

Raspberry Pi imager with hostname, login settings, wifi settings, enabled ssh

ssh username@hostname.local

sudo raspi-config

Enable VNC

Enable I2C

Change VNC Resolution

sudo nano /etc/modules

i2c-bcm2708

i2c-dev

sudo nano /etc/modprobe.d/raspi-blacklist.conf

Delete:

blacklist i2c-bcm2708

sudo reboot

ssh username@hostname.local

sudo i2cdetect -y 1

Proceed if no error, sends device details

git clone https://github.com/pimoroni/adxl345-python

cd adxl345-python

sudo nano adxl345.py

Delete print statements at end of the file

Ctrl S

Ctrl X

sudo nano example.py

Add parentheses to print statements at end of the file

Ctrl S

Ctrl X

sudo python example.py

Copy RaspiSender into adxl345-python folder with corresponding drone# & ServerIp

sudo nano launcher.sh

#!/bin/bash

env sleep 10

[[! -t 0 && -x /usr/bin/x-terminal-emulator]] && (/usr/bin/x-terminal-emulator -e "bash -c
\"\$0 \$* ; read -s -p 'Press enter to close this window...\\\") || sudo python

/home/[Username]/adxl345-python/RaspiSender.py

sudo chmod 755 launcher.sh

Test with:

bash launcher.sh

cd

mkdir logs

sudo crontab -e

@reboot bash /home/[Username]/adxl345-python/launcher.sh

>/home/[Username]/logs/cronlog 2>&1

Test with: (should run our python file RaspiSender.py)

sudo reboot

Useful sources:

<https://www.instructables.com/how-to-use-the-ADXL345-on-Raspberry-pi/>

<https://www.instructables.com/Raspberry-Pi-Launch-Python-script-on-startup/>

<https://forums.raspberrypi.com/viewtopic.php?f=91&t=151320#p996624>