

Amati.linea Streaming Player with amplifier

Amati.linea Streaming player plays all your network music in HD quality staying design wise, powerfull and affordable. Streaming Player plays music from 32GB built-in flash, UPnP/DLNA servers, Airplay, FTP servers, Internet radios. KNXnet/IP support allows easy and fast audio control function, internet radio and specific song or folder mapping to KNX group addresses.

Not only the listening experience is made beautiful with SP, but the domestic visual experience as well. Streaming Player takes care of the flawless stream, the perfect timing needed to get so deep into your digital recordings, you'll completely rediscover everything you've ever heard in digital.



ENG - Data sheet

Issue date 26.11.2021

Application

Music integration into BMS, Multi-room, Control of whole music/player library from touch devices

Types of product

AUDIO-DINSTA Streaming Player with built in amplifier

Standards and norms compliance

EMC: EN61000-6-1
EN61000-6-3
PCT Certificate

Technical data:

Power supply:	7-36V DC	
Power consumption:	1.2W	Idle mode
Connectivity:	10BaseT/100BaseTX	1
	RS485	1
	USB2.0	1
	0-10V input	1, for external volume control
	Stereo output pair	1
Connections:	KNX bus:	KNXnet/IP over Ethernet
	Power supply:	Clamp, 1.5mm ² , up-to 8A
	Serial:	Clamp, 1.5mm ²
	IO:	Clamp, 1.5mm ²
	Stereo output	Screw,
Operating elements	LED	1 – CPU load 1 - Activity
Audio	Audio formats	MP3, WAV, AAC, WMA, FLAC, lossless FLAC 96/24, 24/192
	Protocols supported	DLNA, UPnP, AirPlay, FTP, HTTP, KNXnet/IP, Modbus TCP/RTU
	Sampling frequencies	32, 44, 48, 88, 96, 192 kHz
	Resolutions	16, 20, 24 bit

Enclosure:	Material:	Polyamide
	Color:	Gray
	Dimensions:	70(W)x90(H)x51(L) mm
Usage temperature:	-5C ... +45C	
Storage temperature:	-25C ... +55C	
Weight:	300g	
Warranty:	2 years	



Caution
Security advice

The installation and assembly of electrical equipment may only be performed by skilled electrician. The devices must not be used in any relation with equipment that supports, directly or indirectly, human health or life or with application that can result danger of people, animals or real value

Mounting advice

The devices are supplied in operational status. The cables connections included can be clamped to the housing if required.

Electrical connection

The devices are constructed for the operation of protective low voltage (SELV). Grounding of device is not needed. When switching the power supply on or off, power surges must be avoided.

Terminal connection scheme



Default IP configuration

Login name	admin
Password	admin
IP address/mask	DHCP-client

1. Quick startup guide

The device may be used for installations in dry locations.

1. Connect your speakers(**6-8 Ohms**) to the Streaming Player's loudspeakers outputs
2. Connect Ethernet cable to LAN port (make sure the cable is interconnected with your local network)
3. Plug USB drive with music files in MP3, WAV, AAC, WMA, FLAC. **Note!** Please make sure USB is formatted with FAT/FAT32 file-system, NTFS is currently not supported.
4. Connect power supply to Streaming Player (power supply's red pole to +24V, black – GND. **Note!** Streaming Player supports two power sources, use any for connecting power supply)
5. To check if the wiring is done well, you can run any music file on your iPhone/iPOD and Share it to play on remote Airplay device (*amatilinea*).
6. Streaming Player is setup as DHCP-client. It uses Zero-config utility is called "Bonjour" by Apple which enables automatic discovery of computers, devices, and services on IP networks. iPod, iPhone have this utility pre-installed. For iPad use utility called **Discovery** (the server will be discovered in the service ROAP). On Windows 7 computer you can see the Player as Network share with name *amatilinea*, right click on it, Properties and you will see its IP address. Or you can simply check your DHCP server's lease list to find assigned IP to Streaming Player. More see here: <http://openrb.com/discover-ip-of-logic-machine-or-streaming-player/>
7. Enter Streaming Player's home page by typing IP address in your web browser.
8. DLNA/UPnP/Airplay services are enabled by default in the Streaming Player's *Quick setup*
9. Add additional music sources if any in the Streaming Player's *Quick setup* → *Services* → *FTP mountpoints*
10. Depending on count of music files the device will update its local database in Audio Player menu and you can start playing songs there
11. Connect by remote user interface (also called digital media controllers) from iPOD/iPhone/iPAD (*MPoD/MPaD* or any UPnP controller apps available as freeware at App

Store like *Kinsky*), Android-based phones (*Droid MPD*), PC (*Ario*, *Kinsky*). Choose the server (*amatilinea* or by IP) and start making your playlists, controlling the music etc. Update player's database with *Update Database* command from your remote controller. **It might take some time to do initial database update.**

12. Map music control functions to KNX in *Network config* → *Network* → *KNX Audio control* menu. Default login and password to access *Network config* is **admin / admin**
13. Please note that you have to **use external KNX IP Router** (e.g. Logic Machine 2) to access the KNX TP, as Streaming Player supports only KNXnet/IP (TP is not used due to sound quality distortions).

2. Amati.linea WEB-based configuration

Using IP assigned to Streaming Player, connect using web browser.

To access *Network config*, you need to enter login name and password.

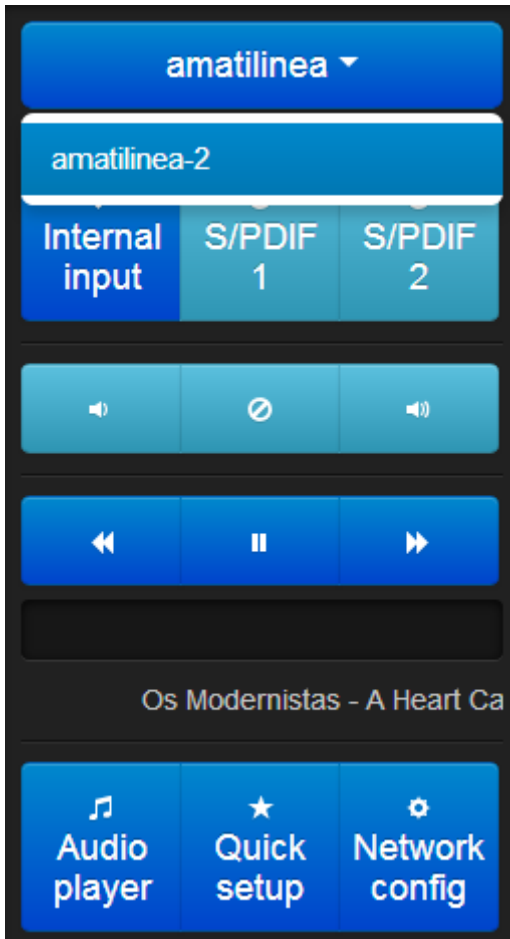
Login	admin
Password	admin



- **Audio Player** – built-in music player/controller
- **Quick setup** – audio related configuration
- **Network config** – network related configuration

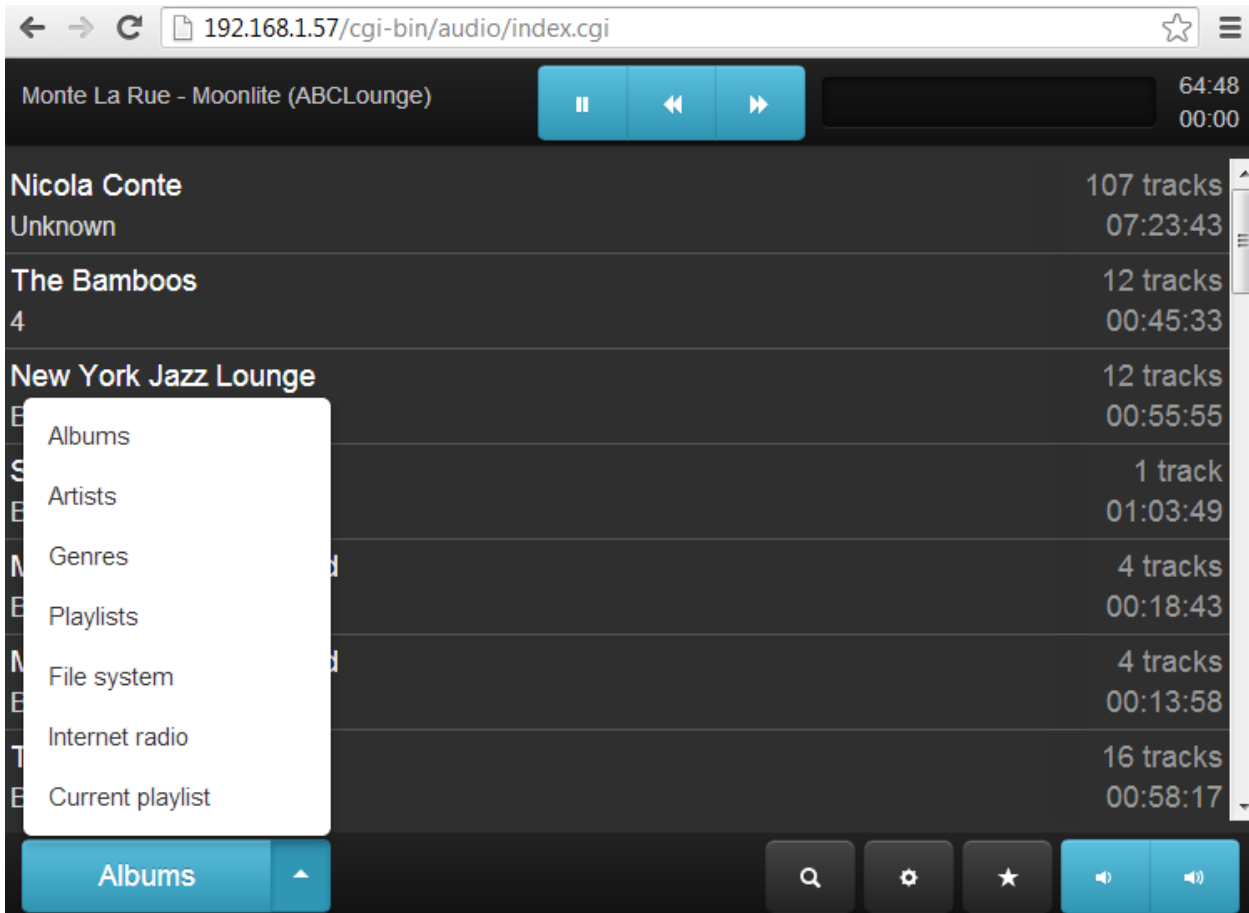
Default web page of the player provides quick player functionality.

On the top bar you can choose the player to control from your network. In case you have several Streaming Players installed in your LAN, you can control them from one interface.




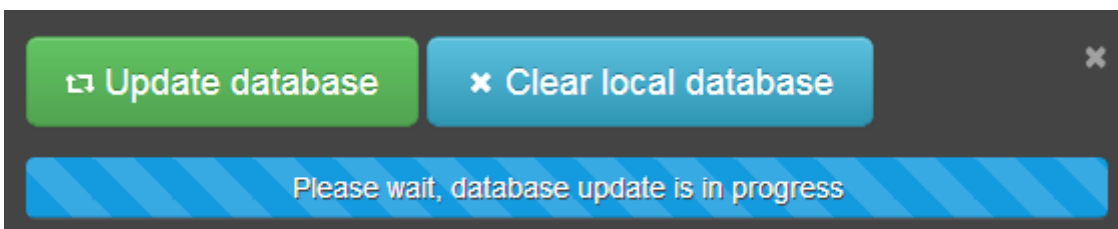
2.1. Audio Player – built-in audio controller, player

In *Audio Player* menu you can control your player, create playlists, favorites.



2.1.1. Update database

First thing to do after you enter the interface of audio player is to update local database which will create local library file with pointers to the music sources you have defined (DLNA servers, FTP servers, USB flash drives, internal FTP server). It may take some while if the library of songs is big. Click  on the *Settings* button to access the window.



2.1.2. Sorting

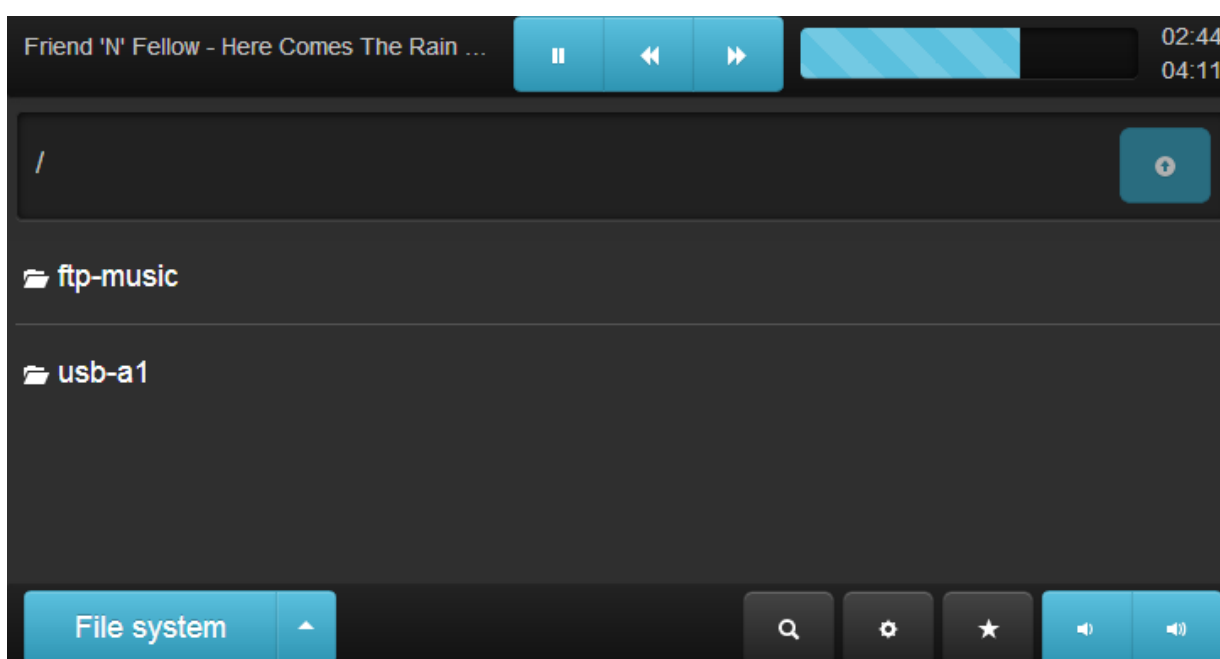
Albums – sort music library by albums

Artists – sort music library by artists

Genres – sort music library by genres

2.1.3. File system

File system folder contains music sources added and available on the network – DLNA, FTP servers, USB, internal FTP server.



You can enter specific folder by double clicking on it.

Liz Cass - They Can't Take That Away Fr... 08:26
00:00

/usb-a1

2009 -Touch Yello

keep calm and relax

Friend 'N' Fellow - Both Sides Now (Joni Mitchell) (Discovered) 00:04:59
Friend 'N' Fellow - 04 - Both Sides Now (Joni Mitchell).flac

Friend 'N' Fellow - A Case Of You (Joni Mitchell) (Discovered) 00:04:51
Friend 'N' Fellow - 08 - A Case Of You (Joni Mitchell).flac

Friend 'N' Fellow - Here Comes The Rain Again (Eurythmics) (Discovered) 00:04:12
Friend 'N' Fellow - 10 - Here Comes The Rain Again (Eurythmics).flac

usb-a1/test.wav 00:00:08
test.wav

File system

Search, Settings, Star, Mute, Volume


By double click on the song, it starts to play. By one time click on the entry it offer specific functions to do with folder/song – *Play, Add to current playlist, Refresh*

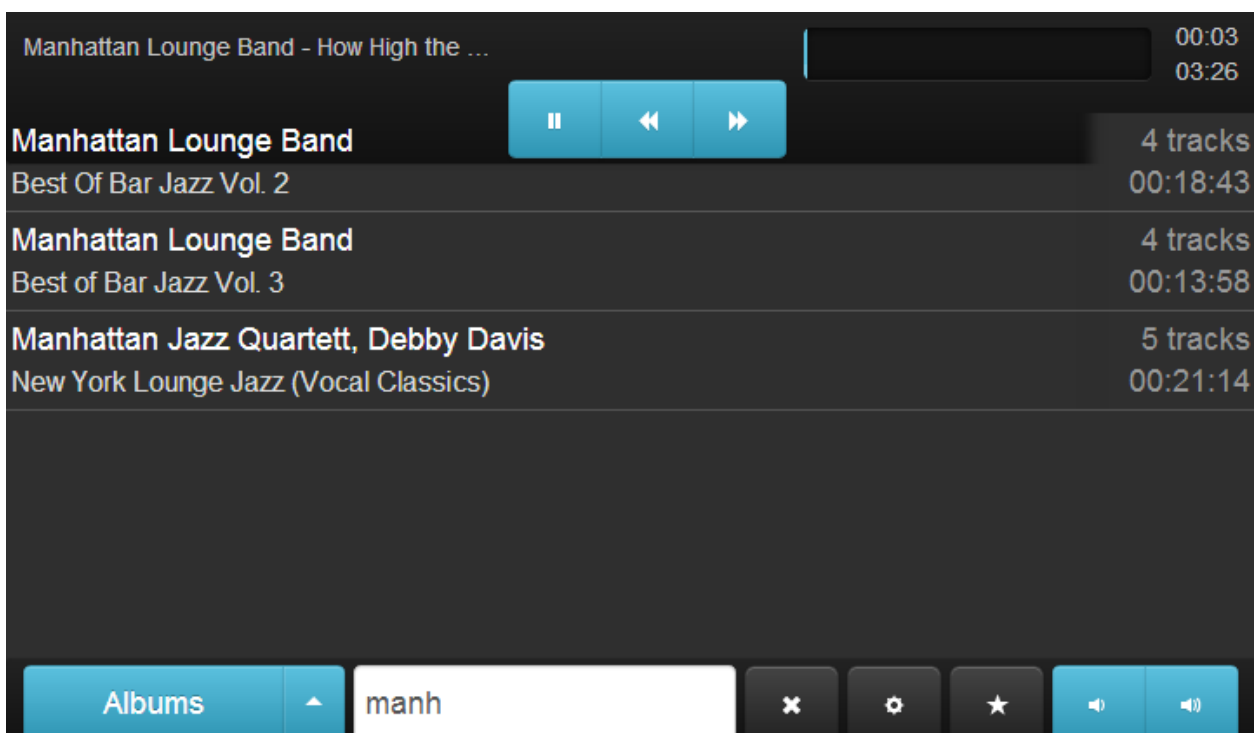


By one time click on the folder, there is also *Info* option, which opens content of the folder.



2.1.4. Search

Click on the *Search* button  and type the search phrase to find appropriate folders and songs.

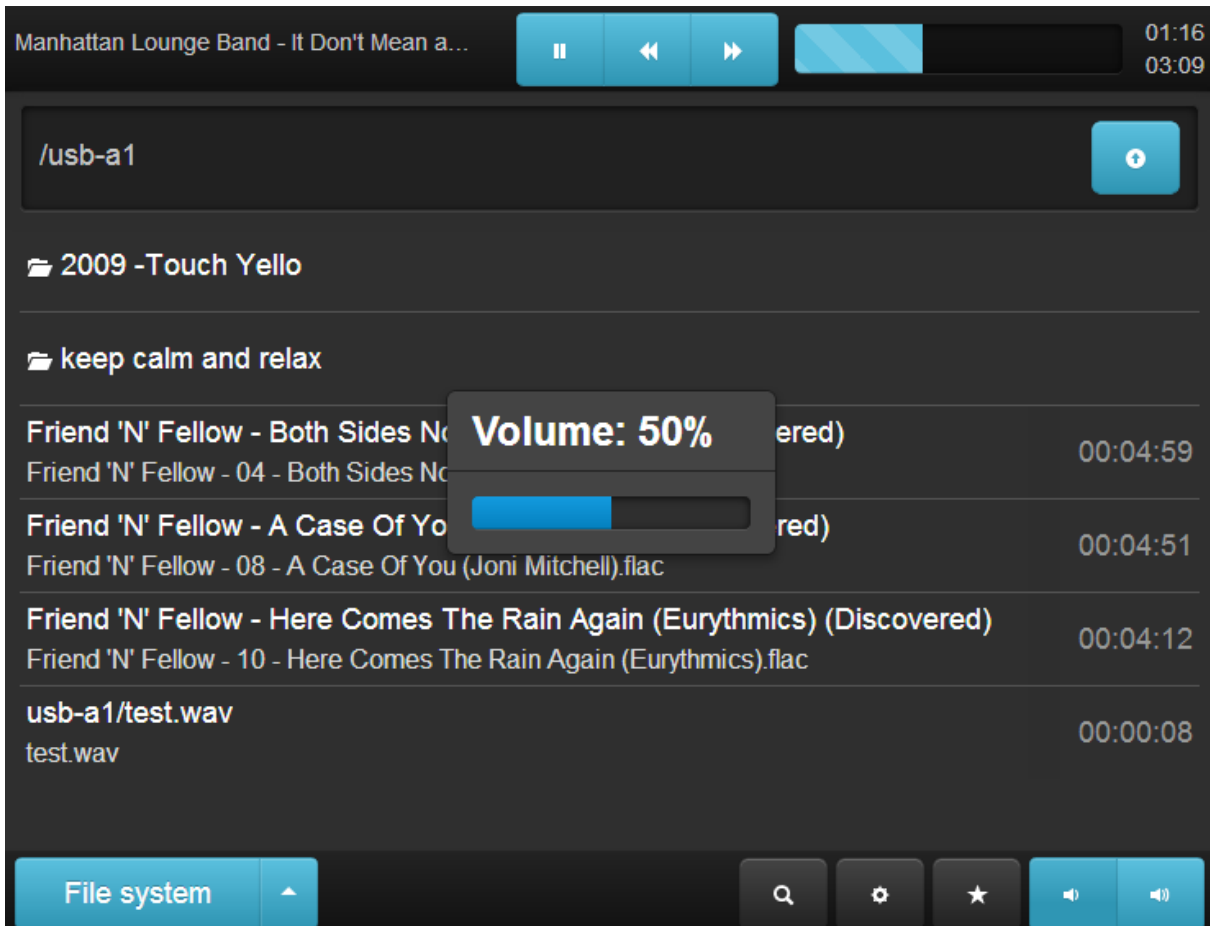


2.1.5. Volume control

With *Volume Up*, *Volume Down* buttons



you can control the volume of the player.



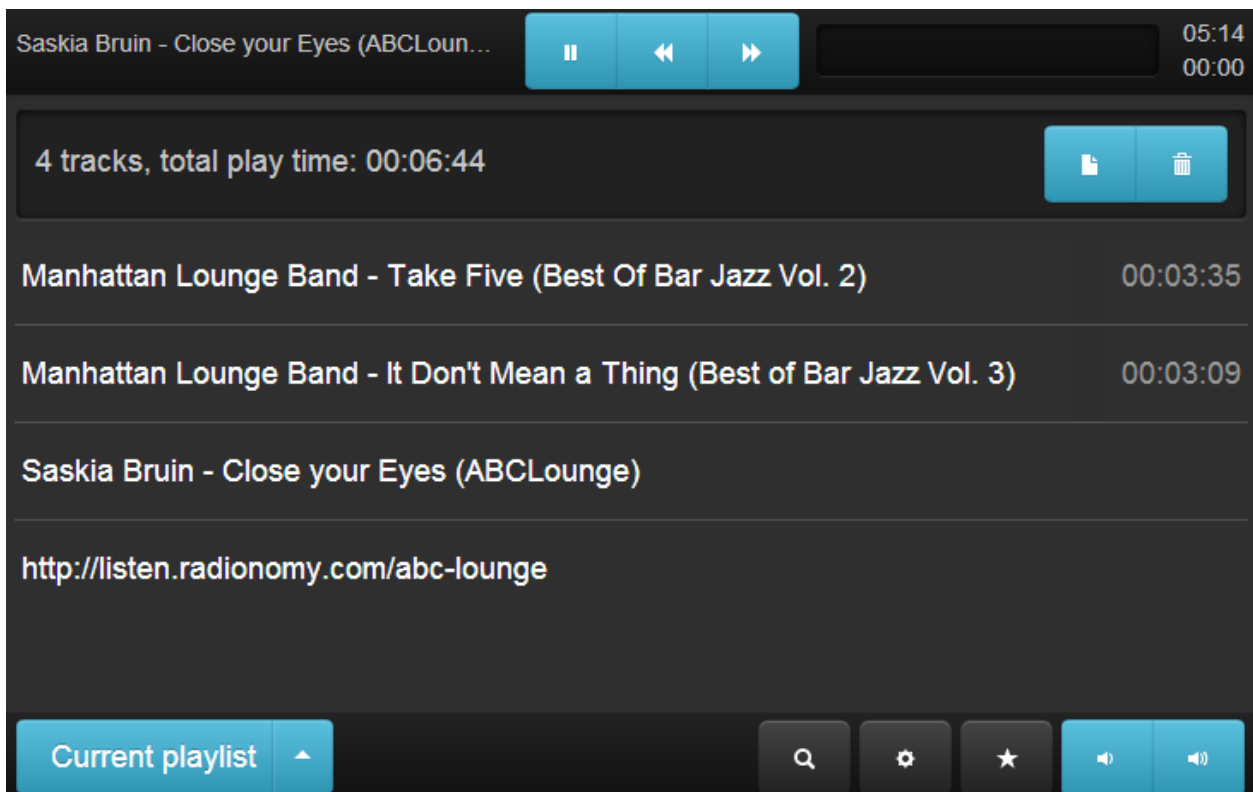
2.1.6. Top control bar

On top bar you will find currently playing song name, you can pause the song, jump to next or previous song in the current playlist, forward the current song, time elapsed and song length.

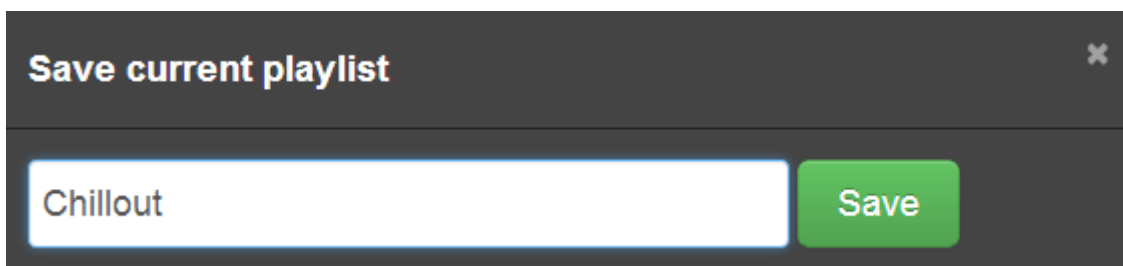


2.1.7. Current playlist – play, save, delete

In Current playlist you can see all songs which you have added by double-click or via *Add* button



You can save current playlist by clicking *New* button.



You can delete the content of current playlist by clicking on *Delete* button.



2.1.8. Favourites

While some song or plays, you can click on *Favourites* button, **Favourites**. If the song is already favourite, the button is green.

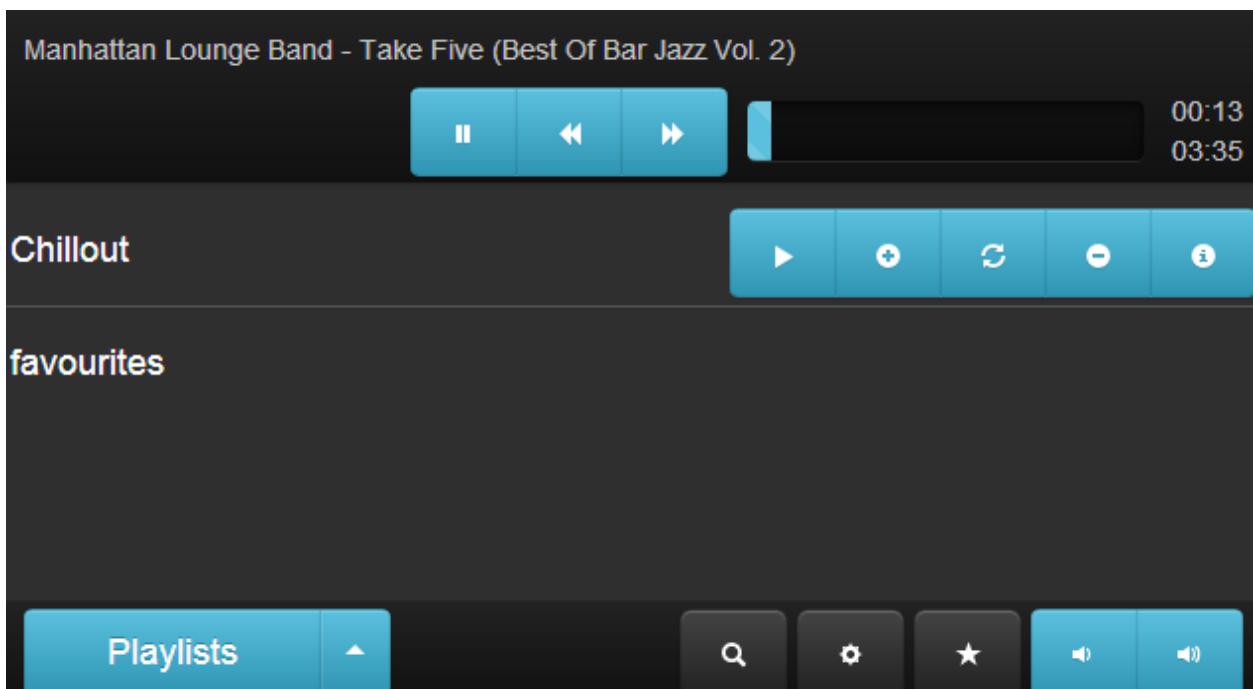


to add it to Playlist



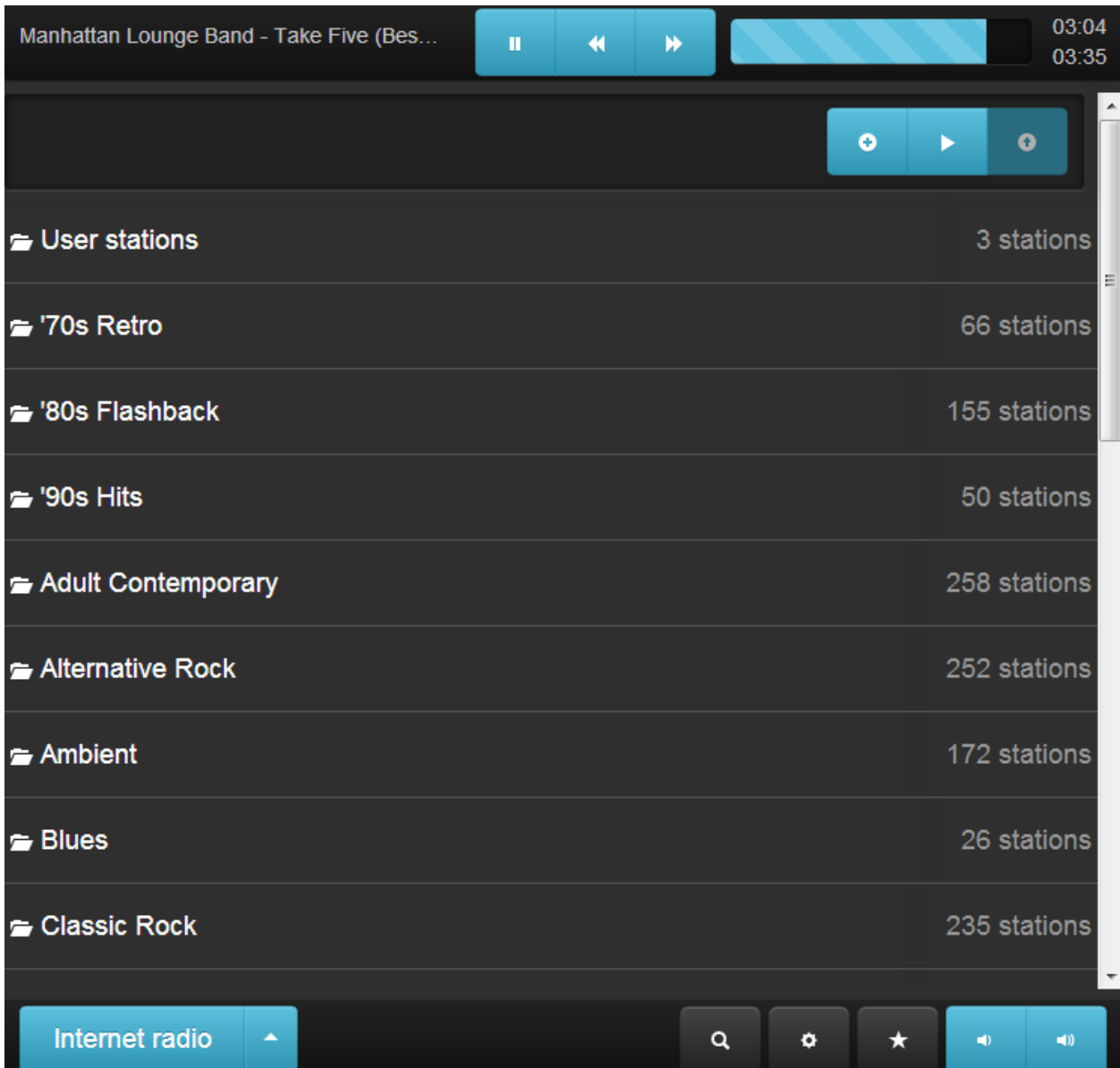
2.1.9. Playlists


In *Playlists* you will find both your selected *Favourites* songs as well as defined Playlists.



2.1.10. Internet radio

There are more than 4000 radio stations built-in in the Streaming Player, grouped by genres. As with regular songs you can add them to playlists.



You can add new radio stations by clicking on *Add* button . Added internet radios will appear in *User stations* folder.

A dialog box titled "Add new station" with a close button (X) in the top right corner. It contains two text input fields: "Title" and "URL". Below the fields is a green "Add" button.

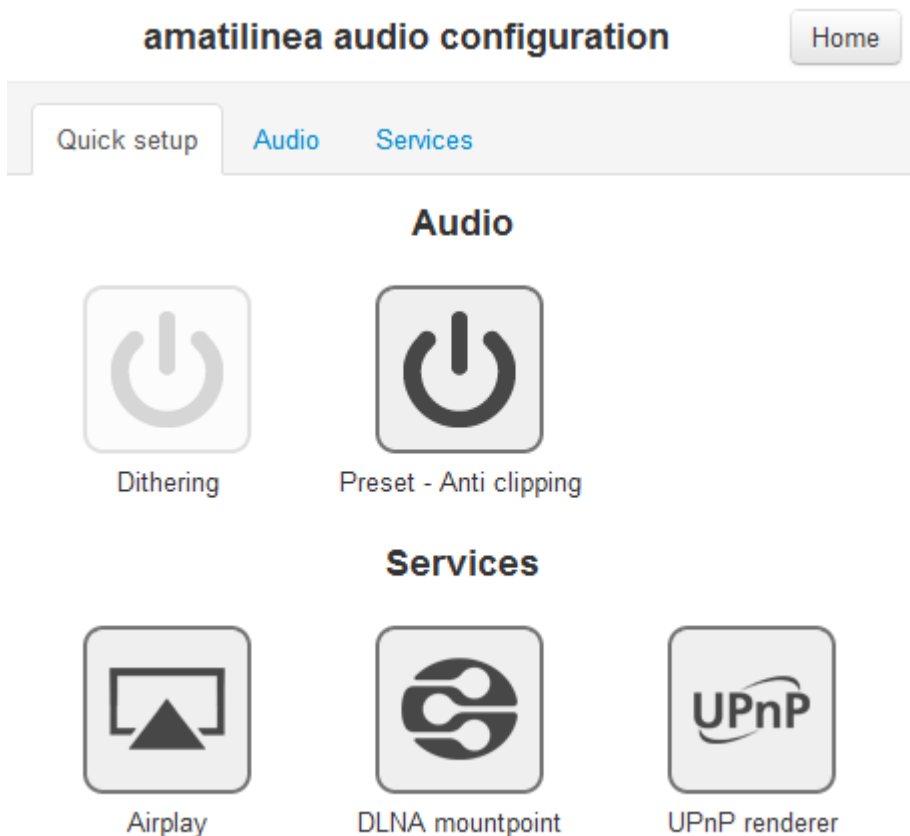
2.2. Quick setup

Audio configuration is sorted in three main tabs:

- *Quick setup* – quick configuration
- *Audio* – audio specific configuration like presets, dithering
- *Services* – services

2.2.3. Quick setup

In Quick setup window it is possible to fast configuration by enabling or disabling Airplay, DLNA, UPnP renderer or Audio settings



2.2.4. Audio settings

- *Dithering* – dithering on/off. Make the sound more realistic.

- *Preset [Off, Night, Anti clipping, Bass Boost]*–type of preset to use

amatilinea audio configuration [Home](#)

[Quick setup](#) **Audio** [Services](#)

Dithering

preset preset

2.2.5. Services

amatilinea audio configuration [Home](#)

[Quick setup](#) [Audio](#) **Services**

Player name

Airplay

DLNA mountpoint

UPnP Renderer

KNX/IP control

MPD Password

Advanced settings

Player name – name of the player

Airplay – enable Airplay protocol support

DLNA mountpoint – enable DLNA mountpoint so the Streaming Player will make local library with song list from DLNA servers. This feature is convenient to use if you plan to use built-in music player or MPD based app for music control

UPnP Renderer – enable UPnP renderer feature which will allow to play the songs directly from UPnP renderer applications. UPnP renderer can only be used as a stand-alone solution. It cannot be used together with KNX control or MPD control applications. UPnP renderer might not be compatible with some control devices and applications.

KNX/IP control – enable KNXnet/IP support for mapping specific audio control functions to KNX group addresses. There should be external KNX IP Router used to perform access to KNX TP (e.g. Logic Machine 2)

MPD Password – MPD protocol access password

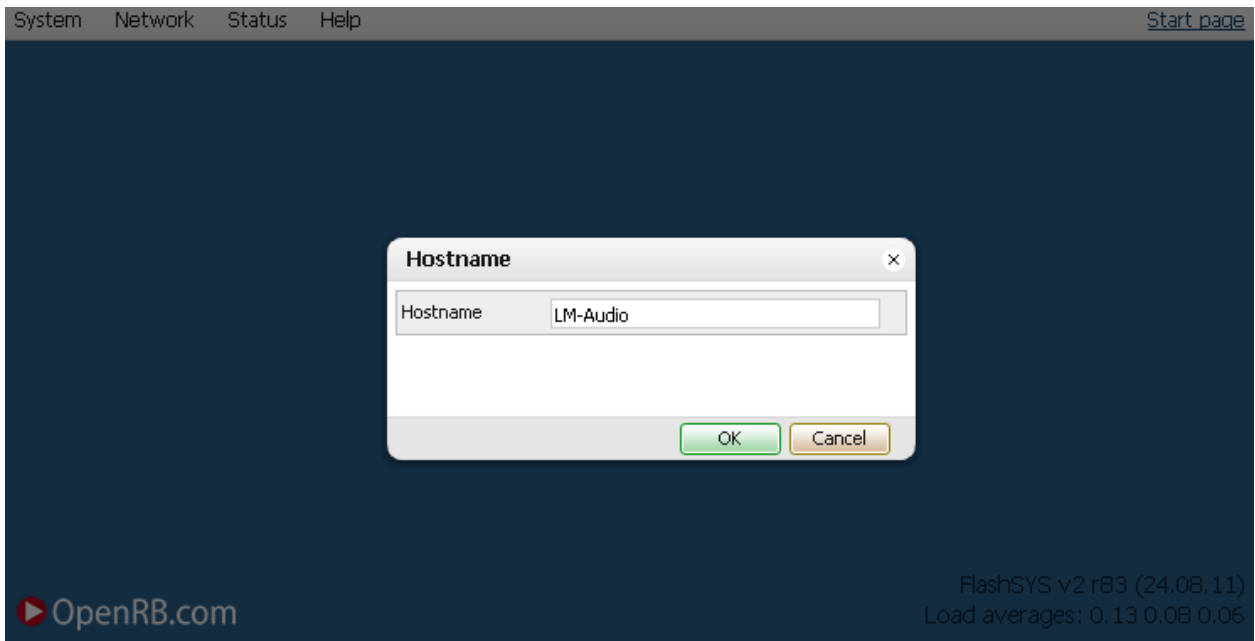
Advanced settings – shortcuts to quick access of KNX/IP mapping and FTP server list

Note! It is advised to restart client applications when changing any of the configuration values.

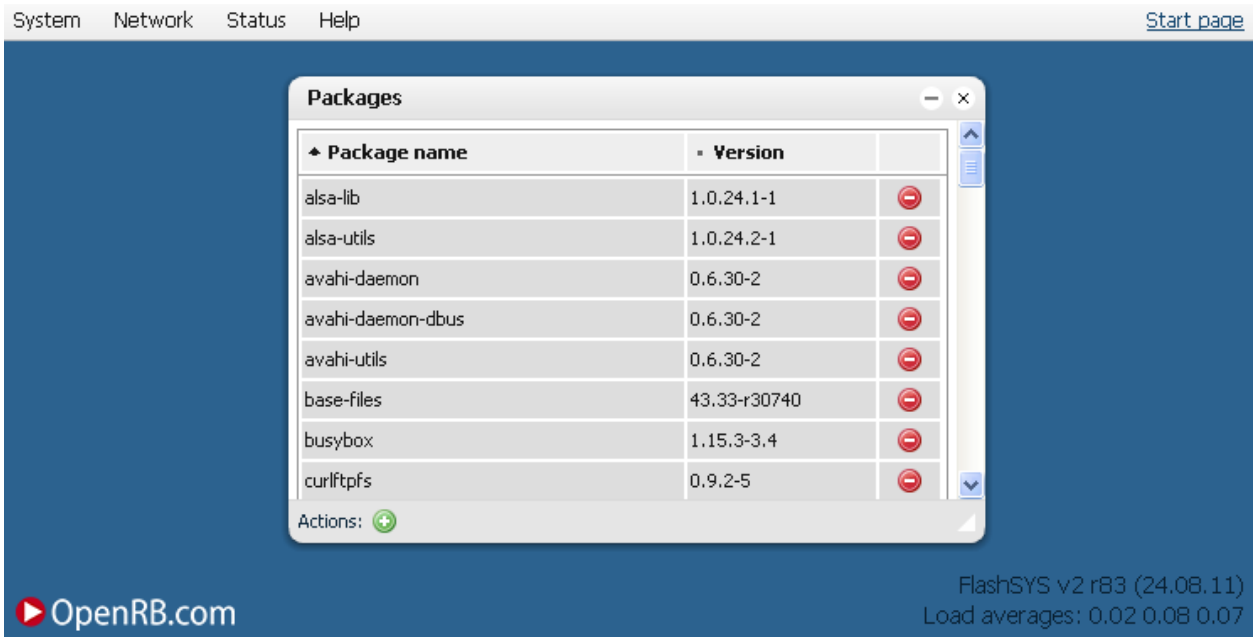
2.3. Network configuration – network and KNX related configuration

2.3.3. System configuration

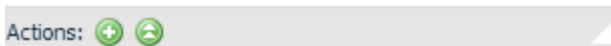
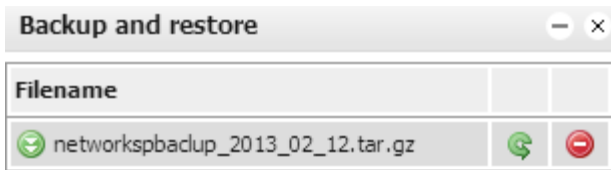
System → Hostname – Name of the Player, all other network devices will see the device by this name



System → Packages – Package management of the operating system. In case of add-ons new packages should be added by +



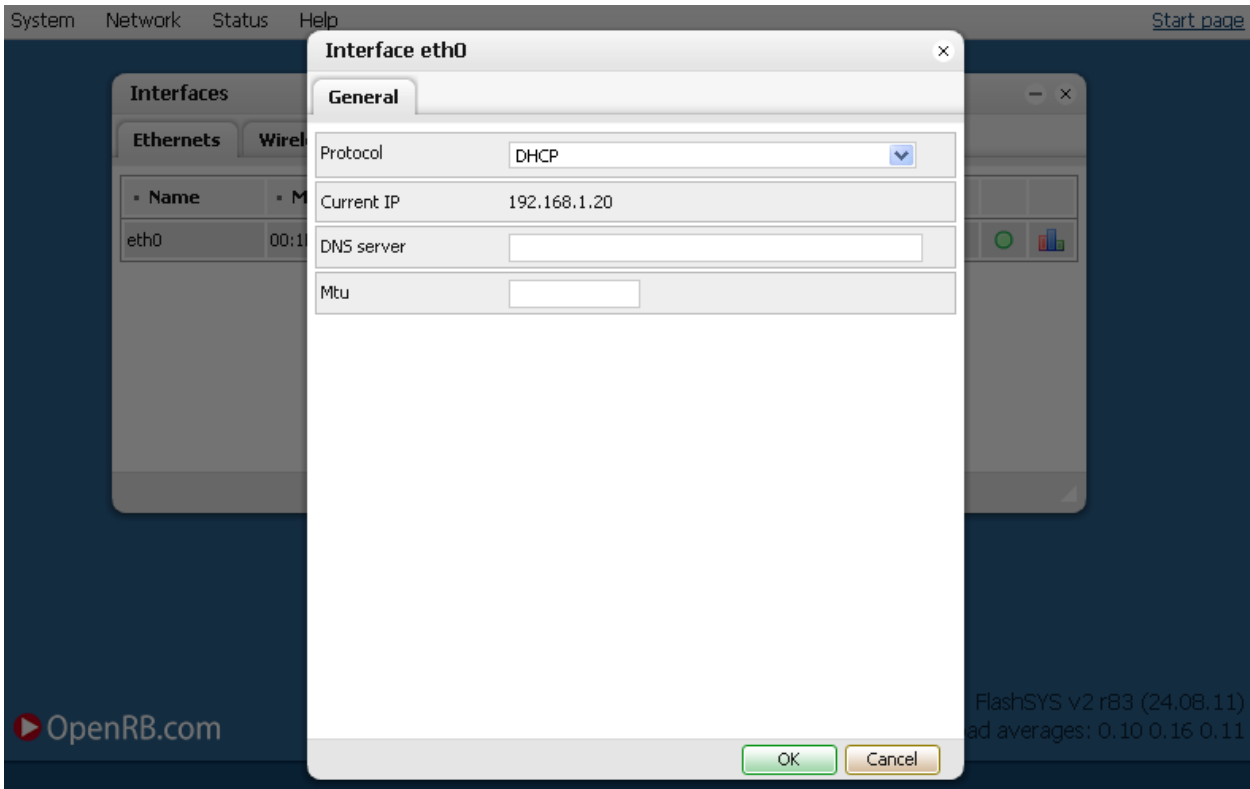
- System** → **GUI login** – password settings for login
- System** → **Backup and Restore** – backup or restore network settings



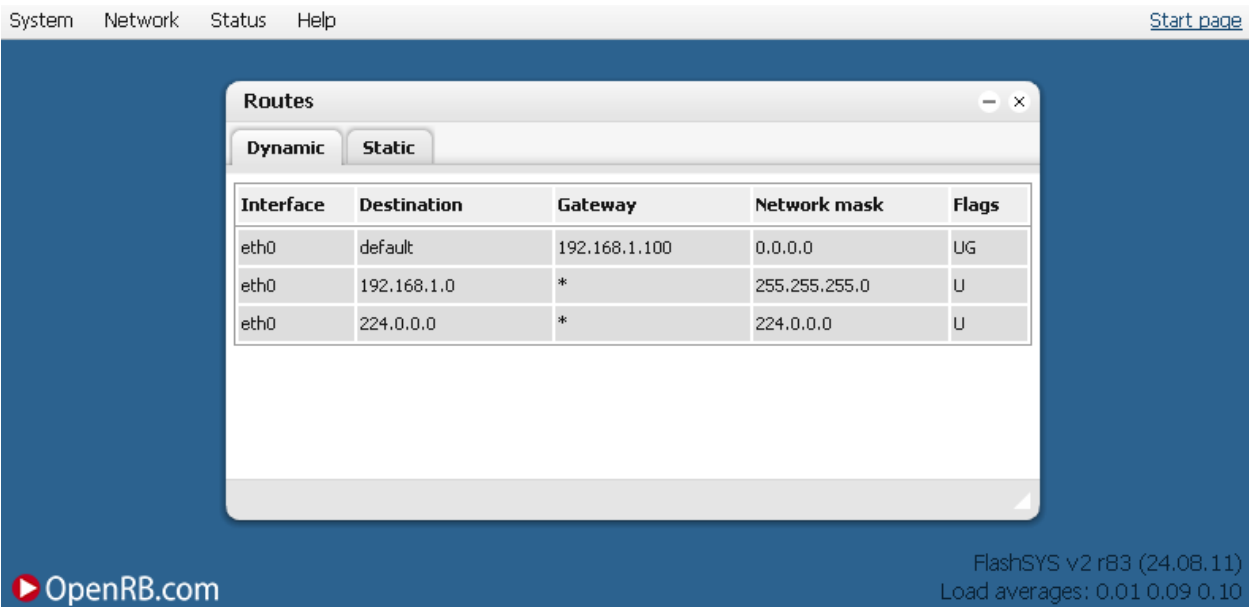
- System** → **Upgrade firmware** – upgrade system's firmware version
- System** → **Reboot** – restart the system
- System** → **Shutdown** – shut down the player

2.3.4. Network configuration

Network → **Interfaces** – Interface and IP management. Static IP, DHCP or PPPoE can be set up for interface



Network → Routes – dynamic/static route management. In case advanced routing is necessary, static routes can be added.



Network → ARP table – Address Resolution Protocol table with hosts being associated with the streaming player

System Network Status Help [Start page](#)

ARP table

Interface	IP address	Mask	MAC address	Flags
eth0	192.168.1.100	*	00:1c:c0:54:88:cb	0x2
eth0	192.168.1.241	*	00:0e:2e:c0:97:63	0x2
eth0	192.168.1.208	*	00:0e:2e:cd:35:e9	0x2
eth0	192.168.1.122	*	00:1c:c0:45:3e:74	0x2
eth0	192.168.1.48	*	f0:b4:79:30:48:d4	0x2

FlashSYS v2 r83 (24.08.11)
Load averages: 0.00 0.06 0.08

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2.3.5. FTP servers, DLNA configuration

Network → **FTP servers / DLNA** – DLNA/UPnP/FTP server settings

System Network Status Help [Start page](#)

FTP servers / DLNA

Server

192.168.0.1

Actions:

FTP server

Server

Username

Password

Local directory

Leave username and password blank for anonymous access

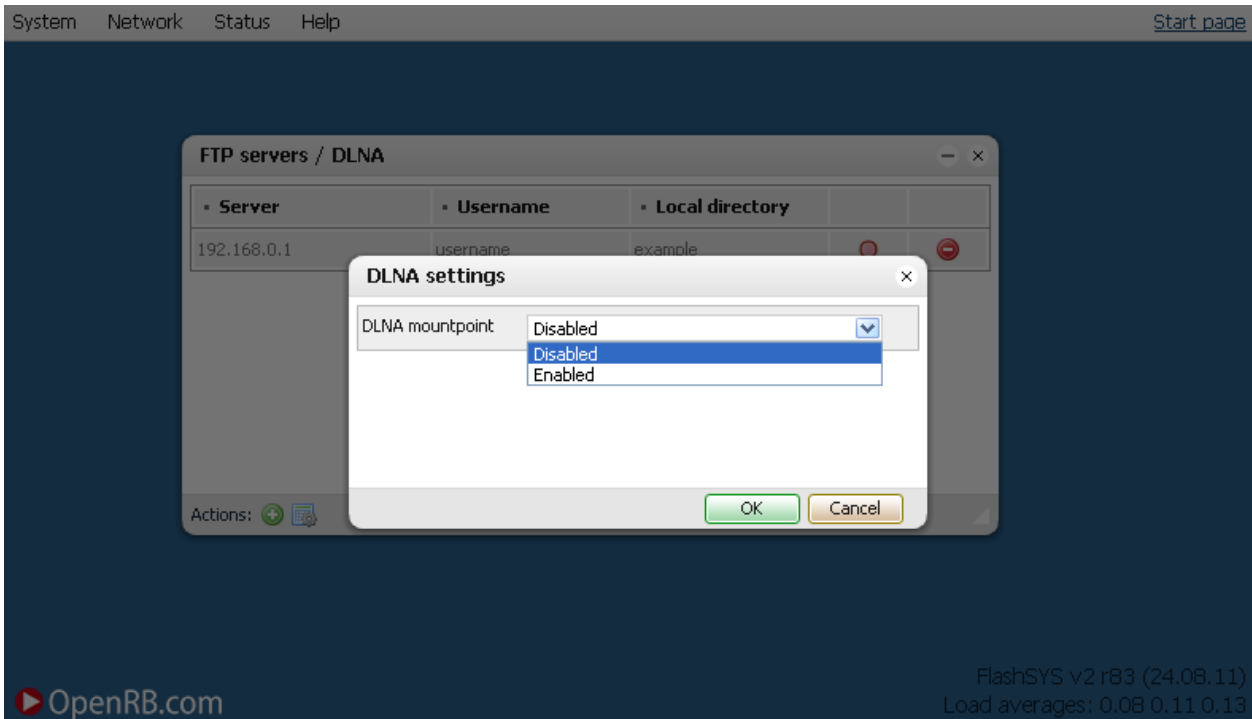
FlashSYS v2 r83 (24.08.11)
Load averages: 0.01 0.08 0.13

OpenRB.com

By clicking on Settings button , there is a possibility to switch DLNA-server auto discover YES/NO

Server – IP address of FTP server e.g. *192.168.1.101*

Username – FTP server login name
Password – FTP server password
Local directory – specific folder name e.g. *music*



2.3.6. Internal FTP server settings

There is 32GB internal memory for media file storage.

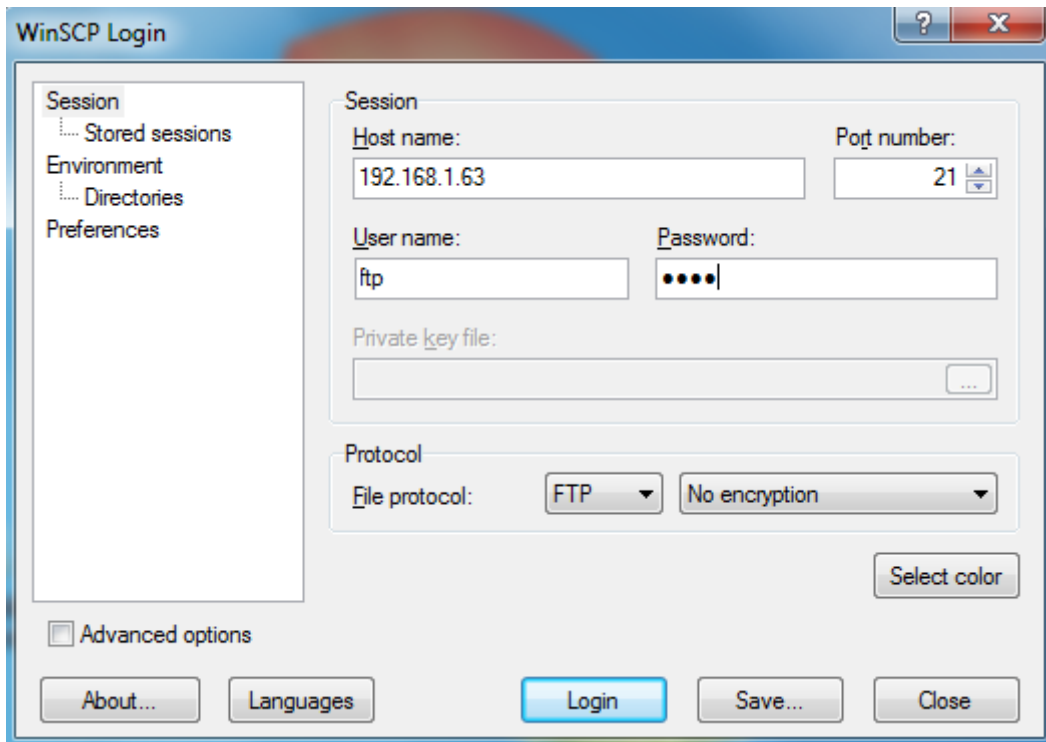
You have to enable internal FTP server with password in *Network Configuration* → *Services* → *FTP server*

The 'Local FTP server' configuration window contains the following fields:

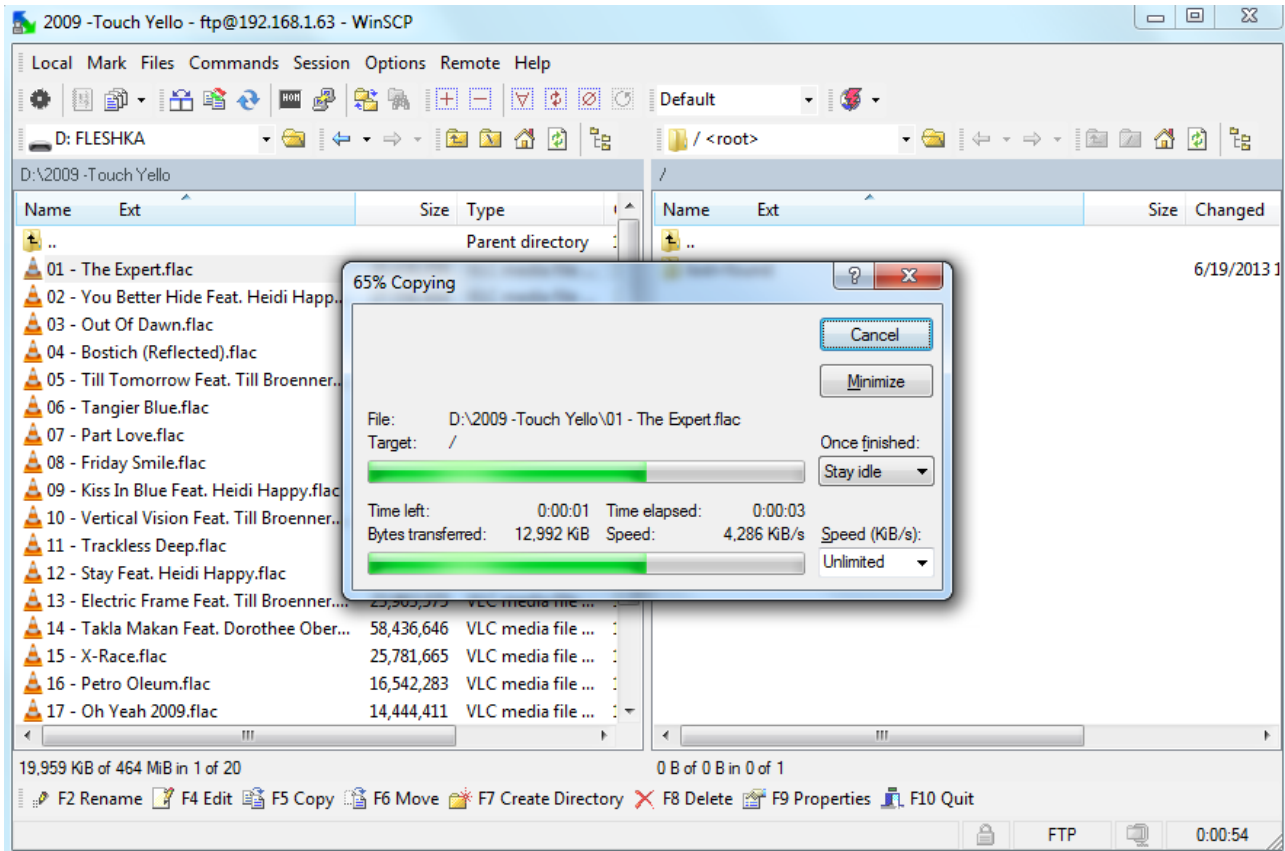
- Server status: Disabled
- Username: ftp
- Password: (blank)

Below the password field, there is an information icon and the text: "Leave password to blank to keep it unchanged". At the bottom of the window are 'OK' and 'Cancel' buttons.

Use any FTP client program to upload songs to the internal flash disk e.g. WinSCP

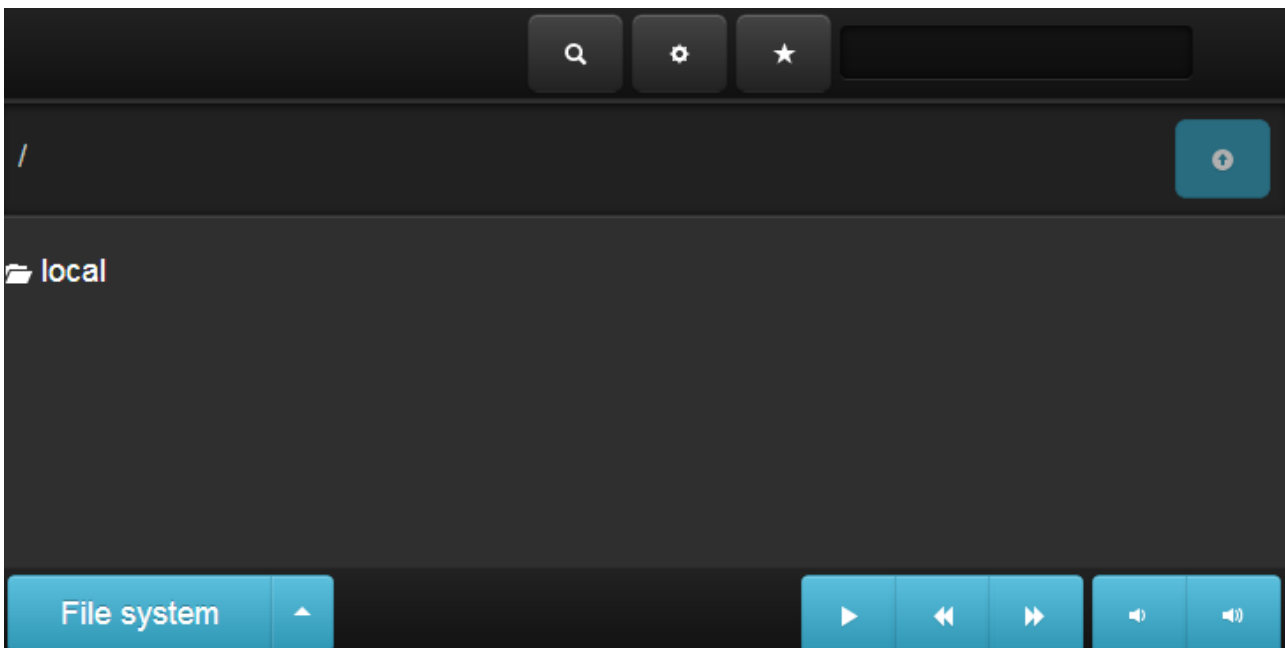


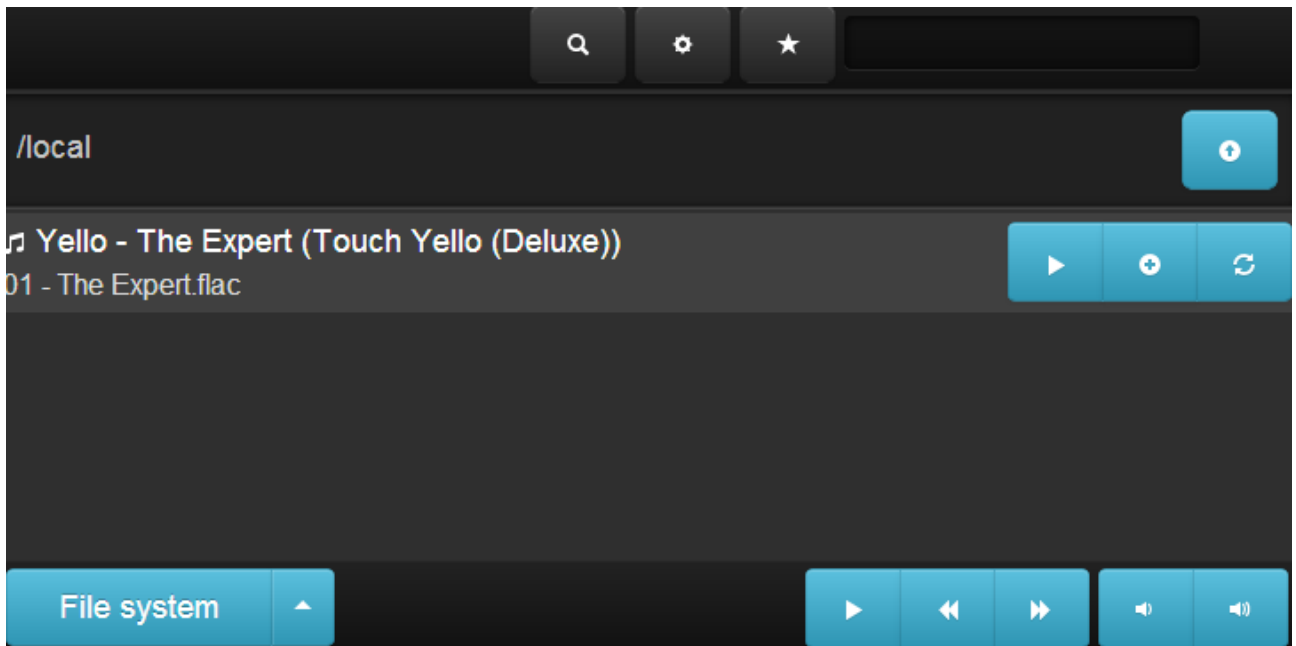
Copy media files or folders to the root folder of the flash drive.



Once files are copied, Update Database as described in point 2.1.1.

You can find the copied files and folders in *Audio Player* → *File system* → *local*





2.3.7. KNX connection settings

KNX connection	
Mode	EIBnet/IP Routing
Parameter	
KNX address	15.15.255
KNX IP features	<input checked="" type="checkbox"/>
Multicast IP	224.0.23.12
Multicast interface	eth0
Maximum telegrams in queue	100

OK Cancel

2.3.8. Mapping to KNX group addresses

Network → **KNX Audio Control** – mapping audio functionality to KNX

Note! KNX mapping currently works only with MPD control applications.

Note! You have to **use external KNX IP Router** (e.g. Logic Machine 2) to access the KNX TP, as Streaming Player supports only KNXnet/IP (TP is not used due to sound quality distortions).

General mapping functions

Simply type the KNX group addresses which will store the current value of player functionality like *Play/pause*, *Next track*, *Previous track*, *Track name*, *Random on/off*, *Repeat on/off*, *Volume*, *Next playlist*, *Previous playlist*, *Playlist name*.

Field	Value
KNX address	15.15.255
Play/pause	1/1/7
Next track	1/1/8
Previous track	1/1/9
Track name	
Random on/off	
Repeat on/off	
Volume	3/3/4
Next playlist	
Previous playlist	
Playlist name	

KNX address – KNX physical address

Data types:

Play/pause – 1-bit [In/Out]

Next track – 1-bit [In]

Previous track – 1-bit [In]

Track name – 14-byte string [Out]

Random on/off – 1-bit [In/Out]

Repeat on/off – 1-bit [In/Out]

Volume – 1-byte scale 0..100% [In/Out]

Next playlist – 1-bit [In]

Previous playlist – 1-bit [In]

Playlist name – 14-byte string [Out]

Map specific track or radio stream to KNX group address

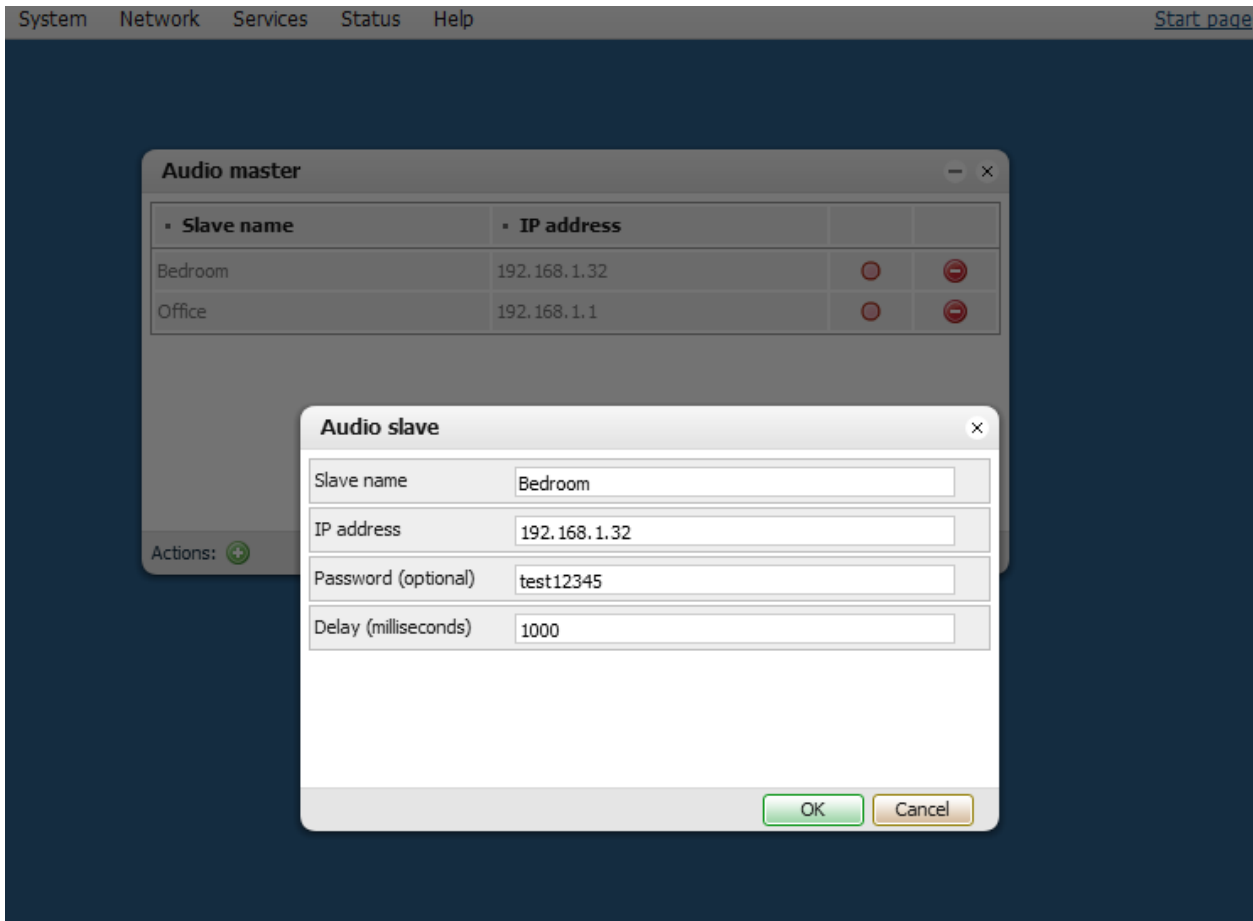
You are able to map specific tracks from music sources or specific internet radio to KNX group address in *Play specific track* tab. Up to 12 sources can be mapped.

Track	Group Address	Path
Track 1	1/1/1	usb-a1/2009 -Touch Yello/01 - The Expert.flac
Track 2	1/1/2	http://u16b.di.fm:80/di_progressivepsy
Track 3	1/1/3	http://u17.di.fm:80/di_harddance
Track 4	1/1/4	http://scfire-mtc-aa01.stream.aol.com:80/stream/10;
Track 5		
Track 6		

OK Cancel

2.3.9. Master-Slave configuration (multiroom)

Network → Audio master – add slave players to this master player. Slaves will play/do the same what is done on Master device




- *Slave name* – name of the slave device
- *IP address* – IP address of slave device
- *Password (optional)* – Login password to access Slave device
- *Delay (milliseconds)* – Delay for the stream

It is possible to disable/enable slave players any time with the circle button.

2.3.10. System, network status

Status → **System status** – General system parameters, memory usage, partitions

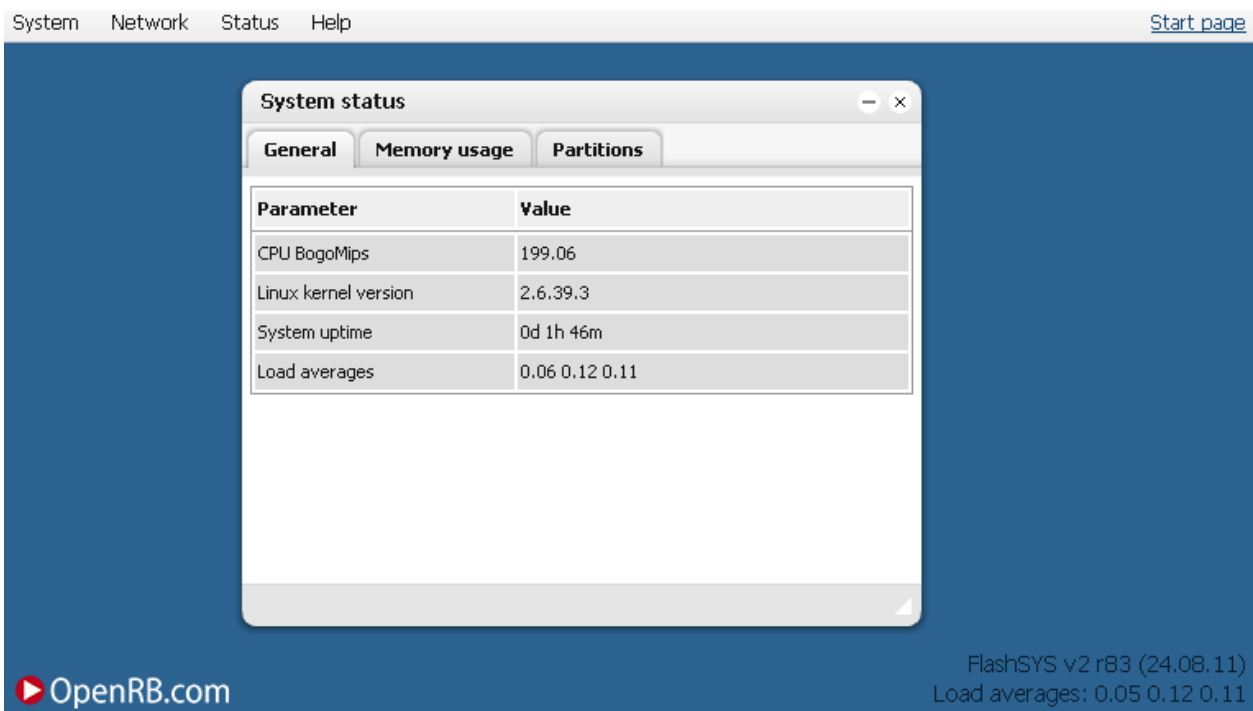


The screenshot shows a web interface with a navigation bar containing 'System', 'Network', 'Status', and 'Help', and a 'Start page' link. The main content area features a 'System status' window with three tabs: 'General', 'Memory usage', and 'Partitions'. The 'General' tab is active, displaying a table with the following data:

Parameter	Value
CPU BogoMips	199.06
Linux kernel version	2.6.39.3
System uptime	0d 1h 46m
Load averages	0.06 0.12 0.11

At the bottom left is the 'OpenRB.com' logo, and at the bottom right is the text 'FlashSYS v2 r83 (24.08.11)' and 'Load averages: 0.05 0.12 0.11'.

Status → **Network status** – Network status, bandwidth graph, TX/RX bytes



This screenshot is identical to the one above, showing the 'System status' window with the 'General' tab selected. The table displays the same system parameters: CPU BogoMips (199.06), Linux kernel version (2.6.39.3), System uptime (0d 1h 46m), and Load averages (0.06 0.12 0.11). The footer text remains 'FlashSYS v2 r83 (24.08.11)' and 'Load averages: 0.05 0.12 0.11'.

System Network Status Help [Start page](#)

Network status [- x]

Name	Mac address	IP address	Mtu	TX Bytes	RX Bytes	Errors
eth0	00:1B:C5:00:12:2D	192.168.1.20	1500	5 MB	2 MB	2 / 2

Network usage for interface eth0 [- x]

In 6 Kbps
Out 4 Kbps

Switch to bytes/s
AutoScale (follow)

OpenRB.com (24.08.11) Load averages: 0.24 0.14 0.12

Status → Network utilities – Ping, traceroute network utilities

System Network Status Help [Start page](#)

Network utilities [- x]

Ping Traceroute Network performance

IP / Hostname

```

PING www.openrb.com (159.148.135.178): 56 data bytes
64 bytes from 159.148.135.178: seq=0 ttl=57 time=13.185 ms
64 bytes from 159.148.135.178: seq=1 ttl=57 time=13.217 ms
64 bytes from 159.148.135.178: seq=2 ttl=57 time=13.626 ms
64 bytes from 159.148.135.178: seq=3 ttl=57 time=12.925 ms
64 bytes from 159.148.135.178: seq=4 ttl=57 time=16.553 ms

--- www.openrb.com ping statistics ---
5 packets transmitted, 5 packets received, 0% packet loss
round-trip min/avg/max = 12.925/13.901/16.553 ms

```

OK Cancel (24.08.11) Load averages: 0.02 0.08 0.10

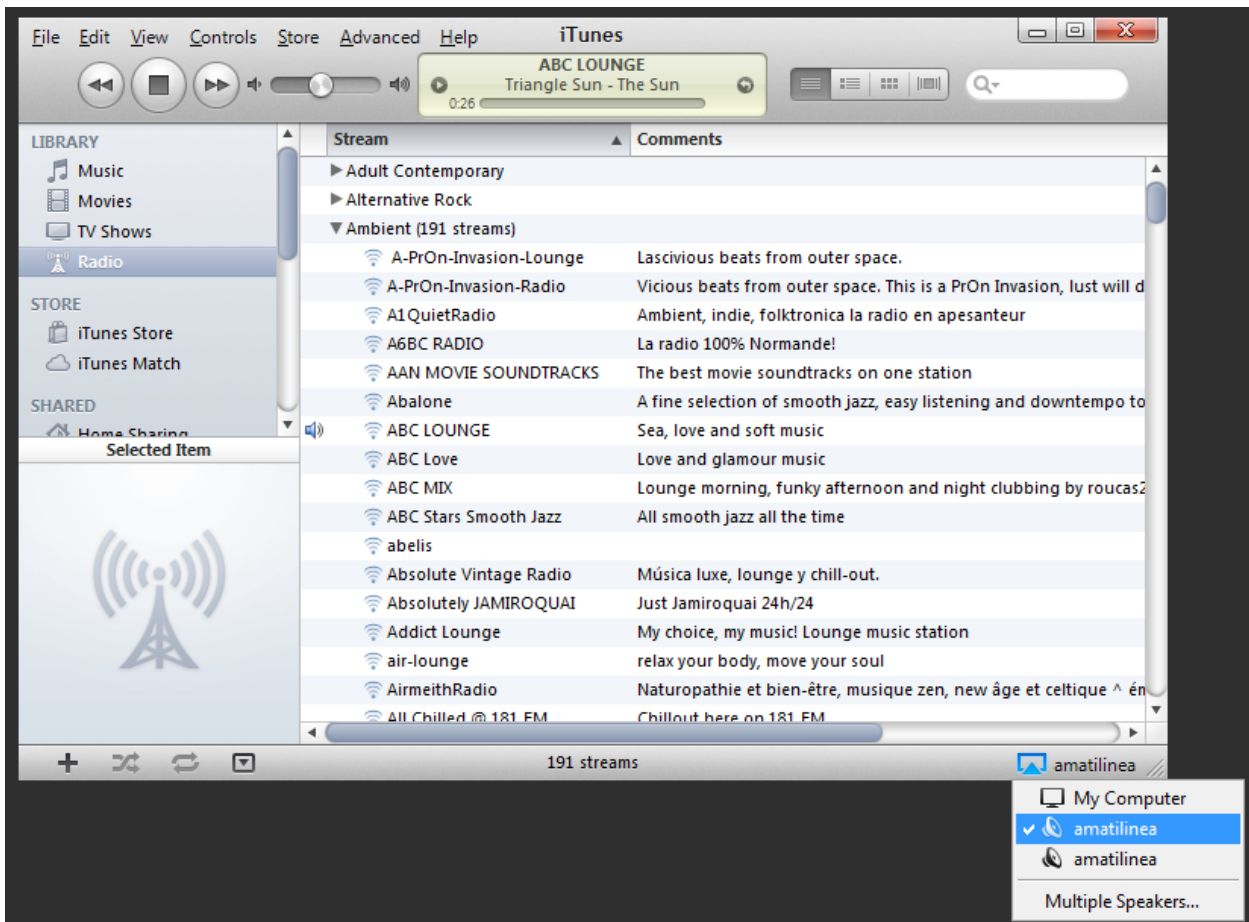
OpenRB.com

Status → System log – system log

Status → Running processes – operating system running processes

3. Stream music from Apple devices over AirPlay protocol

On your Apple device or PC via iTunes while playing music click on *Airplay* icon and choose the name of the Streaming Player where you want to play the song/radio. The songs or internet radio is streamed directly from your iPhone/iPad/iPod or PC.



4. MPaD application usage notes (iPad)

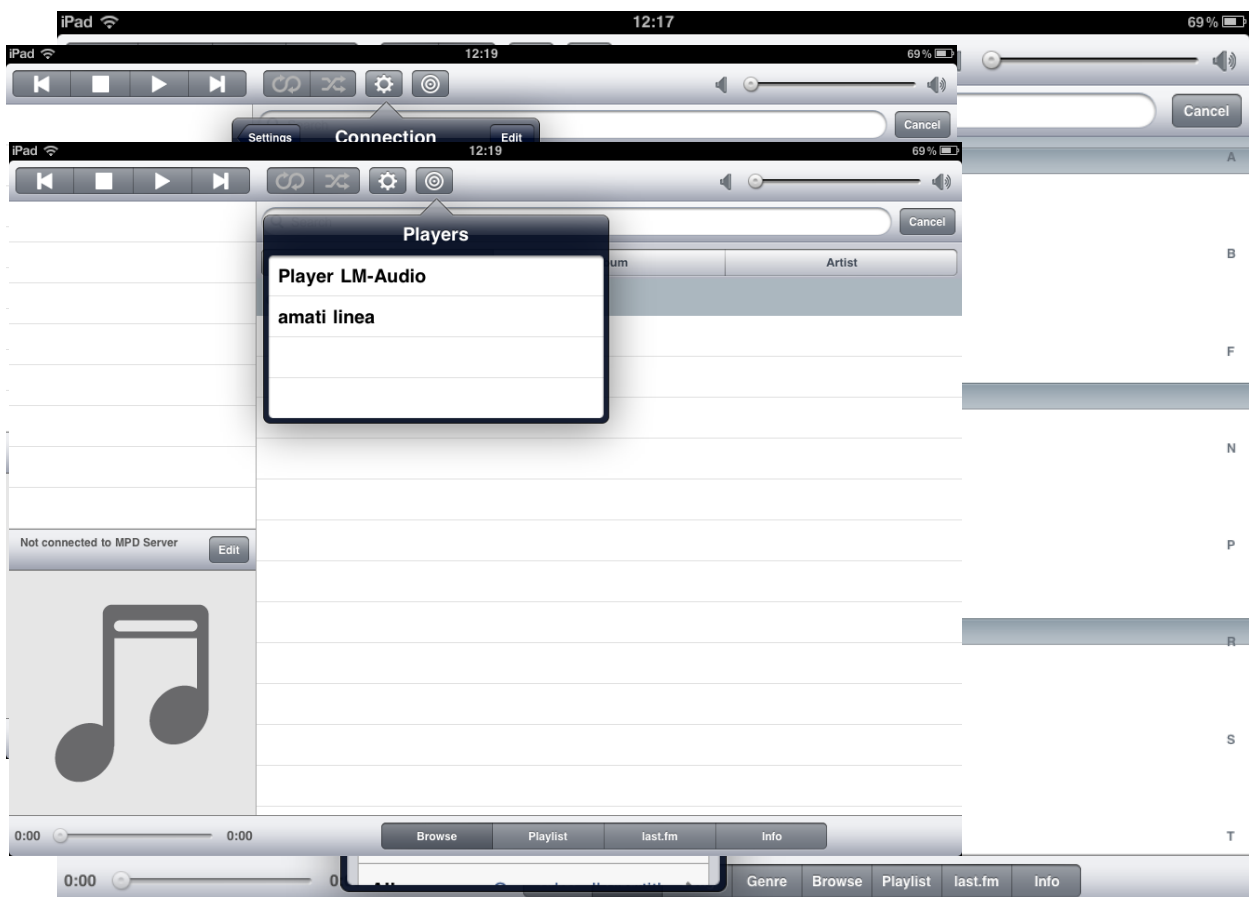
You can use third party apps in parallel of built-in player of the Streaming Player – MPD or UPnP based. MPaD is MPD protocol based app.

4.1. Settings

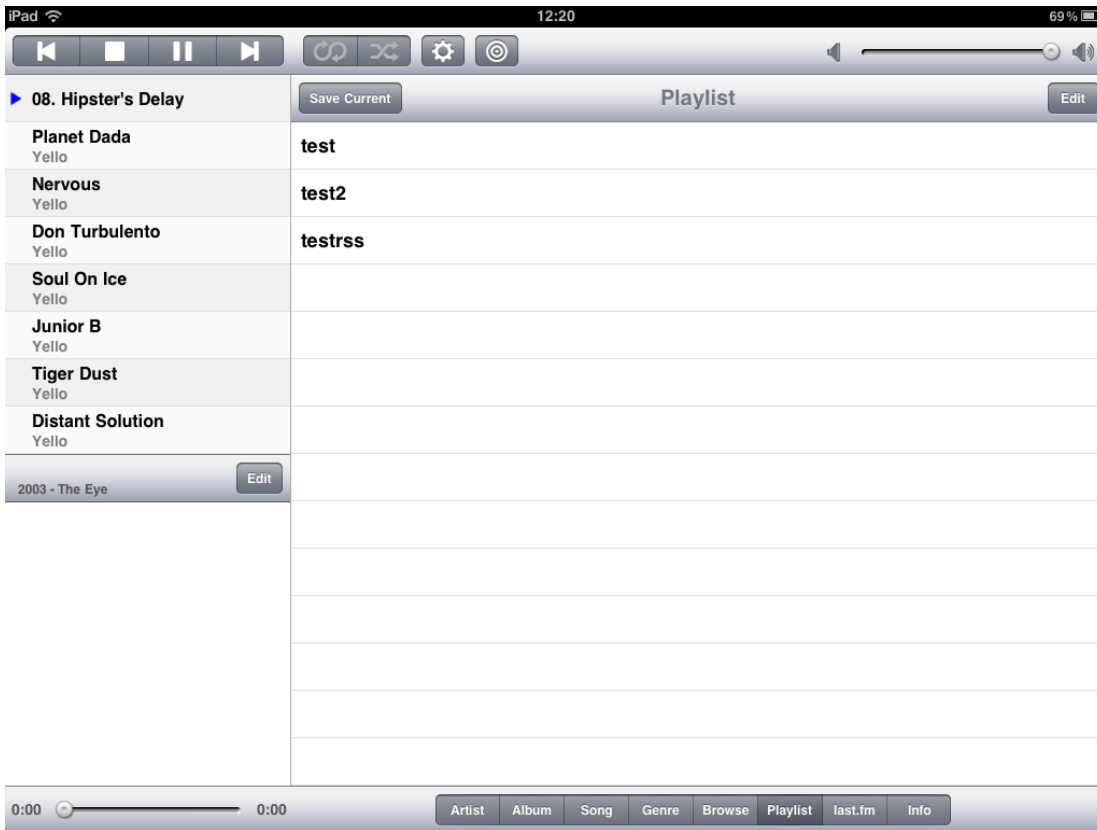
- Streaming Player has local cache library with pointers to all music files available on music sources you've added (DLNA/UPnP//FTP/USB/Internet radio). You can push the update the library by pressing **Update database** button.
- **Update local cache** is local device copy of the music library file from Streaming Player. Used to speed up the communication, not overloading the network with regular requests

4.2. Connection: choose music source to control

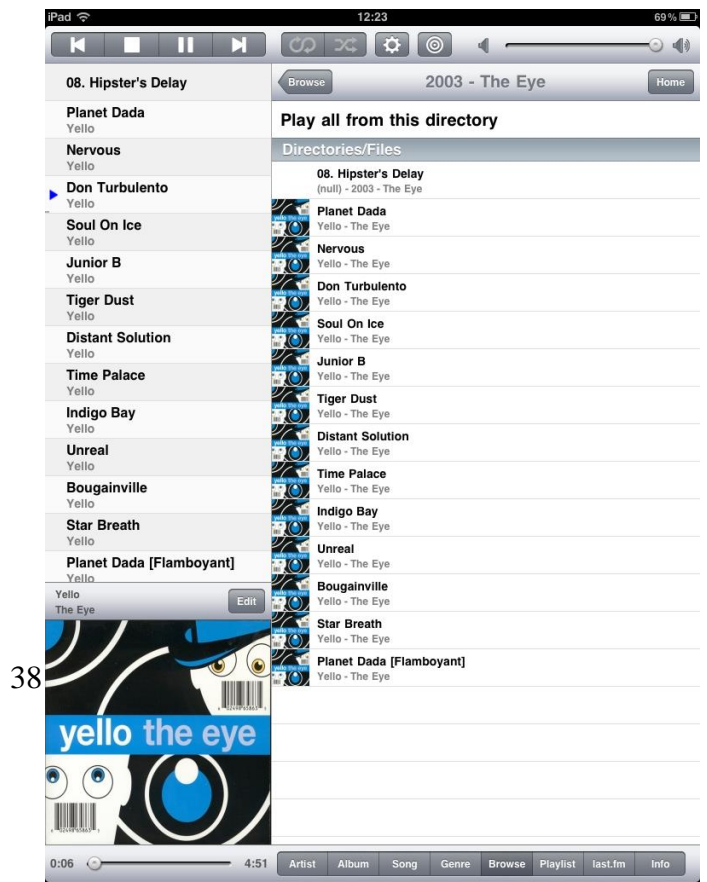
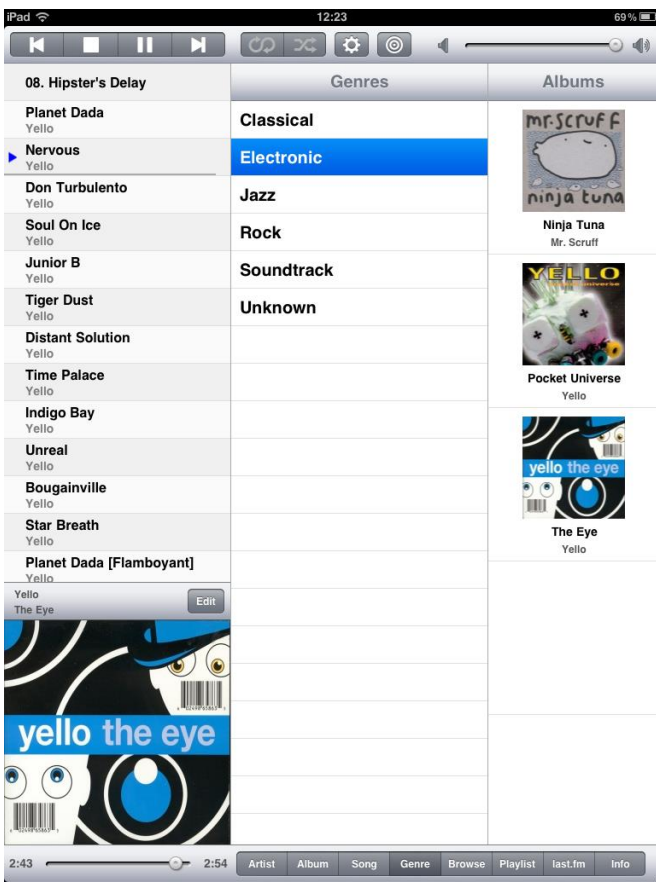
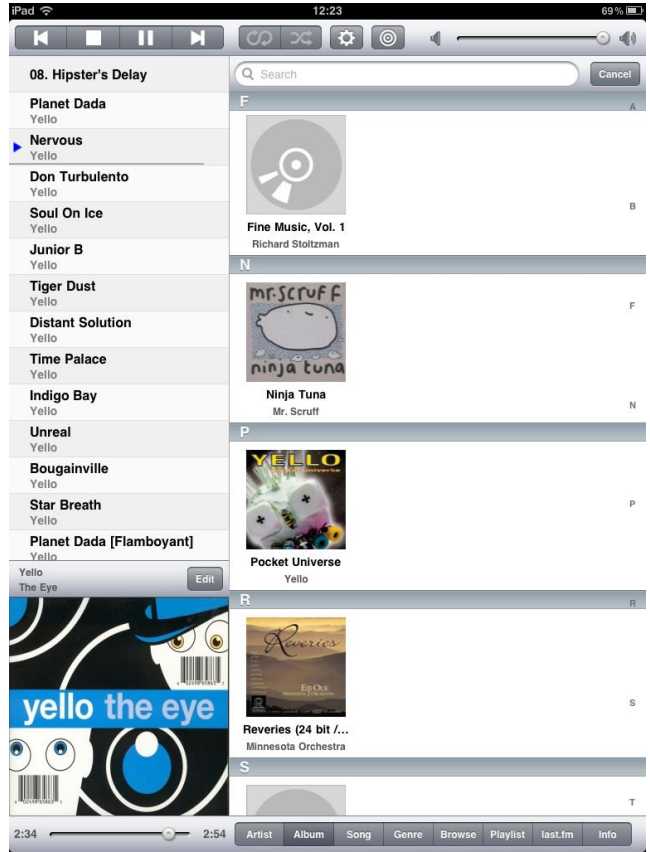
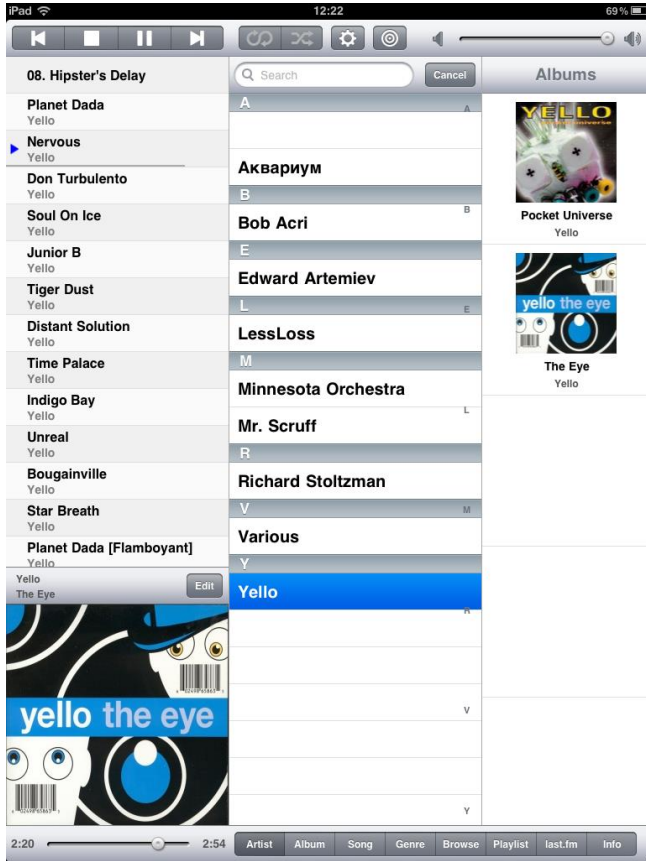
4.3. Player: choose players where to play the selected song



4.4. Playlists: if more than one controller device is used, Playlists are distributed over all devices



4.5. Sort by Artist / Album / Genre



4.6. Internet radio

The screenshot displays the Last.fm mobile application interface on an iPad. At the top, there is a status bar showing 'iPad', signal strength, '12:21', and '69%' battery. Below the status bar is a music player with playback controls (play/pause, stop, previous, next) and a volume slider. The main content area is divided into several sections:

- Playlist:** A vertical list of songs by Yello: '08. Hipster's Delay', 'Planet Dada', 'Nervous', 'Don Turbulento', 'Soul On Ice', 'Junior B', 'Tiger Dust', and 'Distant Solution'. The current song is 'The Eye' by Yello, with an 'Edit' button next to it.
- Artist Profile:** The profile for Yello is displayed, including:
 - Artist:** Yello
 - Biography:** 3,019,305 plays (244,674 listeners). A button to '+ Add to my Library' is visible.
 - Videos:** A video player showing a performance of Yello.
 - Similar Artists:** A list of other artists recommended for Yello.
 - Share this artist:** Options to 'Send', 'Tweet', and 'Recommend' (15 recommendations shown).
- Listening Now:** A list of users currently listening to Yello, including 'chrisgregorycom', 'freaky_DE', and 'mats_s'.
- Top Listeners:** A list of top listeners, including 'pbns1979' and 'zila_hu'.

At the bottom of the screen, there is a navigation bar with buttons for 'Artist', 'Album', 'Song', 'Genre', 'Browse', 'Playlist', 'last.fm', and 'Info'. The bottom left corner shows the current time '0:43' and the total duration '2:54'.

5. MPoD application usage notes (iPod, iPhone)

In similar way as with MPaD, configuration and management is done on MPoD with iPod or iPhone.

