Hobbywing EZRUN MAX10 80A Combo 3652SD

Hobbywing EZRUN MAX10 80A Combo 3652SD User Manual

Model: EZRUN MAX10 80A Combo 3652SD 3300KV

1. Introduction

This manual provides detailed instructions for the setup, operation, and maintenance of your Hobbywing EZRUN MAX10 80A Combo 3652SD. This high-performance power system is designed for remote-controlled vehicles, offering advanced features and robust construction for various terrains.

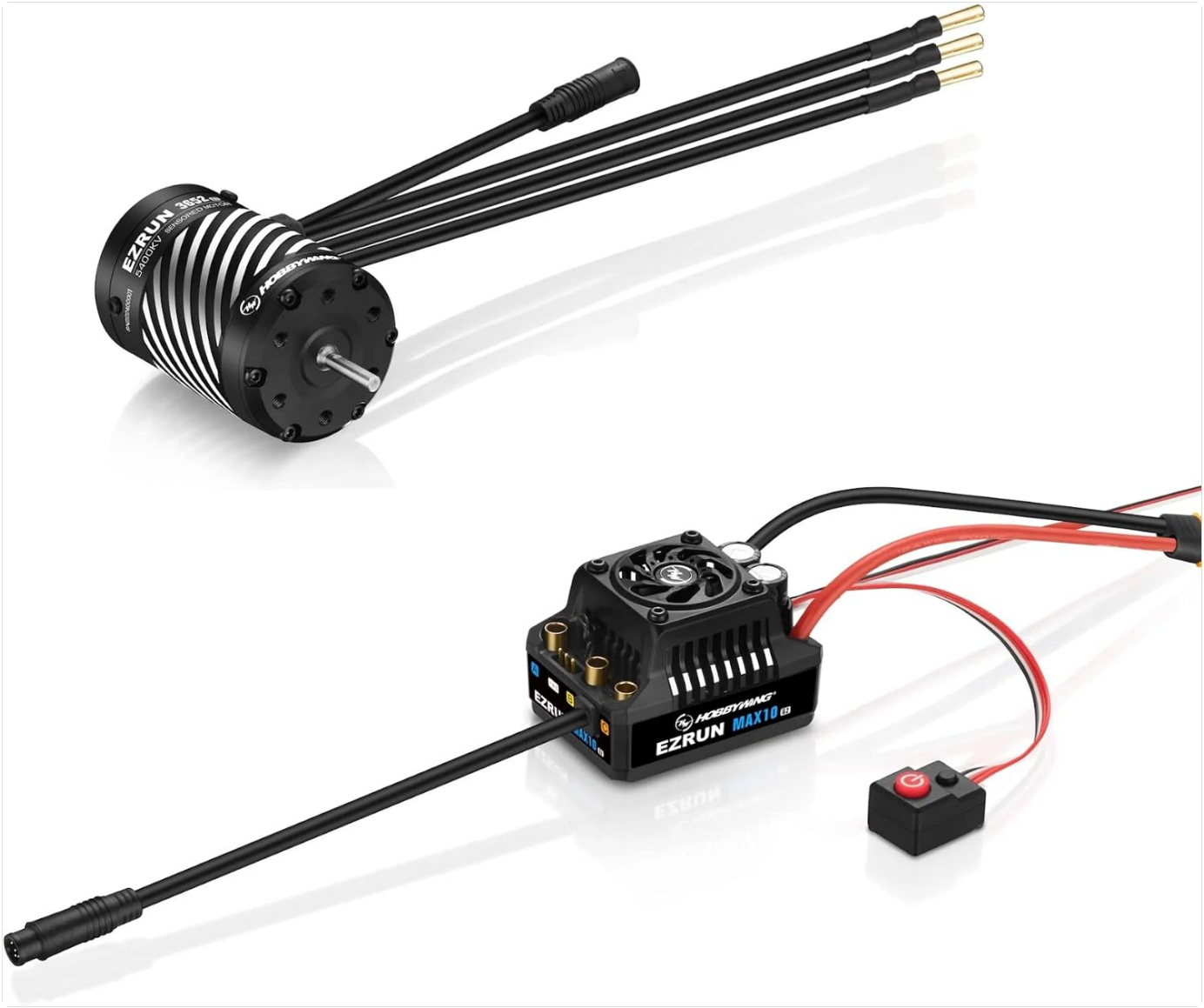


Image: The Hobbywing EZRUN MAX10 80A Combo 3652SD, showing both the black sensored motor with its ribbed casing and gold-tipped wires, and the black electronic speed controller (ESC) with a cooling fan, red and black power wires, and a small red power button.

2. What's in the Box

- 1 x EZRUN MAX10 80A G2 (XT60 Power Plug)
- 1 x EZRUN 3652 SD Motor
- (3) 12 AWG, 200C Black wires for a brushless motor
- (1) Double side tape
- (2) Heat shrink tube
- (1) User's manual
- (1) HOBBYWING decal

3. Key Features

- **Improved Waterproof Sensored Cable Interface:** Enhanced design for reliable performance in wet conditions.
- **Upgraded Sensored Mode:** Provides precise control feel, perfectly matched with EzRun 3652/3665 SD G3 motors.
- **Turbo Timing Adjustment:** Supports up to 32 degrees, increasing maximum speed by 25% when combined with EzRun 3652/3665 G3 motors.
- **Smart Start-Stop Technology:** The frameless fan activates only when necessary, reducing noise and conserving

power.

- **Enhanced Capacitance:** Total capacitance increased by 74% with overheating protection, improving power delivery and preventing capacitor overload.
- **Smart Freewheeling Technology:** Achieves higher drive efficiency and lower operating temperatures (approximately 25°C lower than previous generation).
- **Real-time Data Monitoring:** Connect via OTA Bluetooth module to view throttle amount, voltage, current, temperature, speed, and more in real-time via a mobile app. Data logging for historical review is also available.
- **IP-67 Waterproof System:** Guarantees excellent waterproofing and dustproofing, allowing operation on mud, sand, ice, snow, and water without damaging the power unit.

4. Specifications

Attribute	Detail
Product Dimensions	6.5 x 4.8 x 2.1 inches
Item Weight	1.07 pounds
ASIN	B0BJNQMPFF
Date First Available	October 18, 2022
Manufacturer	Hobbywing Technology
Brand	Hobbywing
Recommended Uses	RC applications
Unit Count	1.0 Count
Model Name	EZRUN MAX10 80A Combo 3652SD

5. Setup Guide

1. **Mounting the ESC:** Securely mount the EZRUN MAX10 80A G2 ESC in your vehicle using the provided double-sided tape. Ensure adequate airflow around the ESC for cooling.
2. **Mounting the Motor:** Install the EZRUN 3652 SD Motor into your vehicle's motor mount. Ensure proper gear mesh between the motor pinion and the spur gear.
3. **Wiring the Motor:** Connect the three black 12 AWG wires from the ESC to the motor's three phase wires. For sensored operation, connect the sensored cable from the ESC to the motor's sensor port. Ensure correct polarity if applicable.
4. **Connecting to Receiver:** Plug the ESC's throttle cable into the throttle channel (usually Channel 2) of your RC receiver.
5. **Connecting Battery:** Connect your battery pack to the XT60 power plug of the ESC. Ensure the battery is fully charged and compatible with the ESC's voltage requirements.
6. **Power Switch:** Position the power switch in an easily accessible location.
7. **Calibration:** Perform ESC calibration with your radio system according to the detailed instructions in the full user manual (not included here). This typically involves setting throttle neutral, full throttle, and full brake points.

6. Operating Instructions

- **Power On:** Turn on your radio transmitter first, then turn on the ESC using its power switch.
- **Pre-Run Checks:** Before operating, ensure all connections are secure, the battery is charged, and the steering and throttle responses are correct.
- **Driving:** Operate your RC vehicle smoothly. Avoid sudden, harsh throttle inputs to prolong the life of the components.
- **Temperature Monitoring:** While the ESC features smart temperature management, regularly check the temperature of the motor and ESC during operation, especially during initial runs or in demanding conditions.
- **Power Off:** Always turn off the ESC first, then turn off your radio transmitter. Disconnect the battery from the ESC after use.
- **Waterproof Operation:** The IP-67 rating allows operation in wet conditions. However, always ensure proper drying and maintenance after exposure to water to prevent corrosion.

7. Maintenance

- **Cleaning:** Regularly clean the ESC and motor to remove dirt, dust, and debris. Use a soft brush or compressed air.
- **Inspecting Connections:** Periodically check all electrical connections for looseness or corrosion. Ensure wires are not pinched or frayed.
- **Motor Bearings:** Inspect motor bearings for smooth operation. Replace if they feel rough or noisy.
- **Cooling Fan:** Ensure the ESC's cooling fan is free from obstructions and spins freely.
- **Storage:** When not in use, store the combo in a dry, cool place away from direct sunlight and extreme temperatures.

8. Troubleshooting

Problem	Possible Cause	Solution
ESC does not power on.	Battery not connected or discharged; power switch off; faulty connection.	Check battery connection and charge level; ensure power switch is on; inspect all wiring.
Motor not responding to throttle.	ESC not calibrated; motor wires loose; receiver not bound; radio settings incorrect.	Perform ESC calibration; check motor wire connections; ensure receiver is bound to transmitter; verify radio throttle settings.
Motor or ESC overheating.	Improper gearing; excessive load; insufficient cooling; incorrect timing settings.	Adjust gearing; reduce load; ensure cooling fan is clear; check ESC timing settings.
Erratic or inconsistent performance.	Loose connections; sensor cable issue; radio interference.	Check all connections, especially sensor cable; ensure no strong interference sources nearby.

9. Warranty and Support

For specific warranty information and technical support, please refer to the official Hobbywing website or contact your local Hobbywing distributor. Keep your purchase receipt as proof of purchase for warranty claims.
Online Resources: For the most up-to-date information, firmware updates, and detailed programming guides, please visit the official Hobbywing website: www.hobbywing.com

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Question

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Details

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