

## icos system HE15 & HE24 (Natural Gas Only)

Destination Countries: GB, IE

HE15 G.C. Appliance No. 41 421 99

HE12 G.C. Appliance No. 41 397 82

### Introduction

The **icos system** is a wall mounted, room sealed, condensing boiler, featuring full sequence automatic spark ignition and fan assisted combustion.

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 the plastic waste pipe at the lower rear 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.

In your own interest, and that of safety, it is the law that this boiler must be installed by a CORGI registered installer.

In IE the installation must be carried out by a competent person and installed in accordance with the current edition of I.S. 813 "domestic Gas Installations", the current Building Regulations and reference should be made to the current ETCI rules for electrical installation.

*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.

Connection must be made in a way that allows complete isolation of the electrical supply such as a double-pole switch, having a 3mm (1/8") contact separation in both poles, serving only the boiler and system controls. Alternatively, a 3-pin UNSWITCHED socket may be used. The means of isolation must be accessible to the user after installation.

### 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.
- 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 CORGI registered installer or in IE a competent person.
- Under NO circumstances should any of the sealed components on this appliance be used incorrectly or tampered with.

In cases of repeated or continuous shutdown a CORGI registered installer or in IE a competent person should be called to investigate and rectify the condition causing this and carry out an operational test. Only the manufacturers original parts should be used for replacement.

### Minimum Clearances

Clearances of **165mm (6 1/2")** above, **100mm (4")** below, **5mm (1/4")** at the sides and **450mm (17 3/4")** at the front of the boiler casing must be allowed for servicing.

The minimum front and bottom clearance allowed when built into a cupboard is 5mm.

### To light the boiler. Refer to Frame 1

If a programmer is fitted refer to separate instructions for the programmer before continuing.

1. CHECK THAT THE ELECTRICITY SUPPLY TO THE BOILER IS OFF.
2. Set the mains ON/OFF switch (A) to OFF and the thermostat knob (F) to maximum.
3. Switch ON the electricity supply to the boiler and check that all external controls, e.g. programmer, room thermostat, etc., are ON.
4. Set the mains ON/OFF switch to ON.

The boiler will commence the ignition sequence, supplying heat to the central heating, if required.

**Note.** In normal operation the control unit display (C) will show the codes:

□ Standby - no demand for heat.

c CH being supplied.

During ignition, the LED (E) will flash.

During normal running the LED (E) will remain illuminated.

**Note.**

*If the boiler fails to light after 3 attempts the fault code L F will be displayed.*

Press the reset button (D) for 2 seconds then release. The boiler will repeat the ignition sequence. If the boiler still fails to light consult a CORGI registered installer or in IE a competent person.

**Note.**

*The pump will operate briefly as a self-check, once every 24 hours regardless of system demand.*

### Control of water temperature

The boiler controls the central heating radiator temperature to a maximum of 82°C, adjustable via the thermostat knob (F).

Approx. flow temperatures for the boiler thermostat settings are:

Knob Setting	Flow Temperature	
	°C	°F
Minimum	30	86
Maximum	82	180

All CORGI registered installers carry a CORGI ID card, and have a registration number. Both should be recorded in the **Benchmark** Commissioning Checklist. You can check your installer by calling CORGI direct on 01256 372300.

**Ideal Stelrad Group** is a member of the Benchmark initiative 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.



## To shut down the boiler

### 1. For short periods

Set the mains ON/OFF switch (A) to OFF

### 2. For longer periods

Set the mains ON/OFF switch (A) to OFF, and switch the electricity supply to OFF.

For longer periods the entire system should be drained.

## To relight the boiler

Repeat the procedure detailed in 'To light the boiler'.

## Frost protection

If no frost protection is provided and frost is likely during a short absence from home, leave the heating controls (if fitted) at a reduced temperature setting. For longer periods, the entire system should be drained.

If the system includes a frost thermostat then, during cold weather, the boiler should be turned OFF at the time switch (if fitted) ONLY. The mains supply should be left switched ON, with the boiler thermostat left in the normal running position.

## Boiler overheat thermostat

This thermostat will shut down the boiler in the event of overheating. Should this occur a fault code *LH* will be displayed. Press the reset button (D) and the boiler will re-light.

If the fault re-occurs, turn off the boiler and consult a CORGI registered installer or in IE a competent person.

## Flame failure

Should this occur a fault code *L-F* will be displayed. Press the reset button and the boiler will relight. If the fault recurs, turn off the boiler and consult a CORGI registered installer or in IE a competent person.

## Loss of system water pressure

The gauge (H) indicates the central heating system pressure. If the pressure is seen to fall below the original installation pressure of 1-2 bar over a period of time then a water leak may be indicated. In this event conduct the re-pressurising procedure (see Trouble shooting problem 4). If unable to do so or if the pressure continues to drop a CORGI registered installer or in IE a competent person should be consulted.

**DO NOT FIRE THE BOILER IF THE PRESSURE HAS REDUCED TO ZERO FROM THE ORIGINAL SETTING.**

## Condensate Drain

The condensate drain (G) must not be modified or blocked.

Blockage of the condensate drain, caused by debris or freezing, can cause automatic shutdown of the boiler.

If freezing is suspected and the pipe run is accessible an attempt may be made to free the obstruction by pouring hot water over the exposed pipe and clearing any blockage from the end of the pipe. If this fails to remedy the problem the assistance of a CORGI registered installer or in IE a competent person should be sought.

## Escape of gas

Should a gas leak or fault be suspected contact your local gas supplier without delay.

**Do NOT search for gas leaks with a naked flame.**

## 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.**

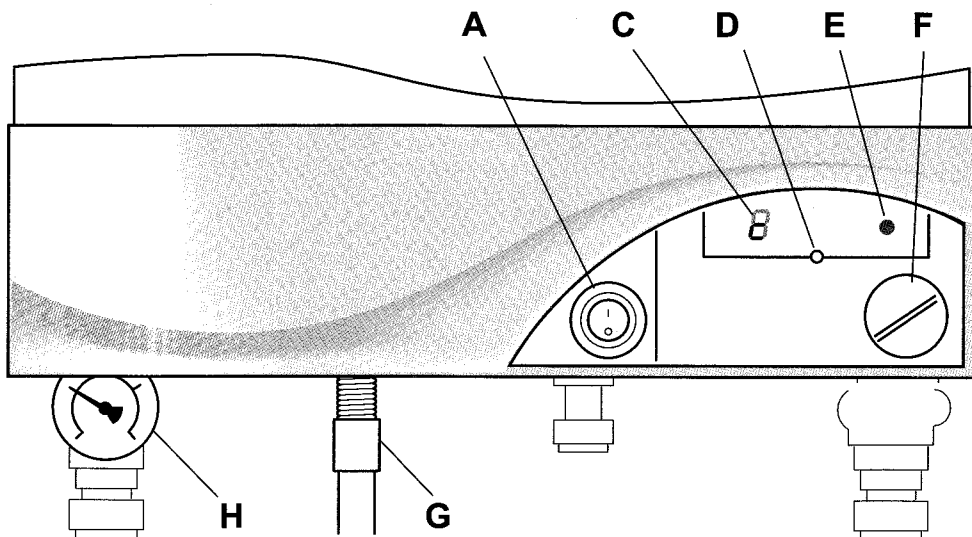
## Maintenance

The appliance should be serviced at least once a year by a CORGI registered installer or in IE a competent person.

## 1 BOILER CONTROLS

### LEGEND

- A Boiler ON/OFF switch
- C Display
- D Reset button
- E LED
- F CH thermostat knob
- G Condensate drain
- H Pressure gauge



**CAUTION.** To avoid the possibility of injury during the installation, servicing or cleaning

# POINTS FOR THE BOILER USER

**Note.** 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.

## TROUBLESHOOTING - TYPICAL NON PRODUCT FAULTS

Problem	Solution
Boiler is not working for central heating or hot water.	<ul style="list-style-type: none"><li>• Check there is power to the boiler – switch (A) in the ON position and 'O' displayed on the controls.</li><li>• If 'O' not displayed then not a boiler fault – contact your installer/service company.</li><li>• Check external programmer is set to an 'ON' period and the relevant function selected i.e. central heating or domestic hot water. Test by overriding the programmer by setting to 'continuous'.</li><li>• Check room thermostat for central heating or the cylinder thermostat for domestic hot water, are set at the required temperature. To test operation of either thermostat turn fully up. If no response contact your installer.</li></ul>
Boiler is not working for central heating or hot water but attempts to fire by going through 3 ignition attempts. Display shows 'L:F' (flashing).	<ul style="list-style-type: none"><li>• Press reset button (D) for 2 seconds to repeat ignition sequence.</li><li>• Check gas supply (try another appliance – cooker/fire etc.) – If no gas supply then not a boiler fault – contact gas supplier.</li><li>• Check condensate pipe is not blocked or frozen. If blocked clear blockage – if not possible to check contact your installer.</li></ul>
Boiler is not working for central heating or hot water and the display shows 'L:A' (flashing).	<ul style="list-style-type: none"><li>• Press reset button (D) for 2 seconds, the boiler should then re-light. If fault recurs this indicates an overheat condition. The boiler should be turned off and your installer contacted.</li><li>• Check if <b>ALL</b> radiators have thermostatic radiator valves fitted. If they have contact your installer.</li></ul>
Boiler is not working for central heating or hot water and the display shows 'H:A' (flashing).	<ul style="list-style-type: none"><li>• Check pressure gauge on boiler shows a minimum of 1 bar. If not re-pressurise via the filling loop to 1 bar (if unsure contact your installer), turn off the tap on the filling loop and turn the on/off switch (A) off and then back on again to reset the boiler. If unable to do so or if the pressure continues to drop after filling then contact your installer.</li><li>• Check if <b>ALL</b> radiators have thermostatic radiator valves fitted. If they have contact your installer.</li></ul>



**HORSTMANN**

Horstmann's CentaurPlus - Two Channel Programmers Offer up to three programmed operating periods per day with Hot water Boost and Heating Advance control on a fully pumped system.

**The following are some of the easy to operate features:-**

**1 Hour Boost on Hot Water**

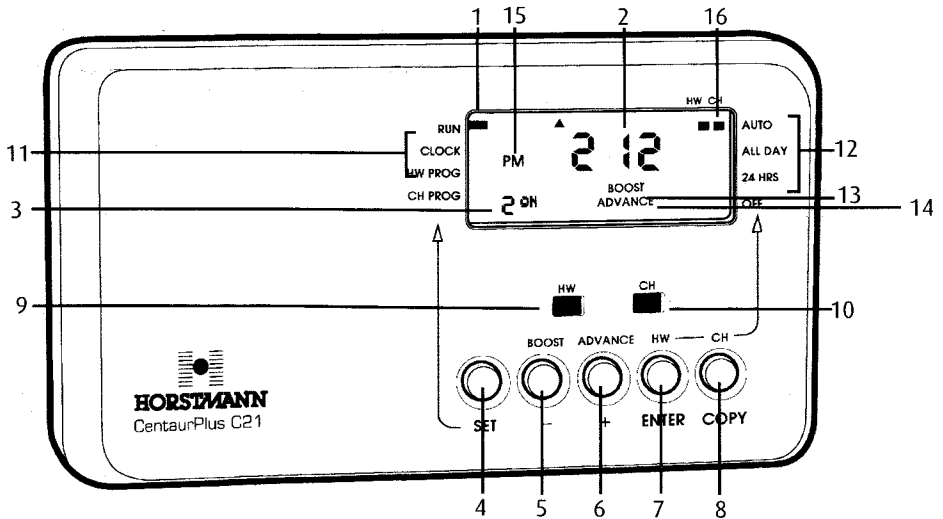
**Independent timing on Hot Water and Heating**

**Central Heating Advance gives instant On/Off override**

**Up to 3 On/Off periods per channel in each 24Hr operation.**

**Programme options: Auto / All day / 24 Hours / Off**

**FRONT VIEW OF PROGRAMMER**

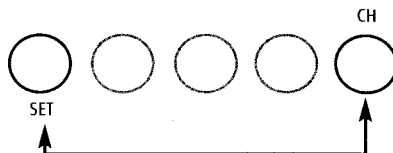


- |  |                                 |
|--|---------------------------------|
| 1.SET indicator                                | 9.Hot water ON indicator        |
| 2.Time of day                                  | 10.Central heating ON indicator |
| 3.Switch Period symbol                         | 11.SET positions                |
| 4.SET Button                                   | 12.PROGRAMME positions          |
| 5.Hot water BOOST or adjust (-) button         | 13.BOOST symbol                 |
| 6.Central heating ADVANCE or adjust (+) button | 14.ADVANCE symbol               |
| 7.Hot water (HW) select or ENTER Button        | 15.AM/PM symbol                 |
| 8.Central heating (CH) select button           | 16.PROGRAMME indicators         |

# RESETTING THE PROGRAMMER

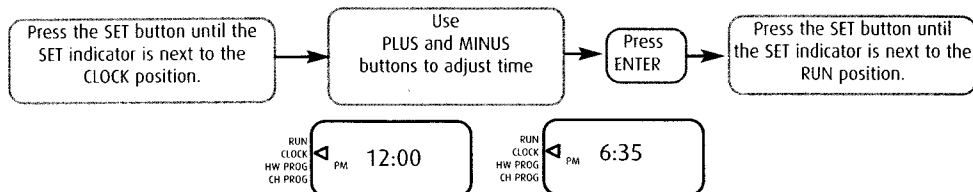
Electronic equipment can in some circumstances be affected by electrical interference. If the programmer's display becomes frozen or scrambled; or if you wish to revert back to the default time settings please use the following procedure.

Press the SET and CH buttons together then release the buttons and the programmer will return to preset factory settings.



The simple instructions below are designed to help with the programming of the unit.

## SETTING THE TIME OF DAY

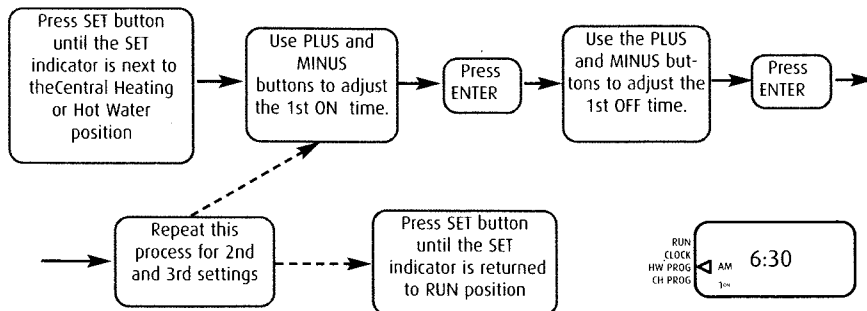


## DEFAULT TIME SETTINGS

1st ON	1st OFF	2nd ON	2nd OFF	3rd ON	3rd OFF
6:30 AM	8:30 AM	12:00 PM	12:00 PM	4:30 PM	10:30 PM

The default factory settings are shown above, however if you wish to change these proceed as instructed below.

## SETTING THE ON AND OFF TIMES



Should you encounter any problems, please refer to the **Question and Answer** section located on page 4.

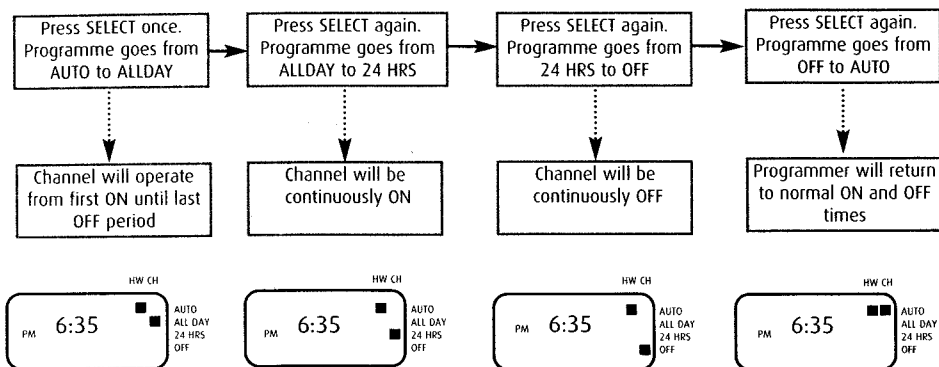
# INFORMATION AND ADVICE

## Programming ON/OFF times

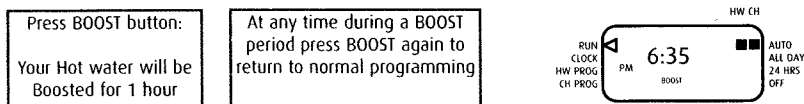
If a Heating or Hot water period is not required it can be cancelled by setting the ON and OFF settings to the same time. Example ON 10:00am OFF 10:00am

## SPECIAL FEATURES

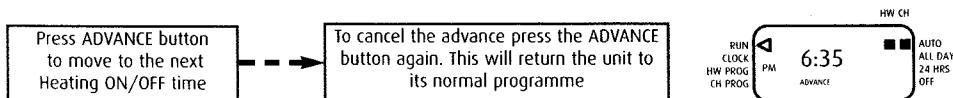
The SET indicator must remain in the RUN position for the following instructions. The following actions work independently on either Hot Water or Central Heating.



## BOOST FUNCTION - 1hour temporary override



## ADVANCE FUNCTION - Brings forward next ON or OFF operation



## FULLY PUMPED OR GRAVITY SYSTEM

The installer will have set the programmer to suit the installed system. If this is a Fully pumped system this will allow independent control of the Central heating and Hot water, however on a Gravity system the Central heating and Hot water are linked so that it is not possible to use the Central heating independently. This will allow only one common time setting for both Hot Water and Central Heating.

# BATTERY

The programmer is fitted with a non-rechargeable, long life battery, which will maintain the programmed time settings for a minimum of ten months with the supply disconnected. THIS SHOULD BE SUFFICIENT TO COVER POWER INTERRUPTIONS DURING THE LIFE OF THE UNIT. During power interruptions the display will be blank, after 3 days the current time of day will be lost. These measures are to prolong the battery life.

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## SERVICE AND REPAIR

This programmer is NOT user serviceable. Please do not dismantle the unit. In the unlikely event of a fault developing please refer to the RESETTING THE PROGRAMMER section of this user guide located on page 2. If this fails to resolve the problem please contact a local heating engineer or a qualified electrician.

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## QUESTIONS AND ANSWERS

The unit display has become frozen	This could be due to local electrical interference Using the RESET procedure may rectify the fault.
The indicator neon fails to illuminate on Hot water or Central heating channel	Using the RESET procedure may rectify the fault. If the problem persists the programmer will need replacing.
The indicator neon will illuminate but the pump and/or boiler fails to operate	This may indicate a problem elsewhere in your system; E.g. A zone valve, etc. please contact a registered installer for advice.
There is no display on the programmer	Try the RESET procedure on page 2, if this fails to rectify the problem please have the mains supply checked
How do I know if the programmer is still under warranty	The CentaurPlus range comes with a 2 year guarantee from the date of manufacture. This date is located on the rear of the unit, indicated by a month over a year
How is the programmer removed from the wall	<b>WARNING:</b> The CentaurPlus programmer must only be removed from it's backplate by either a qualified electrician or heating engineer; The programmer plugs in to a 6 pin backplate located on the rear of the unit and is secured using 2 screws located on the bottom surface of the unit. Undo these screws and pull forward and up in an arc motion

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LEAFLET No P60497  
ISSUE 4