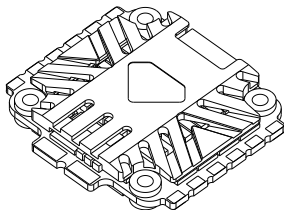


穿越机飞行器 无刷电子调速器说明书

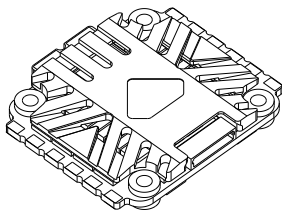
BL-32 4 in1 ESC



感谢您使用本产品！本产品功率强大，错误的使用可能导致人身伤害和设备损坏，强烈建议您在设备使用前仔细阅读本说明书并保存，严格遵守规定的操作程序。我们不承担因使用本产品或擅自对产品进行改造所引起的任何责任，包括但不限于对附带损失或间接损失的赔偿责任。我们有权在不经通知的情况下变更产品的设计、外观、性能及使用要求。

二.零件清单

- BL-32 4in1 ESC 1x
- 硅胶减震柱 4x
- XT60电源线 1x
- 10P&10P 硅胶线束 1x
- 电解电容 1x

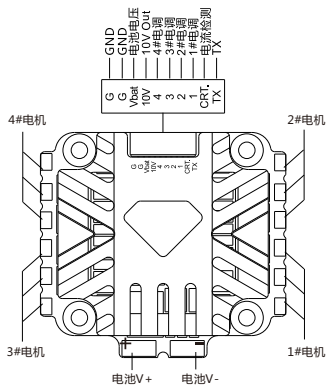


- 10P & 10P 硅胶线束，可适用 Tmotor F722 飞控。
- 为加强更好滤波效果，请将配件包中的电解电容，焊接在正负极两端。
- 对于快速安装线束，连接前务必确认线序与飞控接口的线序是对应关系。
- 如果不对应，请改装连接线以适用于您的飞控。

四.使用注意事项

- 每次上电后电调会自动检测输入的油门信号，并执行相应的油门模式；
- 首次使用电调或更换遥控设备后都必须进行油门行程校准（Dshot 协议无需校准）；
- 请勿刷写其他型号的固件程序，以免损坏电调；
- 请留意电缆的正负极性，错误的连线会损坏设备，通电前必须确认各接线顺序及正负极是否正确；
- 连接或断开设备时，请先关闭电源；
- 请勿连接使用超出电调最大工作电流的设备；
- 请使用足额功率的焊接设备并选择合适大小的烙铁头，焊接时避免虚焊、错焊、连焊等情况，否则设备将不工作或短路导致损坏损毁；
- Vbat接口输出的电压为电池电压，若连接其他设备，请务必先确认设备的输入电压是否在允许范围内；
- Crt.(Current)为电流值检测输出接口，可连接至T-MOTOR F4、F7或其他支持电流检测的飞控；
- 如有其他问题可联系T-MOTOR售后技术支持。

一.连线图



三.规格参数

● 型号:	V45A	P50A	P60A
● 持续电流	45A	50A	60A
● 瞬时电流	55A (10s)	60A (10s)	70A (10s)
● BEC	10V/2A		
● 锂电池节数	3-6S		
● 重量	20g		
● 尺寸(供参考)	44.6x41x7mm		
● 安装孔	30.5x30.5mm, M3		
● 调参软件	BLHeliSuite32		
● 电调固件	Tmotor_32Bit		
● 典型应用	170-450 多旋翼		

- 附件内提供的10Pin-10Pin硅胶连接线可直接与T-MOTOR F4或F7飞控连接使用；
- 请将电容与电源线正负极并联焊接（电容侧面有白色标记的为负极）；
- 若电调与其他品牌飞控搭配使用，请确认各自的接口定义是否对应正确，若不对应请先调整线序，错误的线序会损坏飞控或电调

焊接小技巧：

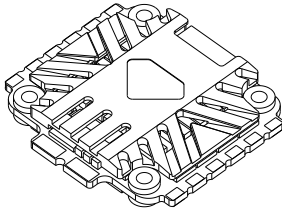
- 焊接时焊锡丝不要添加得太快太多，可避免锡球飞溅
- 焊接前可在焊点周围的散热片上贴一层电工胶布，避免锡及其他污染物沾染
- 通电前请检查焊点和触点之间是否有多余锡球或粘连的焊点，避免短路损毁设备
- 清理PCB板时可使用95%以上的酒精或洗板水，避免用力挤压板上的元件和线材

浸水后的应急处理：

- 电调或飞控或其他电子设备若遭受进水情况，第一时间切断供电，且不要再次上电
- 清理干净污物并擦干表面残水后，可用吹风机吹干或晾干
- 不确定内部是否进水的情况下，请勿再次通电，尽快联系商家售后检查处理
- 如发现焊点或者元器件有焦黑痕迹表明此处可能有烧毁情况，请勿再次通电造成更大损害

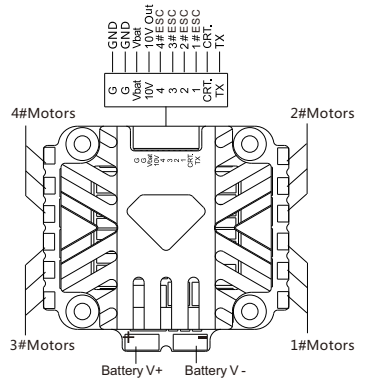
FPV aircraft brushless electronics speed controller instruction manual

BL-32 4in1 ESC



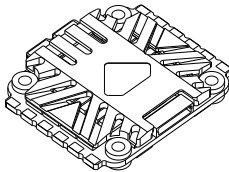
Thanks for purchasing our Electronics Speed Controller(ESC). High power system for RC model can be very dangerous. Any improper use may result in injury and damage to human and abide by its rules. We assume no responsibility for personal injury property damage or consequential losses resulting from the product. We have a right to modify the design, appearance, performance and operating requirements of products without notice.

1.Connection diagram



2.Parts list

- BL-32 4in1 ESC 1x
- Silicone shock absorber strut 4x
- Xt60 power line 1x
- 10P & 10P silicone harness 1x
- electrolytic capacitor 1x



- 10P & 10P silicone harness, apply to Tmotor F722 Flight Controller.
- Please weld the electrolytic on the anode and cathode to get better filtering effect.
- For express setup, please confirm if the line order of harness and flight controller port is corresponding. If not, please modify the wire to apply to your flight controller.

4. Notice

- Each time ESCs are connected to the system, input throttle signal will be detected automatically when powered on and execute corresponding throttle mode.
- When BLDC motor is connected to the system for the first time, or RC equipment is changed, throttle calibration is required. Please skip throttle range calibration when input signal is Dshot mode.
- Don't flash any other firmwares to avoid esc damage.
- Please repeatedly check the polarity before power up.
- Please repeatedly check if the polarity and connection sequence are correct before power up. Wrong connection would damage the equipments.
- Please power off first when plugging or making any connections.
- Please using within the range of ESC working current.
- Please use welding equipment with full power and choose right-size welding head. Try to avoid any equipments out of operation or short-circuits damage caused by wrong welding.
- VBAT is battery voltage, if connecting to other equipment, please make sure if the input voltage is within the range.
- CRT.(Current) is current detection output interface, which can be connected to the flight controllers that support current detection like F4 and F7.
- For more information, please feel free to contact T-MOTOR after-sale service center.

3.Spec

● Model	V45A	P50A	P60A
● Current	45A	50A	60A
● Peak current	55A (10s)	60A (10s)	70A (10s)
● BEC	10V/2A		
● Lipo	3-6S		
● Weight	20g		
● Size	44.6x41x7mm		
● Mounting hole	30.5x30.5mm, M3		
● Parameter tuning software	BLHeliSuite32		
● ESC Firmware	Tmotor_32Bit		
● Typical application	170-450 multi-rotor		

- 10Pin-10Pin silicone wires in accessories can be connected to T-MOTOR F4 or F7 Flight controller directly
- Please make parallel welding for capacitor and power cord positive and negative (The negative is marked in white on the side of capacitor)
- If ESC is matched used with other brands flight controller, please confirm if each interface definition is correct accordingly. If not, please adjust line sequence at first, wrong sequence would damage flight controller or ESC.

Welding Tips:

- Don't add tin wire too much and too fast in welding process in case solder ball spilling out.
- Stick a layer of electrical tape above cooling fin before welding in case tin or other pollutants spotting on fin.
- Please carefully check if there are any tin ball or bonded soldering joint before power up in case equipment damage caused by short-circuit.
- Please use 95% or higher purity alcohol or water when cleaning PCB and dont squeeze components and wires much.

Remedies after water:

- Please power off at first once ESC, FC or other PCBs(including motors) meet water damage, and dont power on again.
- Clean all clutter and dry with hairdryer.
- Please dont power on again before making sure there is no water inside any more Please contact our after-sale service center ASAP.
- If you can see solder joints or burnt traces on components, which means this power section has burned out. Please dont power on again then lead to further damage.