



KE0068

KE0068 KEYES LINE SENSOR (PAD HOLE) RED

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1. OVERVIEW

This sensor is an Arduino dedicated sensor, and its connection port is compatible with the Arduino sensor expansion board. The working principle of the TCRT5000 infrared pair tube on the sensor is to use infrared light to reflect the color differently and convert the intensity of the reflected signal into a current signal. The sensor detects that black is active high, detects that white is active low, and detects height from 0 to 3 cm. In the circuit you can use the knob potentiometer to adjust the sensitivity of black and white tracking. The sensor comes with a positioning hole for you to fix the sensor to other devices.



Figure 1: Sensor Module



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2. SPECIFICATIONS

Working voltage: 3.3-5V (DC)

Interface: 3PIN interface

Output signal: digital signal

Detection height: 0-3cm

Weight: 2.3g

3. CONNECTION DIAGRAM

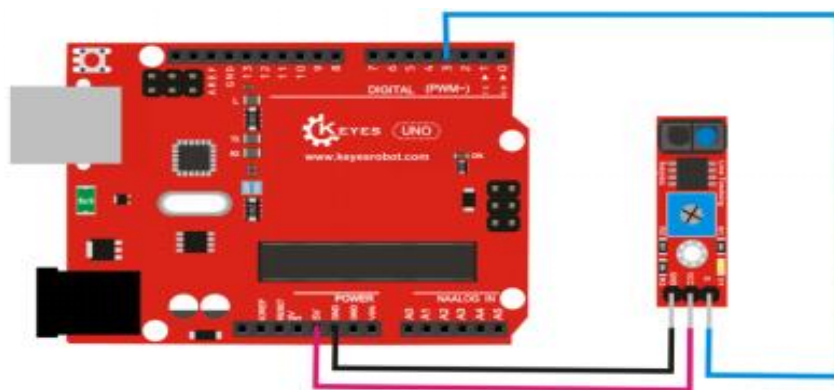


Figure 2: Connection Diagram

4. TEST CODE

Void setup()

```
{
  Serial.begin(9600); // Set baud rate
}
```

Void loop()

```
{
  Serial.println(digitalRead(3)); // Output the value read from digital port 3 and wrap it
  automatically
  Delay(500); // delay 0.5S
}
```



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5. TEST RESULTS

According to the above figure, connect the line and burn the code. After the power is turned on, when the sensor detects black, the signal terminal outputs a high level, the serial port monitor displays 1, and the D1 indicator on the sensor goes out; when the sensor detects other colors. The signal terminal outputs a low level, the serial port monitor displays 0, and the D1 indicator on the sensor lights up. The rotary potentiometer adjusts the sensitivity, and the sensitivity is highest when D1 is adjusted to the critical point of light and no light.

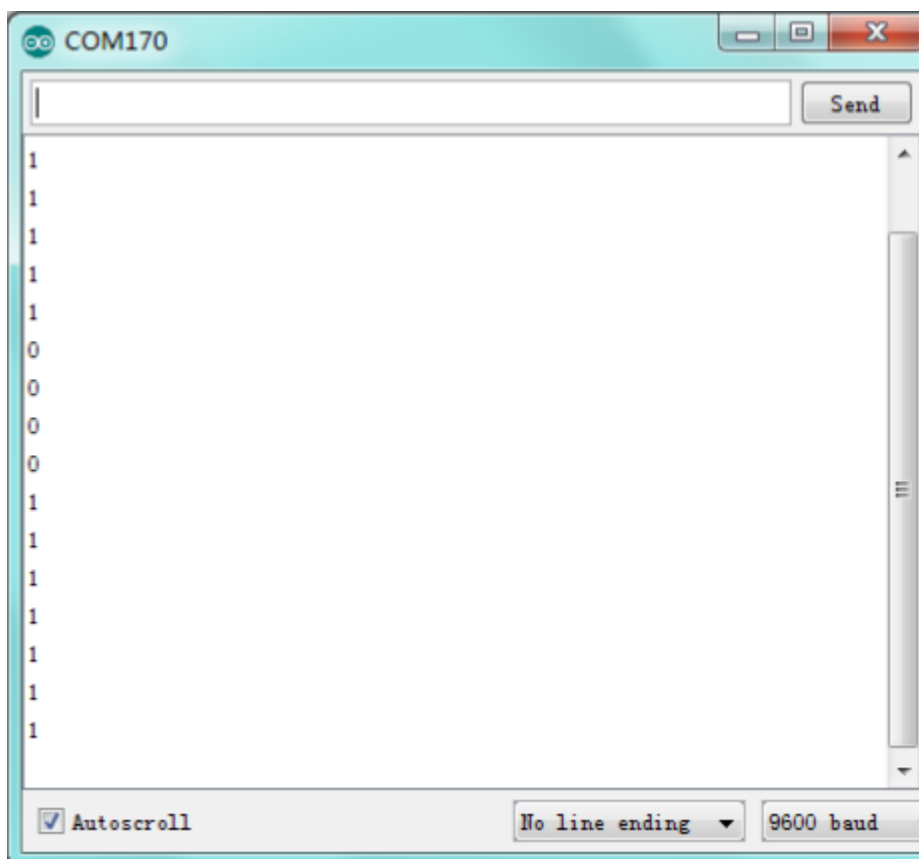


Figure 3: Serial Monitor Results