

# Solid State Battery Separator

## Models:

**BSD175, BSD200 & BSD250**

The Ultimate Power Bi-Directional Battery Separator is designed to give the owner the ultimate in hassle-free dependability and control of electrical loads balanced between the chassis and auxiliary batteries.

As it sounds, it separates the power of the cold-cranking chassis battery meant to start the engine from the deep cycle auxiliary batteries working to operate other DC loads (i.e. inverters, dc motors, GPS, lights etc.). Its primary purpose is to ensure that the failure or low output of one battery does not rob or incapacitate the entire electrical system.

Made of carbon-coated aluminum with copper and tinned connectors and stainless steel locking nuts, our separator avoids the issues connected with past solenoids and isolators by being solid state.

Unlike a solenoid, it has no moving parts. Unlike a diode isolator, it has no diodes to increase the resistance of the circuit and to gather heat. It can control the flow of current to one or multiple batteries.

It carries a two-year advance replacement warranty, and it has a connector that can act as a switch (assist start) in the event that the operator wishes to bypass the circuit to draw power to the weakened or dead chassis battery.

The Ultimate Power Battery Separator is available in three models, with added Mosfets on the heavier duty 200 and 250 amp models.

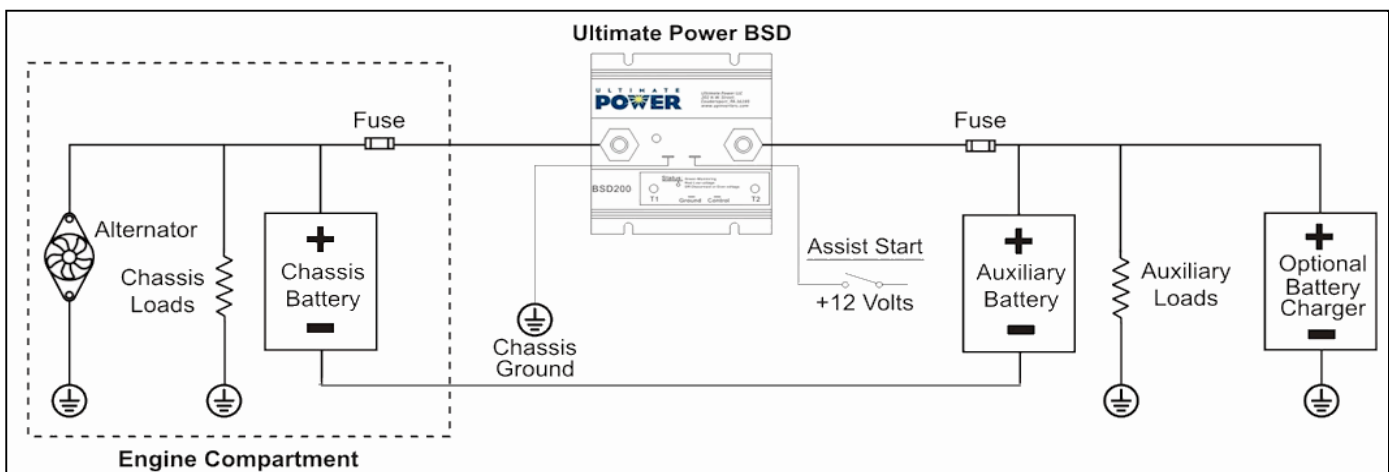
**ULTIMATE  
POWER**

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## Key Features

- Prevents excessive battery discharge by automatically disconnecting loads
- Assist Start allowing current flow from auxiliary battery to chassis battery
- Weather resistant, compact size and low profile
- Minimal voltage drop
- 100% solid state design - no moving parts to cause arcing and electrical noise
- Automatic shutdown protection for over-voltage, over-temperature, over-current, short-circuit, and loss of ground.
- Selectable connect/disconnect switch to control voltages for lithium or lead acid battery use



# Specifications

Model	BSD175	BSD200	BSD250
Rated Current@ Mount A*	175 Amps	200 Amps	250 Amps
Rated Current@ Mount B**	130 Amps	150 Amps	175 Amps
Max Voltage Drop @ Mount A*	0.34Vdc	0.24Vdc	0.24Vdc
Max Voltage Drop @ Mount B**	0.52Vdc	0.32Vdc	0.36Vdc
Logic Power Current Draw	5 milliamps		
Operating Voltage Range (VDC)	8 to 16		
Nominal Operating Temperature	68°F (20°C)		
Over Current Trip	Over 110% for 500 milliseconds, resets every 20s		
Assist Start Surge	150% for 2 seconds (reset control input)		
LED Indicator Status	Solid Green: Connect		
	Flashing Green: Over current or over temp cut off, freq. 1Hz		
	Solid Red: Low voltage cut off (both below 8V)		
	Flashing Red: Over voltage cut off (over 16V), freq. 1Hz		
	Dim: Cut off		
High Temperature Protection	185°F (85°C)		
High Temperature Recover	140°F (60°C)		
Power Terminals	M10 copper stud with tin plating and stainless steel locking nuts		
Power Terminal Torque	10 to 15 ft. lbs.		
Ground Connection	1/4 inch male faston blade terminal		
Dimensions (Inches) (LxWxH)	4.25 x 4.49 x 2.28		5 x 4.49 x 2.28
Weight (lbs.)	1.48		1.76

Mount A\* - Mounting surface such as an aluminum plate 0.5 x 10 inch or larger

Mount B\*\* - Mounting surface such as wood, plastic or free air

## Mechanical Drawing

