

HRB POWER 6000mAh 14.8V 50C 4S EC5

HRB LiPo 6000mAh 14.8V 50C 4S EC5 Battery Instruction Manual

Model: 6000mAh 14.8V 50C 4S EC5

1. INTRODUCTION

This manual provides essential information for the safe and effective use of your HRB LiPo 6000mAh 14.8V 50C 4S EC5 battery. This high-performance lithium polymer battery is designed for various remote-controlled applications, including FPV racing quadcopters, RC cars, helicopters, airplanes, and model boats. Please read this manual thoroughly before using the battery to ensure optimal performance and safety.

2. SAFETY INFORMATION AND WARNINGS

Lithium Polymer (LiPo) batteries are powerful and require careful handling. Failure to follow these safety guidelines can result in fire, personal injury, and property damage.

- **Charging:** Always use a LiPo-compatible charger. Do not overcharge the battery; the maximum voltage per cell should not exceed 4.2V. Do not over-discharge the battery; the minimum voltage per cell should not fall below 3.7V.
- **Temperature:** Do not expose the battery to extreme temperatures. Avoid direct sunlight and store in a cool, dry place.
- **Physical Damage:** Do not puncture, drop, or impact the battery. A damaged battery may explode or catch fire.
- **Disassembly:** Do not disassemble or modify the battery in any way. This can lead to explosion or fire.
- **Moisture:** Do not handle the battery with wet hands or expose it to water.
- **Abnormalities:** If the battery exhibits any abnormal behavior such as swelling, noise, unusual temperature, or liquid leakage, discontinue use immediately and safely dispose of it.
- **Disposal:** Dispose of LiPo batteries according to local regulations. Never dispose of them in regular household waste.

The Following Parameters



The image displays the HRB LiPo battery alongside its typical packaging and a crucial instruction card that outlines important safety warnings and operational guidelines for users.

3. PRODUCT FEATURES

- Superior Japan and Korea Lithium Polymer raw materials (Grade-A cell).
- High capacity up to 332Wh/Kg energy density for extended run times.
- Long lifespan with robust construction.
- Integrated protection features: overcharge, overvoltage, overheat, and short-circuit protection.
- High continuous discharge rate of 50C and a maximum burst discharge of 100C.
- Environmentally conscious, pollution-free type.

About OUR BATTERY



ENERGY CONSERVATION



PREMIUM QUALITY



HIGH-CAPACITY



POLLUTION-FREE TYPE



This graphic emphasizes the core attributes of the HRB LiPo battery, including its design for energy efficiency, superior build quality, high capacity for extended use, and environmentally conscious composition.

4. SETUP

Before first use, ensure the battery is fully charged using a compatible LiPo charger. Always inspect the battery for any signs of damage before connecting it to your device.

1. **Inspect Battery:** Check the battery casing, wires, and connectors for any damage, swelling, or leaks. Do not use if damaged.
2. **Connect to Charger:** Connect the main EC5 connector of the battery to your LiPo charger's output port. Also, connect the balance lead to the balance port on your charger.
3. **Charge:** Set your charger to the correct LiPo charging mode, voltage (14.8V for 4S), and current (typically 1C, which is 6A for a 6000mAh battery). Begin charging.
4. **Monitor:** Monitor the charging process closely. Never leave a charging LiPo battery unattended.
5. **Installation:** Once fully charged, disconnect the battery from the charger. Carefully install the battery into your RC model, ensuring it is securely fastened and the wires are not pinched. Connect the EC5 connector to your model's



A close-up view of the HRB LiPo battery, detailing its components: the robust EC5 connector for power output, the main power wires, and the essential balance port used for safe and balanced charging of individual cells.

5. OPERATING INSTRUCTIONS

This HRB LiPo battery is designed for high-performance RC applications. Ensure your RC model's components (motor, ESC) are compatible with a 4S (14.8V) LiPo battery and can handle the 50C discharge rate.

- **Pre-Flight/Run Check:** Always perform a pre-operation check of your RC model and battery. Ensure all connections are secure.
- **Voltage Monitoring:** Use a low-voltage alarm or telemetry system to monitor the battery voltage during operation. Stop using the battery when any cell reaches 3.7V to prevent over-discharge.
- **Temperature:** Avoid operating the battery in conditions that cause it to overheat. If the battery becomes excessively hot, allow it to cool down before further use or charging.
- **Impact Avoidance:** Protect the battery from impacts during operation. Even minor impacts can damage internal cells.

High Capacity



This image illustrates the HRB LiPo 6000mAh 14.8V 50C 4S EC5 battery and its versatility, suitable for various high-performance remote-controlled models such as racing quadcopters, RC cars, and model boats.

Strong Endurance



This visual showcases the durability and performance of HRB LiPo batteries across a range of demanding RC applications, from off-road trucks and aerial drones to high-speed airplanes and boats.

6. MAINTENANCE

Proper maintenance extends the life and ensures the safety of your LiPo battery.

- **Charging:** Always balance charge your LiPo battery to ensure all cells maintain equal voltage. This is crucial for battery health and longevity.
- **Storage:** For long-term storage, charge the battery to a storage voltage (typically 3.8V-3.85V per cell). Store in a cool, dry place, away from direct sunlight and flammable materials.
- **Inspection:** Regularly inspect the battery for any signs of damage, swelling, or unusual odors.
- **Connector Care:** Keep connectors clean and free of debris to ensure good electrical contact.

7. TROUBLESHOOTING

If you encounter issues with your HRB LiPo battery, consider the following:

- **Battery Not Charging:**

- Ensure the charger is properly connected and powered.
- Verify charger settings match the battery type (LiPo), voltage (14.8V), and cell count (4S).
- Check for damaged connectors or wires on both the battery and charger.

- **Reduced Run Time/Power:**

- The battery may be aging or has been over-discharged.
- Ensure the battery is fully charged and balanced before use.
- Check for excessive current draw from your RC model's motor or ESC.

- **Battery Swelling:**

- **Immediately discontinue use.** Swelling indicates internal damage or overcharging/over-discharging.
- Safely discharge the battery to 0V (if possible and safe to do so, e.g., with a specialized discharger in a fire-safe location) and dispose of it according to local regulations. Do not attempt to use or charge a swollen battery.

- **Overheating During Use/Charging:**

- Stop operation or charging immediately.
- Allow the battery to cool down.
- Check for short circuits in your RC model or incorrect charger settings.

8. SPECIFICATIONS

| | |
|----------------------------------|---|
| Brand | HRB POWER |
| Manufacturer | Yowoo |
| Battery Capacity | 6000 mAh |
| Voltage | 14.8 Volts (4S) |
| Continuous Discharge Rate | 50C |
| Max Burst Discharge | 100C |
| Battery Cell Composition | Lithium Polymer |
| Connector Type | EC5 |
| Dimensions (L x W x H) | 155mm x 48mm x 36mm (6.1 x 1.89 x 1.42 inches) |
| Item Weight | 549 g (20.64 oz) |
| Material | Aluminum |
| Recommended Uses | RC Airplane, Helicopter, Car, Truck, Boat, Drone, FPV |

Battery parameter

6000mAh 50C

Dimension 155X48X36

Weight 549g



This image provides a summary of the HRB LiPo battery's key specifications, including its 6000mAh capacity, 50C continuous discharge rate, physical dimensions of 155x48x36mm, and a weight of 549 grams.

9. PRODUCT VIDEO

This video provides a dynamic overview of HRB LiPo batteries, showing their installation in an RC car, followed by exciting footage of various remote-controlled vehicles—cars, airplanes, and boats—in operation. The video concludes with a glimpse into the advanced manufacturing processes that produce these high-quality batteries.

10. WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the contact details provided with your purchase or visit the official HRB POWER website. Keep your purchase receipt as proof of purchase for any warranty claims.

