

Document No.: LNK-OM-LB-02B

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# **Lifebuoy Light**

**Product Code: LNK-LB-02B**

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## Section I Purpose

The set of instruction serve to guide users on how to operate and maintain LNK-LB-02B Lifebuoy Light properly.

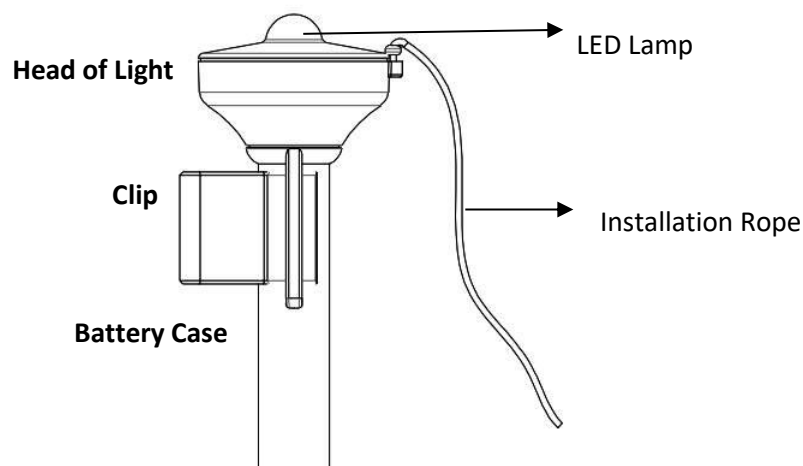
## Section II Description

### 2.1 Introduction

LNK-LB-02B Lifebuoy Light is a man-overboard emergency light powered by replaceable alkaline batteries. It is designed to be installed on the side of a lifebuoy and attached to it. When the lifebuoy is thrown into the water, the light will accompany it. Upon contact with water, the light will float on the water surface with the LED lamp end automatically facing upwards. It will then activate automatically and emit a flashing white light with a minimum intensity of 2.0cd for at least 24 hours (10 hours at  $-1^{\circ}\text{C}$ ). This continuous flashing light serves to indicate the position of the lifebuoy and increases the chances of successful rescue. The light is equipped with a gravity sensor activation system, which means it will automatically turn off when the head of the LED lamp is facing downwards.

### 2.2 Product Structure

2.2.1 LNK-LB-02B Lifebuoy Light consists of the battery case, two alkaline batteries, the head of the light with an LED lamp, and a clip and rope for installation. The structure is shown as below [Figure 1](#).



[Figure 1](#) Product Structure

## 2.3 Technical Parameters

Table 1 Technical Parameters

Technical Parameter	Specification
Battery Type	2* AA alkaline batteries (replaceable)
Light Source	LONAKO patented LED
Chromaticity	White
Light Type	Flashing
Flash Frequency	50~70times/min
Luminous Intensity	≥2.0cd
Operation Life	≥24h over 2.0 cd (10h at -1°C)
Maximum Stowage Height	76 meters
Storage Temperature	-30°C ~ +65°C
Working Temperature	-1°C ~ +30°C
Expiry Date	5 years from date of manufacture
Weight	114g (including clip)
Dimension	Main Body: Φ60*144mm
Activation	Automatically turn on when the head of light is upwards; Automatically turn off when the head of light is downwards
Performance	Fire-resistant, Oil-resistant, Mould-proof, Corrosion-proof, Waterproof, UV-resistant
Environment Performance	Meet RoHS and asbestos-free requirements
Standards	IMO Res.MSC.81 (70), as amended, IEC 60945:2002 incl. IEC 60945 Corr.1(2008), ISO 24408:2005, USCG 161.110
Certifications	MED, USCG

## 2.4 Product Mark

2.4.1 The product mark of LNK-LB-02B Lifebuoy Light is shown in Figure 2 below.

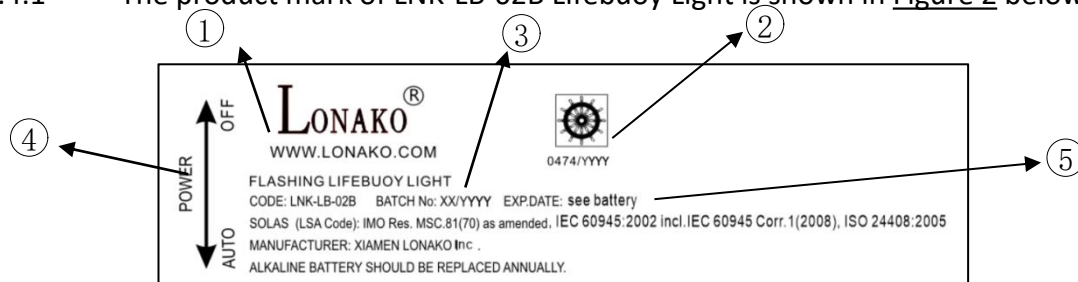


Figure 2 Product Mark

2.4.1.1 The product mark will be displayed on labels or engraved on the main body of the light. The font used on the product mark may vary depending on specific requirements, but the content itself will remain unchanged.

2.4.1.2 The product mark contains:

- ① Basic information: Product name, Manufacturer name, logo and company website, Product code, Fulfilled SOLAS & USCG standards, Safety caution
- ② Batch No. represents the manufacturing batch number, where "MM" represents the month of manufacturing, "YYYY" represents the year of manufacturing.
- ③ Wheel Mark, where "0474" represents the notified body number and "YYYY" represents the mark affixed year.
- ④ Power switch direction marking
- ⑤ EXP Date represents the expiry date, where "see battery" represents expiry date as shown in Battery.

## **Section III    Installation Instructions**

### **3.1 Compatibility**

LNK-LB-02B Lifebuoy Light is compatible with all types of lifebuoys. The maximum stowage height is 76 meters.

### **3.2 Installation Guidelines**

LNK-LB-02B Lifebuoy Light is supplied with installation clip and rope. The clip should be mounted on the side of lifebuoy, and the lifebuoy light should be placed on the clip. It must be securely tied to the lifebuoy using a rope. It is important to ensure that when the lifebuoy is thrown into the water, the light is automatically released from the clip and remains attached to the lifebuoy.

- 3.2.1 Twist the light and turn the POWER switch to the "AUTO" position as [Figure 2](#) shows.
- 3.2.2 Each lifebuoy light is packed with a clip and rope. When installing the light, separate the clip from the light, as shown in [Figure 3](#).
- 3.2.3 The first step of the installation process is to securely fix the clip to a suitable position using screws. The second step is to insert the light head into the clip and ensure that it is locked in place, as shown [Figure 4](#).
- 3.2.4 Once the light is properly installed, bind the rope to the lifebuoy and fasten it securely, as shown in [Figure 5](#). When the lifebuoy with the light is thrown into the water, the light should automatically detach from the clip together and begin flashing as soon as it is in the upright position in water.
- 3.2.5 It is important to follow the above steps closely during installation to ensure its proper

functioning and maintenance.

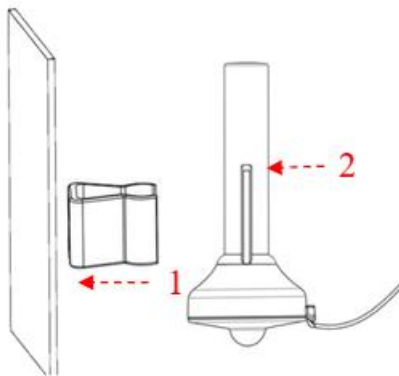


Figure 3

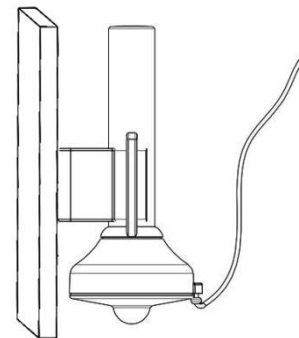


Figure 4

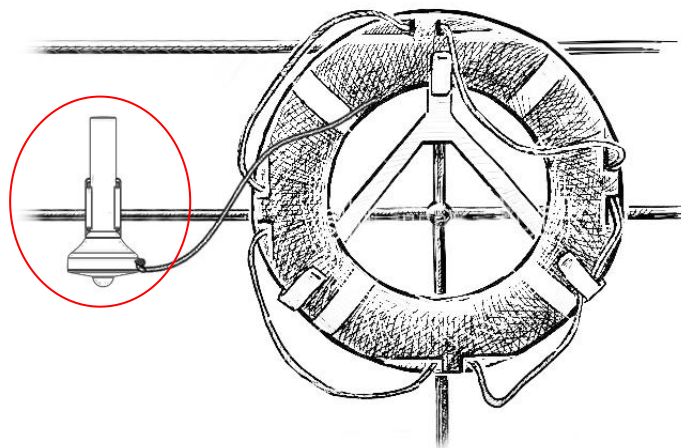


Figure 5

### 3.3 Reassembly Instructions after Replacing Battery

The LNK-LB-02B Lifebuoy Light is designed with replaceable batteries. During its service life, users may need to replace the batteries for maintenance purposes or when the batteries are depleted. Follow the steps below for battery replacement and assembly:

3.3.1 Start by removing the light from the installation clip and unscrewing the light.

3.3.2 Next, remove the used batteries and replace them with 2 new alkaline batteries. Make sure to orient the batteries correctly, with the negative pole facing the battery case and the positive pole facing the LED lamp. Refer to Figure 6 below for guidance.

3.3.3 Once the new batteries are inserted, screw the head of the light back onto the battery case. Ensure that the rubber sealing ring is in the correct position and tighten it securely to maintain the waterproof integrity of the light.

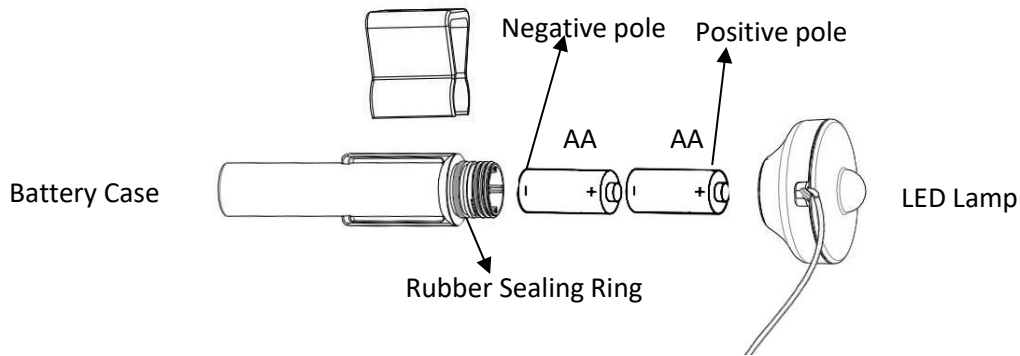


Figure 6

## **Section IV Storage Requirements**

### **4.1 Environment Requirements**

LNK-LB-02B Lifebuoy Lights should be stored in a clean, non-polluted and liquid-free environment.

### **4.2 Temperature and Humidity Requirements**

Storage temperature should be within  $-30^{\circ}\text{C} \sim +65^{\circ}\text{C}$  ( $-22^{\circ}\text{F} \sim +149^{\circ}\text{F}$ ) and the environment humidity should be less than 80%.

## **Section V Service & Safety**

5.1 The service life of LNK-LB-02B Lifebuoy Light is five years from the date of manufacture. During the service time of the lights, stowage and application conditions should meet the requirements listed in Section 4.

5.2 Once the light has been activated, it can work continuously for at least 24 hours at more than 2.0cd (10 hours at  $-1^{\circ}\text{C}$ ).

5.3 To ensure the functionality of the light during emergency situations, it is recommended to replace the batteries if the light has been in use for more than 10 hours according to Section 3.3. Once the batteries have been replaced, the light can be put back into service if it is within 5 years from the date of manufacture.

5.4 LNK-LB-02B Lifebuoy Light contains batteries. These processes must be handled correctly:

5.4.1 Do not dismantle battery pack.

5.4.2 Do not make any external electrical connection.

5.4.3 Do not recharge.

5.4.4 Do not incinerate.

5.4.5 Store between  $-30^{\circ}\text{C} \sim +65^{\circ}\text{C}$ .

## **Section VI Inspection**

### **6.1 Routine Inspection**

LNK-LB-02B Lifebuoy Light should undergo inspections prior to installation and should be inspected regularly alongside lifebuoys after installation.

### **6.2 Inspection Methods**

6.2.1 Visually inspect the lights for any sign of damage or corrosion. The light body, excluding the battery, has a service life of 5 years from the manufacturing date. However, if any damage is detected on the light body, it should be promptly removed and replaced with a new one.

6.2.2 Check the manufacturing date shown on the product. Once the product has expired, the light must be promptly removed and replaced with a new unit. For products in stock, it is recommended to check the battery installation date and replace the batteries annually.

6.2.3 To test the functionality of the light, twist the light and set the POWER switch to the "AUTO" position. Pull out the light from the clip and ensure that the head of the LED lamp is facing upwards. The lifebuoy light should begin flashing within 3.5 seconds. Similarly, when the head of the LED lamp is facing downwards, the flashing should stop. If the light is functioning properly, securely place it back into the clip.

## **Section VII Maintenance**

LNK-LB-02B Lifebuoy Light is maintenance-free, but during the storage period, ensure that the LED lamp faces downwards at all times.

## **Section VIII Repair & Disposal Instructions**

### **8.1 Repair Instructions**

LNK-LB-02B Lifebuoy Light are non-repairable. Dispose and replace used, expired or defective lights with a new unit.

### **8.2 Disposal Instructions**

Disposal of used, expired or defective lights should be in accordance with local regulations. This process should be done through an approved environment disposal agent.

## **Section IX Packaging Instructions**

9.1 The lights will be packed individually in plastic bags and a master carton.

9.2 Each light will be packed together with an instruction manual, a clip and a rope.



9.3 Each master carton contains 100 units of lifebuoy lights. The dimensions of the master carton are 440\*340\*300 mm and the gross weight of each master carton package is about 12.6 KG.

**(END)**