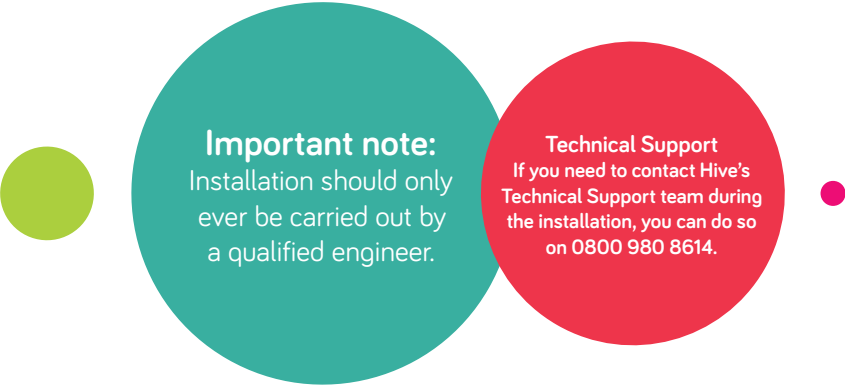




Installation Guide for
Hive Active Heating™



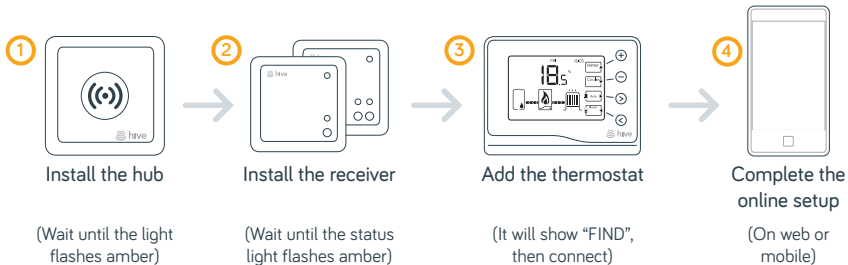


Important note:
Installation should only
ever be carried out by
a qualified engineer.

Technical Support
If you need to contact Hive's
Technical Support team during
the installation, you can do so
on 0800 980 8614.

For a quick installation, follow the steps in order

We recommend that you install Hive Active Heating™ in the order shown in the diagram below. This is the simplest route and should ensure a quick and efficient setup.

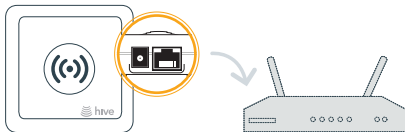


1 - The hub

Before starting, confirm that the household's broadband is working, that the broadband router has a spare network port and that there is a spare power socket nearby. Then connect the hub as follows:



1



Firstly connect the hub to the household's broadband router using the network cable provided. Secondly fit the power cable into the hub and plug it into a power socket.

3



Wait for an amber flashing light. Multi-coloured lights and a red light will flash, followed by the amber light. This usually takes less than 30 seconds but can take up to 5 minutes if updates need to be downloaded.

2



Switch on the hub

1a – 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 Technical Support.

Once the hub, the receiver and the thermostat have all been connected, the hub's lights will turn off to save energy.

Hub lights and what they mean

Colour	Pattern	What does this mean?	Notes
Red, blue or multi-coloured	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 5 minutes, contact 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 40 minutes at a time. It will then pause, as indicated below.
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.
No lights	-	Normal operation. The hub is in power save mode.	This happens once the hub, receiver and thermostat are all installed and synchronised.
Red	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

Some important information before you get started

- Before you do anything, make sure the mains supply to the central heating system is isolated and stays off for the duration of the installation. Remember to always follow appropriate safe electrical isolation procedures.
- Only a fully-trained engineer should install this product. The wiring must comply to the current editions of BS7671 (IEE Wiring Regulations), Part 'P' of the Building Regulations and any relevant Technical Operational Procedures.
- 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



Dual channel receiver
for conventional boilers with hot water cylinders

2a – Installing the receiver

You should fit the receiver in a convenient location close to the boiler or central heating system.

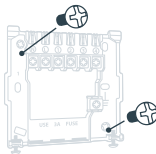
Make sure it's at least 30cm away from large metal objects, such as a boiler or hot water cylinder, to avoid interference with radio signals. Take care to avoid any cables and pipes that may be buried in the walls. Once you've found a suitable location, install the receiver as follows:

1



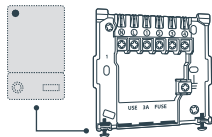
Loosen the screws on the underside of the receiver and remove the backplate by pulling the bottom of it away from the front panel.

2



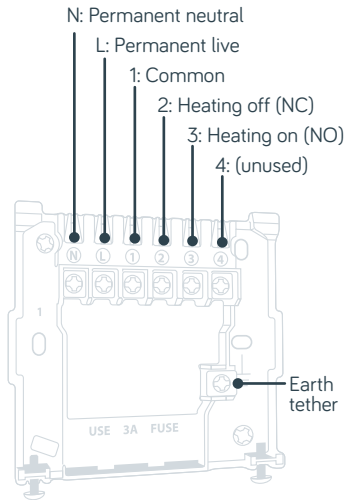
Fix the backplate to the wall with the terminals at the top.

3

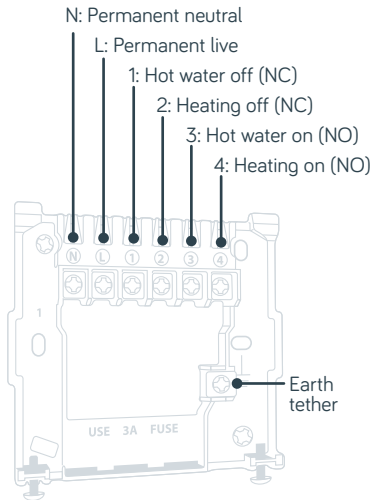


Run cable from the boiler or wiring centre (if required), then continue on to the next section to wire up the backplate.

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 Confirm that the receiver's front panel is in place and that it is safe to commission the boiler.
- 2 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.
- 3 Test the receiver's wiring to the heating system by briefly pressing the Central heating button (do not press and hold). 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, which means it's ready to connect to the hub and thermostat, and move on to install the thermostat.

Replacing existing controllers

If there's an existing single zone programmer or wireless receiver, you should replace it with the Hive receiver. Hive receivers are compatible with a number of common boiler controllers 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 (SLS1, supplied separately) to create space to accommodate existing wiring, or to cover bare wall when replacing a dual gang 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:

WR-1 receiver, UT2 and EMT2 thermostats

Dual channel receiver compatibility:

UP2 and EMP timer programmers

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.

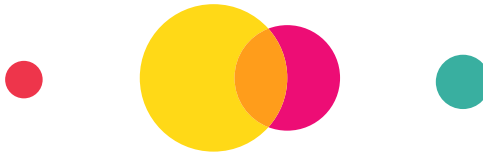
The receiver status light will show BLUE when entering 'gravity-fed' mode. Or GREEN for 'fully pumped' mode. Fully pumped mode is the default for new devices.

Stand-alone installation

For Hive Active Heating™ a hub, a receiver and a thermostat are installed together. Where this service has not been purchased, the thermostat and receiver can also be installed without a hub. This is known as 'stand-alone' mode.

In stand-alone mode the thermostat acts as a normal wireless thermostat with none of the benefits of Hive Active Heating™.

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



Switching in and out of stand-alone mode

Activate stand-alone mode as follows:

- 1 Remove the batteries from the Hive thermostat.
- 2 Switch off the power to 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 Central heating button on the receiver for 10 seconds – until the status light begins to flash white/pink. The receiver is now in 'stand-alone' mode.
- 5 While holding down the \oplus and \ominus buttons on the thermostat, insert the batteries. Keep the buttons pressed until 'FIND' is displayed on the screen. After a few seconds the thermostat will connect to the receiver and show room temperature. If the thermostat shows 'REJOIN' then try step 5 again.

To switch back to 'remote heating' mode:

- i) Switch the hub off and then on again. If it begins to flash amber continue on to step (ii). 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.
- ii) Now follow the steps 1-5 above, but note that the lights will be different. At step 3 the receiver's status light will initially flash white/pink and it will change to amber (for 'remote heating') in step 4 once you have held the Central heating button down.

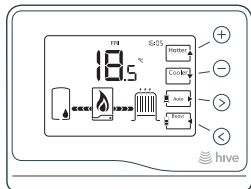
Receiver lights and what they mean

The receiver has lights on its front panel to indicate 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.	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'.
Status	Green	Solid	Normal operation.	The receiver is connected to the rest of the Hive system and operating normally.

Light	Colour	Pattern	Meaning	Notes
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.
Status	Amber	Flashing	Installation. The receiver is trying to connect to other Hive devices.	The light switches to solid amber when the receiver times out and ceases its search for other devices.
Status	White / pink	Flashing	The receiver is in stand-alone mode and is actively seeking to connect to a Hive thermostat.	The light switches to solid white when the receiver times out and ceases its search for a thermostat.
Status	Amber or white	Solid	Installation. The receiver has paused its search for other devices.	To restart the search, simply power 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). Call Technical Support to resolve the issue.

3 – The thermostat



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

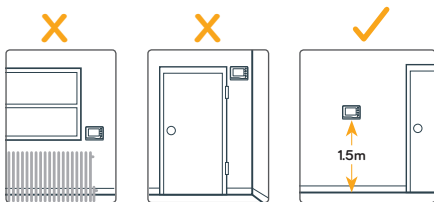
3a – Selecting a location for the thermostat

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.

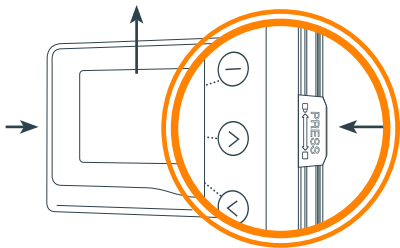
To make accurate temperature readings the thermostat needs a free flow of air, so make sure it's installed in an area not covered by curtains or similar objects.

The thermostat must 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.

You must fix the thermostat in a permanent location as the heating system will not function accurately otherwise.



3b – Wall mounting the thermostat



Remove the front panel of the thermostat by squeezing the buttons on both sides and sliding it up and off the backplate.

Once you've found a suitable location, fix the backplate to the wall using the appropriate fixings. The backplate is designed for size 6 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.

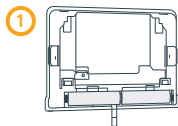
3c – Confirming the hub is ready to connect

Before inserting the batteries into the thermostat, check the hub is flashing amber – this means it's ready to connect. If it is displaying a solid amber light, simply 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

Make sure that you are standing where the thermostat will be installed before proceeding to insert the batteries. The battery compartment is located at the back of the thermostat and is only accessible when the front panel is removed from the backplate.



1 Insert two AA batteries.



2 The thermostat display will show 'FIND' plus a timer – meaning it's searching for the hub and receiver. If it searches for more than five minutes contact Technical Support and they will diagnose any problems.



4 The receiver will display a solid green or blue status light and the hub lights will turn off to save energy.



3 The thermostat will then display room temperature – meaning it's connected successfully to the hub and receiver.

3e – Final steps

Installation is almost complete.

All that's left to do is:

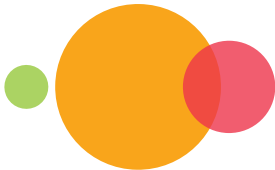
- 1 Slide the thermostat down onto the backplate.
- 2 Remove the screen protector from the front of the thermostat and place the user guide into the slot at the top.
- 3 Confirm the system is properly configured by checking:
 - The thermostat is displaying room temperature.
 - The receiver's status light is solid green or solid blue.
 - The hub has no lights on.

If the system is not properly configured it will not be possible to complete online setup.

Replacing an existing thermostat

If you're replacing an existing **wired thermostat**, be sure to first make the wires safe by disconnecting and looping out the wired thermostat in the wiring centre or boiler.

If you're replacing an existing **wireless thermostat**, decommission it by detaching it from the wall and removing its batteries.



4 – Online account setup

Hive Active Heating™ is now installed and ready to be registered. There are two ways to complete online setup:

Set up using a web browser

- 1 Go to **hivehome.com**
- 2 Log in using the account details supplied in the order confirmation email.
- 3 Enter the hub ID – this is the XXX-123 formatted number on the underside of the hub.
- 4 Once the hub ID has been entered, setup is complete and Hive Active Heating™ is ready to use.

Set up using the smartphone app

- 1 Download the Hive app.
- 2 Log into the app using the account details supplied in the order confirmation email.
- 3 Enter the hub ID – this is the XXX-123 formatted number on the underside of the hub.
- 4 Once the hub ID has been entered, setup is complete and Hive Active Heating™ is ready to use.



Forgotten your password?
Go to **hivehome.com**,
click “log in” and
then click the “Forgot
your password?” link

Hive Active Heating™ is up and running. Heating and hot water can now be controlled from work, the pub or the comfort of a sofa. The User Guide (tucked into the back of the thermostat) contains information on using the system and there is more help online at **hivehome.com**





Hive Active Heating™ -
the clever way to control
your heating.

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