



Jukebox

VOLUMIO[®]
THE AUDIOPHILE MUSIC PLAYER

Preparing your SD card for the Raspberry Pi

In order to use your Raspberry Pi, you will need to install an Operating System (OS) onto an SD card. An Operating System is the set of basic programs and utilities that allow your computer to run. Eg. Windows on a PC or OSX on a Mac.

The following instructions will guide you through installing an OS on your SD card that will allow you to easily install different OS's and to recover your card if you break it.

1. Insert an SD card that is sized between 4GB and 32 GB, into your computer
2. Format the SD card so that the Pi can read it

A. Windows

- Download the SD Association's Formatting Tool from https://www.sdcard.org/downloads/formatter_4/eula_windows/
- **Note:** *The builtin Windows formatting tool will only format the first partition that Windows can read not the entire disk. For this reason we advise using the official SD Card Association Formatting Tool.*
- Install and run the Formatting Tool on your machine
- Set "FORMAT SIZE ADJUSTMENT" option to "ON" in the "Options" menu
- Check that the SD card you inserted matches the one selected by the Tool
- Click the "Format" button

B. Mac

- Download the SD Association's Formatting Tool from https://www.sdcard.org/downloads/formatter_4/eula_mac/
- Install and run the Formatting Tool on your machine
- Select "Overwrite Format"
- Check that the SD card you inserted matches the one selected by the Tool
- Click the "Format" button

C. Linux

- We recommend using gparted (or the command line version parted)
- Format the entire disk as FAT

Install Volumio on SD card

Volumio is a version of Debian Linux specifically configured to run on the Raspberry Pi .

1. Download the latest Volumio + OS available for free from the Volumio website.
<https://volumio.org/get-started/>

2. Installing is on SD card

A. Windows

Once you have the ZIP file downloaded to your computer, unarchive it using eg. 7zip (<https://www.7-zip.org/>). There will be a single .img file inside. This is the disk image you will flash to the SD card. To install, you will need an SD card that has at least 8 GB of space or more. Note that the cheap 16 GB Class 10 SD card works great on the Raspberry Pi.

Insert the SD card into your SD card reader and check which drive letter was assigned. You can easily see the drive letter, such as G:, by looking in the left column of Windows Explorer. You can use the SD card slot if you have one, or a cheap SD adapter in a USB port.

Download Rufus utility from <https://rufus.ie/>. Install the tool and run it. You may need to run this as administrator. Right-click on the file, and select Run as administrator. Select the drive letter of the SD card in the device box. Be careful to select the correct drive. If you get the wrong one you can destroy the data on your computer's hard disk! If you are using an SD card slot in your computer and can't see the drive in Rufus, try using an external SD adapter.

Select the image file .img you extracted earlier.

Click Write and wait for the write to complete.

Exit the imager and eject the SD card.

An alternative is Etcher (<https://www.balena.io/etcher/>) or, laterly the Raspbian Imager: <https://www.raspberrypi.org/documentation/installation/installing-images/>

B. Mac

<https://www.raspberrypi.org/documentation/installation/installing-images/mac.md>

C. Linux

<https://www.raspberrypi.org/documentation/installation/installing-images/linux.md>

Setup Volumio

Start-up the Pi and make the initial set-up based on the information found below

Extra setting at OS level

- **activate SSH**

open the webpage <http://volumio/dev> and enable SSH.

SSH



Once activated, use a SSH terminal, like Putty or SmarTTY and connect to the Pi. Use Ip adres "volumio"

login name: volumio

password: volumio

- **install cron**

```
# sudo apt -y install cron
# crontab -e (for volumio user)
add
```

```
0 5 * * * /sbin/reboot
```

Now change to root account

```
# sudo -i
# sudo crontab -e (for root user)
```

add

```
0 5 * * * /sbin/reboot
```

Now set correct timezone

```
# sudo systemctl stop systemd-timesyncd
# sudo nano /etc/systemd/timesyncd.conf
```

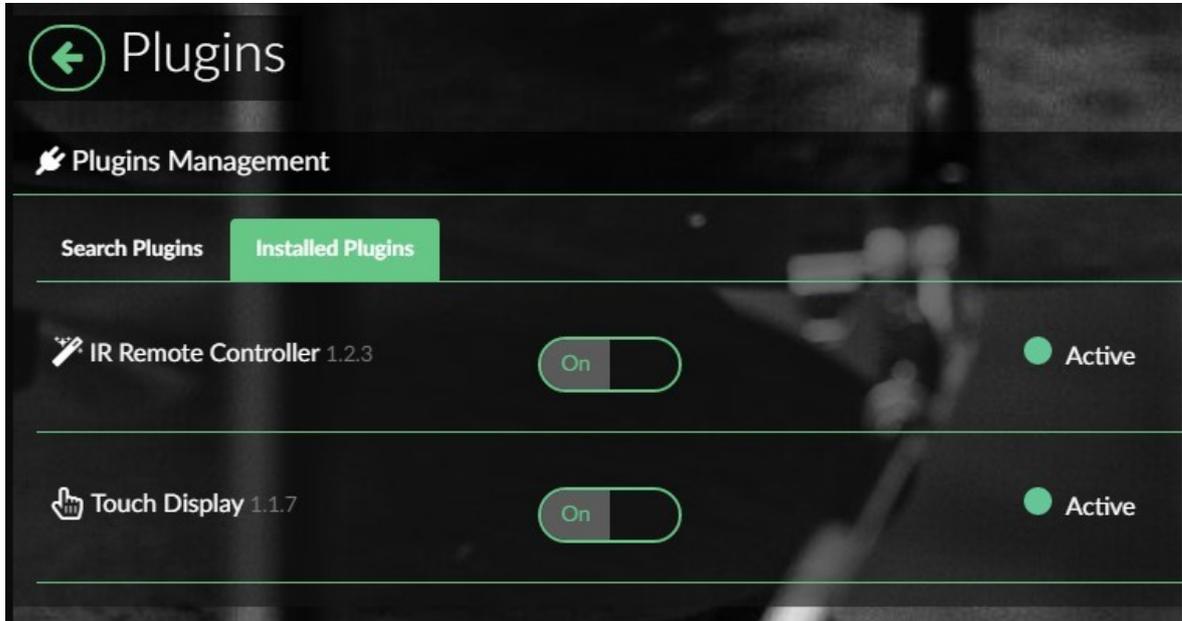
replace debian.pool with be.pool

```
# sudo systemctl daemon-reload
# sudo timedatectl set-ntp true
# sudo systemctl enable systemd-timesyncd
# sudo systemctl start systemd-timesyncd
# sudo systemctl status systemd-timesyncd
# sudo timedatectl timesync-status
# sudo timedatectl
```

Extra setting at Volumio level

- **install extra plugins**

open webpage <http://volumio/> and go to 'Plugins'. From 'Miscellanea', install 'Touch Display". From 'Accesories' install IR Remote Controller. Activate both



For IR Remote control, select the profile "JustBoom IR Remote".

For Touch Panel Display,

← Touch Display Configuration

← Back

⊙ Screensaver Settings

The screen will be set to DPMS "off" state after a given time has been elapsed.

Screensaver Timeout ⓘ

No Screensaver While Playing ⓘ

Apply

⊙ Brightness Settings

NOTE: On a Raspberry Pi Display V1.0 brightness values below 128 will just turn the screen off while values above 127 will turn it on.

Brightness ⓘ

Apply

⊙ Orientation Settings

Rotate Screen Content By ⓘ

Apply

GPU Memory Settings

The amount of memory used by the GPU can be adjusted in steps of one megabyte. Increasing the memory allocated to the GPU decreases the system's performance.

Control GPU Memory ⓘ

Apply

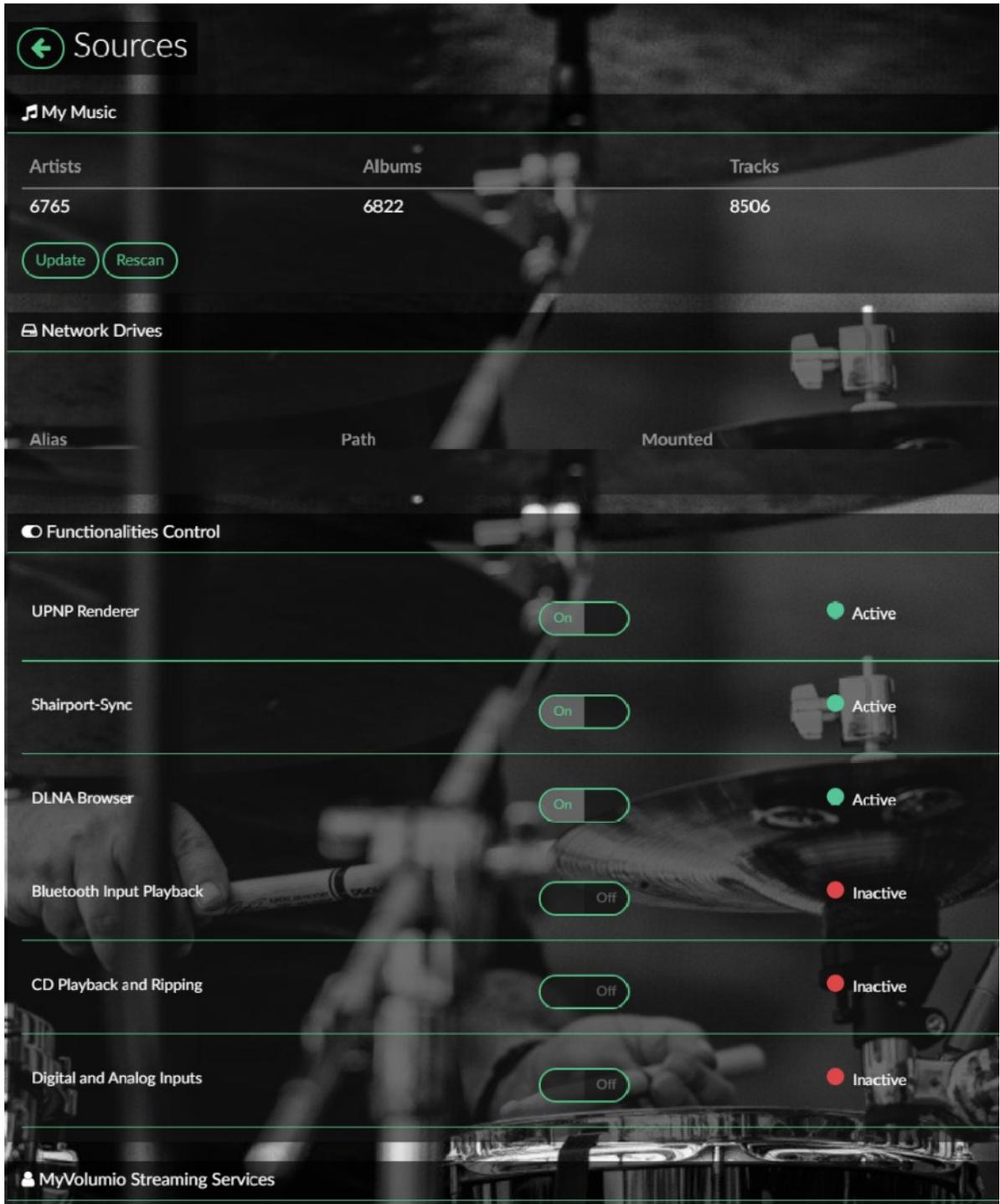
🖱 Mouse Pointer Settings

Show Mouse Pointer ⓘ

Apply

- **Extra settings**

In 'Settings', make the required changes as shown below.



← System Settings

🔧 General Settings

Player Name ⓘ

Startup Sound ⓘ

Run First Config Wizard

Show Advanced Settings ⓘ

ⓘ System Version

System Version: 2.779 Released: Mon Jun 8 18:17:29 CEST 2020

🔄 System Updates

Check Updates Check if new

Factory Reset Reset your S

📄 Credits And Open Source Licenses

Credits And Open Source Licenses

🔒 Privacy Settings

Allow UI Statistics Collection ⓘ

← General Playback Options

🔊 Audio Output

Output Device HiFiBerry DAC Plus ⓘ

I2S DAC On ⓘ

DAC Model HiFiBerry DAC Plus ⓘ

Save

☰ General Playback Options

DSD Playback Mode DSD Direct ⓘ

DSD Auto Volume Level On ⓘ

Volume Normalization On ⓘ

Audio Buffer Size 2 MB ⓘ

Buffer Before Play 10% ⓘ

Persistent Queue Off ⓘ

Playback Mode Continuous ⓘ

Save

🔊 Volume Options

Mixer Type Hardware ⓘ

Mixer Control Name Digital ⓘ

Default Startup Volume 15 ⓘ

Max Volume Level 70 ⓘ

One Click Volume Steps 2 ⓘ

Volume Curve Mode Natural ⓘ

MPD Clients Volume Control Off ⓘ

Save

🔊 Audio Resampling

Audio Resampling Off ⓘ

Save

← Network Settings

🌐 Network Status

Wireless

📶 Engrie

IP Address: 192.168.1.33

Speed: 72.2 Mb/s

🔌 Wired Network

Automatic IP

On

Save

📶 Wireless Network

Wireless Networking

On

Automatic IP

On

Save

📶 Wireless Network Connection

📶 🔒 telenet-05D6A

📶 🔒 TelenetWiFiFree

📶 🔒 Engrie

📶 🔒 telenet_4422F

📶 🔒 Manual WIFI Connection

🔄 Refresh

📶 Hotspot Settings

Enable Hotspot

On



Hotspot Fallback

Off



Hotspot Name

Vnlumin-Engrie

Password Protected Hotspot

On



Hotspot Password

••••••••



Hotspot Channel

4



Save

📄 DNS Settings

Enable Custom DNS Server

Off



Save



IR Remote Controller

JustBoom Remote	Volumio
OK	play/stop
Volume-Up	volume plus
Volume-Down	volume minus
Mute	volume toggle
Right	next track
Left	previous track
Up	seek plus
Down	seek minus
Back	repeat
Menu	random
Power	poweroff
Home	clear