**14.Arduino UNO platform ------- bluetooth\_control**

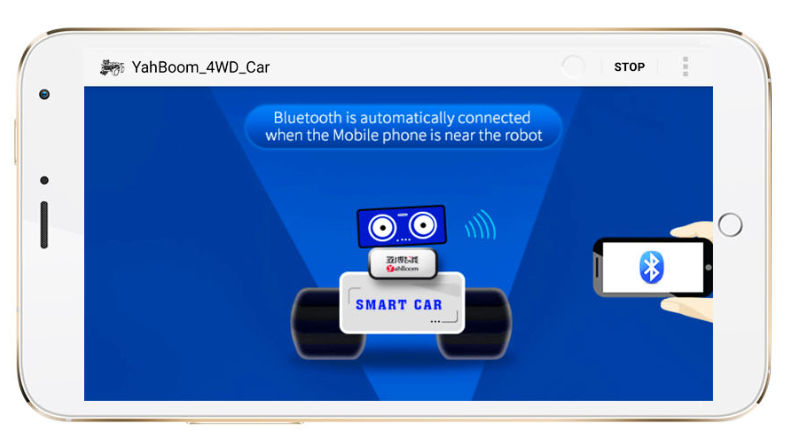
**1)Introduction of experimental**

In this experiment, we control car by Bluetooth App by Android Mobile phone. The mobile phone sends commands through the serial port to control the advance, backward, turn left, turn right , stop, any angle control of the servo, out fire, whistle, speed of robot car.

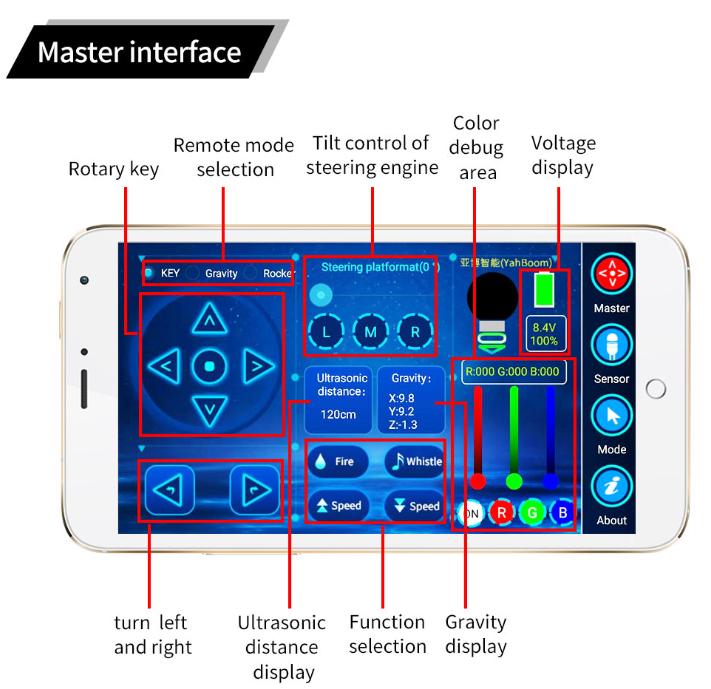
At the same time, the status of various sensors on the robot car and the distance measured by the ultrasonic wave are displayed in real time on the Bluetooth APP interface by the serial port.

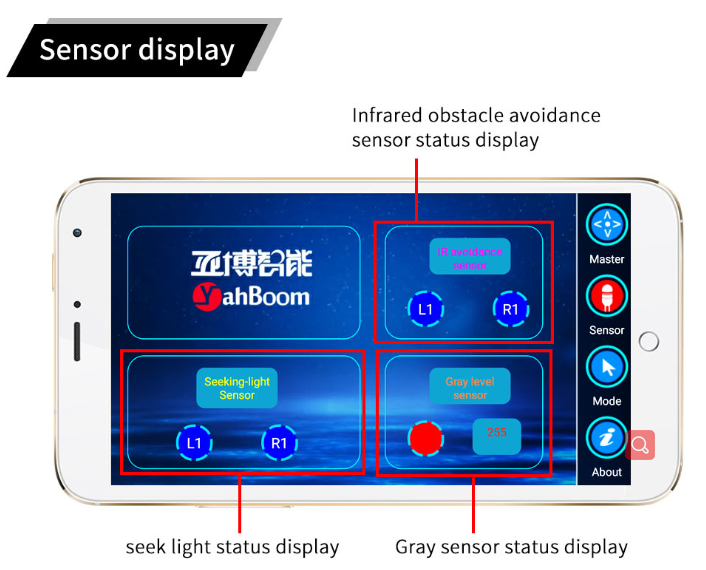
**2)Experimental Steps**

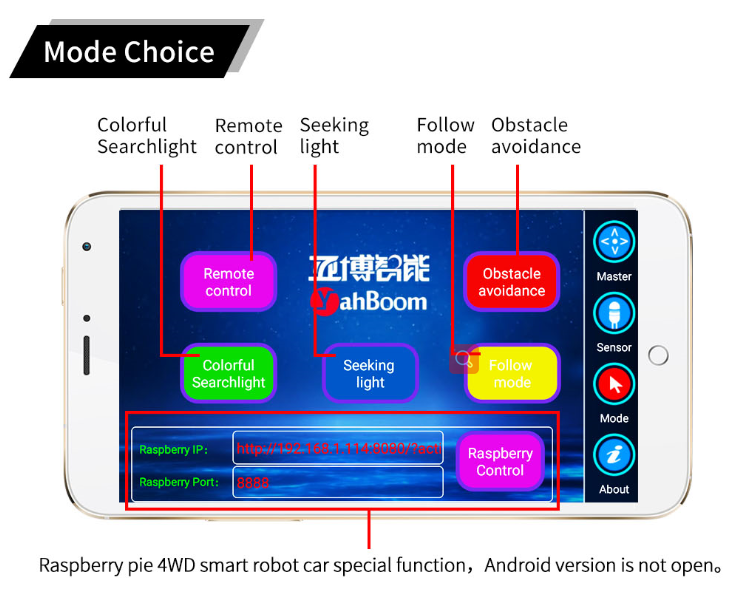
(1) You need to install the 【Yahboom 4WD Controller】 software on your Android mobile phone, turn on the power switch of the car(the red indicating light of the Bluetooth module is flashing). You should open the Bluetooth on your Android mobile phone and open the 【Yahboom 4WD Controller】 software. Bluetooth is automatically connected when the Mobile phone is near the robot.



1. After successful connection,enter the main control page

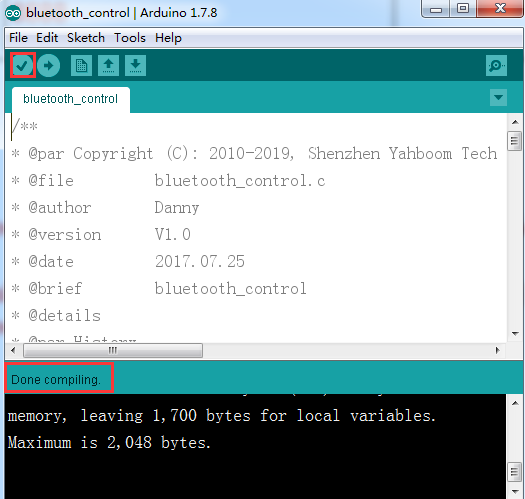






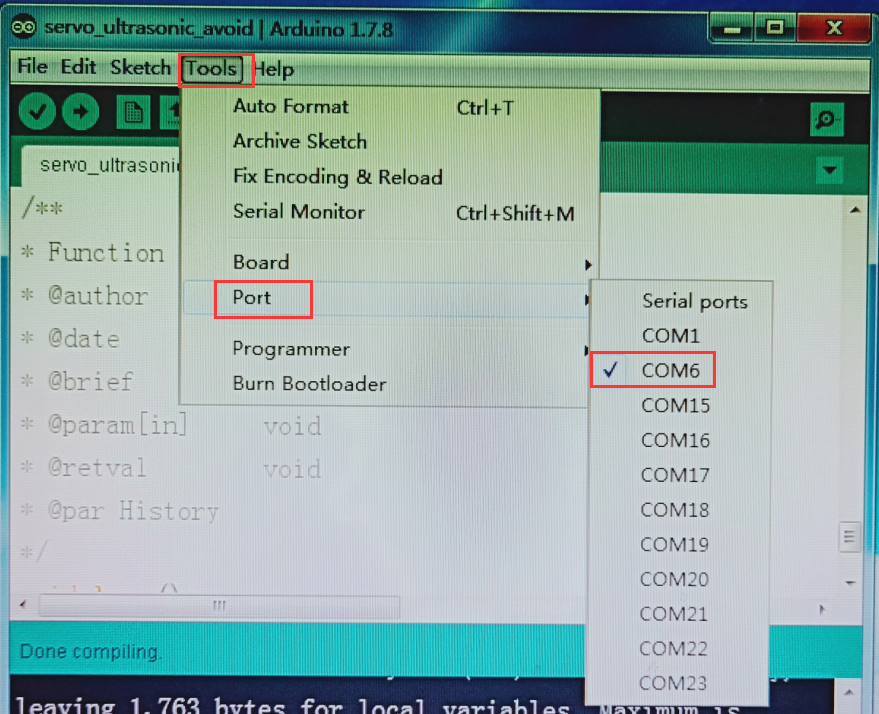
1. About the code

1. We need to open the code of this experiment:**bluetooth\_control.ino**, click“**√**” under the menu bar to compile the code, and wait for the word "**Done compiling** " in the lower right corner, as shown in the figure below.

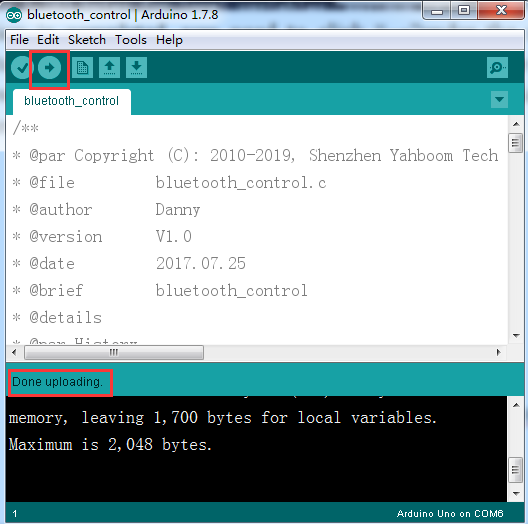


2.In the menu bar of Arduino IDE, we need to select 【Tools】---【Port】--- selecting the port that the serial number displayed by the device manager just now, as shown in the figure below.





3.After the selection is completed, you need to click “**→**”under the menu bar to upload the code to the Arduino UNO board. When the word “**Done uploading**” appears in the lower left corner, the code has been successfully uploaded to the Arduino UNO board, as shown in the figure below.



!!!Note:

1. The Bluetooth module needs to be properly inserted into the expansion board of the robot car.

2. 51/Arduino Download Switch on the expansion board must be set to [OFF].

3. The ultrasonic module must be inserted.