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## Ignite - Touch

rev 1.1

Ignite Touch - 2ch,  
Ignite Touch 4ch-1, 4ch-2, 4ch-3, 4ch-4  
Ignite Hot Water

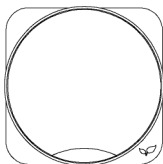
[www.inspirehomeautomation.co.uk](http://www.inspirehomeautomation.co.uk)



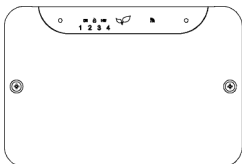
## CAUTION: High Voltage Wires

**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



Ignite Touch  
Thermostat \*



1 x Ignite Touch  
Receiver



Screw Pack \*



AA Batteries \*

### TOOLS REQUIRED



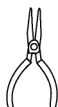
Drill + 5mm  
Drill Bit



Phillips  
Screwdriver



Flat Blade  
Screwdriver



Long  
Nose Pliers



Boiler  
Manual



Multimeter



Smart  
Device



Wire  
Cutters

\* If Applicable, and quantity will vary depending upon variant.

## INTRODUCTION

The **Ignite - Touch 2ch series** is designed to control a typical domestic central heating system. The system can switch two independent channels, Central Heating and Hot Water (if applicable).

The **Ignite - Touch 4ch series** is designed to control a zoned domestic central heating system. The system can switch up to four independent channels. This would usually be a combination of Central Heating, Hot Water, Towel Rails and/or Pumps (if applicable).

**The Ignite Touch system can be either Wireless (Battery Powered) or Wired 12v (From Receiver) - See Installation - Thermostat on page 13.**

If you do not have a typical gas / oil fired central heating system, **please scan the QR code at the front of the manual for further assistance.**

The central heating / hot water channels are switched on and off in response to commands from the supplied Thermostat or Remotely via our Apps.

## SPECIFICATION

### Ignite Touch Receiver

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

Switch Type: [2ch Series: 1 x (HW) SPDT, 1 x (CH) SPST] / [4ch Series: 4 x SPST]

Switch Rating: 3 Amps Total load on all Channels

Radio Frequency: 2.4 GHz (Wi-Fi) & 868 MHz (Thermostat to Receiver)

Dimensions: 156 x 105 x 29 mm

### Ignite Touch Thermostat

Power Supply: 2 x AA Alkaline Batteries or 12v (From Receiver)

Controllable Temperature Range: 1.5 – 30.0°C

Humidity Sensing Range: 10 – 90% Rh

Motion Sensing Range: 70°@ 3 Metres - Horizontal, 20°@ 3 Metres - Vertical

Frost Protection: 1.5 - 30.0°C

Radio Frequency: 868 MHz (Thermostat to Receiver)

Dimensions: 105 x 105 x 25 mm

## WIFI SIGNAL

**Please start by checking the Wi-Fi strength** before locating the receiver to ensure it can connect to the Internet. To test, connect your phone to the property's Wi-Fi, place the phone where the receiver is to be installed for 30 seconds then check how many Wi-Fi bars you have. If during this time there are less than two bars, find a new position or consider installing a Wi-Fi extender.

**Scan the QR code at the front of the manual for further assistance.**

## RADIO SIGNAL

### Only Applicable for Wireless Install...

Consideration for the location of your Thermostat and Receiver, and the affect 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.

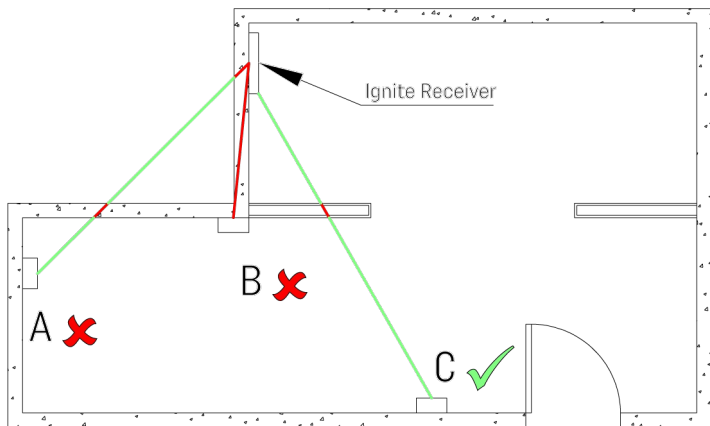
Unlike the Receiver, that connects via Wi-Fi, the Thermostat connects to the Receiver via its internal low power radio (RF).

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.

**Fig 1**, shows three possible Thermostat locations, and the path that the signal will travel to communicate between the Receiver and the Thermostat. If the Thermostat is located at "A", the signal will need to go through two external walls.

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.

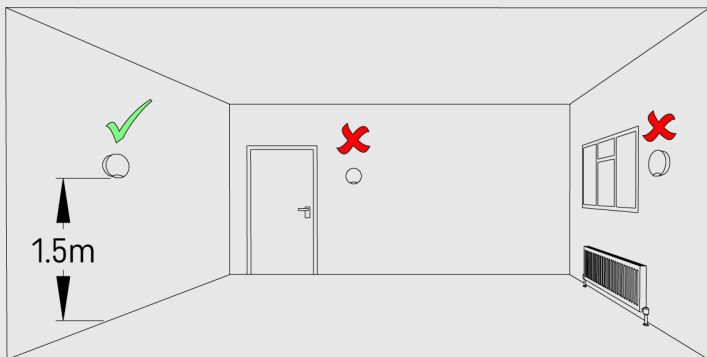
If the Thermostat is located at "C", it will have a significantly better signal as it will only have to travel through one internal wall.



**Fig 1**

## LOCATION

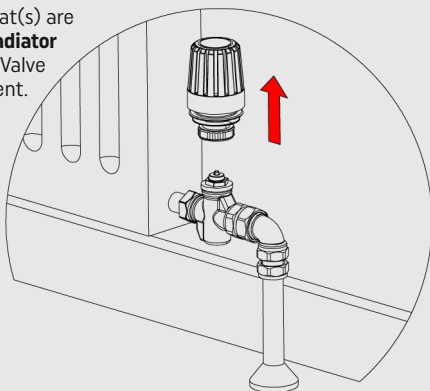
As shown in **Fig 2**, ideally the Thermostat should be mounted on an internal wall at a height of 1.5m and in a high traffic area. Avoid locating near draughts such as the front door or windows. Do not position above heat sources and avoid direct sunlight.



**Fig 2**

The rooms where the Thermostat(s) are 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 3**

## INSTALLATION

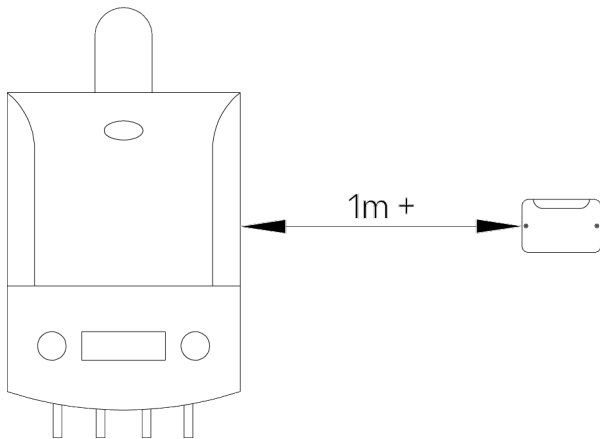
Before commencing work, please consider if you will be installing the system as **Wired** or **Wireless**.

If installing the thermostat as **Wired**, please **refer to page 14 before commencing installation**. Both **Wired** and **Wireless** installation requires the Receiver.

The Receiver can be installed anywhere in the property providing you are able to run cables, this can help improve RF signal connection strength. This is beneficial for properties where the boiler is located in the loft/basement and outbuildings.

**Note: RF struggles to connect through thick walls.**

Please review **Fig 4** for positioning of the receiver, to avoid potential radio signal issues, place the Receiver at least 1 metre away from metal objects such as boilers, hot water cylinders etc. To avoid potential water damage, do not install underneath the boiler. To prolong the life of the Receiver, avoid installing in hot ambient environments such as airing cupboards and **ensure adequate ventilation** around the unit.



**Fig 4**

### 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 run in suitable trunking, 1mm<sup>2</sup> cable is recommended and no bare copper should be visible outside the connector block. All wiring must conform to the current IEEE wiring regulations.

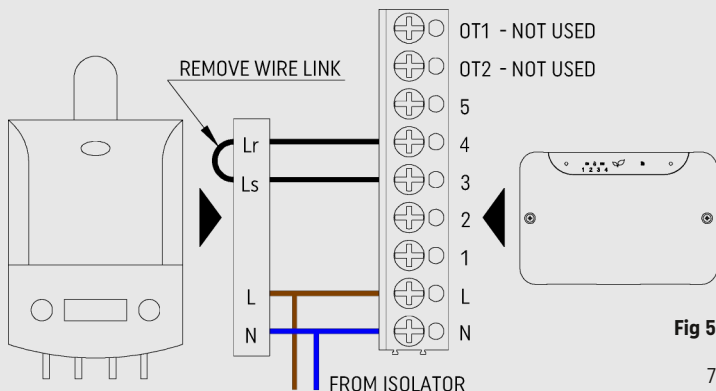
The Ignite Touch Receiver is a class 2 device and does not require an earth. You may need to join existing earth leads together using a terminal strip to maintain earth continuity to the rest of the circuit. Ensure that the circuit is protected by a 3 amp fuse.

## INSTALLATION - 2CH SERIES COMBI BOILER WITHOUT ROOM THERMOSTAT OR TIMER

**(No hot water cylinder, Boiler switches on when hot tap is opened)**

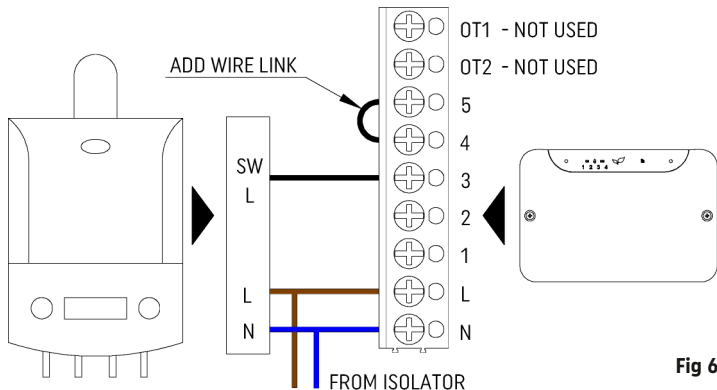
Install the Ignite Receiver as described in **Installation - Receiver** on page 13.

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 5**. 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 6**, remembering to remove the link wire in the boiler (if required) and add a link wire between terminals 4 & 5 on the Receiver.

Proceed to **Installation - Thermostat** on page 13.



**Fig 6**

## 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**". The existing wiring can re-used - please see page 14.

### 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 - Receiver** on page 13.

Install the previously identified wires into the appropriate terminals on the Ignite Receiver. If 4 wires are present, see **Fig 5**. If only 3 wires, then see **Fig 6**, remembering to add the link wire between terminals 4 & 5.

Proceed to **Installation - Thermostat** on page 13.



## 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)

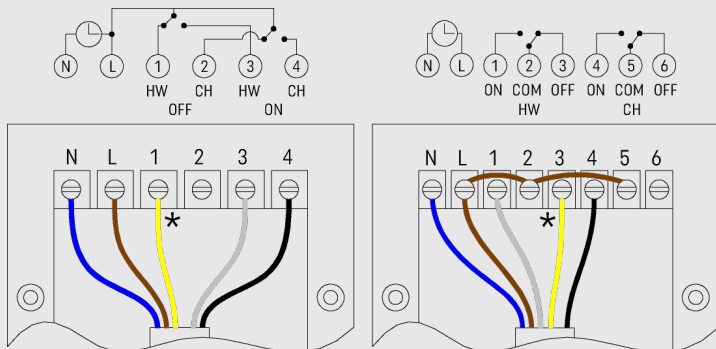
Usually 5 wires to existing programmer, Live, Neutral, CH ON, HW ON, HW OFF. (CH OFF not used)

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 7).**

**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.

**Fig 7**

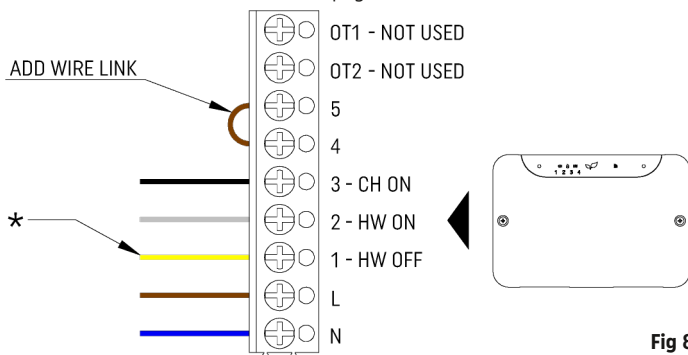
\* Note: if you have an S-Plan system, this cable will not be present

Once each wire is identified, remove the existing wires from the old programmer and install the new Receiver as described in **Installation - Receiver** on page 13.

Install the previously identified wires into the appropriate terminals (see **Fig 8**). 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 Receiver.

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

Proceed to **Installation - Thermostat** on page 13.



**Fig 8**

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

### **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. These wires can be used to power the Thermostat - see page 14.

## **INSTALLATION - 4CH SERIES**

The Ignite receiver can control up to four zones. These can be either hot water cylinders(s) or heating zones.

Heating zones are controlled by the supplied Thermostat(s). Each Thermostat will be paired to a zone, starting from zone 1 . e.g. if you have purchased two Thermostats, they will be paired to zones 1 & 2. Three Thermostats would be paired to zones 1 ,2 & 3 etc. Any remaining zones without Thermostat will default to timed (Hot Water) zones.

## SYSTEM/COMBI BOILER WITH EXISTING CONTROLS

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

A multi zone setup will usually be wired as an "S Plan Plus" (One 2 port zone valve per zone, usually near the hot water cylinder or boiler)

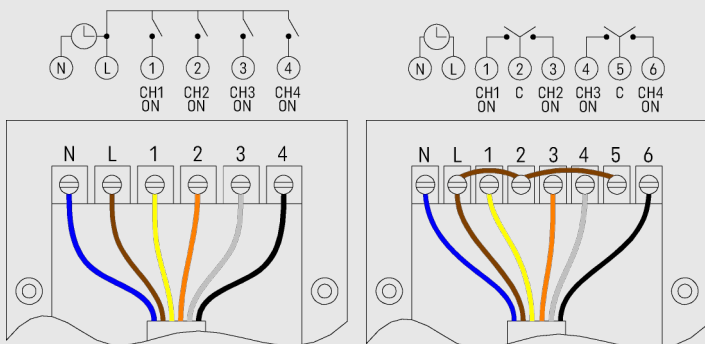
There will be 2 wires for power and 1 additional wire per zone to the existing programmer. e.g. Live, Neutral, CH1, CH2, CH3, HW.

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 9**

Using this schematic, identify and label each wire according to its function, e.g. Live, Neutral, CH1, CH2, HW 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.

Once each wire is identified, remove the existing wires from the old programmer and install the Receiver as described in Installation - Receiver on page 13.



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

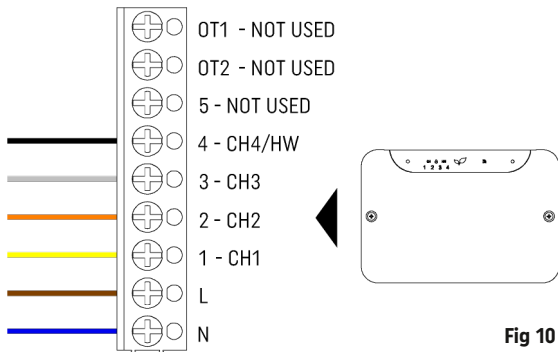
**Fig 9**

Install the previously identified wires into the appropriate terminals (see **Fig 10**). For example, the Yellow wire in terminal 1 of the old programmer is identified as "CH1 ON" from the existing programmer schematic. This would go into terminal 1 "CH1" on the new Ignite Receiver.

**NOTE: that the "HW indicator LED" refers to Zone 4, therefore we strongly recommend that the Hot Water Zone is wired to terminal CH4/HW.**

For example. If you have an existing 3 zone timer, and zones 1 and 2 are heating zones and hot water is on zone 3. You would transfer zones 1 & 2 to CH1 and CH2, but zone 3 (The hot water zone) would be moved to CH4/HW in the inspire system. CH3 in this case would not be used.

Proceed to **Installation - Thermostat** on page 13.



**Fig 10**

### **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.

These wires can be used to power the Thermostat - see page 14.

## **NEW HEATING SYSTEM WITHOUT EXISTING CONTROLS**

If this is a new heating system and you do not have any existing controls, we would recommend this is wired as an "S Plan" (2ch series) or "S Plan Plus" (4ch series).

**Scan the QR code at the front of the manual for further assistance.**

## INSTALLATION - RECEIVER

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

If you do not have an existing back box, use the receiver 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 receiver to the wall using appropriate wall plugs and screws.

**WARNING be aware of any buried cables before drilling!**

## INSTALLATION - THERMOSTAT

Twist the thermostat anticlockwise to release from its back plate (see **Fig 12**).

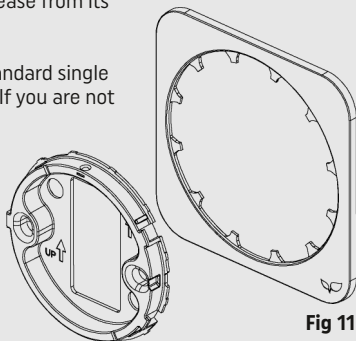
The Thermostat backplate will cover a standard single gang backbox, use M3.5 screws provided. If you are not covering a back box, then you can cut the cover piece and discard (see **Fig 11**).

Secure the Thermostat backplate to the wall using supplied screws and wall plugs.

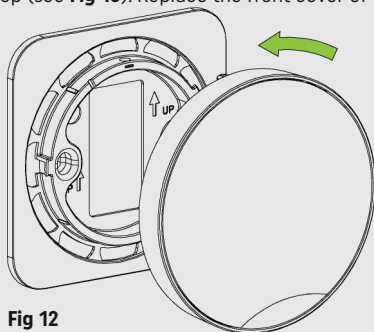
The Thermostat can either be **Wired or Wireless**.

### Wireless Installation

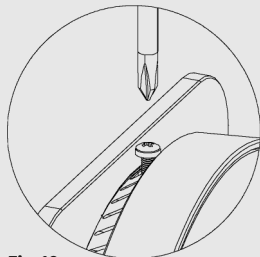
Unwrap the two supplied batteries and install into the back of the Thermostat. Rotate the thermostat back onto the backplate and secure with the screw at the top (see **Fig 13**). Replace the front cover of the Ignite Touch Receiver.



**Fig 11**



**Fig 12**



**Fig 13**

## Wired Installation

The supplied batteries are **not** required.

Using new, or existing cabling, ensure there is 10mm of exposed copper at the Thermostat and 8mm at the Receiver. Connect S1 and S2 on the Thermostat (see **Fig 14**) to S1 and S2 on the Receiver (see **Fig 15**). These can be linked together if you are installing multiple Thermostats, or individually wired back to the Receiver. If necessary, join the wires in a wiring centre or terminal strip.

**Important** if re-using existing cabling, **ENSURE** that this is not connected to the 230v system **BEFORE** connecting to the Thermostat or Receiver. **230v will cause permanent damage to the units!**

After the wiring has been completed, fit the Thermostat to the wallplate and secure the screw at the top (see **Fig 13**), replace the front cover of the Ignite Touch Receiver and secure using the two screws.

**Scan the QR code at the front of the manual for further assistance.**

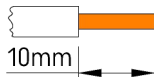


Fig 14

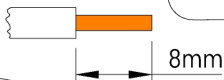
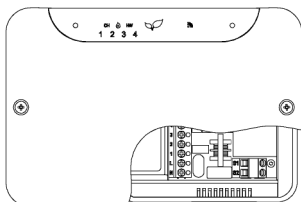
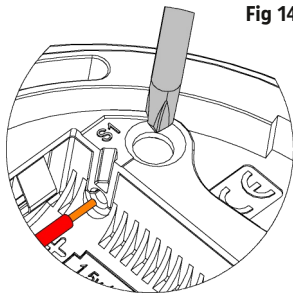
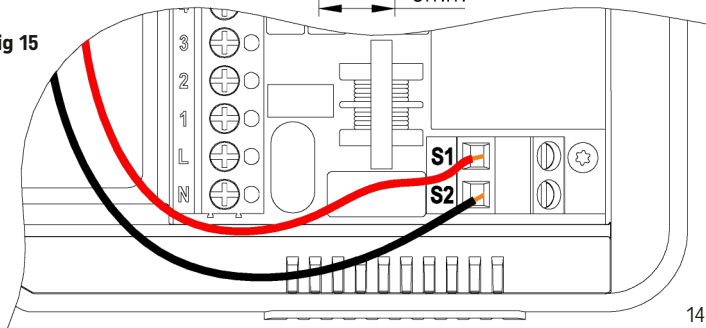
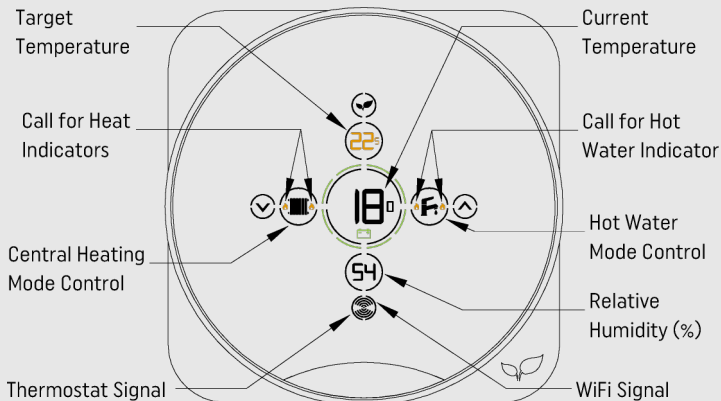


Fig 15

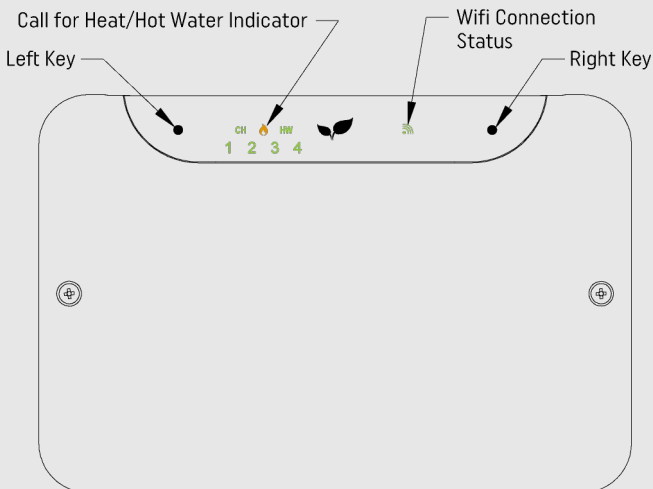


## IGNITE TOUCH THERMOSTAT



**Fig 16**

## IGNITE TOUCH RECEIVER



**Fig 17**

## TESTING THE SYSTEM

### Signal

Touch the Thermostat to illuminate the display and ensure there are at least two signal bars for both the Wi-Fi and Thermostat signal (see **Fig 16**).

### Central Heating and/or Hot Water outputs

Press and hold both keys on the Receiver for 5 seconds. '1' and the 'WiFi' light will slowly flash. Cycle the left key until '1,2,3 and 4' all flash at the same time, then press the right key.

The unit is now in **test mode** and either 'CH' (2ch series) or '1' (4ch series) will flash.

- Use the left key to switch between zones (CH / HW or 1 – 4).
- Use the right key to switch the zone On and Off (The flame will light when the zone is on).
- You can exit this mode by pressing and holding both keys. Test mode will automatically exit after 10 minutes with no key presses.

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

### Thermostat

Touch the Thermostat to illuminate the display. Press the radiator key until Man is highlighted below. Press and hold the up arrow until the CH flames light up. Check that the CH light is flashing on the Receiver.

**If one of the above tests fail, then please scan the QR code at the front of the manual for further assistance.**

## CONNECTING THE SYSTEM

Search "Inspire Home Automation" in the **app store**, install our app, then follow the instructions. If this is an additional Thermostat, Tap the menu icon, then select Tools -> Register Thermostat from within the app. Or scan the QR code at the front of the manual for further assistance.



### Important

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