**WEIJASHI T**

# User Manual: 48V 12Ah Lithium Ion Electric Bike Battery Pack

Model: T (ASIN: B0F2H3BT2B)
Brand: WEIJASHI

## 1. Introduction

This manual provides essential information for the safe and efficient use of your WEIJASHI 48V 12Ah Lithium Ion Electric Bike Battery Pack. Please read this manual thoroughly before installation and operation to ensure optimal performance and longevity of your battery.
This battery pack is designed for use with 200-1000W electric bicycles, scooters, and tricycles, featuring a built-in 13S4P Battery Management System (BMS) for enhanced protection.


Figure 1: WEIJASHI 48V 12Ah Lithium Ion Electric Bike Battery Pack with T-plug connector.

## 2. Safety Information

**WARNING: Failure to follow these safety instructions may result in fire, electric shock, injury, or damage to the battery and connected devices.**

- **Charging:** Only use the charger provided with the battery pack. Using an incompatible charger can cause damage, overheating, or fire. Do not charge unattended.
- **Temperature:** Do not expose the battery to extreme temperatures (above 60°C/140°F or below -20°C/-4°F). Avoid direct sunlight and heat sources.
- **Physical Damage:** Do not puncture, drop, crush, or disassemble the battery pack. If the battery casing is damaged, do not use it.
- **Water Exposure:** Although the outer PVC material offers insulation, avoid submerging the battery in water or exposing it to heavy rain.
- **Short Circuit:** Do not short-circuit the battery terminals. This can cause severe damage to the battery and pose a fire hazard.
- **Disposal:** Dispose of the battery pack according to local regulations. Do not dispose of it in household waste or by incineration.

- **Children:** Keep the battery out of reach of children.

## 3. Setup and Installation

### 3.1 Unpacking

Carefully remove the battery pack and charger from the packaging. Inspect for any visible damage. If any damage is found, contact customer support immediately.

### 3.2 Initial Charge

It is recommended to fully charge the battery before its first use. Connect the charger to the battery's charging port, then plug the charger into a standard wall outlet. The charger indicator light will typically show red during charging and turn green when fully charged.

Figure 2: Included battery charger and various power cables for different regions.

### 3.3 Connecting the Battery

Identify the appropriate connector on your electric bicycle, scooter, or tricycle. This battery pack is available with various connector types. Ensure the battery's output connector matches your device's input connector.


Figure 3: Common battery plug types. Ensure your battery's plug matches your device's connector.

Carefully align the battery connector with the device's connector and push firmly until it clicks into place. Ensure a secure connection to prevent power interruptions or damage.

### 3.4 Mounting

Securely mount the battery pack in a designated battery compartment or using appropriate straps/brackets on your vehicle. Ensure it is stable and does not move during operation. Avoid mounting in areas exposed to excessive vibration, heat, or direct impact.

## 4. Operating Instructions

### 4.1 Charging the Battery

To charge the battery, connect the charger to the battery's charging port and then plug the charger into a suitable AC power outlet (100-240V). The charging process is indicated by the charger's LED light (usually red for charging, green for fully charged). Charging time will vary based on the battery's discharge level. The battery's internal Battery Management System (BMS) includes features to optimize charging, potentially increasing charging speed by up to 25% under ideal conditions.

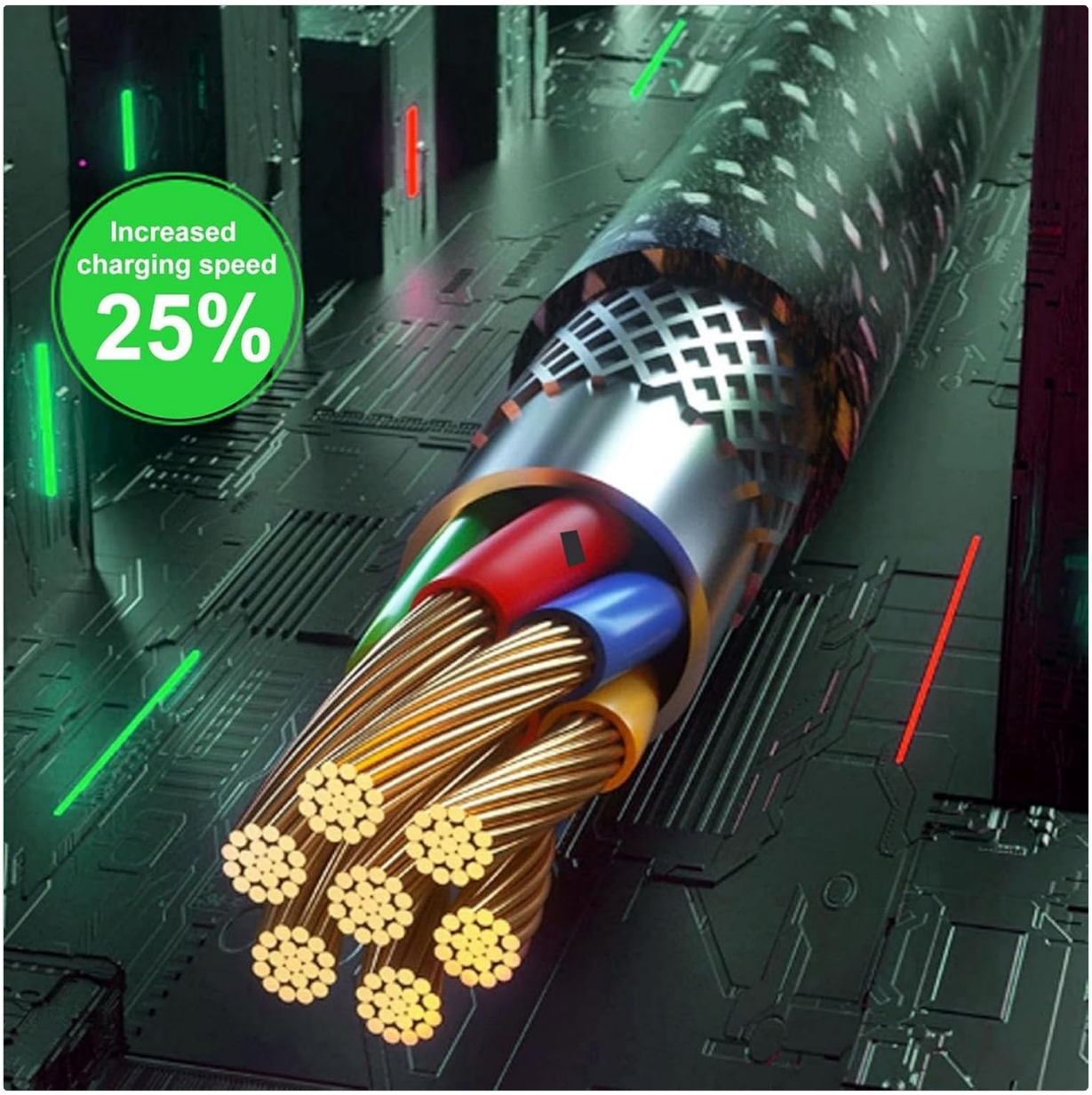


Figure 4: The battery's design supports optimized charging for faster replenishment.

## 4.2 Battery Management System (BMS)

The integrated 13S4P BMS provides comprehensive protection for the battery pack, ensuring safe and reliable operation. Key protection functions include:

- **Equalization Function:** Balances cell voltages for extended battery life.
- **Overvoltage Protection:** Prevents overcharging.
- **Overcharge Protection:** Stops charging once the battery reaches full capacity.
- **Over-discharge Protection:** Prevents the battery from discharging below a safe voltage level.
- **Overcurrent Protection:** Protects against excessive current draw.
- **Short Circuit Protection:** Automatically cuts off power in case of a short circuit.
- **Charge Protection:** General protection during the charging process.
- **Charging Anti-reverse:** Prevents damage from incorrect charging polarity.


Figure 5: The Built-in BMS Intelligent Protection Board offers 8 main protection functions.

### 4.3 Usage

Once connected and charged, the battery is ready for use. Monitor your device's battery indicator to avoid deep discharge, which can reduce battery lifespan. For optimal performance, avoid operating the battery at its absolute minimum or maximum charge levels for extended periods.

## 5. Maintenance

- **Storage:** If storing the battery for an extended period, charge it to approximately 50-60% capacity. Store in a cool, dry place away from direct sunlight and extreme temperatures. Recharge every 3 months to prevent deep discharge.
- **Cleaning:** Use a dry, soft cloth to clean the battery pack. Do not use water or chemical cleaners. Ensure connectors are free from dust and debris.
- **Inspection:** Periodically inspect the battery casing and cables for any signs of damage, swelling, or corrosion. If any issues are detected, discontinue use and contact support.
- **Cycle Life:** The battery is designed for approximately 1000 charge/discharge cycles. Proper charging and storage practices can help maximize its lifespan.

## 6. Troubleshooting

| Problem | Possible Cause | Solution |
|---|---|---|
| Battery not charging | Charger not connected properly; Charger malfunction; Battery over-discharged; BMS protection activated. | Ensure all connections are secure. Try a different outlet. If battery is deeply discharged, it may require a specialized charger or professional assistance. Contact support if BMS is suspected. |
| Battery not powering device | Battery not charged; Loose connection; Device malfunction; BMS protection activated (e.g., short circuit). | Charge the battery fully. Check all cable connections. Test the device with another power source if possible. If BMS protection is active, disconnect and reconnect the battery after a few minutes. |
| Reduced range/power | Battery not fully charged; Aging battery; Extreme temperatures; High power consumption. | Ensure full charge before use. Operate within recommended temperature ranges. Consider battery replacement if significant degradation is observed after many cycles. |
| Unusual heat during operation/charging | Overload; Internal short; Damaged cells; Faulty charger. | **Immediately disconnect the battery and charger. Do not use. Contact customer support. This indicates a serious issue.** |

## 7. Specifications

| Parameter | Value |
|---|---|
| Voltage | 48V |
| Capacity | 12Ah |
| Combination Method | 13S4P |
| Dimensions (L×W×H) | 238 × 68 × 80 mm (Approx. 9.37 × 2.68 × 3.15 inches) |
| BMS Protection | Overcharge, Over-discharge, Overcurrent, Short Circuit, Overvoltage, Equalization, Charge Protection, Charging Anti-reverse |
| Outer Material | PVC (Insulation and wear resistance) |
| Cycle Life | Approx. 1000 cycles |
| Compatible Motor Power | 200-1000W |


Figure 6: Battery dimensions for compatibility assessment.

## 8. Warranty and Support

For any questions, technical assistance, or warranty inquiries regarding your WEIJASHI 48V 12Ah Lithium Ion Electric Bike Battery Pack, please contact the manufacturer or your point of purchase. Please have your product model (T) and ASIN (B0F2H3BT2B) ready when contacting support.
While third-party protection plans may be available, direct product support should be sought from the manufacturer for product-specific issues.