Started

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**1. Prerequisite Item List**

**Require Tool:**

* RaspPi Power Adaptor/USB-C power cable
* MicroSD card USB reader
* Micro HDMI cable
* Mouse and Keyboard

**Require Software Install In Window OS:**

* Install Raspberry Pi Image (<https://www.raspberrypi.com/software/>)

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* Install RealVNC Viewer (<https://www.realvnc.com/en/connect/download/viewer/?lai_vid=X1y8VO3xrhJe&lai_sr=5-9&lai_sl=l>)

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**Require OS:**

* Install Raspberry Pi OS (<https://www.raspberrypi.com/software/operating-systems/>)

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**2. Initiate Setup**

* Install the image into SD card from Windows OS PC

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* Go To "Preferences" >> "Raspberry Pi Configuration"
  + "Interfaces" >> Turn On All Interfaces.

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* "Localisation" >> Locale, Timezone, Wireless LAN Country. (SG,Singapore)

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* For General Update Require: (MUST)

sudo apt install apache2 -y

sudo apt-get upgrade

sudo apt update

sudo apt full-upgrade

sudo reboot

* Install Development IDE

sudo apt install code

sudo apt update

* Python Environment Setup: (OPTIONAL)

sudo apt install python3 idle3

sudo apt install python3-pip

sudo apt-get install python3-spidev

sudo apt-get install python3-gpiozero

sudo apt install python3-flask

* For GPIO Lib Setup: (MUST)

sudo apt install libgpiod-dev

* For DQGHATS Setup: (MUST)

sudo apt install git -y

cd ~

git clone <https://github.com/mccdaq/daqhats.git>

cd ~/daqhats

sudo ./install.sh

(For Python environment)

cd /

sudo python3 -m venv "pyvenv"

sudo chmod 777 "pyvenv"

sudo /pyvenv/bin/pip install daqhats

sudo /pyvenv/bin/pip install dash

cd ~/daqhats

sudo /pyvenv/bin/python setup.py install

sh -c '/pyvenv/bin/python ~/daqhats/examples/python/mcc118/web\_server/web\_server.py'

<http://localhost:8080/>

**3. VSCODE**

VSCODE Extension Require:

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**Source Code:**

/BIO/SourceCode/MCC\_DAQ\_HATS

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**Release:**

/BIO/Program/MCC\_DAQ\_HATS

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**Logs:**

/BIO/Program/MCC\_DAQ\_HATS/log

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**4. Service List**

The List as below:

* rc-local.service
* pyweb.service
* nmbd.service
* smbd.service

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