# **USER MANUAL OF RPM SENSOR**

#### **Function of RPM Sensor**

Thank you for purchasing the RPM sensor for brushless motor.

It detects the voltage changes at the wires of brushless motor, and then outputs the RPM signal. It is suitable for different kinds of brushless motors and different PWM driving methods.

This RPM sensor can work with some speed control systems; one of its typical applications is to work as the RPM sensor for V-Bar system made by Mikado (www.mikado-heli.de).

## **Specifications**

- 1. Size: 23mm(L)\*10mm(w)\*2mm(H)
- 2. Weight: 6g (Input and output wires are included)
- 3. Working voltage: 3.5V to 8.4V(1S to 2S Lipo)
- 4. Current: 1 to 5mA
- 5. Voltage range of the motor wires: 2 to 14S Lipo
- 6. RPM range (for 2 poles brushless motor): 1000rpm to 300000rpm
- 7. Working temperature: 0 to 50 Celsius degree or 32 to 122 Fahrenheit degree

## **Wiring Diagram**



## **How to Use**

The lead A and lead B is connected to any 2 wires of the brushless motor (Do not need to consider about the polarity). The lead C is a three color wires with a connector at the end, the black wire is the ground wire, the red wire is connected to 3.3V or 5V to supply the sensor, and the white wire outputs RPM signal.

## Note

- 1. Please do not disassemble, modify or repair the RPM sensor by yourself.
- 2. Please do not get water into the RPM sensor.

# 无刷电机测速传感器使用说明书

#### 无刷电机测速传感器的作用

该电机测速传感器检测无刷电机引线上的电压变化,输出对应的电机转速的信号。其适用于各种不同 KV 值的无刷电机及不同的 PWM 调制驱动方式。

该传感器可以和多种转速控制系统相连,典型的应用如:作为 Mikado 公司的 V-Bar 系统转速传感器。

#### 规格

- 1、 外形尺寸: 23mm \*10mm \*2mm (长\*宽\*高)
- 2、 重量: 6g(含输入输出线)
- 3、 工作电压: 3.5V 至 8.4V (1~2S Lipo)
- 4、 消耗电流: 1~5mA
- 5、 电机线信号电压范围: 2~14S Lipo
- 6、 电气转速测试范围 (2 极电机): 1000rpm~300000rpm
- 7、 工作温度: 0 to 50 ℃ 或 32 to 122 F

#### 接线图



### 使用方法

 $A \times B$ 接无刷电机的任意两根引线(不分极性),C是白红黑三色排线,黑线为地线,红线接  $3.3V \cong 5V$  电源为本传感器供电,白线输出电机转速(RPM)信号。

## 注意事项

- 1、 请勿自动拆卸、改装和维修本设备。
- 2、 请避免沾带水汽而造成电路故障。