



**INSTALLATION / OPERATING  
INSTRUCTIONS FOR  
DUAL TARIFF BOOST TIMER  
- TT09-C**

Please read the instructions fully before attempting installation.

**IMPORTANT**

*This unit should be installed to current IEE wiring regulations if in doubt consult a qualified electrician.*

- Timer must not be mounted on a flammable surface.
- Ensure that the timer does not come into contact with any combustible materials such as towels or bedding.
- Ensure at least a 300mm air space is allowed around the timer.

**INSTALLATION**

**THIS TIMER SHOULD NOT BE FITTED ONTO A CONDUCTIVE SURFACE (I.E METAL)**

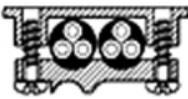
1. Before you begin to install. **DISCONNECT THE MAINS SUPPLY**
2. The Dual Tariff Boost Timer is suitable for fixed wiring only.
3. The following cable cross sections are possible:

Fig.1



3 x 2.5mm<sup>2</sup>  
(2X) output

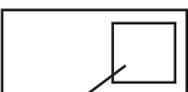
Fig.2



3 x 4mm<sup>2</sup>  
(2X) output

4. Select the single or twin box fixing points on the plate.
5. If the timer is to be surface mounted: select the single or twin fixing points on the back plate.
6. Wire entry from rear, both sides possible.

Fig.3



box

Fig.4



box

7. Connect main cable as shown in Fig.5.
8. Select desired flexible cable outlet to immersion heaters and using pliers remove the selected slot.
9. Clamp cables using attached cable clamp.

**NOTE**

Use the terminals 1 to 5 as identified.

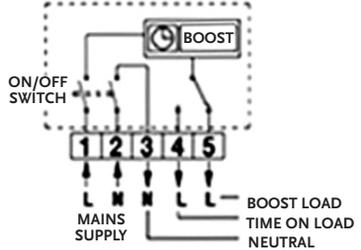


Fig.5

10. Connect the 'BOOST' and the 'TIMED ON' as required in Fig.6,7 & 8.
11. Assemble the timer to the back plate by aligning the location pins on the top of the backplate with the cut outs provided on the clock body. Lock in position using a fixing screw.

**APPLICATIONS**

This timer controls the use of cheap rate electricity during the night to heat the water in your tank for the following applications:

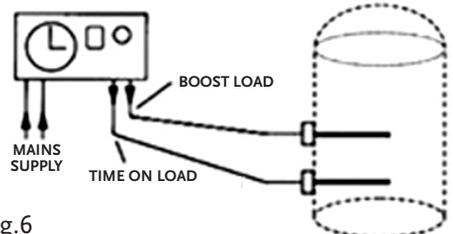


Fig.6

Two separate immersion heaters.

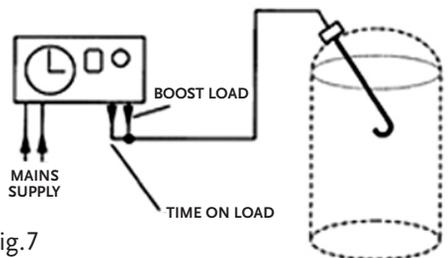


Fig.7

Single immersion heaters.

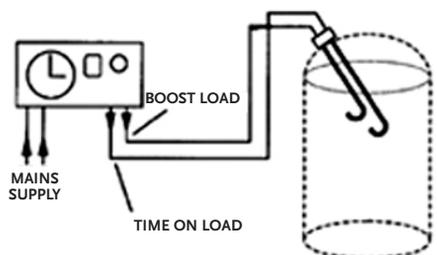
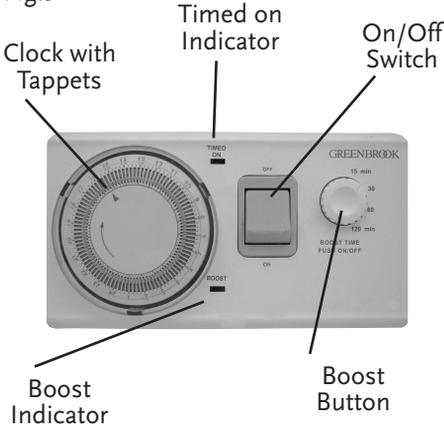


Fig.8

Dual immersion heaters.

## HEATER CONTROLLER AT A GLANCE

Fig.9



### TIMED ON INDICATOR

The indicator glows when the 'TIMED ON' output is active.

### BOOST ACTIVATOR

The indicator glows if the 'BOOST SWITCH' is used.

### ON/OFF SWITCH - SWITCH IS IN 'OFF POSITION'

The settings of the 'TIMED ON' and 'BOOST' time period are not activated the clock runs but the heater is disconnected.

### SWITCH IS IN 'ON POSITION'

The settings of the 'TIMED ON' AND 'BOOST' time period are activated and the water will be heated during the 'TIMED ON' time period.

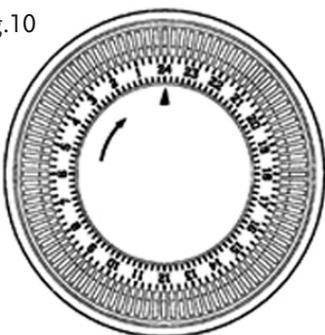
### BOOST BUTTON

1. This button is only needed if you need extra hot water during the day time 'PEAK' time.
2. Choose your boost time (adjustable between 15 & 120 minutes). Press the '**BOOST BUTTON**' once for switching ON.
3. If you want to interrupt the boost function before the boost time is completed: Press the '**BOOST BUTTON**' again.

### CHANGING THE 'TIMED ON' TIME PERIOD

To set the time on period, move the tappets for the 'TIMED ON' time period to the outer position of the dial. The minimum switching time is 15 minutes.

Fig.10



### SETTING THE TIME OF DAY

Turn the dial in the direction of the arrow (clockwise) until the correct time of day is exactly opposite the time set marker on the clockface (24hr clock).

### FITTING THE SEE-THROUGH COVER

1. Once the see through cover is located, it can be removed using a screwdriver.
2. Align the bar on the edge of the cover with the groove at the lower end of the dial in the housing.
3. Remove the cover by applying a screwdriver between groove and cover.

Fig.11



## TECHNICAL DATA

Rated Voltage:	230V, AC~50Hz
Max Current:	16A resistive, 2A Inductive
Ambient Temp:	-10°C to + 55°C
Rating:	16A for immersion heaters upto 3.5Kw
Boost:	Adjustable between 15 and 120 minutes
Fitting:	Surface mounted
Dimensions:	86H x 155W x 55D (mm)
Protection Category:	IP20

## GUARANTEE

Your KingShield Dual Tariff Boost Timer is guaranteed for 12 months from the date of purchase. This does not affect your statutory rights.

**PLEASE KEEP THESE INSTRUCTIONS SAFE FOR FUTURE REFERENCE**

**GREEN  
BROOK**  
ELECTRICAL PLC

WEST ROAD . HARLOW  
ESSEX . CM20 2BG . UK  
sales@greenbrook.co.uk  
WWW.GREENBROOK.CO.UK

