



ABYSS BATTERY

POWER YOUR PURSUIT.

ABYSS

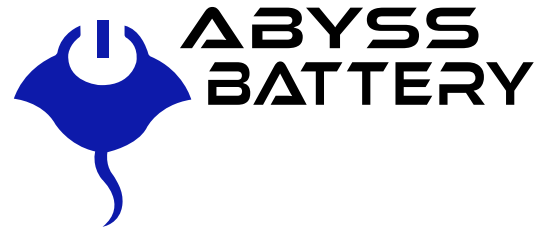
BATTERY



INSTRUCTION MANUAL

WWW.ABYSSBATTERY.COM





DISCLAIMER

Thanks for choosing our lithium-ion batteries, please read this User Manual carefully before using the battery.

We do not take the responsibility for losses or accidents resulting from improper use, or facts identified as the following:

1) Defects caused by improper assembly or disassembly; 2) defects occurring after purchase due to product modification, intentional damage, accident, misuse, abuse, negligence or exposure to corrosive elements; 3) cosmetic damage and 4) labor or assembly costs. Except as provided herein, Abyss Battery, Inc. makes no express warranties, and any implied warranty, including without limitation any implied warranty of merchantability or fitness for a particular purpose, is limited in its duration to the duration of the written limited warranty set forth herein. Except as provided herein, Abyss Battery, Inc. shall have no liability or responsibility to the purchaser or any other person or entity with respect to any liability, loss or damage caused or alleged to be caused directly or indirectly by use of the product, including, but not limited to, any incidental or consequential damages.

THE WARRANTY CONTAINED HEREIN IS THE EXCLUSIVE WARRANTY MADE BY ABYSS BATTERY®, INC. AND THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR OF MERCHANTABILITY MADE WITH RESPECT TO SUCH BATTERIES. ABYSS BATTERY, INC. IS NOT LIABLE FOR ANY INJURY OR MISHAPS SUSTAINED IN THE USE OF THIS PRODUCT. THE USER OF THIS PRODUCT ACKNOWLEDGES ASSUMED RISKS AND WAIVES ANY AND ALL CLAIMS AGAINST ABYSS BATTERY, INC. AND ANY OF IT'S AGENTS.

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PRODUCT OVERVIEW:

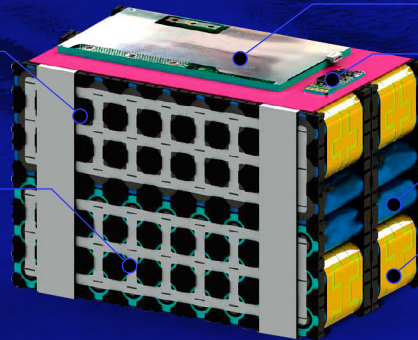
DIMENSIONS:



INTERNAL STRUCTURE:

Molded Plastic cell holder

Molded Nickel sheet



BMS

Bluetooth module

Cell

Heating film

PACKAGE INCLUDES:

- 1 x Lithium-Iron-Phosphate Battery
- 2 x M8 Stainless Terminal Bolts
- 2 x Stainless lock nuts & washers
- 1 x Abyss Battery Quick Start Guide



TECHNICAL SPECIFICATIONS:

ELECTRICAL SPECIFICATIONS	Model Nominal Voltage
	Nominal Capacity Parallel Connection
	Serial Connection BMS
	Bluetooth Heat
	Circuit Protection Cycle Life
	Self-Discharge Charge Efficiency
	Discharge Efficiency

CHARGE SPECIFICATIONS	Charge Voltage
	Standard Current
	Fast Current

DISCHARGE SPECIFICATIONS	Standard Current
	Max. Con. Current
	Peak Current
	Cut-off Voltage

MECHANICAL SPECIFICATIONS	Dimensions (mm)
	Approx. Weight (KG)
	Terminal Type
	Case Color/material
	IP Rating 65
	Cell Type: Lithium Iron Phosphate
	Cell holder: Yes

TEMPERATURE SPECIFICATIONS	Charge Temp
	Discharge Temp
	Storage Term

INTRODUCTION:

Not All Lithium Batteries Are Built Equal or Perform the Same. With pre-programmed intelligence, Abyss Batteries can better understand how you use your boat and trolling motor during each charge cycle. Our battery's ability to learn and "adapt" makes it stand out as a superior option for lithium-ion technology.

There is no technical way to compare against other brands of batteries on the market today with similar specifications. Abyss battery design offers more capacity and amp-hours in a smaller size while also maintaining stability throughout discharge cycles -all without sacrificing performance!

KEY BENEFITS:

Higher qualified cylindrical cells:

UL1642, IEC62619, and IEC62133 are listed with a cycle life of more than 3000times and excellent consistency.

Bluetooth Integration:

Monitor battery status (charge, discharge, current, temperature, cycle life, and so on) and manage/change the data for different applications.

Heating Functions:

Uniform internal heating is an important feature of our cold-weather performance batteries, as many external heating blanket options currently available cannot sense the internal temperature of the cells and may not be completely effective at heating the battery throughout. The system features proprietary technology that draws power from the charger itself, requiring no additional components. The entire process of heating and charging is completely seamless. Simply plug the battery into the regular lithium charger and the internal heating and monitoring system takes care of the rest.



More Stable and Firm Internal Structure:

Our cell holder design construction protects and separates each cell within the battery to avoid any circuit short risk caused by vibration or impact or over current, while also improving heat dissipation.

Smaller size + less weight:

The size of our battery is just 3/4 size of the standard 12V 100Ah battery from other Lithium Battery Companies.

FEATURES:

- **Cell matching:**
Strict cell matching standard, the difference of Internal resistance is 1mn and voltage is 5mV.
- **Automatic cell welding:**
Cells are assembled with Automatic welding equipment to ensure quality, reliability, and consistency.
- **100% Cycle test:**
All battery packs are 100% cycle tested (Fully -Discharged- Fully Charged - Fully Discharged - 60% Charged) before package and all test reports are stored.
- **Unique tracking number:**
All battery packs are lasered with a unique serial number on the case side for quality tracking.



WHERE TO USE:



RV



MARINE



LIGHT EV


 ENERGY
STORAGE


GOLF CART



CLEANING



ROBOTICS



LIGHTING

OPERATION METHOD:

a. General instructions

Read the following instructions completely before installation. The information contained in this manual will assist you in properly installing a functioning operating system, proper disposal, and avoiding serious injury or harm.

Caution: LiFePO4 batteries if punctured may emit a hazardous electric vapor.

Toxic Vapor: It may be harmful to inhale and cause inflammation of the lungs.

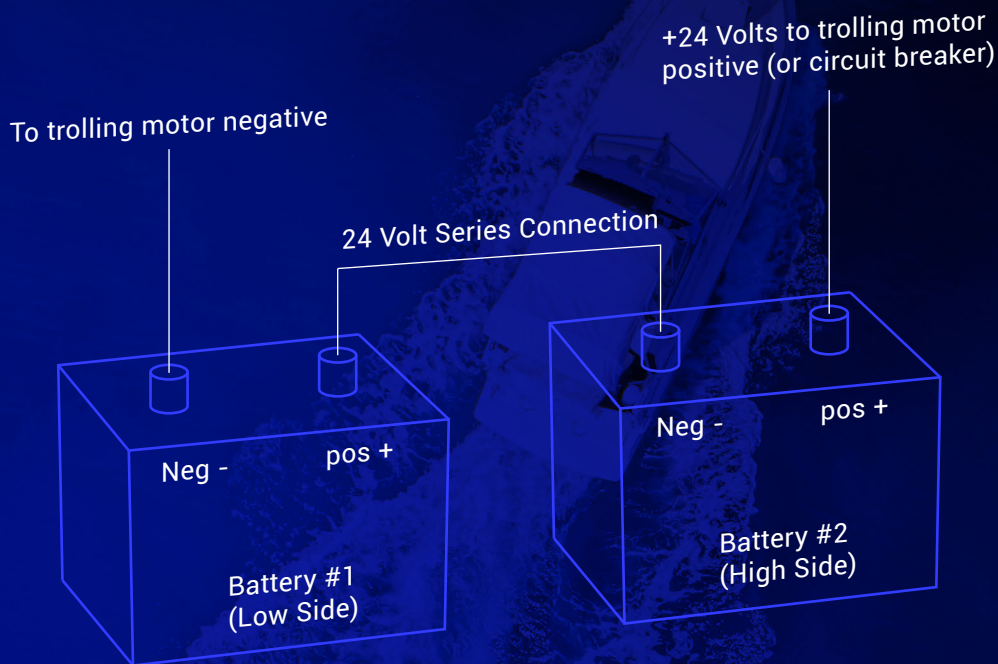
Danger: Short Circuitry.



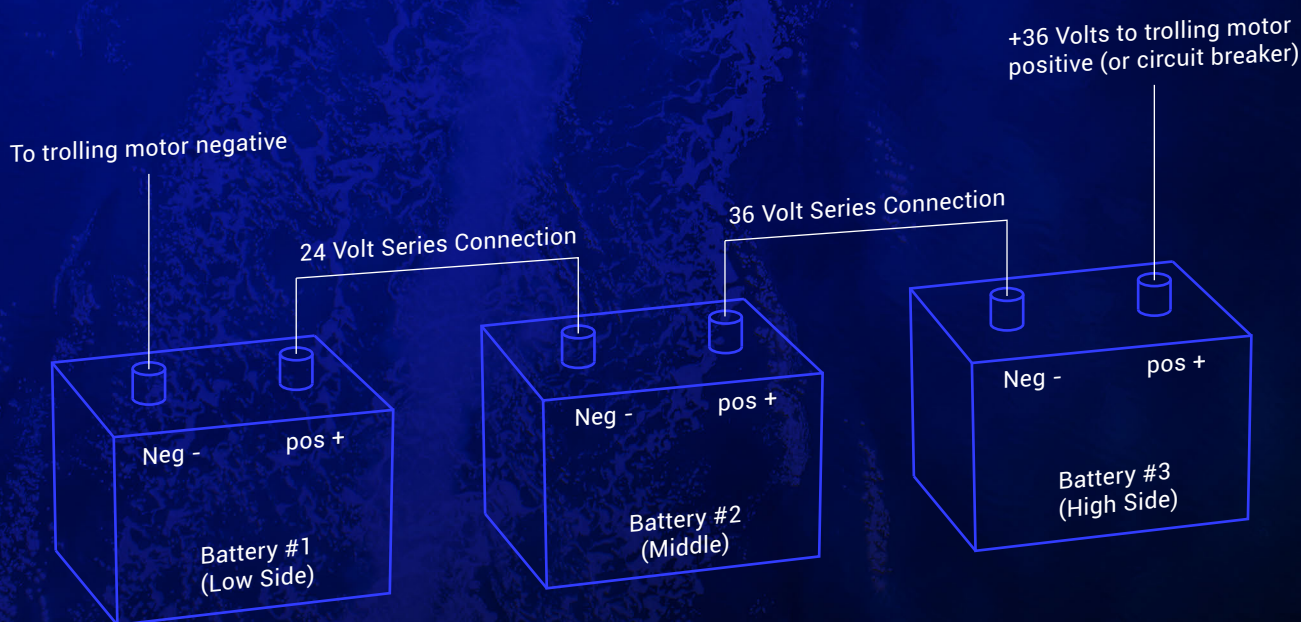
b. Battery Installation

Series Battery Connections

24V CONNECTION WITH TWO 12V BATTERIES (FIGURE 1)



36V CONNECTION WITH THREE 12V BATTERIES (FIGURE 2)



c. Charging

- Only use ABYSS® Approved Lithium Battery chargers or Compatible battery chargers recommended.
- DO NOT leave your battery charging overnight. Our batteries only take two hours to fully charge.
- Recommended Charging Method: Plug in your Battery Charger the night before your fishing trip, by doing this and only fully charging your battery when you need it you will drastically extend your battery life cycle.

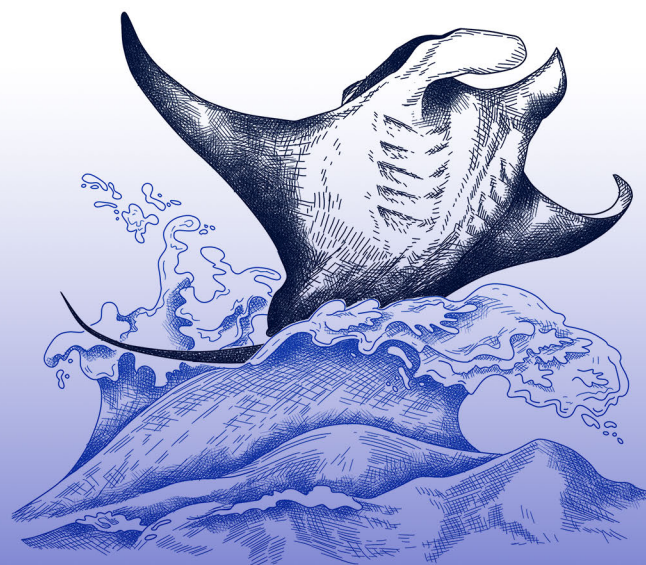
TRANSPORTATION REQUIREMENTS:

1. ABYSS BATTERY™ is an approved Hazmat shipper which is required to ship lithium-ion batteries. All our products are delivered in packaging that meets or exceeds federal and international standards for shipping lithium-ion batteries.
2. FedEx and UPS require you to be Hazmat trained and certified to ship lithium ion batteries. If you do not have an open and active Hazmat account you will not be allowed to ship us your batteries with these carriers. Abyss Battery® will be required to arrange an LTL Freight shipment to return your batteries to us.
3. Please do not attempt to ship your battery back to us without proper packaging or if you are not an approved hazmat shipper!
4. All lithium batteries are required to be shipped in accordance with UN38.3 certification and must meet or exceed international and federal regulations for lithium-ion batteries. If you do not have your original packaging, ABYSS BATTERY™ can send you the proper packaging for a small fee including shipping costs.



STORAGE & MAINTENANCE:

1. Do not leave batteries unused for extended periods. When a battery has been unused for 6 months, check the charge status and charge-discharge batteries for a full cycle or dispose of the battery as appropriate.
2. Prolonged inactivity isn't favorable for batteries, so be sure to store them in a safe, dry environment that's well-ventilated and away from any sources of flame. Temperature should remain at 20° or lower with the battery powered down to about 40% charge.
3. Avoid placing batteries upside down and protect them from any type of shock or stress, such as rain. Furthermore, be sure to store these items away from potentially flammable materials which could cause combustion or a dangerous explosion.



WARRANTY:

Thank you for taking interest in the products we offer at Abyss Battery. This Limited Warranty applies to physical goods, and only physical goods purchased from Abyss Battery. Unlike other Lithium battery companies, Abyss Battery has additional support through the purchase of our Extended Warranty program.

MANUFACTURER'S LIMITED WARRANTY

WARRANTY COVERAGE	5-YEAR FREE REPLACEMENT	AFTER 5 YEARS, 35% OFF A NEW REPLACEMENT UP TO 10-YEARS
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EXTENDED WARRANTY

EXTENDED COVERAGE	7-YEAR FREE REPLACEMENT	AFTER 7 YEARS, 50% OFF A NEW REPLACEMENT FOR LIFE
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Enjoy 7 years of peace of mind when you buy Recharge+ for your Battery. Recharge+ for Abyss Battery® Extends your Free 5-Year Replacement Coverage by 2+ additional years from your purchase date. In addition to a free battery replacement, you'll get 24/7 priority access to our Battery experts by chat or phone.

WHAT DOES LIMITED WARRANTY COVER?

- We guarantee that every battery sold by us or any of our authorized dealers and OEM distributors is defect-free from the date of purchase.
- Our Li-ion batteries are designed to be a drop-in replacement for lead-acid and AGM battery applications.
- This Limited Warranty covers any defects in materials and workmanship under normal use during the Warranty Period.
- During the Warranty Period, Abyss Battery will repair or replace, at no charge, products or parts of a product that proves defective because of improper workmanship, under normal use and maintenance.

SAFETY & PRECAUTIONS:

1. All ABYSS® Batteries are IP65 rated / waterproof and constructed to withstand saltwater conditions, you'll be ready for whatever the sea throws at you.
2. Do not use a battery IF the temperature is ($>55^{\circ}\text{C}$), smells, has a deformation, or other abnormalities while discharging , charging, or during storage.
3. Do not expose battery to flammable and explosive materials during charging or storage.
4. Do not reverse the installation or the load in equipment, and do not reverse the positive and negative pole of a battery. (Reverse Polarity)
5. Do not try to disassemble, crush, or puncture the battery.
6. Do not short the external contacts on a battery.
7. Do not purposefully heat a battery or dispose of a battery in fire or water.
8. Do not expose a battery directly to temperatures above 60°C (140°F).
9. Keep the battery away from children.
10. Avoid exposing the battery to excessive shock or vibration.
11. Do not use a battery with a deformed or damaged outer shell casing.
12. If a battery pack has leaking fluids, avoid touching the fluids. Dispose of a leaking battery pack. (see Disposal and Recycling in this document).
13. In case of eye contact with fluid, do not rub your eyes. Immediately flush eyes thoroughly with water for at least 15 minutes, lifting upper and lower lids, until no evidence of the fluid remains. Seek medical attention.
14. Toxic Vapor: If you notice or smell a hazardous gas, take protective measures (such as covering the nose and mouth with a wet towel) to prevent inhalation of fumes. As smoke and other harmful gases may cause damage to the respiratory system, seek medical treatment in severe cases.
15. Do not power on electronics or discharge the battery if any type of serious impact from the force, or puncture has caused damage or has compromised the Battery pack.
16. DO NOT try to disassemble the battery. The warranty will be void. No Exceptions!!!
17. DO NOT operate electronics or batteries if poor wire connections and corroded terminals are present.
18. DO NOT use or operate the battery outside of its specified limits.

THIS LIMITED WARRANTY DOES NOT COVER ANY PROBLEM THAT IS CAUSED BY:

- Conditions, malfunctions, or damage not resulting from defects in material or workmanship.
- Damages from shipping.
- Damages caused by abuse/neglect (DO NOT JUMP START!)
- Loose terminal bolts.
- Corroded hardware.
- Failure to improperly install the battery.
- Tampering or removal of manufacturer codes.
- Properly charging and maintaining the battery.
- Breakage from the collision.
- Improper storage, which includes damage from water, extreme heat, or freezing temperatures.
- All bolts must be tightened with a torque wrench and NOT by hand to avoid overheating caused by a loose connection.
- Use approved and authorized chargers only.

DISPOSAL AND RECYCLING:

- Lithium-Ion batteries are subject to disposal and recycling regulations that vary by country and region. Always check and follow your applicable regulations before disposing of any battery.
- Contact Rechargeable Battery Recycling Corporation (www.rbrcc.org) for the U.S.A. and Canada, or your local battery recycling organization.
- Many countries prohibit the disposal of waste electronic equipment in standard waste receptacles.
- Place only discharged batteries in a battery collection container. Use electrical tape or other approved covering over the battery connection points to prevent short circuits.

CERTIFICATIONS:

UL 1642 (Cell)
IEC62133 (Cell)
IEC62619 (Cell)
CE (Pack)
UN38.3 (Cell/ Pack)
ROHS (Cell)

MSDS

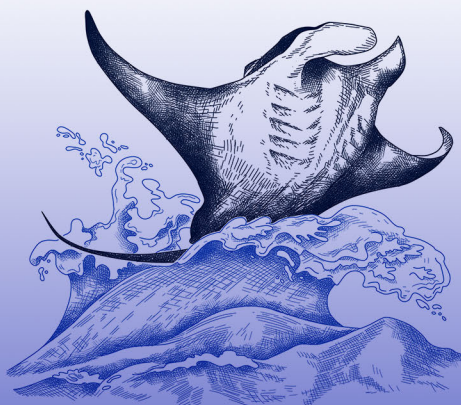


UN38.3



For more information, please click the link below:

[MORE](#)





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