

## Hall Magnetic Sensor

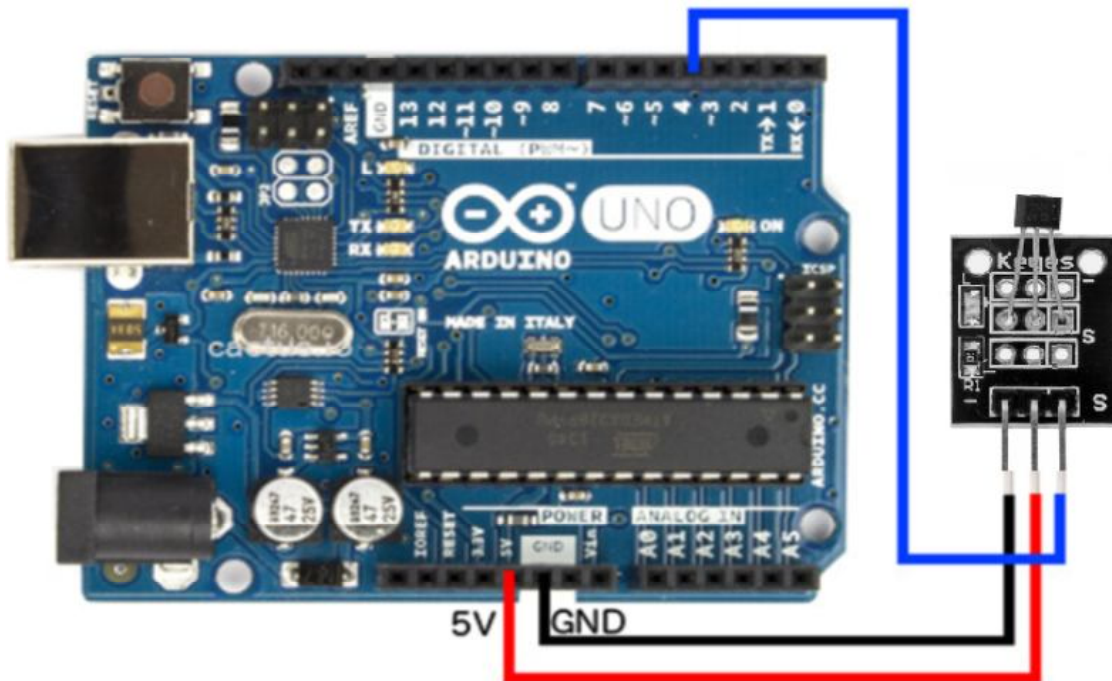
### Module: KY0003

#### Introduction

This is a Magnetic Induction Sensor. It can sense the magnetic materials within a detection range up to 3cm. The detection range and the strength of the magnetic field are proportional. The output is digital on/off. This sensor uses the SFE Reed Switch - Magnetic Field Sensor

#### Specification:

- Sensing magnetic materials
- Detection range: up to 3cm
- Output: digital on/off
- Detection range and magnetic field strength are proportional
- Size: 30\*20mm
- Weight: 3g



#### Reference program :

```
int ledPin = 13; // choose the pin for the LED
int inputPin = 4; // Connect sensor to input pin 4
int val = 0; // variable for reading the pin status

void setup() {
  pinMode(ledPin, OUTPUT); // declare LED as output
  pinMode(inputPin, INPUT); // declare pushbutton as input
}

void loop(){
  val = digitalRead(inputPin); // read input value
  if (val == HIGH) { // check if the input is HIGH
    digitalWrite(ledPin, LOW); // turn LED OFF
  } else {
    digitalWrite(ledPin, HIGH); // turn LED ON
  }
}
```