













Instruction Manual Digital socket box timer



Grässlin UK
Vale Rise
Tonbridge/Kent TN9 1TB
Tel. (0 17 32) 35 98 88
Fax (0 17 32) 35 44 45
www.tfc-group.co.uk



page

	Safety precautions, short description, wiring diagram.....	3
	Installation.....	3
	Technical data.....	5
	Symbols, keys.....	5
	Setting the timer.....	6
	Setting 24h or am/pm clock, time and weekday.....	6
	Pre-set programs.....	8
	Selecting pre-set programs P01 to P03.....	9
	User defined programs.....	10
	Deleting programs.....	13
	Summer/winter time.....	14
	Manual override.....	14



Safety precautions

- The connection and installation of electrical devices may only be carried out by a qualified electrician.
- Interventions in and changes to the device result in the voiding of the warranty claim.
- Observe your national regulations and the respective safety provisions.
- Switch-off commands have priority over switch-on commands.



Mains installation

This product must be installed by a qualified person in accordance with I.E.E. wiring regulations. The examples are suitable for connecting to a mains input / mains output installation.

Volt-free switching

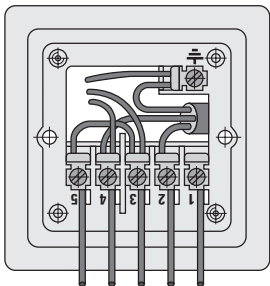
If there is no link between terminals 3 and 5, it is possible to use the timer to control a load on a separate supply circuit, which can be a different voltage value up to 250 V AC. In this case, connect the mains live and neutral to 5 and 4 respectively, then connect the live in / live out of the circuit to be switched, to terminals 2 and 3.

Installation procedure

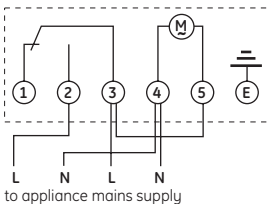
1. Switch off supply to socket box.
2. Unscrew the two screws located top left and bottom right of the front module cover; remove cover and gently pull module from backplate. Do not put undue stress on, or interfere with fixed blue wires.
3. Fix backplate to socket box.
4. Connect wiring in accordance with wiring diagram. Do not combine solid and flexible conductors in the same terminal. When connecting flexible conductors use the ferrules supplied.
5. Fit cover over module and reassemble to backplate. Ensure fixed blue wires stowed neatly without being trapped.
6. Re-fit and tighten two screws.
7. Switch on mains.



Backplate wiring: Example



Wiring diagram



The link illustrated between terminals 3 and 5 (when required) must be fitted by the installer. The diagram above is appropriate when switching a mains load.

**Technical Data**

Supply voltage	see inprint on device
Switching capacity	see inprint on device
Ambient temperature	-10°C to +55°C
Protection class	IP 51 electronic IP 20 terminal box
Accuracy	+/- 1 sec day at 20°C
Reserve power	3 years from factory at +20°C
Shortest switching time	1 min
Memory spaces	20

**OK
reset**

- I** : Overview of daily switching program
- 24hRM** : Setting of 24h or am/pm
- +1h** : Summer/winter clock changes
- ◀** : Weekday display
- ⊙** : Switching status display ON/OFF
- ⚡** : Manual operation / advance ON / advance OFF
- ⊙** : Automatic operation
- +/-** : Adjustment keys:
By pressing the key longer than 2 sec. you can adjust the timer in steps of 5 units
- Res.** : Reset
- Menu** : By pressing the menu key programming is terminated and the system reverts to automatic operation
- OK** : Confirmation of programming



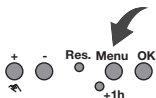
Setting the timer

Setting of this programmable timer is depending of the user preference to use pre-set programs or defining own programming.

Using Pre-set programs (first time installation)



User defined programming by Menu mode



Using **Reset** key you can adjust the following values:

24h or am/pm:	see pg 6
Time (hour and minutes):	see pg 7
Week day:	see pg 7
Pre-set programs P01 to P03:	see pg 8

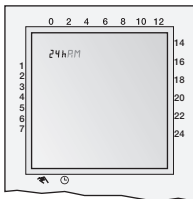
Using **Menu** key you can adjust / review the following values:

24h or am/pm:	see pg 6
Time (hour and minutes):	see pg 7
Week day:	see pg 7
Programs P--:	see pg 8

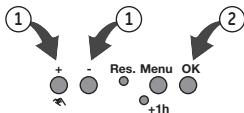


Setting the clock

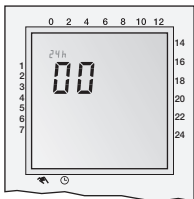
Sequence to follow after selecting programming by pre-set programs or Menu mode.



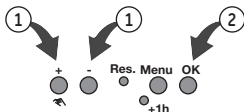
Set display format 24h or am/pm



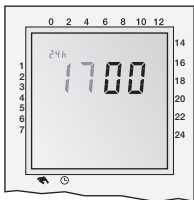
Select 24h or am/pm (+/-) and confirm with **OK**.



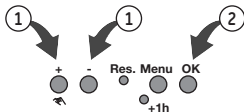
Set hour



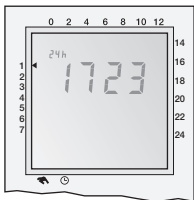
Select hour (+/-) and confirm with **OK**.



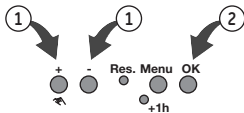
Set minutes



Select minutes (+/-) and confirm with **OK**.



Set week day



Select week day (+/-) and confirm with **OK**.

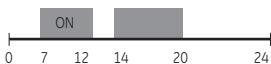
- | | |
|---------------|--------------|
| 1 = Monday | 5 = Friday |
| 2 = Tuesday | 6 = Saturday |
| 3 = Wednesday | 7 = Sunday |
| 4 = Thursday | |

Pre-set programs

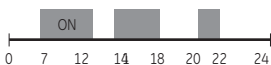
P01: Mo - Su, 1 x ON/OFF



P02: Mo - Su, 2 x ON/OFF



P03: Mo - Su, 3 x ON/OFF



Programs P01-03

The switching on and off times for programs P01 to P03 are preset (pre).

The user can change these programs.

Individual program, P--

Under the menu option P-- you have the option of creating a user-defined program.

This program can be changed at any time.

There are up to 20 memory locations available for 10 OFF and 10 ON commands.

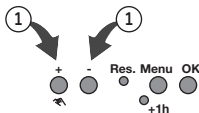
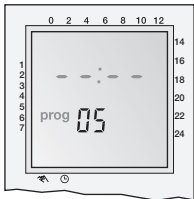
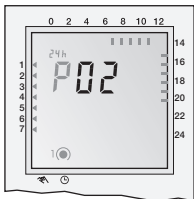
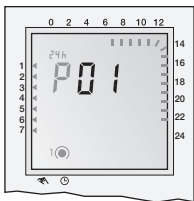
You can allocate a corresponding weekday or week block to each memory location.

Note:

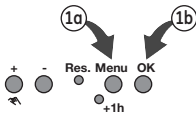
For two channels version pre-set program is established in the two channels.

Selecting pre-set programs

Sequence to follow after setting time in the Reset mode.



Select pre-set program (+/-).



Once selected the program desired there are following options:

Menu

terminate programming

OK

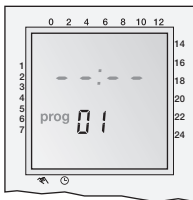
Going through pre-set programs to modify selection (any program ON or OFF can be modified by using "+" or "-" keys and confirming with **OK**) or accept it with **OK** key to go to the next free memory location in order to add new user defined programs (see pg 10).

e.g. after selecting P02 you should also program:

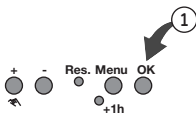
- Sa-Su 22:30 ON (prog05)
- 23:00 OFF (prog06)

User defined programs

Sequence to follow after setting time and week day while running Menu mode or adding programs to the pre-set P01 to P03.



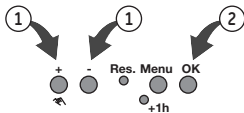
Select program ON



and confirm with OK.



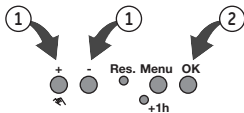
Set hour ON



Select hour (+/-) and confirm with OK.



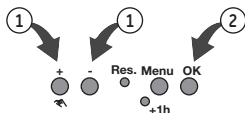
Set minutes ON



Select minutes (+/-) and confirm with OK.



Set week day ON



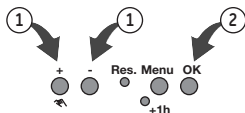
Select week day (+/-) and confirm with OK.

Possible week blocks and individual days

	↓	↓	↓	↓	↓
1	◀	◀	◀		◀
2	◀	◀	◀		◀
3	◀	◀	◀		◀
4	◀	◀	◀		◀
5	◀	◀	◀		◀
6	◀	◀		◀	◀
7	◀			◀	◀



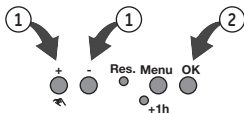
Set hour OFF



Select hour (+/-) and confirm with OK.



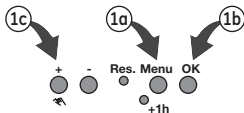
Set minutes OFF



Select minutes (+/-) and confirm with **OK**.



Set week day OFF



Should the OFF command be the same day of ON command then select **Menu** to terminate programming or select **OK** to go to a new program ON setting.

Shift

Should the OFF command be the following day of ON command then select "+" key then select **Menu** or **OK**.

Example:

Mo-Fr

20:00 p.m. - 03:00 a.m. ON

03:00 a.m. - 20:00 p.m. OFF

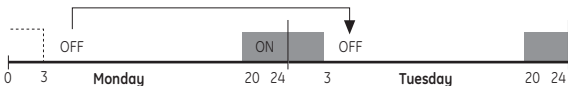


Mo-Fr

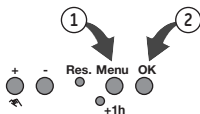
20:00 p.m. - 03:00 a.m. ON

Tu-Sa

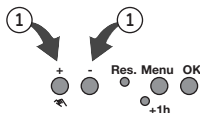
03:00 a.m. - 20:00 p.m. OFF



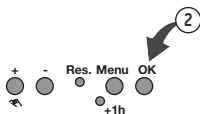
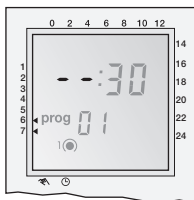
Deleting programs



Select **Menu**, then select **OK** key until getting onto the ON time of the program you want to delete.

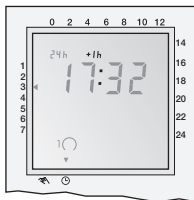


Select "--" with (+/-) key and confirm with **OK**.

**Note:**

Switching programmes are deleted in ON-OFF pairs. If you delete a single ON instruction, the corresponding OFF instruction is also deleted.

Summer / winter time

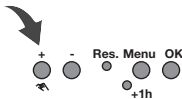
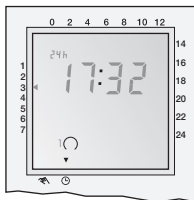




The **+1h** key is for the changeover from summer to winter time.

- 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.



Manual override



The "+" key serves to change over between automatic , advance ON  and advance OFF operations until next command is executed.



