Lesson 24 Line Tracking Module

Overview

In this experiment, we will learn how to use the tracking module and avoidance module.

Infrared obstacle avoidance sensor is designed for the design of a wheeled robot obstacle avoidance sensor distance adjustable. This ambient light sensor Adaptable, high precision, having a pair of infrared transmitter and receiver, transmitter tubes emit a certain frequency of infrared, When detecting the direction of an obstacle (reflector), the infrared receiver tube receiver is reflected back, when the indicator is lit, Through the circuit, the signal output interface output digital signal that can be detected by means of potentiometer knob to adjust the distance, the effective distance From 2 ~ 40 cm, working voltage of 3.3V-5V, operating voltage range as broad, relatively large fluctuations in the power supply voltage of the situation Stable condition and still work for a variety of microcontrollers, Arduino controller, BS2 controller, attached to the robot that can sense changes in the ir surroundings

Tracking

IR light reflection switch, useful for obstacle avoidance or line following on models that move around the floor. An obstacle in front of the sender/receiver diodes will cause the 'out' pin to be pulled low (active low). A pot allows adjustment of the circuit's sensitivity. The detection distance can be up to approximately 1cm.

1.OUTPUT
2.VCC: 3.3V-5V DC
3.GND:ground

Component Required:

(1)x Elegoo Uno R3

(1)x USB cable

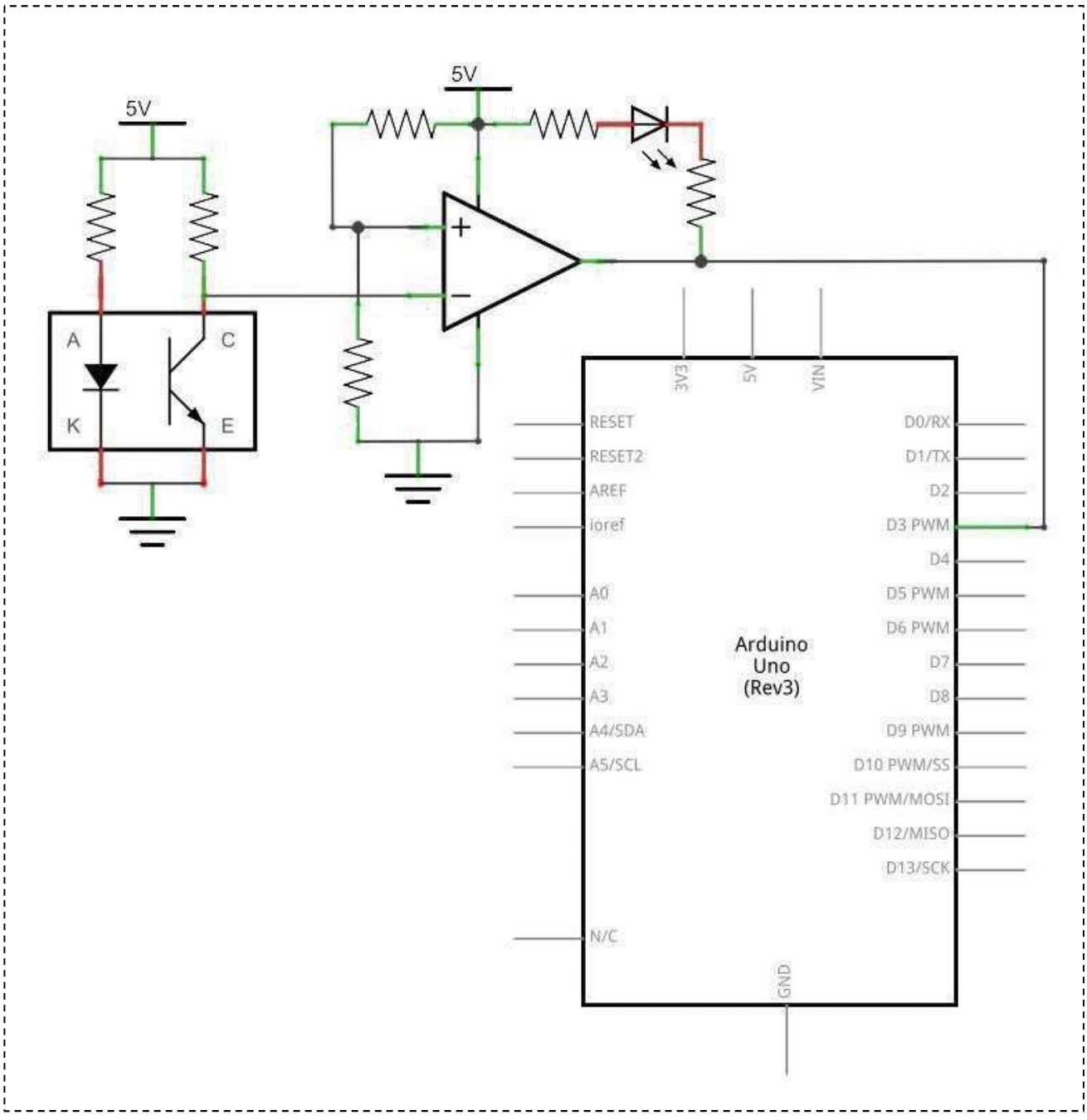
(1) x Tracking module

(x) x F-M wires

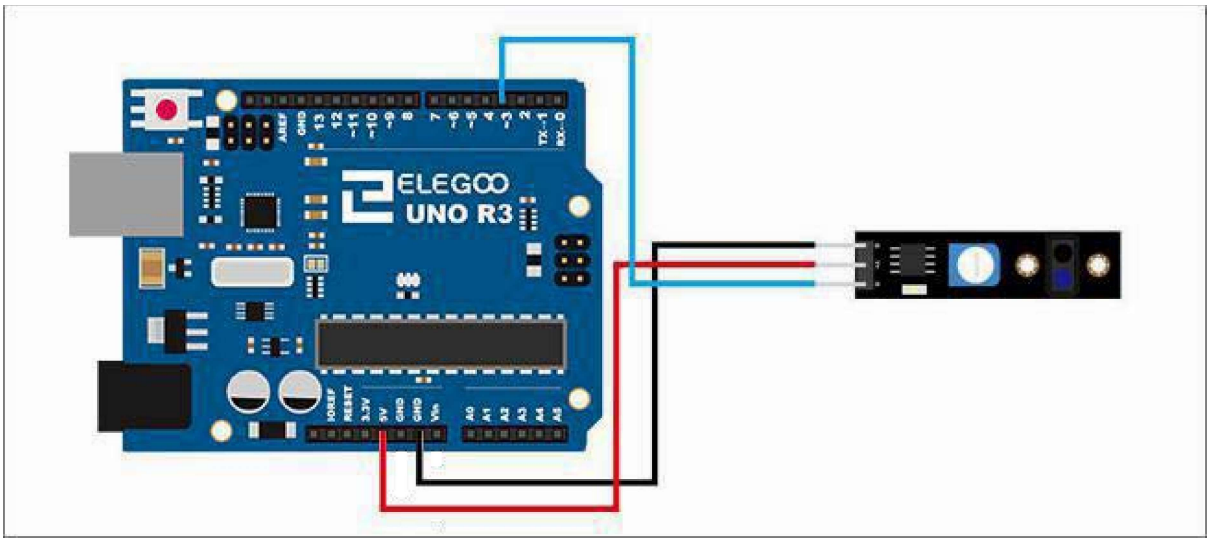
Component Introduction

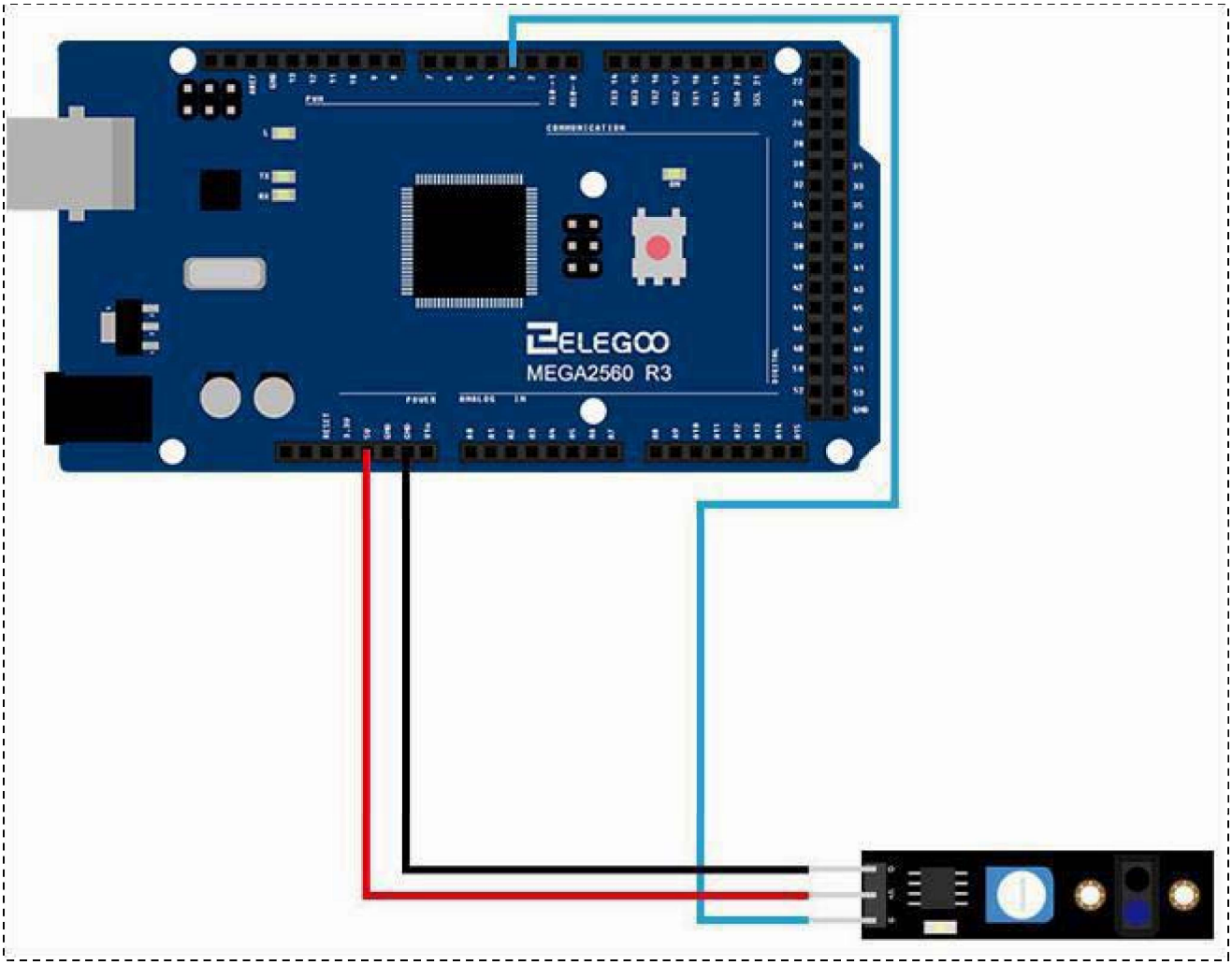
Connection

Schematic

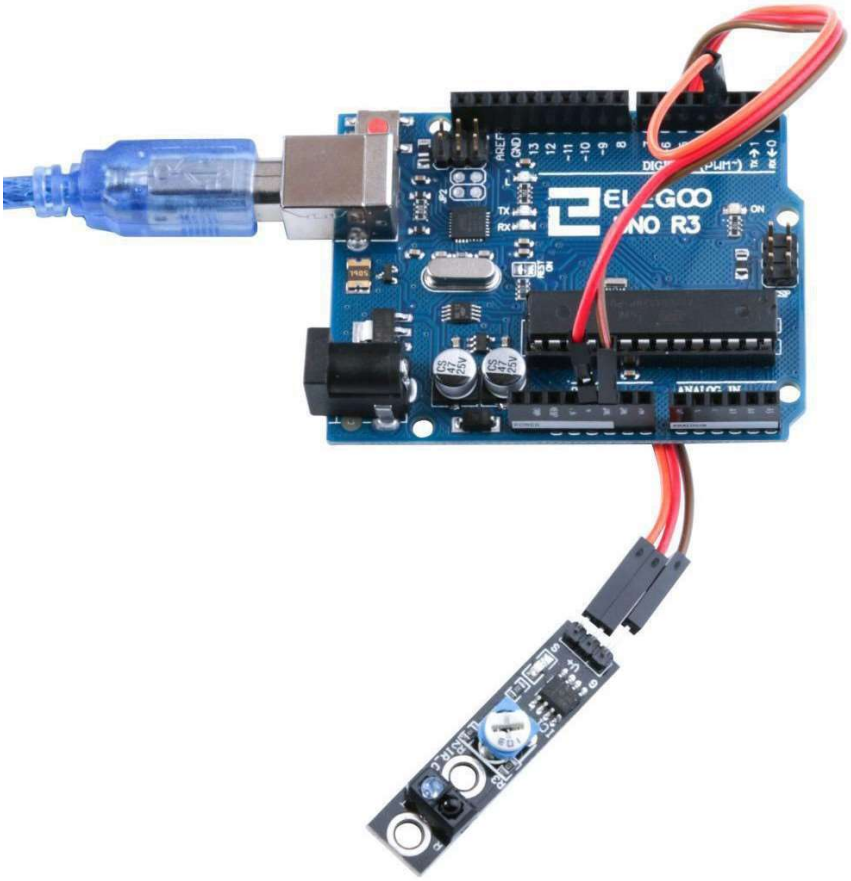


Wiring diagram





Result


ELEGOO
UNO R3