



Ignite - Wireless 4ch
rev 2.0

Ignite Wireless 4ch-1
Ignite Wireless 4ch-2
Ignite Wireless 4ch-3
Ignite Wireless 4ch-4
Ignite Hot Water

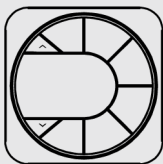
www.inspirehomeautomation.co.uk



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 Wireless
Thermostat*



1 x Ignite Wireless
Receiver



Screw Pack* &
Cable Clamp



AA
Batteries*

TOOLS REQUIRED



Drill + 5mm
Drill Bit



Phillips
Screwdriver



Flat Blade
Screwdriver



Long
Nose Pliers



Boiler
Manual



Multimeter



Smart
Device



Wire
Cutters

*Quantity will vary depending upon variant.

INTRODUCTION

The Ignite Wireless 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).

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

Central heating channels are switched on and off in response to commands from the appropriate Thermostat.

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

Once installed, each heating zone 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:	4 x SPST
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 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(s) 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.

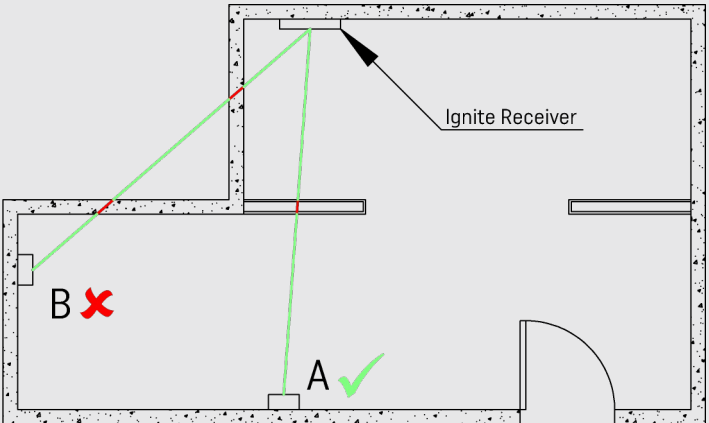


Fig 1

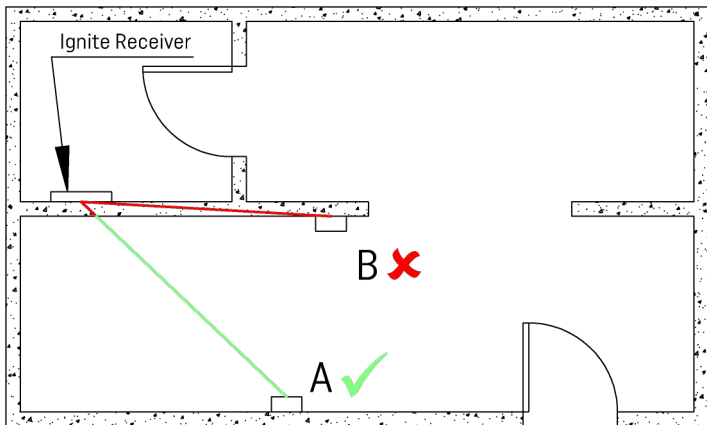


Fig 2

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.

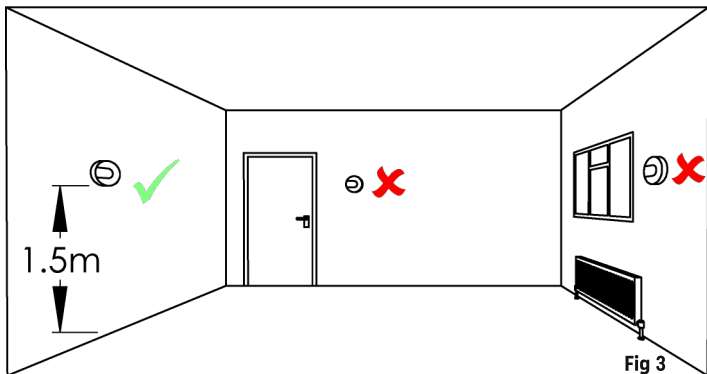


Fig 3

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 rooms where the Thermostats 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.

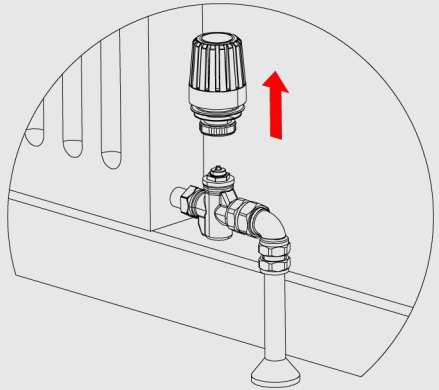


Fig 4

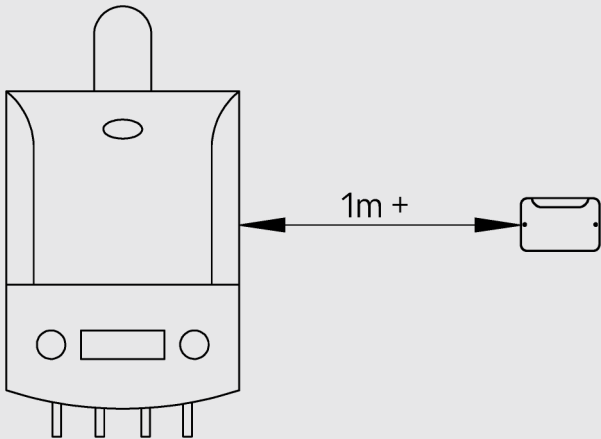


Fig 5

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.

INSTALLATION

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

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.

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 6). 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 Inspire Ignite Receiver as described in Installation - Wall Mount on page 10.

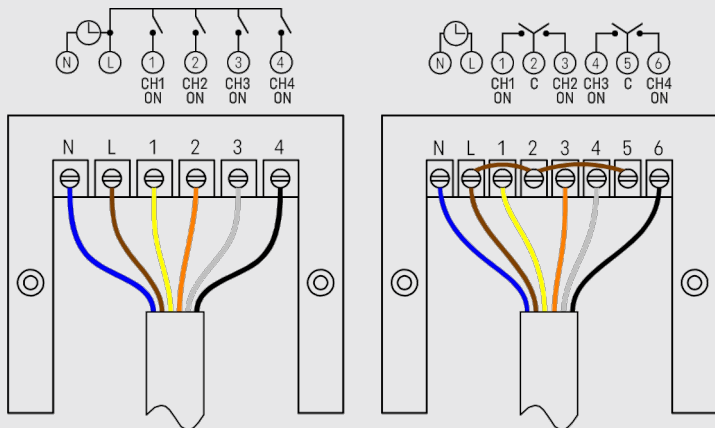


Fig 6

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

Install the previously identified wires into the appropriate terminals (see Fig 7). 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 The Wireless Thermostat(s) can also control the hot water function e.g. Off, Auto, Manual. For this to work correctly, the hot water zone **MUST** be wired into Zone 4 on the Ignite system.

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.

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

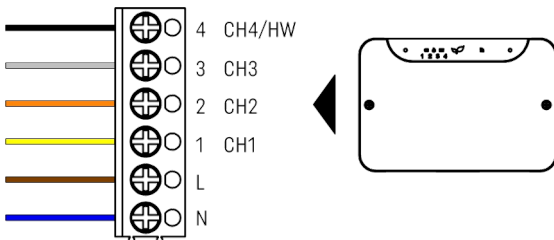


Fig 7

Important

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

SYSTEM/COMBI BOILER WITHOUT EXISTING CONTROLS

If this is a new heating system and you do not have any existing controls, we would strongly recommend this is wired as an "S Plan Plus" system. 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 8**)

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 9**)

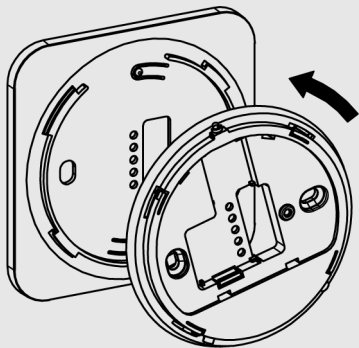


Fig 8

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

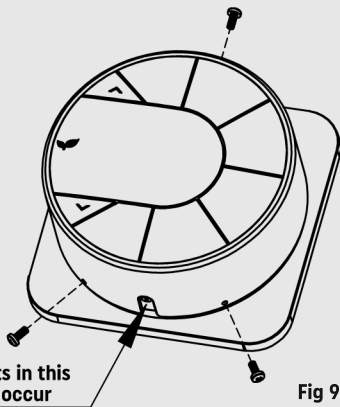


Fig 9

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

If one of the below tests fail, see "Troubleshooting" on page 16.

Signal

Press any key 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, a number (1-4) and CH will flash, the flame will illuminate and the unit will call for heat on that central heating zone.

Check that the boiler has fired up and the correct zone valve has opened.

Press the 'CH MODE' key again to turn this central heating zone off.

Repeat the above two steps for each additional Thermostat you have in this system.

Hot Water (if applicable)

On any Thermostat, 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 thermostat to max for this test.

Test Mode

This allows you to independently test each zone. e.g. if you have a timed zone(s) not controlled by a Thermostat.

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 should show just '1' flashing.

Use the left key to switch between zones.

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.

CONNECTING THE SYSTEM

The final step is to add the system to an online account.

Android / iPhone

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.

Windows / Mac

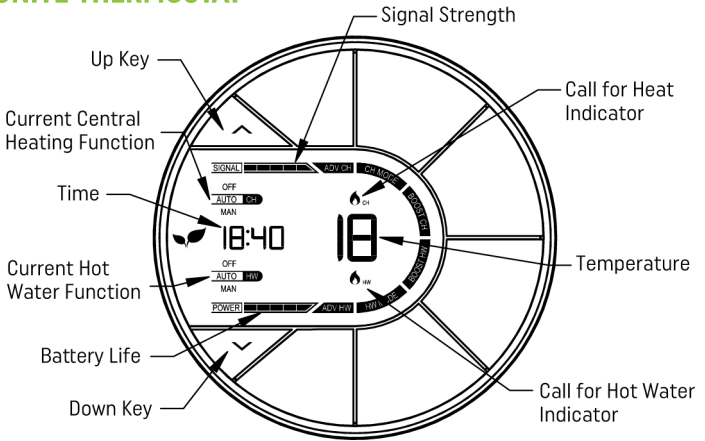
Follow our simple, 3 step, online setup.

To start, please 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

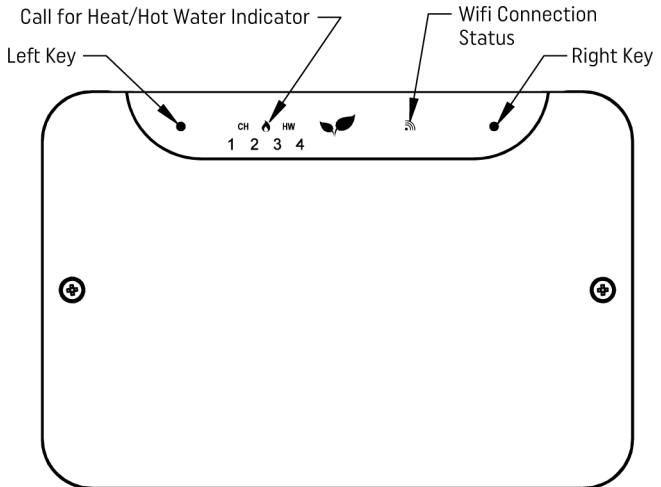


Fig 10

BASIC FUNCTIONS (HEATING)

Off

This heating zone will be switched off.

Auto

This heating zone 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

This heating zone will be switched on and maintain this zone at the set temperature.

Boost

This is used if you would like to switch this zone 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.

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

Adjusting the Temperature (not applicable when in Off)

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

Adjusting the Mode

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 zone 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 system 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.

SETTING THE CLOCK

If you have an Internet connection, this will be done automatically. If you are outside of the United Kingdom, you can specify your time zone on the 'Setup' page within your online account. To set the clock manually, press, and hold the 'BOOST CH' and 'BOOST HW' keys. Use the '^' and 'v' keys to set the hours, then press 'ADV CH' this will take you to the minutes and then the days (1 = Sunday, 7 = Saturday) which are set in a similar way. To exit, press the 'BOOST CH' and 'BOOST HW' keys simultaneously.

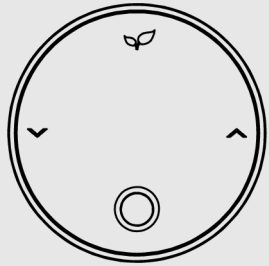
ALSO AVAILABLE

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

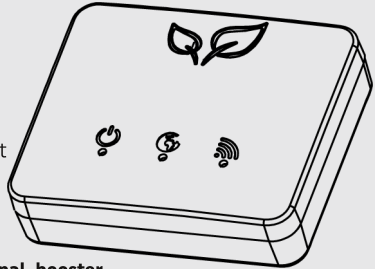
www.inspirehomeautomation.co.uk/smart_sensor



Ignite Signal Booster

Is your signal strength poor on one or more of your Thermostats?
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



VIDEO TUTORIALS

Please go to www.inspirehomeautomation.co.uk/videos to get started on using your new Inspire system.

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.