

## 1. Set the Timer

**Do not** rotate the dial anti-clockwise as this will damage the mechanism.

Rotate the minute hand clockwise until the arrow-head on the clock face aligns with the correct time on the outer dial—see Fig. 1.

The dial shows the 24 hour clock. Note that 9 = 9:00 a.m., 21 = 9:00 p.m. When setting-up the 7 day version, align correct time on outer dial, within current day sector of dial. Please note: on the IHTGPW seven-day timer, the weekdays are printed around the edge of the dial in abbreviations of three languages.

To set ON / OFF times, move all tappets between

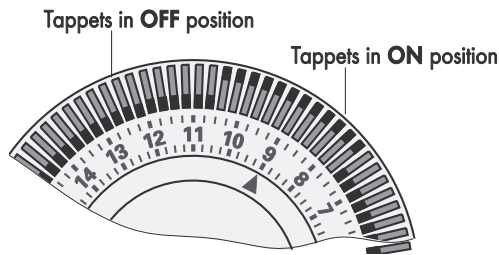


Figure 1.

ON and OFF times required to the outer edge of the dial. See Fig. 1.— to set ON at 7:30 a.m. and OFF at 10:30 a.m. move all tappets to outer position between 07:30 and 10:30 on the dial. Set any other ON/OFF times in a similar manner.

## 2. Manual Override

### Immersion Heater Timer

There is a three-position manual selector built-in to the clock dial face. See Fig. 2.

Leave the selector in the middle-position for automatic control, when the output is ON or OFF according to the tappet settings. To switch ON manually, move the selector to position 1 (marked I on the dial). To switch OFF manually, move the selector to position 3 (marked 0 on the dial).

The manual lever is a fixed selection. The output will stay as selected until the manual lever is moved once more.

### General Purpose Timer

The timer incorporates a changeover switch. There-

fore, when in use as a general purpose timer, the manual switch functions as follows:

In position 1, terminal 4 output is ON

In position 2, the output will switch between terminals 4&5, as determined by tappet positions.

In position 3, terminal 5 output is ON.

1 = ON

2 = AUTO

3 = OFF

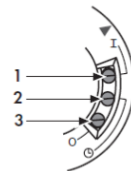


Figure 2.

## 3. Installation guide

Installation must be carried out in accordance with the current edition of the I.E.E. Wiring Regulations. It is recommended that installation is undertaken only by a qualified electrician.

Undo the recessed cross-head screws 'a' (see Fig. 3). Lift off the outer housing. Grip the square base of the timer and pull the timer away from the backplate.

Drill the wall to suit the three backplate mounting holes b, c, & d. Do not mount the timer on an un-earthed metal or metallised surface.

Secure to wall surface using suitable wall plugs & screws.

### Immersion Heater Control

Connect wiring according to the wiring diagram. See Fig. 4. When installing for immersion heater control ensure the brass link is correctly positioned and retained as pre-fitted to terminals 2 & 3.

### General Purpose Control

Removal of the brass link converts the timer switch to a volt-free configuration.

Secure cable and flex using clamps provided (see Fig. 5.) Do not connect unprepared stranded wires. Use ferrules supplied to crimp stranded wire terminations.

Means of disconnection with minimum 3mm contact separation in all poles must be incorporated in the fixed wiring mains supply.

Push timeswitch module onto backplate, ensuring good engagement of tab terminals. Refit housing to backplate.

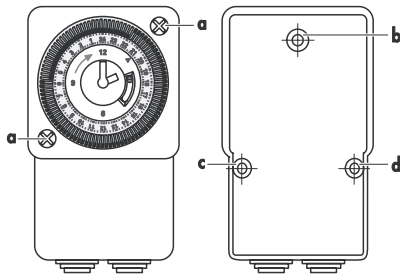


Figure 3.

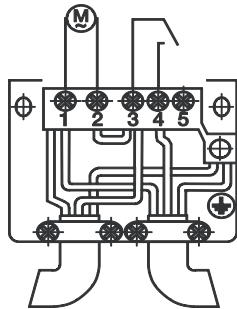


Figure 4.

**Wiring for immersion heater or mains-switching applications**

**Connection:**

**Supply:**

Live - terminal 3

Neutral - terminal 1

**Load:**

Live - terminal 4

Neutral - terminal 1

**Link:**

Terminals 2 - 3

Earth - Earth park

**Wiring for general purpose use**

**(as a volt-free control)**

To convert the timer for volt-free applications, remove the brass link. Connect mains to terminals 1 & 2 (not polarity conscious). Switching will occur across terminals 3, 4 & 5.

Common - terminal 3

Normally open (ON) - terminal 4

Normally closed (OFF) - terminal 5

Earth - Earth park terminal

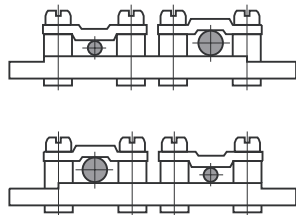


Figure 5.

**4. Specification**

Motor: 220-240V AC 50Hz

Temperature rating T45

Switch type: changeover

Rating:

16A resistive / 8A inductive

Not suitable for direct switching of lighting types: HID, SON, LED—use a contactor

Class II control / Protection class IP20

Complies with European Norm EN 60730-1: 2011

Automatic Electrical Controls for Household and similar use, and European Directives: LVD; EMC; RoHS

[www.tfc-group.co.uk](http://www.tfc-group.co.uk)

**TFC Group LLP Tonbridge TN9 1TB**



**OPTIMUM Time Switch**

For immersion heater control and general purpose use

**User instructions**

**OP-IHTGPT** 24 Hour Synchronous  
Min switching 15 minutes

**OP-IHTGPW** 7 Day Synchronous  
Min switching 2 hours

(product version is shown on the rating label)

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2. Manual override
3. Installation guide
4. Specification