'):
   • the flow from the bath hot water tap will stop;
   • the 'Bath fill' button on the Bathroom Controller(s) and the 'Bath' indicator on the Kitchen Controller monitor will flash;
   • the buzzer will sound;
   • the voice will say "Bath fill is complete. Turn off the bath hot water tap and push the 'Bath fill' button."

(e) **IMPORTANT – Close the hot water tap for the bath**. This is very important to prevent over filling of the bath.

(f) Press the 'Bath fill' button. This is also important. It tells the hot water unit that the customer is aware that the bath fill function has been completed and that the hot water tap for the bath has been shut. The hot water unit will not allow hot water to flow from any fixture until the 'Bath fill' button has been pressed.

The Bath fill button light on the Bathroom Controller and the 'Bath' indicator on the Kitchen Controller monitor will go out.

> **CAUTION**
>
> **NEVER LEAVE YOUNG CHILDREN UNATTENDED IN THE BATH.**
> When using the 'Bath fill' function, ALWAYS close the hot water tap for the bath after the bath has filled and flow has stopped.

Using the Infinity with 2 Deluxe Temperature Controllers and 1 Standard Temperature Controller

When 3 Temperature Controllers are used for either Infinity 18, 20, 22, or 24, they must be one MC-70-1A (Kitchen) model, one BC-70-1A model (Bathroom), and one BSC-45-3A (Ensuite).
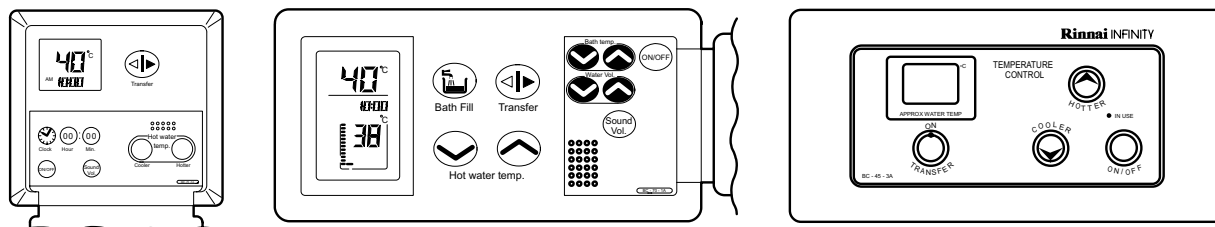
Switching the System On

The hot water system and three controllers can be switched on and off from any controller by pressing the 'ON/OFF' button as shown. When the system is turned on, the monitors will be lit. During normal operation the system is left on.
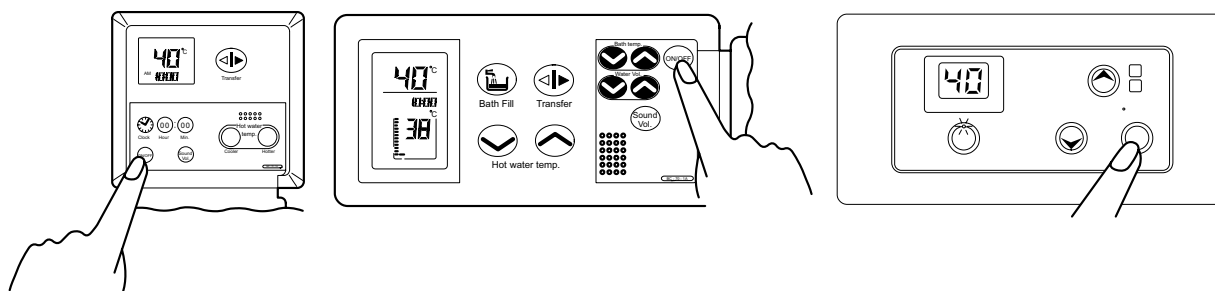
Setting the clock

See page 21 for details on setting the clock.

Setting the Sound Volume

See page 22 for details on setting the sound volume.

Using Hot Water

The hot water delivery temperature can be controlled from either the Kitchen Controller (MC-70-1A) or Bathroom Controllers (BC-70-1A/BSC-45-3A). See pages 22 to 23 and page 11 for details on setting the hot water delivery temperature for the Kitchen and Bathroom Controllers.

Bath Fill Function

The 'Bath fill' function can only be used on Temperature Controller BC-70-1A. See pages 23 to 25 for details on the 'Bath fill' function.

CAUTION

NEVER LEAVE YOUNG CHILDREN UNATTENDED IN THE BATH.
When using the 'Bath fill' function, ALWAYS close the hot water tap for the bath after the bath has filled and flow has stopped.

Repeat the relevant procedures above for the third (Bathroom) controller.

Using the Infinity with 3 Deluxe Temperature Controllers

When 3 Temperature Controllers are used for the Infinity 32, they must be one MC-70-1A (Kitchen) model and two BC-70-1A models (Bathroom and Ensuite).
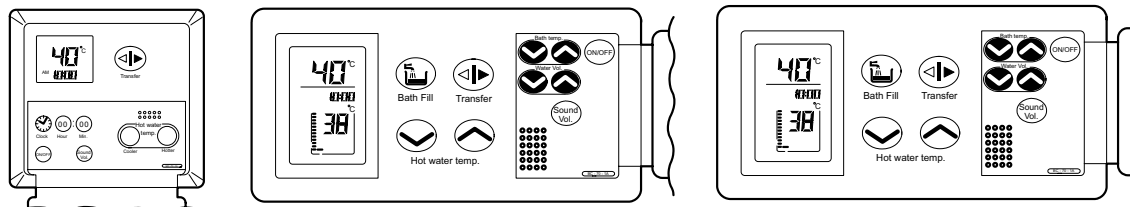
Switching the System On

The hot water system and three controllers can be switched on and off from any controller by pressing the 'ON/OFF' button as shown. When the system is turned on, the monitors will be lit. During normal operation the system is left on.
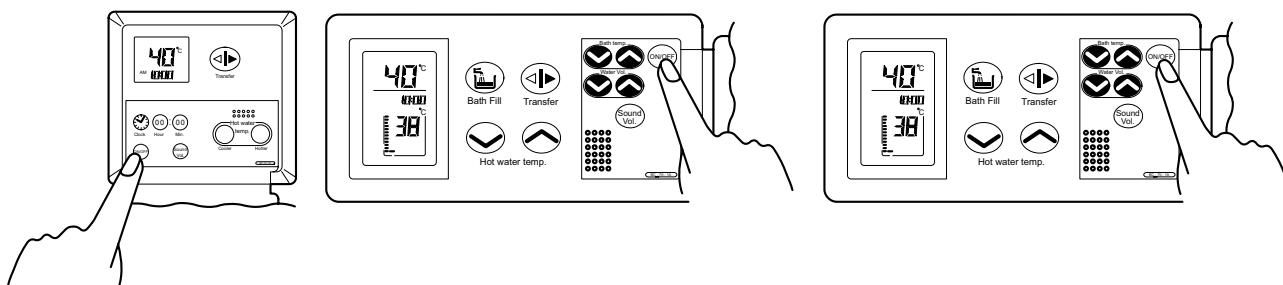
Setting the clock

See page 21 for details on setting the clock.

Setting the Sound Volume

See page 22 for details on setting the sound volume.

Using Hot Water

The hot water delivery temperature can be controlled from either the Kitchen Controller (MC-70-1A) or Bathroom Controllers (BC-70-1A). See pages 22 to 23 for details on setting the hot water delivery temperature for the Kitchen and Bathroom Controllers.

Bath Fill Function
See pages 23 to 25 for details on the bath fill function. With two Bathroom Controllers fitted (one in each bathroom) only one bath can be filled at a time.

CAUTION

NEVER LEAVE YOUNG CHILDREN UNATTENDED IN THE BATH.
When using the 'Bath fill' function, ALWAYS close the hot water tap for the bath after the bath has filled and flow has stopped.

Repeat the relevant procedures above for the third (Bathroom) controller.

TROUBLESHOOTING

The hot water unit has the ability to check its own operation continuously. If a fault occurs, an Error Code will flash on the Digital Monitor if you have Temperature Controllers. This assists with diagnosing the fault, and may enable you to overcome a problem without a service call. Please quote the code displayed when enquiring about service. (Refer to Warranty page for Warranty Conditions.)

Code Displayed	Fault	Remedy
-	Noticeable reduction in water flow	Inlet water filter needs to be cleaned. Service call.**
03	Power interruption during Bath fill (water will not flow on power reinstatement)	Turn off all hot water taps. Press ON/OFF twice.
10	Air intake or flue blocked	Service Call
11	No ignition / No gas supply	Check gas is turned on at water heater and gas meter or cylinder. * **
12	Flame Failure / Low gas flow	Check gas is turned on at water heater and gas meter. Check that nothing is obstructing flue outlet. Turn on gas supply to water heater.*
14	Remaining Flame Safety Device	Service Call
16	Over Temperature Warning	Service Call
32	Outgoing Water Temperature Sensor Faulty	Service Call
33	Heat Exchanger Outlet Sensor Faulty	Service Call
52	Gas Modulating Valve Faulty	Service Call
61	Combustion Fan Failure	Service Call
65	Water Flow Control Faulty (does not stop flow properly)	Service Call
71	Micro-processor Failure	Service Call
72	Micro-processor Failure	Service Call

* In all cases, you may be able to clear the Error Code simply by turning the hot water tap OFF, then ON again. If this does not clear the Error Code, try pushing the ON/OFF button OFF, then ON again. If the Error Code still remains, contact Rinnai or your nearest service agent for advice.
** Faults caused by insufficient gas/water supply or gas/water quality and installation errors are not covered by the manufacturer's warranty.

Troubleshooting Without Controllers
If you have no Temperature Controllers and experience the following symptoms, please carry out the suggestions below. If the symptom continues, please contact Rinnai for advice.

Fault	Remedy
The unit does not attempt to start at all.	Check the power is on at the unit. Check the cold water valve at the unit is on.
The unit starts then shuts down immediately.	Check the power is still on. Check the gas valve at the unit and the gas meter is fully open.** Open your hot water tap fully.
The unit starts then the water goes cold	Check the power is still on. Open your hot water tap further or try another tap. (Your unit has a minimum flow of 3L/min. required to operate the unit.)

** Faults caused by insufficient gas/water supply or gas/water quality and installation errors are not covered by the manufacturer's warranty.

WARRANTY

The benefits conferred by this warranty are in addition to all other rights and remedies in respect of the product which you have under the Trade Practices Act and similar State or Territory Laws. Given installation is in accordance with the manufacturers specification, this appliance is warranted by Rinnai for the cost of labour and components in the event of defects arising from faulty materials and/or workmanship with the ensuing warranty conditions.

Domestic Use :	Labour :	Parts :	Commercial Use :	Labour :	Parts :
Heat Exchanger	3 Years	10 Years (pro-rata)	Heat Exchanger	1 Year	1 Year (pro-rata)
All Other Parts	3 Years	3 Years	All Other Parts	1 Year	1 Year

*All terms are effective from date of installation.

Faults arising from improper installation, gas supply, water quality *, plumbing fittings and other outside influences are not the responsibility of Rinnai Australia and service calls for these issues will be charged for.
* The recommended water quality levels are as follows:

Description	pH	TDS (Totally dissolved solids)	Total Hardness	Chlorides	Magnesium	Calcium	Sodium	Iron
Maximum Recommended Levels	6.5 to 8.5	Up to 600 mg/litre	Up to 200 mg/litre	Up to 300mg/litre	Up to 10 mg/litre	Up to 20 mg/litre	Up to 150 mg/litre	Up to 1 mg/litre

Please record below the following information for your own records.

Your Retailer :

Address :   Phone :

Date of Purchase :

Your Installer :   Installer's License No. :

Address :   Phone :

Date of Installation :   Certificate of Compliance No. :

Please remember to send in your warranty card.

SERVICE CONTACT POINTS

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Service :   (03) 9271 6699   Facsimile : (03) 9271 6688

☎ **Helpline : 1300 366 388**
Mon-Fri (8.30am to 5.30pm EST)
Cost of a local call. Higher from mobile or public phones.

Internet : www.rinnai.com.au
email : enquiry@rinnai.com.au

Rinnai Australia Pty. Ltd. Reserves the right to make
modifications and change specifications without notice.

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