arduino-IO method

Experimental preparation

1. Arduino mainboard
2. 8-channel line patrol module
3. Several Dupont cables

Adruino board needs to download the IO communication source code provided in the document

Experimental Purpose

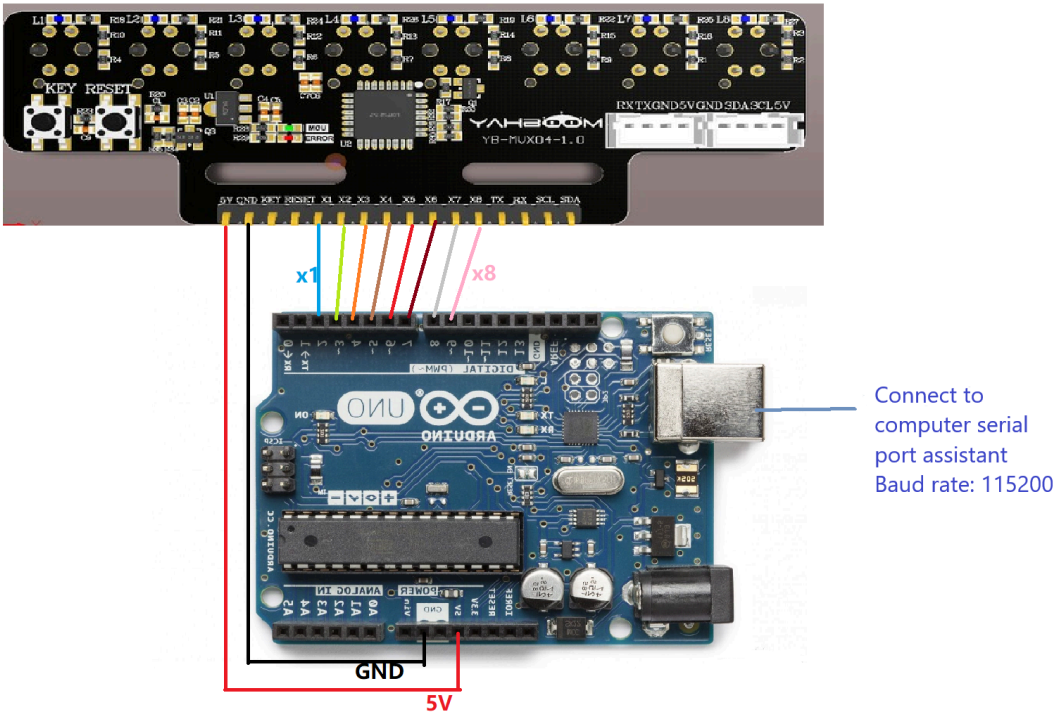
The content of this experiment is mainly to use the Arduino master to receive data from the 8-channel line patrol module through IO.

Experimental wiring

Adruino connected to the serial port assistant can be directly connected using the program download port

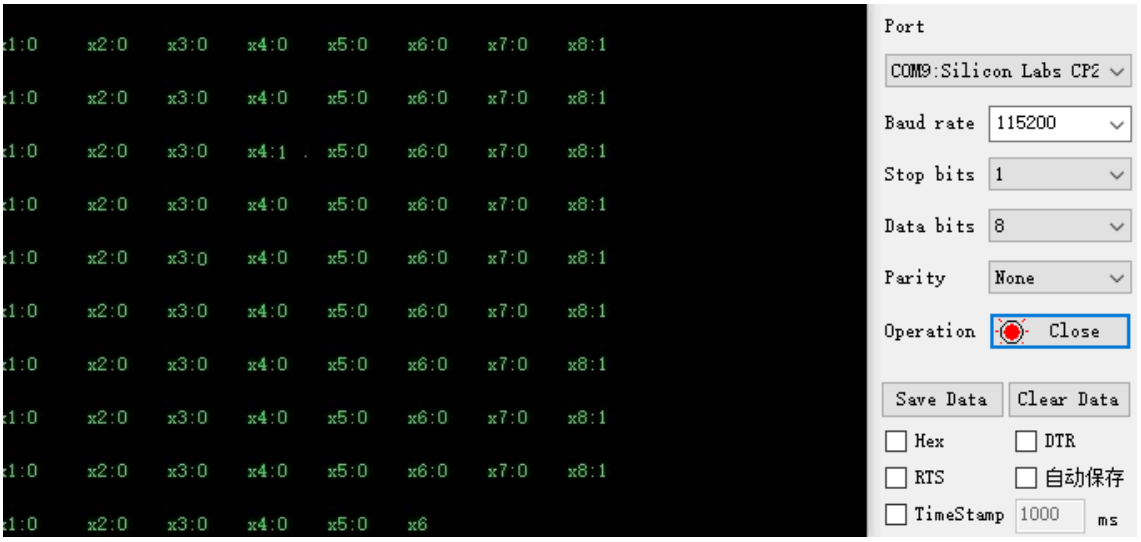
adruino	8-channel line patrol module
2	x1
3	x2
4	x3
5	x4
6	x5
7	x6
8	x7
9	x8
5V	5V
GND	GND

As shown in the figure:



Experimental steps and phenomena

1. After connecting the wires, open the serial port assistant and you can see the numerical data of the infrared module. Set the baud rate to 115200.
   As shown below:



Experimental source code

```
void loop() {

    x1 = digitalRead(2);
    x2 = digitalRead(3);
    x3 = digitalRead(4);
    x4 = digitalRead(5);

    x5 = digitalRead(6);
```

```
    x6 = digitalRead(7);
    x7 = digitalRead(8);
    x8 = digitalRead(9);

    sprintf(buf,"x1:%d x2:%d x3:%d x4:%d x5:%d x6:%d x7:%d
x8:%d",x1,x2,x3,x4,x5,x6,x7,x8);
    Serial.println(buf);

}
```

The source code reads the IO signal of each probe of the 8-channel line patrol and prints it out.