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> Hobbywing Ezrun MAX6 G2 ESC and 4990 SD G2 Motor Combo Instruction Manual

HOBBYWING HWI38010803

Hobbywing Ezrun MAX6 G2 ESC and 4990 SD G2 Motor Combo Instruction Manual

Model: HWI38010803

1. INTRODUCTION

This manual provides essential instructions for the proper setup, operation, and maintenance of your Hobbywing Ezrun MAX6 G2 Electronic Speed Controller (ESC) and 4990 SD G2 Motor Combo. Please read this manual thoroughly before using the product to ensure safe and efficient operation and to prevent damage.

2. SAFETY PRECAUTIONS

- Always disconnect the battery from the ESC when not in use to prevent accidental activation.
- Ensure all connections are secure and properly insulated to avoid short circuits.
- Operate the motor and ESC in well-ventilated areas to prevent overheating.
- Keep hands and loose clothing away from rotating parts of the motor.
- Use only compatible batteries and chargers. Refer to your battery manufacturer's guidelines.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm (Proposition 65 warning). Handle with care and wash hands after use.
- If the motor or ESC becomes excessively hot, immediately stop operation and allow it to cool down before proceeding.

3. PACKAGE CONTENTS

Verify that all items listed below are included in your package:

- 1x Ezrun MAX6 G2 Electronic Speed Controller (ESC)
- 1x EzRun 4990 SD G2 Motor
- 1x User's Manual (this document)

- 1x HOBBYWING Decal Sheet



Image 1: The Hobbywing Ezrun MAX6 G2 ESC and 4990 SD G2 Motor Combo. This image displays the main components included in the package, typically showing the electronic speed controller and the brushless motor.

4. SETUP

4.1 Motor Installation

1. Securely mount the EzRun 4990 SD G2 motor into your vehicle's motor mount using appropriate screws. Ensure proper gear mesh between the motor pinion and the spur gear.
2. Connect the three motor wires from the ESC to the motor. The connection order may affect motor rotation direction. If the motor spins in the wrong direction, swap any two of the three motor wires.

4.2 ESC Connection

1. Connect the ESC's battery connector to your vehicle's battery pack. Ensure correct polarity (red to positive, black to

negative).

2. Plug the ESC's receiver cable (usually a black, red, and white wire) into the throttle channel (CH2) of your RC receiver.
3. If applicable, connect any auxiliary wires (e.g., cooling fan, programming port) as per your vehicle's requirements.

4.3 ESC Calibration

Proper calibration of the ESC with your radio transmitter is crucial for correct operation. Follow these general steps:

1. Turn on your transmitter and ensure the throttle trim is at neutral and the throttle travel is set to 100% (or maximum). Disable any ABS or brake mixing functions.
2. With the transmitter on and the battery connected to the ESC (but the ESC off), press and hold the SET button on the ESC.
3. Turn on the ESC. Release the SET button when the LED on the ESC starts to flash.
4. Set the neutral point: Leave the throttle trigger at the neutral position, then press the SET button once. The LED will flash once.
5. Set the full throttle endpoint: Pull the throttle trigger to the full throttle position, then press the SET button once. The LED will flash twice.
6. Set the full brake/reverse endpoint: Push the throttle trigger to the full brake/reverse position, then press the SET button once. The LED will flash three times.
7. The ESC is now calibrated and ready for use.

5. OPERATING INSTRUCTIONS

After successful setup and calibration, your Hobbywing Ezrun MAX6 G2 combo is ready for operation. Always ensure your battery is fully charged before use.

- Turn on your transmitter first, then turn on the ESC.
- Gently apply throttle to move your vehicle. Observe the motor's response and vehicle's behavior.
- Monitor the temperature of the motor and ESC during operation. If temperatures become excessively high, reduce load or adjust gearing.
- After use, turn off the ESC first, then turn off your transmitter. Disconnect the battery from the ESC.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your motor and ESC combo.

- **Cleaning:** After each use, especially in dusty or wet conditions, clean the motor and ESC with a soft brush or compressed air to remove dirt and debris. Avoid using water or solvents directly on electronic components.
- **Inspection:** Periodically inspect all wires and connectors for signs of wear, fraying, or corrosion. Ensure all screws are tight, especially those securing the motor.
- **Storage:** Store the motor and ESC in a dry, cool place away from direct sunlight and extreme temperatures. Disconnect batteries during storage.
- **Motor Bearings:** Check motor bearings for smooth operation. If they feel rough or noisy, they may need cleaning or replacement.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your Hobbywing Ezrun MAX6 G2 ESC and 4990 SD G2 Motor Combo.

Problem	Possible Cause	Solution
Motor does not spin or responds erratically.	Incorrect ESC calibration; loose motor/ESC connections; faulty receiver signal; low battery voltage.	Recalibrate the ESC (refer to Section 4.3); check all wiring connections; ensure receiver is powered and bound; charge or replace battery.
ESC or motor overheats quickly.	Over-gearing; excessive load; insufficient cooling; incorrect motor timing.	Reduce pinion gear size or increase spur gear size; ensure vehicle drivetrain moves freely; check for obstructions to airflow; verify motor timing settings (if adjustable).
Motor runs in the wrong direction.	Incorrect motor wire connection.	Swap any two of the three motor wires between the ESC and motor.
ESC does not power on.	Battery not connected; faulty battery; damaged ESC.	Ensure battery is properly connected and charged; test with a different battery; contact support if ESC is suspected to be faulty.
Loss of power or intermittent operation.	Loose battery/motor connectors; damaged wires; low battery voltage.	Check and secure all connections; inspect wires for damage; ensure battery is fully charged and healthy.

8. SPECIFICATIONS

Key technical specifications for the Hobbywing Ezrun MAX6 G2 ESC and 4990 SD G2 Motor Combo:

- **Brand:** HOBBYWING
- **Model Name:** HWI38010803
- **Material:** Metal
- **Item Weight:** Approximately 2.94 Pounds (1.33 kg)
- **Part Number:** HWI38010803
- **Motor KV:** 1650KV (for the 4990 SD G2 Motor)
- **UPC:** 088718507646

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact Hobbywing customer service directly. Details regarding warranty periods and terms are typically provided with your purchase documentation or can be found on the official Hobbywing website.

It is recommended to retain your proof of purchase for any warranty claims.

