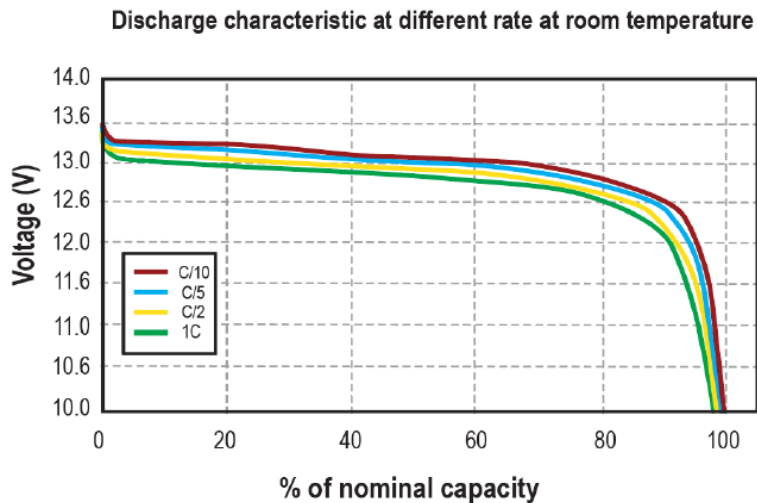


# OWNER'S MANUAL



**Lifeline Batteries, Inc.**

292 E Arrow Highway | San Dimas, CA 91773

1-800-527-3224

[www.lifelinebatteries.com](http://www.lifelinebatteries.com)

Congratulations on the purchase of a new Lifeline Lithium Battery! Lifeline has been the leading name in the AGM (Absorbed Glass Mat) batteries since 1993. The quality and durability of the Lifeline battery series has been proven again and again in military and commercial applications worldwide.

This manual is intended to be used for quick reference only. For the full content of Lifeline's technical recommendations, cautions and other important information, please refer to the "Lifeline Technical Manual" available for download at [www.lifelinebatteries.com](http://www.lifelinebatteries.com). If you do not have web access, please contact Lifeline Customer Service Dept. by calling 1-800-527-3224 or (909) 599-7816 to receive a copy by mail.

## Battery Charging:

The following charging voltages are recommended for maximum battery life for all Lifeline Lithium models only.

Your Lifeline Lithium battery comes about 60% charged to protect cell balancing while in transit.

**Recommended Charge Current:** 20% of rated capacity. For maximum battery life charge current should be  $.2C = 20\%$  of the rated capacity of the battery. (For ex: 20 Amp charge current for a 100 Ah LiFePO4 battery)

**Maximum Charge Current:** 100% of rated capacity

**Recommended Charge Voltage:** 14.6V. For full charge and balancing of cells, (multiple batteries in parallel is not recommended)

**BMS Charge Cut-Off Voltage:** <15.6V (3.9V/Cell)

**Reconnect Voltage:** >14.6V (3.65V/Cell)

**Balancing Voltage:** <14.6V (3.65V/Cell)

**Float:** Float charging is not recommended for Lifeline Lithium batteries.

**Equalization:** Equalization charge is not recommended or necessary for Lifeline Lithium batteries. BMS (Battery Management System) will disconnect battery if voltage has reached 15.6V.

## Battery Discharging:

**Maximum Continuous Discharge Current:** 100% of rated capacity

**Peak Discharge Current:** 200% of rated capacity for 3 seconds

**BMS Discharge Cut-Off Current:** 300% of rated capacity

**Recommended Low Voltage Disconnect:** 11V (2.75V/Cell)

**BMS Discharge Cut-Off Voltage:** >8.0V (2 Seconds) (2.0V/Cell)

**Reconnect Voltage:** >10.0V (2.5V/Cell)

**Over-Discharge:** BMS will automatically disconnect at 8V

## Temperature Performance:

**Discharge Temperature:** -4 ~ 131° F (-20 ~ 55° C)

**Charge Temperature:** 32 ~ 113° F (0 – 45° C)

**Storage Temperature:** 23 ~ 95° F (-5 ~ 35° C)

**BMS High Temperature Cut-Off:** 149° F (65° C)

**Reconnect Temperature:** 131° F

