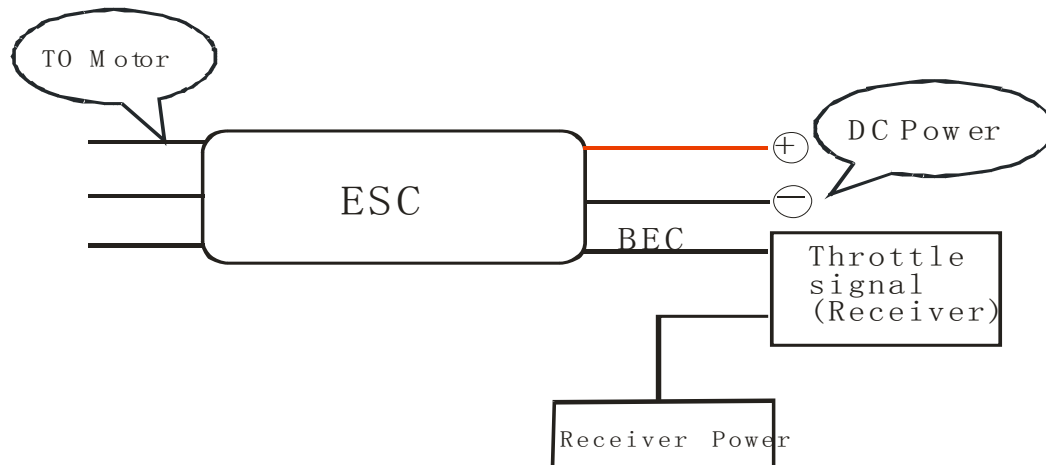




## Power series ESC manual

Type of ESC	Dimensions	Weight	Operating range	BEC	BEC load	Current	Peak (10 sec)
10P	25x12x9mm	9g(0.31oz)	2-3 LiPo/5-10NC	1A	2-3 Servos	10A	15A
15P	30x23x8mm	10g(0.35oz)	2-3 LiPo/5-10NC	1A	2-3 Servos	15A	20A
20P	34x24x6mm	24.5g(0.86oz)	2-3 LiPo/5-10NC	2A	2-3 Servos	20A	25A
30P	37x25x7mm	25.5g(0.89oz)	2-3 LiPo/5-10NC	2A	2-4 Servos	30A	35A
40P	35x25x8mm	25.5g(0.89oz)	2-3 LiPo/5-10NC	2A	2-4 Servos	40A	45A



### Functions and Features:

1. Battery can be commonly used by ESC, receiver and brushless motor, the ESC can be programmed to a certain voltage rating, when the data is lower than the programmed voltage rating, the power to the motor will be cut off by the program, then pull the throttle to full cutting off, the motor will be restarted, you need to be sure landing your airplane at this moment. The standard voltage of Lipoly is 3.7V, should not be more than 4.2V when charged, the discharge voltage should not lower than 2.5V, otherwise it will hurt your batteries or lower its quality. This ESC will protect your battery when its voltage is lower than 3V.
2. when signals between the transmitter and receiver is not good enough and stable, the power to the motor will be cut off by the ESC automatically. And the motor will be restarted when signals is recovered after the full cutting off of throttle.
3. The higher the frequency of PWM, the more efficiency of the ESC. You can select the frequencies among 8KHz、16Khz and 32KHz, it is compatible with motors of different brands.

**Usage method:** Be sure you have connected the ESC with motor, and the throttle of Radio is on

low position, then connect the ESC with power, , sounds( beep—beep) can be heard from the systems of ESC indicating normal of ESC systems just waiting for throttle controlling.

**How to Setup:** Be sure of not connecting the batteries.

Pull the throttle stick to full

Connect the batteries.

Sounds (beep beep beep beep beep beep) can be heard after having connect with batteries for about 2 seconds, you should select some kind of function, and pull throttle stick to lowest position rapidly when the sounds is over, sound(beep) can be heard when the setup of the function is successful.

**Function 1.** beep setup of the protection of low voltage cutoff for 2 Li-poly batteries. The low cutoff voltage is 6V

**Function 2.** beep beep setup of low voltage cutoff protection for 3 Li-poly batteries, the cutoff voltage is 9V

**Function 3** beep beep beep setup of low voltage cutoff protection for 4 Li-poly batteries, the cutoff voltage is 12V.

**Function 4** beep beep beep beep setup of low voltage cutoff protection for 5 Li-poly batteries, the cutoff voltage is 15V.

**Function 5** beep beep beep beep beep setup of low voltage cutoff protection and can automatically detect the voltage when it falls to the 80% of the starting run voltage.

**Function 6** beep beep beep beep beep beep setup of low voltage cutoff protection and can automatically detect the voltage when it falls to the 72% of the starting run voltage.

**Function 7** beep beep beep beep beep beep beep setup of low voltage cutoff protection and can automatically detect the voltage when it falls to the 65% of the starting run voltage.

**Function 8** beep beep beep beep beep beep beep beep setup of low voltage cutoff protection and can automatically detect the voltage when it falls to the 55% of the starting run voltage.

**Function 9** beep beep beep beep beep beep beep beep beep (9 sounds) setup of the Positive and Negative Turn of motor (this function can eliminating worry from connecting the ESC with motor)

**Function 10** beep beep beep beep beep beep beep beep beep beep (10 sounds) setup of brake mode, this is a function that can be switched between the brake and anti-brake (when the throttle stick is shut off, the brake function can be realized via Circuit Simulation to avoid the motor is driven by propeller, especially useful for airplane with fold propeller.)

**Function 11** beep beep beep beep beep beep beep beep beep beep beep (sounds 11) setup of speeding up, speeding up rapidly (linear variation of motor speeding up can be set up, especially useful to expert flyer)

**Function 12** sounds 12 setup of speeding up, normal speeding up.

**Function 13** sounds 13 setup of speeding up, slow speeding up

**Function 14** sounds 14 setup of PWM mode, 8KHZ (the frequency of ESC can be set up, and brushless motor can reach its max efficiency)

**Function 15** sounds 15 setup of PWM mode, 16KHZ

**Function 16** sounds 16 setup of PWM mode 32KHZ

The system of ESC can circulate the function for setup till user have selected the right function, then ESC can return to the normal state (driving motor)