ideal HEATING

USER GUIDE

LOGIC MAX HEAT²
H12 H15 H18 H24 H30

When replacing any part on this appliance, use only spare parts that you can be assured conform to the safety and performance specification that we require. Do not use reconditioned or copy parts that have not been clearly authorised by Ideal Heating.

For the very latest copy of literature for specification and maintenance practices visit our website idealheating.com where you can download the relevant information in PDF format.

October 2022
UIN 228292 A05

CONTENTS

1.1 INTRODUCTION

The **Logic Max Heat² H** is a heat only boiler, featuring full sequence automatic spark ignition and fan assisted combustion. It is designed to provide central heating and hot water when a separate hot water cylinder is installed.

Due to the high efficiency of the boiler, condensate is produced from the flue gases and this is drained to a suitable disposal point through a plastic waste pipe at the base of the boiler. A condensate 'plume' will also be visible at the flue terminal.

Safety

Current Gas Safety (Installation & Use) Regulations or rules in force.

It is the law that this appliance installation and any work carried out on the appliance is carried out by a Gas Safe Registered engineer in accordance with the above Regulations.

It is essential that the instructions in this booklet are strictly followed, for safe and economical operation of the boiler.

Electricity Supply

This appliance must be earthed.
Supply: 230 V ~ 50 Hz. The fusing should be 3A.

Important Notes

- This appliance must not be operated without the casing correctly fitted and forming an adequate seal.
- If the boiler is installed in a compartment then the compartment MUST NOT be used for storage purposes. The compartment should also be fitted with a suitable label in accordance with current standards
- If it is known or suspected that a fault exists on the boiler then it MUST NOT BE USED until the fault has been corrected by a Gas Safe Registered Engineer.
- Under NO circumstances should any of the sealed components on this appliance be used incorrectly or tampered with.
- This appliance can be used by children 8 years and above. Also persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, provided they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

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.

All Gas Safe Register installers carry a Gas Safe Register ID card, and have a registration number. Both should be recorded in the Benchmark Commissioning Checklist. You can check your installer by calling Gas Safe Register direct on 0800 4085500.

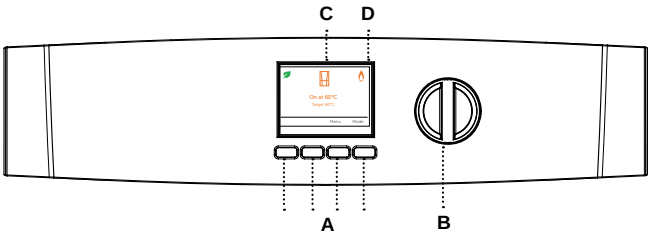
Ideal Heating is a member of the Benchmark scheme and fully supports the aims of the programme. Benchmark has been introduced to improve the standards of installation and commissioning of central heating systems in the UK and to encourage the regular servicing of all central heating systems to ensure safety and efficiency.

benchmark COLLECTIVE MARK
THE MARK OF QUALITY FOR THE INSTALLATION, COMMISSIONING AND SERVICING OF DOMESTIC HEATING AND HOT WATER SYSTEMS

THE BENCHMARK SERVICE INTERVAL RECORD MUST BE COMPLETED AFTER EACH SERVICE

USER

1.2 BOILER OPERATION



Legend

A. Hot Keys
B. Central Heating Temperature Knob
C. Boiler Status Display
D. Burner On indicator

TO START THE BOILER

Start the boiler as follows:

1. Switch on electricity to the boiler and check that all external controls, e.g. programmer, room thermostat and cylinder thermostat are on.
3. If a Boiler symbol is shown on the screen then press Mode until Ready or On is shown underneath the Boiler symbol.

   If Tap and Radiator symbols are shown press Mode until Ready or On is shown underneath the radiator symbol..
4. If a Boiler symbol is shown on the screen turn the temperature control knob until 80°C is shown. If Tap and Radiator symbols are shown turn the temperature control knob until 30°C is shown..

Once the boiler has lit see the following page about where the Temperature Control knob should be set..

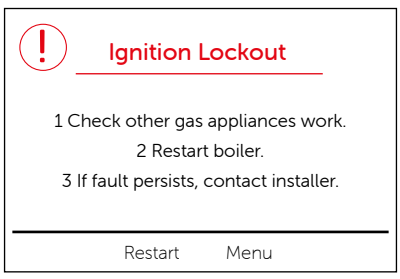
In normal operation the boiler status display (D) will display messages.

Refer to Section 1.8

Boiler frost protection - boiler will fire if temperature is below 5ºC.

During normal operation the burner on symbol (C) will remain illuminated when the burner is lit.

If the boiler fails to light after five attempts the following fault messages will be displayed:



To restart the boiler, press Restart. The boiler will repeat the ignition sequence. If the boiler still fails to light consult a Registered Gas Installer.

OPERATION MODES

Winter Conditions - (Central Heating and Domestic Hot Water required)

If a Boiler symbol is shown on the display then press Mode until either Ready or On is shown under the Boiler symbol. If Tap & Radiators symbols are shown then press Mode until Ready or On is shown under the radiator and tap symbol.

[ ].

The boiler will fire and supply heat to the radiators.

Summer Conditions - (Domestic Hot Water only required)

If a Boiler symbol is shown on the display then central heating must be disabled at the timer or room thermostat. If Tap and Radiators symbols are shown on the display then press Mode until Ready or On is shown under the Tap and Off is shown under the Radiator. [ ].

Boiler Off

If a Boiler symbol is shown on the display then press Mode until Off is shown under the Boiler symbol. If Tap and Radiator symbols are shown on the display then press Mode until Off is shown underneath the Radiator symbol.

CONTROL OF WATER TEMPERATURE

Central Heating

The boiler controls the central heating radiator temperature to a maximum of 80°C, adjustable via the central heating temperature knob (B).

Approximate temperatures for central heating:

Knob Setting	Central Heating Radiator Temperature (approx.)
Minimum	30ºC
Maximum	80ºC

For economy setting [ ] refer to Efficient Heating System Operation.

EFFICIENT HEATING SYSTEM OPERATION

The boiler is a high efficiency, condensing appliance which will automatically adjust its output to match the demand for heat. Therefore gas consumption is reduced as the heat demand is reduced.

The boiler condenses water from the flue gases when operating most efficiently. To operate your boiler efficiently (using less gas) turn the temperature control knob (B) until the leaf symbol is shown [ ].

In winter periods it may be necessary to turn the Temperature Knob clockwise until an 80°C target is shown to meet heating requirements. This will depend on the house and radiators used.

Reducing the room thermostat setting by 1ºC can reduce gas consumption by up to 10%.

WEATHER COMPENSATION

When the Weather Compensation option is fitted to the system then the central heating temperature knob (B) becomes a method of controlling room temperature. Turn the knob clockwise to increase room temperature and anti-clockwise to decrease room temperature. Once the desired setting has been achieved, leave the knob in this position and the system will automatically achieve the desired room temperature for all outside weather conditions.

BOILER FROST PROTECTION

The boiler is fitted with frost protection that operates in all modes, provided the power supply to the boiler is always turned on. If the water in the boiler falls below 5ºC, the frost protection will activate and run the boiler to avoid freezing. The process does not guarantee that all other parts of the system will be protected.

If a system frost thermostat has been installed, the boiler must be set in winter mode, [Ready or On] for the frost protection to run.

If no system frost protection is provided and frost is likely during a short absence from home it is recommended to leave the system heating controls or built in programmer (if fitted) switched on and running at a reduced temperature setting. For longer periods, the entire system should be drained.

BOILER RESTART

To restart the boiler, when directed in the listed fault messages (see section 4) press the “Restart” button. The boiler will repeat its ignition sequence. If the boiler still fails to start consult a Gas Safe Registered Engineer.

MAINS POWER OFF

To remove all power to the boiler the mains power switch must be turned off.

1.3 POINTS FOR THE BOILER USER

In line with our current warranty policy we would ask that you check through the following guide to identify any problems external to the boiler prior to requesting a service engineers visit. Should the problem be found to be other than with the appliance we reserve the right to levy a charge for the visit, or for any pre-arranged visit where access is not gained by the engineer.

FOR ANY QUERIES PLEASE RING THE IDEAL CONSUMER HELPLINE : 01482 498660

BOILER RESTART PROCEDURE - To restart boiler press the restart button

1.4 FROZEN CONDENSATE DRAIN

This appliance is fitted with a siphonic condensate trap system that reduces the risk of the appliance condensate from freezing. However should the condensate pipe to this appliance freeze, please follow these instructions:

a. If you do not feel competent to carry out the defrosting instructions below please call your local Gas Safe Registered installer for assistance.

b. If you do feel competent to carry out the following instructions please do so with care when handling hot utensils. Do not attempt to thaw pipework above ground level.

If this appliance develops a blockage in its condensate pipe, its condensate will build up to a point where it will make a gurgling noise prior to locking out displaying “Ignition Lockout” on the display. If the appliance is restarted it will make a gurgling noise prior to it locking out displaying “Ignition Lockout” on the display.

To unblock a frozen condensate pipe;

1. Follow the routing of the plastic pipe from its exit point on the appliance, through its route to its termination point.

   Locate the frozen blockage. It is likely that the pipe is frozen at the most exposed point external to the building or where there is some obstruction to flow. This could be at the open end of the pipe, at a bend or elbow, or where there is a dip in the pipe in which condensate can collect. The location of the blockage should be identified as closely as possible before taking further action.

2. Apply a hot water bottle, microwaveable heat pack or a warm damp cloth to the frozen blockage area. Several applications may have to be made before it fully defrosts.

   Warm water can also be poured onto the pipe from a watering can or similar. DO NOT use boiling water.

3. Caution when using warm water as this may freeze and cause other localised hazards.

4. Once the blockage is removed and the condensate can flow freely, restart the appliance. (Refer to “To Start the boiler”)

5. If the appliance fails to ignite, call your Gas Safe Registered engineer.

Preventative Solutions

During cold weather, set the central heating temperature knob (B) to “**MAX**”, (Remember to return to original setting once cold spell is over).

Place the heating on continuous and turn the room thermostat down to 15ºC overnight or when unoccupied. (Return to normal after cold spell).

SCAN
for video

1.5 GENERAL INFORMATION

MINIMUM CLEARANCES

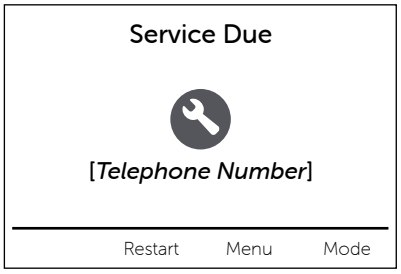
Clearance of 165 mm (6 1/2") above, 100 mm (4") below, 2.5 mm (9 1/8") at the sides and 450 mm (17 3/4") at the front of the boiler casing must be allowed for servicing.

BOTTOM CLEARANCE

Bottom clearance after installation can be reduced to 5 mm

SERVICE REQUEST FUNCTION

When the boiler has been installed for more than 1 year the following message will appear on screen:



Press "Restart" to clear this message.

ESCAPE OF GAS

Should a gas leak or fault be suspected contact the National Gas Emergency Service without delay. **Telephone 0800 111 999**.

Ensure that;

- All naked flames are extinguished
- Do not operate electrical switches
- **Open all windows and doors**

CLEANING

For normal cleaning simply dust with a dry cloth. To remove stubborn marks and stains, wipe with a damp cloth and finish off with a dry cloth. ***DO NOT use abrasive cleaning materials.***

MAINTENANCE

The frequency of servicing will depend upon the installation condition and usage but should be carried out at least annually by a Gas Safe Registered Engineer.

1.6 TROUBLESHOOTING

NO HOT WATER

Ensure that the mains power is turned on. If a Boiler symbol is shown On the display then press Mode until either Ready or On is shown underneath the Boiler Symbol. If a Tap symbol is shown on the display then press Mode until either Ready or On is shown underneath the Tap symbol.

Ensure that the Hot Water Timer is On & the Cylinder Thermostat is calling for heat?

NO

YES

If fault persists contact Ideal Customer Service Helpline if your appliance is under warranty or a Gas Safe Registered engineer otherwise.

Contact a Gas Safe Registered Engineer

NO CENTRAL HEATING

Ensure that the mains power is turned on. If a Boiler symbol is shown On the display then press Mode until either Ready or On is shown underneath the Boiler Symbol. If a Radiator symbol is shown on the display then press Mode until either Ready or On is shown underneath the Radiator symbol.

Ensure that the Central Heating timer is On and that the room thermostat is turned up.

Does the boiler operate and provide central heating?

NO

YES

Check the time settings on the programmer are as you require and adjust if necessary

Contact a Gas Safe Registered Engineer

NO HOT WATER OR CENTRAL HEATING

Ensure that the mains power is switched on. If there is a boiler symbol on the display then press Mode until Ready or On is shown under the Boiler symbol. If a Radiator symbol is shown on the display then press Mode until Ready or On is shown underneath the Radiator symbol..

Does the boiler have a display showing on the front control panel?

NO

YES

See boiler "Display Functions" section

Contact a Gas Safe Registered Engineer

USER

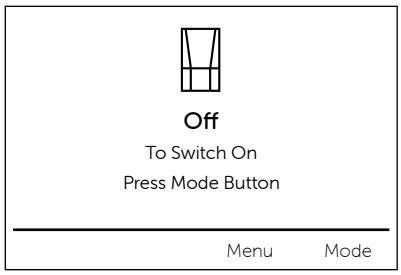
1.7 DISPLAY FUNCTIONS - NORMAL OPERATION MODE

NORMAL OPERATION SCREENS

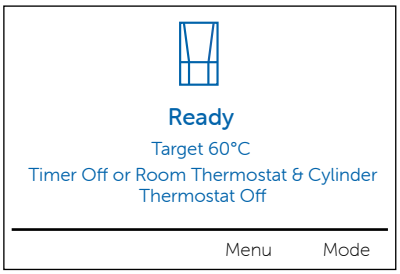
WITHOUT OUTSIDE SENSOR

How to adjust Boiler Temperatures

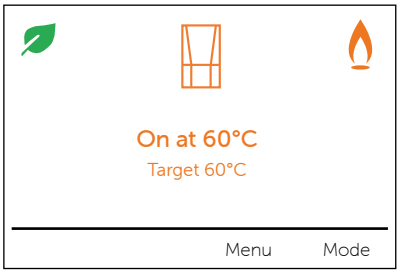
Off Mode



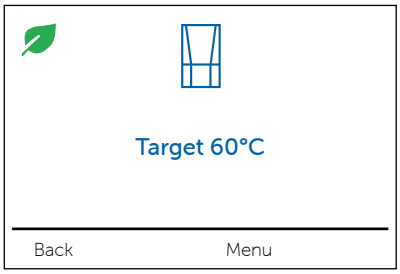
On Mode, No Heat Demand



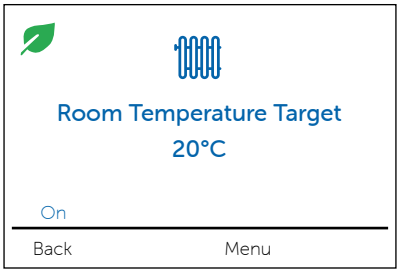
On Mode, With Heat Demand



CH Knob Rotated

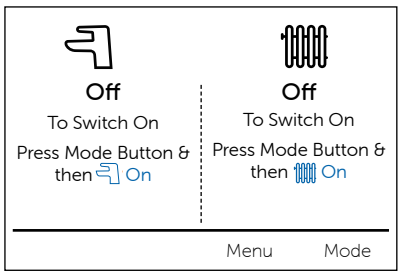


CH Knob Rotated
(outside sensor connected)

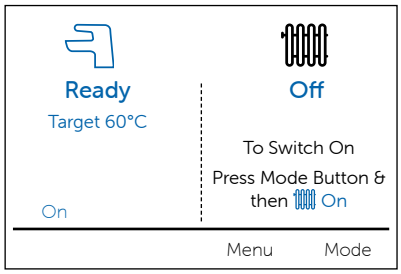


WITH OUTSIDE SENSOR

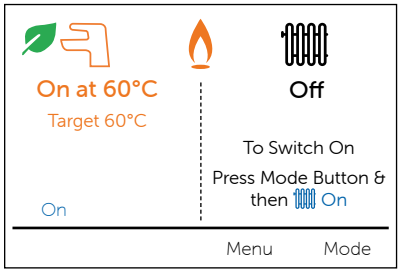
Off Mode



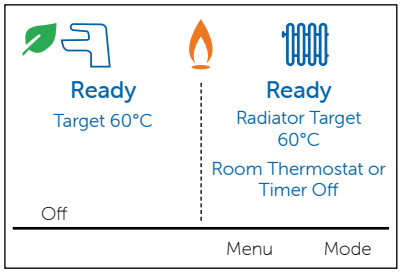
Summer Mode, No Heat Demand



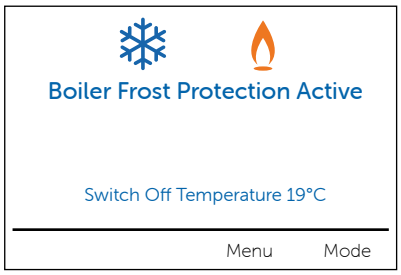
Summer Mode, DHW Demand



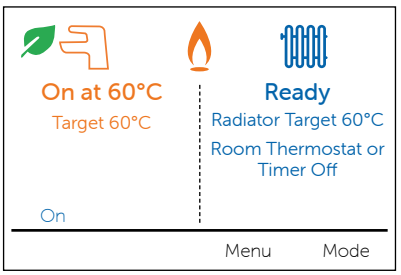
Winter Mode, No Heat Demand



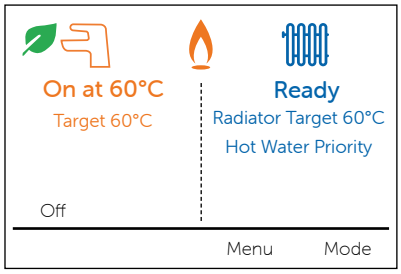
Boiler Frost Protection



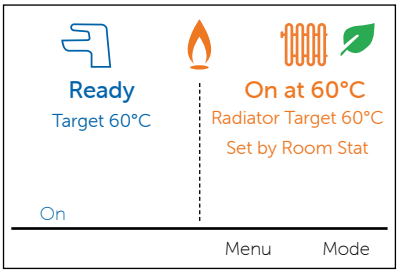
Winter Mode, DHW Demand



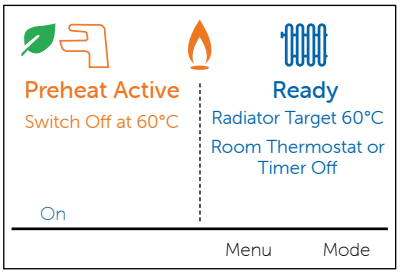
Winter Mode, DHW & CH Demands



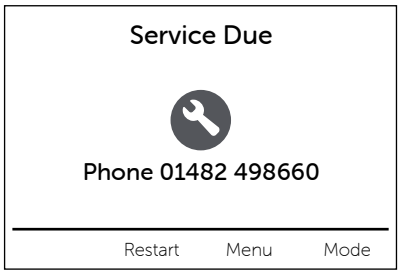
Winter Mode, CH Demand



Winter Mode, Pre-heat Demand



Service Required



The display scrolls through a maximum of 3 messages under any operational condition, as shown above

Note. The temperatures shown below are for illustration purposes only. The measured temperatures will be shown on the boiler.

USER

1.8 DISPLAY FUNCTIONS - FAULT MESSAGES

Overheat Lockout

1 With boiler off & system cold, fill system to 1.0bar.
2 Bleed radiators, refill system to 1.0bar.
3 Check radiator valves & boiler valves are open.
4 Restart boiler.
5 If fault persists contact installer.

Restart Menu

Outside Sensor Fault

Contact Installer

Menu

Spare PCB Not Set

Contact Installer

Menu

Ignition Lockout

1 Check other gas appliances work.
2 Restart boiler.
3 If fault persists, contact installer.

Restart Menu

Return Thermistor Fault

Contact Installer

Restart Menu

No Water Flow

1 With boiler off & system cold, fill system to 1.0bar.
2 Bleed radiators, refill system to 1.0bar.
3 If fault persists, contact installer.

Menu

Flame Loss

Contact Installer

Menu

Fan Fault

Contact Installer

Menu

Flow/Return Reversed

Contact Installer

Menu

Too Many Restarts

Contact Installer

Menu

PCB Fault

Contact Installer

Menu

Gas Valve Fault

Contact electricity provider

Restart Menu

Flame On Before Gas On

Contact Installer

Restart Menu

Low Mains Voltage

Contact electricity provider

Menu

Blocked Flue/Condensate

1 Check if condensate pipe blocked/frozen
2 Check if flue blocked
3 If fault persists, contact installer

Restart Menu

Flow Thermistor Fault

Contact Installer

Restart Menu

Room Thermostat Fault

Check room thermostat batteries

Menu

At Ideal Heating we take our environmental impact seriously, therefore when installing any Ideal Heating product please make sure to dispose of any previous appliance in an environmentally conscious manner. Households can contact their local authority to find out how.
See https://www.gov.uk/managing-your-waste-an-overview for guidance on how to efficiently recycle your business waste.

Technical Training

Our Expert Academy offer a range of training options designed and delivered by our experts in heating.
For details please visit: expert-academy.co.uk

Ideal Boilers Ltd., pursues a policy of continuing improvement in the design and performance of its products.
The right is therefore reserved to vary specification without notice.

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