11. STM32 platform-------Bluetooth control car

1）Introduction of experimental

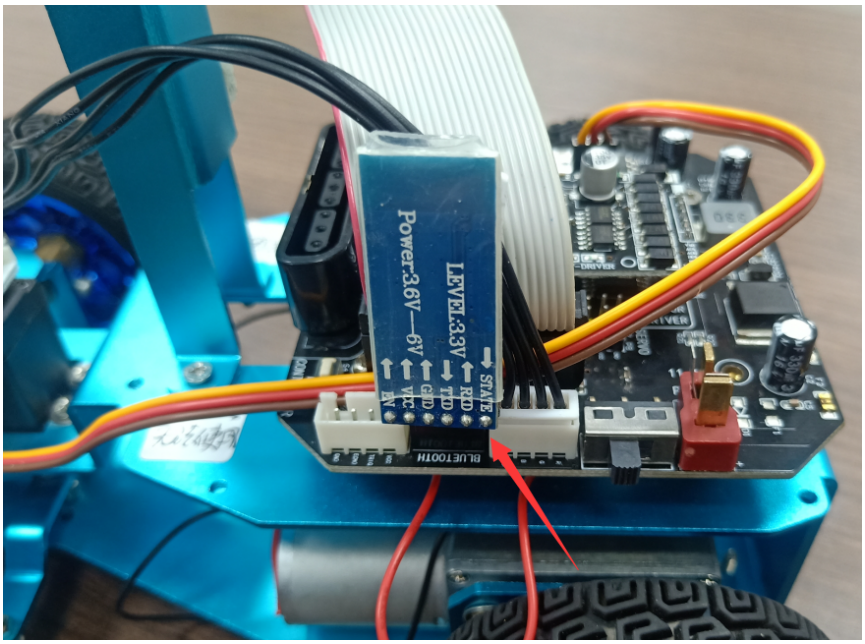
In this experiment, we control car by Bluetooth App by Android Mobile phone. The mobile phone sends commands through the serial port to control the advance, backward, turn left, turn right , stop, any angle control of the servo, out fire, whistle, speed of robot car.

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.

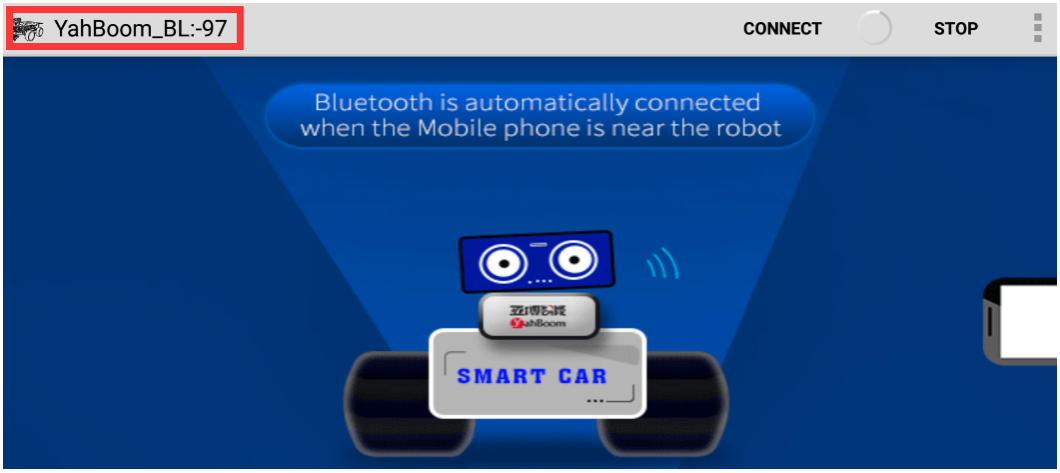
2）Experimental Steps

(1) You need to install the【Yahboom 4WD】APK on your Android mobile phone,

(2) The Bluetooth module needs to be properly inserted into the expansion board of the robot car. As shown in the figure below.

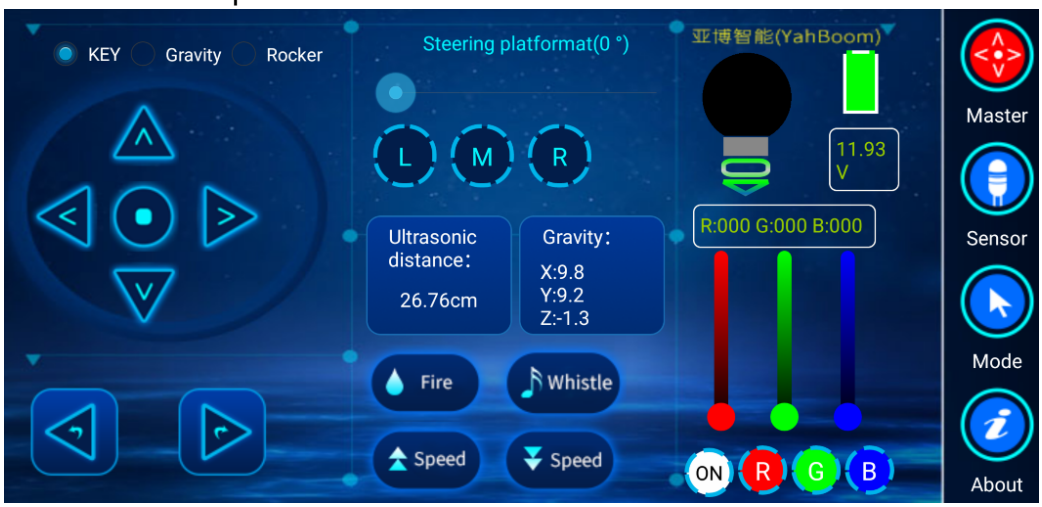


(3) Turn on the power switch of the car(the red indicating light of the Bluetooth module is flashing). You should open the Bluetooth on your mobile phone and open the 【Yahboom 4WD】APK. The mobile phone is close to the car, you will see the Bluetooth signal in the upper left corner of the Bluetooth APP interface, as shown below.



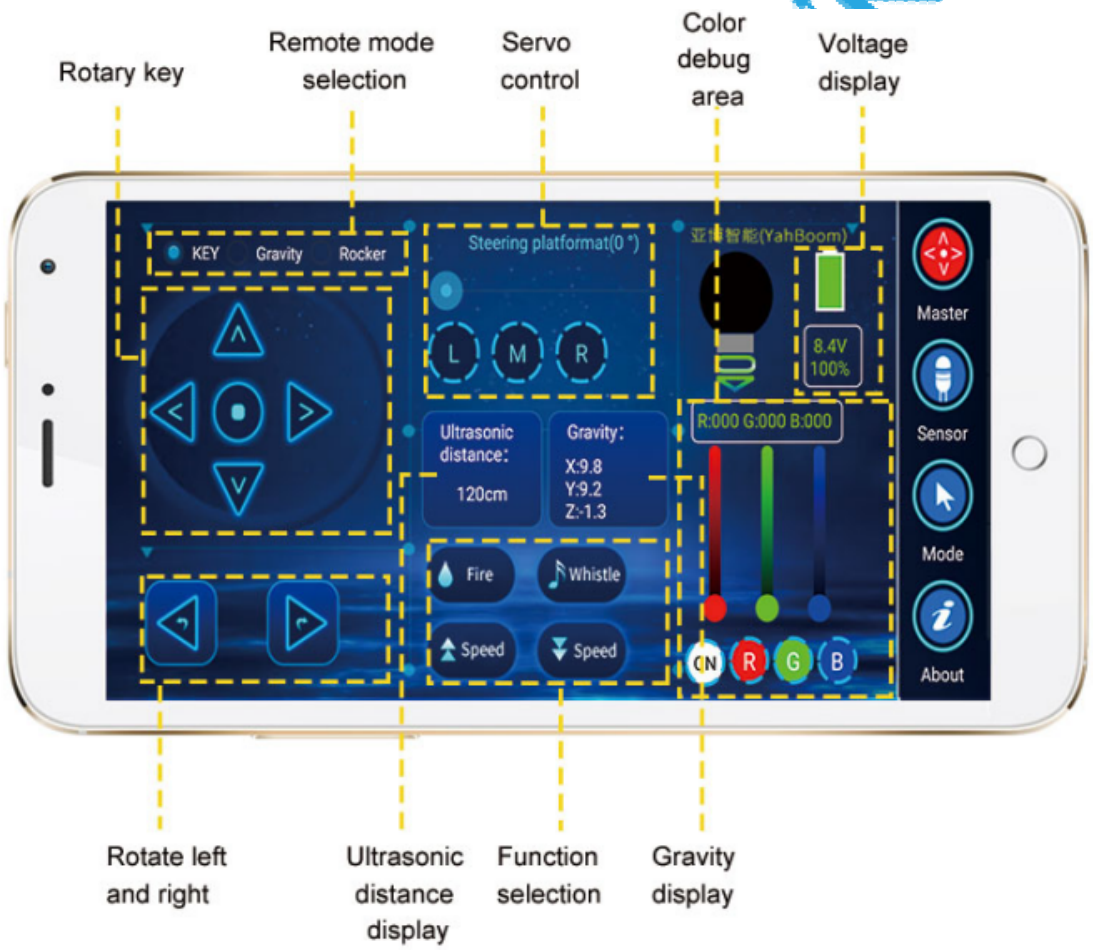
(4) Bluetooth is automatically connected when the Mobile phone is near the robot. If there is no automatic connection, you need to click 【CONNECT】 on the APP interface.

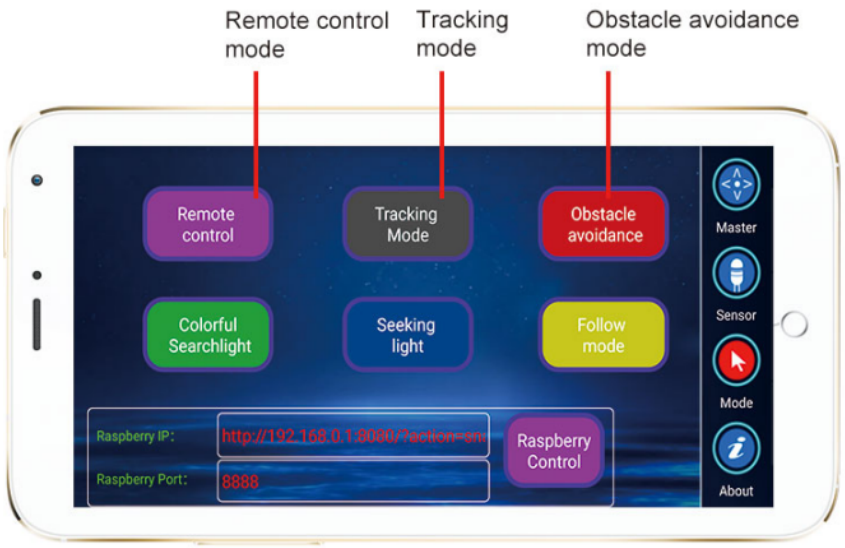
(5) Then, Bluetooth can be successfully connected, and the APP will enter the interface as shown below. At the same time, the red indicator of the Bluetooth module will be keep on.



(6) Wait for the ultrasonic data to change, it prove that Bluetooth starts to transmit data normally. You can start to control the car.

!Note: The ultrasonic module must be inserted.





This product only supports 3 modes, remote control mode, camera tracking mode, and obstacle avoidance mode.