# XIAMEN LONAKO INDUSTRY & TRADE CO., LTD

# **OPERATION and MAINTENANCE INSTRUCTIONS**

Product Name: Lifejacket Light

Product Type: LNK-SL3

LNK-SL3W

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# TABLE OF CONTENTS

| SECTION I PURPOSE                             | 2 |
|---|---|
| SECTION    DESCRIPTION                        | 2 |
| SECTION III INSTALLATION INSTRUCTIONS         | 4 |
| SECTION IV STORAGE REQUIREMENTS               | 5 |
| SECTION V SERVICE LIFE & SAFETY               | 5 |
| SECTION VI INSPECTION                         | 6 |
| SECTION VII MAINTENANCE                       | 6 |
| SECTION VIII REPAIR AND DISPOSAL INSTRUCTIONS | 6 |
| SECTION IX PACKAGING INFORMATION              | 6 |
| SECTION X MANUFACTURER INFORMATION            | 7 |

# **SECTION** I PURPOSE

The operation and maintenance instruction is used to guide users how to operate and maintain LNK-SL3 & LNK-SL3W lifejacket lights properly.

# **SECTION II DESCRIPTION**

#### 2.1 Introduction

LNK-SL3W lifejacket lights are alkaline battery-powered emergency lights to be installed on all kinds of life jackets. When the water sensors on the lights` main body contact water, they will be automatically activated and keep outputting the flashing white light more than 0.75cd light intensity during at least 26 hours (13 hours at  $-1^{\circ}$ C), which can uninterruptedly indicate the survivor's location to increase the success rate of rescue. They can be manually turned off and turned on while the water sensors contact with water.

**LNK-SL3**: only with signal flashing light, can be manually turned off and on while the water sensors contact with water.

**LNK-SL3W**: available to switch different functions as operating sequence "FLASHING – STEADY - SOS – OFF" via the manual switch while the water sensors contact with water..

#### 2.2 Product Structure

2.2.1 LNK-SL3 & LNK-SL3W lifejacket lights consist of Main body with battery\LED Lamp \Water sensors\Manual switch and installation buckle. The structure is shown as Figure2-1:

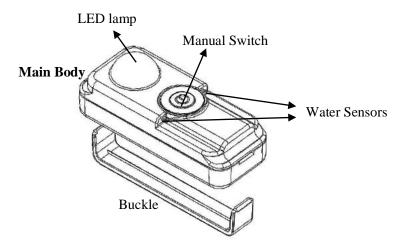


Figure 2-1 Product Structure

2.2.1 The difference between LNK-SL3 and LNK-SL3W lifejacket lights can be identified by the manual switch stick as <u>Figure 2-2</u>, And code number on the label as <u>Figure 2-3</u> shown.



**LNK-SL3** 

**LNK-SL3W** 

Figure 2-2 Manual switch label

# 2.3 Technical Parameter

| Technical parameter            | Specification                               |
|--------------------------------|---|
| Battery                        | Alkaline batteries                          |
| Light source                   | LED   |
| Chromaticity                   | White                                       |
| Light type                     | Flashing                                    |
| LNK-SL3                        |   |
| Light type                     | Flashing-Steady-SOS-OFF                     |
| LNK-SL3W                       |   |
| Flash Frequency                | 50~70times/min                              |
| Luminous Intensity             | ≥0.75.cd                                    |
| Operation Life                 | ≥26h over 0.75cd (13hrs at -1°C)            |
| Storing Temperature            | -30°C $\sim$ +65°C                          |
| Working Temperature            | -1°C $\sim$ +30°C                           |
| Expiry Date                    | 5 years                                     |
| Weight                         | 38g (including buckle)                      |
| Dimension                      | Main body: 62.5*25.4*23.5mm                 |
|                                | buckle: 61.2*9.5*11.7mm                     |
| Activation                     | Water-activation automatically on           |
|                                | / manual off / manual on(in water)          |
| Performance                    | Fire-resistant, Oil-resistant, Mould-proof, |
|                                | Corrosion-proof, Water-proof,               |
| <b>Environment Performance</b> | Meet RoHS and asbestos-free requirement     |
| Standards                      | MSC.81(70) as amended                       |
| Certifications                 | MED、CCS、USCG                                |

Table 2-1 Technical parameter

# 2.4 Marking

2.4.1 Standard product marking of LNK-SL3 & LNK-SL3W lifejacket lights are shown as below pictures. <u>Figure 2-3</u>:

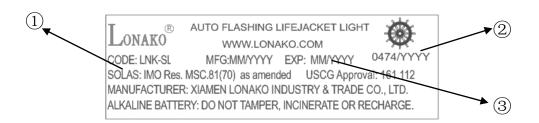


Figure 2-3

- 2.4.1.1 The Marking content will be fixed on the light's main body by laser machine or label.
- 2.4.1.2 Marking content contains:
- ① Basic information: Product name, Manufacturer's company website, Product Code number, Fulfilled SOLAS & USCG standards, Manufacturer, Safety CAUTION
- ② Wheel Mark , Notified body number 0474 , and "YYYY" at figure 2-2 ② represents mark affixed year.
- 2.4.2 MFG batch number and EXP. Date show the latest status of light and manufacturing batch.

They will be shown as MM/YYYY, "MM" represents the month of manufacturing /expired date , "YYYY" represents the year of manufacturing/expired date.

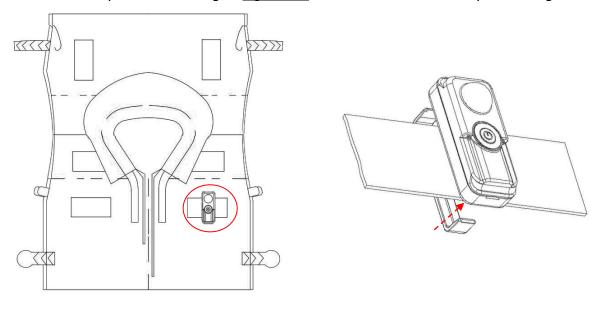
# <u>SECTION III Installation Instructions</u>

- 3.1 Installation Limitation
  LNK-SL3 and LNK-SL3W lifejacket lights are fit for all types of lifejackets.
- 3.2 Installation Requirement

LNK-SL3 and LNK-SL3W lifejacket lights are supplied with fix buckles. The buckle is normally placed behind a belt of lifejacket or fixed through the fiber at suitable position near the shoulder of lifejacket. The users must ensure the light can provide maximum visibility after installation, meanwhile the water sensors can contact with water when the life jacket drops in the water. The typical installation is shown as <u>Figure 3-1</u>:

3.2.1 The lifejacket light should be firmly mounted on the lifejacket and the whole LED lamp part should be clearly seen in the 360°horizontal direction without any obstacle.

- 3.2.2 The installation position must ensure that the water sensors on main light body will be able to contact with water when the life jacket drops in the water.
- 3.2.3 Installation procedures are show as below pictures. <u>Figure 3-1</u> shows the example installation position of the light. <u>Figure 3-2</u> shows the installation steps of the lights.



<u>Figure 3-1</u> <u>Figure 3-2</u>

# SECTION IV STORAGE REQUIREMENTS

4.1 Storage Environment Requirements

LNK-SL3 and LNK-SL3W lifejacket lights should be stored in a clean, non-pollution and liquid free environment.

4.2 Storage Temperature and Humidity Requirements

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

# SECTION V SERVICE LIFE & SAFETY

- 5.1 The life of LNK-SL3 and LNK-SL3W lifejacket lights are five years from the date of manufacture. During the service time the storage and application conditions meet the Section  $\,\mathrm{IV}$  storage requirements.
- 5.2 Once the light was been activated ,it can keep working for more than 26hrs at over 0.75 cd light intensity(13hrs at  $-1^{\circ}$ C). After the battery runs out, the light should be removed from the life jacket and replaced by a new light.
- 5.3 LNK-SL3 and LNK-SL3W lights contain batteries. These processes must be handled correctly:

- 5.3.1 Do not dismantle battery pack;
- 5.3.2 Do not make any external electrical connection;
- 5.3.3 Do not recharge;
- 5.3.4 Do not incinerate;
- 5.3.5 Store between  $-30^{\circ}\text{C} \sim +65^{\circ}\text{C}$ .

# SECTION VI INSPECTION

#### 6.1 Inspection Time

LNK-SL3 and LNK-SL3W lifejacket lights should be inspected before installation or regularly inspected together with lifejackets after installation.

# 6.2 Inspection Methods

- 6.2.1 Visually inspect the light for signs of damage or corrosion.
- 6.2.2 Test the light by immersing it in water, as the light should start flashing at once. And manually pressing the switch on main body, and then the light can be turn off(LNK-SL3) or switch functions and turn off(LNK-SL3W).
- 6.2.3 Remove the main body with water sensors from water and dry them, the light can be turned off by manual switch but after 2 seconds it cannot be turned on again
- 6.2.4 If any defective appearance is found or not functioning well the light should be regarded as defected. The defective light should be removed from the life jacket and replaced by a new light.

# SECTION VI MAINTENANCE

LNK-SL3 and LNK-SL3W lifejacket lights are maintenance free. but in the storage period, do not contact water sensors with hands and ensure the water sensors keep dry all the time.

# SECTION VIII REPAIR AND DISPOSAL INSTRUCTIONS

# 8.1 Repair Instructions

LNK-SL3 & LNK-SL3W lifejacket lights cannot be repaired. Just dispose and replace the used and expired lights or other defective lights.

#### 8.2 Disposal Instructions

Dispose of used and expired lights in accordance with local regulation. This process should be done through an approved environment disposal agent.

# SECTION IX PACKAGING INFORMATION

9.1 The lights will be packed by middle carton boxes and Master carton.

#### Operation and Maintenance Instruction LNK-OM-SL3&W/V3.2

- 9.2 Each middle carton box contains 100pcs lifejacket lights and 102pcs buckles(2 pcs spared buckles).
- 9.3 One master carton contains 5 middle carton boxes with  $\underline{500}$ units lifejacket lights. The size of master carton is  $\underline{420*290*390}$  mm and gross weight of each master carton package is about 20KGS.

# SECTION X MANUFACTURER INFORMATION

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