

QUICRUN
USER MANUAL
Sensorless Brushless Motor
QUICRUN 2840/2850 G2

20250312



Thank you for purchasing this HOBBYWING product! Any improper use may cause personal injury and damage to the product and related devices. We strongly recommend reading through this user manual before use and strictly abide by the specified operating procedures. We shall not be liable for any liability arising from the use of this product, including but not limited to reimbursement for incidental or indirect losses. Meanwhile, we do not assume any responsibility caused by unauthorized modification of the product. We have the right to change the product design, appearance, performance and use requirements without notice.

HW-SMB352DUL00

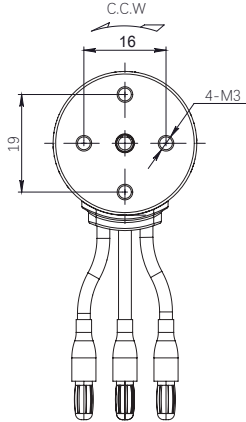
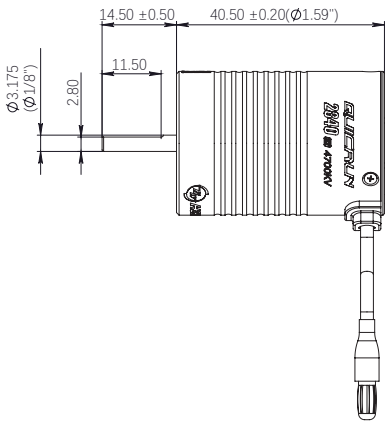
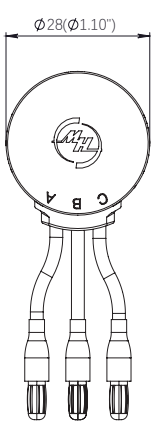
01 Warnings

- Read the manuals of all the items being used in the build. Ensure gearing, setup, and overall install is correct and reasonable.
- All connections, must be made correctly. You may lose control, or run into major issues caused by improper, bad, weak, or poor connections.
- Never apply full throttle if the pinion is not installed. Due to the extremely high RPMs without load, the motor may get damaged.
- Stop usage if the motor exceeds 100°C/212°F. High temperature will damage the motor and cause the rotor to weaken.

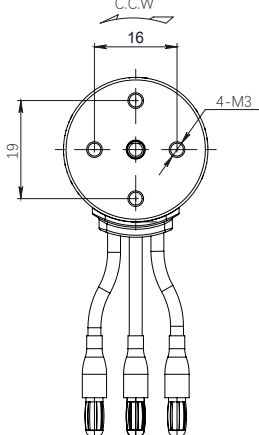
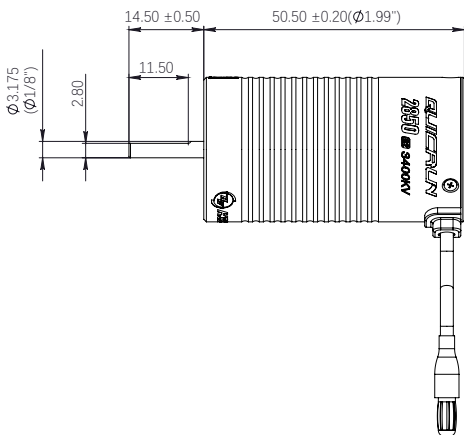
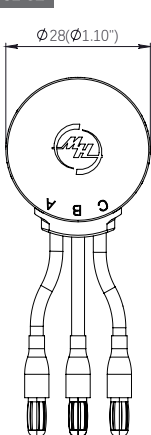
02 Specifications

Model	KV	LiPos	No-load Current	Diameter/Length	Shaft Diameter/Length	Bearing size (mm)	Poles	Weight	Applications
QUICRUN 2840SL-4700KV G2	4700KV	2S	3.1A	φ=28mm(1.1") L=40.5mm(1.59")	φ=3.175(0.13") L=14.5(0.57")	Front: D9*D4*14 Rear: D9.525*D3.175*t3.967	4	89g	1/14 On-road/Buggy/Short Course Truck, 1/16 Truck/Monster truck
QUICRUN 2850SL-4700KV G2	4700KV	2S	4.3A	φ=28mm(1.1") L=50.5mm(1.99")	φ=3.175(0.13") L=14.5(0.57")	Front: D9*D4*14 Rear: D9.525*D3.175*t3.967	4	125g	1/14 Truck/Monster truck, 1/12 On-road/Buggy
QUICRUN 2850SL-3400KV G2	3400KV	2-3S	2.8A	φ=28mm(1.1") L=50.5mm(1.99")	φ=3.175(0.13") L=14.5(0.57")	Front: D9*D4*14 Rear: D9.525*D3.175*t3.967	4	125g	1/14 Truck/Monster truck, 1/12 On-road/Buggy

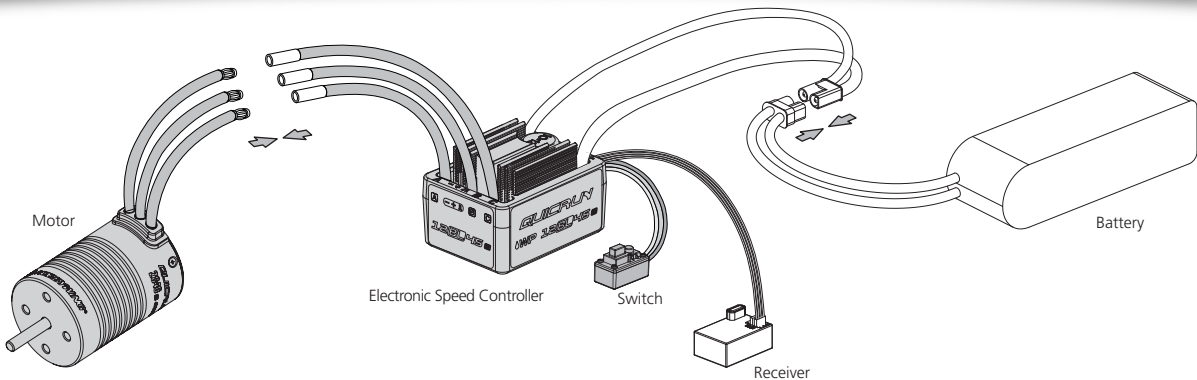
QUICRUN 2840SL G2



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03 Installation & Connection



1. Installation of the motor

There are 4 motor mounting holes in M3 specification, and the mounting holes are 4mm in depth, before installing the motor on the vehicle, please carefully confirm whether the specification of the screws is appropriate according to the thickness of the motor mounting plate to avoid damage to the motor due to too long screws.

2. How to Connect the Motor to an ESC

There is no strict wire sequence requirement for the connection between the motor and the esc, the # A/# B/# C three wires of the motor and esc can be connected at will, if the motor rotation in the opposite direction, you can exchange any two wires.

3. Inspection

Before powering on the esc, please check the motor installation and the order of all connections.

04 Gearing

Reasonable selection of gear ratio is very important. Improper gear ratio may cause damage. You can select the gear ratio according to the following points!

1. The operating temperature of the motor

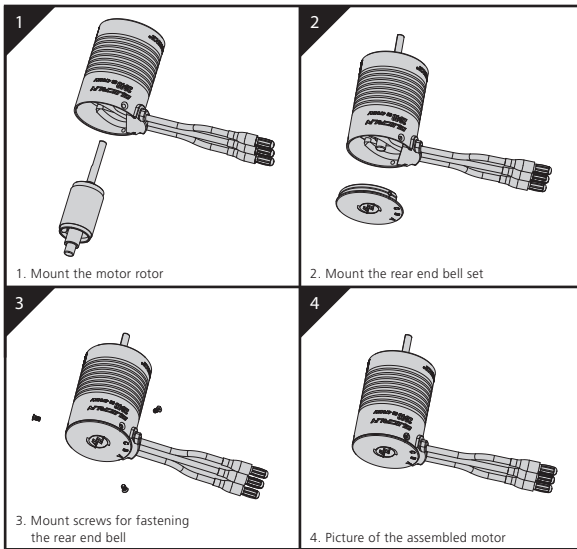
The motor temperature should be lower than 100 degrees Celsius (212 degrees Fahrenheit) in operation. High temperature may cause the magnets to get demagnetized, the coil to melt and short circuit, and the ESC to get damaged. A suitable gearing ratio can effectively prevent the motor from overheating.

2. The principle of selecting gear ratio

To avoid the possible damage to ESC and motor caused by the overheating, please start with a small pinion/a big FDR and check the motor temperature regularly. If the motor and ESC temperature always stays at a low level during the running, you can change a larger pinion/a lower FDR and also check the motor temperature regularly to ensure that the new gearing is suitable for your vehicle, local weather and track condition. (Note: For the safety of electric devices, please check the ESC and motor temperature regularly.)

05 Assembly and Disassembly

In order to make the motor have longer service life and higher efficiency, we suggest to regularly check the bearing and clean the dirt in the motor. The specific time depends on the frequency of using the motor and the site conditions. When installing, please follow the steps in the following assembly drawing; when disassembling, follow the reverse steps.



Parts List

