

# DietPi OS Installation & Basic Configuration for USBridge

**Product:** [Sparky SBC + USB board](#)

**Soundcard Name:** USB DAC

## DietPi + Allo GUI OS Features:

User friendly Web Interface with icons 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 optimized. All the optimizations and features of DietPi, 156MB RAM usage, RAMlog and more.

**Note:** This DietPi version is loaded on the eMMC supplied along with USBridge purchased from ALLO. DietPi V154 (Debian stretch) onwards install Allo GUI

When you receive your unit, please follow the instructions on the quick installation guide.

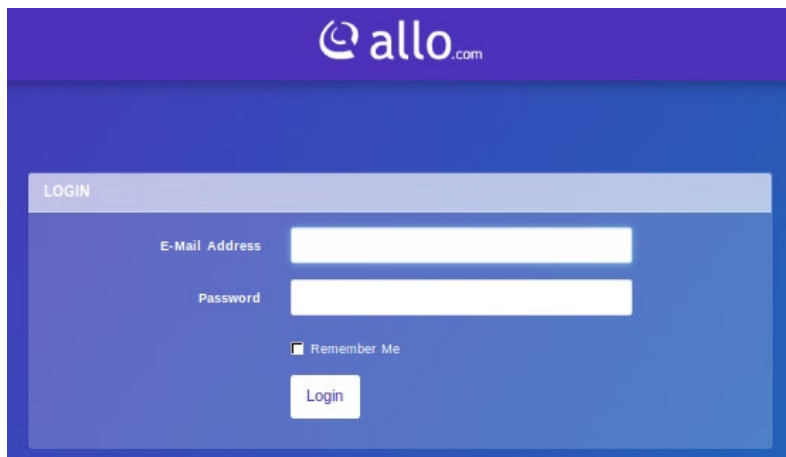
**Allo Web GUI Access: Open Browser on Laptop/desktop-pc connected to same network**

Hostname access: <http://dietpi.local>

Or

type the IP address of the unit in your browser.

## **THE LOGIN SCREEN APPEARS:**



Login Details:

Username = admin@allo.com

Password = allo

The HOME SCREEN APPEARS:

The screenshot displays the Allo Web Interface home screen. At the top, the header includes the Allo logo, the text "Allo Web Interface Sparky S8C (armv7l)", the date "Nov 10, 2017", and a user profile for "admin". Below the header, a section titled "Software Options" contains a grid of eight software modules, each with a status indicator, a "View" button, and specific configuration details.

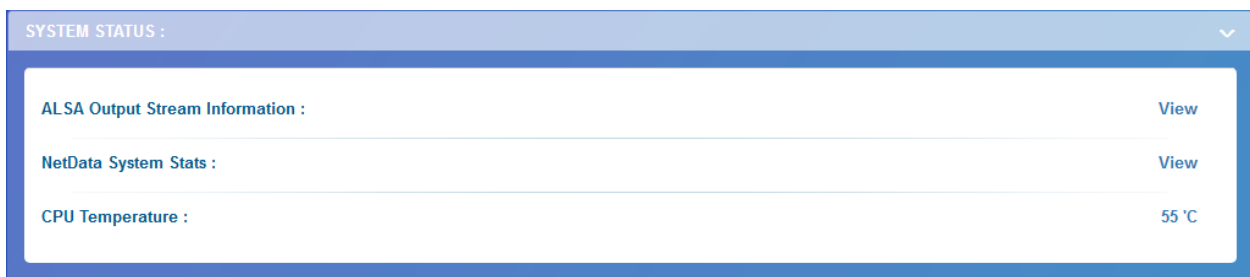
Software Option	Status	Frequency	Bit	Additional Info
MPD + CIMPD	ACTIVE	44100 Hz	16	Icon: Speaker and tablet
ROOM BRIDGE	ACTIVE	-	-	Icon: Room bridge symbol
RAA DAEMON	ACTIVE	-	-	Icon: signalyst logo
WiFi HOTSPOT	ACTIVE	-	-	SSID: UtesP-HotSpot, KEY: Dietpilotspot
SHairport SYNC	ACTIVE	44100 Hz	16	Icon: Monitor and triangle
GMRENDER	ACTIVE	-	-	Icon: Speaker and CD
NETDATA	ACTIVE	-	-	Icon: Bar chart with red arrow
SQUEEZELITE	ACTIVE	-	16	Icon: Beans and CD



## 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 / power off 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 re-sampling

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

### Squeezelite Settings:

Service control ' enable/disable and status

## ROON

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

\*\* roon membership necessary to install and use.

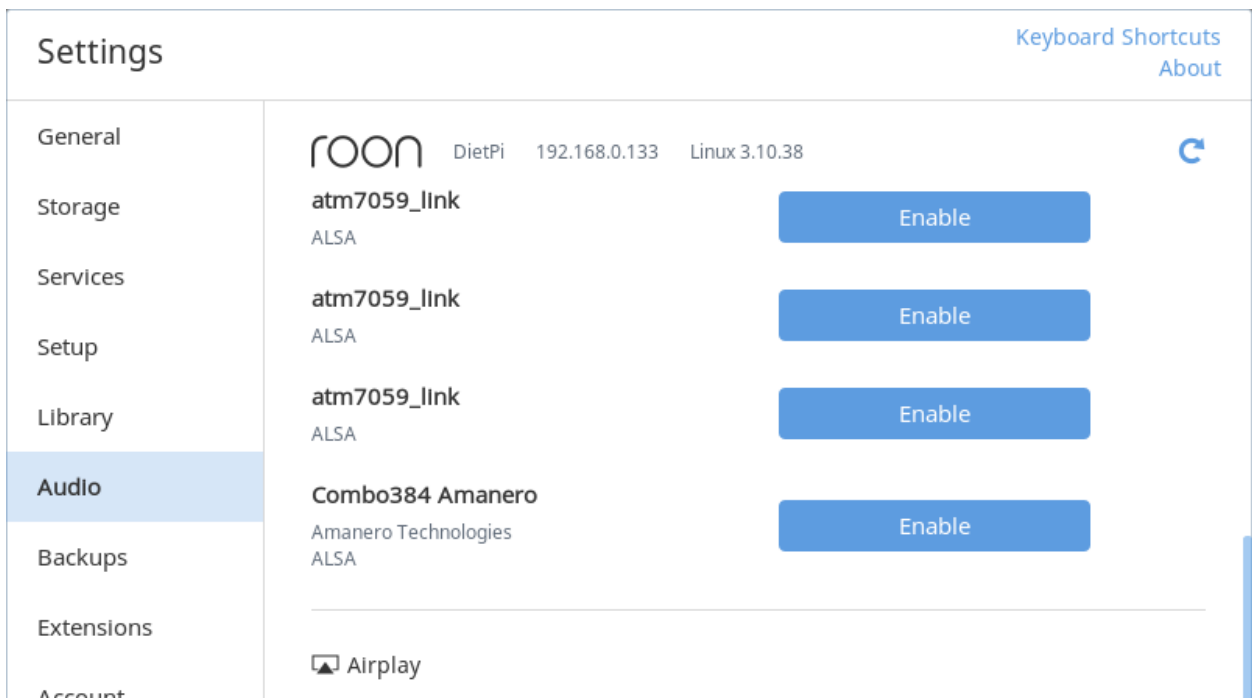
The detailed description of download procedure can be seen

[https://kb.roonlabs.com/Getting\\_Started](https://kb.roonlabs.com/Getting_Started)

<https://roonlabs.com/downloads.html>

Open Roon application and Enable appropriate audio device listed.

USB DAC









The screenshot shows the Roon Settings application interface. On the left is a sidebar menu with categories: General, Storage, Services, Setup, Library, Audio (highlighted), Backups, Extensions, and Account. The main content area is titled 'Settings' and includes links for 'Keyboard Shortcuts' and 'About'. At the top of the main area, it displays 'roon DietPi 192.168.0.133 Linux 3.10.38' and a refresh icon. Below this, there are four audio device entries, each with an 'Enable' button:

- atm7059\_link (ALSA)
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- Combo384 Amanero (Amanero Technologies ALSA)

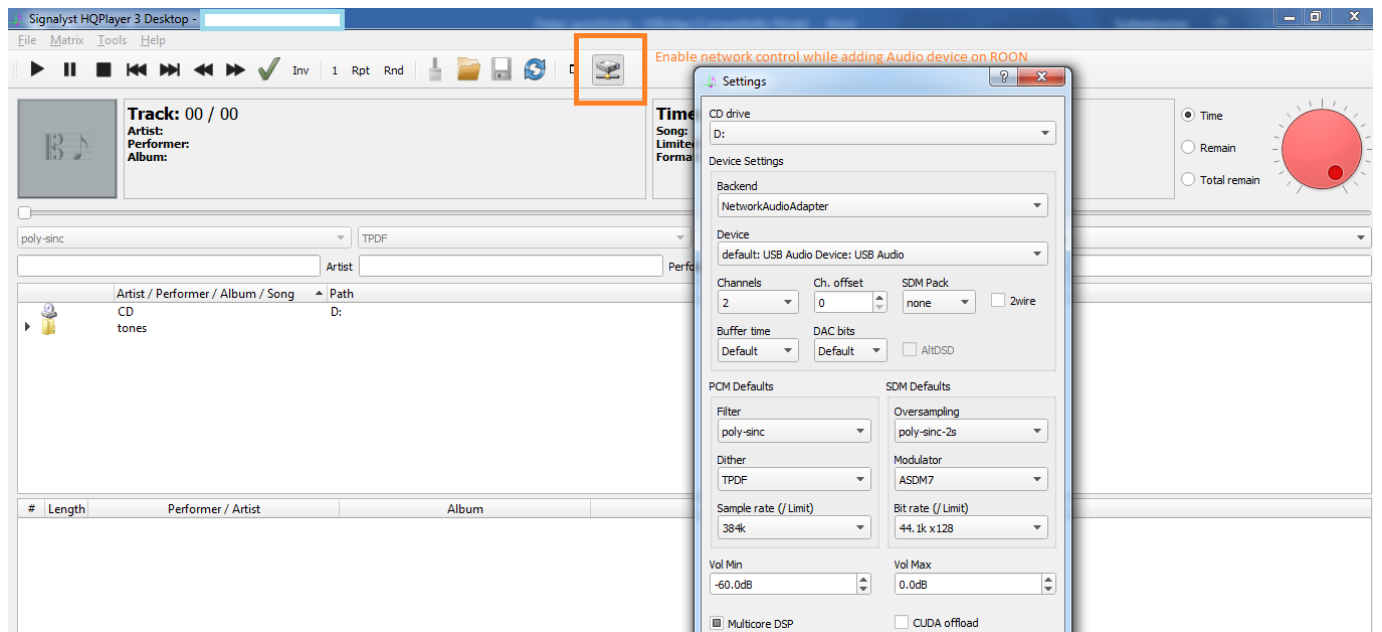
At the bottom of the main area, there is an 'Airplay' option with a speaker icon.

Enable the audio device, play the music.

Zones Audio Setup  
Pause All Zones

-  combo384  
Nothing Playing  ⋮
-  headset  
Magnificat: Et misericordia  
Nidarosdomens Jentekor, Trondheim Soloists  
(TrondheimSolistene), Nidarosdomens jentekor &  ⋮
-  system  
Nothing Playing  ⋮

## HQplayer:



The screenshot shows the Signalyst HQPlayer 3 Desktop application. The main interface includes a playback control bar, a track display showing "Track: 00 / 00", and a file browser. A settings dialog box is open, displaying various audio configuration options. A red box highlights the "Settings" icon in the top toolbar. A red circle highlights the "Time" radio button in the right-hand panel.

Settings dialog box details:

- CD drive: D:
- Device Settings:
  - Backend: NetworkAudioAdapter
  - Device: default: USB Audio Device: USB Audio
  - Channels: 2, Ch. offset: 0, SDM Pack: none, 2wire:
  - Buffer time: Default, DAC bits: Default, AltDSO:
- PCM Defaults:
  - Filter: poly-sinc
  - Dither: TPDF
  - Sample rate (/ Limit): 384k
  - Vol Min: -60.0dB
- SDM Defaults:
  - Oversampling: poly-sinc-2s
  - Modulator: ASDM7
  - Bit rate (/ Limit): 44.1k x128
  - Vol Max: 0.0dB
- Multicore DSP:  CUDA offload:

# O!MPD

