



TECHNICAL DATA SHEET

CANFORD STUDIO ILLUMINATED SIGNS

51-403 ILLUMINATED SIGN BC BASE FITTING TYPE B, 240 VOLT

51-404 ILLUMINATED SIGN ES BASE FITTING TYPE B, 240 VOLT

51-406 ILLUMINATED SIGN ES BASE FITTING, TYPE B, 110 VOLT

This range of attractive signs has been designed by Canford for any application where a visually attractive annunciator is required in such applications as broadcast studios, conference suites, medical centres and other architectural uses. The units have the advantage that the illuminated state is clear to see through 180 degrees of viewing angle. They are intended to be wall mounted with fixed external wiring, and must be used with a suitable cover. A range of translucent covers is available. Eg, 51-420; Illuminated Sign Red cover, Unprinted. The two available type B base fittings are identical with the exception of the different integral lampholders fitted to each model.

REMOTE CONTROL INFORMATION

There are two modes of operation, 'ON' and 'FLASH'. Remote control of either mode is achieved by shorting the appropriate control pin to a common ground or alternatively by reducing the voltage across the contacts to below approximately 2-3 volts DC with respect to common pin 1.

Therefore this enables the use of micro switches, relays, toggle switches or open collector outputs to provide the necessary switching.

'ON' is achieved by shorting pin 2 to pin 1, 'FLASH' is achieved by shorting pin 3 to pin 1.

Figure 4 shows the silk screen for the pcb, the remote control connector J3 is denoted by legend (3) which shows the pin positions and their relative functions viz '0V', 'ON' and 'FLASH'.

FLASH RATE CONTROL

There are three sections on J2 (5) Figure 4 as shown on the diagram. The first section sets the duty cycle (ON/OFF time (1) Figure 4). To set the duty cycle to 3:1, three jumper links should be pushed onto the link pins marked 3:1 (these are the 1st, 3rd and 6th from left to right). To set the duty cycle to 2:1 three jumper links should be pushed onto the link pins marked 2:1 (these are the 2nd, 4th and 6th sets of links on J2). To set the duty cycle to 1:1 three jumper links should be pushed onto the link pins marked 1:1 (these are the 1st,

3rd and 5th sets of links on J2). Any unused jumper links may be removed completely or pushed onto a single pin, taking care not to short to any other pins.

The second section sets the speed of the flash (2) Figure 4. To set the speed of the flash to 'SLOW', two jumper links should be pushed onto the link pins marked 'S' (these are the 7th and 8th sets of links on J2).

To set the speed of the flash to 'FAST', two jumper links should be pushed onto the link pins marked 'F' (these are the 9th and 10th sets of links on J2).

The third section of jumper link pins are only used during manufacture and test and must not have any jumper links pushed onto the link pins.

| Duty Cycle | 1:1 | 2:1 | 3:1 |
|----------------|----------|-----------|------------|
| FAST ON | .32 SECS | .64 SECS | .96 secs |
| OFF | .32 SECS | .32 SECS | .32 secs |
| SLOW ON | .64 SECS | 1.28 SECS | 1.92 secs* |
| OFF | .64 SECS | .64 SECS | 1.92 secs* |

*Factory default

The 'FLASH' function takes logical precedence over the 'ON' setting; ie if 'FLASH' control is activated, the unit will flash in the style set up by the jumper links on the 12 way DIP header, J2, regardless of whether the control input is set for 'ON' operation or not. The control circuit is fully electrically isolated from the mains to the voltage rating required via the mains transformer and onto the coupler. Zero voltage switching is featured and there is no delay between control function input to the change of state of the lamps. Control input connections are on a 3 pin PCB mounted screw terminal polarised connector J3 (4) Figure 4; mating screw terminal supplied.

NOTE

As supplied, a link, LK1, connects mains earth to circuit 0V. If required, to prevent inadvertent unintentional mixing of earth's, this link may be removed, but under no circumstances should the mains earth be disconnected.



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INSTALLATION INSTRUCTIONS

The installation should be carried out by appropriately qualified staff.

TURN ELECTRICITY SUPPLY OFF AT MAINS BEFORE INSTALLING OR MAINTAINING THIS LUMINAIRE.

PLEASE REFER TO THE EXPLODED DRAWING.

Following unpacking and inspection for damage in transit, the base unit should be dis-assembled, firstly by unscrewing the four posi-drive screws holding the lamp-holder assembly, (A) Figure 2, to the base, (B) Figure 2.

The attached wiring loom is then disconnected from the base by unplugging the free part, (C) Figure 2, of the mains terminal block. The assembly is then laid aside taking care to avoid mis-placing the screws.

The plastic tray should be firmly fixed in place, taking care to avoid obstruction of cooling vents, (D)

Figure 2, using appropriate fasteners. Fixing holes are provided to match UK (BS 4662), European (DIN) and American flush electrical boxes, as well as UK conduit boxes.

External wiring should be connected, through the entry hole, (E) Figure 2, to the terminal block.

WARNING - THIS EQUIPMENT MUST BE EARTHED.

Connect **Live** wire to the terminal marked '**L**' Connect **Neutral** wire to the terminal marked '**N**' Connect **Earth** wire to the terminal marked '**E**' The unit must be fed from a suitably protected supply with a capacity not exceeding 5 amps.

(Note: Un-insulated protective earth wires should be sleeved with green/yellow insulating sleeve).

The lamp-holder assembly may now be re-connected and fixed in place on the tray. Two suitable bulbs should be fitted, and the chosen cover "hooked" onto the base. The unit should now be ready for use.

In the UK the completed installation must comply with "Regulations for electrical installations", current edition, as published by the Institution of Electrical Engineers.

MAINTENANCE

- (1) Ensure a copy of these instructions are presented to the responsible authority for maintenance.
- (2) Replace lamps only with suitable types as described below.
- (3) Clean diffuser/cover regularly with lukewarm soapy water and dry thoroughly before re-fitting.

SUITABLE REPLACEMENT LAMPS ARE:

- 51-025 ILLUMINATED SIGN Lamp, 25 watt BC 230 Volts (B22 BAYONET)
- 51-026 ILLUMINATED SIGN Lamp, 25 watt ES 230 Volts (E27 SCREW)
- 51-027 ILLUMINATED SIGN Lamp, 25 watt ES 110 Volt (E27 SCREW)

It is important that the fitting is only used with the intended lamp. These are 45mm nominal diameter opal (or frosted) types, maximum 25 watts. Other types may cause overheating and are potentially a fire hazard.

TECHNICAL SPECIFICATION

EQUIPMENT TYPE - Fixed class Luminaire, for wall mounted, internal use.

| | | |
|------------------------------|--|--|
| Conforming Standards: | BS4533 BS EN 60065 | Luminaires Specification of safety requirements for mains operated electronic and related equipment approved for household and similar general use. |
| EC Compliance: | BS EN 60598-1 EMC Directive Low Voltage Directives | Luminaires, general requirements and testing. 89/336/EEC 73/23/EEC 93/68/EEC |
| Rated Duty: | Continuous Rated | Maximum ambient temperature: 40°C |
| Rated Voltage: | 51-403 230 Volt 51-404 230 Volt 51-406 110 Volt | Dimensions (with cover fitted): See drawing |
| Rated Wattage: | 2 x 25W | Weight, packed: 1 Kg approximately |
| Rated Frequency: | 50-60 Hz | Materials: Base: Polycarbonate moulding Lamp-holder assembly: Epoxy powder coated mild steel |

