| LED LAMP SPECIFICATIONS: |  |
| :--- | :---: |
| Luminaire lumens (with <br> diffuser) | $\mathbf{4 3 7}$ Im |
| Lumens from chip (no diffuser) | $\mathbf{4 7 0}$ Im |
| Useful lumens | $\mathbf{4 0 9}$ Im |
| Rated Wattage | 4.5 W |
| Nominal life time of the lamp | $50,000 \mathrm{hrs}$ |
| Colour temperature | 6000 K |
| Voltage / Frequency | $220-240 \mathrm{~V} \sim 50 \mathrm{~Hz}$ |
| Ambient Temp | $-20-45^{\circ} \mathrm{C}$ |

## EVENTUALLY, YOU MAY WANT TO

 REPLACE THIS PRODUCT:Regulations require the recycling of Waste from Electrical and Electronic Equipment (European "WEEE Directive" effective August 2005-UK WEEE Regulations ffective 2nd January 2007). Environment Agency Registered Producer: WEE/GA0248QZ.

WHEN YOUR PRODUCT COMES TO THE END OF ITS LIFE OR YOU CHOOSE TO REPLACE IT, PLEASE RECYCLE T WHERE FACILITIES EXIST - DO NOT DISPOSE WITH HOUSEHOLD WASTE.


See website for more information on replacability and recycling

## CLEANING:

Clean this fitting only with a soft dry cloth
Do not use any chemical or abrasive cleaners.
IF YOU EXPERIENCE PROBLEMS:
If you believe your product is defective, please return it to the place where you bought it. Our Technical Team will gladly advise on any Eterna Lighting product, but may not be able to give specific instructions regarding individual installations.

Everyday Lighting For Professionals

## INSTALLATION INSTRUCTIONS

A guide for qualified electricians


## READ THIS FIRST:

This product must be installed by a competent person in accordance with the current building and IEE wiring regulations.

As the buyer, installer and/or user of this product it is your own responsibility to ensure that this fitting is fit for the purpose for which you have intended it. Eterna Lighting cannot accept any liability for loss, damage or premature failure resulting from
inappropriate use.

This light fitting must be installed in accordance with the Building Regulations making reference to the wiring Regulations BS 7671.

Switch off the mains before commencing installation and remove the appropriate circuit fuse or lock off MCB.
The batteries supplied with this fitting are consumable parts and therefore may be outside of any warranty offered

This unit is suitable for indoor use only.
Before making fixing hole(s), check that there are no obstructions hidden beneath the mounting surface such as pipes or cables.
The chosen location of your new fitting should allow for the product to be securely mounted and safely connected to the mains supply (lighting circuit).

Ensure that the fitting will be accessible after installation for maintenance and self testing.
When making connections ensure that the terminals are tightened securely and that no strands of wire protrude. Check that the terminals are tightened onto the bared conductors and not onto any insulation.

You are advised at every stage of your installation to double-check any electrical connections you have made. After you have completed your installation there are electrical tests that should be carried out, these tests are specified in the current IEE wiring and building regulations.

## LAMP REPLACEMENT:

Lamps may only be replaced by a qualifed electrician.

## INSTALLATION:

Choose the location of your new fitting giving consideration to all of the points listed above

1) Unclip and lift off front cover.
2) Make cable entry hole using an appropriate hole cutter.
3) Using the back of the fitting as a template, mark and drill out fixing holes on your mounting surface.
4) Prepare fixing points to mounting surface as appropriate.
5) Thread the supply cable through the cable entry and into the fitting.
6) Secure the back of the fitting to the mounting surface using suitable fixings.
7) Connect the un-switched supply cable to terminals marked LN.

## This product is double insulated. Do no

 connect any part to Earth.
08) Mark the current date on the battery pack.
09) Connect the battery lead
10) Refit the front cover.
11) 11. Restore the power and check the fitting is working correctly. The Green LED charge light should always be present, indicating there is a healthy charge into the battery
12. The fitting should be run/charged for a minimum of 24 hours, to allow the battery to charge before testing record of inspection and testing.

## IMPORTANT NOTES:

The control gear must be operated only within the enclosure supplied. The gear must not be operated outside of the enclosure.

The battery charging circuit and control gear are separated from the mains by at least basic (single layer) insulation
When energised by a constant mains supply, the battery will be constantly charged whether or not the lamp is illuminated. On failure of the constant mains supply, the fitting will switch automatically using transistorised switching from battery charging to battery discharge powering the lamp whether or not the lamp was illuminated before the power failure. Both the mains and battery supplies incorporate fuse protection, see fitting for location and rating.

## BATTERY REPLACEMENT

If after routine operation check, the lamp does not remain lit for the three hour period, a new battery pack may be required.

1) Switch off the electricity at the mains and allow batteries to fully discharge then reconnect to supply and allow charging for 24 hours.
2) Test again for 3 hours, if light does not remain lit, then change the battery pack as follows:
3) Unplug the battery lead.
4) Remove the screws from the back of case tha secure the battery pack in place and lift the battery pack out of the fitting.
5) Write current date on the new battery pack and fit new battery pack securing in place.
6) Reconnect battery.
7) Restore power and allow charging for 24 hours
8) Perform full operation check and update test record.

## REPLACEMENT BATTERY TYPE:

Li-Ion 3.2V 4500mAh. Replacement battery code B18.

## INDUSTRIAL BATTERIES:

Within certain products Eterna Lighting Ltd places lead acid, lithium ion, nickel cadmium \& nickel metal hydride batteries on the market. Industrial batteries are subject to waste regulation under the Waste Batteries and Accumulators Regulations 2009 and should be disposed of responsibly. Purchasers may be able to dispose of their waste industrial batteries locally via legitimate licensed trade waste contractors. Eterna is obliged to take back, rree of charge and within a reasonable supplied to Purchaser for treatment and recycling and is required to do this in any calendar year new industrial batteries are placed on the market In certain circumstances, this may include batteries not originally supplied by Eterna. If any Purchaser requires Eterna to take back Industrial batteries, they should write to the Operations Director, Eterna Lighting Ltd, Huxley Close, NN8 6AB, who will then advise on the necessary arrangements for the receipt, proper treatment and recycling of, the waste industrial batteries

This product is fitted with an automatic, self-test unction that will commission and test itself in accordance with the requirements of the British standards. Monthly, semi-annual and annual tests will be automatically completed as detailed below with tests including battery charge condition,
functional test and duration test.
Monthly - two minute functional test Semi-Annual - full three-hour duration test Annually - full three-hour duration test

When the fitting is first installed, and the battery is fully charged the automatic test system will perform the first monthly 2 minute test, then at 30 day intervals it will perform the same 2 minute tes a further 4 times.

At 6 months the automatic test system will perform a full check to ensure the battery discharge duration is greater than 3 hours then will return the fitting to normal operation

- The automatic test system will then perform a further 5 monthly tests at 30 day intervals and finally a full duration test at 1 year to ensure the battery discharge duration is greater than 3 hours, then return the fitting to normal operation

The schedule of these tests will be remembered if no power is supplied to the luminaire

- If there is a mains failure during the self-test operation the unit will go into emergency mode

If there is a mains failure in 24 hours before a test is due to be conducted, the test will automatically be postponed until sufficient time is allowed to recharge the battery.

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For full testing schedule, please visit:
www.eterna-lighting.co.uk/testing-schedule/
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## TESTING

This product is designed to conduct self-testing in accordance with BS EN 62034, the results of monthly and annual tests should be endorsed on the test record form supplied.

## Daily:

Visual inspection of the battery charge LED.

## Each Month

The product will be energised from its battery for adequate time to ensure that emergency mode is functioning correctly

## Once Each Year:

The product will be placed into emergency mode and check that the duration provided meets the specified time period.

## There is a control button on the side of th

 Twinspot:NOTE: This can only be completed under main conditions and accordingly must only be conducted by a qualified electrician.

- System reset function - Press and hold the test button for 15 seconds. The buzzer will sound indicating that the system timing has been reset.
- Press and hold the test button and release after the buzzer sounds once. The emergency LEDs will be on, none of the indicators will be on. Press the test button again to return to normal operation.

| PERFORMANCE AND FAULT INDICATORS: |  |
| :--- | :--- |
| Normal operation | Constant green LED |
| Monthly duration test <br> underway | Green LED Flashing at 1Hz |
| Annual duration test <br> underway | Green Light Flashing at 2Hz |
| Battery circuit failure | Green LED off, Red LED Flashing every second, <br> Buzzer sounds twice immediately then twice every <br> minute |
| Lamp failure | Green LED off, Red LED Flashing twice per second, <br> Buzzer sounds twice immediately then twice every <br> minute |
| Battery over-discharge | Green LED off, Red LED remains on, Buzzer sounds <br> twice after 1 minute then twice every minute |
| Mains failure | Green LED off Lamps lit in emergency (battery) mode |
| Faults must be resolved for the fitting to resume normal operation |  |

## Installed

By:

| 듣 | Test | Year: |  | Year: |  | Year: |  | Year: |  | Year: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| < |  | Sign | Date | Sign | Date | Sign | Date | Sign | Date | Sign | Date |
| 01 | Function |  |  |  |  |  |  |  |  |  |  |
| 02 | Function |  |  |  |  |  |  |  |  |  |  |
| 03 | Function |  |  |  |  |  |  |  |  |  |  |
| 04 | Function |  |  |  |  |  |  |  |  |  |  |
| 05 | Function |  |  |  |  |  |  |  |  |  |  |
| 06 | Function |  |  |  |  |  |  |  |  |  |  |
| 07 | Function |  |  |  |  |  |  |  |  |  |  |
| 08 | Function |  |  |  |  |  |  |  |  |  |  |
| 09 | Function |  |  |  |  |  |  |  |  |  |  |
| 10 | Function |  |  |  |  |  |  |  |  |  |  |
| 11 | Function |  |  |  |  |  |  |  |  |  |  |
| 12 | Function |  |  |  |  |  |  |  |  |  |  |

