

Important Information Regarding Your Lithium Battery.



The Powerhouse range of Lithium batteries have undergone two charge/discharge cycles at the factory during manufacture, and are only shipped with approximately 30% charge.

It is important to completely charge a new battery prior to first use. To obtain best performance and prolong battery life, you should use a battery charger suitable for Lithium batteries.

In an emergency you can use a traditional SLA charger, but you will not get optimum performance from the battery as it will never get to 100% charged.

Battery Management System (BMS) Overview

Every model Powerhouse Lithium battery has an inbuilt Battery Management System known as a BMS which is an elaborate electronic protection circuit. The purpose of the BMS is to protect the internal battery cells from numerous adverse conditions, including over temperature, over voltage, under voltage, over discharge as well as ensuring the internal cells making up the battery are properly charged and discharged and are overall well balanced.

SAFE/SLEEP mode.

During use, if the battery does encounter over temperature, over voltage, under voltage or over discharge situations, the BMS will place the battery into "SAFE/SLEEP" mode. When in this "SAFE/SLEEP" mode, there is no voltage present at the terminals. If you measured the battery with a DC volt meter the reading will be 0V. This could lead you to believe the battery is dead or faulty, but it is not. It is in protection "SAFE/SLEEP" mode and to continue using it, it has to be brought out of this state.

Reactivating Battery From "SAFE/SLEEP" mode.

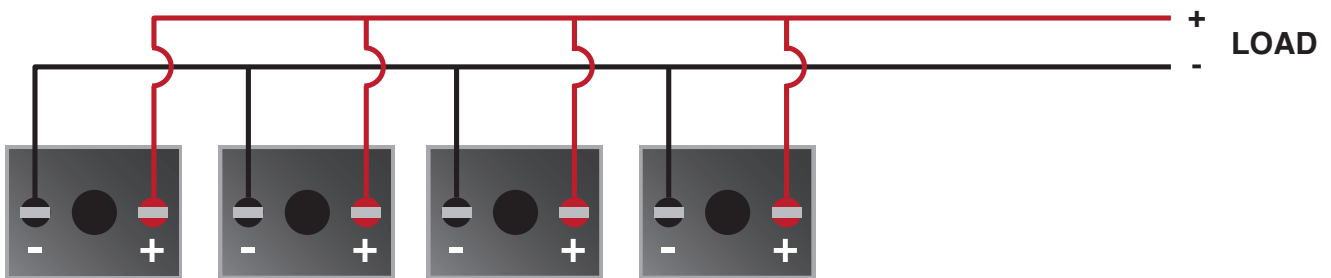
With the battery completely disconnected, you will need to use a mains lithium battery charger with a "wake" circuit (suitable Powetran chargers include M8534A and M8536A). This will pulse the battery, eventually getting it to start charging. The time it takes varies depending on the charger used and the capacity of the battery. This can take from several minutes to more than an hour.

Do not use the battery until it has been 100% recharged.

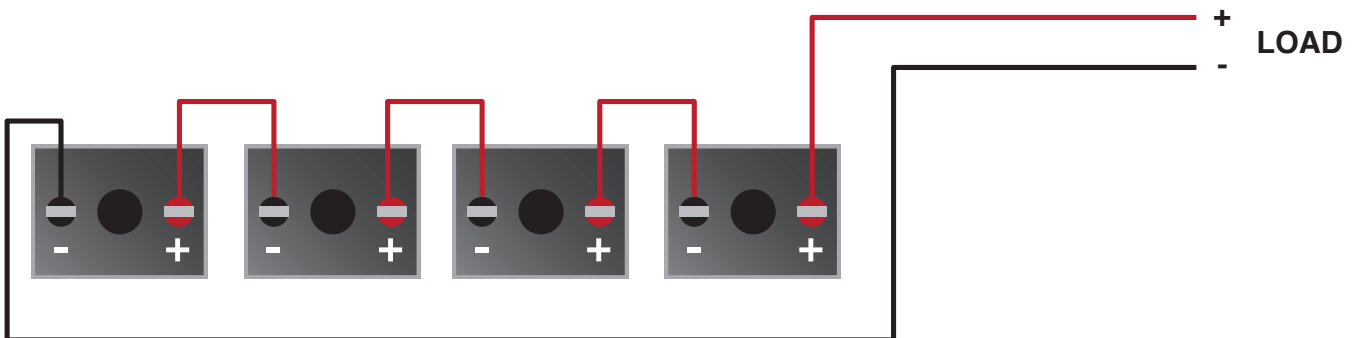
Battery Wiring Configurations

Regardless of your wiring configuration it is technically best to individually charge each battery to 100% capacity using the same charger before connecting them. This ensures all batteries are at the same terminal voltage and will charge/discharge evenly.

Parallel Batteries (no limit on number connected - always check battery datasheets to confirm).



Series Batteries (maximum 4 units - always check battery datasheets to confirm).



Note: When using LiFePO4 batteries in circuits, NEVER mix brands, capacities or voltages. Always use identical batteries in your circuit (ie: same brand/model, same amp hour (Ah) rating, same voltage).

Disclaimer

Information provided as a guide only. Please seek professional advice when installing battery circuits in your vehicle or trailer. Battery wiring can carry very high currents and if not fused correctly, could cause circuit failures and fires.

Warranty Statement

Altronic Distributors warrants Powerhouse LiFePO4 batteries for 5 years from date of purchase from Altronic or its resellers to the consumer. If this item is part of an installation or another product, please contact the installer or supplier for your warranty. During the warranty period, we undertake to repair or replace your product at no charge if found to be defective due to a manufacturing fault. The warranty excludes damage by misuse or incorrect installation (i.e. failure to install and operate device according to specifications in the supplied instruction manual), neglect, shipping accident, or no fault found, nor by use in a way or manner not intended by the supplier.

For repair or service please contact your PLACE OF PURCHASE.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. NOT FIELD SERVICEABLE.

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