

## Energy Master User Instructions

### What is a programmer?

... an explanation for householders

Programmers allow you to set 'On' and 'Off' time periods. Some models switch the central heating and domestic hot water on and off at the same time, while others allow the domestic hot water and heating to come on and go off at different times.

Set the 'On' and 'Off' time periods to suit your own lifestyle. On some programmers you must also set whether you want the heating and hot water to run continuously, run under the chosen 'On' and 'Off' heating periods, or be permanently off.

The time on the programmer must be correct. Some types have to be adjusted in spring and autumn at the changes between Greenwich Mean Time and British Summer Time.

You may be able to temporarily adjust the heating programme, for example, 'Override', 'Advance' or 'Boost'. These are explained in the manufacturer's instructions.

The heating will not work if the room thermostat has switched the heating off. And, 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.

Total Energy Controls Marcus House Parkhall Business Village Longton Stoke-on-Trent Staffordshire ST3 5XA Phone: 01782 599313 Fax: 01782 599224



## Making adjustments to the TEC Energy Master

The installation technician will have programmed your TEC Energy Master to match the existing time and temperature levels, providing the comfort you normally enjoy while saving energy. The existing boiler thermostat will have been set higher than normal to allow the Energy Master to perform efficiently. This is perfectly normal, so do not lower this setting. You should not need to make any adjustments – however, two rocker switches are provided, marked 'AUTO-CONSTANT' and 'HTG/HW-HW ONLY'. Their functions are explained below.

#### 'AUTO-CONSTANT'

**'AUTO'** The unit is working in fully automatic mode.**'CONSTANT'** The unit is providing a constant output 24 hours a day.

#### 'HTG/HW-HW ONLY'

- **'HTG/HW'** The unit is fully controlling both the heating and hot water (where this applies). **'HW ONLY'** The unit is fully controlling the hot water but not the heating.
  - **Note:** The Energy Master has a fully automatic mode to switch off the heating when the outside temperature reaches a certain level. Some users may prefer the manual mode as provided by the '**HTG/HW-HW ONLY**' switch.

#### For users with technical knowledge

The Energy Master has 11 adjustable programs which you can access through the four keypads on the front of the unit. The available programs and settings are as follows.

- 1 Calendar
- 2 On/off times
- 3 Frequency
- 4 Select days
- 5 Maximum flow temperature
- 6 Minimum flow temperature
- 7 Minimum return/hot water temperature
- 8 Night temperature
- 9 Frost temperature
- **10** External cut-off temperature
- **11** Calibration (engineers only)

(Factory set) (Two on/off periods a day) (Once, twice, 24 hours) (Every day, weekends, weekdays) ( $30^{\circ}C$  to  $85^{\circ}C$ ) ( $25^{\circ}C$  to  $85^{\circ}C$ ) ( $20^{\circ}C$  to  $85^{\circ}C$ ) ( $0^{\circ}C$  to  $85^{\circ}C$ ) ( $0^{\circ}C$  to  $35^{\circ}C$ ) ( $0^{\circ}C$  to  $35^{\circ}C$ ) ( $0^{\circ}C$  to  $35^{\circ}C$ ) ( $-10^{\circ}C/+20^{\circ}C$ )

#### **Common adjustments**

#### 1 Too warm or too cool when the outside temperature is 0°C

To increase or lower the flow temperature during winter conditions, do the following.



#### 2 Too warm or too cool during mild conditions

Press

ENTER

To increase or lower the flow temperature during mild conditions, do the following.



to store the new setting and press it again to leave program mode.

#### 3 Adjusting the hot-water temperature

To increase or lower the hot-water temperature (where this applies), follow steps 1 and 2 until **'RTN-HW Temp'** is displayed and adjust and store as previously described.

#### 4 Adjusting the on and off times (programmer)

To change the programmed on and off times, do the following.



Repeat as described above for setting the second on and off times, if necessary.

After pressing Enter for the final time, the display will show the new settings for Monday. To repeat the on and off times for other days of the week, press Press Program Enter to copy Monday's on and off times. Press for display 'WEDS' and repeat as above as necessary. SELECT

If you need to set different times for weekends, program individual days as described before.

**Note:** If you do not need two on and off times, set the **first on time** and the **second off time** and set the next program, **'FREQUENCY**' to **'ONCE'**.

The changes described above are the only ones you should need to adjust. If you need advice, please phone 01782 599313 and ask for our technical department.

## Customer's copy

#### Current settings (to be filled in by the installation engineer)

| Program 1              | Factory set    | ]                    |           |            |
|------------------------|----------------|----------------------|-----------|------------|
| Program 2              |                |                      |           |            |
| Monday                 | First on       | First off            | Second on | Second off |
| Tuesday                | First on       | First off            | Second on | Second off |
| Wednesday              | First on       | First off            | Second on | Second off |
| Thursday               | First on       | First off            | Second on | Second off |
| Friday                 | First on       | First off            | Second on | Second off |
| Saturday               | First on       | First off            | Second on | Second off |
| Sunday                 | First on       | First off            | Second on | Second off |
| Program 3<br>Program 4 |                | ]                    |           |            |
| Program 5              |                | ]                    |           |            |
| Program 6              |                | ]                    |           |            |
| Program 7              |                | ]                    |           |            |
| Program 8              |                | ]                    |           |            |
| Program 9              |                | ]                    |           |            |
| Program 10             |                | ]                    |           |            |
| Program 11             | Engineers only | Customer's signature |           |            |

Notes

# Engineer's copy

#### Current settings (to be filled in by the installation engineer)

| Program 1                           | Factory set    | ]                                      |
|-------------------------------------|----------------|--|
| Program 2                           |                |  |
| Monday                              | First on       | First off     Second on     Second off |
| Tuesday                             | First on       | First off     Second on     Second off |
| Wednesday                           | First on       | First off     Second on     Second off |
| Thursday                            | First on       | First off     Second on     Second off |
| Friday                              | First on       | First off     Second on     Second off |
| Saturday                            | First on       | First off     Second on     Second off |
| Sunday                              | First on       | First off Second on Second off         |
| Program 3<br>Program 4<br>Program 5 |                |  |
| Program 6                           |                |  |
| Program 7                           |                |  |
| Program 8                           |                |  |
| Program 9                           |                |  |
| Program 10                          |                |  |
| Program 11                          | Engineers only | Customer's signature                   |

Notes