

Cre8 Associates Limited

Light Isolation Modular System (LIMS)

Vehicle Blackout System

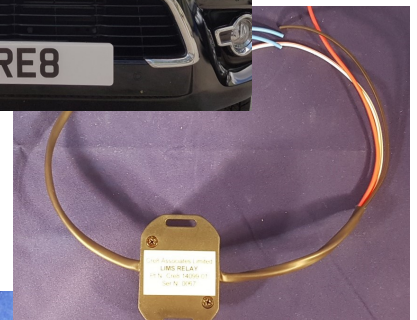
In certain applications it may be desirable to make the vehicle appear less visible to the outside world, during covert operations or in a defensive situation. The appearance of lights or sounds on a vehicle often distinguishes it not only from its own surroundings but from that of other vehicles. In these cases a system that alters the vehicles appearance or masks them completely could be advantageous. **LIMS** allows a very quick method of implementing this, using a cockpit mounted NVG friendly switch to operate the system, it provides a one touch blackout capability to the operator. Already operational on many Toyota SUV products and other makes, it has been in service around the world since 2011.

LIMS is designed to alter or mask the vehicles light and sound appearance. With the touch of a single button all internal and external lights and sound sources either OEM or aftermarket can be switched off and other functions like IR front driving lights and IR convoy and brake lights, switched on automatically. In addition, the system can switch FLIR cameras and monitors on to aid in driving. The unit can be mounted anywhere inside the vehicle and is configured prior to fitting but can easily be altered in the future. It is designed to interrupt low power control signals as well as sending CAN messages to stop other functions (specific to the customers requirements).

The system has 20 low power circuits, (2 digital pulses and 1 CAN generator can be supplied as an option) and is capable of switching off all or some of the light sources depending on customer requirements. When used with the **LIMS** high voltage unit it can switch off power up to 15 Amps and up to 3 **LIMS** modules can be connected together giving 60 independent circuits. **LIMS** remains in the background until such time as is needed and can then be activated by operation of the "Blackout" switch. Duplicate switches can be placed around the vehicle for other users or for specific functions (i.e. internal lights when the passenger compartment is opened). In "Mission" mode the only way to turn the system on and off is by the switch itself thus allowing blackout functions to remain operational when the engine is off. In the "Road" mode the system retains these functions but automatically resets to normal operation when the ignition is switched off. This stops inadvertent operation and battery drain when the vehicle is off and avoids unintentional driving of the vehicle after start up with no external lights.

Key Points

- System is configurable to meet your needs
- Analogue outputs (digital and CAN outputs if requested)
- System resets when ignition off (Road) or remains on (Covert)
- NVG suitable adjustable LED Switch
- Controls audible outputs also such as horn and reversing alarms
- Can be used in multi-cabin vehicles



Problematic Issues?

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Specifications

| | |
|---------------------|---|
| System Part Number | 11059 |
| Operation (Road) | Operator Activate and deactivate with automatic deactivate on ignition off |
| Operation (Mission) | Operator Activate and deactivate |
| Current Drain | Ignition operated with 0 Amps until activated, 800 mA when activated per single LRU |
| Protection | Only in Cockpit of vehicles |
| Temperature Range | -40 - +70°C |
| Voltage Range | +13.5 or 27.5 VDC |
| Configuration | Normally all 20 Outputs set to No Volts Normally Closed, Specific configurations can be made depending on requirement |
| Analogue Outputs | Normally 20 NC No Volt Contacts @ 500mA Max |
| Digital Outputs | 2 (when requested) |
| CAN Outputs | Multiple messages (when requested) |
| Weight | 2.5 Kg with harness |
| ECU Size | 160 * 110 * 30 mm (L*W*D) |

LIMS is a self contained line replaceable unit (LRU) and is fully interchangeable allowing modules to be mission specific and fitted in seconds after initial wiring installation. The system is fully compatible with the Cre8 SVEDS PCB power and control system or stand alone for separate fitting.

Small compact and very versatile it has been used to completely blackout vehicles and trailer systems and to modify light signatures.

This system is designed to be installed with expert understanding of the vehicles electrical system as it integrates into the donor vehicles wiring system and thus means that the OEM wiring is disrupted.

Please be aware that this system may not legally be approved for use on vehicles in certain countries.



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Issue 2 - Dated 7 July 2017