Note: This Pi-motion Raspberry Pi AI Visual PTZ requires the purchaser to make network settings based on their local conditions. If you know how to set a static ip address for the Raspberry Pi, you can read it directly from the third section.

1. How to inquiry local network address

After completing the hardware assembly according to the installation steps of the manual, we need to connect the keyboard, mouse, and display to the Raspberry Pi. Turn on the power on the expansion board. Click on the terminal in the upper left corner, as shown in Figure 1:

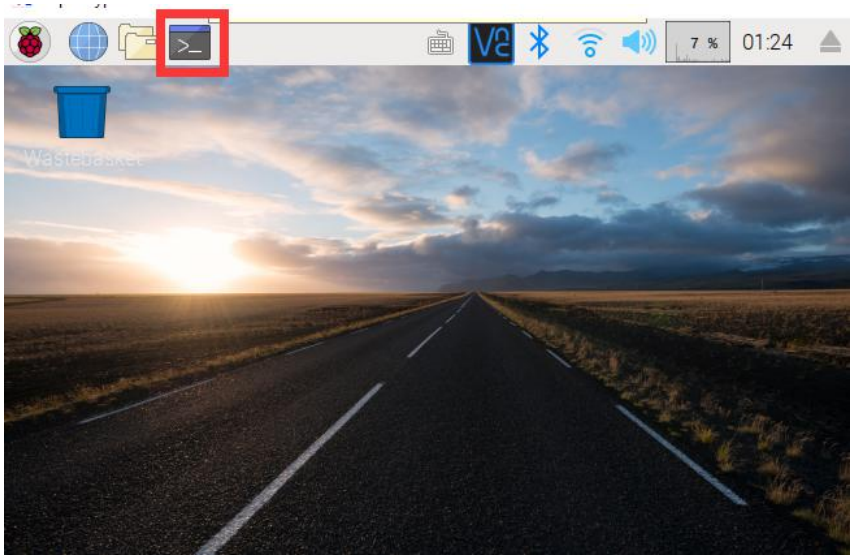

Figure 1-1

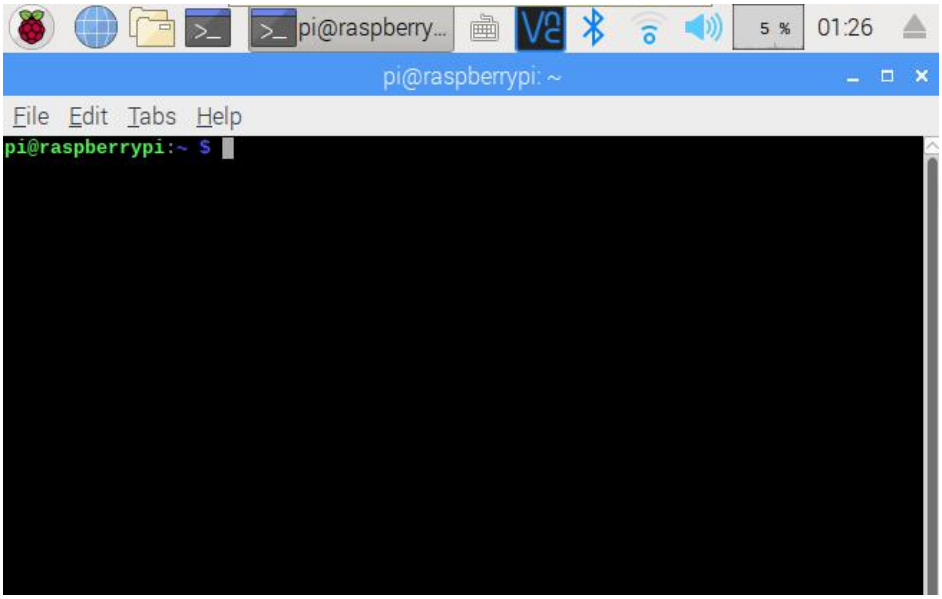

Figure 1-2

We need to input:

sudo ifconfig

You will see aome message as shown in Figure 2 below:

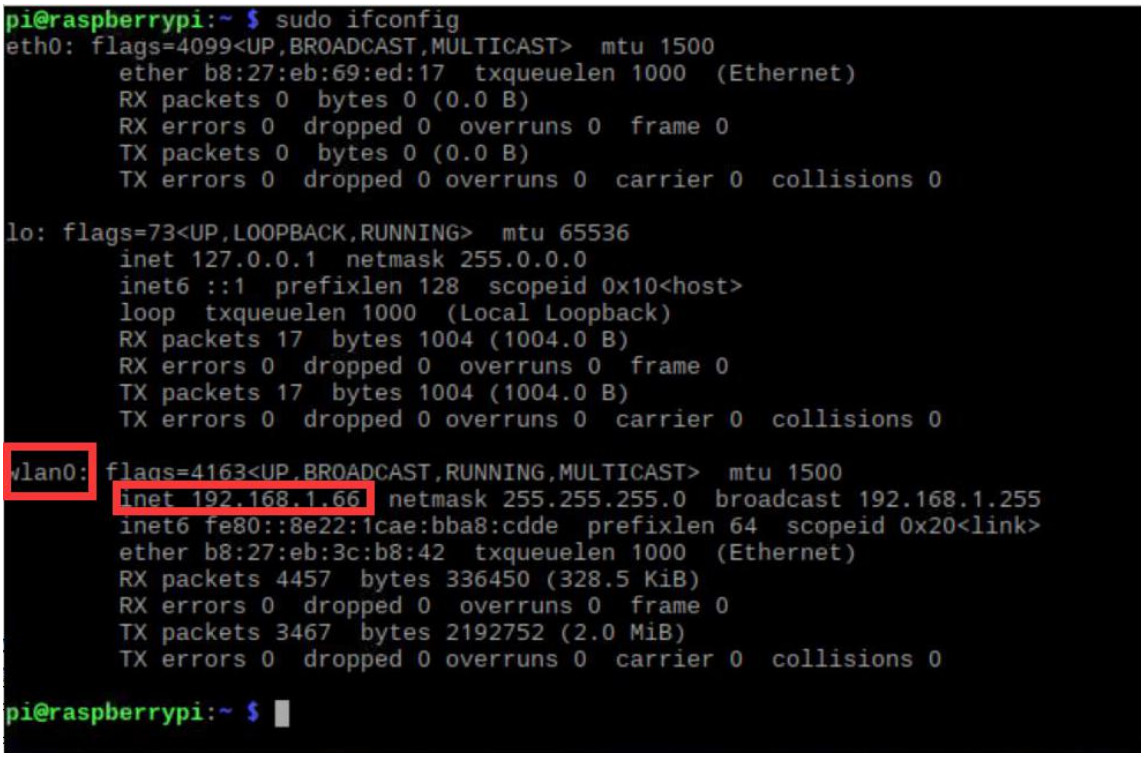

Figure 2

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 Figure 2 below, the IP address of "wlan0" is "192.168.1.66".

Next, you can view the network segment of the local network by other devices, and you can view it from any device that has access to the local Internet, for example:

1.Android phone: "Settings" - "WLAN" - "Details" - "IP address"

2. iOS mobile phone: "Settings" - "wireless LAN" - "details" - "IP address"

3.Windows computer: "Start" - search for "cmd" - enter "ipconfig"

4.macOS computer: open terminal - enter "ifconfig"

The useful information obtained by the above four methods of searching are:

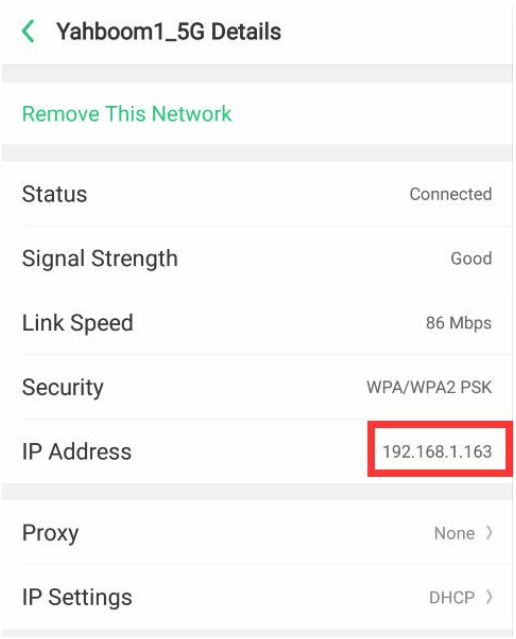

Figure 3 Android phone IP Address

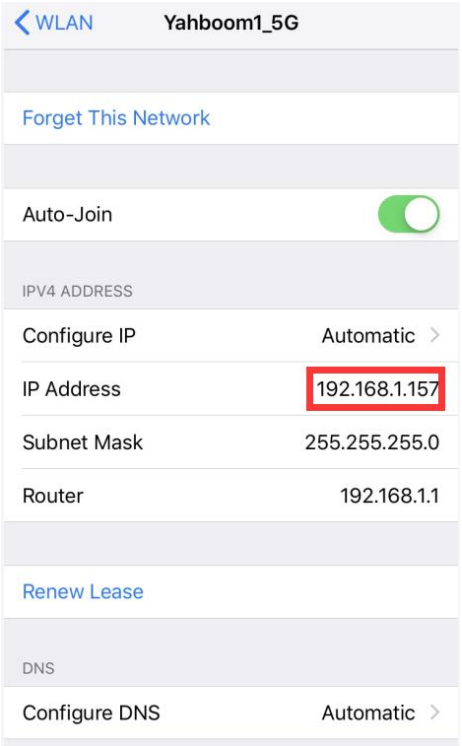

Figure 4 iphone IP Address

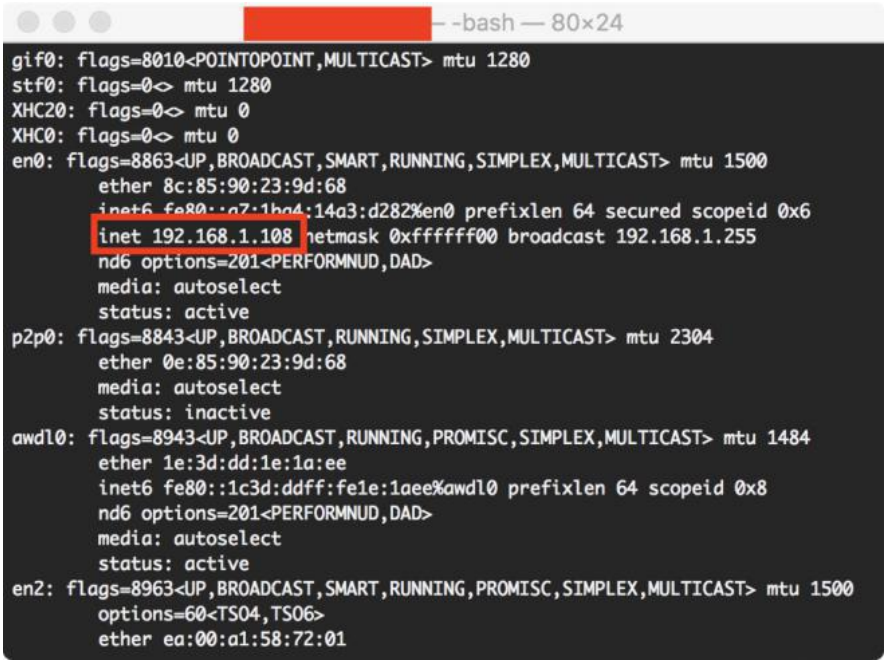

Figure5 macOSPC IP Addres

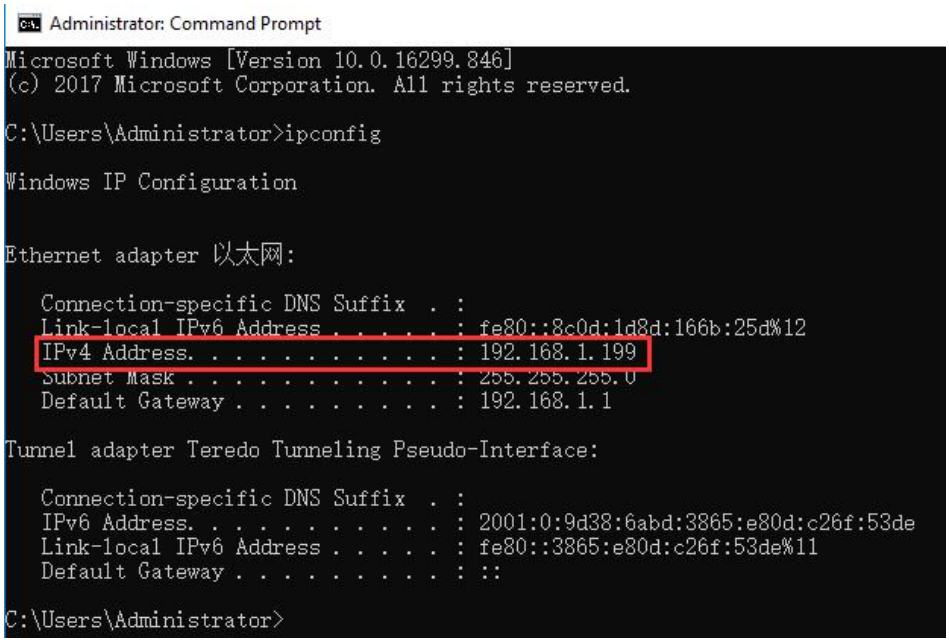

Figure 6 WINDOWS PC IP Address

As shown in the above four results, the current network segment is 1, so the third digit of the IP address of each service is ".1".

You need to remember the local network address + Subnet address. For example, the network address + Subnet address of the above four results is "192.168.1"

2. how to set a static IP address

We need to input:

sudo nano /etc/dhcpcd.conf

You can also use other favorite text compilers. After entering the file, find the two commands at the bottom of the file as shown in Figure 7 below.

Figure 7

According to the network address found in the first step, configure the static IP address of the Raspberry Pi.
(For example:If the IP address of the discovered mobile phone is “192.168.0.70”, you can change the Raspberry Pi command to:)

interface eth0

static ip_address=192.168.0.55/24
static routers=192.168.0.1
static domain_name_servers=192.168.0.1

interface wlan0

static ip_address=192.168.0.66/24
static routers=192.168.0.1
static domain_name_servers=192.168.0.1

eth0 and wlan0 do not conflict, you can also set both at the same time. After the modification is completed, you need ot press ctrl+x , “y”, “enter”on the keyboard to save and exit the file.
Restart the Raspberry Pi. You will find that the IP address has changed by using the "ifconfig" command on the terminal again.

3.set the startup file of the program run

After successfully setting the static IP for the Raspberry Pi, we should enter /home/pi/Adafruit_Python_PCA9685 on the graphical page and find and open "ConnectInfo.txt" in the folder, we need to modify the first line IP of the text document to the Raspberry Pi static IP address set in the second part, as shown in Figure 8 below. And save and exit.

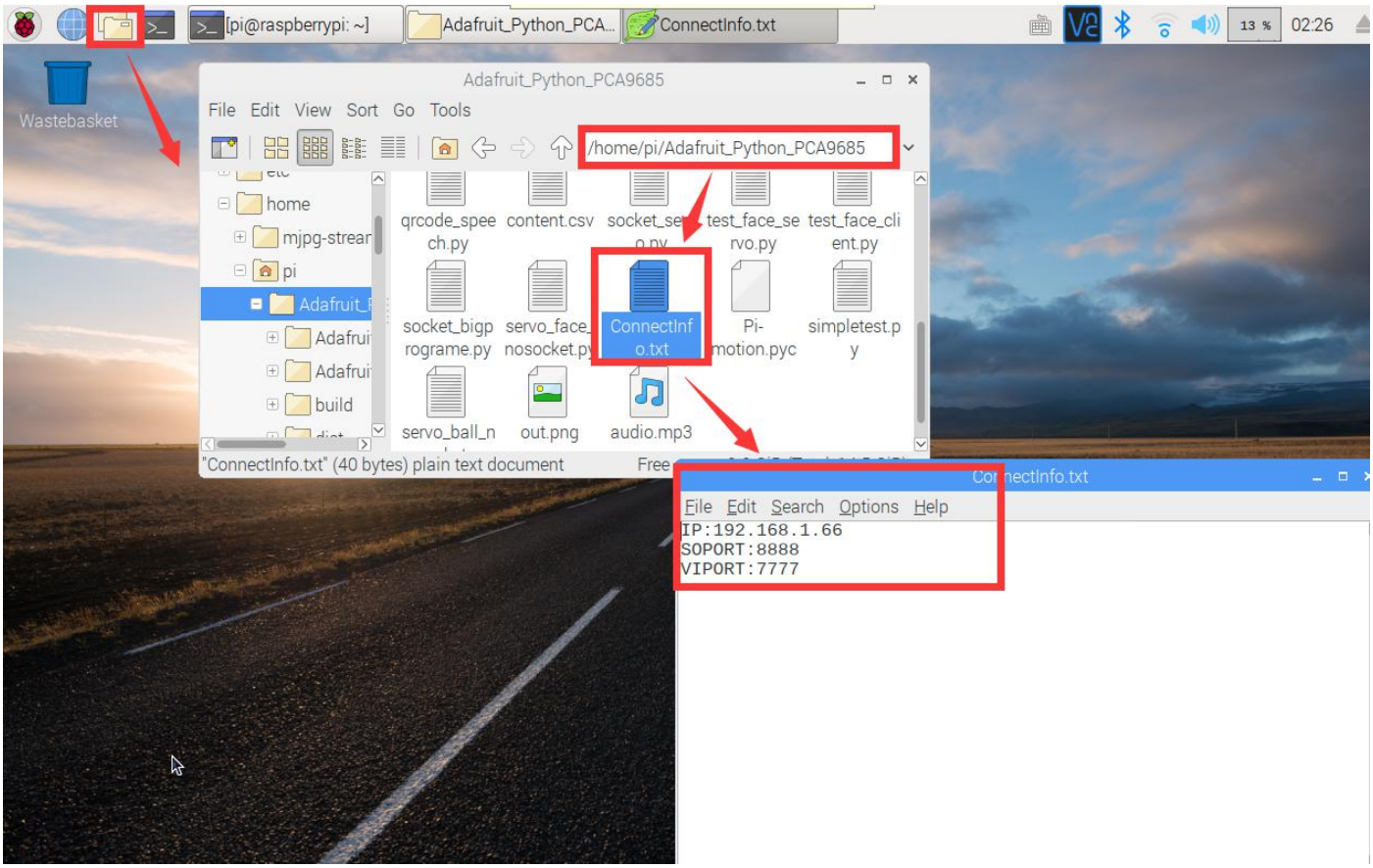

Figure 8

After the modification is completed, after restarting the Raspberry Pi, open the Yahboom Pi-motion mobile App or the Pi-motion PC software to use it.