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HALO

LITE RF

Halo Lite RF Installation Guide



WEEE DIRECTIVE 2012/19/EU
Waste Electrical and Electronic Equipment Directive

- At the end of the product life, dispose of the packaging and product in a corresponding recycle centre.
- Do not dispose of the unit with the usual domestic refuse.
- Do not burn the product.
- Remove the batteries.
- Dispose of the batteries according to the local statutory requirements and not with the usual domestic refuse.

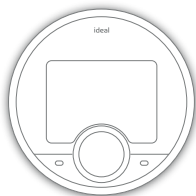


The code of practice for the installation, commissioning
& servicing of central heating systems

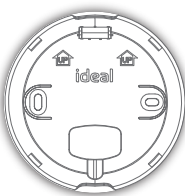
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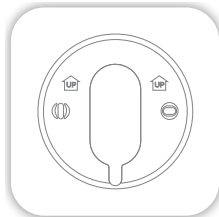
1. KIT CONTENTS



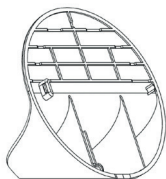
A. Halo Lite RF PRT display unit



B. PRT rear housing



C. Trim plate



D. Desk stand



E. Halo Lite RF Receiver



F. Installation guide



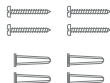
G. User guide



H. SAP registration label



I. 4 x AA batteries



J. Screws & Rawlplugs™

2. HALO LITE RF

Product Code: 237423

Wireless Programmable Room Thermostat (PRT)

ERP Details:

Halo Lite RF enhanced load compensator with OpenTherm Ideal boiler (Class V)

Halo Lite RF with OpenTherm Ideal boiler & OS2 weather compensator temperature sensor (Class V)

Halo Lite RF & Ideal Heat Pump with weather compensator (Class VI)

Compatible with the following boilers: Atlantic Combi, Classic Combi², Esprit Eco Combi², Exclusive Combi², Instinct Combi², I-mini Combi², Independent Combi², Logic Combi ESP1, Logic Code Combi ESP1, Logic Combi², Logic Combi² IE, Logic+ Combi², Logic Max Combi², Logic Max Combi² IE, Vogue Gen2 Combi, Vogue Max Combi, Vogue Max Combi IE.

Compatible with the following

Heat Interface Units: Indirect POD i305, i405, i505, i605, i705.

Direct POD D30, D40, D50, D60

Heat Pumps: Logic Air and HP290.

For a full list of compatible products, please visit Idealheating.com

The Ideal Halo Lite RF is a wireless PRT with a wired receiver to the boiler or heat pump.

The Halo unit is powered by 4 AA batteries and communicates with the Halo Lite Receiver unit on a 868MHz frequency, a local RF protocol.

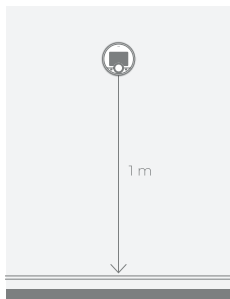
3. SAFETY INFORMATION

The Halo Lite RF must be installed by a competent person with the appropriate safety qualifications. Please read the instructions carefully. Failure to follow these instructions can damage the product or cause a hazardous condition.

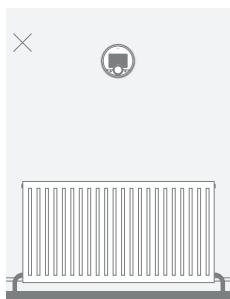
These instructions are applicable to the Ideal Boiler / heat pump models stated and must not be used with any other make or model of boiler. This product must be installed to all applicable standards.

Always isolate the mains supply before installing or working on any components relating to the boiler or heat pump electronics.

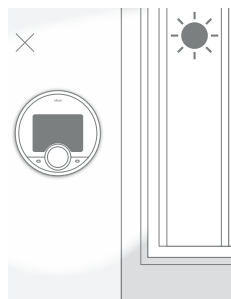
4. LOCATION GUIDELINES



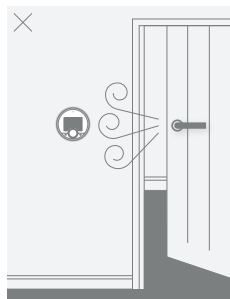
A. Mounted 1 m above the floor.



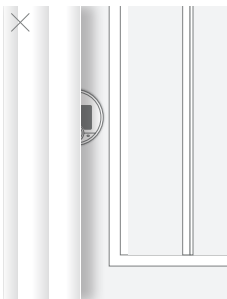
B. Not above radiator/heat source.



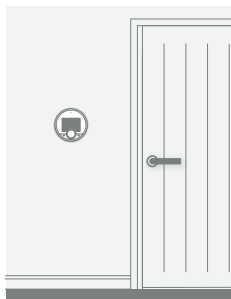
C. Not in direct sunlight.



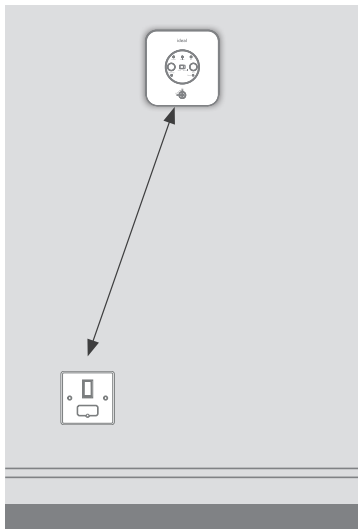
D. Away from any draughts.



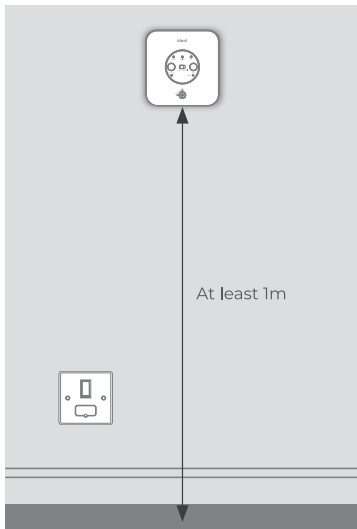
E. Not fitted behind curtains.



F. Internal use only.



G. The receiver should be mounted close to a 230 V AC fused supply.

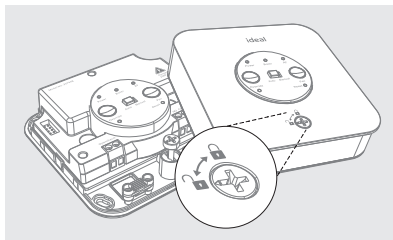


H. The receiver should be mounted horizontally on the wall at least 1m from the floor.

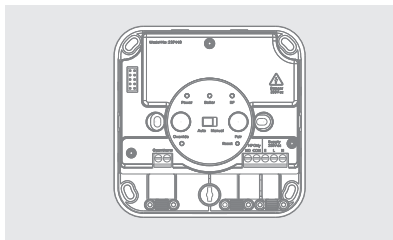
5. INSTALLATION OF THE HALO LITE RF RECEIVER

The Halo Lite RF Receiver must be installed by a competent person with the appropriate safety qualifications. All wiring must be adequately sheathed and insulated.

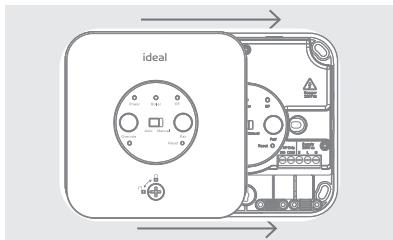
Isolate any 230 V AC mains supply to the Halo Lite RF Receiver and any other linked components before commencing works.



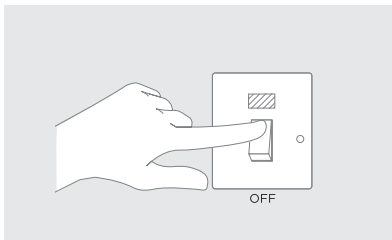
- A. Using a suitable screwdriver turn the locking key one quarter turn anticlockwise to the [UNLOCK] position. Remove the front panel by lifting the bottom edge first. Assemble in reverse order. Always remember to lock the front panel to the Halo Lite Receiver. The receiver is supplied out of the box in the [UNLOCK] position.



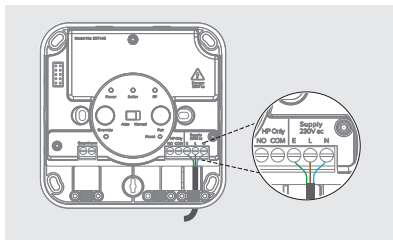
- B. To mount directly onto the wall, mark and drill mounting holes and fix the bracket to the wall using suitable fixings for the wall type.



- C. To mount over the electrical box, place the bracket over the electrical box and fix into place.



D. Isolate mains supply.



E. From the fuse spur wire the Earth, Live and Neutral connections into the right hand side connections marked (E), L, N. The wiring can be rear entry or surface mounted.

If installing with an Ideal boiler / Heat Interface Unit (HIU) continue to *Section 5.1 on page 10.*

If installing with a Logic Air Heat Pump or HP290 Heat Pump go to *Section 5.2 on page 12.*

If installing with a HP290 Outdoor Unit go to *Section 5.3 on page 13.*

5.1 INSTALLING THE HALO LITE RF RECEIVER WITH A BOILER / HEAT INTERFACE UNIT (HIU)

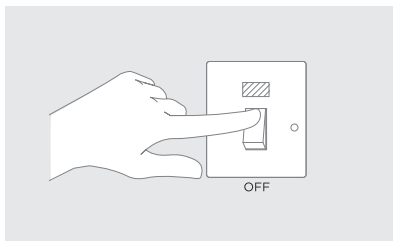
The below refers to the Ideal logic² combi boilers. For all other models, including the compatible heat interface units, please refer to the relevant install manuals to locate connections.

Wiring Guidelines

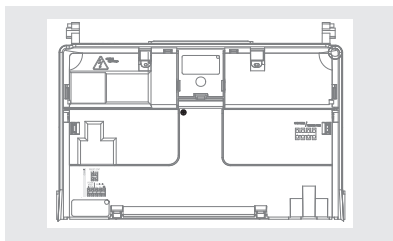
The Boiler connection to the Ideal Halo Lite RF receiver should only be wired into the OpenTherm low voltage connection and should not be connected to a 230 V AC supply. If utilising existing wiring, please ensure that the wiring is not connected to a 230 V AC supply.

Opentherm Cable Details:

- Length between receiver to boiler is 50 meters maximum
- Core diameter - 0.5 – 1.0 mm diameter should be used, multi strand should be tinned
- Should not be adjacent to any 230 V AC cabling

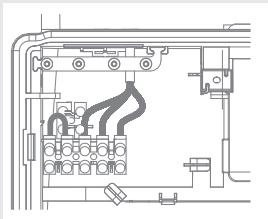


A. Make sure mains supply is still isolated

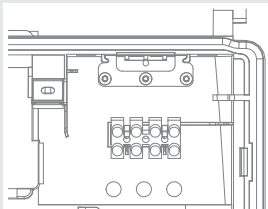


B. Remove boiler front panel and swing the control box into the servicing position.

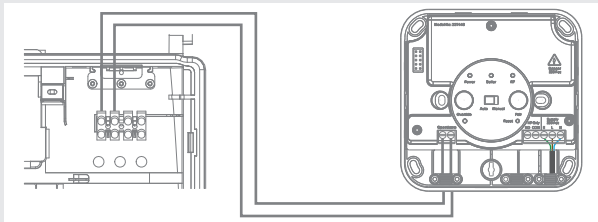
Note. Logic² panel shown for reference only.



- C. Locate the mains wiring terminals (left hand side). If removed, replace the mains thermostat link.

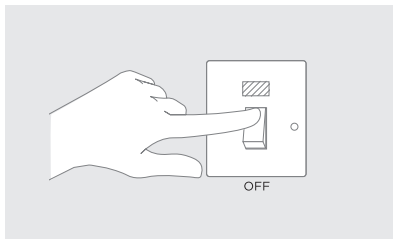


- D. Locate the opentherm terminals (right hand side). Remove the link if present.

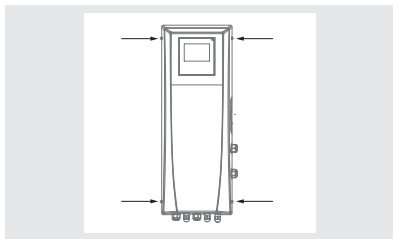


- E. Wire the Halo Lite RF receiver to the boiler using the Opentherm connections. (not polarity conscious). Continue to Section 6.

5.2 INSTALLING THE HALO LITE RF RECEIVER WITH A LOGIC AIR OR HP290 HEAT PUMP

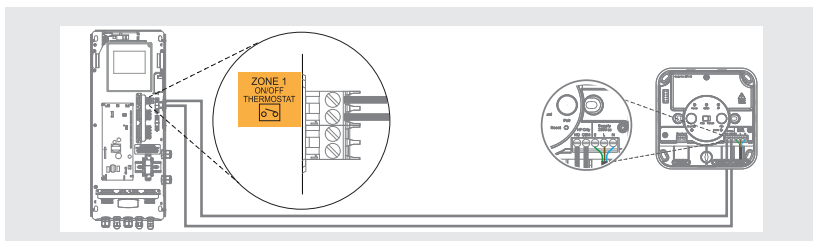


A. Make sure mains supply is still isolated



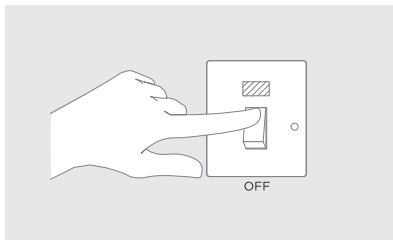
B. Remove the 4 fixings displayed above and remove outer cover.

Note. HP290 image shown for reference only.

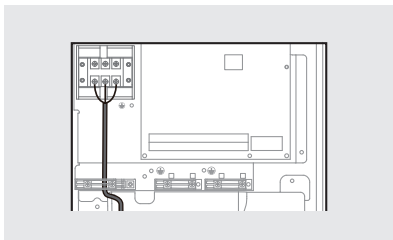


C. Connect the Receiver to the relevant zone connection on the Logic Air or HP290 control panel (For 2 zone application wire into the second zone terminal). **Note.** HP290 image shown for reference only. Continue to Section 6.

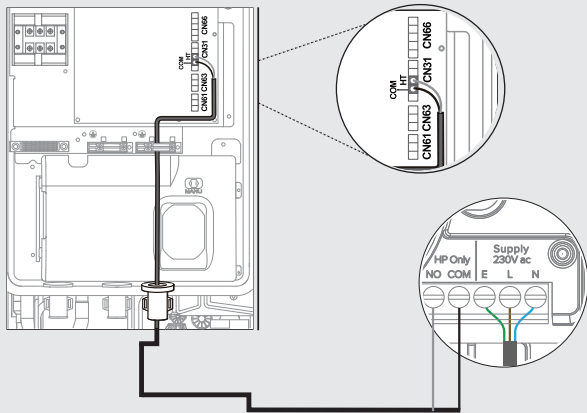
5.3 INSTALLING THE HALO LITE RF RECEIVER WITH A HP290 OUTDOOR UNIT (ODU)



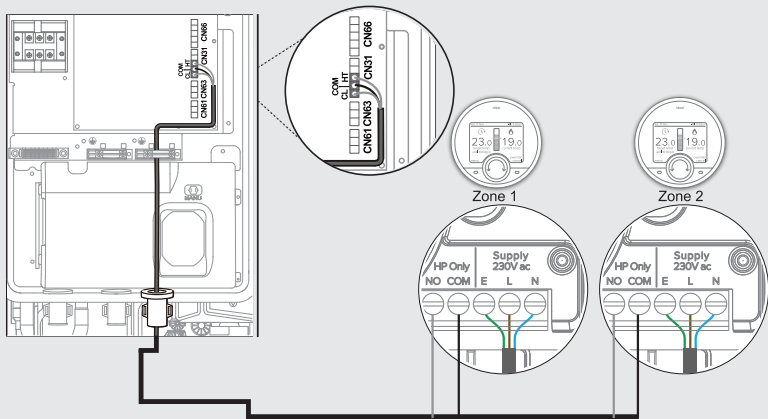
A. Make sure mains supply is still isolated.



B. In the main HP290 install guide, follow sections 4.1.7 to remove the outer panel and section 4.1.10 to remove the terminal cover. Continue to next page.



- C. For a single zone connection, wire Com to Com, and HT on the HP290 ODU to NO on the Halo Lite RF receiver. Continue to Section 6. **Note.** For a two zone connection, see next page.



- D. For a two-zone connection, wire Com to Com, HT on the HP290 ODU to NO on the Halo Lite RF Receiver (Zone 1), and CL on the HP290 ODU to NO on the Halo Lire RF Receiver (Zone 2). Continue to Section 6.

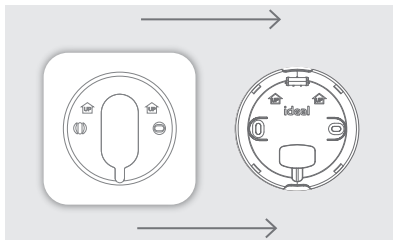
Note. Once wiring is complete, commission the heat pump following the steps in Section 5.5.2, onwards, from the main HP290 install guide.

6. INSTALLING THE HALO LITE RF PRT

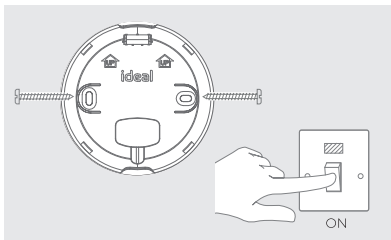
6.1 WALL MOUNTING

The Halo can be either wall mounted or desk mounted using the integrated rear housing and desk stand. If there are any concerns regarding signal strength and location of the wall mounted PRT it is advisable to pair the control and check the signal strength before fixing to the wall.

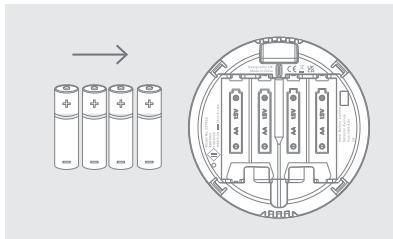
Note: The PRT and Receiver are pre-paired. Please follow the sequence below.



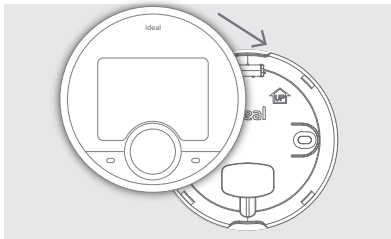
- A. The Halo can be installed with or without the provided trim plate.



- B. If no trim plate is required, use the rear housing of the Halo to position the unit on the wall, alternatively secure rear housing to trim plate. Take care not to over-tighten the screws. **Turn on power to Halo Lite RF Receiver.**

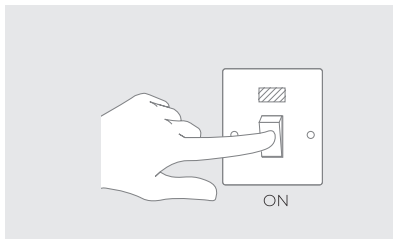


- C. Insert the 4 AA batteries provided into the front housing of the Halo. Pay close attention that the orientation of the batteries is as indicated in the housing.

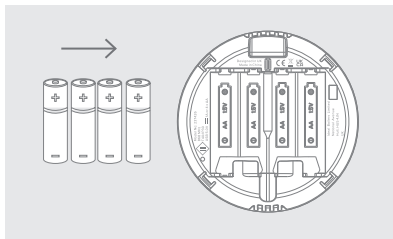


- D. Locate the front housing (display) in position perpendicular to the rear housing and clip into place.

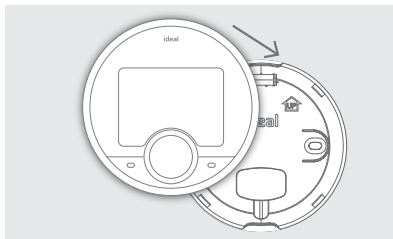
6.2 DESK MOUNTING



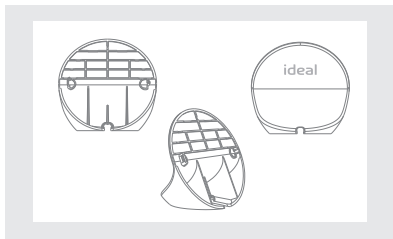
A. Turn on power to Halo Lite RF Receiver.



B. Insert the 4 AA batteries provided into the front housing of the Halo. Pay close attention that the orientation of the batteries is as indicated in the housing.

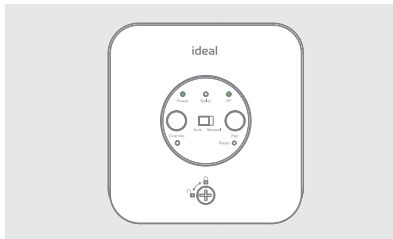


C. Locate the front housing (display) in position perpendicular to the rear housing and clip into place.

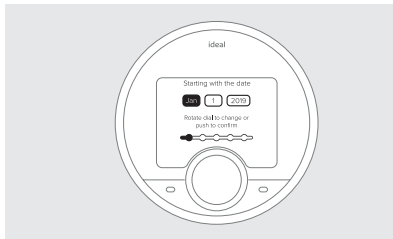


D. Clip the combined rear housing and display onto the desk stand.

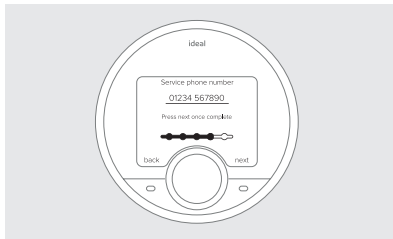
6.3 PAIRING



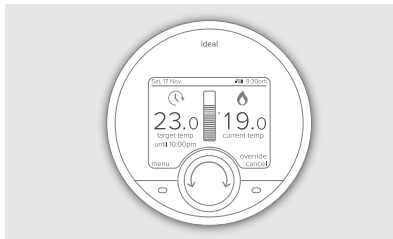
- A. After power has been established. The unit will automatically pair to the PRT. Once this is completed the Power and RF LED will be solid Green. Make sure the side switch is in the auto position.



- B. The device will prompt set up of the time and date using an easy step by step process.



- C. There is the opportunity to add an installer contact phone number into the device at this stage, if not changed this will default to the Ideal Heating Customer Service number.



- D. Once the setup is completed the home screen will be shown.

7. HALO FEATURES AND CONFIGURATION

To enter the settings menu press the menu button.

Menu Options	Action
Holiday	Holiday mode allows the device to be switched off for a pre-defined period of time then automatically returns to the pre-programmed heating schedule.
Timed heating schedule	Set a heating schedule with up to six periods per day.
Support	Includes information such as software version and key contact numbers.
Fault page	Shows the latest fault code and fault description.
Time and date	Time and date are set on power up and can be adjusted via the menu.
Advanced settings	Advanced features of the device setup should be set by a competent person.
Landlord settings	Specific setting for landlords.

8. HALO LITE RF RECEIVER LED



LED	Status
Power	Green - Power on
	No illumination - Power off
Boiler	Green - Demand
	No illumination - No demand
RF	Solid green - Paired and communicating
	Flashing green - Searching for PRT
	Flashing red - Pairing mode
	Solid red - lost connection to the PRT
Override	Green - Override active
	No illumination - Override not active

9. ADVANCED SETTINGS

Advanced Settings should only be adjusted by a competent person, the wrong configuration can have a detrimental effect on the thermostat and the heating system.

Description	Factory Setting	New Setting
Optimised start Boiler or heat pump starts heating in advance of schedule so heating reaches the required temperature at the time specified.	OFF	
Optimised stop Boiler or heat pump stops heating in advance of schedule so heating reaches the required temperature at the time specified.	OFF	
Delayed start If the room temperature is close to target temperature the heating start time is delayed to save energy.	OFF	
Display tolerance Select the display tolerance of the current room temperature, this can be set at increments of 0.5 or 0.1 °C.	0.1 °C	
Temperature offset Fine tune the room temperature display -2.5 to 2.5 °C.	0	
Daylight saving time Automatically move to daylight saving.	ON	
Frost protection The temperature that will be used to protect your home when the thermostat is off. Can be set 5 - 16 °C.	5 °C	
Service phone number Opportunity to input installer contact number for service reminders.	Ideal Heating number	

10. COMMISSIONING CHECKLIST

Description	Confirmed
Halo PRT is positioned in the homeowners chosen location if desk mounted.	
Check RSSI (Received Signal Strength Indication) of the 868MHz wireless connection via support page on the PRT (access via the menu).	Target RSSI between 0 and -65 and text green
On the Halo set the mode to AUTO then increase the temperature to 30 °C.	Flame ON
	Boiler ON
	Boiler LED on Receiver ON (Green)
On the Halo PRT set the mode to AUTO then decrease the temperature to 5 °C.	Flame OFF
	Boiler OFF
	Boiler LED on Receiver OFF
Check the Receiver indication is correct.	Power LED green RF LED green
Full battery level indication on Halo home screen.	
868MHz network icon is present on the Halo home screen.	
The slide switch on the Halo Lite RF receiver is in the Auto position.	
Time and date correct.	
Installer contact details inputted if required.	
Suitable schedule has been entered for the user.	
General overview of operation provided to user - refer to user guide.	
Any advanced settings changes have been recorded.	
Remember to leave this guide with the householder.	
Make sure the receiver side switch is in the auto position.	

11. TROUBLE SHOOTING (BOILER/HEAT PUMP/HIU)

No power LED on Receiver	Check that the receiver is wired correctly. Check that the power is on.
Boiler / heat pump fails to call when increasing target temperature on the Halo	Check the target temperature is above current temperature. Check that the Receiver power LED is green. Check the Receiver is correctly wired into the boiler.
Halo PRT screen shows failed to sync	Check Receiver RF LED is flashing green. Check distance between Receiver and Halo PRT (see Section B).
In the support page the 868MHz is lower than -65 and text red	Consider moving the Halo PRT closer to the Receiver.



Hereby, Ideal Boilers Ltd declares that this device (model 237423) containing devices (237426 & 237448) is in compliance with: Directive **2014/53/EU**.

The full text of the EU declaration of conformity is available at the following internet address idealheating.com



UIN: 237463 A06

RF frequency: 868MHz

Max. RF output power: 10dBm

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