

## Line Tracking Module

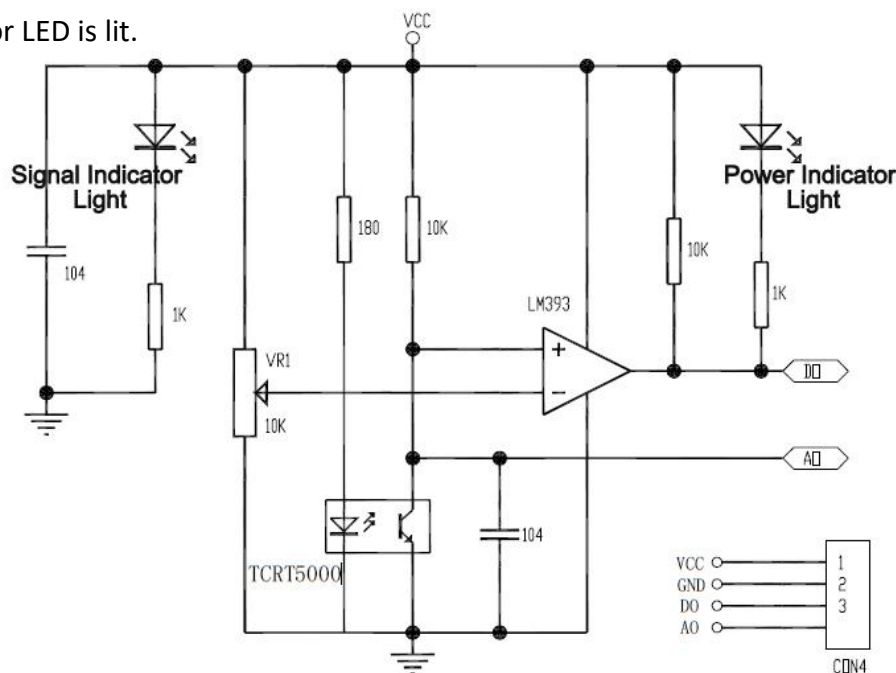
**DESCRIPTION:**

With this module your DIY car or robot can walk only along one line way. When the detector move from white to black, it could output TTL signal, So if you draw one black line between in the two wheels of your car, it will walk along your expecting road.



**working principle:**

TCRT5000 infrared sensor emits infrared emitting diode continuously when no infrared rays emitted or reflected back is reflected back but the strength is not large enough, the phototransistor has been in the off state, and the output terminal of the module is high, indicating that the diode has been in the off state; in the object to be detected with in the detection range, and the intensity of the reflected infrared rays is large enough, phototransistor saturated, and the output terminal of the module is low, the indicator LED is lit.



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### Specification:

- Voltage: 3.3V to 5V
- Operating current: 20mA @ 5V
- Operating temperature range: 0°C ~ + 50°C
- Black for LOW output, White for HIGH output
- Size: 48x10.5mm

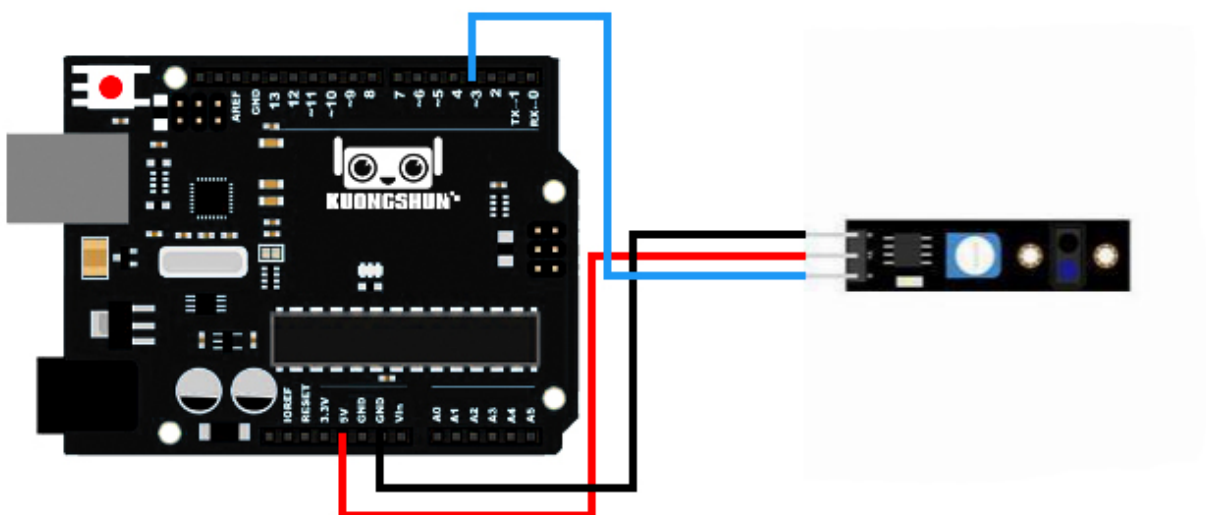
### PIN CONFIGURATION:

- 1、 “S”: Analog
- 2、 “V+” : +5V
- 3、 “G” : GND

### Example:

The example show that when the sensor detect black area, the “s” pin output Low TTL signal, then the LED13 turn off meanwhile the light “L” on this module turns on. On the contrary, LED13 turns on.

The connection as below:



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**Code:**

```
int Led=13;

int tracking =3;

int val;

void setup()
{
    pinMode(Led,OUTPUT);
    pinMode(tracking,INPUT);
}

void loop()
{
    val=digitalRead(tracking);
    if(val==HIGH)
    {    digitalWrite(Led,HIGH);
        }
    else { digitalWrite(Led,LOW);
        }
}
```