GW03

GATEWAY INSTRUCTIONS

TS

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.

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Getting started

WiFi Requirement

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

The gateway can only support 2.4GHz and 5GHz wireless routers. Please refer to the gateway pairing section beginning on page 12.

The gateway should not be in the blacklist of the router.

Please restart your wireless router periodically or restart it before you are 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 your wireless router. Some routers may not work properly if too many devices are connected.

During the connection process you will need to specify which band your WiFi is broadcasting on. (2.4GHz or 5GHz.) If you are not sure, you may need to go to your router settings to check. Alternatively you can contact your internet provider.

Device Operating System

1) Apple iOS 9 or later.

2) Android OS 5.1 Lollipop or later.

Positioning of the gateway

The gateway should be located near the receiver in an area with good WiFi signal. It should not be installed close to appliances such as microwaves, televisions, internet boosters and smart speakers etc.

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

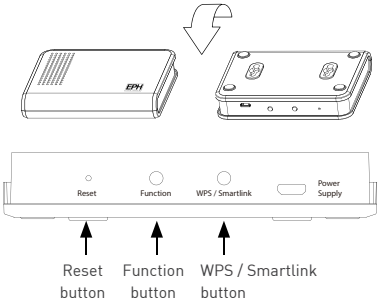
Useful Information:

Visit EMBER YouTube channel for the TS Set up Guide.

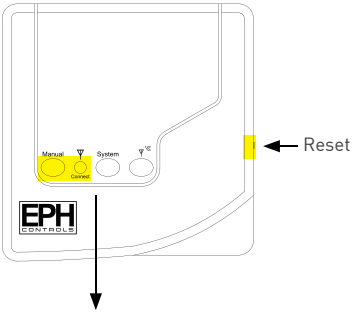
On the Initial Setup screen, click on the Setting icon to access Tutorials, FAQs and Videos.

LCD / LED / Button legend

Figure 1: The gateway



LED	Status
Red LED on	Gateway has power
Green LED on	Gateway connected to WiFi
White LED on	Gateway connected to receiver



Buttons to be used during gateway installation

Figure 2: The RF receiver

Pairing your receiver to your gateway

Complete this step below to pair your receiver to your GW03 Gateway

* Please note: If you are installing a CP4 or CP4-HW-OT the thermostat and the receiver will have a pre-established RF connection so it is not necessary to carry out Step 2 in the RF connection process below.

** Please note: If you are installing a CP4i, the thermostat, receiver and gateway will have pre-established RF connections so there is no need to carry out the steps in this section.

1. Ensure that your thermostat(s) are paired to your receiver(s). This can be tested by turning the thermostat on or off and ensuring the receiver is switching on and off accordingly. If a thermostat is not paired to the receiver please follow the instructions in section 17 of RFRP-OT Operating Instructions.
2. Ensure that the receiver you're connecting to the boiler is set up as a hub receiver. For instructions on how to do this, please see steps below.
3. Press the 'Connect' button on the receiver. The Red and Green LEDs will begin to flash simultaneously. If only the Red light flashes, please see the steps below to make your receiver into a hub receiver.
4. On the Gateway, press and hold the 'Function' button for 3 sec.
5. The White LED on the gateway will begin to flash at 1 second intervals.
6. When the White LED become solid On, the gateway has been connected to the hub receiver.

Making your RF1A-OT receiver into a Hub Receiver.

1. Press the Reset button ▭ on the receiver that you wish to make the Hub Receiver - Red and Green lights will both be solid.
2. Immediately press and hold Connect and Manual for 5 seconds, the Red light will start blinking.
3. Press Connect and the Green light will be solid - this is now the hub receiver.
4. Press Manual to exit to the normal interface.

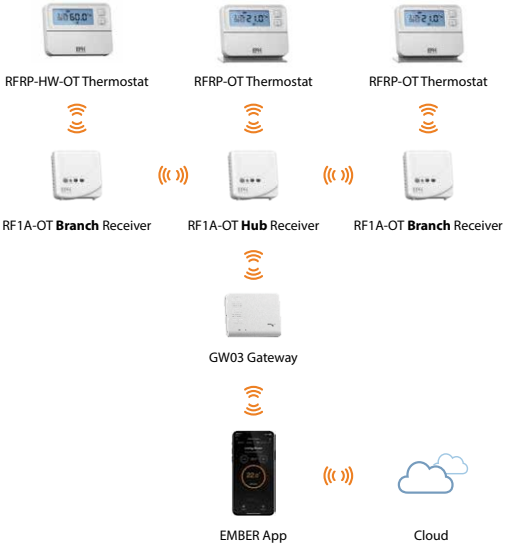
Note: If you are connecting multiple receivers to a gateway, please ensure that all branch receivers are connected to the hub receiver. There can only be 1 hub receiver in a system. Allow 5 minutes for all receivers to synchronise with the hub receiver before connecting the gateway to the EMBER App.

System architecture

To optimise battery life, the end to end communication can take up to 3 minutes .

Example A Single Zone System

Example B Multi Zone System



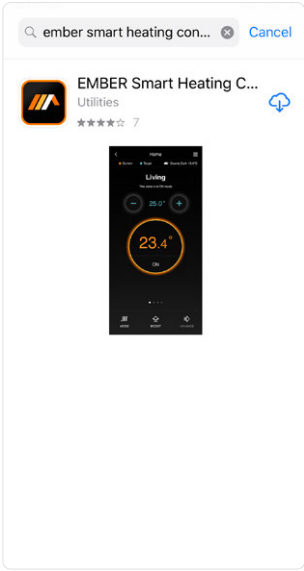
Note: A maximum of 6 thermostats can be used with each GW03 gateway.

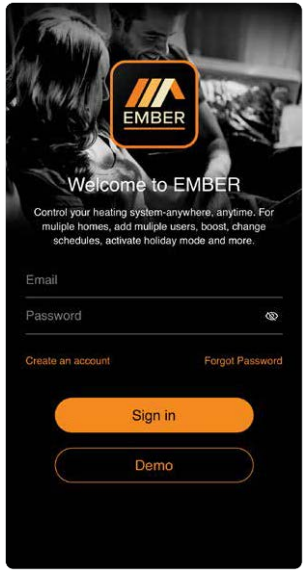
Downloading the EMBER Smart Heating Control App

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.

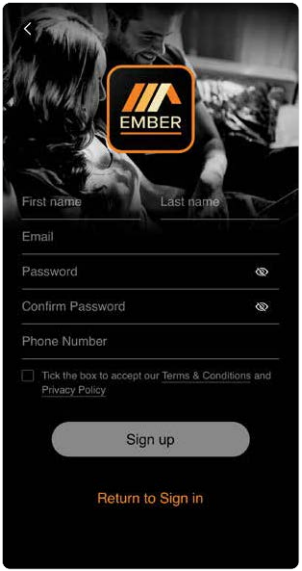
   QR codes to the download links are available on the back cover.

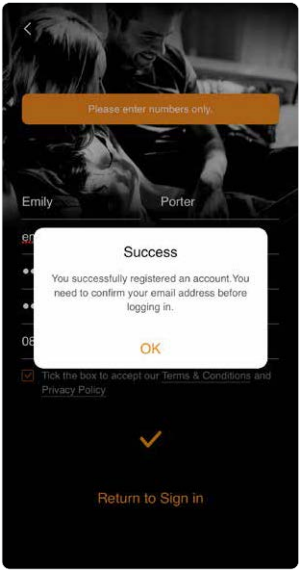
2. Once the app has been installed, open it.
3. Select 'Create an account' to Sign up with your email address.





4. Enter your First name.
5. Enter your Last name.
6. Enter your Email address.
7. Enter your Password (Minimum 6 characters – including lowercase, uppercase and number)
8. Confirm your Password.
9. Enter your telephone number. (optional)
10. Tick the box to accept our Terms & Conditions and Privacy Policy.
11. Press 'Sign up'.





Downloading the EMBER Smart Heating Control App

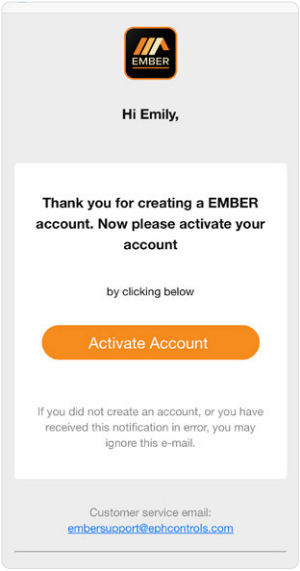
(Continued)

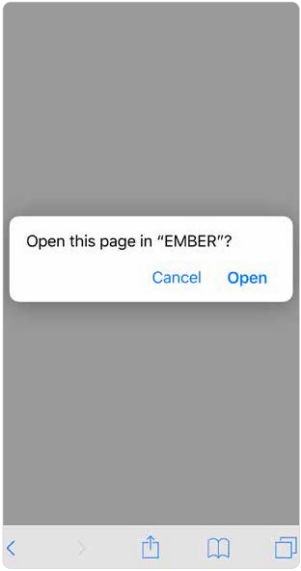
12. A confirmation email will arrive in your inbox from EMBER.

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

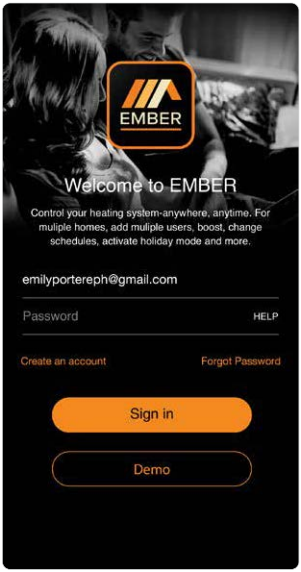
13. Open the email and press the 'Activate Account' button.

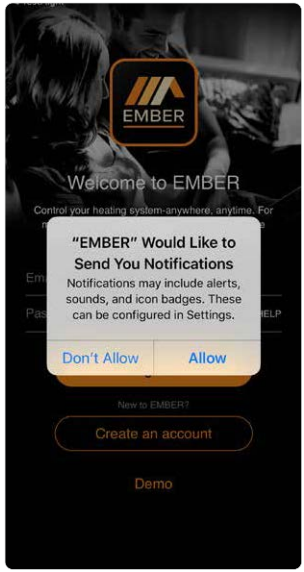
14. You will be directed to the EMBER App. Select 'Open' in EMBER. If you are not automatically directed to the App, manually open it and complete step 15.





15. When the App opens, enter your email address and password.
16. Press 'Sign in'.
17. Choose 'Allow' so EMBER App can send you notifications.





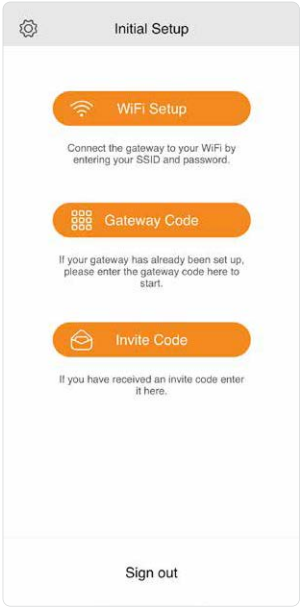
Pairing your gateway to your wireless internet

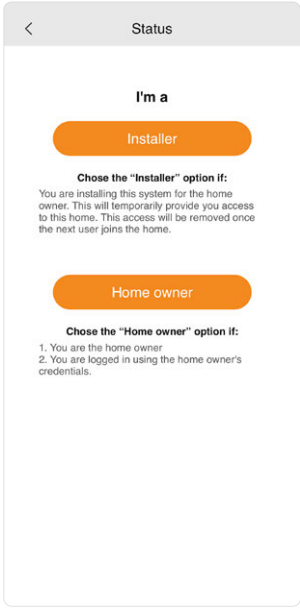
1. Press 'WiFi Setup' and you will be directed to the WiFi Setup screen.

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

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

2. If you are an installer select the 'Installer' option. If you are the home owner select the 'Home owner' option.





3. On the 'Your System' screen, you must choose the 'TS' (Thermostat System) option.

   GW03 will not operate with the 'PS' (Programmer System).

Next steps:

Option 1: 2.4GHz WiFi with Android or IOS device, please proceed to page 14.

Option 2: 5GHz WiFi with Android device, please proceed to page 16.

Option 3: 5GHz WiFi with IOS device, please proceed to page 18.

Pairing your gateway to your 2.4GHz Wireless Internet

Note:

It is recommended to allow location permission on devices running IOS 13 / Android 9 or above. This will allow EMBER to automatically populate the WiFi (SSID) information during Setup.Without giving this permission, you will have to enter your WiFi (SSID) details manually.

For IOS devices local network permission is also required.

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

Note:

After entering the WiFi 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 WiFi password.

3. **On the GW03 gateway:**

   Hold the WPS / Smartlink button for 5 seconds.

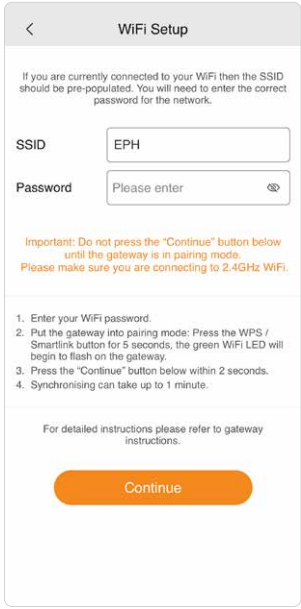
   The green light will begin to flash.

4. **On your mobile device:**

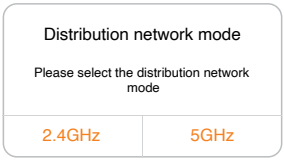
   Immediately press 'Continue'.

   When successful the lights on the gateway will be solid green and you will progress to the Gateway Code screen.

   Synchronising can take up to 2 minutes.



5. From the pop up dialogue box, select distribution mode

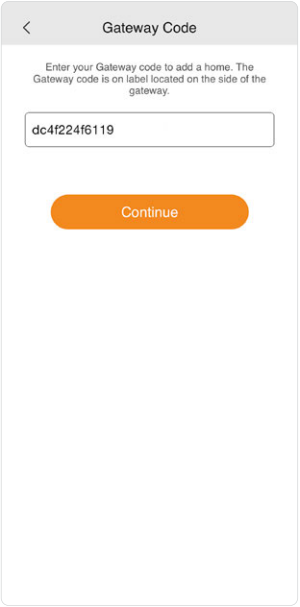


6. Select 2.4GHz. When the gateway is successfully connected the light will be solid green and the EMBER App will bring you to the Gateway Code screen. Synchronising can take up to 3 minutes.
7. If pairing is unsuccessful, please repeat steps 3-6.
8. The Gateway now needs to be paired with your EMBER App.

9. Enter the gateway code located on the gateway housing.

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

10. Press 'Continue' once only.



Pairing your gateway to your 5GHz Wireless Internet (Android)

Note:

It is recommended to allow location permission on devices running Android 9 or above. This will allow EMBER to automatically populate the WiFi (SSID) information during Setup. Without giving this permission, you will have to enter your WiFi (SSID) details manually.

It is strongly recommended to close all other Apps before beginning the WiFi pairing process.

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

Note:

After entering the WiFi 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 WiFi password.
3. **On the GW03 gateway:**

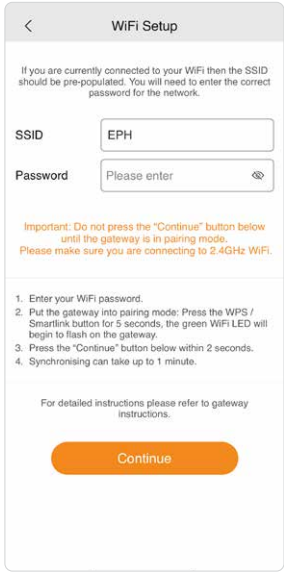
   Hold the WPS / Smartlink button for 5 seconds.

   The green light will begin to flash.

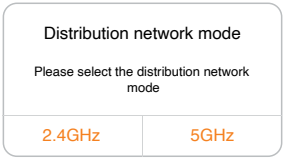
4. **On your mobile device:**
   Immediately press 'Continue'.

   When successful the lights on the gateway will be solid green and you will progress to the Gateway Code screen.

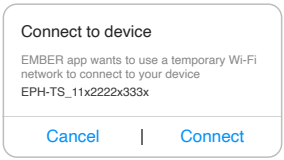
   Synchronising can take up to 3 minutes.



5. From the pop up dialogue box, select distribution mode



6. Select 5GHz. A pop up diaglogue box will appear to connect you to a temporary WiFi network.

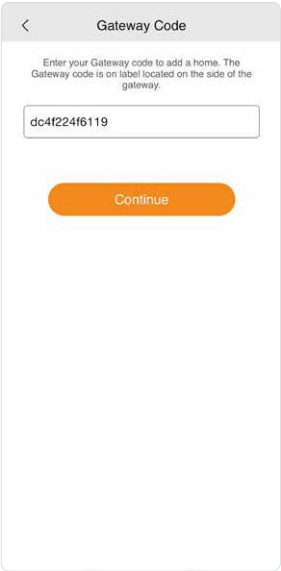


7. Press 'Connect'.
8. When the gateway is successfully connected the light will be solid green and the EMBER App will bring you to the Gateway Code screen. Synchronising can take up to 2 minutes.
9. If pairing is unsuccessful, please repeat steps 3-7.
10. The Gateway now needs to be paired with your EMBER App.

11. Enter the gateway code located on the gateway housing.

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

12. Press 'Continue' once only.



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

Note:

It is recommended to allow location permission on devices running IOS 13 or above. This will allow EMBER to automatically populate the WiFi (SSID) information during Setup.Without giving this permission, you will have to enter your WiFi (SSID) details manually. Local network permission is also required.

It is strongly recommended to close all other Apps before beginning the WiFi pairing process.

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

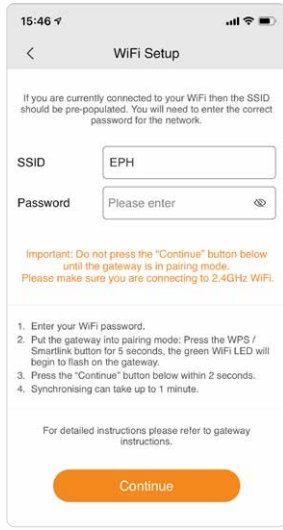
Note:

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

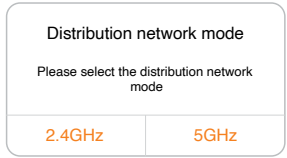
2. Enter the WiFi password.
3. **On the GW03 gateway:**

   Hold the WPS / Smartlink button for 5 seconds.

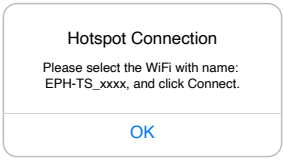
   The green light will begin to flash.
4. **On your mobile device:**
   Immediately press 'Continue'.



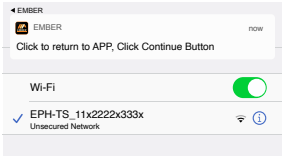
5. From the pop up dialogue box, select distribution mode



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



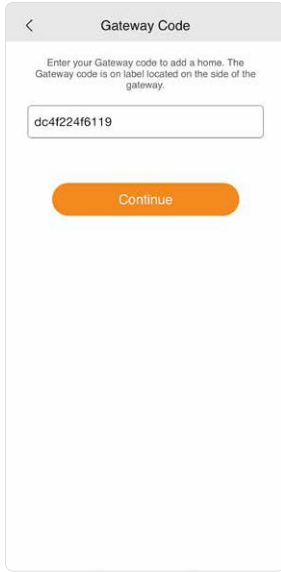
7. Press 'OK'. You will be redirected to your iOS WiFi settings page. An EPH-TS_Hotspot will appear. Tap to select this network. A dialogue box will appear with a message saying Click to return to EMBER App.



8. Press Continue on the EMBER App.
9. 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 2 minutes.
10. If pairing is unsuccessful, please repeat steps 3-8.
11. The Gateway now needs to be paired with your EMBER App.
12. Enter the gateway code located on the gateway housing.

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

13. Press 'Continue' once only.



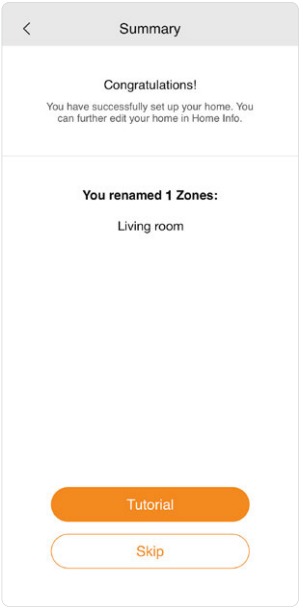
Home Setup

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.
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.
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.



Home setup (Continued)

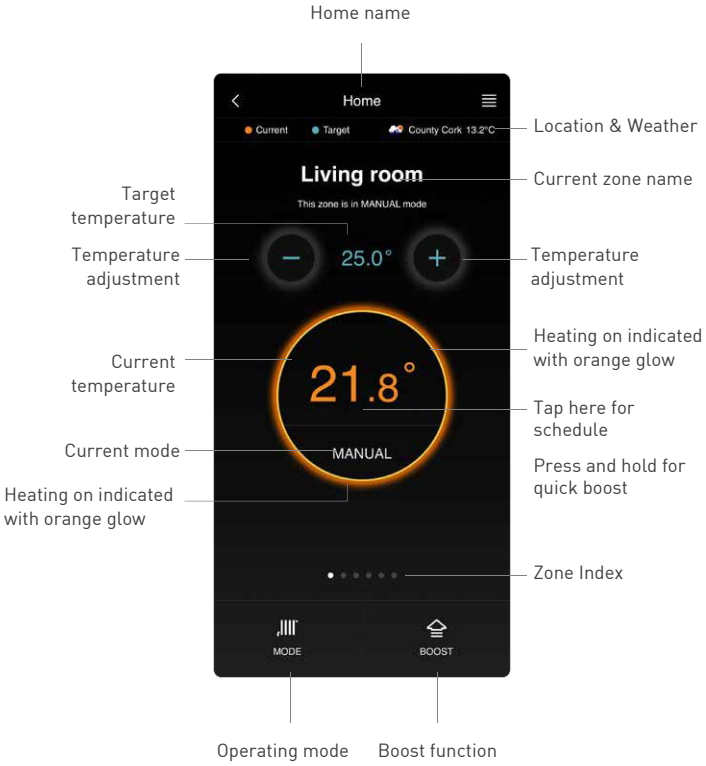
11. The Home screen will appear.

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

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

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

Zone control diagram



Official Site EMBER

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2026-03-04_GW03_DS_PK

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