



## BL Series DC User Manual

BL4000DC / BL8000DC / BL16000DC



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**EXIN Light** is a division of **Deeps Engineering Pty Ltd.**

All EXIN Light products are manufactured, tested, and assembled by Deeps Engineering at our facility in Salamander Bay, NSW, Australia.

For more information, please visit [www.exinlight.com](http://www.exinlight.com) or [www.deepsengineering.com.au](http://www.deepsengineering.com.au)



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***The information contained within this Manual is based on the latest information and technical specifications available at the time of printing. Deeps Engineering reserves the right to make changes to product specifications without notice.***

# 1. Equipment Safety Guidelines

Every year many accidents occur which could have been avoided by a few seconds of thought and adopting a more careful approach when planning a job or simply using equipment. You as the operator can avoid many accidents or even damage to the equipment by observing and following the precautions and instructions contained in this Manual.

- a) Ensure that you have fully read and understood this Manual prior to setting up, installing, operating, or charging the equipment.
- b) Never operate this equipment if under the influence of alcohol or drugs.
- c) This equipment is only to be operated by a competent person.
- d) If the ability of this equipment to carry out its intended function is in doubt, then remove it from service and return it to an Authorised Distributor for repair.
- e) When charging from mains power, please ensure that the charging procedure is adhered to, and only charge with a power supply between 100-240V. If supplying power outside this voltage range, it may cause serious injury or damage to the equipment.
- f) Never allow any person to mount, use or charge this equipment until they have developed a thorough understanding of the safety precautions on how it operates.
- g) In some jurisdictions, operator training or equipment documentation may be required. Please check with your local regulatory authority prior to use.

## 2. Introduction

Thank you for purchasing an EXIN Light by Deeps Engineering. The information contained in this manual covers charging, setting up, operation and maintenance of the EXIN Light BL Series DC. This manual needs to be fully read and understood prior to the BL Series AC light being and used.

The EXIN Light BL Series DC has been developed to help with the lighting needs of consumers and for recreational activities such as boating, camping & fishing, as well as the mining sector, hire industry and service providers such as utilities (gas, water, electricity), railway trades, road maintenance, emergency services, disaster control and other industrial uses. An integrated USB port allows the user to charge devices when on the go.

The EXIN Light BL Series DC reduces set up time and running costs. This product comes with a LiFePO4 battery which boasts a high discharge current and does not require any active maintenance to extend its service life. A battery management system (BMS) is integrated to ensure maximum safety and reliability.

When removing the EXIN Light from its packaging, remember to dispose of all packaging materials in an environmentally correct manner, then, follow powering instructions in this manual to ensure that the full use of the product is realised.

### 3. Charging

When the battery is low, the “Battery Low” LED light on the front of the unit will light up. When a charge is required, follow the charging instructions below.

The LED indicator light on the black box of the external charger will display:

- Red for charging
- Green for fully charged

The EXIN Light can be charged via a Mains Charger suitable for 100-240 volt AC 50-60Hz supply. The charger should only be used indoors and not exposed to the weather. 100-240 volt AC: Insert the Charger into a 3 pin outlet (outlet needs to be on a protected circuit fused / circuit breaker / RCD). Never charge the unit in a hazardous environment (i.e. a wet environment poses numerous risks including electrocution).

To charge your EXIN Light, ensure that it is placed on a firm level surface. Open the plastic protective cap on the charging port located on the rear of the unit and place the relevant end of the charging lead into the socket. This socket has a keyway which allows easy entry for the plug. Turn the circular collar of the plug clockwise and this will lock the plug into place.

To achieve a speedy charge, ensure that the light is off when recharging, however, if necessary, the EXIN Light can be used while on charge in a safe environment.

When the battery is fully charged turn off the power to stop the charging process. Lithium iron phosphate batteries (LiFePO<sub>4</sub>) do not require active maintenance to extend their service life. Also, the batteries show no memory effects and due to low self-discharge (<3% per month), you can store them for a longer period of time.

## 4. Operating Instructions

Place the BL Series DC unit on a firm level surface. Your EXIN Light is ready to use.

The ON/OFF switch (black) and the function switch (red) are located on the main housing directly above the USB Charging Socket. To start, press the black ON/OFF switch, this will turn on the Light Head. The function of the EXIN Light BL Series DC will change with each press of the red switch. The order of the function is as follows:

- Press the first time for low power mode, extending your run time.
- Press a second time for flash mode.

The BL Series DC will flash at a speed of 1 flash per second. After pressing the red function switch a third time you will return to the original function. The red switch will not turn the EXIN Light completely off, you must press the black main power switch for complete shutdown.

## 5. Using the USB Charger

The BL Series DC comes with an integrated USB Charger, allowing the user to charge devices or tools while on the go utilizing the built in LiFePO4 Battery.

**NOTE: Charging devices will drain the battery, and will affect the run time of the light. Different devices require different levels of charge, please consult the user manual for the device being charged.**

To use the USB charger, open the plastic protective cap and press the power switch located above the USB port. Power supply to the USB port will be indicated by a blue LED light inside the charging port. Plug your device into either the USB-A or USB-C socket.

To turn off the USB charge function, press the power button again and the blue LED will turn off.

## 6. Battery & LED Performance

The battery life cycle of the EXIN Light is approximately 5,000 life cycles when charged according to the instructions in this manual. The battery is a Lithium Iron Phosphate LiFePO<sub>4</sub> (19.2-volt 18Ah) and does not need water or service, only to be charged in accordance with the instructions provided. The batteries show no memory effects

Figures based on a fully charged battery the LED light source supplied with the EXIN Light has approximately 60,000 life hours when the light is used in accordance with this manual.

### **WARNING:**

- Never use a non-standard charger for the EXIN Light. This may damage the light and void your warranty. Never leave the battery fully discharged as this may permanently damage the battery.
- The battery must be stored in a cool, dry environment. High temperatures or wet environments could potentially damage the battery

## 7. Battery Removal

It is advised that battery replacement be carried out by an authorized service technician or the manufacturer. If you attempt to do this yourself you may void the warranty.

- a) Whilst in a safe environment disconnect all charging cables.
- b) Remove the rubber plugs around the USB Port Plate and unscrew the 4 screws. Remove the cover slowly.
- c) Disconnect the Red (positive wire) and Black (negative wire) Anderson style plug.
- d) Remove the rubber covers from around the base and unscrew the 8 bolts. Carefully lift the unit and feed the battery wires through the hole in the bottom of the yellow main body.
- e) Remove the battery and take note of the way the battery was packed. You must return it to the same position.
- f) Ensure that the Battery is returned to the original position including foam and reassemble the battery case feeding the wires back through to the main body.
- g) Connect the wires to the corresponding connection on the battery.
- h) Re-install the 8 bolts and 4 screws and fit the rubber seals.
- i) Place the EXIN light on charge to bring the Battery to full charge.
- j) Dispose of the Old Battery by following the guidelines and laws within your State or Territory.

## 8. LED Replacement

Please consult your local distributor or the manufacturer for LED replacement.

## 9. Specifications

	BL4000DC	BL8000DC	BL16000DC
Gross Weight (kg)	5.4	6.1	7.3
Net Weight (kg)	4.8	5.3	6.3
Height (mm)	790	1030	1630
Width (mm)	200		
Voltage AC/DC	100-240V AC - 19.2V DC		
Battery	19.2V Lithium Iron Phosphate (LiFePO4)		
Light Type	LED		
Light Head	360 Degrees Direction		
Lumens	4000	8000	16000
Charging Time (hrs)	4-5		
Battery Run Time (hrs)	Low: 28-30 High: 14-16	Low: 16-18 High: 8-10	Low: 9-11 High: 5-6

\*Battery Runtime is based on the condition of the battery and use of the USB Charger.

## 10. Spare Parts

Replacement parts are available from Deeps Engineering. Please consult your place of purchase.

## 11. Accessories

As standard the EXIN Light comes with a 1.0 metre 100-240 volt (voltage depending on country requirements) charging cable and a 1.5 metre 12 volt charger. These cables are able to be stored within the body inside the charging cable compartment.

Optional extras are available to purchase separately, these include additional charging options and safety & protective clip-on lenses. We are continually expanding our Accessories range, please view our website ([www.exinlight.com](http://www.exinlight.com)) to keep up to date with the latest Accessories available for your EXIN Light as some accessories may not have been available at time of printing this manual.

## 12. Attachments

The attachments mentioned in this manual are to be used for mounting EXIN Lights only. They are not to be used for any other purpose. All attachments are covered by our normal manufacturer's warranty. The warranty does not cover damage by intentional misuse or neglect.

## 13. Product Warranty

### International Product Warranty

The EXIN Light is covered by a 12 month Limited Warranty (the “EXIN Light Warranty”).

### Proof of Purchase

The EXIN Light Warranty can only be claimed with a copy of the dated sales receipt as proof of purchase.

### The EXIN Light Warranty

EXIN Light makes every effort to ensure that its products meet high quality and durability standards and warrants to the original Customer/Purchaser of our products that each product be free from defects in materials and workmanship as follows:

The EXIN Light Warranty is a 1 year limited warranty from the time of purchase by the end-user on this EXIN Light product. This Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations outside of our facilities or our Authorised Service Agents or due to a lack of maintenance or to light tubes or LED's.

To proceed with a Warranty claim; the product must be returned via normal freight pre-paid to Deeps Engineering for examination with proof of purchase and an explanation of the problem.

### To the extent permissible by law, EXIN Light:

1. Excludes all implied conditions or warranties and consumer guarantees; and
2. Limits its liability for breach of the EXIN Light Warranty or for breach of any non-excludable warranty, condition or consumer guarantee to:
  - a. Replacement of the defective good; or
  - b. Repair of the defective good.
3. Excludes all liability for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our Products.

### Local Laws

It is the responsibility of the Distributor to ensure that EXIN Light's Products, Packaging and Labelling comply with any laws in the Distributor's jurisdiction that impact on the distribution of the EXIN Light in such jurisdiction. Should such laws impact on such issues as labelling, registration or certification of the product or warranties, it is the

responsibility of the Distributor to provide full details of such issues to EXIN Light before orders are placed. Any changes required to EXIN Light's labelling or products will be at the cost of the Distributor.

Date of Warranty Claim: \_\_\_\_\_

Purchaser's Name: \_\_\_\_\_

Purchase Date: \_\_\_\_\_

Purchased from (Company Name): \_\_\_\_\_

Product Name: \_\_\_\_\_

Product Model: \_\_\_\_\_

Serial No: \_\_\_\_\_

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**NOTES:**