

## OCTO PRINTER IMAGE DOWN LOAD

<https://octoprint.org/download/>

OCTO PRINTER IMAGE to SD MEMORY WRITE

<https://www.raspberrypi.org/forums/viewtopic.php?t=131489>

<https://www.raspberrypi.org/forums/viewtopic.php?p=890408#p890408>

## RASPBERRY PI FIRMWARE UPDATE

```
sudo rpi-update
```

## RASPBERRY PI UPDATE

```
sudo apt-get update
```

```
sudo apt-get upgrade
```

## RASPBERRY PI XWINDOWS INSTALL

```
sudo apt-get install --no-install-recommends xserver-xorg
```

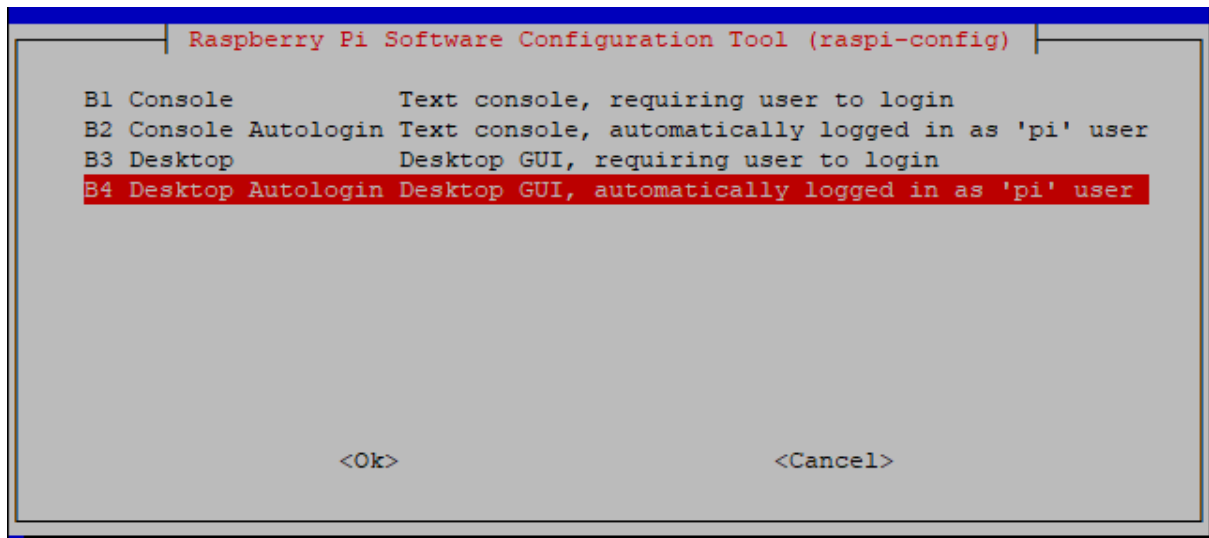
```
sudo apt-get install --no-install-recommends xinit
```

```
sudo apt-get install raspberrypi-ui-mods
```

## xwindos auto login & Pi camera setting

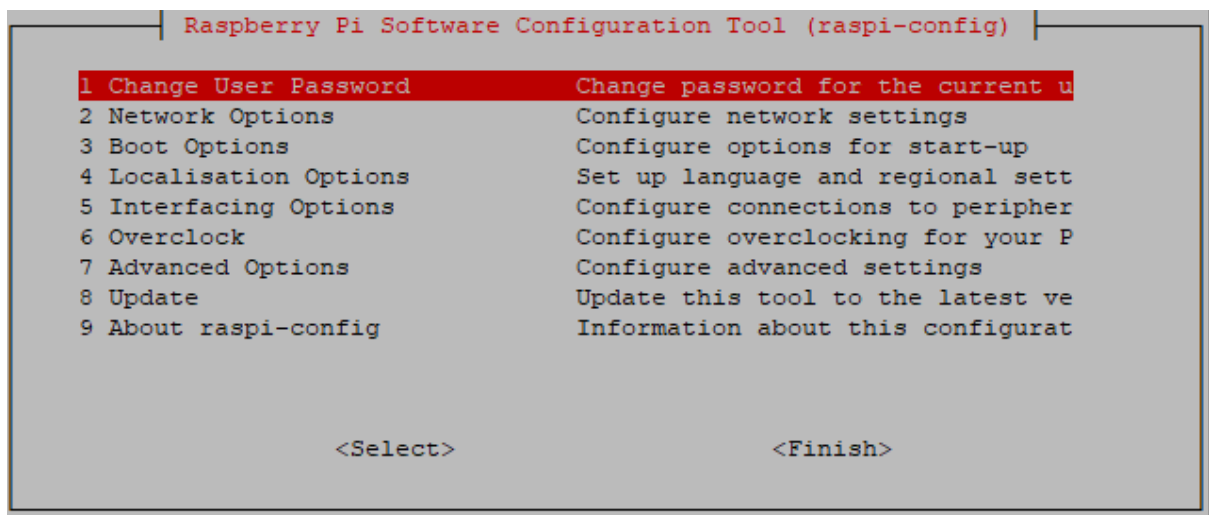
```
sudo raspi-config
```

3.Boot-option -> B1 Desktop /CLI -> B4 Desktop Autologin

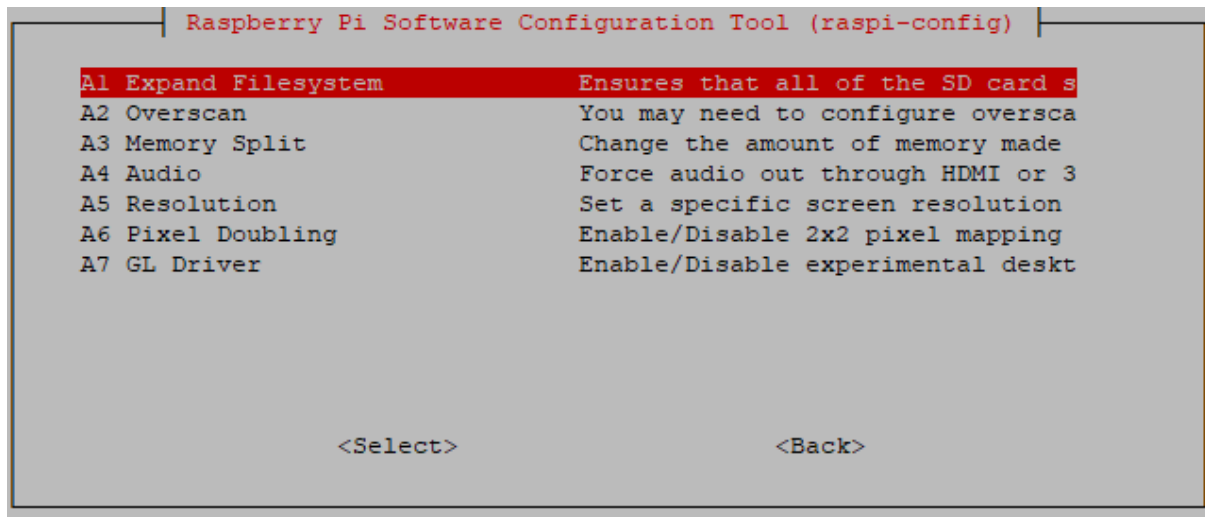


Pi CAMERA SETUP (Raspberry pi camera 사용시)

5. Interfacing Optin -> Pi Camera -> Yes



7.Advanced Options -> A1 Expand Filesystem



## TFT DRIVER INSTALL

[https://www.waveshare.com/wiki/3.5inch\\_RPi\\_LCD\\_\(A\)#Method\\_1.\\_Driver\\_installation](https://www.waveshare.com/wiki/3.5inch_RPi_LCD_(A)#Method_1._Driver_installation)

**wget https://www.waveshare.com/w/upload/1/1e/LCD-show-180817.tar.gz**

```
pi@octo_x5s:~$ wget https://www.waveshare.com/w/upload/1/1e/LCD-show-180817.tar.gz
```

## DRIVER extractor

```
tar xvf LCD-show-180817.tar.gz
```

```
cd LCD-show/
```

```
chmod 777 LCD35-show
```

```
./LCD35-show
```

## SPI-LCD & TOUCH DRIVER INSTALL

<https://www.raspberrypi.org/forums/viewtopic.php?t=175616>

```
sudo apt-get install xinput-calibrator
```

## CHROMIUM INSTALL

```
sudo apt-get install unclutter  
sudo apt-get install xdotool
```

<https://raspberrypi.stackexchange.com/questions/374/how-do-i-install-google-chrome>

```
sudo apt-get install chromium-browser
```

## CHROMIUM AUTO START SETTING

<https://www.raspberrypi.org/forums/viewtopic.php?t=163316>

```
sudo nano ~/.config/lxsession/LXDE-pi/autostart
```

```
sudo -u pi chromium-browser --kiosk --incognito http://127.0.0.1 &
```

```
GNU nano 2.7.4      File: /home/pi/.config/lxsession/LXDE-pi/autostart  
  
@lxpanel --profile LXDE-pi  
@pcmanfm --desktop --profile LXDE-pi  
@xscreensaver -no-splash  
@point-rpi  
  
sudo -u pi chromium-browser --kiosk --incognito http://127.0.0.1 &  
█
```

```
sudo reboot
```

## PSU Control Plug In Setup

## General



Show warning dialog when powering off via toggle button.

GPIO Mode

BOARD

Pin number will be converted if an alternate mode has already been set by another plugin.

## Switching

Switching Method

GPIO Pin

On/Off GPIO Pin

37



Invert



Enable switching with G-Code commands.

## Sensing

Sensing Method

Internal

## LED Strip Control Plug in Setup

### GPIO Configuration

GPIO pins should be specified as [physical pin numbers](#), not GPIO/BCM numbers.

Red Pin Number

31

Green Pin Number

32

Blue Pin Number

33

White Pin Number  
(Optional)

35

☐ Use [pigpiod](#)

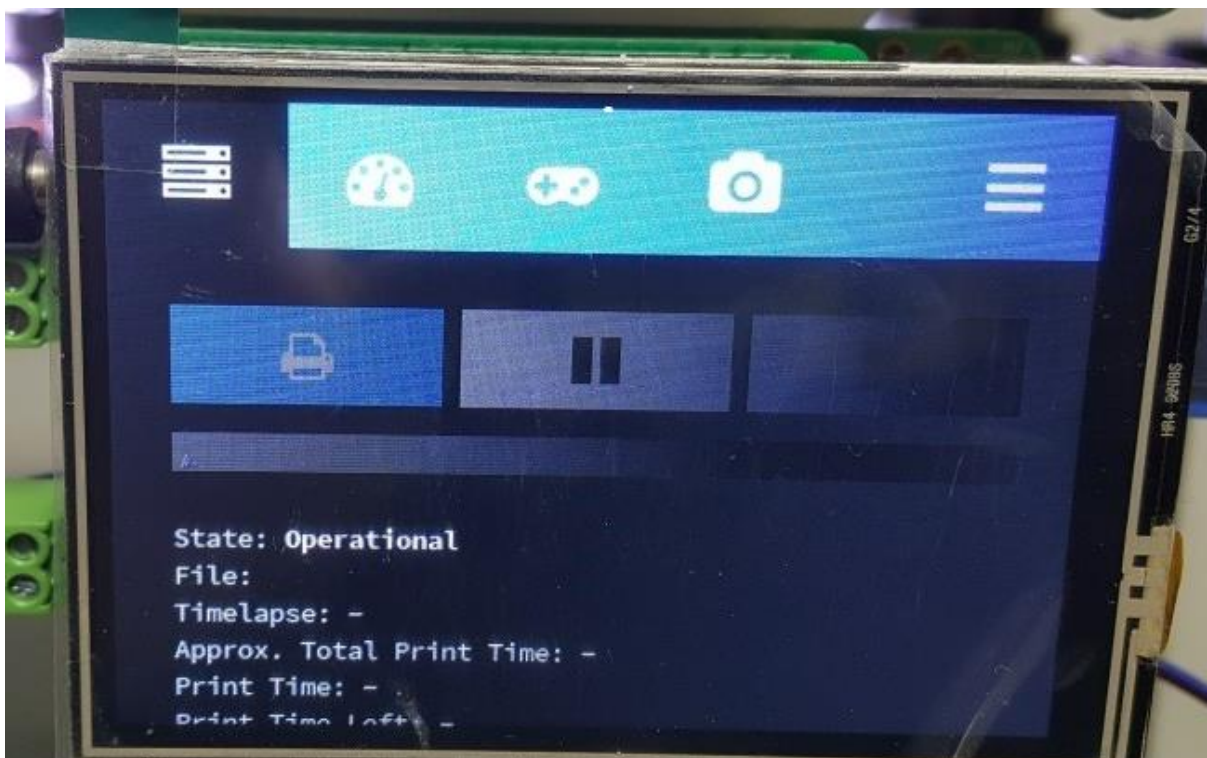
If unchecked use RPi.GPIO. PiGPIOd should give smoother PWM frequencies but requires a more involved setup. Please see the [documentation](#) for details.

☒ Turn on LEDs on OctoPrint startup

## TouchUI Plug in Setup

- ☒ Display 'TouchUI settings' when the touch interface is inactive.
- ☒ Start TouchUI automatically on load based on resolution.
- ☒ Start TouchUI automatically on load based on touch device.
- ☐ Enable customization

☐ Use local file



USB CAM Install(Optional)

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

```
sudo apt-get install subversion libjpeg8-dev libav-tools libv4l-dev cmake
```

```
git clone https://github.com/jacksonliam/mjpg-streamer.git
```

```
cd mjpg-streamer/mjpg-streamer-experimental
```

```
export LD_LIBRARY_PATH=.
```

```
sudo make
```

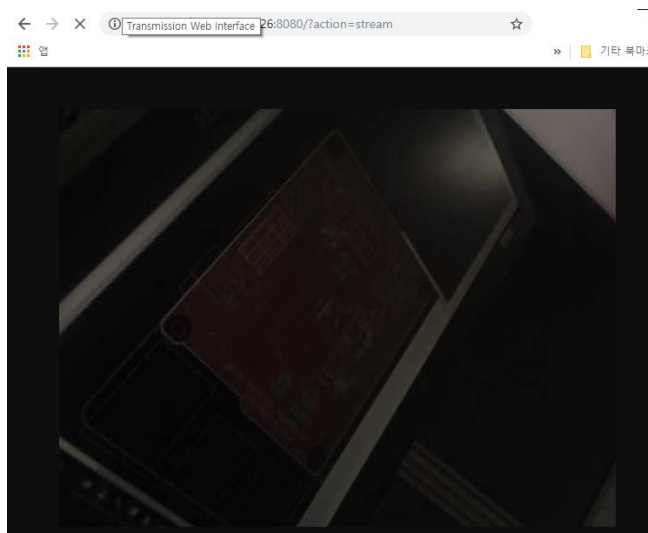
Connecting camera repeat command.

ls /dev/video\* (If you see the / dev / video0, then everything should be fine, go ahead)

<https://github.com/foosel/OctoPrint/wiki/MJPEG-Streamer-configuration>

```
sudo ./mjpg_streamer -i "/input_uvc.so -f 2 -y" -o "/output_http.so"
```

check at <http://<your Raspberry pi's IP>:8080/?action=stream>



```
sudo usermod -a -G video pi
```

(to allow user access to a device video, it is necessary to add it to the appropriate group)

```
sudo make install
```

```
cd ~
```

```
sudo nano webcam-streamer
```

```
#!/bin/bash
```

Daemon=mjpg\_streamer

DaemonBase=/usr/local

DaemonArgs="-i W"input\_uvc.so -f 2 -yW" -o W"output\_http.soW""

case "\$1" in

start)

eval LD\_LIBRARY\_PATH=\${DaemonBase}/lib \${DaemonBase}/bin/\${Daemon} \${DaemonArgs}  
>/dev/null 2>&1 &

echo "\$0: started"

;;

stop)

pkill -x \${Daemon}

echo "\$0: stopped"

;;

\*)

echo "Usage: \$0 {start|stop}" >&2

;;

Esac



```
GNU nano 2.7.4      File: webcam-streamer      Modified

#!/bin/bash
Daemon=mjpg_streamer
DaemonBase=/usr/local
DaemonArgs="-i \"input_uvc.so -f 2 -y\" -o \"output_http.so\""
case "$1" in
start)
eval LD_LIBRARY_PATH=${DaemonBase}/lib ${DaemonBase}/bin/${Daemon} ${DaemonArgs}
echo "$0: started"
;;
stop)
pkill -x ${Daemon}
echo "$0: stopped"
;;
*)
echo "Usage: $0 {start|stop}" >&2
;;
esac

[ Unbound key: M-^Z ]
^G Get Help  ^O Write Out ^W Where Is  ^K Cut Text  ^J Justify  ^C Cur Pos
^X Exit      ^R Read File ^\ Replace   ^U Uncut Text ^T To Spell  ^_ Go To Line
```

sudo chmod +x webcam-streamer

sudo mv webcam-streamer /usr/local/bin/

sudo nano ~/.octoprint/config.yaml

system:

actions:

- action: streamon

command: sudo /usr/local/bin/webcam-streamer start

confirm: false

name: Start video stream

- action: streamoff

command: sudo /usr/local/bin/webcam-streamer stop

confirm: false

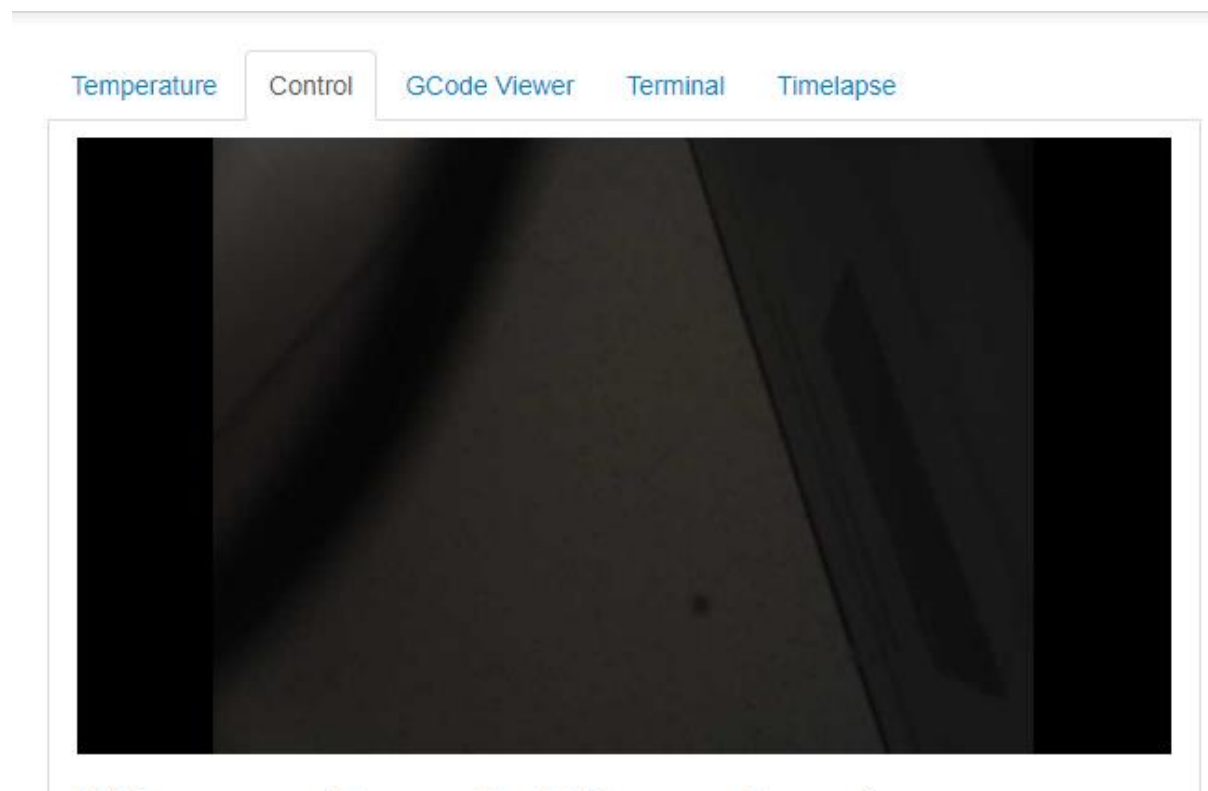
name: Stop video stream

```
GNU nano 2.7.4      File: /home/pi/.octoprint/config.yaml      Modified

ffmpeg: /usr/bin/avconv
snapshot: http://127.0.0.1:8080/?action=snapshot
stream: /webcam/?action=stream

system:
  actions:
    - action: streamon
      command: sudo /usr/local/bin/webcam-streamer start
      confirm: false
      name: Start video stream
    - action: streamoff
      command: sudo /usr/local/bin/webcam-streamer stop
      confirm: false
      name: Stop video stream

[ Unbound key: M-^Z ]
^G Get Help  ^O Write Out  ^W Where Is   ^K Cut Text   ^J Justify    ^C Cur Pos
^X Exit      ^R Read File  ^\ Replace    ^U Uncut Text ^T To Spell   ^_ Go To Line
```



Auto start cam

sudo nano /etc/rc.local

usr/local/bin/webcam-streamer start

(Just make sure to put it above the line that reads exit 0).

```
GNU nano 2.7.4      File: /etc/rc.local      Modified
#
# By default this script does nothing.

# Print the IP address
_IP=$(hostname -I) || true
if [ "$_IP" ]; then
    printf "My IP address is %s\n" "$_IP"
fi

sleep 7
fbcp &

usr/local/bin/webcam-streamer start
exit 0
```

[ Unbound key: M-^Z ]

^G Get Help	^O Write Out	^W Where Is	^K Cut Text	^J Justify	^C Cur Pos
^X Exit	^R Read File	^_ Replace	^U Uncut Text	^T To Linter	^_ Go To Line