

EG TROOPER II & EG III ESC Manual

USER MANUAL OF WP-SC10-RTR, WP-SC8-RTR, WP-SC8-ADV-RTR, WP-S8A-RTR, WP-S8B-RTR ESC

1.1. **Running Mode:** In "Forward with Brake" mode, the car can go forward and brake, but cannot go backward, this mode is suitable for competition; "Forward/Reverse with Brake" mode provides backward function, which is suitable for daily training.

Note: "Forward/Reverse with Brake" mode uses "Double-click" method to make the car go backward. When you move the throttle stick from forward zone to backward zone for the first time (The 1st "click"), the ESC begins to brake the motor, the motor speeds down but it is still running, not completely stopped, so the backward action is NOT happened immediately. When the throttle stick is moved to the backward zone again (The 2nd "click"), if the motor speed is slowed down to zero (i.e. stopped), the backward action will happen. The "Double-Click" method can prevent mistakenly reversing action when the brake function is frequently used in steering.

By the way, in the process of braking or reversing, if the throttle stick is moved to forward zone, the motor will run forward at once.

"Forward/Reverse" mode uses "Single-click" to make the car go backward. When you move the throttle stick from forward zone to backward zone, the car will go backward immediately. This mode is usually used for the Rock Crawler.

1.2. **Drag Brake Force:** Set the amount of drag brake applied at neutral throttle to simulate the slight braking effect of a neutral brushed motor while coasting.

1.3. **Low Voltage Cut-Off:** The function prevents the lithium battery pack from over discharging. The ESC detects the battery's voltage at any time, if the voltage is lower than the threshold for 2 seconds, the output power will be cut off, and the red LED flashes in such a way: "☆-☆-, ☆-☆-, ☆-☆-".

1.4. **Start Mode (Also called "Punch"):** Select from "Level1" to "Level9" as you like. Level1 has a very soft start effect, while level9 has a very aggressive start effect. From Level1 to Level9, the start force is increasing. Please note that if you choose "Level7" to "Level9" mode, you must use good quality battery with powerful discharge ability, otherwise these modes cannot get the burst start effect as you want. If the motor cannot run smoothly (that means the motor is trembling), it may be caused by the weak discharge ability of the battery, please choose a better one or a softer gear ratio.

1.5. **Maximum Brake Force:** The ESC provides proportional brake function. The brake force is related to the position of the throttle stick. Maximum brake force refers to the force when the throttle stick is located at the end point of the backward zone. A very large brake force can shorten the brake time, but it may damage the gears. The "Disable" option inhibits the inherent brake function of the speed controller. When this option is selected, the brake function is realized by a traditional mechanical disc-brake system driven by a servo.

2. Reset All Items To Default Values

At any time when the throttle is located in neutral zone (except in the throttle calibration or parameters program process),

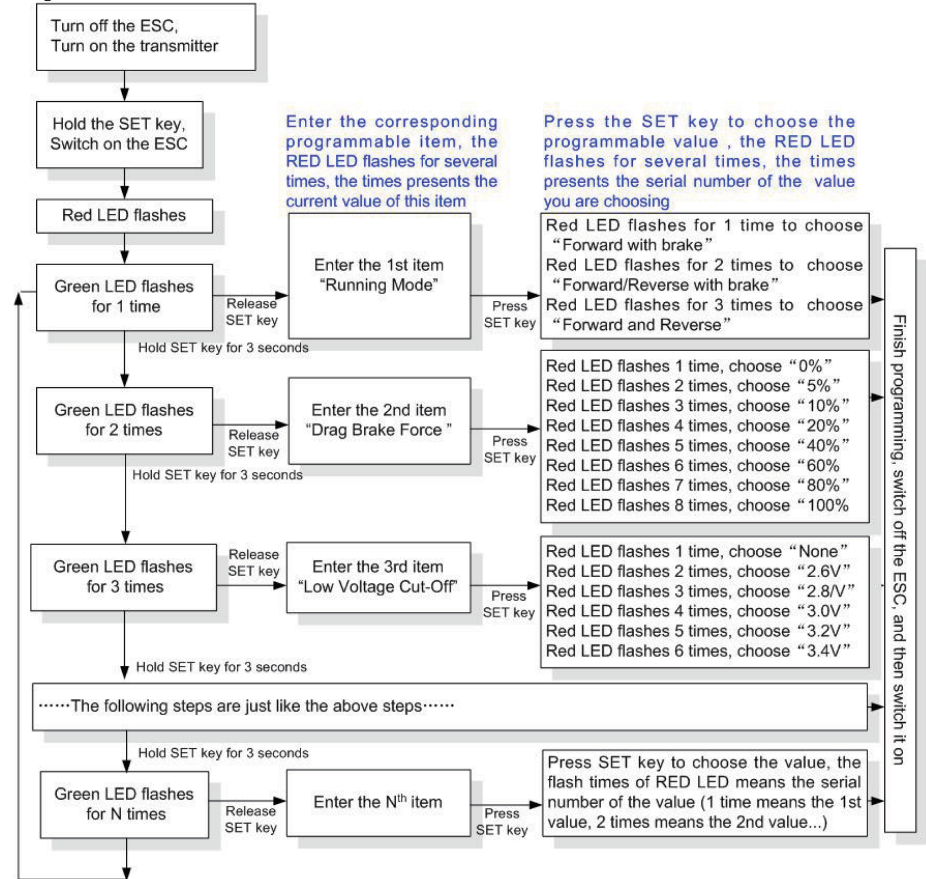
Trouble	Possible Reason	Solution
After power on, motor doesn't work, and the cooling fan doesn't work	The connections between battery pack and ESC are not correct	Check the power connections Replace the connectors
After power on, motor can't work, but emits "beep-beep-, beep-beep-" alert tone. (Every "beep-beep-" has a time interval of 1 second)	Input voltage is abnormal, too high or too low	Check the voltage of the battery pack
After power on, red LED always lights, the motor doesn't work	Throttle signal is abnormal	Plug the control wire into the throttle channel of the receiver correctly.
The motor runs in the opposite direction when it is accelerated	The wire connections between ESC and the motor are not correct	Swap any two wire connections between the ESC and the motor.
The motor suddenly stops running while in working state	The throttle signal is lost	Check the transmitter and the receiver Check the signal wire from the throttle channel of your receiver
	The ESC has entered the Low Voltage Protection Mode or Over-heat Protection Mode	Red LED flashing means Low Voltage. Green LED flashing means Over-heat
When accelerating quickly, the motor stops or trembles	1) The battery has a bad discharge performance 2) Gear ratio is too aggressive 3) The "Start Mode (Punch)" of the ESC is too aggressive	1) Use a better battery 2) Use lower KV motor or softer gear ratio 3) Set the "Start Mode (Punch)" to a softer value
When the throttle stick is in the neutral range, the red LED and the green LED flashes synchronously	Over current protection, motor demagnetization, or motor is over load	1) Reduce the load (Use softer gear ratio or reduce the input voltage) 2) Change the motor
Cannot connected with the LED Program Card or LCD Program Box	Mistakenly uses the Rx wire to connect to the program card/box.	Connect the program card/box to the special programming port of the ESC, don't use the Rx wire.

hold the "SET" key for over 3 seconds, the red LED and green LED will flash at the same time, which means each programmable item has been reset to its default value.

[TROUBLE SHOOTING]

[PROGRAM THE ESC]

1. Program the ESC with the SET button on the ESC



Note:

- In the program process, the motor will emit "Beep" tone when the LED is flashing.
- We use a long time flash and long "Beep---" tone to represent number "5" for easily identify the items of the big number.
 - "A long time flash" (Motor sounds "B---") = the No. 5 item
 - "A long time flash + a short time flash" (Motor sounds "B---B") = the No. 6 item
 - "A long time flash + 2 short times flash" (Motor sounds "B---BB") = the No. 7 item
 - "A long time flash + 3 short times flash" (Motor sounds "B---BBB") = the No. 8 item
 - "A long time flash + 4 short times flash" (Motor sounds "B---BBBB") = the No. 9 item

2. Program the ESC with the LED program box (Optional equipment)

Note3: The Rx wire of the ESC (for connecting receiver) **CANNOT** be used to connect with the LED Program Card. Please only use the special port between the terminals ABC to connect with the Program Card.

