## Seven Day Pulsed Output Electronic Timeswitches 110 Volt

## INSTALLATION INSTRUCTIONS

The Model 841 \& 842 Timeswitches must be installed by a competent electrician and the installation should conform to IEE Wiring Regulations.

## Installation \& Wiring

1. Slacken the four fixing screws, one in each corner of the unit, and carefully separate the front and rear portions. Unplug the ribbon cable from the rear portion.
CAUTION: Do not allow either half of the unit to hang by the ribbon cable as damage could be caused.
2. Remove the polystyrene packing piece from the top of the transformer. It is marked 'REMOVE'.
3. Select the desired fixing position and observe the label'THIS WAY UP' inside the rear portion. The two halves will only assemble correctly one way round.
4. Four fixing holes are provided for attaching the rear portion to the wall or mounting surface.
Conduit box adaptors as shown below are available if required.
Part No.: 8/3223 Double Gang Surface Box Adaptor

5. Surface cable entries to the units can be made from above, below or from the left hand side. Conduit or recessed cable entry is through the aperture in the rear moulding.
6. For surface cable entry remove the appropriate knock-out and ensure one of the two cable clamps is positioned correctly.
7. Connections to the units should be made as shown below. MODEL 841


MODEL 842


If the control circuit(s) are to operate at 110 V then terminals $\mathrm{L} \& 1$ (Model 841) and terminals L, 1 and 4 (Model 842) must be linked, ensuring that the cable is sheathed and of a size to carry the required load current.
If, however, the control circuit(s) are operating at other than 110 V then no link(s) shall be fitted and in the case of Model 841 both terminals 1 and 2 should be connected to the load.

In the case of Model 842 terminals 1, 2 and 3 (if required) should be connected to the load controlled by Channel 1 and terminals 4,5 and 6 (if required) to the load controlled by Channel 2.
8. The unit is supplied set for a 5 second single pulse output. If a multi pulse output is required, proceed as described in paragraph 10 (b). If a number of pulses or the pulse duration is required to be different from supplied, proceed as described in paragraph 11 (b).
9. Upon completion of wiring plug in the ribbon cable ensuring the polarised plug is fully inserted into the socket. Refit the front half of the timeswitch ensuring correct alignment and that no cables are trapped before re-tightening the screws.
10. TO CHANGE FROM SINGLE TO MULTI PULSE OUTPUT
(a) Remove the front portion of the unit as described in 'Installation and Wiring' paragraph 1.
(b) A push/pull switch is provided on the rear of the printed circuit board inside the front portion of the unit.
With the switch pulled out (as supplied) this provides a single pulse output. Push the switch in to achieve a multi pulse output ( $1 / 2$ second on followed by $1 / 2$ second off).
On Model 842 a push/pull switch is provided for each channel to enable different types of pulsed output if required. The switch relating to each channel is clearly marked.

## 11. RESETTING OF SWITCHING DURATION

(a) Remove the front portion of the unit as described in 'Installation and Wiring' paragraph 1.
(b) The bank of four miniature rocker switches is mounted on the printed circuit board inside the front portion of the unit.

When switch no. 1 is 'on' 1 second duration is set. When switch no. 2 is 'on' 2 seconds duration is set. When switch no. 3 is 'on' 4 seconds duration is set. When switch no. 4 is 'on' 8 seconds duration is set. When all 4 switches are 'on' the duration is
$1+2+4+8=15$ seconds.
Any combination of the 4 switches may be selected to set from 1 to 15 seconds in increments of 1 second.
If all 4 switches were'off'there would be no output and so this setting should be avoided.

EXAMPLES


| Slider Switch Positions | 'ON' Duration |
| :---: | :---: |
|  | 8 seconds |
|  | 9 seconds |
|  | 10 seconds |
|  | 11 seconds |
| $\begin{array}{\|llll} \hline \mathrm{N}_{\mathrm{ONF}}^{\mathrm{ONF}} \square_{\square}^{2} & \square^{3} & \square^{4} \\ \hline \end{array}$ | 12 seconds |
|  | 13 seconds |
|  | 14 seconds |
|  | 15 seconds |


| Technical Specification | Model 841 | Model 842 |
| :---: | :---: | :---: |
| Max. current rating of output | 15 A at 110 Vac | $3 A^{*}$ (at 110 Vac on each channel. <br> * If set as multi pulse output giving 15 pulses per event 200 times per week, rating reduces to 1 A at 110 Vac <br> Conversely if set as single pulse at 100 events per week, rating increases to 5A at 110 Vac |
| Output contacts | Enclosed single pole single throw (SPST) Type B | Enclosed single pole double throw (SPDT) voltage free on each channel Type B |
| Mains supply required | 110 V (+/-10\%) AC 50/60 Hz | 100 V (+/-10\%) AC 50/60 Hz |
| Battery reserve | Retains memory settings for a period of 3 months during mains power failure (once battery is fully charged) |  |
| Temperature Rating | $0^{\circ} \mathrm{C}$ to $45^{\circ} \mathrm{C}$ |  |
| Enclosure Rating | IP30 |  |
| Max Ambient Temperature | $45^{\circ} \mathrm{C}$ |  |
| Overall Dimensions | 210 mm wide, 115 mm high, 50 mm deep |  |
| Max. No. of programmable operations | 200 which may be freely allocated throughout the 7 days |  |
| Setting and Running Accuracy | +/-1 1 min and +/-1 min/month |  |
| Mode of operation | Provides either a continuous or interrupted pulse ( $1 / 2$ second 'ON' followed by $1 / 2$ second 'OFF') for a duration of between 1-15 seconds at each programmed event. <br> The unit leaves the factory set for a single pulse of 5 seconds duration. This can be reset if required (see paragraphs 10 and 11 overleaf) | Provides either continuous or interrupted pulse ( $1 / 2$ second 'ON' followed by $1 / 2$ second 'OFF') on each channel for a duration of 1-15 seconds at each programmed event. The unit leaves the factory with both channels set for a single pulse of 5 seconds duration. Either or both of these can be reset independently of each other to give differing outputs (see paragraphs 10 and 11 overleaf). |
| Control Pollution Situation | Degree 2 |  |
| Software Classification | Class A |  |
| Rated Impulse Voltage | 2.5 kV |  |
| Ball Pressure Test | $75^{\circ} \mathrm{C}$ |  |

MODEL 841


This product complies with the following EC Directives: Electro-Magnetic Compatibility Directive
(EMC) ( $89 \backslash 336 \backslash E E C$ ), $(92 \backslash 31 \backslash E E C)$
Low Voltage Directive.
(LVD) ( $73 \backslash 23 \backslash \mathrm{EEC}$ ), ( $93 \backslash 68 \backslash \mathrm{EEC}$ )

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