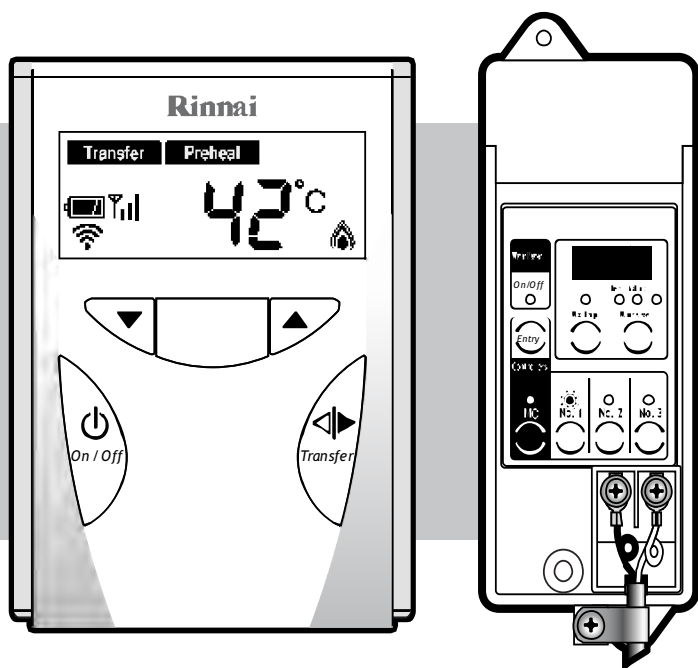


Rinnai

Operation / Installation Manual



Wireless Controller Model: MC502S

This manual applies to the Rinnai Wireless Controller MC502S.

This manual must be used in conjunction with the Rinnai Water Heater Operation / Installation Manual supplied with Rinnai water heaters.

MC502S Wireless Controllers are compatible only with the Rinnai water heater and other remote controller models shown.

Refer to the table on page 2 of this manual to confirm the maximum number and combination of controllers that can be fitted to your Rinnai water heater model.

For information regarding compatibility with other Rinnai water heater and water controller models contact Rinnai.

Compatible Rinnai water heater models:

Infinity XR 32
Infinity XR 26
Infinity XR 24
Infinity XR 20
Infinity XR 18
Infinity XR 16
Infinity XR 26i
Infinity XRPlus 26
Infinity XRPlus 20
HD200
HD200i
HD250
HD250i

Compatible Rinnai wired remote controller

Universal	MC-91
Deluxe Kitchen	MC-70V
Deluxe Bathroom	BC-70V

This wireless water controller and transceiver must be installed in accordance with the manufacturer's Installation Instructions.

Rinnai NZ
Radio Spectrum
Supplier Code: Z822

OPERATION MANUAL

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IMPORTANT INFORMATION

INSTALLATION AND SERVICING

Rinnai Wireless Transceivers can be connected to the water heater models listed on the cover page by the end user in accordance with these Instructions. A qualified tradesperson is not required.

Rinnai Wireless Transceivers are also compatible with some older water heater models not listed on the cover page of these Instructions. In this case they must be installed and commissioned by a suitably qualified trades person. Contact Rinnai for information regarding compatibility with older water heaters.

Regardless of water controller or transceiver installation, all Rinnai water heaters must only be installed by an Authorised person.

Water controllers, transceivers and water heaters do not contain user serviceable parts and must only be serviced and repaired by an authorised person.

Keep this manual in a safe place for future reference.

All dimensions referred to in this manual are in millimetres, unless otherwise specified.

A WARNING ABOUT HOT WATER



Excessively hot water is dangerous, especially for young children and the infirm. Rinnai water controllers allow you to control the temperature of hot water to safe levels.

High water temperatures can cause severe burns. Those most at risk are children, disabled, elderly and the infirm.

ALWAYS.....

Test the temperature of the water with your elbow before placing your child in the bath, also carefully feel water before bathing or showering yourself.

Supervise children whenever they are in the bathroom.

Make sure that the hot water tap is turned off tightly.

CONSIDER.....

Installing child proof tap covers or child resistant taps (both approaches will prevent a small hand being able to turn on the tap).

NEVER.....

Leave a toddler in the care of another child. they may not understand the need to have the water temperature set at a safe level.

RADIO COMMUNICATIONS

Rinnai wireless controllers are classified as short range radio communications devices and referred to as Low Interference Potential Devices (LIPD's) in AS/NZS 4268:2003*. As such, they operate in the same radio frequency spectrum as many other devices classified as LIPD's such as garage door openers and keyless automobile entry systems. Although interference with other LIPD's is unlikely, it is not guaranteed interference will not occur.

Rinnai wireless controllers must not be used in the vicinity of other devices if radio interference with such devices could result in a dangerous situation, unless it is verified that interference will not occur. Possible examples are medical devices and fire alarms.

*AS/NZS 4268:2003 'Radio Equipment and systems – short range devices – Limits and methods of measurement'.

GENERAL WATER CONTROLLER INFORMATION

Water controllers allow precise temperature control by the user. When used correctly, the hot water unit will deliver the selected temperature, even when the water flow is varied, or more than one tap is in use. Each remote controller can be individually programmed, however the water heater can only deliver one set temperature at any time. The available temperatures (°C) are as follows:

Master Controller:

37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 50, 55°C* (60, 65°C HD models only)

Bathroom Controller:

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


Whilst hot water outlets are open the set temperature may be lowered. However the set temperature cannot then be raised above 43°C. In addition transfer of 'priority' between controllers is not possible. These are safety features.

Suggested temperatures are:

Kitchen 50°C ~ 55°C*, Shower 37°C ~ 43°C

** Temperature may not be available on all installations. Rinnai water heaters can be programmed to deliver higher temperatures via the kitchen controller. Contact Rinnai for more details.*

These temperatures are suggestions only. You may find higher or lower temperatures more comfortable. Maintaining lower temperatures helps save energy. To obtain water temperatures lower than 37°C simply add cold water.

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, the burner will automatically go out. The 'In Use'  indicator will also go out. The burner will ignite again once the outgoing hot water temperature falls to that shown on the digital monitor.

Wireless controllers can be fitted along with wired 'Compact' and 'Deluxe' water controllers. Wireless and Compact water controllers allow temperature selection only. Deluxe water controllers allow temperature selection, shower saver / bath fill and have a clock function.

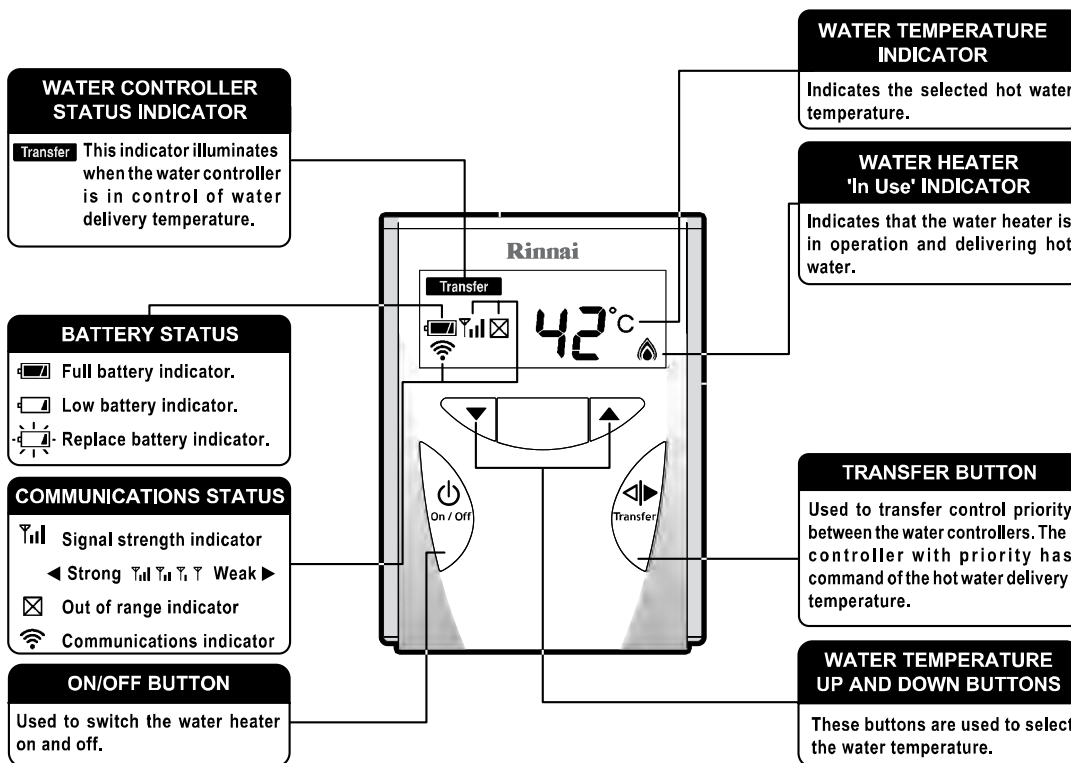
Wireless (MC502S), Universal (MC-91) and Deluxe (MC-70V & BC-70V) Controllers - available configurations:

Wireless Only Installations.	<p>A maximum of 4 wireless water controllers can be fitted with the following limitation:</p> <p>Only <u>ONE</u> MC502S can be set as the Master Controller.</p>
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Wired & Wireless Installations.	<p>A maximum of 4 water controllers can be fitted. Any combination of deluxe, universal and wireless controllers can be used with the following limitations:</p> <p>Only <u>ONE</u> master controller can be installed. This can be a MC-70V, a MC-91 (when programmed as a master controller) or a MC502S water controller.</p> <p>Up to <u>TWO</u> BC-70V water controllers can be installed.</p> <p>The <u>FOURTH</u> water controller in any installation MUST BE a MC502S or a MC-91.</p>
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USING WIRELESS CONTROLLERS

ABOUT THE WIRELESS CONTROLLER



HOW TO USE WIRELESS CONTROLLERS

TURNING ON THE WIRELESS CONTROLLER

When the controller is switched off only the battery status and communications indicators are displayed [Battery icon] [Signal strength icon] on the digital monitor. To turn on the controller, press the On/Off [On/Off icon] button once. The communications [Signal strength icon] indicator will briefly illuminate to confirm that a signal has been sent to the transceiver connected to the water heater.

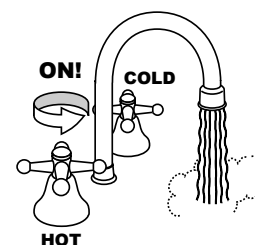
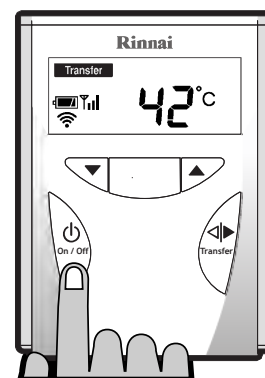
The Transfer [Transfer icon] indicator and the digits of the Water Temperature indicator will illuminate to indicate that the water heater is ready to supply hot water once a hot water tap is opened.

ADJUSTING TEMPERATURE

Simply press the 'hot water temp' [Up arrow icon] or [Down arrow icon] buttons until the required temperature is displayed on the digital monitor.

To operate the water heater, open any hot water tap. This will automatically light the burner, providing hot water. The 'In Use' indicator [Water drop icon] will illuminate on the water controller.

Once the hot water is running, if the set temperature is either too hot or cold press the [Up arrow icon] or [Down arrow icon] buttons until the desired temperature is reached.



CHECK WATER TEMPERATURE BEFORE USE.

A parent or carer should always check the temperature before a child is placed in contact with hot water, see page 1.



Whilst hot water outlets are open the set temperature may be lowered. However it cannot then be raised above 43°C. This is a safety feature.

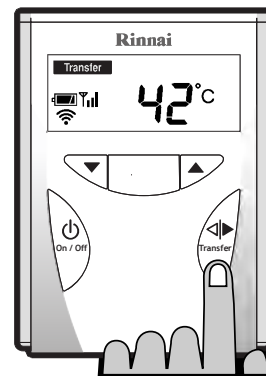
USING WIRELESS CONTROLLERS

TRANSFERRING PRIORITY BETWEEN CONTROLLERS

To control the water delivery temperatures when using two or more controllers it is necessary to have priority transferred to the water controller you wish to use.

An illuminated Transfer **Transfer** indicator confirms that the desired water controller is in control of the water delivery temperature. If the Transfer **Transfer** indicator is not illuminated press the 'Transfer' <▶ button to transfer priority to the desired water controller.

The Transfer **Transfer** indicator on the water controller will now illuminate indicating that control of the water delivery temperature has been transferred and that the water heater is ready to supply hot water once a hot water tap is opened.



NOTE

Whilst hot water outlets are open transfer of 'priority' between controllers is not possible. This is a safety feature.

TEMPERATURE DISPLAY RESPONSE TIME

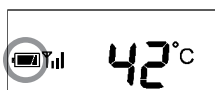
When the temperature setting is changed on a particular wireless controller, there may be a delay of up to 15 seconds before other controllers display the new temperature. This is due to the wireless radio communications and not a malfunction.

HOT WATER CONTROL

Temperatures higher than 50°C should only be able to be selected on the controller used for the kitchen, not on controllers used in bathrooms, ensuites or toilets. This helps minimise the risk of burns. The wireless transceiver has been incorrectly assigned if temperatures in excess of 50°C are able to be selected on controllers used in bathrooms, toilets and laundries. Re-assign the wireless transceiver if this is the case. See "UN-ASSIGNING AND RESETTING WIRELESS CONTROLLERS" on page 12 and "INSTALLING WIRELESS WATER CONTROLLERS" on page 11

WIRELESS CONTROLLERS BATTERIES

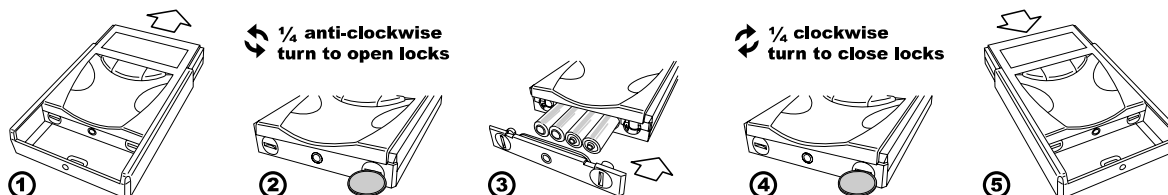
Wireless water controllers use 4 x 1.5V AA batteries. The battery symbol in the display monitor indicates the remaining charge in one of three levels.



- Battery charge level OK.
- Battery charge level is low.
- Batteries need replacing.

To replace the batteries:

1. Remove the controller from its' wall mounting bracket.
2. Using a coin or a suitable screw driver open the battery compartment with a ¼ anti-clockwise turn of both locks.
3. Insert the batteries observing the correct polarity as shown on the rear of the controller.
4. Using a coin or a suitable screw driver close the battery compartment with a ¼ clockwise turn of both locks.
5. Return the controller to its' wall mounting bracket.



IMPORTANT

Use only 4 x 1.5V AA ALKALINE batteries. NEVER mix old and new batteries.

Battery life is approximately 1 year.

Remove batteries if the remote control is not going to be used for a long period. This will help avoid damage from leaking batteries.

TROUBLESHOOTING

ERROR CODES

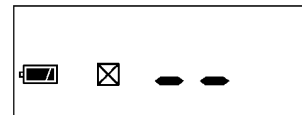
Your Rinnai Infinity Continuous Flow water heaters has a self diagnostic capability. If a fault occurs, an Error Code will flash on the digital monitor of your water controllers. This assists with diagnosing the fault, and may enable you to overcome a problem without a service call. Please quote the code displayed when enquiring about service. *Status Monitor available on Infinity 26, HD250, HD250i, HD200, HD200i and Infinity XR20 Plus and Infinity XR26 Plus models.

CODE	FAULT	REMEDY
☒	Wireless water controller is 'Out of Range' due to distance from transceiver or an obstruction.	Move wireless water controller or transceiver or remove the obstruction.
-	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 or cylinder. Check there are no obstructions to the flue outlet.
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.
34	Combustion Air Temperature 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 for advice.

No power display

When power to the water heater is disconnected the LCD of all wireless water controllers will display as shown. Check that power is available, the water heater is plugged in and that the power point is turned 'on'.



Faults caused by insufficient gas supply, insufficient water supply, gas quality, water quality, installation errors or operation errors are not covered by the Rinnai warranty. Refer to the Warranty Conditions of your water heater manual for full warranty details.

SERVICE

Wired and wireless controllers, transceivers and water heaters do not contain user serviceable parts and must only be serviced and repaired by an authorised person.

Rinnai has a Service and Spare Parts network with personnel who are fully trained and equipped to give the best service on your Rinnai appliance. If your appliance requires service, please call 0800 Rinnai (0800 746 624). Rinnai recommends that this appliance be serviced every 3 years.

INSTALLATION MANUAL

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INSTALLATION GENERAL

RINNAI WIRELESS CONTROLLERS

A wireless water controller installation utilises a 'transceiver' and up to 4 wireless controllers. Unlike most remote control systems, there is 'two way' communication between the transceiver and controllers. The 'transceiver' is connected by electrical cable to the water heater. The 'transceiver' transmits control signals received from the wireless controllers operated by the user to the water heater. The 'transceiver' transmits operational 'status' signals from the water heater which are received by individual wireless controllers to ensure controller displays reflect the operational status of the water heater.

Wireless controllers can be installed in conjunction with Universal and Deluxe wired water controllers and will function as described in the Operation Section of this manual. Refer to page 2 to confirm the maximum number and combination of water controllers that can be fitted.

Master and Sub controllers and temperatures

Only one wireless or wired controller can be designated the 'Master Controller' (MC). This controller is normally used in the kitchen and usually has a maximum temperature of 55°C, sufficient for almost all kitchen applications. Temperatures higher than 55°C are possible but usually unnecessary and will result in higher gas use and increase the risk of burns. Some conditions regarding Master Controller maximum temperatures are as follows:

- Temperatures of 55°C or higher can only be selected on the controller designated as Master Controller (MC) if the transceiver 'Max Temp' is also programmed to 55°C or higher.
- The temperature of hot water delivered is always limited to the maximum temperature programmed into the water heater itself. For example, if the transceiver maximum temperature is programmed to 55°C and the water heater is limited to 50°C, the maximum temperature that the water heater will deliver is 50°C. In this case 55°C will be displayed on the wireless Master Controller until a tap is opened after which the display will revert to 50°C.



The water heater maximum temperature cannot be adjusted by the user. These adjustments can only be carried out by a qualified and licensed tradesperson.

The remaining controllers are designated 'sub' controllers and are for use in bathrooms, toilets and laundries. The temperature limit for all 'Sub' controllers is always 50°C to minimise the risk of burns in these areas.

Adhesive labels are included for individual identification of wireless controllers as master or sub controllers. These labels are usually placed on the back of the wireless water controller body.



Other manufacturers water controllers are NOT compatible with Rinnai water heaters. Water controllers MUST NOT be used with any Solar Boost water heater. Rinnai water controllers brought in from other countries are not compatible with Rinnai appliances sold in New Zealand.

GENERAL INSTALLATION INFORMATION

Rinnai Wireless Transceivers can be connected to the water heater models listed on the cover page by the end user in accordance with these Instructions. These water heaters contain the 'Ezi connect' cable connector and a qualified tradesperson is not required.

Rinnai Wireless Transceivers are also compatible with some older water heater models not listed on the cover page of these Instructions. Since older water heater models do not contain the 'Ezi connect' cable connector, wireless controllers must be installed and commissioned by a suitably qualified and licensed tradesperson. Contact Rinnai for information regarding compatibility with older water heaters.



Regardless of water controller installation, all Rinnai water heaters must only be installed by an Authorised person.

Water controllers, transceivers and water heaters do not contain user serviceable parts and must only be serviced and repaired by an authorised person.

INSTALLATION GENERAL

POSITIONING OF TRANSCIEVER AND WIRELESS CONTROLLERS

The water controllers must be installed in shaded and clean locations. The water controllers and the transceiver should be fitted out of reach of children (suggested height from floor to be at least 1500 mm).

The water controllers are water resistant, however, durability is improved when positioned outside the shower recess. The water controllers must be installed at least 400 mm above the highest part of a sink, basin or bath.

The transceiver comes supplied with a 1.5m communications cable.

The transceiver's antenna is located in the top. For the best results mount the transceiver so the top of the transceiver is higher than the top of the water heater. If the transceiver is mounted to the side or below the water heater signal strength may be reduced.

The transceiver may be mounted inside metal recess boxes or pipe covers, however this may also reduce signal strength.

Take the signal strength into consideration when determining the location for the wireless water controllers.

COMMUNICATION CABLE

CONNECTING COMMUNICATION CABLES TO THE WATER HEATER

Communication cables connect the water heater to any wired water controllers and the wireless transceiver and operate at an extra low voltage (12 Volts DC) which is supplied from the water heater. Communication cables are supplied with the wired controllers (15m) and the transceiver (1.5m) and are fitted with spade terminals for connection to water heater. Up to two cables can be connected directly to the 'Quick connect' cable connector at the water heater. Extension cables are available from Rinnai. Alternatively, two core sheathed (double insulated) flex with minimum cross sectional area of 0.5mm² may be used. Cable lengths must not exceed 20 metres.

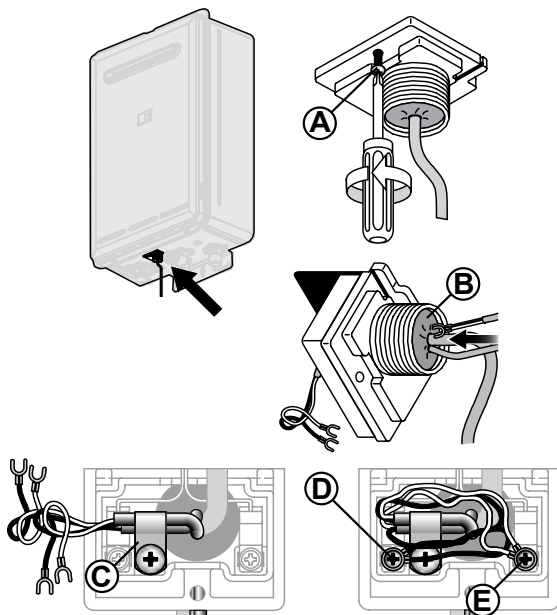


DO NOT attempt to connect cables to the 'Quick connect' cable connector at the water heater unless the electric power to the water heater is switched 'off' otherwise damage to electrical components may occur.

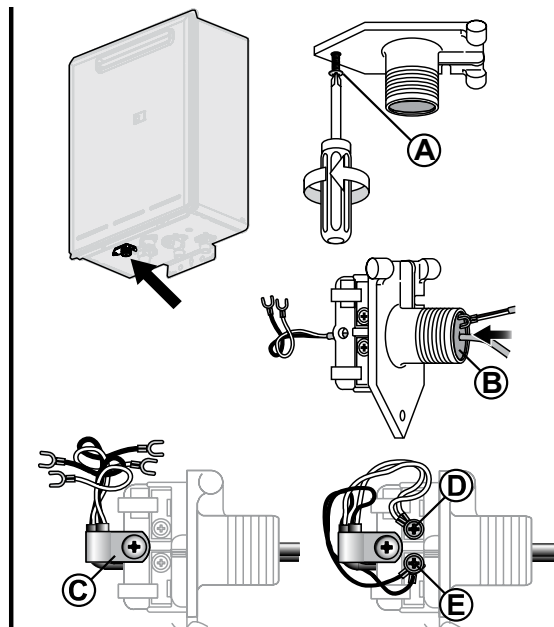
If your water heater is not fitted with an 'Quick Connect' cable connector, installation must be completed by a qualified and licensed tradesperson.

To connect up to two cables to the 'Quick Connect' cable connector

1. Isolate the electric power supply by switching the power point off and removing the power plug of the water heater from the electric power socket.
2. Remove the retaining screw **(A)** of the 'Quick Connect' cable connector at the base of the appliance.
3. Swing the 'Quick Connect' cable connector door open and thread the cable through the weather seal of the cable access hole **(B)** in the direction shown allowing sufficient cable length so that the sheath of the cable can be secured with cable clamp **(C)** supplied with the transceiver.
4. Loosen screw terminals **(D)** and **(E)** and connect the cable spade connectors to these terminals and re-tighten. Polarity is not important, either wire colour can be connected to either terminal.
5. Return the 'Quick Connect' cable connector to the original position taking care not to damage cable wires in the process and replace the retaining screw **(A)**.



'Quick connect' cable connector for water heater models:
INFINITY 16, 18, 20, 24, 26 XRPlus 26 XRPlus 20, and HD200



'Quick connect' cable connector for water heater models:
INFINITY XR32, 26i and HD200i, HD250, HD250i



To connect three or four cables to the 'Quick Connect' cable connector, consult the "CONNECTING WATER CONTROLLERS" section of the water heater Operation / Installation manual supplied with the water heater.

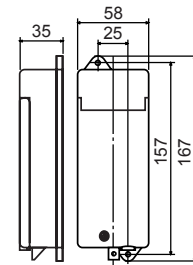
TRANSCEIVER INSTALLATION

MOUNTING THE TRANSCEIVER



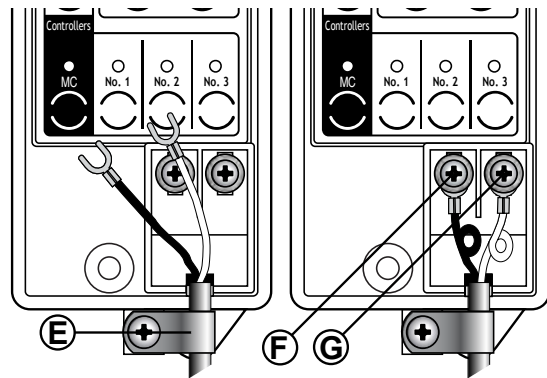
- The distance between the water heater and the transceiver must not exceed 20m.
- Metallic structures, appliances or magnetic fields in the vicinity of transceiver or wireless water controllers may reduce signal strength.
- Do not install transceiver near a heat source, such as a cook top, stove or oven. Heat, steam, smoke and hot oil may cause damage.
- The transceiver **MUST NOT** be installed where chemicals such as benzene, alcohol, turpentine, hydrogen sulphide, ammonia, chlorine or similar chemicals are in use.

1. Determine the most suitable position for the transceiver (See “POSITIONING OF TRANSCEIVER AND WIRELESS CONTROLLERS” on page 8.).
2. Using the wall mounting brackets of the transceiver as a template mark off and drill 2 holes for use with mounting fixings.
3. Secure the transceiver to the wall with the screws and or anchors provided. Avoid over-tightening of fixings as this may cause damage. **DO NOT** use powered tools to tighten fixings.



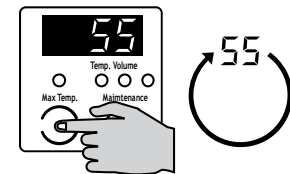
CONNECTING COMMUNICATION CABLE TO THE WIRELESS TRANSCEIVER

1. With the electric power supply still isolated, unscrew the transceiver access cover to reveal control keypad and terminals.
2. Thread the transceiver cable through the cable clamp (E), allowing sufficient cable length so that the sheath of the cable can be secured.
3. Loosen screws terminals (F) and (G) of the transceiver and connect the spade connectors of the cable to these terminals and re-tighten. Polarity is not important, either wire colour can be connected to either terminal.



SETTING THE MAXIMUM TEMPERATURE AT THE TRANSCEIVER

1. Ensure the power to the water heater is switched 'on'.
2. Set the transceiver's maximum water temperature to 55°C by pressing the 'Max Temp' button until 55 is displayed.



Refer to “Master and Sub controllers and temperatures” on page 7 for information regarding using of the maximum temperatures with wireless water controllers.

WIRELESS CONTROLLER INSTALLATION

INSTALLING WIRELESS CONTROLLERS

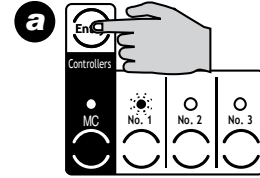


This installation procedure applies to wireless controller installations only. For combined wired and wireless water controller installations refer to "INSTALLING WIRED AND WIRELESS CONTROLLERS" on page 12.

Up to 4 wireless controllers can be installed. Only one of these can be designated as a 'Master Controller' (MC), others will be designated as 'Sub' controllers.

Only one wireless water controller can be installed at a time. DO NOT insert batteries until step 3.

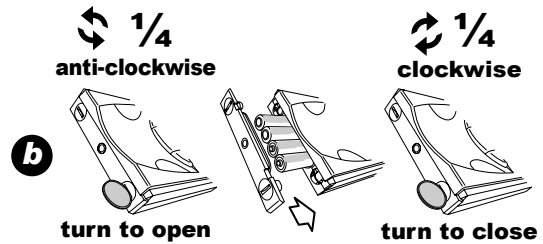
1. Ensure the power to the water heater is switched 'on'.
2. Press the 'Entry' button **a** on the transceiver for approximately 3 seconds to select a wireless controller channel for tuning. The first unassigned wireless controller channel LED will begin a fast flash, signifying that this channel has been selected for tuning.



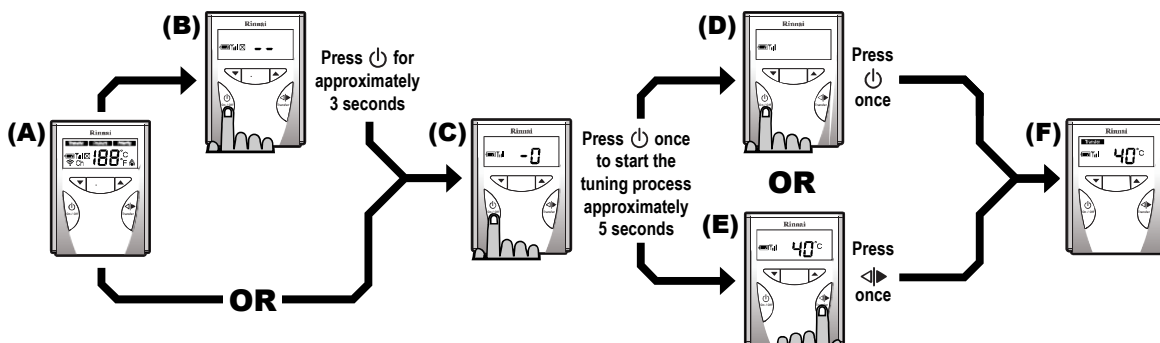
The default order of channel selection is as follows: MC Æ No. 1 Æ No. 2 Æ No. 3 Æ No. 4
To set up a Master Controller 'MC' channel PRESS and HOLD the entry button 4 times for approximately 3 seconds to select this controller channel.

The wireless Master Controller is the only wireless controller capable of selecting maximum delivery Temperatures exceeding 50°C. Ensure that the Master Controller label provided is placed on the rear of the assigned controller.

3. Select a wireless controller for tuning to the unassigned transceiver channel and remove the controller from it's wall mounting bracket. Open the battery compartment with a ¼ anti-clockwise turn of the locks using a coin or a suitable screw driver. Insert the batteries observing the correct polarity. Close the battery compartment with a ¼ clockwise turn of the locks **b**



4. After battery installation the wireless controller will momentarily display an initialisation screen (A), which will then switch to screen (B) or (C).
5. If screen (B) is displayed press and hold the 'On/Off' button until screen (C) is displayed. This takes approximately 2 seconds.
6. From screen (C) press the 'On/Off' button once to start the tuning process which will take approximately 5 seconds. Once the controller is tuned the controller channel LED on the transceiver will become steady and the controller LCD will switch to screen (D) or (E).
7. From screen (D) press the 'On/Off' button once or from screen (E) press the 'Transfer' button once to complete the tuning of this channel. At this point screen (F) will be displayed by the controller. The wireless water controller is now tuned and ready to control the delivery temperature of the water heater.
8. Apply one of the self-adhesive identification stickers to the rear of the controller, ensuring that the Master Controller sticker is only applied to the wireless water controller tuned to channel MC.



WIRELESS CONTROLLER INSTALLATION

INSTALLING MULTIPLE WIRELESS CONTROLLERS

To install subsequent wireless water controllers repeat steps 3 to 8 for each additional wireless water controller.

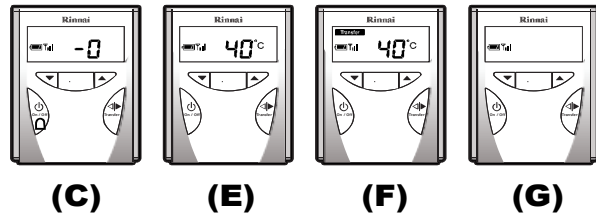
Once all wireless controllers are installed re-secure the transceiver access cover.

TROUBLE SHOOTING WIRELESS CONTROLLERS CHANNEL ASSIGNMENT

If at the end of the installation process screen (C) is displayed do the following:

Confirm first that the power is still on at the water heater.

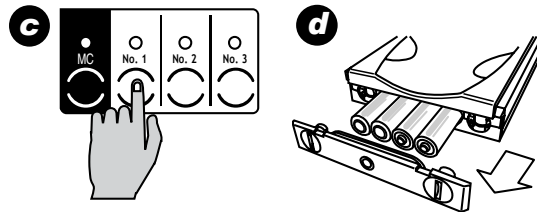
If power is off turn it back on. If the channel has been correctly assigned then the display should show either screens (E), (F) or (G).



If screen (C) is still displayed un-install and reset the wireless controller and repeat the installation procedure.

UN-ASSIGNING AND RESETTING WIRELESS CONTROLLERS

1. Press the desired controller channel button (C). The LED will go out to signify that this channel is now un-assigned.
2. Removing the batteries (d) from the wireless controller will reset the wireless controller and complete the un-install process.



INSTALLING WIRED AND WIRELESS CONTROLLERS



When installing combinations of both wired and wireless controllers, all wired controllers **MUST BE** connected before the wireless controllers are assigned to a transceiver channel.

Refer to page 1 to confirm the maximum number and combination of water controllers that can be fitted

Wired water controllers can **ONLY** be added to an existing wireless installation when:

- All wireless transceiver channels have been un-assigned.
- All wireless controllers have been reset.

See “UN-ASSIGNING AND RESETTING WIRELESS WATER CONTROLLERS” above.

When the wireless transceiver is installed it automatically detects any wired water controllers already connected to the water heater.

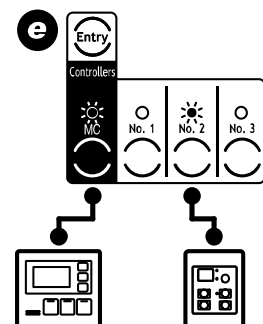
The LEDs of the channels assigned to wired controllers (e) will slow flash. The wired channels are assigned in sequence as follows:

MC70V or MC91 (programmed as a Master Controller) will be assigned to Channel MC.

BC70V will be assigned to Channels No. 2 and/or No. 1.

MC91 (not programmed as a Master Controller) will be assigned to Channels No. 2 and/or No.1 and/or No. 3.

Install the wireless controllers to any of the unassigned channels following steps 1 to 9 on page 11.





WIRELESS CONTROLLER INSTALLATION


MOUNTING THE WIRELESS CONTROLLER




- Metallic structures, appliances or magnetic fields in the vicinity of transceiver or wireless water controllers may reduce signal strength.
- Do not install wireless water controllers near a heat source, such as a cook top, stove or oven. Heat, steam, smoke and hot oil may cause damage.
- Do not install wireless water controllers in direct sunlight.
- Do not install wireless water controllers outdoors unless protection from dust ingress and sunlight are provided.
- **Wireless water controllers MUST NOT be installed where chemicals such as benzene, alcohol, turpentine, hydrogen sulphide, ammonia, chlorine or other similar chemicals are in use.**

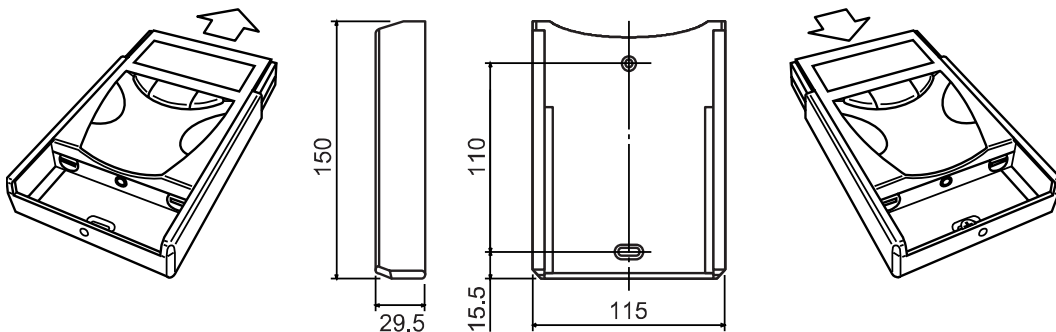
1. Determine the most suitable position for the water controller ("POSITIONING OF TRANSCEIVER AND WIRELESS CONTROLLERS" on page 8).

The 'Signal Strength'  indicator displays one of four levels. ◀ **Strong**  **Weak** ▶

The 'Out Of Range'  indicator displays when the wireless controller is out of range of the transceiver or when an object is obstructing the radio signal.

Wireless controllers should be positioned such that the signal strength indicator displays at least '2 bars' next to the antenna symbol  during installation. Signal strength varies with atmospheric and other conditions. If the signal strength is weaker than '2 bars' during installation, there may be other times when the signal is too weak to allow operation.

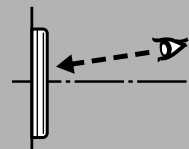
2. Slide the wireless controller from its' wall mounting bracket.
3. Use the wall mounting bracket as a template to mark off and drill 2 holes for use with mounting fixings.
4. Secure the wall mounting bracket to the wall with the screws and or anchors provided. Avoid over-tightening of fixings as this may cause damage. DO NOT use powered tools to tighten fixings.
5. Slide the wireless controller back into its' wall mounting bracket.



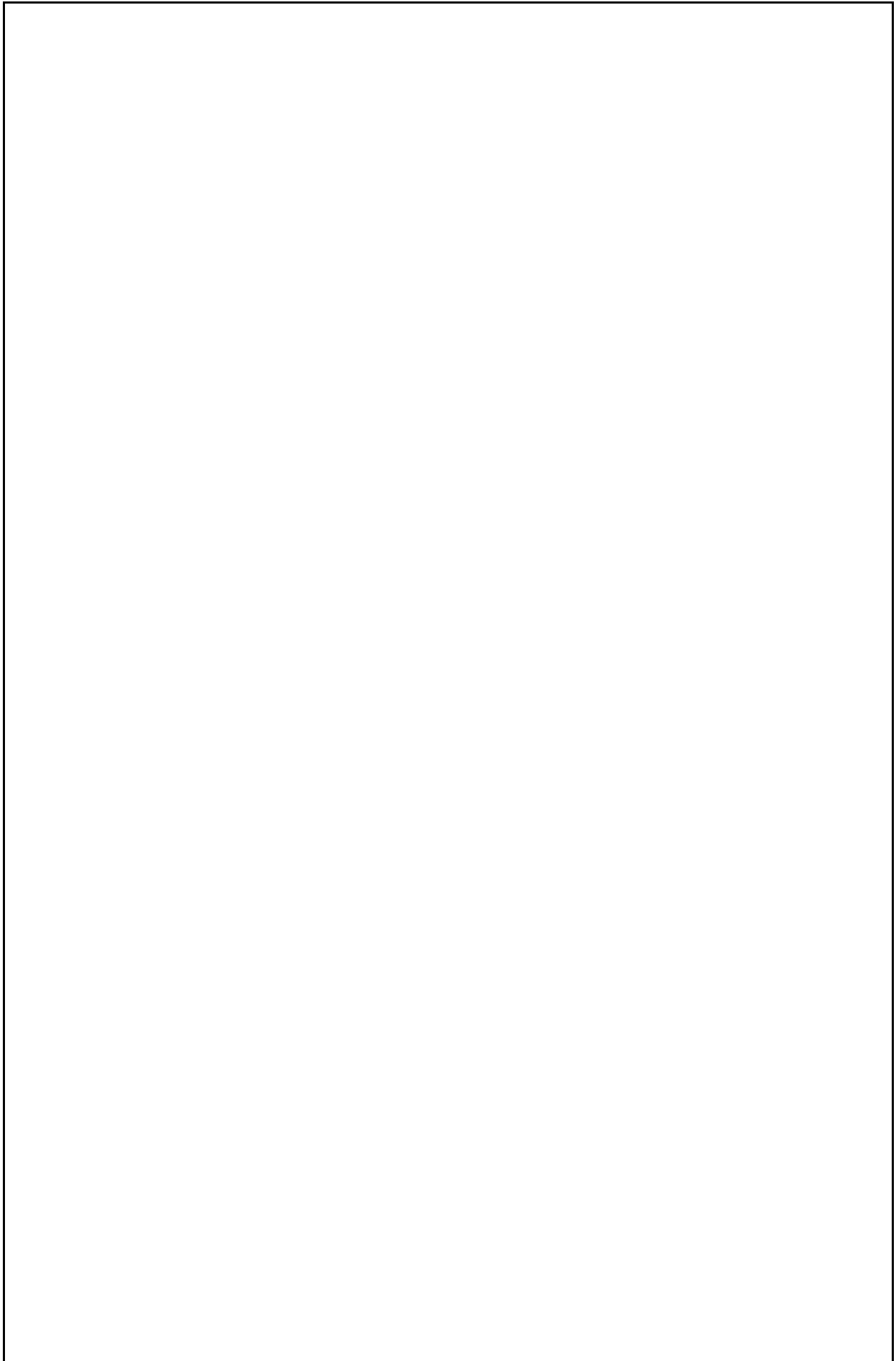
ADDITIONAL WATER CONTROLLER MOUNTING CONSIDERATIONS.

The MC502S uses a Liquid Crystal Display (LCD) for the digital monitor. Light reflections can make the LCD difficult to see at direct eye level.

For best results when installing the MC502S mount the remote controller lower than your eye-level to avoid these light reflections.



NOTES



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