

## Enjoybot 87.6V 10A

# Enjoybot 87.6V 10A LiFePO4 Lithium Battery Charger User Manual

Model: 87.6V 10A

## INTRODUCTION

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This manual provides essential information for the safe and efficient operation of your Enjoybot 87.6V 10A LiFePO4 Lithium Battery Charger. This charger is specifically designed for 72V (87.6V) LiFePO4 batteries and features a 0V charging function to reactivate or repair batteries that have been unused for extended periods.

Key features include:

- **72V LiFePO4 Battery Compatibility:** Designed for 72V (87.6V) LiFePO4 batteries with a 0V charging function.
- **IP65 Waterproof Rating:** Durable die-cast aluminum alloy casing provides protection against water, dust, and vibration.
- **Multiple Security Protections:** Includes reverse polarity, output short circuit, output overvoltage, output overcurrent, over-temperature, under-voltage, and lightning protection.
- **Efficient Charging:** Charges a 72V 100Ah LiFePO4 battery in approximately 10 hours.
- **Real-Time Charging Status:** LED indicator displays standby, charging, fully charged, and abnormality statuses.

## SETUP INSTRUCTIONS

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Before connecting the charger, ensure the battery is a 72V LiFePO4 type and that the charger's specifications match your battery requirements.

1. **Inspect the Charger:** Verify that the charger and its cables are free from any visible damage.
2. **Connect to Battery:** Connect the charger's DC output cable to your 72V LiFePO4 battery. The charger features an Anderson connector for easy and secure connection. Ensure the polarity is correct (red to positive, black to negative). If using M8 ring terminals, ensure they are securely fastened to the battery terminals.
3. **Connect to Power:** Plug the AC power cord into a standard 100-240Vac electrical outlet.

4. **Mounting (Optional):** The charger features a portable and mountable design with 6mm mounting holes. If permanent installation is desired, secure the charger using appropriate fasteners in a well-ventilated area.

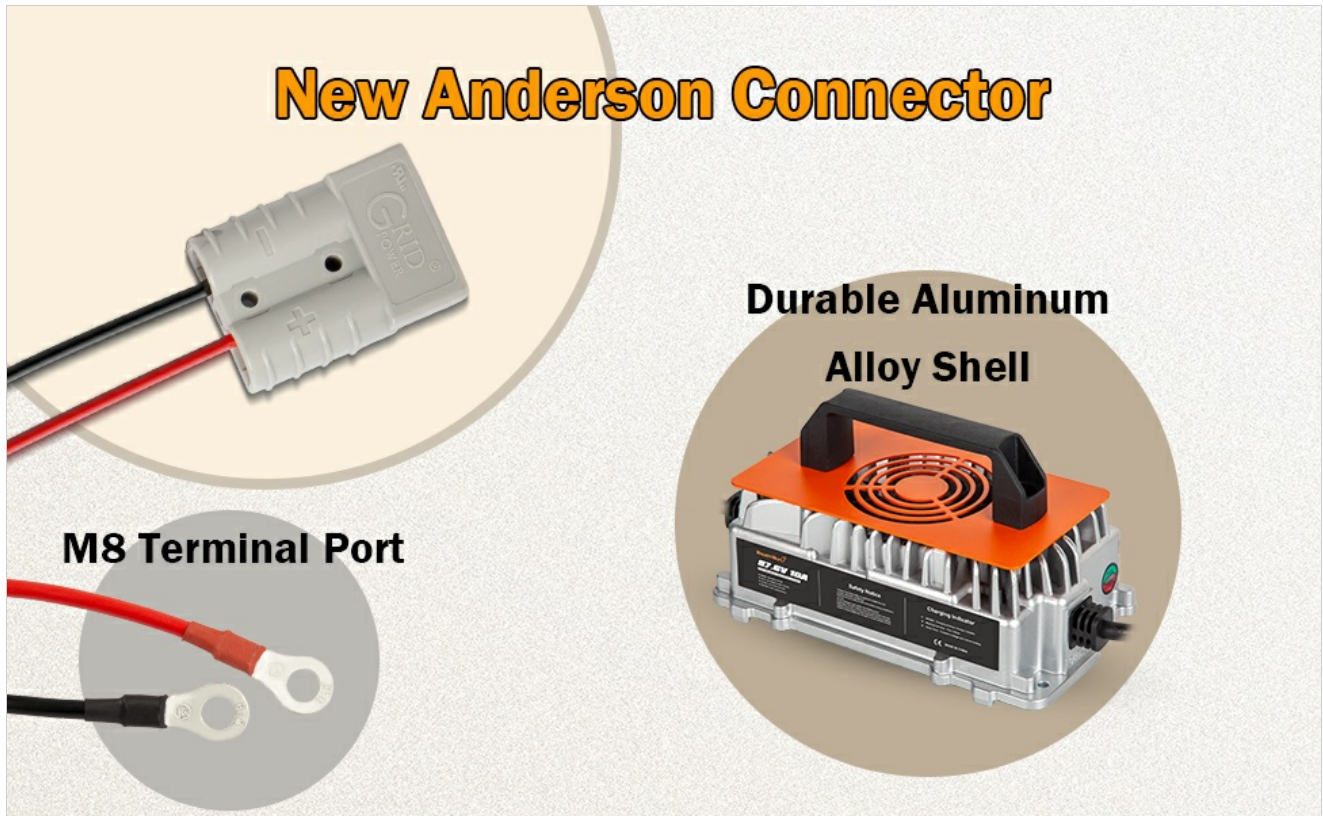


Image: Easy connection using the Anderson connector or M8 ring terminals.



Image: The charger's portable and mountable design, highlighting the 6mm mounting holes.

## OPERATING INSTRUCTIONS

Once the charger is properly connected to both the battery and the AC power source, it will begin the charging process automatically.

### LED Indicator Status:

- **Green Light ON:** Indicates standby mode or that the battery is fully charged.
- **Red Light FLASH:** Indicates the charger is in active charging mode.
- **Green Light FLASH:** Indicates constant voltage and current limiting phase of charging.



Image: Detailed view of the LED indicator and its corresponding charging statuses.

### 0V Smart Charge Function:

The charger is equipped with a 0V smart charge function. This feature allows the charger to attempt to reactivate or repair LiFePO<sub>4</sub> batteries that have been deeply discharged (down to 0V) or have not been used for a long time. This can help extend the battery's lifespan.

# 0V CHARGING ACTIVATION

Batteries Back To Life



**Quick Battery  
Charger**



**Wake up Protection  
State Battery**



**Extend  
battery life**



Image: Visual representation of the 0V charging activation feature, highlighting quick charging, wake-up protection, and extended battery life.

## Safety Protections:

The Enjoybot charger incorporates multiple safety features to protect both the charger and the battery:

- Over-Current Protection
- Over-Temperature Protection
- Over-Voltage Protection
- Lightning Protection
- Under-Voltage Protection
- Short-Circuit Protection
- Reverse-Connection Protection

# 7 SAFETY PROTECTIONS



Over-Current  
Protection



Over-Temperature  
Protection



Under-Voltage  
Protection



Short-Circuit  
Protection



Reverse-Connection  
Protection



Over-Voltage  
Protection



With Lightning  
protection



Image: Overview of the 7 smart protection features integrated into the charger.

## MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your charger.

- **Cleaning:** Regularly wipe the charger's exterior with a dry, soft cloth. Do not use harsh chemicals or abrasive cleaners. Ensure the cooling fan vents are clear of dust and debris.
- **Storage:** When not in use, store the charger in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Cable Inspection:** Periodically check the AC and DC cables for any signs of wear, cuts, or damage. Replace damaged cables immediately.
- **Waterproof Design:** The IP65 rating provides protection against water splashes and dust. However, avoid submerging the charger in water.

# IP65

## WATERPROOF DESIGN



Image: The IP65 waterproof design of the charger, showing its resistance to water splashes.

## TROUBLESHOOTING

If you encounter issues with your charger, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Charger not turning on / No LED indication	No AC power; Faulty AC cable; Charger malfunction.	Check AC power outlet and cable connection. Try a different outlet. Ensure the charger is connected to the battery.
Charger not charging (Green light ON, but battery not full)	Battery not connected properly; Battery voltage too low (below 0V); Battery fault.	Ensure DC cables are securely connected to the battery with correct polarity. The 0V smart charge function should attempt to reactivate deeply discharged batteries. If the issue persists, the battery may be faulty.
Red light flashing, but charging seems slow or stops prematurely	Battery capacity is very high; Charger overheating; Internal protection activated.	Ensure adequate ventilation around the charger. Check for any obstructions to the cooling fan. If the charger is hot, disconnect it and allow it to cool. Verify battery health.
Charger LED indicates an error (e.g., rapid flashing, specific color not listed)	Reverse polarity; Short circuit; Overvoltage/Overcurrent; Battery fault.	Immediately disconnect the charger from both AC and DC. Check all connections for correct polarity and ensure no short circuits. Inspect the battery for damage. Reconnect carefully. If the error persists, contact support.

If troubleshooting steps do not resolve the issue, please contact Enjuobot customer support.

## SPECIFICATIONS

Feature	Detail
Model Number	87.6V 10A
Input Voltage	100-240Vac
Output Voltage	87.6V
Charging Current	10A
Battery Type Compatibility	72V LiFePO4 Lithium Batteries
Waterproof Rating	IP65
Product Dimensions	8.45"D x 5"W x 4.33"H (21.46 x 12.7 x 10.99 cm)
Item Weight	2.41 pounds (1.09 kg)
Operating Temperature	-4°F~113°F (-20°C~45°C)
Safety Certification	CE



Image: Charger dimensions including length, width, height, and cable lengths.

## WARRANTY INFORMATION

Enjoybot products are manufactured to high-quality standards. For specific warranty details regarding your 87.6V 10A LiFePO4 Lithium Battery Charger, please refer to the warranty card included with your product or visit the official Enjoybot website. Keep your purchase receipt as proof of purchase for warranty claims.

## CUSTOMER SUPPORT

For technical assistance, troubleshooting not covered in this manual, or warranty inquiries, please contact Enjoybot customer support through the following channels:

- **Official Website:** [Visit the Enjoybot Store on Amazon](#) (for general inquiries and product information)
- Refer to your product packaging or included documentation for direct contact information such as email or phone number.