



Spider manual Instruction

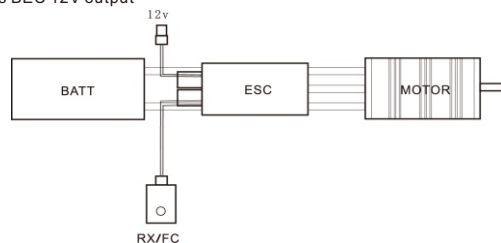
Thank you for purchasing ZTW Spider Series Brushless Electronic Speed Controller (ESC). Spider series ESCs are especially designed to meeting the demand of ever popular multi-rotors, and has been improved and bettered base on the various feedback from the market given the compatibility with some new design motor on the market. With better quality and competitive price, Spider will be your best choice for your multirotors.

Connecting your ESC:

- Connect your controller with motor wires.
- Solder appropriate connectors to the battery wires.
- Insulate all solder connectors with heat shrink tubes.
- Connect ESC signal cable according to your own flight control instruction.
- Red and Black wires from ESC should connect to battery pack Red and Black wires respectively.



Note: In order to provide better power supply to external equipment, we add extra 12v for new Spider 50A OPTO 12V and Spider 60A OPTO 12V. Longer one is signal cable to receiver or FC, and short one is BEC 12V output



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.
- Capable of using BLHEL1 and Simonk firmware.
- Capable of ONESHOT feature to work better with your flight controllers.
- Super smooth and accurate throttle linearity.
- Super fast Refresh Rate up to 600Hz.

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:



1. Power on your radio and push your throttle stick to 100%. (see fig 1)
2. Then connect battery to your ESC, you will hear "W V" from motor to confirm the end point after three seconds.
3. Pull throttle stick back to 0%, you will hear two " - - - " from motor confirm the lowest end point.
4. Throttle calibration is done. Please recycle your battery to use ESC.



fig 1



fig 2

Specifications:

Type	PN#Model	Cont./Burst	Battery cell	Weight	Size(mm)	User
		Current(A)	NXX\Lipo	(g)	W*L*H	Program
Spider 12A OPTO	5012301	12A\20A	5-12NC\2-4Lipo	8	15*26*6	NO
Spider Lite 18A OPTO	5018301	18A\30A	5-12NC\2-4Lipo	5.3	12*22*4.3	NO
Spider 20A OPTO	5020301	20A\30A	5-18NC\2-6Lipo	23	25*43*9	NO
Spider 30A OPTO	5030301	30A\40A	5-18NC\2-6Lipo	25	25*43*9	NO
Spider 40A OPTO	5040301	40A\50A	5-18NC\2-6Lipo	33	27*52*10	NO
Spider 20A OPTO Small	5020311	20A\30A	5-18NC\2-6Lipo	23	20*47*8	NO
Spider 30A OPTO Small	5030311	30A\40A	5-18NC\2-6Lipo	20	20*47*8	NO
Spider 40A OPTO Small	5040311	40A\50A	5-18NC\2-6Lipo	31	20*47*10	NO
Spider 50A OPTO 12V	5050311	50A\60A	5-18NC\2-6Lipo	48	30*55*13	NO
Spider 60A OPTO 12V	5060311	60A\70A	5-18NC\2-6Lipo	50	30*55*13	NO
Z-Link	201000010			2.1	30*12*6	NO
UBEC 3A	300100010	3A\5A	5-18NC\2-6Lipo	7	30*13*6	NO
UBEC 6A	300200010	6A\10A	5-18NC\2-6Lipo	18	45*23*10	NO
UBEC 12A	300300010	12A\18A	8-60NC\3-14Lipo	51	60*34*15	NO

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ZTW-Spider系列航调说明书



蜘蛛系列多轴专用无刷电子调速器说明书

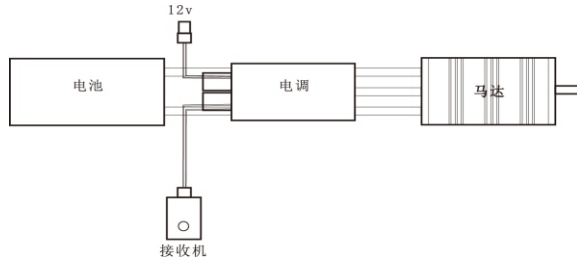
感谢购买中特威蜘蛛系列多轴电调。中特威蜘蛛多轴系列是为了迎合当前多轴市场的需求而专门设计的产品，此系列产品秉承了中特威一贯的做工与工艺，拥有极佳的油门曲线，马达启动顺滑，最重要的是极好的稳定性保障了飞机在空中的安全。产品安装容易使用方便，是当前市场上多轴电调的不二选择。郑重声明此产品不是玩具，未成年人必须在成人的监督下使用。中特威对于在使用过程中造成的损失，伤害不负任何责任。

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。
- 电调信号线连接到飞控输出端口，连接顺序请参考飞控说明书。
- 最后电池与电调连接。（注意正负极，避免短路）



新款SPIDER 50A OPTO 12V与SPIDER 60A OPTO 12V为了方便玩家安装外设特别增加了12V稳压输出解决外设的供电问题，较短信号线即为12V输出端口，具体接线如下：



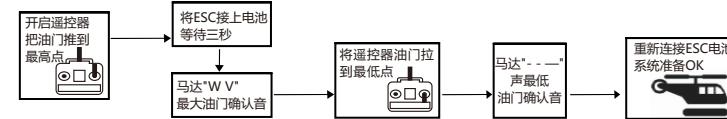
特性：

- 采用新一代MOS管，保证电调超低发热，超高的稳定性。
- 兼容性好，可兼容模型市场上所有主流马达。
- 可使用Simon或BLHELI软件。
- 支持ONESHOT功能。
- 马达启动顺滑，油门曲线极佳。
- 支持高达600Hz的信号频率 ONESHOT模式下可高达3K。



电调油门行程校准：

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)



产品规格表：

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V4.0

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品质确认：

日期：2016-05-23
版本：V4.0

研发确认：