





INSTRUCTIONS FOR USE

Introduction:

Thank you for purchasing an ElectriBank ESS Deep-Cycle battery for your car, boat, motorhome, 4WD, campervan, caravan, campsite, event, aircraft, home or office. You have purchased the highest quality item made using the very latest in LiFePO4 lithium materials technology. If maintained correctly, your ElectriBank ESS battery wil give you many years of high performance service. All ElectriBank ESS batteries ship ready to use. These two models of ESS100 battery have 100Ah Lithium nominal or 200Ah PbEq capacity.

Setup & Operation:

Your ElectriBank ESS Deep-Cycle Bluetooth battery ships with 2 x 8mm bolt connection terminals +ve and -ve. Install your ElectriBank ESS Battery in a dry location and ensure it is secured using your vehicle or boat's standard or compliant battery fixing device, this is particularly important for vehicles or boats encountering off-road driving conditions or high vibrations/yaw such as in ocean going vessels. A suitable isolating material such as rubber or foam should be installed between the ElectriBank ESS battery and any hard surfaces that can transmit vibration or impacts. Ensure terminals are connected securely with the correct orientation and cables used have a suitable gauge for high current applications (Min 8 AWG). ElectriBank ESS batteries can be installed in any orientation.

To connect to the battery via Bluetooth first download the ElectriBank App from either the App Store or Google Play by scanning the barcode on the battery label or by visiting: <u>www.electribank.com/electribank-app</u> Once the App is downloaded follow the prompts on

the App and connect to the ElectriBank ESS unit in the form ejxxxxxx in the Bluetooth devices list in the App. Toggle through the pages to be presented the battery data. The battery should read between 13.2V and 13.6V when resting after being fully charged. Anything over 13.2V can be considered a usable full charge at rest. The State of Charge SOC graph requires a no. of cycles to configure and display correct data. Please note that depending on the charging equipment used, a full charge is only achieved with the voltage reaching between 14.2-14.4V. Adjust your charger settings where applicable to ensure a FULL charge is achieved.



Connection Parallel or Series:

There are only certain condition in which these batteries can be introduced or connected in parallel or series with another battery including other deep-cycle batteries or engine starter batteries e.g. Lithiumax Starter Batteries. Both batteries must be 12.8V lithium LiFePO4 units, do not mix battery chemistries. All units must be at a similar charge state (at or over 12.5V for the ElectriBank ESS battery) prior to connecting in parallel or series. If the ElectriBank ESS battery is below 12.5V do not connect with another charged battery else this may trigger the over-charge protection circuit within the Battery Management System (BMS). Once the overcharge state is removed, the battery BMS will reset automatically. Maximum 4 batteries in series for up to 48V and any no. in parallel. Parallel connection will add the additional battery capacity at the same voltage. Series connection will add the voltage at the same capacity.

Maintenance:

It is recommended that you use a dedicated Lithium battery charger or ElectriBank ESS Maintenance or Fast Charger for battery maintenance. These are available through www.electribank.com

Your regular vehicle or boat alternator, DC/DC Charger or dedicated quality battery/trickle charger may be adequate for this purpose along with other 12-15VDC (higher Volts if running multiple units in series) charging systems such as solar panels, wind generators or fuel generators using lithium suitable charge controllers such as an MPPT solar charge controller.

Note: Ensure that you do not use a lead-acid conditioning or de-sulphation setting for your charger on your ElectriBank ESS battery, as this may void the warranty. Do not charge your ElectriBank ESS battery over 14.8V as this will trigger the overcharge protection within the BMS and cut charging to the cells until the overcharge condition is removed.

Low-Voltage Cut-Out: Please note that the BMS low-voltage cut-out is set at 10V and the battery will need to be charged over 10.8V for the battery BMS to restart battery operation. It is recommended that you set your system cut-out at 11V. A copy of ElectriBank ESS specifications for your ElectriBank model can be found at: www.electriBank.com/support

Warning: Do not jump start your engine using an external power source with the terminals connected directly to your ElectriBank ESS battery, as this may damage one or more of the internal cells and void your warranty. For jump starting purposes, disconnect the +ve terminal from the ElectriBank ESS battery and jump directly to the +ve terminal cable. Once the engine has started, reconnect the +ve terminal cable to your ElectriBank ESS battery in order to allow it to charge as normal. It is advised that ElectriBank ESS batteries are connected via a battery isolator circuit to ensure safe battery decoupling when required for both engine starting and other battery connection and isolation purposes. Emergency starting from this ESS battery may be possible up to 500CA if required. Max 5 seconds.

Note: Be sure to pass these details on to your vehicle, camper, boat or aircraft service agent.

For further details please contact us at admin@electribank.com or by visiting www.electribank.com