RPI HIFI AMP HAT

A RPI Amplification Module Supports all series RPI like PI ZERO，PI A+,PI B+,PI2,PI3,PI3+

1、Overview

The RPI HIFI AMP HAT is a high-quality, highly efficient 25W Class-D power amplifier for the Raspberry Pi. you can get a stereo audio system by mount it onto your Raspberry Pi. You only thing you have to do is connect your loudspeakers to our module. It’s the ideal choice for small room audio system.



2、Functions and Features

1, Up to 25W output power.
2, Capable of driving 4 Ohm speakers or higher.
3, Fully controllable from the Raspberry Pi.
4, Support 44.1kHz and 48kHz sample rates.
5, Digital-analog conversion included—no need for external DACs or sound cards.
6, Fully digital sound path for optimal audio performance.
7, Connects directly to the Raspberry Pi no additional cables needed.
8, Wide Power input :12-20v external power input for both RPI and module.
9, HAT size.
10, Up to 90% Efficient.
11, Integrated EEPROM for automatic configuration (Option).

3、Hardware connection

Connect the RPI HIFI AMP HAT and RPI with 40 pin connector .While installing the module attention to align the first leg of the raspberry pi and RPI HIFI AMP HAT.



6	Right-
5	Right+
4	Left-
3	Left+
2	GND
1	+12V---+20V
DC-JACK	DC POWER,12V,5.5MM*2.0MM

Remark：PIN6,PIN5 is a set of signal，PIN4,PIN3 is another set of signal。

Attention：When Using RPI HIFI AMP HAT，not need to power the raspberry pi.
Use DC-Jack Or PIN1,PIN2（One of them）

4、Software Installation

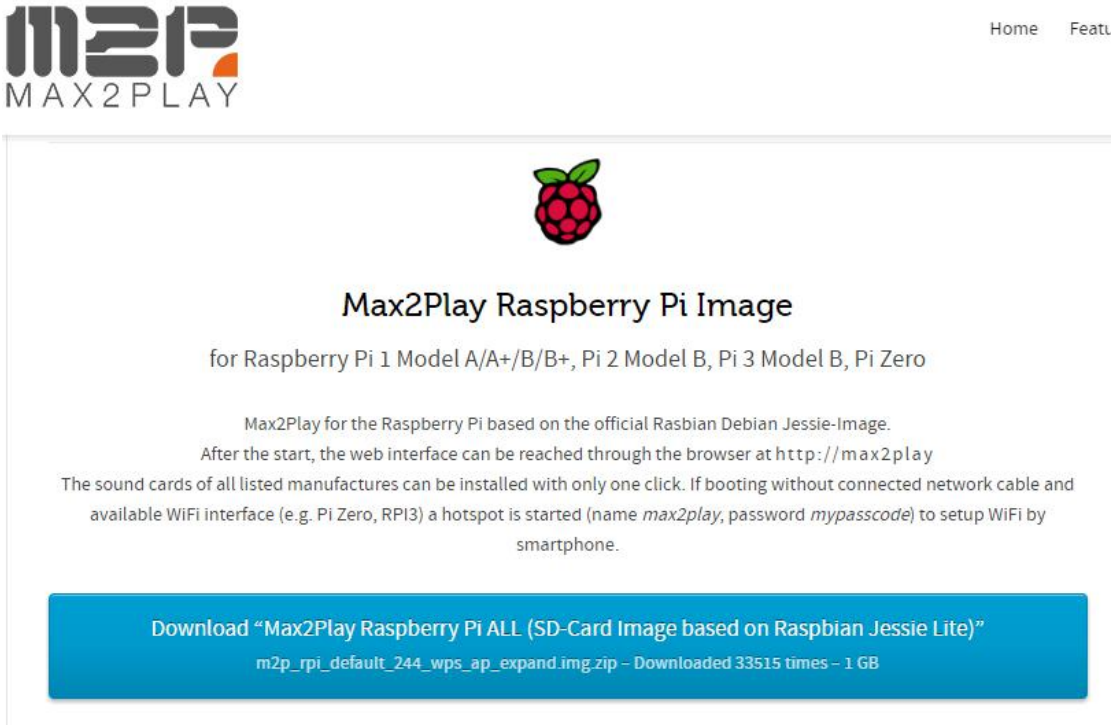
4.1 Third-party system

RPI HIFI AMP HAT compatible with many Raspberry pi music playback system such as: OSMC / Max2Play / RuneAudio / Volumio / Moode / PiCorePlayer / PiMusicBox / OpenELEC etc. The user can choose a suitable for their own .

Like max2play and Volumio User can easily download the latest software from the official website, follow the official user guide do some simple configuration then you can enjoy it.

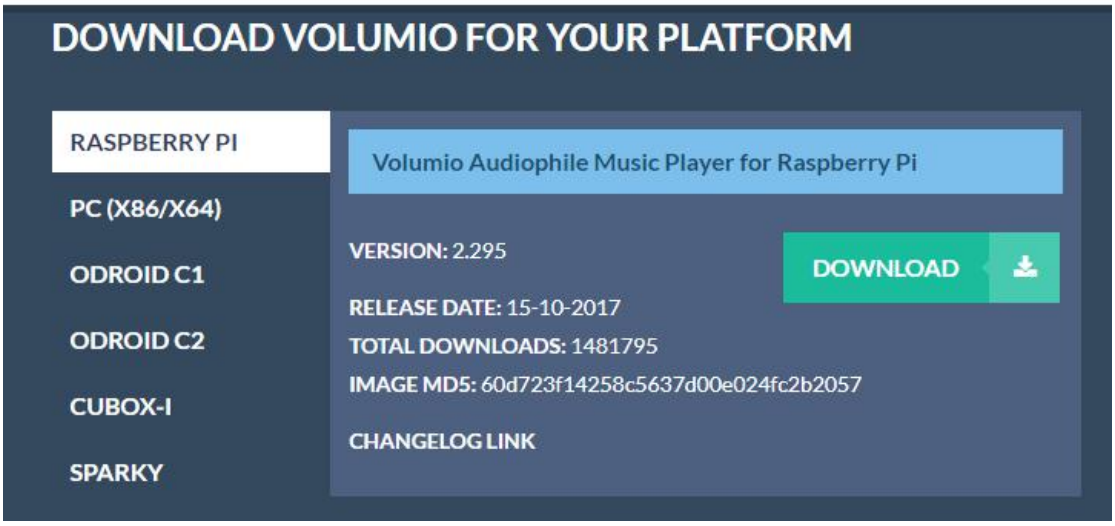
MAX2PLAY

https://www.max2play.com/en/max2play-image/#close



VOLUMIO

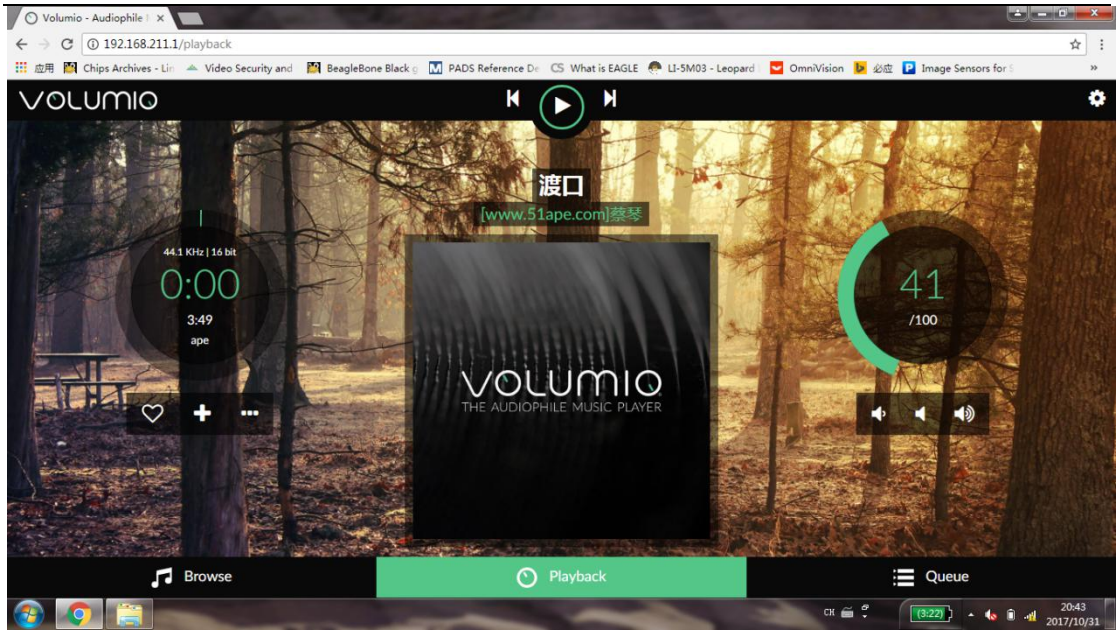
https://volumio.org/get-started/



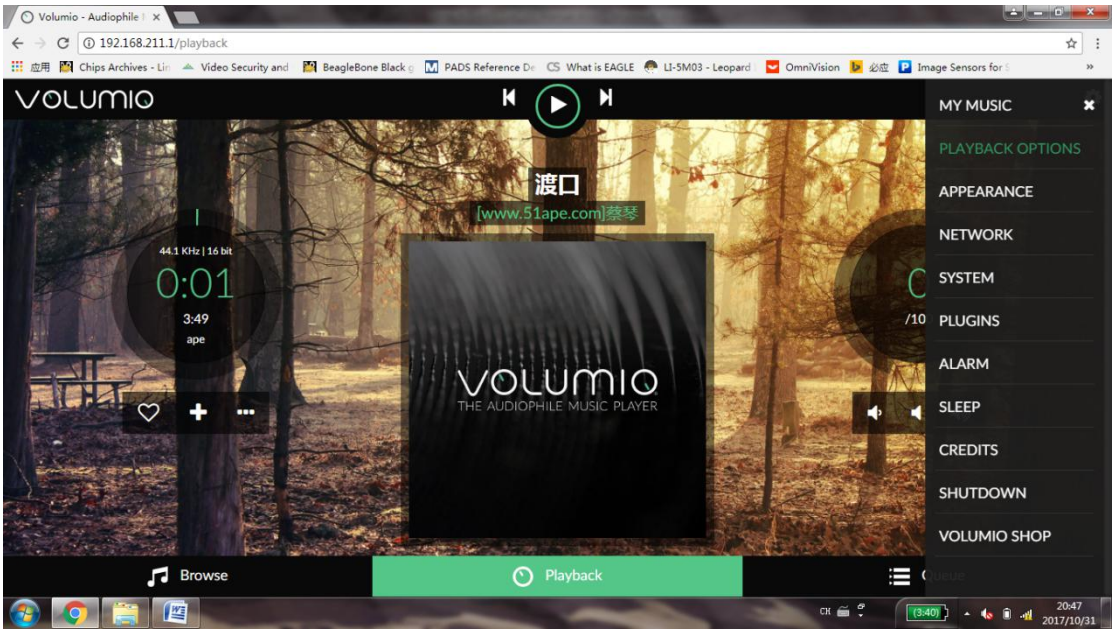
For the convenience of fast experience here we can supply Volumio preset software image: volmio-2.2.46-AMP-ok.img, operation as follows：
Prepare a capacity of more than4 GB TF card and card reader.

1, Open Win32DiskImager.exe and select volmio-2.2.46-AMP-ok.img click 「write」wait for it complete .
2, Insert the TF card into the Raspberry pi then power on the system.
3, Using your smart phone or tablet or any device with wifi and browser search for wifi hotpots.
4, Connect hotspot Volumio with password *volumio2* （you can change your password once you login）the browser will automatically eject playback software UI which is based on web interface (if you connect the hotspot successfully but for some reason browser can't pop up the playback page automatically, you can using http://192.168.211.1 login it).

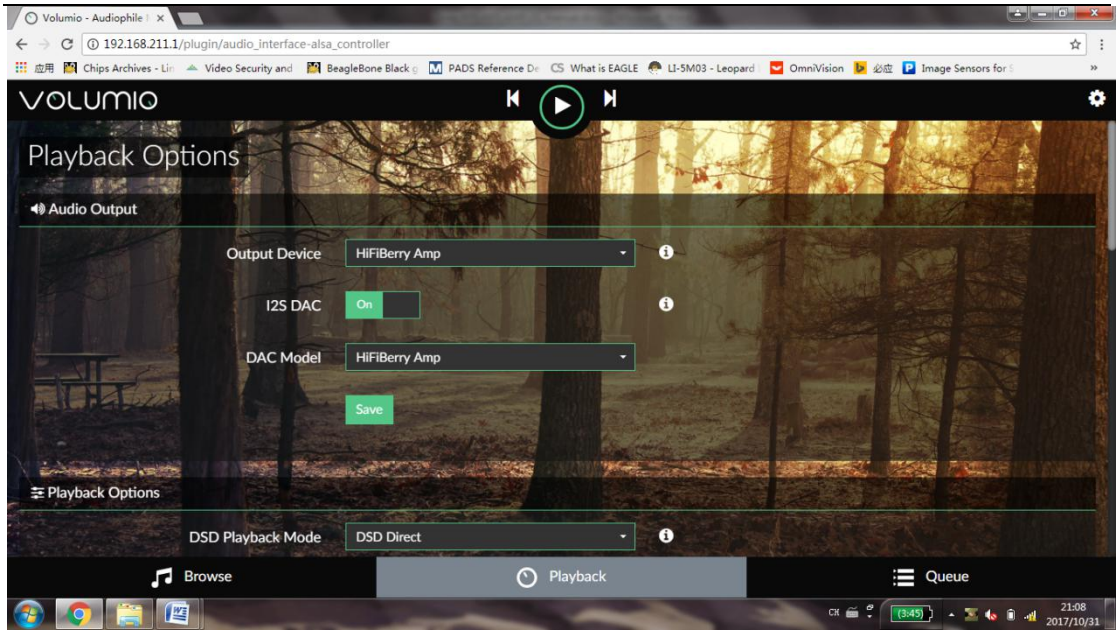
Music player UI



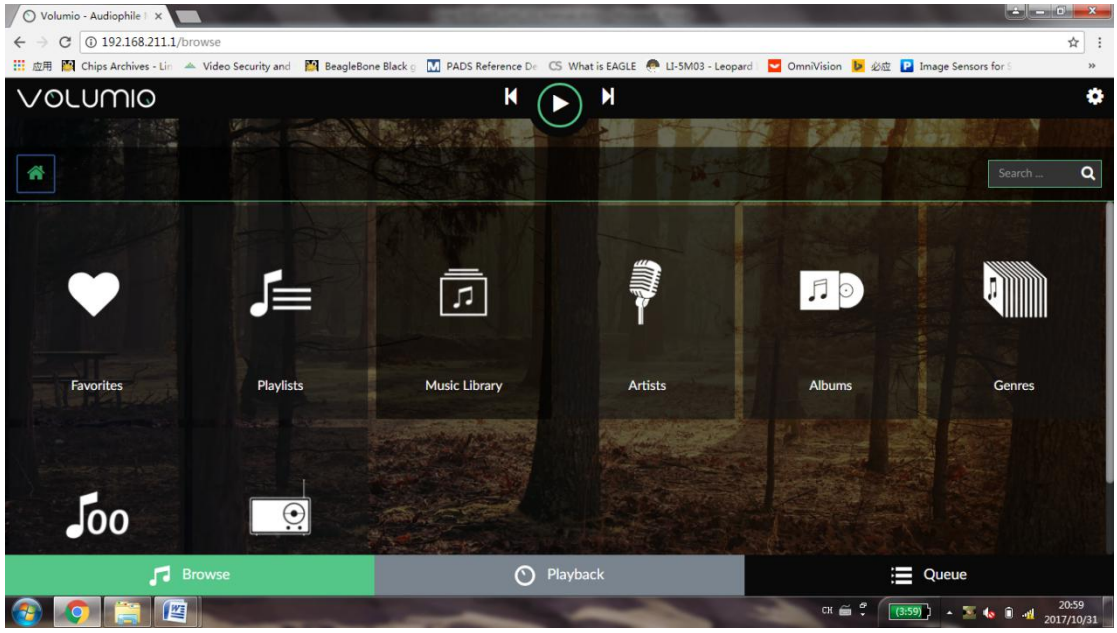
Software settings：

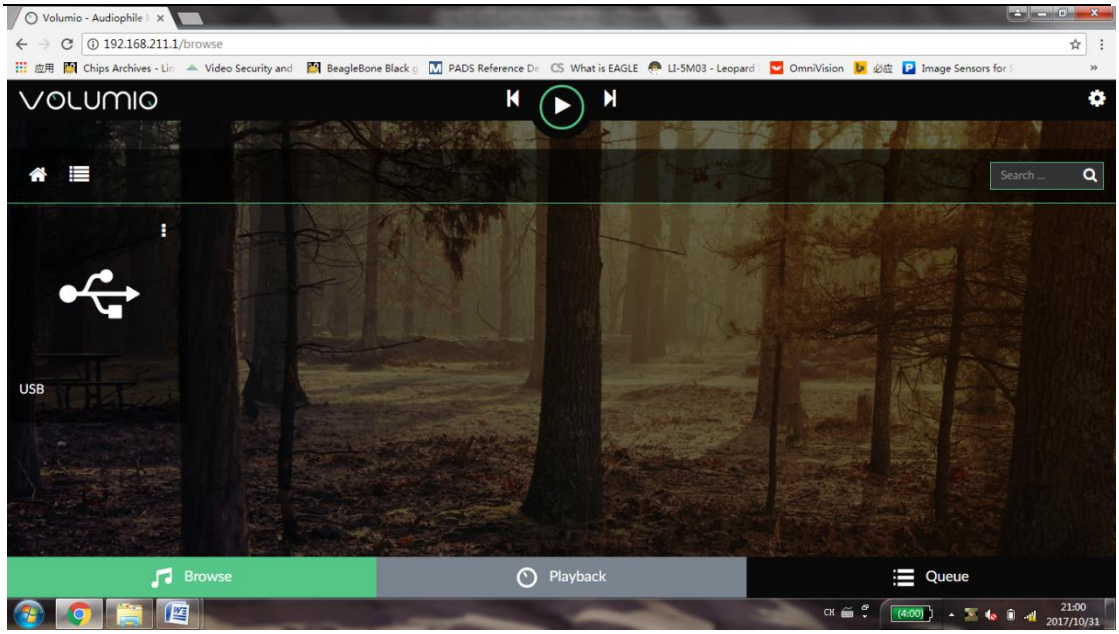


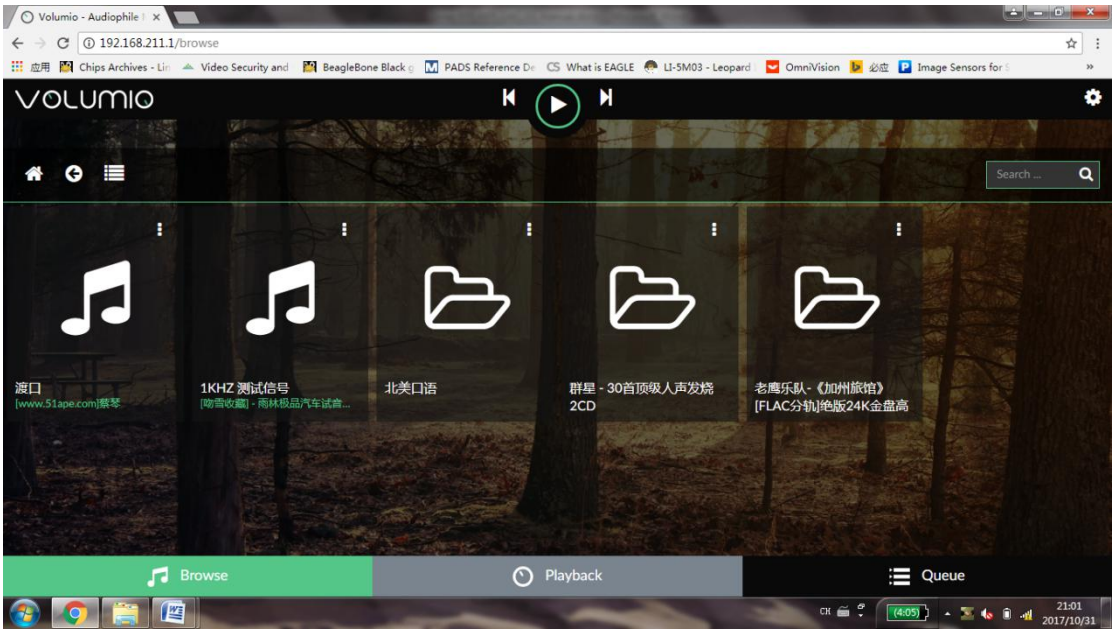
RPI HIFI AMP HAT hardware setting.



Music library select：







4.2 Debian System

1） Download debian system, burn into TF card。

2） Find and edit config.txt in FAT partition FAT, enable IIS Audio Card。

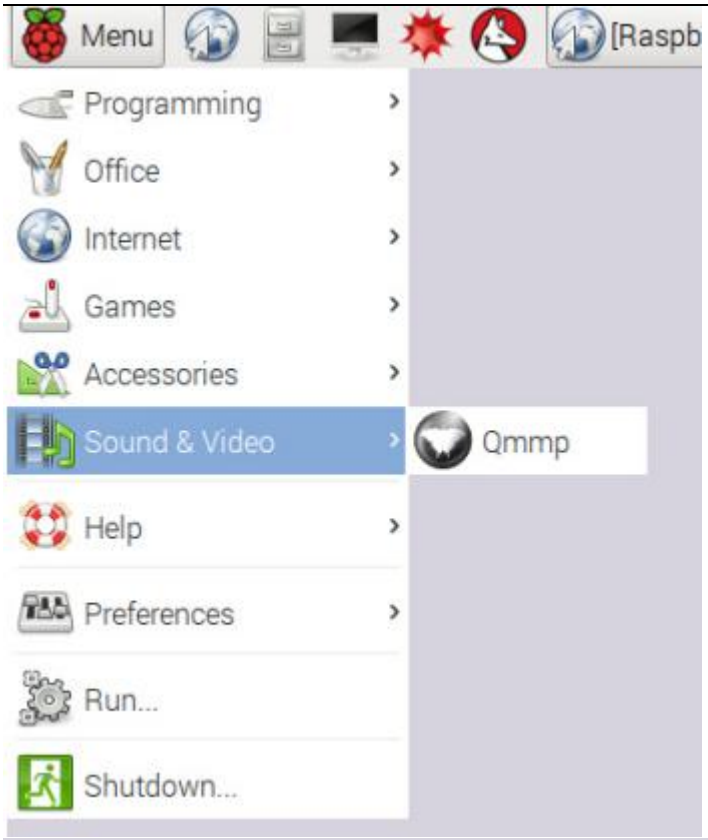
Add the following code as follows in config.txt：

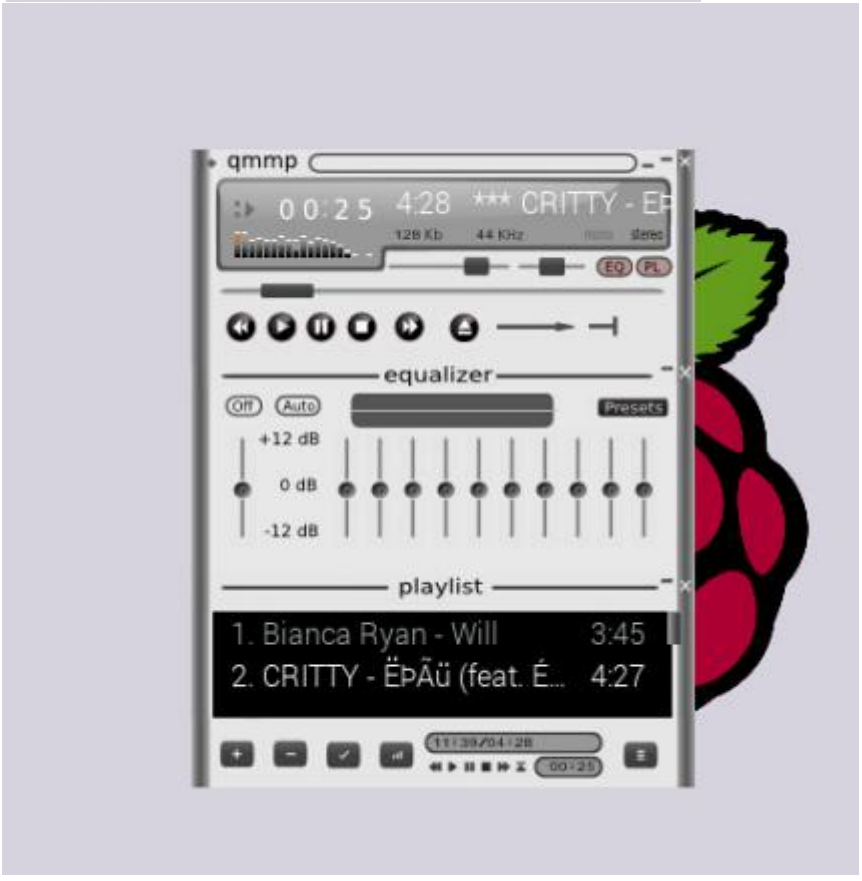
```
dtoverlay=hifiberry-amp
```

3） Install the music player：

```
Sudo apt-get install Qmmp.
```

After the installation is,we can find the player under the menu bar





4) Set RPI AMP Module(hifiberry-amp) as default system Audio card in Preferences