Hobbywing SEAKING 160A V4

HOBBYWING SEAKING 160A V4 ESC (8S) User Manual

Model: SEAKING 160A V4 | Brand: Hobbywing

1. Introduction

This manual provides essential information for the proper installation, operation, and maintenance of your HOBBYWING SEAKING 160A V4 Electronic Speed Controller (ESC). This high-performance ESC is designed for marine applications, featuring excellent waterproof capabilities and integrated Bluetooth functionality for convenient settings adjustment via the HW LINK mobile app.

2. Safety Information

WARNING: Failure to follow these safety instructions may result in damage to the product, property, or serious injury.

- 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, false soldering, 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 does not touch human bodies or objects during setup, in order to avoid safety 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.

3. Product Overview and Features

The HOBBYWING SEAKING 160A V4 ESC is engineered for robust performance and ease of use in demanding marine environments.



An image showing the HOBBYWING SEAKING 160A V4 ESC. The black rectangular unit has gold-colored connectors on one end and various colored wires (black, red, yellow, white) extending from the other. A small black module with a blue power button is attached via a red and white wire.

Key Features:

- **IP67 Fully Waterproof Design:** Outstanding waterproof and dustproof capabilities, allowing direct use without additional waterproofing treatment.
- **Super Built-in BEC:** Delivers up to 25A of current with switchable output voltages (6V, 7.4V, 8.4V) to power high-torque and high-voltage servos.
- **Integrated Bluetooth Function:** Built into the switch for ESC settings and upgrades via the HW LINK mobile app, eliminating the need for additional devices.
- **Data Logging Functionality:** View various running data through the HW LINK app.
- **Firmware Upgrades:** Supports firmware upgrades for access to the latest features.

4. Specifications

Parameter	Value
Model	SEAKING 160A V4
Continuous / Peak Current	160A / 800A
Lipo Cells	3-8S

Parameter	Value
BEC Output	6V / 7.4V / 8.4V, 8A
Size (w/o water cooling pipe and mounting hole)	91 x 41 x 25.5 mm
Inner / Outer diameter of water cooling pipe	3.0 / 5.5 mm
Weight (w/ wires & output connectors)	220g
Applicable Boat Length	≤ 120cm
Programming Method	HW LINK APP
Product Dimensions	6.8 x 3.4 x 2.1 inches
Item Weight	10.4 ounces

5. Setup

Proper setup is crucial for the safe and efficient operation of your ESC. Always ensure power is disconnected before making any connections.

1. **Motor Connection:** Connect the three output wires from the ESC to the corresponding wires on your brushless motor. Ensure correct phase matching (A-A, B-B, C-C) for proper rotation. If the motor rotates in the wrong direction, swap any two of the ESC output wires.
2. **Battery Connection:** Connect the battery input wires of the ESC to your LiPo battery pack. Ensure correct polarity (red to positive, black to negative). Incorrect polarity will cause severe damage to the ESC and battery.
3. **Receiver Connection:** Plug the ESC's throttle cable (usually a black, red, and white wire) into the throttle channel (CH2 or CH3, depending on your receiver) of your RC receiver.
4. **Water Cooling System:** Connect the water cooling pipes to the designated inlets/outlets on the ESC and ensure a proper water flow path through your boat's cooling system.
5. **ESC Calibration:** Follow the specific calibration procedure for your ESC and radio system to ensure proper throttle range recognition. Refer to the HW LINK APP for detailed calibration steps if available.

6. Operating

Once the ESC is properly installed and calibrated, you can begin operation.

- **Power On:** Connect the battery to the ESC. The ESC will emit a series of tones indicating battery cell count and readiness.
- **Throttle Control:** Use your radio transmitter to control the boat's speed and direction.
- **HW LINK APP:** Utilize the integrated Bluetooth function to connect your mobile device to the ESC via the HW LINK APP. This allows for real-time monitoring of data, adjustment of parameters, and firmware updates.
- **Power Off:** Always disconnect the battery from the ESC immediately after use to prevent over-discharge and potential damage, as noted in the safety information.

7. Maintenance

Regular maintenance will prolong the life and performance of your ESC.

- **Post-Use Cleaning:** After each use, especially in saltwater environments, rinse the ESC with fresh water to remove any salt or debris.
- **Drying:** If water enters during use, thoroughly blow-dry each plug and connector to prevent rusting and corrosion. Ensure the unit is completely dry before storage or next use.
- **Inspection:** Periodically inspect all wires, connectors, and the ESC casing for any signs of damage, wear, or corrosion. Replace damaged components immediately.
- **Storage:** Store the ESC in a dry, cool place away from direct sunlight and extreme temperatures.

8. Troubleshooting

If you encounter issues with your ESC, refer to the following common troubleshooting steps. For persistent problems, contact customer support.

- **ESC Not Powering On:**
  - Check battery connection and ensure it is fully charged.
  - Verify all wiring connections are secure and correct.
  - Inspect for any visible damage to the ESC or wires.
- **Motor Not Responding / Erratic Behavior:**
  - Ensure ESC is properly calibrated to your radio's throttle range.
  - Check motor phase connections.
  - Verify receiver connection and ensure the receiver is powered and bound to the transmitter.
  - Check for any obstructions in the propeller or motor.
- **Overheating:**
  - Ensure the water cooling system is functioning correctly and not obstructed.
  - Check that the motor and propeller are appropriately sized for the ESC.
  - Reduce load or operating time if consistently overheating.
- **ESC Catches Fire (as reported by some users):**
  - Immediately disconnect power.
  - This indicates a severe malfunction. Do not attempt to reuse the unit.
  - Contact Hobbywing customer support or your retailer for assistance and potential replacement.

9. What's in the Box

Upon opening the product packaging, you should find the following item:

- (1) HOBBYWING SEAKING 160A V4 ESC

10. Warranty and Support

Hobbywing products are manufactured to high-quality standards. For warranty information, technical support, or service inquiries, please contact Hobbywing customer service or your authorized dealer. Please note that damage resulting from improper battery disconnection after use may not be covered under warranty.
No official product videos were found for this item.

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question