Audiophile audio music playback on Raspberry Pi with DAC Equipment's

1. Raspberry Pi B or B+

2. DAC I2C

   Durio Sound Basic from www.gravitechthai.com
   [https://www.gravitechthai.com/product_detail.php?d=1287] at price 50$.
   Durio Sound adds a 24bit 192kHz ultimate sound quality with
   the lowest possible distortion.

3. OLED 128x64 I2C

   OLED 128x64 I2C White from www.gravitechthai.com
   [https://www.gravitechthai.com/product_detail.php?d=1938] at price 10$.
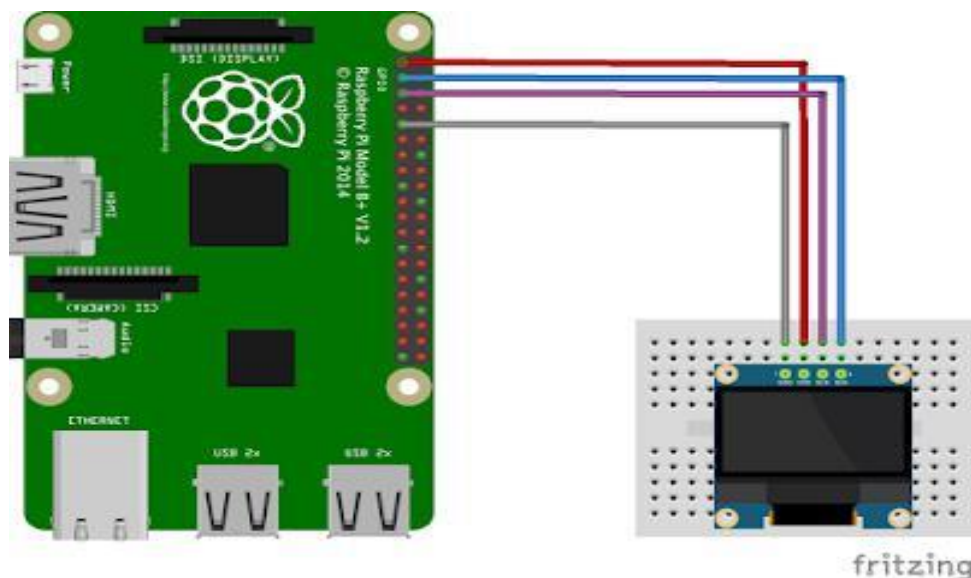

CONFIGURATION

How to change Raspberry Pi to ultimate sound.

1. **Download** moOde audio player from
   www.moodeaudio.org and write to SD Card
   a) insert boot SD card or USB drive
   b) connect USB or I2S audio device
   c) connect USB storage devices
   - Ethernet mode
   a) insert ethernet cable
   b) power on
   c) http://moode
   - Access Point (AP) mode
   a) insert WiFi adapter that supports AP mode
   b) power on
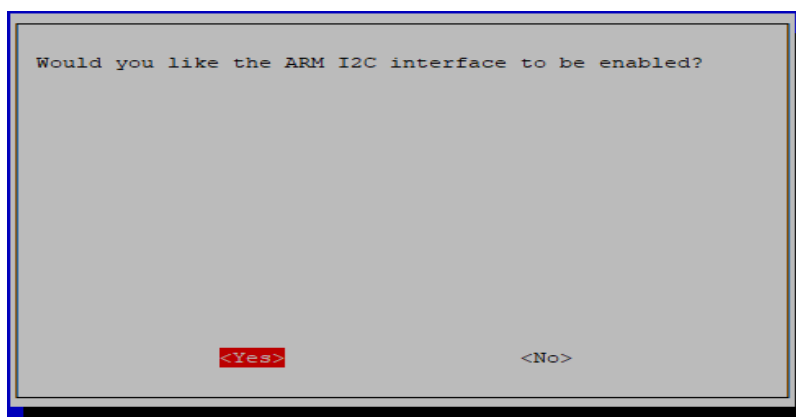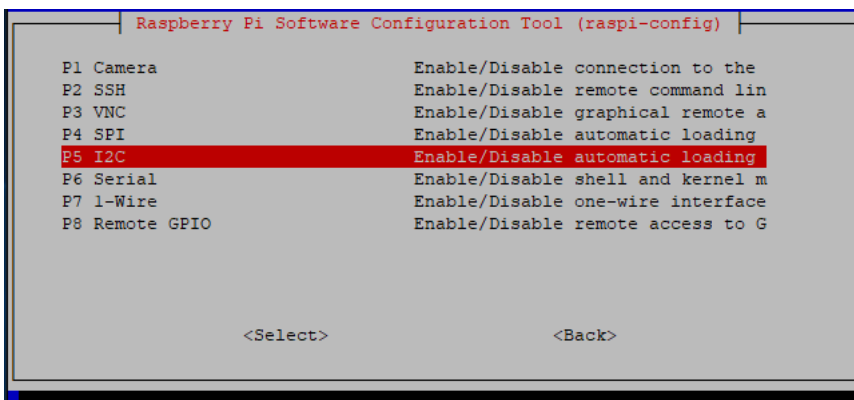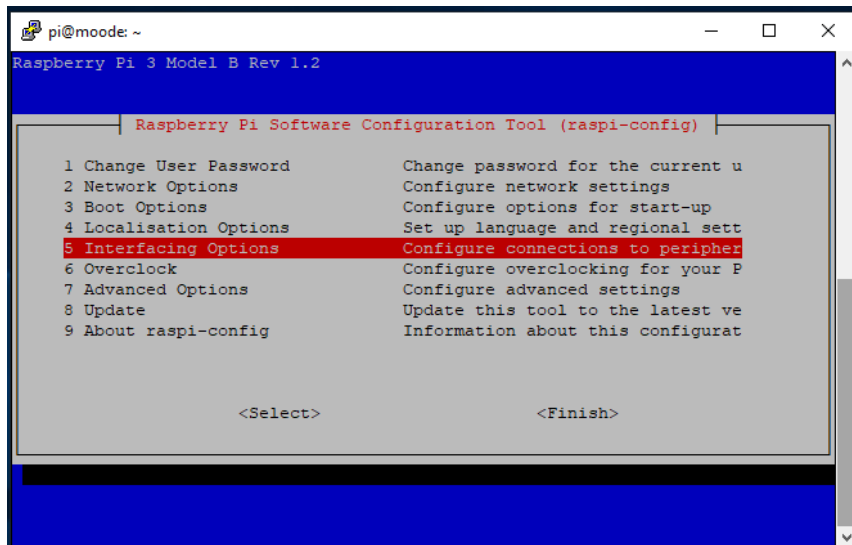   c) join network SSID=Moode, pwd=moodeaudio
   d) http://moode.local

2. **Wiring**

3. **Case**
4. **Assembly**
5. **Setup (**using putty)
    ssh login with user pi and password moodeaudio

    sudo apt-get update

    sudo raspi-config

```
pi@moode: ~                                    —    □    ×
Raspberry Pi 3 Model B Rev 1.2                             ^

        ┤ Raspberry Pi Software Configuration Tool (raspi-config) ├

      1 Change User Password     Change password for the current u
      2 Network Options          Configure network settings
      3 Boot Options             Configure options for start-up
      4 Localisation Options     Set up language and regional sett
      5 Interfacing Options      Configure connections to peripher
      6 Overclock                Configure overclocking for your P
      7 Advanced Options         Configure advanced settings
      8 Update                   Update this tool to the latest ve
      9 About raspi-config       Information about this configurat


              <Select>                     <Finish>


                                                          v
```

```
        ┤ Raspberry Pi Software Configuration Tool (raspi-config) ├

      P1 Camera                  Enable/Disable connection to the
      P2 SSH                     Enable/Disable remote command lin
      P3 VNC                     Enable/Disable graphical remote a
      P4 SPI                     Enable/Disable automatic loading
      P5 I2C                     Enable/Disable automatic loading
      P6 Serial                  Enable/Disable shell and kernel m
      P7 1-Wire                  Enable/Disable one-wire interface
      P8 Remote GPIO             Enable/Disable remote access to G




              <Select>                     <Back>

```

```
    Would you like the ARM I2C interface to be enabled?












                  <Yes>                      <No>

```

sudo apt-get install build-essential python-pip python-dev python-smbus git python-imaging python-mpd

sudo apt-get install -y python-dev python3-dev

sudo apt-get install -y python-imaging python-smbus i2c-tools

```
i2cdetect -y 1
```

```
git clone https://github.com/adafruit/Adafruit_Python_GPIO.git
```

```
cd Adafruit_Python_GPIO
```

```
sudo python setup.py install
```

```
cd ..
```

```
git clone https://github.com/adafruit/Adafruit_Python_SSD1306.git
```

```
cd Adafruit_Python_SSD1306
```

```
sudo python setup.py install
```

```
cd ..
```

```
git clone https://github.com/naisema/MoodeAudio-OLED.git
```

6. **UI**
Open Moode in web browser and navigate as shown
menu -> Configure -> System -> Local Services -> LCD update engine fill full path of python script.

```
/home/pi/MoodeAudio-OLED/moode-oled.py
```

On button and apply SET