

**Features:**

1. Use top quality components to get strong current endurance.
2. Low voltage cut-off protection / over-heat protection / throttle signal loss protection.
3. Throttle range can be configured to be compatible with all transmitters.
4. Maximum motor speed: 210000 RPM (2 poles), 70000 RPM (6 poles), 35000 RPM (12 poles).

**Specifications:**

Class	Model	Cont. Current	Burst Current (>10s)	BEC Mode	BEC Output	BEC Output Capability			Battery Cell		Weight	Size
						2S Lipo	3S Lipo	Lipo	NiMH	L*W*H		
20A	20A	20A	25A	Linear	5V/2A	5 servos	4 servos	2-3S	5-9 cells	19g	42*25*8	
40A	40A	40A	55A	Linear	5V/3A	5 servos	4 servos	2-3S	5-9 cells	35g	68*25*8	
40A	40A Ubec	40A	55A	Switch	5V/4A	5 Servos	2-4S	5-12 Cells	43g	65*25*12		

**Begin To Use Your New ESC**

**IMPORTANT!** Because different transmitter has different throttle range, please calibrate throttle range before flying.

**How to set the throttle range and how to use the throttle stick to program the “Brake” function?**

1. Move the throttle stick to the top (highest) position, and then connect battery pack to the ESC, You will hear 1 low, long tone to indicate startup, then the respective number of medium-length mid-tones to indicate the cell count .
2. After 2 seconds, the motor sounds **2 long beeps (B—B—)**, which means the highest position of the throttle range is already recognized by the ESC (After the beeps, if the throttle stick is moved to the lowest position in 2 seconds, the ESC will recognize the lowest position, quit the throttle range calibrating process and get ready to start).
3. After 2 seconds, the motor sounds **a short beep (B) after a music**, which means the Brake function is **Disabled** (After the beep, if the throttle stick is moved to the lowest position in 2 seconds, **the ESC will recognize the Brake function is disabled**, quit the programming mode and get ready to start).
4. After 2 seconds, the motor sounds **2 short beeps (BB)**, which means the Brake function is **Enabled** (After the beeps, if the throttle stick is moved to the lowest position in 2 seconds, **the ESC will recognize the Brake function is enabled**, quit the programming mode and get ready to start).
5. After 2 seconds, the ESC stops running.

**How to start the ESC?**


Move the throttle stick to the lowest position, and then connect battery pack to the ESC, You will hear 1 low, long tone to indicate startup, then the respective number of medium-length mid-tones to indicate the cell count, followed by 3 rising tones to indicate the ESC is armed.

**Protection Function**

1. Start up failure protection: If the motor fails to start within 2 seconds of throttle application, the ESC will cut-off the output power. In this case, the throttle stick **MUST** be moved to the bottom again to restart the motor. (Such a situation happens in the following cases: The connection between ESC and motor is not reliable, the propeller or the motor is blocked, the gearbox is damaged, etc.)
2. Over-heat protection: When the temperature of the ESC is over about 110 Celsius degrees, the ESC will reduce the output power.
3. Throttle signal loss protection: The ESC will reduce the output power if throttle signal is lost for 1 second, further loss for 2 seconds will cause the output to be cut-off completely.

**Trouble Shooting**

Trouble	Possible Reason	Action
After power on, motor does not work, no sound is emitted	1, The connection between battery pack and ESC is not correct 2, Throttle signal is irregular; 3, The throttle stick is not in the bottom (lowest) position	Check the power connection. Replace the connector. Check the receiver and transmitter Check the cable of throttle channel Move the throttle stick to bottom position
After power on, motor does not work, such an alert tone is emitted: “beep-beep-, beep-beep-,beep-beep-” (Every “beep-beep-” has a time interval of about 1 second)	Input voltage is abnormal, too high or too low.	Check the voltage of battery pack

After power on, motor does not work, a special tone “  567i2” is emitted after 2 beep tone (beep-beep-)	Direction of the throttle channel is reversed, so the ESC has entered the program mode	Set the direction of throttle channel correctly
The motor runs in the opposite direction	The connection between ESC and the motor need to be changed.	Swap any two wire connections between ESC and motor