

PROFESSIONAL LVD



Professional LVDs (Low Voltage Disconnects) are the ideal solution for protecting expensive deep cycle batteries from over-discharge. Ideal for caravan and motorhome applications.

Operation

The LVD unit monitors the battery voltage and disconnects the DC load when the battery voltage falls below the set disconnect point, preventing further discharge and possible damage.

Once the battery is recharged and the battery voltage reaches the set recovery point the DC load will automatically be reconnected. The LVD can also be reconnected manually prior to reaching the set recovery point by pressing the reset button.

Features

- ❑ Over-discharge protection: protect batteries and equipment from damage due to over discharge.
- ❑ Adjustable disconnect point: set the disconnect voltage to best suit the application.
- ❑ Sophisticated microprocessor control.
- ❑ Comprehensive protection functions: over temperature, over-current and over voltage.
- ❑ Minimal voltage drop.
- ❑ LED status indicator: multi-color LED indicates operating status of LVD.
- ❑ Vibration and weather proof: fully sealed shock proof aluminium housing protects against dust and water ingress (Ip66).

Available models

LVD-XXX

Current rating (Amps)
Low Voltage Disconnect (LVD)

MODEL	AMPS	LENGTH	WEIGHT
LVD-100	100	4.25"	1.7Lbs
LVD-150	150	4.25"	1.7Lbs
LVD-200	200	4.25"	1.7Lbs
LVD-250	250	4.25"	1.7Lbs

NOTE:

The LVD performs optimally mounted to a metal surface. If mounted on a non-metallic surface, maximum current capacity diminishes by 30%.

Specifications

- ❑ Continuous current: up to 250Amps
- ❑ System voltage: 12Vdc
- ❑ Operating voltage: 9.0-16.0V
- ❑ Alarm/cutoff voltage setpoints: 9/11V, 10/12V, 11/13V and 11.5/13.5V
- ❑ Voltage setting: DIP switches
- ❑ Cutoff delay: 60 seconds
- ❑ Control input voltage: >9V to activate, <4V to deactivate
- ❑ Thermal trip/recover: 85°C/60°C
- ❑ Over current trip: over 110% for 0.5 seconds, reset every 20s
- ❑ Logic current draw: 5 mA
- ❑ Voltage drop: 0.28V max.
- ❑ Ground/control/alarm connections: 0.25" male faston blade terminals
- ❑ Environmental protection: Ip66
- ❑ Power studs: M10, copper with tin plated
- ❑ Nuts: brass nuts, stainless steel locking nuts
- ❑ Torque settings: 10-15 Ft.Lbs.

Alarm/cutoff Voltage Setting

The LVD allows you to set the alarm/cutoff voltage points of your unit to best suit your application. Voltage points are set by selecting the DIP switches. The table below illustrates the 4 voltage points:

DIP switches



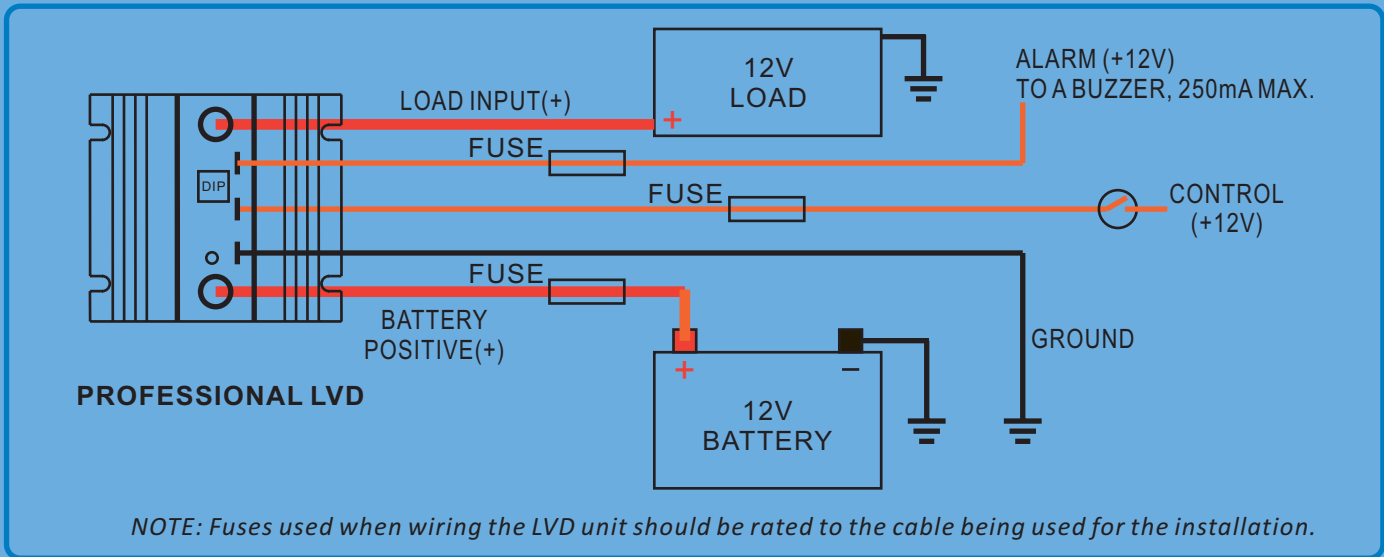
DIP Switches			Disconnect Voltage	Reconnect Voltage
1	2	3		
OFF	OFF	OFF	9.0	11.0
ON	OFF	OFF	10.0	12.0
ON	ON	OFF	11.0	13.0
ON	ON	ON	11.5	13.5



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Typical Installation (Wiring Diagram)

RUBSTONE ELECTRONIC MFG.



LVD Status - LED indicator - Operation

LVD Status	LED Indicator	LVD Operation
Connect1	Solid green	Connect
Connect2	Solid green	Low voltage alarm, alarm terminal activated
Disconnect1	Dim	Cut off
Disconnect2	Flashing red	Over voltage protection
Disconnect3	Flashing green	Over current or over temperature protection

Safety Fuse and Cable Size

Current rating	Min.Fuse size	AWG
100amps	100amps	#6
150amps	150amps	#4
200amps	200amps	#2
250amps	250amps	#1/0

NOTE: cable length should not exceed 20 ft max.

Dimensions

