VGOOD SpinX Series ESC Manual

Introduction:

Thank you for purchasing V-GOOD Spinx series ESC product!
Brushless power system can be very dangerous. Any improperuse may cause personal injury and damage to the product andrelated devices. We strongly recommend reading through this user manual before use.
Because we have no control over the use, installation, or maintenance of this product, no liabilitymay be assumed for any damage or losses resulting from the use of the product. We do not assume responsibility for any losses caused by unauthorized modifications to our product.
For the latest specifications, please visit the company website: www.vgoodrc.com

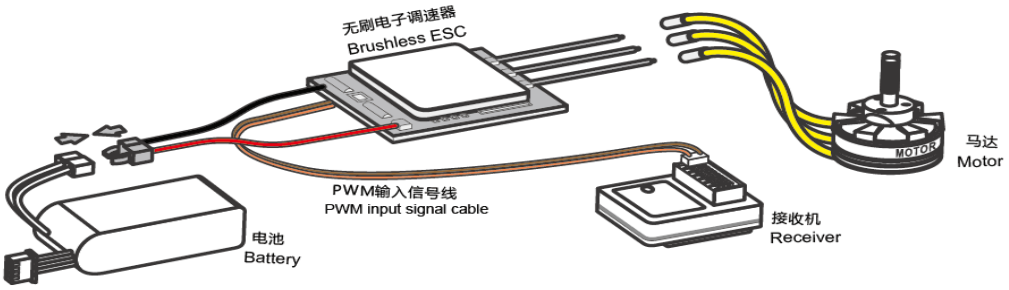
Product Features:

1.32 bit ARM MCU, small size, light weight and rapid running speed.
2. High resolution, smooth and responsive throttle linear.
3. Synchronous rectification, regenerative braking, more energy-efficient compared with the other regular ESCs.
4. Automatically detect input signal. Throttle is available for calibrating and compatible with different controllers.
5. Good compatibility to motors, it can work well for most motors in the market.
6. Be able to set for airplane and helicopter mode by programming card
7. Super strong power in airplane mode, excellent governor speed effect in helicopter mode.
8. In airplane mode, the motor direction can be reversed by controller channel key.
9. 5-8V adjustable SBEC (Not all items)

Specification

1. Support 2- 14S (Please check ESC sticker to verify the specified cells)
2. Regular throttle range is: 900us~2400us
3. Max RPM: 300,000 rolls (2poles), 100,000 rolls (6poles), 50,000 rolls (12poles)

Connection Diagram



Operation:

1. Throttle Calibration:

Please set throttle when the first time to use the ESC.

Step: 1-Startup controller and push stick at highest throttle position.

Step: 2-Power on ESC, motor beeps "♪♪", means high throttle set ok;

Step:3- Push stick to the lowest position, motor beeps "♪♪" means low throttle is detected, then another "♪♪" as confirmation that throttle is set ok and ready, you can push stick to go.

2. Normal start procedure:

Startup controller and push stick to Min throttle (if higher than1800us, it will get into throttle calibration).

Power on ESC, first will detect battery cells, motor beeps "♪♪♪…" . For example 4 cells battery, there will be 4 beeps, as: "♪♪♪♪". Then 2 beeps "♪♪" means ESC is ready.

3. Standby beeps:

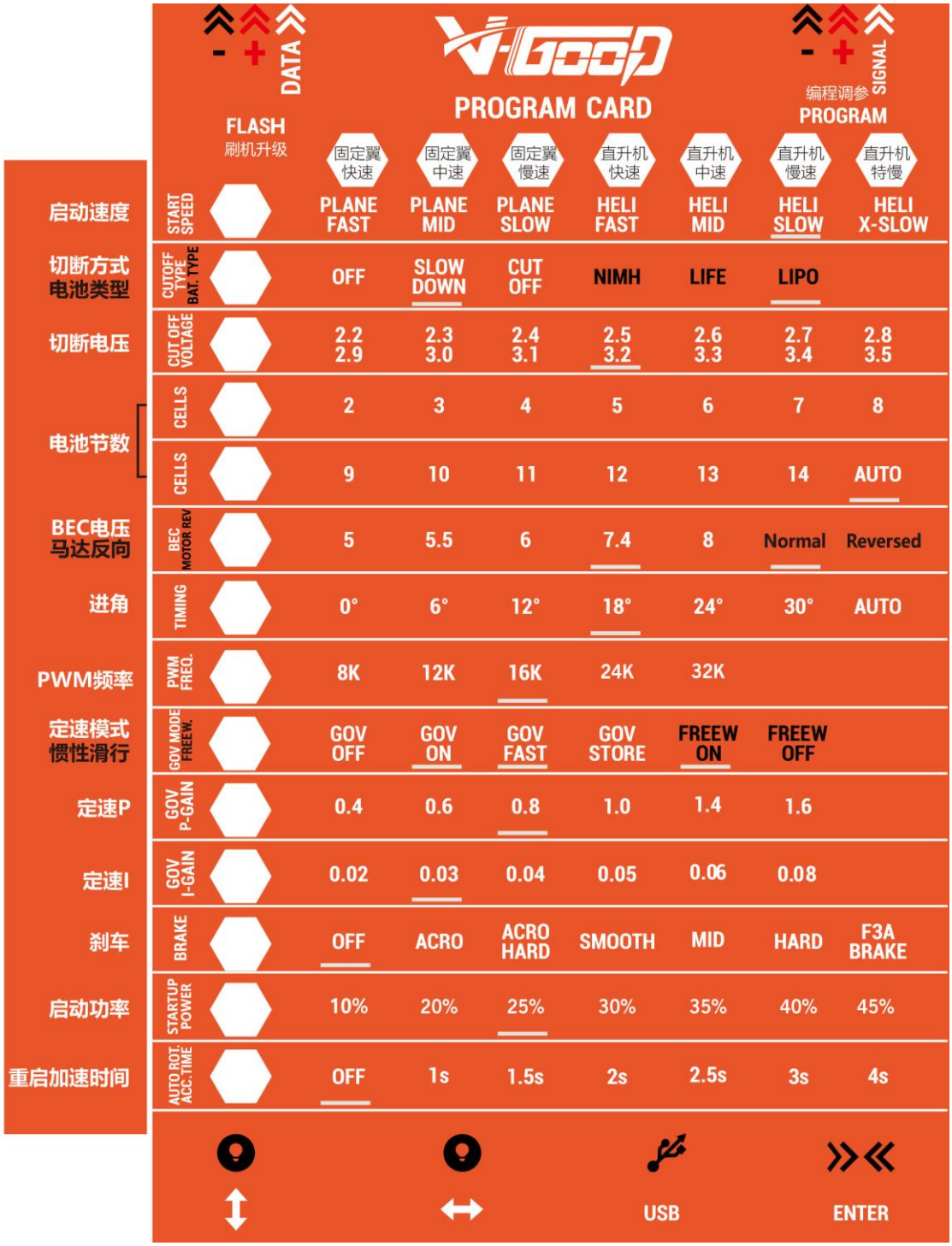
10 minutes after get into standby mode, the motor will sound reminder beep "♪"every 5 seconds, means the ESC has connected with battery.

4. Setting with governor speed:

1. if you set with governor fast, that no need any additional setting, just fly up, everything will be automatically done.

2. if you want to go with Gov store, please select GOV ON, GOV STORE, FREEW ON with programming card and confirm, then push your throttle no less than 50%, after finishing startup, pull throttle to zero, you will hear a long beep "♪", that means setting ok.

Programming-Card Parameters



Safety points:

Due to brushless power system is powerful, improper using may cause the personal injury and device damage. Please strictly follow the instructions to operate.

1. Please don't operate long time with the battery under-voltage. lt will reduce the battery usage life and ESC working efficiency.
2. Please don’t operate long time when the ESC is over temperature, otherwise it will damage the MOS FET easily.
3. Please don’t let ESC overvoltage for a long time, otherwise will short the usage life of ESC.
4. Always keep all the things away from propeller when working on a power system with the battery connected
5. Please pay attention to the motor. Don’t operate continually when the motor was blocked. Otherwise, it will reduce the usage life of motor and ESC.
6. Always use ESC in safe situation.
7. Broken ESC can’t be used.
8. Only can use battery power supply, can’t plug to AC power directly!

Attentions:

1. If motor rotation direction is wrong, you can exchange any two of the three motor cables to correct.
2. Only use a clean and tight metal connector to connect the motor to the battery. Connectors of 5.5m/6mm PK specifications are preferred. Note that the battery connector is positive and negative. Replace oxidized or loose plugs or sockets, as only tight connections ensure high currents and protect speed controllers from high voltage hazards and interference.

Fault Analysis beeps:

Motor will beep accordingly when ESC happen with below conditions, warning beeps will be cleared after restarting ESC.

1. 1 beep repeat: Under-voltage identification.
2. 2 beeps repeat: Temperature rise warning.
3. 3 beeps repeat: Receiver signals failed
4. 4 beeps repeat: means startup failed.