GW04 GATEWAY

Dual Band 2.4/5GHz

INSTRUCTIONS



EMBER

PS RS TS US

Welcome

Thank you for choosing EMBER Smart Heating by EPH Controls.

We hope you enjoy using it as much as we did developing it!

Controlling your heating anywhere, anytime is only a few simple steps away.

In this booklet, we will provide a step by step guide to setting up the EMBER Smart Heating Control app and its associated hardware.

Again, thank you for choosing EMBER.

EMBER

PS RS TS US



Index

Page 4 Getting started (Wi-Fi requirements / Device software etc)

Page 5 LED / Button legend

Page 5 Resetting the GW04 Gateway

Page 6 Important Notes

Page 7 Pairing the R_7-RF^{V2} Programmer to the GW04 Gateway

Page 8 Pairing the RF16 Controller to the GW04 Gateway

Page 9 Pairing the RF1B Receiver to the GW04 Gateway

Page 10 Pairing the UFH10-RF to the GW04 Gateway

Page 11 Download the EMBER App

Page 12 Set up the EMBER App

Page 19 Initial Setup

Page 22 Pairing your GW04 Gateway to the 2.4/5GHz Wi-Fi (Android)

Page 25 Pairing your GW04 Gateway to the 2.4/5GHz Wi-Fi (iOS)

Page 29 Home setup

Page 35 Home Menu

Page 36 Zone control diagram

Getting started

WiFi Requirement

The SSID of the Wi-Fi should not be hidden when pairing the gateway to the router.

The Gateway can only support 2.4GHz and 5GHz wireless routers. Please refer to the gateway pairing section beginning on page 21.

For best connectivity, the Gateway should be paired directly to the main router and not a booster or access point.

Please restart the wireless router periodically or restart it before going on holiday to ensure that the connection is kept after long periods of inactivity or a power cut.

Pay attention to the number of devices connected to the wireless router. Some routers may not work properly if too many devices are connected.

For BT routers the wireless mode should be set to Mode 3 in the router settings.

Device Operating System

1) Apple iOS 11.0 or later.
2) Android OS 5.1 Lollipop or later.

Positioning of the gateway

The Gateway should be located near the Hub receiver or main controller in an area with good Wi-Fi signal.

It is important to keep the gateway at least 1 metre away from other electronics. Appliances such as microwaves, T.V's, Wi-Fi Routers and Boosters, Smart Speakers, Wireless Alarm systems etc. These can interfere with the gateway signal.

Choosing a good location will ensure a stable connection for remotely controlling your heating system.

On the Initial Setup screen, click on the Setting icon to access Tutorials, FAQs and Videos.

LED / Button legend

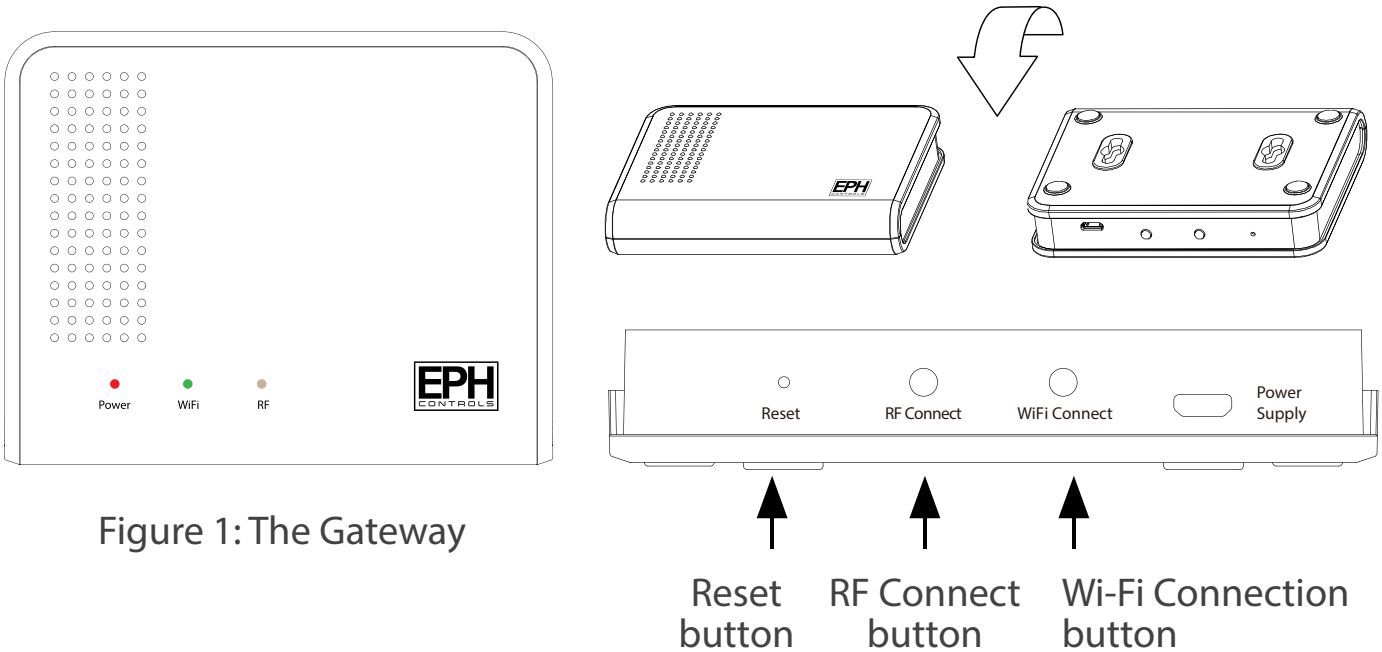


Figure 1: The Gateway

LED	Status
Red LED on	Gateway has power
Green LED on	Gateway connected to Wi-Fi
White LED on	Gateway RF connection established

Resetting the GW04 Gateway

Resetting the GW04 will clear the RF connection only. There is a reset button as seen in above diagram.

- Use a ballpoint pen to access the button within the housing.
- Hold the reset button for 5 seconds.
- All of the LED lights will flash on the Gateway.
- After 10 seconds the Gateway will return to normal operation.
- The RF connection is now cleared.

Important Notes

- If you encounter problems during the Wi-Fi pairing process:
  - Restart your phone.
  - Close backround apps.
  - Restart your Wi-Fi router.

- For iOS devices Local Network and Location permission is required.

- If you are using a VPN, this must be disabled during the pairing process.

- To connect to a commercial Wi-Fi, contact your network administrator.

- When the battery low symbol  appears on a wireless thermostat or the EMBER App, the batteries should be changed.

- Good quality batteries are essential to ensure the correct operation of the wireless thermostats:
  - EPH recommend using Duracell or Energiser batteries with wireless thermostats.
  - For ETRV's Li-FeS_2 (Lithium Iron) batteries should be used.

- Do not use low quality battery brands, they can cause the following problems:
  - Cause issues with wireless communication.
  - Can cause the equipment to reset.
  - Can cause the EMBER App to display the incorrect information.

PS Pairing the R_7-RF^{V2} Programmer, to the GW04 Gateway

1. **On the R_7-RF^{V2} Programmer:**

   Press [MENU], '**P01 rF COn**' will appear on the screen.

   Press [+] until '**P02 gAtE**' will appears on the screen.

   Press [OK]. '**CONNECT**' will flash on the screen.

2. **On the GW04 Gateway:**

   Press and hold the RF connect button until the white RF LED begins to flash.

3. **On the R_7-RF^{V2} Programmer:**

   When successful '**r1**' and '**CONNECTED**' will appear on the screen.

   Press [OK] to confirm pairing and to return to normal operation.

Note:

It is possible to pair up to four R_7-RF^{V2} programmers to a GW04 Gateway. If multiple R_7-RF^{V2} programmers are paired to the same Gateway **r2**, **r3** or **r4** may appear on the screen.

Pairing the RF16 Controller to the GW04 Gateway

1. **On the GW04 Gateway:**

   Press and hold the RF connect button until the white RF LED begins to flash.

2. **On the RF16 Controller:**

   Press MENU.

   'P01 & rF Cn' will appear on the screen.

   Rotate ◯ until **'P02 & gAtE'** appears on the screen.

   Press ◯ to select.

   'CONNECT' will flash on the screen momentarily and the RF16 will return to normal operation.

   The GW04 and RF16 will now pair.

   The white light on the GW04 will stop flashing and will become solid.

Note:

It is possible to pair one RF16 to a GW04 Gateway.

TS

Pairing the RF1B Receiver to the GW04 Gateway

Note: When installing a CP4V2 or CP4-HWV2, the thermostat and the receiver will have a pre-established RF connection.

Note: When installing a CP4iV2, the thermostat, receiver and gateway will have pre-established RF connections so there is no need to carry out the steps in this section.

The RF1B needs to have to the HUB light illuminated to pair to a GW04. If the HUB light is active, please skip to step 1. If the HUB light is not illuminated, please follow 'Making a HUB receiver' instructions below.

Making the RF1B a HUB receiver:

Hold [Manual] & [Connect] for 5 seconds.

The HUB light will illuminate. The receiver is now a HUB.

The RF1B is now ready to pair to the GW04.

1. On the RF1B receiver:

Hold [Connect] on the RF1B until RF LED flashes.

2. On the GW04 Gateway:

Hold the RF Connect button ◯ until RF LED flashes.

The Gateway & receiver will stop flashing. Paring is now complete.

The white RF light on the Gateway will stay illuminated.

Note: When connecting multiple receivers to a gateway, ensure that all branch receivers are connected to the hub receiver. There can only be 1 hub receiver in a system. Allow 5 minutes for all receivers to synchronise with the hub receiver before connecting the gateway to the EMBER App. See page 51 & 52 of the CP4V2 instructions.

Note: Mount the receivers approx 25cm apart to prevent interference.

US

Pairing the UFH10-RF to the GW04 Gateway

1. **On the UFH10-RF:**

   Press MENU, '**P01 rF COn**' will appear on the screen.

   Rotate ◯ until '**P02 gAtE**' will appears on the screen.

   Press ◯. **'CONNECT'** will flash on the screen.

2. **On the GW04 Gateway:**

   Press and hold the RF connect button until the white RF LED begins to flash.

3. **On the UFH10-RF:**

   When successful '**r01**' and '**CONNECTED**' will appear on the screen.

   Press ◯ to confirm pairing and to return to normal operation.

Note:

It is possible to pair one UFH10-RF to a GW04 Gateway.

Download the EMBER App

1. Go to the Apple App Store on your iPhone or the Google Play Store on your Android device and download the EMBER Smart Heating Control App.

   QR codes to the download links are below.

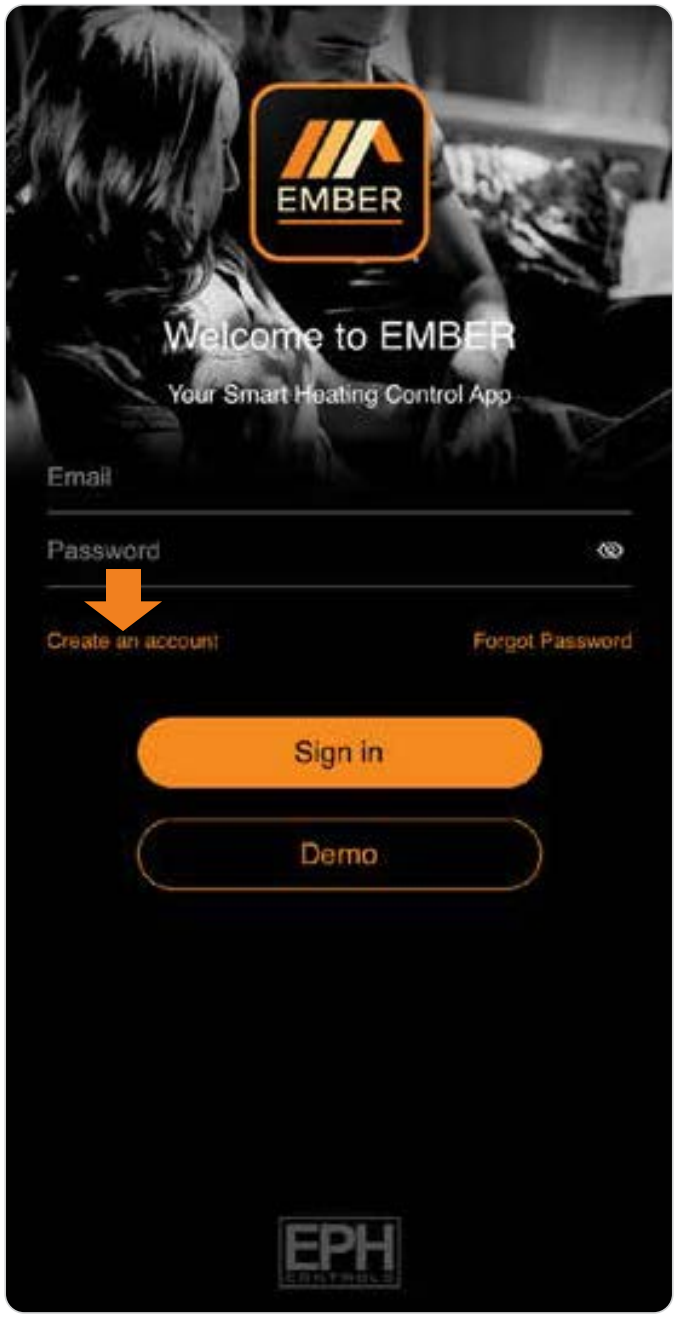
Download on the App Store

GET IT ON Google play

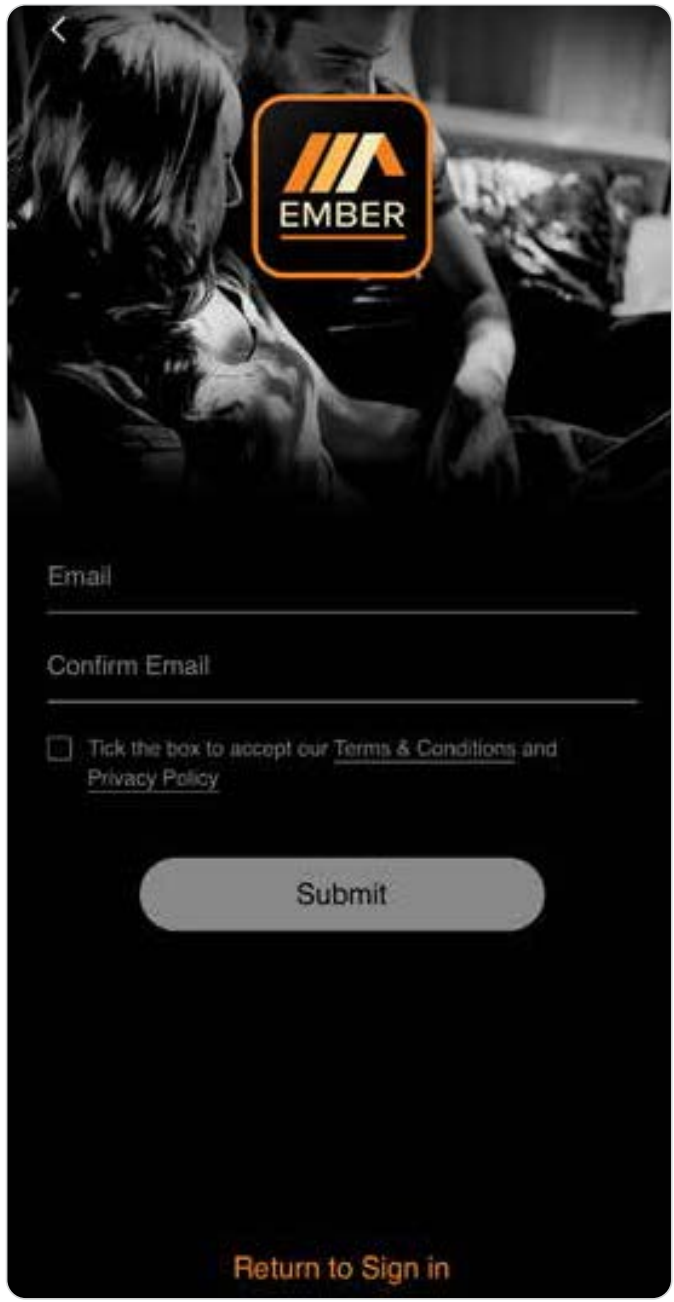


Set up the EMBER App

2. Once EMBER has been installed, open it.
3. Select ‘Create an account’.



4. Enter your email address.
5. Confirm your email address.
6. Accept the Terms & Conditions.



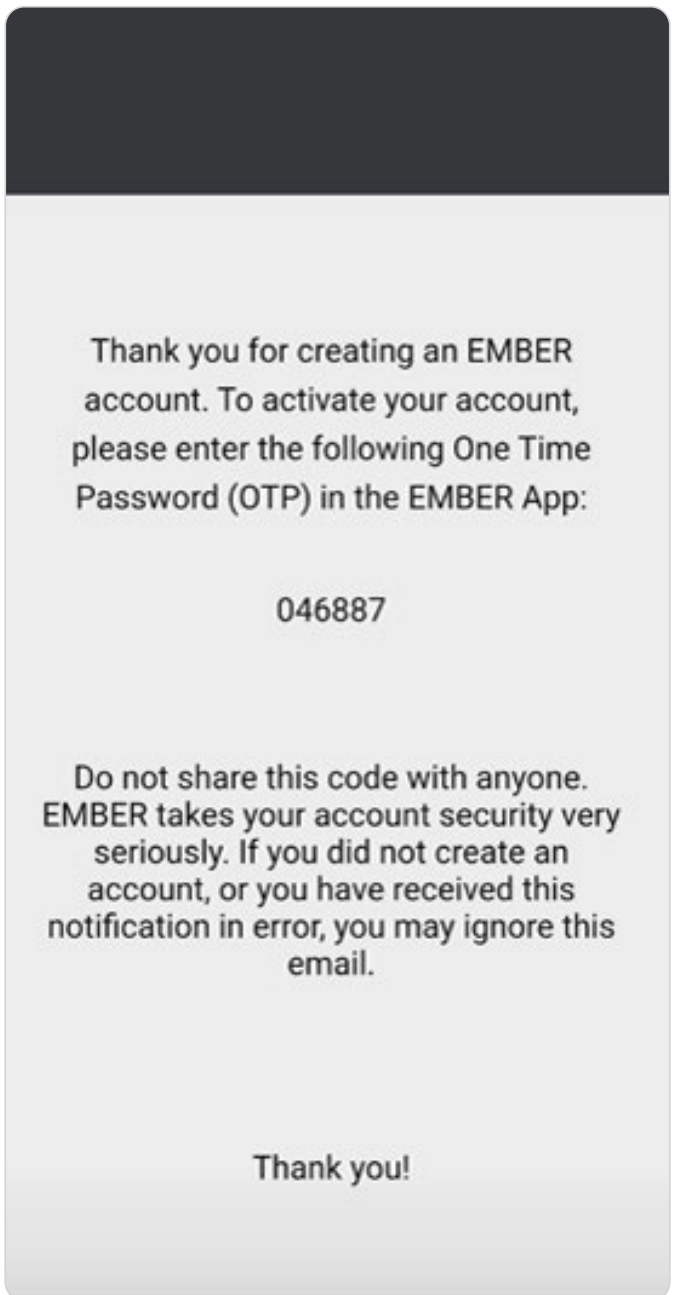
Set up the EMBER App (Continued)

7. A confirmation email will arrive to your inbox from EMBER.

   This can take up to 2 minutes. If you do not receive the email, please search your Junk / Spam email folder.

   Note: If you are using a company email address the registration may be blocked by your company email policy. Refer to your company IT.

8. Open the email and you will retrieve your 6 digit code.

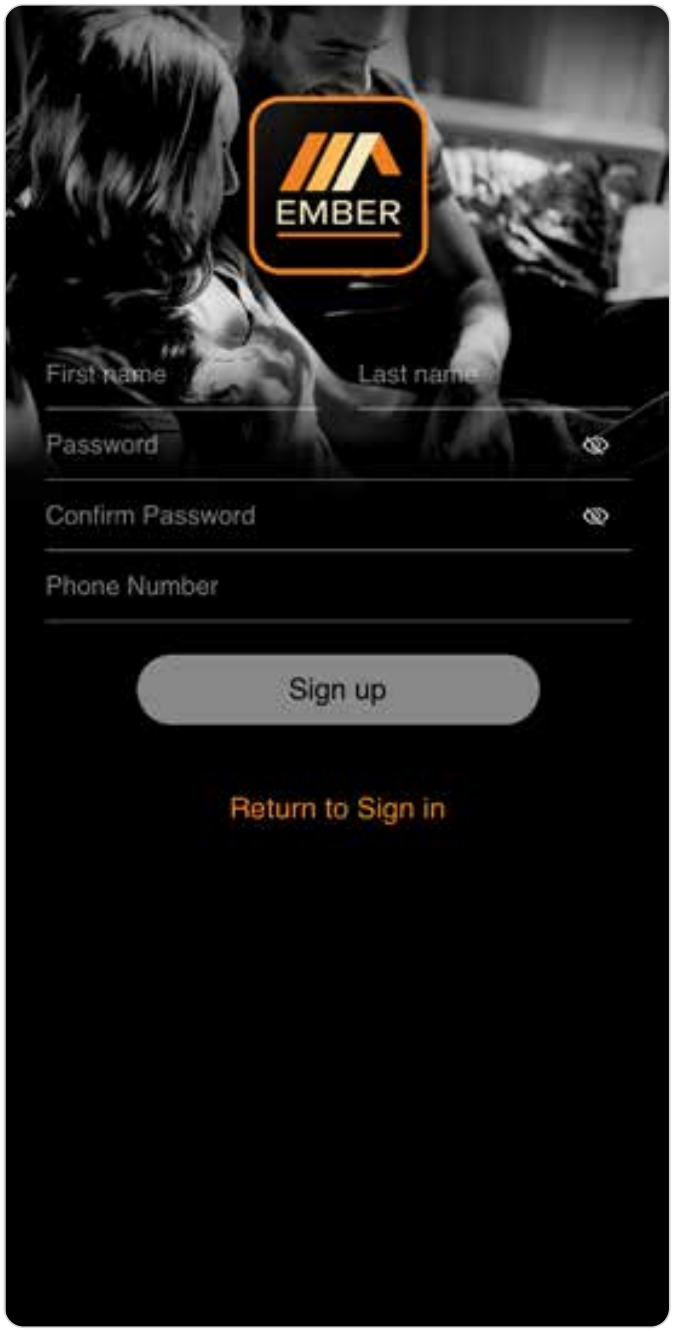


9. Return to the EMBER App and enter your 6 digit code.



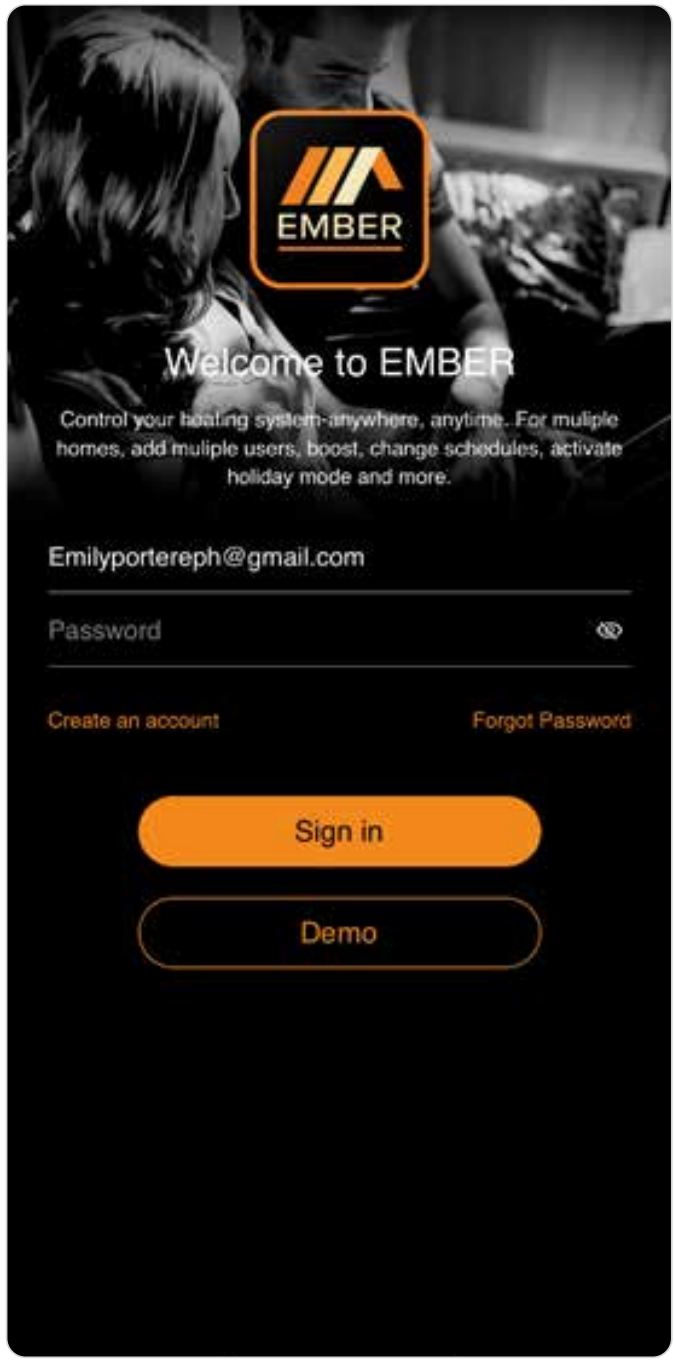
Set up the EMBER App (Continued)

10. Enter your First name.
11. Enter your Last name.
12. Enter your Password. (Minimum 8 characters - including lowercase, uppercase and number).
13. Confirm your Password.
14. Enter your Phone Number. (Optional)



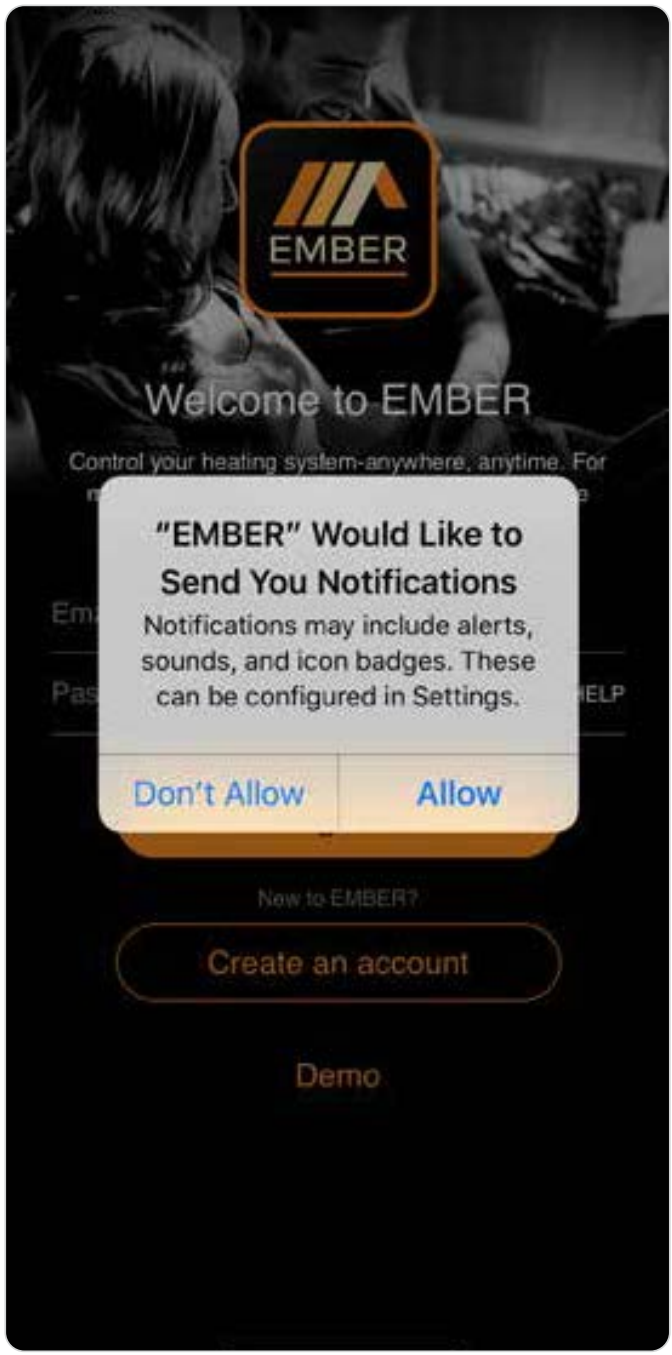
15. You will be returned to the sign in screen where you can enter your email address and password.

16. Press ‘Sign in’.



Set up the EMBER App (Continued)

17. Choose 'Allow' if you would like the EMBER App to send you notifications.



Initial Setup

1. Press 'Wi-Fi Setup' and you will be directed to the Wi-Fi Setup screen.

   If the Wi-Fi light on the gateway is solid green you can go directly to the Gateway Code option.

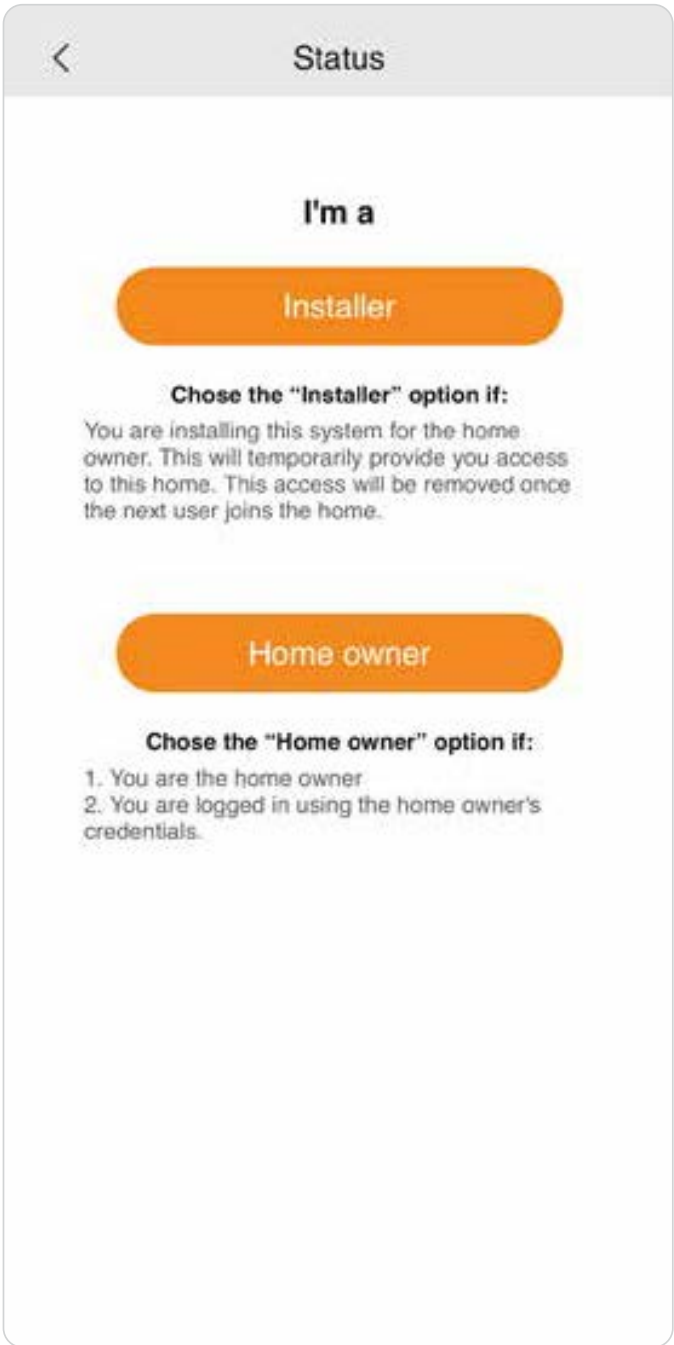
   If you have received an invite code, press 'Invite Code' and enter the code to access the home.



Initial Setup (Continued)

2. If you are an installer select the ‘Installer’ option. If you are the Home owner select the ‘Home owner’ option.

   Note: If you select “Installer” you will set the system up as normal, you can then invite the Home owner. When the Home owner uses the invite code you will be removed from the system and they will take over.



3. On the ‘Your System’ screen, you must choose the black GW04 Gateway.



Pairing your GW04 gateway to your 2.4/5GHz Wireless Internet (Android)

Note:

Location permission is required on devices running Android 9 or above. This will allow EMBER to automatically populate the Wi-Fi (SSID) information during Setup.

It is strongly recommended to close all other Apps before beginning the Wi-Fi pairing process.

1. Ensure your mobile device is connected to the same Wi-Fi network that the gateway will be connected to. This will ensure that the SSID will be automatically populated.

Note:

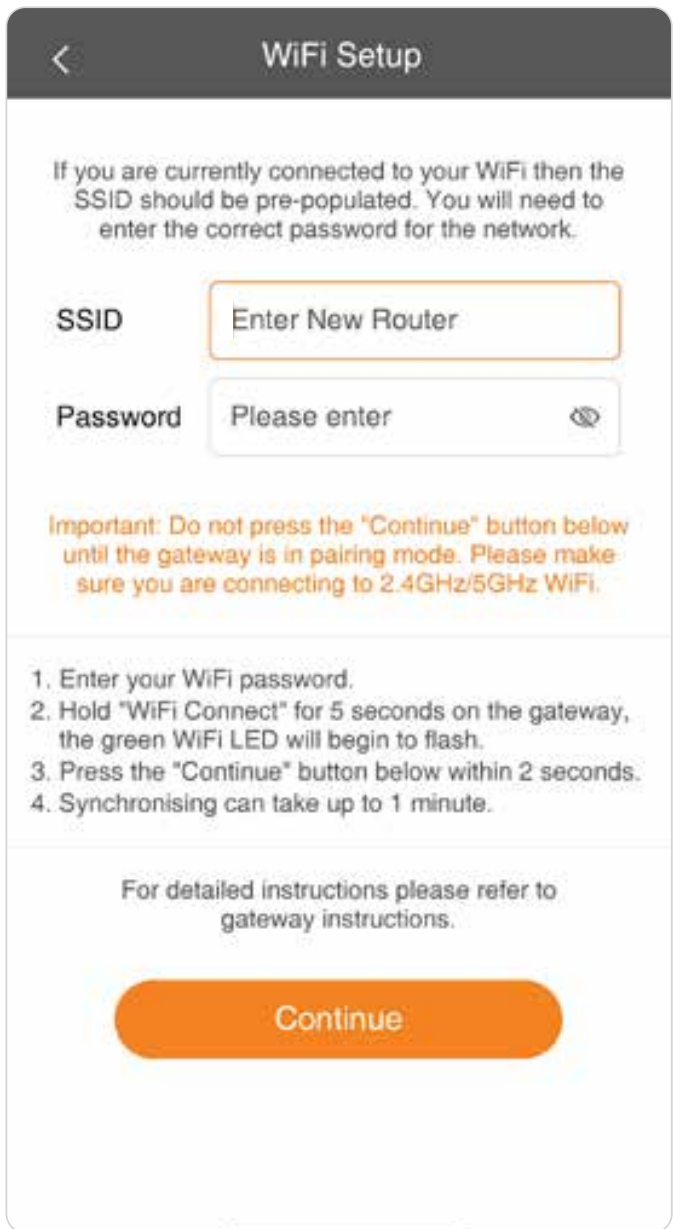
After entering the Wi-Fi password in Step 2, do not press the continue button. Complete step 3 and then press continue button as per step 4.

2. Enter the Wi-Fi password.
3. **On the GW04 Gateway:**

   Hold the Wi-Fi connect button for 5 seconds.

   The green light will begin to flash.
4. **On your mobile device:**
   Immediately press 'Continue'.
5. A pop up dialog box will appear to connect you to a temporary Hotspot connection. 'Press connect'.

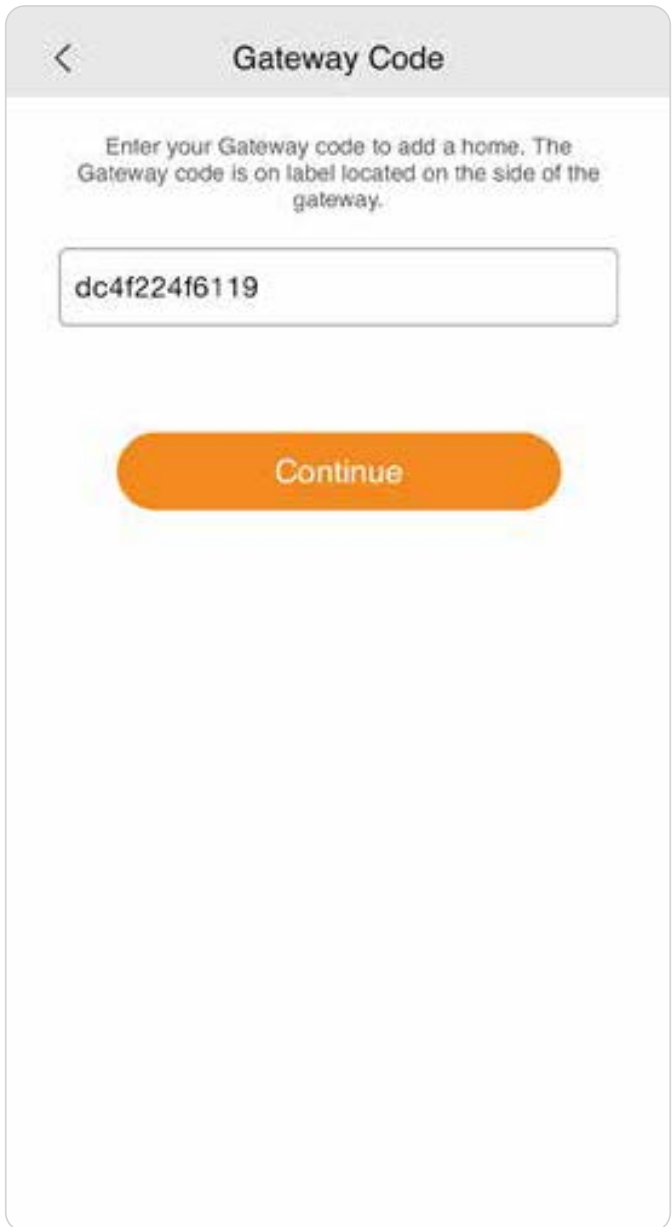
   When the gateway is successfully connected the light will be solid green and the EMBER App will bring you to the Gateway Code screen. Synchronising can take up to 3 minutes.



Pairing your GW04 gateway to your 2.4/5GHz Wireless Internet (Android)

(Continued)

6. If pairing is unsuccessful, please repeat steps 3 and 4.
7. The Gateway now needs to be paired with your EMBER App.
8. Enter the Gateway code located on the gateway housing. The gateway code will normally pre-populate on the Gateway Code screen.
9. Press 'Continue' once only.



Note:

Do not press "Continue" until all 3 LEDs are on constantly.

Note:

If the RF light is not illuminated please refer to the pairing instructions for your system see pages 7 to 10.

Pairing your GW04 gateway to your 2.4/5GHz Wireless Internet (iOS)

Note:

Location and Local network permission is required on devices running iOS 13 or above. This will allow EMBER to automatically populate the Wi-Fi (SSID) information during Setup.

It is strongly recommended to close all other Apps before beginning the Wi-Fi pairing process.

1. Ensure your mobile device is connected to the same Wi-Fi network that the gateway will be connected to. This will ensure that the SSID will be automatically populated.

Note:

After entering the Wi-Fi password in Step 2, do not press the continue button. Complete step 3 and then press continue button as per step 4.

2. Enter the Wi-Fi password.

Pairing your gateway to your 2.4/5GHz Wireless Internet (iOS)

(Continued)

3. **On the GW04 Gateway:**

   Hold the Wi-Fi connect button for 5 seconds.

   The green light will begin to flash.

4. **On your mobile device:**
   Immediately press 'Continue'.

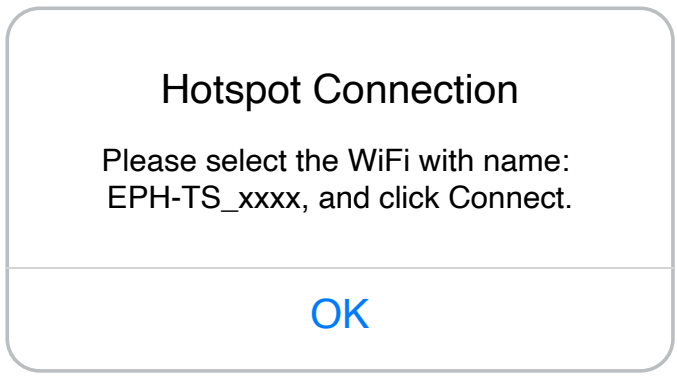
5. A pop up dialogue box will appear to connect you to a temporary Hotspot connection.

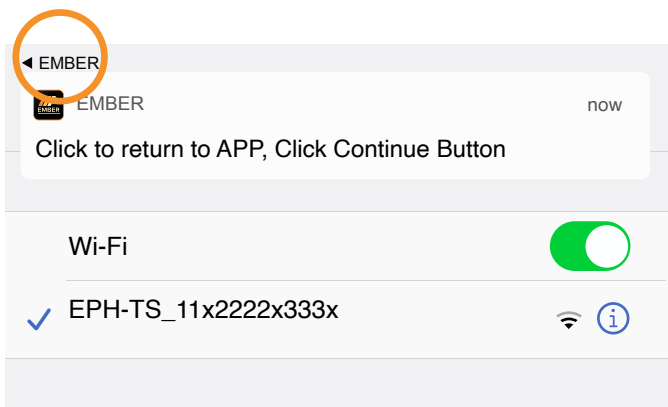


6. Press “OK”. You will be redirected to your iOS Wi-Fi settings page. Go to Wi-Fi settings.

7. An EPH-TS Hotspot will appear. Tap to select this network.

8. Press EMBER on the top left if you are not automatically redirected back to the EMBER App.





Pairing your gateway to your 2.4/5GHz Wireless Internet (iOS)

(Continued)

9. Press 'Continue' on the EMBER App.
10. When the Gateway is successfully connected the light will be solid green and the EMBER App will bring you to the Gateway Code screen. Synchronising can take up to 3 minutes.
11. If pairing is unsuccessful, please repeat steps 3-8.
12. The Gateway now needs to be paired with your EMBER App.
13. Enter the Gateway code located on the Gateway housing. The Gateway code will normally pre-populate on the Gateway code screen.
14. Press 'Continue' once only.



Note:

Do not press "Continue" until all 3 LEDs are on constantly.

Note:

If the RF light is not illuminated please refer to the pairing instructions for your system see pages 7 to 10.

Home Setup

Home Setup appears on the Screen.

1. Enter the Home name.
2. Enter the Zone names. (It is not possible to rename a Hot Water zone.)
3. Press 'Save' to continue.

   Note: It is recommended to use unique zone names if you are planning to use a third party voice control or smart speaker system. Check with your service provider for compatibility.



Home Setup (Continued)

4. Enter the postcode or your address to set the location of your home.
5. Press 'Save'.



6. The Invite Users screen will appear.

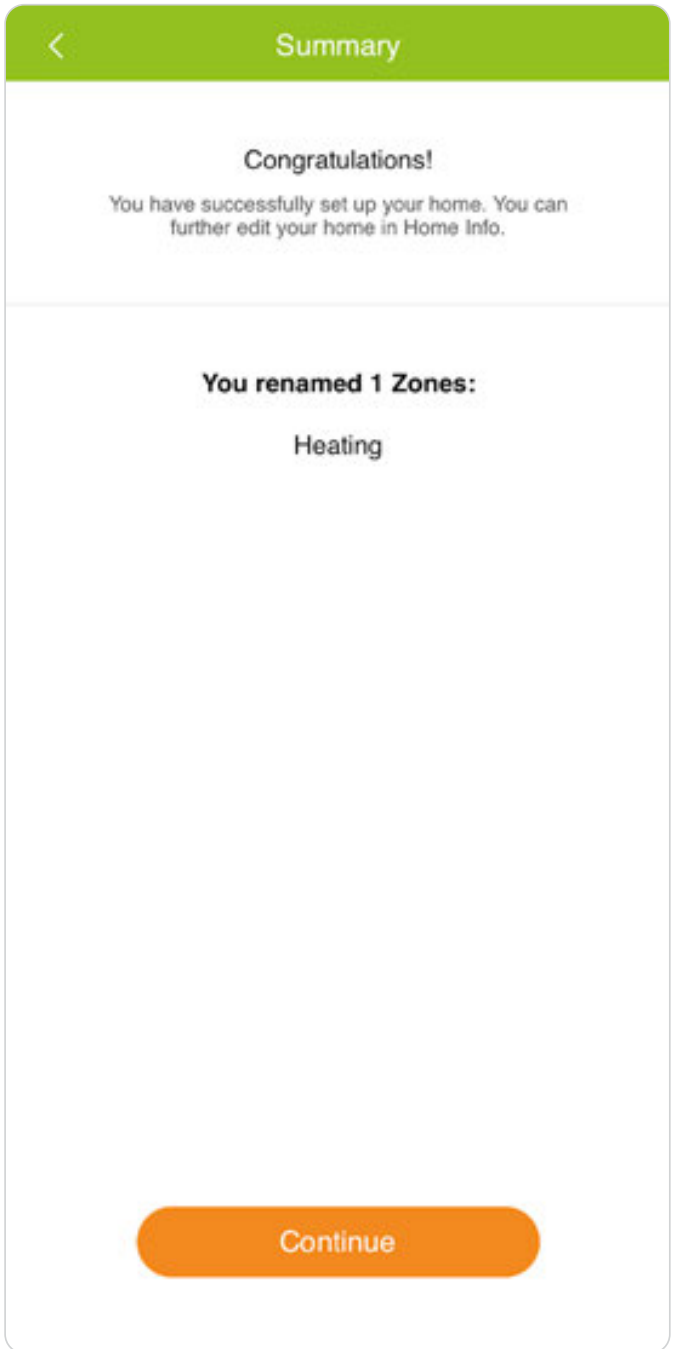
7. To allow additional users access to the EMBER home, enter their name and email address here. Press ‘Invite’.



Home Setup (Continued)

8. A summary confirming the changes that you have made is displayed.
9. Press 'Tutorial' to view the tutorials.*
10. Press 'Skip' to complete Home Setup.

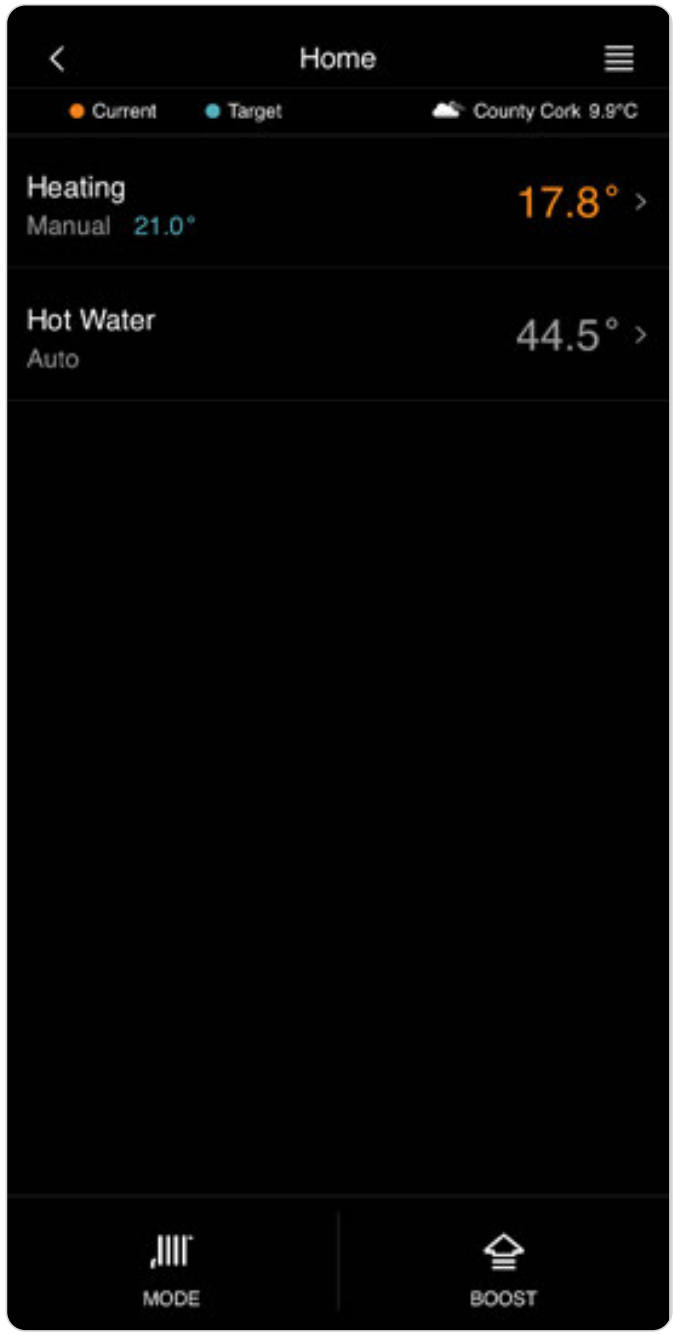
Note: You can access the tutorials from the setting menu ⚙ and burger menu ☰ in the EMBER App.



11. The Home screen will appear.

    If you have multiple zones, you will see a zone list with the relevant number of zones.

    Note: You can boost or change the mode of multiple zones on the zone overview screen by pressing mode or boost at the bottom of the screen.



Home Setup (Continued)

12. Select one of the zones on the Home screen to access zone control.



Home Menu

Group Zones

When this is set to On it will allow you to drag multiple zones into one group. Once this is done you can activate boost and change mode for all of these zones at once.

Frost Protection

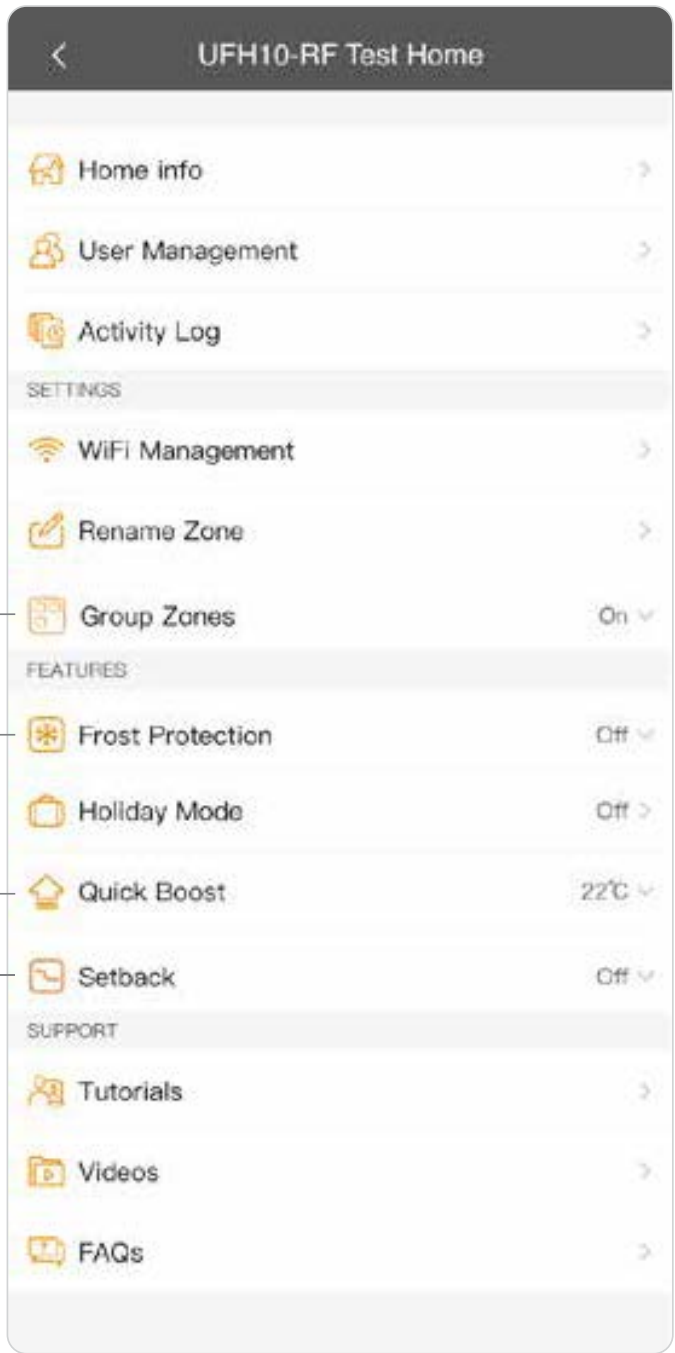
This will activate frost protection for the system. The temperature for this is set on the hardware.

Quick Boost

Quick Boost allows a 1 hour boost when you hold down on a zone for 2 seconds. Here you can set the target temperature for this feature.

Setback

This is a feature that operates with the US and PS systems. When the system is set to Auto or All Day it will reduce the temperature by a value set by you when the zone is timed off. The setback temperature can be selected in the programming screen.



Zone control diagram



Home name

Location & Weather

Current zone name

Target temperature

Temperature adjustment 'Down'

Temperature adjustment 'Up'

Current temperature

Tap here for schedule

Current mode

Press and hold for quick boost

'Zone On' indicated with orange glow

Zone Index

Operating mode

Boost function

Notes

Notes

Notes

Official Site EMBER

Download on the App Store

GET IT ON Google play

EPH Controls IE

021 471 8440
Cork, T12 F753
technical@ephcontrols.com
www.ephcontrols.com

EPH Controls UK

01933 322 072
Harrow, HA1 1BD
technical@ephcontrols.co.uk
www.ephcontrols.co.uk

2026-04-01_GW04DB_DS_PK