Instruction manual

# BATTEN EM KIT MANUAL & SELF TEST 2-IN-1

107137


UK CA CE LFP LED 24 5 180min SELV 220-240 IP20 EL-T EL

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

## Relevant standard

IEC 61347-1
IEC 61347-2-7
EN 55015
EN 61547
EN 61000-3-2
EN 61000-3-3
EN 62493
AS/NZS 60598-2-22
AS2293.3

## Warranty

- Warranty 5 years. (Emergency driver and battery)
- Except for the following circumstances:
1) Improper installation or operation.
2) Misuse.
3) Abuse.
4) Unauthorized or improper repair alteration.
5) Accident or negligence in use, storage, transportation.
6) Any natural acts.

## Ordering data

| E.M Power | Duration | Battery Pack |
|---|---|---|
| DC2.5-3.5V 1W constant power | 3 Hours | LiFePO4 3.2V 1.6Ah 5.12Wh |

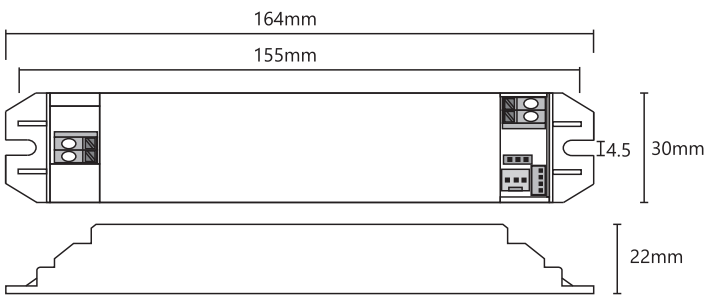
## Applications

- Use in dry environment.
- LiFePO4 battery pack.
- For use on a wide range of LED fittings to convert them from standard to emergency fitting.
- LED fitting would be maintained emergency LED fitting if standard (main powered) driver, emergency lighting kit and battery are all retained in the circuit. LED fitting would be non-maintained emergency LED fitting if only emergency lighting kit. And battery is retained in the circuit.
- Additional Relay that can control standard LED driver.
- Deep discharge protection.
- Connector between emergency kit and battery has the function of polarity reversal protection.
- Ambient range ta 0....45 ℃
- IP20 protection, relies on end-product enclosure for protection against accidental contact live parts.
- Not intended for use in luminaries for high-risk task area lighting.
- Can turn off self test mode by dial switch.

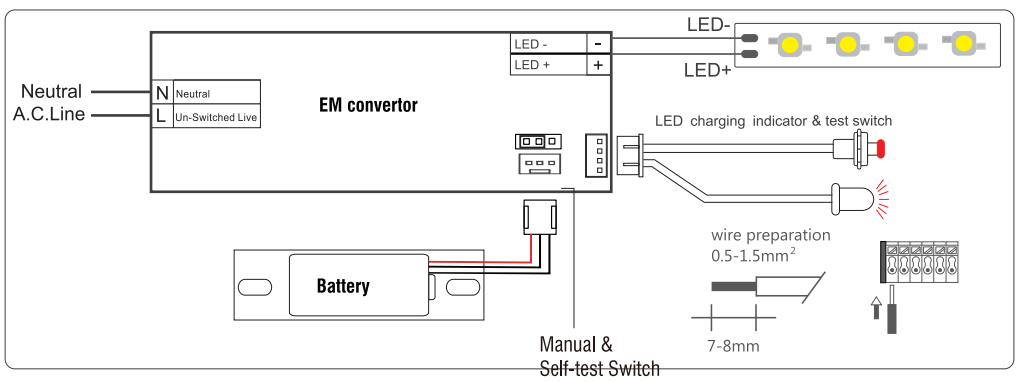
## Technical data

| Item | Data |
|---|---|
| Rated input | 220-240VAC,50/60Hz, 20mA, 2Wmax |
| Output voltage range | DC 2.5-3.5V |
| Max output current | 400mA |
| Output power | 1W max |
| Battery cells voltage /capacity | LiFePO4 3.2V 1.6Ah 5.12Wh |
| Recharge current | 130mA |
| Recharge time | 24hours |
| Discharge time | 180 minutes |
| Max. casing temperature tc | 80 °C |

## Dimensions




## Wiring diagram




## Self-test

The emergency kits carry out self-tests automatically to ensure its functionality.
The self-test includes 3 types of tests:

### Initial test

- As soon as mains supply is connected, the emergency kit will carry out a 3-seconds functional test automatically.
- In case of a failure, the LED will turn permanent red. Otherwise, the charge mode will start.

### Functional test

- Refers to charging, discharging and the functioning of load.
- Carry out for 10 seconds automatically every 30 calendar days.

### Duration test

- Refers to the test of batteries capacity.
- Carry out every 180 calendar days.

### Reset mode

Rest mode can be initiated during emergency mode by pressing test switch longer than 3 seconds.
The rest mode will be exited automatically after reconnect AC mains.

### Reset method(choose either of below):

1. AC power off, press and hold test button more than 5s;
2. AC power off and unplug battery, wait 5s and plug battery.

* During initial installation, the indicator light might be showing red and fitting working properly, please keep it charging for few hours, then reset, the indicator should change to green.

### Please note

If mains supply is off during self-test period, emergency conversion module would terminate self-test immediately and go into emergency mode.
Self-test is under the regulation of EN 62034.

## Explanation of LED indicator

| | Color | LED indication | Status | Comment |
|---|---|---|---|---|
| ☀ | Green | Slow flashing green (3 sec on, 1 sec off) | Charging Mode | AC mode |
| ● | Green | Permanent green | Fully Charged | AC mode |
| ☀ | Green | Fast flashing green (0.1 sec on, 0.1 sec off) | Function test underway | |
| ☀ | Green | Slow flashing green (1 sec on, 1 sec off) | Duration test underway | |
| ● | Red | Permanent red | Load failure | Open circuit / Short circuit Led failure (emergency mode) |
| ☀ | Red | Slow flashing red (1 sec on, 1 sec off) | Battery failure | Battery failed the duration test or function test / No battery |
| ○ | | Green and red off | DC mode | Battery operation (emergency mode) |

### Test switch

The test button is a open switch , if you press it, it connects, and then you release it, it cuts off automatically.
During your maintenance, if you press the test button, the emergency driver goes into emergency mode, if you release the button, the emergency driver will go back to normal mode.

**UK Manufacturer:** BH17 7BY
**EU Manufacturer:** Brilliant AG,
Brilliantstrasse 1, D-27442 Gnarrenburg

V4 11/08/2026
www.saxbylighting.com

## Replaceable Battery Information

| | |
|---|---|
| Category | Portable battery - 18650*1 |
| Weight | 44g |
| Capacity | 1600mAh |
| Chemistry | Polymer Li-ion |
| Hazardous substances present (excluding mercury, cadmium or lead) | The battery does not contain hazardous substances above the applicable thresholds set out in Regulations (EU) 2023/1542 |
| Usable extinguishing agent | Water (incl. water mist), foam |
| Critical raw materials present | Lithium etc. Only list the ones over 0.1% of weight |

**Instructions for Disposal (End-of-Life Management):**

This product contains a lithium battery which must be disposed of separately from household waste at the end of its life. To protect the environment and human health, please ensure proper disposal of this battery and the product.

**Information for Recyclers:**

We are committed to responsible sourcing of raw materials used in our products, including lithium batteries.

We adhere to robust due diligence policies to prevent and mitigate social and environmental risks throughout our supply chain, in accordance with Regulation (EU) 2023/1542.

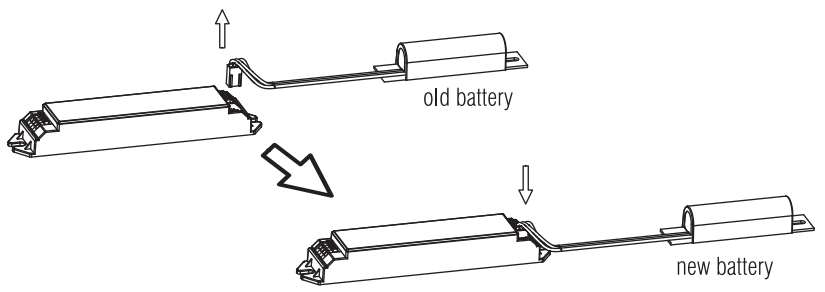
## HOW TO REPLACE THE BATTERY

### Battery Replacement

If after routine operation check, the lamp does not remain lit for the three hours 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:

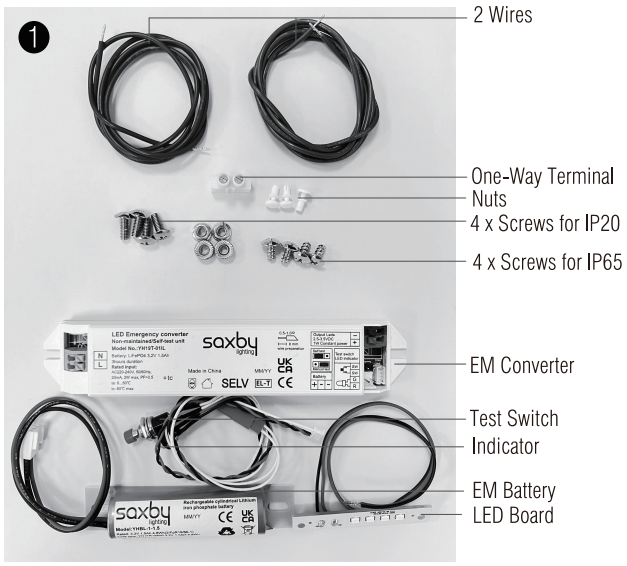
- Disconnect from the main supply both permanent and switched supply.
- Remove the old battery pack and take the battery pack out of the fitting. Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycing advice.
- Replace the battery with a LiFePO4 3.2V 1600mAh kit 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 and plug the battery connector into the PCBA.
- Restore power and allow to charge for 24 hours.
- Perform full operation check and update test record.

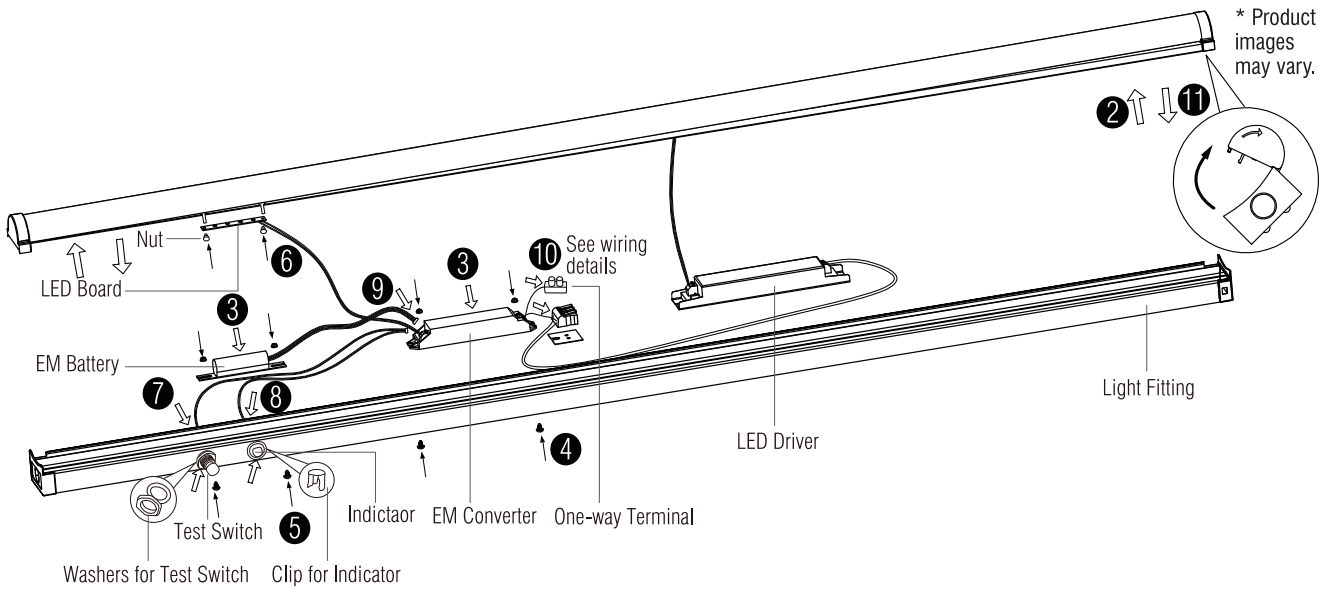



**Note:**

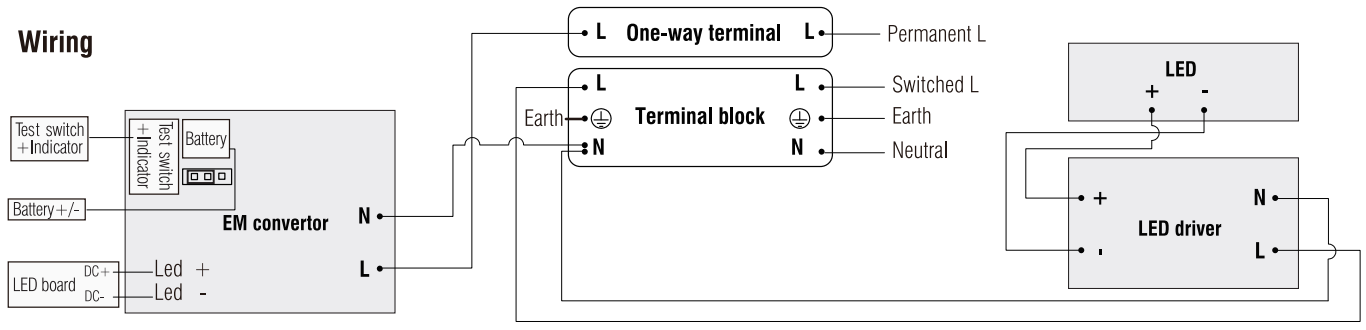
1. Turn off main power, enter emergency mode, press test switch longer than 3 seconds.
2. Unplug the old battery pack from the EM driver and plug in the new one, then turn on main power.

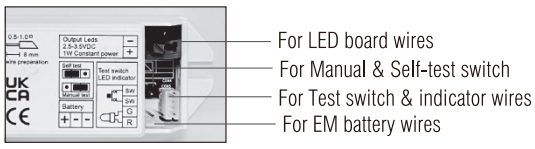
## Instruction for RularPlus / RularPro / Rular Base




1. Ready all the EM kit accessories: EM converter, EM battery, LED board, test switch, indicator, one-way terminal, screws, nuts, 2 wires.
2. Open the diffuser cover.
3. Locate the EM converter and EM battery to the holes, ensure the EM converter output is close to the battery.
4. Secure the EM converter to the light fitting with 2 screws by screwdriver.
5. Secure the EM battery to the light fitting with 2 screws by screwdriver.
6. Secure the LED board to the PCB board with 2 white nuts, keep the out-wire is on backplate.
7. Remove the 2 washers from the Test Switch, pull the test switch through the hole then using 2 washers to secure fitting in the.
8. Removed the clip from the Indicator, then insert the clip into the hole from outside the fitting, then insert the indicator from inseide the fitting then through the clip to secure it.
9. Insert the wire of LED board, EM battery, test switch and indicator in the corresponding position on EM converter.
10. Wire as per the wiring diagram.
11. Re-close diffuser cover into the place.




* Product images may vary.