## GREENBROK

# LIGHT SENSITIVE LIGHT SWITCH INSTALLATION/OPERATING INSTRUCTIONS

#### **MODEL NUMBER: T41D-C**

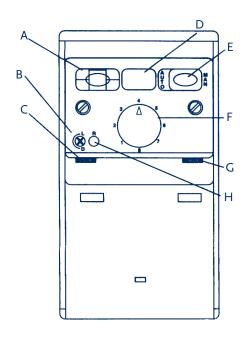
Thank you for purchasing a quality security timer from Greenbrook. Please read these instructions fully prior to initial use.

Every effort has been made to ensure that the guidance information on this sheet will enable the installation of the security light switch to be carried out safely and correctly.

IF IN DOUBT, INSTALLATION
SHOULD BE MADE BY A QUALIFIED
ELECTRICIAN IN ACCORDANCE WITH
CURRENT WIRING REGULATIONS.

#### **IMPORTANT**

FOR EFFECTIVE OPERATION, THIS UNIT MUST BE EXPOSED TO DIRECT DAYLIGHT AND SHOULD NOT BE COVERED BY CURTAINS OR FURNISHINGS.
ALSO, IT SHOULD NOT BE SUBJECTED TO STRONG STREET LIGHTING, AS THE LIGHT SENSOR CANNOT DIFFERENTIATE BETWEEN DAY & NIGHT.



- A. FUSE CARRIER Pull out to replace fuse (a special 3A BS646 20mm x 5mm, this is not an ordinary 3amp fuse)
- B. DARKNESS SENSITIVITY CONTROL Allows switch to react to different levels of darkness
- C. DARKNESS SENSOR Monitors light
- D. PUSH ON/OFF Switch Allows unit to operate as ordinary light switch.
  Activates even when lid is closed.
- E. OVERRIDE SWITCH MAN: Manual mode
  - AUTO: Automatic programme mode
- F. TIME ON Allows selection of "ON" periods up to 8 hours (in hourly intervals)
- G. RED NEON Lit when in automatic mode
- H. RESET BUTTON

#### WIRING INSTRUCTIONS

Before attempting any installation work, turn off the electrical supply at the main switch, fuse box or consumer unit and for additional safety remove the fuse.

ONLY SUITABLE for tungsten filament lamp loads of 40 to 400 watts maximum, and low energy (CFL)11W and above.

GreenBrook light switches cannot be used with any other electronic products.

#### DO NOT USE -

- In two way systems with dimmers or any other switch containing electronic circuitry.
- With fluorescent strip lights.
- With low voltage lighting.

### WIRING INSTALLATION IN ONE WAY SWITCHED CIRCUIT

Diagram 1 - Before

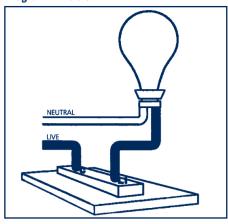
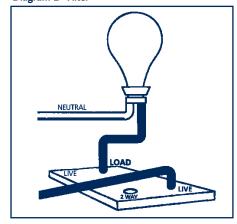


Diagram 2 - After YELLOW AND GREEN



EARTHS MUST REMAIN CONNECTED TO METAL BACK BOX

### WIRING INSTALLATION IN TWO WAY SWITCHED CIRCUIT

Before installing your security Light switch in a two way circuit it is first necessary to determine which method of wiring has been used in your home.

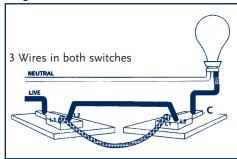
The primary reason for doing this is to make sure that the security switch is wired in such a way that has a permanent live feed at all times in order to power the electronic timer.

- 1. TURN OFF THE MAIN SUPPLY.
- 2. Loosen the two switch plates from the wall.
- 3. Do NOT disconnect any wires at this stage.

- Study the existing wiring arrangement; compare to the 'Before' illustrations.
  - if you find 3 wires at each switch (excluding the earth wire) see diagram 3.
  - if you find 5 wires at one switch and 3 wires at the other (excluding the earth wire) see diagram 5.

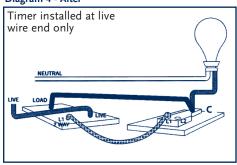
After establishing the appropriate wiring method install the Security Light Switch as per the corresponding 'After' illustration.

Diagram 3 - Before YELLOW AND GREEN



EARTHS MUST

Diagram 4 - After REMAIN CONNECTED TO



METAL BOX

### WIRING INSTALLATION FOR 5 & 3 WIRE ARRANGEMENT

Diagrams 5 to 7 show various installations before and after your Greenbrook security timer has been fitted.

Diagram 5 - Before

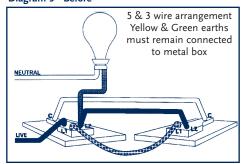
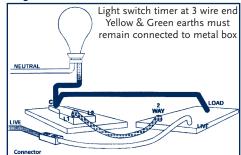
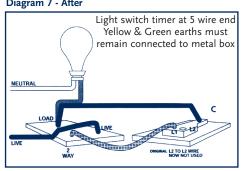


Diagram 6 - After





#### **OPERATING INSTRUCTIONS**

#### SETTING YOUR LIGHT SWITCH

- a) Ensure light fitting(s) being controlled have bulb(s) fitted, otherwise light switch will not function.
- b) After installation is complete, reconnect power at the mains (remembering to replace the fuse if removed for safety reasons).
- c) Press reset button H with ball point pen and hold for two seconds.

#### **SETTING TIME ON**

This sets the time your light remains on for. The time on period can be set from a minimum of 1 hour to a maximum of 8 hours in 1 hour increments. This is set by turning dial F (see first diagram for reference) to the desired time i.e. 1,2,3,4,5,6,7 or 8 hours.

#### PREPARING FOR OPERATION

#### STFP 1

Slide the override switch E so that the automatic position is showing, the red neon G will illuminate.

#### STFP 2

Ensure the room light is off, if necessary use the push on/off switch (D).

As darkness approaches monitor when the light(s) come on.

- a. If the light comes on too early i.e. still too light outside, use a small screwdriver to turn the darkness sensitivity control B slightly towards D (anti-clockwise).
- b. If the light comes on too late i.e. too dark outside, use a small screwdriver to turn the darkness sensitivity control B slightly towards L (clockwise). Close the front cover until it clicks into position concealing operation controls.

#### STEP 4.

For the next few days monitor the when the light comes on. Fine adjustments to the darkness sensitivity control B will ensure that the light comes on when you want it to. To achieve the desired on time, this may also take a few days of adjustments.

#### **AUTOMATIC OR MANUAL CONTROL - OVERRIDE SWITCH**

During those occasions when you are home early and you do not want your light switch to operate as set, slide the override switch E so that MAN shows for manual operation. The light switch will only operate via the push on/off switch (D), the red neon (G) will not be illuminated. To revert back to automatic operation i.e. light switch works to the preset programme), slide override switch (E) so that AUTO position is showing. Red neon (G) will be illuminated and the light will switch on when the pre-set level of darkness is reached.

#### MANUAL ON/OFF OPERATION

When all settings have been completed close the front cover until it clicks into position concealing the operating controls. The room light(s) can be turned on and off by simply pressing the top of the front cover. The position of the override switch (E) does not affect this operation. With the front cover closed, the red neon (G) will be illuminated or in manual mode when it will be off. To access the controls again, grip the front cover with forefinger and thumb either side and ease the cover forward.

#### **FALSE ACTIVATION**

Someone standing against the light switch for more than 30 seconds or a heavy thunderstorm may result in early activation. When normal light level is resumed, press the reset button (H) for 2 seconds.

#### **CHANGING A LIGHTBULB**

In the event of a lightbulb 'blowing' the light switch will fail to work. Always disconnect the power before replacing the light bulb by pulling the fuse carrier (A) forward until the fuse is fully visible. It may be necessary to replace the fuse following the replacement of a lightbulb if the light switch does not operate when the carrier (A) is pushed back into position. Replace the old fuse by pushing it upwards from the slot in the base of the carrier.

> Note: After replacing a lightbulb, replacing a fuse or a mains power failure, press the reset button (H) for 2 seconds.

#### **FUSE REPLACEMENT**

Always replace the fuse with a BS646 rated 3amp fuse. A normal 3amp fuse will not fit.

#### TROUBLE SHOOTING

#### PROBLEM 1

Light will not switch on

#### **SOLUTION**

- Press reset button H.
- Check that bulb has not blown.
- Check wiring is correct.
- Check fuse, by withdrawing fuse carrier A, incorrect wiring can blow the fuse.
- The required level of darkness has not Been reached previously.
- Wait until dusk then adjust darkness sensor C as described.

#### **PROBLEM 2**

Sufficient light is prevented from being detected by darkness sensor C

#### SOLUTION

Remove any soft furnishings or other obstructions from proximity.

#### **PROBLEM 3**

Light only operates correctly from one switch in a two way circuit

#### **SOLUTION**

The wiring is incorrect, consult a qualified electrician.

#### **TECHNICAL DATA**

	Rated Voltage:	230V, AC $\sim$ 50Hz
	Load:	Max 400W-Min 40W + most
		Low Energy (CFL) 11W & above
		Tungsten bulbs only
		Integral 3 amp fuse

### **ALWAYS REPLACE WITH A SPECIAL** 3AMP BS646 FUSE. (THIS IS NOT AN **ORDINARY 3AMP FUSE)**

PLEASE KEEP THESE INSTRUCTIONS SAFE FOR FUTURE REFERENCE





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