

How Low-Voltage Disconnect Protects You

Low-Voltage Disconnect is a feature of our internal Battery Management System (BMS), which comes inside all Dragonfly Energy batteries and has lots of other safety features programmed into it to protect your investment and preserve the life of your battery. When fully depleting a Dragonfly Energy battery, the BMS detects when the battery's voltage falls below 10V, and it will disconnect the battery. This prevents any charge from leaving the battery to protect it from damage. Many people will think their Dragonfly Energy battery is dead, but it's just in LVD and not sending out a charge.

When a battery enters Low-Voltage Disconnect, it needs to be jumped with another 12V source to "wake up" the battery. It's important to jump the battery within 5 days of the battery going into LVD mode to preserve its lifespan. Leaving the battery at a 0% charge for too long can damage the battery and void your warranty.

Waking up Your Battery

Many chargers must detect a voltage of more than 5V coming from the battery to charge it, but many chargers are different, so be sure to check their user manuals for charging requirements. But in Low-Voltage Disconnect, a voltmeter will only read 0-5V from the battery because the BMS has disconnected it. So, sometimes you have to jump the battery before charging it, depending on the charger.

The most low-tech method to getting a battery out of Low-Voltage Disconnect is to jump it with another 12V source. Just connect your Dragonfly Energy battery to a starting battery from a boat or car, and jump like you would a car battery, leaving them connected for a few minutes and up to an hour. This should wake up the Dragonfly Energy battery, and if you have a voltmeter, you should be able to read a voltage above 10V coming from the battery. Then you can charge it normally.

There are a few products that can make waking up your battery easier. The best choices include using a lithium jumper pack or a Victron Blue Smart IP65 Charger.