



Gas fireplace Wi-Fi control

User guide

Rinnai



Rinnai gas fireplace Wi-Fi control

The Rinnai fireplace app allows complete control of your Rinnai gas fire, with up to four devices¹ being able to connect to the one fire. For commercial applications up to 30² fires can be run off the one app.



Thermostat function

Enables you to set a comfortable temperature and then have the fire do the rest. The fire will automatically modulate, like an air conditioning unit, to maintain the room at the temperature you have set.

The room temperature, visible at the top of the screen takes the temperature from a thermistor in the fire.

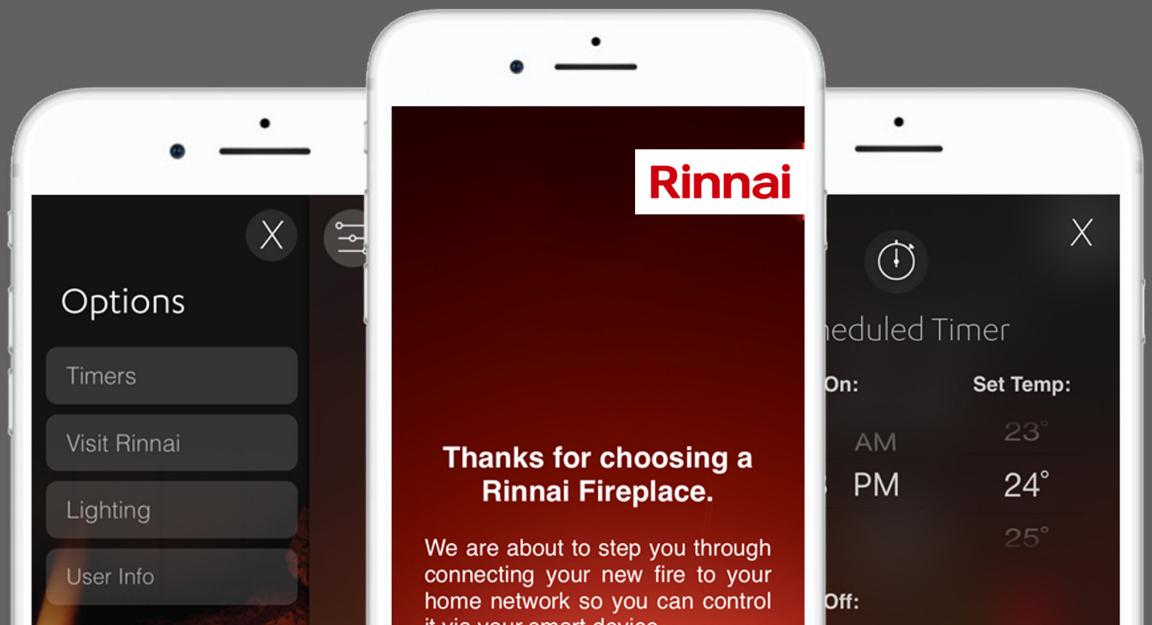


Flame function

Ideal for those that love a full-flame picture regardless of the room temperature. This doesn't operate on a thermostat, so best to switch back to thermostat if you plan on leaving the room.

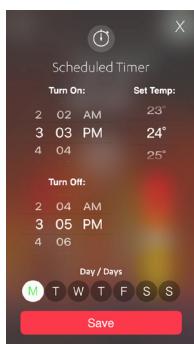
¹ Maximum of four people can operate the fire at one time

² If more than one fire, make sure you only turn one fire on at a time to complete registration. This ensures you don't mix up the unique Wi-Fi module identifiers.



Timers

For those that love ultimate control, multiple timers can be set and changed for every day of the week. A maximum of eight timers can be set.



Lighting

If you have an Ember or Linear 800 FlameTech fire you have the option of having the LED lighting turned on when the fire is on standby—access lighting from the options menu.



Economy

When the room temperature exceeds the preset temperature by 2°C, the burner will reduce to an extra low setting in order to decrease the room temperature. Refer p.13 for more information.



Contents

CONNECTION

Rinnai Wi-Fi control	5
Rinnai Wi-Fi connection process - Apple	6
Rinnai Wi-Fi connection process - Android.....	8

OPERATION

Thermostat function.....	10
Flame function	11
Timers.....	12
Lighting	13
Economy.....	13

SUPPORT

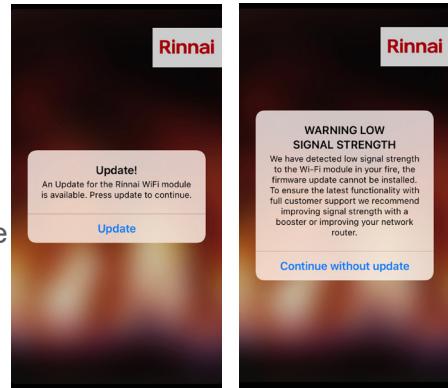
Error codes.....	14
Options screen	16
Troubleshooting	17
Connecting to a Wi-Fi booster	19
Setting up a Wi-Fi booster / extender	19

Important

On the back of your gas fire operation guide is a serial number for your fire. You **MUST HAVE** this to register your fire and use the app. We recommend taking a photo or noting it down, just in case you misplace your guide.



From time to time there will be firmware updates (like an operating system update) with new and improved features. It is important when doing the update **not to close or lock your phone**. You may need to adjust your auto-lock from two to four minutes. If for some reason the update fails or gets 'stuck', switch off the mains power to your fire, wait one minute, close the app, switch the power to your fire back on, and relaunch the app. The update screen will be displayed and the update will restart.



Please note: Ensure you have adequate signal strength, refer next page, before doing the update. If low signal strength is detected a 'WARNING LOW SIGNAL STRENGTH' screen will appear. A Wi-Fi booster or a router change may be required.

Rinnai Wi-Fi control

System requirements

The Rinnai Wi-Fi fire app will run on the following devices:

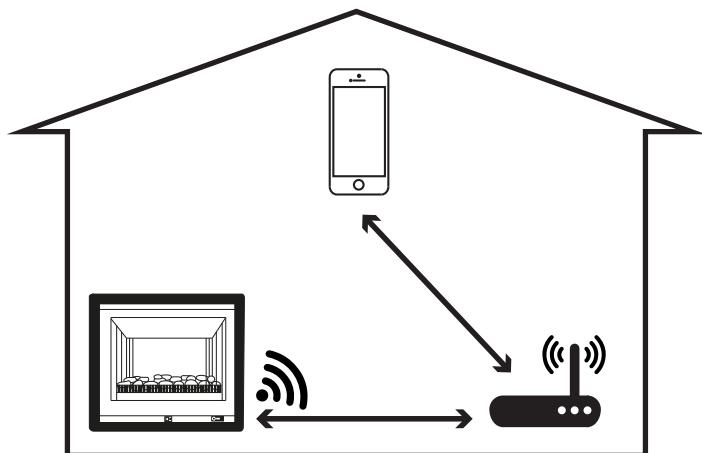
- Apple devices using iOS 10.0 and above
- Android 4.4 API level 19 and above
- Wi-Fi router running on 2.4 GHz (not 5 GHz)—check the Wi-Fi settings on your device
- Wi-Fi signal three bars or higher



Summary of how it all works

1. Wi-Fi module is installed, or retrofitted into the fire and checked to make sure it is working.
2. Homeowner downloads the app on their smart device.
3. Through the app, the Wi-Fi in the fire links (pairs) to the homeowners smart device.
Important: Only one person can connect to the Wi-Fi module, otherwise you will receive a cannot connect error message.
4. Homeowner, through the app, is taken through the registration process—they will need the serial number from the back of the operation guide.
5. The app process then links the Wi-Fi in the fire to the Wi-Fi router (or booster) in the home—essentially making the smart device the fireplace controller.

Rinnai gas fireplace Wi-Fi connectivity

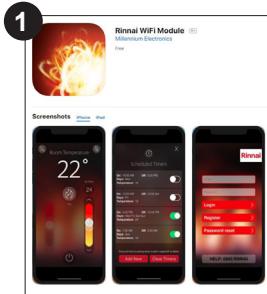


Important

For the app to work the fire must always be switched on at the wall and in standby mode.

If the mains power to the router is off for more than 24 hours, the Wi-Fi resets itself and you will need to go through the connection process again.

Rinnai Wi-Fi connection process - Apple



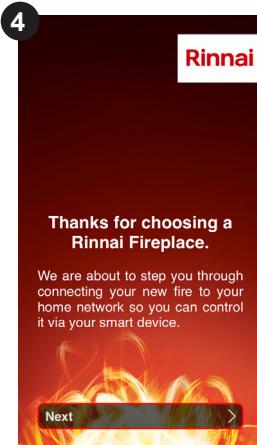
Find the Rinnai Fireplace app, place 'Rinnai' into the search field, download, and **OPEN**.



Find the app on your smart device and open.



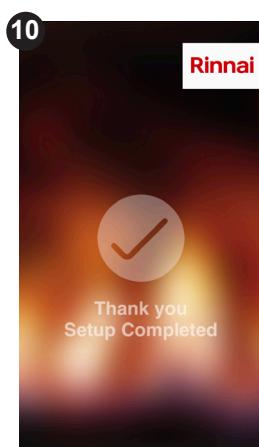
As this is the first time setting up, the above message will appear, select **New Setup**.



Select **Next**, this will step you through the connection process.



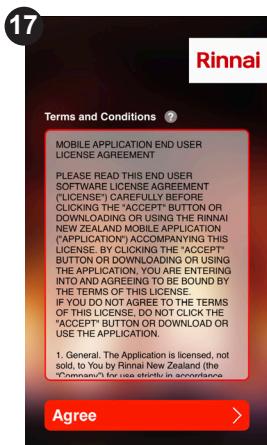
The home Wi-Fi is now trying to connect to the Wi-Fi module in the fire.



If the connection is successful this screen will **briefly** appear—you may miss it.



Shows the number of Rinnai fires available to connect to, select the fire and **OK**.



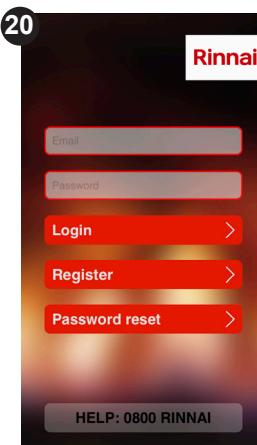
Agree terms and conditions.



If registration is successful this screen will **briefly** appear.



App will now connect you with the fire.



Enter your email, password, and **Login**.



Ensure the fire is on, select **Next**.



Close the app and go into **Settings** on your device.



In **Settings (Wi-Fi)** select **RinnaiWiFi_xxxxxx**, this is the Wi-Fi module in the fire. This connects your device to the fire.



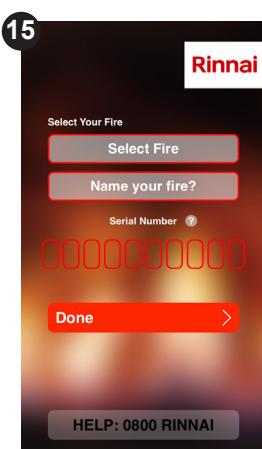
Reopen the app. Select your home Wi-Fi from the list, enter your password (max. 32 char.), and click **OK**. Signal strength needs to be three bars or higher.



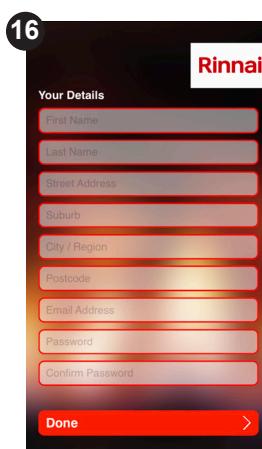
If there is a firmware update then you will see this screen. If updating DO NOT close the app or lock your screen.



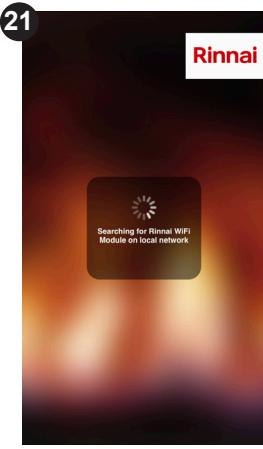
Select **Register**—so the fire can be matched to you.



Name your fire, if you have two you might want to name the location, and enter your serial number, this is located on the back of your operation guide.



Complete **Your Details** and select **Done**. Ensure a valid email address otherwise you won't be able to login.



All systems connecting.

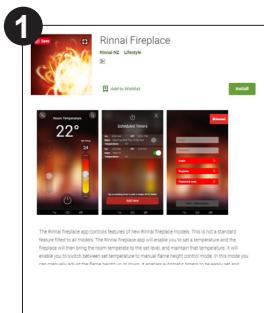


Success, you are now operational.

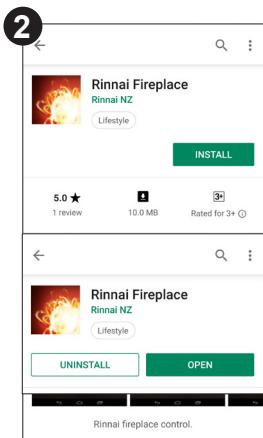
Tips and troubleshooting

- Before starting check your location services settings are set to NZ, otherwise a list of available fires will not display. Also 'Allow Rinnai Fire to use your location', refer screen grab on next page.
- If the 'search' and 'connecting' screens hang for more than two minutes, close and reopen the app.
- Remember the Wi-Fi signal strength needs to be three bars or greater. The majority of problems will be signal strength on connection.
- If you made an error in the setup in naming your fire you can change this. Press and hold the fireplace icon to edit the name, a popup screen will appear asking if you wish to rename [existing fire name], enter the new name and 'Save'.

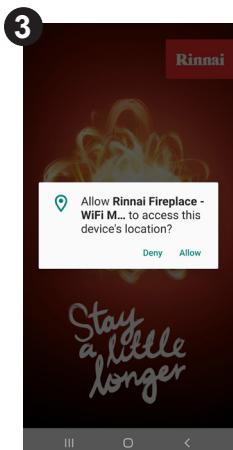
Rinnai Wi-Fi connection process - Android



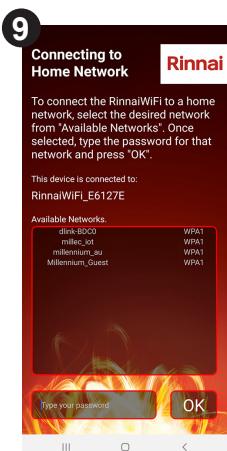
Find the Rinnai Fireplace app, place 'Rinnai' into the search field, download, and **OPEN**.



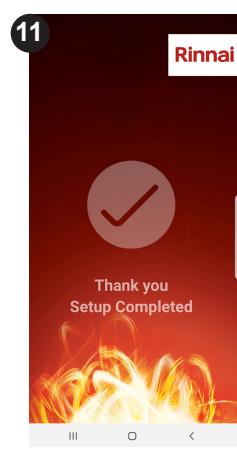
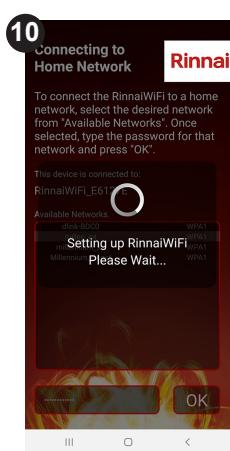
Install and Open.



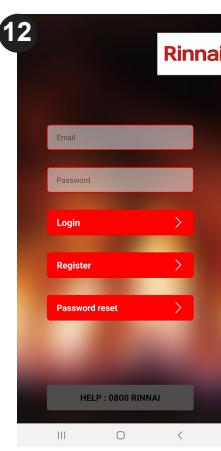
Allow to continue the process.



The home Wi-Fi is now trying to connect to the Wi-Fi module in the fire. Click on your home Wi-Fi and enter the password (max. 32 char.).



If the connection is successful this screen will **briefly** appear—you may miss it.



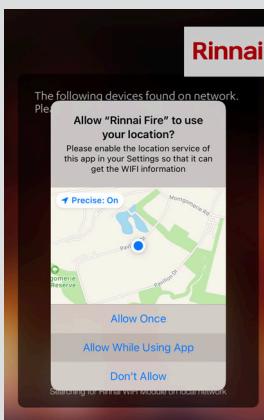
Select **Register**—so the fire can be matched to you.

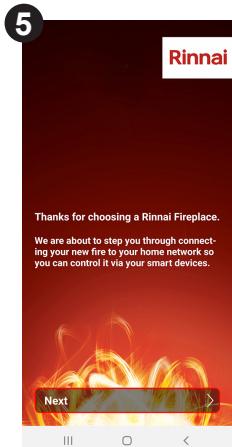


Success, you are now operational.

Tips and troubleshooting

- Before starting check your language & region settings are set to NZ, otherwise a list of available fires will not display. Also 'Allow Rinnai Fire to use your location'.
- Android, when pairing your phone directly to your fire (step 8), may show 'Internet not available' during this step, this is normal.

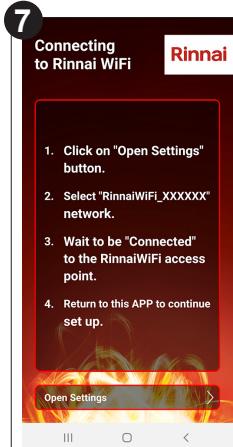




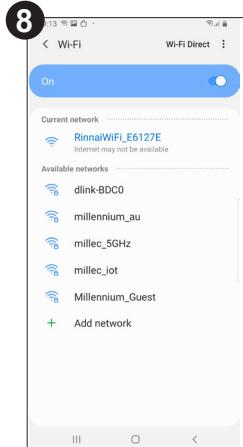
Select **Next** this will step you through the connection process.



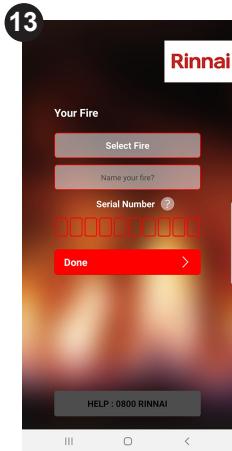
Ensure the fire is on, select **Next**.



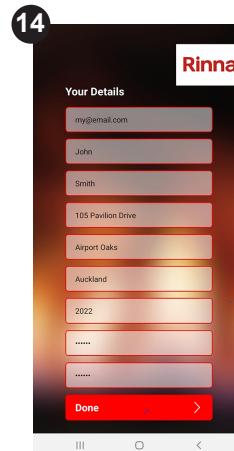
Close the app and open 'Settings' (we know this conflicts with what's written on the screen).



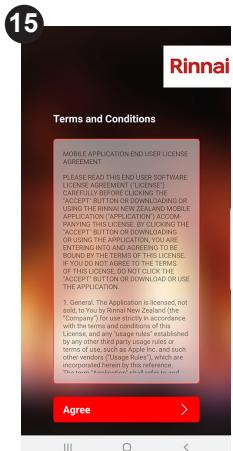
In **Settings** select **RinnaiWiFi_xxxxxx**, this is the Wi-Fi module in the fire. This connects your device to the fire.



Select your fire, name your fire, if you have two you might want to name the location, and enter your serial number, this is located on the back of your operation guide.



Complete **Your Details** and select **Done**. Ensure a valid email address otherwise you won't be able to login.



Agree terms and conditions.



All systems connecting.

Operation: Thermostat function

Each time the Rinnai Fire app is opened, the Wi-Fi network will be looking for the Wi-Fi module in the fire, remember the power to the unit needs to be on (in standby), just like your TV. Once the connection has been established (approx. 20 secs) a list of connected devices will appear, select the fire and press ok.

The app will default to showing the status of the fire, i.e. turned off (red power button), and the room temperature.

To switch the fire on, press the red power button and you'll get the green 'Starting Up' light, and approximately 30 seconds to a minute later the 'Room Temperature' screen will appear.

To adjust the set temperature you can either drag the button, or use the up and down arrows. You will hear a beep each time you change the setting. Don't be too speedy as the fire needs to register the signal and change accordingly. Also after startup it will be approximately 3-5 minutes before the fire fan starts up.

In thermostat mode the fire operates like an air conditioning unit, automatically modulating the fire settings to achieve and maintain the set temperature.

Room temperature display

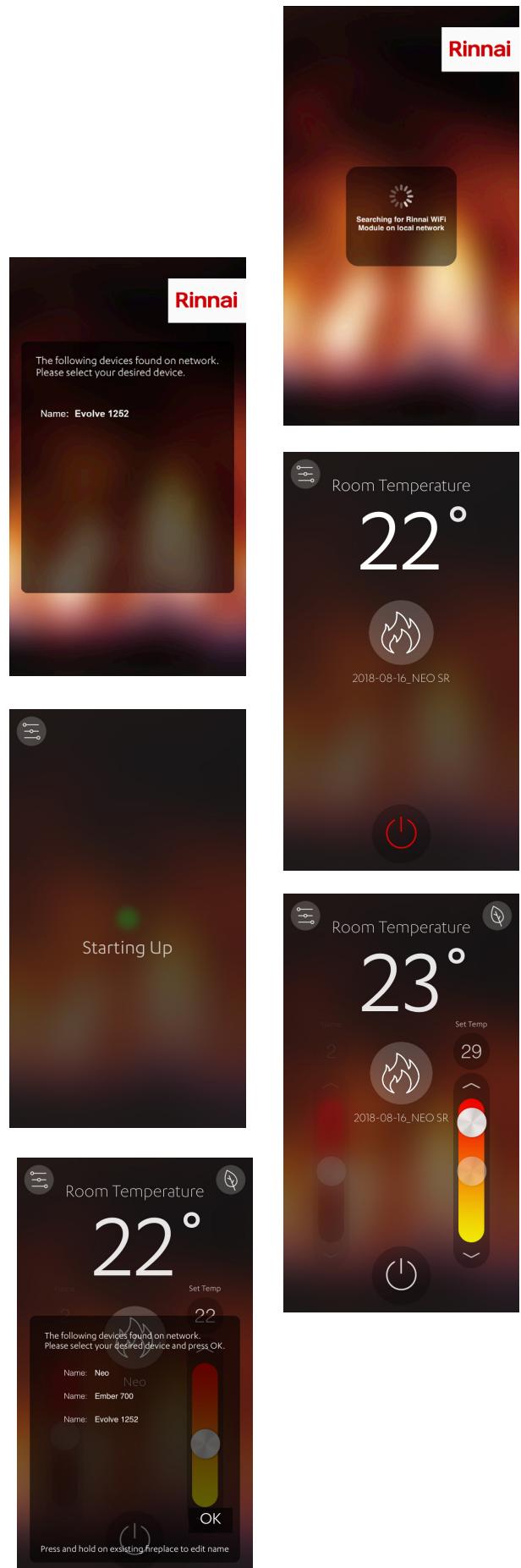
The room temperature displayed on your device is based on a temperature thermistor reading from within the fire.

Why two circles on the temperature bar?

The bright white circle represents the set temperature setting, and the transparent circle displays the actual room temperature. As the room temperature increases to the set temperature the circles will gradually merge together.

Flame icon

If you press the flame icon, just under the temperature display, a popup text screen will appear with a list of available connected devices—some homes will have more than one fire. This allows you to switch control from one fire to another.



Operation: Flame function

This allows manual control of the fire, so rather than having a set temperature 'Flame' mode allows you to control the flame picture of the fire, regardless of the room temperature.

This doesn't operate on a thermostat, so best switch back if you plan on leaving the room.

As with the thermostat, to change the flame settings, drag on the bar, or use the up and down arrows—flame settings are from 1-5, 5 being the highest flame setting.



This explanation text box displays if the 'Show Hints' box is ticked (accessible from the options screen).



Important

Closing the app does not turn off the fire. You always need to power off on the app to turn the fire off and then close the app.

Operation: Timers

Really really important

The timer operation function cannot be accessed remotely, so please remember to switch off all timers if you plan on going away for any period of time.

To access the timer functionality, select the menu icon, the three circled lines in the top left corner of the screen. Select 'Timers' from the options menu. Just a reminder that you need to be in the home with your smart device for this to work, and the fire must be in standby.

Adding timers

'Add New', then select the days you want the timer to operate, the on time, the off time, the set temperature, and save.

In the example shown, there are two timer periods for Mon-Fri, and one timer period for the weekend.

Mon-Fri

- On at 6am, switches off at 8am
- On at 5:30pm, switches off at 9:30pm
- Set temperature 20 °C

Sat-Sun

- On at 7am, switches off at 9am
- Set temperature 20 °C

When the fire is running off a timer a 'timer' icon will appear on the screen, refer last image on this page. A beep will also signify that the timer has come on.

Timer FAQ's

Will the timers work when I'm not in the house?

Yes, when you set up the timers the signal gets sent to the PCB of the fire. This means the timers will work even if you are not at home.

Can I override the timer?

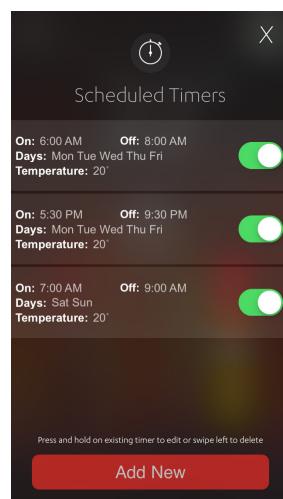
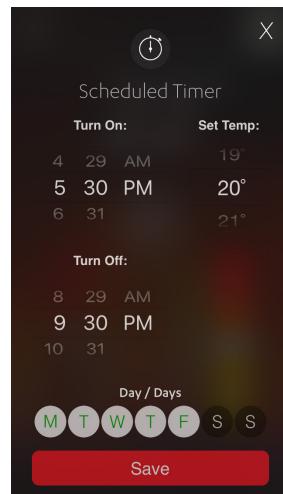
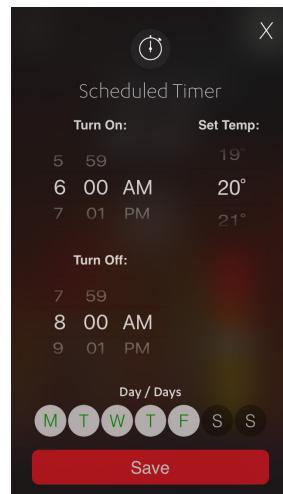
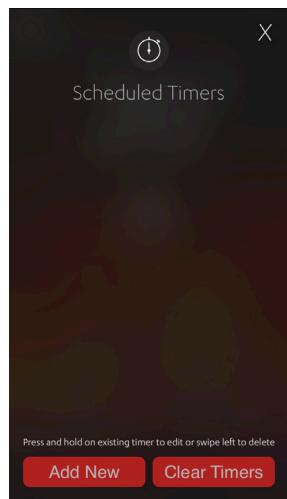
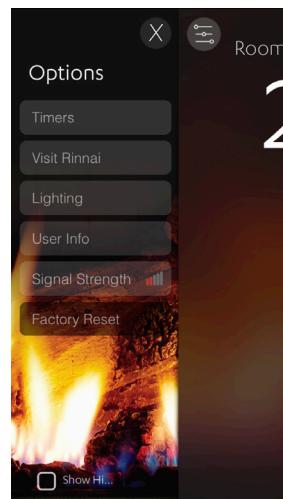
Yes, you can still switch the fire on and off which will temporarily override the timer.

Do the timers have the preheat function like some of your other fires?

No, the timer will only come on at the designated 'Turn on' time.

How many timers can you have?

A maximum of eight.



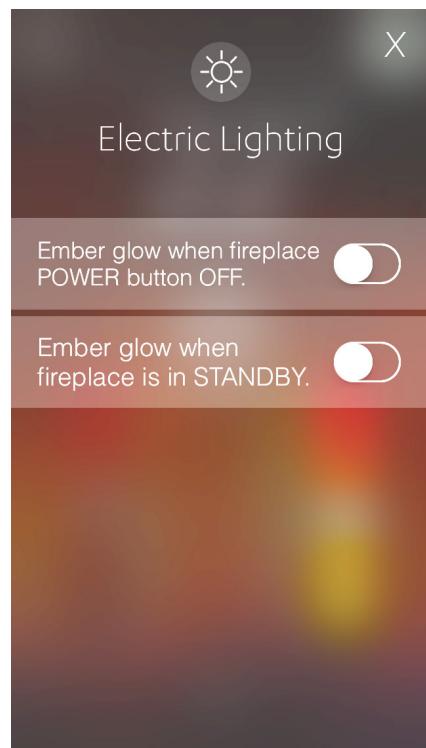
Operation: Lighting

This feature is only available for the following Rinnai gas fires:

- Rinnai Ember 600/700
- Rinnai Linear 800 FlameTech

To access the lighting function, select the menu icon, the three circled lines in the top left corner of the screen. Select 'Lighting' from the options menu.

Activate if you want the lighting to be on when the fire is not.



Operation: Economy

Economy will ONLY work in thermostat mode. If you press the economy icon while in thermostat mode, you will hear a beep and the leaf symbol on the top right will be white, as shown in the image.

Economy function explanation

In some instances, even while in thermostat mode, the room temperature can still increase, especially if the room size is small. With 'economy' on, if the room temperature rises 2 ° above the set temperature and stays there for 1-2 minutes, the economy feature will switch to the lowest burner setting, and in some cases go to pilot flame only. If the room temperature goes below the set temperature, the burner will return to normal to maintain the room temperature.



Error codes

Your Rinnai gas fireplace has self diagnostics that monitor the appliance during startup and operation. Should a fault occur the heater will shut down. The fault that has caused the shut down will be indicated via the Wi-Fi app on your smart device with a suggested action.

Unfortunately for the majority of faults a service call is required. The only faults that the homeowner can possibly rectify are:

- 00 mains power failure
- 11 ignition failure
- 12 incomplete combustion
- 16 room overheat
- 90 communication error
- 91 communication error

Error codes and their likely causes can also be found in the operation guides of each fire. It will look like this.

Error codes		
Error code	Likely cause	Suggested solution
00	Mains power failure	Reset the fire, press the On/Off button on the control panel or remote control twice to turn the fireplace on.
11	Ignition failure	Check the gas supply is turned on. Turn the heater OFF then ON again. If the problem continues a service call will be required.
12	Incomplete combustion	As above.
16	Overheat safety device	Service call.
18	Room overheat	Lower room temperature to below 40 °C.
30	Room temperature sensor faulty	Service call.
32	Overheat temperature 1 sensor faulty	Service call.
33	Overheat temperature 2 sensor faulty	Service call.
52	Spark sensor faulty	Service call.
61	Combustion fan motor faulty	Service call.
70	Model error	Incorrect PCI for model, service call.
71	Solenoids faulty	Service call.
72	Flame detection circuit fault	Service call.
73	Communication error	Service call.

Technical description and action text

Don't be put off by the technical description and action text. If a service call is required, this is the information used by the service technician to help diagnose the fault.

The screenshots show the 'Fault Code and Fix' screen for five different error codes:

- 00 Mains power failure:** Probable Cause: Mains power failure. Description: When power failure is sensed operation stops. Action: Reset heater, press the On/Off button at the fireplace twice.
- 11 Ignition failure:** Probable Cause: Ignition Failure Flame rod. Description: Current cannot reach 0.1 µA for 3 seconds during initial combustion. Action: Check Gas supply is turned on, switch the fireplace On/Off at the fireplace twice to try and re-ignite.
- 12 Incomplete combustion:** Probable Cause: Incomplete combustion. Description: Flame rod current remains below 0.1 µA for 3 seconds during initial combustion. Action: Check Gas supply is turned on, switch the fireplace On/Off at the fireplace twice to try and re-ignite.
- 14 Over heat safety device:** Probable Cause: Over heat safety device. Description: High Limit temperature thermistor or thermal fuse has activated. Action: Clean the air filters on the fireplace, if the error code continues a service call is required.
- 16 Room overheat:** Probable Cause: Room overheat. Description: Room temperature is sensed as being above 40°C for more than 10 minutes. Action: Lower room temperature.

Below is a table of the fault code and fixes, they will appear as fault code screens like those on the previous page.

Error code	Probable cause	Description	Action
00	Mains power failure	When power is sensed operation stops.	Reset heater, press the On/Off button at the fireplace twice.
11	Ignition failure flame rod	Current cannot reach 0.1 µA for 3 seconds during initial combustion.	Check gas supply is turned on, switch the fireplace On/Off twice to try and reignite.
12	Incomplete combustion	Flame rod current remains below 0.1 µA for 3 seconds during initial combustion.	Check gas supply is turned on, switch the fireplace On/Off twice to try and reignite.
14	Overheat safety device	High limit temperature thermistor or thermal fuse has activated.	Clean the air filters on the fireplace (homeowner cannot do this), if the error code continues a service call is required.
16	Room overheat	Room temperature is sensed as being above 40 °C for more than ten minutes.	Lower room temperature.
31	Room temp. sensor faulty	Open circuit in the temperature thermistor.	Service call.
32	Room temp. sensor faulty	Open circuit in temperature sensor 1.	Service call.
33	Room temp. sensor faulty	Open circuit in temperature sensor 2.	Service call.
53	Spark sensor faulty	Open circuit in spark sensor.	Service call.
61	Combustion fan motor faulty	Open circuit in combustion fan wiring.	Service call.
71	Solenoids faulty	Open circuit or stuck solenoid.	Service call.
72	Flame detection circuit	Open circuit to flame detection.	Service call.
73	Communication error	Main PCB faulty.	Service call.
90	Communication error	Communication error detected between main PCB and Wi-Fi module.	Service call.
91	Communication error	Communication error detected between smart device and Wi-Fi module.	Please check your smart device and Wi-Fi module are within range. Check your network settings.
92	Cloud function	Cloud function currently not available	This is due to another device having control on the home network, or the Wi-Fi module has gone offline.

Fault code 90: Communication error between the Main PCB and Wi-Fi module

This possibly requires a reset of the Wi-Fi module in the fire (or on the app). For the Linear this can be done by the homeowner, refer to the instructions in the operation guide. For the Evolve, Ember and Neo the reset can be done on the app, as a last resort for troubleshooting.

Options screen

The 'Timers' and 'Lighting' functions are explained on p.12-13. Signal strength is explained on p.5.

Visit Rinnai

Option of accessing:

- Rinnai website
- Rinnai Facebook
- Rinnai YouTube channel
- 0800 746 624 (Mon-Fri 8-5pm)

User info

Option to update your details, for example, if you change your email address.

The exit door at the top of the screen is a logout screen—in normal day-to-day use you would rarely have to use this. If logged out you would no longer be able to control the fire via the app and a new account would need to be created. The only other reason to use logout will be to reset your password.

Linked appliances

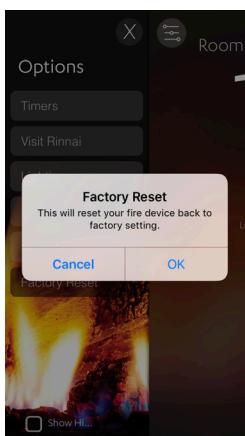
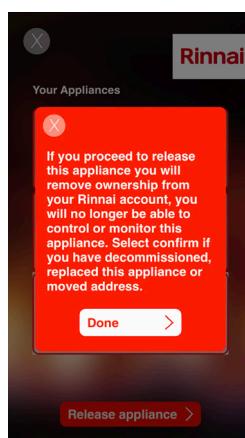
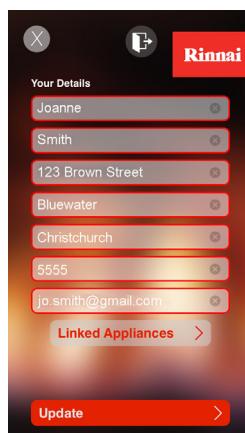
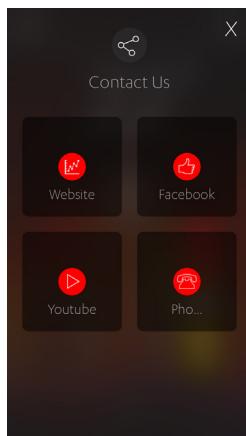
Selecting 'Linked Appliances' allows you to see which gas fires are paired to your phone with an option to claim (if not already) and release the appliance (for example if you move).

Factory reset

This is like 'Control-Alt-Delete' on your computer. This resets the fire to what it was when it was first installed. Only 'reset' if all other troubleshooting options have been exhausted. You will hear multiple beeps once the fire has reset itself.

Claim appliance

If you've moved into a house with a Rinnai Gas Fireplace enabled with Wi-Fi functionality you will have to 'claim' the appliance from the previous owner and complete the registration process.





SUPPORT

Uh-oh: Advice, tips, and troubleshooting

Experience tells us that the majority of problems will be related to your Wi-Fi network or signal strength on initial connection. Please work through the advice on this page and general home wireless troubleshooting steps (taken from the Orcon website) first before contacting us, as often you'll be able to fix the problem yourself.

Signal strength fluctuations

The Rinnai fire app requires a signal strength of three bars and above (refer p.5). If you find levels regularly fluctuate below three bars a Wi-Fi booster or extender may be required. Talk to your local electronics expert first to see if this will solve the problem.

Home wireless troubleshooting

1. Reboot your modem

Often when the internet appears to be broken a restart of the modem can solve the problem.

- Turn the modem off at the wall
- Leave it off for at least two minutes
- Turn the modem back on at the wall

The modem will take a few minutes to start up and re-establish the connection. If the problem persists, continue to the next step.

2. A few things to check

Check the actions below to see if they apply to you. These can cause what seems like a wireless network fault.

- Make sure the wireless light on your modem is on.
- Check your mobile device has the Wi-Fi enabled and that your device is connected to your router rather than just mobile data.

Check if the problem is a wireless network issue.

- Plug a computer or laptop into the modem using a Ethernet cable and check all other connections.
- After connecting, wait a minute or two for the wired connection to be established, then open your web browser and visit a known web page such as google.

If you can surf the web as normal, then it indicates a problem with the wireless connection. Stay plugged in and go to the next step.

If your browser is still unable to surf the web at this point, contact your internet service provider for assistance.

3. Test another device

If you have another wireless capable device, try connecting to the network using that. If this device works, then the one that's not working may be the problem.

To find a solution for your device, try a Google search to see if there are any known issues with your device. Your device's manufacturer should also be able to provide support.

If you don't have another device to check with, or the problem is related to all devices, go to the next step.

4a. I can't find or connect to my wireless network

Double check you have Wi-Fi enabled on your device. If this is on contact your internet provider to help you configure your specific model of modem.

4b. Frequent disconnections, slow wireless performance, weak or no signal

Disruptions to your wireless network can come from all sorts of things, including your appliances, the house, and your neighbours' internet.

Consider the location of your router and the location of your devices. The downside to having a wireless network is that the more walls, floors, appliances and obstructions between your device and the router, the weaker the signal strength will be. Ideally your router will be in a central location in the house.

5. Contact your internet provider

If your wireless network still isn't behaving as it should, then please contact your internet service provider support team for assistance.

Uh-oh: App specific problems

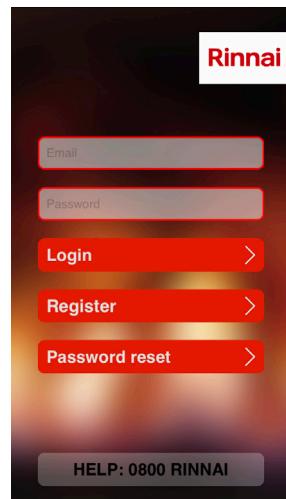
Incorrect email or password

If you get an email or password error (system will beep multiple times) it will be because during the initial registration you either mistyped your email and/or password. This is very easy to do (speaking from experience) as some screens are very small.

To fix this problem you will need to re-register, take your time and make sure the characters in the email and password fields are correct. Close and re-open the app, unfortunately you'll need to go through most of the connection process again.

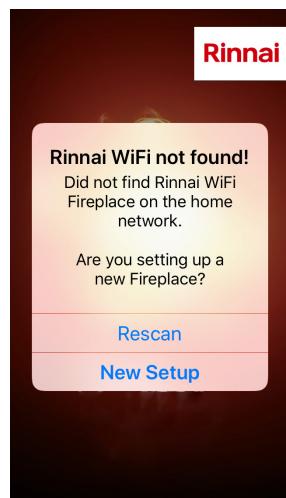
Important

Password cannot be over 32 characters.



Rinnai WiFi not found

Apart from signal strength, which is mentioned on the previous page, there could be an issue with the Wi-Fi module in the fire. For the Linear model you can reset the Wi-Fi module, refer to the operation guide for how to do this, or you can 'Factory Reset' in the options menu. The 'Factory Reset' is also an option if you have an Evolve, Ember, or Neo fire.



One step that can be done before a call to Rinnai, is to turn off the fire at the wall. Wait for a few seconds and then turn the power back on. Sometimes this is enough to reset everything. Close the app and open again, **rescan** to see if this solves the problem.

Serial number invalid

The reason for strict validation of the serial number is so the fire can be matched to an individual and/or house. If you get error messages regarding your serial number you will need to call our Customer Services team (0800 746 624) to obtain a correctly formatted ghost serial number.

Simple remote control

Don't forget that you still have your simple remote to operate the fire if for some reason your app isn't working.



Router off and router password change

If the router power goes off for more than 24 hours, or there has been a router password change, the system will reset itself and go back to factory reset. This means you'll need to go through the registration process again.

Unable to reset unit

This may be due to an issue with an over the air firmware update, refer bottom of p.4 for more detail. **Retry at least three times** before contacting Rinnai. In a small number of cases the problem with the firmware update could cause a corrupted Wi-Fi module, which may require a service call.

LED lights and what they mean

For some Rinnai fires the LED is visible. This can be useful if you are having app problems.

Solid red	Fire is in factory mode—waiting for owner to begin connection process
Solid orange / red / green	Module stuck in an over the air update.
Flashing green	Will occur during connection process, searching for router. If it can't find/connect for more than 24 hours it will reset and go back to solid red.
Solid green	Connected to the network

Registration process - unable to see a list of available fires

Check your location services or language & region settings are set to NZ (or Aust), otherwise a list of available fires will not display.

Connecting to a Wi-Fi booster

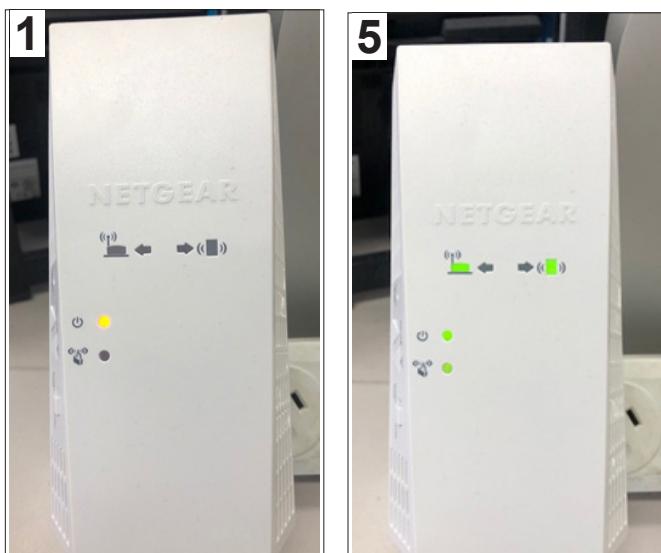
If during the connection process you have discovered you need a Wi-Fi booster, do the steps below to reset/reconnect to your fire.

1. Change the name of the booster network, it can't be the same name as your home router.
2. Go into the Rinnai Fireplace app options and select 'Factory Reset', and then 'OK'
3. Connect your fire to your booster network following the same connection steps you did previously.
4. Ensure the signal strength has improved using the booster, it needs to be three bars or higher, refer p.5.
5. Ensure you are connecting to a 2.4 GHz network (not 5 GHz).
6. Follow the process for connection to Apple or Android.

Setting up a Wi-Fi booster / extender

Example using the Netgear AC1750 (ex6250) Wi-Fi mesh extender

1. Connect the extender near your fireplace, preferably in the same room. Wait for the power LED to go green.
2. Once the extender has been fully setup, it's important to RENAME the extender's name to something different to your router. This is so the fireplace can distinguish the different access point names in the building. For example, if your home network is called *MyHomeNetwork*, by default the Wi-Fi extender will give the same name. Rename it something like *MyHomeNetwork-ext*, which makes it obvious which access point is your extender, and which is your home network.
3. Once the Wi-Fi extender is setup, you should get a number of LED indicators, refer image below.
4. Using the Rinnai Fireplace app, setup your fireplace, making sure to access the Wi-Fi extender.



Rinnai.co.nz

Tel: 0800 746 624
<http://www.youtube.com/rinnainz>
<http://facebook.com/rinnainz>

Gas Fireplace Wi-Fi control user guide
7-26