




## FVT Program Card

For FVT RC Airplane ESC, Sky / Swallow Series

1 Brake	<input type="radio"/>	<input type="radio"/>					
2 Battery Type	<input type="radio"/>	<input type="radio"/>	<b>Favourite</b> 				
3 Cut Off Type	<input type="radio"/>	<input type="radio"/>				Reduce Cut-Off	
4 Cut Off Voltage	<input type="radio"/>	<input type="radio"/>				<input type="radio"/>	Low Middle High
5 Timing Mode	<input type="radio"/>	<input type="radio"/>				<input type="radio"/>	Low Middle High
6 Start Mode	<input type="radio"/>	<input type="radio"/>				<input type="radio"/>	Very Soft Soft Accelerate
7 Governor Mode	<input type="radio"/>	<input type="radio"/>				HeLi-on HeLi-off	
8 Motor Dir	<input type="radio"/>	<input type="radio"/>				Normal Reverse	
						<input type="radio"/>	<input type="radio"/>
			▲	◀▶	Load Default	OK	

1. Brake: Off / Start

2. Battery type: Lipo (lithium battery) / NiMH (nickel hydrogen)

3. Low-voltage shutdown type: gradually reduce power / stop immediately

Note: When the ESC is in low pressure or over temperature, the operating mode is gradually reduced. Regardless of your throttle position, the power is gradually reduced with a certain amount of data and finally maintained with a certain data to keep the system stable.

4. Low voltage protection value: low / medium / high

1) When the battery type is Lipo, the ESC automatically calculates the number of lithium batteries. The low-to-medium/high-state battery cut-off voltage is 2.8V/3.0V/3.2V. For example, if three lithium batteries are used and the medium cutoff voltage is set, the low voltage protection threshold is  $3.0 \times 3 = 9.0V$ .

2) When the battery type is NiMH, the cutoff voltage at low/medium/high is 0%/60%/65% of the input voltage at power-on. 0% means no low voltage protection. For example, when using a 6-cell NiMH battery, the voltage is  $1.44 \times 6 = 8.64V$  when fully charged. When the medium cutoff voltage is set, the cutoff voltage threshold is  $8.64 \times 60\% = 5.18V$ .

5. Motor advance angle: low / medium / high

In general, the low angle of advance can accommodate more motors. However, because the motor structure is very different, please try each angle to get a satisfactory driving effect. In order to increase the speed, the advance angle can be set to a high advance angle, but the motor heats up faster. After changing the advance angle, it is recommended to test on the ground before flying.

6. Starting acceleration: super soft start / soft / acceleration

Acceleration start for fixed wings, soft start / super soft start for helicopters. The initial speeds of the soft start and super soft start are relatively low. Even if the throttle stick is pushed to the maximum position instantaneously, the motor will delay from a standstill to full speed for a short time.

7. Flight mode: fixed wing / helicopter

Note: Helicopter mode motor lags from standstill to full speed for 8 seconds. If the throttle is closed within three seconds after the start speed is stable, it will start in acceleration mode when restarting again. If the throttle is off for more than three seconds, restart again in helicopter mode. start up.

ESC works in helicopter mode, no brakes and works in a gradual reduction of power mode when in low voltage and over temperature alarms

8. Motor Steering: Forward/Reverse

In most cases, motor forward/reverse is typically achieved by swapping any two motor lines. The motor wire has been directly soldered

When the ESC is on, the motor can be changed to change by changing the setting value on the ESC.

1. 刹车：关闭/启动
2. 电池类型： **Lipo（锂电池）** / NiMH（镍氢）
3. 低压关断类型： **逐渐减小功率**/立即停止  
注意：当ESC处于低压或超温**逐渐减小**工作模式，不管你的油门在任何位置，功率以一定的数据**逐渐减小**最终以某一数据保持来使系统保持平稳。
4. 低压保护值：低/**中**/高
  - 1) 当电池类型为Lipo时，电调自动计算锂电节数，低/中/高情况下每节电池的截止电压分别为：2.8V/3.0V/3.2V。例如使用3节锂电，设定为中截止电压，则低压保护阈值为： $3.0*3=9.0V$ 。
  - 2) 当电池类型为镍氢时，低/中/高情况下截止电压为开机时输入电压的0%/60%/65%。0%意味着不进行低压保护。例如：使用6节镍氢电池，充满时电压为  $1.44*6=8.64V$ ，当设定为中截止电压时，则截止电压阈值为： $8.64*60%=5.18V$ 。
5. 马达进角：低/**中**/高  
一般情况下，低进角可以适应较多的电机。但是因为电机结构差异很大，请试用各个进角以获得满意的驱动效果。为提高转速，可以将进角设为高进角，但电机发热较快。改变进角后，建议先在地面进行测试，然后再飞行。
6. 启动加速度：超柔和启动/**柔和**/加速  
加速启动适用于固定翼，柔和启动/超柔和启动适用于直升机。柔和启动和超柔和启动的初始转速都较低，即便瞬时将油门摇杆推到最大位置，电机从静止到全速都要延时一小会儿。
7. 飞行模式： **固定翼**/直升机  
注意：直升机模式电机从静止到全速滞后 **8** 秒，启动速度稳定后若关闭油门三秒内，再次启动时则均以加速模式启动，如果油门关断 时间超过三秒，再次启动均以直升机模式缓启动。  
ESC 工作在直升机模式时，无刹车并工作在**逐渐减小**功率模式当处于低压和超温报警时
8. 马达转向： **正**/反转  
大多数情况下，马达正/反转一般是通过交换任意两条马达线来实现的。在马达线已被直接焊在电调上时，可以通过改变电调上的设置值来使马达改变转向。