

Installation/Operating Instructions for Din Rail Mounting Digital Compact Timer Model - T80

Please read the instructions fully before attempting installation.

#### **IMPORTANT**

This unit should be installed to the current IET Wiring Regulations, by a qualified electrician.

- Before connecting the timer to the mains, check that the mains voltage and frequency correspond to the rating plate (on side of timer).
- Do not overload. Refer to the Ampere rating (amps) on the rating plate.
- Do not expose the timer to extremely high or low temperatures.
   Do not place the timer in direct sunlight.
- Do not allow the timer to come into contact with water.
- If the time switch is mounted near equipment where heat produced raises the local ambient temperature above 55°C, then a 1/2 module space should be left between the time switch and the equipment.
- If used to operate a contactor, then a 1 module space should be left between timer and contactor.

# INSTALLATION

- This timer is designed to be din rail mounted.
- Ensure that the 230V AC supply is connected to terminals 1 and 2.
- Terminals 3 and 4 are volt free contacts. Live in goes to terminal 3 and Live out goes to Load.
   There is no neutral switching with the T80, ensure that maximum loading is complied with.

## **HOW TO OPERATE**

When the timer is new or when it has not been used for some time it may need to be "charged".

To do this, connect to power. The built-in rechargeable battery will begin to charge. When symbols appear in the display (after approx. 2 minutes), press the "Reset" button (use a pencil or pen).

Caution: this will cancel all memory including timer settings. The timer will be 'clean' for new commands. If a power failure should occur (or should the timer be disconnected from the power supply for a short time), the built-in rechargeable battery will then provide power to the clock and guarantee that the time and switching programmes are retained and not disturbed or lost.

# HOW TO SET 24 HOUR CLOCK

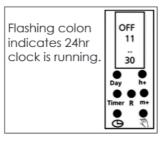
#### Present time and day

 Keep button depressed during the entire "present time and day" setting procedure.

- Set the present time using buttons "h+" and "m+".
   If you keep buttons "h+" and "m+" depressed for longer than a second the figures in the display will scroll
  - the week using button "Day".

    3. Release Button () . The clock is now running. The flashing colon indicates this. Use a reliable time signal (e.g. telephone or radio) to set the clock accurately to the minute.

continuously. Set the present day of



# **SWITCHING TIME(S)**

You can set as many as six switching-on commands and an equal number of corresponding switching-off commands in the following manner:

Depress "Timer" button once. The actual time will disappear from the display. This Timer on indication will be displayed instead, denoting a vacant "on" time on No. 1 programme

ON	M
	TU
	W
	TH
••	FR
	SA
	SU

#### NOTE:

Setting hours and minutes: When setting switch-on time and switch-off time be sure to set minutes as well as hours.
e.g. if 08.00 is required set all 4 digits: "08."
and ".00"

- Set the required switching-on time using button "h+" and "m+".
- Set the day(s). See "Day" button selection (over) on which the switching-on command must be executed.
- Depress button "Timer" once. Timer-off will be displayed.
- Set the required switching-off time using button "h+" and "m+".
- Set the day(s) on which the switching off command must be executed.

(Default setting is every day).

Pressing the "Timer" button will move the timer to programme 2 ON.

When this **2 Timer on** indication appears you can begin setting another switching-on command, if you wish. Six such programmes may be stored in this manner, following 2) to 6) above.

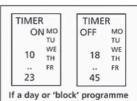
After setting the required "on" and "off" times, press (1) to revert to present time.

# EXAMPLE

TIMER	MO	TIMER	MO
ON	TU	OFF	TU
11	TH	21	TH
	FR		FR
30	SA	55	SA
1 30	5U	33	SU

The switching commands will be carried out every day if no day or days have been set. **NOTE:** Be sure that the desired day or days are chosen on both the 'on' and the 'off' displays.

## EXAMPLE



of days is chosen, the timer will respond to each of those days and omit the blanks

# "DAY" BUTTON SELECTIONS

# Every day of the week

If you do not enter the day when setting a switching command, the switching will be carried out at the set time on every day of the week.

Only one day of the week
If you enter a particular day while

setting a switching command (using button "Day"), the command will be carried out at the set time only on that specific day of the week.

#### Abbreviations

MO = Monday, TU = Tuesday, WE = Wednesday, TH = Thursday,

FR = Friday, SA = Saturday,

SU = Sunday.
On a weekly combination (or 'block'

#### programming) of days When pressing button "Day" several

times, you will find by means of the display that three combinations of days are also possible:

MO TU WE TH FR = Monday to Friday
SA SU = Saturday and Sunday

MO TU WE TH FR SA = Monday to Saturday

If you enter these combinations of days instead of one individual day, the on/off command will be carried out at the set time on each of the corresponding days of the week. This programme will repeat itself week after week until the programme is

after week until the programme is changed or the timer is disconnected.

HOW TO CHECK, CHANGE

# OR DELETE SWITCHING COMMANDS

## Checking

By pressing button "Timer" a number of times you can make the switching-on and switching-off commands visible in the display: first the set commands are presented and then the free spaces.

#### Changing

You can change a switching command by making it appear on the display and pressing "day", "hour" and "minute" buttons accordingly.

#### Deleting

command.

Delete a timer command period (an 'on' and 'off' time) by pressing the "timer" button until the required program number on time is displayed in the window and pressing h+ until — is displayed immediately after 23. Do the same with m+ until — appears after 59. Repeat this sequence for the 'off' mode. The deleted command then becomes available for reprogramming. Press button "Timer" after changing or deleting a command to save the new

#### Switching back to present time

After setting the switching commands you return to normal time reading by pressing () button.

Is power being supplied to connecting load?

The word "ON" or "OFF" in the display, above the time reading, informs you about the actual switching condition.

# OVERRIDE SWITCH

When in the "off" mode pressing the button marked will switch "on" the power to the load connected to the timer. If the button is pressed again the power will switch off. If the button is not pressed again, power will remain on until the completion of the next on/off command when power will switch off. If not pressed again the power will remain off until the following 'on' command has been reached.

#### IMPORTANT:

- If the current time is within your programmed 'ON' period then you will need to press the manual override 'Hand Symbol' button to switch output to 'ON'
- To maintain battery life do not leave uncharged for more than 6 months.

## TECHNICAL INFORMATION

No of Channels:	1		
Contact Rating:	16A, 230V AC		
	2A Inductive volt free		
	switching		
Shortest Switching			
Time:	1 minute		
Capacity:	6 programme blocks		
Voltage Supply:	230V		
Mains Frequency:	50Hz		
Class Type:	II		
Possible Settings:	Clock time, time on/		
	time off, days of week,		
	block programme		
Display:	LCD figures 4mm high		
Deviation:	2.5 seconds per day		
Reserve:	100 hours		
Manual Override Switch:	Yes		
Mounting:	DIN rail mounted		
Connections:	2.5mm <sup>2</sup> max		
Size:	Width 18mm		
	(1 module), projection from		
	DIN rail 55mm, height 90mm		
Conforms To:	BS EN IEC 60730-2-7		
	& BS EN 60730-1		

#### NOTE:

Product & Packaging Disposal
When disposing of this item and its packaging
please follow local regulations and use an
appropriate waste disposal centre.
See GreenBrook website for further details.

## **GUARANTEE**

Your GreenBrook Din Rail Mounting
Compact Timer is guaranteed for 1 year
from the date of purchase.
This is in addition to your statutory rights.

PLEASE KEEP THESE INSTRUCTIONS SAFE FOR FUTURE REFERENCE



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