



DIGITAL TIME CLOCK

12 AND 24 VOLT DC 10 AND 7 AMP SWITCHING

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<http://www.oilstoves.co.uk/>

INTRODUCTION

The digital time clock is a seven-day programmable time clock with a storage capacity of 10 on and 10 off programmed instructions.

Example

On at 06.00 and Off at 09.00 and On at 16.00 and Off at 22.00.

Repeated for seven days would use 2 on times up and 2 off times up, leaving a further 16 programmed instructions available.

If a further on and off time were to be programmed in at say On at 12.00 and Off at 14.00, repeated for the seven days, then one more programmed instruction would have been used making a total usage of three on times and three off times per day, leaving a further 14 programmed instructions available.

The programmer has a built in rechargeable battery, which automatically keeps itself charged as soon as input power is available.

If the input voltage is turned off the battery will keep the clock powered up for a minimum of 150 hours.

The battery powers the clock mechanism and the relay is powered by the input voltage.

The clock has:-

1. Push button advance and manual override facilities and comes complete with programming instructions.
2. Simple Summer time to Winter time switching.
3. 12 or 24 hr display

APPLICATIONS

The programmer can be used for a variety of activities such as -:

Controlling a heating system.

Controlling security lighting.

Controlling security systems

Starting diesel engines. (This would be linked to further relays and controls)

Etc.

SPECIFICATION

System Voltage	12V/24V D.C. Nominal.
Voltage range	11V – 28V.
Load Current	5mA minimum to 35mA maximum.
Relay Output	SPNO 10A – 12VDC or 7A – 24VDC.

Note that in section 8 of the technical data provided with the clock module the switching output should be disregarded as the integral relay has been upgraded to give the 10amp at 12 volt dc and the 7 amp at 24 volt dc capacity.

INSTALLATION

1. When connecting the unit ensure correct polarity.
2. **Connect the D.C supply to terminal 2 positive and terminal 3 negative.**
3. Connect the load to terminals 5 and 6 normally open volt free contacts.
4. For clock setting procedure see the separate sheet enclosed in the clock package.

SHORT FORM PROGRAMMING GUIDE

EM/1 DIGI 20

EM/1 DIGI 20 + RELAY

The EM/1 DIGI 20 is a 7-day time switch module with a storage capacity of 10 'ON' and 10 'OFF' programmed instructions.

1 BEFORE PROGRAMMING

Operate recessed 'reset' button to clear any unwanted information. (The reset button is also used to clear the memory and/or reset the unit in the event of interference, which may occur from time to time).

2 SET CURRENT TIME AND DAY

Press and hold  button.

Now use Day, h, m, buttons to enter current day/time.

Release  button.

±1h button used to add/delete one hour at summer/wintertime changeover.

3 SET ON AND OFF TIMES

Press prog button

Now use Day,h,m, buttons to select day(s) and time for first ON instruction.

Press prog button to store first ON instruction in memory and select first OFF space.

Enter first OFF in same manner as above.

Continue to store, select and programme successive ON and OFF spaces as above.

When programming complete, press  button to return to current time display.


4 REVIEW/AMEND PROGRAMMES

Press prog button to view programmed information. While displayed, day(s), hours and minutes can be changed.

5 ADVANCE/MANUAL OVERRIDE

Press  1 button once to switch ON or OFF early.

Press  1 button twice to select FIX O
N

Press  1 three times to select FIX O
F
F

Press  1 four times to return to AUTO.

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