

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

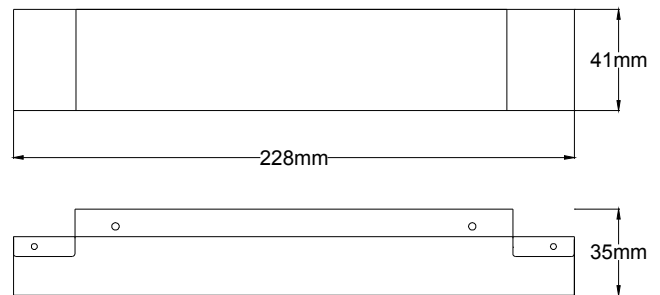
**Installation & Wiring Instructions for  
ELV/12M/TP57 Emergency Power Pack**

**Description:**

The ELV/12M/TP57 is an Emergency Power Pack designed for either 12V constant voltage LED's or low voltage tungsten halogen lamps for use in either maintained or non-maintained mode. The packs can be used to convert low voltage downlighters or similar, to provide maintained emergency lighting by utilising its existing lighting transformer. The units use a 12 Volt battery, which will give 100% ballast lumen factor in emergency mode with a maximum load of 12 Watts, using a NiCd (Nickel Cadmium) battery pack

**Specification**

Input Voltage	230-240 Volts AC 50/60 Hz
Input Current & PF	Non-Maint. 38mA - $\lambda = 0.84$
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
Connections	Ferruled Ends
Battery Fuse	Internal
Battery Discharge Current	1000mA
Discharge Voltage Limit	10.2V
Maximum Load	12 Watts
Ingress Protection	IP20
Battery Pack	12.0V 4.0Ah D Cell Ni-Cd
Charge Current	200mA Nom
Recharge Period	24 Hours
Module Size (L x W x H)	228mm x 41mm x 35mm
Battery Pack (L x D)	Φ 35mm x 850mm
Battery Weight	2.0Kg



**Important**

It is recommended that the module is installed by a competent person ensuring the installation complies with the necessary standards. Liteplan 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 if the unit is being used for maintained operation.

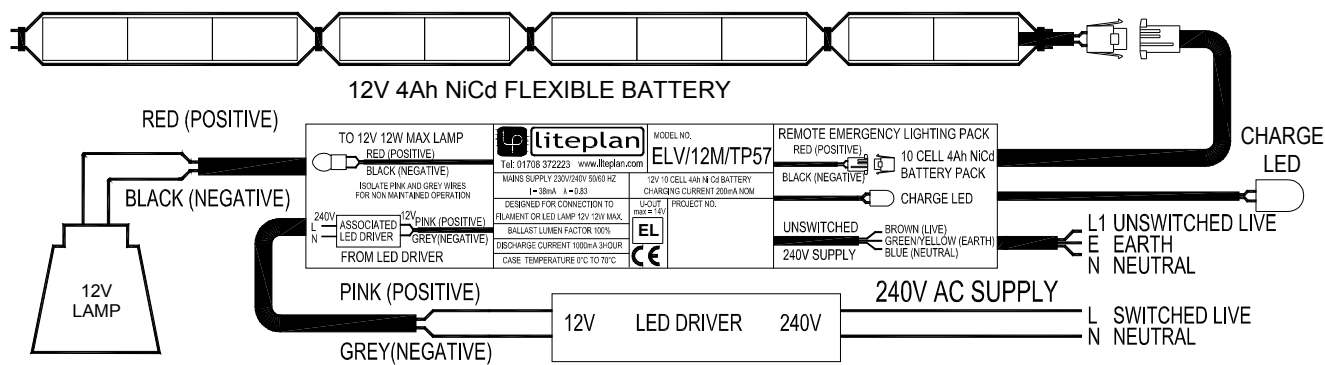
**ISOLATE BOTH MAINS SUPPLIES AND DISCONNECT THE BATTERY BEFORE INSTALLATION OR MAINTENANCE.**

**Installation**

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

1. Install the remote pack and battery such that they will operate within their temperature ratings.
2. Keep the interconnecting loom between the lamp and driver (via the emergency Power Pack) as short as possible. Refer to mains gear specification.
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 Power Packs 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 their relevant supplies.
7. Identify clearly the NEW Un-switched supply.
8. Ensure the LED Charge Indicator is clearly visible.

## Typical Conversion Wiring Diagram



## Maximum Cable Run (Metres) – Emergency Operation Only

### CABLE SIZE (mm<sup>2</sup>) - VOLTS DROP (mV/A/m)

Lamp Wattage	1.0 mm <sup>2</sup> 44 mV/A/m	1.5 mm <sup>2</sup> 29 mV/A/m	2.5 mm <sup>2</sup> 18 mV/A/m	4.0 mm <sup>2</sup> 11 mV/A/m	6.0 mm <sup>2</sup> 7.3 mV/A/m
12 W	10.9 m	16.5 m	25.8 m	43.5 m	65.6 m

## 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 (if connected) - Check the LED illuminates as normal.
- Switch off the Maintained Supply (if connected).
- Switch off the Unswitched Supply - Check the Charge LED extinguishes and the load illuminates.
- Enter the commissioning date on the Battery Pack.
- Switch on the Unswitched Supply.

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