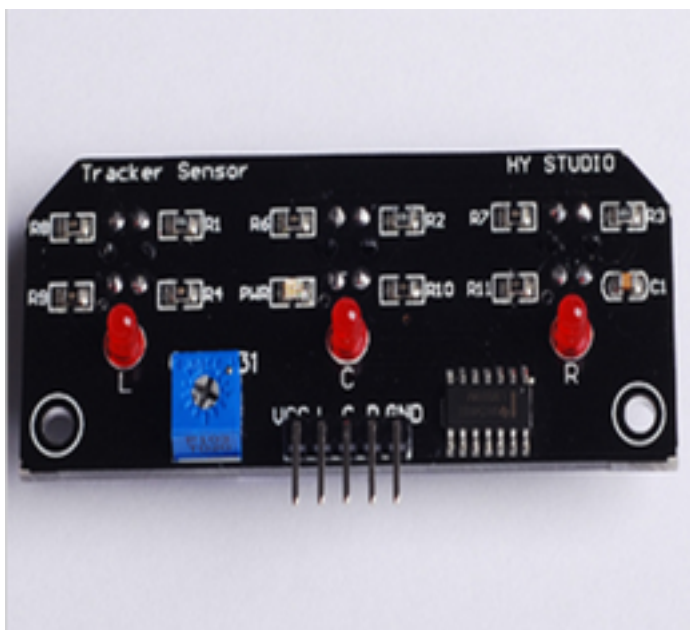


Line Tracker Sensor (3 Channels)

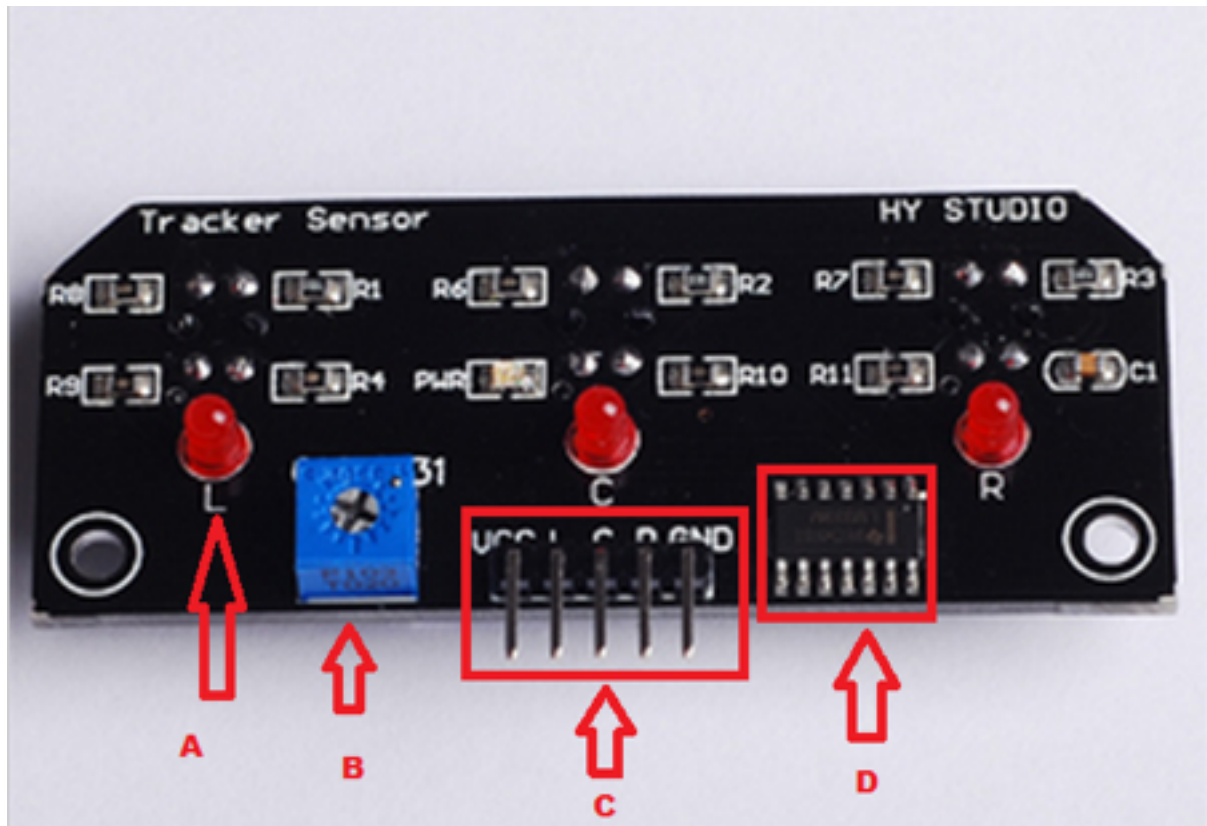
Line Tracker sensor consists of 3 IR transmitter and IR receiver pairs. This tracker sensor is typically used for robots in line following task. It can be used for either dark or bright line following. The tracker sensor have 3 digital outputs to user indicating the existence of the line. Every sensor is provided with its own LEDs as indication of line detection.



Features:

- 1- Three way tracing sensor.
- 2- The distance adjustable, stable performance.
- 3- The working voltage 5 v, white line output low level.

PRODUCT LAYOUT:



Label	Function
A	Sensor Indicator LEDs
B	Distance Adjustable (potentiometer)
C	Power and output signal connectors
D	LM 339

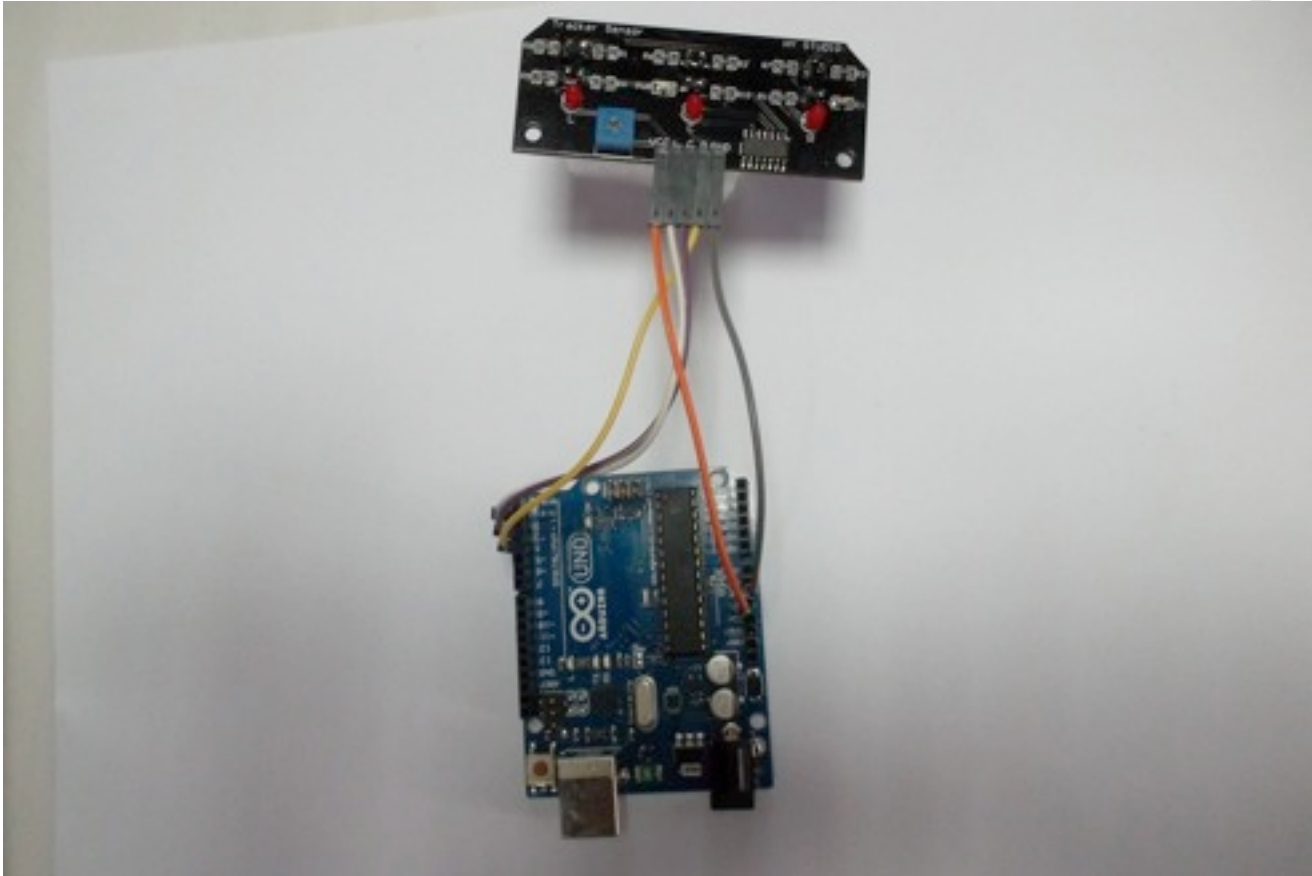
A – Sensor indicator LEDs (red) will light down showing that it detects line.

B – Distance adjustable is used to enter different distance.

C – Power and output signal connector

D – LM 339 for signal conditioning.

Connection with Arduino



Arduino Code:

```
const int PinL = 2;  
const int PinC = 3;  
const int PinR = 4;
```

```
int LState = 0;  
int CState = 0;  
int RState = 0;
```

```
void setup() {
```

```
Serial.begin(9600);
pinMode(PinL, INPUT);
pinMode(PinC, INPUT);
pinMode(PinR, INPUT);
}

void loop() {
  LState = digitalRead(PinL);
  CState = digitalRead(PinC);
  RState = digitalRead(PinR);

  if (LState == HIGH) {Serial.print(" black1"); Serial.print(" "); }
  if (LState == LOW){Serial.print(" white1");Serial.print(" "); }

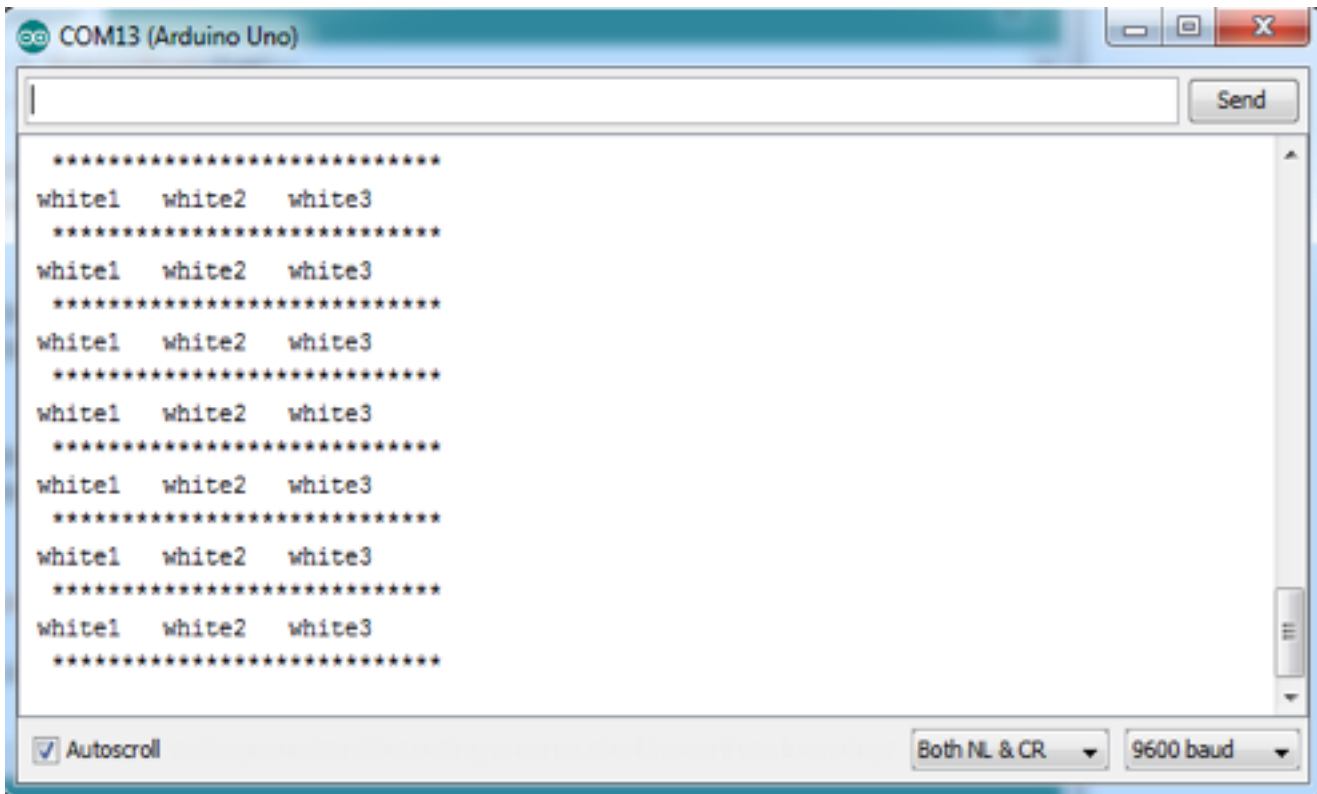
  if (CState == HIGH) {Serial.print(" black2"); Serial.print(" ");}
  if (CState == LOW) {Serial.print(" white2");Serial.print(" "); }

  if (RState == HIGH) {Serial.print(" black3"); Serial.print(" "); }
  if (RState == LOW) {Serial.println(" white3"); Serial.print(" ");}

  Serial.println("*****");

  delay(1000);
}
```

The Result:

A screenshot of a serial monitor window titled 'COM13 (Arduino Uno)'. The window contains a text area with the following output:

```
*****  
white1  white2  white3  
*****  
white1  white2  white3  
*****  
white1  white2  white3  
*****  
white1  white2  white3  
*****  
white1  white2  white3  
*****  
white1  white2  white3  
*****  
white1  white2  white3  
*****
```

The window also features a 'Send' button at the top right, an 'Autoscroll' checkbox checked at the bottom left, and dropdown menus for 'Both NL & CR' and '9600 baud' at the bottom right.