

# DIGITAL SOLID STATE FLASHERS: 2001/2002 SERIES

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### GENERAL

The Model 2001/2002 Series of flashers fills the need for reliable solid state 4-pin flashers which mate with the Econolite sub-base to replace models used in Automobile Traffic Controllers, as well as to replace electromechanical models.

The units described herein utilize a finned aluminum extrusion which forms the outer case and serves as a heatsink. These models make use of special molded nylon shoulder washers to provide electrical insulation between the case and the mounting pins with each unit tested at 2000 V. rms to ensure good electrical isolation.

Dimmable flasher models deliver positive half-wave power to incandescent loads when ac common (ac-) is supplied through an extra pin provided for this purpose. During Dimmed Mode Operation, approximately 45% less electricity is used by the lamps flashing. Connection of the switched ac common signal is made directly to the flasher unit without modification of the flasher sub-base. Bright Mode Operation (full-wave output) occurs when ac common is removed from the extra pin. The extra pin on the flasher unit is a male quick connect tab 0.250 in. wide X 0.032 in. thick. The wire carrying the switched ac common signal to the flasher unit should be terminated with an insulated female quick connect terminal.

Dimming may be activated by a photoelectric cell in series with a clock timer having battery back-up.

These Models also feature **output indicators** which show an orange-red light during Bright Mode Operation and a green light during Dimmed Mode Operation. Additionally, abnormal negative half-wave output to loads is indicated by red light from these indicators. NOTE: TSC and ACC **Dimmable Flashers** are designed such that if an element in the switched ac common supply fails, it will most likely fail open circuit and flashing operation will revert to Bright Mode Operation.

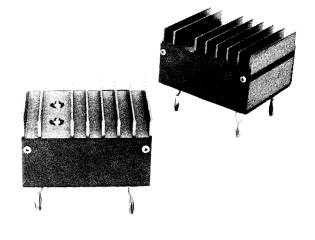
The dimming feature may be disabled internally any time by cutting and removing the wire inside the flasher which connects the extra pin to the circuit board. Inductive loads, such as Neon Ped-Heads, should not be dimmed. Dimmed mode operation should not be performed on signals in daylight or those having a bright light background.

#### ZERO VOLTAGE SWITCHING

Reduced RFI, extended light bulb life.

#### HIGH STABILITY FLASH RATE

No drift with temperature and voltage variations. Flash rate is  $56 \pm 3$  per minute, on-time equal to off-time.



#### WIDE TEMPERATURE OPERATION

Full load capability from  $-35^{\circ}F$  to  $+165^{\circ}F$  ambient temperature.

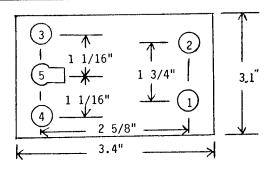
## DIMENSIONS - NEW

Nominal 3.45" long X 3:1" wide X 2.05" high, exclusive of pins. Add 1.1" to height for pins and insulators. 2.55" installed height.

# EXCELLENT WARRANTY AND SERVICE

These flashers are guaranteed against failures due to defects in manufacture for two years.

# FLASHER BASE WIRING DIAGRAM



TOP VIEW OF RECEPTACLE

1 - a.c. +

2 - a.c. - (Common)

3 - Load 1

4 - Open (Model #2001)/Load 2 (Model #2002)

5 - Switched a.c. -\*

\*Pin 5 is only on 'Dimmable' models and is a 0.250" x 0.032" male quick connect tab

SINGLE CIRCUIT FLASHER-Model No. 2001B-20A. rms Max. Load at Pin 3. 60-135 VRMS, 60 Hz.

DUAL CIRCUIT FLASHER-Model 2002B-10 A.rms Max. Combined Load at Pins 3 & 4.60-135 VRMS, 60 Hz.

Above models available with output LED indicators by adding 'L' after above model numbers. Above model numbers with dimmable outputs and output LED indicators available by adding 'Dimmable' to standard part numbers.

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