

SERIES  
**CR7000**  
MARINE SIGNAL  
MODULE



Series cr7000 LED Marine Signal Module (one LED system shown)

**The Series cr7000 LED Marine Signal Module and Series cr7100 LED Marine Signal Lantern** are designed to be a superior alternative to incandescent lanterns in the 1 to 8 mile peak intensity visibility range with lower power consumption yet greater vertical divergence.

The module mounts into the standard lens ring of a 155 mm marine lantern base in place of the 155 mm lens. It contains everything needed to replace the entire 155 mm incandescent system and includes the LEDs, the side emitting lens(es), the electronics and the Daylight Control Sensor. The predicted LED life of 100,000 hours makes the lantern much more reliable and reduces maintenance costs significantly when compared to the older incandescent lamp systems. The compact design of the CR7000 module greatly simplifies wiring and makes converting a 155 mm lantern into an LED light effortless. It is based on the novel CR Side Emitting LED lens which offers outstanding brilliance. This lens greatly simplifies the construction of the LED light head. This simplified optical system is lower in cost but can produce as much light as the large quantity LED systems presently on the market. The lens provides excellent uniformity in the horizontal plane (no molding seams) as well as a wide 7.5° to 10° symmetrical vertical divergence to 50% of peak intensity (FWHM). The state of the art flasher and driver circuits powering the LEDs provide high efficiency with its Pulse Width Modulated (PWM) constant current drive system. The three hole mounting pattern of the module matches the pattern of standard 155 mm lenses which makes change-over of a standard 155 mm lantern into an LED light straightforward; just bolt it on with the three screws, connect the power and place it into service.



Series cr7100 LED Marine Signal Lantern (one LED system shown)

**Materials:**

**Mounting Plate:**

Hard coat anodized marine grade aluminum

**Protective Tube & Lens:**

Acrylic which is superior to UV protected polycarbonate when subjected to UV.

**Connector Contacts:**

Gold plated

**Specifications:**

- **Operating Voltage:** 8-24 V DC
- **Peak Light Intensity in Candelas:**

**7.5° Vertical Divergence**

	1-LED	2-LED
White	130	260
Green	115	130
Red	65	130
Amber	60	120

**10° Vertical Divergence**

White	300	600
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- **Intensity Settings:** Four (4) switch selectable intensity settings
- **Vertical Divergence:** 7.5° or 10° (varies on LED brightness) to 50% of peak intensity (FWHM). Symmetrical with horizontal plane.
- **Rhythms:** Up to 252 DIP switch selectable rhythms with four (4) additional available for infinite rhythm selection at factory.

**Temperature Range :**

-40° C to +85°C

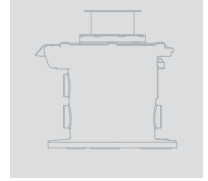
• **Colors Available:** Red, Green, White and Amber all meet recommendations of International Association of Lighthouse Authorities (IALA)

• Separate constant current drivers for each LED for enhanced reliability

• **Lens:** High efficiency, acrylic, excellent horizontal uniformity (Patent pending)

• **Daylight Control:** On - 250 lux + 50 lux(dusk); Off - 320 lux (dawn) + 50 lux

• **LED Manufacturer Rated Life Expectancy:** 100,000 hours on steady - much longer when flashed

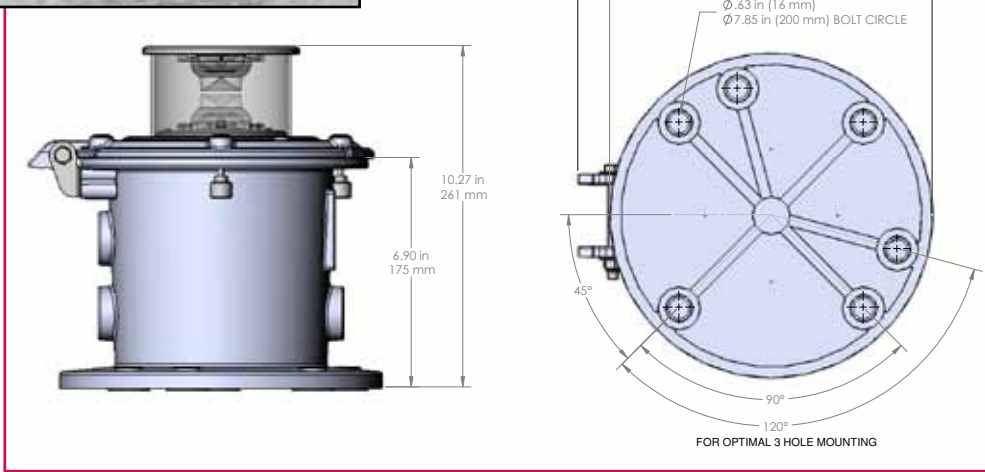


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MARINE SIGNAL  
MODULE



(one LED system shown in photos)

SERIES  
**CR7100**  
MARINE SIGNAL  
LANTERN



**CR Control Systems Inc.**

20 Airpark Road, West Lebanon, NH 03784 USA - 888-897-9391 603-298-2113 fx: 603-298-7783 sales@CRCONSYS.com

**www.CRCONSYS.com**