



Part No.DOC.17 Rev.06 May 2011

## USER INSTRUCTIONS

### General notes on using the timer

The timer will automatically control the times at which your boiler operates for central heating each day of the week. It also provides a permanent display of the time of day (24hr or am/pm) and day of the week. A small indicator on the display shows when the heating is either ON or OFF.

If the electricity supply to the boiler is interrupted, e.g during a power cut, the display will remain and the timer will retain the time and on/off program settings. It will not have to be reset when the supply is restored.

The timer is supplied with three pre-set program options each giving different On/Off settings. Refer to Page 3 – **'To select and use a pre-set program'** section.

Alternatively, you can set your own program of On/Off settings, with different ON and OFF times for heating for different days of the week, if required. You can set up to 10 ON and 10 OFF commands throughout the week. Refer to page 5 – **Setting your own program**. Once set this program can be changed at any time as required.


When setting the times for the ON periods it is useful to remember that it might take up to an hour for the house to become warm, especially in colder weather. Also the effect of the central heating will remain for a time when the central heating is turned off.

When setting the time for the start of the first ON period it must be after midnight. The time for the end of the last ON period can be after midnight. Refer to Page 6 – for the **'Shift'** function section.

While setting any times, if a period of more than 1 minute elapses since the last key was pressed, the timer automatically reverts back to the original program. Any changes made up to that point will be lost as they were not confirmed.

To temporarily override the current switching time, i.e. change OFF to ON or ON to OFF, use the **'+'** key on the Timer. Pressing the **'+'** key will advance the Heating to the next program operation.

**NB. The timer will NOT automatically return to the set program at the start of the next program operation. Refer to Page 6 - To manually override automatic operation.**

For 'Summer' use the central heating can be set to OFF by pressing the **'+'** key. Check that the 'switching status' display  indicates that the heating function is OFF.



### Grant Engineering (UK) Limited

Hopton House, Hopton Industrial Estate, Devizes, Wiltshire SN10 2EU

Telephone: (01380) 736920 Fax: (01380) 736991

email: info@grantuk.com website: www.grantuk.com

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# ETKIT Fitting and User Instructions for Electronic Timer

Suitable for  
Vortex Pro Internal Combi e models  
and  
Indoor Grant Combi V3 & Combi Max models

## IMPORTANT

These fitting Instructions must be read in conjunction with the wiring diagrams given in the Installation manual supplied with the boiler

### FITTING INSTRUCTIONS

#### 1. Kit contents

The Electronic Timer Kit (Ref. ETKIT) for Grant Vortex Pro Internal Combi e boilers and Indoor Grant Combi V3 & Combi Max boilers contains the following items:

- 1 x Grasslin 'Tactic' 7-day single channel electronic timer
- 1 x Wiring harness with plug (Note: plug is NOT required when used with Vortex pro Combi models)
- 1 x Fitting and User instructions

#### 2. Electrical connections

The kit is supplied with the wiring harness already connected to the electronic timer as follows:

- Blue wire:** To **Mains Neutral** terminal 1 on the timer
- Red wire:** To **Mains Line** terminal 2 on the timer
- Brown wire:** To **Common** terminal 3 on the timer
- Brown wire:** To **Heating On** terminal 4 on the timer

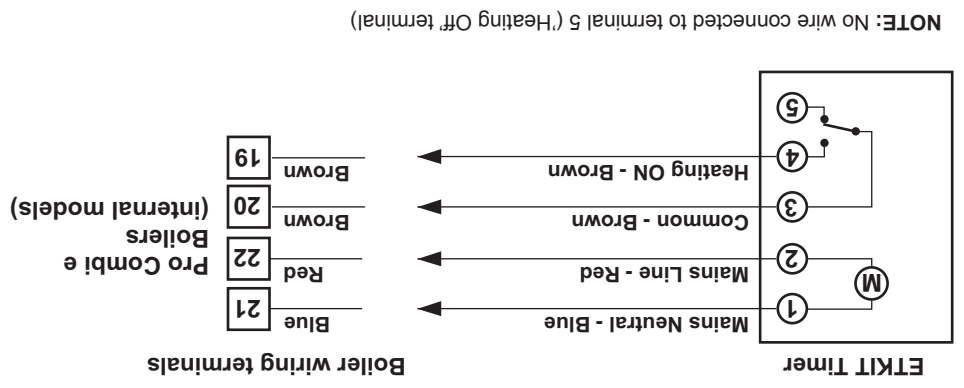
#### 3. Fitting procedure

##### Important:

Ensure the electrical supply to the boiler has been isolated before fitting the timer.

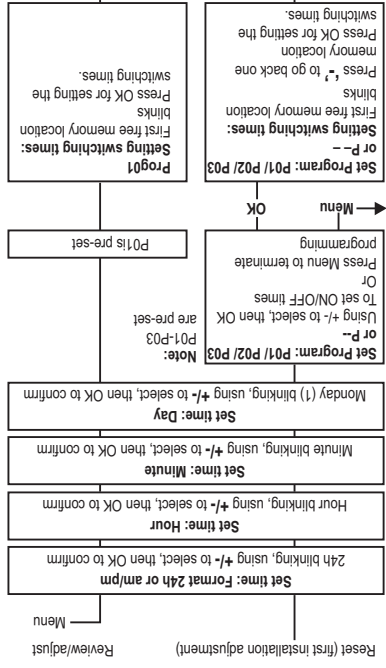
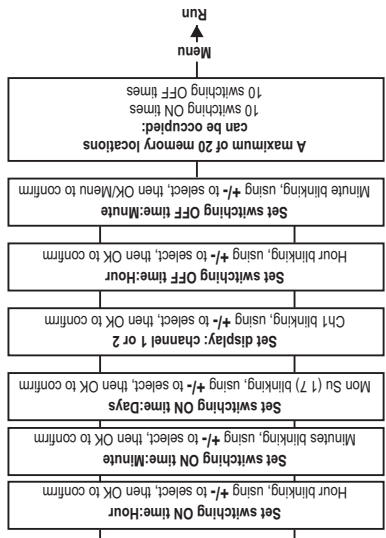
#### Grant Combi V3 & Combi Max – Indoor models

1. Remove the front door and front top casing panel.
2. Loosen (do not remove) the four screws securing the control panel to the side panels. Hinge the control panel forwards and allow it to drop down to gain access to the rear of the panel.
3. Remove the two screws securing the terminal block cover and lift off the cover.
4. Remove the factory fitted link from **terminals 8 and 9**.
5. Remove the four screws from the rear of the control panel. Remove the rear access cover.
6. From underneath the control panel, remove the screw securing the bracket behind the timer aperture. Withdraw and discard the bracket.
7. Remove the blanking piece from the timer aperture, in the control panel fascia, by firmly pressing on the Grant logo (in the centre of the black square) until it is detached from the rear of the fascia. Remove the blanking piece from the panel and discard.
8. Fit the 6-way plug on the timer wiring harness, firmly into the 6-way socket inside the control panel, to connect the timer to the boiler.
9. Locate the electronic timer in the square aperture in control panel front. Secure by pressing in and turning the two screws (in upper right and lower left corners) a quarter turn clockwise.



4. Connection diagram – For Vortex Pro Combi e boilers ONLY

10. Replace the rear cover of the control panel and secure with the four screws previously removed.
  11. Replace the terminal block cover in position over any wires, and secure in position with the two screws previously removed.
  12. Hinge the control panel back into position on the two retaining screws and replace the front top casing panel. Reconnect the electricity supply and check the operation of the timer. Refer to the instructions on the following pages for operating and setting the timer.
  1. Remove front and top boiler casing panels. Loosen (do not remove) the four screws securing control panel to the side panels. Hinge the panel forward to access top and rear of control panel.
  2. Remove the two screws and lift off the terminal block cover from top of control panel.
  3. Remove the Black wire link from terminals 19 & 20 on control panel. DO NOT remove the Red link from terminals 17 & 18.
  4. Carefully push through and remove square pre-cut 'knockout' section in the control panel front.
- Vortex Pro Combi e – Indoor models**
5. Disconnect and remove the plug from the end of the wiring harness. Do not disconnect any of the four wires from the terminals of the electronic timer. They must be connected as shown in the Diagram in Section 4 below.
  6. Feed the wires through hole in control panel front and then up through rectangular opening in control panel top. Connect wires to terminals on control panel – refer to Connection diagram.
  7. Locate the electronic timer in the square aperture in control panel front. Secure by pressing in and turning the two screws (in upper right and lower left corners) a quarter turn clockwise.
  8. Re-fit terminal block cover on control box and fasten with the two screws.
  9. Reconnect the electricity supply and check the operation of the timer. Refer to the instructions on the following pages for operating and setting the timer.
- IMPORTANT: After fitting the timer leave these instructions with the User**



Programming sequence diagram



## 2.8 Set week day OFF



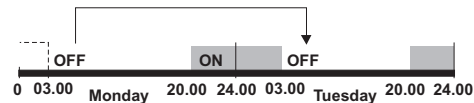
- Press **1** or **2**
1. Select week day by pressing **+ or -**
  2. Confirm setting by pressing **OK** and go to Prog 03 or press Menu to end program

Should the **OFF** setting be the same day as the **ON** setting then press **Menu** to quit the programming mode, or select **OK** to go to a new program **ON** setting.

Repeat this process to set second program **ON** time (prog 03) and second program **OFF** time (prog 04) and so on.

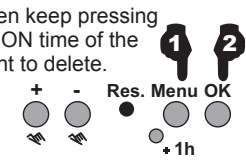
**Shift:** Should the **OFF** setting be in the day following the **ON** setting press **+** key. Then press **Menu** or **OK**.

e.g.  
**Mo-Fr** 20.00pm - 03.00am ON → **Mo-Fr** 20.00pm - 03.00am ON  
**Tu - Sat** 03.00am - 20.00pm OFF → **Tu - Sat** 03.00am - 20.00pm OFF



## 3. To delete a program

- ### 3.1 Press Menu. Then keep pressing OK key until the ON time of the program you want to delete.



### 3.2



- Press **2** or **1**
1. Press **OK**. The hours flash
  2. Press **+** or **-** until -- appears

## 3.3



- Press **2** or **1**
1. Press **OK** to confirm
  2. Press **Menu** to quit the programming mode

**Note:** Program settings are deleted in ON-OFF pairs. If you delete a single **ON** setting, the corresponding **OFF** setting is also deleted.

## 4. To change from Summer to Winter time

To quickly alter the time setting of the programmer when changing from Summer to Winter time, or back.



- Press **+** or **-**
- The **+1h** key is for the changeover from summer to winter time.

By pressing the **+1h** key 1 hour is added to the current time.

**+1h** is shown on the display.

By pressing **+1h** again 1 hour is subtracted from the current time.

## 5. To manually override automatic operation

If you want to override the automatic function of the timer and set the Heating to either ON or OFF, use the **+** key as follows:

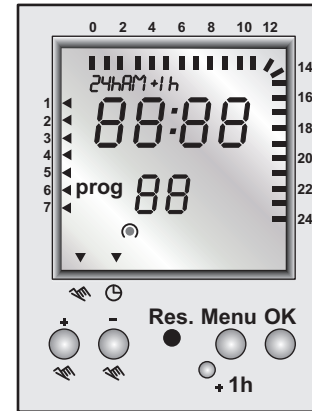


- Press **+** or **-**
- Pressing the **+** key overrides the **timer** - either switching the Heating ON or OFF.

**NB.** If the automatic program setting is ON, then press the **+** key **twice** to switch it OFF. If the automatic program setting is OFF, press the **+** **once** to switch it ON. **The timer will NOT automatically return to the set program at the next ON/OFF switching operation.** It will be necessary to manually switch the timer back to the required setting by pressing the **+** key (as above).  
 Automatic or Manual operation of Heating is indicated at the lower left part of the display.

## USER INSTRUCTIONS

### TIMER DISPLAY AND KEYS



	Overview of daily switching program		Switching status display ON
	Setting of 24h or am/pm		Switching status display OFF
	Summer/winter clock changes		Manual operation/ fixed ON/fixed OFF
	Weekday display		Automatic operation

**+/- :** Adjustment keys: By pressing the key longer than 2 sec you can adjust the timer in steps of 5 units

**Res:** Reset - press using a ballpoint pen or paperclip until it 'clicks'

**Menu:** By pressing the menu key programming is terminated and the system reverts to automatic operation

**OK:** Confirmation of programming

### Note

By pressing the **Menu** key you can adjust/review the values for:

- 24h or AM/PM
- Time (hours/minutes)
- Day of the week
- Pre-set programs P01 to P03

## SETTING THE TIMER

**Note:** The boiler ON/OFF switch must be set to **ON** before setting the timer.

The method of setting the timer depends on whether you wish to use the pre-set ON/OFF programs or set your own operating program as follows:

### 1. To select and use a pre-set program

Three different programs (P01, P02 & P03) are pre-set to switch the Heating ON and OFF at the times shown on the diagrams below, e.g. P01 switches ON at 06.00 and OFF at 22.00 where P02 switches ON at 07.00 OFF at 12.00 ON again at 14.00 and OFF at 20.00.

#### P01: Mo-Su. 1xON/OFF setting per day



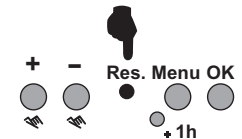
#### P02: Mo-Su. 2xON/OFF settings per day



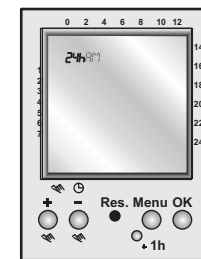
#### P03: Mo-Su. 3xON/OFF settings per day



- ### 1.1 Press the Reset key using a ballpoint pen or paperclip until it 'clicks'.



### 1.2 Set display to 24 hour or AM/PM



- Press **1** or **2**
1. Select either '24h' for 24 hour display or 'pm' for am/pm display by pressing **+ or -**
  2. Confirm setting by pressing **OK**