

Hobbywing EZRUN MAX10 80A Combo 3652SD 5400KV

Hobbywing EZRUN MAX10 80A Combo 3652SD User Manual

Model: EZRUN MAX10 80A Combo 3652SD 5400KV

INTRODUCTION

This manual provides essential information for the proper setup, operation, and maintenance of your Hobbywing EZRUN MAX10 80A Combo 3652SD. This high-performance electronic speed controller (ESC) and motor combination is engineered for reliability and efficiency in various RC applications, including RC cars, trucks, and monster trucks. Please read this manual thoroughly before use to ensure optimal performance and longevity of your product.

WHAT'S IN THE BOX

Upon unboxing your Hobbywing EZRUN MAX10 80A Combo 3652SD, you should find the following components:

- 1 x EZRUN MAX10 80A G2 Electronic Speed Controller (ESC) with XT60 Power Plug
- 1 x EZRUN 3652 SD Motor
- 3 x 12 AWG, 200C Black wires for brushless motor connection
- 1 x Double-sided adhesive tape
- 2 x Heat shrink tubes
- 1 x User's manual (this document)
- 1 x HOBBYWING decal sheet

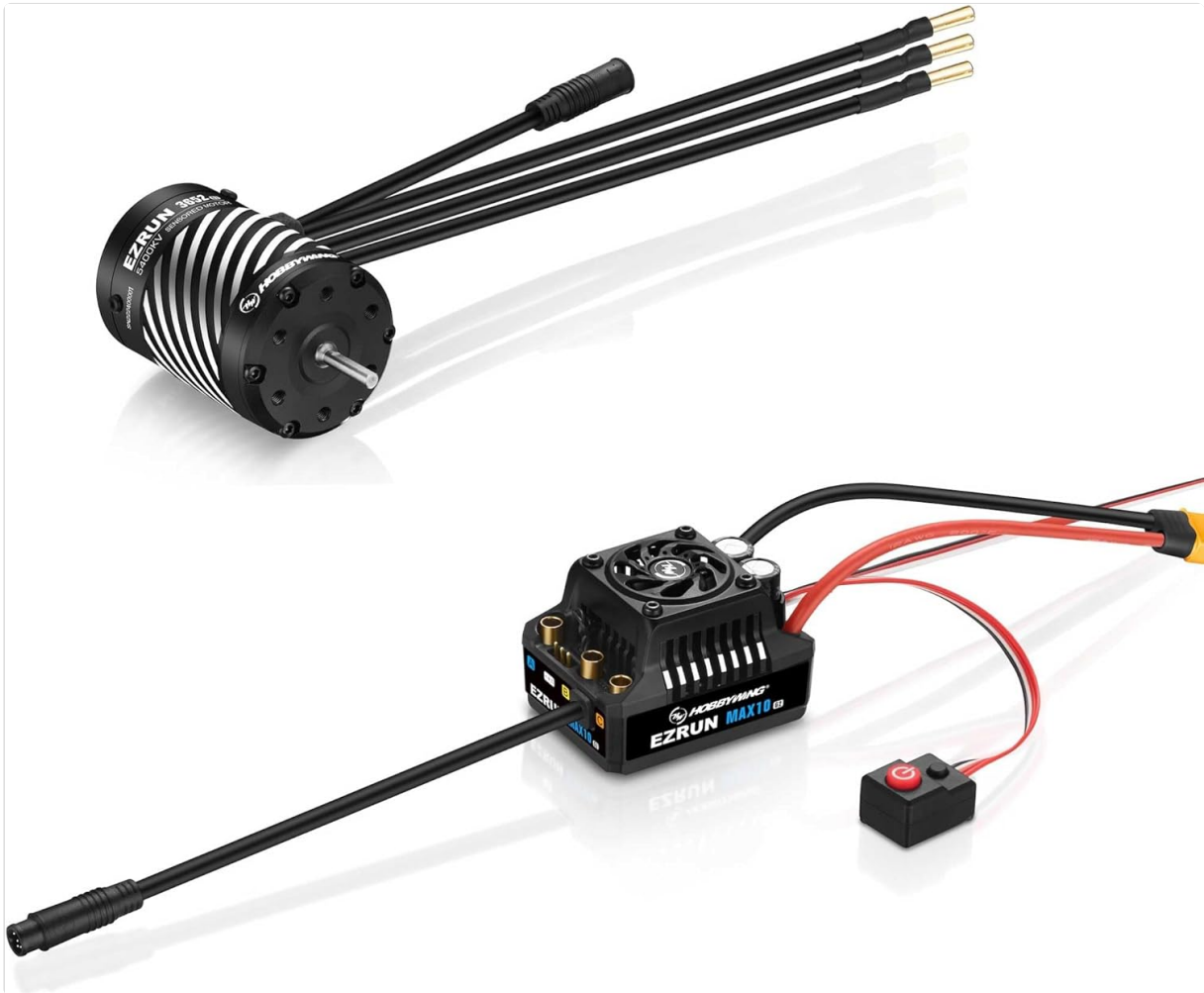
SETUP

Proper setup is crucial for the performance and safety of your Hobbywing EZRUN MAX10 80A Combo. Follow these steps for initial installation and configuration:

1. **Motor and ESC Connection:** Connect the EZRUN 3652 SD Motor to the EZRUN MAX10 80A G2 ESC using the provided 12 AWG wires. Ensure the connections are secure and correctly phased for

brushless operation. The EzRun Max10 G2 features an improved waterproof sensored cable interface for reliable signal transmission.

2. **Battery Connection:** Connect your compatible battery pack to the XT60 power plug on the ESC. Ensure correct polarity.
3. **Receiver Connection:** Connect the ESC's signal cable to the throttle channel of your RC receiver.
4. **OTA Bluetooth Module (Optional):** For advanced configuration and real-time data monitoring, connect the optional OTA Bluetooth module to the ESC. This allows you to view data such as throttle amount, voltage, current, temperature, and speed via a mobile application. Data logging is also available for reviewing past performance.
5. **Mounting:** Use the double-sided adhesive tape to securely mount the ESC in your vehicle chassis, ensuring adequate airflow around the unit.



An image showing the Hobbywing EZRUN MAX10 80A G2 Electronic Speed Controller (ESC) and the EZRUN 3652 SD Motor. The ESC is black with a fan on top and various wires for connection, including power input and motor output. The motor is cylindrical, black with silver fins, and has three wires extending from it, designed for brushless operation.

OPERATING

The Hobbywing EZRUN MAX10 80A Combo is designed for robust and efficient operation. Here are key operational features:

- **Turbo Timing Adjustment:** The ESC supports Turbo timing adjustment of up to 32 degrees. When combined with the EzRun 3652/3665 G3 motors, this feature can increase the maximum speed by up to 25%, offering enhanced performance.
- **Smart Start-Stop Fan Technology:** The MAX10 G2 ESC incorporates smart start-stop technology

for its cooling fan. The frameless fan will only activate when the temperature rises to a certain level, reducing noise and conserving power during cooler operation.

- **Smart Freewheeling Technology:** This technology enables the MAX10 G2 to achieve higher drive efficiency compared to previous generations. This results in lower operating temperatures, potentially up to 25°C cooler than older models, contributing to improved reliability and performance.
- **Waterproof and Dustproof Protection (IP-67):** The entire power system boasts an IP-67 waterproof rating, guaranteeing excellent protection against water and dust ingress. This allows the system to operate reliably on various challenging surfaces, including mud, sand, ice, snow, and water, without compromising the power unit.

MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Hobbywing EZRUN MAX10 80A Combo:

- **Post-Run Cleaning:** After operating in wet, muddy, or dusty conditions, it is recommended to clean the ESC and motor. Gently rinse off mud and debris with clean water, then allow the components to air dry completely before storage or next use.
- **Capacitor Care:** The MAX10 ESC features increased total capacitance (by 74% compared to the previous generation) and is overheating protected. These functions improve power delivery and help prevent capacitor issues. Avoid exposing the ESC to extreme temperatures beyond its operating range.
- **Connection Checks:** Periodically inspect all electrical connections (motor wires, battery plug, receiver cable) for any signs of wear, corrosion, or looseness. Secure any loose connections to prevent intermittent operation or damage.
- **Fan Inspection:** While the fan operates intelligently, occasionally check for any obstructions or debris that might hinder its rotation when active.

TROUBLESHOOTING

If you encounter issues with your Hobbywing EZRUN MAX10 80A Combo, consider the following common troubleshooting steps:

- **No Power/No Response:**
 - Check battery charge level.
 - Verify all power connections (battery to ESC, ESC to motor) are secure and correctly polarized.
 - Ensure the ESC's power switch is in the 'ON' position.
- **Motor Not Spinning/Erratic Operation:**
 - Confirm motor wire connections are secure and correctly phased.
 - Check the sensored cable connection between the motor and ESC.
 - Recalibrate the ESC's throttle range with your radio system.
- **Overheating:**
 - Ensure adequate airflow around the ESC.
 - Verify the smart start-stop fan is activating when temperatures rise.
 - Check for excessive gearing or motor load in your vehicle setup.

- **Data Logging/Bluetooth Connectivity Issues:**

- Ensure the OTA Bluetooth module is correctly connected to the ESC.
- Verify Bluetooth is enabled on your mobile device and the Hobbywing app is up to date.

For persistent issues, consult the Hobbywing official website or contact their customer support for further assistance.

SPECIFICATIONS

Detailed specifications for the Hobbywing EZRUN MAX10 80A Combo 3652SD:

Specification	Value
Product Dimensions	6.5 x 4.8 x 2.1 inches
Item Weight	1.07 pounds
ASIN	B0BJNW2QL8
Brand	Hobbywing
Recommended Uses	RC Car/ Truck / Monster Truck / etc
Unit Count	1.0 Count
Reusability	Rechargeable
Model Name	EZRUN MAX10 80A Combo 3652SD
Manufacturer	Hobbywing Technology

WARRANTY AND SUPPORT

This product is manufactured by Hobbywing Technology. For specific warranty information, terms, and conditions, please refer to the official Hobbywing website or contact Hobbywing customer support directly. Keep your proof of purchase for any warranty claims.

For technical support, troubleshooting assistance beyond this manual, or inquiries about replacement parts, please reach out to Hobbywing Technology's customer service department. Contact information can typically be found on their official website.