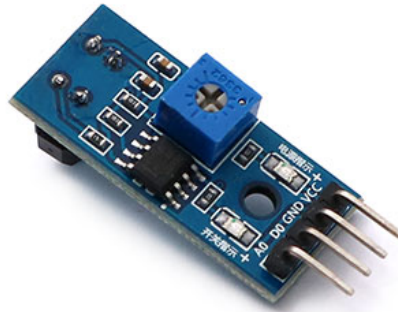


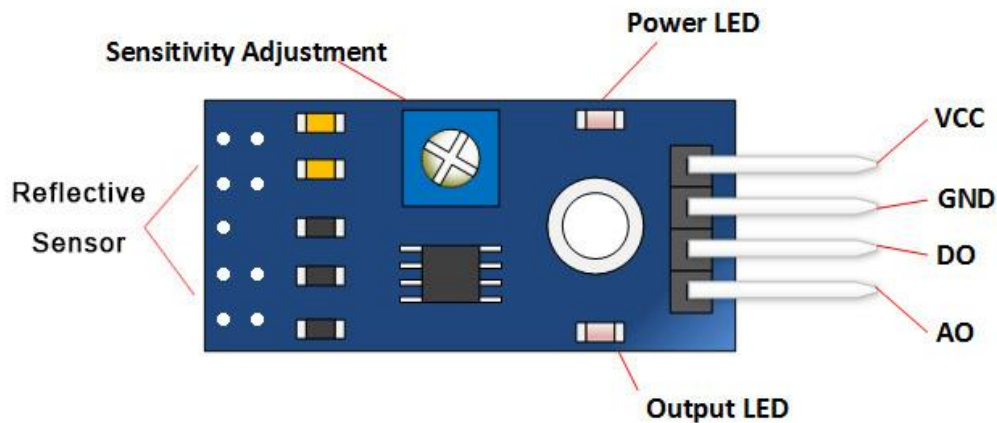
# Infrared Tracking Sensor Module 1 Channel

## Model: TCRT5000

### User Manual



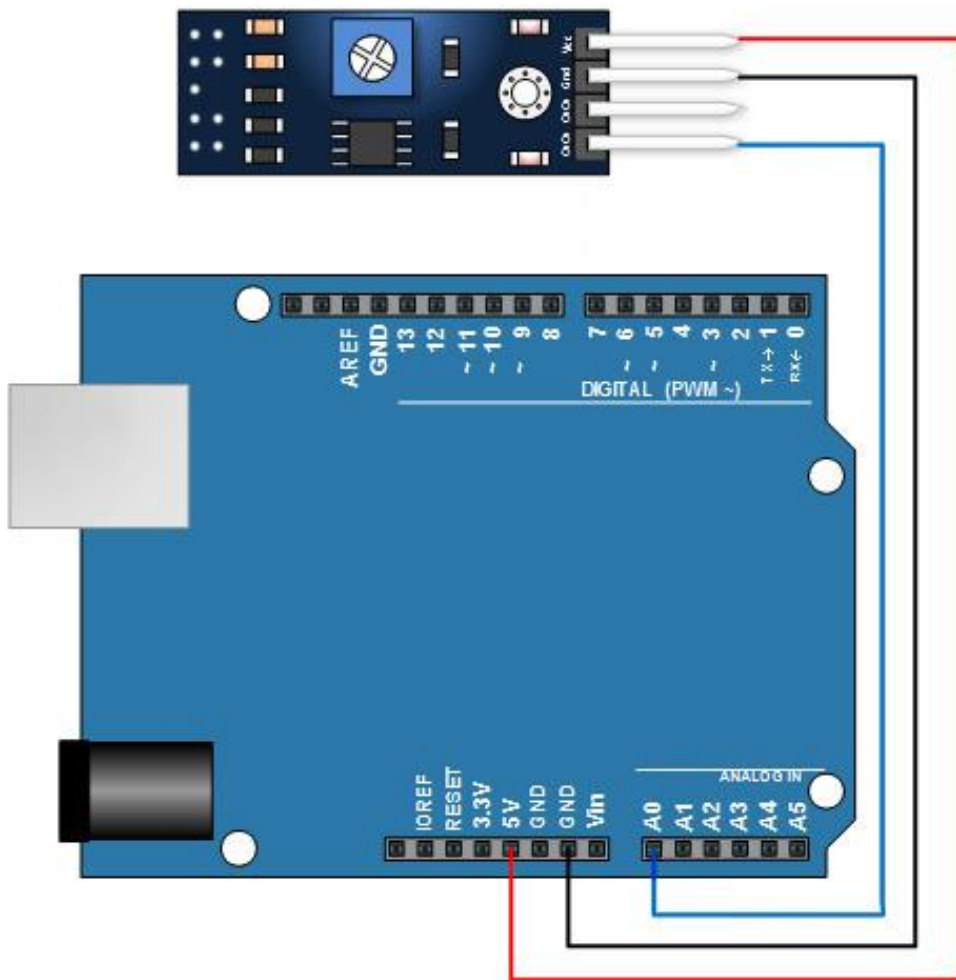
#### Pin, Control Indicator Definition:



VCC	3.3 to 5 VDC Supply Input
GND	Ground Input
DO	Output that goes low when obstacle is in range
AO	Output Analog signal
Power LED	Illuminates when power is applied
Obstacle LED	Illuminates when obstacle is detected
Distance Adjust	Adjust detection distance. CCW decreases distance. CW increases distance.
IR Reflective	Infrared Reflective LED

### Connecting Detection Module to Arduino:

Wiring up the TCRT5000 to an Arduino is relatively straight forward and measure the voltage drop produced by the transistor all we need to do is connect an analog pin from the Arduino to the Collector (C) of the Transistor.



You actually don't even have to write any code to start using the Arduino TCRT5000 sensor, all you need to do is launch the AnalogReadSerial example and Upload it to your Arduino.

```
/*
AnalogReadSerial
Reads an analog input on pin 0, prints the result to the serial monitor.
Attach the center pin of a potentiometer to pin A0, and the outside pins to +5V and ground.
*/

// the setup routine runs once when you press reset:
void setup() {
  // initialize serial communication at 9600 bits per second:
  Serial.begin(9600);
```

```
}

// the loop routine runs over and over again forever:
void loop() {
  // read the input on analog pin 0:
  int sensorValue = analogRead(A0);
  // print out the value you read:
  Serial.println(sensorValue);
  delay(1);        // delay in between reads for stability
}
```

Then simply open the serial monitor window to see what is going on.