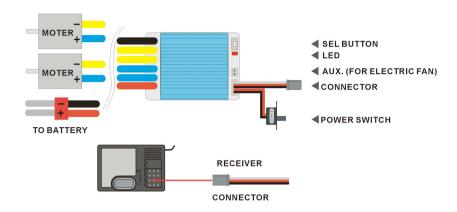
# The Splash Water Resistant Brushed Speed Controller (ESC)

(Item No.: E410)

The Splash Water Resistant Brushed ESC (Item No.E410) is only used for rock crawlers.



Output: 6V(Min.), 7.2V(Normal), 8.4V(Max.)

• Current: 60A (Normal), 80A (Max.)

• +5V Current: 1A (Normal), 2A/10S (Peak)

Resistance: 0.003 ohmMotor Type: RC 540 /14T

SIZE/WEIGHT: 42\*32\*22mm, 51q

Battery Type: Ni-CD/Ni-MH/Li-Po

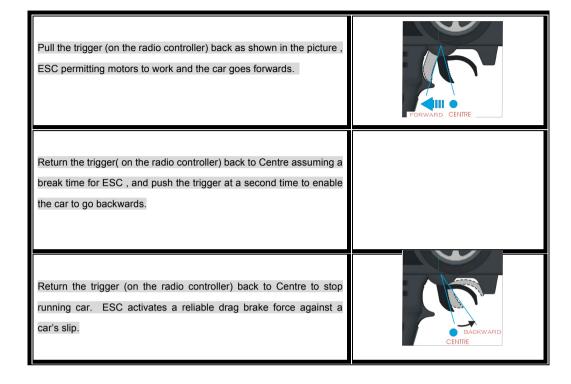
## INSTALLATION:

- Attach the speed controller (ESC) to the vehicle, e.g. with a piece of hook-and-loop tape or double-faced adhesive tape. The speed controller (ESC) should be installed in the car as far as possible away from the receiver.
- The power switch of the speed controller (ESC) should be attached with no breakage and locked with the screws onto the car.

## **OPERATION:**

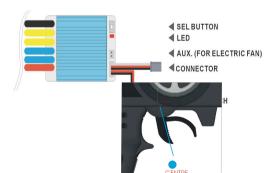
Note: When switching the speed controller on, for safety reasons please ensure the vehicle is off the ground.

- 1) Make sure the speed controller is switched off and then connect a charged battery to the speed controller
- 2) Switch on the radio controller.



## SET-UP:

- 1) Make sure the speed controller is OFF.
- Press and hold SEL button, and not to release it until the speed controller is switched on.
- The red LED becoming flashing regularly , the speed controller enters SET-UP menu.



The items, listed as follows, can be calibrated in sequence.



#### Throttle Calibration (Centre Point)

Returning the TH.TRIM (on the radio controller) to Zero point, the trigger reverts to Centre automatically.

Press and hold SEL button, and the red LED alternates with two flashes every two seconds, which means Centre Point Calibration is completed.



#### Throttle Calibration (Max. Forward )

Pull the trigger back to the end, press and hold SEL button, and LED alternates with two flashes every three seconds, which implies Max. Forward Throttle Calibration is completed.



#### Throttle Calibration (Max. Backward)

Push the trigger to the end, press and hold SEL button, and LED goes three flashes every two seconds, which denotes Max.

Backward Throttle Calibration is completed.



Note: Incorrect operation comes when LED goes swiftly five flashes. If it is the case, the speed controller automatically reverts to Throttle Calibration (Centre Point) again.

## PROTECTION PROGRAMMING:

The items, listed as follows, can be enabled (or disabled) in sequence.



- 1) Make sure the speed controller is OFF.
- 2) Press and hold SEL button, switching on the speed controller.
- 3) Keep holding SEL button for around 5-6 seconds even after the speed controller is switched on.
- 4) LED becoming flashing regularly, the speed controller enters protection programming automatically.
  On entering protection programming:
- Shortly press SEL button once to enable OVERHEATING PROTECTION
- Shortly press SEL button at a second time to disable OVERHEATING PROTECTION.

While it is being either enabled or disabled, there comes at first one flash to LED, secondly LED lights for one second, and finally LED is immediately off.

With OVERHEATING PROTECTION being enabled, the speed controller disconnects connection with motor on the condition that it heats 100 centigrade degrees. It renews working once it drops less than 80 centigrade degrees

Press and hold SEL button (for over 2-3 seconds) to go on to LOWER VOLTAGE PROTECTION (LI-PO)

- Shortly press SEL button once to enable LOWER VOLTAGE PROTECTION
- Shortly press SEL button at a second time to disable LOWER VOLTAGE PROTECTION

While it is being either enabled or disabled, there comes shortly two flashes to LED, secondly LED lights for one second, and finally LED is immediately off.

With LOW VOLTAGE PROTECTION being enabled, the speed controller works intermittently on the condition that battery voltage drops under 5.8V. If it is the case, please switch off the speed controller and charge your li-po battery.

Press and hold SEL button (for over 2-3 seconds) to go on to OVERLOADED VOLTAGE PROTECTION

- Shortly press SEL button once to enable OVERLOADED VOLTAGE PROTECTION
- Shortly press SEL button at a second time to disable OVERLOADED VOLTAGE PROTECTION

While it is being either enabled or disabled, there comes shortly three flashes to LED, secondly LED lights for one second, and finally LED is immediately off.

With OVERLOADED VOLTAGE PROTECTION being enabled, LED becomes flashing for three times and the speed controller shuts itself off immediately it detects that the battery voltage is over 9.5V.

Note: With no operation in 10 seconds, the speed control exits programming and starts working.