Seven Day Two Channel Electronic Timeswitch

Model 852

User Instructions

DESCRIPTION

The **Day** and **Time** are displayed as five digits on the liquid crystal display (LCD).

The first digit in its separate window marked **Day** will be a numerical from **1** to **7** which may be allocated in sequence to the days of the week at the user's discretion. The normal convention is Monday = 1, Tuesday = 2 .... Sunday = 7.

The remaining four digits in the window marked **Time** will display the time to a resolution of one minute from 0000 to 2359.

A short 'bleep' will be heard when a keypad is pressed. In addition when a numeric keypad is pressed the associated digit on the LCD will either blink or change.

There are ten red indicator lights. Eight (4 per channel) are associated with the keypads '**Enter On**', '**Enter Off**', '**Extend**' and '**Crop**', and two (1 per channel) labelled '**Output**'.

The 2 position selector switches may be set to **Off** to override the programmes or it may be set to **Auto** to follow the programme which has been set. On the respective channels the programme indicator lights will switch on and off to follow the set programme events in both the selector switch positions but the output status indicator lights will only be on if the selector switch is at **Auto** and either the '**Enter On**' or '**Extend**' indicator lights are on.

If the **Enter On** and **Crop** indicator lights for any one channel are on the output status indicator light for that channel will be off.

It is recommended that the key be removed from the keyswitch to prevent unauthorised or accidental changes to the settings. The key can only be removed when in **Run** position.
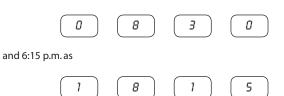
TIME OF DAY

The mains electricity supply must be **ON**, the key inserted and turned to **Set Time** position before carrying out the operations detailed below.

When the timeswitch is first connected, or when the battery has been allowed to discharge fully, and the mains electricity supply is switched **ON** a dash (-) will be displayed in each of the five digit positions.

Decide which day of the week you wish to assign as Day 1.

Press the number key representing the current day of the week (listen for the 'bleep').

The remaining days will be automatically numbered in sequence.

Key in the time using four keypads e.g. 8:30 a.m. must be keyed as

$$\boxed{0}\quad\boxed{8}\quad\boxed{3}\quad\boxed{0}$$

and 6:15 p.m. as

$$\boxed{1}\quad\boxed{8}\quad\boxed{1}\quad\boxed{5}$$

The unit will not allow the entry of a spurious day or time e.g. day 8 will not be accepted nor will a time entry of 3600. Depression of an out of range key will not register on the display; the LCD digit will blink but remain unchanged until an acceptable number is keyed.
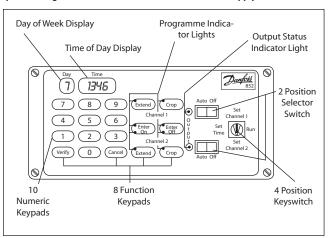
DO NOT PRESS ANY FUNCTION KEYPADS.

Returning the key to the **Run** position will enter the time shown on the display.

SETTING SWITCHING TIMES

The mains electricity supply must be **ON**, the key inserted and turned to set '**Channel 1**' position before carrying out any of the following operations.

CAUTION: The unit operates at mains voltage and should only be opened by a qualified engineer after disconnection from the mains supply.

Initially the display will show

$$\boxed{E}\quad\boxed{E\ E\ E\ E}$$

indicating that the memory is empty.

Since the timeswitch is capable of automatically carrying out up to 200 switching operations it is recommended that the required programme be tabulated before setting is commenced, noting that the day number on display is the current day of the week. A table is provided for this purpose.

It is not essential to key in the programme in sequence since it will automatically be sorted into chronological order.

To set a programme event:

First press the number key representing the day of the week to be programmed.

Secondly, key in the time using four numeric keypads in the range 0000 to 2359.

Finally press '**Enter On**' or '**Enter Off**' to enter the required event into the memory.

The unit will not allow the entry of a spurious day or time e.g. day 8 will not be accepted nor will a time entry of 3600. Depression of an out of range key will not register on the display; the LCD digit will blink but remain unchanged until an acceptable number is keyed.

Proceed with the programming of every event using the same entry sequence.

If an attempt is made to exceed 200 programme events then the display will show

$$\boxed{F}\quad\boxed{F\ F\ F\ F}$$

indicating that the memory is full.

If an incorrect key is pressed then press the '**Cancel**' key and recommence the sequence.

If a programme event is repeated at the same time on different days then the keying may be simplified as follows.

Key in the first event using the normal entry sequence. Now simply key in the new day number and then '**Enter On**' or '**Enter Off**' as required.

The appropriate indicator lights at the top of the keypad will illuminate.

The complete programme may be checked by the use of the **'Verify'** key. Each press of this key will advance the programme by one event allowing a complete review in chronological sequence commencing from the day and time on display. If a particular day's programme is to be reviewed then key the day number followed by

| 0 | 0 | 0 | 0 | and | Verify |

when the first programmed event for that day will be displayed then proceed with repeated presses of the **'Verify'** key.

When reprogramming one or more events, unwanted events must be cleared by advancing to the event in question using the **'Verify'** key as explained above and then clearing it by a single press on the **'Cancel'** key.

When programming of **Channel 1** is complete, turn the key to **Set Channel 2** and enter the programme required for this channel in the same manner.

When pressing either the **Enter** keypads the appropriate indicator light at the bottom left of the keypad will illuminate.

Note: The 200 switching operations are able to be freely spread over both channels. If a common event time is required on both channels this represents only one switching operation.

To clear the entire programme on both channels, press and hold down the **'Cancel'** key for approximately 3 seconds until the display shows

| E | EEEE |

On completion of the programming return the key to **Run** and both selector switches to **Auto**.

Extend Facility

The mains electricity supply must be **ON** and the keyswitch set to **Run** before carrying out the operations detailed on this page.

The unit is supplied with an extend facility to allow additional periods of operation without disturbing the set programme.

At the time of installation, the extend period is set to 1 hour on each channel but this can easily be altered. Different extend periods can be set for each channel.

To alter the extend period:

Insert the key and turn to **Set Channel 1.**

Press Channel 1 **'Extend'** and the display will show the extend period set for Channel 1.

Press any of the numerical keypads to alter the extend period to 1 to 8 hours or 0 to disable the function (display will show **'nil'**), or 9 for a constant extend period (display will show **'con'**).

Once the required extend period is displayed, press **'Enter On'** and the new extend period will be stored.

To alter the extend period on Channel 2, use the above procedure on Channel 2.

Using the Extend Function:

With the keyswitch set to **Run**, pressing the appropriate **'Extend'** activates the additional period of operation on that channel.

If the key is pressed when the output is **'Off'** it will switch the relative channel on immediately and will automatically switch off after the extend period has elapsed. The associated red indicator light will be illuminated throughout the extend period.

If the key is pressed when the output is 'On' the current 'On' period on the relative channel will be extended by the length of the extend period. The red indicator light will be illuminated until the output is switched off.

The Extend facility may be cancelled at any time by pressing the key again when the indicator light will go out and the unit will revert to the set programme.

Crop Facility

This facility enables a current **'On'** period to be cancelled without having to disturb the set programme.

If the **'Crop'** key is pressed when the output light is illuminated it will switch the output off on the relative channel until the next programmed **'On'** event. During the remainder of the present **'On'** period the associated red light will be illuminated and the output light will be off. The programme event lights will remain unchanged.

Pressing the **'Crop'** key again will cancel the Crop facility and restore the unit to the set programme.

Note: Pressing the **'Crop'** key when the output is already programmed to be off will have no effect.

BATTERY RESERVE

The unit does not rely on the internal battery in order to work satisfactorily providing the mains power supply is connected to the unit. The battery is fitted purely to memorise the Time of Day and selected Switching Times in the event of a power failure or disconnection of supply.

When the unit is first connected it will require a minimum of 24 hours to become sufficiently charged in order to perform this memory function. Thereafter the battery is automatically recharged.

If the mains power supply is lost, for any reason, the display and lights on the unit will go out and the output will be switched off. The battery will maintain the memory for a period of up to 3 months during this condition. When the power supply is restored, the unit will automatically switch on again and resume the set programme without any resetting being necessary.

Example	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
Assigned Day No.	1		2		3		4		5		6		7	
Event /Time	ON	0830	ON	0929	ON	0436	OFF	0034	ON	0929	ON	0853		
	OFF	1342	OFF	2317	OFF	1129	ON	0708	OFF	2317	OFF	1342		
					ON	1916	OFF	1723						

Record	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Sunday	
Assigned Day No.														
Event /Time Channel 1														
Event/Time Channel 2														