

USER MANUAL

MODEL NO: □25A □35A □45A □60A □80A □120A



Congratulations and thanks for purchasing electronic speed controller (ESC). The brushless power system for RC model can be very powerful and dangerous, so please read this manual carefully. Since we have no control over the installation, application, use or maintenance of this product, in no case shall we be liable for any damages, losses or costs. Besides, we have the rights to change the design, appearance, functions and operational requirements without any notifications.

01 Features

- Water-proof and dust-proof for all-weather races;
(Note: please uninstall the cooling fan before using this ESC in water; Clean and dry it soon after the use for avoiding the connectors get rusty.)
- External programming port, easy to connect to the Program Card when setting the ESC;
- Proportional brake with 4 steps of maximum brake force adjustment and 8 steps of drag brake force adjustment;
- 9 steps of acceleration(punch) adjustment from “soft” to “Very aggressive” to fit for different kinds of models, tires and tracks;
- Multiple protections: Low voltage cut-off protection / Over-heat protection / Throttle signal loss protection / Motor lock-up protection;
- Compatible with the optional device-the portable Digital LED Program Card, especially convenient for outdoor use.

02 Specifications

Model	25A	35A	45A	60A	80A	120A
Cont. Current/ Burst Current	25A/100A	35A/120A	45A/180A	60A/320A	80A/480A	120A/600A
Motor Type	Sensorless Brushless Motor					
Suitable Car	1/18, 1/16 car	1/18, 1/16, 1/14 car	1/10 car	1/10 car	1/8 car	1/8 car
Suitable Brushless Motor	>=12T	>=12T	>=9T	>=9T	>=5.5T	>=3.5
Resistance	0.004ohm	0.003ohm	0.0014ohm	0.0007ohm	0.0005ohm	0.00035ohm
Battery	2 cells Lipo	2~3 cells Lipo	2~3 cells Lipo		2~4 cells Lipo	2~4 cells Lipo
BEC Output	5.8V/3A (switch mode)	5.8V/3A (switch mode)	5.8V/3A (switch mode)		5.8V/3A (switch mode)	

03 Instructions

1. Connect BEC wires with the receiver
2. Connect motor wires with ESC
3. Turn on the transmitter
4. Connect battery pack with ESC then switch on the ESC.
5. When the connection of motor and battery is finished, the motor emits "Beep-Beep" tone.
6. When the throttle stick is in the neutral position, the motor re-emits "Beep-Beep" tone.
7. The ESC is workable.



Programming Projects (First Line LED)	Parameter values (second row LED)											
	1	2	3	4	5	6	7	8	9	10	11	12
1: Operation model	Positive rotation and brake	Direct positive and negative inversion	Positive belt proportional brake	Positive and Reverse Belt Proportional Brake								
2: Motor Rotation Direction	Positive rotation	Reversal										
3: Start mode	1 level	2 level	3 level	4 level	5 level	6 level	7 level	8 level	9 level	10 level		
4: Minimum Forward Strength	5%	7%	9%	12%	14%	16%	18%	20%	22%	25%		
5: Minimum backing strength	5%	7%	9%	12%	14%	16%	18%	20%	22%	25%		
6: Maximum Backing Strength	23%	32%	40%	49%	58%	66%	75%	83%	92%	100%		
7: Initial braking strength	0%	5%	11%	16%	22%	27%	33%	38%	44%	50%		
8: Maximum braking strength	0%	11%	22%	33%	44%	55%	66%	77%	88%	100%		
9: Braking force	0%	11%	22%	33%	44%	55%	66%	77%	88%	100%		
10: Neutral point range		2.3%	2.6%	3.0%	3.3%	3.6%	4.0%	4.3%	3.6%	5%		
11: Brake frequency	16KHz	8KHz	4KHz	2KHz		500Hz	250Hz	125Hz				
12: lithium saving	Automatic recognition	2S	3S	4S	5S	6S						
13: Low Voltage Protection Threshold	2.6V	2.7V	2.8V	2.9V	3.0V	3.1V	3.2V	3.3V	3.4V	3.5V	3.6V	3.7V
14: Low Voltage Protection	No protection	Protect										
15: Reverse maximum throttle stroke	0.9ms	0.933ms	0.967ms	1ms	1.033ms	1.067ms	1.1ms	1.133ms	1.167ms	1.2ms		
16: Forward maximum throttle stroke	1.8ms	1.833ms	1.867ms	1.9ms	1.933ms	1.967ms	2.0ms	2.033ms	2.067ms	2.1ms		
17: Synchronized rectification	Close	Open										

programme card Appearance description

