User Manual of Henge 8A UBEC

Thank you for choosing our products, please make sure that you use the equipment's rated voltage or withstand voltage, and correctly adjust the output voltage of UBEC before using this product.

1. Specifications：

1.1 Output：5V/8A, 6V/8A or 7.4V/8A (Changeable with an jumper);

1.2 Input：7-25.5V (2 to 6 cells Lipo battery pack, 6 to 16 cells NIMH battery pack);

1.3 Continuous output current：8A;

1.4 Burst output current：12A (≤15 Sec);

1.5 Ripple：＜35mVp-p(@8A/12V);

1.6 Size：45mm*22mm*7.5mm (L*W*H);

1.7 Weight：16g(Including the cable and the ferrite ring);

2. Features：

2.1 Designed with an advanced switching power supply control chip with overcurrent and overheat protection function, the max efficiency of the chip is up to 93% ；

2.2 The small size and the light weight make it very convenient to use；

2.3 Provide large output current, the continuous output current is 8A, and the burst output current is 12A,fully guarantee the power demand of equipment.；

2.4 Designed with a high quality switching power supply conversion chip, significantly reduce the electromagnetic interference and ensure the receiver works properly；

2.5 With ultra-wide input voltage range, works properly from 7V-25.5V (low voltage version)；

2.6 Shows the working status with an indicator(LED), lights when the output is in normal range；

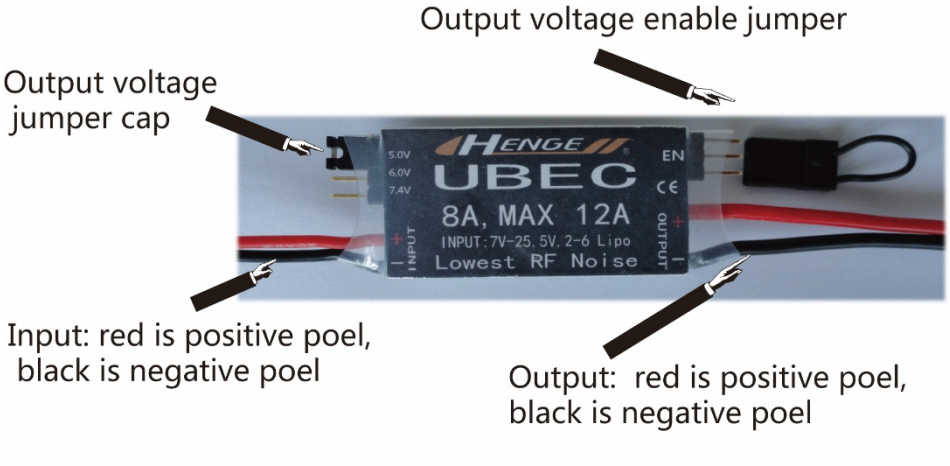
3. The advantages compared with the traditional linear BEC：

Compared to the traditional linear BEC , the switch-mode BEC has the following advantages: When using a lithium batterypack more than 3S, a switch-mode BEC has much higher efficiency with lower heat.For a traditional linear BEC, For example, a 4S lithium battery pack has a typicalvoltage of 14.8V, in order to let BEC output 5V/1A, the current flow into the BEC is at least 1A, so the power on BEC is 14.8V* 1A=14.8W. But the useful output power is only 5V*1A=5W,so the efficiency of the linear mode BEC is just 5W/14.8W=33.8%, the redundant power 14.8W-5W=9.8W changes to heat, which makes the BEC very hot, and makes it enter protection state, thus unable to work.For a switch-mode BEC in the above case, in order to let BEC output 5V/1A, the current flow into BEC is only 0.37A (actual test data), so the power on BEC is 14.8V* 0.37A =5.476W, and the efficiency of BEC is 5W/5.476W=91.3%.

4. Special Explanation：

Although we have tried our best to reduce the electromagnetic interference, it may still cause very little interference when the switch-mode UBEC is working. Thus please put the whole UBEC as far as possible away from the receiver to ensure it's working properly.

5. How to use the UBEC:



Input / Output port as per the drawing above

Output voltage enable port: output off when enable jumper plug in, output on when enable jumper plug out

Caution: Must plug off the sub-jumper when working well, otherwise voltage output disabled

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