

Installation & Operating Instructions

Product Specification

- Mains voltage:	230V +/- 10%
- Mains frequency:	50 - 60Hz
- Power Consumption:	(See product label)
- 2 x user-serviceable internal fuses:	'T' 2A 5x20mm
- Emergency output voltage range:	(See product label)
- Emergency Duration:	(See product label)
- Battery:	(See product label)
- Ambient temperature range:	+5°C to +35°C
- Min/Max Conductor sizes:	0.5-4mm ²
- Weight	Max 1kg
- Charging time:	24 hours
- Protection class:	1
- Degree of protection:	IP20
- Material:	UL94 V0 Polycarbonate
- Em module complies with:	BS EN 61347-2-7/2-13
- Suitable for installation to EN50172 and BS7671	

The unit provides reinforced insulation between the mains supply and battery charging circuit and employs self-resetting protection against short-circuit of battery terminals. Normal charging will resume automatically once a fault is removed.

Disclaimers

This product and its associated accessories have been manufactured and designed to comply with the requirements of EN60598-2-22 in and associated standards. Operation beyond the parameters specified in this document and the associated standards may result in reduced performance and ultimate premature failure, with the warranty made void. It is the responsibility of the luminaire manufacturer or organisation carrying out the emergency conversion to ensure compliance of the luminaire to relevant Standards. The lighting scheme specifier should be aware of the environment to which the luminaire and these components are used and follow both these and the luminaire manufacturer's specifications. Installation should be in line with the following guides. Please contact our Technical department if you are in any doubt.

NOTE – To comply with regulations, installation must be carried out by a suitably qualified, competent person and in accordance with the current IEE wiring regulations (BS7671) and building regulations.

Precautions

This product should be installed as per these guidelines, electric shock or damage to the product may result if incorrectly installed.

If the product is to be mounted in an external location, consider the battery as temperatures below 0°C may be frequent in cold months. Likewise, best effort should be made to keep the product away from other sources of heat, i.e. other mains LED drivers, LED lamps, heating pipes/ ducting etc. Avoid obstructing airflow around the sides of the product. In either case, operating outside the specified temperature range will compromise the battery's 4 year design life and more frequent battery replacements may be needed.

Installation

Ensure the mains supply is isolated before attempting installation!

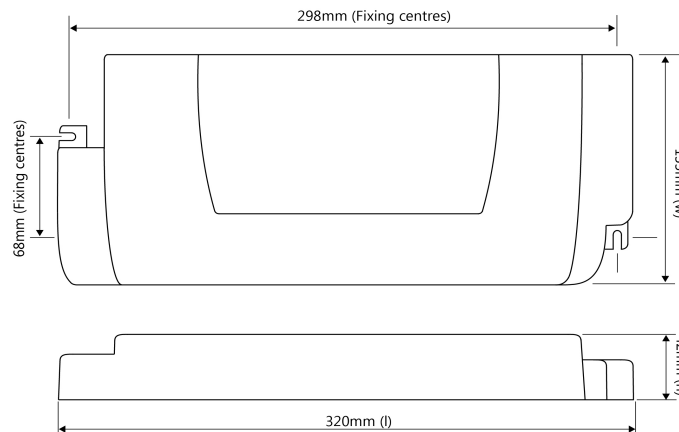
The emergency pack requires a permanent supply for charging the battery pack, one for switching the lamp on and off and a 'control live', if corridor function is activated. Refer to page 2 of this leaflet for wiring details.

Lamp Connections should be kept as short as possible and should not exceed 1m for self-contained luminaires.

User configuration settings 'LK1' and 'LK2' should be checked and adjusted for correct use in the intended application before use. Incorrect settings can reduce life of the luminaire or cause permanent damage to the LED lamp. Spare jumpers can be ordered separately as required. (See accessory page for Details). Refer to page 2 for details of configuration jumper settings.

Features

- Maintained emergency solution for use with LED panels, down lights etc. up to 50W
- User selectable, mains-mode LED output current with additional 10, 20 & 25% reductions
- Integral microwave presence detector for automatic on/off switching of the lamp when movement is detected. ('OS' models only).
- 1-10V lamp dimming or dim to 10% upon absence
- Contains replaceable 2, 3 or 4 cell, 4Ah Nickel Cadmium (NiCd) battery (See product label)
- Emergency output power (Typical): 1.4W (2-cell) to 3.7W (4-cell)
- External polarity protected battery connector for simple isolation



Installation continued

Once wiring is complete, secure all cables and the lid in place with the cable grips and screws provided.

A miniature ceiling bezel is supplied in the packaging carton, which allows recessed installation of the indicator LED through a 16mm hole

The RBU products have two mounting slots on opposite corners, which are suitable for use with screws up to 4mm diameter. (See fixing centres above).

Once installation is complete and mains power is applied, the indicator LED will be illuminated and the supply should be left undisturbed for a minimum of 24 hours to charge the batteries before attempting a commissioning test.

The green indicator LED shows the following conditions:

- LED green: mains OK and battery connected
- LED off: Mains failure [below 160V], battery disconnected/ faulty or faulty unit

After a successful test, the date should be noted on the space provided on the battery. If the luminaire has been stored for a number of months, it may be necessary to repeat the charge/discharge process several times to re-condition the battery.

Routine test and inspection should be performed in accordance with EN50172 or otherwise local legislation. Short discharge periods of around 5 – 10 minutes each month for the purposes of inspection will not adversely affect One-LUX batteries and should be considered as a maintenance exercise for the battery. Regular full discharge cycles will adversely affect the design life of the battery. The following minimum inspections and tests should be carried out:

Monthly

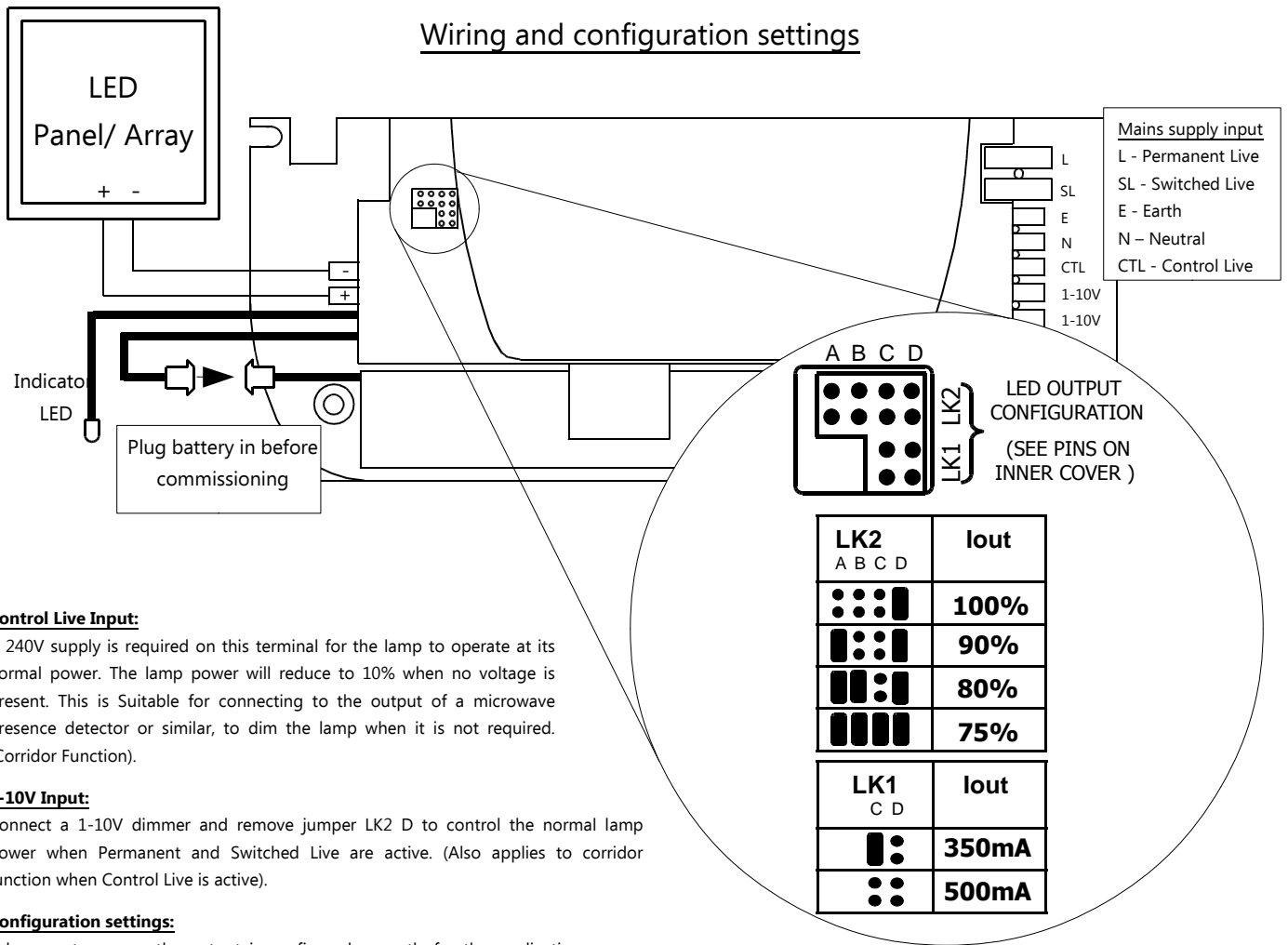
Switch off the mains power supply to the lighting unit. Inspect all emergency lights for satisfactory operation. Any defects should be noted and actioned by a competent person as soon as possible.

Yearly

Switch off the mains power supply to the lighting unit. Leave the unit to run for the rated period (e.g. three hours). The lights should remain operable from the battery for the whole period.

Please be aware that further inspection / testing may be required, e.g. by risk assessment / local legislation.

Wiring and configuration settings



Control Live Input:

A 240V supply is required on this terminal for the lamp to operate at its normal power. The lamp power will reduce to 10% when no voltage is present. This is suitable for connecting to the output of a microwave presence detector or similar, to dim the lamp when it is not required. (Corridor Function).

1-10V Input:

Connect a 1-10V dimmer and remove jumper LK2 D to control the normal lamp power when Permanent and Switched Live are active. (Also applies to corridor function when Control Live is active).

Configuration settings:

Take care to ensure the output is configured correctly for the application. Spare selection jumpers are available in packs of 100 pieces from your supplier.

LK2 A, B & C are used to reduce the output current to the percentage levels shown, if the corresponding jumpers are fitted.

LK2 D, sets normal mode if a jumper is fitted or activates 1-10V dimming mode if the jumper is removed. (Supplied fitted as standard)

LK1C Selects the lower output current with a jumper fitted and higher output current if the jumper is removed.

(Currents are shown for a 350/500mA model as an example).

LK1 D also allows de-activating corridor function if the jumper is fitted. (Supplied not fitted as standard)

Batteries and Disposal

The internal battery has a design life of 4 years and must be replaced in a timely manner to ensure the integrity of the emergency lighting system is maintained. In any case, the battery should be replaced when it no longer provides the rated duration (3 hours).

The manufacturer of the enclosure is committed to fulfil its obligations as a producer of batteries used in emergency lighting applications. End-of-life batteries may be returned to the remote enclosure manufacturer at the customer's cost and arrangements will be made to ensure their correct disposal. Alternatively, they may be returned directly to an authorized treatment facility at the customer's cost.