SUPERIOR MATCHING CONCEPTS

170A ESC Wiring and Setup Instructions

ESC Specifications

	2S	*1S*
Amps	170A	170A
Resistance	0.00027 Ohm	0.00021 Ohm
Size	Footprint W30.5mm x L37.2mm x H19.5mm. Width including solder tabs is 36.8mm	Footprint: W30.5mm x L36.8mm x H16mm. Width including solder tabs is 36.8mm
Weight	59g with cap, no wires	42g with cap, no wires
Case	Aluminum case for maximum cooling	
BEC	Adjustable: 6V and 7.4V	6V
Battery	2S LiPo/LiFe or 4-8 cell NiMh/NiCd	1S LiPo/LiFe or 3-4 cell NiMh/NiCd
Motor Type	Sensored 540 2-pole	
Switch	Integrated on/off switch	

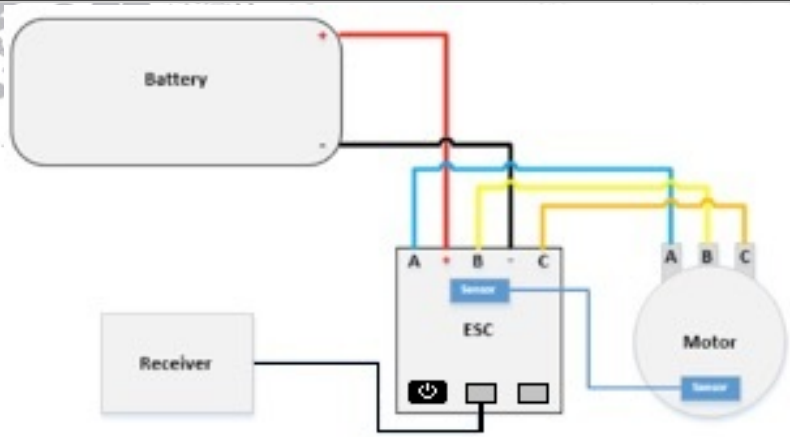
ESC Features

- Compatible with sensored 540 2-pole brushless motors.
- Data analysis.
- PC interface for advanced programming and updating.
- Easy programming through the program box.
- Built-in one touch On/Off switch with LED.
- Built-in low voltage cut-off, overheat protection and signal loss protection.

Setting Neutral, Forward and Brake Endpoints of the ESC

1. Ensure ESC is wired properly using the diagram and steps above.
2. Turn on transmitter and leave throttle stick/trigger at neutral position.
3. Set transmitter throttle and brake EPA to 100%.
4. Connect battery to ESC.
5. Press and hold the on/off button to turn esc on ***until*** a GREEN LED is lit up SOLID and the ESC will BEEP repeatedly.
6. With throttle stick/trigger at neutral position, press the on/off button once. The GREEN LED will BLINK to indicate throttle neutral position is being set. ***Wait*** until the RED LED lights SOLID and the ESC BEEPs once.
7. With throttle stick/trigger at full throttle, press the on/off button once. The RED LED will BLINK to indicate full throttle position is being set. ***Wait*** until the RED and GREEN LEDs light SOLID and the ESC BEEPs twice.
8. With throttle stick/trigger at full brake, press the on/off button once. The GREEN/RED LED will BLINK to indicate full brake position is being set. ***Wait*** until the LEDs are off and the ESC BEEPs thee times.
9. Move the throttle stick/trigger to the neutral position, the GREEN LED will light up to indicate that the throttle endpoints have been set. The GREEN LED will flash if no timing or turbo are set and will be solid green if they are set.

Connection Diagram & Installation



1. Connect the middle port of the speed control to the receiver Channel 2 (the white shrink wire is Signal) using one of the two supplied wires.
2. Connect power wire “A” to the motor “A” solder-tabs.
3. Connect power wire “B” to the motor “B” solder-tabs.
4. Connect power wire “C” to motor “C” solder-tabs.
5. Connect a sensor cable to the speed control (underneath the solder tabs) and motor.
6. Connect power wire ”+” to battery “+” sign.
7. Connect power wire “-“ to battery “-” sign.
8. A fan may be connected to the right port of the ESC. The right port is also for connecting to the optional program box.

Using the Program Box

1. Ensure the ESC is connected to the battery.
2. Plug the one of the supplied wires into the Program Box in the blue slot. Make sure to respect the correct polarity.
3. Plug the other end of the wire into the right port on the ESC. The fan may need to be disconnected to gain access to the right port.
4. Turn on the ESC and the Program Box will turn on.
5. Scroll through the functions using the UP and DOWN arrow keys.
6. Use the LEFT and RIGHT arrow keys to scroll through the available settings. The setting is automatically saved after a short delay. The motor will “beep” to indicate the setting is saved.
7. When all setting changes are complete, turn off the ESC, disconnect the programming wire and re-connect the fan if used.