Dietpi OS Installation & Basic Configuration

SBC : Sparky SBC + USBridge
Audio Hardware : USB DAC

Dietpi + Allo GUI OS Features:

User friendly Web Interface to configure the system.

- Preinstalled with Audiophile software, such as Roon, O!MPD, NAA Daemon and Shairport-sync (AirPlay)
- Ready to Run. Preconfigured and pre-installed image (No SSH/Terminal setup required)
- Audiophile quality, all the optimizations and features of DietPi, 156MB RAM usage , RAMlog and more. Perfect for audio usage.

Note: Allo GUI version Dietpi Image loaded on the eMMC supplies along with USBridge. Dietpi V154 (Debian stretch) onwards install Allo GUI

The Following is the procedural steps to installation of **Roon bridge** on Dietpi.

Step 1 : Download The latest Dietpi image for Sparky SBC from the Dietpi official website.
Sparky SBC: http://dietpi.com/downloads/images/DietPi_SparkySBC-armv7-(Stretch)_AlloGUI.7z

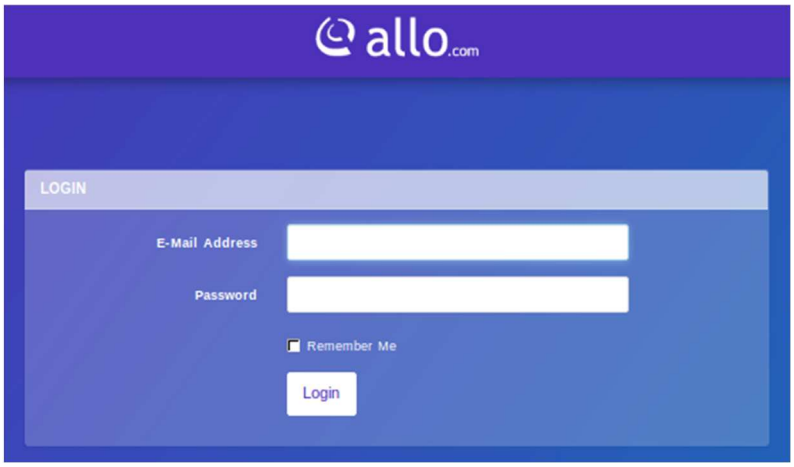
Step 2 : Load the Downloaded image into an SD card of size preferably 8Gb or more.

Refer notes on http://dietpi.com/phpbb/viewtopic.php?f=8&t=9#p9
http://dietpi.com/phpbb/viewtopic.php?f=8&t=2317#p8868

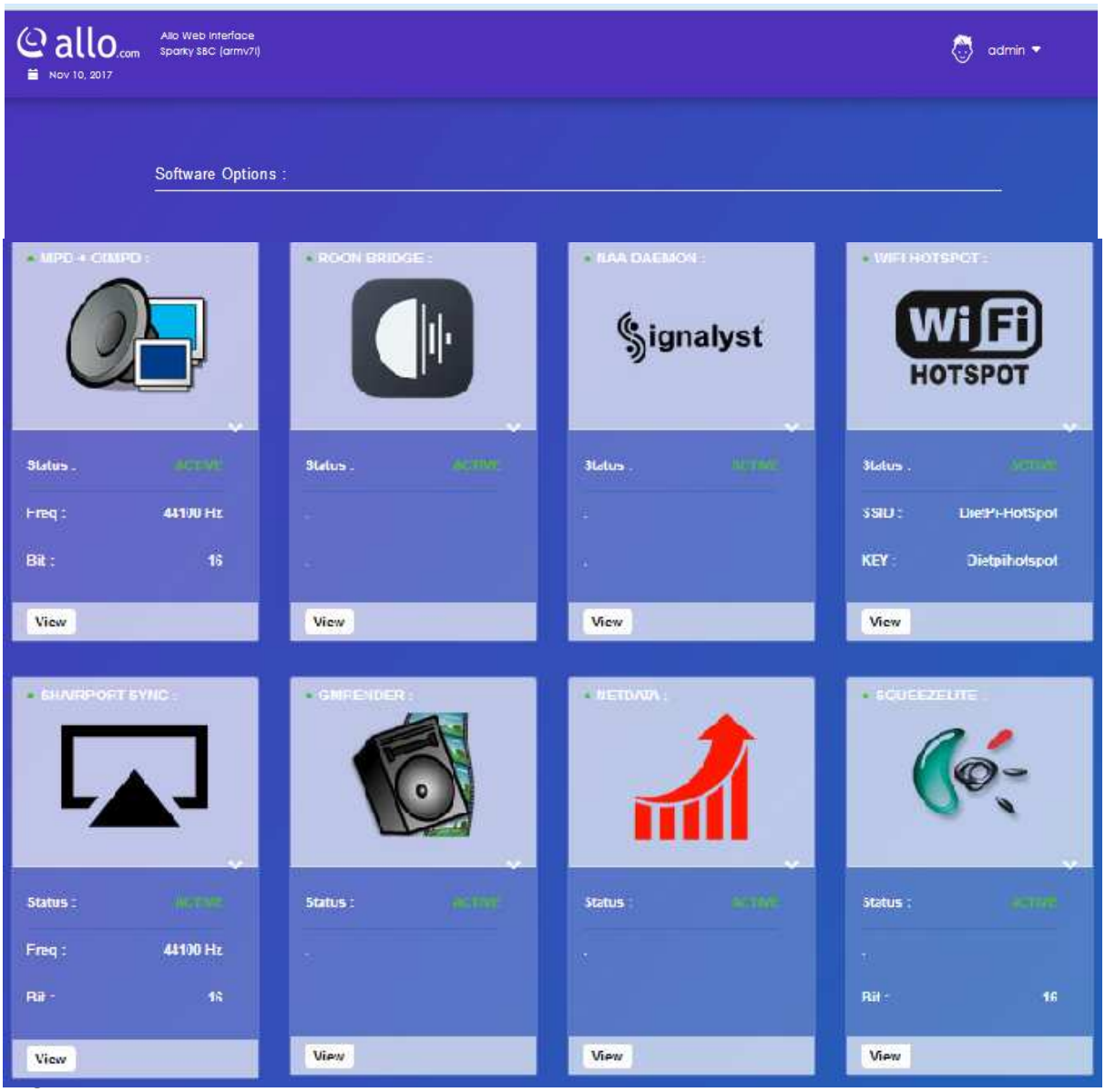
Step 3 : Plug the SD card into your device and turn it on.
- Wait for DietPi to complete the filesystem expansion (this will automatically reboot your device 2 times). Once completed, the login screen will appear

Login to DietPi
username = root password = dietpi ***terminal access only**

Allo webgui access : Open Browser on Laptop/desktop-pc connected to same network
Hostname access: http://dietpi.local
Or
IP access: http://192.168.0.24 (replace IP to match SBC IP)



Login Details:
Username = admin@allo.com
Password = allo



Web Interface Features:

System Settings : View and Edit

- Change hostname → you can change the host name here (default dietpi)
- Networking configuration (DHCP/STATIC IP) → changing of network to dynamic/static. DHCP by default
- Soundcard configuration → Audio DAC configuration, USB dac by default.
- CPU governor → Used for CPU scaling.
- Swapfile size configuration → virtual memory configuration
- DietPi version /Update → Shows current version &Available updates
- Power control → reboot/poweroff option

System Status : Monitor:

ALSA output stream information → lists actual frequency and bit depth during playback
Access NetData web interface
CPU information → lists the CPU usage and CPU temperature
Memory usage → lists the ram usage
Storage usage → lists the used/available memory

MPD and O!MPD Settings :
Service control → enable/disable and status
Access O!MPD interface → enable the access to OMPD
SOXR sampling output options → enable/disable, set quality and resampling
Output frequency/bit depth options → apply frequency and bit depth

Access : http://dietpi.local/ompd (use board IP in place dietpi.local)
username : admin password :admin

Roon Bridge Settings/Status :
Service control → enable/disable and status

NAA Daemon (HQ player endpoint) Settings :
Service control → enable/disable and status

WiFi HotSpot (Sparky SBC only, Allo.com WiFi dongle required) Options:
Service control → enable/disable
Connect to available network using valid credentials
** **How to enable wifi.**
NB: We highly recommend ethernet connection for a stable audio streaming experience.
To achieve a WiFi connection, you will need to access the terminal (either via SSH or locally using keyboard + monitor):

- Login with username = root , password = dietpi
- Sparky Only: Uninstall HotSpot using the command dietpi-software uninstall 60
- Run dietpi-config
- Select Network Options: Adapters > WiFi
- If a prompt appears, requesting WiFi to be enabled, please select Ok
- Select WiFi option again
- Select Scan, choose your SSID and follow the onscreen prompts to enter credentials

ShairPort-Sync (AirPlay) Settings:
Service control → enable/disable and status
Output frequency/bit depth options : frequency and bit depth settings option.
(use bit depth 32 for working with 32 bit DAC)

GM Render Settings:
Service control → enable/disable and status
Netdata Settings:
Service control → enable/disable and status
Web interface access details

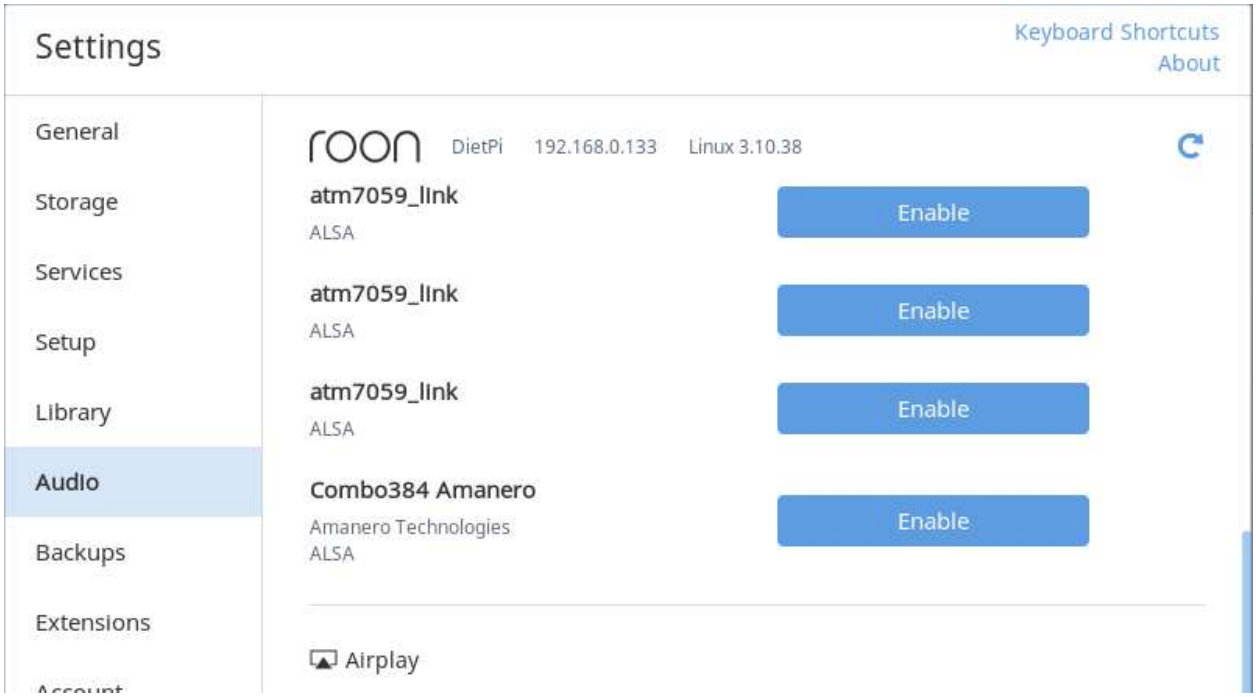
ROON

You need to install ROON (Control + Core + Output)** on a windows pc or laptop.

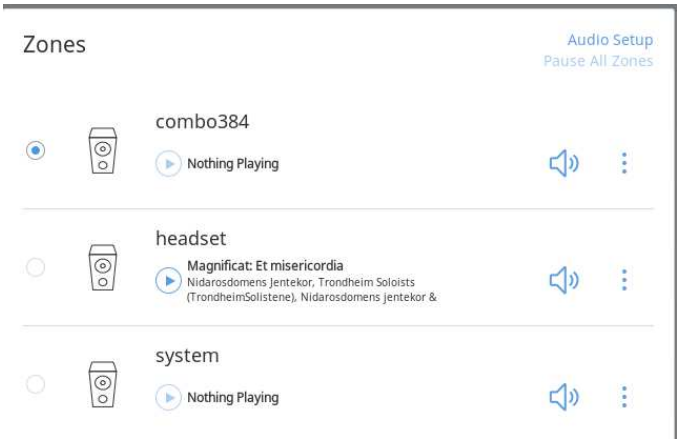
** roon membership necessary to install and use.

The detailed description of download procedure can be seen
https://kb.roonlabs.com/Getting_Started
https://roonlabs.com/downloads.html

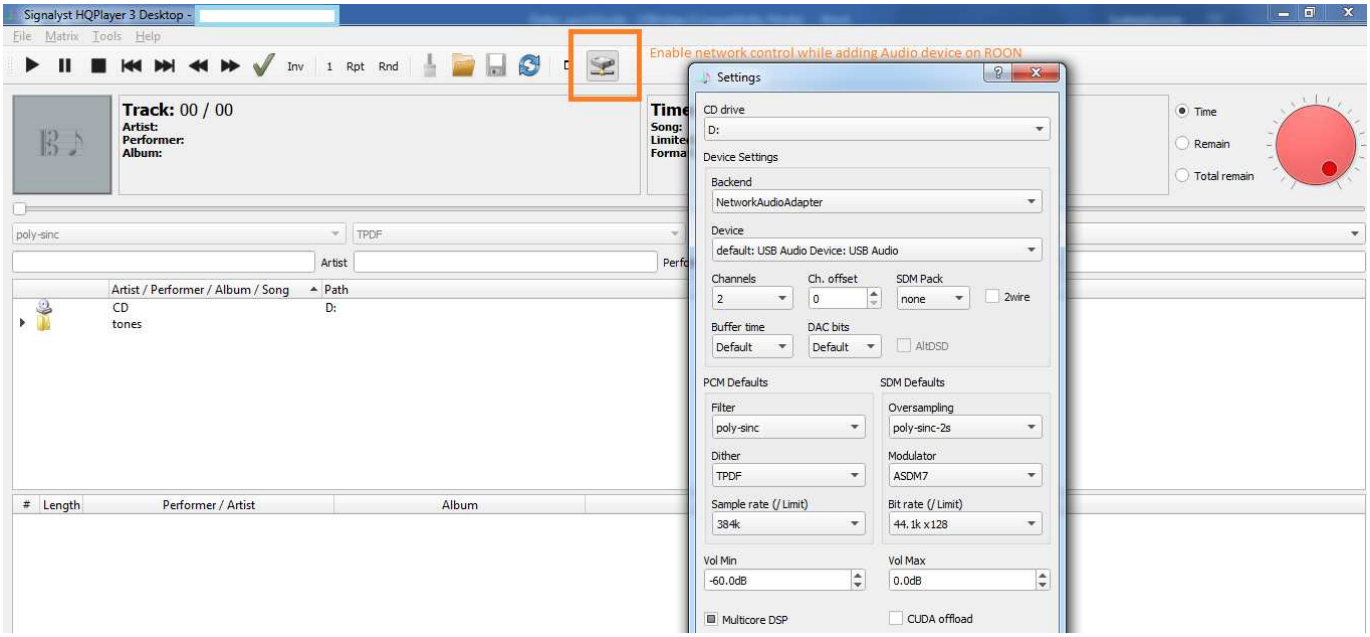
Open Roon application and Enable appropriate audio device listed.
USB DAC



Enable the audio device , play the music.



HQplayer:



O!MPD