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 patented 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.

OPTIONS:  
- Stainless Steel Bird Deterrent wire  
- Infrared (IR) Remote Control Unit

• Operating Voltage: 8-24 V DC  
• Peak Light Intensity in Candels:  
  7.5° Vertical Divergence  
  1-LED  2-LED  
  White . . 165  330  
  Green . . 110  220  
  Red . . . . .100  200  
  Amber . . . . 87  174
  10° Vertical Divergence  
  White 300  call
• 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.

• Electrostatic Discharge as per IEC 61000-4-2:2008, 10.0kV Air Discharge, 6.0kV Contact Discharge  
• 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: Patented high efficiency, acrylic, excellent horizontal uniformity  
• 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

Materials:  
Mounting Plate:  
Hard coat anodized marine grade aluminum  
Protective Tube & Lens:  
Acrylic - more scratch resistant and is superior to polycarbonate under Ultra Violet light exposure.  
Bird Deterrent: Stainless Steel and removable for easier transport of the lantern (on 2 LED systems only)  
Connector Contacts: Gold plated
Series CR7000
Marine Signal Module

Series CR7100
Marine Signal Lantern

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

U.S. Patents: 7,703,950 & 7,726,837