Hobbywing 60A

HOBBYWING SEAKING V4 ESC (60A) User Manual

Model: 60A

Introduction

Thank you for choosing the HOBBYWING SEAKING V4 60A Electronic Speed Controller (ESC). This manual provides essential information for the proper setup, operation, and maintenance of your ESC. Please read it thoroughly before use to ensure optimal performance and safety.

Safety Information

- Ensure all devices in the system are connected correctly to prevent any damage to the system.
- It is important to ensure that all wires and connectors soldered are properly secured. A good soldering station is recommended to do such a job to avoid short circuits, floating solder joints and overheating.
- Do not attempt to drive two brushless motors with a single ESC, as this may cause damage to the ESC.
- Please hold the boat in the air and ensure that the propeller can free spin and may not catch body parts or objects during setup, in order to avoid accidents.
- The battery must be disconnected after use. There is a small draw even when the system is off, and will eventually fully drain the battery. This may cause damage to the ESC, and will NOT BE COVERED UNDER WARRANTY.

What's in the Box

- (1) HOBBYWING SEAKING V4 60A ESC

Key Features

- Dominate the water with explosive acceleration and top speeds!
- Built-in ultra-powerful switch mode BEC and adjustable voltage, supporting high torque and high voltage servos.
- Integrated Bluetooth function (in the switch) for setting and upgrading the ESC via mobile app without additional devices.

- Data logging function to view various running data on the HW LINK app.
- Supports firmware upgrade of the ESC for access to the latest functions.
- Excellent waterproof performance (IP67). Can be used directly without any waterproof treatment (note: if water enters after use, please blow dry each plug to prevent rusting).
- AUX External Control Channel for Real-time Parameter Adjustment: Connect the yellow signal wire to an unused receiver channel to adjust ESC parameters (like reverse thrust) in real-time using your radio's open aux channel. This allows simple on-the-fly tuning.

Product Overview



Figure 1: The HOBBYWING SEAKING V4 60A ESC, showcasing its compact design and pre-attached power and motor wires.



Figure 2: A detailed view of the SEAKING V4 60A ESC, highlighting the Hobbywing logo and model specifications on the casing.



Figure 3: An overhead perspective of the ESC, revealing the internal capacitor and connection points, demonstrating the robust build quality.

Setup Guide

1. Connecting the Motor

Connect the three motor wires from the ESC to the corresponding motor phase wires. Ensure a secure connection to prevent power loss or damage.

2. Connecting the Battery

Connect the battery connector from the ESC to your LiPo battery. Ensure correct polarity (red to positive, black to negative) to avoid severe damage to the ESC and battery.

3. Connecting to Receiver

Plug the throttle signal cable (usually black, red, white/yellow) from the ESC into the throttle channel (typically channel 2)

of your RC receiver.

4. ESC Calibration

Refer to your radio transmitter's manual for throttle range calibration. Typically, this involves powering on the transmitter, then the ESC while holding full throttle, then neutral, then full brake, to set the throttle endpoints.

Operating Instructions

Powering On/Off

To power on, ensure all connections are secure, then connect the battery. To power off, disconnect the battery first. Always disconnect the battery after use to prevent drainage and potential damage.

Basic Control

Once calibrated, use your radio transmitter's throttle stick to control the motor speed. Push forward for acceleration and pull back for braking/reverse (if enabled).

Using the HW LINK App

The built-in Bluetooth allows connection to the HW LINK mobile app. Download the app, power on the ESC, and connect via Bluetooth to access settings, update firmware, and view data logs.

Maintenance

- **Cleaning:** After each use, especially in saltwater environments, rinse the ESC with fresh water to remove salt and debris. Ensure all plugs are blown dry to prevent rusting.
- **Storage:** Store the ESC in a dry, cool place away from direct sunlight and extreme temperatures.
- **Connection Check:** Regularly inspect all wires and connectors for signs of wear, corrosion, or loose connections.
- **Waterproofing Note:** While the ESC is IP67 rated, this protection is not permanent and may decrease with wear and aging. Avoid prolonged submersion or high-pressure water jets.

Troubleshooting

- **No Power:** Check battery connection, ensure battery is charged, and verify all wiring is secure.
- **Motor Not Spinning:** Re-calibrate the ESC throttle range. Check motor wire connections. Ensure the motor is not jammed.
- **Overheating:** Ensure proper ventilation. Check for excessive load on the motor or propeller. Verify battery voltage is within the ESC's supported range.
- **Erratic Behavior:** Check for radio interference. Ensure receiver and ESC connections are secure. Re-calibrate the ESC.

Specifications

Attribute	Value

Product Dimensions	5.23 x 3.4 x 2.1 inches
Item Weight	6.7 ounces
Country of Origin	China
ASIN	B0F1XGJ35C
Manufacturer Recommended Age	4 years and up
Manufacturer	Hobbywing Technology

Warranty and Support

For warranty information and technical support, please contact Hobbywing North America directly. Keep your proof of purchase for any warranty claims. Damage due to improper connection, overloading, or failure to disconnect the battery after use may not be covered under warranty.

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