



**Lithium (LiFePo4)  
Battery Charger  
Owners Manual**

Part #'s Covered

EB-BC-4815	48V 15A LiFePo4 Charger
EB-BC-3615	36V 15A LiFePo4 Charger
EB-BC-2415	24V 15A LiFePo4 Charger
EB-BC-1215	12V 15A LiFePo4 Charger

**WARNING!**

- Always wear safety glasses when working with any type of battery.
- Do not short circuit the battery terminals.
- Do not connect the battery terminals with reverse polarity.
- Make sure the battery charger voltage matches the battery, and is correct for the application.
- Do not connect the charging leads with reverse polarity.
- AC input plug is designed for NEMA-15 115V outlets only. Do not modify the input plug in any way.

**Charging Method**

The charging method for all Eco Battery Lithium (LiFePo4) battery chargers is CC/CV (constant current/constant voltage). Once AC power is connected, the battery charger will initiate a bulk charge. When the battery reaches the voltage set point, it will stop charging. There is no float stage. For 12V and 24V models, even if left plugged in, you will need to unplug/plug in the AC power to initiate a new charge cycle. For 36V and 48V chargers, the charger will automatically initiate a new charge cycle if the battery voltage drops significantly while plugged in. Max charge time for all chargers is 12 hours.

**Installation**

1. Mount charger with suitable hardware for the application.
2. Connect the M8 ring terminal charging leads to the battery. Ensure highest power drawing cables are attached to the battery first, with lower drawing cables stacked on top. See figure 1 below.
3. Torque terminal nuts or bolts to battery specifications - Do not over tighten.
4. Plug AC power cord into 115V receptacle.
5. Battery charger will now begin a charge cycle.

### LED Indicator

Charger is powering on	Green LED blinks momentarily
Charging in progress	Red LED blinks continuously
Charging is complete	Green LED is lit steady

### Charging voltages:

Charger Model	Nominal Voltage	Target Voltage	Float
EB-BC-1215	12.8V (4S)	14.2V	No
EB-BC-2415	25.6V (8S)	28.4V	No
EB-BC-3615	38.4V (12S)	43.0V	No
EB-BC-4815	51.2V (16S)	57.0V	No

### Warranty

Eco Battery, LLC warrants each Eco Battery branded Lithium Iron Phosphate (LiFePO<sub>4</sub>) battery charger sold by Eco Battery or any of its authorized distributors or dealers, to be free of manufacturers defects for a period of one (1) year from the date of sale as determined by customer's sales receipt. Terms and conditions apply. See [www.ecobattery.com/warranty](http://www.ecobattery.com/warranty) for full warranty policy and exclusions.

