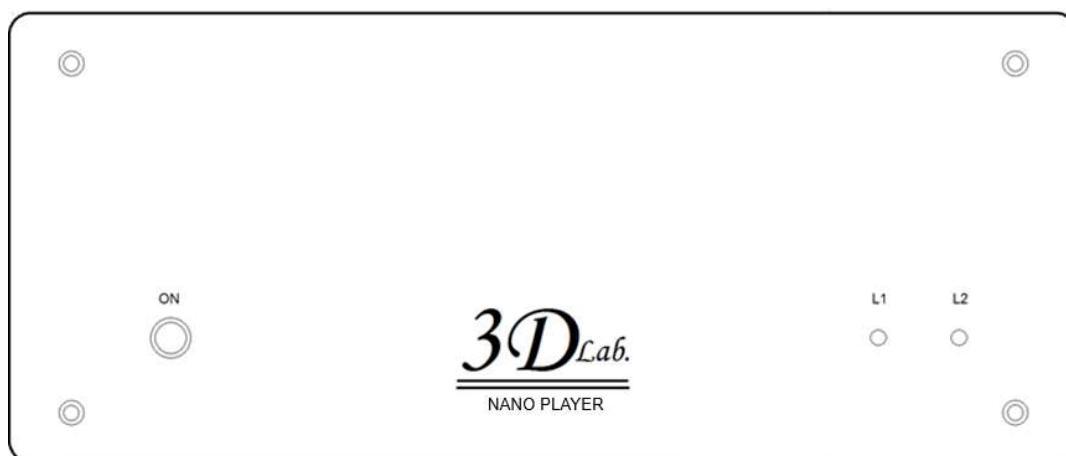




NANO PLAYER / TRANSPORT



NETWORK PLAYER V5

AUDIO SERVER

PCM 32-784 & DSD native 22.4

UPnP DNLA - Bit Perfect media device

Ethernet RJ45 - WIFI(*) – AIRPLAY - BLUETOOTH

Equipped with RJ-45 allowing WIFI integration (*)

3D Lab Distributed by SIEA

+33 (0) 493 470 306

www.3d-lab-av.com

TRANSPORT			
MODEL TYPE	TRANSPORT SONATA	TRANSPORT PLATINUM	TRANSPORT SIGNATURE
PCM	16b-44,1KHz to 32b-768kHz	16b-44,1KHz to 32b-768KHz	16b-44,1KHz to 32b-768KHz
DSD	2,8 to 22,4	2,8 to 22,4	2,8 to 22,4
RJ45	YES	YES	YES
AIRPLAY	YES	YES	YES
WIFI with DONGLE	NP *	NP *	NP *
CLOCK	High precision	Ultra-High precision-173dB (bruit)	Ultra-High precision-173dB (bruit)
EXTERNAL POWER SUPPLY	9V	9V	9V
INTERNAL POWER SUPPLY	TRIPLE **	TRIPLE **	TRIPLE SUPER PLUS ***
CHASSIS	NANO	NANO	NANO SIGNATURE

* NP = NOT PROVIDED

** = ultra-low noise 1.0 μ V rms total

*** = ultra-low noise 0,7 μ V rms total

PLAYER			
	PLAYER SONATA	PLAYER PLATINUM	PLAYER SIGNATURE
PCM DAC RESOLUTION	16b-44,1KHz to 32b-768KHz	16b-44,1KHz to 32b-768KHz	16b-44,1KHz to 32b-768KHz
DSD DAC RESOLUTION	2,8 to 22,4	2,8 to 22,4	2,8 to 22,4
PCM DIGITAL OUTPUT	16b-44,1KHz to 32b-768KHz	16b-44,1KHz to 32b-768KHz	16b-44,1KHz to 32b-768KHz
DSD DIGITAL OUTPUT	2,8 to 11,2	2,8 to 22,4	2,8 to 22,4

NB: PLAYERS are TRANSPORT with integrated DAC.

The NANO product range

3 Network TRANSPORT and 3 Network integrated PLAYER

Functionalities of the TRANSPORT/PLAYER: READING: PCM, WAV, DFF, DSF, AAC, FLAC, M4A, MP3, OGG, ALAC, WMA, AIFF, etc.....

Compatibility: AUDIRVANA, QOBUZ, TIDAL, JRIVERS, ROON, HQPLAYER, etc....

Functions: network player, network server, 4xUSB port for KEY & external Hard Drive.

Network: AIRPLAY, OpenHome, intranet, internet, RJ45, WIFI with non-provided dongle. Every player's name on the network is editable.

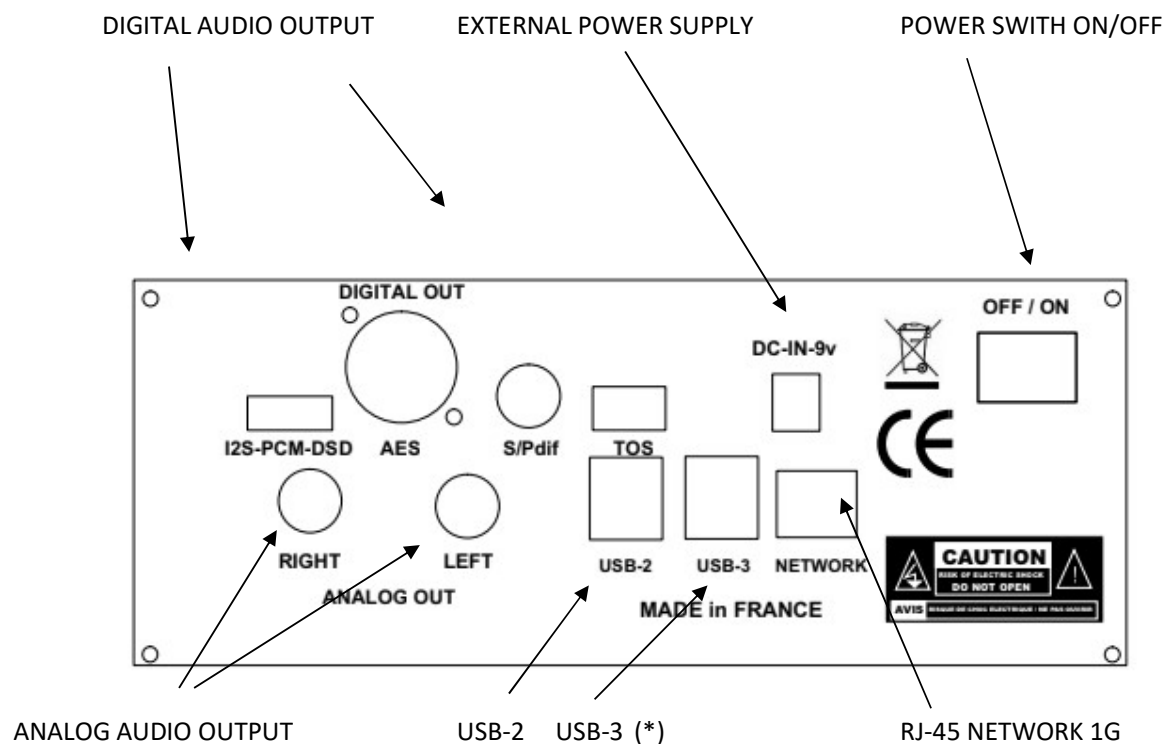
Architecture: Ultra powerful FPGA (developed by 3D Lab.), IP hotspot based on RAPS BERRY. The RAPS BERRY is used only for the HotSpot function. The AUDIO treatment and functions are entirely processed and by the 3D Lab FPGA. Two level power supply, three level clocking, three lever DAC and external power supply. We got it external in order to reduce power supply noise as much as possible. Regulators and filtration are very high quality and internal in the 3D Lab device. So 2 power supply on each NANO device.

FPGA: The FPGA is multifunction. It processes the audio PCM and DSD coding from the audio network or provided data-flux. The FPGA also control the Raspberry and commend its frequency. The process and timing is not done by the Raspberry unlike most device on the market but by our FPGA who also control our AES, S/Pdif, TOS and I2S. He also works as perfect synchronisation of the AUDIO flux, CLOCK and DATA are fully synchronic. Clock and Power supply of this part of the unit is also very high end.

Your player is fully upgradable into a higher version due to its independent architecture and that all the hardware and software is 3D Lab designed.

CONNECTIONS / PLUG IN:

REAR VIEW



INTEGRATED PLAYER ONLY

(*) 4 connector USB 2 & 3 for USB key or hard drive.

WARNING: for high capacity external hard drive use hard drives with their own external power supply.

POWER BLOCK / "POWER SUPPLY to plug in the external power supply entry:



Digital AUDIO Outputs :

- I2S / AES-EBU / S/Pdif / TOS-LINK
- Analogic AUDIO Output with variable level (depending on application)
- USB: 4 x USB 2 & 3 for Audio server (using USB KEY or Hard drive)

Most network audio players are usually PC computers, they have a lot of signal pollution by their design and components hence they can't be good Audio players. In NANO players there's no element who could provoke signal alteration, we don't do cosmetic on computers but create real audio devices with very powerful DSP and high-quality linear power supply. Using a computer is a good choice as data-base but a very poor choice as a player with a lot of compromises.

Digital signals formats are entirely processed and re-synchronises. A very powerful anti-jitter device is also incorporated offering the highest professional standard.

Nano players offers uncompromised characteristics. They can be used in multi-room systems, with one or many servers, one or many commands.

SERVEUR : 3D Lab players can be used as Audio Servers when connector to data servers such as NAS , Tablets, GSM, Computers, Mac, Internet media box, etc ... it can be connected to different devices in a same integration. You can assign a different name to every player.

Multi-Room : NANO network players can be used in Multi-Room, it's possible to use different players in different rooms while reading different Audio files in every separate room.

Control : NANO network players can be operated by tablets, smartphones, computer, MAC, etc... Many apps are possible to use and compatible, our system being fully open then possibilities are endless.

We let our users the choice. The soft side is upgradable with lots of solutions.

(*) it is possible to add very easily an RJ45 - WIFI converter on the RJ45 input for a limited cost to use the NANO in WiFi.

STARTING :

- 1 - Plug in the RJ45 network or to a WIFI routing network.
- 2 - Connect the audio output.
- 3 - Plug in the power supply and start the device with the switch at the back of the player.

N.B. : The front touch pad is not active.

- 4 – Wait initialisation of the device while L1 & L2 operates.

L1 = 1 & L2=1 : starting , booting

L1 = 1 & L2=0 : ready to use

L1 = 0 & L2=0 : ERROR

OPERATION :

The Network Player is used either as server, with a computer, a MAC, a smartphone, a tablet or a NAS.

-The easiest way is your computer or tablet or smartphone having your audio files and used as controller.

-The classic way is your network having the audio files and smartphone or tablet is used to control it.

-The best quality way is to have a NAS stocking the files and smartphone or tablet is used to control it.

Using a NAS in RAID1 or RAID5 is an ideal solution as file is read without data loss as data are in double copy to ensure/verify the information is not altered.

-If used as server the player can be directly connected to a USB KEY/DRIVE.

-AIRPLAY (APPLE): All you need is to connect the player in RJ45 to your WiFi network and use any device you have to send AIRPLAY to the Network Player.

WIFI CONNECTION :

EXEMPLE WITH TP-LINK : TL-WR902AC

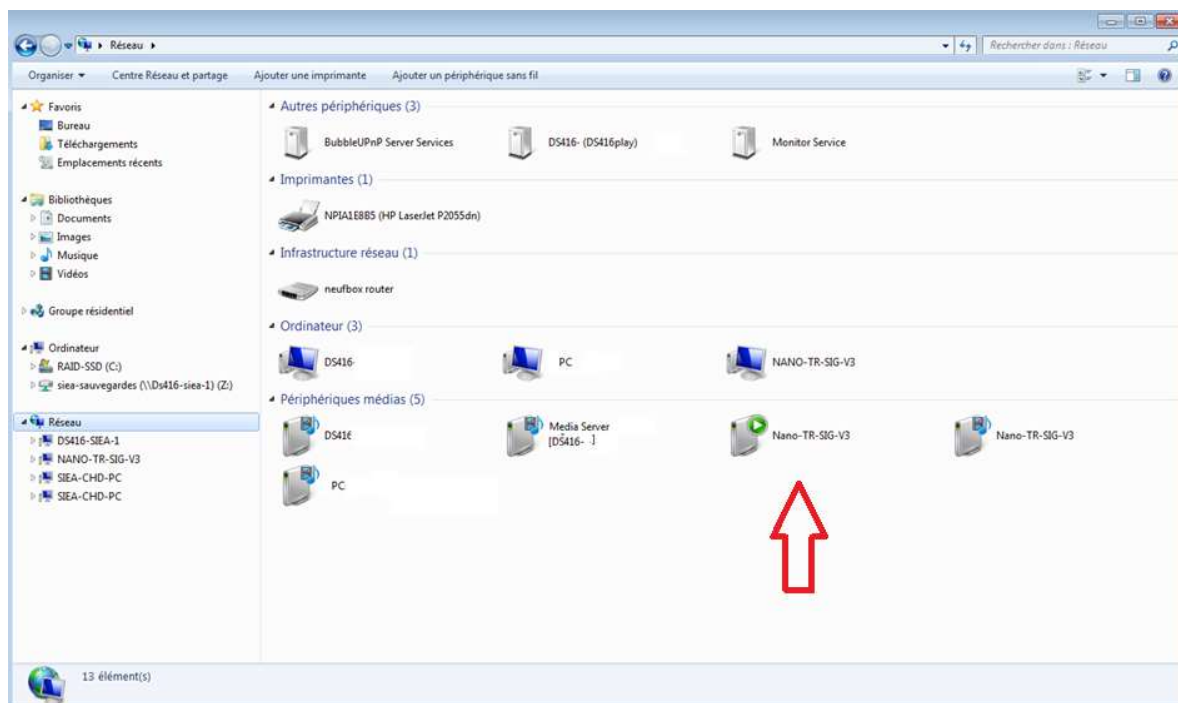


- To use the NANO in WiFi connect the TP LINK TP-WR902AC on the RJ45 connector of the player.
- Use a computer connected to this WiFi in order setup the NANO on this same Network.
- Le TP-WR902AC is a very economic way and easy to source but you can go for bigger devices.

N.B.: The NANO Network player has high professional quality AUDIO characteristics. A cabled RJ45 is preferable for quality than a WiFi , it will always be more stable and more performant.

NETWORK CONTROL :

You can name or change the name of the device and Upgrade the software of the Player.
Go in the Network configuration panel of your computer or Mac and click on the Player:

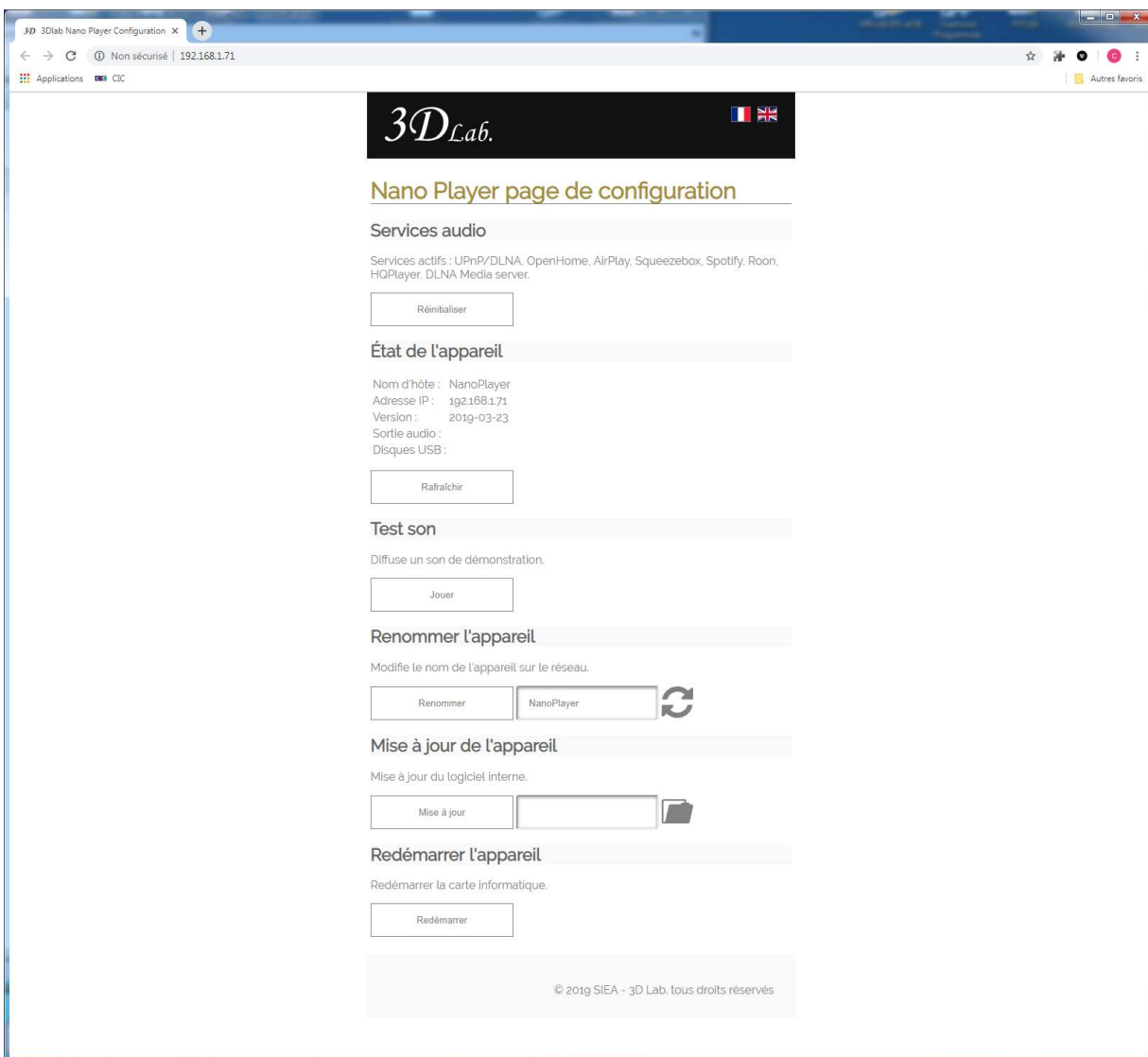


ACCESS TO THE CONFIGURATION OF THE NANO DEVICE :

Type in you navigator / Browser: nanoplayer.local

For ENGLISH language click the English flag / For FRENCH language click the French flag.

QUICK ACCES TO THE HTML PAGE



-STATE : Refresh the player on the Network (initialisation of the NANO).

-SOUND TEST : Sends sound to the speakers to control operation.

-AUDIO SERVICE : Initialise files database (USB port KEY/DRIVE).

-Rename the device : Change the name of the NANO on the network.

-UPDATE of the device : For software upgrade of the NANO.

-Restart of the device : Stop and reboot of the NANO.

Files to download on 3d-lab-av.com.

GENERAL NOTICE :

- OPEN HOME ENVIRONEMENT installed**
- RADIO available on OPEN HOME**
- CD PLAYER reading/functions available**
- CD Reading thru USB (USB2 or USB3) is bit-to-bit offering a reading without data loss , hence offering a much better data quality than any conventional CD PLAYER and without risk or lag or data loss. The result is a very superior reading and jitter reduced from 5 nano sec (average on CD player) to 40 pico sec thanks to this process developed by 3D lab. Musical quality is then much better than on a conventional CD Player.**
- To access to CD reading you only need to switch to sever mode.**
- Ripping CD thru the NANO device is possible.**
- External CD-ROM or BR-ROM device should be powered externally with a USB-3 HUB. (these functions are tested on i-tec USB3.0 Charling Hub 7 Port devite + Power Adaptor 36W).**
- USB-C and RJ45 can't be receiving data at the same time, make sure you stop the data flux on one to be able to activate the other one.**

WARNING - ATTENTION

When using RJ45 don't plug any USB-C

When using USB-C don't plus any RJ45