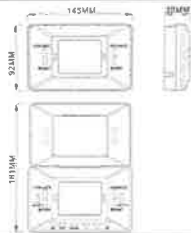




## TECHNICAL DATA

Voltage:	230V AC +15% -15% 50/60 Hz
Rating:	3 (1) A 230V AC
Wiring:	Designed for Fixed Wiring only To comply with current IET regulations
Battery Backup:	Settings hold in memory indefinitely
Timekeeping Accuracy:	less than 10 minutes per year
Programme Resolution:	10 minutes
Ambient temperature:	Operating: 0°C to 45°C Storage: -20°C to 50°C
Maintenance:	No user maintenance should be attempted
Pollution Degree:	II
Software Class:	A
Rated Impulse Voltage:	2.5KV
Ball Pressure Test Temp:	75°C for the shell, 100°C for the back wall plate
Relevant EC Directives:	LVD 2006/95/EC, EMC 2004/ 108/EC RHOS 2011/65/EU, Battery 2006/66/EC

## DIMENSIONS



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## INSTALLER PARAMETERS

The Flomasta Two-Channel Programmer has an Installer mode where some factory set features, known as parameters, can be adjusted to suit individual preferences.

The table on the next page shows the parameters which can be adjusted.

To make adjustments:

1. Press the **+** and **OK** buttons together for 3 seconds to access the parameter menu.
2. Press either the **+** or **-** button to select the parameter to be changed.
3. Press the **OK** button.
4. Press either the **+** or **-** button to select the new option.
5. Press the **OK** button to accept the change and move to the next parameter.
6. Repeat steps 2 to 5 to make further changes.
7. Press the **SET** button at any point to exit the setting mode and return to the run mode.

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Parameter Number	Installer Parameter	Default Setting	Options	Description
1	12 or 24 hour clock	24	12, 24	12 = am/pm 24 = 24 hr clock
2	Default Programmes	1	1, 2, 3	1 = Work 9 till 5 2 = Home for lunch 3 = At home
3	Reset to factory settings	off	on, off	on = Restore settings to factory defaults. Changes to "off" when settings are restored
4	Summer / Winter time	on	on, off	on = Summer / Winter time enabled off = Summer / Winter time disabled
5	On / Off periods per day	3	2, 3	2 = 2 On / Off periods per day 3 = 3 On / Off periods per day

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## GRAVITY HOT WATER OPERATION

The Flomasta Two-Channel Programmer can be used as a Mini Programmer

The Flomasta Two-Channel Programmer can be set to operate as a Mini Programmer i.e. pumped heating with gravity circulation hot water, by accessing the Installer menu and changing parameter 5.

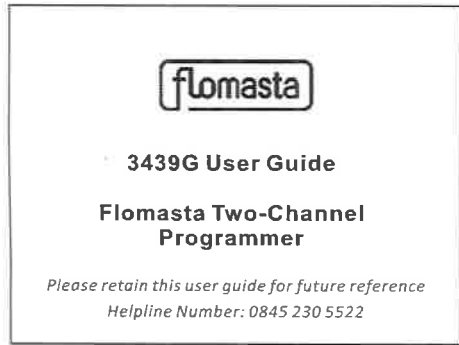
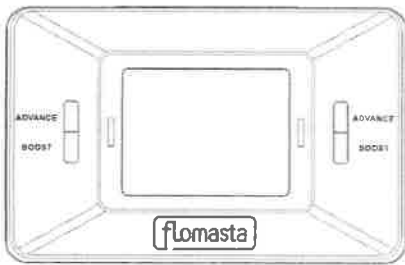
The heating and hot water can be ON together, or hot water alone, but NOT heating alone. It is therefore not possible to have independent heating and hot water programmes.

It is only necessary to set the Heating programme; the Hot water timing will follow the same programme.

The table below shows the allowable combinations.

Heating	Hot Water
OFF	OFF
OFF	AUTO
OFF	ALL DAY
OFF	ON (CONTINUOUS)
AUTO	AUTO
AUTO	ALL DAY
AUTO	ON (CONTINUOUS)
ALL DAY	ONCE (ALL DAY)
ALL DAY	ON (CONTINUOUS)
ON (CONTINUOUS)	ON (CONTINUOUS)

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**PRODUCT INFORMATION**

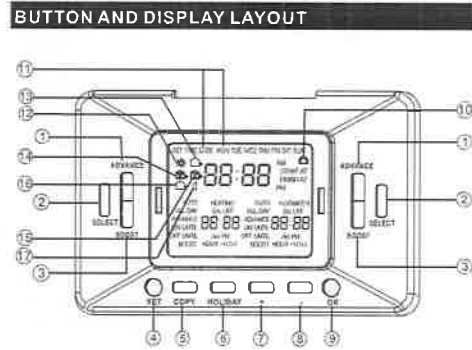
Product: 3439G Two Channel Programmer

Product range: Flomasta

Contact Address: Watersmith (UK) Ltd, Trade House, Yeovil BA22 8RT

Helpline number: 0845 230 5522

Please retain this user guide for future reference



- BUTTONS**
- The **ADVANCE** button will switch a channel OFF that is ON and vice versa.
  - The **SELECT** button will allow you to select ON or OFF, AUTO or ALL DAY on the heating or hot water channel.
  - The **BOOST** button will allow you to switch a channel on for an additional 1, 2 or 3 hours.
  - The **SET** button allows you to choose and set a programme.
  - The **COPY** button allows you to copy a programme to another day.
  - The **HOLIDAY** button allows you to switch the power off from the hot water and central heating for a period of time.
  - The + button will move you forward in a programme.
  - The - button will move you backwards in a programme.
  - The **OK** button is used to accept a setting or change.
- DIGITAL DISPLAY**
- Holiday mode.
  - Day and date display.
  - Daytime heating on.
  - Leaving home settings.
  - Start of lunch time settings.
  - End of lunch time settings.
  - Returning home settings.

**WHAT IS A PROGRAMMER?**

An explanation for householders.

Programmers allow you to set 'On' and 'Off' heating periods.

Some models switch the central heating and hot water on and off at the same time, while others allow the hot water and heating to come on and go off at different times.

You can set the 'On' and 'Off' time periods to suit your own needs.

With some programmers, you must also set whether you want the heating and hot water to run continuously during the chosen 'On' and 'Off' heating periods, or be permanently switched off.

The time on the programmer must be correct. Some programmers need to be adjusted in spring and autumn when the clocks change.

You are able to temporarily adjust your heating programme, for example, by pressing 'Advance' or 'Boost'. These are explained in the manufacturer's instructions.

Your heating will not work if the room thermostat has switched the heating off. If you have a hot-water cylinder, the water heating will not work if the cylinder thermostat detects that the hot water has reached the correct temperature.

**ABOUT YOUR PROGRAMMER**

The Flomasta Two-Channel Programmer will automatically switch each independent channel (Heating or Hot water) ON or OFF up to three times a day.

Your programmer has factory settings which mean you can use it straight from the box.

If you need to change any of the programme settings, follow the step-by-step instructions to set your programmer.

You can select different on/off times for each day of the week (i.e. 7 day programming).

The programmer has 3 pre installed heating and hot water programmes.

If you do not wish to make any adjustments to these, simply select AUTO for both the HEATING and HOT WATER channels and the programmer will follow the preset time program.

The clock is factory set so no adjustment should be necessary.

The **BOOST** feature gives an extra one, two or three hours ON time when selected. The display will show the next switching time as well as the actual time of day.

The **ADVANCE** feature allows a channel that is currently off to be switched on and vice versa. The programme will resume at the next switching time.

In the event of a power failure, the programme times are retained in internal memory.

**ADJUSTING TIME AND DATE**

The date and time is factory pre-set. If for any reason you need to adjust them proceed as follows:

- Press the **SET** button.
- The **SET** icon will be displayed.
- The **TIME** icon will flash.
- Press the **OK** button.
- The **HOURS** will flash.
- Use the + and - buttons to set the hours.
- Press the **OK** button.
- The **MINUTES** will flash.
- Use the + and - buttons to set the minutes.
- Press the **OK** button.
- The **DATE** will flash.
- Use the + and - buttons to set the date.
- Press the **OK** button.

- The **YEAR** will flash.
- Use the + and - buttons to set the year.
- Press the **OK** button.
- The **MONTH** will flash.
- Use the + and - buttons to set the month.
- Press the **OK** button.
- The **DAY** of the month will flash.
- Use the + and - buttons to set the day of the month.
- Press the **OK** button.

**Note.** Press the **SET** button once to return to the run mode at any time.

## PRE SET PROGRAMME

There are 3 preset built in time programmes. Programme 1 will run unless another programme has been set by your installer.

A different preset programme can be selected by following the steps in the installation instructions.

Programme 1 (Default) - 9 'til 5. Programme 2 - Home for lunch

Event No.	Hot Water & Heating	Mon-Fri	Sat-Sun	Event No.	Hot Water & Heating	Mon-Fri	Sat-Sun
1	1st ON	6:30	7:00	1	1st ON	6:30	7:00
2	1st OFF	8:30	9:00	2	1st OFF	8:30	9:00
3	2nd ON	12:00	12:00	3	2nd ON	12:00	12:00
4	2nd OFF	12:00	12:00	4	2nd OFF	14:00	14:00
5	3rd ON	16:30	16:00	5	3rd ON	16:30	16:00
6	3rd OFF	22:30	23:00	6	3rd OFF	22:30	23:00

Programme 3 - Home worker

Event No.	Hot Water & Heating	Mon-Fri	Sat-Sun	Hot Water	Mon-Fri	Sat-Sun
1	1st ON	6:00	7:00	1st ON	6:30	7:00
2	1st OFF	22:30	23:00	1st OFF	8:30	9:00
3				2nd ON	12:00	12:00
4				2nd OFF	12:00	12:00
5				3rd ON	16:30	16:00
6				3rd OFF	22:30	23:00

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## CHANGING PROGRAMME TIMES

You cannot set the first ON before midnight (i.e. the previous day). If you try to set an ON time after it's matching OFF time, both will 'lock' and the ON UNTIL and OFF UNTIL symbols in the display will flash alternately.

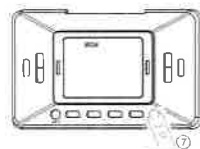
If you wish to change the factory preset programme proceed as follows:



1. Press the SET button once.
2. The SET icon will be displayed.



3. Repeatedly press the + button until the channel to be set is flashing.
4. Press the OK button.



5. The MON icon will flash.
6. Use the + and - buttons to change the day if required.
7. Press the OK button.

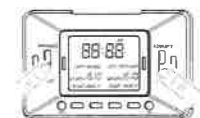
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## BOOST FUNCTION

The Boost function will switch an OFF channel ON for 1, 2 or 3 hours, or extend the current ON time for 1, 2 or 3 hours.

Pressing the ADVANCE button will cancel boost.

The channel will return to the programme at the end of the boost extension time.



For heating and hot water:

Press right BOOST button for hot water.

Press left BOOST button for heating.

1. Press the BOOST button once, twice or three times to switch ON for a period of 1, 2 or 3 hours or to extend the current ON time by 1, 2 or 3 hours.
2. The display will show BOOST HOUR +1, +2 or +3 extension time and new ON UNTIL 'time.
3. Press the BOOST button a fourth time to cancel the boost function and return to the set programme.

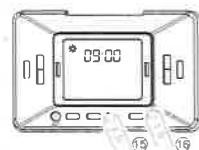
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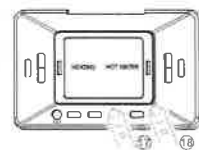
6. The first TIME PERIOD icon will flash.
9. If you want to leave the preset time as it is press the + or - buttons to select the other time periods.
10. If you want to adjust the preset time press the OK button.



11. The TIME will flash.
12. Use the + and - buttons to adjust the time.
13. Press the OK button.



14. The next time period icon will flash.
15. Repeat the process for the remaining time periods if required.
16. When the last time period has been set, the next channel icon will flash.



17. Repeat the process for the remaining time period and channels.
18. If you wish to copy this programme to another day follow the Copy function instructions.

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## HOLIDAY MODE

The holiday mode can be set in advance of your departure date, and will operate from midday to midday to turn off the power to the heating and hot water. On the day of your return it will return to the set programme.



1. Press the HOLIDAY button.
2. The Holiday icon (suitcase) and START AT will be displayed.
3. The Year will flash.
4. Use the + and - buttons to set the year.
5. Press the OK button.
6. The Month will flash.
7. Use the + and - buttons to set the month.
8. Press the OK button.
9. The Date will flash.
10. Use the + and - buttons to set the date.
11. Press the OK button.
12. FINISH AT will be displayed.
13. Repeat steps 3 to 11 to set the finish date.



14. Press the OK button again to accept the holiday settings, and run the holiday mode. If the holiday mode is set in advance of your departure date, the set programme will run i.e. AUTO.
15. The SUITCASE icon will be displayed indicating that the holiday period has been set.
16. When the holiday mode is operating the day and month will be displayed for the finish of the holiday period.

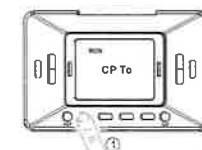


NOTE: When set, press the HOLIDAY button then the SET button to cancel the holiday mode at any time. Press the SET button at any point to return to the set programme i.e. AUTO.

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## COPYING THE DAY

The programme for any day can be copied into any other day.



1. Press the COPY button.
2. CP To will be displayed.
3. The day to be copied will flash.
4. Use the + and - buttons to select a different day if required.
5. Press the OK button.



6. The target day will flash.
7. Use the + and - buttons to select a different day if required.
8. Press the OK button.

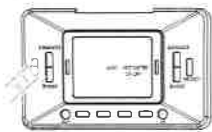
Repeat the process to programme the remaining days if required.

Press the COPY button at any time to exit the copy mode and return to the programme.

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## RUNNING THE PROGRAMME

Different selections for heating and hot water can be made. The display will indicate which operating mode is selected.

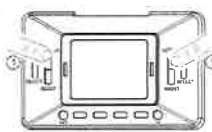


1. Press the SELECT button for either the Heating or Hot Water channel to choose:

ON- continuously ON.  
OFF- continuously OFF.  
ALL DAY- ON from the morning to the evening time period.  
AUTO- switching ON and OFF following the programme.

## ADVANCE FUNCTION

You can switch on this temporary override mode when in the AUTO or ALL DAY mode.



1. Press the ADVANCE button once and the advance function will switch a channel off if it is on or on if it is off.
2. The display will change to show ADVANCE, and the new on or off times.
3. The channel will return to the programme at the next switch time.

4. To cancel this function press the ADVANCE button a second time

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## RESET TO FACTORY SETTINGS

The programmer can be reset to the original factory settings excluding the date and time.

Momentarily pressing SELECT and + buttons together will reset the unit to the factory default condition, excluding the date and time.

## BST / GMT TIME CHANGES

The internal clock will automatically adjust backward or forwards by 1 hour for BST - GMT time changes.

## FAULT FINDING

Symptom	Possible cause	Remedy
Blank screen	No power to heating system.	Check power switched ON to heating system.
	Fault in Programmer	Call installer.
Flomasta Two-Channel Programmer Heating LED ON but radiators cold	Room thermostat set too low.	Set room thermostat to higher temp.
	Boiler not switched ON.	Switch boiler ON.
Flomasta Two-Channel Programmer Hot Water LED ON but DHW cold	Boiler, motorised valve or pump malfunction.	Call installer.
	Cylinder thermostat set too low.	Set cylinder thermostat to higher temp.
	Boiler not switched ON.	Switch boiler ON.

This product complies with the following EC Directives:  
Electro-Magnetic Compatibility Directive (EMC) (2004/108/EC)  
Low Voltage Directive (LVD) (2006/95/EC)  
Restriction of Hazardous Substances (ROHS) (2011/65/EU)



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