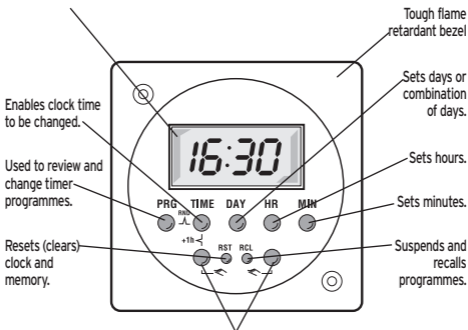


24 Hour & 7 Day Digital Immersion Heater Timeswitch Article 943 320

Large 24 hour clock/programme display.



Either changes operating mode from Auto (timer mode) with ON or OFF to ON or OFF (without AUTO) being a permanent state.

fig 1

1. General

The timeswitch is a compact and easy to programme digital immersion heater timeswitch which fits on a single gang wall box. It is primarily intended for control of domestic immersion heaters up to 13A (3kW).

It has a valuable permanent OFF facility which enables the heater under control to be turned OFF when alternative methods of heating are available or during holiday periods.

2.Features

- 6 ON/OFF switching programmes which can be made to operate over all 7 days (24 hr operation), six days less Sunday, 5 weekdays, 3 days (mon, wed, fri), 3 days (tues, thurs, sat), 2 weekend days or an individual day.
- Self-cancelling override.
- Permanent ON/OFF facility.
- Battery back-up retains programmes and clock time during loss of mains supply.
- Shortest switching time of 1 minute.
- Programmes can be suspended from operation.
- Programme review.

3.Installation



fig 2

Important: switch off the mains electricity supply before commencing the work. Remove bezel fixing screws and remove bezel from timer module and back plate (see figs 2 and 3). Separate the timer module from the back plate and remove the wall box fixing screws. Ensuring that the free terminals on the back plate terminal block are at the top (see fig 3) connect the installation wiring to the terminal block according to the legend on fig 3 and fit the wall box fixing screws through the back plate into the wall box threaded holes. Tighten until back plate is located firmly against the wall or to the surface box if fitted.

Fit the timer module to the back plate ensuring the four locating holes on the timer module seat correctly on the back plate locating pegs. Fit the bezel and bezel fixing screws and tighten adequately.

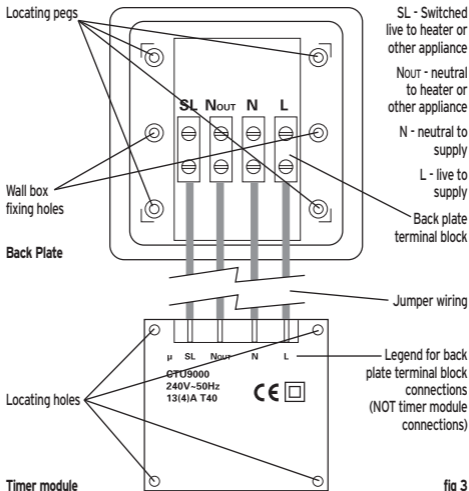


fig 3

The earth wires should be connected to the wall box earthing terminal (if using a surface box ensure that it has an earthing terminal to ensure continuity of earthing or use a single way connector block).

4. Battery

The timeswitch has a factory fitted rechargeable battery to give clock operation and programme memory back-up during loss of mains supply.

Before programming for the first time connect the unit to the mains for at least 15 minutes prior to pressing the "Rst" button and programming the unit.

If the display is not visible or very faint charge for 4 hours prior to pressing "Rst" and programming.

5. Reset (RST)

The timeswitch must be reset before programming for the first time or after subsequent discharge for more than five days and a following 4 hour period of charging.

Press "Rst" using a pointed object (eg a pencil). Display will show its full set of characters and clear to show -



6. Setting Clock

i Press and continually hold down "Time" button whilst alternately pressing "Day", "Hr" and "Min" buttons to set the correct day and time. Note: Rapid selection can be achieved by continually holding down either the "Hr" or "Min" buttons.

ii Release the "Time" button.
The unit is now in its operating mode and displays the clock time and day of week with the colon between the hours and minutes flashing e.g. -



7. Setting 24 Hr Programmes

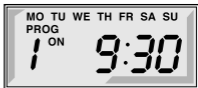
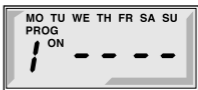
Note: during programming if no button is pressed in approximately 2 minutes the display will revert to operating mode.

The required programme can then be accessed again by repeatedly pressing the "Prg" button as required.
(Prg - programme)

i Press "Prg" button and display shows -

ii Set programme 1 ON time by using the "Hr" and "Min" buttons e.g. -


iii Press "Prg" button and now set programme 1 OFF time using the "Hr" and "Min" buttons.



THE UNIT IS NOW PROGRAMMED FOR A 24 HOUR OPERATION OF 1 ON/1 OFF TIME REPEATING DAILY INDEFINITELY.

- iv Repeat steps i to iii for further programmes up to a total of 6 (it is not necessary to use all 6 programmes but any unused programme times must be left blank (-- -- : -- --).

Note: The display will always show the number of the ON/OFF programme you are setting.

- v To set the unit into its operating mode always press the "Time" button after completing the ON/OFF programming. The display will then revert back to the clock display with the colon between the hours and minutes flashing - the unit's operating mode.
- vi Before using ensure that the timeswitch output is correct according to programme for the current clock time by using either of the  buttons to get AUTO and ON or OFF as required on the display to the left of the time indication (see section 9, page 6).


8. Setting 7 Day or Weekly Programmes

- i Press "Prg" button and set 1 ON time using the "Hr" and "Min" buttons.
- ii Repeatedly press the "Day" button to call up the day (s) required :- 6 days less Sunday, 5 weekdays, 3 days (Mon, Wed, Fri), 3 days (Tu, Th, Sa), 2 weekend days or an individual day e.g. -



- iii Press "Prg" button and the display reverts to showing all of the days, then set 1 OFF time by pressing the "Hr" and "Min" buttons and finally press the "Day" button repeatedly to call up the required day (s). This selection could be different to that for the "ON" time if, for instance, a programme crossing midnight is required for a single day.


THE UNIT IS NOW PROGRAMMED FOR 7 DAY (WEEKLY) OPERATION OF 1 ON/1 OFF TIME OPERATING ON THE CHOSEN DAYS REPEATING WEEKLY INDEFINITELY.

- iv Continue programming in this way for up to 6 programmes leaving any unused programmes blank (-- -- : -- --). On completion remember to set the unit into its operating mode by pressing the "Time" button.
- v Before using ensure that the timeswitch output is correct according to programme for the current clock time and day by using either of the  buttons to get AUTO and ON or OFF as required on the display to the left of the time indication.


Note: a) There is no restriction on mixing 24 hr and Weekly Operation programmes within the maximum of six programmes.

b) There is no restriction on programming across midnight, the day for the programme ON time can be different to the day for the OFF time by up to six days if required.

9. Permanent ON/OFF and Self-cancelling Override

These can be selected when in operating mode by using one of the  buttons. When the ON or OFF symbols appear along with the AUTO symbol the timeswitch is in timer mode and is ON or OFF as indicated at the current clock time.

When the ON or OFF symbols appear alone the timeswitch will be either permanently ON or OFF as indicated.

A temporary override (until the next programme change) can be achieved pressing one of the  buttons to change by changing from OFF to ON or vice versa whilst keeping the AUTO symbol on the display.

10. Suspending a Programme


To suspend a programme from operation:-

- i Press "Prg" button until the ON or OFF programme you need to suspend is displayed.
- ii Using a pointed object (eg a pencil) press "Rcl" - programme time shown on the display will disappear. The programme is now suspended from operation until re-instated by pressing either the "Day", "Hr" or "Min" button when the programme in question is displayed.
If you require the corresponding OFF/ON programme to be suspended this must be carried out separately.
- iii Remember to return the timeswitch to its operating mode by pressing the "Time" button.

11. Reviewing and Changing Programmes or Adjusting Clock Time

Repeated pressing of the "Prg" button will display each programme or unused setting in sequence. Programmes can be changed if required by using the "Hr", "Min" and "Day" buttons. Return to operating mode on completion by pressing the "Time" button. To adjust clock time press and continually hold down the "Time" button whilst pressing the "Hr", "Min" and "Day" buttons as necessary to adjust the hours, minutes and day. Then release the "Time" button to return to the operating mode.

12. Summer Winter Time Change-over

To make use of this facility you will need to initially set the clock to winter time irrespective of the time of year. If it is summer time when you are setting up the timeswitch then you will need to press one of the  buttons and the "Time" button simultaneously to change the time by +1 hour. When winter time begins these two buttons can be pressed simultaneously to go back 1 hour.

13. Random Delay of Programme Start and Finish

This may be useful if this product is used to control lighting for security purposes and similar applications (remember the timeswitch is limited to 400W of filament only lighting). All programmes will be started and stopped at random delay times from that programmed giving the appearance that the lights or other appliances are not being controlled by a time switch.

To do this press the "Prog" and "Time" buttons simultaneously when in operating mode. The **[RND]** symbol will appear on the right hand side of the display and will flash when the random delay period (between 2 and 32 min) is under way.

Helpline

If you are experiencing problems in operating your time controller, please ring our Technical Service Department on 020 8450 0515.

Specifications

Switch Rating:	13A (3kW) resistive, 4 amp inductive, 400W filament lamps
Operating Voltage:	230V 50Hz
Operating Temp:	0°C to 40°C
Battery:	Factory fitted rechargeable. Provides up to 150 hours of clock operation and memory back-up.
Minimum Depth of Wall Box:	32mm
EC Directives:	Conforms to 73/23/EEC and 89/336/EEC
Not suitable for fluorescent, low energy, low voltage or discharge lighting.	

3 Year Guarantee

In the unlikely event of this product becoming faulty due to defective material or manufacture, within 3 years of the date of purchase, please return it to your supplier with proof of purchase and it will be replaced free of charge. **Should you encounter any difficulty please contact our helpline on 020 8450 0515.**

Battery Disposal

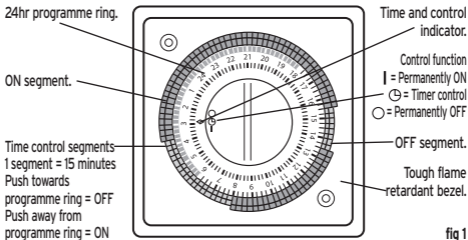
The timeswitch contains a Nicad battery, please dispose of correctly - consult your local council regarding disposal facilities.



Cd

24 Hour Immersion Heater Timeswitch

Article 939 435



8

1. General

The timeswitch is a compact and easy to use segment immersion heater timeswitch which fits on a single gang wall box. It is primarily intended for control of domestic immersion heaters up to 13A (3kW).

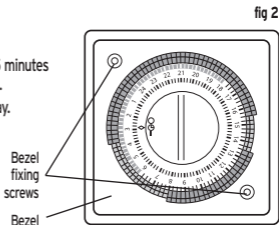
It has a valuable permanent OFF facility which enables the heater under control to be turned OFF when alternative methods of heating are available or during holiday periods.

2. Features

- Permanent ON/OFF facility.
- Shortest switching time of 15 minutes increasing in 15 minute steps.
- Up to 48 programmes per day.

3. Installation

Important: switch off the mains electricity before commencing the work.



Remove bezel fixing screws and remove bezel from timer module and back plate (see figs 2 and 3). Separate the timer module from the back plate and remove the wall fixing screws.

Ensuring that the free terminals on the back plate terminal block are at the top (see fig 3). Connect the installation wiring to the terminal block according to the legend on fig 3 and fit the wall box fixing screws through the back plate into the wall box threaded holes. Tighten until back plate is located firmly against the wall or to the surface box if fitted.

Fit the timer module to the back plate ensuring the time marker is on the left hand side (see fig 2) and the four locating holes on the timer module seat correctly on the back plate locating pegs. Fit the bezel and bezel fixing screws and tighten adequately. The earth wires should be connected to the wall box earthing terminal (if using a surface box ensure that it has an earthing terminal or use a single way connector block).

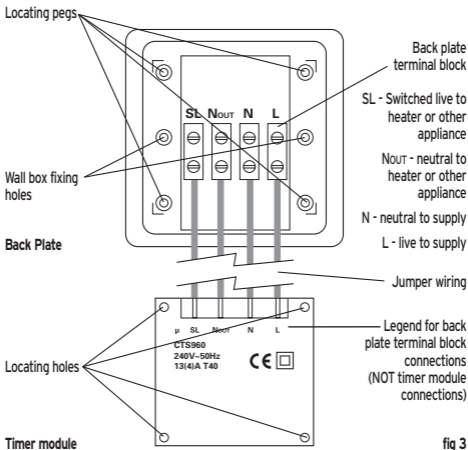


fig 3

Programming the timeswitch

- 1 Decide what times you would like the timeswitch to switch ON and OFF.
- 2 Push all the segments in towards the centre of the timeswitch for the complete duration of an OFF period and leave them all in the outer position for an ON period (see fig 1). The minimum switching interval is 15 minutes and this can be increased in 15 minute steps.
- 3 Bring the timeswitch into the correct condition by manually turning the programme ring clockwise through a 24 hour cycle. Note: when an ON/OFF or OFF/ON segment transition passes the time indicator a slightly increased resistance to movement is felt.
- 4 Turn the programme ring clockwise until the correct time of day on the ring lines up with the time indicator.

Points to note:

- The segment dial can be turned when the time controller is operating.
- In case of power failure, re-adjust the time controller to the correct time of day, turning the dial in a clockwise direction.

10 Permanent Override

By rotating the central switch clockwise so that the **I** symbol lines up with the time marker the unit will be permanently ON.

With the \ominus symbol lining up with the time marker the unit acts as a timeswitch.

With the \circ symbol lining up with the time marker the unit will be permanently OFF.

Specifications

Operating Temperature: 0°C to 40°C

Operating Voltage: 230V 50Hz

Switch Rating: 13A resistive (3kW), 4A inductive, 400W filament lamps

Minimum Depth of Wall Box: 32mm

Conforms to Directives: 73/23/EEC & 89/336/EEC

Not suitable for low energy, fluorescent, low voltage or discharge lamps.

3 Year Guarantee

In the unlikely event of this product becoming faulty due to defective material or manufacture, within 3 years of the date of purchase, please return it to your supplier with proof of purchase and it will be replaced free of charge. **Should you encounter any difficulty please contact our helpline on 020 8450 0515.**