Raspian OS 32/64位系统 dmesg查看硬件型号REV，4B一般都是1.2以上

1. **开机初始配置：语言、网络、用户名、密码、WIFI**

SSH、wpa\_supplicant.conf

sudo killall wpa\_supplicant

sudo wpa\_supplicant -c /etc/wpa\_supplicant/wpa\_supplicant.conf -iwlan0

sudo nano /etc/wpa\_supplicant/wpa\_supplicant.conf

country=CN

ctrl\_interface=DIR=/var/run/wpa\_supplicant GROUP=netdev

update\_config=1

network={

ssid="WIFI"

psk="18931983446"

key\_mgmt=WPA-PSK

priority=3

}

network={

ssid="GOD619"

psk="13931966009"

key\_mgmt=WPA-PSK

priority=2

}

1. **更换apt-get源**

sudo nano /etc/apt/sources.list

**32bit**

deb http://mirrors.aliyun.com/raspbian/raspbian/ buster main contrib non-free rpi

deb-src http://mirrors.aliyun.com/raspbian/raspbian/ buster main contrib non-free rpi

**64bit**

deb http://mirrors.tuna.tsinghua.edu.cn/debian buster main contrib non-free

deb http://mirrors.tuna.tsinghua.edu.cn/debian-security/ buster/updates main contrib non-free

deb http://mirrors.tuna.tsinghua.edu.cn/debian buster-updates main contrib non-free

sudo nano /etc/apt/sources.list.d/raspi.list

**32bit**

deb http://mirrors.aliyun.com/raspbian/raspbian/ buster main contrib non-free rpi

deb-src http://mirrors.aliyun.com/raspbian/raspbian/ buster main contrib non-free rpi

**64bit**

deb http://mirrors.tuna.tsinghua.edu.cn/raspberrypi/ buster main ui

1. **更新软件包并下载**

sudo apt-get update

sudo apt-get upgrade

1. **配置摄像头**

如果你使用的是这个系统的话，使用CSI摄像头需要在/boot/config.txt文件中将start\_x=1的注释去掉，重启后ls /dev/video\*能看到有/dev/video0的话，CSI摄像头就可以正常使用了（后面的video10 video11 video12不是CSI摄像头）

raspistill -o test.jpg

安装**fswebcam**视频软件

sudo apt-get install fswebcam -y

fswebcam 10 test.jpg

xdg-open test.jpg

1. **摄像头实时监控**

[**motion**](https://blog.csdn.net/scien2011/article/details/52587016)

sudo apt-get install motion

sudo vim /etc/default/motion

start\_motion\_daemon=yes #后台守护进程

sudo nano /etc/motion/motion.conf #ctrl+w查找关键字

#deamon off 改成 on

deamon on

#设置分辨率

width 800

height 600

#关闭 localhost 的限制

webcam\_localhost off

rotate 180 #画面旋转 0 90 180 270 度

width 1920 # 宽度

height 1080 # 高度

framerate 60 #画面帧率 2-100

stream\_port 8081 #视频流端口

stream\_maxrate 70 #视频流速率 >1

stream\_localhost off #仅限于本地端口访问

webcontrol\_port 8080 #网络TCP/IP端口

webcontrol\_localhost off #限制网络TCP/IP端口控制

# 调整帧数

framerate 50 #我调整50 change frame rate

# 调整质量

stream\_quality 50 # 如果觉着卡慢可以降低下质量 chenxzongcf

# 默认是1 我调100 超级流畅

stream\_maxrate 100

<http://[your.domain]:8081>

[配置流畅画面](https://blog.csdn.net/qq_45478359/article/details/115028670?utm_medium=distribute.pc_relevant.none-task-blog-baidujs_baidulandingword-5&spm=1001.2101.3001.4242)

**mjpg-streamer**

**方法1 失败**

<https://github.com/jacksonliam/mjpg-streamer>

#sudo apt-get install subversion

#sudo apt-get install libjpeg8-dev

#sudo apt-get install imagemagick

#sudo apt-get install libv4l-dev

**sudo apt-get install cmake**

#sudo apt-get install git

sudo apt-get install cmake libjpeg8-dev

# gcc g++编译器 Raspberry Pi的Debian系统自带

# 更新系统版本 sudo apt-get update

# 安装git 来获取mjpg-streamer包

sudo apt-get install git

sudo git clone <https://github.com/jacksonliam/mjpg-streamer.git>

cd mjpg-streamer/mjpg-streamer-experimental

sudo make all

sudo make install

sudo mjpg\_streamer -i "input\_uvc.so -n -f 30 -r 640x480 -d /dev/video0" -o "output\_http.so -w ./www"

./mjpg\_streamer -i "./input\_uvc.so" -o "./output\_http.so -w ./www"

或者 更改./start.sh，直接在文件目录下执行./start.sh



# -p指定端口 -fps 帧率 -rot 旋转 -x/y 分辨率

# raspicam🡪CSI摄像头 uvc🡪USB摄像头 但CSI摄像头用uvc也没有关系

**由于64位系统不太支持自带摄像头，故不可使用input\_ raspicam.so**

<http://IP:8080/stream.html>[默认端口为8080]

1. **安装中文字体**

sudo apt-get install fonts-wqy-zenhei

1. **安装中文输入法**

sudo apt-get install fcitx fcitx-googlepinyin fcitx-module-cloudpinyin fcitx-sunpinyin

1. **安装vim**

sudo apt-get install vim

1. **配置vim**

" 可以在buffer的任何地方使用鼠标（类似office中在工作区双击鼠标定位）

cd ~/

vim .vimrc

set mouse=a

set selection=exclusive

set selectmode=mouse,key

set number

filetype on

set history=1000

set nocompatible

set shiftwidth=4

color evening

syntax on

set autoindent

set smartindent

set tabstop=4

set showmatch

set guioptions-=T

set vb t\_vb=

set ruler

set nohls

set incsearch

1. **更换pip3源**

pip3 install --upgrade pip

pip3 config set global.index-url <https://pypi.tuna.tsinghua.edu.cn/simple>

1. **开机自启动[以mjpg\_streamer为例]**
2. 写一个简单的脚本(.py或者.sh)

#设置其他帧率、分辨率

./mjpg\_streamer -i "./input\_uvc.so -n -f 90 -r 640x480 -d /dev/video2" -o "./output\_http.so -w ./www" &

echo "mjpg\_streamer is runing"

1. 开机启动脚本

cd /etc/init.d

sudo vim mjpg\_streamer

sudo chmod 777 mjpg\_streamer

1. 脚本相关命令

#!/bin/bash

case "$1" in

start):

echo "Starting mjpg\_streamer"

cd /home/pi/Downloads/mjpg-streamer/mjpg-streamer-experimental/

sh start.sh &

;;

stop):

echo "Stopping mjpg\_streamer"

killall mjpg\_streamer

;;

\*)

echo "Usage: service mjpg-streamer start|stop"

exit 1

;;

esac

exit 0

启动服务：sudo service mjpg\_streamer start

停止服务：sudo service mjpg\_streamer stop

开机启动：sudo update-rc.d mjpg\_streamer defaults

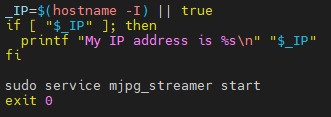
取消开机启动：sudo update-rc.d -f mjpg\_streamer remove

注意：这样，还是启动失败，故接下来进行如下步骤

1. 设置本地启动项

sudo vim /etc/rc.local

在exit 0前添加：sudo service mjpg\_streamer start



1. 重启加载

sudo reboot

1. 停止服务

sudo service mjpg\_streamer stop

1. **VNC远程网络连接**

防火墙开启端口

sudo iptables -I INPUT -p tcp --dport 5901 -j ACCEPT

https访问

192.168.X.X:5901

1. [**VS Code远程调试**](https://blog.csdn.net/weixin_42397613/article/details/114983147?utm_medium=distribute.pc_relevant.none-task-blog-2%7Edefault%7EBlogCommendFromMachineLearnPai2%7Edefault-1.control&depth_1-utm_source=distribute.pc_relevant.none-task-blog-2%7Edefault%7EBlogCommendFromMachineLearnPai2%7Edefault-1.control)