

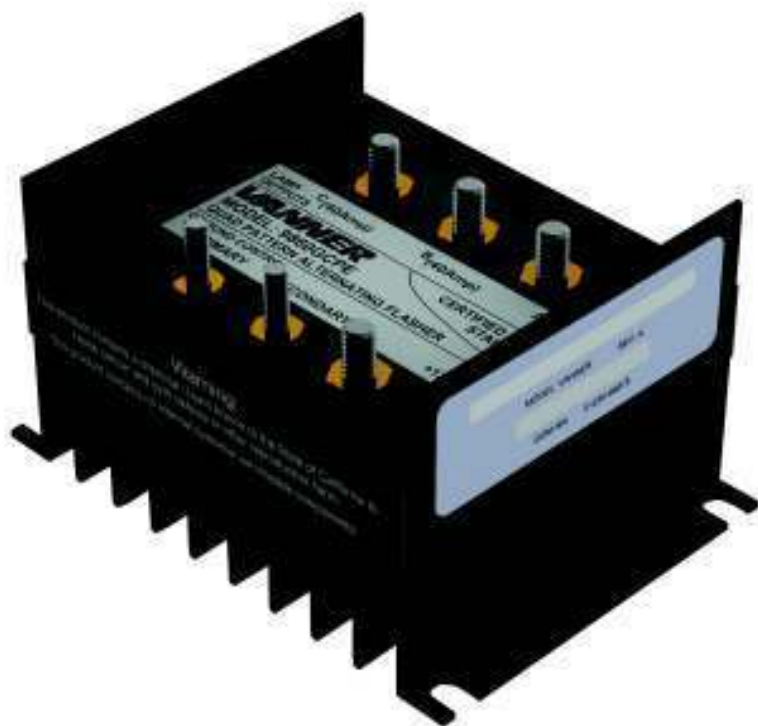
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LifeStar™ 9860GCPE **Ambulance Electronic Flasher**

Innovative 4 Pattern Selectable Electronic LED Flasher



Robust, Reliable and Safe

- Changes flash patterns easily in 3 seconds and saves time on production line
- Works on all brands of lights and reduces inventory items
- Rated at 140 total amps with one flasher for Halogen, LED, and selectable lamps.
- Terminal A - 60 amps
- Terminals B & C - each 40 amps
- Innovative Heat Sink Design, proven reliability and *really dissipates heat*
- No pins, minimal crimping required and saves time on production floor
- Same footprint as our current units; drop in for 3860, 5860GCPE series
- Saves precious space on the electrical panel and saves space compared to other brands
- Designed for your new ambulance or service vehicle
- Field-tested to extreme temperatures for dependability with a near zero % return rate.
- Backed by more than 30 years of Vanner EMS research and engineering

Experience Power ... Experience Vanner.

LifeStar™ 9860GCPE Electronic Flasher Specifications

Maximum Output Current:	Terminal A: 60 Amps Terminal B: 40 Amps Terminal C: 40 Amps
Input Voltage	10-16 Vdc, 13.6 Vdc Nominal
Flash Rate	75-80 per minute at 50% duty cycle
Ambient Temperature	-40°F to +122°F (-40°C to +50°C)
Fuse or Circuit Breaker	70 Amps Max. Customer supplied overload protection <i>must</i> be in series with +12Vdc input and should be 25% greater than either all A lights, or all B & C lights, whichever is larger.



Vanner EMS products lead the industry in attention-getting patterns in emergency and service vehicle lighting systems. Vanner flashers meet or exceed all GSA, Triple K-1822 and AMD specifications.

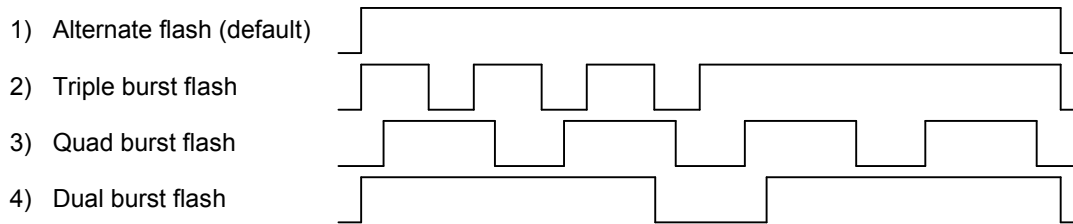


9860GCPE FLASHER Owner's Manual

GENERAL

The 9860GCPE Quad Pattern electronic flasher has been designed to operate in the most severe environments. This heavy duty flasher with its default flash pattern has been designed and certified to Federal specification for Ambulances KKK Standards. The flasher has output short circuit protection and reverse input voltage protection. This unit is designed to be operated manually in either the Primary or Secondary mode. Primary Mode is standard running mode, which alternately flashes the A warning lights with the B & C warning lights. The Secondary Mode is normally used at the scene and alternately flashes the A warning lights with the B warning lights, with C lights off. All lights operate at full power when in either mode. To change the flash pattern see below.

FLASH PATTERNS:



To Change the Flash Mode

With flasher operating, jumper the 12V terminal with Terminal A for 3 - 4 seconds.
(note: jumper will need to carry full terminal load current)

Remove the jumper from 12V to A terminal.

The flasher will then flash the new flash pattern.

Repeat Steps 1 and 2 to advance to the next flash pattern.

WARNING LIGHTS

The 9860GCPE flasher can be used with most incandescent, halogen, and LED warning lights.

CHARACTERISTICS & TIPS

- 1) For extended service reliability, it is important that the flasher is not overloaded. In some cases the unit's short circuit protection may consider the overload a short circuit, and shut the unit down.
- 2) If the Primary and Secondary terminals are both grounded, the flasher will operate in Primary Mode.

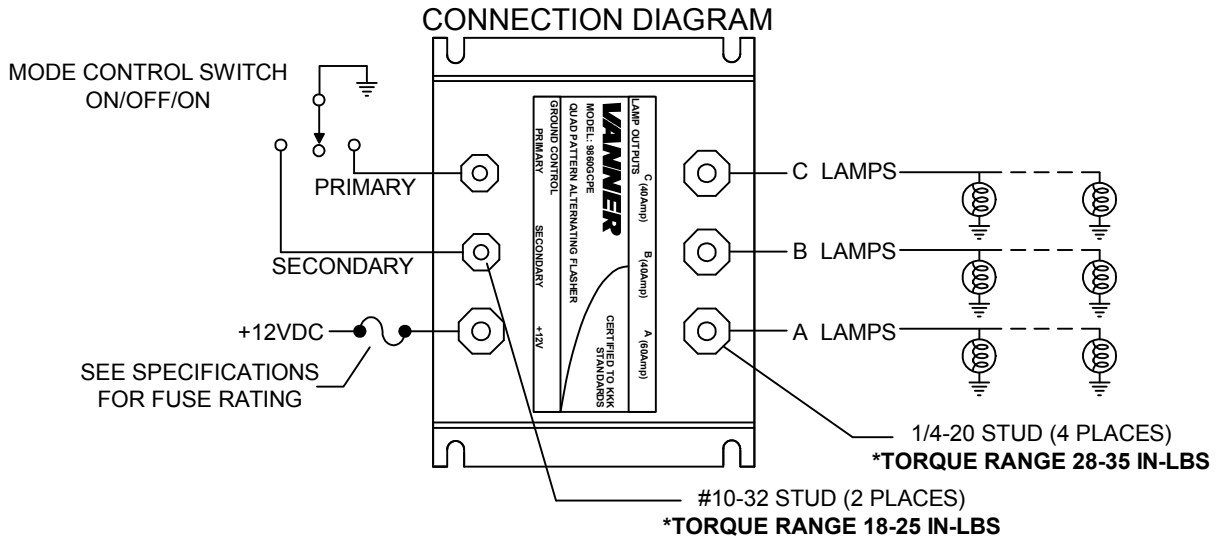
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TROUBLESHOOTING

PROBLEM	ITEMS TO CHECK
All outputs do not flash:	1) Is the battery voltage less than 10Vdc? 2) Are the wire and light connections proper? 3) Do you have more than the rated number of lights on the outputs? 4) Is the remote ground switch wired correctly?
One output does not flash:	1) Is the battery voltage less than 10 Vdc? 2) Is the affected output shorted or overloaded? 3) Are the wire and light connections proper?

*If after reviewing this chart you still can't locate the problem, contact Vanner for technical assistance - 800-AC-POWER.



***CAUTION**

THE STUDS (TERMINALS) ON THE FLASHER ARE SOLDERED TO THE INTERNAL PRINTED CIRCUIT BOARD. OVER TORQUING WILL DAMAGE THE PRINTED CIRCUIT BOARD.

MOUNTING DIMENSIONS

