Hobbywing 30203201

HOBBYWING Platinum 80A V5 ESC User Manual

Model: 30203201

1. Safety Information

Thank you for purchasing this HOBBYWING product! Please read this declaration carefully before use, once you starts to use, we will assume that you have read and agreed with all the content. Brushless power systems can be very dangerous and any improper use may cause personal injury and damage to the product and related devices, so please strictly follow the instruction during installation and use. Since we have no control over the use, installation, or maintenance of this product, no liability may be assumed for any damages or losses resulting from the use of the product. We do not assume responsibility for any losses caused by unauthorized modifications to our product. We have the right to modify our product design, appearance, features and usage requirements without notification. We, HOBBYWING, are only responsible for our product cost and nothing else as result of using our product.

2. Product Overview

The HOBBYWING Platinum 80A V5 ESC is an advanced Electronic Speed Controller designed for high-performance RC applications, particularly 325-420 class electric helicopters and fixed-wing aircraft. It features a new heat sink design for efficient cooling and a built-in 12V Switch BEC with adjustable voltage output.

Key Features:

- Continuous/Peak current: 80A/120A
- Input voltage: 3-8S LiPo
- BEC: Switch Mode BEC; output voltage 5-12V adjustable (adjusted 0.1V); output current Cont. 8A, Peak 20A
- New heat sink design for enhanced cooling via craft airflow.
- Built-in 12V Switch BEC with adjustable voltage (5-12V) and 25A max output.
- Supports Mikado VBar System, Futaba S.BUS2, and other data return protocols for remote parameter adjustment and ESC status monitoring.
- Includes DEO technology for faster throttle response, improved flight stability, higher efficiency, longer battery life, and lower ESC temperature.

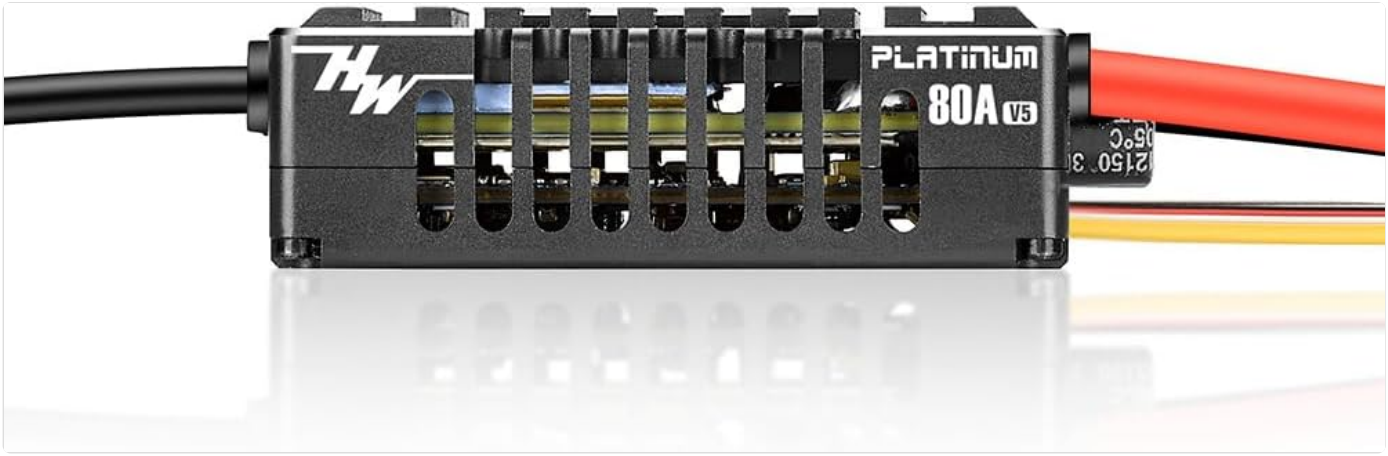


Figure 1: Top view of the HOBBYWING Platinum 80A V5 ESC, highlighting the robust heat sink and main power connections.



Figure 2: Side view of the ESC, displaying the input and output wiring, along with the product specifications printed on the casing.

3. What's in the Box

Upon opening the package, please verify that all the following items are included:

- (1) Platinum 80A V5 ESC
- (1) PLT Manual (This document)

4. Specifications

Attribute	Value
Product Dimensions	4.2 x 2.8 x 1.9 inches
Item Weight	6.7 ounces
Country of Origin	China
ASIN	B0DHFSHHJW
Item Model Number	30203201
Manufacturer Recommended Age	4 years and up
Manufacturer	Hobbywing Technology

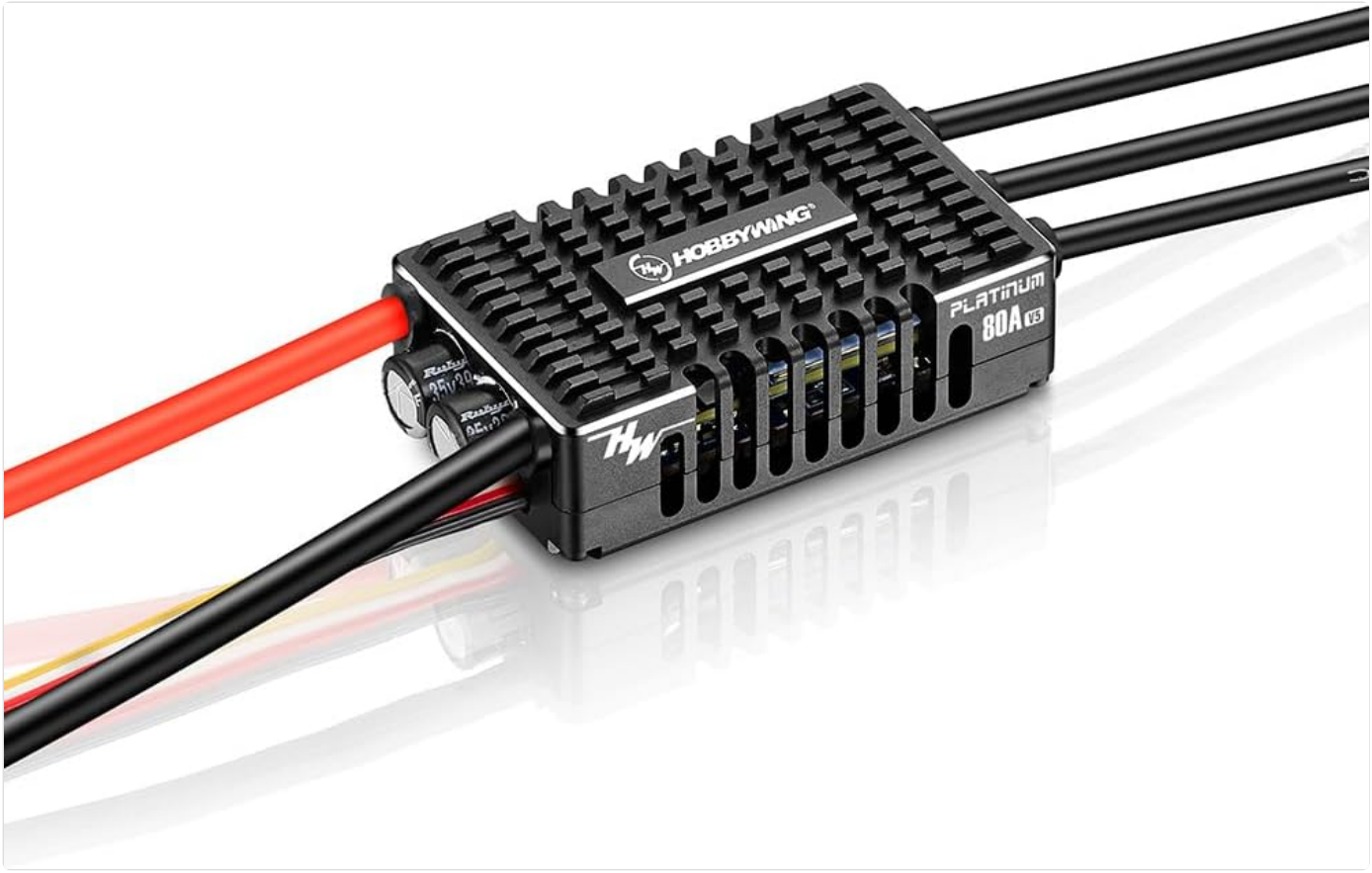


Figure 3: Angled view of the ESC, showcasing its compact design and connection points.

5. Setup Guide

Proper setup is crucial for the safe and efficient operation of your ESC. Please follow these general guidelines:

1. **Mounting:** Securely mount the ESC in a location with adequate airflow to ensure optimal cooling. Avoid areas prone to excessive vibration or direct impact.
2. **Motor Connection:** Connect the three motor wires from the ESC to your brushless motor. Ensure correct phasing (A-A, B-B, C-C). If the motor spins in the wrong direction, swap any two of the three wires.
3. **Battery Connection:** Connect the battery input wires (red for positive, black for negative) to your LiPo battery. Ensure polarity is correct to prevent damage.
4. **Receiver Connection:** Plug the BEC output cable from the ESC into the throttle channel of your RC receiver.
5. **BEC Voltage Setting:** If your model requires a specific voltage for servos or other components, adjust the BEC output voltage (5-12V) as needed. Refer to your receiver and servo specifications.
6. **Throttle Range Calibration:** Perform a throttle range calibration with your radio transmitter. This ensures the ESC recognizes the full throttle and brake/reverse range of your transmitter. Consult your transmitter's manual for specific calibration steps.
7. **Parameter Programming:** Utilize a Hobbywing program box or software (if applicable) to adjust advanced parameters such as timing, acceleration, and protection settings according to your motor and battery specifications, and flying style.



Figure 4: Overhead view of the ESC with all wires laid out, illustrating the complete wiring configuration.

6. Operating Instructions

Once the ESC is properly installed and calibrated, follow these steps for operation:

1. **Pre-Flight Check:** Before each use, ensure all connections are secure, the battery is fully charged, and the propeller/rotor blades are free from obstructions.
2. **Power On:** Turn on your radio transmitter first, then connect the battery to the ESC. The ESC will emit a series of beeps indicating successful initialization and cell count detection.
3. **Arming:** After initialization, the ESC will typically arm when the throttle stick is at its lowest position. Listen for a confirmation tone.
4. **Throttle Control:** Slowly increase the throttle to begin motor rotation. Observe the motor's behavior and ensure smooth operation.
5. **Monitoring:** If using telemetry, monitor ESC temperature, battery voltage, and current draw during operation to ensure safe limits are not exceeded.
6. **Power Off:** Always disconnect the battery from the ESC first, then turn off your radio transmitter.

Important: Always operate your RC model in a safe and responsible manner, away from people, animals, and property. Be aware of your surroundings.

7. Maintenance

Regular maintenance will extend the lifespan and ensure the reliable performance of your HOBBYWING Platinum 80A V5

ESC:

- **Cleaning:** Keep the ESC clean and free from dust, dirt, and moisture. Use a soft brush or compressed air to remove debris from the heat sink fins.
- **Inspections:** Periodically inspect all wires and connectors for signs of wear, fraying, or corrosion. Replace damaged components immediately.
- **Heat Sink:** Ensure the heat sink remains unobstructed to allow for proper airflow and cooling.
- **Storage:** Store the ESC in a cool, dry place when not in use, away from direct sunlight and extreme temperatures.
- **Firmware Updates:** Check the official HOBBYWING website periodically for firmware updates. Updating the firmware can improve performance, add features, or fix bugs.

8. Troubleshooting

If you encounter issues with your ESC, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
ESC does not power on / No beeps	Incorrect battery connection, faulty battery, loose wires, damaged ESC.	Check battery polarity and connection. Test with a different, fully charged battery. Inspect all wiring. Contact support if ESC is damaged.
Motor stutters or runs rough	Incorrect motor wiring, motor timing issues, damaged motor, low battery voltage.	Verify motor wire connections. Adjust motor timing via programming. Check battery voltage. Inspect motor for damage.
Motor spins in wrong direction	Incorrect motor phasing.	Swap any two of the three motor wires between the ESC and motor.
ESC overheats	Insufficient airflow, excessive load, incorrect gearing/propeller size, motor timing too advanced.	Ensure proper ventilation. Reduce load. Adjust gearing/propeller. Reduce motor timing.
No throttle response	Throttle range not calibrated, receiver not bound, faulty receiver connection.	Perform throttle range calibration. Ensure receiver is properly bound to transmitter. Check BEC cable connection to receiver.

9. Warranty and Support

For detailed warranty information, please refer to the official HOBBYWING warranty policy available on their website or contact your local distributor. HOBBYWING is committed to providing high-quality products and customer satisfaction. For technical support, product inquiries, or service, please visit the official HOBBYWING website or contact their customer service department:

- **Official Website:** www.hobbywing.com
- **Contact Information:** Refer to the "Contact Us" section on the official website for regional support details.

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Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

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