

LED Flashing Red Beacon

CWLFR/120-240 & CX2LFR/120-240

Installation & Maintenance Information

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

OVERVIEW

The Crouse-Hinds Flashing Red Beacon is designed for the lighting of towers, flare stacks, chimneys, offshore oil platforms, petrochemical facilities, and other obstructions to aerial navigation, as specified by the FAA, FCC, ICAO, and Transport Canada.

The L864 Flashing Red Beacon as shown in Figure 1, (hereafter referred to as the Beacon) is pre-wired with a power cable and operates from 120 / 240VAC 50/60 Hz. The beacon consists of 42 High Performance LEDs that provide the light output equivalent to an incandescent fixture while consuming a fraction of the electrical power. This manual provides guidance and recommendations for the installation and checkout of the beacon assembly. Please read this document in its entirety before installing the Beacon.

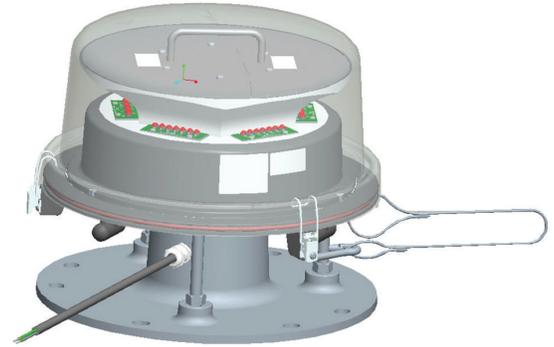


Figure 1 - L864 Flashing Red Beacon with Pre-wired Power Cable

The Crouse-Hinds Flashing Red Beacon is Compliant to:

- Canadian Aviation Regulation (CAR): CAR 621.19
- International Civil Aviation Organization (ICAO): Annex 25, November 2004, Fourth Edition
- Federal Communications Commission (FCC): This device complies with part 15 of the FCC rules operation is subject to the following two conditions: (1) This device may not cause harmful interference

and (2) this device must accept any interference that may cause undesired operation.

The Crouse-Hinds Flashing Red Beacon is ETL Certified to:

- Federal Aviation Administration (FAA): AC No. (150/5345-43F).

WIRING AND MOUNTING

WARNING

ONLY QUALIFIED PERSONNEL SHOULD PERFORM INSTALLATION.

TO AVOID ELECTRICAL SHOCK OR COMPONENT DAMAGE, DISCONNECT POWER BEFORE ATTEMPTING INSTALLATION OF THE LIGHT FIXTURE.

Failure to install the unit in accordance with the National Electrical Code (NEC), all applicable Federal, State and local codes as well as Underwriter's Laboratories (UL) safety standards for the installation, location and application may cause serious personal injury, death, property damage and/or product malfunction.

These Instructions are guidelines for the installation of Light Emitting Diode (LED) fixtures. Installation may vary depending on the application. Licensed electricians should provide all installation services requiring connection to a power source.

WARNING

This unit must be earthed.

NOTE

If the unit's vertical and radial angles are disturbed during installation, they should be readjusted after installing.

Wiring the Beacon

1. The Beacon is supplied with a power cable pre-wired to the internal electronics to facilitate installation.
2. The only connection required is 120 / 240 VAC, 50/60 Hz power. The ground wire must be connected for proper operation and protection of the Beacon. See table below.

Terminal	Wire Color
AC In	Black
Common	White
Chassis/Ground	Green

Mounting the Beacon

1. Crouse-Hinds recommends the installation of one or more lightning rods near the installed Beacon. The lightning rods should extend a minimum of three feet above the height of the Beacon.
2. The Beacon is mounted to the tower pedestal utilizing customer supplied 1/2" hardware. Six mounting holes are provided on the Beacon base (Figure 2). These mounting holes will align with most tower pedestals. The Beacon should be installed level to maintain light output in accordance with FAA requirements.

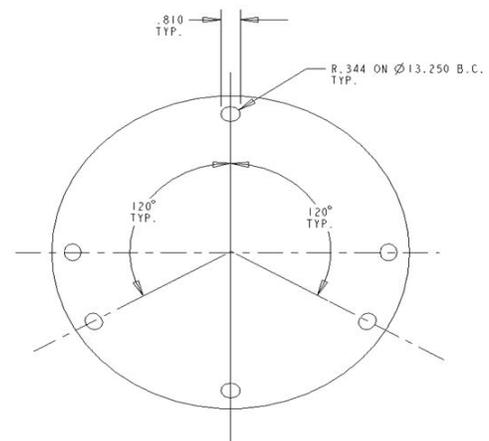


Figure 2 - Beacon Bottom View

OPERATION AND CHECKOUT

1. Prior to installation, it is recommended that the unit be tested to ensure no damage was incurred during shipping. This is accomplished by applying power to the input power cable described in the **Wiring and Mounting** section. Visual verification of the functioning of the Beacon will indicate proper performance.
2. Upon completion of the Checkout, the installation may proceed.

BEACON THEORY OF OPERATION

System Overview:

The block diagram in Figure 4 shows the major components of a typical Beacon installation. The parts of the system are the LED Beacon and Controller.

- The LED Beacon is made up of one LED module, which lights when current passes through it.
- The LED Module contains its own internal power supply.

The Beacon is designed for use with an external controller. This external controller provides the properly timed flashing signal and alarm interfaces.

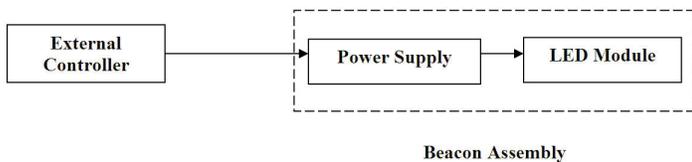


Figure 3 - System Block Diagram

Lightning Protection:

The Beacon incorporates protection against voltage surges (as induced by nearby lightning strikes) by means of Gas Discharge Tubes (GDT's).

MAINTENANCE & TROUBLESHOOTING

No regularly scheduled maintenance is required for the Beacon.

1. General cleaning of the Dome Assembly is recommended after re-lamping with regular glass cleaning solution, soapy water or any acrylic cleaning solutions. No other cleaning solutions are recommended. Abrasive compounds will scratch the Dome Assembly.
2. Replacement of the Crouse-Hinds LED Module is recommended after 5 years to insure FAA compliance.

Table 1 lists possible faults and repair procedures for the L864 Beacon.

Symptom	Possible Cause	Corrective Action
Beacon does not light	No AC power	Verify proper AC levels from power source thru supply lines.
	Damaged LED Module	Replace defective LED Module. See repair and replacement procedures.
	Failed Power Supply	Replace power supply
Beacon does not flash	Refer to controller documentation supplied by the manufacturer.	-----

All statements, technical information and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof are not guaranteed. In accordance with Crouse-Hinds "Terms and Conditions of Sale," and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability whatsoever in connection therewith.