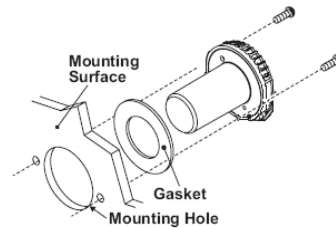


Installation Guide: Endurance LED Light Head

Installing the light head

The Endurance LED light head found in this kit can be mounted within head lights, tail lights, indicators and inside existing warning equipment. They are designed to utilise reflectors or Fresnel lenses built-in around the head for optimum effectiveness.

Drill a 25mm (1") diameter hole in the reflector of the lens assembly. A hole-saw is typically best suited for this purpose. The light head may be used as a template to mark the location of the holes needed for the screws provided to mount the light head. Using the PU foam gasket (red) provided mount the head as shown below. You should seal the gasket with silicone.



Connecting the light head cables

The light head should be wiring using the information below as a guide. The power wire should ideally be connected through a single pole switch (customer supplied). If you require access to the flash pattern change whilst in use with a vehicle then a momentary switch will need to be fitted (customer supplied).

Cable key

These keys are written for 12v as an example only. In the case of 24v products, simply adjust the voltage as required.

Wire colour	Function	Voltage	Fuse
Red	Power	+12v	3A
White	Head Select Cable	N/A	N/A
Yellow	Synchronisation & Flash Patterns	+12v	N/A
Black	Ground	-12v	N/A

Flash pattern selection

To advance to the next pattern, apply +12VDC to the yellow wire for less than 1 second. To reset the flash pattern back to the default pattern, apply +12VDC to the yellow wire quickly three times or apply for 5 seconds.


Synchronisation

To synchronise light heads, configure the heads to the same flash pattern and connect the yellow wire from each light head to the others. To enable the light heads to alternately flash, connect the red and white wires from the Group 1 light head together whilst leaving the white completely disconnected on the other. Repeat the process for other light heads within the same group. Once you have done this you can cut the spare white wire from the other light heads.


You can synchronise any of the Endurance LED heads with Conqueror and Defender LEDs as required, up to a maximum number of 16 heads (total).

Flash patterns


0 - Random (default)	10 - Double (all)
1 - Single (split)	11 - Quad (all)
2 - Double (split)	12 - Quint (all)
3 - Quad (split)	13 - Mega (all)
4 - Quint (split)	14 - Ultra (all)
5 - Mega (split)	15 - Single-Quad (all)
6 - Ultra (split)	16 - Single H/L (all)
7 - Single-Quad (split)	17 - Steady 2 (California)
8 - Single H/L (split)	18 - Steady burn (all)
9 - Single (all)	




WARNING
Ensure that only suitably trained personnel attempt to install this device or devices. Failure to install the device properly could result in damage to the vehicle, injury or even death.



AIR BAGS
Many vehicles are now fitted with side and curtain air bags. Ensure that you do not drill and avoid accidentally triggering the devices during fitting.



LED WARNING
This product contains high-intensity LEDs. Do not stare directly into these lights as momentary blindness and/or permanent eye damage could result.



WARNING
Customer supplied wires that connect to the positive terminal of the battery must be sized to supply at least 125% of the maximum operating current and fused at the battery to carry that load. Do not use circuit breakers with this product.

