

VLCU

LIGHTING CONTROL UNIT

The Forman VLCU Lighting Control Unit monitors ambient lighting levels inside and outside the vehicle through separate circuits. Each circuit has independent settings for the minimum lighting levels required for lighting activation.

The unit can automatically activate or deactivate vehicle headlights and saloon lights when lighting levels measured inside or outside the vehicle drop below the set threshold. Alternatively, if automatic control of lighting is not desired, an alert can be set to prompt the driver action.

The Royal Society for Prevention of Accidents reported that 40% of road accident occur after dark, so it is vital that vehicle lighting be used appropriately and promptly when lighting levels drop below the acceptable threshold. The VLCU uses a sensor mounted behind the windscreen, away from interior lighting, to accurately measure the lighting levels outside the vehicle.



Exterior and interior sensors

Two independent sensor circuits monitor and control the activation of headlights and saloon lights.



Configurable lighting levels

Lighting levels can be set according to customer requirements, with a range of lighting thresholds available.



Optional automatic lighting activation

The VLCU can be set to automatically activate exterior and interior lights, or prompt driver action.

How Does VLCU Work?

The VLCU uses advanced optical sensors to measure interior and exterior lighting levels.

External and internal channel settings are configured independently of each other. The exterior lighting level sensor is mounted behind the windscreen of the vehicle and the interior lighting level sensor is positioned inside the vehicle and set at a separate light level to the exterior sensor.

If desired, the VLCU can automatically control the vehicle headlights and interior lights when lighting levels fall below the specified threshold. Inputs are provided to enable the driver to override the VLCU and force the lights off.

In applications where direct control of circuits is not desired or permitted, the unit outputs can be used to trigger warning lights and buzzers or to interface with the Forman VMMS to deliver audio warnings to the driver.

Ambient light levels are evaluated immediately following power on, and the outputs then set accordingly. A range of light level thresholds from 200 lux to 3900 lux can be set via the VLCU interface. This allows customisation to suit each installation and operation conditions.

Key Technical Specification

Connectors	1; AMP .070 series connectors: 12 way
Power Supply	Voltage: 18 V to 30 V (32 V tolerated for 1 hour) Current: less than 60 mA; protected against reverse polarity and transients.
Sensor	1 Recommended cable: overall screened single pair 18 AWG, 16/0.254 mm (RS-774-4035); maximum length 10 m; connect screen to GND and VLCU end only.
Inputs	2 Switched contact; low-side switched
Outputs	5 Switched contact; low-side switched
Approvals	E-marking: E11 10R-045586

For the complete technical specification and operating instructions, please contact Forman Vehicle Services.

**To find out how we can help you enhance
the safety of your vehicles, call us on
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