

If you purchased our Raspberry Pi G1 Tank, you need to perform the following steps:

Step 1: After the G1 Tank is assembled, you will need to download the Raspberry Pi image we provided.

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

Welcome to Raspberry pi G1 Tank repository

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.

Please click "Download ZIP" to enter Google Drive.

Raspberry pi G1 Tank

- 1.Remote control operation
- 2.Development environment
- 3.Experimental tutorial**
 - 3.0 Preparation before class
 - 3.1 Color_LED
 - 3.2 advance
 - 3.3 CarRun
 - 3.4 ServoControlColor
 - 3.5 KeyScanStart
 - 3.6 tracking
 - 3.7 avoid_ultrasonic
 - 3.8 servo_avoid_ultrasonic
 - 3.9 bluetooth_control

[Download](#) [APP](#)

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.

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2.1 Download and write the system image

The following steps will teach you how to download and write the Raspberry Pi system image

1.Start up mode of Raspberry Pi and system image

Raspberry Pi board without on-board FLASH. It supports SD card boot, to download the corresponding system image, and burn it on the SD. When Raspberry Pi is connected to the power supply, the system can be start

Raspberry pi G1 Tank

- 1.Remote control operation
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 - 2.3 Method of enter Raspberry...
 - 2.4 SSH remote transfer file
 - 2.5 linux commands and vim e...
 - 2.6 Raspberry Pi system backup
 - 2.7 wiringPi library

- 3.Experimental tutorial ▾
- 4.Battery and charging ▾

Download

APP

Code

SCH

Tools

[Download ZIP](#)

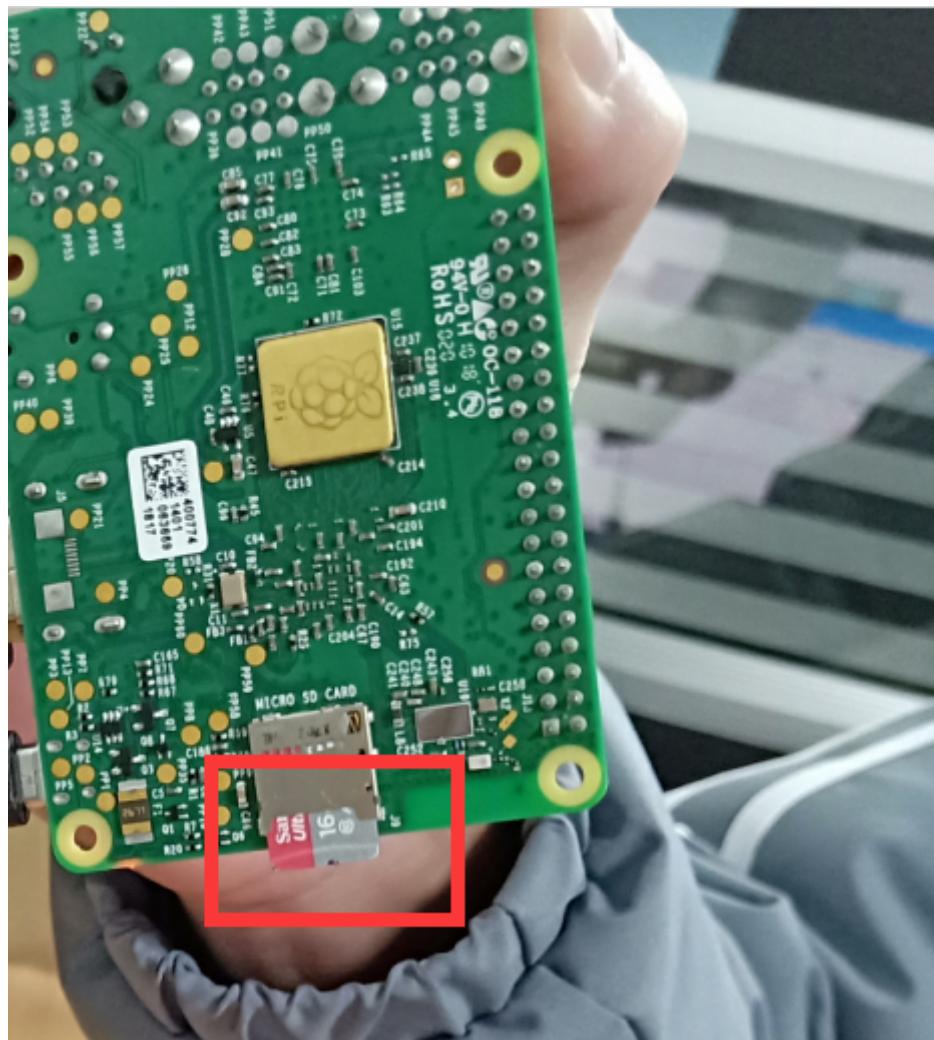
You can click here to get Tools folder

[Download address:](#)

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

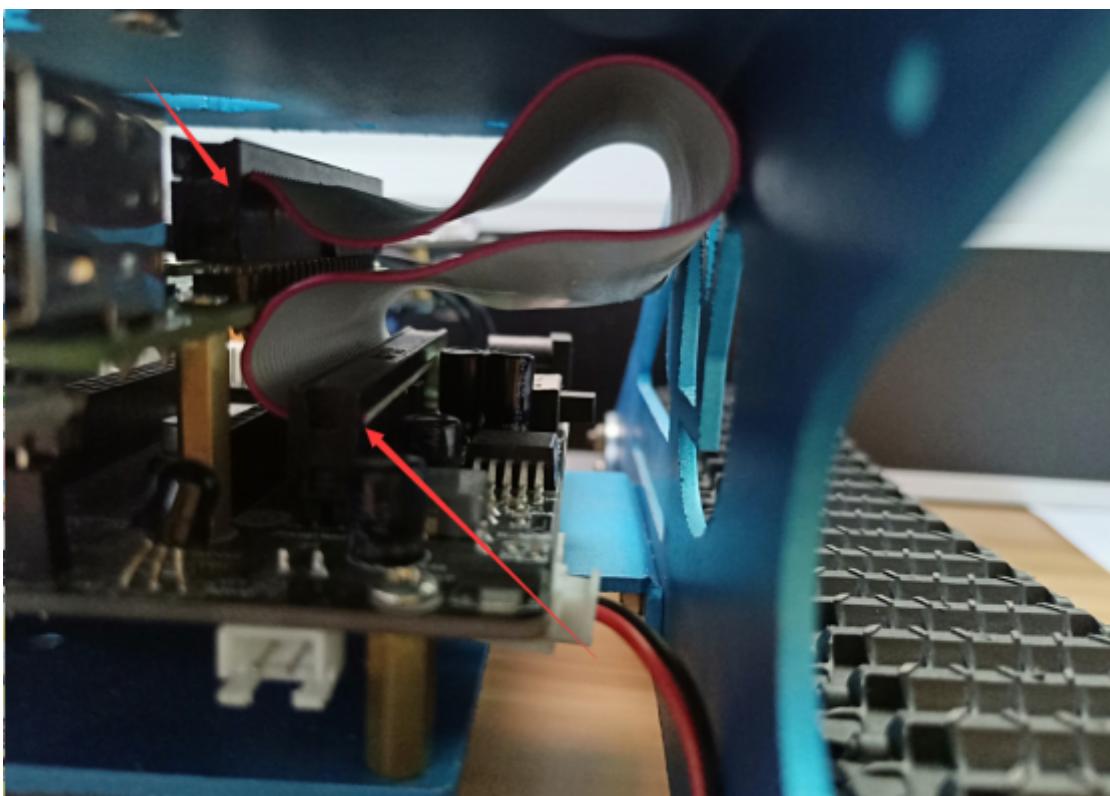
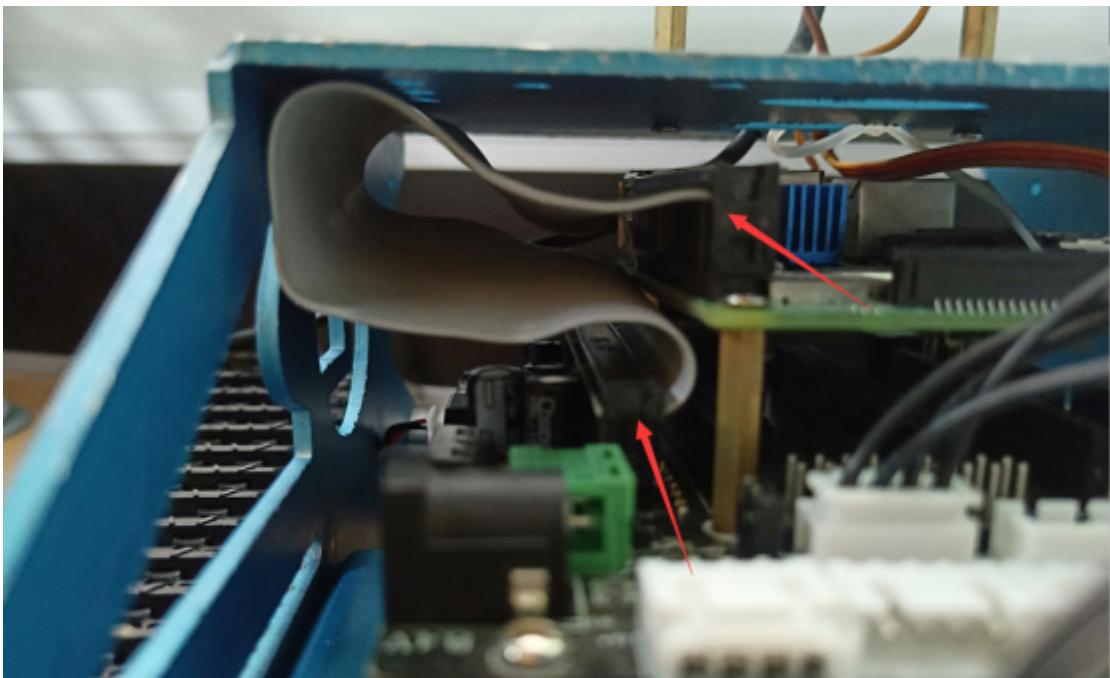
BLOG DOWNLOADS COMMUNITY HELP FORUM EDUCATION

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: Please use the Android phone to download and install the Bluetooth APK we have provided. The download location is as shown below or you can enter the google drive link given in our manual to download.

4. Battery and charging ^

4.1 Battery of G1 robot car use ...

Download 

 APP 

Code 

SCH 

Tools 

[Download ZIP](#)

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, and open the Bluetooth APP. 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, while the red indicator of the Bluetooth module keeps flashing.



Step 7: The phone will automatically connect to the Bluetooth near the Tank. If there is no automatic connection, you need to click 【CONNECT】 on the APP interface.

9.Raspi

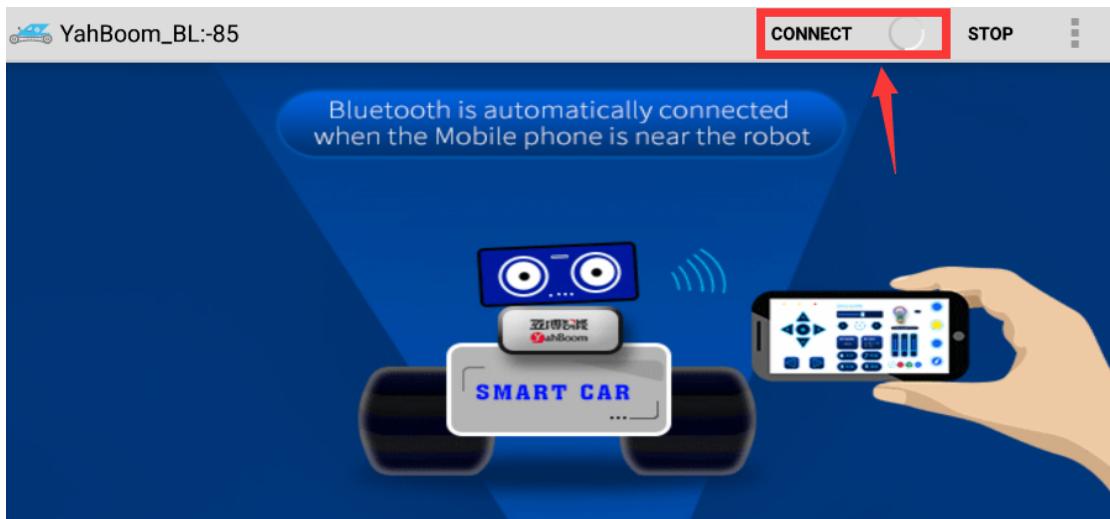
1)Introduction of exper

In this experiment, we control the robot car by the mobile phone. The mobile phone sends commands through the Bluetooth module. The robot car receives the command and moves forward, turn right , stop, any angle clockwise, any angle counter-clockwise.

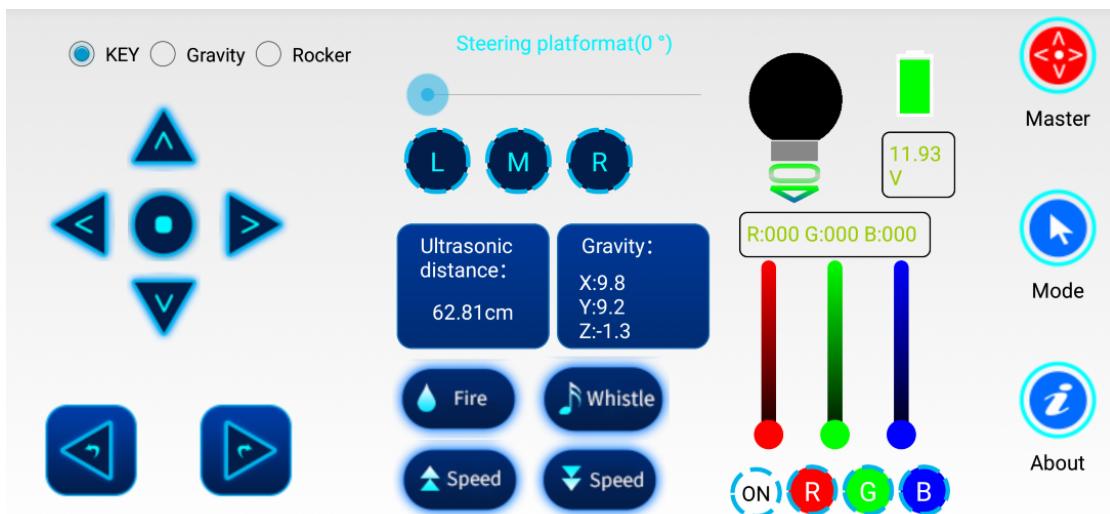
At the same time, the status of the robot car can be monitored by the ultrasonic wave are detected by the ultrasonic sensor and sent to the mobile phone port.

2)Experimental Steps

(1) You need to install the APP on your Android mobile phone, the APP can be found in the download section.



Step 8: 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.



Step 9: Wait for the ultrasonic data to change, it prove that Bluetooth starts to transmit data normally. You can start to control the Tank.

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:**

Arduino G1 Tank

1. Remote control operation

▼

2. Arduino IDE programming

▼

3. Graphical programming

▼

4. Battery and charging

▼

4.1 Battery of G1 robot car use ...

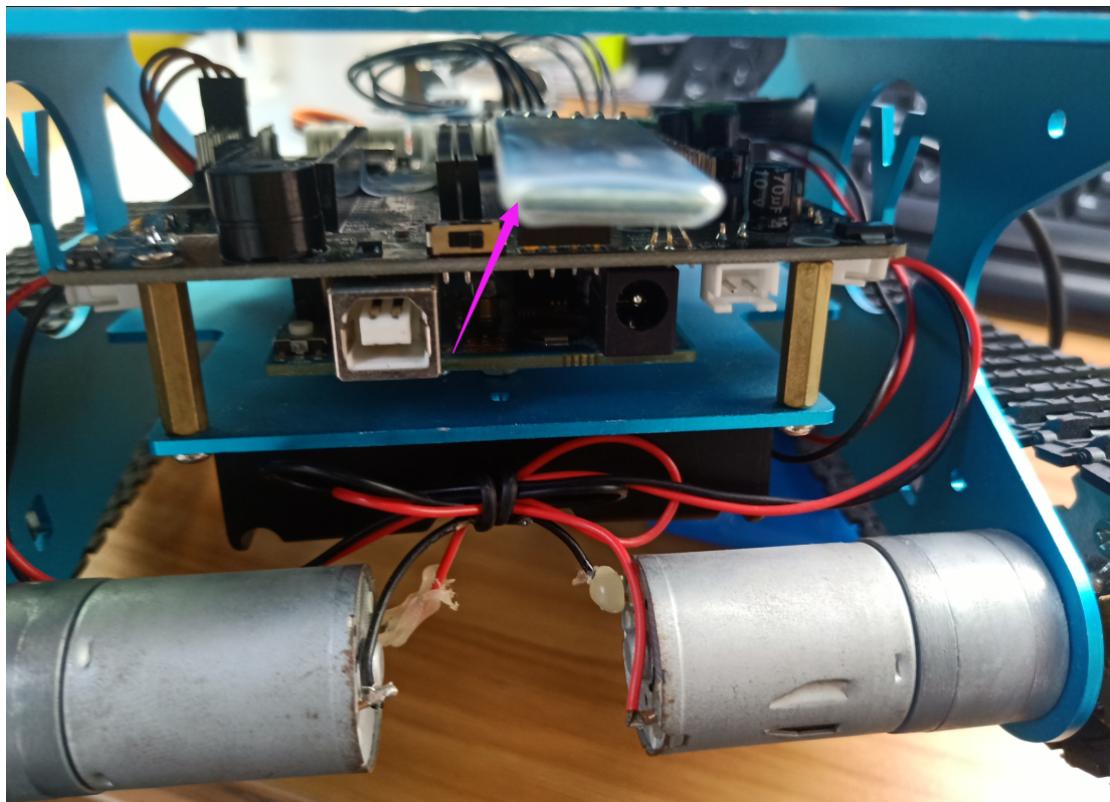
Welcome to Arduino G1 Tank

4.1 Battery of G1 robot car use precautions

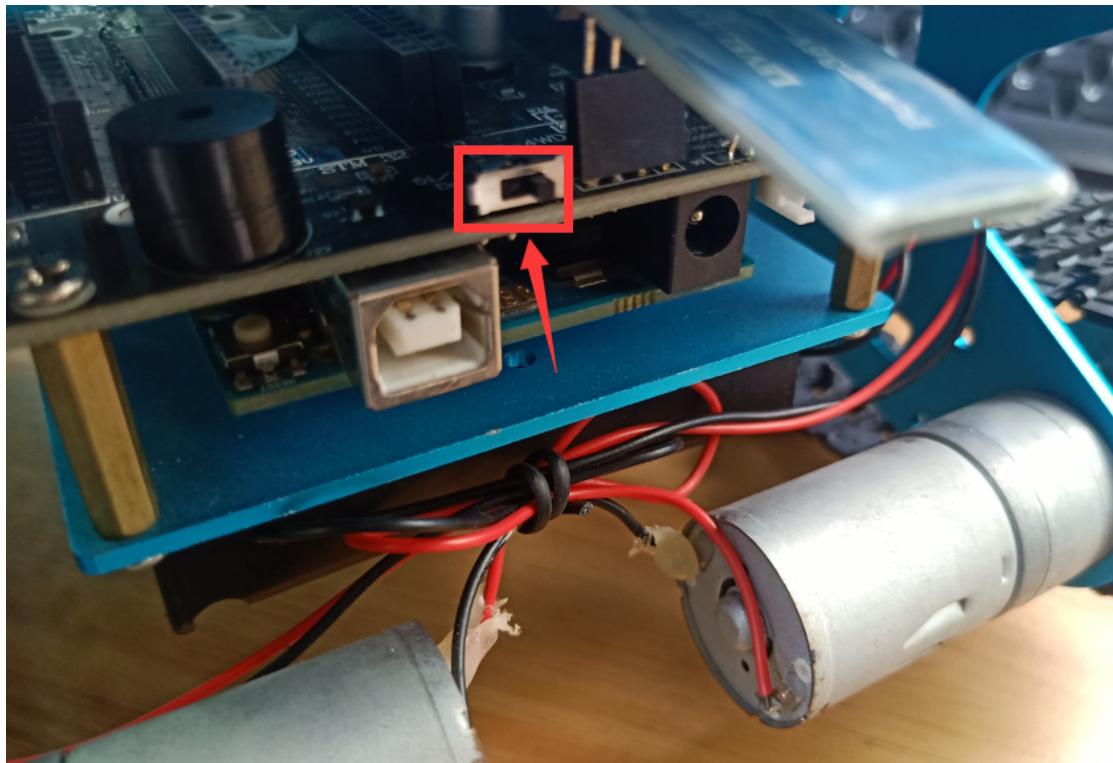
Battery of G1 robot car use precautions:

1. Please use the charger we provide to charge the car.
2. The car cannot be used while charging.

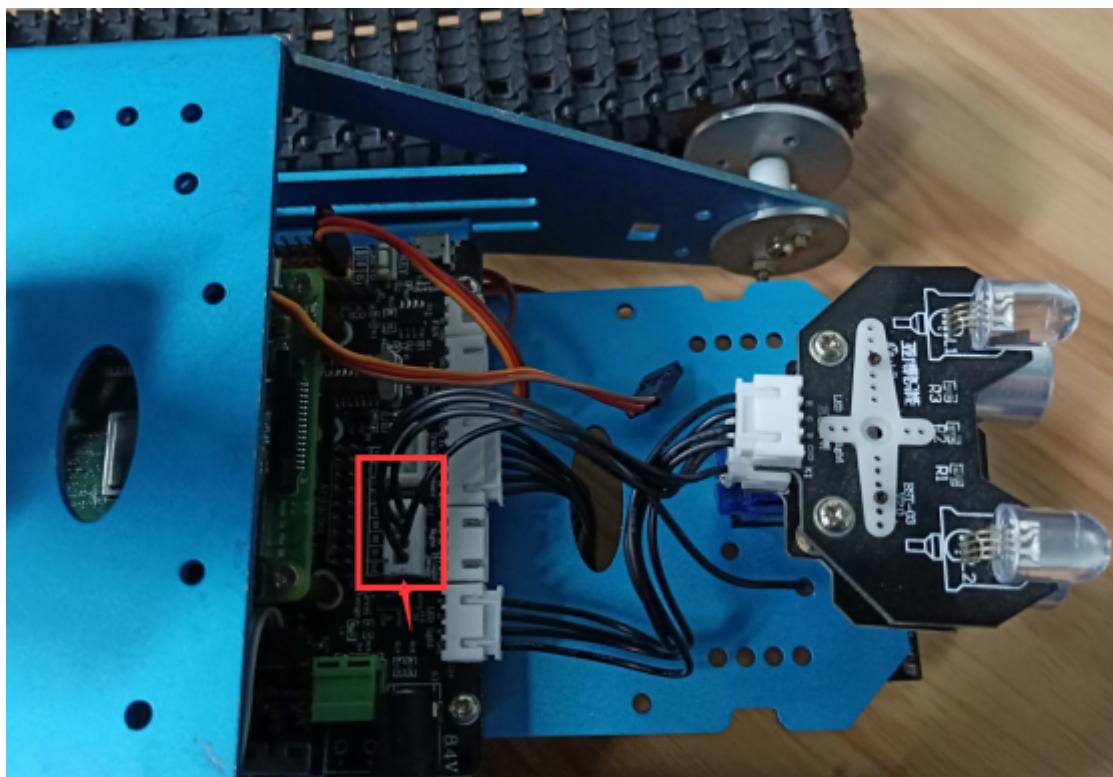
(2) The Bluetooth module needs to be properly inserted into the expansion board of the Tank. As shown in the figure below.



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



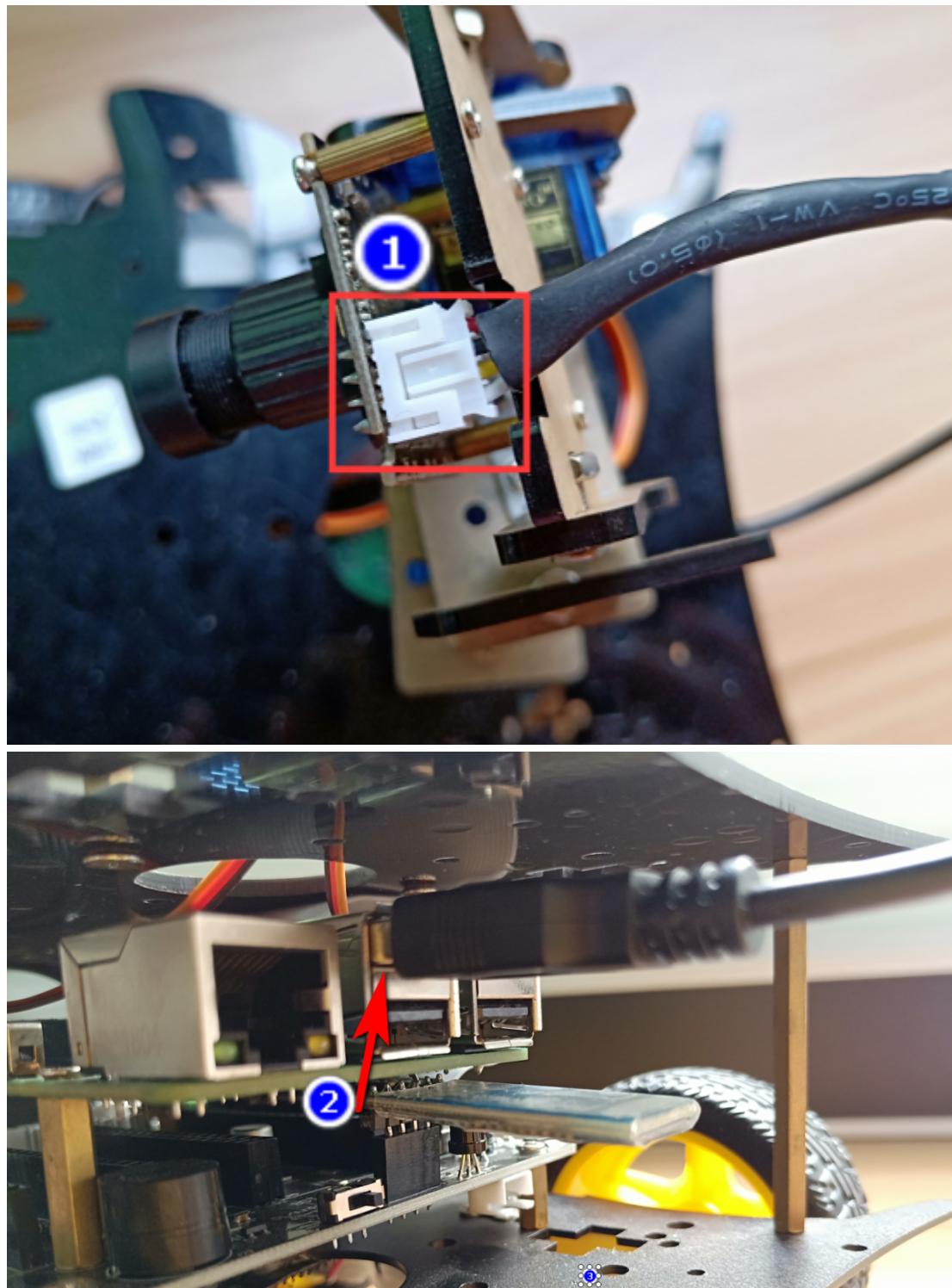
(4) The ultrasonic module must be inserted. As shown in the figure below.



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

About camera:

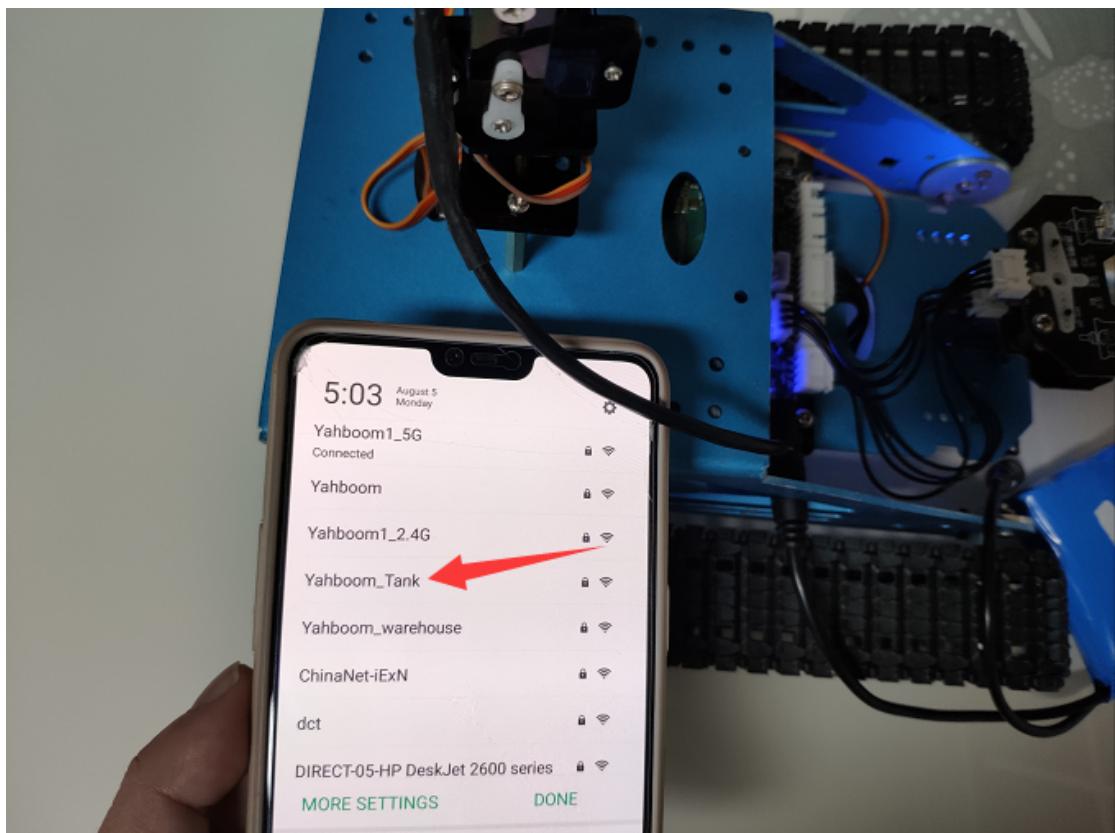
If you want to use camera, you need to connect the camera and the Raspberry Pi motherboard correctly. The camera connection is as follows:



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, you can see the picture taken by the camera on your mobile phone. As shown below.

