



**THOR Manufacturing**  
7050 W. Palmetto Park Rd., Suite 15 Boca  
Raton, FL 33433  
1-866-955-THOR



## TH-LVD

### PROFESSIONAL GRADE LOW VOLTAGE DISCONNECT



**Senses low battery voltage and automatically disconnects devices to save power for starting or to preserve battery life.**

THOR Manufacturing's, Low Voltage Disconnect switch is a solid state electronic module designed to protect batteries from excessive discharge. Think of them much like a surge protector, but instead of terminating connection when voltage spikes, they disconnect when voltage drops too low, preventing damage to the batteries and load.

The LVD when used with a battery isolator will automatically disconnect and reconnect loads based on battery voltage. No operator action required. This prolongs battery life by preventing damage due to excessive discharge.

### TH-LVD SPECIFICATIONS

- Input Volts: 12V or 24V
- 30 second Delay Timer
- Over-current shut off
- Over voltage protection
- Durable case
- 4-wire terminal configuration
- Dimensions: 4.75" x 2.25" x 1.25"
- Compact size with mounting bracket



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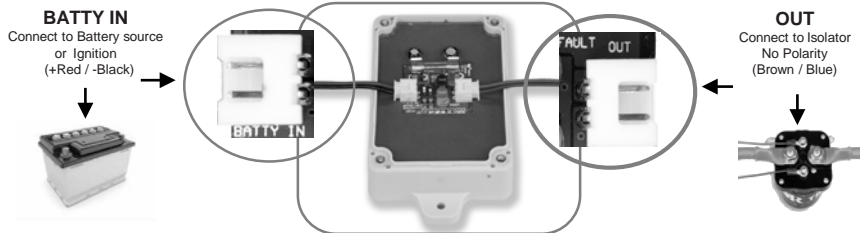
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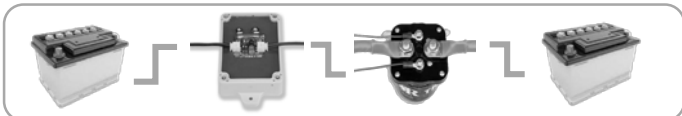
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### Installation

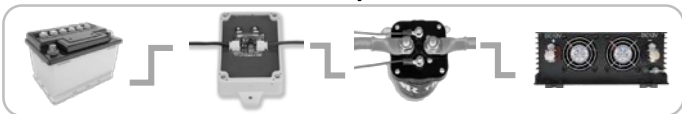
The LVD should be installed in between the 12V battery and a THOR Battery isolator. Typically, the load is a THOR power inverter, two-way mobile radio, mobile computer and other vehicle DC electronics.



### USING LVD TO TURN ISOLATE ACCESSORY BATTERY



### USING LVD TO TURN ON / OFF THOR INVERTER



Standard installation involves installing the LVD in between the vehicles ignition and the battery isolator. When installing the LVD, you need to connect "BATTY IN" (positive RED and negative BLACK) to a 12 volt source or your vehicles ignition.

The LVD is compact and designed to fit almost anywhere. Its waterproof construction is ideal for all 12V mobile or base station type battery systems. User selectable settings for low voltage disconnect of: 10.5,11.0,11.5, 12.0, VDC. The LVD will automatically reconnect batteries when the voltage reaches 12.2V or higher.

### Disconnect Voltage Adjustment Table

Low Voltage Disconnect		Switch Location	
12V	24V	Switch 1	Switch 2
10.5 Vdc	21 Vdc	Off	Off
11 Vdc	22 Vdc	Off	On
11.5 Vdc	23 Vdc	On	On
12 Vdc	24 Vdc	On	Off
12 Volt Recovery Voltage		12.2 Vdc	
24 Volt Recovery Voltage		24.4 Vdc	

Note: To activate, push buttons UP. This diagram shows all segments in the OFF position.



User selectable LVD settings can be adjusted to one of the following low voltage disconnect settings (10.5, 11.0, 11.5, 12.0 VDC).

1 2

### Over Voltage Protection:

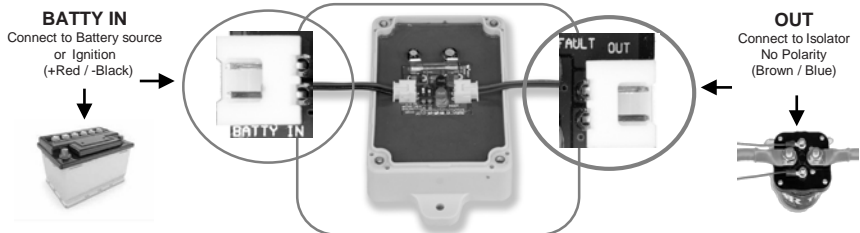
Over Voltage Protection is included in the LVD unit. Should the LVD ever receive a voltage of 16.5 volts or higher, the unit will automatically shut off protecting the electronics connected on the load side of your unit. Once the voltage drops to 15.0 volts or less the LVD will turn back ON.

### LIMITED TWO-YEAR HOME USE WARRANTY

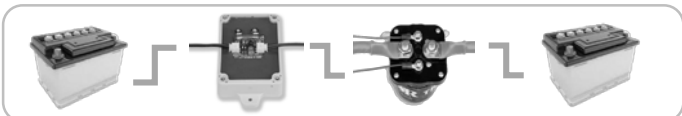
Please complete the Warranty Registration Form on the THOR Manufacturing website <http://thorpowerproducts.com/register-product/>. Enter the model number and product type. All THOR Manufacturing products must be registered within 30 days of purchase to activate this warranty.

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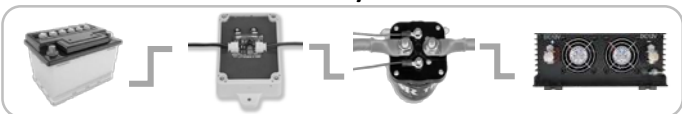
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