

# Installation & Wiring Instructions

## NLP/1/TP40 Remote Conversion Kit

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

### Description:

The Liteplan range of NLP/1 modules are designed to convert a wide range of LED types with two versions. The NLP/1 is the popular choice for converting most standard LED luminaires and arrays containing from 2 to 20 LEDs in series, whilst the NLP/1/80 extends the range by converting from 2 to 30 LED's in series.

The modules are 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 modules 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 and are compatible with a wide range of lighting.

The unit will recharge the batteries after the test of clause 22.3 of BS EN 61347-2-7:2012.

The battery is fitted with a PCM to protect the supply voltage against reverse polarity.

### Specification:

Input Voltage	230-240 Volts AC 50/60 Hz
Input Current & PF	3.2W - 35mA - $\lambda = 0.40$
Insulation between supply & battery	Double Reinforced
Duration	3 hours
Ambient Temp. Ta	0°C to + 50°C
Max Case Temp. Tc	70°C
Max Battery Temperature	55°C
Recharge Period	24 Hours
Battery Type	3.2V 3.8Ah LiFePO4
Charge Current	Dual Rate 0-250mA
Discharge Current	900mA nominal
Charge Voltage Limit	4.0 Volts
Discharge Voltage Limit	2.4 Volts
Ingress Protection	IP20
Recharge Period	24 Hours
Module Size (L x W x H)	231mm x 33.6mm x 22.5mm
Module Fixing Centers	224mm
Module Weight	0.21Kg

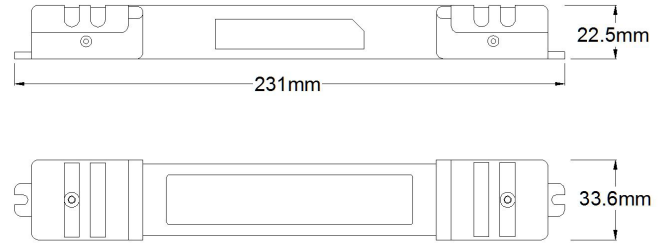
#### Battery Details (mm)

Stick 90mm x 28mm diameter FC = 80mm

Remote 94mm x 34.5mm Diameter

Battery Weight	0.13Kg
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Cut-out (mm)	40	45	50	53	56	60	65	70	75
Void (mm)	180	150	140	135	130	100	85	80	65



#### Fixing Centres 224mm

#### NLP/1/TP40

Rated - 3W to 80W  
 Irated - 320-35mA  
 Voltage Range 6 - 55 Volts  
 Open Circuit Voltage (U-OUT) = 60 Volts

#### NLP/1/80/TP40

Rated - 3W to 80W  
 Irated - 320-24mA  
 Voltage Range 6 - 80 Volts  
 Open Circuit Voltage (U-OUT) = 90 Volts

#### 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**

#### 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 observe the following points:-

1. Ensure that the module and battery pack will operate within their temperature ratings at their chosen location.
2. Ensure that the interconnecting loom is kept as short as possible.
3. Ensure that the Permanent Live & Switched Live feeds are connected correctly.
4. Arrange the wiring to avoid running the 240 Volt cables next to the modules output to the LED to obtain the best EMC results.
5. Requirements for 'F' markings must be observed.
6. Identify clearly the NEW Un-switched supply.
7. Ensure the LED Charge Indicator is clearly visible in every day use.
8. If fitted within a metal enclosure, connect earth terminal to metal gear tray for improved EMC.
9. This module is not intended for use in luminaires for high-risk task area lighting.
10. This module is protected against battery polarity reversal.

