


INSTRUCTION SHEET
for: **2422LED / 2VA 959 030-421**



ADR - APPLICATION AND
MOUNTING INSTRUCTIONS

Jumbo LED Double Multivolt (9-33 VOLT) Module Assembly
STOP / REAR POSITION / REAR DIRECTION INDICATOR LAMP

The LED modules are designed to operate on input voltages from 9 - 33 volts.

Lens Marking and ADR 13/00 Installation Requirements

This lamp assembly, identified with lens markings HNZ 9030, was manufactured to comply with
ADR 49/00 Rear position (Side) / Stop Lamps
ADR 6/00 Cat 2a Rear Direction Indicator Lamp
ADR 47/00 Reflex Reflector

A tolerance of +/-3° applies on all mounting details.

Lamp modules mounting plane must be vertical to the ground

Lamp modules reference axis must be parallel to the vehicle longitudinal axis

Lamp modules centre line must be horizontal to the ground (Please note the "TOP" engraving on the inner surface of the lens)

Lamp module must be visible from 45° inboard and 80° outboard, as well as from 15° above and below the horizontal axis

Lamp module should be mounted with reflex reflector closest to the outboard edge of the vehicle

Please refer to ADR 13/00 for more details.


lamp mounting plane

centre line

LENS IDENTIFICATION NUMBERS:

HNZ 9030 Red Lens 2317

HNZ 9030 Amber Lens 2138

CATALOGUE NUMBER	ENGINEERING NUMBER	CRN NUMBER	COMPLIANCE NUMBER	ADR 51/00 GLOBE	ADRs APPLICABLE
2317 2138	2TA 959 030-00 2BR 959 031-15	22948 / 42577 / 42579 22948 / 42578 / 42582 22948 / 44203 / 44204 22948 / 44205 / 44209	8-2317-H-17 8-2317-V-17 RD2138H12V(24V) RD2138V12V(24V)	N/A LED	ADR 49/00 ADR 47/00 ADR 6/00 Cat 2a ADR 47/00
AMENDMENTS			<div>ADR COMPLIANCE VERIFIED</div> <div></div>	ISSUE DATE: 04/2007	
05/2010	07/2010	05/2012			
				959 150-38	

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Lamp Module Mounting Instructions

Surface Mounting

- Lamp should be mounted on a flat surface and as close as possible to the outer extremities of the vehicle. Refer to the front page for mounting restrictions.
- Determine a suitable location for the lamp and drill two holes at 8.5mm diameter or larger at 300mm centres.
- Drill one hole for the cable if required up to 8mm diameter and use a grommet if there are sharp edges around the hole.
- Ensure, if water can collect at the back of the lamp, there are sufficient exits for the water to drain.

Wiring Procedure:

- Disconnect the earth cable from vehicle battery before attempting any electrical work or connections. Failure to do so could result in damage to vehicle and/or an electrical fire.
- Try to keep the cables as long as possible, preferably join the cable inside a sealed cable junction box.
- Connect lamp as per chart below and Hella recommends wire connections be soldered, and heat shrink tubing applied to seal the joint. Power to the lamp functions should be protected by a fuse not rated higher than 5 amps
- Thoroughly check all connections and wiring, only then reconnect the earth cable to battery and test the new installation.

Please note: The LED modules in this assembly contain a patented hydrophobic breathing system to equalise air pressure inside the lamp. The module is sealed against moisture and dust but not designed for prolonged submersion.

Wiring Colour Coding

Note: Lamp is polarity conscious. The reversal of the polarity will not damage this product but will inhibit its function.

Colour	Connect to	Power Consumption
White	Earth (-)	-
Blue	Indicator (+)	6 watts
Red	Stop (+)	6 watts
Brown	Tail (+)	1 watt

Important Notes for the Installer and Vehicle Owner



Introduction

Multivolt LED signal and marker lamps offer many advantages over conventional bulb lamps. Significantly reduced power consumption, ultra long life and high tolerance to shock and vibration make the LED lamps the ideal choice for the commercial transport industry, where the cost of ownership versus the initial purchase price of the product is well understood.

Compatibility to existing electrical systems

It is important for the installer to ascertain the compatibility of the low power consumption LED lamps with the electrical and/or electronic systems of the complete vehicle, including trailers. In most cases the reduced power consumption is beneficial by imposing less demands on the entire electrical system.

For certain functions some electrical systems rely on a set power consumption for monitoring whether, for example, a trailer is connected.

Operation of this lamp using alternating current or modulated direct voltage will cause premature light failure. HELLA recommends connecting ADR or ECE certified Multivolt LED signal and marker lamps to a continuous (unmodulated) 12V or 24V power supply to ensure safe light operation.

Electromagnetic Compatibility (EMC)

Multivolt LED lamps are electronic devices. The electrical circuits contain components that suppress possible interference, both emission as well as susceptibility, to the technical requirements for the application of the Regulatory Compliance Mark (RCM).

To avoid false signals or interference, it is recommended practice that the installer always ascertains that a good earth is provided to potentially sensitive equipment such as the ECU's of the ABS, TCS, or Tachographs etc. If this cannot be assured, a direct earth path should be provided.

Protection against damage due to voltage spikes

The lamp is protected against reverse polarity connection and negative voltage spikes of up to 1000 volts.

FIT AND FORGET - BY DESIGN



Congratulations, the product you have selected comes from **HELLA** - a world leader in LED lighting design.

Following the launch of the first LED automotive signal lamps in 1990, **HELLA** Design and Innovation continues to set new standards. **HELLA** innovative solutions have been incorporated into millions of lamps, engineered and tested to the most stringent standards, to suit the most demanding environmental conditions.

The cornerstone to the success of our products is our no compromise **Fit and Forget - by Design** philosophy which is incorporated into every step of the product life cycle.

In a world consuming finite resources at an ever faster rate, **Fit and Forget - by Design** is the right environmental choice that also makes perfect economic sense to customers that consider the total life cycle Cost of Ownership.

For general comments about Hella's products please contact us on E-mail at techfeedback@hella.co.nz