

BLA
MARINE PERFORMANCE
SERIES

LITHIUM
LiFePO4



Instruction Manual

Welcome to your new BLA Marine Performance Lithium Batteries packaged by Sealed Performance Batteries.

Please read the instructions and warning on manual carefully to ensure you get the most out of your battery.

WARNINGS

- Keep battery away from exposure to heat, high voltage and direct sunlight.
- Never short circuit the positive and negative terminals.
- Never ship or store battery along with metal.
- Never disassemble the battery.
- Never knock, throw or impact the battery.
- Never throw the battery into water.
- Never install in under bonnet applications.
- Never install in a starting application.
- Always use a charger with a Lithium profile and ensure that it has been selected. BLA Marine Performance Lithium Chargers are recommended for this battery.
- If using an inverter, ensure that it does not exceed the specifications of the battery.

TIPS

- If battery cuts out on low voltage immediately disconnect load – Low voltage cut off device strongly recommended at 9.5V.
- If battery gets below 9V, charge battery within 15 days.
- Battery should be charged every 6 months.
- Ideal storage temperature -20°C – 35°C.
- Do not leave battery in low state of charge for long periods of time.
- Keep battery away from high temperatures.
- If battery shows signs of deformation, heat or emits smell, immediately discontinue use.

WARRANTY

BLA Marine Performance Batteries packaged by Sealed Performance Batteries has a 7-year replacement warranty when installed in an approved application. Please visit bla.com.au and register your battery to ensure your battery is in an approved application. bla.com.au/bla-marine-performance-battery-warranty

CHARGING

- Always use a battery charger with a lithium profile that does not exceed the charging specifications of the battery.
- Charger must not contain Sulphation/Equalisation setting. If so then this needs to be turned off.
- The charging table below should be followed when charging.

Battery Voltage	12V	24V	36V	48V
Max Charge Voltage	14.6V	29.2V	43.8V	58.4
Float Charge Voltage	13.8V	27.8V	41.4V	55.2

- Do not have batteries sit on float charge for an extended period of time.
- Please ensure your charger is matched to the current rating of your battery and take note of the recommended charge current in the batteries specification sheet – Normally half the batteries rated capacity. For example SNL12V100S – Recommended charge current = 50A.
- We will only warrant the battery if a Lithium (LiFePO4) profile charger has been used.
- For specifications for your battery please visit bla.com.au

WAKING UP BATTERY FROM OVER-DISCHARGE

If the battery is over-discharged this will cause it to drop below its operational voltage and the BMS will activate, putting the battery into protection mode.

To identify whether your battery is in protection mode you can check the voltage using a multimeter, if the battery is below 5V then the BMS is in protection mode. In Bluetooth models the mobile application can be used.

The BLA Marine Performance Lithium Chargers has a wake up function.

If you require support with this product, please contact our Technical Services Teams at service@bla.com.au in Australia or service@bla.nz.co in New Zealand.

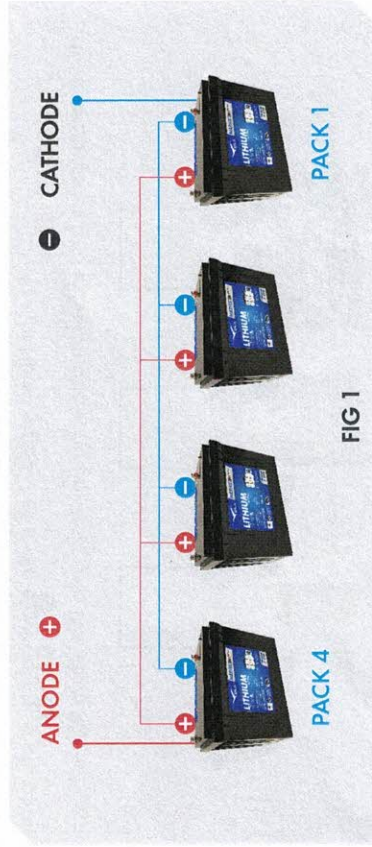
Battery Voltage	12V	24V	36V	48V
BMS Over-discharge Protection Voltage	10V	20V	30V	40V

SERIES AND PARALLEL OF BATTERIES

There are strict conditions under which the BLA Marine Performance Lithium Batteries Range can be configured into Series OR Parallel systems. Please note these conditions below.

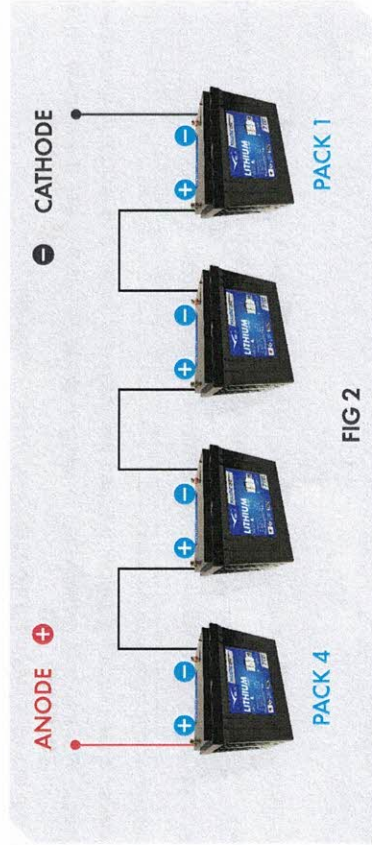
- Not all SNL batteries can be configured into a Series or Parallel system. Please note for all Bluetooth Batteries. If the battery has Bluetooth they can be paralleled but the BT function will no longer work. These BT Batteries cannot be configured in Series (eg 2 x 12V to 24V). Series configuration is strictly prohibited.
- All BLA Marine Performance Lithium Batteries can be configured into a parallel configuration up to 4 units in parallel under the conditions outlined in the following pages.

PARALLEL CONFIGURATION



1. Ensure all batteries to be in the parallel configuration have been fully charged individually by matched chargers.
2. Ensure OCV of each battery is less than <math><0.2V</math> of each other.
3. After charging, set aside and allow to rest for 8 hours.
4. Utilising wires of circumference large enough to carry required current (>100A), connect the batteries in the above (Fig 1) configuration. Ensure all connecting cables lengths are of the same length.
5. Be careful not to reverse connect the Positive and Negative.
6. Ensure correct charge voltage and current is utilised for configuration.
7. It is absolutely prohibited to series a paralleled configuration.
8. Once in Parallel configuration ensure a full charge is completed a min of every 3 months.
9. Once in Parallel configuration, the system must be charged and discharged as a system. If one battery needs to be replaced, the whole system will require replacing.

SERIES CONFIGURATION



1. Check to ensure the battery is suitable for Series configuration.
2. Ensure all batteries to be in the series configuration have been fully charged individually by matched chargers.
3. Ensure OCV of each battery is less than <math><0.2V</math> of each other.
4. After charging, set aside and allow to rest for 8 hours.
5. Utilising wires of circumference large enough to carry required current (>100A), connect the batteries in the above (Fig 2) configuration. Ensure all connecting cables lengths are of the same length.
6. Be careful not reverse connect the Positive and Negative.
7. Ensure correct charge voltage and current is utilised for configuration:
 - B. Two batteries in Series – 29.2.
 - C. Three Batteries in Series – 43.8V.
 - D. Four Batteries in Series – 58.4V.
8. It is absolutely prohibited to Parallel a series configuration.
9. Once in Series configuration ensure a full charge is completed a min of every 3 months.
10. Once in Series configuration, the system must be charged and discharged as a system. If one batteries needs to be replaced, the whole system will require replacing.

APP DOWNLOADS

To download our app, please scan the QR code below. This will give you the option to download the app via Apple Store or Google Android.

Scanning the QR code will also give you access to manuals and safety data sheets.

