

If you purchased our Raspberry Pi 4WD Car, you need to perform the following steps:

Step 1: After the 4WD Car is assembled, you will need to download the Raspberry Pi image we provided.

Please click “Download ZIP” on Raspberry pi 4WD Car repository to download the image.

Link: <https://www.yahboom.net/study/4wd-Pi>

Step 2: You need to burn the image to the Raspberry Pi SD card.

For the method of burning the image, please click the location as shown in the figure below, and read the contents carefully.

**Welcome to Raspberry pi 4WD repository**

**Raspberry pi 4WD**

- 1. Remote control operation
- 2. Development environment
- 3. Experimental tutorial**
  - 3.0 Preparation before class
  - 3.1 Color\_LED
  - 3.2 advance
  - 3.3 Car Run
  - 3.4 ServoControlColor
  - 3.5 KeyScanStart
  - 3.6 infrared\_avoid
  - 3.7 infrared\_follow
  - 3.8 light\_follow
  - 3.9 tracking

**3.0 Preparation before class**

If you need to download the Raspberry Pi image we have provided, please follow the steps below to find the image.

1. Please click “Download ZIP” to enter Google Drive.

**Raspberry pi 4WD**

- 1. Remote control operation
- 2. Development environment
- 3. Experimental tutorial

**Welcome to Ra:**

**Download**

- APP
- Code
- SCH
- Tools**

**You can click here to get Tools folder**

**2.Raspberry PI system image download address.**

Raspberry Pi supports a variety of system types, such as ARM, Debian Squeeze, Firefox OS, Gentoo Linux, Google C, Fedora Remix, Slackware ARM, QtonPi, Slackware, ARM, FreeBSD, NetBSD, Android 4.0(Ice Cream Sandwich)

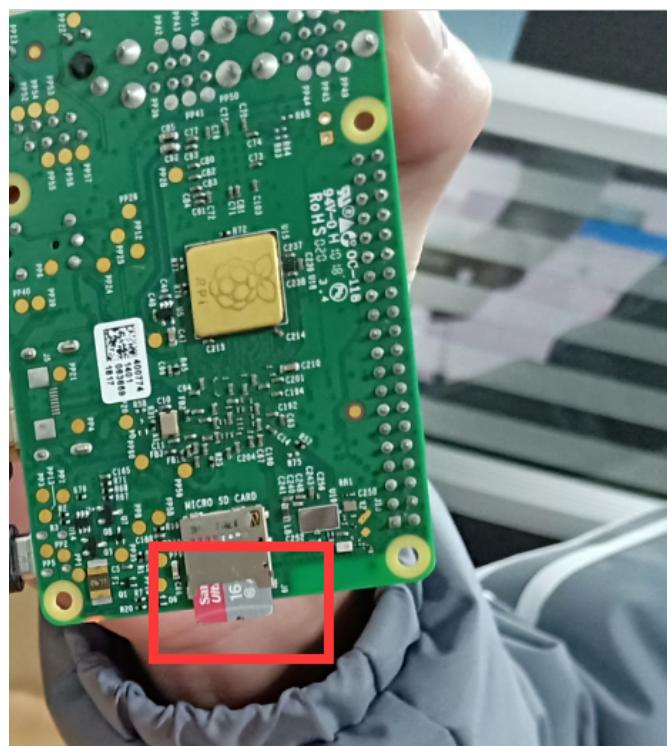
In the development of the Raspberry pi 4WD robot car, v operating system.

**Download address:**

<http://www.raspberrypi.org/downloads>

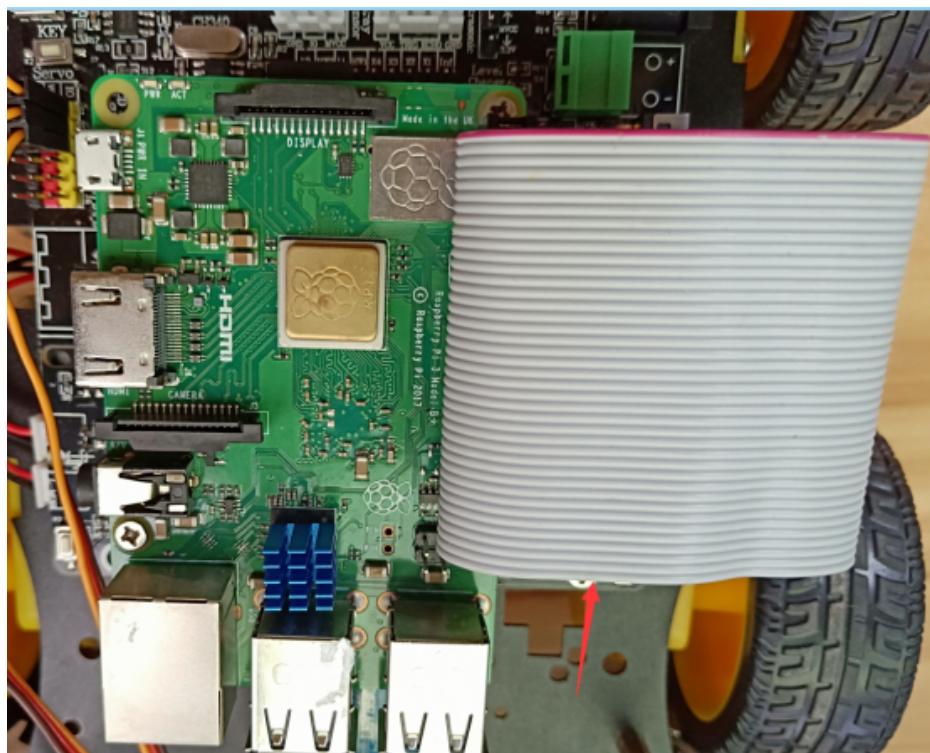
BLOG DOWNLOADS COMMUNITY HELP FORUMS EDUCATION

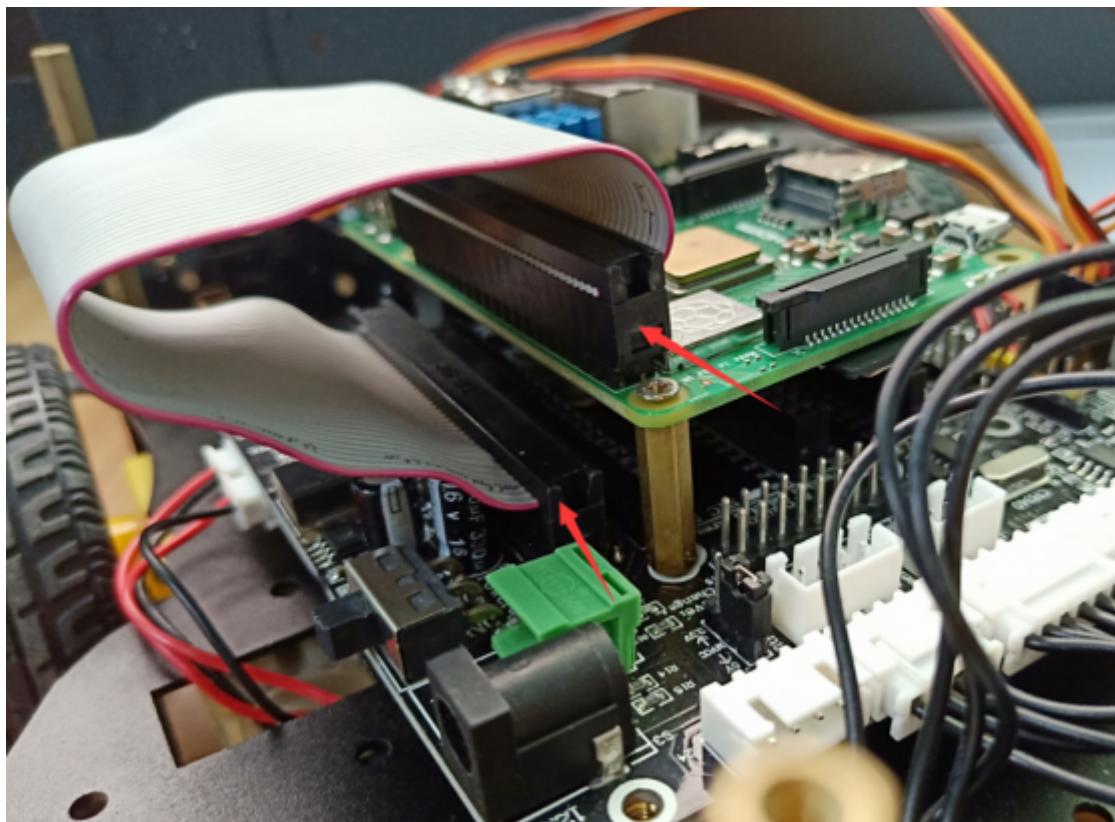
Step 3: After the burning is completed, you need to insert the SD card into the card slot behind the Raspberry Pi, as shown in the figure below.



Step 4: You need to connect the Raspberry Pi board to the 4WD expansion board by the 40PIN cable, as shown in the figure below.

(Please ensure the correctness of the connection)





Step 5: Android Please use the browser to scan the QR code to download and install APK; Apple please use camera to scan the QR code to enter the APP Store to download and install or search for "YahboomRobot" in the APP Store. As shown in figure below.

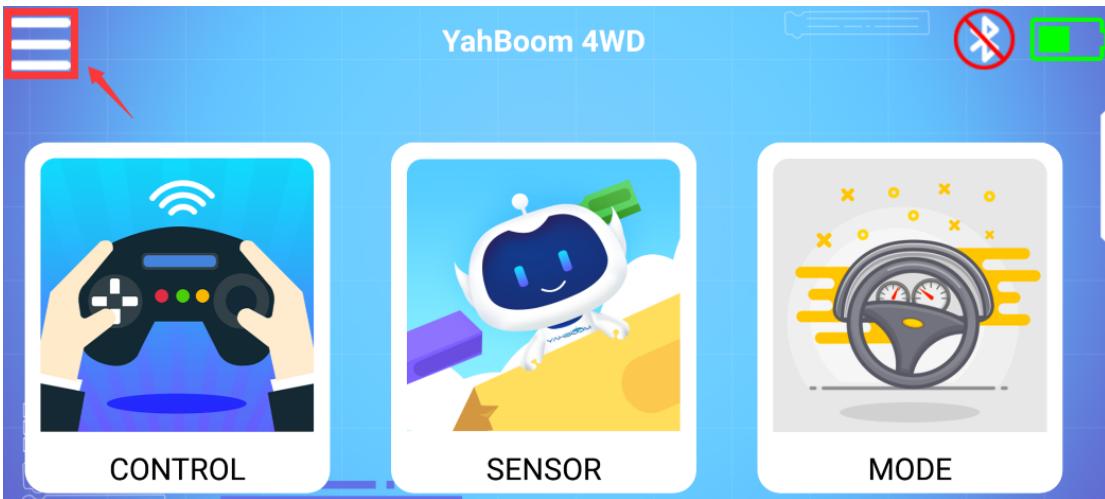
!!Note:Because the software is relatively large, the download takes a certain amount of time, please be patient.



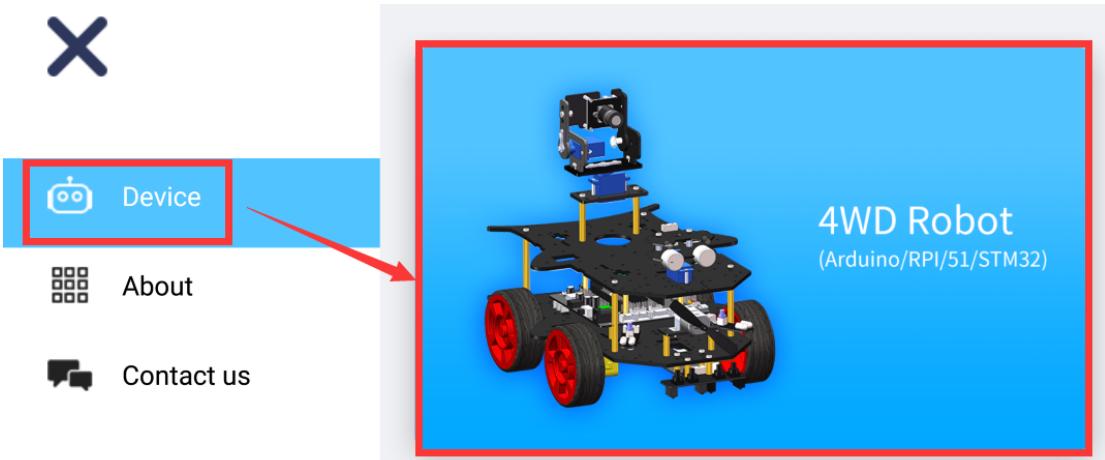
**Note:During installation, If you find any prompts on your phone (for example: location permissions of your phone). You must select "Yes".**

Step 6:After the APP is installed, open the Bluetooth of the your phone, open the power switch of the Tank, the red indicator of the Bluetooth module keeps flashing.

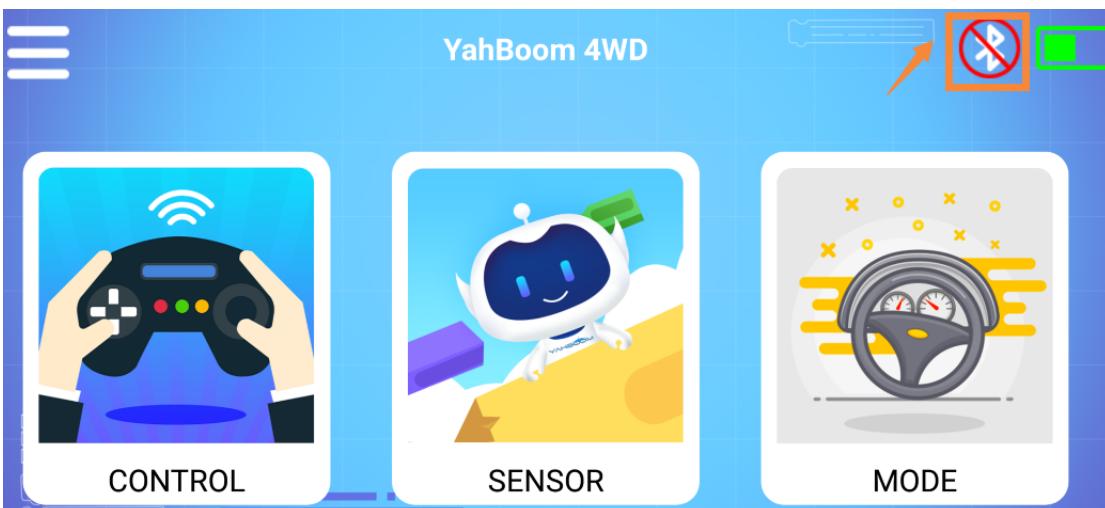
Step7: Then, open the **YahboomRobot** APK. You will see the APK interface and we need to click on the top left corner of the APK to select the device as shown below.



Step 8: Select 【G1 Tank】 to enter the remote control interface, as shown below:



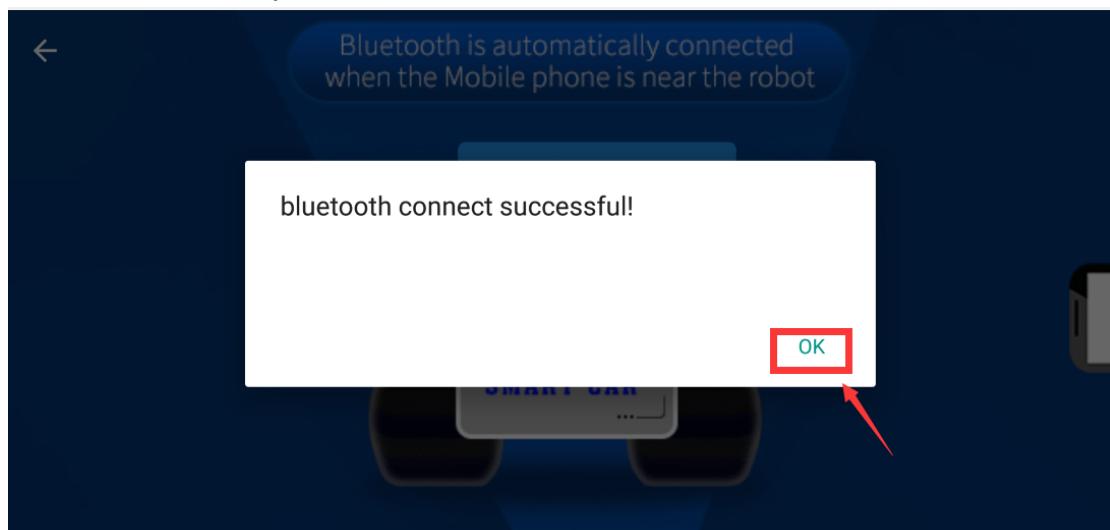
Step 9: You will see this interface as shown below. Click on the top right corner of the APK to connect bluetooth.



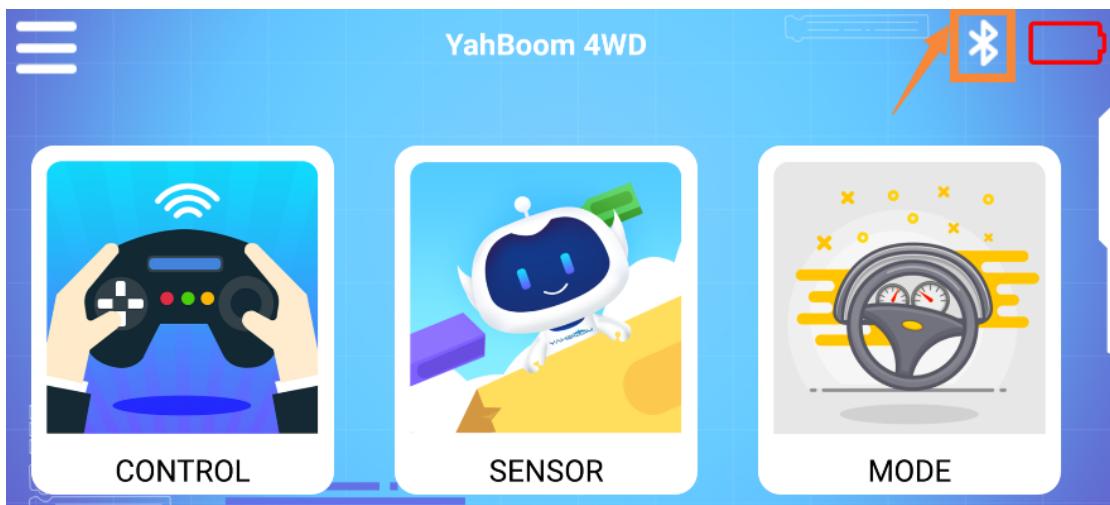
Step 10: You can see bluetooth signal. Wait patiently, the phone will automatically connect to the Bluetooth near the Car.



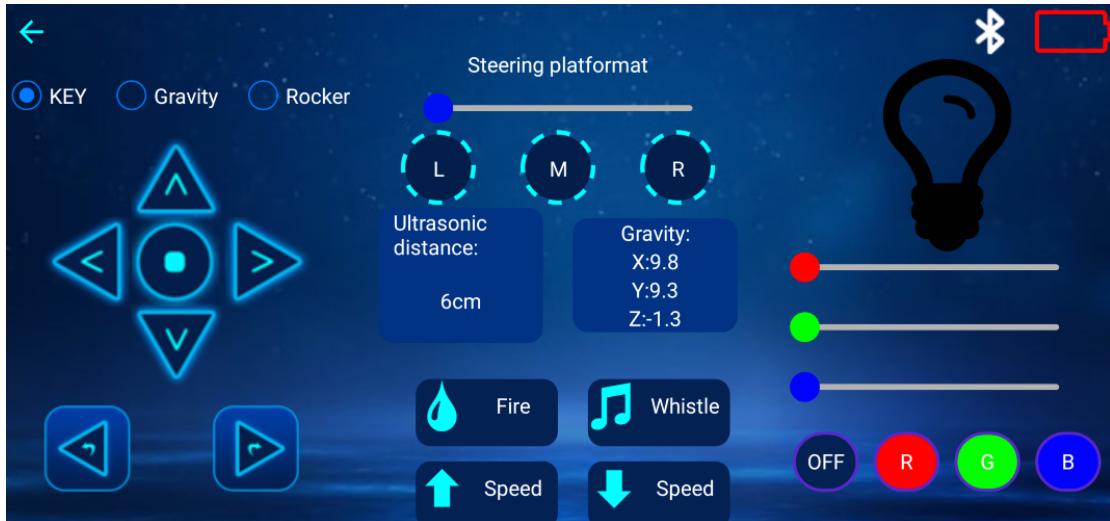
Step 11: Bluetooth can be successfully connected, and the APP will enter the interface as shown below. At the same time, the red indicator of the Bluetooth module will be keep on. You need to click "OK".



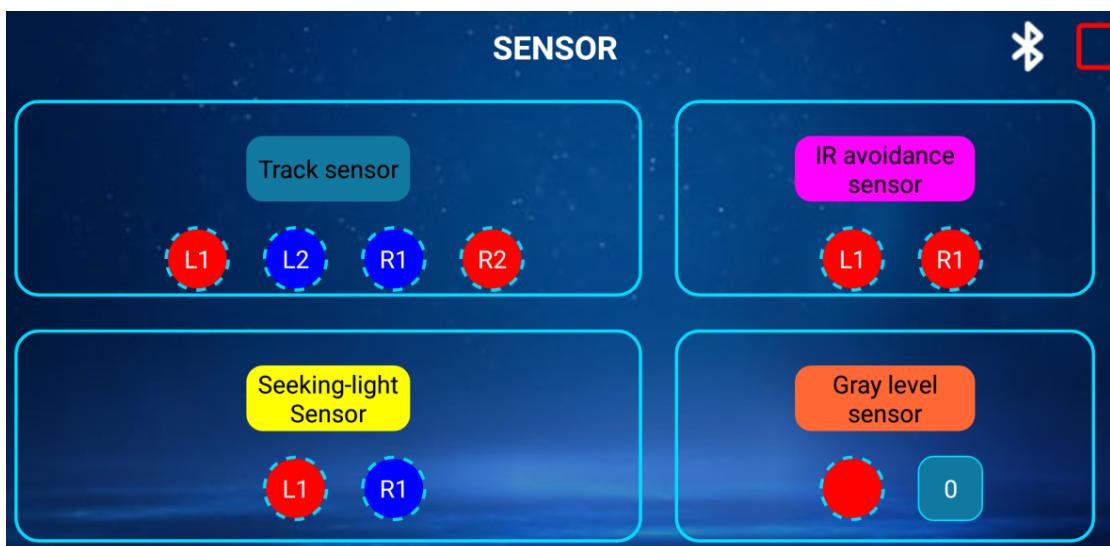
You will enter the interface as shown below.



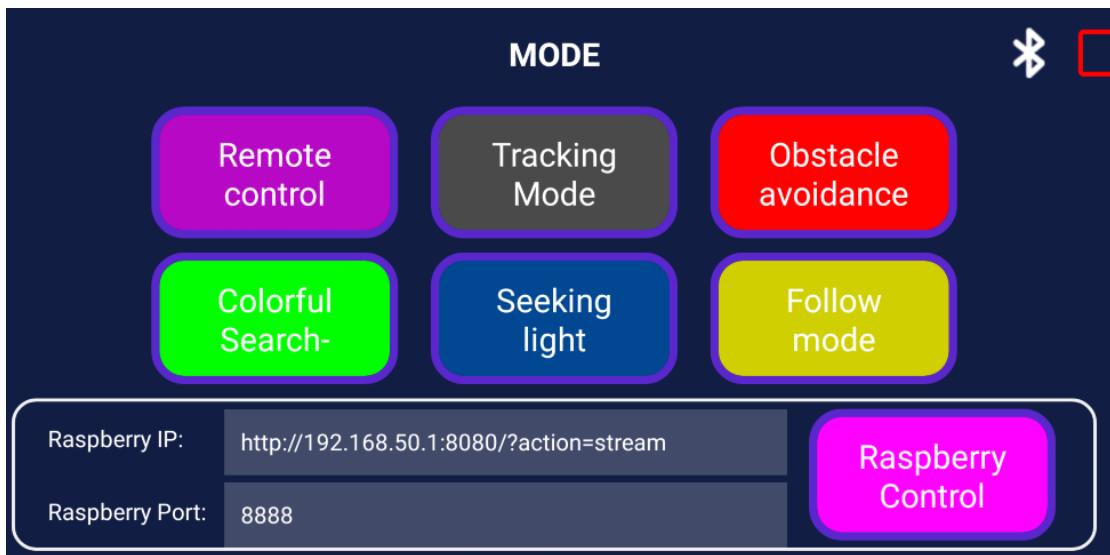
Step 12: Click “CONTROL” to enter interface as shown below. Wait for the ultrasonic data to change, it prove that Bluetooth starts to transmit data normally. You can start to control the car.



Step 13: Click “SENSOR” to enter interface as shown below.



Step 14: Click “ MODE” to enter interface as shown below.



You need to pay attention to the points, otherwise the Bluetooth remote control function will have problems.

**Note:**

(1) **The robot Tank needs to have enough voltage to work properly. Please refer to the following figure for the charging method and battery usage:**

Raspberry pi 4WD

- 1. Remote control operation
- 2. Development environment
- 3. Experimental tutorial
- 4. Battery and charging
  - 4.1 Battery of 4WD robot car u...

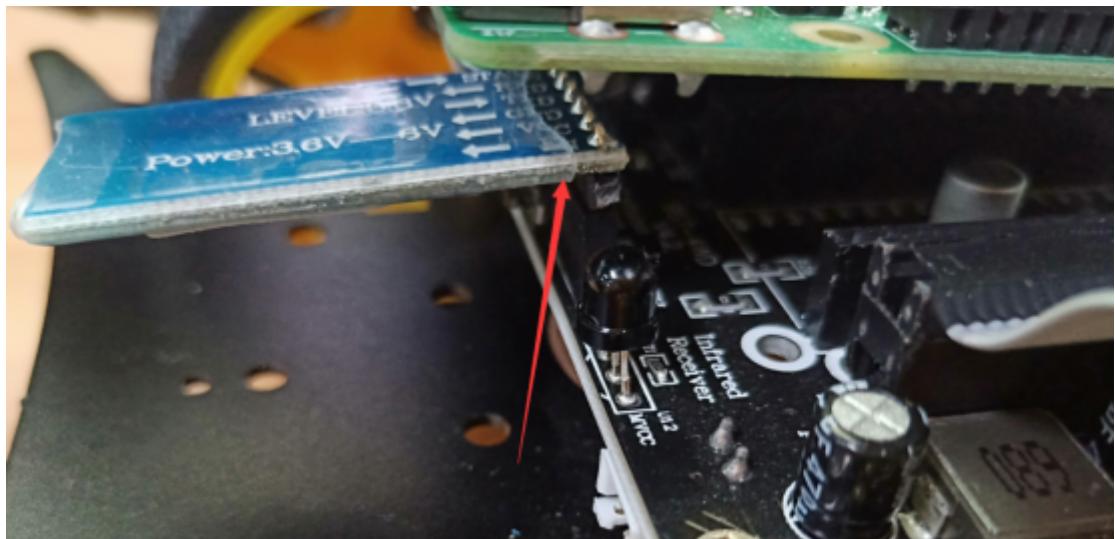
Welcome to Raspberry pi 4WD repos

**4.1 Battery of 4WD robot car use precautions**

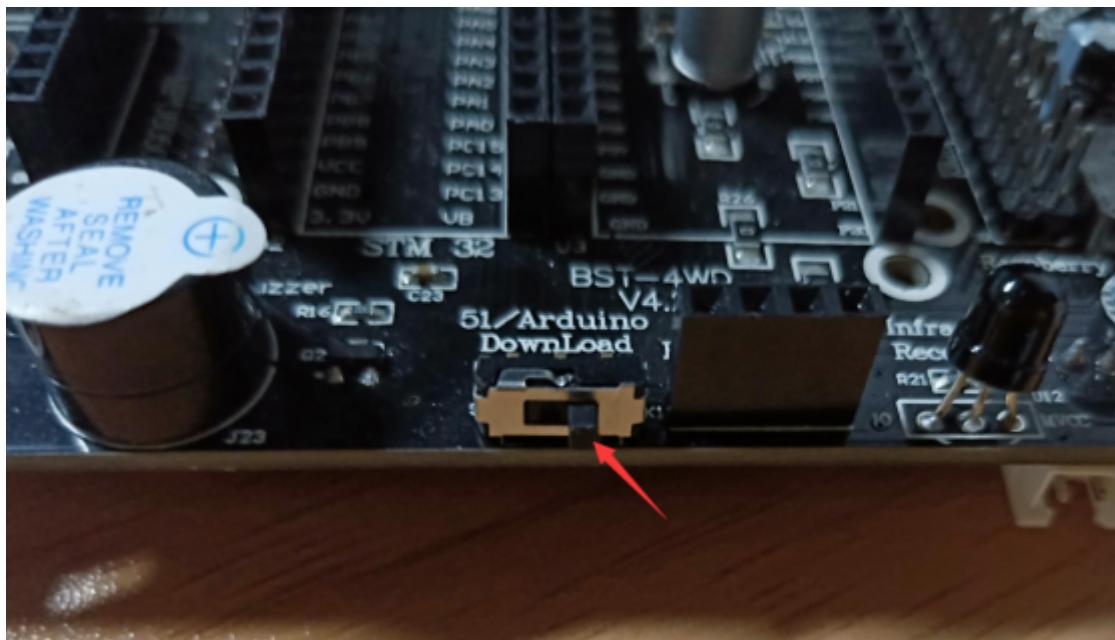
**Battery of 4WD robot car use precautions:**

1. Please use the charger we provide to charge the car.
2. The car cannot be used while charging.
3. The voltage needs to be charged in time at around 9V. When the ch...

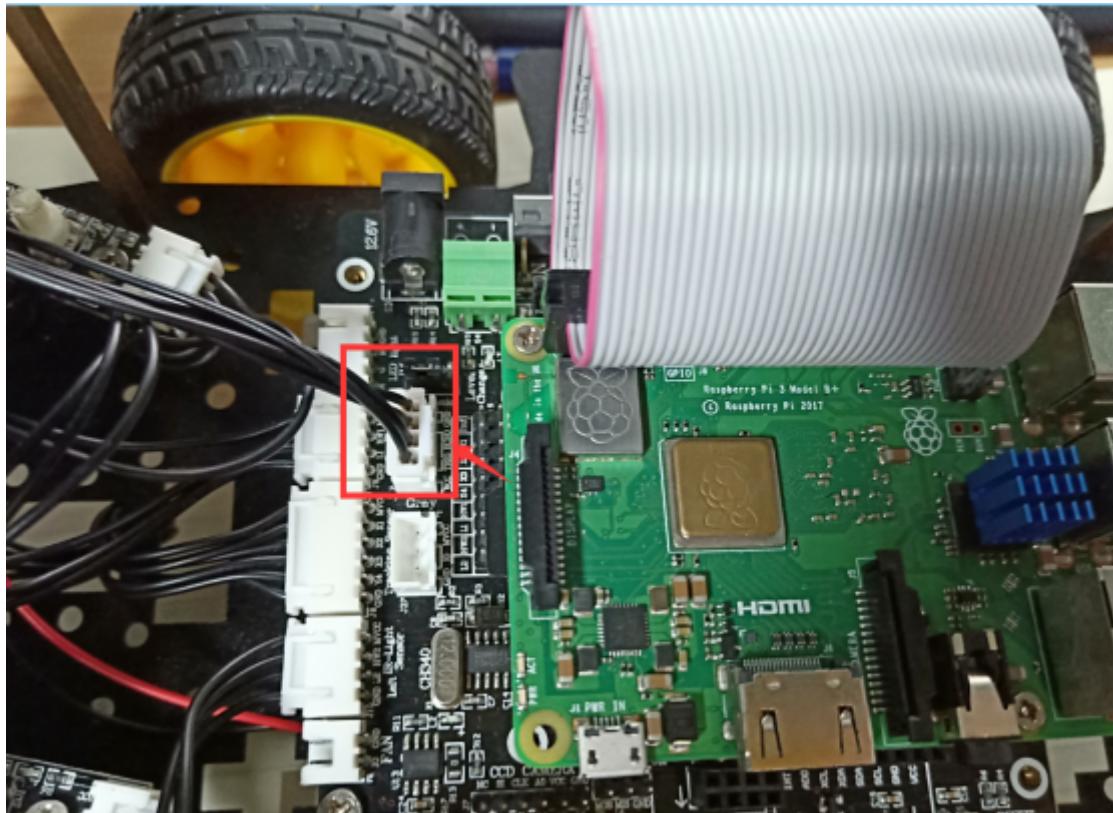
(2) **The Bluetooth module needs to be properly inserted into the expansion board of the Tank. As shown in the figure below.**



(3) 51/Arduino Download Switch on the expansion board must be set to [OFF]. As shown in the figure below.



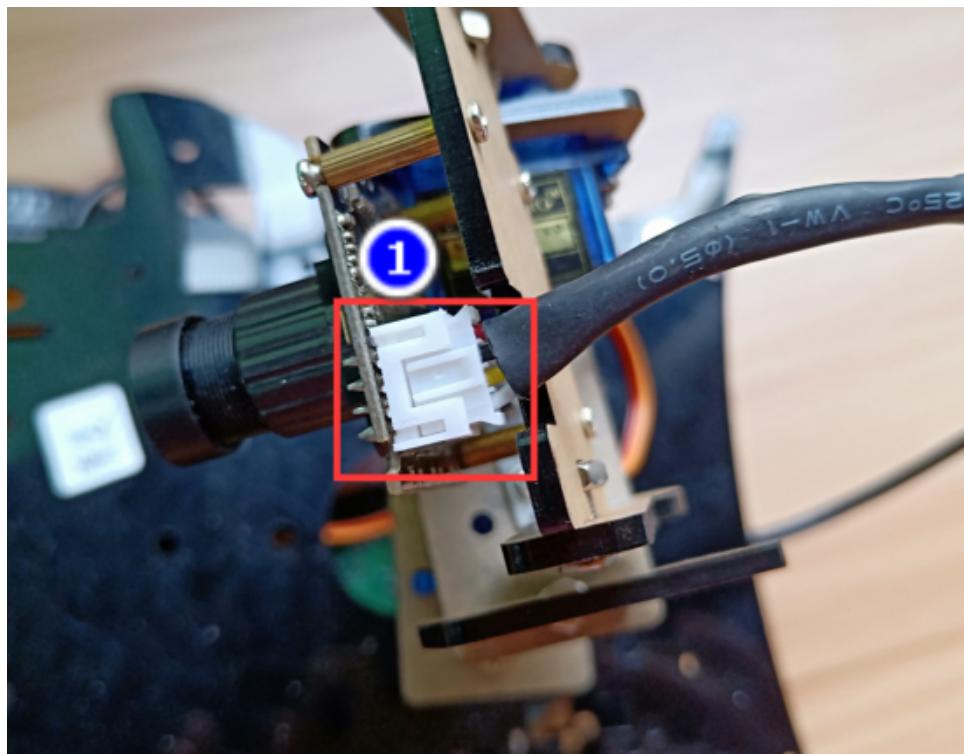
(4) The ultrasonic module must be inserted. As shown in the figure below.

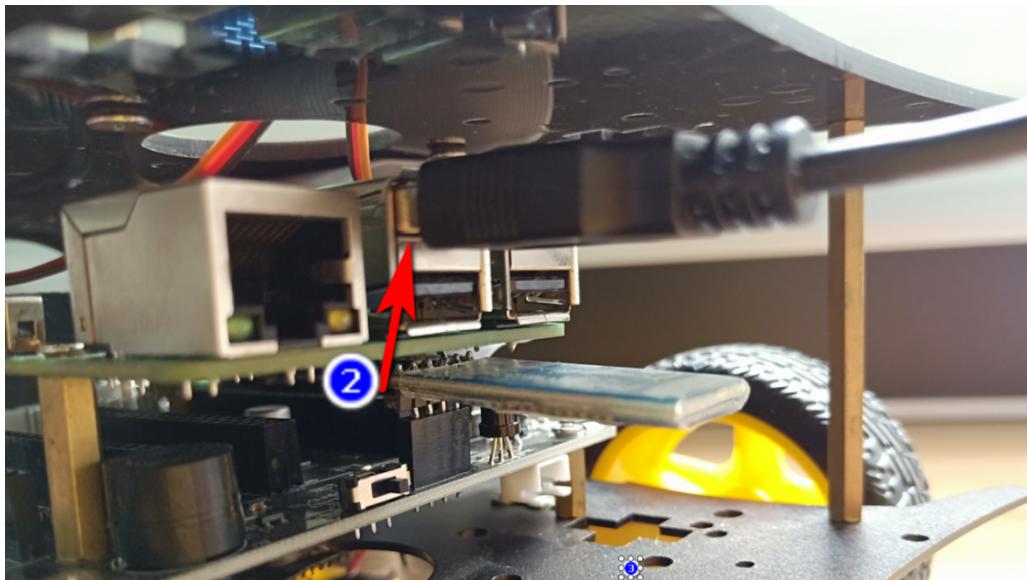


Please read our manual for introductions of Bluetooth remote control interface.

#### About camera:

If you want to use camera, you need to connect the camera and the Raspberry Pi motherboard correctly. The camera connection is as follows:





Your phone must connect WiFi of the Tank. As shown below.

**Name: Yahboom\_Tank**

**Password: 12345678**



This WiFi is only used to transmit video and cannot be accessed online.

When you connect to WiFi, Click “**RaspberryControl**” you can see the picture taken by the camera on your mobile phone.

**IP address for 4B image:**



**IP address for 3B+ image:**



Video as shown below.

