



WORCESTER

Bosch Group

TWIN CHANNEL PROGRAMMER FITTING AND OPERATING INSTRUCTIONS

General information is given in the users instruction leaflet despatched with the appliance and/or on the lighting instruction plate fitted to the appliance.

CONFORMS TO THE ESSENTIAL REQUIREMENTS OF THE FOLLOWING DIRECTIVES:

89/336/EEC – ELECTROMAGNETIC COMPATIBILITY

73/23/EEC – LOW VOLTAGE DIRECTIVE



THESE INSTRUCTIONS APPLY IN THE UK ONLY

THESE INSTRUCTIONS ARE TO BE LEFT WITH THE USER OR AT THE APPLIANCE

Gas Safety (Installation and Use) Regulations 1984: All gas appliances must be installed by a competent person, in accordance with the above regulations. Failure to install the appliance correctly could lead to prosecution. The manufacturers notes must not be taken, in any way, as overriding statutory obligations.

WARNING: This appliance must be earthed and protected by a 3A fuse if a 13A plug is used, or, if any other type of plug is used, by a 5A fuse either in the plug or adaptor or at the distribution board.

IMPORTANT: To get the best from your Worcester appliance please read these instructions carefully.

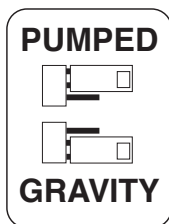
PROGRAMMER

7 Day Twin Channel Timeswitch. Maintenance: User maintenance should not be attempted.

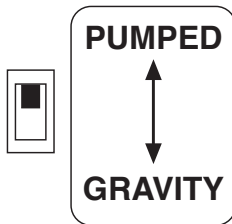
Switch Rating: 2(10A 240V Supply Voltage 220-240 ac 50Hz).

If you have a fully **PUMPED** and controlled system you can have central heating without hot water and vice versa. A **GRAVITY** fed hot water system does not permit the heating to be on without hot water. It is possible to have hot water without the heating.

Set the switch or selector on the back of the programmer to **P** or **G** according to the type of system.



Selector



Switch

TO FIT PROGRAMMER

WARNING: Disconnect the electrical supply at the mains and turn off the gas supply at the service cock before commencing any work.

Access must be gained to the rear of the fascia as described in the appliance instruction book.

Unplug the operating switch from the 4-way terminal block. Remove the operating switch mounting panel from the fascia by unscrewing the four nuts, two at the top and two at the bottom.

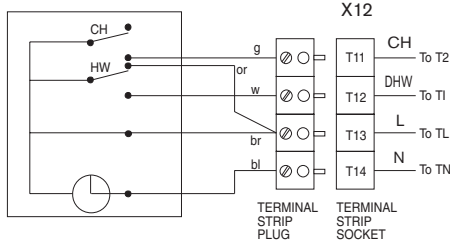
Fit the programmer assembly in the reverse order, carefully tightening the fixing nuts. Plug in the programmer connection into the 4-way terminal block. Check that the plug-in terminal block is properly aligned before making the connection.

TO REPLACE THE PROGRAMMER

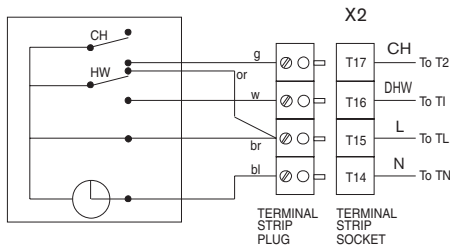
Follow the preceding instructions if it is necessary to replace the programmer.

ELECTRICAL CONNECTIONS

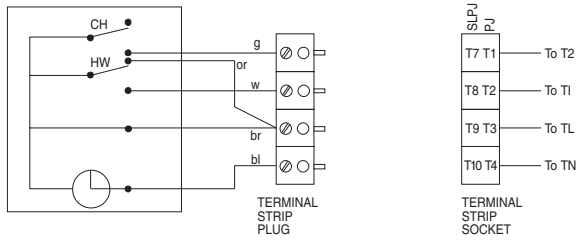
Highflow 400



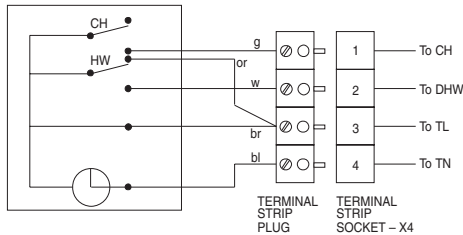
Highflow 400 Electronic



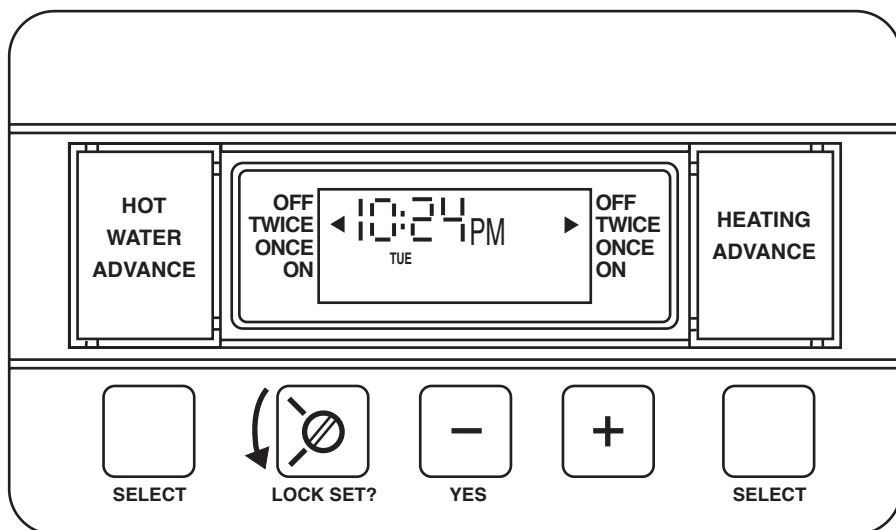
Danesmoor & Greenstar II Oil Boiler



Oil Heatslave



OPERATION OF CONTROLS



The programmer controls the hot water and central heating functions independently.

When a **CENTRAL HEATING** programme is selected, the appliance will operate at times dictated by the programmer in response to the system controls.

When the **HOT WATER** programme is selected the appliance will operate whenever a demand for hot water is made within the setting of the programmes.

PROGRAMMER OPERATING INSTRUCTIONS

Check that the gas supply to the appliance is **OFF** and that the room thermostat, if fitted, is at minimum to prevent accidental operation of the appliance during the initial setting of the programmer. It is not necessary to do this when making adjustments to the programme at a later date.

Switch on the electricity supply.

Select **OFF** by pressing the **SELECT** button until the arrow appears next to **OFF** on the display.

Release the lock screw to alter the programmer settings. Set the lock screw after any alterations.

Press and release the **SET** and **+** buttons simultaneously to get the display **Mon - 12.00 - AM**.

To Set the Clock

Press **SET** and **SET CLOCK?** will appear.

Press **YES** and **TIME** and **DAY** will appear. The day will flash.

Press **-** and **+** buttons to alter the day.

Press **SET** to enter the day. The Hours will flash.

Press – and + buttons to alter the hour.

Press **SET** to enter the hour (with the correct **AM** or **PM**). The minutes will flash.

Press – and + buttons to alter the minutes.

Press **SET** to enter the minutes.

The display will show **SET PROG?** – See Changing the Programme.

Press **SET** and **TEST?** will appear – See Programme Test.

Press **SET** and **SET H'DAY?** will appear – See Holiday Setting.

Press **SET** and the **DAY** and **TIME** display will appear.

If the programme is left in the programming mode it will automatically revert to the normal mode after a period of 1 to 2 minutes.

Do not forget to re-set the clock when the British Summer Time changes are required.

Standard Programme

The programmer has an in-built programme of “standard” switching times shown in the table. These may be changed to suit your specific requirements.

SWITCHING	STANDARD PROGRAMME			
	Mon.-Fri.		Sat.-Sun.	
	CH	HW	CH	HW
ON1	6.30 a.m.	6.30 a.m.	7.00 a.m.	7.00 a.m.
OFF1	8.30 a.m.	8.30 a.m.	9.00 a.m.	9.00 a.m.
ON2	4.30 p.m.	4.30 p.m.	4.00 p.m.	4.00 p.m.
OFF2	10.30 p.m.	10.30 p.m.	11.00 p.m.	11.00 p.m.

ON1 – Start of the first timed period of the day.

OFF1 – End of the first timed period.

ON2 – Start of the second (evening) period.

OFF2 – Final shut down for each day (up to 23hr 50min after ON1).

Changing the Programme

Check that the time is correctly set before changing the programme.

Press **SET** until **SET PROG?** appears.

Press **YES** until Time, Monday-Friday, **CH ON** appears.

NOTE: If you press **SET** after each operation of **YES** you advance that setting to its next stage i.e. Mon-Fri to each individual day or **CH** to **HW** etc.

You can now set the **CH** operating times for the Monday-Friday period.

Press – and + buttons to set the **CH ON** time in 10 minute steps.

Press **SET** to enter the **ON1** time. **OFF** will appear.

Press – and + buttons to set the **CH OFF** time.

Press **SET** to enter the **OFF1** time.

Continue and set the **ON2** and **OFF2** times.

HW appears.

Press **YES** to get **HW ON**.

Set **HW ON1** to **OFF2** as previously described.

When the **OFF2** time is entered **SET MON PROG** will appear.

You can now enter **CH** operating times for **MONDAY** only if required.

Press **YES** until Time, **ON** appears.

Press – and + buttons to set the time and continue as described in the preceding instructions to set **CH** and **HW**.

The final press of **SET** will change the day. Amend the times as required.

Continue until **SAT SUN** appears.

Set the **CH** and **HW** operating times for these two days as described in the preceding instructions. It will then be possible to set specific times for **SATURDAY** or **SUNDAY** as required.

The final press of **SET** produces **TEST?** on the display.

Press **SET** (twice) and the **DAY** and **TIME** display will appear.

Enter the new programme times in the table following.

Central Heating

	ON1	OFF1	ON2	OFF2
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

Hot Water

	ON1	OFF1	ON2	OFF2
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

Programme Test

Press **SET** until **TEST?** appears.

Press **YES** and 12.00 **AM** on that particular day will appear.

Press and hold **YES** and the time display will run pausing for 2-3 seconds at each switching operation. The **CH** or **HW** indicator will be energised as appropriate.

Release the **YES** button to hold the switching time for longer than 2-3 seconds.

Press **YES** to continue the examination moving through each day of the week.

Press **SET** (twice) to return to the Day and Time display.

Holiday Setting

Press **SET** until **SET H'DAY?** appears.

Press **YES** and 00 will appear.

Press – and + buttons to set the number of days you require the system to be off.

Each pass through midnight counts as one day.

Press **SET** and **H'DAY** will appear. The system will countdown to zero and then return to normal settings.

To override the holiday setting press any button and normal operation will resume immediately.

If you wish to inspect a single days settings press **SET** to get **PROG?** followed by **YES** and **SET** to get the desired day. Press **YES** to display the times and then repeatedly press **SET** to progress through the settings of that day. Alter the times as desired remembering to press **SET** at the end. To return to the day and time display if no change to the programme is made repeatedly press **SET**.

The programme can be reset to the start-up display and the standard pre-set programme by pressing **SET** and + simultaneously. You will have to reset the clock and then enter the programme required following the preceding instructions.

Operational Notes

Programmer Flexibility

Switching options for **CH** and **HW** are:

- OFF** – Off all the time.
- TWICE** – On for two periods each day.
- ONCE** – On for one period each day (**ON1** → **OFF2**).
- ON** – On all the time.

Operate the **SELECT** button to move the arrow in the display to the option you require.

Mixing Once or Twice Options

To have your **CH** (Central Heating) or **HW** (Hot Water) Twice on some days but **ON** all day the others, first programme the “Twice” days in the normal manner. For the other days set **ON1** to the required switch-on time and then set **OFF1**, **ON2** and **OFF2** all at the same required switch-off time. Finally, set the **SELECT** button to Twice.

One Day Off Option

If you require the appliance to be off on a particular day, set the relevant **ON1** and **OFF1** to the same time and **ON2** and **OFF2** to the same later time on that particular day. Set the appropriate **SELECT** button to **ONCE** or **TWICE** as required.

Central Heating or Hot Water Shut Down

To shut down the **CH** (Central Heating) or, where appropriate, **HW** (Hot Water) without disturbing the programme, set the appropriate **SELECT** button to **OFF**.

Advance

If you wish to switch the central heating from **ON** to **OFF** or vice-versa, press and release the appropriate advance button. The regular programme will be automatically resumed as the later switching times are reached.

Advance does not operate if you have selected the **ON** or **OFF** options.

TO LIGHT AND STOP THE APPLIANCE

Refer to the user's operating instructions or the lighting instruction plate fixed to the appliance door panel, for detailed instructions on the lighting and operation of the appliance.



Worcester Heat Systems Ltd (Bosch Group), Cotswold Way, Warndon, Worcester WR4 9SW.

Telephone: 01905 754624 Fax: 01905 754619

Technical Helpline 08705 266241

www.worcester-bosch.co.uk

This booklet is accurate at the date of printing but will be superseded and should be disregarded if specifications and/or appearances are changed in the interests of continued improvement.

All goods sold are subject to our official Conditions of Sale, a copy of which may be obtained on application.

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