HOBBYWING QuicRUN-WP-1060-Brushed

HOBBYWING QuicRUN-WP-1060-Brushed Electronic Speed Controller User Manual

Model: **QuicRUN-WP-1060-Brushed** | Brand: **HOBBYWING**

1. Introduction

Thank you for choosing the HOBBYWING QuicRUN-WP-1060-Brushed Electronic Speed Controller (ESC). This ESC is designed for 1/10 scale RC vehicles and features a robust, waterproof, and dustproof design, making it suitable for various weather conditions. It incorporates a built-in BEC and offers multiple protection functions to ensure reliable performance. Please read this manual thoroughly before use to ensure proper setup and operation.

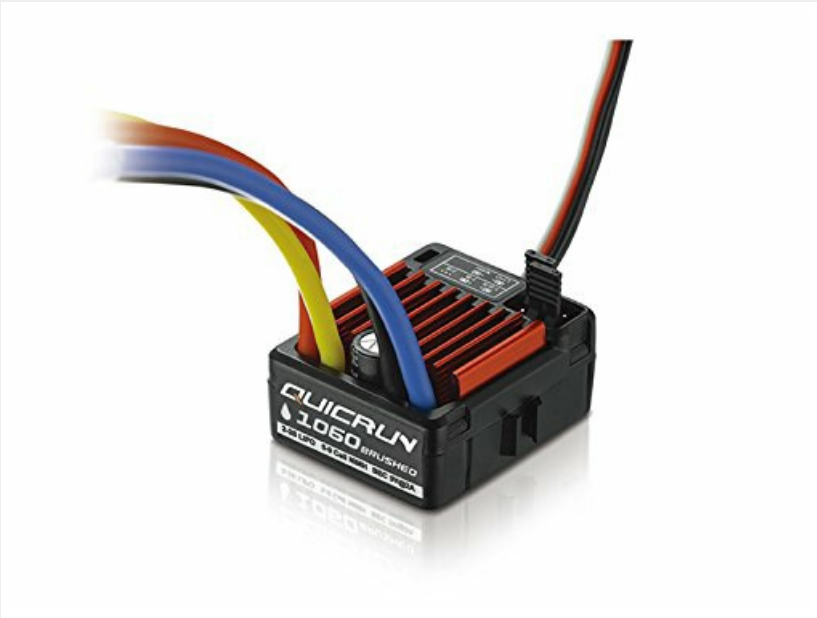

Image 1.1: The HOBBYWING QuicRUN-WP-1060-Brushed ESC, showing its compact design with attached wires for motor, battery, and receiver connections, along with the power switch.

2. Safety Precautions

- Always disconnect the battery from the ESC when not in use to prevent short circuits.
- Ensure all connections are secure and correctly polarized before powering on. Incorrect connections can damage the ESC or other components.

- Keep the ESC away from moisture and extreme temperatures, even though it is waterproof, to prolong its lifespan.
- Do not attempt to disassemble or modify the ESC. This will void the warranty and may cause damage.
- Use only compatible batteries and motors as specified in the product specifications.
- Perform throttle range calibration before the first use and after any changes to the transmitter or receiver.

3. Features

- **Waterproof and Dustproof:** Designed for use in various weather conditions, ensuring durability and reliability.
- **Compact Design:** Small size with an integrated capacitor module for easy installation.
- **Easy Parameter Setting:** Simple configuration of ESC parameters using jumper plugs.
- **Multiple Running Modes:**
  1. Forward with Brake
  2. Forward/Reverse with Brake
  3. Forward/Reverse without Brake
- **High Output BEC:** Built-in 3A/6V BEC provides excellent power output for servos and other electronics.
- **Automatic Throttle Calibration:** Simple and quick automatic throttle range calibration for initial setup.
- **Comprehensive Protection:** Includes Battery Low Voltage Cut-off Protection, Over-heat Protection, and Throttle Signal Loss Protection.
- **Battery Compatibility:** Supports both LiPo and NiMH batteries. (Note: When using LiFe batteries, set the ESC to NiMH mode).

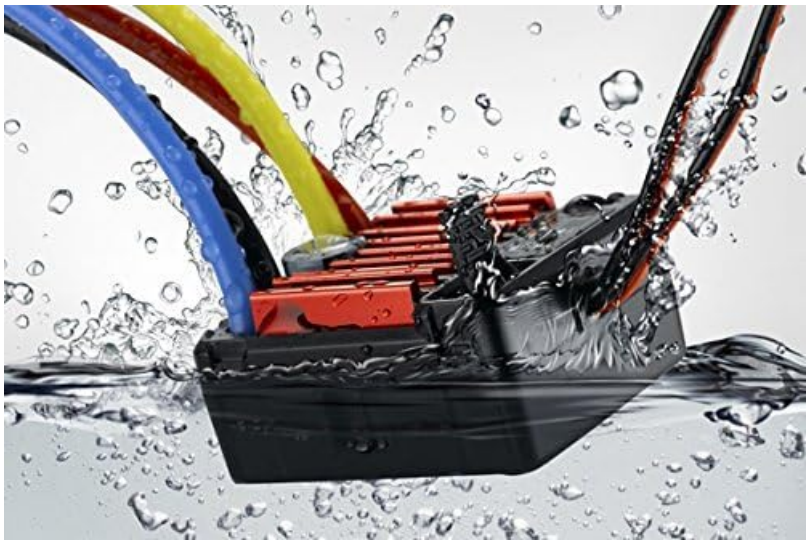

Image 3.1: The ESC demonstrating its waterproof capability, suitable for various weather conditions.

4. Specifications

Parameter	Value
Model Number	30120201
Application	1/10 Scale Brushed RC Vehicles
Built-in BEC	3A/6V

Parameter	Value
Dimensions	13.3 x 8.9 x 5.7 cm
Weight	39 g
Battery Compatibility	LiPo, NiMH

5. Setup

5.1 Wiring Connections

Connect the ESC to your motor, battery, and receiver as shown in the diagram below. Ensure correct polarity for all connections.

- **Motor Connection:** Connect the two motor wires to the ESC's motor output terminals. The order does not matter for brushed motors, but ensure a secure connection.
- **Battery Connection:** Connect the battery to the ESC's power input connector. Pay close attention to polarity (red to positive, black to negative).
- **Receiver Connection:** Plug the ESC's throttle cable (usually black, red, white/orange) into the throttle channel (CH2) of your receiver.

Image 5.1: Connection diagram illustrating how to properly connect the ESC to the motor, battery, and receiver.

5.2 Throttle Range Calibration

Before first use or after changing your transmitter, perform throttle range calibration:

1. Turn on your transmitter and set the throttle channel to neutral.
2. Connect the battery to the ESC.
3. Press and hold the SET button on the ESC, then turn on the ESC. Release the SET button when the LED flashes.
4. Set the throttle stick to the maximum forward position. The ESC will beep once.
5. Set the throttle stick to the maximum reverse position. The ESC will beep twice.
6. Return the throttle stick to the neutral position. The ESC will beep three times. Calibration is complete.

5.3 Parameter Setting with Jumper Plugs

The QuicRUN-WP-1060-Brushed ESC uses jumper plugs for easy parameter adjustment. Refer to the diagram below for jumper positions.

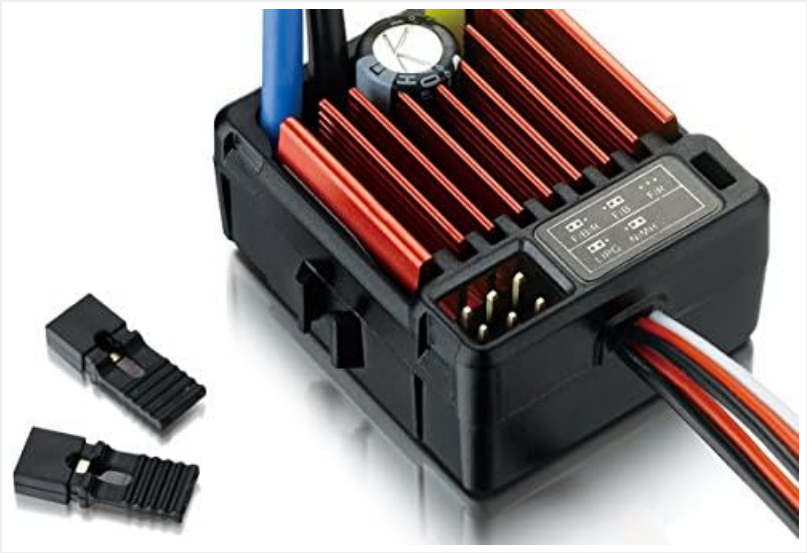

Image 5.2: Close-up view of the ESC's jumper plug area, indicating settings for running modes and battery types (LiPo/NiMH).

- **Running Mode:** Adjust the jumper to select between Forward with Brake, Forward/Reverse with Brake, or Forward/Reverse without Brake.
- **Battery Type:** Set the jumper for LiPo or NiMH battery type. This ensures correct low voltage cut-off protection.

6. Operating Instructions

Once the ESC is properly set up and calibrated, you can begin operating your RC vehicle.

1. Ensure the ESC is connected to the battery, motor, and receiver.
2. Turn on your transmitter.
3. Turn on the ESC using its power switch.
4. The ESC will perform a self-test and indicate readiness with an LED or sound.
5. Operate your vehicle using the transmitter's throttle and steering controls.
6. When finished, turn off the ESC first, then the transmitter, and disconnect the battery.

7. Maintenance

- Regularly inspect all wires and connectors for damage or loose connections.
- Clean the ESC periodically to remove dirt, dust, and debris. Use a soft brush or compressed air.
- Store the ESC in a dry, cool place when not in use.
- Avoid exposing the ESC to direct sunlight or extreme heat for extended periods.

8. Troubleshooting

Problem	Possible Cause	Solution
ESC does not power on.	Battery not connected or discharged; faulty power switch; incorrect wiring.	Check battery connection and charge; inspect power switch; verify wiring.

Problem	Possible Cause	Solution
Motor does not respond to throttle.	Throttle signal loss; incorrect throttle calibration; motor wires loose.	Check receiver connection; re-calibrate throttle range; secure motor wires.
Vehicle moves slowly or cuts out.	Low battery voltage cut-off activated; ESC overheating.	Recharge or replace battery; allow ESC to cool down; check for proper ventilation.
ESC beeps continuously.	Error code or warning (e.g., low voltage, overheating, signal loss).	Refer to the LED/beep code chart (if available in full manual) or check for common issues like low battery or signal loss.

9. Warranty and Support

This product comes with a warranty card and a Japanese instruction manual. For warranty claims or technical support, please contact your local HOBBYWING distributor or the retailer where you purchased the product. Keep your proof of purchase for warranty validation.
For further assistance, you may visit the official HOBBYWING website or contact their customer service department. Ensure you have your product model number (QuicRUN-WP-1060-Brushed) and purchase details ready.