



Ignite - Wireless

rev 2.1

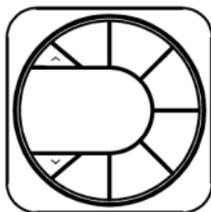
www.inspirehomeautomation.co.uk



CAUTION: High Voltage Wires

WARNING Electricity is dangerous. Before commencing work, ensure that you read and understand these instructions and isolate the relevant circuit. **This product should only be installed by a qualified electrician or heating engineer** and should be installed in accordance to **BS 7671 (IEE Wiring Regulations)**, or to another equivalent standard.

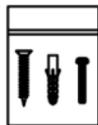
WHAT'S IN THE BOX



1 x Ignite Wireless
Thermostat



1 x Ignite Wireless
Receiver



1 x Screw Pack
& Cable Clamp



2 x AA
Batteries

TOOLS REQUIRED



Drill + 5mm
Drill Bit



Phillips
Screwdriver



Flat Blade
Screwdriver



Long
Nose Pliers



Boiler
Manual



Multimeter



Smart
Device



Wire
Cutters

INTRODUCTION

The Ignite Wireless series is designed to control a typical domestic central heating system. The system can switch two independent channels. This would usually be the Central Heating and the Hot Water (if applicable).

If you do not have a typical gas / oil fired central heating system, please see www.inspirehomeautomation.co.uk/other_heating for further information.

The central heating channel is switched on and off in response to commands from the supplied Thermostat.

The hot water channel (if applicable) is switched on and off at the programmed time intervals that the user sets. (When in Auto Mode)

Once installed, your central heating and hot water can be switched on and off in response to commands from the Thermostat or remotely using a computer or Smart Phone.

SPECIFICATION

Ignite Wireless Receiver

Power Supply: 230V~ 50Hz, 3W (Max)

Switch Type: 1 x SPDT (HW), 1 x SPST (CH)

Switch Rating: 3 Amps Total load on all Channels

Radio Frequency: 2.4 GHz (WiFi) & 868 MHz (Thermostat to Receiver)

Dimensions: 156 x 105 x 29 mm

Ignite Wireless Thermostat

Power Supply: 2 x AA Alkaline Batteries

Controllable Temperature Range: 1.5 – 34.5°C

Frost Protection: Programmable from 1.5 - 30°C

Radio Frequency: 868 MHz (Thermostat to Receiver)

Dimensions: 103 x 103 x 45 mm (max)

RADIO SIGNAL AND LOCATION

Consideration for location of your Thermostat and Receiver, and the affects that this may have on the radio signal is extremely important. The signal will travel between units in a straight line and will degrade both with distance and (much more importantly) objects that it has to pass through.

If you have a large number of WiFi devices in the property or you cannot get a good WiFi signal at your Receiver location (you can use your phone to get a good indication of WiFi signal strength), then we would strongly recommend that you upgrade your WiFi Network. Please see www.inspirehomeautomation.co.uk/wifi for further help and advice.

Unlike the Receiver, that connects via WiFi, the Thermostat connects to the Receiver via its internal low power radio. (RF).

Every house is different and this is NOT a guarantee, but as a guide, the Thermostat and Receiver should be able to communicate with each other through two single skin brick or stud walls.

If the above is not possible, consider adding an **Ignite Signal Booster** to increase the range. (please see www.inspirehomeautomation.co.uk/signal_booster)

Fig 1 shows two possible Thermostat locations, and the path that the signal will travel to communicate between the Receiver and Thermostat. If the Thermostat is located at "B", the signal will need to go through two **external walls**. If the Thermostat is located at "A", it will have a significantly better signal as it will only have to travel through one **internal wall**.

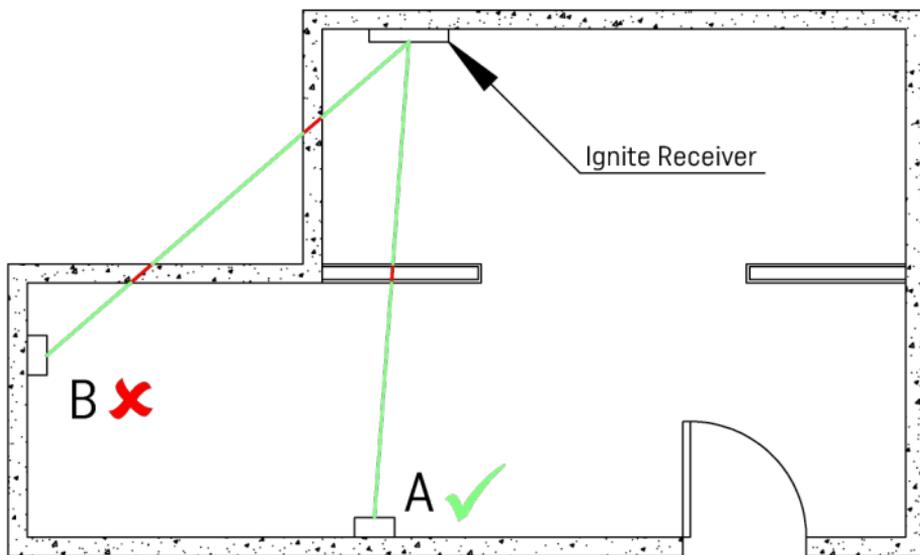


Fig 1

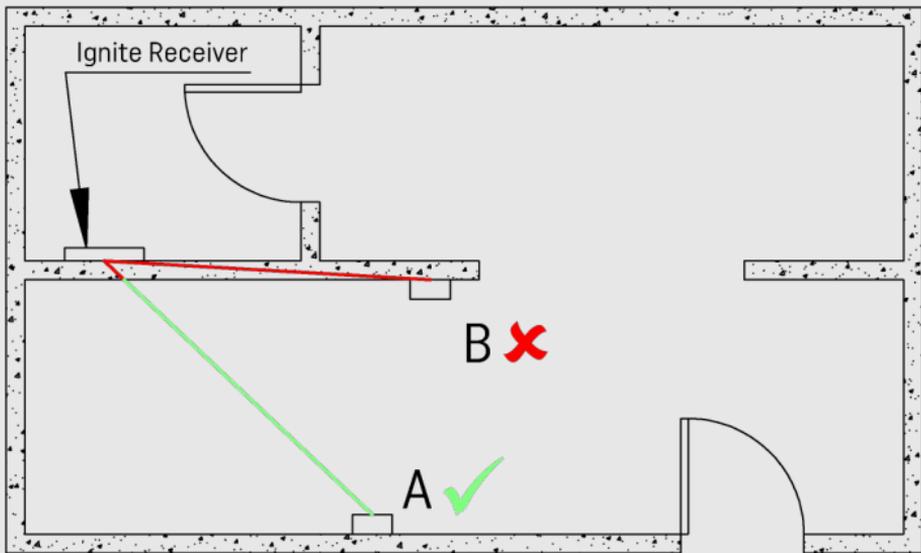


Fig 2

Fig 2 shows another two possible positions. The Thermostat located at "B" will have the signal travelling entirely through a solid wall. This will create a very poor signal, or no signal at all.

When moved to position "A" the signal will be considerably stronger.

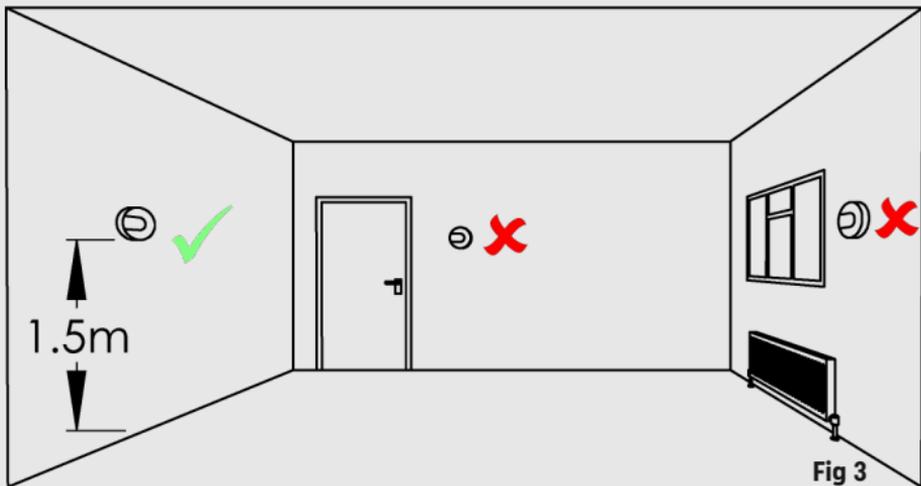


Fig 3

As shown in **Fig 3**, ideally the Thermostat should be mounted on an internal wall at a height of 1.5m. Avoid locating near draughts such as the front door or windows. Do not position above heat sources and avoid direct sunlight.

The room where the Thermostat is located must have a working radiator and the Thermostatic Radiator Valve (TRV) **must be removed** if present.

Most TRV's can be removed by turning it up to the maximum setting, gently pushing down from the top and undoing the metal collar. Once undone, it will lift off the radiator.

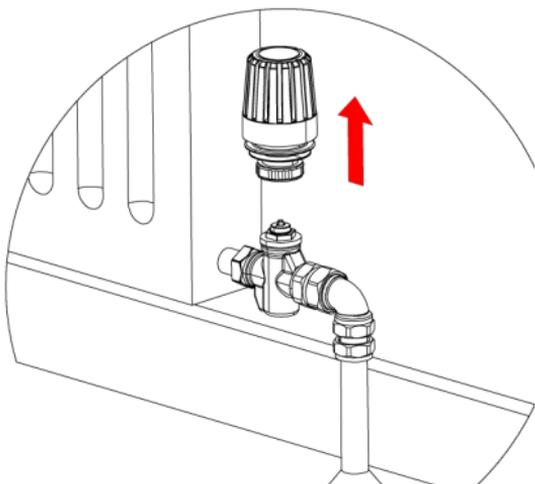


Fig 4

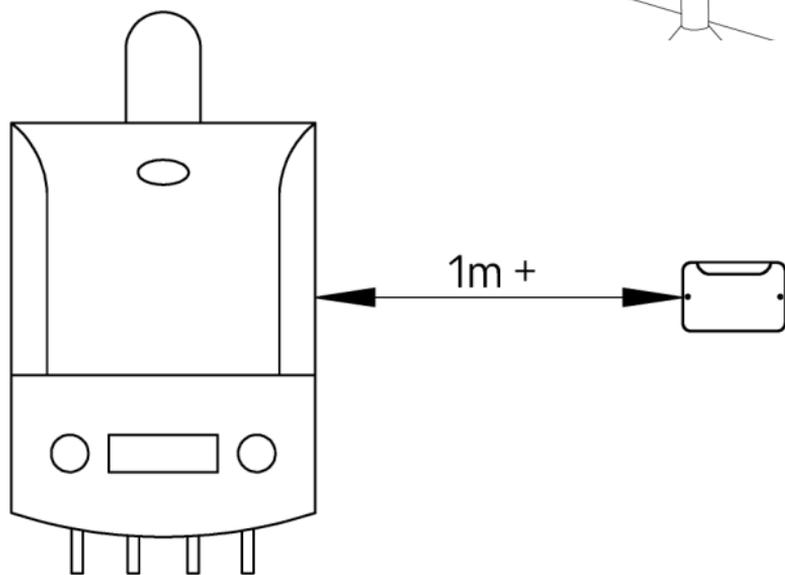


Fig 5

We recommend placing the Receiver at least 1 metre away from metal objects such as boilers, hot water cylinders etc (Fig 5). To avoid potential water damage, **do not** install underneath the boiler.

If the boiler is in the attic, consider running cables and installing the receiver on the floor below to improve the signal.

INSTALLATION

Before commencing work, isolate the existing power supply.

To remove the front cover, undo the two screws on the Receiver, then lift off.

This unit is designed for fixed wiring only. If running surface mount cable, use cutters to break out the tab underneath and secure cable(s) with the supplied cable clamp. Surface mount cable should be clipped to the wall or ran in suitable trunking, 1mm² cable is recommended and no bare copper should be visible outside the connector block. All wiring must conform to the current IEEE wiring regulations.

The Ignite Receiver is a class 2 device and does not require an earth. You may need to join existing earth leads together using a terminal strip to maintain earth continuity to the rest of the circuit. Ensure that the circuit is protected by a 3 amp fuse.

COMBI BOILER WITHOUT ROOM THERMOSTAT OR TIMER

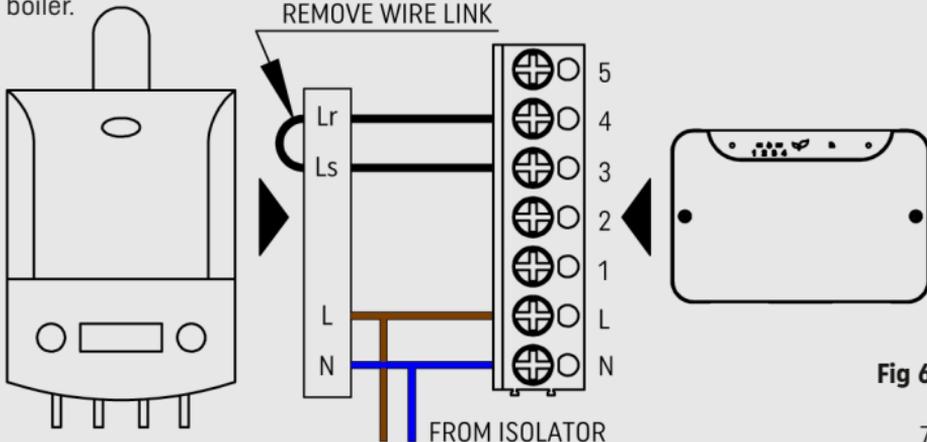
(No hot water cylinder, Boiler fires when hot tap is opened)

Install the Ignite Receiver as described in **Installation - Wall Mount** on page 11.

We recommend that any internal timers are disconnected if possible.

Please consult your boiler installation manual for guidance on how to wire in external controls. Usually, there will be a wire link to remove on the boiler terminal block, then these two terminals are wired to terminals 3 & 4 on the Inspire Terminal board as shown in **Fig 6**.

Connect the Receiver Live(L) and Neutral(N) to the same fused spur as the boiler.



The majority of combi boilers can be wired using the 4 wire installation method. If your boiler manual suggests a 3 wire install, then refer to **Fig 7**, remembering to remove the link wire in the boiler (if required) and add a link wire between terminals 4 & 5 on the Receiver.

After the wiring has been completed, replace the front cover and secure using the two screws - **DO NOT OVERTIGHTEN**. Restore power to the circuit.

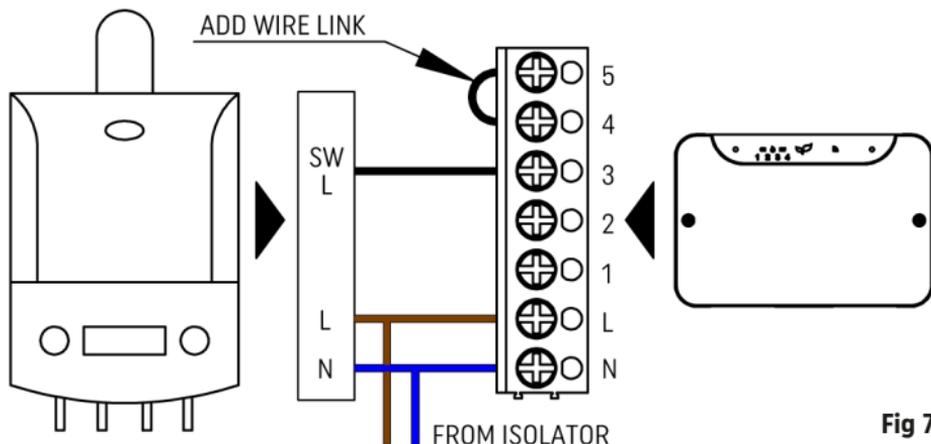


Fig 7

COMBI BOILER WITH EXISTING ROOM THERMOSTAT

Wired Thermostat

Remove the existing Thermostat wiring from the boiler, then follow the steps on page 7 for "**Combi Boiler without Room Thermostat or Timer**".

Wireless Thermostat with built in receiver

Wireless Thermostats with a receiver built into the front panel of the boiler, (e.g. Drayton LP10RF) this **MUST** be removed from the boiler. Then follow the steps on page 7 for "**Combi Boiler without Room Thermostat or Timer**".

Wireless Thermostat with external receiver

Make a careful note of the locations of the existing wiring at the receiver, then remove the old receiver.

Install the Ignite Receiver as described in **Installation - Wall Mount** on page 11. Install the previously identified wires into the appropriate terminals on the Ignite Receiver. If 4 wires are present, see **Fig 6**. If only 3 wires, then see **Fig 7**, remembering to add the link wire between terminals 4 & 5.

After the wiring has been completed, replace the front cover and secure using the two screws - **DO NOT OVERTIGHTEN**. Restore power to the circuit.

SYSTEM BOILER WITH EXISTING CONTROLS

System Boiler with existing 2 channel programmer and optional Thermostat

****Before commencing, take clear photos of the existing programmer wiring****

S Plan (2 x 2 port zone valves, usually near hot water cylinder)

Usually 4 Wires to existing programmer, Live, Neutral, CH ON, HW ON. (CH OFF and HW OFF not used)

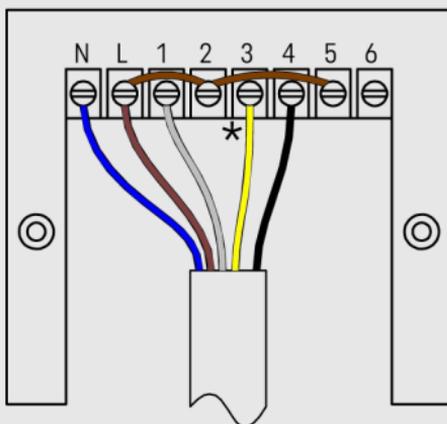
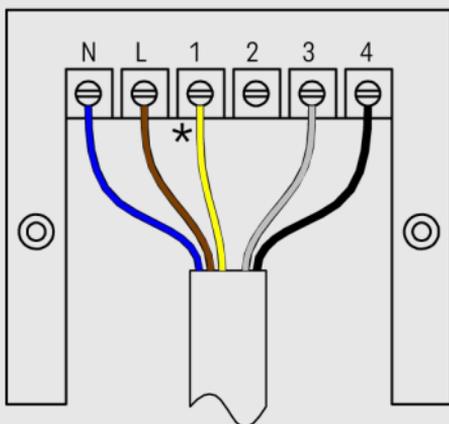
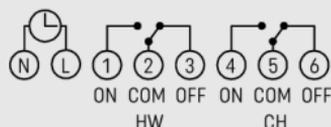
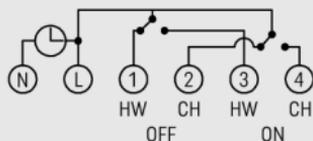
Y plan (1 x 3 port zone valve, usually near the hot water cylinder)

Usually 5 wires to existing programmer, Live, Neutral, CH ON, HW ON, HW OFF. (CH OFF not used)

Existing programmers will usually have 6 or 8 terminals (Plus possibly an earth terminal)

There should also be a wiring schematic on the existing programmer (see **Fig 8**).

Using this schematic, identify and label each wire according to its function, e.g. Live, Neutral, CH ON/OFF, HW ON/OFF etc. If the programmer has 8 terminals, with 'C', 'Com' or 'Common' AND these terminals are linked to Live, then ignore the links and identify the remaining wires. If the existing programmer uses the notation NO (Normally Open) & NC (Normally Closed), NO = ON and NC = OFF



Colours shown are for indication only, and may vary in your installation.

* Note, if you have an S-Plan system, this cable will not be present

Fig 8

Once each wire is identified, remove the existing wires from the old programmer and install the Inspire Ignite Receiver as described in **Installation - Wall Mount** on page 11.

Install the previously identified wires into the appropriate terminals (see **Fig 9**). As an example, the black wire in terminal 4 of the old programmer is identified as "CH ON" from the existing programmer schematic. This would go into terminal 3 "CH ON" on the new Ignite Receiver.

Finally, add a link wire between terminals 4 & 5 on the Receiver.

After the wiring has been completed, replace the front cover and secure using the two screws - **DO NOT OVERTIGHTEN**. Restore power to the circuit.

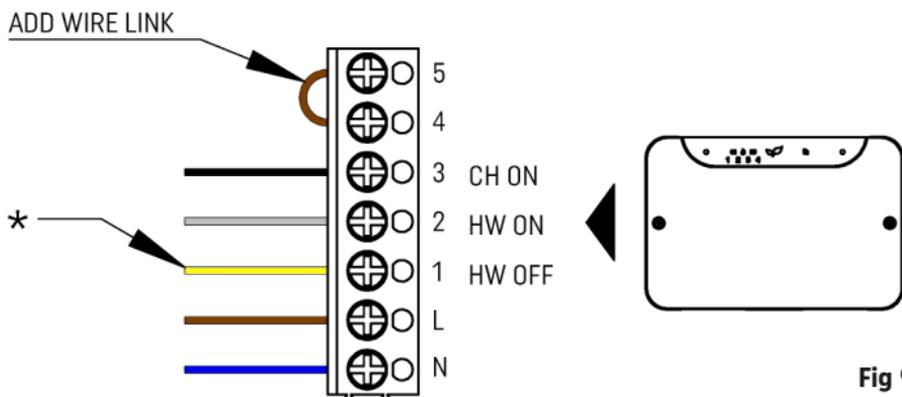


Fig 9

* Note, if you have an S-Plan system, this cable will not be

Important

If the existing installation has a wired Room Thermostat, the wiring for this **MUST BE REMOVED** at the wiring centre and the thermostat terminals Live and Switched Live/Call linked.

SYSTEM BOILER WITHOUT EXISTING CONTROLS

If the boiler has been newly installed and you do not have any controls, please wire as a standard S or Y Plan. See www.inspirehomeautomation.co.uk/newboiler for more information.

INSTALLATION - THERMOSTAT

Preparing your new Thermostat

Pull the thermostat away from the wall mount. There is a back panel that can be used to fully cover single gang back boxes. If this is not required, it can be removed from the wall mount by twisting it anti-clockwise. (See **Fig 10**)

Install the wall mount as described in **Installation - Wall Mount** below.

Install the Batteries in the Thermostat, then place the Thermostat over the wall mount, this will click into place.

If you purchased our Landlord or Calendar version, secure the Thermostat to the wall mount using the three small Phillips screws provided. (See **Fig 11**)

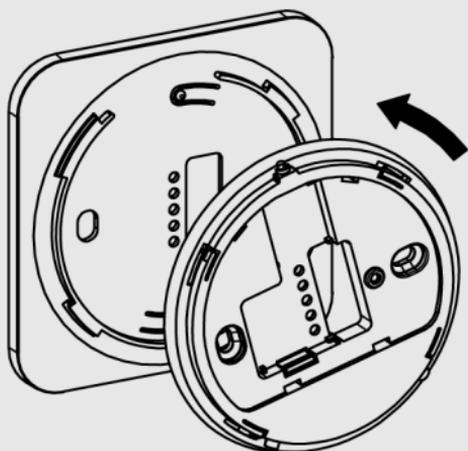


Fig 10

Do not insert any objects in this opening or damage will occur

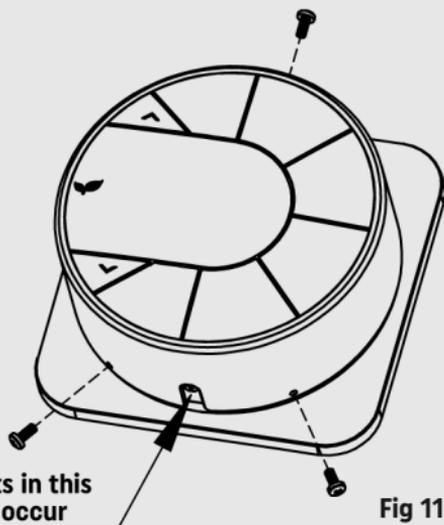


Fig 11

INSTALLATION - WALL MOUNT

If you have a single gang back box, secure the wall mount to this using two of the M3.5 screws provided.

If you do not have an existing back box, use the wall mount as a template and mark the location of the two holes on the wall. For reference, the two holes are 60.3 mm apart. Drill suitable holes (5mm diameter for the supplied wall plugs) and fix the wall mount to the wall using appropriate wall plugs and screws. **WARNING be aware of any buried cables before drilling.**

TESTING THE SYSTEM

Signal

Press a button to illuminate the Thermostat display and ensure there are at least 3 signal bars showing on the top left of the display.

Central Heating

Press the 'CH MODE' key until the CH Selector hovers over Man.

Press the '^' key to raise the temperature until you see a flame icon appear on the Thermostat.

Check the Ignite Receiver. After a few moments, CH will flash, the flame will illuminate and the unit will call for heat on the CH circuit.

Check that the boiler has fired up and any zone valves (if applicable) have moved to their appropriate positions. Press the 'CH MODE' key again to turn the central heating off.

Hot Water (if applicable)

Press the 'HW MODE' key until the HW Selector hovers over Man.

Check the Ignite Receiver. After a few moments, HW will flash, the flame will illuminate and the unit will call for heat on the HW circuit.

Check that the boiler has fired up and any zone valves have moved to their appropriate positions. Press the 'HW MODE' key again to turn the hot water off.

If the boiler does not fire up, you may already have a full tank of hot water. In which case, temporarily increase the cylinder stat to max for this test.

If one of the above tests fail, then please see Troubleshooting on page 16.

CONNECTING THE SYSTEM



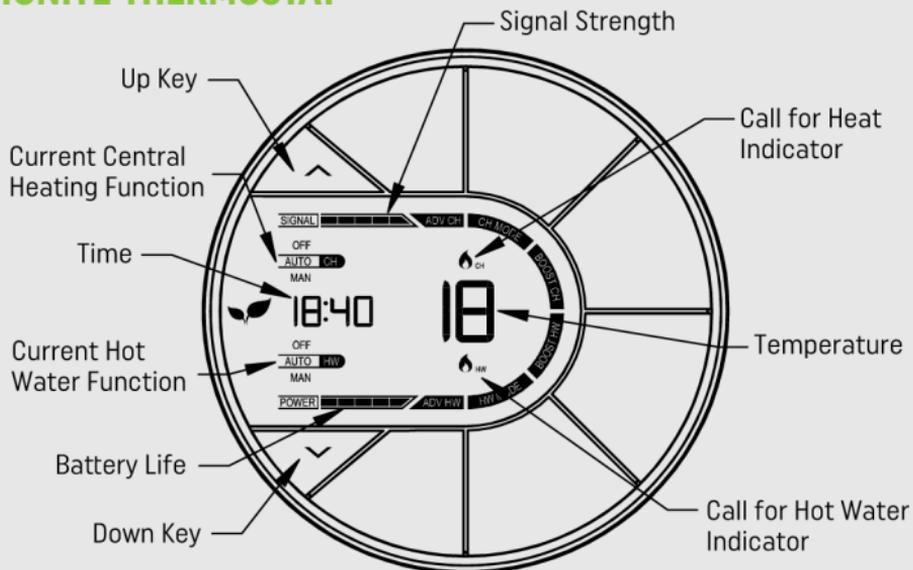
Search "Inspire Home Automation" in the app store, install our app, then follow the instructions. If this is an additional Thermostat, then select User -> Add Device from within the app.

Or browse to: www.inspirehomeautomation.co.uk/start

Important

You will need to be in the same location as the inspire system to complete the initial setup.

IGNITE THERMOSTAT



IGNITE RECEIVER

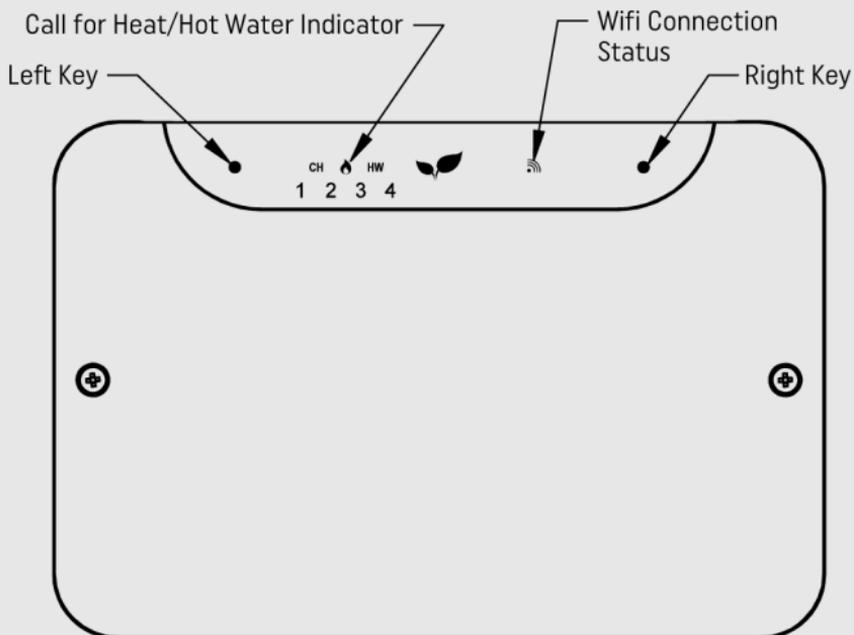


Fig 12

BASIC FUNCTIONS (HEATING)

Off

Your heating will be switched off.

Auto

Your Thermostat will follow its Heating Schedule

The **default** is: (This can be adjusted via your online account)

15 Degrees between 00:00 and 06:00

20 Degrees between 06:00 and 08.30

17 Degrees between 08:30 and 17:00

22 Degrees between 17:00 and 22:30

15 Degrees between 22:30 and 00:00

Man

Your heating will be switched on and keep your property at the set temperature.

Boost

This is used if you would like to switch your heating on for a set period of time.

The default is 1 hour at 20 degrees. When pressed, 'BOOST CH' will flash to indicate that boost is currently active.

Your heating will switch on for the programmed length of time, at the programmed Boost Temperature (if set). After this time has expired, the Thermostat will return to the previous function.

Adjusting the Temperature (not applicable when in Off)

Use the '^' and 'v' buttons to set the desired room temperature.

Pressing the 'CH MODE' key will cycle through the above modes.

Program Advance

This is used if you would like to 'jump' to the next profile temperature. Press the 'ADV CH' key to 'jump' to the next Temperature in your schedule. It will only have an effect if the Thermostat is in auto mode. Pressing the 'ADV CH' key a 2nd time will cancel the program advance and the unit will revert back to the current profile set temperature.

BASIC FUNCTIONS (HOT WATER)

Off

Your hot water will be switched off.

Auto

Your Thermostat will follow its Hot Water Schedule.

The default is: (This can be adjusted via your online account)

On between 06:00 and 08.30

On between 12:00 and 13:00

On between 18:00 and 20:00

Man

Your hot water will be switched on and will keep your hot water cylinder at the temperature set by your cylinder thermostat.

Boost

This is used if you would like to switch your hot water on for a set period of time.

The default is 1 hour. When pressed, 'BOOST HW' will flash to indicate that boost is currently active.

Your hot water will switch on for the programmed length of time. After this time has expired, the hot water function will return to the previous function.

Adjusting the Mode

Pressing the 'HW MODE' key will cycle through the above modes.

Program Advance

This is used if you would like to 'jump' to the next scheduled hot water setting.

Press the 'ADV HW' key to 'jump' to the next setting in your schedule. It will only have an effect if the hot water function is in auto mode. Pressing the 'ADV HW' key a 2nd time will cancel the program advance and the unit will revert back to the current profile setting.

VIDEO TUTORIALS - INSPIRE COLLEGE

Please go to www.inspirehomeautomation.co.uk/videos to help you get started in setting up your account.

Here you will find handy bite sized videos showing you how to setup your account as well as helpful information videos.

ALSO AVAILABLE

Ignite Smart Sensor

Concerned about high humidity causing mould?
Are some rooms colder than others?
Do you want to avoid heating an empty house?

If the answer is YES to any of these, find out how our Smart Sensor can keep you informed and get you back in control. Visit

www.inspirehomeautomation.co.uk/smart_sensor



Ignite Signal Booster

Is your signal strength poor on your Thermostat?
Do you have an old Victorian property with thick walls?
Do you want to position your Thermostat further away from the Receiver?

Fix poor radio signals with our Ignite Signal Booster. Find out more by visiting

www.inspirehomeautomation.co.uk/signal_booster



PHONE APP

Please go to this weblink to download the app

www.inspirehomeautomation.co.uk/apps or search for "Inspire Home Automation" in the app store.

TROUBLESHOOTING

Please visit our website for further help and assistance:

www.inspirehomeautomation.co.uk/help

Please check out our **FAULT FINDING GUIDE** and **FAQ** for assistance, there will also be information here on how to contact us.

PLEASE LEAVE THIS MANUAL WITH THE USER.