

# (Designed & Manufactured by RC EXPLORER TEAM)

# **Brushless Motor User Guidelines**

## **Suggested Gear Ratio Table and KV values:**

Standard Size	Touring Car 1/10	Touring Car 1/10 (Small	Kv (rpm/volt), sensor at 0
Motor	(Big Track)	Track)	position
3.5 T	9.4	10.0	~9900 KV
4 T	8.9	9.5	~8500 KV
4.5 T	8.4	9.0	~7700 KV
6.5 T	7.4	8.0	~5300 KV
7.5 T	6.9	7.5	~4600 KV
8.5 T	6.4	7.0	~4000 KV
9.5 T	5.9	6.5	~3700 KV
10.5 T	5.4	6.0	~3400 KV
11.5 T	4.8	5.4	~3200 KV
13.5 T	4.6	5.2	~3000 KV
17.5 T	4.2	4.8	~2400 KV

#### **Installation Procedure:**

- Connect the sensor wire between the brushless motor and electronic speed controller.
- For convenience to solder the A, B, C wires, please solder the given connection adaptor to the pcb(A,B,C position) of the brushless motor. After that, three wires from the electronic speed controller can be connected to these three adaptors directly. Please make sure the connection position (A,B,C) between the motor and electronic speed controller should be matched.
- Use the M3 screws mounting the motor to the car and the max length of screws shall not exceed 6mm.

# **Warning Note:**

- Never solder capacitors & schottky diode to the motor.
- All wires and connection have to be well insulated. Short circuit will destroy the motor.
- For better performance, it is recommended to use cooling fan to cool down the brushless motor.

### Timing (only for Team Powers brushless motor with variable end bell):



- To increase the power, revolution and torque by moving the mounting screw to +2 or +4 position.
- To decrease the power, revolution and torque by moving the mounting screw to -2 or -4 position.

#### **Notes:**

To increase the power, revolution and torque through +2, +4 positions will generate excessive heat and it may destroy the motor. It is suggested to use the default factory setting (at 0 position)

### **Motor Specifications:**

	Standard Motor Dimension	'Super Lite' Version Motor
		Dimension
Design Specification:	Based on IFMAR/ROAR Rule	
<b>Motor Dimension:</b>	35.8mm(Diameter) x 51mm(Length)	35.8mm(Diameter) x 45mm(Length)
Shaft Diameter:	3.17mm	3.17mm
Magnet Dimension:	3.5turn~9.5turn: 12.5mm(diameter)	12.3mm(diameter) x18mm(length)
	x24mm(length)	
	Over 10.5 turn: 12.3mm(diameter)	
	x24mm(length)	
Weight:	~170g	~140g
Recommend RC	1:10 or MINI RC CAR	F1, MINI CAR
Model Car:		

If any further information need upon reviewing the instruction, please feel free to contact **enquiry@rc-explorer.com**. For more Team Powers or other product information, you can go to the below web site. <a href="http://www.rc-explorer.com">http://www.rc-explorer.com</a> or <a href="http://www.team-powers.com">http://www.team-powers.com</a>.