

Long-Range FPV Battery Operation Guide

1. Product Overview

This guide covers the safe installation, charging, operation, and maintenance of long-range FPV lithium batteries for UAV applications.

2. Before Installation

Confirm the battery voltage, capacity, connector, and dimensions match your drone. Inspect the pack for swelling, cracks, loose wires, or damaged connectors.

3. Installation

Power off the drone. Secure the battery using a battery tray and straps. Connect the power plug firmly and ensure cables cannot contact propellers. Verify the battery is balanced and centered.

4. Pre-Flight Checklist

Check battery voltage, cell balance, connector condition, battery mounting, and flight controller battery settings. Do not fly with damaged or swollen batteries.

5. Charging

Use a compatible balance charger with the correct chemistry settings. Charge on a fire-resistant surface. Never leave charging batteries unattended. Stop charging if abnormal heat or swelling occurs.

6. Operating Guidelines

Avoid over-discharging. Land before the battery reaches the minimum safe voltage specified by the manufacturer. Avoid exposing the battery to water, impact, or excessive heat.

7. Storage

Store in a cool, dry place. For storage longer than one week, keep the battery at approximately 40-60% state of charge. Inspect periodically.

8. Maintenance

Clean connectors regularly, inspect for damage after each flight, and replace batteries showing swelling or abnormal performance.

9. Safety Warnings

Do not puncture, crush, short-circuit, disassemble, or place the battery near open flames. Dispose of batteries according to local regulations.

10. Troubleshooting

Battery not detected: Check connector and polarity.

Short flight time: Balance-charge and inspect battery health.

Battery overheating: Stop use immediately and inspect for damage.

Note

Specifications and installation methods vary by battery model. Follow the battery and UAV manufacturer's recommendations.