DC Power Accessories

Low Voltage Disconnect - LVD

Discharging batteries beyond a critical low voltage can damage the batteries and/or load, and require a longer recharge interval. A low voltage disconnect prevents this condition.



The LVD contains a sense and control circuit housed in a compact, rugged, vinyl-clad aluminum case. It is installed in-line between the battery and the load. The unit continually monitors battery voltage and if it falls below a preset voltage threshold, the load is automatically disconnected. When batteries are recharged past another pre-set voltage the load is reconnected. Connect and disconnect points are user adjustable.

Models:

LVD 12-30, LVD 12-75 (Neg. Ground) LVD 24-50 (Neg. Ground) LVD 48-30 (Pos. Ground)

Specifications

Factory Set Actuation Voltages:									
	12 VOLT	24 VOLT	48 VOLT						
Disconnect	10.4 VDC	21.0 VDC	42.0VDC						
Connect	12.2 VDC	24.5 VDC	49.0VDC						

Voltage and Contact Current Ratings:

Indicated By Model Number (i.e., LVD 12-30 = 12 Volts, 30 Amps Continuous)

Dimensions (Mounted vertically, all models): 5.25" H x 5.25" W x 3.5" D **Weight:** (All models): 1 LB.

Typical LVD Installation





Emergency Relay/Charger - ERC

The E.R.C. allows emergency battery tie-in to a radio system that is normally operated by a power supply.



Under normal conditions the radio is connected through the ERC to the power supply and the back-up battery receives only a trickle charge to keep it in peak condition.

In the event of AC power failure a relay automatically connects the radio to the back-up battery, restoring the system within one second. When AC power is restored the radio is automatically reconnected to the power supply and the trickle charge resumes to the battery.

Available in 12 or 24 VDC, 15 or 35 Amp ratings, (not ignition protected.)

Application notes:

- 1 sec. switch over delay may not be suitable for data transceivers, use instead a system where the battery is floated on output of power supply – see Power-Pac or IPS (pg 11) or APS (pg 14).
- Trickle charge current will maintain a back up battery and will slowly restore a deeply discharged battery. A separate high current charging source is recommended for deep discharge recovery.

Specifications

ERC	Amps		Size-inches			Lbs	Kg
Model	Int.C	Cont.	н	W	D		
<u>12-15</u>	15	10	2.25	2.875	4	1	.5
<u>24-15</u>	15	10	2.25	2.875	4	1	.5
12-35	35	30	3.875	2.875	4	2	.9
24-35*	35	30	3.875	2.875	4	2	.9

*Built to order

Typical Trickle Charge Current:

1.5 amps – will vary depending on power supply voltage and battery condition. **Optimal Power Supply Voltage:**

12 volt systems: 13.4 - 14.0 VDC 24 volt systems: 26.8 - 28.0 VDC

Typical ERC Installation



Lamp Dimmer System

Adjust DC lights to ease eye strain and enhance night vision. Light intensity is easily regulated by remote panel.



Control Panel - LDP

5000 Ohm dimmer control panel adjusts brightness between Off and 85% of full voltage. Black anodized aluminum panel. **Size:** 3" x 3" (7.6 x 7.6 cm)



Dimmer Unit - LD

100 watt capacity, for 12, 24, and 32 VDC systems. Rugged anodized aluminum heat sink case. Size: 9" x 4.5" x 2.75"; 2 lbs.

22.9 x 11.4 x 7cm. .9 Kg.

Model: LD Panel Control Panel

Model: LD Dimmer only (no panel)

Typical LD Installation



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DC Power Onboard