Hobbywing 30107200

HOBBYWING QUICRUN WP 10BL120 G2 ESC Instruction Manual

Model: 30107200

Brand: Hobbywing

1. Product Overview

The HOBBYWING QUICRUN WP 10BL120 G2 ESC is designed for robust performance in various conditions. It features excellent waterproof and dustproof capabilities, making it suitable for diverse climates and harsh environments. The smart freewheeling technology enhances driving efficiency and reduces operating temperature, improving overall stability and reliability.
Key features include:

- **Waterproof and Dustproof:** IP-67 rated for all-weather operation, allowing use in mud, sand, ice, snow, and water.
- **Smart Freewheeling Technology:** Higher driving efficiency and lower operating temperature.
- **Powerful Built-in BEC:** Continuous current up to 5A, instant up to 10A, with adjustable 6V/7.4V output to drive powerful and high-voltage steering servos.
- **Multiple Protection Functions:** Includes battery low voltage protection, ESC overheat protection, throttle signal loss protection, current protection, and capacitor overheat protection.
- **Independent Programming Port:** Allows convenient connection of a program card without disconnecting the throttle cable from the receiver.
- **Integrated Radiator Design:** Combined with patented copper thermal conduction sink for efficient heat dissipation.



Image: HOBBYWING QUICRUN WP 10BL120 G2 ESC with external power switch and motor wires.

2. What's in the Box

- 1x Quicrun 10BL120 G2 ESC
- 1x Instruction Manual

3. Product Specifications

Specification	Value
Model Name	QUICRUN WP 10BL120 G2
Continuous/Peak Current	120A / 760A
Lipo Cells Supported	2-4S Lipo

Specification	Value
BEC Output Voltage	6V / 7.4V (Adjustable)
Dimensions (L x W x H)	52.8 x 39.8 x 38.2 mm
Weight (Included wires & connectors)	119g (0.26 lbs)
Motor Limit (3S Lipo)	KV 4000 (3660 size motor)
Motor Limit (4S Lipo)	KV 2600 (4268 size motor)
Material	Plastic Housing, Aluminum Heatsink, Circuit Board, Connectors

4. Setup & Connections

Before using the ESC, ensure all connections are secure and correct. The ESC comes with 12AWG wire pre-installed and an XT60 connector. Motor connections are made via 4mm bullet plugs on the ESC. Ensure your motor has compatible connectors or install them as needed.
The video below provides a detailed unboxing and setup guide for the HOBBYWING QUICRUN 10BL120 ESC and Motor Combos, including connection instructions.

Video: Unboxing and setup guide for the HOBBYWING QUICRUN 10BL120 ESC and Motor Combo, demonstrating physical connections and initial power-up.

5. Operating Instructions

The ESC features a dual-button switch for power on/off and calibration. The fan is temperature-sensing and will only activate when the ESC reaches a certain temperature, so it may not run immediately upon power-up.
Tuning of the ESC is performed using a dedicated LED Program Card (sold separately). This program card plugs into the designated port on the ESC. It is important to use the correct program card as other Hobbywing programmers (like the LCD box or OTA programmer) are not compatible with this G2 series ESC.



Image: HOBBYWING LED Program Card connected to the ESC, showing the display and buttons for parameter adjustment.

The instruction manual includes a detailed setting chart for programmable items. Always refer to this chart to ensure correct parameter adjustments, as setting numbers may vary between different program cards or firmware versions.

Item	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7	Option 8	Option 9
Running Mode	Forward with brake	Forward / Reverse with Brake	Forward with reverse						
Cutoff Voltage	Disabled	2.6V/Cell	2.8V/Cell	**3.0V/Cell**	3.2V/Cell	3.4V/Cell			
Punch	Level 1	Level 2	Level 3	Level 4	**Level 5**	Level 6	Level 7	Level 8	Level 9
Drag Brake Force	0%	5%	10%	20%	40%	60%	80%	100%	
Max. Brake Force	25%	50%	**75%**	100%	Disabled				
Max. Reverse Force	25%	50%	**75%**	100%					
Neutral Range	6%	**9%**	12%						
Timing	0°	3.75°	7.5°	**11.25°**	15°	18.75°	22.5°	26.25°	
Lipo Cells	**Auto**	2S	3S	4S					
BEC Voltage	**6.0V**	7.4V							

The video above also demonstrates how to use the LED Program Card to adjust these settings.

ESC Calibration

Before any tuning, it is crucial to calibrate the ESC to your radio transmitter. This process teaches the ESC the neutral, full throttle, and full reverse positions of your radio. The video above demonstrates the calibration process.
To calibrate:

1. Connect the ESC to Channel 2 of your receiver. Ensure the black wire of the ESC harness goes to the outer edge of the receiver port.
2. Hold down the SET button on the ESC's power switch.
3. Turn on the ESC. It will start to blink or beep.
4. Release the SET button when prompted (usually after one beep).
5. Set your radio's throttle to neutral and tap the SET button (one beep).
6. Set your radio's throttle to full forward and hold it, then tap the SET button (two beeps).
7. Set your radio's throttle to full reverse and hold it, then tap the SET button (three beeps).
8. The ESC will confirm calibration and be ready for use.

6. Maintenance

Regular maintenance ensures the longevity and optimal performance of your ESC. Due to its waterproof design, cleaning is simplified. After running in wet or dusty conditions, clean the ESC with fresh water and allow it to dry completely. Periodically inspect all wires and connectors for any signs of wear or damage. Ensure the cooling fan is free from debris.

7. Troubleshooting

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

- **ESC does not turn on after power-up:** Check battery connections, power switch, and ensure the receiver is properly connected.
- **Motor does not start or runs erratically:** Re-calibrate the ESC to your radio transmitter. Check motor and battery connections. Ensure the correct Lipo cell count is selected in the ESC settings.
- **Motor runs in the wrong direction:** For sensorless setups, swap any two of the three motor wires connected to the ESC to reverse motor direction.
- **Overheating:** Check gearing, motor load, and ensure the cooling fan is operating correctly when hot. Reduce timing settings if motor runs too hot.
- **Inconsistent reverse or drag brake:** Adjust the Neutral Range setting on the program card to account for potential trigger wear on your radio.

8. Warranty and Support

For warranty claims or technical support, please contact Hobbywing North America directly. Refer to the official Hobbywing website or your product's packaging for the most up-to-date contact information and warranty policy details.

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

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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