## Warranty, Service & Repair

To register your product with the manufacturer, fill out the enclosed warranty card and return it immediately to:

Flowline Inc.
10500 Humbolt Street
Los Alamitos, CA 90720.

If for some reason your product must be returned for factory service, contact Flowline Inc. to receive a Material Return Authorization number (MRA) first, providing the following information:

1. Part Number, Serial Number
2. Name and telephone number of someone who can answer technical questions related to the product and its application.
3. Return Shipping Address
4. Brief Description of the Symptom
5. Brief Description of the Application

Once you have received a Material Return Authorization number, ship the product prepaid in its original packing to:

Flowline Factory Service
MRA _____
10500 Humbolt Street
Los Alamitos, CA 90720

To avoid delays in processing your repair, write the MRA on the shipping label. Please include the information about the malfunction with your product. This information enables our service technicians to process your repair order as quickly as possible.

FLOWLINE®

# Strobe Alert
# Flash Alarm
# LC09/LC10-1004 Series
# Owner's Manual

Version 2.1A
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Manual # LCS90001 05/05

## WARRANTY

Flowline warrants to the original purchaser of its products that such products will be free from defects in material and workmanship under normal use and service for a period which is equal to the shorter of one year from the date of purchase of such products or two years from the date of manufacture of such products.

This warranty covers only those components of the products which are non-moving and not subject to normal wear. Moreover, products which are modified or altered, and electrical cables which are cut to length during installation are not covered by this warranty.

Flowline's obligation under this warranty is solely and exclusively limited to the repair or replacement, at Flowline's option, of the products (or components thereof) which Flowline's examination proves to its satisfaction to be defective. FLOWLINE SHALL HAVE NO OBLIGATION FOR CONSEQUENTIAL DAMAGES TO PERSONAL OR REAL PROPERTY, OR FOR INJURY TO ANY PERSON.

This warranty does not apply to products which have been subject to electrical or chemical damage due to improper use, accident, negligence, abuse or misuse. Abuse shall be assumed when indicated by electrical damage to relays, reed switches or other components. The warranty does not apply to products which are damaged during shipment back to Flowline's factory or designated service center or are returned without the original casing on the products. Moreover, this warranty becomes immediately null and void if anyone other than service personnel authorized by Flowline attempts to repair the defective products.

Products which are thought to be defective must be shipped prepaid and insured to Flowline's factory or a designated service center (the identity and address of which will be provided upon request) within 30 days of the discovery of the defect. Such defective products must be accompanied by proof of the date of purchase.

Flowline further reserves the right to unilaterally wave this warranty and to dispose of any product returned to Flowline where:

a. There is evidence of a potentially hazardous material present with product.
b. The product has remained unclaimed at Flowline for longer than 30 days after dutifully requesting disposition of the product.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE OF THIS WARRANTY. This warranty and the obligations and liabilities of Flowline under it are exclusive and instead of, and the original purchaser hereby waives, all other remedies, warranties, guarantees or liabilities, express or implied. EXCLUDED FROM THIS WARRANTY IS THE IMPLIED WARRANTY OF FITNESS OF THE PRODUCTS FOR A PARTICULAR PURPOSE OR USE AND THE IMPLIED WARRANTY OF MERCHANT ABILITY OF THE PRODUCTS.

This warranty may not be extended, altered or varied except by a written instrument signed by a duly-authorized officer of Flowline, Inc.

Spec Tech Industrial 203 Vest Ave. Valley Park, MO 63088 Phone: 888 SPECTECH
E-mail: sales@spectechind.com www.spectechind.com

# SPECIFICATIONS

**Step One**

## About This Manual:

PLEASE READ THE ENTIRE MANUAL PRIOR TO INSTALLING OR USING THIS PRODUCT. This manual includes information on three different models of Compact Relay Controllers from Flowline: LC09-1004, LC10-1004 and LC10-1004-E. Many aspects of installation and use are similar between the three models.

## Specifications:

| | |
|---|---|
| Flash type: | Xenon Tube (Amber) |
| Flash frequency: | 1 per second |
| Strobe life: | 10M cycles |
| Supply voltage: | LC09: 12-36 VDC; LC10: 120 VAC; LC10-E: 240 VAC |
| Consumption: | LC09: 80 mA; LC10: 2 watts; LC10-E: 3 watts |
| Material: | Polycarbonate |
| Enclosure rating: | NEMA 4X (IP 65) |

## Unpacking and Inspection:

The following items are included in this package:

1 LC09-1004 or LC10-1004
1 Junction Wire
1 Instruction Manual
1 Warranty card

Check to make sure that all the parts are included in the kit before proceeding.

## User's Responsibility for Safety:

Flowline manufactures several models of controller, with different mounting and switching configurations. It is the user's responsibility to select a controller model that is appropriate for the application, install it properly, perform tests of the installed system, and maintain all components.

## Electrical Shock Hazard:

It is possible to contact components on the controller that carry high voltage, causing serious injury or death. All power to the controller and the relay circuit(s) it controls should be turned OFF prior to working on the controller. If it is necessary to make adjustments during powered operation, use extreme caution and use only insulated tools. Making adjustments to powered controllers is not recommended. Wiring should be preformed by qualified personnel in accordance with all applicable national, state and local electrical codes.

## Flammable or Explosive Applications:

Sensor mount controllers should not be used with explosive or flammable liquids, which require an intrinsically safe rating such as the Flowline LC90 series. If you are unsure of the suitability of a controller for your installation, consult your Flowline representative for further information.

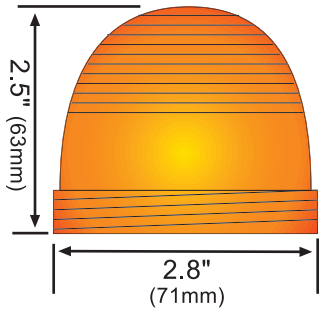
## Install In a Dry Location:

The LC10 and LC11 series controller housing is liquid-resistant and made of Polypropylene (PP). When installed properly, the controller is not designed to be immersed. It should be mounted in such a way that it does not normally come into contact with fluid. Refer to an industry reference to ensure that compounds that may splash onto the controller housing will not damage it. Such damage is not covered by the warranty.

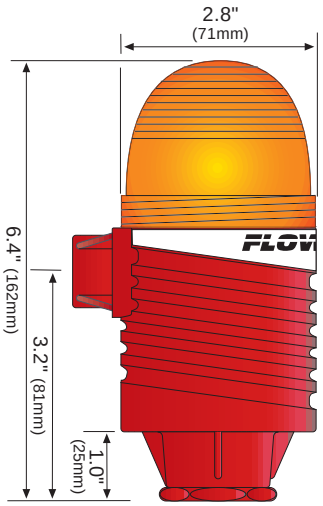
## Testing with a Flowline Controller:

1. If connected, turn Off power to the controlled device (motor, alarm circuit). Turn On power to the controller at the switch or circuit breaker. The green Power LED should turn On.
2. Immerse the sensor(s). The amber INPUT LED(s) should turn on immediately when liquid is sensed.
3. Turn the TIME DELAY pot full counterclockwise for immediate response from the relay. Depending on the setting of the INVERT switch, the red relay LED should come on at the desired sensor conditions. A slight click is audible when the relay is turned On and Off.
4. Turn on power to the controlled device (motor, etc.) and test to make sure that the relay circuit performs as expected.

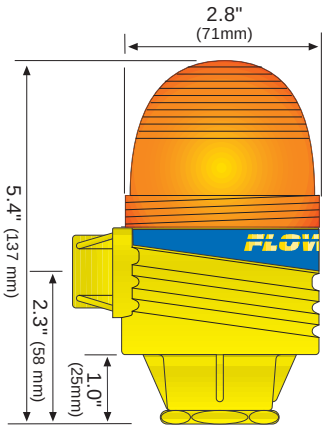
## Strobe Alert Alone: LC09-1004 & LC10-1004




## Strobe Alert w/ Controller: LC10-1002




## Strobe Alert w/ Controller: LC09-1002




**Strobe Alert**

**LC __ - 1 0 0 4**

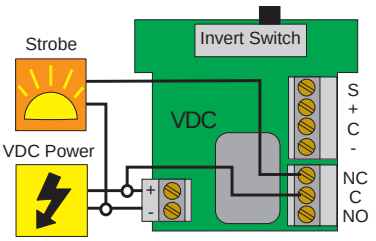
**Strobe**

**0 9** - 12 - 36 VDC
**1 0** - 120 VAC*

*(LC10-1004-E = 240 VAC

## Strobe Alert to LC09-1001 controller:

The 6A relay on the LC09-1001 is an independent SPDT relay. The Strobe can be wired either to the NO or NC side of the relay. The Strobe can use either the power provided to the controller or to an alternative power supply.




## Strobe Alert to LC10-1001 controller:

The 10A relay on the LC10-1001 is an independent SPDT relay. The Strobe can be wired either to the NO or NC side of the relay. The Strobe can use either the power provided to the controller or to an alternative power supply.