

Contents

How do I connect my stove to the app?	2
What are the modes of operation?	2
Emergency Mode Selection	2
Why don't I get notifications?	3
How do I get reload alerts?	Δ
Turning on reload alerts using the app	
Firmware versions above release 139	
What do these app icons mean?	
What is the stove using Bluetooth and Wi-Fi connectivity for?	5
What happens if there is a power cut?	6
Option 1:	6
Option 2:	6
How can I make the power supply lead longer?	€
Can I use a battery pack?	7
Examples of Compatible Battery Packs:	7
How do I factory reset?	7
To do a factory reset:	7
What should I do if the app or stove become unresponsive? - Android	8
Stage 1 – Off & On	8
Stage 2 – Delete Bluetooth Connection	8
Stage 3 – Delete Pairing Information	8
What should I do if the app or stove become unresponsive? - iPhone	g
Stage 1 – Off & On	g
Stage 2 – Delete Bluetooth Connection	g
Stage 3 – Delete Pairing Information	g
How do I stop the Android App crashing on startup?	10
How do I do a firmware update?	10
How do I send a log file to Charnwood Technical?	10
What errors can occur?	11
Connection Errors	11
Motor Errors	11
How many devices can I pair?	11
Why is the graph not showing the correct date?	11



How do I connect my stove to the app?

- Ensure your phone is connected to your WIFI network.
- Download the Charnwood Control app from the App Store or Play Store.
- Open the App and press "Setup Stove"
- Scan QR Code on Serial Plate located to the left underneath of the firebox on a Skye E700 (figure 1) or the lollipop at the back of the Aire 300/500/700 (figure 2).
- Once the stove is scanned, press "OK", press "Next", then proceed to connecting stove via Bluetooth.
- Press "Connect", and on the stove, once the stove button is flashing blue, press the button.
- Click on "Pair". Ignore the code that is displayed.
- The prompt at the bottom of the screen reads "Pairing Complete".
- Proceed to connect to Wi-Fi.
- Look for your Wi-Fi name and enter password. Save network.
- Wait for the Wi-Fi Icon to Illuminate white.



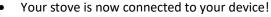






Figure 2 - Aire 300/500/700

Door Handle,

Identification Plate, located underneath

Figure 1 - Skye E700

on the left

Identification Plate

What are the modes of operation?

There are three modes for operation of the stove:

- Automatic mode the stove will endeavour to burn the fuel load in the best way possible
- Room Temperature Mode the stove selects the most appropriate intensity to achieve the set room temperature
- **Test Mode** used to verify that the air control is operating correctly

When operating the air control from the stove itself there are 5 set levels in each mode. A short press (less than 1.5 secs) indexes through the 5 intensity levels. A long press (more than 1.5 secs) changes mode.

Emergency Mode Selection

An extra-long press (more than 5s) in any mode will take you to the emergency state. Short presses (less than 1.5s) toggle the mode and long presses (more than 1.5s) select the mode. There are two modes in this state:

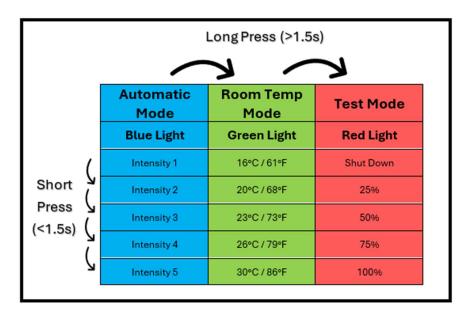
- **Chimney Fire Mode** the first option indicated by a red flashing light. Used in the event of a chimney fire, this mode shuts the air control down to prevent combustion.
- **Power Cut Mode** indicated by a green flashing light. Used when there is a power cut, this mode sets the stove to a nominal setting when there is no available electricity.

To exit from either emergency modes the stove <u>must</u> be restarted by cycling the power or selecting the mode via the app menu and accepting the prompt to return to normal operation.

If no selection is made within 15s the stove will return to normal operation.



Power cut mode will not function if there is no power available for the air control to operate. Use a battery pack to get into this mode and then disconnect once the selection has been made.



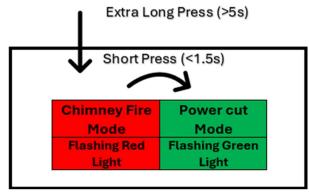


Figure 1 - Button Operating Mode Selection

Why don't I get notifications?

Popup notifications can only be received on a mobile device if:

- They are enabled in phone/tablet settings
- The app is running in the background
- The correct stove is active in the app
- They are in Bluetooth range or connected to the same Wi-fi network.

They will not be shown if the app is in use, or the app has been closed.

Refuel notifications are active in overnight mode but are turned off when overnight becomes active.

A good way to test the notifications is to open the door which should generate a notification if the above conditions are satisfied.



How do I get reload alerts?

A reload alert consists of a pulsing blue light on the control button when stove deems it necessary to reload the stove.

Turning on reload alerts using the app

Reload alerts can be toggled on and off via the control screen on the app, by using the button in the bottom right (see figure 3).



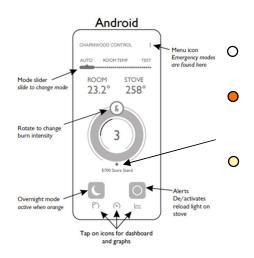
Firmware versions above release 139

For installed firmware releases above **139**, it is also possible to toggle reload alerts on and off by cycling the power to the stove with the door in different positions. Please see table 1 below to choose the correct setting:

Stove turned on with the door <u>open</u>	Reload Alerts Not active
Stove turned on with the door <u>closed</u>	Reload Alerts Active

Table 1 -Setting Reload Alerts

What do these app icons mean?

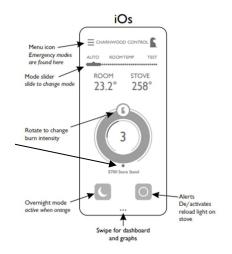


Connection Status:

Unlit dot – Stove is not connected to the app

Orange Dot – Stove is connected via Bluetooth and can be controlled

Cream dot – Controls are greyed out, stove is transmitting performance data via Wi-Fi





÷	Wi-Fi Disconnected – Your stove is <u>not</u> connected to the Wi-fi Network
\$	Wi-Fi Connected – Your stove is connected to the Wi-fi Network
1	Error – There is an error with the stove. Press to open the prompt and view the error.
3	Flash – Can be used to toggle the phone torch when scanning the QR code on the serial label.
	Overfire – The stove has exceeded the maximum recommended operating temperature and is taking steps to reduce itself. This is usually a result of excessive fuel.
	Door Open – The stove door is in the open position
	Reload – The stove believes it is ready to be reloaded.

What is the stove using Bluetooth and Wi-Fi connectivity for?

The Bluetooth connection between the stove and a mobile device enables control of the stove using the app (the stove can be controlled using the button on the stove).

The Wi-Fi connection is required to transmit graph data to the device and to request firmware updates onto the stove. It is also used to update home screen indicators if Bluetooth connection cannot be used.

The stove can only be connected to a 2.4 GHz Wi-Fi network.

When using mobile hotspots on IOS devices it is essential that the setting "Maximise Compatibility" is enabled. It may also be necessary to reboot the stove to ensure the network settings are saved.

Wi-fi will only update stove performance data such as stove temperature, room temperature and intensity but will not allow for controlling the stove. Wi-fi will also transmit notifications to the app such as refuel and any errors.



What happens if there is a power cut?

There are two options when a power cut occurs:

Option 1:

Place a 9V battery in the holder supplied with the stove. Disconnect the mains power adapter from the extension lead. Plug the battery holder into the jack plug. Switch on and enjoy normal operation for up to 1.5 hours.

Option 2:

Place a 9V battery in the holder supplied with the stove. Disconnect the mains power adapter from the extension lead. Plug the battery holder into the jack plug. Set the stove into power cut mode from the menu on the app or by extra-long pressing the stove button. Wait approximately 30 seconds and disconnect the power pack. This will leave the stove in a nominal position for combustion. When refuelling or lighting it may be necessary to leave the stove door slightly ajar until the fuel is lit.

If the button intermittently starts flashing blue but the controller does not function correctly once you have connected the battery pack it is likely that the battery is faulty.

How can I make the power supply lead longer?

The stove should be operated using the supplied 9V power supply and extension lead.

If the cable is not long enough it is possible to purchase an additional male to female DC extension cable with **2.1mm pin** and **5.5mm barrel**, available from various suppliers such as RS, Farnell, or Amazon.

An alternative would also be to use a conventional 13-amp 3 pin extension cable to move the mains electricity supply within the range of the 9V power supply adapter.

An example of the DC power extension cable: https://www.amazon.co.uk/CASPERi-Extension-Adapter-Extender-Security-

Black/dp/B09TWBC518/ref=sr 1 5?adgrpid=157892541061&dib=eyJ2IjoiMSJ9.dxYu7c4wGGwConb DdGD49ornbqf &th=1



Can I use a battery pack?

To use battery power, you *must* replace the 9V power adapter with the battery pack. For convenience we supply an extension lead which allows for the connection to be made away from the stove.

For the stove to operate correctly the following power supply criteria must be met:

Power: 4W

Voltage: 9V

Controller Current Draw: 0.44A

Power Supply Connector: 2.1mm barrel connector with positive center pin

Examples of Compatible Battery Packs:

Manufacturer	Model	Capacity	Runtime $\frac{Capacity}{Current Draw}$
Duracell	Core 10, DRPB3040A*	10000 mAh	12 hrs (tested)
Duracell	9V PP3	692 mAh	1.5hrs
Duracell	6 x AA	3.016Ah	6.8 hrs
Eaton	2.2Ah power bank	2.2Ah	5 hrs

^{*}If you use the Duracell Power Bank module then you *MUST* use a special lead. This is a USB Type C PD to DC Power Cable 9v. Here's a link to a suitable one on Amazon:

https://www.amazon.co.uk/dp/B0B9FQGBNL?ref=ppx yo2ov dt b fed asin title&th=1

How do I factory reset?

Factory resets should only be performed under the direction of Charnwood Technical.

Performing a factory reset will reset the stove to the original state when it was manufactured. This will mean that any subsequent bug fixes since the stove have been manufactured will no longer be implemented.

A factory reset will delete all the Bluetooth pairing connections from the stove. For IOS users it is necessary to forget the Bluetooth connection on their device and to toggle Bluetooth on and off via the device's setting screen before re-pairing.

To do a factory reset:

- Power on the stove whilst holding the air control button in.
- The white ring should appear.
- Release the button.
- Wait until the blue light is displayed.
- Re connect with the stove.

When performing a factory reset it is critical to ensure all sensors are plugged in and operational otherwise the factory reset will not execute correctly.



What should I do if the app or stove become unresponsive? - Android

If the app or stove become unresponsive, do the following in stages:

Stage 1 – Off & On

- Turn the stove off and on (cycle the power)
- Close the app and restart it**

Stage 2 – Delete Bluetooth Connection

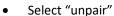
- Close the app **
- Open "Bluetooth" in settings on the phone.
- Press the gear or info icon.
- Select "unpair"
- Turn off Bluetooth.
- Wait 20 seconds.
- Turn the stove and Bluetooth back on.
- Open the app
- A pairing prompt should appear along with the button on the stove start flashing blue.
- Press the button on the stove.
- Click "pair"
- The stove reconnects to the app and the orange status dot is displayed

Stage 3 – Delete Pairing Information

- In the Charnwood Control app go to main menu → Wi-Fi settings → delete Wi-Fi information
- Press "Delete Wi-Fi information"

Ignore the status messages, once the command is sent to the stove it terminates all connections to the apps so the status will not get updated.

- Press "close" to go back to the main menu.
- Select delete stove and confirm to delete the stove from the app
- Close the app **
- Open "Bluetooth" in settings on the phone.
- Press the gear or info icon.



• Turn off Bluetooth.

Gear Icon



The stove and app connections have been reset. The stove will need to be repaired starting from scratch using the serial label.

^{**}When restarting you must ensure that it is not still running in the background.



What should I do if the app or stove become unresponsive? - iPhone

If the app or stove become unresponsive, do the following in stages:

Stage 1 – Off & On

- Turn the stove off and on (cycle the power)
- Close the app and restart it**

Stage 2 - Delete Bluetooth Connection

- Close the app **
- Open "Bluetooth" in settings on the phone.
- Press the info icon.
- Select "Forget this Device"
- Turn off Bluetooth.
- Wait 20 seconds.
- Turn the stove and Bluetooth back on.
- Open the app
- A pairing prompt should appear along with the button on the stove start flashing blue.
- Press the button on the stove.
- Click "pair"
- The stove reconnects to the app and the orange status dot is displayed

Stage 3 – Delete Pairing Information

- In the Charnwood Control app go to main menu → Wi-Fi settings → Delete Wi-Fi information
- Press "Delete Wi-Fi information"

Ignore the status messages, once the command is sent to the stove it terminates all connections to the apps so the status will not get updated.

- Press "close" to go back to the main menu.
- Select delete stove and confirm to delete the stove from the app
- Close the app **
- Open "Bluetooth" in settings on the phone.
- Press the info icon.
- Select "Forget this Device"

• Turn off Bluetooth.



Info Icon

Info Icon

The stove and app connections have been reset. The stove will need to be repaired starting from scratch using the serial label.

^{**}When restarting or closing you must ensure that it is not still running in the background.



How do I stop the Android App crashing on startup?

We have had some cases where the Android app crashes on startup. This seems to be related to updating the app. Uninstalling the App and re-installing it *does not* fix the problem. The following usually fixes it:

- Open Phone settings
- Go to Apps
- Scroll to the Charnwood App
- Select Storage
- Tap on "Clear data" (at the bottom of the screen maybe)
- Re-start the app

How do I do a firmware update?

Firmware updates only occur when requested by the user from the app. Updates are recommended and include the latest bug fixes and developments. To request a firmware update:

- From the control screen select Main Menu (top left for IOS and top right for Android).
- From the Main Menu press the menu icon again (top left for IOS and top right for Android).
- Select "Firmware Update" then press "update".
- The update will then take place. Ignore the status message, during the update the stove reboots and so the app may become disconnected.
- Wait for the blue light on the stove to turn on.

If the blue light flashes three or more times it is likely that the update has not been successful.

It is vital that the stove has a robust connection to the internet via the Wi-fi network when performing an update.

If the initial attempt to update is unsuccessful it is recommended to restart the stove and verify that it is still connected to the correct 2.4GHz Wi-Fi network before trying again.

How do I send a log file to Charnwood Technical?

Log files should only be sent if directed to by Charnwood Technical. In the event of an error, it is possible to use the diagnostic file to assist in resolving an issue.

To retrieve the log file from the stove the mobile device and stove need to be connected to the same Wi-Fi network.

To send a log file:

- From the control screen select Main Menu (top left for IOS and top right for Android).
- From the Main Menu press the menu icon again (top left for IOS and top right for Android).
- Select "Support"
- Choose the date where the issue occurred.
- Click "Send"



What errors can occur?

Contact your supplier or service engineer for help with this.

Connection Errors

These errors are displayed in the app when there is a problem with the connection between sensors such as the door switch, thermocouples, or light sensor and main board. Causes of this are the following:

- A sensor has become unplugged from the front of the controller.
- The cable is broken at the termination with the sensor.

Motor Errors

These errors are displayed in the app when the motors are unable to complete their calibration cycle. This is often caused by a foreign object jamming the inlet valve and preventing it from rotating. Therefore, in most cases the injection moulded assembly should be inspected and if required removed and cleaned to ensure the disc is able to rotate freely.

How many devices can I pair?

There is a maximum of 3 devices that can be paired and connected at the same time.

If 3 devices are connected the 4th device will not be able to pair and connect

If 3 devices are paired, but less than 3 are connected, additional devices can be connected which will remove the pairing information for one of the unconnected devices.

If a device has previously been connected but has had its pairing information overwritten, it will be necessary to repair the device to the stove.

On Apple devices, it may be necessary to forget the stoves' Bluetooth connection in the phone's Bluetooth settings, as well as toggling Bluetooth on/off. This should ensure a successful re-pairing to the stove.

Why is the graph not showing the correct date?

The stove is only aware of the date once a device and the app have been connected.

Therefore, in the instance where a stove has been run but not connected to the app, the data shown in the graphs will not be shown on the correct date and will likely be appended to data for 1st January 2020.

Connecting the stove to the app will rectify this issue and ensure that data is logged to the correct date in the future assuming that the stove remains powered on from that point forward.