

# eco hometec

## Variable Controlled Output (VCO) Solar Compatible \*\*\*\* Gas Condensing Boilers EC 16, 23, 31 and 38kW





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eco hometec is committed to design, develop and produce environmentally friendly appliances for both domestic and commercial applications

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## 1. User Instructions

## 1.1 Annual Servicing.

It is a condition of the boiler warranty that all servicing and maintenance be carried out annually by eco hometec approved engineers only.

When the word [INSPECTION] is displayed in the LCD display on the control panel, a full service of the unit is required.

A service has to be carried out when :

The status display appears INSPECTION or

## **Every 12 months**

### **1.2 Decommissioning the boiler.**

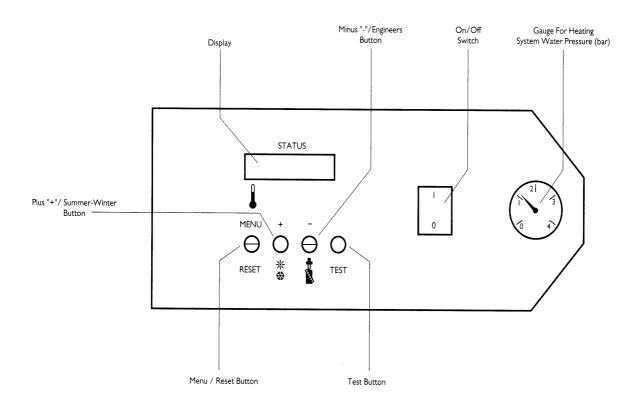
When decommissioning the boiler, precautions should be taken to avoid frost damage. Therefore it is essential that both the boiler and the central heating system are completely drained down.

## 1.3 Built-in clock

The appliance has a unique built-in 3 channel programmable time clock. This enables not only the setting of the heating times for various temperatures, but also the heating times for hot water. During programmed off periods Combi models ('S' types) will maintain a minimum storage temperature of 40°C. For H and HS type appliances connected to hot water cylinder for this function to operate temperature control has to be provided with a sensor (available from eco hometec). When hot water temperature control is provided by a cylinder thermostat this function is not available.

For convenience it is possible to ignore the built in programmer and alternatively control the boiler using a remote programmer.

Please check with your installer to confirm which option has been installed.



## **Boiler Control panel**

## **1.4 Boiler Control Panel**

The boiler control panel incorporates the following features.

## 1.5 System water pressure

Informs user of current system water pressure.

## 1.6 On / off switch

Boiler isolating switch.

Always switch to the OFF position when working on the unit.

## 1.7 Lcd control display

The display has two lines:

the upper line indicates the current operating status e.g HW DEMAND and either "S" (summer) or "W" (winter / "D" (day) or "n" (night).

b. the lower line indicates on the left-hand side the current boiler water temperature, and on the right-hand side the time.

If the button is pressed briefly, the following data may be viewed in the following order:

Press 1 x T1 supply temperature in the system

Press 2 x T3 tap water temperature

Press 3 x T4 return temperature in the system

Press 4 x T5 water, if connected, or the maintained temperature of the built-in tap water exchanger of the boiler

Press 5 x T6 outside temperature

Press 6 x Room 1 - heat demand value of connected room unit

Press 7 x Speed 1 - fan speed

Press 8 x Pump - % pump speed in relation to maximum

Only the values of connected components are shown.

## 1.8 Menu - reset button

A pressure operated switch activated by pressing with finger until sensor below casing facia clicks or display changes. This button when pressed allows:

Access to 3 layer menu programming options.

Access to current boiler status displays. Confirms an entry when programming control.

Reset the boiler after lockout.

For meaning of lockout "FLASHING" display please refer to installer manual.

## **1.9 Summer winter button**

Advances (scrolls forwards through + menu and programming options).



Increases a value in the LCD display. Sets boiler control to either summer (hot water only) or winter (hot water

and heating both on mode)

#### 1.10 **Engineers button**

Reverses (scrolls backwards through menu and programming options).

Reduces a value in the LCD display.



Places appliance into engineer's mode for servicing purposes.

#### 1.11 **Test button**

Checks overheat safety feature. When the burner is on and the button depressed, the burner will shut down when button released, the unit will start up again.

Checks pump function. When the burner is off and the button depressed, the pump will run at 100% speed for approx 2 seconds.

#### 1.12 General

To access the programming mode for times, temperatures, etc., the "Menu" button must be depressed for <u>3 seconds</u> the screen will briefly display "-MENU-" and display a menu option. Use the "+" and "-" buttons to scroll through the various options and the "MENU" button to select and confirm changes.

## 2. **Programming Menu options**

## 2.1 Party

This function allows you to extend the current heating period. To access the party option press the "-MENU-" button once and "\_\_\_\_hours" will flash on the screen, press "+" or "-" to enter a value then press "- MENU-" button once to confirm entry.

After expiry of the extension time set, the night-time temperature will start; if the lower night temperature had already started at the time of setting the party time, the daytime temperature will be obtained for the duration of the time set, after which the night-time temperature will be resumed.

Range 0 – 24 hours. Default 0 hours.

## 2.2 Hot Water Temperature

For S type appliances (COMBIS) this function allows you to select the maximum hot water temperature. For H and HS type appliances connected to hot water cylinder where temperature control is provided with a sensor (available form eco hometec) this function allows you to select the maximum temperature for the water in the cylinder.

To access the "TEMP DHW" option press the "MENU" button until "\_\_\_\_\_" °C flashes on the screen. press "+" or "-" to enter a value then press "-MENU-" button once to confirm entry.

Temperature range 40 -  $60^{\circ}$ C. Default  $60^{\circ}$ C.

## 2.3 Day temperature function

When the boiler is set up for outside temperature control (with or without a room thermostat or room unit) adjusting this setting raises or lowers the heating curve.

This has the effect of increasing or lowering the boiler water temperature and ultimately increasing or lowering the room temperatures as the cooler or warmer water circulates through the heat emitters.

Raising or lowering the building ambient temperature is possible without adjusting the setting of the room thermostat or room unit. If the boiler is set up to work without outside temperature reference then the feature has no function. To access press "MENU" button as before then press "+" or "-" to enter a value then press "-MENU-" button once to confirm entry. The default value for this setting is 20°C

## 2.4 Time/day function

Having selected this function, there is a subprogram with two options:

the correct time, in minutes

To change the time press "-MENU-" button once and the use the press "+" or "-" to change the time then press "-MENU-" button once to confirm entry.

the day

To change the day press "-MENU-" button once and the use the press "+" or "-" to set the day then press "-MENU-" button once to confirm entry.

## 2.5 Setting the ch timer

When a RE2132 room unit is fitted the built in timer function takes priority over the boilers timer control. In this case the boiler timer should be set to 00.00 hours.

This programme enables the setting of 3 time blocks (3 start and 3 end times) per day (24 hours) for higher and lower room temperatures.

This menu has two submenus: a. the days of the week

b. the start and end times of each block

To access this function from the main menu display press "MENU" button for three seconds.

You will arrive at "PARTY O HOURS" in the display.

Press the "+" button three times to arrive at SET CH TIMER

Press the "MENU" button once and the first display will be "Monday" use the "+" and "-" buttons to scroll through this submenu to reach the day you want to change.

Having found the correct day, press the "MENU" button once to arrive at

"CopySU>MO" ignore this and press the "+" button once to arrive at "SWITCH ON 1" "MO 00:00"

Press the "MENU" button once and the hours "00" part of the display will start flashing.

This sets the hour the heating will start for the first of three possible on times per day Adjust the hour by pressing the "+" and "-" buttons. When the correct time is displayed confirm by pressing "MENU" button once and the minutes part of the display "00" will start flashing.

Adjust the minutes by pressing the "+" and "-" buttons. When the correct time is displayed confirm by pressing "MENU" button once. Press the "+" button once to arrive at "SWITCH OFF 1" "MO 00:00" This sets the hour the heating will switch off for the first of three possible off times per day.

Adjust the hour by pressing the "+" and "-" buttons.

When the correct time is displayed confirm by pressing "MENU" button once and the minutes part of the display "00" will start flashing.

Adjust the minutes by pressing the "+" and "-" buttons. When the correct time is displayed confirm by pressing "MENU" button once.

Press the "+" button once to arrive at "SWITCH ON 2" "MO 00:00"

Repeat as above to programme all 3 start and 3 end times

If you wish to ignore any periods then simply enter "0.00".

Please note due to the nature of the preprogrammed boiler software there may be a half-hour delay in the CH system start and off times.

This period can be offset by adjusting the on and off times.

e.g. if you leave the house at 10:00 then enter 9:30 and if you are returning at 12:.30 enter 12.00.

Always confirm the times with the "MENU" button.

Programming all periods - note: you may ignore any blocks by entering 00:00 with the

exception of "SWITCH ON 1" and "SWITCH OFF 1" for which you must enter a real time.

After you have programmed all three on and off period's press the "+" button to arrive at "<-BACK" Press the MENU button and you will arrive at TUESDAY.

Press the MENU button again and you will arrive at COPY "MO -> TU"

You can now copy the previous days program onto the next day e.g. Mondays times to Tuesday by pressing MENU or alternatively program in new times by pressing "+" button and repeating the process described in the previous section.

To copy the previous days program Press the "MENU" button, you arrive at: "MON -> TUESDAY"

Press the "MENU" button once to copy and the display will change to "WEDNESDAY".

Press the "MENU" button, you arrive at: "TU -> WEDNESDAY"

Press the "MENU" button once to copy and the display will change to "THURSDAY" Repeat the process until all day have been copied or changed as required and you arrive at <- BACK.

To exit this second submenu, from <-BACK press "MENU" button once and you will arrive at SET HW TIMER

From here you can either continue to programme the unit or return to the operating display menu by pressing "+" repeatedly until you arrive at <-BACK then exit by pressing menu.

## 2.6 Setting the hw timer

This programme enables the setting of 3 time blocks (3 start and 3 end times) per day (24 hours) for higher and lower temperatures of the supply of tap water. This menu has two submenus:

a. the days of the week

b. the start and end times of each block

For programming, repeat as for section CH timer.

During programmed off periods Combi models ('S' types) will maintain a minimum storage temperature of 40°C.

For H and HS type appliances connected to hot water cylinder for this function to operate temperature control has to be provided with a sensor (available from eco hometec). When a cylinder thermostat provides hot water temperature control this function is not recognised.

## 2.7 Setting MR03 times

When a MR 03 secondary circuit control unit has been fitted then this programme enables the setting of 3 time blocks (3 start and 3 end times) per day (24 hours) for higher and lower temperatures for a second central heating circuit. Note unless a MR 03 is connected this function will not be seen.

## 2.8 Night-time lower 0°c

This is used to programme the value for the night time set back temperature in relation to the room temperature during the day.

NOTE! If the difference between the daytime temperature and night time setback temperature is considerable, the start time of the central heating unit must be set earlier than required to compensate.

Statistically, it has been proven that a night time decrease of 5°C is best; if a lower night-time temperature is set, heating in the morning requires too much energy.

With "SETBACK" displayed on the screen press "MENU" button until "\_\_\_\_" °C flashes on the screen. press "+" or "-" to enter a value then press "-MENU-" button once to confirm entry.

## 2.9 Holiday function

Use the "+" and "-" buttons to set the number of days of the holiday period.

During this period, the night time temperature will be maintained, while the tap water temperature will be set at a minimum of 20°C.

If you are away for an extended period then to save energy adjust the night time temperature to 10°C.

After the number of days has expired, the unit will start operating according to the clock programme set.

Remember when you return to re-adjust the night time temperature to it's original setting. Having completed the setting, press the "MENU" button to confirm the new value.

## 2.10 Installer

This function is for the service engineer only and is code protected.

Save gas Save money Only boilers from eco hometec are fitted with Variable Controlled Output

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