

## Universal Emergency Module (UEM Pro) for LED Luminaires

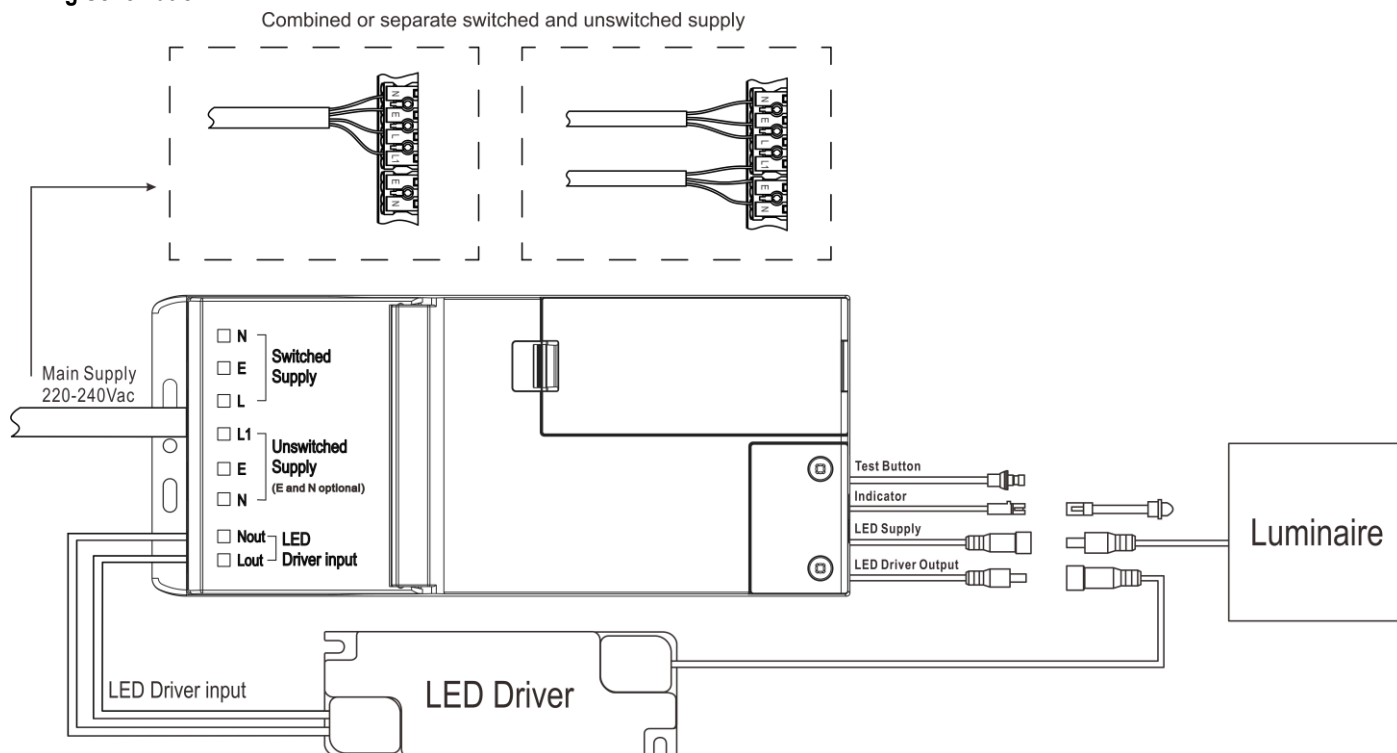
Please read these instructions thoroughly before use and retain for future reference.

- This is a stand-alone, self-contained emergency module requiring manual testing.
- The UEM is suitable for class III luminaires with integrated LEDs and separate LED drivers. The electrical specification is given below.
- Compatibility with luminaires should be verified before committing to an installation.

### Safety Information

- Installation must be carried out in accordance with national building and wiring regulations.
- If you are in any doubt about installing this product, please consult a qualified electrician.
- The system should be designed and installed such that only authorised personnel can make changes.
- This product is suitable for connection to a 220-240Vac 50/60Hz supply.
- This is a **class II, independent** driver not requiring an earth and is **IP20** rated for indoor use.
- Do not use this emergency module if the cable is damaged.
- Do not carry or transport the product by the output cables, damage to product may occur and any warranty will be invalid.
- Ensure appropriate protective equipment is worn where required.
- When drilling or cutting holes take care not to damage existing pipework or wires.
- Take care not to trap fingers or skin when closing wire terminal and battery compartment cover.
- This emergency module is not suitable for use on a battery supply with a trickle or intermittent re-charging circuit.
- This emergency module is not protected against supply voltage polarity reversal.
- Insulation between supply and battery circuit is double insulation.
- The recharging device will recharge the battery normally after removal of a battery short-circuit.
- Ensure battery is disposed of via appropriate waste streams at end of life.

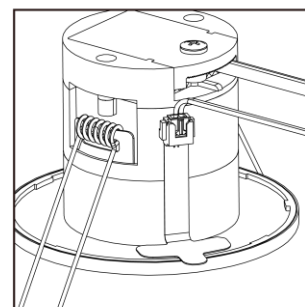
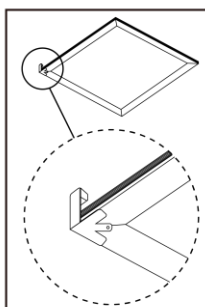
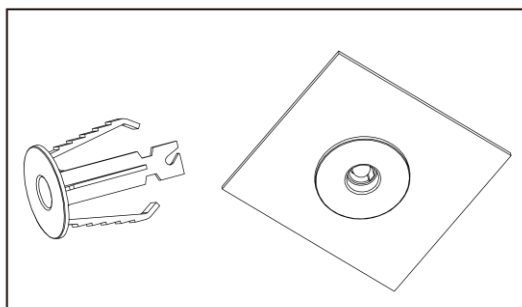
### Wiring Schematic



### Installation Information

- The UEM provides power in the event of a cut in the supply and must be wired to the switched and unswitched supply. **There must be a permanent supply to the Unswitched Supply Live (Lin) as well as the Switched Supply Live (Lin) for the luminaire to work in a normal maintained state.**
- Before commencing installation, turn off and isolate the circuit to be worked on by removing the fuse or switching the circuit breaker off at the distribution board.
- The switched and unswitched supply may be combined in a single cable or supplied through separate cables.
- Connect the **switched supply** to the UEM switched supply terminals as follows:  
**Brown = Switched Live (Lin), Blue = Switched Neutral (N). The optional Earth (E) is for continuity only.**
- Connect the **unswitched supply** to the UEM unswitched supply terminals as follows:  
**Brown = Unswitched Live (Lin). The Unswitched Neutral (N) and Earth (E) terminals are optional and for continuity only.**
- Connect the **LED Driver Input** supply wires to the **LED Driver Input** terminals **Live (Lout)** and **Neutral (Nout)**.
- The UEM is supplied with two connected leads with DC jacks. These are to connect the **LED Driver Output** to the LED Driver Output terminals and to connect the **LED Luminaire Input** to the LED Supply terminals on the UEM. The lead polarity is **Red(+), Black(-)**.

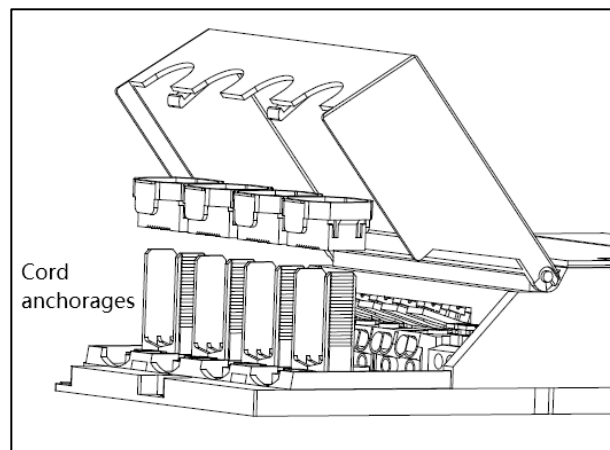
- It is critical that the connections and polarity for LED Driver Output and LED Supply are correctly identified and connected for the UEM to power the LED luminaire.
- In cases where the connectors are not suitable, the wires from the LED Driver Output and the LED Luminaire Input may be connected directly into the terminals. The connections and polarity are marked on the cover.
- There is a choice of shrouded or flat LED indicators. If used, the shroud requires a 20mm hole. The self-adhesive flat LED indicator may be stuck to a panel edge or the back of the downlight bezel such that it can be seen at the edge of the bezel when installed, as shown.



- Connect the LED Indicator to the LED Indicator terminals on the UEM.
- Use cord anchorages supplied to secure the cables.
- The battery is supplied disconnected. To connect or replace the battery, disconnect the UEM from the supply, open the central battery compartment cover on the UEM and connect the battery cable.
- Write the commissioning date on the battery label.
- Stick the Maintained or Non-Maintained emergency luminaire label on the luminaire where it can be seen.
- Ensure that all electrical connections are tight with no loose strands.
- Replace the battery compartment cover and reconnect the supply.
- The battery leaves the factory in a charged state but may take up to 24 hours to fully charge for a 3-hour test. Charge for 5 minutes before performing a functional test to ensure there is some charge in the battery.
- To fully test the emergency function, the un-switched supply will need to be switched off. A quick functional test can be performed by pressing the test button.
- Replace the battery when the luminaire fails to meet the 3-hour duration requirement in testing.

## Specifications

|                                |                                    |
|--------------------------------|------------------------------------|
| Product Code                   | UEM04                              |
| Input Voltage                  | 220-240 Vac 50/60 Hz               |
| Input Current (max)            | 25 mA                              |
| Battery Output Wattage (max)   | 4 W                                |
| Output Voltage                 | 24-54 Vdc                          |
| Output Current                 | 50-135 mA                          |
| Open Circuit Voltage           | 59 Vdc                             |
| Maximum Working Voltage        | 59 Vdc                             |
| Protection                     | IP20, Class II, Independent Driver |
| Input to Output Protection     | Double Insulation                  |
| Battery                        | Li-Ion BAT26Li2                    |
| Battery Voltage                | 7.2 V                              |
| Battery Capacity               | 2600 mAh                           |
| Battery Charge Voltage         | 8.5 Vdc                            |
| Battery Charge Current         | 30-210 mA                          |
| Battery Discharge Voltage      | 6.0-8.4 Vdc                        |
| Battery Discharge Current      | 600-700 mA                         |
| Charging Time                  | 24 h                               |
| Battery Life                   | 4 Years                            |
| Emergency Conversion Time      | 1 s                                |
| Emergency Operation Time       | > 3h                               |
| Test Function                  | Manual                             |
| Length x Width x Depth         | 211 x 91 x 32 mm                   |
| Maximum Case Temperature (°C)  | 75 °C                              |
| Ambient Temperature Range (°C) | 0 to 45 °C                         |



## The cut-out size

If the ceiling to ceiling height is greater than 205mm, the minimum cut-out is 98mm;

If the ceiling and ceiling height is less than 205mm, Please refer to the size of cut-out in the table:

| Minimum ceiling void (mm) | Cut-out (mm) |
|---------------------------|--------------|
| 120                       | > 160        |
| 140                       | > 135        |
| 160                       | > 115        |



The Waste Electrical & Electronic Equipment Regulations (WEEE) requires that products bearing this symbol must not be disposed of with household waste as they may contain substances harmful to the environment. The Local Authority can provide advice on recycling.