

LDX Lifejacket Light Instruction Manual

1.0 Purpose

This Instruction Manual is intended to provide descriptive information of the Model LDX Marine Lifejacket Light, operating instructions, information for its maintenance and overhaul, instruction concerning the proper mounting of the light on lifejackets to ensure compliance with minimum performance standards, and limitations for the device.

2.0 Description of Device

The Model LDX is a SOLAS approved lifejacket light that is activated automatically when immersed in water. The LDX consists of a battery and light encased in a plastic housing.

1. The battery consists of two CR123A primary Lithium Manganese Dioxide cells incorporated into water-tight sealed housing. The light has two exposed water sensor contacts. The electronic circuit detects water and activates the light. The design prevents inadvertent extinguishing of the light if the water sensor is not continuously immersed in water.
2. The light is a LED covered by a polycarbonate cover.

3.0 Operating Instructions

The LDX is activated automatically following immersion of the water sensor in fresh water or seawater.

4.0 Maintenance and Overhaul Information

1. Maintenance or periodic overhaul is not required. Overhaul at end of life is not possible.
2. Recommended inspection of LDX:
 - Electrical Test of battery and lamp:
 - i. Create an electrical short between the exposed electrical contacts using tweezers or other conductive wire. (Do not use water)
 - ii. Check that the lamp lights up. An inoperative light should be rejected.
 - iii. **IMPORTANT:** Take care not to test the light continuously for more than a couple of seconds so as not to fully activate the light. Once fully activated, the light will remain on and the product cannot be reused.
 - Visual Inspection:
 - i. Replace product if the battery housing shows obvious signs of mechanical damage (e.g., cracking or discoloration of the plastic, bulging at one end of the case, etc.).
3. Defective units should be returned to the manufacturer or otherwise disposed of.

5.0 Instructions for Mounting on Lifejackets.

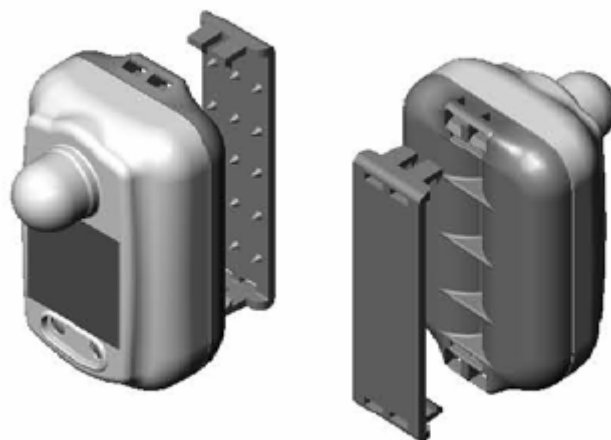
It is the responsibility of the lifejacket manufacturer to ensure that the light is attached securely and is in the correct position on the lifejacket; or to provide instruction regarding correct positioning on the lifejacket.

Recommended methods for mounting the LDX on lifejackets are as follows:

1. Attach the LDX firmly to a strap in its designated position on the lifejacket, using the plastic clip bracket provided with the LDX. Feed the strap along the back of battery and fasten the bracket to the battery by pushing the clip's plastic hooks through the corresponding holes on the battery housing. The plastic spikes should face inwards, holding the strap firmly in place.
 - Once fastened with the clip, the light cannot be removed without breaking the clip.
2. The LDX light should be placed at the top or on the front of the shoulder of the lifejacket in accordance with the instructions of the lifejacket manufacturer.
3. Alternatively, one may use tie wraps or adhesive strip to attach the LDX to a strap or fabric, making sure not to block the water sensors.

6.0 Limitations of the Device.

1. The device is designed to provide effective luminous intensity of at least 0.75 candlepower (Cd) in all directions of the upper hemisphere of the lens, as required under IMO SOLAS regulations, for a minimum of eight (8) hours after activation.
2. The device is limited to a service life of five (5) years from the date of manufacture. Until then, it is considered usable as a safety appliance, under IMO SOLAS regulations, if the battery does not show signs of mechanical damage and the light bulb is operative.
3. LDX contains lithium batteries. Do not dismantle, tamper, recharge or incinerate.
4. Storage: Avoid extreme humidity and temperatures.
5. Disposal: Dispose of used batteries in accordance with local regulations.



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FRONT VIEW

REAR VIEW

TOP VIEW

ONE-PIECE LIGHT

ISOMETRIC VIEWS

Notes:

1. All dimensions are for reference.
2. Define product type and Belt Clip availability upon each order.
3. For catalog number (p/n) refer table 1.

Catalog Number	Belt Clip Size	Notes	Modification	Refer sheet #
102 501 - 11	52 mm	LDX-I	One-piece	1
102 501 - 12	26 mm			
102 501 - 21	52 mm	LDX-II	Separate Lamp	2
102 501 - 22	26 mm			
102 501 - 31	52 mm	LDX-III	Separate Sensor	3
102 501 - 32	26 mm			

Electric Fuel
 Industrial Fuel (Pvt.) P.O. Box 471, 4th, St. James 38000, 124th
 Tel: (972)-390-0888 Fax: (972)-390-1512

DRAWING NAME: **LDX Lifejacket Light**
 General Drawing

DWG. TYPE: DOCUMENT NO. **102 526**

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