

# LiFeBlue Battery Safety & Installation Guidelines

Please read and understand these Guidelines and all LiFeBlue Battery instructions before installing, using or charging your LiFeBlue Battery. Failure to do so may result in fire, personal injury or damage to property. The buyer assumes all risks associated with LiFeBlue product.

## Handling

There is risk of electric shock when working on a Li-ion battery pack. Always wear personal protective equipment (PPE) when working on a battery pack per Occupational Safety and Health Administration (OSHA) and National Electric Code (NEC) guidelines.

## Storage & Transportation

Store battery in cool, dry environment.

Do not store or install in direct sunlight.

Discharge battery to 50% SoC before long term storage of more than 30 days.

Check battery voltage every 60 days and recharge if below 13.0 volts.

Battery must be secured during transportation.

## Warnings

Read and follow all instructions for use, storage and disposal of this battery.

Do not allow children or pets to contact battery.

Do not overcharge the battery.

Do not drop the battery.

Do not immerse the battery or subject it to water.

Do not install the battery near any heat source or open flame.

Do not store battery where terminals may contact metal.

Do not short positive and negative terminals.

Do not connect reverse polarity.

Improper use may cause fire, rupture, damage or capacity deterioration of the battery.

Do not disassemble the battery.

Do not combine more than 4 batteries in parallel.

Do not connect batteries of different age or capacity in series.

For any questions regarding the above Guidelines and Instructions please contact us.

# LiFeBlue Battery Safety & Installation Guidelines

## Battery Preparation

If you are unsure about any of these guidelines, stop, do not install or use the battery and contact us or consult a professional. LiFeBlue Battery assumes no liability for any failure to comply with these Guidelines and Instructions. The buyer assumes all risks associated with LiFeBlue Battery product.



### IMPORTANT PROCEDURE BEFORE BATTERY INSTALLATION OR USE

All LiFeBlue batteries must be fully charged and balanced separately before use. This will synchronize the SoC meter and insure that all batteries are at the same capacity and voltage potential. *Do not install any LiFeBlue battery before performing these steps!*

1. Charge each battery separately until it reaches 14.4 ~14.6 volts.
2. Using the Smart Connect App, check the current going into the battery
3. Continue charging until the current drops to about 2A per 100AH capacity. Example:  
If the battery is a 200AH battery, the charge current needs to drop to 4 amps or less.
4. Repeat this process with all batteries.
5. After ALL batteries have been charged separately, you may connect in series or parallel and begin use.

## Installation and Use

1. Every LiFeBlue battery includes an Energy Management System (EMS). The battery pack and cells are monitored and protected by the EMS system. It is important to understand that the EMS is not a regulation system. It is only a protection system in case the user exceeds the limits of safe operation. The user is ultimately responsible for the proper and safe operation of the battery.
2. Always install the proper circuit protection, a fuse, circuit breaker or other current interruption device, sized for any branch circuit that is connected to a LiFeBlue battery.
3. Always use the proper battery charger to charge LiFeBlue Li-ion batteries. If you are unsure about your charger, email LiFeBlue Battery with your charger model and we will advise you.
4. All batteries must be securely installed to avoid any movement of battery, connections, wiring or connected devices.
5. Use caution when installing bus bars or cables. Tools, such as screw drivers and wrenches should be an electrically insulated type.

## **LiFeBlue Battery Safety & Installation Guidelines**

6. Battery terminals, bus bars or cables must be free from acid from any previous use and kept clean and dry. All fasteners must be tightened properly on the battery terminals before battery is used. Loose connections will result in high contact resistance, heat generation, and can potentially be a fire hazard. Torque each terminal bolt to 9 N-m or 80 in-lb. Do not over tighten. Check bolt torque periodically.
7. Bus bars, terminal connectors and cables must be adequately sized to handle the maximum charge and discharge current. Inadequately sized bus bars, connectors or cables may cause over-heating and are a potential fire hazard.
8. LiFeBlue Battery shall not be used in connection with life support systems, life saving or other medical equipment or devices. Use of LiFeBlue Battery with this type equipment is at your own risk.