

**PLEASE READ THESE INSTRUCTIONS
BEFORE COMMENCING INSTALLATION &
LEAVE WITH END USER**

**Installation & Wiring Instructions for
VOL Module in SP98 Remote Enclosure**

Description:

The Voltacon VOL/3/SP98 emergency lighting unit is a remote pack designed to fit through a 98mm aperture to convert a wide range of LED types with two versions. The VOL/3 is the popular choice for converting most standard LED luminaires and arrays containing from 2 to 20 LEDs in series, whilst the VOL/3/80 extends the range by converting from 2 to 30 LED's in series.

The VOL range is designed to be installed by breaking into the low voltage connection between the mains LED Driver and the LEDs and allows the LEDs to be operated as normal under mains healthy conditions and operated at reduced light output in an emergency.

The VOL range automatically adjusts the output LED current to provide the best match between the battery and the load, providing maximum illumination whilst ensuring full battery duration. The VOL range is compatible with a wide range of lighting LEDs such as Philips Fortimo DLM, SLM and LLM ranges, Bridgelux LS/ES/RS ranges, Citizen 4-41W ranges, GE Infusion, Xicato and many others.

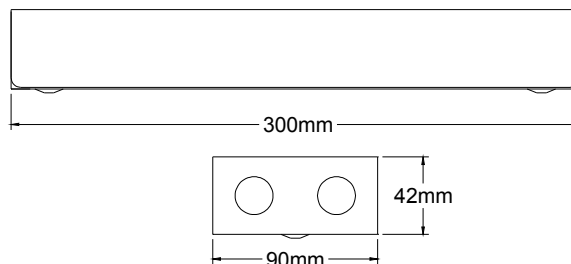
Specification

Supply Voltage	230-240 Volts AC 50/60 Hz	
Power Rating	22mA	$\lambda = 0.85$
Insulation between supply & battery	Double Reinforced	
Duration	3 hours	
Ambient Temp.	0°C to + 50°C	
Max Case Temperature *	70°C	
Max Battery Temperature	55°C	
Terminal Blocks	0.5-1.5mm ² Screw Terminal	
Battery Fuse	Internal	
Recharge Period	24 Hours	
Supply Fuse – Mains In	20 x 5mm 1A Quick Blow	
Supply Fuse – Mains Out	20 x 5mm 3.15A Quick Blow	
Battery Pack	3 x 4.5Ah D Cell Ni-Cd	
Charge Current	200mA ± 50mA	
Discharge Voltage Limit	2.5 Volts	
Enclosure (L x W x H)	300mm x 90mm x 42mm	
Weight	1.4 Kg	

*Geometric centre of side of case

VOL/3/SP98 From 2 to 20 LED's in series
3W to 80W that operate in
Voltage Range 6 – 55 Volts
O/C Voltage (U-OUT) = 70 Volts

VOL/3/80/SP98 From 2 to 30 LED's in series
3W to 80W that operate in
Voltage Range 6 – 80 Volts
O/C Voltage (U-OUT) = 90 Volts



Important

It is recommended that the unit is installed by a competent person ensuring the installation complies with the necessary standards. VOLTACON accept no responsibility for injury, damage or loss, which may arise as a result of incorrect installation, operation or maintenance.

The conversion requires an unswitched supply for charging the battery and a switched supply for a maintained conversion.

ISOLATE BOTH MAINS SUPPLIES AND DISCONNECT THE BATTERY BEFORE INSTALLATION OR MAINTENANCE. High voltage could be present at the output terminals if the battery is not isolated.

Conversion

When converting a luminaire using a remote conversion pack, observe the following points:-

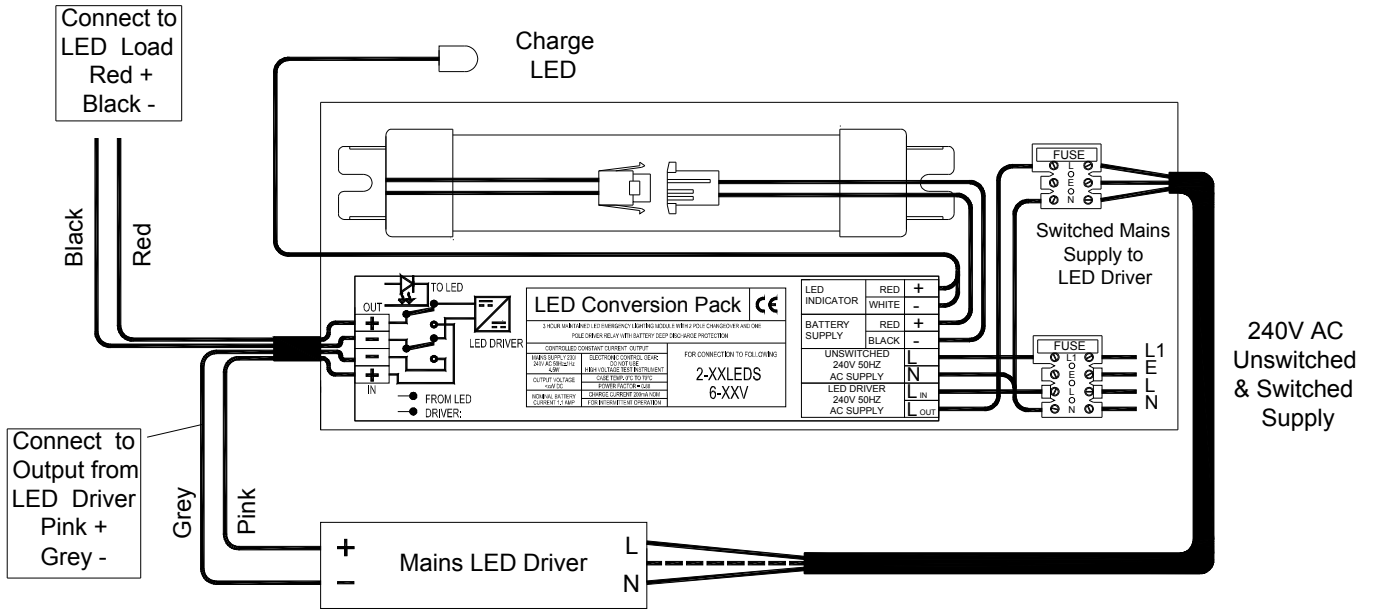
1. Install the remote pack such that they will operate within their temperature ratings.
2. Keep the interconnecting loom as short as possible.
3. Connect the labelled leads as per wiring diagram on Pg. 2.
4. Arrange the wiring to avoid running the 240 Volt cables next to the modules output to the LED(S) to obtain the best EMC results.
5. Requirements for 'F' markings must be observed.
6. Connect the Switched & Unswitched supplies to the Terminal Block in the SP98 enclosure.
7. Identify clearly the NEW Un-switched supply.
8. Ensure the LED Charge Indicator is clearly visible.

Warning

Avoid running the LED mains driver and Emergency Pack without the load connected. Failure to do so may result in damage to the LED array

Typical Remote Conversion Wiring Diagram

LED PANEL (SQUARE/ROUND)



Testing/Commissioning

- Ensure the Load is connected.
- Connect the battery.
- Switch on the Unswitched Supply - Check the Charge LED illuminates.
- Switch on the Maintained Supply - Check the LED illuminates as normal.
- Switch off the Maintained Supply.
- Switch off the Unswitched Supply - Check the Charge LED extinguishes and the load LED illuminates at a reduced output.
- Enter the commissioning date on the Battery Pack. Switch on the Unswitched Supply

Luminaire Ref/Location		In Case of difficulty, contact the Installation Engineers:- Tel: _____									
Full Recharge Time 24 Hours			Duration 3 Hours			Lamp Type - LED					
ROUTINE TEST RECORD											
Monthly Test	Year 1		Year 2		Year 3		Year 4		Year 5		
	Signed	Date	Signed	Date	Signed	Date	Signed	Date	Signed	Date	
Functional											
Functional											
Functional											
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Functional											
Three Hour											