



Installation & User Guide

Bluetooth Battery Monitor

Model:
TVD-BM500BR-EZY

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General

The 12 Volt Direct Easy Fit Battery Monitor (Also known as a coulometer or shunt) that allows you to check the status of your battery via your smartphone using our free app.

The battery monitor allows you to monitor discharge & recharge currents, battery state of charge (SOC), as well as the amp hours (AH) going in and out of the battery.

This Battery Monitor is suitable for all common battery types including AGM, wet, gel, calcium and lithium.

Safety Information

This manual contains important safety instructions for your Bluetooth Battery Monitor. Do not operate the Battery Monitor or modify the installation unless you have read and understood this user manual.

We recommend that the battery monitor be installed by an appropriately qualified professional.



Disclaimer

While caution has been taken to ensure the accuracy of the contents of this guide, we assume no responsibility for errors or omissions. Please note that specifications and product functionality may change without notice.

Warning

DO NOT alter or disassemble the battery monitor under any circumstances. Any effort made to modify, repair or attempt to gain access to the electronics may void the unit warranty. Avoid all contact with water, rain, snow or spray. Failure to do so may lead to permanent irreparable damage to the internal electronics and may void the unit warranty.

Applications

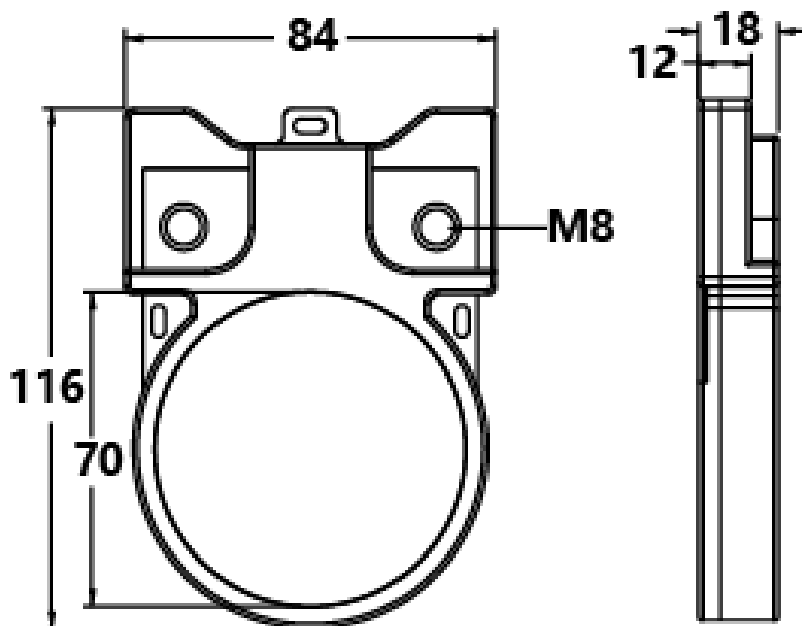
- Mobile & Stationary Applications
- Marine RV's
- Solar Energy Storage
- Aerial Work Platforms.
- Robotics.

Data Displayed

- Battery Voltage (V)
- Battery Current (A)
- Battery State of Charge (SoC)
- Total Amp Hours (AH)

Specifications

Parameter	Min	Max	Unit
Voltage	8.0	80.0	V
Current	0.0	500.0	A
Capacity	0.1	999.0	Ah
Temperature	0.0	35.0	°C
Active Parasitic Current		14.0	mA
Standby Parasitic Current		0.8	mA
Sleep Parasitic Current		80.0	uA
Voltage Accuracy	±1		%
Current Accuracy	±1		%
Capacity Accuracy	±1		%

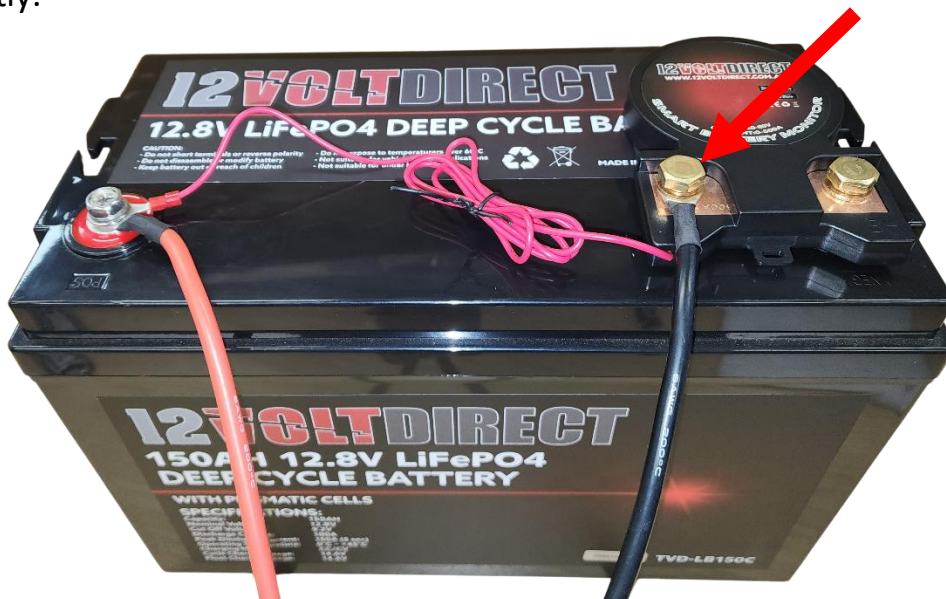
Dimensions**Dimensions in
Millimeters.**

Connecting To Your Battery

1. Remove the cable or cables connected to the negative terminal of your battery.



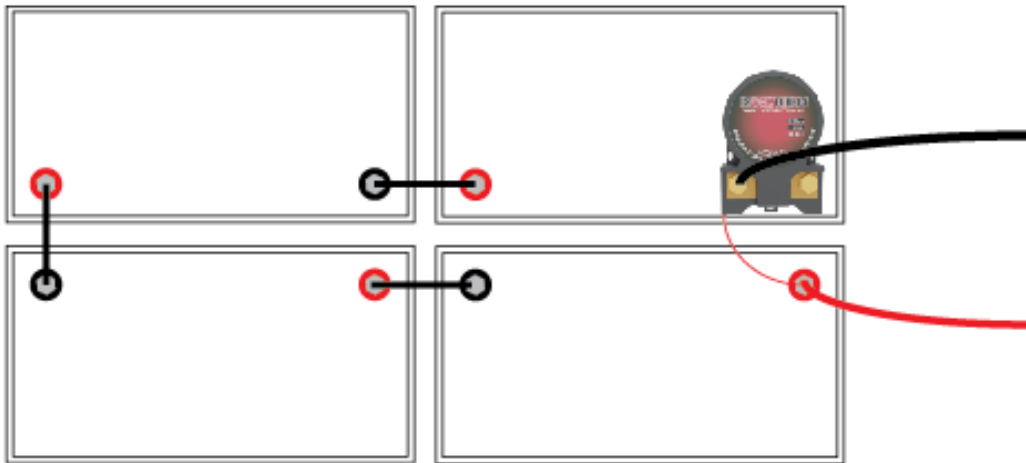
2. Connect the battery monitor (B-) to the battery's negative terminal using the included extended bolt.
3. Connect the red wire from the battery monitor to the battery's positive terminal.
4. Reconnect your negative cables to the (P-) side of the battery monitor.
5. Note All loads MUST be connected to the (P-) side of the shunt to function correctly.



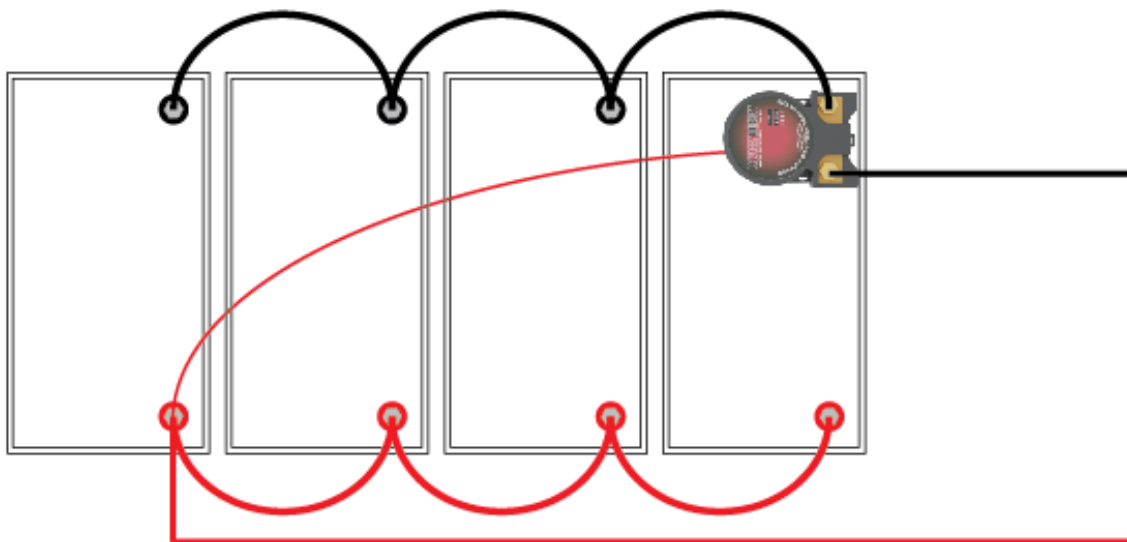
Connecting To Multiple Batteries

Connect your battery monitor to multiple batteries wired in series as shown below. Ensure you use cables of appropriate gauge for your system.

Series Connection:



Parallel Connection:



Using The Smartphone App

(Ensure the battery is at 100% charge. Failure to do this will result in errors.)

1. Install the Smart Battery Monitor app via Google Play or the Apple App Store.



2. Open the app, and select the battery monitor by its serial number.
3. At the 'SETTINGS' screen, enter the required parameters for your system:

Prior to updating these settings ensure your battery has reached 100% fully charged so the battery capacity can be synchronized.

Rated Capacity: The total capacity of your battery or battery bank in Amp Hours (AH)

Under Voltage: The voltage at which you will be alerted to a low battery.

Full Battery Voltage: The voltage at which your battery has reached 100% SOC

Capacity Remaining: The remaining AH capacity of your battery. Providing your battery is fully charged this should be the same as the rated capacity.

Peukert Exponent: The default setting is 1.

Contact Us

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