

Module 1.1

Booting Raspberry Pi and Installing Zymkey 4i

Compu**Things** ***Technology**;

Module Target

1. Booting Raspberry Pi
2. Connect to Rpi using Remote Desktop
3. Installing Zymbit 4i on Rpi
4. Running Zymbit Installation Script.
5. Binding Zymbit to Rpi using developer mode.

1. Booting Raspberry Pi

- Insert Raspbian noobs Micro SD card into Rpi SD card slot.
- Power up Rpi with power adapter and micro hdmi, usb mouse and usb keyboard.
- Switch on monitor to see Rpi boot.

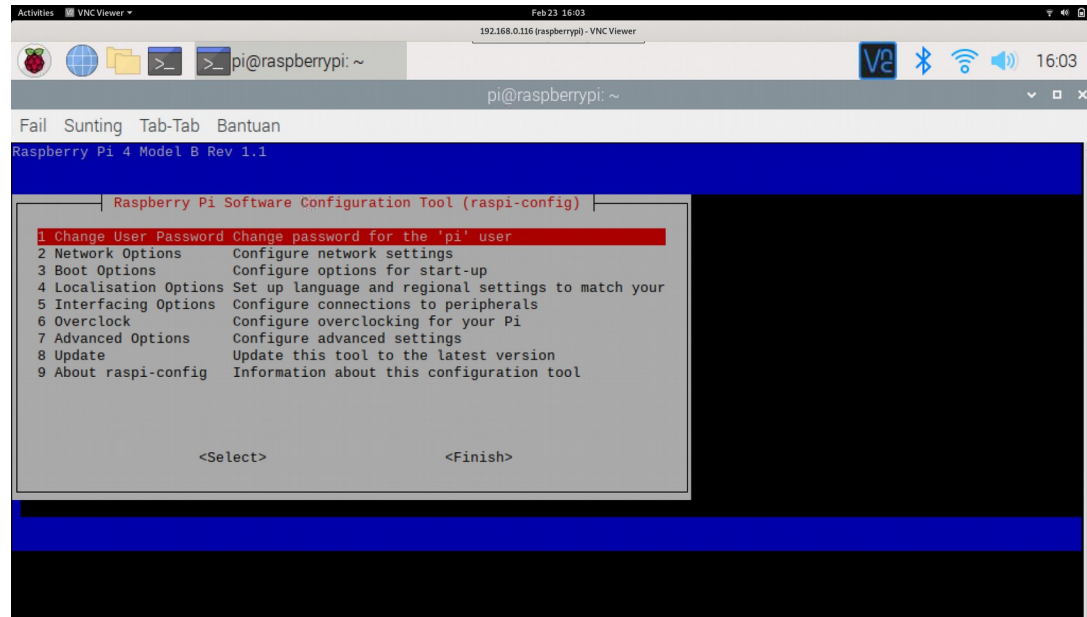


Download and Boot Rasbian Buster Image

- http://downloads.raspberrypi.org/raspbian_full/images/raspbian_full-2020-02-14/2020-02-13-raspbian-buster-full.zip
- Unzip the file. You will get one .img file.
- Download into SD card. Using rufus on windows or command dd on Linux.
- Change directory to download folder and run below command.
- `#sudo dd if=2020-02-13-raspbian-buster-full.img of=/dev/sdc iflag=fullblock oflag=direct status=progress bs=4M` *(maybe take around 10 minutes)*
- Boot again rpi using new image and do setup again. *(set password and connect to wifi)*
- `#ifconfig` to know IP address of your Rpi.

#sudo raspi-config

- Run above command to enable i2c for zymbit, ssh and vnc for remote desktop.

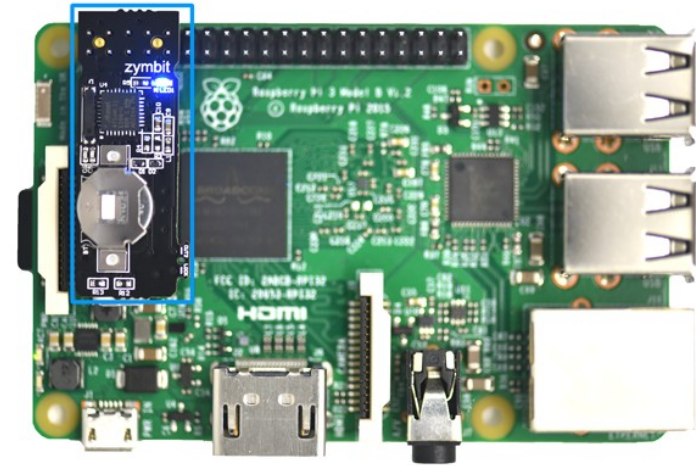


2.Connect to Rpi on Remote Desktop

- On your machine, download realvnc
<https://www.realvnc.com/en/connect/download/viewer/linux/>
- Run vncviewer and connect to your Rpi.

3. Installing Zymbit on Rpi

- Put battery on your zymkey 4i.
- Switch off your Rpi.
- Put zymkey 4i like this picture.
- Turn on Rpi.
- Ensure that zymkey LED blink fast.



4. Running Zymbit Installation Script

- Zymbit installation script is a automated script that install required software and libraries in order to run zymbit services and API.
- Run below command
- ```
#curl -G https://s3.amazonaws.com/zk-sw-repo/install_zk_sw.sh
| sudo bash
```



## 5. Binding Zymkey 4i to Rpi

- After the script run smoothly, Rpi will reboot and zymkey LED is blinking slower, once in 3 second.
- That's mean your zymkey is successfully bind to your Rpi.
- To prove your Zymbit is working, run below command:
- `#python /usr/local/share/zymkey/examples/zk_app_utils_test.py`
- `#python /usr/local/share/zymkey/examples/zk_crypto_test.py`
- If the scripts run smooth, congratulations. Zymkey is running on your Rpi.
- Keep Your Rpi running with vncviewer on.

# Conclusion

- Zymkey is binded on developer mode.
- In next module we will discuss detail theoretical background on all this.