

OBL-2xxA OBL-2xxB

LED OBSTRUCTION LAMP

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SAFETY INSTRUCTIONS

Please read and follow this user's guide carefully and completely.

Important: Please keep this user's guide for reference in order to use the LED Obstruction Lamp properly and safety. This user's guide consists of safety instruction, introduction, installation, operation and specifications.

For product safety, please check this product annually by our service qualified personnel or if there are any symptoms of problems which are not mentioned in this guide or any queries about our products, please contact your LEONICS local distributors, LEONICS service center or send e-mail to marketing@lpsups.com.

For your convenience and quick reference for LEONICS service, please fill the requested information in the blanks below:

Leonics Model: _____
 Serial Number: _____
 Purchased date: _____
 Purchased from: _____

1.1 Electrical Safety

Warning: Risk of electric shock, **DO NOT** remove cover. No user serviceable parts inside, please refer servicing to qualified service personnel.

Warning: **DO NOT** work alone where there are electrically hazardous conditions.

Warning: Contact with live conductors will cause burns and dangerous electric shock. **DO NOT** touch any terminal or internal parts of the unit while the unit is operating.

- Properly install and ground (⊕) the equipment in accordance with the instruction manual.
- Periodically check your cable, terminal and power source to make sure that they are in good condition.

1.2 Safety instruction for installation and operation

Caution: Before installing or using this unit, read all instructions and caution markings on the unit and other system compartments and all sections of this user guide.

- Install this unit in outdoor.
- Use insulated tools to reduce your risk of electric shock.
- Remove all jewelry or other metal objects such as rings, necklace, bracelets and watches when installing this product.
- Verify correct connections to prevent the damage occurs.

INTRODUCTION

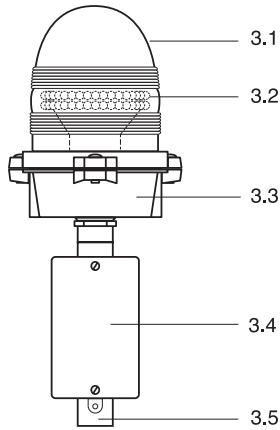
2.1 General

OBL-2xxA and OBL-2xxB series LED Obstruction Lamp are energy efficient product which using Ultra-bright LED (Light Emitting Diode) lamp technology with advantage of the long life and low power consumption and operating with AC input power source. This obstruction lamp is suitable to use as the obstruction light system which is complied to the ICAO International Civil Aviation Organization Standard to reduce the hazards to the aircraft from the obstacles such as tall buildings or telecommunication towers.

2.2 Features

- Long life Ultra-bright LED lamps (100,000 hours plus)
- Light and clear acrylic lens with UV protected to maintain the brightness of the lamp
- IP65 protection level silicone sealant and polyester paint coated metal body
- Nominal operating voltage 220 - 240 Vac, 50/60 Hz
- Jumper setting for choosing operation mode ; fixed or flashing mode (Factory default setting is flashing mode)

OBSTRUCTION LAMP PARTS



3.1 UV resistant acrylic lens

3.2 LED lamps

3.3 Body: Die cast aluminum body with screws to fasten the lens

3.4 Waterproof junction box: The box contains with control circuit board which provide the AC input connection and jumper setting for choosing the lamp operation mode.

3.5 Holder: 3/4 inch NPT thread to fasten the lamp on the mast.

INSTALLATION AND OPERATION

Caution: The warranty will be voided, if this product has been improper installation, not following the installation that instruction mentioned in this user's guide.

4.1 Before you install the lamp, give it a through visual examination to ensure it has not been subjected to shipping damage. If it is not in perfect condition, please contact your local distributor or service center

4.2 Transport this unit with its packaging until it arrive the installation location to avoid shipping damages.

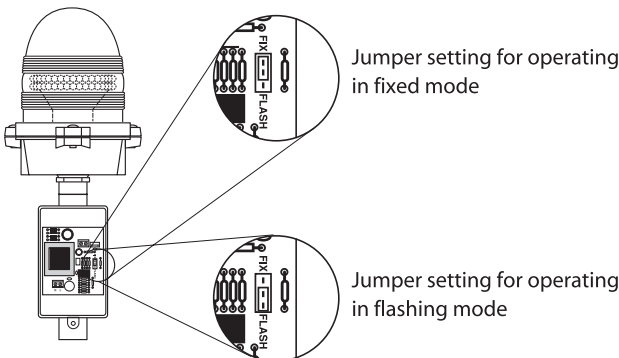
4.3 Installation

4.3.1 Unscrews the cover of junction box.

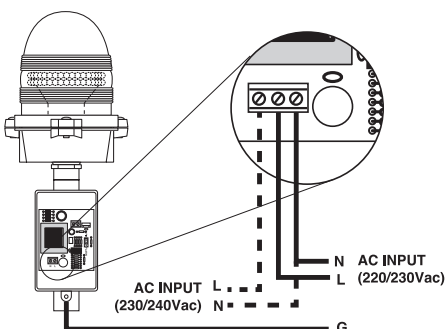
4.3.2 Set the jumper on the control circuit board for selecting the lamp operation mode as follow

Fixed mode: set jumper between FIX and center pins.

Flashing mode: set jumper between FLASH and center pins.



4.3.3 Connect Line, Neutral and Ground cable from AC source to the L, N and G of ACINPUT connector as figure below.



Caution: Check the rating of AC power source to suit with the obstruction lamp rating.

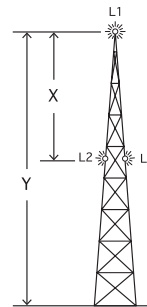
- OBL-220A and OBL-220B model are for 220 Vac, 50/60 Hz, 0.1A.

- OBL-230A and OBL-230B model are for 230 Vac, 50/60 Hz, 0.1A.

- OBL-240A and OBL-240B model are for 240 Vac, 50/60 Hz, 0.1A.

4.4.4 Close the cover of junction box and fasten the screws.

4.4.5 Calculate the location of obstruction lamps and spacing of each lamp for installing on masts or tall buildings as follow.



$$\text{Number of lights} = N = \frac{Y \text{ (metres)}}{45}$$

$$\text{Light spacing} = X = \frac{Y}{N} \leq 45 \text{ m}$$

N = Number of obstruction lamp

X = Light spacing

Y = Mast height

4.5 Operation

The obstruction lamp operates automatically when AC power is supplied.

Caution: Do not open the lens when the obstruction lamp is operating.

TROUBLESHOOTING

If the obstruction lamp does not operate, check whether the AC input cable disconnect from AC INPUT connector or not.

SPECIFICATIONS

OBL-2xxA series model

MODEL	OBL-220A	OBL-230A	OBL-240A
LAMP TECHNOLOGY	Ultra-bright Light Emitting Diode (LED)		
POWER CONSUMPTION / SET	7 Watt		
ICAO STANDARD LOW INTENSITY	Type A		
IP PROTECTION (DUST AND WATER)	IP 65		
NOMINAL OPERATING VOLTAGE	220 Vac	230 Vac	240 Vac
OPERATING VOLTAGE RANGE	±10%		
LAMP AVERAGE LIFE (MTBF)	> 100,000 hours		
LIGHT INTENSITY (Type)	> 10 cd		
ICAO REQUIREMENT (+10°)	≥ 10 cd		
COLOUR	Aviation Red (Dominate wavelength = 626 nm)		
VIBRATION RESISTANCE	yes		
WIND LOAD AT 200 km/hr.	< 40 N		
WEIGHT	1,600 g		

OBL-2xxB series model

MODEL	OBL-220B	OBL-230B	OBL-240B
LAMP TECHNOLOGY	Ultra-bright Light Emitting Diode (LED)		
POWER CONSUMPTION / SET	10 Watt		
ICAO STANDARD LOW INTENSITY	Type A		
IP PROTECTION (DUST AND WATER)	IP 65		
NOMINAL OPERATING VOLTAGE	220 Vac	230 Vac	240 Vac
OPERATING VOLTAGE RANGE	±10%		
LAMP AVERAGE LIFE (MTBF)	> 100,000 hours		
LIGHT INTENSITY (Type)	> 32 cd		
ICAO REQUIREMENT (+10°)	≥ 32 cd		
COLOUR	Aviation Red (Dominate wavelength = 626 nm)		
VIBRATION RESISTANCE	yes		
WIND LOAD AT 200 km/hr.	< 40 N		
WEIGHT	1,600 g		

Continuous product development is our commitment. In that manner, the above specifications may be changed without prior notice.