

SPORT 10A Brushless ESC

Distributed By Stevens AeroModel - www.stevensaero.com
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This 10A SPORT ESC can be used with 2-3 cell LiPo batteries and will automatically detect the number of cells of your battery pack. The BEC is functional with up to 3 LiPo cells (no more than two micro servos are to be used when operating under the power of a 3S 11.1V LiPo battery). Prior to installation within your model, you should check your equipment for proper operation/rotation, and program the brake setting.

Specifications:

Max Continuous Current:	10A on 3 Cells (15A / 10 Sec. Burst)
BEC:	1A (3 Servos at 7.4V / 2 Servos at 11.1V)
Input Voltage:	2-3S Lithium Polymer
Lithium Cut-Off Voltage:	Slow Down at 3.0V / Cell - Cut Off at 2.9V / Cell
Timing and PWM:	Auto
Country of Origin	China

Warranty: This product is guaranteed to arrive to you operational, beyond that no additional warranty, guarantee of suitability, offer of service, or replacement is offered. We allow 30 days from the date of purchase for the end user to verify the function of this product and make a warranty claim.

This product, while manufactured to a high standard of quality, is suitable for sport applications and value priced to reflect the lack of extended warranty or after sales repair service. If this product breaks, or you break it, then throw it away there is no, extended warranty, repair service, or serviceable parts. If you require a product with a higher level of performance, efficiency, and after sales service; then we highly recommend you consider our premium line of USA manufactured Castle Creations speed controls.

Caution! Accidental startup of an electric motor can cause serious bodily harm and injury or death to you or others. Use of this product is at your own risk.

When testing this product, always secure the motor to a suitable work table, test stand, or sturdy mount within model. Never perform work on your model with the propeller installed on the motor. Always stay clear of the propeller on your model regardless of whether you believe the model to be active or not.

Absolutely do not run this setup on the bench except for short tests no longer than 30 seconds as, in the absence of suitable cooling airflow, damage will occur to the motor and speed control.

Installation:

1. This brushless ESC does not ship with a battery connector. It is up to the end user to select and solder an appropriate connector on the battery “+” (red) and battery “-” (black) leads. We recommend the Deans Ultra-Plug connectors or other suitable connector capable of handling 30A of current.
2. Connect the three motor wires (pre soldered with 1.5mm bullets) to your brushless motor (it's ok to ignore the wire colors for the 3-phase leads that connect to your brushless motor).
3. Plug the servo connector into the appropriate channel on your receiver. Consult the manual for your receiver for details on which port controls throttle. The red wire on the servo connector is positive (+), the brown or black wire is negative (-), and the orange or white wire is the signal.
4. Test your system outside of the model with the propeller removed and the motor secured to your work table! Make sure your transmitter throttle channel is not reversed as many Futaba transmitters have the throttle channel reversed by default. With the throttle stick in the closed (off) position on your transmitter, apply power to the speed control by connecting your flight pack battery to the ESC. Advance the throttle on your transmitter and if the motor spins in the wrong direction, swap any two of the three motor wires to reverse the direction of the motor.
5. Before installation in your model you should program the battery type, number of cells, and cut-off voltage. Make certain that when installing your ESC within the model that it receives good cooling airflow and route the motor and battery wires away from your receiver antenna.

Programming:

1. Perform installation as given above.
2. With flight pack battery DISCONNECTED and propeller REMOVED, turn on your transmitter and move the throttle stick to the full throttle position.
3. Connect the flight pack battery to power up the ESC (you'll hear a musical tone).
4. The ESC will issue a series of beeps representing functions available for programming. Each function is repeated twice. Each function is a simple on/off value. When you hear the function you'd like to set (see table below), move the throttle stick to the closed (full down) position. Note: when modifying the battery type / cut off value choose either LiPo or NiMH/NiCd, not both.

-	1 Beep	LiPo Battery Cut (Select Only)*
--	2 Beeps	Set NiMH/NiCd Battery Cut (Select Only)*
---	3 Beeps	Toggle Brake Mode (on/off)

*Applies to 30A controller

5. Your choice will be confirmed with a sharp tone issued by the ESC indicating your selection has been stored. To program another function it will be necessary to disconnect power from the ESC then repeat steps 1-4 as above.

CAUTION! After programming a function, the ESC will arm the throttle. Thus, advancing the throttle stick on your transmitter will spin the motor. Therefore, stay clear of the rotating motor and propeller (if attached). Disconnect the battery to disarm the unit.