

FAQ

ZYC0076

1. The operation delay is high, and the camera picture freezes

- a. The WiFi signal quality problem requires the customer to change to a WiFi environment with a more stable signal.

2. Camera screen rotated 90 degrees

- a. Customers can open the " 6.1_ESP32_Car.ino" program, open app_httpd.cpp, press CTRL+F to search at the same time, find deg, change the number 0 in front to 90 or negative 90, and then recompile and upload the code .



3. Unable to obtain IP address

- a. First check whether the WiFi name and WiFi password in the code have been changed to those used by the customer. Note that only 2.4GHz frequency is supported.

```
20 #define CAMERA_MODEL_AI_THINKER
21
22 const char *ssid = "zhiyil";           // Enter SSID
23 const char *password = "wuqian198910"; // Enter PW
24
```

- b. After successfully burning the code, change the baud rate of the serial monitor in the Arduino IDE to 115200, press the reset button on the ESP32, wait for the serial monitor to prompt the WiFi connection, and then display the IP address. After that, connect the mobile phone or computer to the same WiFi, and enter the IP address in the address bar of the browser to access. If you can't access, you can change the browser, some browsers will intercept this access operation.

4. UNO programming error, unable to burn

The following error is displayed: **avrdude: stk500_recv():**

- a. In this case, the serial port is interfered, which makes it impossible to burn the code. Unplug the several wires used to connect UNO and ESP32, namely VCC, GND, RX, TX, and then burn them

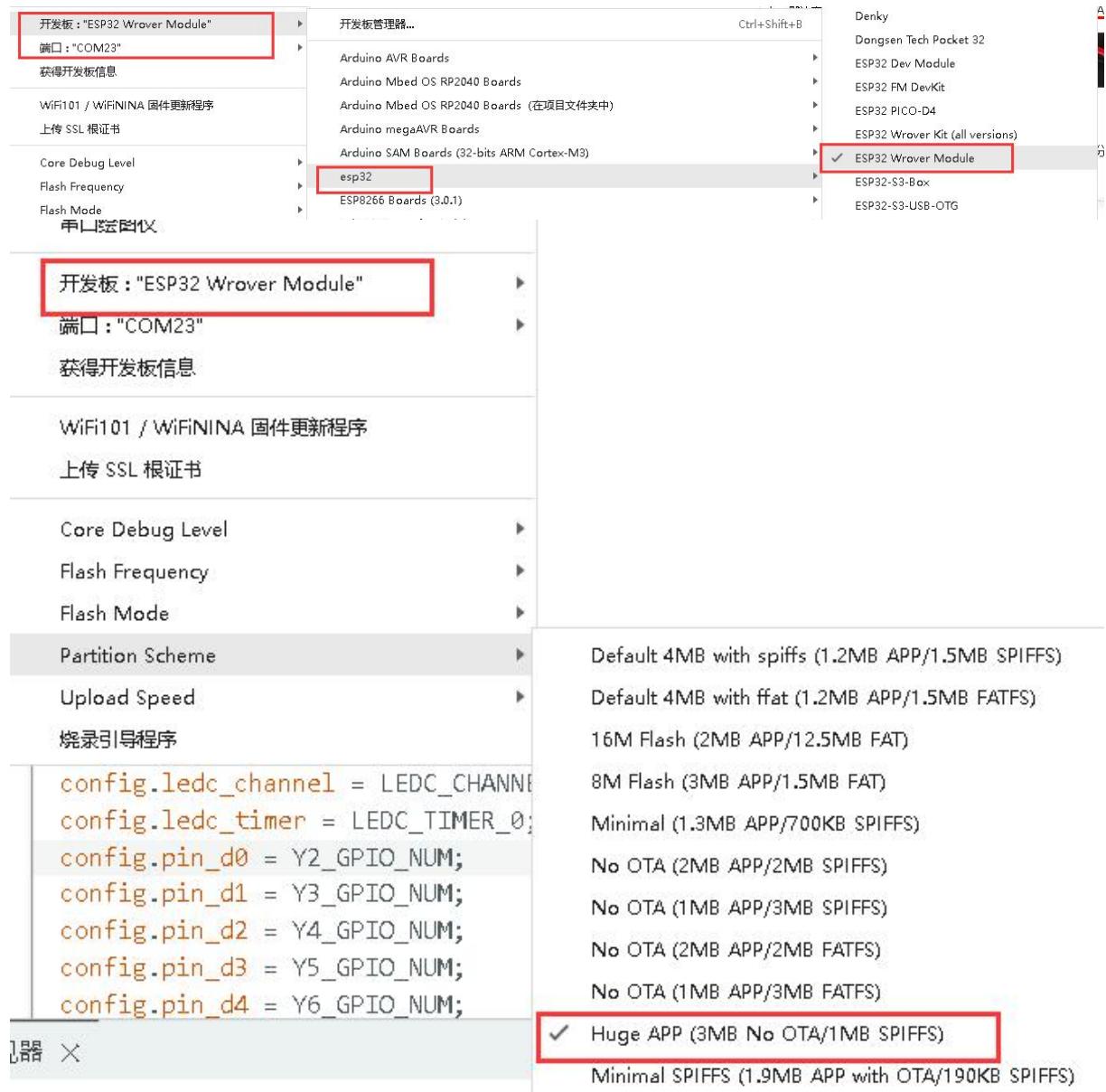


again.

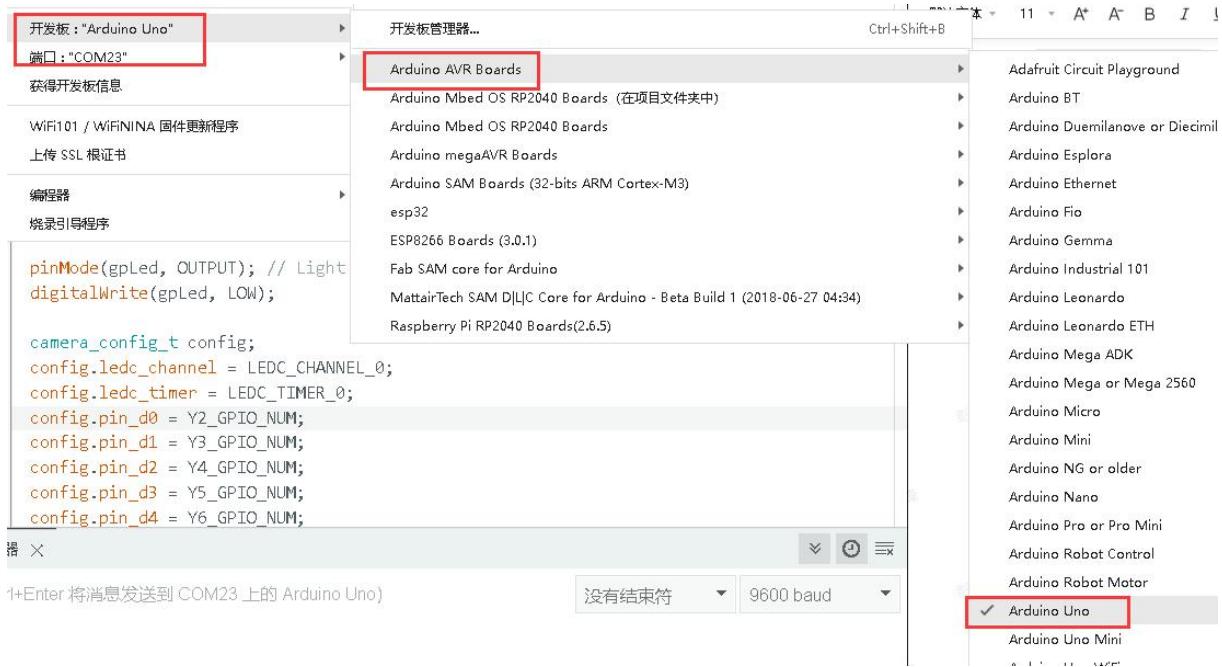
5. The development board model is wrongly selected, and cannot be compiled and uploaded

- a. Burn the program for ESP32, pay attention to the part in the red box

must be selected correctly, the corresponding port should be selected, and other defaults can be used.



- b. Please choose according to the picture to burn the program for UNO, pay attention to the port.



6. Compilation error reported unable to connect to the development board, unable to open the open port

- Open the device manager and check whether there is a port detected on CH340. Go to Arduino IDE and change to the corresponding port.



- The driver is not installed, USB Serial is displayed in the other devices of the device manager, and the port does not detect the CH340, just install the driver.

Windows version driver

<https://www.dropbox.com/scl/fo/zikb24gujy4o6bfqehylo/h?dl=0&rlkey=7om0u25pqgedv1c706n395ysb>



MAC OS version driver

<https://www.dropbox.com/scl/fo/x7mqffbycmyy3g13enpy6/h?dl=0&rlkey=3ux4vttfhf92d9h6gv1c6u5p2>



7. After the firmware is reset, FRAME and SIZE are always displayed...,

and IP is not displayed

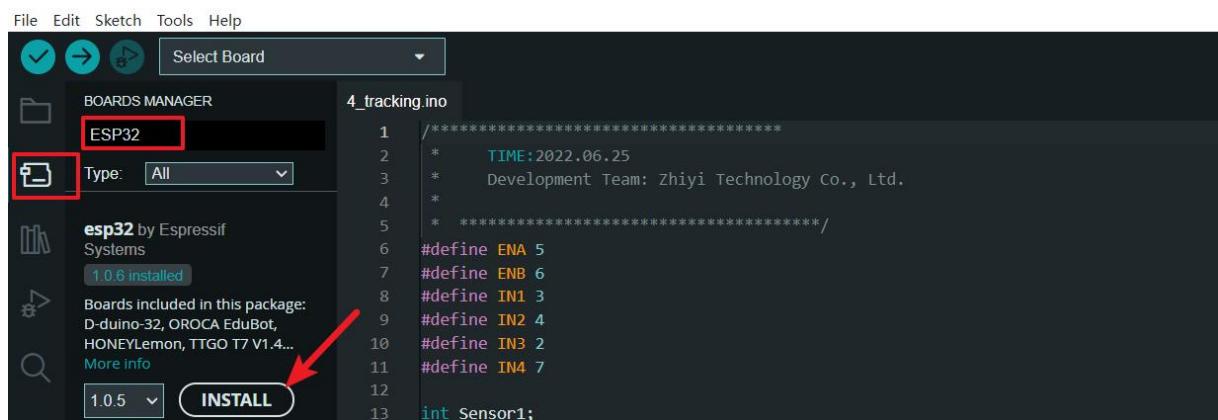
- This kind of error is that the WIFI cannot be connected. It is always waiting for the connection. You need to modify the WIFI name and password in the code. Note that you need to connect to the 2.4G frequency, re-burn, and then press reset to start from the serial port. The monitor can obtain the IP.

8. The serial port monitor reports error 0X20004

- The error is that the camera failed to initialize, and reinstalling the camera will most likely solve it.

9. There is no esp_camera.h error message

- If the ESP32 development board library is not installed correctly, just search and install the esp32 library file.



Note that the settings should be made according to the board model listed in the tutorial.

10. Display Leaving... Hard resetting via RTS pin...

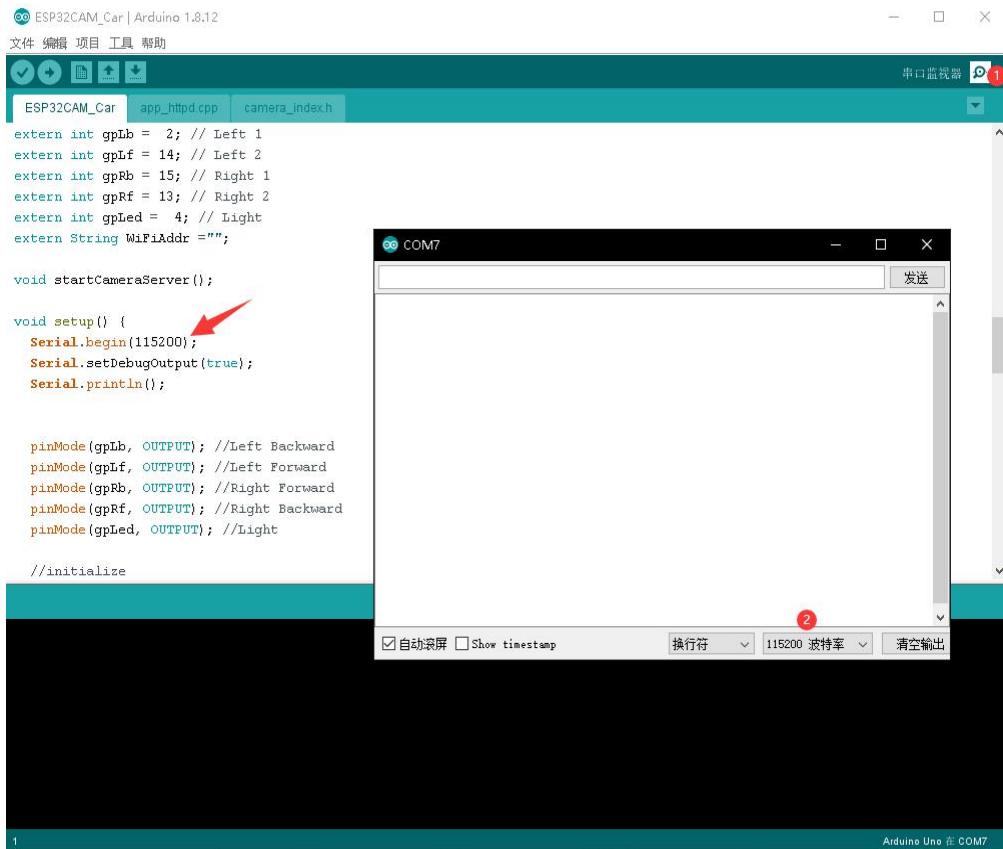
```
Writing at 0x00006c0000... (80 %)
Writing at 0x00070000... (83 %)
Writing at 0x00074000... (86 %)
Writing at 0x00078000... (90 %)
Writing at 0x0007c000... (93 %)
Writing at 0x00080000... (96 %)
Writing at 0x00084000... (100 %)
Wrote 821360 bytes (476076 compressed) at 0x00010000 in 42.2 seconds
Hash of data verified.
Compressed 3072 bytes to 119...
Writing at 0x00008000... (100 %)
Wrote 3072 bytes (119 compressed) at 0x00008000 in 0.0 seconds (e
Hash of data verified.

Leaving...
Hard resetting via RTS pin...
```

- The customer didn't read the manual carefully, and it showed that the upload was completed. You need to open the serial monitor and

press the reset button to obtain the IP address.

Solution: In the first step, you need to open the serial monitor, and in the second part, modify the baud rate to 115200, and then press the reset button of ESP32, the serial monitor will display the WIFI connection status, and then it will display the IP address.



```

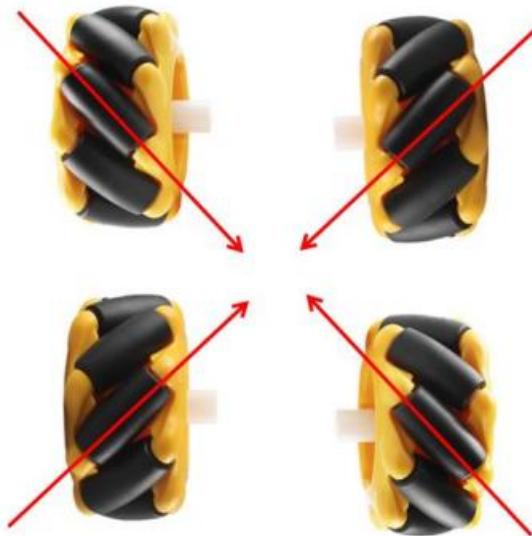
DIY_Surveillance_camera_with_ESP32-Camera | Arduino 1.8.19
File Edit Sketch Tools Help
DIY_Surveillance_camera_with_ESP32-Camera
#define PCLK GPIO_NUM 21
COM4
Send
Camera Stream Ready! Go to: http://192.168.120.205etsrun 0 2016 00:22:57
rst:0x1 (POWERON_RESET),boot:0x13 (SPI_FAST_FLASH_BOOT)
configsip: 0, SPIWP:0xee
clk_drv:0x00,q_drv:0x00,d_drv:0x00,cs0_drv:0x00,hd_drv:0x00,wp_drv:0x00
mode:DIO, clock div:1
load:0x3fff0018,len:4
load:0x3fff001c,len:1216
ho 0 tail 12 room 4
load:0x40078000,len:10944
load:0x40080400,len:6388
entry 0x400806b4
.....
WiFi connected
Camera Stream Ready! Go to: http://192.168.120.205
<
Autoscroll  Show timestamp Newline 115200 baud Clear output

```

11. The wheels spin in the opposite direction

- The interface position of the motor is not connected properly, you can check it according to the wiring photo provided by the customer.

The peripheral axle points to the center of the car

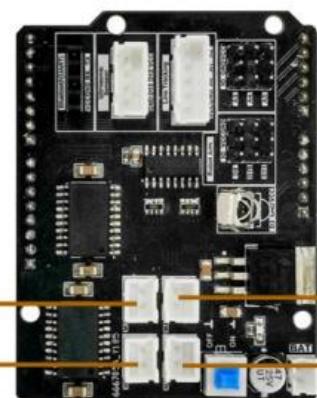


Wiring diagram:

Right front wheel motor



Right rear wheel motor



Left front wheel motor



Left rear wheel motor

