

Raspberry Pi

Info

[Raspberry Pi Homepage](#) | [Raspberry Pi Software \(Imager\)](#) | [Raspberry Pi Docs](#) | [Waveshare PoE HAT \(B\)](#)

In JamLab there are three Raspberry Pi's:

- Raspberry Pi Model 4B
- 2x Raspberry Pi Model 3B+

Operating System

OctoPrint

[OctoPrint](#) is used to control the 3D printer.

On installation (like with RPi Imager), set the main user as `octoprint` or something you are not using for anything else, messing with the main user groups/permissions/etc can cause issues.

Octoprint uses a git wrapper that blocks it from running as root user. To disable the git wrapper run `sudo rm /root/bin/git`

Raspberry Pi OS

[Raspberry Pi OS](#)

Remove desktop environment

To save resources, the desktop environment can be removed from the Raspberry Pi OS:

```
Bash
```

```
1
```

```
sudo apt purge xserver* lightdm* raspberrypi-ui-mods vlc* lxde* chromium*  
desktop* gnome* gstreamer* gtk* hicolor-icon-theme* lx* mesa*  
sudo apt autoremove
```

Camera

To keep an eye on the rack and especially the 3D printer, a [Raspberry Pi Camera Module v2](#) is used.

Documentation for setting up the camera: [Raspberry Pi Camera Module v2 docs](#)

PoE HAT

To simplify cabling, Waveshare PoE HAT (B) are used to power the Raspberry Pis using Ethernet cables.

Waveshare's documentation for setting up the HAT: [Waveshare PoE HAT \(B\)](#).
CharlesGodwin's script simplifies this further (provided you are using RPi OS):
<https://gist.github.com/CharlesGodwin/adda3532c070f6f6c735927a5d6e8555>

My own repo for the script: [rpi-waveshare-poe-hat-b-script](#)