MR. RESISTOR®
Lighting Specialist Est. 1968

PLEASE READ BEFORE USE

Installation & Wiring Guide for TED4 Em Pack

Description

The Mr Resistor TED4 emergency lighting unit is a remote pack designed to fit through a 60mm aperture to convert a wide range of high voltage LED types. The TED/4 will convert any LED panels in the range of 50-240V DC and is suitable for use with some mains rated LED lamps. e.g. T8 LED tubes and GU10 types. The TED4 will run these lamps at DC in emergency so the lamp must be suitable for low power DC operation. Please check with Mr Resistor that the mains rated lamp chosen is suitable for conversion with the TED4 type emergency pack.

The TED4 is designed to be installed either by breaking into the constant current connection between the mains LED driver and the LEDs or breaking into the 240V supply to a suitable mains rated lamp. The TED4 allows the LEDs to be operated as normal under mains healthy conditions and operated at reduced light output in an emergency.

The TED4 automatically adjusts the output LED voltage and current to provide the best match between the battery and the load, providing maximum illumination whilst ensuring full battery duration.

Specification

Supply Voltage	220-240 Volts AC 50/60 Hz
Power Rating	5 Watts
Power Factor	0.9
Duration	3 Hours
Ambient Temp	0°C to + 50°C
Max Battery Temp	55°C
LED Voltage Range	20-250V
LED Voltage Limit	300V
Supply Fuse	20 x 5mm 1A Quick Blow
Battery Pack	4 x 4Ah D Cell Ni-Cad
Charge Current	200mA
Recharge Period	24 Hours

Remote Enclosures

RBA/TED4 - Enclosure	315mm x 120mm x 40mm
SP/TED4 – Flexi Bag	50mm x 50mm x 560mm
Aperture (SP/TED4)	60mm
Weight	1.1 Kgs

TED4/240 For use with Mains Rated Lamps

TED4/RD For use with LED Drivers

Important

It is recommended that the module is installed by a competent person ensuring the installation complies with the necessary standards. Mr Resistor accepts 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 'Switched' supply for maintained conversion.

ISOLATE BOTH MAINS SUPPLIES AND DISCONNECT THE BATTERY BEFORE INSTALLTION 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:

- Install the remote pack such that they will operate within their temperature ratings.
- Keep interconnecting cables as short as possible
- Connect the labelled leads as per wiring diagram on page 2.
- Arrange the wiring to avoid running 240 Volts cables next to the modules output to the LED(s) in order to obtain the best EMC results.
- Requirements for 'F' markings must be observed.
- Connect the 'Switched' & 'Unswitched' supplies to the terminal block in the RBA/TED4 enclosure.
- Identify clearly the NEW 'Unswitched' supply.
- 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.

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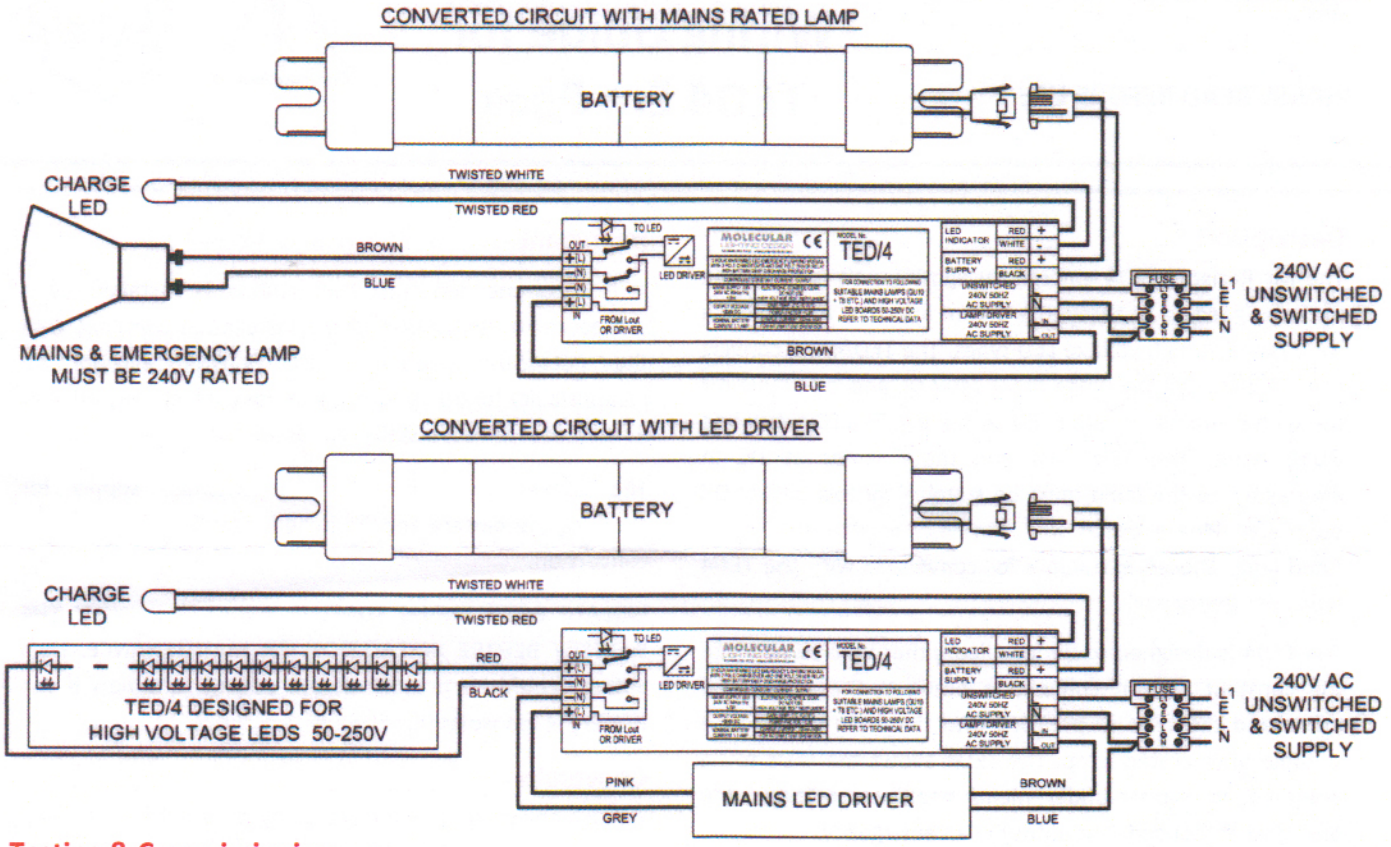
Typical Remote Conversion Wiring Diagram



Testing & Commissioning

- Ensure the Load is connected
- Connect the battery
- Switch on 'Unswitched Supply' and check the Charge LED illuminates
- Switch on the Maintained Supply and Check the LED illuminates
- 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										
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Functional										
Three Hour										

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