

# Emergency LED Conversion Kit Self Test

97818

## 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.

- Switch off the electricity at the mains, both switched and permanent supply.
- Allow batteries to fully discharge then reconnect to supply and allow to charge for 24 hours.
- Test again for 3 hours, if light does not remain lit change the battery pack as follows:
  - Disconnect from the mains supply both permanent and switched supply.
  - Undo the cover on the back of the product.
  - Unplug the battery lead from the lead coming.
  - Remove the battery pack and lift the battery pack out of the fitting. Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.
  - **Replace the battery with a LiFePO4 6.4V 1500mAh only.** Use of a different type of battery will damage the product.
  - Write current date on the new battery pack.
  - Fit new battery pack in position.
  - Plug battery pack into circuit board.
  - Close and secure cover on the back of the product.
  - Restore power and allow to charge for 24 hours.
  - Perform full operation check and update test record.

## Technical data

Supply Voltage:	220-240 V~, 50 Hz	Duration: 3 hours (180 minutes)	Battery Current: 1.5A Maximum
		Operating Temperature: -20 °C to 45 °C	Change over Time: Approximately 1s
		Maximum Operatin Humidity: 10-90%	Battery Specification: LiFePO4 6.4V 1500mAh
		Output: 9-80VDC - 3W Maximum	Battery Charge Time: 24 hours
		Charge Current: 100mA	Battery warranty: 2 years



Conformity with all relevant UKCA Directive requirements.



Conformity with all relevant EC Directive requirements.



The power supply is Double Insulated and does not require connection to an Earth circuit.



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or local store for recycling advice.



This product is rated at IP20.

## Care and Safety

Live Voltages may be present in this unit even when turned off or when completely disconnected.


We recommend cleaning with a soft dry cloth. Do not use solvents or abrasive cleaners as these could damage the finish.

For your safety, always switch off the power supply before cleaning.



Thank you for purchasing this light fitting. Please read the instructions carefully before use to ensure safe and satisfactory operation of this product. Please retain these instructions for future reference.

## Warning

 This light fitting is double insulated and does not require connection to an Earth circuit.

Please read these instructions carefully before commencing any work

This Emergency pack must be fitted by a competent and qualified electrician.

Install in accordance with the IEE Wiring regulations and current Building Regulations.

**Please Note:** The limited warranty shall be deemed null and void in the following circumstances: Failure by the installer, end user or any third party to exercise caution to protect any covered product or part from outside damage, adverse temperature (normal operating ambient temperature 0 - 25°C), humidity conditions, fluctuations in the electrical system or physical abuse as well as failure related to workmanship in the installation of the products or parts.

These products are designed for connection to a 220-240V~50Hz supply.

Check the pack and make sure you have all the parts listed.

To prevent electrocution switch off at the mains supply before installing or maintaining this fitting. Ensure other persons cannot restore the electrical supply without your knowledge.

This Emergency pack is suitable for indoor use only.

If replacing an existing fitting, make a careful note of the connections.

Do not use Megger or similar high voltage instruments. Due to the fact this Emergency pack contains electronic components that maybe damaged by high test voltages, they must be disconnected from the circuit before testing.

To prevent damage to the Emergency pack, do not mix with conventional magnetic ballasts on the same electrical circuit.

Any faulty, broken or damaged modules should be replaced immediately.

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

## Installation

Existing fittings must be completely removed before installation of a new product. Before removing the existing fitting, carefully note the position of each set of wires.

Note that the switch is turned off before installation.

Familiarize yourself with the installation procedure and ensure the power is safely isolated before installing the Emergency pack.

Ensure the LED luminaire is within the specification 9-80VDC.

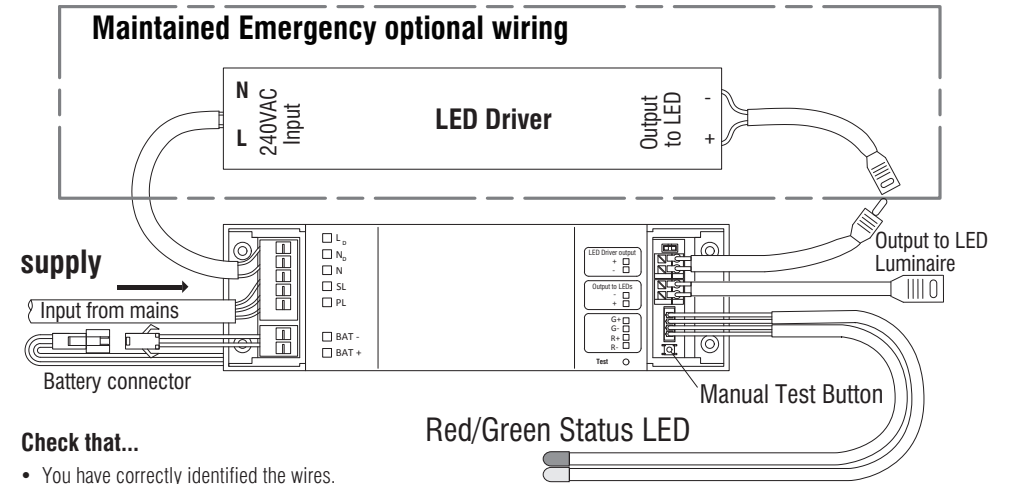
### Wire as required below (Fig.1):

#### Non-Maintained Emergency:

Connect the mains input Unswitched Live (PL), Neutral (N). The low voltage side just requires output to the LED luminaire positive (+) and negative (-). Then connect the battery. Install the LED indicators in a suitable location.

#### Maintained Emergency:

Connect the mains input Unswitched Live (PL), Neutral (N) and Switch Live (SL). Connect the Live out (L<sub>o</sub>) and Neutral out (N<sub>o</sub>) to the driver mains input. The low voltage side connect the output from the LED driver to the LED Driver output (+) and Negative (-) luminaire output to the output to LEDs positive (+) and negative (-). Then connect the battery. Install the LED indicators in a suitable location.



### Check that...

- You have correctly identified the wires.
- The connections are tight.
- No loose strands have been left out of the connection block.

**Please note:** For manual testing purposes a provision is made inside the cover of the low voltage side of the driver (Fig.1) marked as Test on the casing. See overleaf for details on manual testing.

Turn on the power and ensure that the module is showing charge indicator.

This fitting requires a minimum 24 hours initial charge period prior to any manual emergency testing.

The battery has a rated duration of at least 4 years but should be replaced if the duration of operation is less than 3 hours after a 24hr charge time with no interrupted supply.

All full duration tests should be where possible be undertaken at times of low risk adjacent emergency luminaires we recommend that you you reset the inbuilt timer or run a manual 30 day test to stagger testing times. Once commissioned fill in the date of the first test/install date this will allow the end user to monitor and record subsequent test information on the supplied report. All tests with the exception of the visual inspection will be completed automatically including battery charge condition and lamp status.

#### Daily:

The battery in this product has self testing function. Visual inspection of the battery charge LED as below:

**Automatic Monthly (Every 30 Days):** (in addition to the daily check)The results of the short duration test shall be recorded.

**Automatic Annually (Every 180 & 360 Days):** (in addition to the daily check) The results of the full duration tests shall be recorded.

Performance Indicators:	
Normal Operation	Red LED off, Green LED Solid
Automatic 30 Day Test	Red LED off, Green LED flashing once a second
Automatic 180/360 Day Test	Red LED off, Green LED flashing twice a second
Manual Simulated Power Failure	Red LED off, Green LED off
Manual 30 Day Test	Red LED off, Green LED flashing once a second
Manual 180/360 Day Test	Red LED off, Green LED flashing twice a second
Manual Fast Test (24 minutes)	Red LED off, Green LED four times a second
Manual Testing - Can only be completed under mains conditions	
Manual Simulated Power Failure	Hold test button until you hear 1 beep
Manual 30 Day Test	Hold test button until you hear 2 beeps
Manual 180/360 Day Test	Hold test button until you hear 3 beeps
Manual Fast Test (24 minutes)	Hold test button until you hear 4 beeps
Abort Test	Hold the test button for 15 seconds, when you hear the long sound, the self-test function will restore the defaults
Fault Indicators:	
Battery/Charging Fault	Red LED flashing once a second, Green LED off, Beeps twice every minute until fault rectified
Lamp Fault	Red LED flashing twice a second, Green LED off, Beeps twice every minute until fault rectified
Failed Duration Test	Red LED solid, Green LED off, Beeps twice every minute until fault rectified