

PLANE USE ESC INSTRUCTION

PROGCARD BL ESC SERIES

- **P12A:** 12 Ampere (max. 15A) w/BEC programmable by PROG CARD, suitable for 2-3 cells Li-Poly / 6-10 cells Ni-Mh
- **P15A:** 15 Ampere (max. 20A) w/BEC programmable by PROG CARD, suitable for 2-3 cells Li-Poly / 6-10 cells Ni-Mh
- **P20A:** 20 Ampere (max. 25A) w/BEC programmable by PROG CARD, suitable for 2-3 cells Li-Poly / 6-10 cells Ni-Mh
- **P25A:** 25 Ampere (max. 25A) w/BEC programmable by PROG CARD, suitable for 2-3 cells Li-Poly / 6-10 cells Ni-Mh
- **P30A:** 30 Ampere (max. 40A) w/BEC programmable by PROG CARD, suitable for 2-3 cells Li-Poly / 6-10 cells Ni-Mh
- **P40A:** 40 Ampere (max. 50A) w/BEC programmable by PROG CARD, suitable for 2-3 cells Li-Poly / 6-10 cells Ni-Mh
- **P40A-O:** 40 Ampere (max. 50A) no/BEC programmable by PROG CARD, suitable for 2-6 cells Li-Poly / 6-16 cells Ni-Mh
- **P60A:** 60 Ampere (max. 80A) w/BEC programmable by PROG CARD, suitable for 2-3 cells Li-Poly / 6-10 cells Ni-Mh
- **P60A-O:** 60 Ampere (max. 80A) no/BEC programmable by PROG CARD, suitable for 2-6 cells Li-Poly / 6-16 cells Ni-Mh
- **P70A-O:** 70 Ampere (max. 90A) no/BEC programmable by PROG CARD, suitable for 2-6 cells Li-Poly / 6-16 cells Ni-Mh
- **P100A-O:** 100 Ampere (max. 120A) no/BEC programmable by PROG CARD, suitable for 2-6 cells Li-Poly / 6-16 cells Ni-Mh

PRODUCT FEATURES

- Simple settings, easy to operate
- Automatic throttle journey settings, with very good handle
- Connection automatic protection
- Automatic cutting when motor is blocked
- BEC function offer 2 ampere current for Rx & Servo under standard situation
- PWM: 8KHZ
- Automatic protection from higher voltage (max. 18V): refuse to start motor when voltage exceed 18V
- Automatic protection from higher temperature (max. 110 degree)
- Automatic cutting when lose radio signal within 3 seconds
- With the special PROG CARD (for option), very easy to set all parameters
- There are two setting modes to match different motors with different magnet electrode: <1>SOFT MODE --- to match normal motor (2, 4, 6 electrodes) and offer max. efficiency; <1>HARD MODE --- to match motors with 6 or more electrodes to offer max. Rpm and current

SETTINGS

- TEST THE CURRENT MODE:

Put the throttle down at the lowest (idle) position, turn on the transmitter power and connect the speed controller power. When one sound 'Beep' means it at brake mode, and when one sound 'Beep-Beep' means brake off. After about 5 seconds five sounds 'Beep' means soft mode, and five sounds 'Beep-Beep' means hard soft

- TO CHANGE THE CURRENT MODE:

<1>Put the throttle up to the max position and then turn on the transmitter, then connect the speed controller power.

<2>To open brake function, after about five seconds when it sounds 'Beep-Beep-Beep-Beep' just push the throttle back to the idle position. And then it will sound 'Beep' or 'Beep-Beep', and five sound 'Beep' or 'Beep-Beep', this means the setting for brake function is successful.

<3>To close the brake function, just repeat last step.

<4>To set soft mode, first finish step <1>, after about five seconds when sound four continuous 'Beep' (not cyclic), and wait another five seconds there will be two times continuous cyclic sounds (totally five 'Beep' and five 'Beep-Beep'). When sounds five 'Beep' just push the throttle to the idle position, and then it will sound 'Beep' ('Beep-Beep'), and five continuous 'Beep', this means soft mode (hard mode) exchange is successful.

<5>To set hard mode, just repeat last step.

PROG CARD APPLICATION

With the special PROG CARD settings will be much easier, and more functions will be available on the PROG CARD series ESC:

- Brake mode selection: BRAKE ON / OFF
- Motor timing selection: TIMING LOW / HIGH
- Throttle curve linear selection: THROTTLE LINEAR / THROTTLE LOGARITH
- Battery selection: NI-CD, NI-MH / LI-ION, LI-POLY
- Battery cutting voltage selection: CUTTING VOLTAGE HIGH: NI-CD, NI-MH AT 0.9V/CELL; LI-ION, LI-POLY AT 3.0V/CELL; CUTTING VOLTAGE LOW: NI-CD, NI-MH AT 0.7V/CELL; LI-ION, LI-POLY AT 2.7V/CELL
- Motor cutting voltage selection: MOTOR CUTTING HARD: When power lower than set voltage the power will cut at once; MOTOR CUTTING SOFT: When power is lower than set voltage the power supply does not cut at once, just reduce power output.

DEFAULT SETTING

- BRAKE OFF
- MOTOR TIMING HIGH
- THROTTLE CURVE LINEAR
- BATTERY: LI-ION / LI-POLY
- BATTERY CUTTING VOLTAGE LOW: 2.7V/CELL
- MOTOR CUTTING MODE: SOFT