

Maintenance

- When in storage for an extended period of time, discharge the battery to 40-50% State of Charge. Use the Lifeline Bluetooth app to verify State of Charge (SOC%)
- Keep batteries stored in cool, dry, and ventilated areas.

Troubleshooting

If the battery shows 0 volts at the terminal, the battery has gone into protection mode. Please refer to the following instructions or contact us for assistance.

- If the battery becomes over-discharged and reads 0 Volts at the terminal, disconnect the battery from all electrical loads and connect to compatible lithium charger and charge separately at 14.4 - 14.6 Volts to reset the BMS.
- If the battery temperature becomes too high or too low during operation and triggers the battery temperature protection, please disconnect the battery from the charging source and let the battery cool down or remove battery from cold conditions and allow to heat up to operating temperatures and the BMS will automatically reset.
- If too high of a current passes through the battery and triggers the charge/discharge overcurrent protection, disconnect the battery from all electrical loads and the BMS will automatically reset.
- If the battery terminals still show 0 voltage after following these suggestions, the internal battery fuses or sensors may have been damaged due to severe conditions. Please contact us for assistance.

Warranty

- Limited Lifetime Warranty: This warranty is extended to the original purchaser or end user and covers defects in materials and workmanship.
- Lifeline Lithium batteries are covered by a 5 Year Pro-rated warranty.
- RV & Marine applications: Within the 1st 12 months of the warranty period, subject to the exclusions listed below, the battery will be replaced at no cost.
- The warranty is invalidated if any of the following occurs, and is not limited to:
 - Failure to follow the recommendations in this Owner's Manual
 - Accidental or unreasonable use, misuse, over charging or over loading, or normal wear.
 - Extended storage without recharging
 - Product that has been opened, modified or tampered with
 - Product that was used for applications other than which it was designed and intended for, including engine starting.
- The warranty does not cover shipping, or any other incidental costs not related to the battery.
- For all other applications or technical assistance, please contact our Technical Support team at 1-800-527-3224.
- All shipping costs for returns are the responsibility of the owner of the product and are non-refundable.

LIFELINE
LITHIUM BATTERIES

...the heart of your system®

OWNER'S MANUAL

Lifeline Batteries

292 E Arrow Highway | San Dimas, CA 91773

1-800-527-3224

www.lifelinebatteries.com

Low Temperature Models

LL-12V100-24 | 12.8V 100 Ah Group Size 24

LL-12V100-27 | 12.8V 100 Ah Group Size 27

Please read this manual prior to installation and operation.

Congratulations on the purchase of a new Lifeline Lithium Battery! Lifeline has been the leading name in advanced battery technology including AGM (Absorbed Glass Mat) batteries since 1993.

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 Lithium Owner's Manual" available for download at 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.

Attentions and Warnings:

Per US regulation, Lifeline Lithium batteries are shipped in a 60% State of Charge. Please charge batteries to 100% SOC before installation and use.

Download the  Bluetooth app available for iOS and Android.

- This product is intended for Parallel connections only. DO NOT connect in Series for 24, 36, or 48 Volt systems.
- DO NOT open, disassemble, modify, or repair the battery.
- DO NOT puncture, drop, crush, burn, penetrate, shake, or strike the battery.
- DO NOT use a badly damaged battery or operate it with damaged cables or charging adaptors.
- DO NOT permit the battery to freeze. Never charge a frozen battery.
- DO NOT submerge in water. This product is IP65 water resistant which protects against low water pressure only.
- This product contains lithium-ion batteries. When it is worn out, dispose of it properly using local laws and regulations.
- In case of skin or eye contact with damaged or exposed battery chemicals, rinse immediately with clean water and seek medical attention.

The following specifications are recommended for maximum battery life for all Lifeline Lithium Low Temperature models only.

Specifications	
Cell Type	LiFePO4
Nominal Voltage	12.8V
Technical Rated Capacity	100 Ah
Cycle Life (0.2C, 77°F, 25°C)	3500 Cycles (80% DOD)
Terminal Bolt Size	M8
Certifications	UN38.3, CE, UL1642, IEC62133
Shipping Classification	UN3480, Class 9
Model LL-12V100-24	10.2 x 6.6 x 8.6 27.8 lbs
Model LL-12V100-27	12.1 x 6.6 x 8.7 28.2 lbs
Charging	
Recommended Charging Current	20A
Maximum Charging Current	100A
Recommended Charge Voltage	14.4V – 14.6V
BMS Charge Cut-Off Voltage	15.4V
BMS Reset Voltage	14.4V – 14.6V
Balancing Voltage	14.4V - 14.6V
Float Voltage	13.4V -13.8V
Equalization Voltage	14.4V or Disabled
Temperature Compensation	0 or Disabled
Discharging	
Maximum Continuous Discharge Current	100A
Peak Discharge Current	200A
BMS Discharge Cut-Off Current	300A
Low Voltage Disconnect	11.0V
BMS Discharge Cut-Off Voltage	8.0V
Reconnect Voltage	>10.0V
Temperature	
Discharge Temperature	-4 ~ 131° F (-20 ~ 55° C)
Charging Temperature	-4 ~ 131° F (-20 ~ 55° C)
Storage Temperature	23 ~ 95° F (-5 ~ 35° C)
BMS High Temperature Cut-Off	149° F (65° C)
Reconnect Temperature	131° F