CR-SixLED Retro Marine Light Engine

Through extensive optical computer modeling we have been able to design a system that optimizes the light output in point source lenses using an off point source LED module. We are proud to offer our LED retro-fit upgrade to replace both the Flasher and Lampchanger in 155mm and most other marine signal lanterns. Now the advantage of LED technology can be obtained without discarding the entire lantern. Only one lens color now needs to be stocked. Our SixLED system yields both high intensity, high divergence and up to 100,000 hours of dependable life. Features include over 256 flash rhythms selectable by DIP switch, synchronization and daylight control operation. Separate power circuits for each LED provide redundancy to keep the light shining.

"Light Waves To The World"

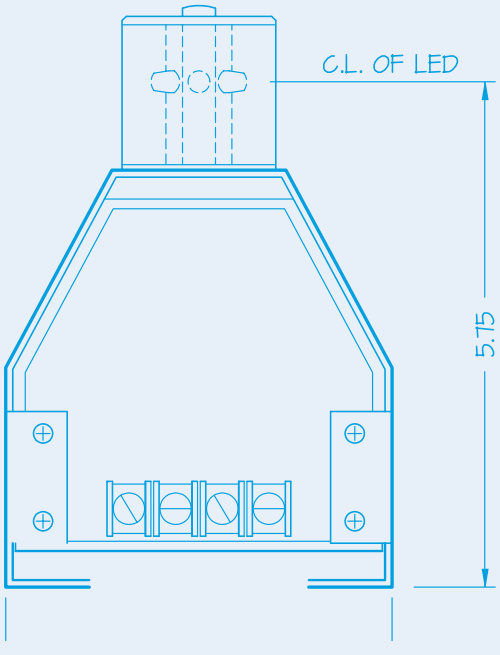
CR Control Systems Inc., 85 Mechanic Street, Suite E2-6, Lebanon, NH 03766
888-897-9391 603-727-9149 fx: 603-727-9166 www.crconsys.com

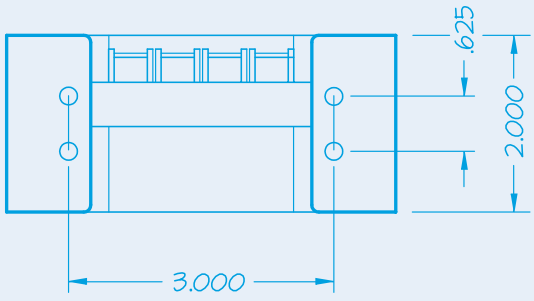
CR-SixLED Retro Marine Lantern

Features:

- 5-6 mile visibility with Fixed rhythm, 12° vertical divergence to +50% of peak horizontal intensity (FWHM) in 155mm lantern
- Up to 256 flash rhythms accessible by simple to use DIP switch, plus infinite external rhythm programmability through personal computer (PC). Up to 4 more rhythms can be placed into 4 reserved switch settings
- Programmable daylight control circuitry allows turn on and turn off at dusk and dawn when used with optional Daylight Control Sensor
- Synchronization of 2 or more lights. If Daylight Control Sensor is used, synchronized flashers will all turn on and off at dusk and dawn: 1) in sync, (CR True-Sync System) or 2) independently; selectable by DIP switch. GPS synchronization available
- Four power setting levels accessible by DIP switch. Levels can be refined through PC connection
- Contains 6 high powered solid state emitters
- Reverse polarity protected
- Color coded terminals for easy hookup identification
- Custom seals protect LED's against water immersion
- Optimal heat management of LED's in our design allows for maximum manufacturer recommended power levels and light intensities even with a Fixed rhythm light. Since the life of LED's are significantly reduced when driven at power levels that cause overheating, we have carefully designed our SixLED system to control power electronically and to successfully drain the LED heat away mechanically.
- We provide six individual power drivers which provide redundancy in the case of an unlikely power driver or LED failure. These power drivers are computer programmable and allow for accurate intensity output matching adjustment of each LED. Designs from other manufacturers connect multiple LED's in series. If an LED fails, their whole string fails. If their design utilizes only one driver circuit and it fails, the whole light goes dark.

SIDE VIEW





BOTTOM VIEW

Technical Specification:

- Input: 6-28 VDC
- Idle Current: <5mA
- Selectable rhythms: 252 DIP switch pro grammed internally, 4 DIP switch locations reserved for external pro gramming by computer
- Daylight Control operational set points: Programmable by computer
- Power setting levels: 4 switch selectable; can be altered by computer
- Reverse Polarity protected
- Temperature operating range: -40° to +85°C (-40° to +185°F)
- Weight: .45 Kg (1 lb)

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