

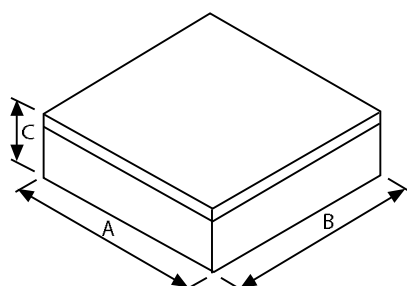
Low Voltage Emergency Lighting

Emergency lighting kits to operate 12 volt tungsten halogen lamps in the event of a power failure

These are available in three modes:

- Non-maintained (NM) where the lamp is only illuminated when power fails
- Remote Maintained where a separate transformer is used, ideal for dimming installations or where matching mains operation characteristics are critical.
- Maintained (M) where the unit is supplied with an integral transformer.

All units incorporate a BSI Approved Charger Circuit to maximise battery life and deep discharge battery protection, essential for Lead Acid batteries. They are housed in a white epoxy coated sheet steel enclosure, and are supplied with 5 year life sealed Lead Acid batteries.



LOW-VOLTAGE EMERGENCY BOX - ECONOMY VERSION (BALLAST LUMEN FACTOR 20W - 6% 50W - 10%)

| Cat No. | Mode | Duration | | | Dimensions (Size in mm) | | | Fixing Centres | Kg |
|---------|--|--------------------|--------------------|--------------------|-------------------------|-----|----|----------------|-----|
| | | 1 Hour | 2 Hours | 3 Hours | A | B | C | | |
| R931/50 | Non-Maintained | 2 x 20W 5 x 20W | 1 x 50W 3 x 20W | 1 x 50W 2 x 20W | 250 | 230 | 72 | 187 | 4.0 |
| R932/50 | Maintained with Maintaining Transformer | 1 x 50W 2 x 20W | 1 x 50W 2 x 20W | 1 x 50W 2 x 20W | 250 | 230 | 72 | 187 | 5.0 |
| R942/50 | Maintained without Maintaining Transformer | 2 x 50W 5 x 20W | 1 x 50W 3 x 20W | 1 x 50W 2 x 20W | 250 | 230 | 72 | 187 | 4.0 |

LOW-VOLTAGE EMERGENCY BOX - 12V VERSION (BALLAST LUMEN FACTOR = 100%)

| Cat No. | Mode | Duration | | | Dimensions (Size in mm) | | | Fixing Centres | Kg |
|-------------|--|--------------------|--------------------|--------------------|-------------------------|-----|-----|----------------|------|
| | | 1 Hour | 2 Hours | 3 Hours | A | B | C | | |
| R939/50 | Non-Maintained | 1 x 50W 2 x 20W | 1 x 20W | 1 x 20W | 250 | 230 | 72 | 187 | 5.2 |
| R940/50 | Maintained with Maintaining Transformer | 1 x 50W 2 x 20W | 1 x 20W | 1 x 20W | 250 | 230 | 72 | 187 | 6.7 |
| R943/50 | Maintained without Maintaining Transformer | 1 x 50W 2 x 20W | 1 x 20W | 1 x 20W | 250 | 230 | 72 | 187 | 5.5 |
| R760/50 | Non-Maintained | 2 x 20W 1 x 50W | 1 x 20W | 1 x 20W | 315 | 270 | 110 | 120 | 5.2 |
| R759/50 | Non-Maintained | 5 x 20W 2 x 50W | 3 x 20W 1 x 50W | 2 x 20W 1 x 50W | 315 | 270 | 110 | 120 | 10.7 |
| R757/50 | Maintained with Maintaining Transformer | 2 x 20W 1 x 50W | 2 x 20W | 1 x 20W | 315 | 270 | 110 | 120 | 6.7 |
| R758/50 | Maintained with Maintaining Transformer | 2 x 20W 1 x 50W | 2 x 20W 1 x 50W | 2 x 20W 1 x 50W | 315 | 270 | 110 | 120 | 12.2 |
| R700/50 | Maintained with 2x 50W Maintaining Transformer | 5 x 20W 2 x 50W | - | - | 315 | 270 | 110 | 120 | 13.5 |
| R700/100/M3 | Maintained with Maintaining Transformer | - | - | 2 x 50W 5 x 20W | 350 | 320 | 110 | 240 | 13.5 |
| R835/50 | Maintained without Maintaining Transformer | 2 x 20W 1 x 50W | 1 x 20W | 1 x 20W | 315 | 270 | 110 | 120 | 5.2 |
| R836/50 | Maintained without Maintaining Transformer | 5 x 20W 2 x 50W | 2 x 20W 1 x 50W | 2 x 20W 1 x 50W | 315 | 270 | 110 | 120 | 10.9 |

Low Voltage Lighting Train for 12V MR16 lamps up to 50W

Orbik's low voltage lighting train enables 12 volt Tungsten Halogen lamps to operate in the event of a power failure. The ability to feed the lighting train through ceiling aperture cut-outs of 60mm ensures easy installation.

The low voltage lighting train features high quality, high temperature Nickel Cadmium battery cells of 1 hour duration and Nickel Metal Hydride for 3 hour duration, and a silicone coated woven glass fibre sleeving ensure's the product complies with BS/EN60924 and EN60598.2.22. The lighting train also allows dimming of the Halogen lamps if required.

Dimensions (millimetres)

Overall Length 740mm (1 hour) and 800mm (3 hour)

Lighting Train can fit through Ceiling Cut-Outs of 60mm or above



Emergency Lighting Options

| Cat No. | Mode | Lamp | Duration (1x20W) | Duration (1x50W) | Ballast Lumen Factor |
|-------------|----------------------------------|------------|------------------|------------------|----------------------|
| R960/50/NM1 | Non-Maintained | 50/20W 12V | 3 Hours | 1 Hour | 50W - 10% / 20W - 6% |
| R960/50/M1 | Maintained (with transformer) | 50/20W 12V | 3 Hours | 1 Hour | 50W - 10% / 20W - 6% |
| R961/50/M1 | Maintained (without transformer) | 50/20W 12V | 3 Hours | 1 Hour | 50W - 10% / 20W - 6% |
| R962/50/NM3 | Non-Maintained | 50/20W 12V | 3 Hours | 3 Hour | 50W - 10% / 20W - 6% |
| R962/50/M3 | Maintained (with transformer) | 50/20W 12V | 3 Hours | 3 Hour | 50W - 10% / 20W - 6% |
| R963/50/M3 | Maintained (without transformer) | 50/20W 12V | 3 Hours | 3 Hour | 50W - 10% / 20W - 6% |

NEW LED Low Voltage Lighting Train for 12V MR16 LED Lamps up to 6W 3 hours

Our low voltage lighting train enables 12 volt MR16 LED lamps to operate in the event of a power failure. The ability to feed the lighting train through ceiling aperture cut-outs of 60mm ensures easy installation.

The lighting train is available in Maintained mode (but can be used non-maintained), which is supplied with an integral driver which operates the lamp in mains healthy and in the event of a power failure.

The low voltage lighting train features high quality, high temperature Nickel Metal Hydride battery cells and a silicone coated woven glass fibre sleeving ensuring the product is manufactured to comply with EN61347.2.13 and EN60598.2.22.

Dimensions (millimetres)

Lighting Train can fit through Ceiling Cut-Outs of 60mm or above



| Cat No. | Mode | Lamp | Duration | Ballast Lumen Factor |
|-------------|---|------------|----------|----------------------|
| RL5012/6/M3 | Maintained (with integral mains driver) | 1.5/6W 12V | 3 Hours | 3 and 6W 100% |

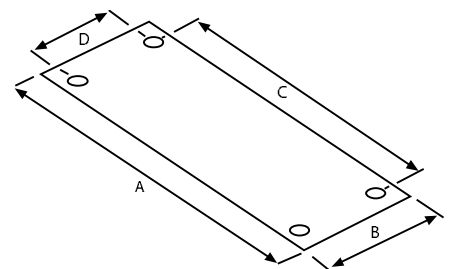
Emergency lighting pcb's to operate 12 volt tungsten halogen lamps in the event of a power failure

The 6V and 12V DC charger circuits incorporated into our tungsten lead acid remote boxes are also available as separate printed circuit boards to give users full flexibility with their choice of housings, batteries and maintaining components. The facility of a 10A terminal block on each PCB offers a greater degree of flexibility for installation within a remote box/ twinspace/luminaire.

Dimensions (mm)

| Cat No. | Voltage | Battery Type | Mode | Lamp Range | No. of Outlets |
|---------|---------|--------------|----------------|------------|----------------|
| CB112 | 12V | VRLA | Maintained or | 10-100W | 2 |
| CB106 | 6V | 25Ah max | Non Maintained | | |
| | A | B | C | D | Height |
| | 147 | 68 | 135 | 50 | 45 |

6V & 12V dc Charger PCB



For emergency options for 11W CFL and GU10 see our Mini-Sine on page 88

NEW High Power LED Conversion Kits



High Power LED Conversion Kits

The Orbik LED emergency conversion unit is compatible with most LED mains drivers and can be configured to operate a single LED or a series LED array of up to a maximum of 10 LED's. This conversion unit is compliant with EN61347-2-13 and will operate a range of LED's over the power range of 3W to 22W and the microprocessor controlled high-efficiency mains monitoring and variable rate switched mode power supply ensure optimum battery performance with minimum power consumption.

An innovative automatic power output sensing circuit monitors the voltage and current demand and will detect and protect itself against over-current demands caused by someone connecting the wrong load to the output terminals and a self-test option is also available to carry out periodic testing in accordance with EN50172.

| Module Number | Battery Cells | LED | BLF % |
|---------------|---------------|------------------------|-------|
| LCM3350 | 5 x 4 Ah | Single LED, 1.0 Watt | 100% |
| | | 7 x 1W LED's in series | 100% |
| | | 1 x 10W LED cluster | 60% |
| | | 1 x 22W LED cluster | 30% |

The LCM3350 LED conversion module delivers a current limited 350mA to the connected device and is suitable for use with a single LED or cluster LED's that can operate from less than the 30V DC limit imposed by EN61347-2-13

Dimensions: 203mm x 42mm x 28mm
Fixing centres: 193mm
Weight: 0.3Kg

Change-over and Sub-circuit Monitor Relay - DRM415AC



The DRM415AC relay module is an enclosed change-over relay for use with static inverter operated emergency lighting systems and is rated at 1250VA.

The DRM415AC can be used with either maintained or non-maintained luminaires, powered from a static inverter and provides local sub-circuit monitoring to comply with the European Standard for centrally supplied emergency systems, EN50171.

For non-maintained operation, the static inverter supply is connected to the DRM415AC together with the local lighting circuits un-switched supply. Upon loss of the local supply, the relay changes over and the luminaire is operated by the output from the static inverter.

For maintained operation, the switched supply is also connected to the DRM415AC. This allows the luminaire to be switched on and off as though it were a normal mains luminaire. In the event of the local un-switched supply failing the luminaire is operated from the static inverter supply, regardless of whether the luminaire was being operated from the normal mains supply at the time.

A number of different options based upon the DRM415AC are available:

- DRM415AC:** Static inverter changeover relay rated at 1250VA
- DRM415AC/NR:** As above, with neon indicator showing that the static inverter supply is present and healthy
- DRM415AC/RB:** Static inverter change over relay housed within a sheet metal box for remote mounting
- DRM415AC/RB/NR:** As above except with neon indicator showing that the static inverter supply is present and healthy
- DRM415AC/ADD:** Addressable remote box incorporating OEL305

All of the above products can be factory fitted within "free-issued" luminaires, please contact our sales office for information.

Dimensions: 203mm x 42mm x 28mm
Fixing centres: 193mm
Weight: 0.3Kg