

## HXJNLDC 103030

# HXJNLDC 103030 3.7V 1000mAh Rechargeable Lithium Polymer Battery Instruction Manual

*Model: 103030*

## 1. INTRODUCTION

This manual provides essential information and instructions for the safe and effective use of the HXJNLDC 103030 3.7V 1000mAh Lithium Polymer Battery. This battery is designed for integration into DIY electronic products requiring a 3.7V to 5V power supply, with a maximum capacity requirement of 1000mAh (3.7Wh).

**Important: This battery is not suitable for high-power electric tools or model aircraft applications.**

## 2. SAFETY INFORMATION

Please read and understand all safety warnings before using this product. Failure to follow these instructions may result in fire, injury, or damage to the battery and connected devices.

- **Polarity:** The red wire indicates the positive (+) terminal, and the black wire indicates the negative (-) terminal. Always ensure correct polarity when connecting the battery to avoid damage. Do not reverse-charge or reverse-connect.
- **Protection Circuit:** The battery includes a built-in Japanese Seiko IC protection board to prevent overcharge, overdischarge, overcurrent, and short circuits. However, proper handling is still essential.
- **Physical Condition:** Do not use the battery if it shows any signs of conspicuous damage, swelling, leakage, or deformation.
- **Temperature:** Avoid exposing the battery to high temperatures, direct sunlight, or extreme cold. Store in a cool, dry place.
- **Disassembly:** Do not attempt to disassemble, puncture, crush, or modify the battery.
- **Disposal:** Dispose of used batteries according to local regulations. Do not dispose of in household waste.

## 3. SPECIFICATIONS

Detailed specifications for the HXJNLDC 103030 Lithium Polymer Battery:

- **Battery Type:** Rechargeable Lithium Polymer (LiPo)
- **Nominal Voltage:** 3.7V
- **Full Charge Voltage:** 4.2V
- **Discharge Cut-off Voltage:** 3.0V
- **Capacity:** 1000mAh
- **Energy:** 3.7Wh
- **Dimensions (L×W×T):** 31mm × 30mm × 10mm (1.2 × 1.181 × 0.394 inches)
- **Weight:** 16.8g (0.593oz)
- **Maximum Continuous Discharge Current:** 1A
- **Cable Type:** 3302-26 high temperature resistant silicone cable
- **Connector Type:** Genuine JST Pitch 1.25mm 2-wire connector module
- **Internal Protection:** Overcharge, overdischarge, overcurrent, short circuit
- **Item Model Number:** 402030 (Note: The product is commonly identified by its dimensions, 103030, referring to 10mm thickness, 30mm width, 30mm length.)

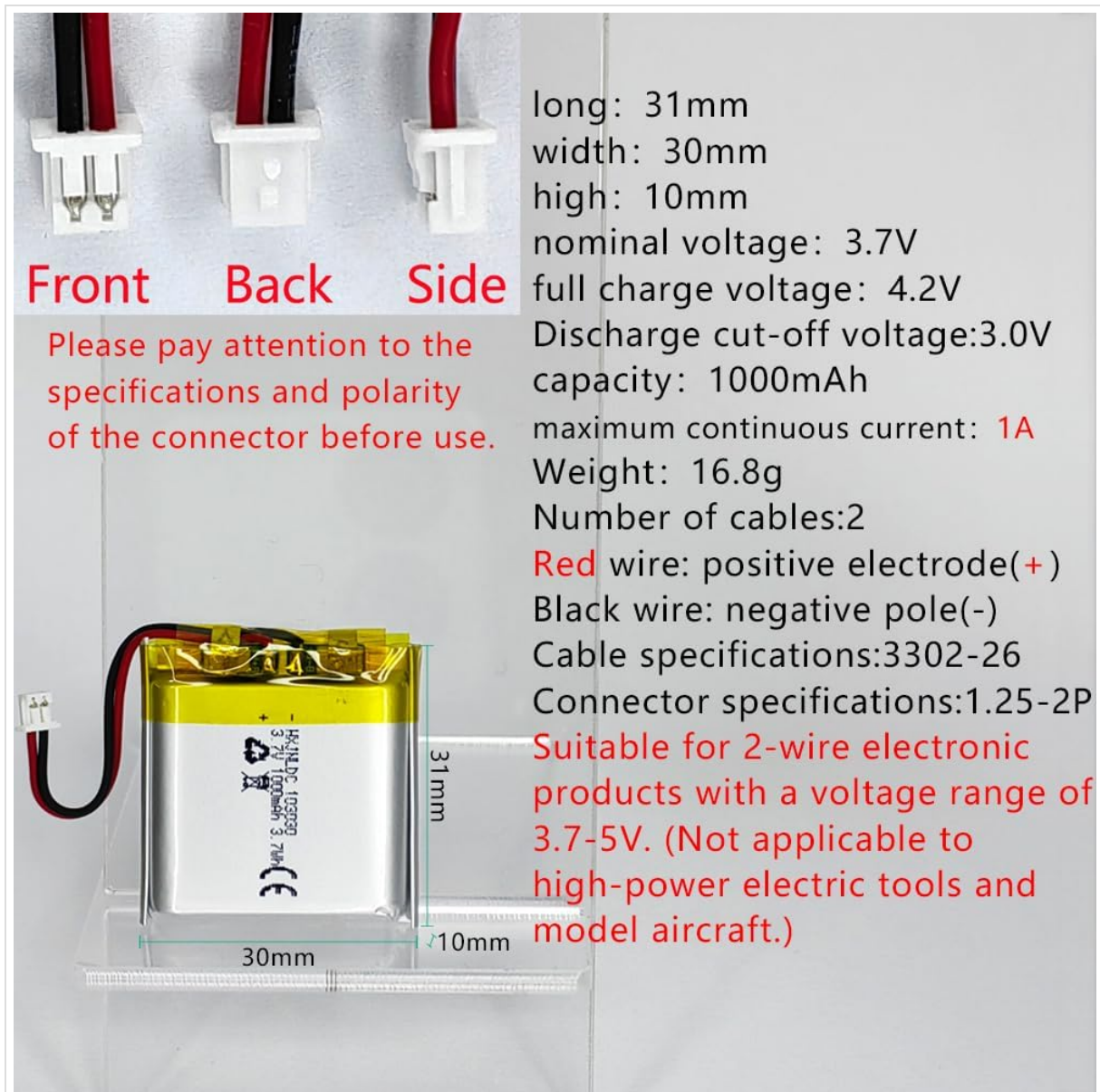


Image 1: HXJNLDC 103030 Lithium Polymer Battery showing its physical dimensions and key specifications. This visual aid helps in confirming the battery's size and connector type.



Image 2: Front view of the HXJNLDC 103030 Lithium Polymer Battery, displaying the brand, voltage, capacity, and regulatory markings.

#### 4. SETUP AND INSTALLATION

Careful attention to connector type and polarity is crucial during installation.

1. **Verify Compatibility:** Before connecting, compare the specifications and connector type of this battery with your electronic device. Ensure the device operates within the 3.7V-5V range and requires less than 1000mAh capacity.
2. **Check Polarity:** Confirm that the red wire from the battery connects to the positive (+) terminal of your device and the black wire connects to the negative (-) terminal. Incorrect polarity can damage both the battery and the device.
3. **Connector Matching:** If your device's primary battery has no plug, a mismatched plug, or mismatched polarity, you may need to modify the connection. You can cut the existing plug and solder the wires directly, ensuring correct polarity.
4. **Insulation:** Use the provided heat shrinkable insulating sleeve to secure and insulate any soldered connections. This prevents short circuits and ensures a safe connection.

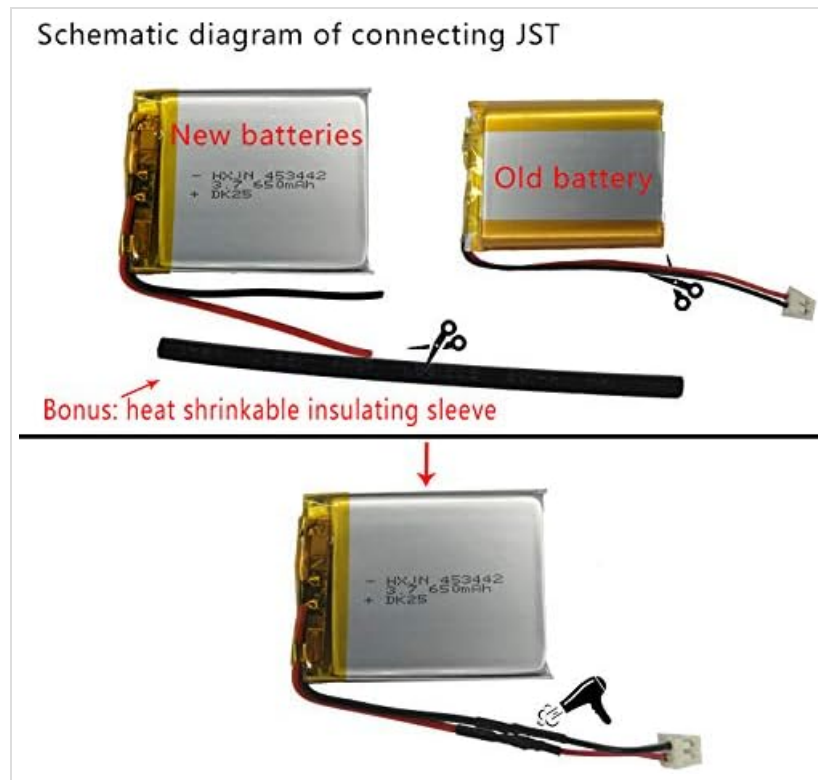


Image 3: Schematic diagram illustrating how to connect the JST connector, including the use of a heat shrinkable insulating sleeve for secure and safe wiring.

## 5. OPERATING INSTRUCTIONS

To ensure optimal performance and longevity of your battery, follow these operating guidelines:

- **Charging:** Charge the battery using a compatible LiPo charger designed for 3.7V batteries, ensuring the charging voltage does not exceed 4.2V. The built-in protection circuit will manage overcharge.
- **Discharging:** Avoid discharging the battery below its cut-off voltage of 3.0V. Deep discharge can permanently damage the battery.
- **Current Limits:** Ensure that the electronic product's current draw does not exceed the battery's maximum continuous discharge current of 1A. Exceeding this limit can lead to overheating and damage.
- **First Use:** For the first use, it is recommended to fully charge the battery before use.

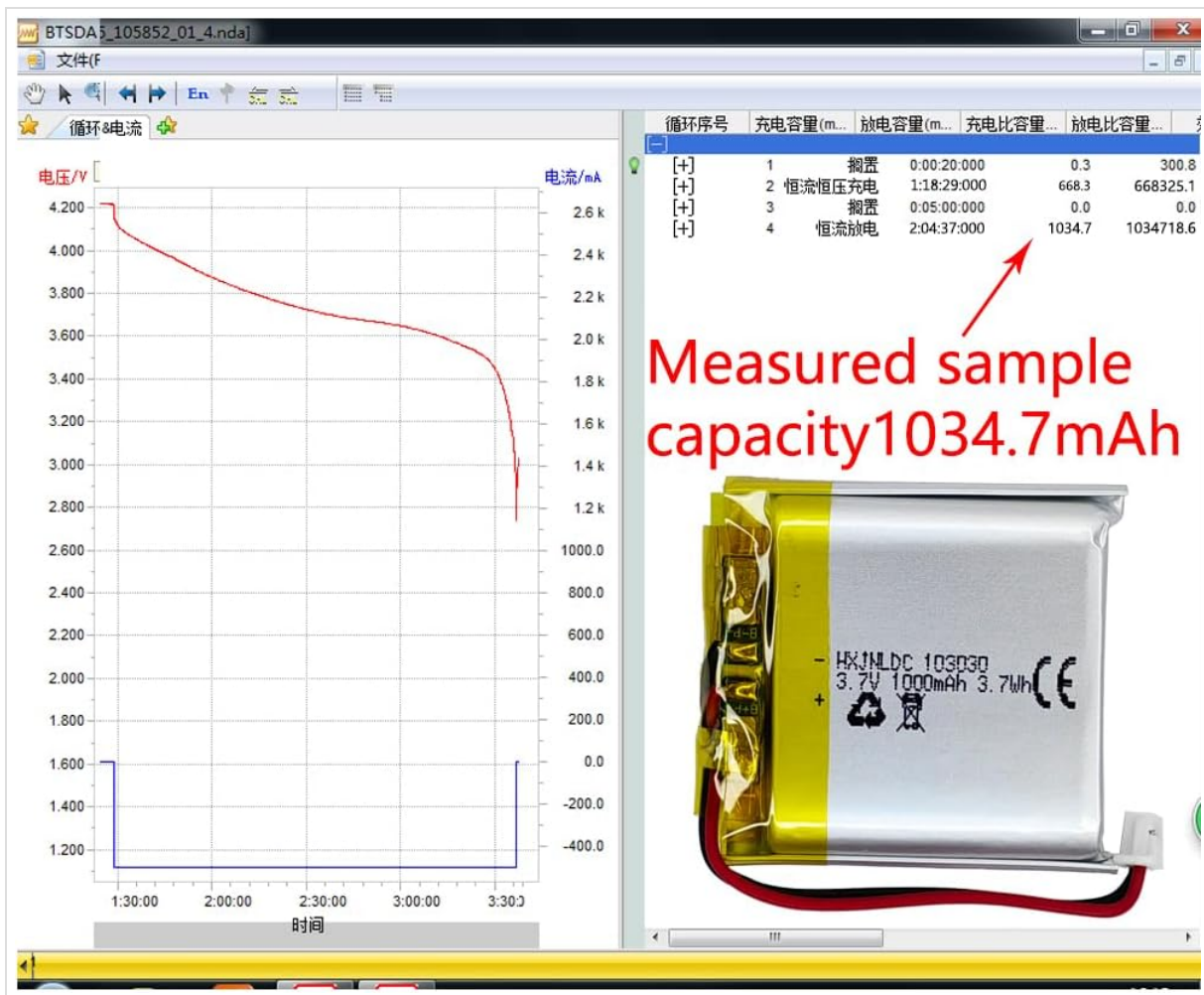


Image 4: A graph illustrating the discharge curve of the battery, showing voltage drop over time during use. This helps understand battery performance characteristics.

## 6. MAINTENANCE

Proper maintenance will extend the lifespan of your HXJNLDC Lithium Polymer Battery:

- **Storage:** When not in use for extended periods, store the battery at approximately 3.8V-3.9V (storage voltage) in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Cleaning:** Keep the battery and its connectors clean and free from dust or debris. Use a dry, soft cloth for cleaning.
- **Inspection:** Periodically inspect the battery for any signs of damage, swelling, or corrosion. If any issues are observed, discontinue use immediately.

## 7. TROUBLESHOOTING

If you encounter issues with your battery, consider the following troubleshooting steps:

### Issue: Battery not charging or powering the device.

- **Check Polarity:** Ensure the red (+) and black (-) wires are connected correctly to your device.
- **Verify Connector:** Confirm that the battery's JST connector is securely and correctly plugged into the device or charging circuit.
- **Device Compatibility:** Double-check that your device's voltage and current requirements are within the battery's specifications (3.7V-5V, max 1A continuous discharge).
- **Battery Condition:** Inspect the battery for any visible damage, swelling, or signs of overheating. If

damaged, discontinue use.

- **Charger Functionality:** If charging is the issue, test your charger with another compatible battery or device to ensure it is functioning correctly.

**Issue: Battery swells or becomes unusually hot during use/charging.**

- **Discontinue Use:** Immediately disconnect the battery and discontinue use. Swelling indicates a serious internal issue.
- **Proper Disposal:** Dispose of the damaged battery safely and according to local hazardous waste regulations. Do not attempt to charge or use it again.

## 8. WARRANTY AND SUPPORT

---

HXJNLDC provides a warranty for this product:

- **Warranty Period:** If there are any quality issues within one year of purchase, please contact us for a replacement.
- **Contact Support:** For warranty claims or technical assistance, please contact HXJNLDC customer support via email. Refer to your purchase documentation for contact details.

Manufacturer: HXJN