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 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 brushless 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: ( three )

1.4 Start Mode (Also called "Punch"): Select from "Level1" to "Level6" as you like. Level1 has a very soft start effect, while level6 has a very aggressive start effect. From Level1 to Level6, the start force is increasing. Please note that if you choose "Level6" to "Level7" 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 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 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), the ESC will enter the setting mode. If you want to change or restore the parameters, please refer to the following settings:

- **Trouble:** The connections between battery pack and ESC are not correct.

- **Possible Reason:** Input voltage is abnormal, too high or too low.

- **Solution:** Check the voltage of the battery pack.

- **Trouble:** The throttle signal is lost.

- **Possible Reason:** The throttle signal is lost.

- **Solution:** Check the transmitter and the receiver.

- **Trouble:** The ESC has entered the Low Voltage Protection Mode or Over-heat Protection Mode.

- **Possible Reason:** Red LED flashing means Low Voltage. Green LED flashing means Over-heat.

- **Solution:** Recheck the battery andESC.

- **Trouble:** The motor stops or trembles.

- **Possible Reason:** 1) The battery has a bad discharge performance

- **Solution:** 1) Use a better battery

- **Possible Reason:** 2) Gear ratio is too aggressive.

- **Solution:** 2) Use lower KV motor or softer gear ratio

- **Possible Reason:** 3) The ‘Start Mode (Punch)’ of the ESC is too aggressive.

- **Solution:** 3) Set the ‘Start Mode (Punch)’ to a softer value.

- **Trouble:** The motor suddenly stops running while in working state.

- **Possible Reason:** Over current protection, motor overheating, or motor is over load.

- **Solution:** 1) Reduce the load (Use softer gear ratio or demagnetization, or motor is over load)

- **Solution:** 2) Change the motor

- **Trouble:** The motor runs in the opposite direction when it is accelerated.

- **Possible Reason:** Throttle wire connections between ESC and the motor are not correct.

- **Solution:** Swap any two wire connections between ESC and the motor.

- **Trouble:** The motor runs in the opposite direction when it is accelerated.

- **Possible Reason:** The ESC has entered the Low Voltage Protection Mode or Over-heat Protection Mode.

- **Solution:** Recheck the battery andESC.

**TROUBLESHOOTING**

1. **PROGRAM THE ESC**

   - 1. Turn off the ESC, then press SET key for 5 seconds.
   - 2. Enter the "Easy Programming" mode.
   - 3. Enter the "Setting Mode".
   - 4. Enter the submenu "ESC Settings".
   - 5. Enter the submenu "ESC Parameters".
   - 6. Enter the submenu "ESC Protection".
   - 7. Enter the submenu "ESC Feedback".
   - 8. Enter the submenu "ESC Configuration".
   - 9. Enter the submenu "ESC Calibration".
   - 10. Enter the submenu "ESC Troubleshooting".
   - 11. Enter the submenu "ESC Programming".
   - 12. Enter the submenu "ESC Test Run".
   - 13. Enter the submenu "ESC Save Settings".
   - 14. Enter the submenu "ESC Restore Settings".
   - 15. Enter the submenu "ESC Reset All Items to Default Values".
   - 16. Enter the submenu "ESC Help Menu".

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

   **Note:** 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.

   **To Program Card**