



(Designed & Manufactured by **RC EXPLORER TEAM**)

### **Brushless Motor User Guidelines- Actinium**

#### **Suggested Gear Ratio (zero timing) Table and KV values:**

<b>Standard Size Motor</b>	<b>Touring Car 1/10 (Medium Track)</b>	<b>Touring Car 1/10 (Small Track)</b>	<b>Kv (rpm/volt), sensor at 0 position</b>
<b>3.5 T</b>	8.4	9.1	~10500 KV
<b>4 T</b>	8.0	8.7	~8900 KV
<b>4.5 T</b>	7.7	8.4	~8000 KV
<b>5.5 T</b>	7.4	8.1	~7200 KV
<b>6.5 T</b>	7.0	7.7	~5500 KV
<b>7.5 T</b>	6.6	7.3	~4800 KV
<b>8.5 T</b>	6.2	6.9	~4200 KV
<b>9.5 T</b>	5.8	6.5	~3900 KV
<b>10.5 T</b>	5.4	6.1	~3500 KV
<b>11.5 T</b>	5.0	5.7	~3300 KV
<b>13.5 T</b>	4.6	5.3	~3100 KV
<b>17.5 T</b>	3.8	4.5	~2200 KV
<b>21.5 T</b>	3.2	4.0	~1800 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:



- To screw out a little bit for the two screws from the top of end bell, then the end bell can be rotated.
- To increase the power, revolution and torque by rotating the end bell anti-clockwise as indicated by '+' direction.
- To decrease the power, revolution and torque by rotating the end bell clockwise as indicated by '-' direction

### Notes:

As the timing is increased, it will generate excessive heat and it may destroy the motor, it is suggested to use the default factory setting

### Motor Specifications:

	Standard Motor Dimension
<b>Design Specification:</b>	Based on IFMAR/ROAR/BRCA Rule, but may be different as those rules are changed in different time
<b>Motor Dimension:</b>	35.8mm(Diameter) x 51mm(Length)
<b>Shaft Diameter:</b>	3.17mm
<b>Magnet Dimension:</b>	3.5turn~9.5turn: 12.5(outer diameter) x5(inner diameter) x24mm(length) 10.5 turn or over: 12.5(outer diameter)x7.25(inner diameter) x24mm(length)
<b>Weight:</b>	~168g
<b>Recommend RC Model Car:</b>	<b>1:10 or MINI RC CAR</b>

If any further information need upon reviewing the instruction, please free to contact [enquiry@rc-explorer.com](mailto:enquiry@rc-explorer.com). For more Team Powers or other product information, you can go to the below web site. <http://www.rc-explorer.com> or <http://www.team-powers.com>.