

# Towerpro Mag 8 Brushless Motor Speed Controller Manual

Operation Limit:

12A: max current 15A, continuous current 12A for 10 minutes

25A: max current 30A, continuous current 25A for 10 minutes

30A: max current 35A, continuous current 30A for 10 minutes

Voltage Range: 6V-12V

Number of Batteries: 4-12NiMH, 2-3LiPo

BEC Output: 5V1.5A.2LiPo\4-5mini servo, 3Lipo\3-4mini servo

Protective Functions:

- ◆ Automatically select 2-3LiPo, protective voltages are 6V/9V respectively;
- ◆ Automatically select NiMH, the protective voltage for each battery is 0.8V.
- ◆ Safe start –will not start if the throttle stick is not in the right position;
- ◆ Temperature protection, shutdown if the surface temperature reaches 110°C
- ◆ lost of control protection, shutdown after 1 second without signal.

Performance:

- ◆ motor limit:
  - ☆ 2-pole adersion as high as 30000rpm
  - ☆ 12-pole adersion 5000rpm
  - ☆ 14-pole adersion 4200rpm
- ◆ For 8KHzPWM control ,
- ◆ Position of the full, throttle will be adjust automatically
- ◆ BEC and MCU use separate power supply for table operation.

Setting Method:

1. Open the transmitter, switch throttle stick to the full power position (for FUTABA series transmitter, the throttle stick shall be switched to REV).
2. Connect the receiver and motor.
3. Connect the power to the speed controller.
4. If the transmitter is in normal condition, it will have the following sound: (if there are no more sounds after a long low sound at the end of this sound, check the reverse setting of the transmitter throttle channel).
  - ☆ B: indicates LIPO automatic protection
  - ☆ BB BB: indicates NiMH/NiCD automatic protection
  - ☆ BBB BBB: indicates brake selection
5. If there is setting you want in the process of sound cycle, switch the throttle stick, to the lowest position at the first time interval. (For example, select LIPO automatic protection: switch the throttle stick to the lowest position when hearing one B sound)
6. If there is another additional setting, quickly switch the gun to the highest position to make a selection.

7. If you have finished the setting you require, wait 2 seconds and the motor will send a confirmation sound for battery protection. It is usable after confirming the position of throttle stick.

8. LIPO automatic protection has only 2 voltage protection points, i.e 6V and 9V. There is no need to use a full capacity battery.

9. NiMH automatic protection is calculated according to the real number of batteries. Sets 0.8V for each battery. In order to ensure accurate judgment of the battery voltage, please charge the battery to full capacity. If the battery is not at full capacity. The speed controller will estimate the protection voltage according to 53% of the full capacity.

10. the brake is seeing as default set

11. Reset the brake operation to release the brake function. .

12. Factory parameter reset function: because this series of electronic governor has an overheating and false operation protective function, if you find that the speed controller is accelerating or changing is direction, or the throttle is different from the original condition, you can reset the factory parameters to obtain the highest performance.

When starting the machine there is a long B sound. It indicates that the electronic governor is in LIPO protection mode. The BBB sound indicates that it is in NiMH/NiCD automatic protection mode.