

Installation & Wiring Instructions for NED Module

Description:

The Lite-Plan NED emergency lighting module is designed to convert a wide range of LED types with two versions. The NED/3 is the popular choice for converting most standard LED luminaires and arrays containing from 2 to 20 LEDs in series, whilst the NED/3/80 extends the range by converting from 2 to 30 LED's in series.

The NED 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 NED 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 NED 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	220-240 Volts AC 50/60 Hz
Power Rating	4.7 Watts
Power Factor	0.9
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
Supply Fuse	Not fitted
Battery Pack	3 x 4.5Ah D Cell Ni-Cd
Charge Current	200mA
Recharge Period	24 Hours
Module Size (L x W x H)	165mm x 45mm x 29mm
Module Fixing Centers	155mm

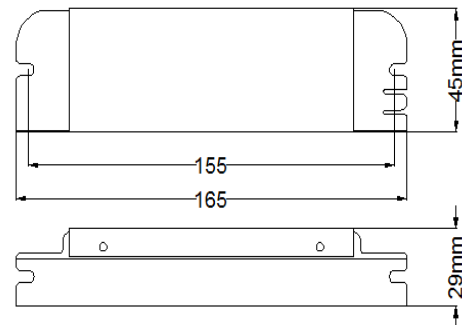
Battery Details (mm)

Type T1 – Single Stick	221 x 37 x 37	FC 145mm
Type T2 - Side by Side on Plate	100 x 60 x 35	FC 32x40mm
Overall Weight	0.75 Kg	

*Geometric centre of side of case.

NED/3	LED Voltage Range	6 – 55 Volts
	No. of LEDs in series	2 -20

NED/3/80	LED Voltage Range	6 – 80 Volts
	No. of LEDs in series	2 -30



Important

It is recommended that the module is installed by a competent person ensuring the installation complies with the necessary standards. Lite-Plan 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.

THIS MODULE MUST BE EARTHED VIA CAN

Conversion

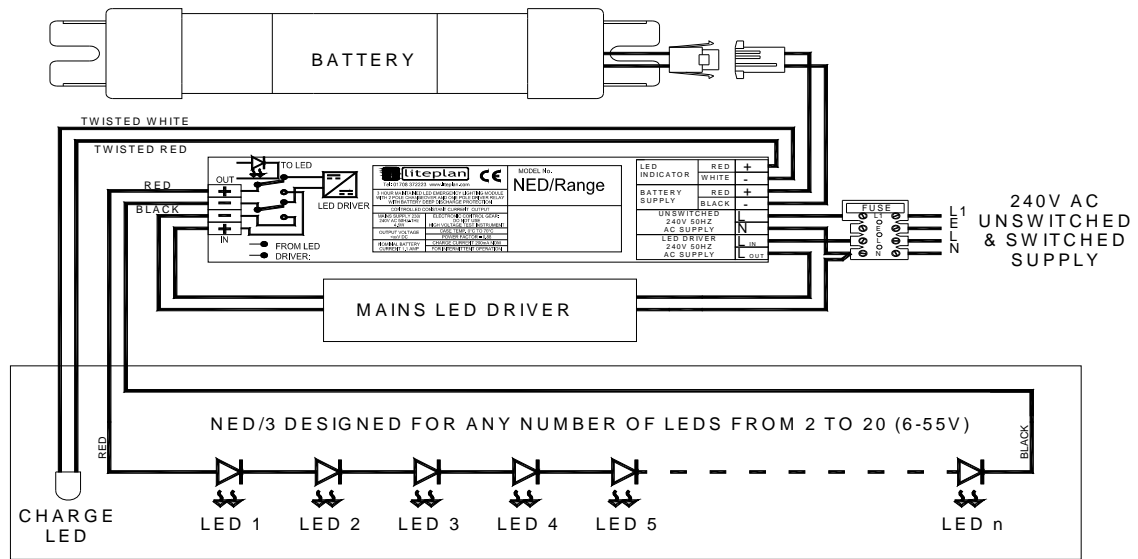
When converting a luminaire observe the following points:-

1. Fit the module & battery pack into the existing luminaire ensuring that they will operate within their temperature ratings.
2. If the module & battery pack do not fit integrally, then a remote conversion can be used. Ensure that the interconnecting loom is kept as short as possible.
3. Wire the module & battery into the luminaire as per wiring diagram on Pg. 2.
4. Ensure that the Switched Live feed is connected to Lin terminal on the module and the Live feed to the LED Mains driver is fed from the Lout terminal.
5. 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.
6. Requirements for 'F' markings must be observed.
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 Conversion Wiring Diagram



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										
	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										
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Functional										
Functional										
Functional										
Functional										
Three Hour										