



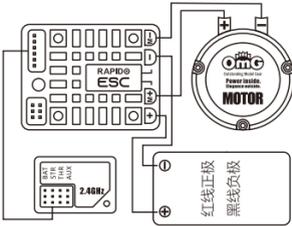
使用前必读

感谢您购买 RCOMG 品牌RAPIDO系列有刷车用电子调速器! 错误的使用可能造成人身伤害和设备损坏。我们建议您在设备前仔细阅读本说明书, 并严格遵守规定的操作程序。我们不承担因使用本产品而引起的任何责任, 包括但不限于对附带损失或间接损失的赔偿责任; 同时, 我们不承担因擅自对产品进行修改所引起的任何责任。我们有权在不经通知的情况下变更产品设计、外观、性能及使用要求。

产品特点

- ◇ 防水防尘, 适应各种气候环境;
- ◇ 三种运行模式(单向/双向/攀爬)适用各种车型;
- ◇ BEC输出能力为5V/3A;
- ◇ 自动油门行程校调, 简便易用, 尤其适合新手;
- ◇ 独特的导风散热槽设计, 散热性能更优, 耐流更强。
- ◇ 电调参数采用跳线设置
- ◇ 多重保护功能(电压过低保护、电机及电调过热保护、油门失控保护)。

连接电子调速器



警告

1. 此电调不具备电源反接保护功能。如果电源反接, 瞬间将可能对电调及电池造成不可恢复的损坏, 请使用时特别注意电池极性。建议使用具有防反插功能的电池插头。
2. 若电机转向不对, 请将电机两条线互换。

型号 RAPIDO-DR-60A/80A
 正向: 持续电流/峰值电流 60A/360A
 反向: 持续电流/峰值电流 30A/180A
 电压范围: 2-3节锂电(Lipo)
 适用车型: 1/10 电房、电越、短卡、大脚车、卡车、攀爬车
 BEC 输出: 3A / 6V (开关稳压模式)
 风扇工作电压: 无风扇

设定油门行程

打开遥控器, 将油门通道的“D/R”、“EPA”、“ATL”等参数调到100%(如遥控器无显示屏, 则将对应旋钮调到最大位置), 油门通道的中点微调“TRIM”调为0(如遥控器无显示屏, 则将对应旋钮调到中间位置)。

FUTABA 及类似的遥控器需要将油门通道方向设为“REV”, 其它品牌遥控器的油门通道方向应设为“NOR”。

我们强烈建议开启遥控器的失控保护功能, 将遥控器油门通道的无信号保护(“F/S”)功能设置为关闭输出方式或将保护值设置为中点位置, 使得当接收机无法收到遥控器信号后, 电机能够停止运转。

内阻(单桥臂): 正转: 0.001Ω, 反转: 0.002Ω
Size:36.5x32x18mm Weight:39g

具有2对电机输出线, 可驱动2个电机。当同时驱动两个电机时, 所支持的电机T数需要增加。这种情况常见于低速双电机攀爬车。

故障检查处理

故障现象	解决方法	可能原因
通电后指示灯不亮, 不自检, 无鸣音。	电调无工作电源; 电调开关损坏。	检查电池到电调的电源输入通路是否有焊接不良情况, 并重新焊好; 更换电调开关。
通电后红灯闪烁, 电机无启动。	电调油门线插反或通道插错; 电调无法成功完成油门自检校调过程。	将电调油门排线按正确方向插到接收机油门通道(Throttle, 第二通道) 将遥控器油门通道的中点微调“TRIM”调为0或将相应旋钮调到中点位置。
遥控前进操作, 车子反而倒退。	遥控器油门通道方向设置错误或电机接线错误。	将电机的两条线互换; 将遥控器油门通道反向, 从原“NOR”换为“REV”或从原“REV”换为“NOR”。
车无法达到全速, 油门摇杆到最大位置, 红灯不恒亮。	遥控器设置错误。	将遥控器油门通道的“D/R”、“EPA”、“ATL”等参数调到100%或相应旋钮调到最大位置, 油门通道的中点微调“TRIM”调为0或相应旋钮调到中点位置。



遥控器油门摇杆位置状态图示说明



参数设定方式

ESC 采用跳线帽设定方式, 可以设置运行模式及电池类型

设置方法: 建议使用镊子并参考下图标示, 拔插跳线帽未设置参数; 如您想把电池类型设为“锂电”模式时, 只需把跳线帽插入电池排针的左侧两PIN即可。

编程项目说明

1. 运行模式: 双向(F/B/R)/单向(F/B)/攀爬(F/R), 出厂默认值为“双向”。
“双向”模式, 即正反转带刹车模式, 提供了倒车功能, 该模式通常用于日常训练。
此模式采用双击式倒车方式, 即油门摇杆在第一次从中点区域推至反向区域时, 电机只是刹车, 不会产生倒车动作; 当油门摇杆快速回到中

立点区域并第二次推至反向区域时(即所谓的“双击”), 如果此时电机已停止, 则产生倒车动作, 如果电机未停止, 则不会倒车, 仍是刹车, 需要再次将油门回到中点并推向反向区才会倒车, 这样做的目的是防止车辆在行驶过程中因多次点刹而造成误倒车。

“单向”模式, 即正转带刹车模式, 车辆仅能前进和刹车, 但不能倒车, 该模式通常用于竞赛。
“攀爬”模式, 即直接正反转模式, 采用单击式倒车方式, 即油门摇杆从中点区域推至反向区域时, 电机立即产生倒车动作, 该模式一般用于攀岩车等特种车辆。
“船用”模式, 此模式采用完全针对船模而设计的全新程序算法

2. 电池类型: 锂电(Lipo) / 镍氢(NiMH), 默认值为“锂电”。

保护功能说明

1. 电压保护: 当电调连续2秒检测到电池电压低于保护阈值后, 将进入低压保护状态(通常情况下, 电调有两级低压保护, 第一级是降低输出功率, 第二级则彻底关闭输出, 且电调上的红灯会持续闪烁。
备注: 设为船用模式时, 进入低压保护后电机停转。此时需先将油门摇杆回到零速位置, 然后再次加大油门可让电机继续运行, 但只有正常情况时一半的动力输出, 请立即靠岸停船。
2. 过温保护: 当电调内部温度高于100°C时将会降低输出功率直至切断输出(发生过温保护时, 电调不会突然切断输出, 以免突然停车造成意外)。停止后红灯将闪烁, 待温度低于80°C时则恢复正常输出功率。

2节锂电	3节锂电
电压降至6.5V, 输出功率减半; 电压降至6.0V, 关闭输出, 不再恢复。	电压降至9.75V, 输出功率减半; 电压降至9.0V, 关闭输出, 且不再恢复。
4节锂电	5-9节NiMH
电压降至13V, 输出功率减半; 电压降至12V, 关闭输出, 且不再恢复。	电压降至4.5V, 输出功率减半; 电压降至4.0V, 关闭输出, 且不再恢复。

3. 油门信号丢失保护: 当电调连续0.1秒没有检测到油门信号将会关闭输出, 信号恢复后立即恢复正常运行。强烈建议开启遥控器的失控保护功能, 将遥控器油门通道的无信号保护“F/S”设置为关闭输出方式或将保护值设置为中点位置。(备注: F/S 关闭输出方式是指: 当接收机无法接收到发射机信号时, 接收机就不输出任何控制信号到电调。



DECLARATION

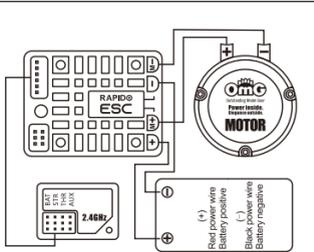
Thank you for purchasing the RCOMG brand RAPIDO series brushed electronic Speed Controller (ESC) for RC Models! Incorrect use may cause personal injury and equipment damage, so please read this manual carefully before using and operate as per the manual guide strictly. We do not assume any liability arising from the use of this product, including but not limited to liability for incidental or consequential damages; at the same time, we do not assume any liability arising from unauthorized modifications to the product. We reserve the right to change product design, appearance, performance and usage requirements without notice.

FEATURES

- ◆ Waterproof and dust proof, suitable for various climatic environments;
- ◆ Three running modes (F/B mode, F/B/R mode, and F/R crawler mode), suitable for various RC cars;
- ◆ 5V/3A BEC output capability;
- ◆ Automatic throttle stroke tuning, easy in operation, friendly for beginners;
- ◆ Unique design for air guide and cooling, better heat dissipation and stronger current resistance;
- ◆ Jumper setting for ESC parameter;
- ◆ Multi Protection Functions, including
- ◆ Motor overheat protection , low voltage cutoff and throttle signal loss protection.

ESC CONNECTED

- 1 This ESC does not have reverse power supply protection. If the power supply is reversed, an



instant irreversible damage to the ESC and the battery may happen. So Please pay more attention to the polarity of the battery when using it. It is highly recommended to use the battery with antireverse function plug.

- 2 If the rotation direction of the motor is wrong, please exchange the two wires of the motor.

RAPIDO-DR-60A

Forward: continuous current/peak current 60A/360A
 Reverse: continuous current/peak current 30A/180A
 Voltage range: 2-3S Lipo
 Applicable models: 1/10 electric TC, electric buggy, short-course truck, monster, Truck, crawlers
 BEC output: 3A / 6V (switch regulator mode)
 Fan operating voltage: no fan

Brushed Motor Limit	2S	540 motor	≥12T or RPM<30000@7.2V
	3S	550 motor	≥18T or RPM<20000@7.2V

内阻(单桥臂): 正转: 0.001Ω, 反转: 0.002Ω
Size:36.5x32x18mm Weight:39g

具有2对电机输出线, 可驱动2个电机。当同时驱动两个电机时, 所支持的电机T数需要增加。这种情况常见于低速双电机攀爬车。

THROTTLE RANGE SETTING

Turn on the transmitter, set the “D/R”, “EPA”, “ATL” value of the throttle channel to 100% (if the transmitter has no display, turn the corresponding knob to the max), and set the throttle trim to “0” (if the transmitter has no display, turn the corresponding knob to the neutral point).

Please set the throttle channel direction to “REV” for FUTABA and similar transmitters, and set “NOR” for other branded transmitters.

We strongly recommend to turn on the fail-safe protection function of the transmitter, setting the no-signal protection (“F/S”) function of the throttle channel to the output turn-off mode or turning the protection value to the neutral point, so that the motor can stop running when the receiver cannot receive signal from transmitter.

Fault phenomenon Possible reasons

- 1 Powered on, no flash, no self-test, and no beep sound.
ESC has no working power supply; the ESC switch is damaged.
Check whether the power input path from the battery to the ESC has bad welding, and re-weld it; replace the ESC switch.
- 2 Powered on, LED red flash, and the motor does not run.
The ESC throttle wire is inserted backwards or the channel is incorrect; the ESC cannot successfully complete the throttle self-checking and tuning process.
Insert the ESC throttle wire into the receiver throttle channel (Throttle, channel 2) in the correct direction; set the throttle trim to “0” or turn the corresponding knob to the neutral point
- 3 Throttle engage Forward, but the car reverses.
The direction of the throttle channel of the transmitter is incorrectly set or the wiring of the motor is incorrect.
Swap the two wires of the motor; reverse the throttle channel of the transmitter, Changing from the original “NOR” to “REV” or from the original “REV” to “NOR”.
- 4 Throttle cannot reach to full speed, the Throttle stick is at the Max, and the LED not solid red
The transmitter settings are wrong.
Set the “D/R”, “EPA”, “ATL” value of the throttle channel to 100% or turn the corresponding knob to the max), and set the throttle trim to “0” or turn the corresponding knob to the neutral point.

Switch on the ESC, with the transmitter stick at neutral point, and wait until the ESC self-check and auto-throttle calibration process finished (within 3 seconds). It will be in normal running after hearing the self-check success beep.

Number of battery cells and self-test beep sound indication

1 short beep sound	NiMH NiCd battery
2 short beep sound	2S lipo
3 short beep sound	3S lipo
4 short beep sound	4S lipo
1 long beep sound	Success of throttle self-checking and tuning

LED Status In Normal Running

LED red no flash	the throttle stick is in the neutral range
LED red flash	forward, brake, reverse under non-full throttle
LED red solid bright	forward, brake, reverse under full throttle

Fault phenomenon Possible reasons

- 5 Can not reverse.
“Running Mode” jumper cap is in the wrong position; the neutral point of throttle is offset.
Insert the “Running Mode” jumper cap into the correct position; set the throttle trim to “0” or turn the corresponding knob to the middle position.
- 6 During the running of the motor, it suddenly stops.
throttle signal is lost; the ESC enters the battery low voltage protection or overheat protection state.
Check whether the battery voltage of the transmitter is too low, and whether the receiver works normally; ESC LED red flashes indicates low voltage or overheat protection, please replace the battery pack or check the temperature of the ESC.

Direction of the position status of the transmitter throttle stick



PARAMETER SETTING METHOD

ESC adopts jumper cap setting method, which can be set to running mode and battery type Setting method: It is recommended to use tweezers and refer to the diagram below, unplugging the jumper cap to set the parameter; if you want to set the battery type to “Lipo” mode, just insert the jumper cap into the two PINs on the left side of the battery.

action from high speed), the ESC will not go into reverse. The motor must be at 0 rpm to engage reverse. This is a protection function for a reversing by mistake.

The F/B mode, that is forward with brake mode, which only go forward and have brakes, but reverse is disabled. This mode is suitable for competition purposes.

The F/R crawler mode, that is Forward / Reverse mode which provide the single-click reversing function. When moving from the neutral point to the backward zone, the ESC will engage reverse immediately. This mode is intended for rock crawling applications.

“Boat” mode, which uses a new procedural algorithm designed entirely for RC boat models.

2. Battery Type: Lithium Battery (Lipo) / NiMH battery, the default is Lipo

Description of protection function

1. Voltage cutoff: When the ESC detects that the battery voltage is lower than the protection threshold for 2 seconds, it will enter the low-voltage protection state and the red LED flashes (usually, the ESC has two levels of low-voltage protection, the first level is to reduce the output power, and the second level is to shut off the output power completely),

Note: When setting to boat mode, the motor will stop running after entering the low voltage protection. At this time, please return the throttle stick to the zero-speed position, and then increase the throttle again to make the motor continue to run, but only half of the power output power available against normal conditions, docking and stopping the boat immediately.

2. Over-heat protection: When the internal temperature of the ESC is higher than 100°C, the output power will be reduced until the output power is cut off (when over-heat protection applied, the ESC will not cut off

the output power suddenly, so as to avoid accidents caused by sudden shutdown). After stopping running, the red light will flash, and when the temperature is lower than 80°C, the normal output power will be restored.

4. Throttle signal loss protection: When the ESC does not detect the throttle signal for 0.1 seconds, the output power will be shut off, and it will resume normal sunning immediately after the signal is restored. It is strongly recommended to turn on the fail-safe protection function of the transmitter, setting the no-signal protection(“F/S”) function of the throttle channel to the output turn-off mode or turning the protection value to the neutral point, so that the motor can stop running when the receiver cannot receive signal from transmitter. (Note: the output turn-off mode means that when the receiver cannot receive the signal from the transmitter, the receiver will not output any control signal to the ESC.