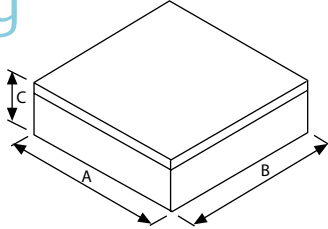


# Low Voltage Emergency Lighting



## 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	1 Hour	Duration			Dimensions (Size in mm)			Fixing Centres	Kg
			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	1 Hour	Duration			Dimensions (Size in mm)			Fixing Centres	Kg
			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	
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	

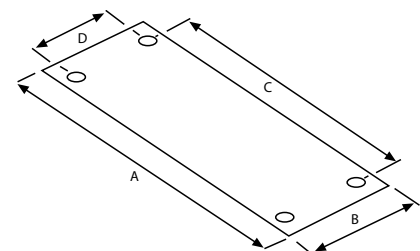
# 6V & 12V dc Charger PCB

## 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

Cat No.	Voltage	Battery Type	Mode	Lamp Range	No. of Outlets
CB112	12V	VP Lead Acid	Maintained or Non Maintained	10-100W	2
CB106	6V				
Dimensions in mm					
	A	B	C	D	Height
	147	68	135	50	45



### A new train with each element housed in a separate galvanised metal box

To compliment our low voltage emergency lighting product range, we have introduced a new product in the form of a train where each element is housed in a separate galvanised metal box. This will operate lamps up to 50W at 6 Volts in emergency mode, giving a ballast lumen factor of 10% for a 50W and 6% for a 20W lamp. The compact size allows it to fit through a 85mm cut-out and the standard non-maintained (or maintained via an external transformer) is in two sections. If required we can supply a maintaining transformer in a third box. All units provide 3-hour duration in the emergency mode from the valve regulated lead acid batteries.

## VRLA Low Voltage Lighting Train



#### Catalogue Numbers

Maintained: R959/50/M3,  
Non-Maintained: R959/50/NM3  
For shorter durations, specify the required time period e.g. /NM3 for 1 hour duration becomes /NM1

#### Dimensions (millimetres)

Charger and LV transformer enclosure:  
Length 230mm x Width 74mm x Height 60mm  
Valve regulated lead acid battery enclosure:  
Length 350mm x Width 74mm x Height 60mm

### Nickel Cadmium Emergency Conversion Kits for 12 Volt Lamps up to 50W 3 hours:

Our 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 lighting train is available in Non-Maintained mode, where the lamp is only illuminated when the power fails and also Maintained mode, which is supplied with an integral transformer 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 Cadmium battery cells and a silicone coated woven glass fibre sleeving ensuring the product is manufactured to BS/EN60924. The lighting train also allows dimming of the Halogen lamps if required.

## NICAD Low Voltage Lighting Train



#### Dimensions (millimetres)

Overall Length 800mm  
Lighting Train can fit through Ceiling Cut-Outs of 60mm or above

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%

## LED Combi Module LCP31051/3



**We have introduced a range of products designed to exploit the significant advantages that the new generation of high power white light emitting diodes (LEDs) offer.**

- Combined electronic parallel LED driver and emergency module, suitable for non-maintained and maintained 3-hour operation.
- Supplies into 6W of output power at 4 Volts D.C.
- Can be used for Nickel Cadmium or Nickel Metal Hydride cells in a variety of capacities dependant on the duration and load requirements.
- Easy selection of charge outputs.
- Load 3-hour battery
  - 1W 3 x 0.7Ah cells
  - 3W 3 x 1.5Ah cells
  - 5W 3 x 4Ah cells
- Maintained output can be switched via a separate input terminal
- Electronics are suitable for a wide operating temperature range of  $-40^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ . (not including batteries).
- Lightweight and compact size polycarbonate case provides designers with a large degree of flexibility. Dimensions: L130mm x W50mm x H30mm. Fixing centres 120mm.
- Short circuit and battery polarity protected.
- All designed to comply with EN55015 and relevant clauses of EN60924.

## LED Power Driver LPD8



- High output parallel LED driver supplying loads up to 8 Watts at 4 Volts a (limiting resistor should be included with the LED array).
- Suitable for 230V  $\pm 50\%$  50Hz (other supply voltages available to order).
- Housed in a polycarbonate case with dimensions of L130mm x W50mm x H30mm. Fixing centres at 120mm.
- Designed to comply with EN55015.

## 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.**