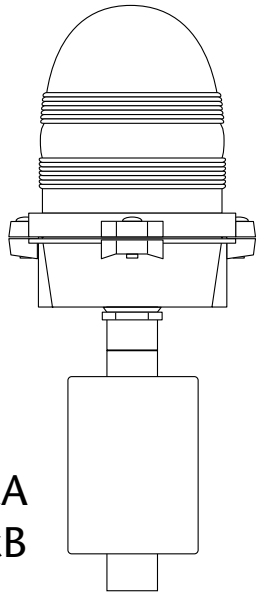
USER'S GUIDE

LED OBSTRUCTION LAMP



Model : OBL-2xxA
OBL-2xxB

Authorized Distributor

● www.leonics.com ● e-mail : global_business@leonics.com ● FAI.MAN.OBL.101 Rev.2.00/2006

LED OBSTRUCTION LAMP

SAFETY INSTRUCTION

Please read carefully and follow this user's guide.

Important: Please keep this user's guide for reference in order to use the OBL-2xxA series and OBL-2xxB series LED OBSTRUCTION LAMP (hereinafter referred as "obstruction lamp") properly and safely. This user's guide contains instructions for installation and operation, troubleshooting and technical specifications.

If there are any symptom of problems which are not mentioned in this guide or any queries, please contact your LEONICS local distributors, LEONICS Service Center, send e-mail to support@leonics.com, or visit us at www.leonics.com.

For your convenience or quick reference for our service,
please fill the requested information in the blanks below.
Obstruction Lamp Model: _____
Serial Number: _____
Purchased date: _____
Purchased from: _____

1.1 Read the installation and operation section before installing and operating the obstruction lamp. It will help you install and operate the system safely and efficiently.
1.2 Do not work alone where there is danger of shock.
1.3 To reduce risk from electric shock, use insulated tools during installation.
1.4 Allow only qualified personnel to install the obstruction lamp and other equipment.
1.5 Do not wear ornaments e.g. rings, necklace, etc. during installtion.
1.6 At any time, please be careful because the installation location is high.
1.7 Never touch exposed electrical connections on the lamp while it is power ON.

INTRODUCTION

2.1 General

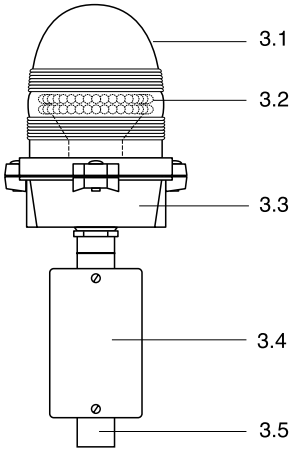
The OBL-2xxA series and OBL-2xxB series LED obstruction lamp, AC input type, is complied to International Civil Aviation Organization (ICAO) standards to alarm aircrafts from obstacles such as high buildings or telecommunication masts at night or when the visibility is bad.

Concerning about our environment, the LED obstruction lamp is designed to save energy by applying ultra-bright LED lamps. It consumes less than 7 Watt in OBL-2xxA series and less than 10 watt in OBL-2xxB series.

2.2 Feature

- Long life ultra-bright LED lamps (100,000 over hours)
- Light and clear acrylic lens with UV protection to maintain the brightness of the lamp
- IP65 protection level silicone sealant and polyester paint coated metal body
- Nominal operation voltage is 220 - 240 Vac , 50/60 Hz
- Jumper to select operation mode, bright or blink (default is bright)

OBSTRUCTION LAMP PARTS



3.1 UV resistant acrylic lens

3.2 LED lamp

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

3.4 Waterproof junction box: Inside has control circuit board which has terminals to connect to AC source and jumper to select lamp operation mode.

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

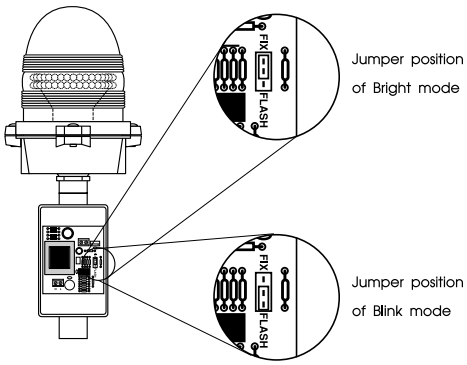
INSTALLATION AND OPERATION

4.1 Installation

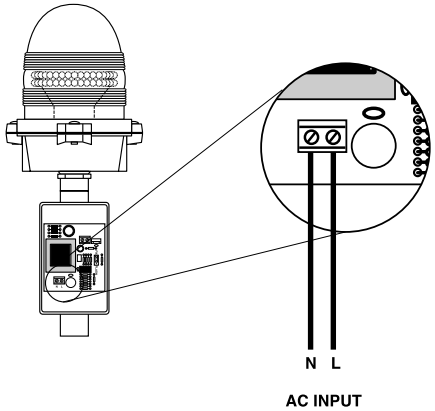
4.1.1 Unscrew the cover of the waterproof junction box.

4.1.2 Set the jumper to choose lamp operation mode as follows:

- Bright mode: connect the jumper between FIX and center pins.
- Blink mode: connect the jumper between FLASH and center pins.



4.1.3 Connect the wire from AC source to AC input terminal. Connect the Line from AC source to L terminal and the neutral to N terminal as shown in the figure.

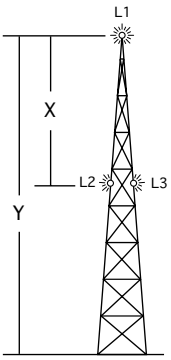


Caution: Check the AC source voltage system and the lamp voltage system.

- Model OBL-220A and OBL-220B are for 220Vac, 50/60 Hz, 0.1 A.
- Model OBL-230A and OBL-230B are for 230Vac, 50/60 Hz, 0.1 A.
- Model OBL-240A and OBL-240B are for 240Vac, 50/60 Hz, 0.1 A.

4.1.4 Cover the junction box and fasten the screw.

4.1.5 You can refer to these formulas for the numbers and position to install the obstruction lamps.



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

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

whereas N = Number of obstruction lamp
Y = Mast height
X = Light spacing

4.2 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 cable disconnects or not.

TECHNICAL SPECIFICATIONS

Model OBL-2xxA series

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)	IP65		
OPERATING VOLTAGE (NOMINAL)	220 Vac	230 Vac	240 Vac
OPERATING VOLTAGE RANGE	± 10 %		
LAMP AVERAGE LIFE (MTBF)	>100,000 hour		
LIGHT INTENSITY (Type)	>10 cd		
ICAO REQUIREMENT (+10°)	≥10 cd		
COLOUR	Aviation Red (Dominate wave lenght = 626 nm)		
VIBRATION RESISTANCE	yes		
WIND LOAD AT 200 km/h.	< 40 N		
WEIGHT	1600 g.		

Model OBL-2xxB series

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)	IP65		
OPERATING VOLTAGE (NOMINAL)	220 Vac	230 Vac	240 Vac
OPERATING VOLTAGE RANGE	± 10 %		
LAMP AVERAGE LIFE (MTBF)	>100,000 hour		
LIGHT INTENSITY (Type)	> 32 cd		
ICAO REQUIREMENT (+10°)	≥ 32 cd		
COLOUR	Aviation Red (Dominate wave lenght = 626 nm)		
VIBRATION RESISTANCE	yes		
WIND LOAD AT 200 km/h.	< 40 N		
WEIGHT	1600 g.		