

Hive Active Heating

Thermostat
installation guide



Here's what you'll need to install Hive Active Heating

- A working gas central heating system
- An existing broadband connection with a spare Ethernet port
- An Android or Apple smartphone to control your heating via the app or an up to date web browser.

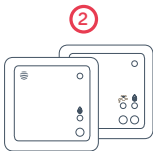
Installation order

For quick and efficient setup install Hive Active Heating in this order:



Install hub

Wait until the hub flashes AMBER



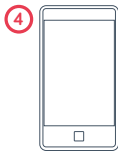
Install receiver

Wait until the status light flashes AMBER



Add thermostat

It will show 'Search' and then connect



Complete online setup

Control your thermostat remotely

Please remember that for your own safety Hive Active Heating should always be installed by a qualified professional.

Contents

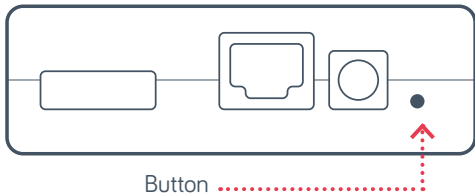
The hub	page 3
The receiver	page 7
The thermostat	page 23
Controlling your thermostat remotely	page 30
Multizone	page 31

1 The Hive Hub

If you already have a Hive Hub just put it into pairing mode. To do this press the button at the rear of the hub for 1 second and release it.

The middle light should now flash AMBER showing it is in pairing mode. Then move on to stage 2.

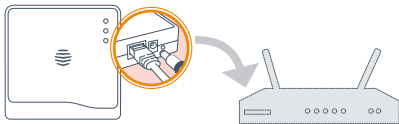
If you are not installing a hub just now skip to step 2.



1a – Installing your hub

To install the hub, there must be a broadband connection with a spare network port and a power socket must be nearby. Once this has been located, connect the hub as follows:

1



Connect the hub to the household's broadband router using the network cable provided.

2



Fit the power cable into the hub and plug it into a power socket.

3



Wait for the middle light to flash AMBER. During start-up the GREEN light will flash, followed by the AMBER light. This usually takes 5-10 minutes.

1b – Connecting the hub

Once the AMBER light is flashing, the hub is set up and you can move onto installing the receiver. If no lights are displayed immediately after the hub has been turned on, check all cables are connected and the power socket works. If the problem still persists contact Hive Technical Support.

Hub lights and what they mean:

Colour	Pattern	What does this mean?	Notes
GREEN	Flashing	Installation and start-up. The hub is attempting to connect to the Hive servers and update itself.	Do not disconnect the hub. If flashing continues after 15 minutes, contact Hive Technical Support to confirm that it has connected.
AMBER	Flashing	Installation. The hub is actively seeking to connect to the receiver and thermostat.	The hub will search for devices for 2 hours at a time. It will then pause, and show solid AMBER.
AMBER	Solid	Installation. The hub has paused its search for other devices.	To restart the search, simply turn the hub off then on. The AMBER flashing light should then return.
GREEN	Solid	Normal operation. The hub is connected.	This happens once the hub, receiver and thermostat are all installed and synchronised.
RED	Solid or Flashing	Error. The hub has failed to connect to the Hive servers.	Check that the hub is plugged in and that the broadband is working. If the problem persists, call Technical Support.

2 The receiver

Important information: **Before you get started**

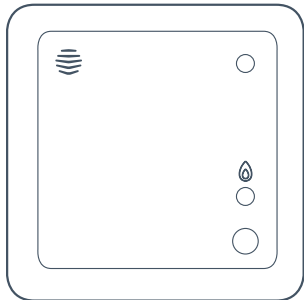
- Before fitting, isolate the mains electricity supply to the central heating system. Confirm it is isolated and secured in the off position for the duration of the installation. Remember to always follow appropriate safe electrical isolation procedures and test to confirm that the supply is isolated before touching any electrical connections.
- This product should only be installed by an electrically skilled person competent in the installation of electrical accessories. The wiring must comply to the current edition of BS7671 (The IET Wiring Regulations), and the appropriate Building Regulations or Standards in place.
- The Hive receiver is double insulated so doesn't need an earth connection. You'll find a tether on the backplate to secure an earth wire if needed.
- **This product is designed for fixed wiring installation only. It must be supplied via a switched fused spur with a minimum contact separation of 3mm (both live and neutral) and fitted with a 3A fuse.**

Installing the correct receiver

Hive Active Heating has two types of receiver:

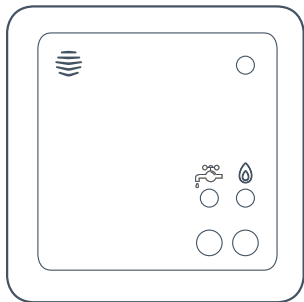
Single channel receiver

for combi boilers and additional plumbed heating zones



Dual channel receiver

for conventional boilers with hot water tanks



Wiring labels

Use the labels provided and attach them to the wires to help you remember which one is which during the installation.

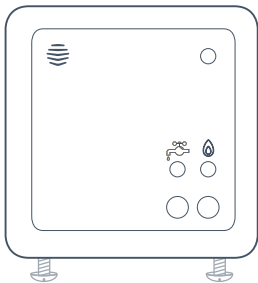


Sticker here

2a – Installing the receiver

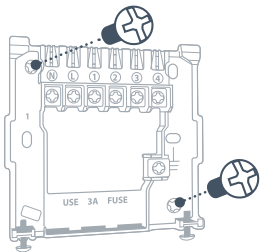
You should fit the receiver in a convenient location close to the boiler or central heating system. Make sure it's at least 30cm away from large metal objects, such as a boiler or hot water cylinder, to avoid interference with radio signals. Take care to avoid any cables and pipes that may be buried in the walls. Once you've found a suitable location, install the receiver as follows:

1



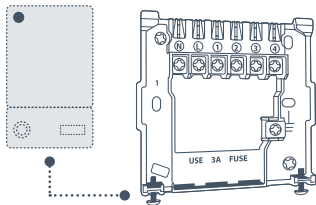
Loosen the screws on the underside of the receiver and remove the backplate by pulling the bottom of it away from the front panel.

2



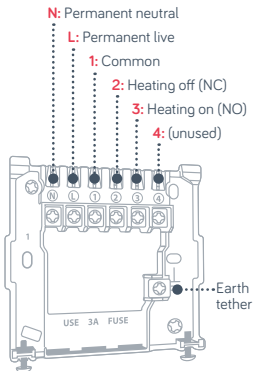
Fix the backplate to the wall with the terminals at the top.

3

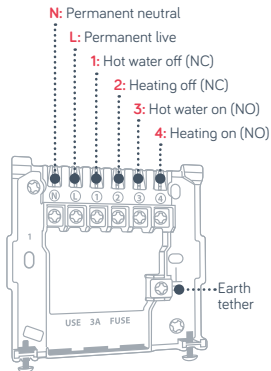


Run cable from the boiler or wiring centre (if required), then continue on to the next section to wire up the backplate.

2b – Single channel receiver wiring





2b – Dual channel receiver wiring



2c – Testing the boiler

To test the receiver to boiler connection follow these steps:

- 1 Visually check the wiring to confirm that the connections have been carried out correctly, referring to the labels on the wires and any photographs taken before replacement began
- 2 Confirm that the receiver's front panel is in place and that it is safe to commission the boiler
- 3 Check the middle light on the Hub is flashing Amber – if it isn't, go back to step 1
- 4 Restore power to the central heating system – the receiver's status light should flash AMBER. This means it's ready to connect to the hub and thermostat
- 5 Test the receiver's wiring to the heating system by pressing the  Central heating button. The GREEN light above the  Central heating button should come on and the boiler should fire up.

Once you've completed these tests, leave the receiver switched on with the status light flashing – this means it's ready to connect to the hub and thermostat. Next, install the thermostat.

Important information: Replacing existing controls

If there's an existing single zone timer or wireless receiver, you should replace it with the Hive receiver. Hive receivers are backplate compatible with a number of common boiler controls that may already be fitted in the home.

If the existing controller **doesn't** have a compatible backplate, remove it completely and wire in the Hive receiver in its place. If needed you can use a stand-off plate (SP, supplied separately) to create space to accommodate existing wiring, or use a decoration plate (DP) when replacing a larger controller.

If the existing controller **does** have a compatible backplate, simply remove the front panel of the existing controller and snap the Hive receiver front panel on in its place.

- **Single channel receiver compatibility:** WR1 receiver, UT2 and EMT2 timers
- **Dual channel receiver compatibility:** UP2 and EMP2 programmers

Important information: Replacing an existing thermostat

If you're replacing an existing wired thermostat, you should ensure that the pre-existing wires and connections are made safe. This can be achieved by disconnecting or bridging out the wired thermostat in the wiring centre or boiler. Where cables are left at the wireless thermostat position, they should be housed and terminated within an enclosure to prevent access. If you're replacing an existing wireless thermostat, decommission it by detaching it from the wall and removing its batteries.

Important information: Gravity-fed and part-pumped systems

Gravity-fed and part-pumped systems are wired differently to standard boilers. With these, the hot water relay switches on the boiler, whilst the heating relay opens a valve, operates a pump, or both, to divert hot water to the heating. If you are installing into a gravity-fed or part pumped system, complete the wiring and then switch the Hive receiver to 'gravity-fed' mode as follows:

- 1 Switch off the power to the boiler and receiver
- 2 Wait at least 5 seconds, then switch the boiler and receiver back on
- 3 Press and hold the hot water button for at least 10 seconds

The receiver status light will flash BLUE for 3 seconds when entering 'gravity-fed' mode. Or GREEN for 'fully pumped' mode. Fully pumped mode is the default for new devices.

Important information: Multizone receiver installation

If you're installing Hive Multizone, you'll need to install all the receivers before proceeding to the next step.

Note: Hive Multizone can support up to three heating zones and one hot water zone. Each Multizone installation should include a maximum of:

✓ **Three single channel receivers**



or

✓ **One dual channel and two single channel receivers**



When installing a dual channel receiver, the chosen central heating zone will need to be wired into the dual channel receiver and this zone will control the hot water.

Hot tips: See **page 13** (section 2c) on how to confirm receivers are installed and operating the heating system correctly.

Label the receivers once you have installed them so that it's clear which receiver controls which zone.

See **page 31** on how to set-up Multizone.

Important information: **Stand-alone installation**

For Hive Active Heating a hub, a receiver and a thermostat are installed. When this service hasn't been bought, the thermostat and receiver can also be installed without a hub. This is known as 'stand-alone' mode.


Follow the steps in the next section if the thermostat and receiver are going to be installed without a hub in 'stand-alone' mode (where Hive Active Heating hasn't been purchased).

In 'stand-alone' mode the thermostat acts as a standard wireless programmable thermostat without the remote heating control features and functionality of Hive Active Heating.

Activating stand-alone mode

- 1 Remove the batteries from the thermostat
- 2 Switch off the boiler and receiver
- 3 Wait at least 5 seconds, then turn the boiler and receiver back on. The receiver's status light will begin to flash AMBER
- 4 Press and hold the heating button for at least 10 seconds – until the status light begins to flash WHITE. The receiver is now in 'stand-alone' mode and is searching for a thermostat
- 5 Insert the batteries into the thermostat, press and hold down the menu (☰) and back (↶) buttons on the thermostat and follow the factory reset instructions on screen. After about 10 seconds, 'Welcome' and 'Searching..' will be displayed on screen. If the thermostat shows 'REJOIN' then try steps 1 and 5 again.

To switch back to 'remote heating' mode:

- a. Switch the hub off and then on again. If it begins to flash AMBER continue on to step b. If all the lights go out and the hub does not flash AMBER, log into **hivehome.com**, open the 'Devices' page and click 'Add devices'. The hub should now begin to flash AMBER.
- b. Now follow steps 1-5 on **page 19**, but note that the lights will be different. At step 3 the receiver's status light will initially flash WHITE/PINK and in step 4 it will change to AMBER (for 'remote heating') once you have held the  Central heating button down.





At any time you can check what mode the receiver is set to by switching it off then on. When power is restored the status light will flash for 5 seconds – AMBER for Hive Active Heating, WHITE for 'stand-alone' mode.

Receiver lights and what they mean:

The receiver has lights on its front panel to show what it's doing.

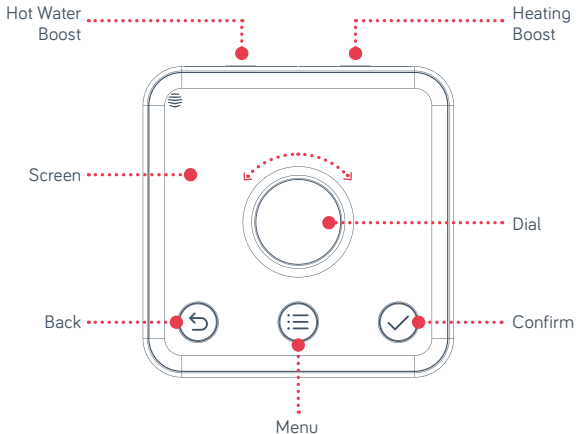
A single channel receiver has two lights – Status and  Central heating.

A dual channel receiver has an additional light for  Hot water. This is what the lights mean:

Light	Colour	Pattern	Meaning	Notes
Central heating 	GREEN	Solid	Heating is on.	
Central heating 	GREEN	Flashing	Commands queued. The receiver has received 2 or more commands to switch the boiler on or off within 1 minute. Or, Heating Boost mode with target temperature lower than room temperature.	The Hive receiver protects the boiler from damage that may occur if it's switched on and off very quickly. Once the boiler has been switched on (or off), it will not change state again for 1 minute as a protective measure.
Hot water 	GREEN	Solid	Hot water is on.	This light is only present on dual channel receivers.
Hot water 	GREEN	Flashing	Commands queued. The receiver has received 2 or more commands to switch the boiler on or off within 1 minute.	See 'Central heating'.

Light	Colour	Pattern	Meaning	Notes
Status	GREEN	Solid	Normal operation. The receiver is connected to the rest of the Hive system and operating normally.	
Status	BLUE	Solid	The system is in gravity-fed mode and is connected to the rest of the Hive system.	See gravity-fed mode section of this manual on page 15 .
Status	AMBER	Flashing	Installation. The receiver is trying to connect to other Hive devices.	The receiver will search for devices for 40 minutes at a time.
Status	WHITE	Flashing	The receiver is in stand-alone mode and is actively seeking to connect to a Hive thermostat.	The receiver will search for a thermostat for 40 minutes. If no thermostat is found within this time it will stop searching and the status light will turn solid WHITE.
Status	AMBER or WHITE	Solid	Installation. The receiver has paused its search for other devices.	To restart the search, simply turn the receiver off and then on. This will return it to the AMBER or WHITE flashing state.
Status	RED	Solid	Error. The receiver has lost its wireless connection to the thermostat.	Whilst in this state heating and hot water will default to off. They can be switched on manually by pressing the 'heating' and 'hot water' buttons on the receiver (hot water only available on dual channel receivers). For help call Hive Technical Support.

3 The thermostat

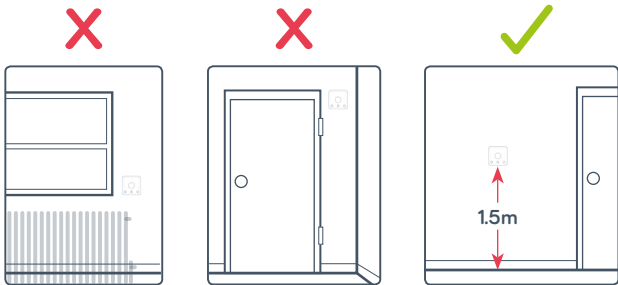


For the thermostat to work accurately, it's important that you install it in the right location.

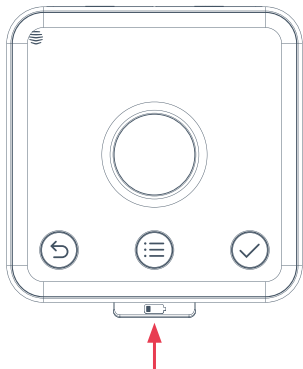
3a – Selecting a location for the thermostat

The thermostat should be fixed to an internal wall, 1.5m from the floor and away from heat sources that could affect its operation, such as radiators and areas in direct sunlight. To make accurate temperature readings, the thermostat needs a free flow of air, so make sure it's installed in an area not covered by curtains or similar objects.

The thermostat should not be installed in the same room as a radiator that's controlled by a thermostatic radiator valve (TRV). Installing the two in the same room may result in the central heating being permanently on.



3b - Wall mounting the thermostat



Remove the backplate of the thermostat by pressing the lever at the bottom and pulling away from the front of the device.

Once you've found a suitable location, fix the backplate to the wall using the appropriate fixings. The backplate is designed for 3.5mm/size 6 or size 8 screws. Be careful to avoid any cables and pipes that may be buried in the wall.

Note: The backplate is designed to mount directly onto a single gang back box, if available.

3c – Confirming the hub is ready to connect

Before inserting the batteries into the thermostat, check the hub is flashing AMBER – this means it's ready to connect. If it is showing a solid AMBER light, turn it off then on, and then switch the receiver and boiler off and then on again too. The hub should then begin to flash AMBER and be ready to connect.



3d – Inserting the batteries and connecting to the hub and receiver

The battery compartment is located at the back of the thermostat and is only accessible when the front of the thermostat is removed from the backplate.

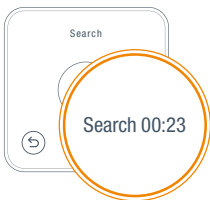
1



Insert the 4 x AA batteries provided.

If you are installing Hive Multizone only insert batteries into one thermostat at a time.

2



The thermostat display will show 'Search' – meaning it's searching for the hub and receiver. A timer will show how long the thermostat has been searching. If this lasts for longer than five minutes contact Hive Technical Support and they will diagnose any problems.

3



The receiver will display a solid GREEN status light or a BLUE light if it's in gravity-fed mode.

If installing Hive Multizone the status light will go GREEN on one receiver only. This is correct as the batteries should only be inserted into one thermostat at a time.

4



The thermostat will then go onto the 'Welcome' pages and a solid GREEN light will appear on the hub.

3e – Final steps

Installation is almost complete. All that's left to do is:

- ① Hook the thermostat onto the backplate and click it in place
- ② Remove the screen protector from the front of the thermostat
- ③ Confirm the system is properly configured by checking:
 - The thermostat is displaying room temperature
 - The receiver's status light is solid GREEN or solid BLUE
 - The hub has solid GREEN lights.

If the system is not properly configured it will not be possible to control your thermostat remotely.

4 Controlling your thermostat remotely

Hive Active Heating is now installed, there is one final step to link your thermostat to your Hive account.

- 1 Download the Hive app
- 2 Login using the email address and password you registered with

OR If you haven't already got a Hive account, tap 'Create Account' on the app Login screen or create one at hivehome.com/register. Once you've created your account then you'll need to log in.

- 3 Select 'Hub' then enter the hub ID when prompted. This is the ABC-123 formatted number on the underside of the hub
- 4 Once the hub ID has been entered, setup is complete and you'll land on your Hive dashboard
- 5 Tap on your thermostat to control it remotely.

Hot tip: You can also control your thermostat and other Hive devices through our website, just go to hivehome.com

5 Multizone

Important note:



Hive Multizone is not compatible with Nano 1 hubs.

Adding additional heating zones

If you've not done so already, install all additional receivers and power them up. For new receivers, their status lights should be double flashing AMBER. Please see **page 16** for more information on receiver installation.



To complete installation of the remaining heating zone(s) use either the hub or the Hive app or online dashboard:

5a – Using the hub

- 1 Press **the button** at the rear of the hub for 1 second and release it. The middle LED should start to flash AMBER
- 2 Now add the batteries to one new thermostat
- 3 Wait until the thermostat display stops showing 'Search'. Now check that the status light on one of the receivers that was previously flashing AMBER has turned solid GREEN
- 4 If there are still more zones to install, repeat steps 2-3
- 5 When all zones have been added, press the button on the rear of the hub to exit from pairing mode. The middle LED will stop flashing.



5b – Using the Hive app or online dashboard:

Please note, if installing Hive Active Heating to a hub that is already connected to other Hive products, you must use the button on the back of the hub to install the first zone. Any additional zones can be added through the Hive app or online dashboard using the steps below.

- 1 Download the Hive app or go to **hivehome.com**
- 2 Login using the email address and password you registered with

OR If you haven't already got a Hive account, tap 'Create Account' on the app Login screen or create one at **hivehome.com/register**. Once you've created your account then you'll need to log in.

- 3 If prompted to do so, enter the hub ID – this is found on the underside of the hub, for example ABC-123
- 4 Select menu in the smartphone app or settings on the website
- 5 Select **Install Devices**, then select **Add Heating Zone** and follow the on-screen instructions.

Hot tips: Once installed, the default zone name can be changed by selecting 'Manage Devices' in the Hive app or online dashboard.

Once all the thermostats and receivers are paired, fit the correct thermostat on the wall in each zone.

Check all thermostats remain in range once mounted in their final locations, adding a signal booster if required.

Can we help?

You can view our handy how-to-use videos along with hints and tips at hivehome.com/support

If for any reason you need to return your Hive Active Heating, simply return your box and its contents to the retailer. Any return is subject to the retailer's refund policy so please don't forget to check the retailer's refund policy too.



Need help?

If you're a qualified professional installing Hive Active Heating yourself and need any help during the installation process, just visit our technical support page at hivehome.com/installation

If you need further help, you can email our support team at help@hivehome.com

This thermostat is a Class I temperature control and contributes 1% to seasonal space heating energy efficiency.

© 2017 Centrica Connected Home Limited.
Registered in England (No. 5782908). Registered office:
Millstream, Maidenhead Road, Windsor, Berkshire SL4 5GD.
All rights reserved. IG70003650517V1

 A British Gas innovation