Hall Magnetic Sensor

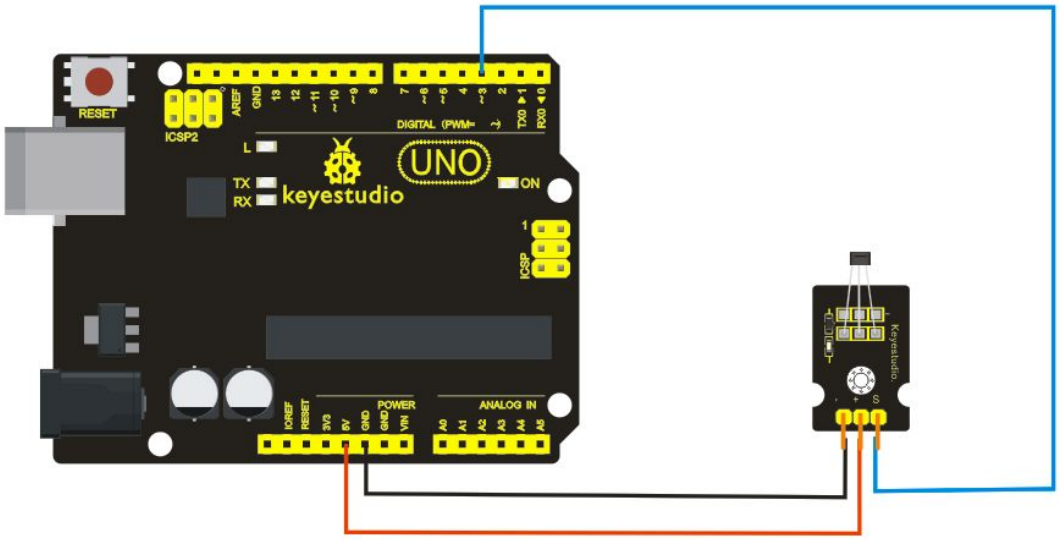
Introduction

This is a Magnetic Induction Sensor. It senses 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

Connection Diagram



Sample Code

```
int ledPin = 13;                // choose the pin for the LED
int inputPin = 3;               // Connect sensor to input pin 3
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
  }
}
```