

First Trial

1. Get image file

1.1 You need to prepare 16G or above SD card and card reader. As show below.



1.2 Download image as shown below.

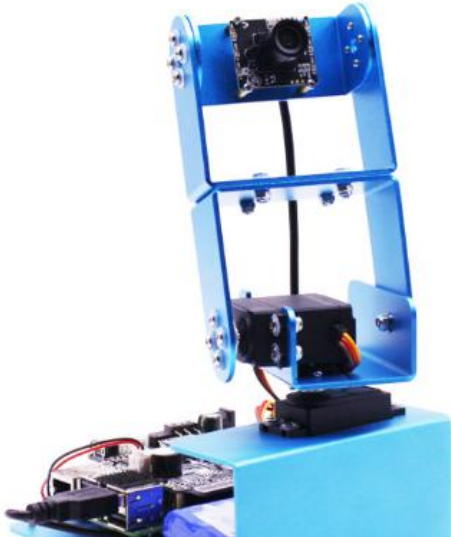
Pi-motion AI camera

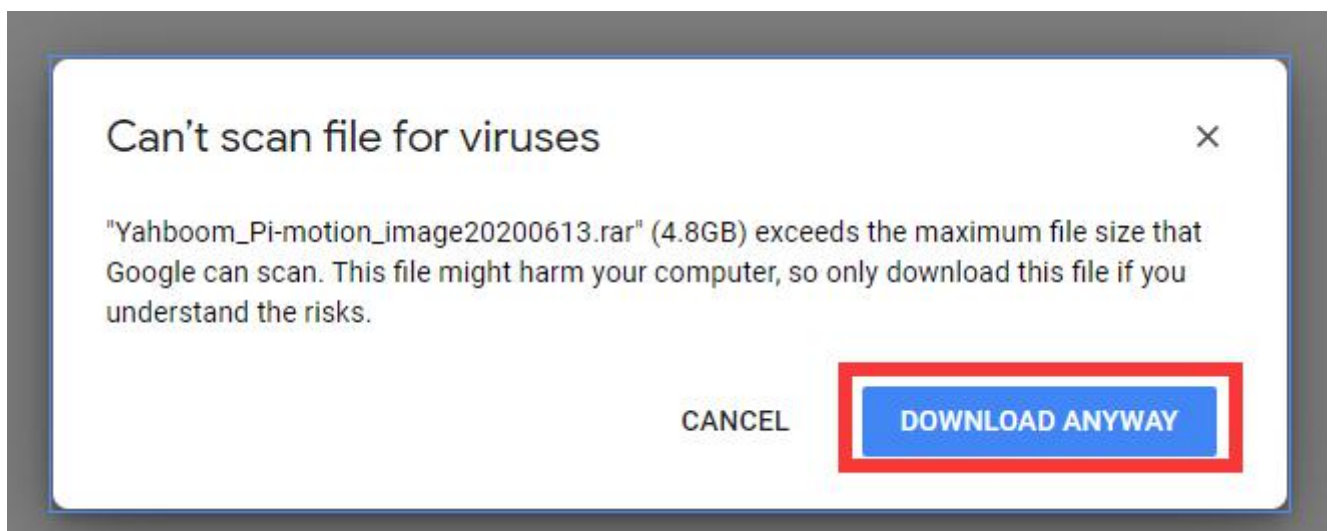
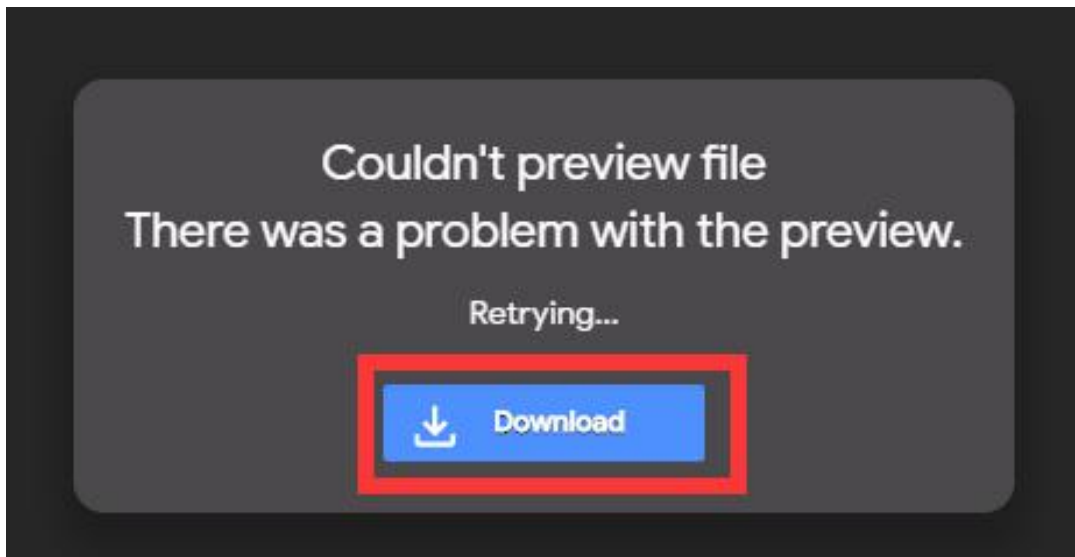
- 1.Installation video ▾
- 2.Remote control operation ▾
- 3.Development environment ▾
- 4.Experimental tutorial ▾
- 5.Contact us ▾
- 6.APP Download ▾
- 7.Charging and battery ▾

Download

- APP(Android)
- Download image**
- PC software
- BST-AI SCH
- Tools
- PCA9685 manual
- Instruction manual

Welcome to Pi-motion AI camera repository

A blue Pi-motion AI camera robot with a camera module mounted on top and a Raspberry Pi board visible at the base.



Don't worry. Our file didn't include any viruses.

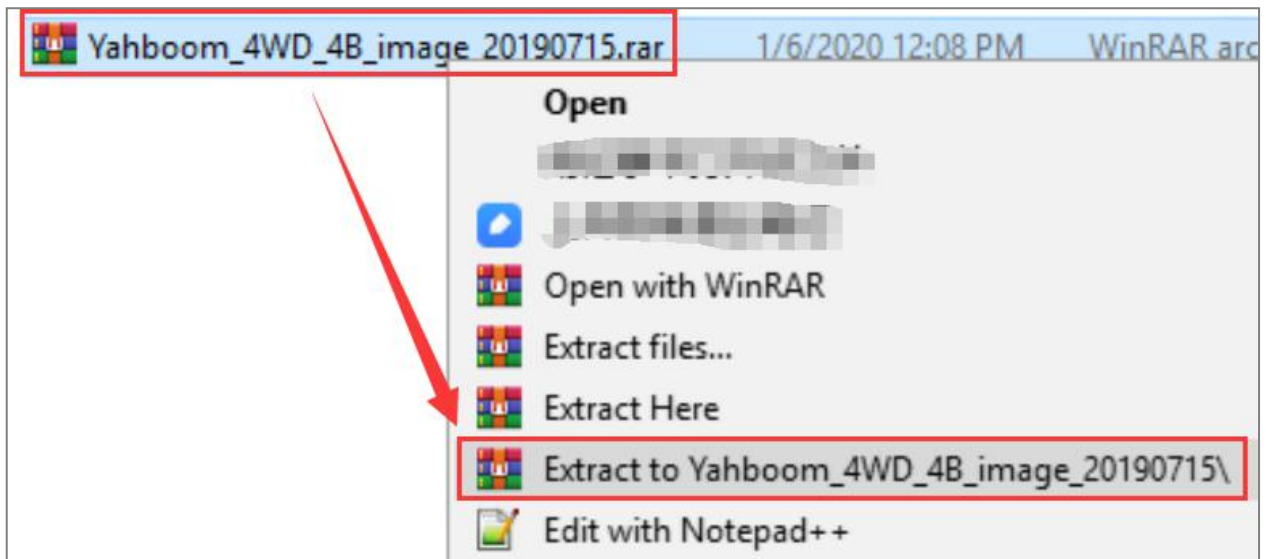
1.3 After download is complete, you will get a Yahboom_Pi_motion.rar file. You must extract this .rar file.

For windows PC

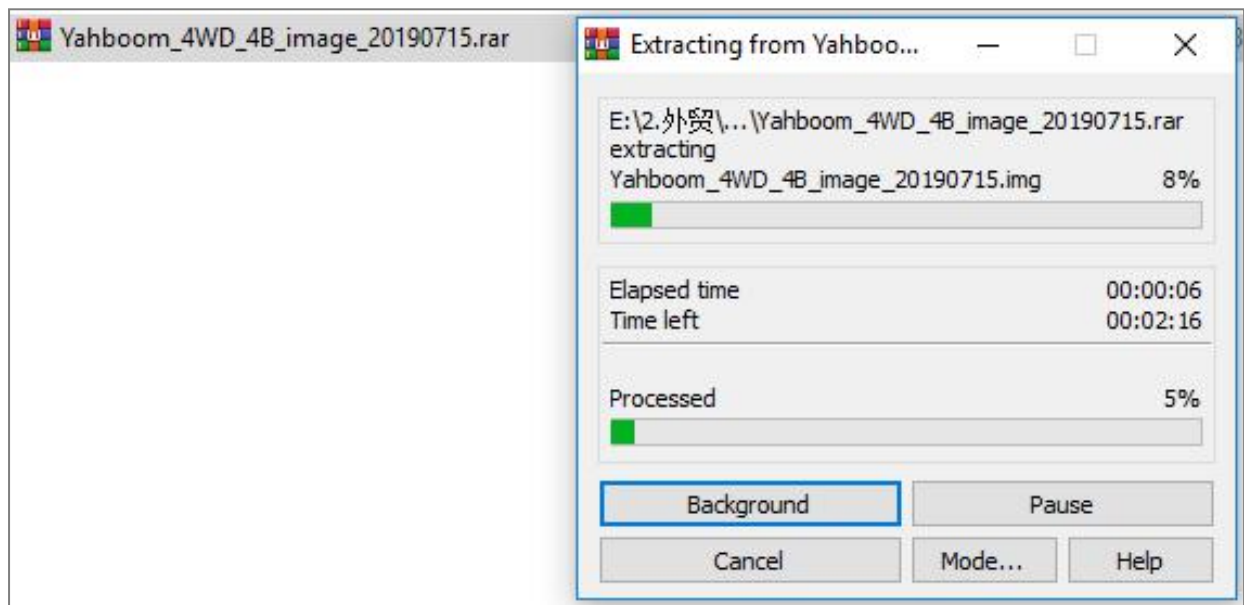
Please download WinRAR software. Link: <https://www.rarlab.com/>

Please download and install latest version of WinRAR software, Otherwise it will fail to decompress.

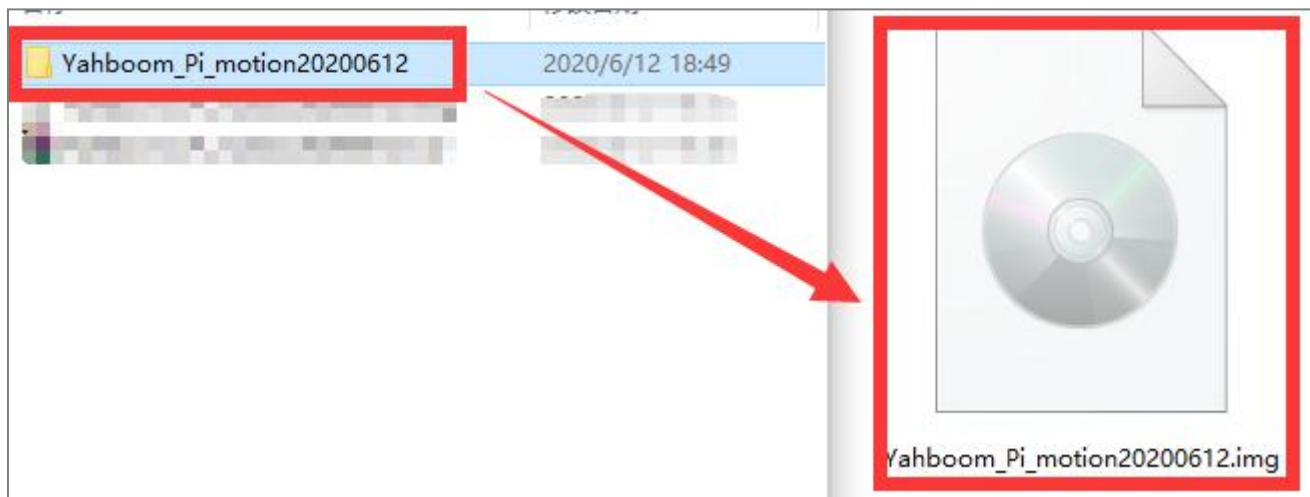
1) Select **Yahboom_Pi_motion.rar** file and choose extract to **Yahboom_Pi_motion** folder, As shown below.



2) Then, you can see the interface as shown below.



3) After extract is complete, you will get a **Yahboom_Pi_motion** folder with **Yahboom_Pi_motion.img**. As shown below.



For MAC

- 1) Download Unarchiver software and install it on your computer.
- 2) Select **Yahboom_Pi_motion.rar** file. "Open with"---"The Unarchiver(default)".

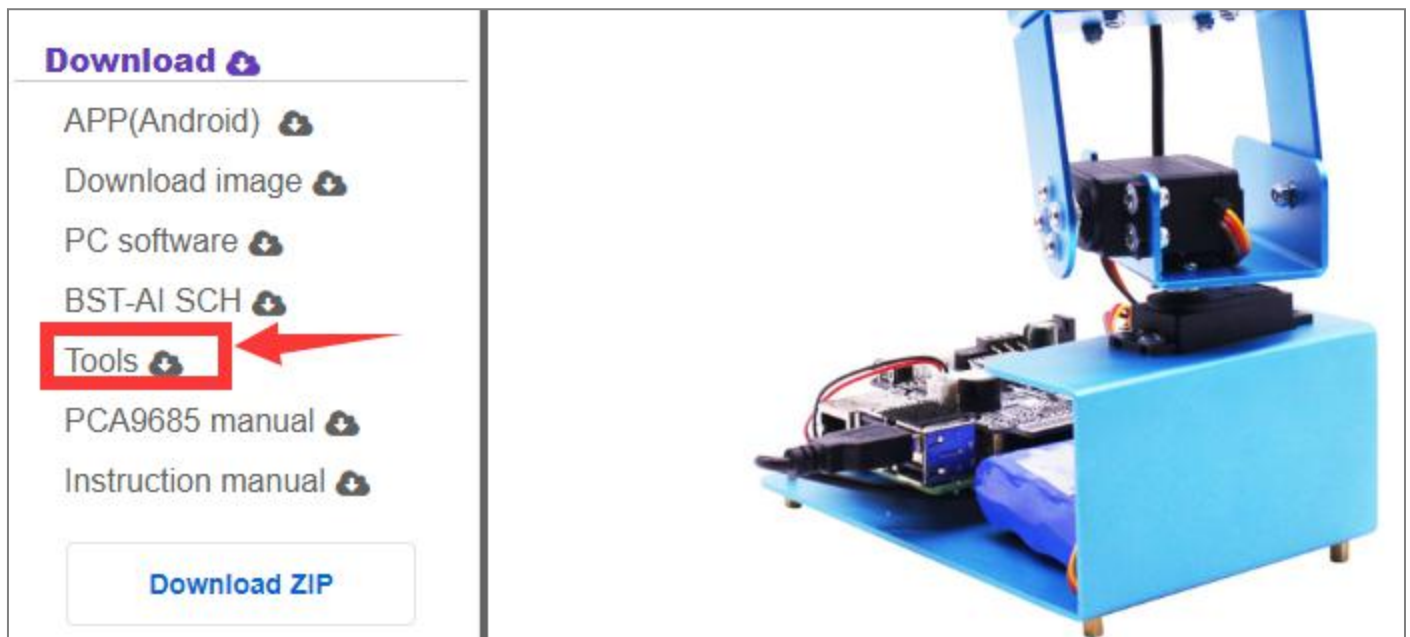
2. Format your SD card

!Note:If any warnings appear during format, please select **【Yes/OK】 .**

Insert the SD card into the computer through the card reader. At this point you can see an extra USB flash drive on the computer.

For windows

Please download and install SDFormatter software to format SD card. Click the place shown below to download it.

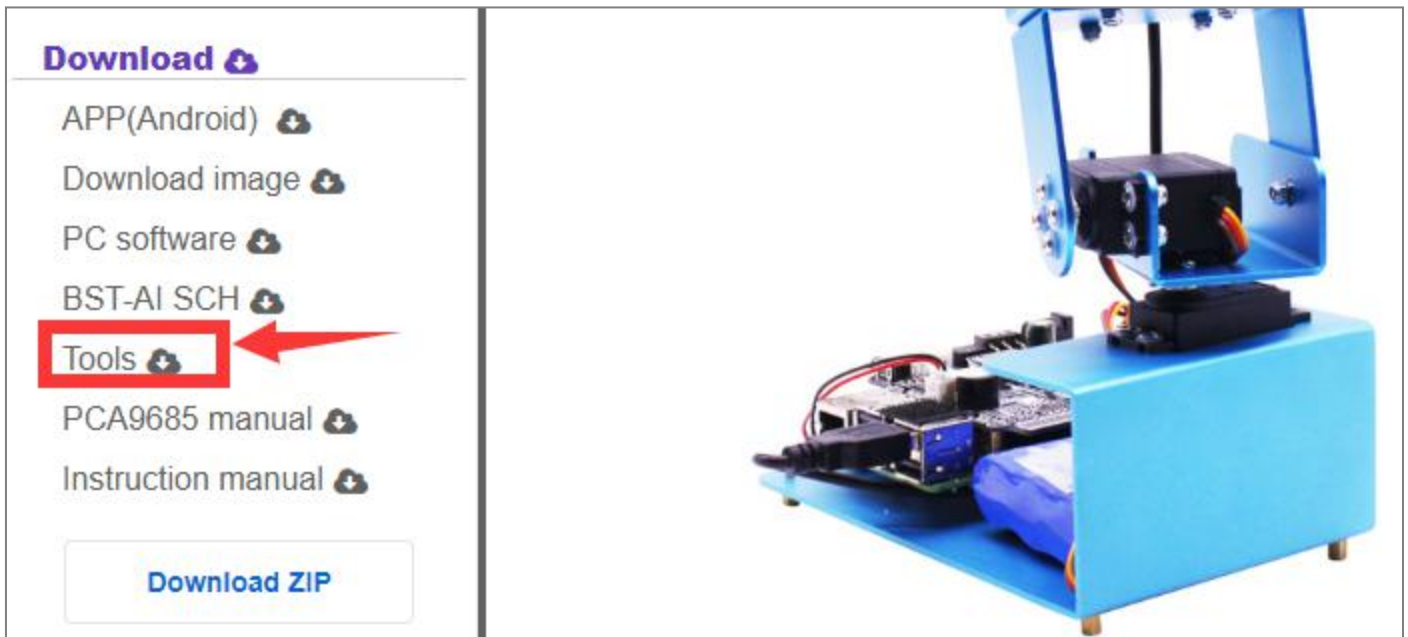
**For MAC**

You can directly format the SD card using the tool that comes with the computer. After the format is completed, we can see the real memory of the SD card is displayed on the computer. Finally, We need to Remove the SD card and card reader from the computer.

3. Write img file into SD card**For windows**

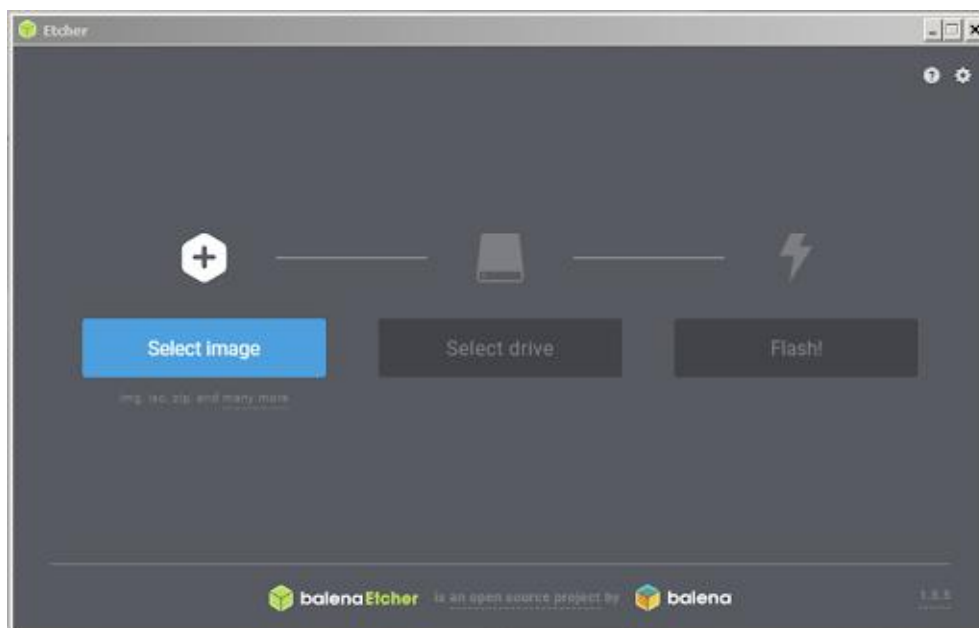
- 1) Write the image into the SD card by Etcher. software.

Install and download Etcher



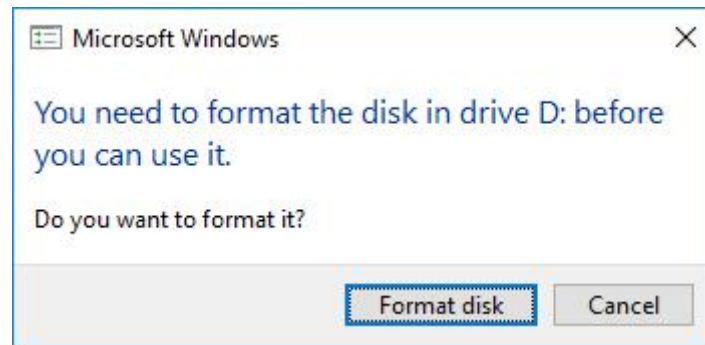
Burn image

Insert the formatted SD card into the computer through the card reader.

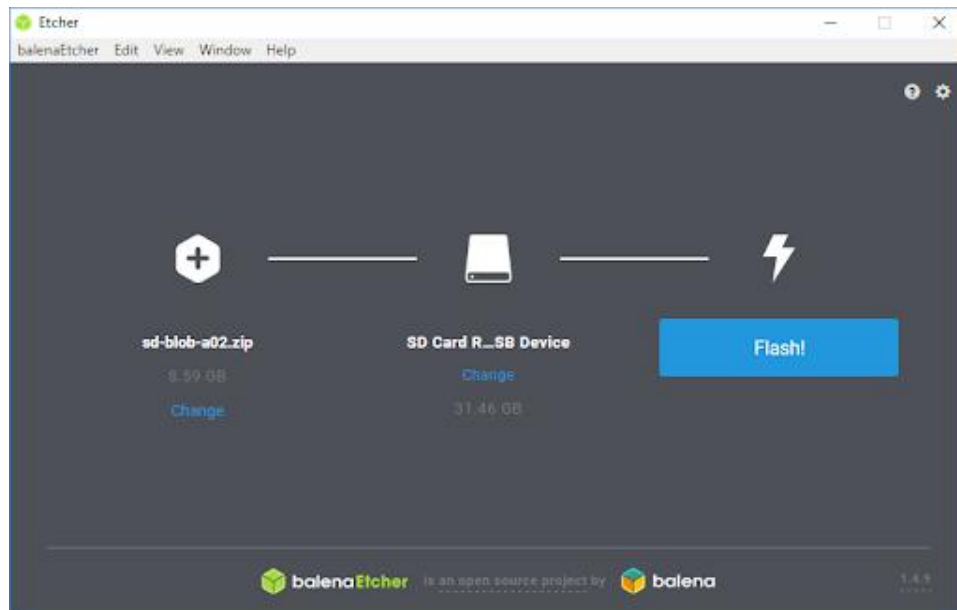


2) Click "Select image" and select the compressed image file you downloaded earlier.

3) If need to insert microSD card. If Windows prompts you to use the following dialog, please click "Cancel" (according to this description).

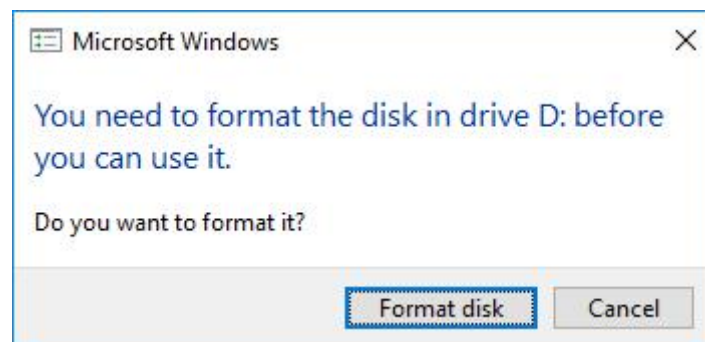


4) Click "Select Drive" and select the correct device.



5) Click on "Flash!". It will take some times, please wait patiently.

6) After the Etcher is complete. If Windows prompts you to use the following dialog, please click "Cancel" (according to this description).



7) Physically remove the SD card from the computer.

For MAC

- 1) Do not insert a SD card on your MAC.
- 2) Download and install and start the Etcher software.



3) Click "Select Image" and select the compressed image file you downloaded earlier.

4) Insert the SD card. If your Mac displays this window, click "Ignore".



5) If you are not connected to another external drive, Etcher will automatically select the SD card as the target device. Otherwise, click "Select Drive" and select the correct device.

6) Click on "Flash!" Your Mac may prompt you for a user name and password before allowing Etcher to continue.



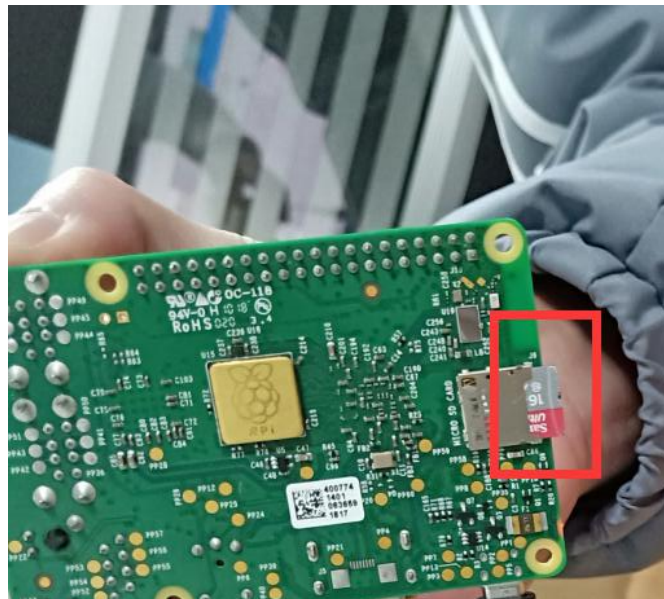
7) After the Etcher is finished, if Mac prompts you to use the following dialog, please click "Ignore" (according to this description).



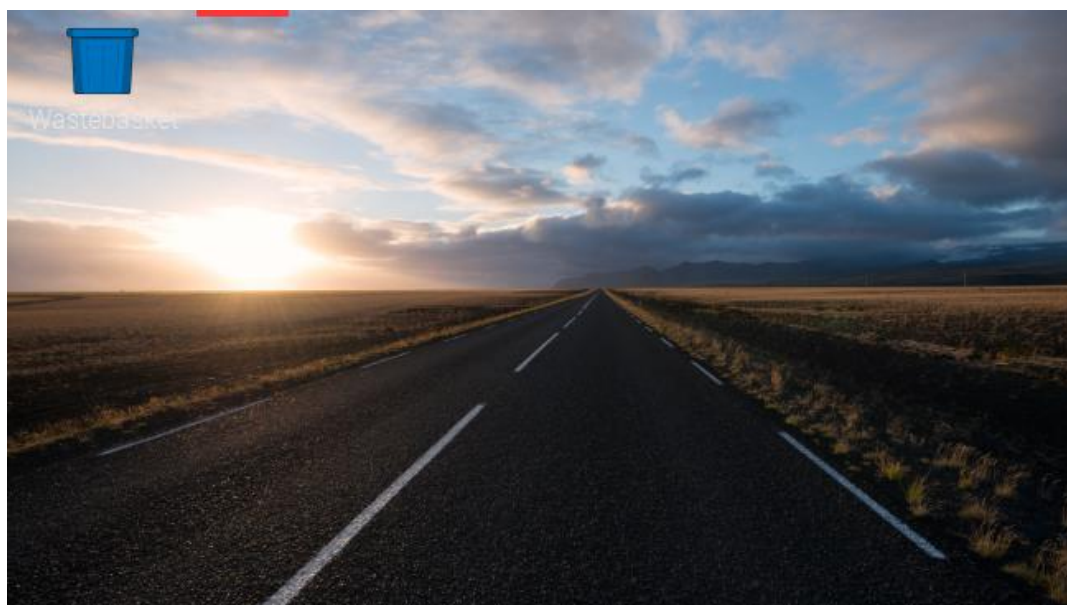
8) Physically remove the microSD card from the computer.

4. Start Pi-motion

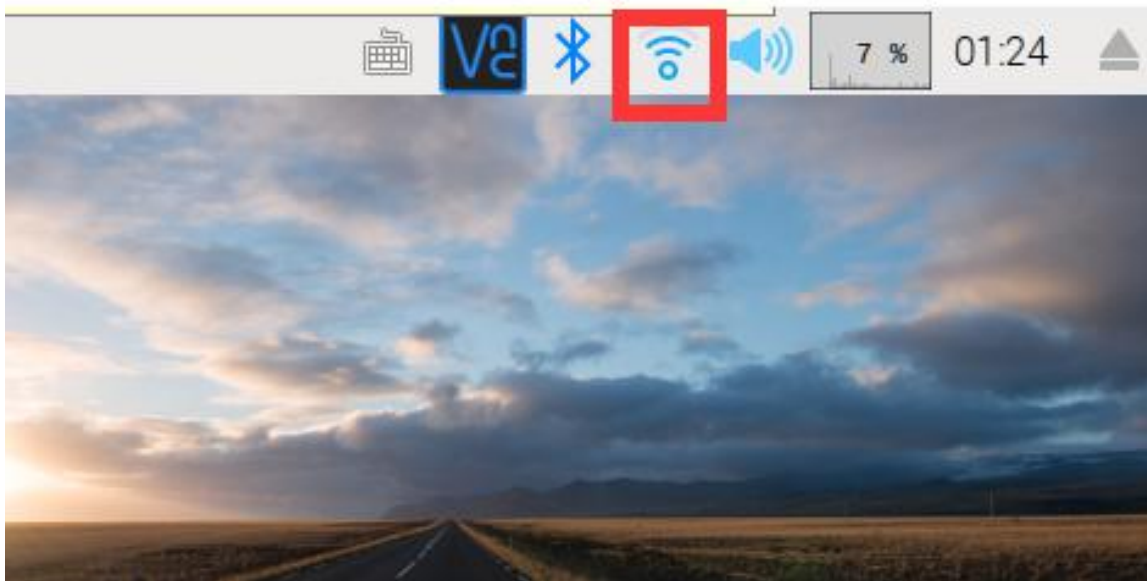
4.1 Insert SD card into Raspberry Pi board. As shown below.



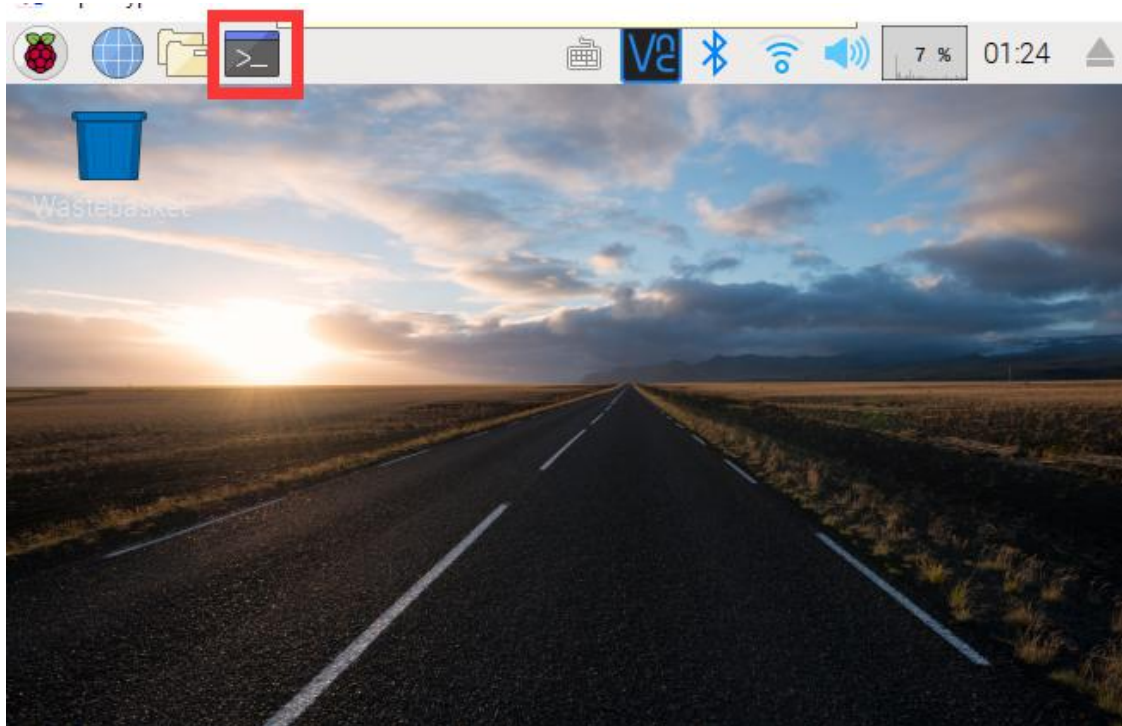
4.2 We need to connect the keyboard, mouse, and display to the Raspberry Pi. Turn on the power on the expansion board. After waiting for the system to start successfully, you will see the interface as shown below on the display screen.

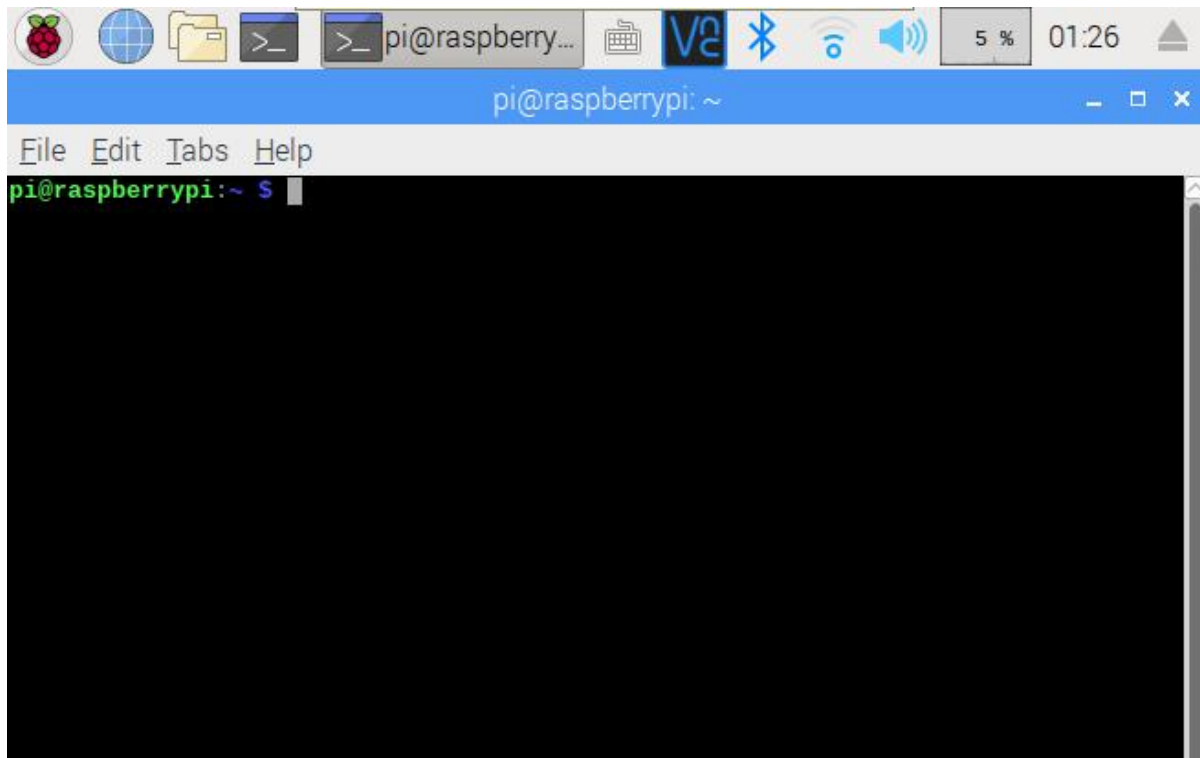


4.3 Then, you need to click on the upper right corner to connect to WIFI or insert a network cable.



4.4 Click the place shown below to open the command terminal.





4.5 We need to input:

sudo ifconfig

You will see some message as shown below.

```
pi@raspberrypi:~ $ sudo ifconfig
eth0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    ether b8:27:eb:69:ed:17 txqueuelen 1000 (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 17 bytes 1004 (1004.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 17 bytes 1004 (1004.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

wlan0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.1.66 netmask 255.255.255.0 broadcast 192.168.1.255
    inet6 fe80::8e22:1cae:bba8:cdde prefixlen 64 scopeid 0x20<link>
    ether b8:27:eb:3c:b8:42 txqueuelen 1000 (Ethernet)
    RX packets 4457 bytes 336450 (328.5 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 3467 bytes 2192752 (2.0 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

pi@raspberrypi:~ $
```

If your Raspberry Pi connect to wired network, you should see information described by the "eth0" option.
If your Raspberry Pi connect to wireless network, you should see information described by the "wlan0"

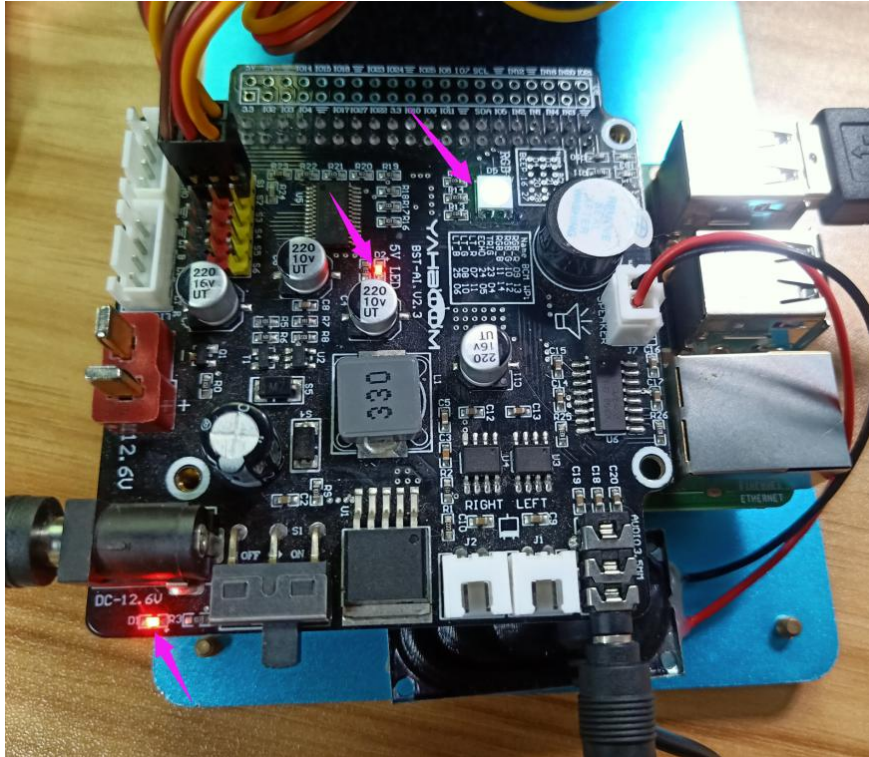
option.

For example, as shown in above, the IP address of "wlan0" is "192.168.1.66".

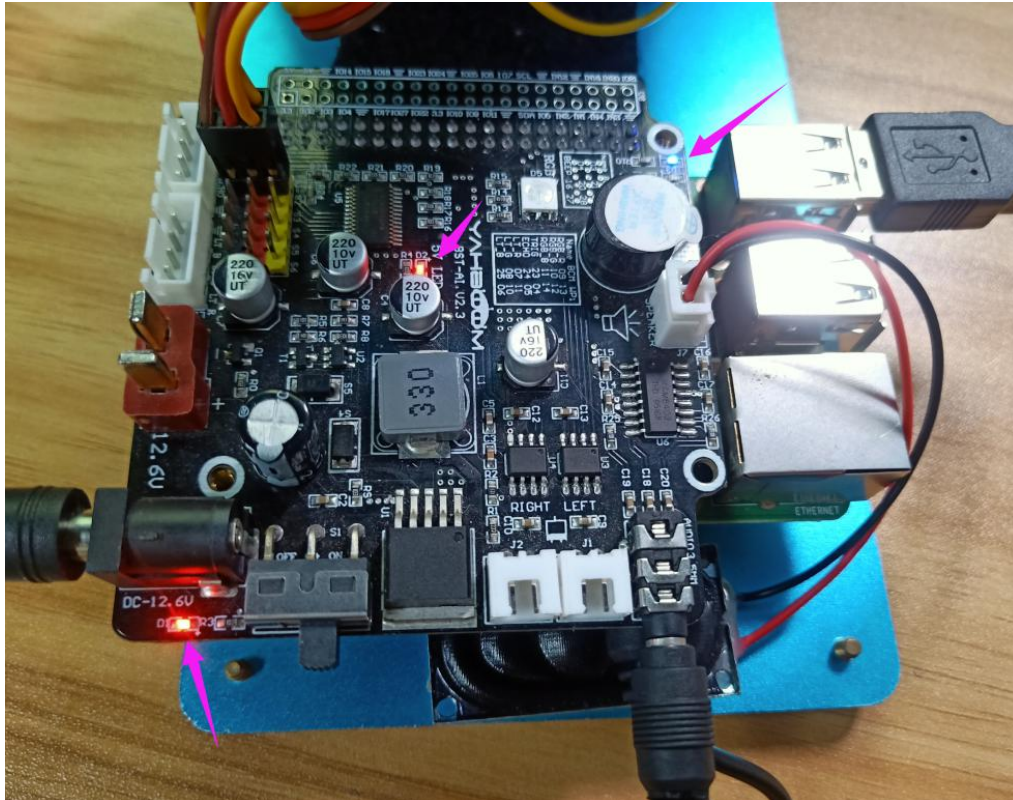
4.6 You need to record this IP address and restart Pi-motion.

4.7 Pi-motion startup process is as follows:

1) You will see three light on expansion board.



2) Wait a moment. When the RGB light on the expansion board is off and the D3 blue light is on, you can hear the speaker will voice broadcast, it means that the system is successfully started, and two servo will be initialized to the corresponding position.



- 3) You will hear the voice broadcast IP address twice. (For example, IP address is 192.168.1.66).
- 4) Then, you will hear that "Welcome to Pi-motion AI camera".

5. Download and install Pi-motion APP

5.1 **Android users search "YahboomRobot" in Play Store to download APP;**

iOS users search "Pi-motion" in App Store to download APP.

5.2 Open the location permission of your phone and pen all the permissions of the Pi-motion APP on the phone.

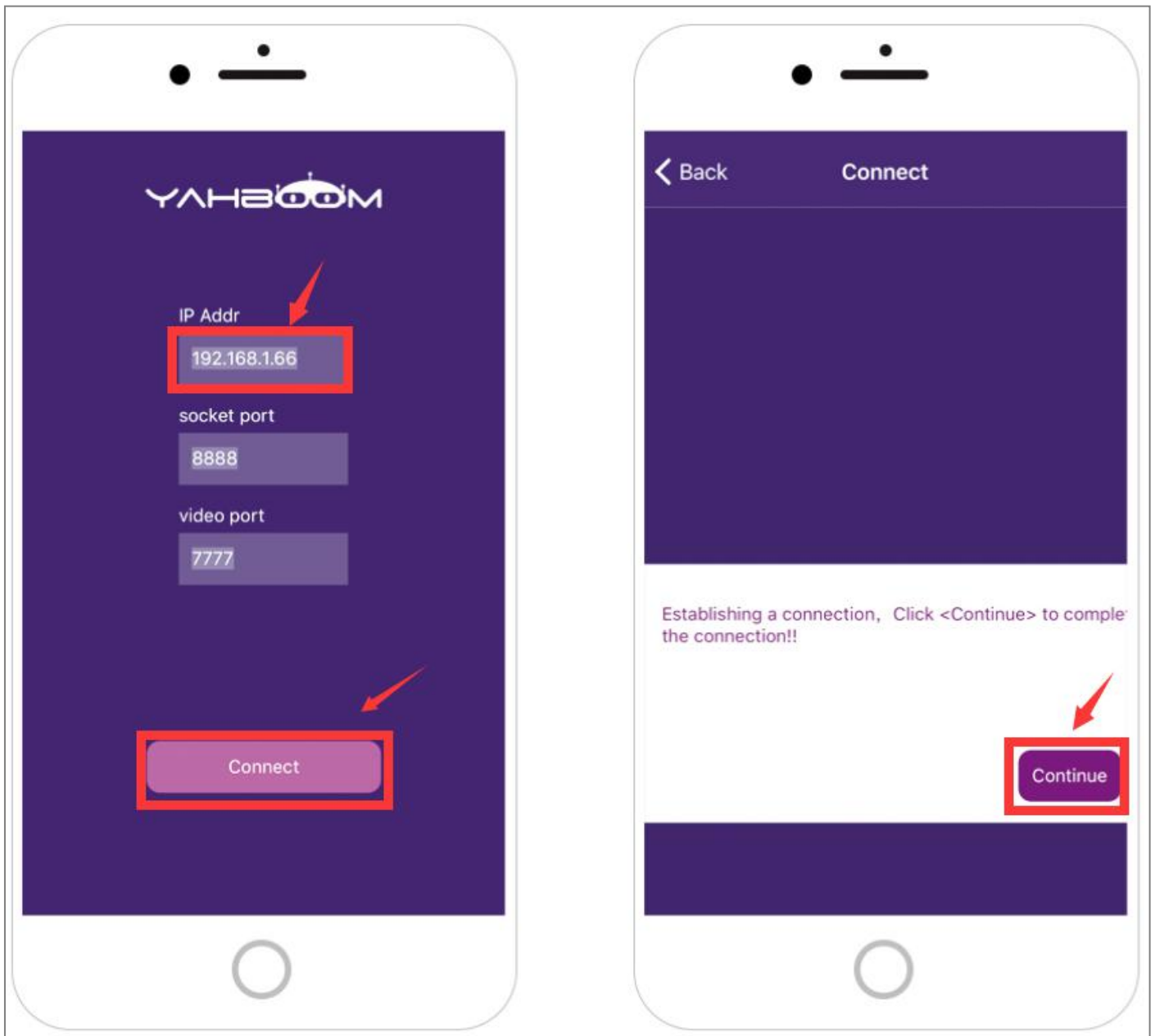
5.3 Make your phone connect same WIFI as Pi-motion AI camera.

5.4 Open the APP, choose "Pi-motion". As shown below.



5.5 Input the IP address you recorded before in the place shown below. Click **【Connect】**

5.6 Then, you will see following interface. Click **【Continue】**



5.7 Then, phone interface will Prompt connection successfully, as shown below. And Pi-motion will voice broadcast "device connected". We can see D4 light will light up red. As shown below.

Function Select



CONTROL

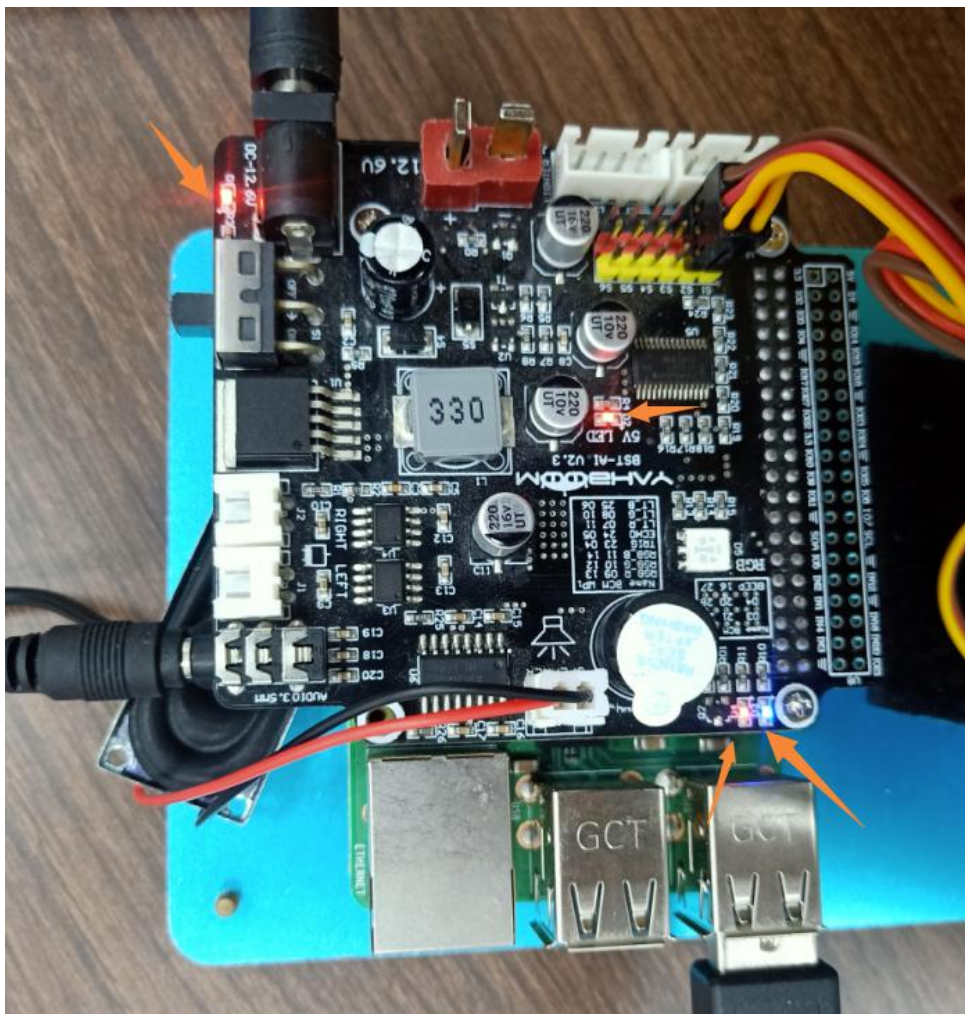
connect successfully

OK

COLOR RECOGNIZE

COLOR TRACK

SPEECH



5.8 Finally, you can control Pi-motion normally. About APP function, please read our manual.