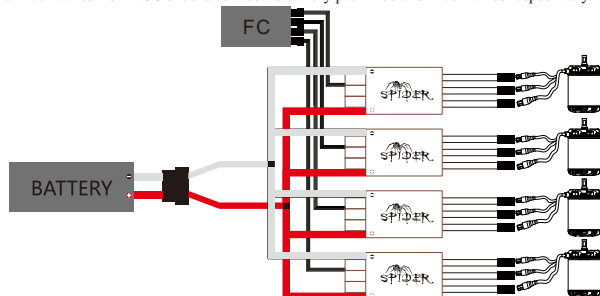


Spider-Series Brushless ESC User Manual v2

Thank you for purchasing ZTW Spider Series Brushless Electronic Speed Controller (ESC). Spider series ESCs are especially designed to meeting the demand of ever popular multirotors. Spider ESCs carry the features and workmanship of our products has been. Most of all the stability of this series will keep your craft safe in the air This product is no toy, please use it carefully. ZTW and its reseller are not responsible for your use of this product, or any damage or injuries you may cause or sustain as a result of it's usage.

Connecting your ESC:

- Connect your controller with motor wires.
- Solder appropriate connectors to the battery wires.
- Insulate all solder connectors with heat shrink tubes.
- Plug signal cable into throttle channel in the receiver.
- Red and Black wires from ESC should connect to battery pack Red and Black wires respectively.





Features:

- Use new generation of the MOSFETs to make sure the ESC low heating and high reliability .
- Supports high RPM motors, can be matched with most of the motors in the RC market .
- Super smooth and accurate throttle linearity.
- Super fast Refresh Rate up to 600Hz.
- Extremely low internal resistance.

Throttle Calibration

When you use the ESC for the first time, we would like to suggest you calibrate your throttle end point of your radio system. This will make the throttle response better. Please see following steps of how-to:

-  Power on your radio and push your throttle stick to 100%
-  Then connect battery to your ESC, you will hear two “beeps” from motor to confirm the end point after three seconds
- Pull throttle stick back to 0%, you will hear two “beeps” from motor confirm the lowest end point.

4. Throttle calibration is done. Please recycle your battery to use the ESC.



Enter Programming Mode

1. Power on your radio and push throttle stick to 100% position
2. Then connect battery to your ESC, you will hear two “beeps” from motor indicating that you are in the programming mode.
3. You will hear two different beep from the motor which indicate different menu. When you hear the beep you want you can pull throttle stick to 0% position. Note: 1 short beep means the you are in the “mode menu”, two short beep means you are in the “motor timing” menu.
4. When you enter a specific menu, the motor will keep beeping till you choose a value by pushing the throttle stick to 100% position.
5. If you want to quit please disconnect the battery to save the setting. Or keep listening the beeps from the motor.

Sound Indication Table

Menu	Beep					Long(1) +Short(1)
	1 Short Beep	2 Short Beep	3 Short Beep	4 Short Beep	1 Long Beep	
Mode	Mode1	Mode2				
Motor Timing	Auto	2°	8°	15°	22°	30°

NOTE: The item marked in gray is the default setting from factory. Mode 1 and Mode2 are designed to cater for different KV motors. If mode1 would not power your motor smoothly please change it to mode2. Normally mode1 would work in most circumstances.

Specifications:

Type	PN#Model	Cont./Burst	Max.Power	Battery cell	Weight	BEC	Size(mm)	User
		Current(A)	W	NiXX/Lipo				
Spider 20A OPTO	5020301	20A\30A	380	5-18NC /2-6Lipo	23	NONE	25*43*9	NO
Spider 30A OPTO	5030301	30A\40A	500	5-18NC /2-6Lipo	25	NONE	25*43*9	NO
Spider 30A OPTO Small	5030311	30A\40A	500	5-18NC /2-6Lipo	24	NONE	20*47*8	NO
Spider 40A OPTO	5040301	40A\50A	630	5-18NC /2-6Lipo	33	NONE	27*52*10	NO
Spider 50A OPTO	5050301	50A\60A	750	5-18NC /2-6Lipo	48	NONE	37*52*10	NO
Spider 60A OPTO	5060301	60A\70A	880	5-18NC /2-6Lipo	50	NONE	37*52*10	NO

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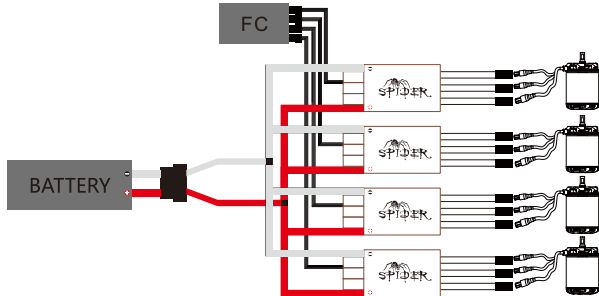
蜘蛛系列无刷电子调速器说明书



感谢购买中特威蜘蛛系列多轴电调。中特威蜘蛛多轴系列是为了迎合当前多轴市场的需求而专门设计的产品，此系列产品继承了中特威一贯的做工与工艺，拥有极佳的油门曲线，马达启动顺滑，最重要的是极好的稳定性保障了飞机在空中的安全。产品安装容易使用方便，是当前市场上多轴电调的不二选择。郑重声明此产品不是玩具，未成年人在成人的监督下使用。中特威对于在使用过程中造成的损失，伤害不负任何责任。

电调接线：

- 电调的马达线与马达连接。
- 电池上焊好与电调相对应的接头。
- 用热缩套管进行绝缘。
- 电调信号线插到接收机动力通道。
- 最后电池与电调连接（注意正负极，避免短路）。

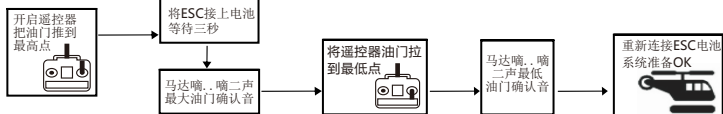


特性：

- 采用新一代MOS管，保证电调超低发热，超高的稳定性。
- 支持RPM马达，可兼容模型市场几乎所有的马达。
- 马达启动顺滑，油门曲线极佳。
- 支持高达600Hz的信号频率。
- 超低内阻。

编程菜单顺序、与说明

油门行程设定说明图(注意:当第一次使用或电调搭配其它遥控设备使用时,均应重新设定油门行程)



使用遥控器设置分为四个步骤

1. 进入遥控器编程模式

- ① 开启遥控器把油门推到最高点；
- ② ESC接上电池等待三秒；
- ③ 马达响，响二声表示进入编程模式。



2. 选择设定选项

进入编程设定后会听到2种不同鸣叫声,按如下顺序循环鸣叫.在鸣叫到某个提示音后,将油门拉到最低!听到一组特殊提示音后进入该设定项。

- ① “嘀” 模式 (1短音)
- ② “嘀嘀” 马达进角 (2短音)



3. 选择参数值:

马达会循环鸣叫,在鸣叫到某个提示音后将油门摇杆推到最高点,则选择该提示音所对应的参数值,接着听到特殊提示音,表示该参数已被保存.(此时如果不想再设定其它选项,则直接断电退出编程设定模式.如果还想设定其它选项,则继续等待,鸣叫声自动退回下一个步骤.请选择对应的设定选项设置)

提示音	“嘀”	“嘀、嘀”	“嘀、嘀、嘀”	“嘀、嘀、嘀、嘀”	“嘀—”	“嘀—嘀”
设定项	1短音	2短音	3短音	4短音	1长音	1长1短音
模式	模式1	模式2				
马达进角	自动	2°	8°	15°	22°	30°

注:灰颜色为出厂默认选项参数;模式1与模式2是针对不同KV马达设计,通常情况下模式1可兼容大多数马达,如果出现匹配问题可更改到模式2。

编程设置示例:(例如将模式改为模式2,即第1设定选项的第2个参数值)

- ① 进入编程设置:开启遥控器,将油门推到最高点,将电调接上电机/电池,等待连续四次“嘀嘀”音后电调进入编程模式；
- ② 进入设定选项:马达开始鸣叫,当听到发达发出“嘀”的一短音时,将油门拉到最低点,进入“模式”模式选项；
- ③ 选择参数值:马达开始鸣叫,在听到连续4次“嘀、嘀”2短音任一一次中把油门推到最高点,马达发出特殊鸣叫声,则已设置为模式2；
- ④ 退出设定:第三步完成后,直接断电退出。

4. 断电退出

产品规格表：

Type	PN#Model	Cont./Burst Current(A)	Max.Power W	Battery cell NiXX/Lipo	Weight (g)	BEC Output	Size(mm) W*L*H	User Program
Spider 20A OPTO	5020301	20A/30A	380	5-18NC/2-6Lipo	23	NONE	25*43*9	NO
Spider 30A OPTO	5030301	30A/40A	500	5-18NC/2-6Lipo	25	NONE	25*43*9	NO
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Spider 50A OPTO	5050301	50A/60A	750	5-18NC/2-6Lipo	48	NONE	37*52*10	NO
Spider 60A OPTO	5060301	60A/70A	880	5-18NC/2-6Lipo	50	NONE	37*52*10	NO

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