12V and 24V LED Battery Master Switches

Operating Instructions Please read these instructions before use



# LV5010 and LV5011 12V and 24V LED Battery Master Switches

Please read these instructions carefully before use.

### **ON-OFF** Indicator:

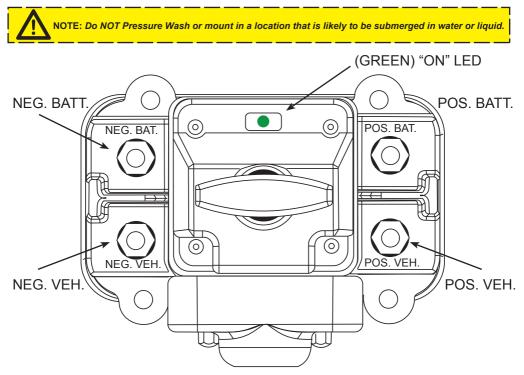
Green LED Lights when unit is ON and turns off when unit is turned OFF.

### Installation:

This Battery Master Switch must be mounted on a flat surface in an easily accessible position close to batteries so that the "LED" window is clearly visible.

Green LED indicates unit is in locked on position and NO LED indicates when switch is on unlocked position.

Using the base of the Master Switch as a guide mark and drill the four 8mm fixing holes. Secure in position with bolts, nuts and washers. The main battery leads need to be fitted with 10mm clearance eyelets and the auxiliary leads with 5mm eyelets. The use of petroleum jelly on the posts is recommended.



#### **Terminal Configuration**

Connect the main battery leads as per the above diagram, the use of rubber boots on the battery posts recommended.







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## **Auxiliary Terminals**

A suitable hole must be drilled in the auxiliary cover plate and protective grommet installed to seal the cable entry point.

**Terminals 1 & 3** - are for use with alternators which do not include surge protection system in their design. A separate contact set opens just prior to the main contacts providing a circuit to be used in series with the alternator field circuit. This arrangement prevents high voltage surges which would occur if the alternator were charging with the main contacts open.

Terminal 12 - provides an unfused solid positive supply—ensure appropriate circuit protection as needed. It is directly connected to Terminal 8.

**Terminal 2** - is used in conjunction with Terminal 4 or a negative supply relative to the vehicle's positive supply to operate the solenoid via a Momentary Push Button switch (not supplied).

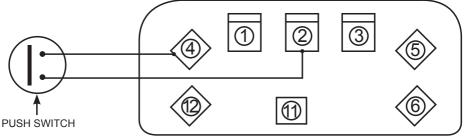
- Excessive voltage drop at Terminal 2 may cause poor solenoid activation, with a current draw of up to 50A.
- Use an appropriate wiring gauge to minimize voltage drop: EG: On a 12V system with a cable run exceeding 5 metres, use a minimum 5mm (2.9mm<sup>2</sup>) cable to ensure proper operation.

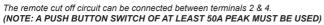
Terminal 4 - is a negative supply source. It is directly connected to Terminal 10.

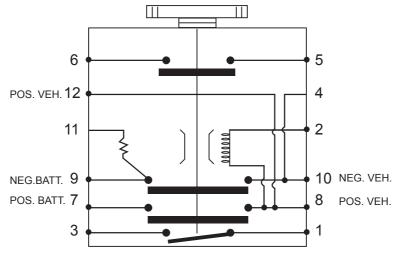
Terminals 5 & 6 - are auxiliary contacts.

**Terminal 11** - is the negative connection for the vehicle Tachograph. This connection enables the Tachograph to operate when the switch is in the "OFF" position.

**NOTE:** Internal resistors are fitted across the main positive terminals & terminals 9 & 11 to provide for Tachograph clock in the "OFF" position.







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