# RCmart brushless motor speed controller "MELODY 12A"

Thanks for choosing **RCmart** Electronic Speed Controller. This is a user-friendly, easy to set up, new developed speed controller for both fix wing & Helicopter. The soft start program is designed for all helicopter users.

Melody 12A **will play a music** when all the setting is ready to go, so all users do not need to worry about whether their speed controller is ready to go or not when the power been connected.

#### Dear customer,

Please read the following instruction and warning before you start using Melody 12A speed controller.

1. Melody 12A is suitable for: Ni-CD/Ni-MH 6 ~9 cell

Li-ion/Li-Polymer 2 ~ 3cell

\*\*warning: when using Ni-CD/Ni-MH 11~9 cell or Li-ion/Li-Polymer 3 cell. The maximum discharge current DO NOT over 12A and 150W.

- 2. Melody 12A has programmed for soft start.
- 3. When battery voltage drops to the pre-set (3V / cell for Li-ion / Li-polymer) level (could be set at 80% for Ni-CD / Ni-MH), the motor output decreased gradually instead of a sudden-stop. This low battery warning function allows an early safe landing on R/C aircraft.
- 4. It has start and over heat protection function.
- 5. Automatic Throttle adjustment for using on every transmitter.
- 6. Brake or Non-brake.
- 7. 8 selectable "ready to go" melody. (need select by program card)
- 8. Melody 12A has program card setting or manual setting function.
- 9. The program can be upgrade when there is new program available. (need to contact **RCmart** or your local dealer)
- 10. The motor will decrease its power to full stop if the receiver is out of the control range. Back to the receiving range the motor power will be resumed.

In field use, switch-on the transmitter and always make sure that the throttle is on the low end before connecting the battery. The controller will detect battery voltage once the battery is connected.

#### **Instruction:**

## 1. Manual setting:

- A. *Throttle curve setting:* move the throttle stick to the top point, than connect battery to Melody 12A, 2 short "B-B" will be heard, then by removing the stick to the low end. When the setting is ready a melody will be heard.
- B. *Non-Brake setting:* switch on transmitter and moving the stick to the top end then connect the battery to Melody 12A. Wait until a 3 "B-B-B" be heard, removing the stick to the low end. When the setting is ready a melody will be heard.
- C. **Brake setting:** switch on the transmitter and move the stick to the top end. Connect battery to ESC. Wait until 4 short "B-B-B" be heard then by removing the stick to the low end. When the setting is ready a melody will be heard.
- 2. **Program card setting:** setting up by program card. (for more detail please read the program card instruction)

## **Technical specs:**

Maximum load (in 30 seconds) 15A., for constant use: 12A Working voltage: Ni-CD / Ni-MH ----- 6 to 9 cell (6-12.6V)

Li-ion / Li-polymer ---- 2 to 3cell (6-12.6V)

Working temperature:  $0^{\circ}\text{C} - 50^{\circ}\text{C}$ 

Maximum RPM: 2-pole motor / 210,000 rpm 6-pole motor / 70,000 rpm 12-pole motor / 35,000 rpm

## Warranty:

The manufacturer's guarantee is limited to the replacement of any defective parts or defective in workmanship. This does not include the damage caused by crash, over-loading or improper use.