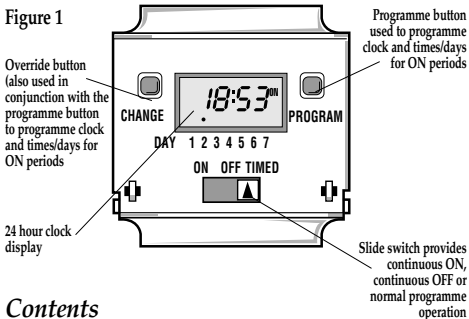


*Panel***MASTER**

Models
 EL11 (24 hour)
 EL17 (7 day)



Figure 1



Contents

- 1 EL11 (24 hour) or EL17 (7 day)
- 1 Panel mount bezel
- 1 Tamper proof cover
- 4 Surface mount stand offs (length 10mm)
- 2 Panel mount bolts
- 2 Self-tapping screws (No. 4 x 5/8 in) for panel mount bolts
- 2 Self-tapping screws (No.6 x 3/8 in) for attaching bezel to EL11/17

General

The EL11 (24 hour) or EL17 (7 day) is primarily a panel mounted timeswitch rated at 240V, 16A resistive at T40. It can also be surface mounted within cubicles if required.

The contacts are single pole change over and are fully voltage free. The front of the unit is shown in figure 1. The rear of the unit showing wiring connections and the internal circuit is shown in figure 2.

Connections are made to the EL11/17 by 1/4 in receptacles. The unit can be made tamper proof by wiring the cover supplied in place which still leaves the display visible.

Installation - Panel Mounting

For panel mounting (in panels up to 7.0mm thick with the cut-out as shown in figure 3) the EL11/17 should be snapped into the bezel supplied and secured in place by the use of the 2 No. 6 x 3/8in self-tapping screws provided as shown in figure 4.

When selecting a position for the unit it should be born in mind that a clearance behind the front panel surface of 26.0mm is required over the full area of the panel cut-out.

The unit is designed to be mounted from the front of the panel by the following procedure:

- Insert the 2 bolts provided in the locations shown in figure 5.
- Then insert the 2 No. 4 x 5/8 in self-tapping screws into the bolts and engage thread.
- Make connections to the unit by wires terminated in 1/4 in receptacles from behind the panel. Ensure that the wiring is adequate for the load to be carried.
- Insert the EL11/17 complete with bezel into the panel and tighten up the 2 No. 4 self-tapping screws. The ears on the bolts will rotate under the tightening action to clamp the unit to the panel.

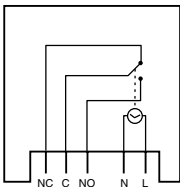


Figure 2

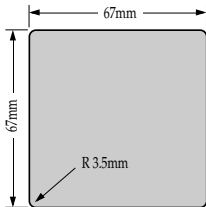


Figure 3

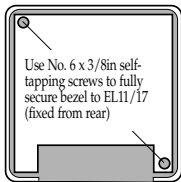
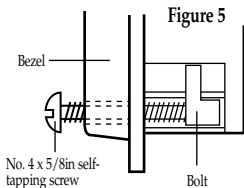


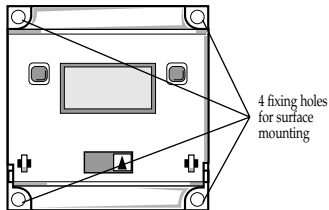
Figure 4



Surface Mounting

The EL11/17 without bezel can be surface mounted using the 4 securing holes as shown in figure 6. The unit can be stood off from the mounting surface by 10mm using the 4 spacers if required. Screws are not provided and it must be remembered that if used in this way the EL11/17 must be installed within a housing or cubicle to prevent access to the mains terminations.

Figure 6



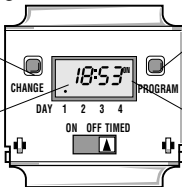
On/Off/Timed Slide Switch

The three position slide switch allows continuously ON, continuously OFF or normal programmed operation.

EL11 Programming Instructions

Change Button sets Hours and Minute times and self cancelling override

Easy view 24 hour digital clock/timer display



Programme Button used to select the clock time and the 4 ON/OFF programme times and to review them once set

Output Status showing unit either ON or OFF

Battery

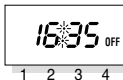
This product has a factory fitted rechargeable battery. If the time controller is left with its mains power switched off for more than 1 month the display may go blank. In this case switch mains on, wait 30 minutes, and apply reset - see 1 before programming.

Programming

Only two setting buttons are provided <Change> and <Program>. During the programme mode the <Change> button is used to set the hour and minute times. Holding this button down achieves rapid selection of the hr and minute times. It is also used for changing the output status during normal operation. The <Program> button is used to select the clock time and 4 ON/OFF programmes and to review them once set. Holding this button down achieves rapid selection of the next programmes or can be used as a quick exit from programme mode or programme review.

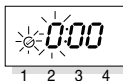
Normal Operating Mode

In normal operation the PanelMaster will display the correct time with the colon flashing. The output status will be shown by either ON or OFF on the display.



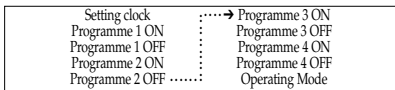
1 To Reset Display

To clear programmes from memory and reset the time controller press and hold down both buttons until the display goes blank. Release buttons and display will fill with its complete range of characters and then clear to show clock and hour digit flashing.



You are now in the clock setting mode at the beginning of the programme sequence

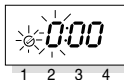
Programming sequence



Note: Button pauses greater than 1 minute during programming will result in automatic return to the operating mode.

2 *Setting Clock (after reset)*

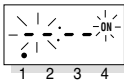
- i **Hour Setting** - Press the <Change> button to advance the hour setting. Note: For rapid hour selections press and hold down <Change> button.



- ii **Minute Setting** - Press the <Program> button once to select the minutes - display shows clock symbol and minute digits flashing. Press the <Change> button to advance the minutes setting. Note: For rapid minute selection press and hold down <Change> button. (Note: 16 hrs shown as example of hrs set)



- iii Press <Program> button once - clock is now set and display shows ready for the first ON programme time with ON and hours digits flashing.

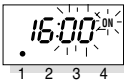


3. *To Set Programme ON/OFF Times (after clock setting)*

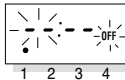
Programme 1 ON time

- i Press <Change> button to advance the hour setting.

- ii Press <Program> button once to select minute time - display shows minute digits and ON flashing. Press <Change> button to advance minute setting. (Note: 16 hrs shown as example of hours set).



- iii Press <Program> button once - the first ON time is now set and display shows ready for the first OFF programme time.



- iv Now set the hrs and minutes as before.
- v Repeat steps i to iv to set the remainder of the 3 ON/OFF times as required. Note: Any unused ON/OFF programme should be skipped until the display shows normal operating mode. Do not programme '0's into unused programmes.

IMPORTANT After setting a clock time which falls within a programmed ON period, the unit will not switch ON. Use the override facility to switch unit ON. After this the unit will operate normally to the programmes set.

4. Programme Review

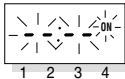
To fast review the set programmes or for quick exit to normal operating mode - press and hold the <Program> button.

5. Initiating Programme Mode

This can be initiated any time during the normal operating mode. Press <Program> button and the Clock symbol, hrs and minutes symbols on the display will flash - this is review mode. If any change to programmes is required press <Change> button to initiate programme mode and then follow steps 2 and 3.

6. Cancelling Programmes

Any ON/OFF programme can be cancelled by clearing its ON and OFF time. Follow step 5 and when into the ON or OFF programme to be cancelled press the <Change> button until the hour digits show --: then press the <Program> button to clear the programme. The display will show the hour and minute digits and ON or OFF flashing.



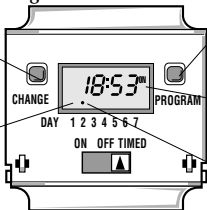
Self Cancelling Override

To change the output status from ON to OFF or vice versa during normal operation press the <Change> button. The output status will change and indicate override is in operation by flashing.

EL17 Programming Instructions

Change Button
sets Day(s), Hours
and Minute times
and self cancelling
override

Easy view 24
hour digital
clock/timer
display



Programme Button
used to select the
clock time and the 6
ON/OFF
programme times
and to review them
once set

Output Status
showing unit
either ON or OFF

Day indicator
1 = Monday
7 = Sunday

Battery

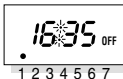
This product has a factory fitted rechargeable battery. If the time controller is left with its mains power switched off for more than 1 month the display may go blank. In this case switch mains on, wait 30 mins, and apply reset - see 1 before programming.

Programming

Only two setting buttons are provided <Change> and <Program>. During the programme mode the <Change> button is used to set days and the hour and minute times. Holding this button down achieves rapid selection of the day and the hour and minute times. During normal operation it is used for changing the output status. The <Program> button is used to select the clock time and 6 ON/OFF programmes and to review them once set. Holding this button down achieves rapid selection of the next programmes or can be used as a quick exit from programme mode.

Normal Operating Mode

In normal operation the PanelMaster will display the correct day and its time with the colon flashing. The output status will be shown by either ON or OFF on the display.



1 To Reset Display

To clear programmes from memory and reset the time controller press and hold down both buttons until the display goes blank. Release buttons and display will fill with its complete range of characters and then clear to show clock and day 1 symbol flashing.



*You are now in the clock setting mode
at the beginning of the programme sequence*

Programming sequence

Setting clock→	Programme 4 ON
Programme 1 ON	:	Programme 4 OFF
Programme 1 OFF	:	Programme 5 ON
Programme 2 ON	:	Programme 5 OFF
Programme 2 OFF	:	Programme 6 ON
Programme 3 ON	:	Programme 6 OFF
Programme 3 OFF:	Operating Mode

Note: Button pauses greater than 1 minute during programming will result in automatic return to the operating mode.

2 Setting Clock (after reset)

- i **Day Setting** - Press <Change> button to advance to the day required.
Day 1 = Monday and Day 7 = Sunday.

- ii **Hour Setting** - Press the <Program> button once to select the hour - display shows clock symbol and the hrs digit flashing.

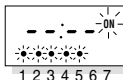


Press the <Change> button to advance the hour setting. Note: For rapid hour selections press and hold down <Change> button.

- iii **Minute Setting** - Press the <Program> button once to select the minutes - display shows with clock symbol and minute digits flashing. Press the <Change> button to advance the minutes setting. Note: For rapid minute selection press and hold down <Change> button. (Note: 16 hrs shown as example of hrs set)



- iv Press <Program> button once - clock is now set and display shows ready for the first ON programme time.



3. To Set Programme ON/OFF Times (after clock setting)

Programme 1 ON time

- i Press <Change> button to advance the day flag to the required day(s) settings which are:

1 2 3 4 5 6 7

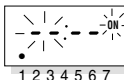
● ● ● ● ● = 5 days (Weekdays) Mo Tu We Th Fr

● ● = 2 days (Weekend) Sa Su

● ● ● ● ● ● ● = 7 days (Everyday) Mo Tu We Th Fr Sa Su

● = Individual days Starting with Monday through to Sunday

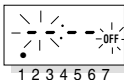
- ii Once day option selected press <Program> button once to select hour time - display shows hour digits and ON flashing. Press <Change> button to advance hour setting.
(Note: Monday shown as an example of days set).



- iii Press <Program> button once to select minute time - display shows minute digits and ON flashing. Press <Change> button to advance minute setting.
(Note: 16 hrs shown as example of hours set).



- iv Press <Program> button once - the first ON time is now set and display shows ready for the first OFF programme time.



- v Now set the hrs and minutes as before.
The day(s) selected remains the same.

- vi Repeat steps i to v to set the remainder of the 5 ON/OFF times as required. Note: Any unused ON/OFF programme should be skipped until the display shows normal operating mode. Do not programme '0's into unused programmes.

IMPORTANT After setting a clock time which falls within a programmed ON period, the unit will not switch ON. Use the override facility to switch unit ON. After this the unit will operate normally to the programmes set.

4. Programme Review

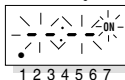
To fast review the set programmes or for quick exit to normal operating mode - press and hold the <Program> button.

5. Initiating Programme Mode

This can be initiated any time during the normal operating mode. Press <Program> button and the Clock symbol, day flag, hrs and minutes symbols on the display will flash - this is review mode. If any change to programmes is required press <Change> button to initiate programme mode and then follow steps 2 and 3.

6. Cancelling Programmes

Any ON/OFF programme can be cancelled by clearing its ON and OFF time. Follow step 5 and when into the ON or OFF programme to be cancelled press the <Change> button until the hour digits show --: then press the <Program> button to clear the programme. The display will show the hour and minute digits and ON or OFF flashing.
(Note: Monday shown as an example of days set).



Self Cancelling Override

To change the output status from ON to OFF or vice versa during normal operation press the <Change> button. The output status will change and indicate override is in operation by flashing.

Specifications

1. A fully CE marked product conforming to BS EN 60730-2-7 for function and safety as a control to be incorporated in other equipment.
2. Complies with EMC standards EN50081-1 for emission and EN50082-1 for immunity as a control to be incorporated in other equipment.
3. Contacts: Silver Cadmium Oxide. Single pole change over.
4. Permissible Loads: 16A Resistive
6A At 0.4 power factor inductive
10A Filament lamps
*500W Fluorescent lighting with or without power factor correction capacitors (4µF per 65W tube)
1h.p. Motor

For other loads refer to Technical Service on 020 8450 0515

*This load with power factor correction capacitors is not recommended for normally closed contacts.

5. Panel Cut Out: 67mm square with 2.5mm radius corners.
6. Battery Back-up: 1000 hours by factory fitted rechargeable battery.
7. Operating ambient temperature: -10°C to 40°C. Upper limit can be increased for loads less than 16A - refer to Technical Service.
8. Operating Voltage: 220 - 240V AC 50Hz.