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› GOUPRC 100A Brushless ESC Instruction Manual for 1/10 Scale RC Vehicles

GOUP RC 100A Brushless ESC

GOUPRC 100A Brushless ESC Instruction Manual

Model: 100A Brushless ESC

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your GOUPRC 100A Brushless Electronic Speed Controller (ESC). Designed for 1/10 scale RC trucks and off-road cars, this waterproof and dustproof ESC is compatible with 2-3S Lipo batteries and various brushless motors. Please read this manual thoroughly before use to ensure proper function and longevity of your product.

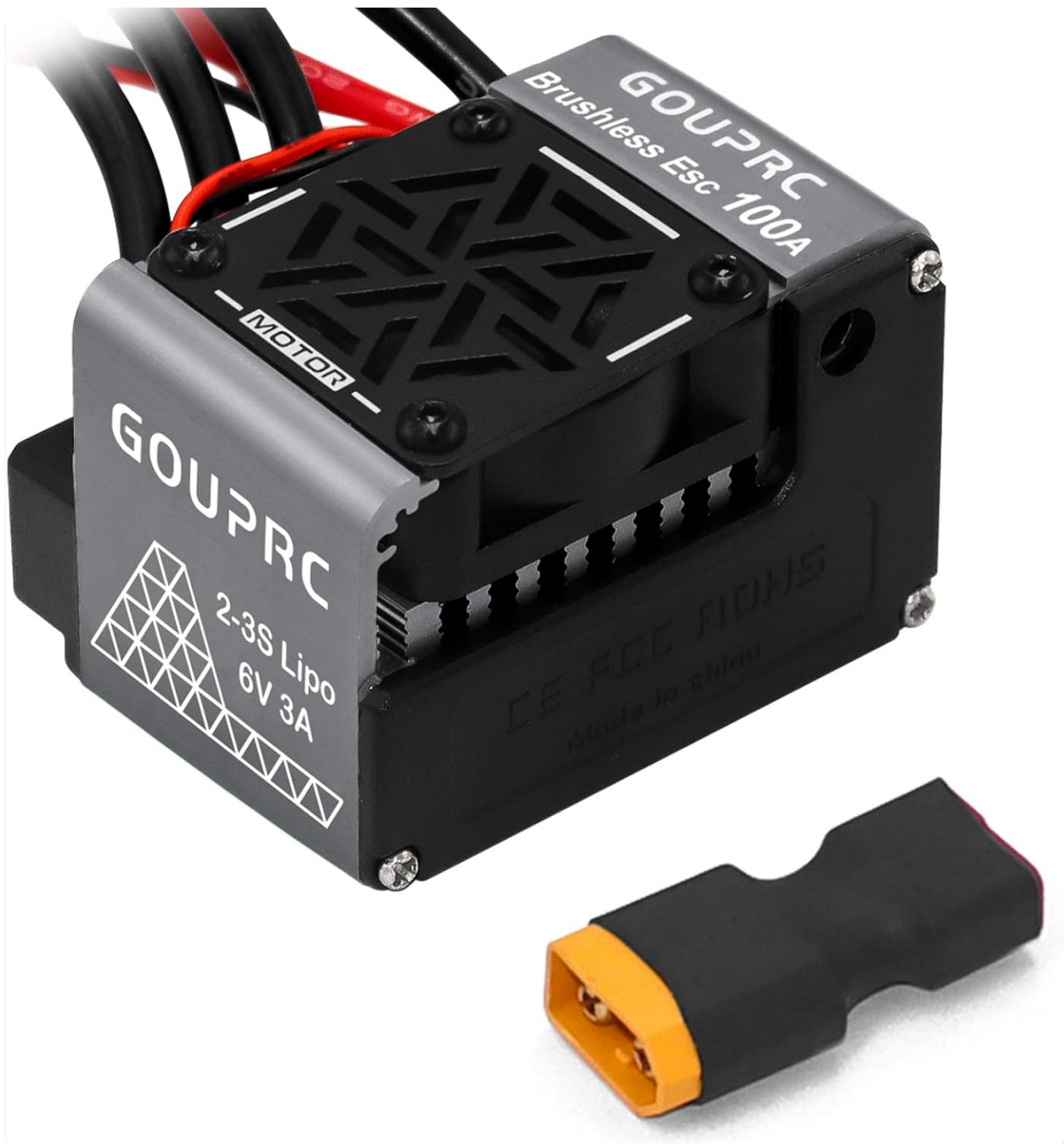


Image: The GOUPRC 100A Brushless ESC, a compact and robust electronic speed controller.

2. PRODUCT FEATURES

- Compatible with 9T 3650, 3660, 3670 brushless motors.
- Waterproof and dustproof design, suitable for 1/10 RC cars.
- Supports T-plug and XT60 plug lithium batteries.
- Operates with 2S Lipo to 3S Lipo lithium batteries.
- Integrated protection functions: low voltage cut-off, over-heat, throttle signal loss, and motor blocked protection.
- High-frequency drive system and low-resistance field effect tube for enhanced load capacity and power utilization.

3. SPECIFICATIONS

100A car model brushless ESC parameter table

1. Operating current: 100A (long time continuous working current is recommended to be 30%-50% of the working current)
2. Operating voltage: 2S-3S (6V-13V)
3. BEC voltage and current: switch BEC, 6V/3A
4. Continuous/Peak Current/Internal Resistance: 100A/520A/0.0035 HaoBattery
5. Product size: length 40mm, width 48mm, height 32mm
6. Product weight: 98g
7. Speed models: 1:12 / 1:10 electric off-road vehicles car, short truck car, Bigfoot car, etc.
8. Support Motor Type: Sensorless Brushless Motor Sensorless Motor Sensorless Mode
9. Products built-in protection procedures: low-voltage protection, blocking protection, over-temperature protection, phase loss protection
10. ESC reference: support for setting card reference



Image: Detailed parameter table for the 100A car model brushless ESC.

Parameter	Value
Operating Current	100A (long time continuous working current recommended to be 30%-50% of working current)
Operating Voltage	2-3S (6V-13V)
BEC Voltage and Current	Switch BEC, 6V/3A
Continuous/Peak Current/Internal Resistance	100A/520A/0.0035 HaoBattery
Product Size (L x W x H)	40mm x 48mm x 32mm
Product Weight	98g
Speed Models Supported	1:12 / 1:10 electric off-road vehicles, short trucks, bigfoot cars, etc.

Parameter	Value
Support Motor Type	Sensorless Brushless Motor, Sensorless Mode
Built-in Protection	Low-voltage cut-off, over-heat, throttle signal loss, motor blocked.
ESC Reference	Support for setting card reference

4. SETUP & INSTALLATION

Follow these steps to correctly connect your GOUPRC 100A Brushless ESC to your RC vehicle components.

1. **Connect the Motor:** Connect the three motor wires from the ESC to your brushless motor. Ensure correct phase connection (A-A, B-B, C-C). If the motor rotates in the wrong direction, swap any two of the three wires.
2. **Connect the Receiver:** Plug the ESC's signal cable (usually a three-wire servo plug) into the throttle channel (CH2) of your RC receiver.
3. **Connect the Battery:** Connect your 2S or 3S Lipo battery to the ESC's power input. Ensure the polarity is correct.
4. **Connect the Servo:** If applicable, connect your steering servo to the steering channel (CH1) of your RC receiver.
5. **Power On:** Turn on your remote controller first, then power on the ESC.

● STEPS FOR USING THE PROGRAMMING CARD

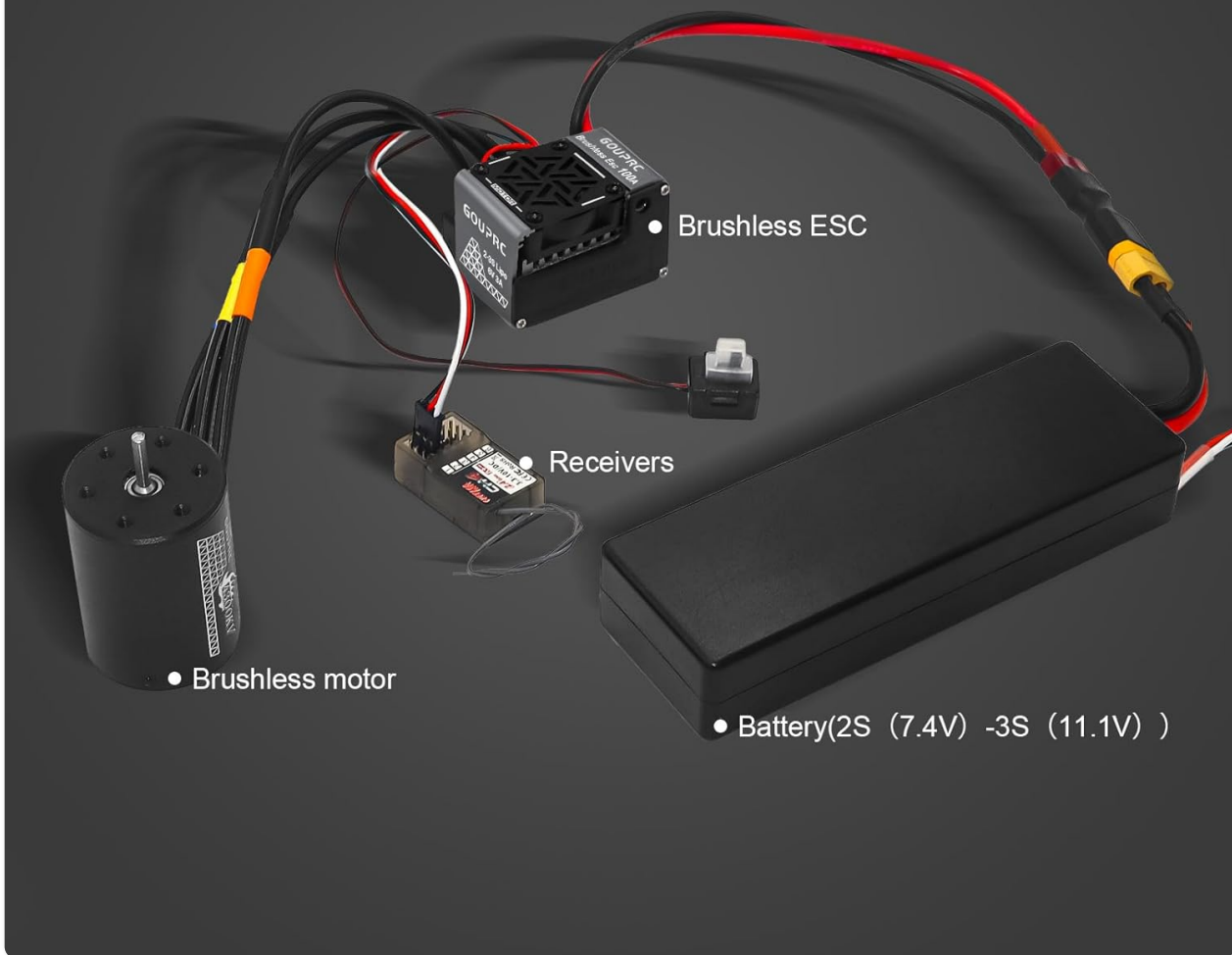


Image: Connection diagram illustrating how to link the brushless ESC, motor, battery, and receiver for operation.

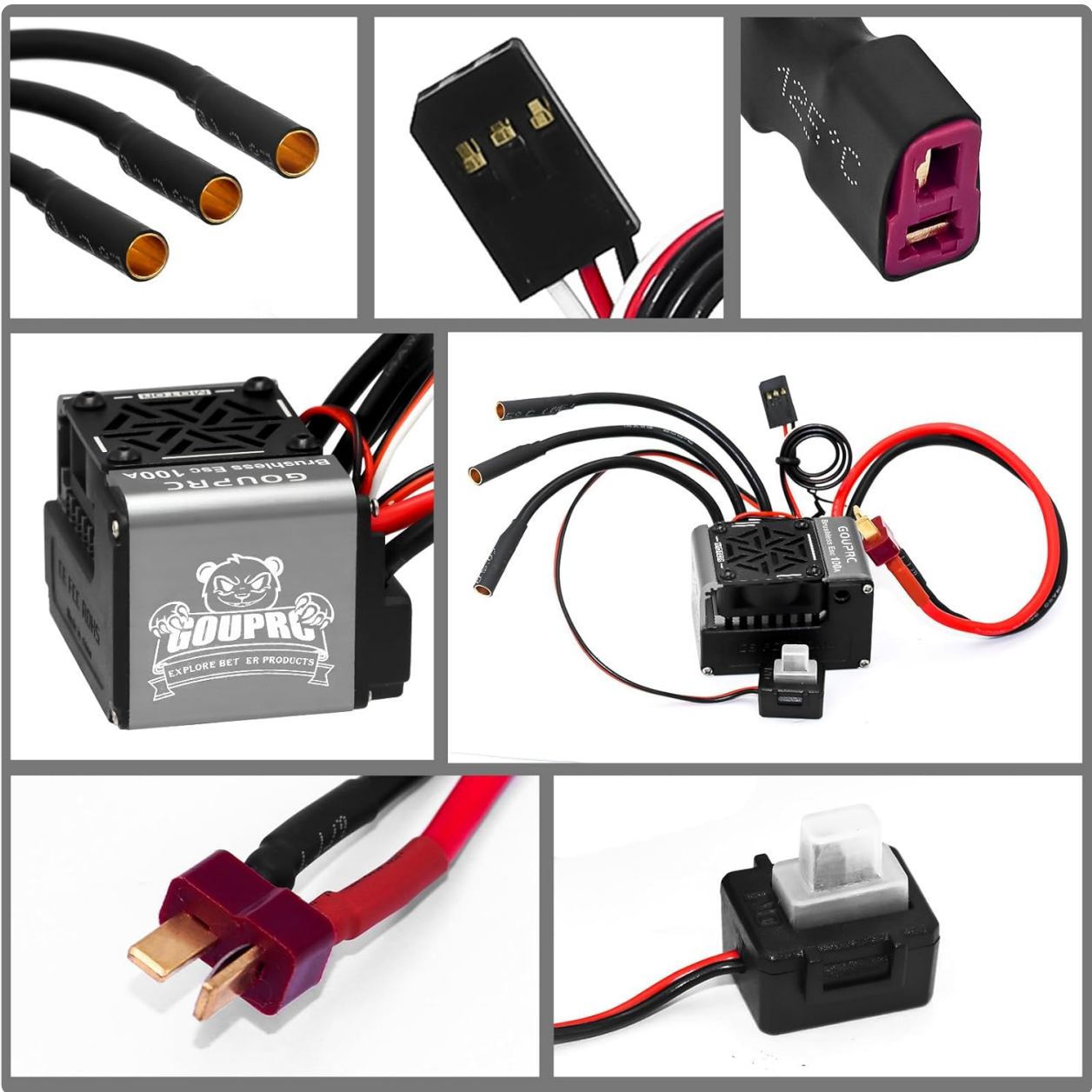


Image: Various close-up views of the ESC, showing motor connectors, receiver plug, and power switch.

5. OPERATING INSTRUCTIONS

After successful installation, ensure your remote controller and ESC are properly calibrated for optimal performance. The ESC will typically auto-calibrate upon first power-up with the remote controller in neutral position. If the motor does not respond or behaves unexpectedly, refer to the troubleshooting section. For advanced settings and fine-tuning, a programming card (sold separately or included in some kits) can be used. This allows adjustment of parameters such as cut-off voltage, drag brake, punch, and more.

6. TROUBLESHOOTING

If you encounter issues with your ESC, consider the following common problems and solutions:

Common Unsuccessful Throttle Alignment Problems:

1. **Throttle Channel Not Adjusted:** If the throttle channel on your remote control is not adjusted to 100%,

or the signal reception is not at the required value, the ESC may not operate normally, and the motor will not respond. Adjust the throttle channel to 100% and re-power the system.

2. **Throttle Trim Not Adjusted:** If the throttle trim is not set to the '0' position, the signal may not be received correctly. The ESC and servo might operate, but the motor will not respond. Adjust the throttle trim to '0' and re-power the system.
3. **Throttle Channel Driving Direction Setting (for Remote Controls with Screens):** Incorrect driving direction settings on advanced remote controls can prevent motor response. Verify and correct the throttle channel direction in your remote's settings.

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Video: Common connection Q&A for brushless motor and remote controller, demonstrating troubleshooting steps for throttle issues.

7. MAINTENANCE

Regular maintenance ensures the longevity and performance of your ESC:

- **Cleaning:** After each use, especially in dusty or wet conditions, clean the ESC with a soft brush or compressed air to remove dirt and debris. Ensure no moisture remains.
- **Connection Check:** Periodically inspect all wire connections (motor, battery, receiver) for any signs of wear, corrosion, or loose contacts. Secure any loose connections.
- **Cooling Fan:** Ensure the cooling fan (if present) is free from obstructions and operating correctly. A blocked fan can lead to overheating.
- **Storage:** Store the ESC in a dry, cool place away from direct sunlight and extreme temperatures.

8. WARRANTY & SUPPORT

For warranty information, technical support, or any other inquiries regarding your GOUPRC 100A Brushless ESC, please contact the seller directly through your purchase platform. Provide your order details and a clear description of the issue for prompt assistance.