AE-4S 50A

User Guide

AE-4S 50A Overview

Compact 4S 32-bit ESC delivering 50 A continuous in a 45.5 × 52.2 mm footprint. Supports BLHeli-S and novaX ef 1.0 firmware for Blade8-class platforms.

AE-4S 50A Specifications

· Basic Specifications

Size	45.5 × 52.2 mm
Mounting Hole	30 × 30 mm / Φ 4 mm
Weight	14.8 g
Voltage Range	3 – 4S LiPo (12.6 – 16.8 V)
Constant Current	50 A
Burst Current	60 A
Capacitor	470 µF / 35 V
PWM Frequency	24 – 48 kHz (Bluejay 96 kHz)
Supported Protocols	DShot150 / 300 / 600, MultiShot, OneShot
Firmware	BLHeli-S, novaX ef 1.0

AE-4S 50A Setup

1. Mounting — Mount with anti-vibration grommets and insulate the component side from carbon frames. Mounting: 30 × 30 mm / Φ 4 mm.
2. Wiring — Connect the battery +/– observing polarity, the motor wires to each output and the signal connector to the flight controller ESC port, following the pinout and board markings. Input: 3 – 4S LiPo (12.6 – 16.8 V).
3. Protocol — Select a supported protocol (DShot150/300/600, MultiShot, OneShot) on the flight controller.
4. Spin check — Without propellers, check motor order and direction; swap two motor wires or reverse it in the settings if needed.
5. Firmware — Configure and update with the BLHeli-S configurator through flight-controller passthrough.

AE-4S 50A Safety Notes

- Do not exceed the input voltage range — 3 – 4S LiPo (12.6 – 16.8 V).
- Do not exceed 50 A continuous / 60 A burst; provide cooling.
- Reverse battery polarity destroys the ESC instantly — check before connecting.
- Long battery leads raise voltage spikes; keep them short.
- Always remove propellers while wiring, configuring or updating firmware.

<Detailed Manual>


novaX