

LV142

## **Product Release**





## LV93 SERIES **LED CONVERSION KITS**

#### In Detail

The LV Automotive LED conversion kits are fitted with the latest LED technology with each conversion kit fitted with genuine Philips Luxeon Z ES chips. Luxeon Z ES chips allow extreme optical output in a micro footprint that helps to ensure colour consistency and luminance output of 3,600 lumens (1,800 lumen per globe), while backed with a 30,000 hour LED operating life.

Available in 12/24V DC input, the LED conversion kits allow for a number of applications from small passenger cars to heavy duty vehicles. Furthermore, designed as a plug-n-play setup, the LED conversion kits ensure a simple and easy fitment from automotive industry specialist to DIY retail customer. Additionally, a LV Automotive LED conversion kit provide a 6,500 kelvin colour temperature, helping to improve driver awareness and can help to minimise fatigue during low light conditions.

An important factor for an extended LED lifespan is the thermal management to dissipate heat created during operation. The LV Automotive LED conversion kits are built with a slim line external driver to remove additional heat from the LED chip, improving the light performance of the LED. Further improving the heat dissipation is the copper heatsink and aviation 6063 aluminium alloy housing.



Light distribution match with original car headlight and Halogen bulb



Clear boundary improved safety without stray light, there is no glaring light for opposite driver

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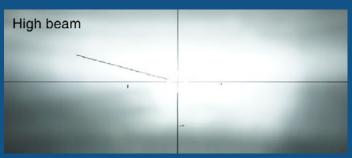
## **Product Release**

**Smaller size** diversified installation applicable for more vehicles



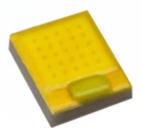






#### Features & Benefits

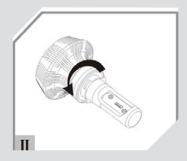
- · Philips Luxeon ZES Chip
- 12-24V voltage input
- 3600 lumens (1800 lumens per globe)
- Plug-n-play setup
- · Compact design for easy installation
- Patented flexible copper heat-sync/aviation aluminum 6063
- 360° adjustable beam angle
- Colour temperature: 6500K
- Operating life: >30,000 hours
- Operating temperature: -40°C to +80°C
- Dustproof
- · Driver IP65 rating
- · Non ADR Off road use only
- · 2 year warranty



Philips Luxeo ZES Chip

### Adjustable Chuck Angle





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# **Product Release**

### **Trouble Shooting Information**

Some modern vehicles are equipped with Controller Area Network vehicle bus (CAN bus), which is a series of specialised interconnected components that enable the communication of various microprocessors, vehicle sensors and the subsystems of the vehicles Engine Control Unit (ECU) without the need for a host computer. The benefit of such a system removes the requirement of a multi-cable loom, as the CAN bus system works through a single or dual wire connection that uses predefined time/event windows to communicate within the CAN bus network. Modern vehicles fitted with 70 ECUs can communicate up to 2500 signals in a CAN bus system.

A drawback of the CAN bus design is the lack of flexibility that can arise when fitting aftermarket components. When fitting aftermarket LED's which were originally incandescent or halogen globes, users may find the need for specially designed electronic cancellers that when fitted allow the aftermarket product to synchronise with the system during operation.

Due to the reduced load of LED's, the ECU that monitors this load may display a fault on the dash of the vehicle. This is the result of the load not matching the set load of the vehicles ECU, for example the pre-set load of a 55/60 watt halogen H4 globe will not match the load of a 25/25 watt LED. To correct the fault, a plug-N-play fault cancelling resistor will apply the load of a 55 watt halogen globe required by the ECU.

Some examples of faults that can occur include (but not limited to):

- One of two lights operating
- Fault code displayed on dash (may require resetting)
- Flicking lights









# Product Release

### **Product Range**

**LED Conversion Kits** 

LLD CONVERSION NICS					
Part No.	Base Type	<b>Bulb Style</b>	Pack Qty		
LV9300	H1	P14,5s	Twin		
LV9301	H3	PK22s	Twin		
LV9302	H4	P43t-38	Twin		
LV9303	H7	PV26d	Twin		
LV9304	H9	PGJ19-5	Twin		
LV9305	H10	PY20D	Twin		
LV9306	H11	PGJ19-2	Twin		
LV9307	HB3	P20D	Twin		
LV9308	HB4	P22D	Twin		
LV9309	HB5	PX29t	Twin		
LV9310	HIR2	PX20D	Twin		
LV9311	H15	PGJ23T-1	Twin		



### Companion Items

**Electronic CAN Bus Cancellers** 

Part No.	Voltage	Base	Pack Qty
LV9320	12V	H4	2
LV9321	12V	H7	2
LV9322	12V	H4	2
LV9324	12V	H8, H9, H11	2

#### **Resistor CAN Bus Cancellers**

Part No.	Voltage	Base	Pack Qty
LV9322	12V	H4	2
LV9323	12V	H7	2
LV9325	12V	H8, H9, H11	2

