MISTRAL

Wi-Fi Wireless Programmable Room Thermostat With Heating & Hot Water Control
ESRTP8W

Installation Instructions

Warning: *Always isolate the AC mains supply before installing. This product must be fitted by a competent person and installation must comply with the guidance provided in the current editions of BS7671 (IEE wiring regulations) and part 'P' of the building regulations*

Please ensure you register your thermostat for extended warranty within 30 days of purchase

Installation

Installation Safety Instructions
The ESi MISTRAL must be installed by a suitably qualified person in accordance with the latest IEE Wiring Regulations. Isolate the mains supply before starting installation. Please read all instructions before proceeding.

Ensure the fixed wiring connections to the mains supply are via a fuse rated at not more than 3 amps and Class 'A' switch having a contact separation of a minimum of 3mm in all poles. The recommended cable sizes are 1.0mm sqr or 1.5mm sqr. No earth connection is required as this product is double insulated but ensure continuity of earth throughout the system.

General Safety Instructions
This product complies with the essential requirements of the following EC Directives
- Electromagnetic Compatibility Regulations 2016
- Electrical Equipment (Safety) Regulations 2016
- Low Voltage Directive 2014/35/EU
- EC Marking Directive 2014/30/EU

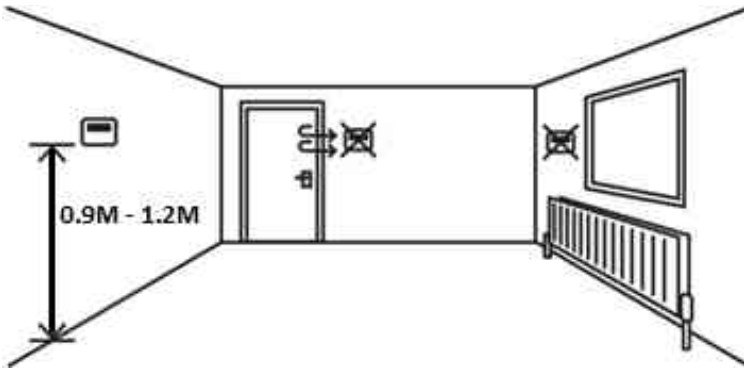**Please leave all instructions with the end user for future reference.**

Maintenance
Always isolate the mains supply before commencing any work, servicing, or maintenance on the system. Please read all instructions before proceeding.

Arrange for an annual maintenance and inspection schedule to be conducted by a qualified person on every part of the heating and hot water system.
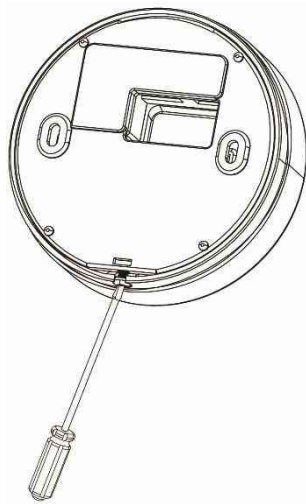
Installing Your ESi MISTRAL
The latest legislation for installing room thermostats states the thermostat must be positioned between 0.9m & 1.2m above floor level. It should be installed in a location where it is accessible, reasonably lit and free from extremes of temperature & draughts. Do not position your ESi MISTRAL near sources of heat such as radiators, lights, TV, direct sunlight or on an outside wall.
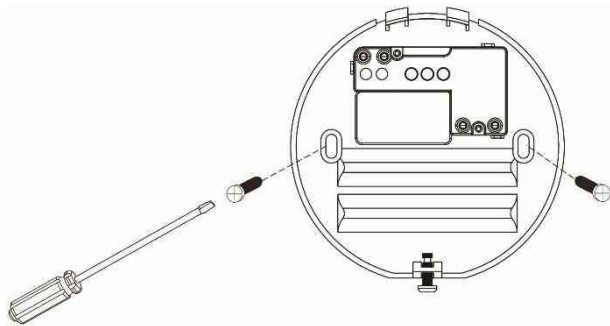
0.9M - 1.2M

Required During Installation
- Permanent 230V power supply to RF receiver.
- 2 x AA batteries (supplied)

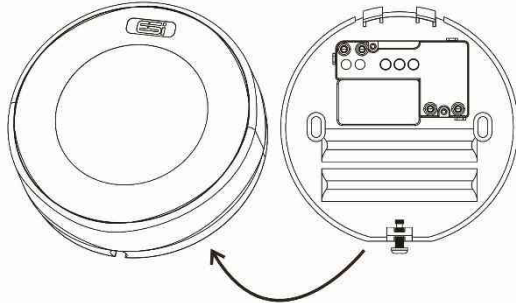Loosen the small screw at the bottom edge of your ESi Mistral and remove the rear cover.

If you would like to wall mount your thermostat, use the rear cover as a guide for your drill holes, then attach the rear cover to the wall.
Return your ESi Mistral to the rear cover and tighten the screw.

Installing/Changing Batteries
The battery compartment is situated on the back of your room thermostat. You must ensure the 2 x AA batteries are inserted the correct way around.

When you have inserted the batteries, re-attach the rear cover and tighten the screw.

RF Receiver

1. **Flame Button**
The outer ring of this button will illuminate red when the thermostat is demanding heat for radiators.
2. **Hot Water Button**
The outer ring of this button will illuminate green when there is a demand for hot water.
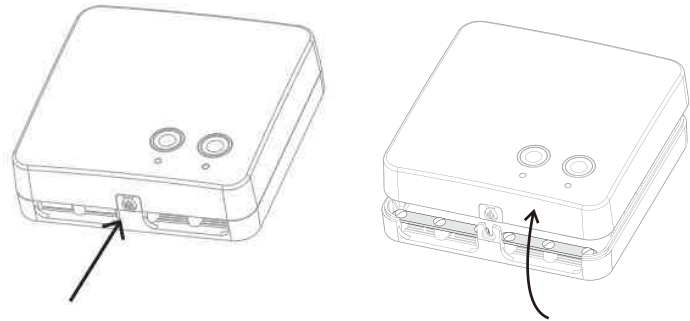3. **RF Comms LED**
This will be solid blue when RF comms are strong. The blue LED will flash if RF comms are lost; the thermostat & RF receiver must be re-paired.
4. **Power LED**
This LED will be red to indicate there is power to the RF receiver.

Preparing The Power Supply
- Find a suitable location close to the boiler.
- Loosen the screw at the bottom of the cover.

Installing The Cable
- Hinge open and remove the front cover to reveal the terminals on the back plate.
- Secure the back plate to a non-combustible flat surface or wall box.
- Install the wiring as shown in the wiring diagrams below.

Adding A Cylinder Thermostat
To achieve temperature controlled hot water, you can pair the ESCTP-RF cylinder thermostat to your ESi MISTRAL.

On your ESi MISTRAL hold the ►► button until the display shows RF SETUP.
Tap ►► and you will see a counter in the centre of the screen.
On your ESCTP-RF cylinder thermostat, remove the rear cover and hold the **PAIR** button inside the cylinder thermostat.
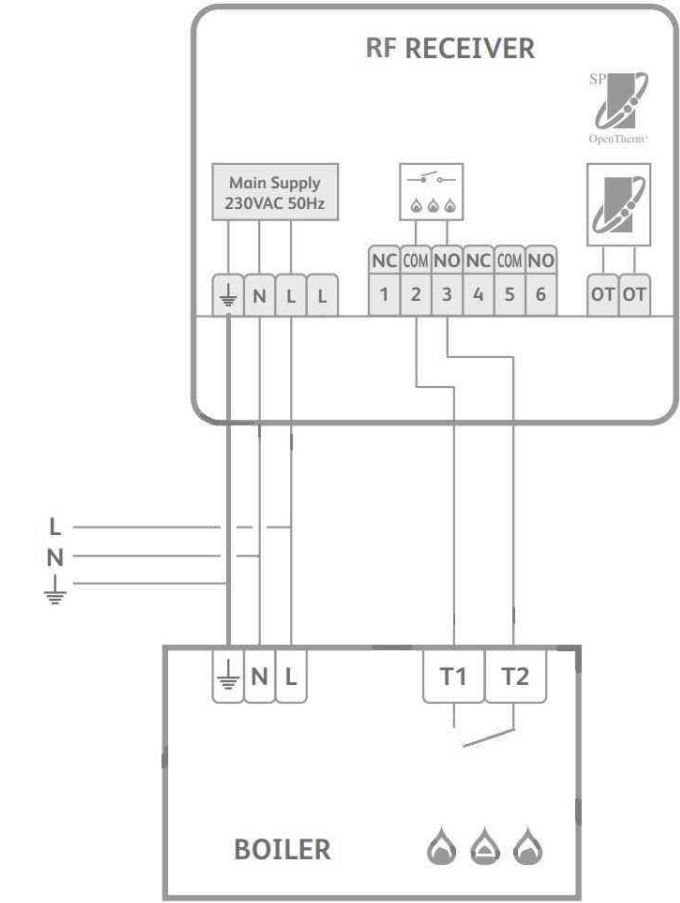When both thermostats are paired, your ESi MISTRAL will show SAVING.

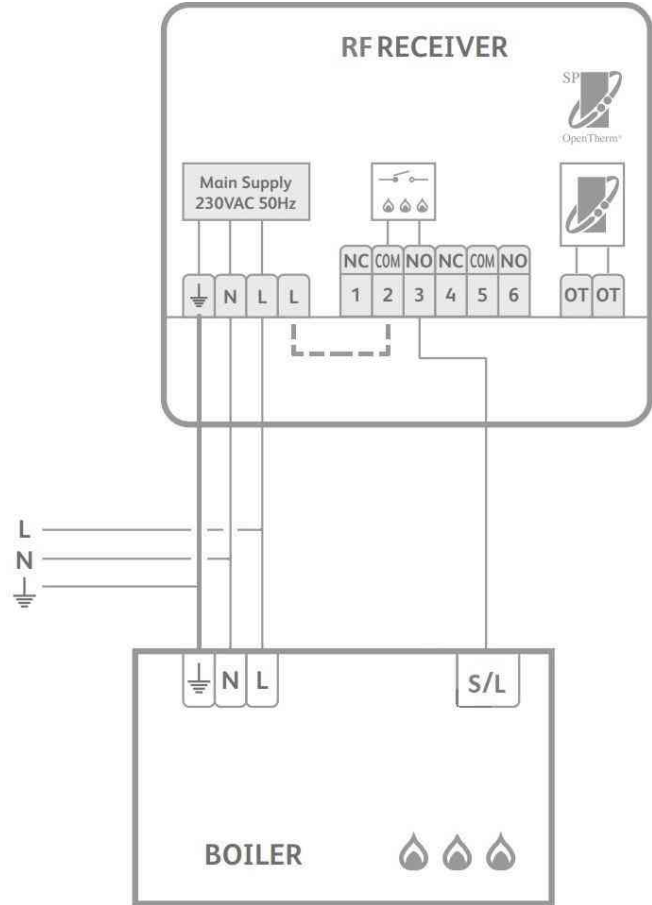**www.esicontrols.co.uk**

Wiring Diagrams

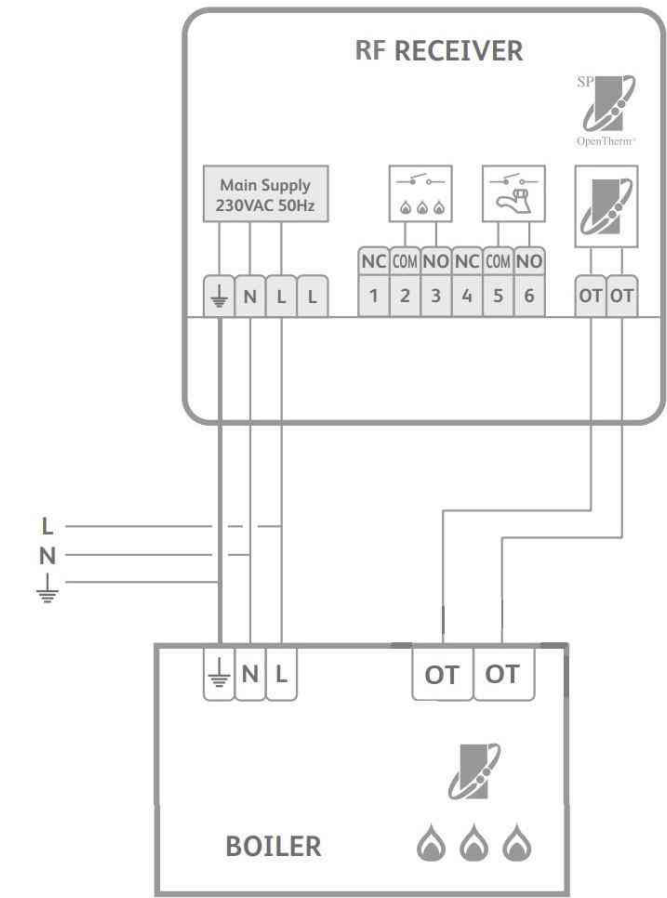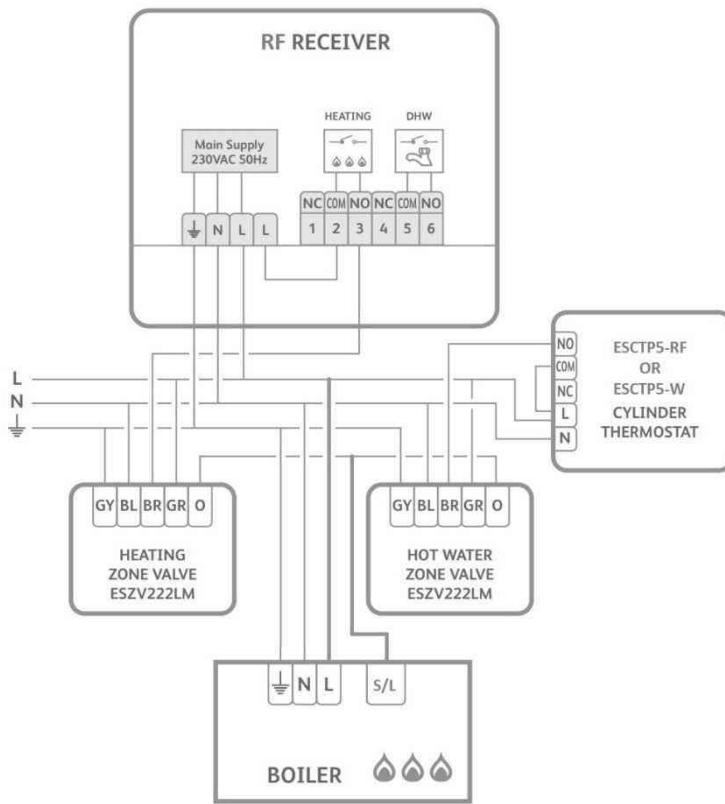To ensure the most economic use of gas, OpenTherm should be used wherever possible.

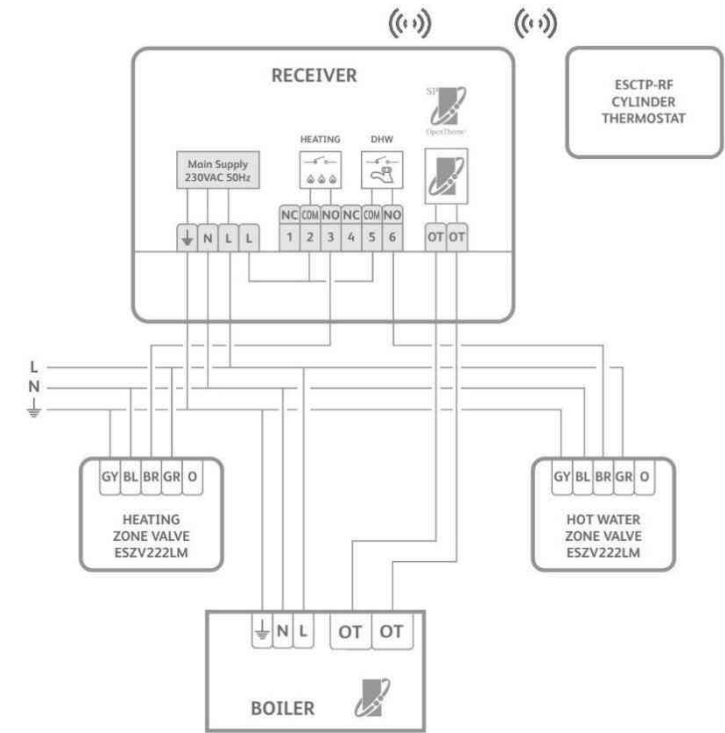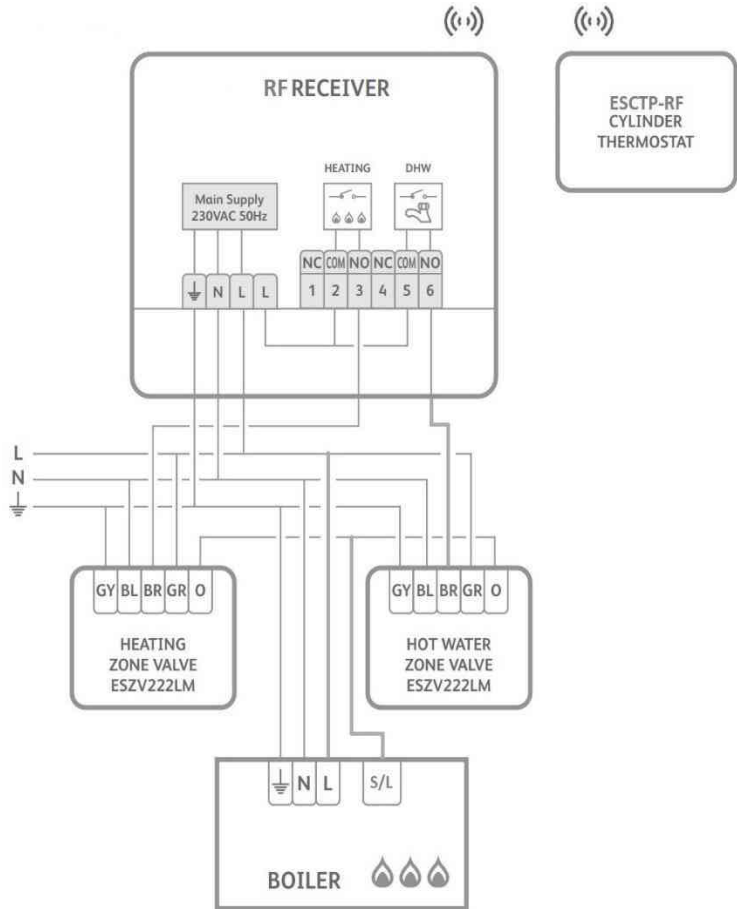### Volt Free Wiring

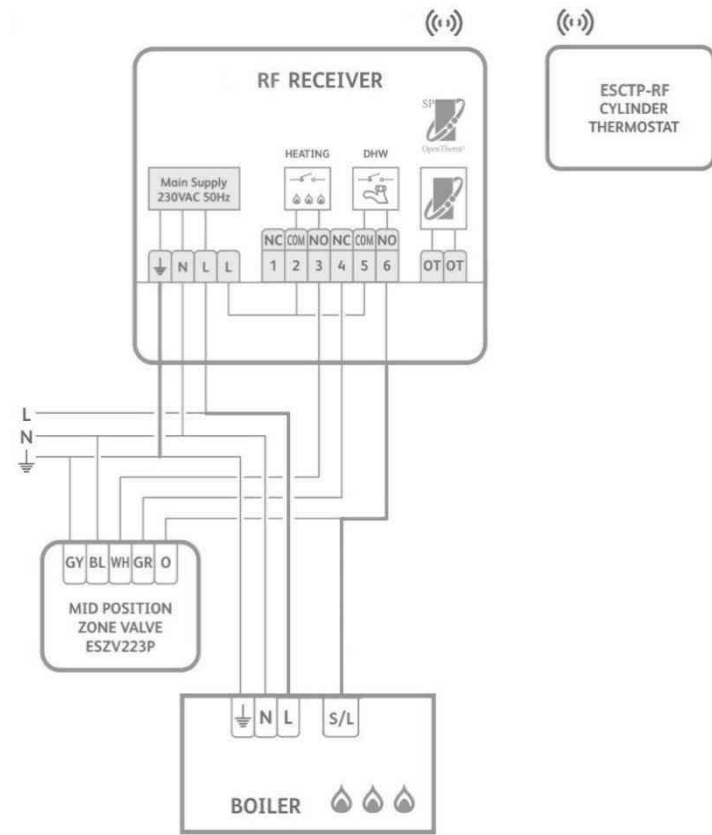### Switched Live Wiring
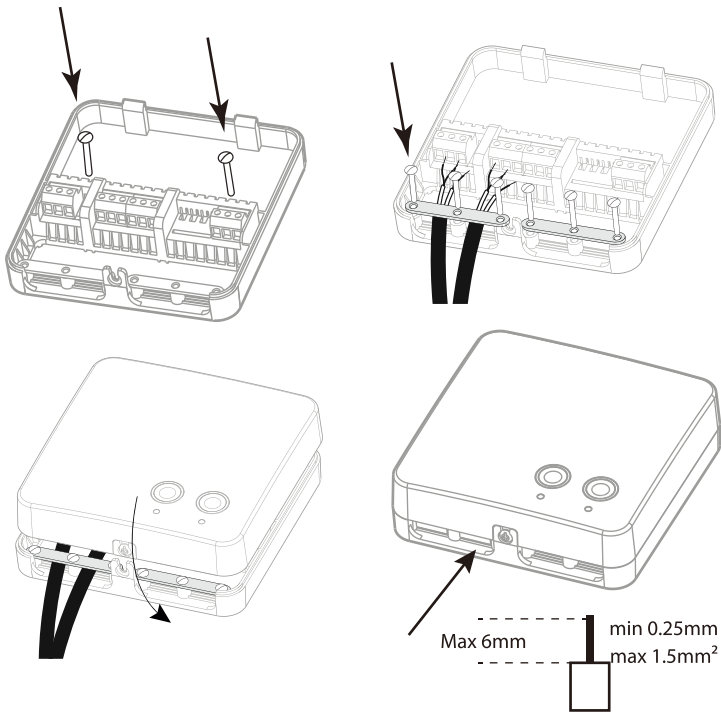

OpenTherm Wiring

S Plan Wiring

Y Plan Wiring

When you have completed the wiring as shown in the diagrams above, use the cable clamps to secure all surface wiring. Replace the cover by first locating the two lugs at the top and swing down. Re-tighten the screw to hold the cover securely in place.

Max 6mm

min 0.25mm
max 1.5mm²

Advanced Settings

RF Pairing
Your ESi MISTRAL will be pre-paired to your RF receiver. If this bond is lost, you will see RF COMMS LOST on your thermostat display. To re-pair, follow these steps.
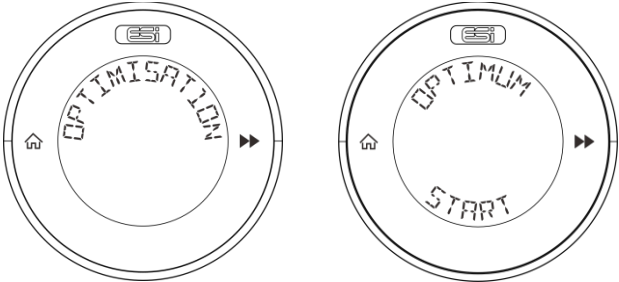
ON YOUR RF RECEIVER
Hold the hot water button until the heating button flashes red.

ON YOUR THERMOSTAT
Hold the ►► button until you can see RF SETUP on the display. This is the **Advanced Settings Menu**. Press the ►► button. Your thermostat and RF receiver will automatically pair.

Optimum And Delayed Start

Enter the **Advanced Settings Menu** as above. Turn the **DIAL** clockwise until you can see OPTIMISATION.
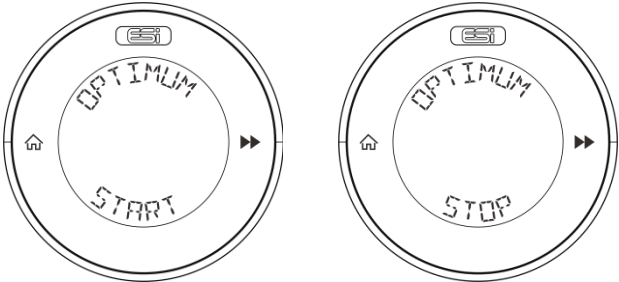
Press ►► & you will see OPTIMUM START. Use the **DIAL** to choose between:

- **OPTIMISATION OFF** – Delayed & Optimum Start will both be switched off
- **DELAY START ON** – Your thermostat can delay switching on your heating by up to 45 minutes, depending on the current room temperature and the SET temperature.
- **OPTIMUM START ON** – Your thermostat will bring your heating on early so the room temperature reaches your SET point at your program time.

Optimum and Delayed start cannot both be on at the same time.

Tap ►► to save your setting. Tap the **HOME** button to exit the menu.
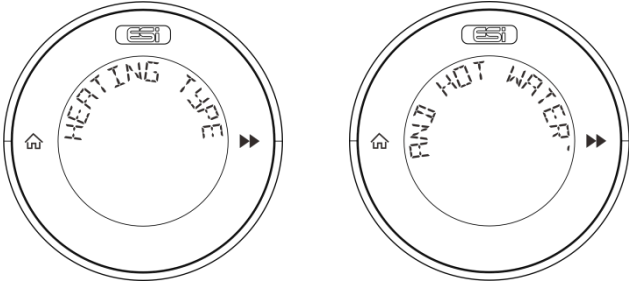
Optimum Stop

Enter the **Advanced Settings Menu** as above. Turn the **DIAL** clockwise & you will see OPTIMISATION. Press ►► & you will see OPTIMUM START.

Turn the **DIAL** clockwise to see OPTIMUM STOP Press ►► to enter Optimum Stop menu Use the **DIAL** to choose between ON & OFF.

Tap ►► to save your setting. Tap the **HOME** button to exit the menu.

Heat Only or Heating & Hot Water
The ESI MISTRAL is a 2 Channel room thermostat which can be used to regulate heating only (combi boilers) or heating & hot water (system boilers)
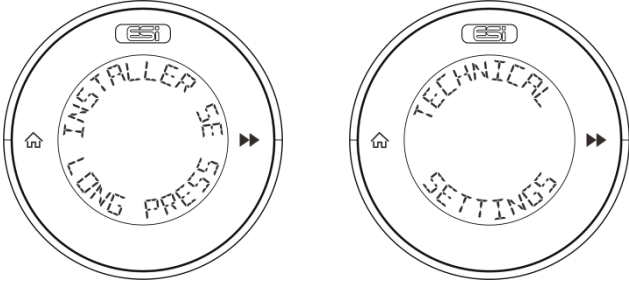

Enter the **Advanced Settings Menu** as above. Use the **DIAL** to select HEATING TYPE Tap ►►

Use the **DIAL** to choose between HEAT ONLY or HEAT AND HOT WATER

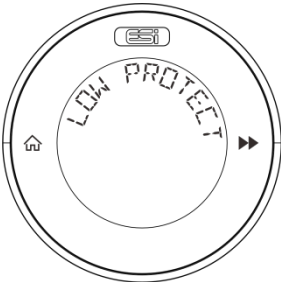Tap ►► to save your setting. Tap the **HOME** button to exit the menu.

Technical Settings
Low Temperature Protection

Enter the **Advanced Settings Menu** as above. Use the **DIAL** to navigate to INSTALLER SETTINGS. LONG PRESS
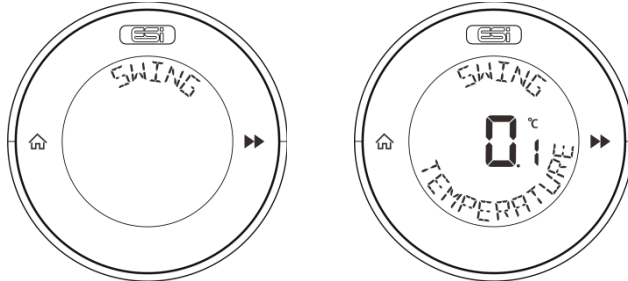
Hold ►► until the display shows TECHNICAL SETTINGS

Press ►►, the display will show LOW PROTECT This is the **Technical Menu**

Press ►►, the display will show LOW PROTECT TEMPERATURE and 5.0⁰C in the centre of the screen. Use the **DIAL** to select a temperature which you would like as a frost protection temperature setting (between 0.5⁰C and 20.0⁰C) Tap ►► to save your setting. Tap the **HOME** button until you get back to your home screen.
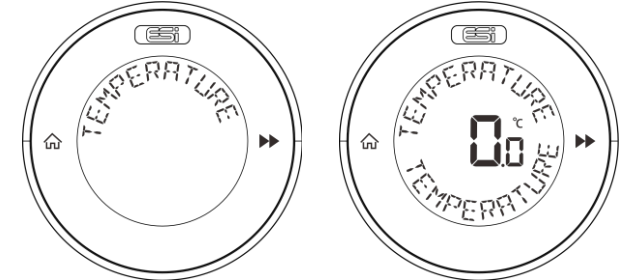

Swing

Enter the **Technical Menu** as above. Use the **DIAL** to navigate to SWING. Tap ►►

The display will show SWING TEMPERATURE with 0.1⁰C in the centre of the display.

Use the **DIAL** to adjust the **SWING** setting (0.1⁰C to 3.0⁰C). Tap ►► to save your setting. Tap the **HOME** button until you get back to your home screen.
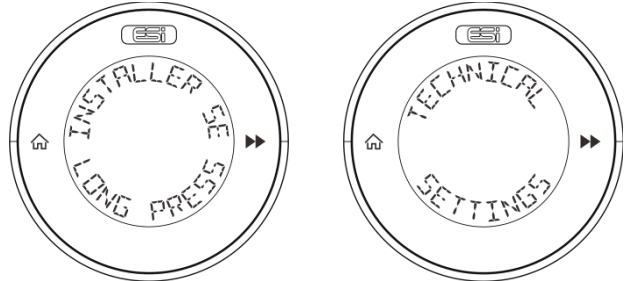
Manual Calibration

Navigate to the **Technical Menu** as above. Use the **DIAL** to select TEMPERATURE CALIBRATION

Press ►►, the display will show TEMPERATURE CALIBRATION at the top of the screen and 0.0⁰C flashing in the centre of the screen.
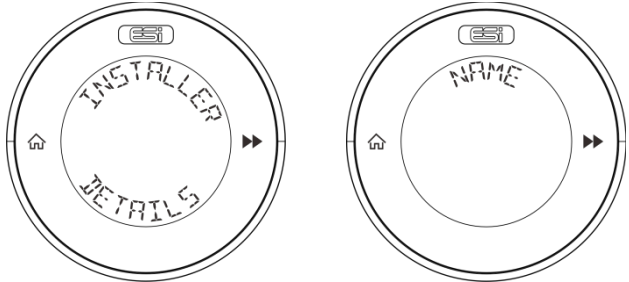

Use the **DIAL** to adjust the number in the centre of the screen (-3.0⁰C to +3.0⁰C). Tap ►► to save your setting. Tap the **HOME** button until you get back to your home screen.
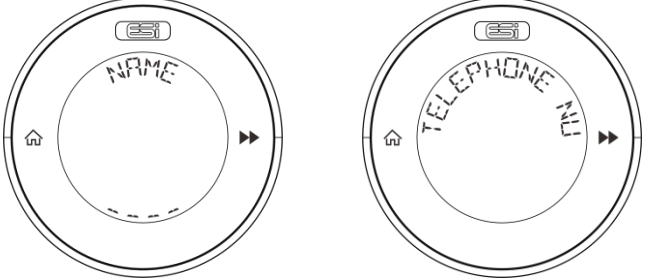

Entering Installer Details

Enter the **Advanced Settings Menu** as described earlier. Use the **DIAL** to navigate to INSTALLER SETTINGS LONG PRESS

Hold ►► until the display shows a TECHNICAL SETTINGS

Use the **DIAL** to scroll to INSTALLER DETAILS. Tap ►►

NAME will appear at the top of the screen. Tap ►►

You will see -- -- -- -- at the bottom of the display. Use the **DIAL** to scroll through letters and use ►► to move onto the next character (up to 12 characters)

When you have finished entering your name, tap ►►, you will see TELEPHONE NUMBER on the display. Press ►►

The display will show TELEPHONE at the top of the display and - - at the bottom of the display. Use the **DIAL** to scroll through the numbers and use ►► to move to the next number.
When you have finished, tap ►► to save your setting. Tap the **HOME** button until you get back to your home screen.
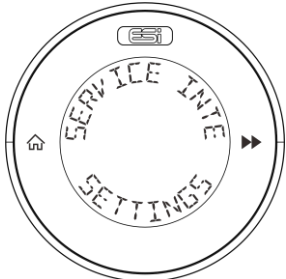
Landlord Settings

Enter the **Advanced Settings Menu** as described earlier. Use The **DIAL** to navigate to INSTALLER SETTINGS LONG PRESS LONG PRESS
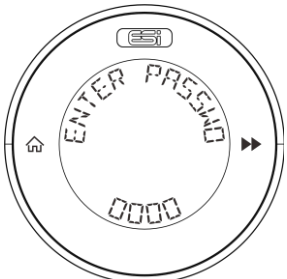
Hold ►► until the display shows. TECHNICAL SETTINGS

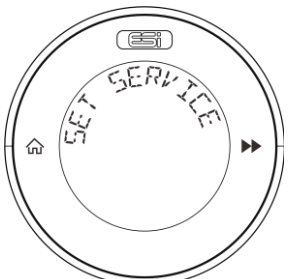Use the **DIAL** to select LANDLORD SETTINGS. Press ►►

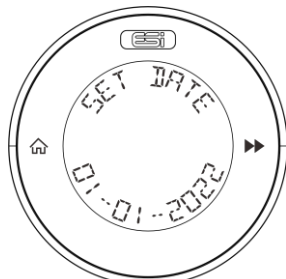The display will show SERVICE INTERVAL SETTINGS Press ►►

The display will show ENTER PASSWORD (PIN) at the top of the screen and 0000 at the bottom of the screen. Use the **DIAL** to scroll through the numbers and use ►► to move to the next number. The default PIN is 0000. When you have entered the PIN, tap ►►

The display will show CHANGE PASSWORD. If you don't want to change the PIN, use the **DIAL** to enter the Landlord Settings and move onto the next step below. To change the PIN, tap ►► and use the **DIAL** to scroll through the numbers and use ►► to move to the next number. When you have entered a new PIN press ►►

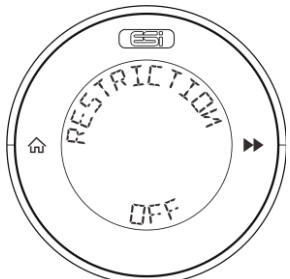The display will show SET SERVICE DUE DATE. Tap ►►

The display will show SET DATE at the top of the screen & a date at the bottom of the screen.

Use the **DIAL** to scroll through the numbers and use ►► to move to the next number.

Tap ►► The display will show RESTRICTION LEVEL. Tap ►►

The display will now show RESTRICTION LEVEL at the top of the screen and OFF at the bottom of the screen.

Use the **DIAL** to adjust the RESTRICTION LEVEL, see below for a guide to the different Levels

OFF – Landlord settings are switched off.
Level 1 – Installer details will be displayed on the screen.
Level 2 – Installer details will be displayed on the screen. Your ESi MISTRAL will only provide heat for 45 minutes per hour after the due date.
Level 3 – Installer details will be displayed on the screen. Your ESi MISTRAL will only provide heat for 30 minutes per hour after the due date.
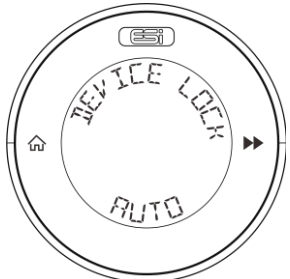**Level 4 -** Installer details will be displayed on the screen. Your ESi MISTRAL will only provide heat for 15 minutes per hour after the due date.
Tap ►► to save your setting. Tap the **HOME** button until you get back to your home screen.

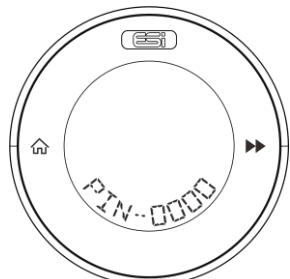### Device Lock - Partial Lock

Tap ►► and use the **DIAL** to navigate to DEVICE LOCK. Tap ►►. You will see PARTIAL at the bottom of the screen.
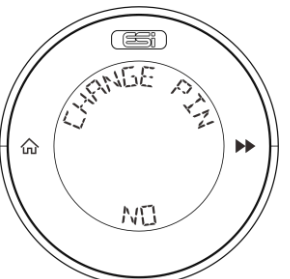
Tap ►► and use the **DIAL** to select AUTO or MANUAL. Tap ►► to

Choosing **AUTO** will lock your thermostat to your program settings. Choosing **MANUAL** will lock your thermostat without running any programs.
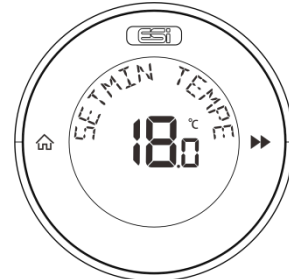

The bottom of the display will show PIN 0000. . Use the **DIAL** to scroll through the digits & ►► to move to the next digit When you have entered your PIN, Tap ►►
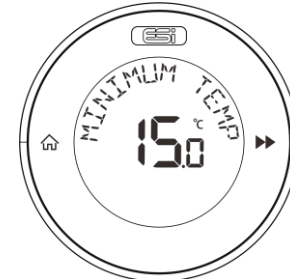
The screen will show CHANGE PIN at the top, and NO at the bottom of the screen . Use the DLAT to select YES or NO
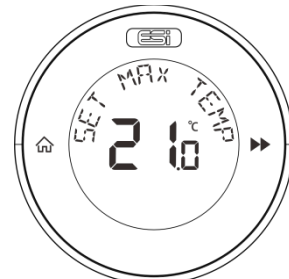This should be DIAL

If you would like to change your PIN now, select YES and Tap ►►. Use the **DIAL** to select the digit & ►► to move to the next digit and save.

SET MIN TEMPERATURE will show at the top of the display & a temperature in the centre of the display e.g. 18.0⁰C.

Use the **DIAL** to set a MINIMUM TEMPERATURE, e.g. 15⁰C. Tap ►► .

SET MAX TEMPERATURE will show at the top of the screen screen & a temperature in the centre of the screen e.g. 21.0⁰C.

Use the **DIAL** to set a MAXIMUM TEMPERATURE e.g. 22.0⁰C. Tap ►► The The display will return to to your HOME screen.
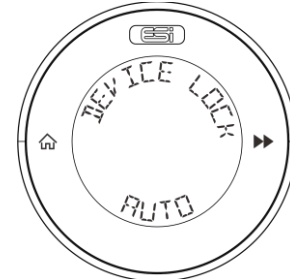
Pressing any of the buttons will show DEVICE LOCK at the top of the screen. You will be able to change the SET temperature using the **DIAL** between the minimum & maximum temperatures set above.
To disable Partial Lock, press the **MODE BUTTON** and enter the PIN using the **DIAL** to select numbers and ►► to confirm.

Device Lock - Full

Tap ►► and use the **DIAL** to navigate to DEVICE LOCK. Tap ►► & you will see FULL at the bottom of the screen.

Tap ►► and use the **DIAL** to select AUTO or MANUAL Tap ►► to confirm

Choosing **AUTO** will lock your thermostat to your program settings. Choosing **MANUAL** will lock your thermostat without running any programs.
Your ESi Mistral will return to your HOME screen. Pressing the buttons will show DEVICE LOCK at the top of the screen. You will not be able to change the SET temperature using the **DIAL.**
To disable Full Lock, press the **MODE BUTTON**, and enter the PIN using the **DIAL** to select numbers and ►► to confirm.

Hot Water Priority
If you have installed the RF receiver using OpenTherm, you can select Hot Water Priority and choose between boiler or heat pump.
- Hold the ►► button until you can see RF SETUP
- Use the **DIAL** to select HEATING TYPE
- Press the ►► button
- Use the dial to select HEAT AND HOT WATER
- Press the ►► button
- The display will show HOT WATER PRIORITY
- Use the dial to choose between YES & NO
- Press the ►► button
- Tap the HOME button to exit the menu

Boiler Or Heat Pump
- Hold the ►► button until you can see RF SETUP
- Use the **DIAL** to scroll to OPENTHERM PARAMETERS
- Press the ►► button
- You will see CONTROL on the display. Press the ►► button
- Use the dial to choose between BOILER or HEAT PUMP
- Press the ►► button
- Tap the HOME button to exit the menu

OpenTherm Settings
- Hold the ►► button until you can see RF SETUP
- Use the **DIAL** to scroll to OPENTHERM PARAMETERS
- Press the ►► button
- You will see CONTROL on the display. Use the dial to select LOW LOAD CONTROL
- Use the dial to scroll through the OpenTherm Settings:
  - FLOW WATER TEMPERATURE
  - RETURN WATER TEMPERATURE
  - DHW TEMPERATURE
  - CH SET POINT
  - DHW CONTROL – Use the **DIAL** to select YES or NO

Hot Water Set Point
- Press the ►► button
- Use the dial to select DHW SET POINT
- Press the ►► button
- Use the dial to choose a hot water set point
- Press the ►► button to save
Tap the HOME button to exit the menu

ESi Centro App
You can use your smartphone or tablet to regulate your heating & hot water by downloading the ESi Centro app. Simply follow the instructions on the Centro app to pair your ESi MISTRAL with your home network.

When connected to the ESi Centro app, this thermostat is compatible with Alexa ©

Technical Information

	Thermostat	Power Supply
Temperature Control Class	ErP Class V Product (3%)	N/A
Energy Efficiency Technology	Optimum Start Optimum Stop Delayed Start OpenTherm	N/A
Programming	7 Day, 5/2 Day or 24 Hour	N/A
Power Supply	2 x AA batteries	230V AC
Temperature Adjustment Range	5⁰C to 35⁰C	N/A
Total Switch Rating	N/A	3(1)A
Heating Contact Type	N/A	230VAC Switched Live
Temperature Sensor Type	Multi-thermistor with intelligent compensation	N/A
Temperature Accuracy	+/- 1⁰C @ 20⁰C	N/A
Enclosure Material	Flame retardant thermoplastic	
Ingress Protection Class	IP30	
Dimensions *(main unit, excluding connections)*	D = 65mm W = 92mm H =110mm	30mm 110mm 115mm
Program Events	Selectable 4 or 6 programs	
Clock	Crystal controlled; automatic time change between BST/GMT	
Standard Compliance	EN60730-1 EN60730 2.7, EN55014 1:2006+A1:2009+A2:2011, EN61000-3-2:2014, EN61000-3-3:2013, EN55014-2: 2015, EN60730-1:2011, EMC Directive 2014/30/EU, LVD Directive 2014/35/EU	