



**ADR - APPLICATION AND MOUNTING INSTRUCTIONS**

**DuraLED® Combi-R STOP / TAIL / INDICATOR LAMP with REFLECTOR Multivolt (Suitable for 12 and 24 volt systems)**

**Features Include:**

- DuraLED® Combi = Fully sealed and submersible
- DuraLED® Combi = Stop, Rear Position, Direction Indicator and Reflector functions in a single lamp
- DuraLED® Combi = Vibration and shock resistant
- DuraLED® Combi = Ultra long service life
- DuraLED® Combi = Ultra fast response time
- DuraLED® Combi = Lens made from advanced Grilamid® material with enhanced impact and chemical resistance
- DuraLED® Combi = Reverse polarity protected
- DuraLED® Combi = Low power consumption
- DuraLED® Combi = Enhanced transient spike protection

**Lens Marking and ADR 13/00 Installation Requirements**

This lamp identified by lens marking 0710 and the logo, was manufactured to comply with:

ADR 6/00 Category 2a Rear Direction Indicator Lamps

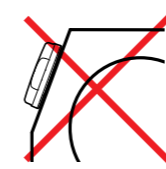
ADR 47/00 Retro Reflectors

ADR 49/00 Rear Position (Side) / Stop Lamps

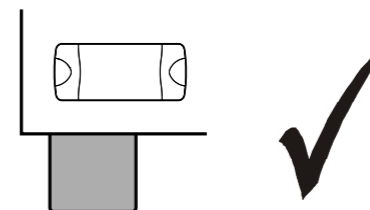
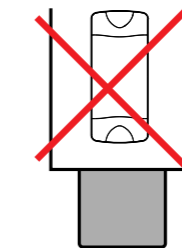
- A tolerance of +/-3° applies on all mounting details.
- Lamp mounting surface must be vertical to the ground, and at right angles to the longitudinal axis of the vehicle.
- Lamp must be visible from 45° inboard and 80° outboard, as well as from 15° above and below the horizontal axis.
- Lamp is approved to be mounted horizontally only.

Please refer to ADR 13/00 for more details.

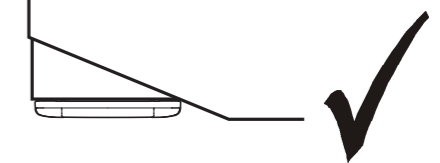
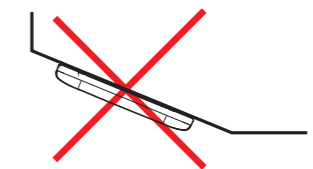
**Side View**



**Rear View**



**Top View**



LENS IDENTIFICATION NUMBER: 0710

| CATALOGUE NUMBER | ENGINEERING NUMBER | CRN NUMBER                      | COMPLIANCE NUMBER                                | ADR 51/00 GLOBE | ADR APPLICABLE                        |
|------------------|--------------------|---------------------------------|--|-----------------|---------------------------------------|
| 2377             | 980 710-00         | 45253<br>45255<br>45256 / 45254 | 2377*RDI*C<br>2377*RR*C<br>2377*ST*C / 2377*RP*C | N/A<br>LED      | ADR 6/00 2a<br>ADR 47/00<br>ADR 49/00 |
| AMENDMENTS       |                    |                                 | ADR COMPLIANCE VERIFIED<br><br>                  | ISSUE DATE:     |                                       |
| 05/2013          | 09/2013            | 04/2013                         |  |                 |                                       |
|                  |                    | 958 780-66                      |  |                 |                                       |

**HELLA-New Zealand Limited, Auckland**



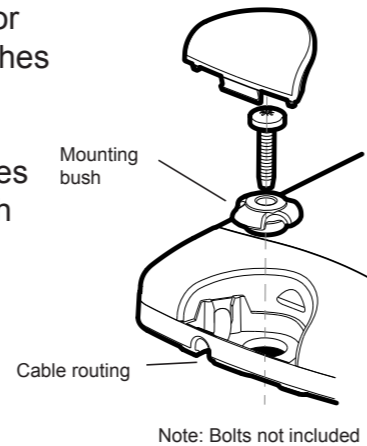
### Lamp Mounting Instruction

#### Screw Cap Removal

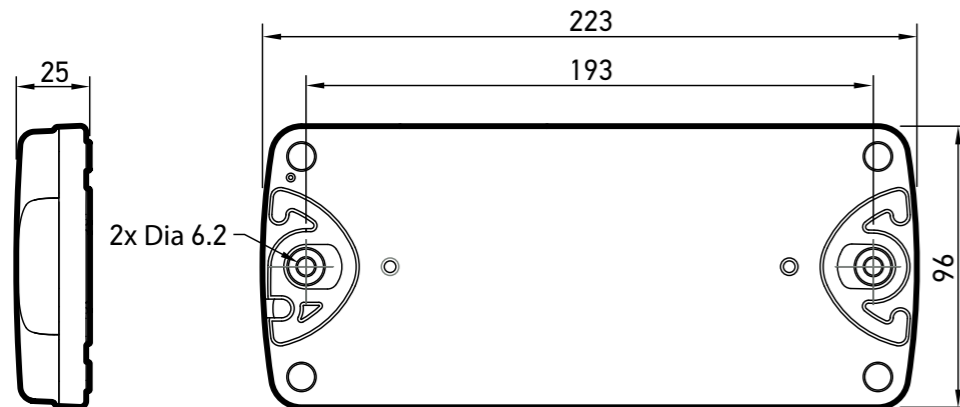
Carefully insert a small flat blade screwdriver between the cap and the lens and pull towards the lens, the cap will unclip. To install the cap push in by hand until the top is flush with the lens.

#### Surface Mounting

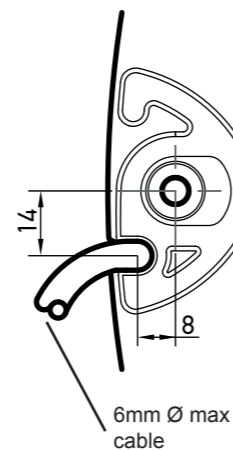
- Drill two holes up to 6.5mm Ø at 193mm centres. 6mm Ø screws or bolts are recommended to mount the lamp using the mounting bushes provided.
- Lamp should be mounted on a flat surface.
- If passing the cable through a hole, ensure there are no sharp edges to cut or chafe the cable. Alternatively, cable can be routed through the end of the base.
- Connect lamp as per chart below.
- Try to keep the cable as long as possible, preferably join the cable inside a sealed cable junction box.
- Clip the screw caps on securely until flush with the lamp surface.



#### General Dimensions (in millimetres)



#### Cable Exit Location



#### Wiring Colour Coding

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

HELLA recommends wire connections be soldered, and heat shrink tubing applied to seal the joint.

| Colour | Connect to        | Power Consumption |
|--------|-------------------|-------------------|
| White  | Earth (-)         | -                 |
| Red    | Stop (+)          | 4 watts           |
| Brown  | Rear Position (+) | 1 watt            |
| Blue   | Indicator (+)     | 4 watts           |

**NB:** Lamp must be protected by a fuse rated at 5 amperes maximum.

## Important Notes for 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 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)

This Multivolt LED lamp is 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 Multivolt LED lamp is protected against damage from positive voltage spikes caused by events such as load dump conditions specified in ISO 7637 and contains a Transient Voltage Suppressor (TVS) designed to withstand a pulse of up to 5000 Watts.

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.

### Warranty Statement

**Congratulations!** The product you have selected comes from HELLA - one of the world's leading manufacturers of lighting products. The product comes with a Lifetime Warranty covering faults in materials, components or workmanship.

In the unlikely event that you should experience a confirmed warranty related problem with your purchase, HELLA will, at its discretion, either repair or replace the product or refund the purchase price.

Warranty services may be obtained by returning the product within the warranty period to the HELLA Dealer where the product was originally purchased. This warranty is in addition to and does not preclude any other rights or remedies available to the consumer under any local legislation related to the provision of goods or services.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Lifetime means the economic life of the vehicle these products were first installed on.

This warranty does not cover:

- 1.) Claim/s as a result of normal wear and tear or of any modifications, alterations non-compliance of assembly, service and operating instructions and/or any unfit or improper use.
- 2.) Any expenses incurred in the process of making the claim.

Note: For lamps sold in Australia, warranty services are provided by HELLA Australia Pty. Ltd., 4 Hargrave Place, P.O. Box 89, Mentone, Victoria, 3194 Australia. Customer Service 1800 061 729 email: [custservice@hella.com](mailto:custservice@hella.com) [https://www.hella.com/hella-au/assets/media\\_global/IAM\\_Statement\\_of\\_Warranty.pdf](https://www.hella.com/hella-au/assets/media_global/IAM_Statement_of_Warranty.pdf)

For general comments about HELLA's products please contact us on E-mail at: [techfeedback@hella.co.nz](mailto:techfeedback@hella.co.nz)