# **Important Notes for Installer and Vehicle Owner**



#### Introduction

This Multivolt LED lamp offers many advantages over conventional bulb lamps. Significantly reduced power consumption, ultra long life and high tolerance to shock and vibration make 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.

### **Daytime Running Lamps**

Daytime running lamps are not a substitute for dipped beam headlights at dusk or in the dark. It is important for the installer to check that the daytime running lamps illuminate only when the vehicle lighting is switched off.

#### 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. In most cases the small additional power consumption of the daytime running lamp will not impose significant demands to the electrical system of the vehicle.

### Electromagnetic Compatibility (EMC)

This LED lamp in an electronic device. 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 standard practice that sensitive instrumentation such as ABS and Tachometers etc. are provided with direct earths.

#### Protection against damage due to voltage spikes

This LED lamp is protected against damage from positive voltage spikes caused by events such as load dump conditions up to severity level 3 of ISO 7637-2.

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

#### **Electric Welding**

Electric Welding may damage the LED lamps. For LED lamps, HELLA recommends the negative connection to be wired isolated from the vehicle chassis. If the lamp uses the chassis as the earth return it is recommended that this earth return is disconnected during electric welding.

## 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 HELLAs products please contact us on E-mail at techfeedback@hella.co.nz

# **ADR - APPLICATION AND** MOUNTING INSTRUCTIONS

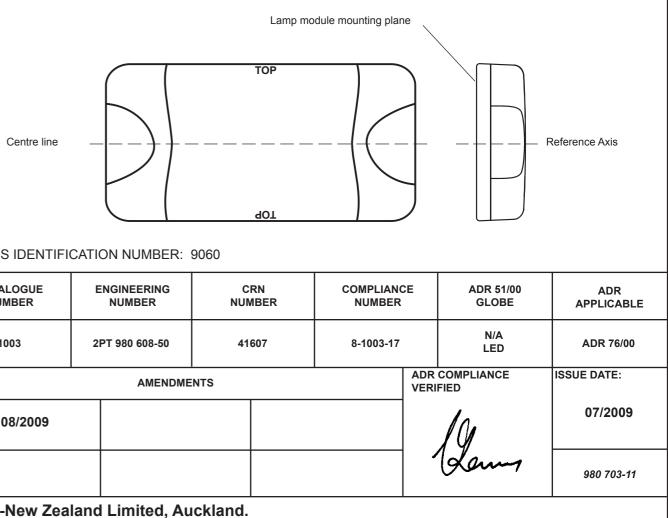
DuraLED<sup>®</sup> LED DAYTIME RUNNING LAMP Multivolt 9 - 33 volts

## Lens Marking and ADR 13/00 Installation Requirements

This lamp module, identified by lens marking 9060, with clear lens was manufactured to comply with ADR 76/00 Daytime Running Lamp.

- A tolerance of +/-3° applies on all mounting details.
- Lamp module mounting plane must be vertical to the ground and facing forward.
- Lamp module reference axis must be parallel to the vehicle longitudinal axis.
- Lamp module centre line must be horizontal (Please note the "TOP" engravings on the outer surface of the lens).
- Lamp module must be visible from 20° inboard and outboard, as well as from 10° above and below the horizontal axis.
- Two lamp modules are required.
- Lamps modules must not be mounted less than 250 mm and more than 1500 mm above the ground.
- Lamp modules must be mounted within 400 mm of the widest point of the vehicle and no closer than 600 mm together.

Notes: Please refer to ADR 13/00 for more details.



#### LENS IDENTIFICATION NUMBER: 9060

CATALOGUE NUMBER	E	NGINEERING NUMBER	-	RN IBER			
1003	2	PT 980 608-50	41	607			
AMENDMENTS							
08/2009							
HELA-New Zealand Limited, Auckland.							

# INSTRUCTION SHEET for: 2PT 980 608-50x / 1003





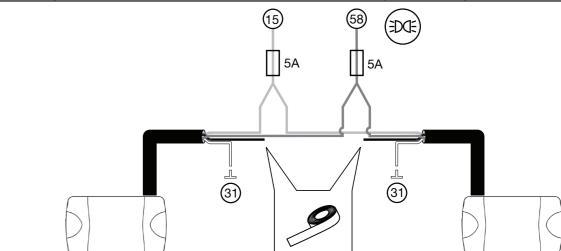


# INSTRUCTION SHEET for: 2PT 980 608-50x / 1003

## Wiring Instructions for Vehicles with Positive Signal Control

This LED lamp will illuminate with the supply voltage (+) applied to the RED wire. The lamp will extinguish when power (+) is applied to the BROWN cable when the vehicle's lighting is switched ON. Isolate the the BLUE wire, it should not be connected.

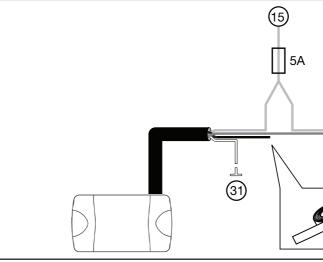
Connect to	Function	Power Consumption
Terminal (31): Earth (-)	-	-
Terminal (15): Ignition (+)	DRL ON	Less than 3 watts
Either, Terminal 58: Front Position Lamp (+) Or, Terminal 56: Headlamp - Dipped Beam (+)	DRL OFF	-
N/A	-	-
	Terminal (31): Earth (-) Terminal (15): Ignition (+) Either, Terminal (58): Front Position Lamp (+) Or, Terminal (56): Headlamp - Dipped Beam (+)	Terminal (31): Earth (-) -   Terminal (15): Ignition (+) DRL ON   Either, Terminal (58): Front Position Lamp (+) DRL OFF   Or, Terminal (56): Headlamp - Dipped Beam (+) DRL OFF



## Wiring Instructions for Vehicles with Negative Signal Control

This LED lamp will illuminate with the supply voltage (+) applied to the RED wire. The lamp will extinguish when the BLUE cable is connected to negative when the vehicle's lighting is switched ON. Isolate the BROWN wire it should not be connected

Colour	Connect to	Function	Power Consumption			
White	Terminal (31): Earth (-)	-	-			
Red	Terminal (15): Ignition (+)	DRL ON	Less than 3 watts			
Brown	N/A	-	-			
Blue	Either, Terminal 58: Front Position Lamp (+) Or, Terminal 56: Headlamp - Dipped Beam (+)	DRL OFF	-			



Installation

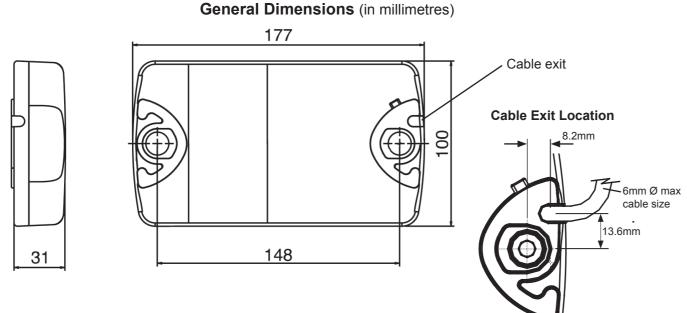
#### Screw Cap Removal

Carefully insert a small flat blade screwdriver between the cap and the lens and pull towards the lens, the cap will unclip.

To install the cap, push it in by hand until the top is flush with the lens.

### Surface Mounting

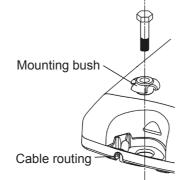
- Drill two holes up to 6.5 mm Ø at 148 mm centres.
- 6 mm Ø screws or bolts are recommended to mount the lamp using the mounting bushes provided.
- · Lamp should be mounted on a flat surface.
- If passing the cable through a hole, ensure there are no sharp edges to cut or chafe the cable.
- · Alternatively, the cable can be routed through the end of the base.
- · Connect cable as per instuctions below.
- Clip the screw caps on securely until flush with the lamp surface.



# **Electrical Connection**

This LED lamp has the capability to operate with the signal controls of both positive and negative switched vehicles. Most vehicles operate the lighting with positive signals, however some vehicles operate by switching negative to ground. Please determine which system is used on your vehicle and wiring accordingly as per the page opposite.

Note 1: Lamp must be protected by a fuse rated at 5 amperes maximum. Note 2: Lamp is polarity conscious. The reversal of the polarity will not damage this product but will inhibit its function.



Note: Bolts not included

