

## Introduction of Hall module

### 1. Working principle

The Hall sensor is a Magnetic field sensor according to the Hall effect. The Hall effect is a kind of Magnetoelectric effect. When the magnet is close to the Hall sensor, the sensor generates a potential difference, which be called Hall voltage.

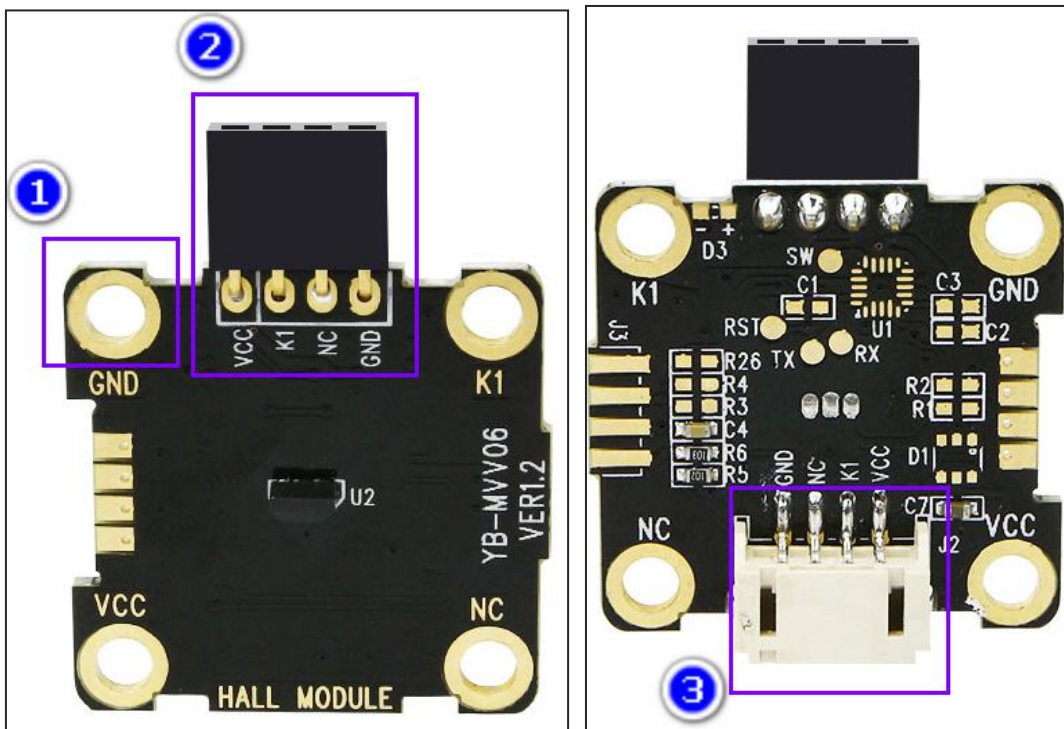
The Hall voltage changes with the change of the magnetic field strength. The stronger the magnetic field, the higher the voltage, the weaker the magnetic field, the lower the voltage.

!Note: The Hall voltage is very small, the multimeter cannot be directly detected, the signal can be detected only by the interrupt mode in the program.

### 2. Practical application

1. Install the magnetic ring and Hall module on the motor to make the speed measuring motor.
2. The magnet detector
3. The taxi calculates the price by calculating the distance traveled.

### 3. About module



3.1 Hall module possess 4 Alligator clip port, Corresponding to GND, VCC, NC and K1.

**K1 pin is the signal output pins of the module.**

3.2 4 pin female socket are reserved, which can be used after welding.

3.3 PH2.0 cable interface.

When the magnet is close to the Hall sensor, the sensor generates Hall voltage and output voltage form K1 pin.

**Working Voltage: 3.3V/5V**