

LUMIN



P1

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It's been a while since Lumin released something new that wasn't just a simple upgrade.

It is now the case since the Lumin P1 has been the opportunity for Pixel Magic to design a brand new casing of a totally different height.

The former billet aluminium chassis has been replaced by a bigger one but without any increase in weight.

Not so easy, however, to increase the proportions of a device while preserving the brand's visual identity... and well, at Pixel Magic, they just did it. They also did better as I find this box set to be even more beautiful than those used for their previous network drives.

The perfect alignment of the oblique feet

with the central display is a beauty. A true piece of industrial design!

But you might easily understand that Pixel Magic's real motivations to release a new chassis were not only guided by aesthetics!

The main reason was indeed to offer a device that would be even more versatile, and which could also accommodate analogue sources, as well as more digital sources versus what previous Lumin network players offered, namely not much apart from the Ethernet port and a possible USB input limited to memory sticks and other small external drives.

Among Blu-ray players, TVs, Home Theatre amplifiers, connected video players, there were indeed many orphan

audio-video sources that would have enjoyed benefiting from the D/A conversion stage of whatever Lumin network players...

It is now hopefully possible, and Pixel Magic has taken advantage of the room made available by the taller chassis to propose a large selection of analogue and digital inputs.

In total, the Lumin P1 offers 9 digital and analogue inputs. Team Lumin proudly announces that the P1 is intended to be the heart of your audio-video installation: it can serve as a pure network player, as a single DAC or a digital preamplifier... not so shabby.

Taking a closer look at the whole range of P1's available inputs, there are 2 analogue

inputs (one balanced and one unbalanced), and seven digital (SPDIF cinch, Toslink, AES-EBU, USB, and 3 HDMI-type inputs).

To these numerous options, it is also necessary adding two further digital inputs which are not directly connected to the DAC, but to the network circuit board itself.

handles, as it was already the case for the X1, PCM 384 kHz and DSD 512 files in native format. DSD upsampling on the fly goes up to DSD 128.

In respect of the HDMI inputs, they respect PCM 2.0 and guarantee the transfer of 4K streams.

Like the Lumin X1, the P1 offers a classic Ethernet RJ45 network input, coupled with an optic fibre input, useful if you already have a switch or router with a SFP port.

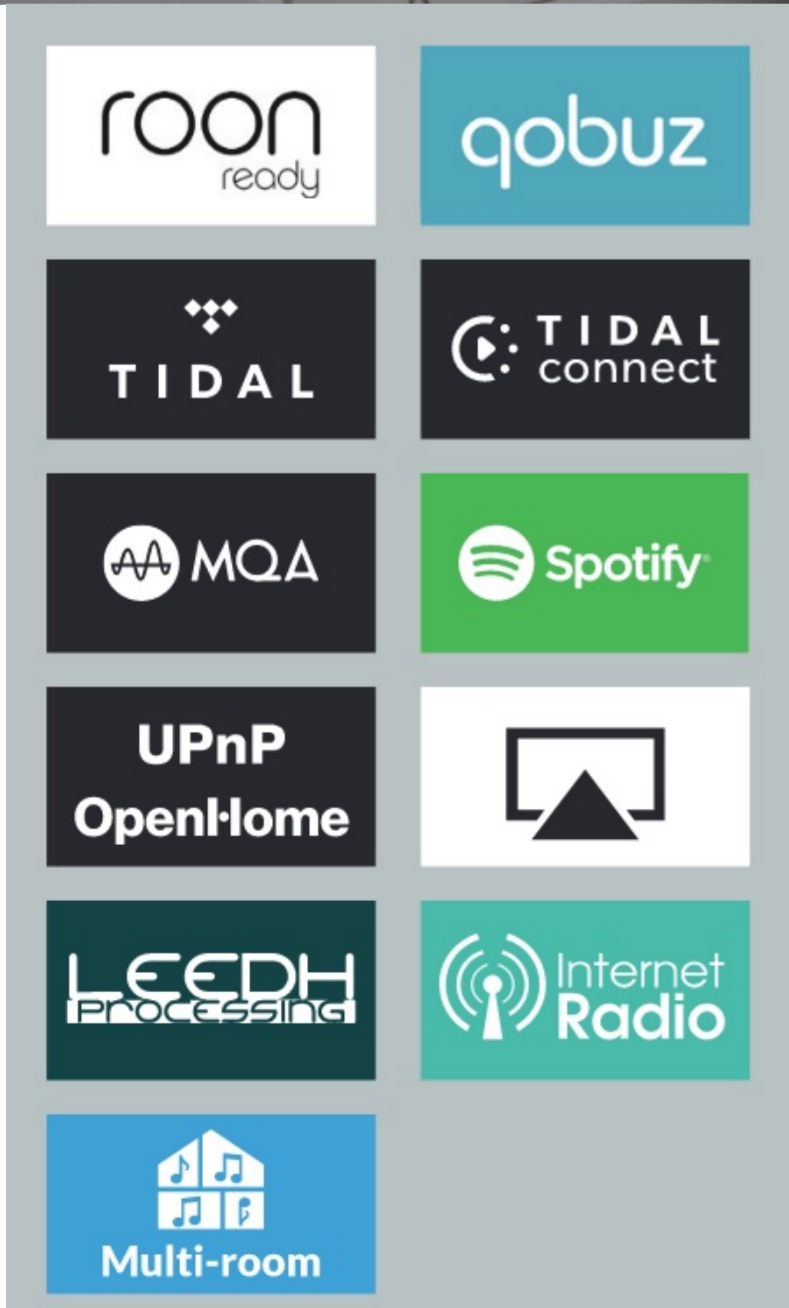
Lumin therefore offers here an extremely versatile device, capable of handling all the digital and analogue audio streams of most demanding audio video systems.

Finally, on the output side, the P1 offers two digital outputs (a USB A connector and usual BNC plug), as well as two analogue outputs (XLR and RCA).

This is undeniably a small step for Pixel Magic, and a big leap for audiophile mankind!

Each digital input accepts at least 24-bit 192 kHz PCM streams as well as DoP 64, and USB goes up to DoP 128 and 384 kHz PCM from 16 to 32-bit. The network card

Under the cover, we can see that the external power supply of the Lumin X1





easily fits inside the P1 case. This also solves the issue of the DC cable, which could have had subtle impact on sound, leading to further audiophile tweaks...

Like the X1, the power supplies for analogue and digital PCBs are separate.

The Lumin P1 benefits from many developments issued from previous models and especially from the X1 flagship.

In addition to the power supply and the SFP optical network input, the P1 uses the X1's reading board, the FPGA system for distributing the FEMTO clocks, as well as the dual mono output stage embedding the famous Lundahl output transformers.

The conversion stage is built around two ESS Sabre ES9028PRO chips (one per channel).

In comparison, the X1 has two ES9038PRO chipsets featuring a higher dynamic range of 140 dB (versus 135 dB for the ES9028PRO).

The choice of ESS Sabre chips notably allows Lumin to implement Leedh Processing volume attenuation directly on DSD audio files without downsampling to PCM.

The Lumin P1 also incorporates an original Analog Device analogue-to-digital (A/D) converter to reformat analogue signals into 24-bit 192 kHz PCM digital format.

An infrared sensor has been included directly inside the P1 to enable a direct remote control without requiring any external receiver plugged into the USB port.

This time, no need to solicit the USB port of the network player since the receiver

is already embedded in the device itself.

The P1 just ranks under the X1 network player, and above the T2, taking finally the position released by the former S1 which has left definitely the Lumin lineup.

However, it remains a very special proposal since it offers unprecedented preamplifier and multi-input D/A converter functions. It could have been part of a totally new Lumin range of network D/A converters. But Pixel Magic decided to keep its lineup unchanged.





LISTENING IMPRESSIONS

As an X1 user, my first move consisted in benchmarking the P1 with Lumin's flagship.

I mainly operated both players from their network input and directly connected to the Lumin Amp power amplifier, using the internal Leedh Processing volume controller.

The loudspeakers used for this review were successively the Acelec Model One, the Leedh E2 Glass and the Lawrence Audio Harp.

The Lumin Amp power amplifier works especially well when paired with low-sensitivity speakers. This panel of speakers has therefore allowed using the Lumin Amp in very good conditions.

I did not test the optical network inputs of the two network players because I generally reach better results with the RJ45 input since my triple Ethernet switch disposal makes it possible to isolate electrical interferences from my home network. I assume that FMC

converters bring finally more disadvantages than real advantages in my case.

But my switch disposal is quite an expensive solution and maybe the fibre network input can be used successfully in other circumstances.

If there were some obvious differences when listening to both streamers, that wasn't night & day.

I have thought during a few days that I was mainly listening to the sonic differences which could have existed between the two different ESS Sabre chipsets (i.e. ES9028PRO in the P1, and ES9038PRO in the X1).

The X1 delivered a more organic sound, with a bit more density in the bass region, greater energy and a little more harmonic richness in the treble and midrange. The P1, on the other hand, provided an impressive clarity as well as a very wide soundstage.

All these impressions are to be considered cautiously as the differences remain quite tenuous although perfectly audible.

I decided then to see what both Lumin device could provide when used as a simple digital transport, connecting their USB output to a high-end external DAC like my Mola Mola Tambaqui.

And I have been quite surprised to find again most part of the tonal differences above mentioned using the analogue output.

The differences observed between the two Lumin network players would therefore not only be the sole consequence of the different D/A conversion chipset...

undoubtedly the boxes, the separation of the power supply, the structure of the PCBs and the different number of inputs also have an impact on sound.

I raised the question to the Pixel Magic technical staff, but I did not get any further clarification on this topic. Consider it relies on the complexity of audio matters...

Given that the Lumin P1 seemed to reproduce in any circumstances a slightly more ethereal sound compared to the X1, I began playing with different power cords. Usually, each time I receive a new device for review, I use its standard black power

cord, so as not to bias my analysis with other external factors.

I nevertheless subsequently tried to associate several audiophile power cords to the Lumin P1, just to try to modify its tonal balance.

And despite the X1 performs better in my room with its standard cable, the P1 seems to appreciate the addition of “exotic cables”.

In that case, I have achieved the best results with my Coincident Speaker Technology power cord, adding more density and dynamics without compromising neither the variety of timbres nor the finesse of the trebles.

However, the Lumin X1 always performs slightly better, delivering a more holographic soundstage and greater tonal richness.

Music seems to flow more freely and smoothly on the X1. This is obvious on piano and violin sonata recordings.

It emanates a feeling of increased presence while the P1 gives less shining trebles, within a higher matt perspective, a little more distant from the musicians.

The same impression applies to symphonic works: the X1 gives a more holographic image while the P1 delivers an image of superimposed planes but without the same naturalness and depth continuity specific to the X1.

On Tchaikovsky's fourth symphony, my own reference version performed by Evgeny Mravinsky conducting the Leningrad Philharmonic, there was indeed this feeling of obtaining a more natural live atmosphere with the X1 than with the P1.

Nevertheless, this higher liquid presentation of the X1 can be widely compensated by asking the P1 to upsample my 96kHz PCM file into a DSD 64 signal. I came then quite close to the performance of the X1 (which perhaps didn't need such artefact) while preserving the intrinsic clarity and precision I have found in the P1 so far.

The hierarchy of pricing seems indeed to be fully respected among the various Lumin streamers as far as sound quality is concerned.

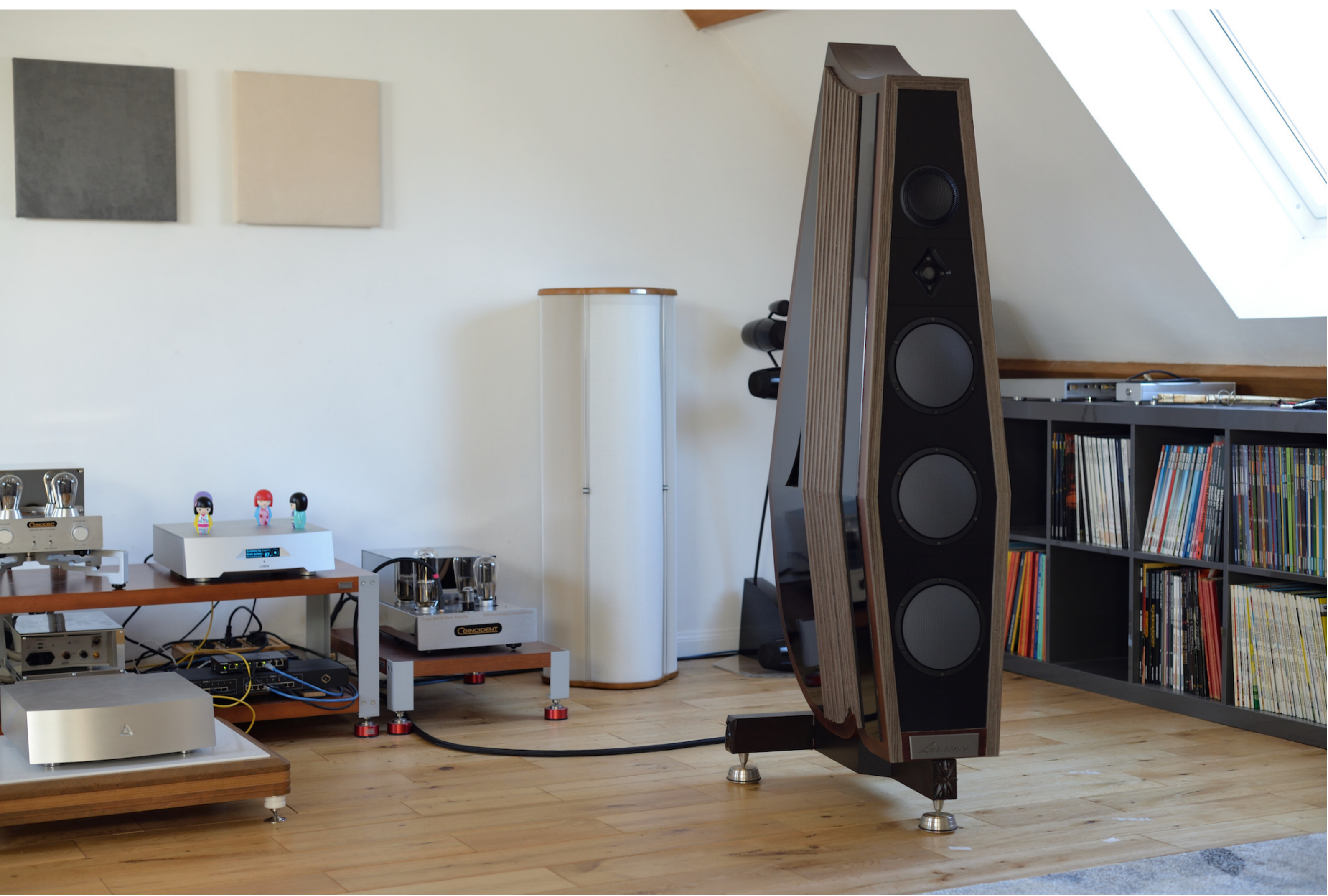
But Lumin P1 brings, beyond all sonic considerations, higher versatility, intended

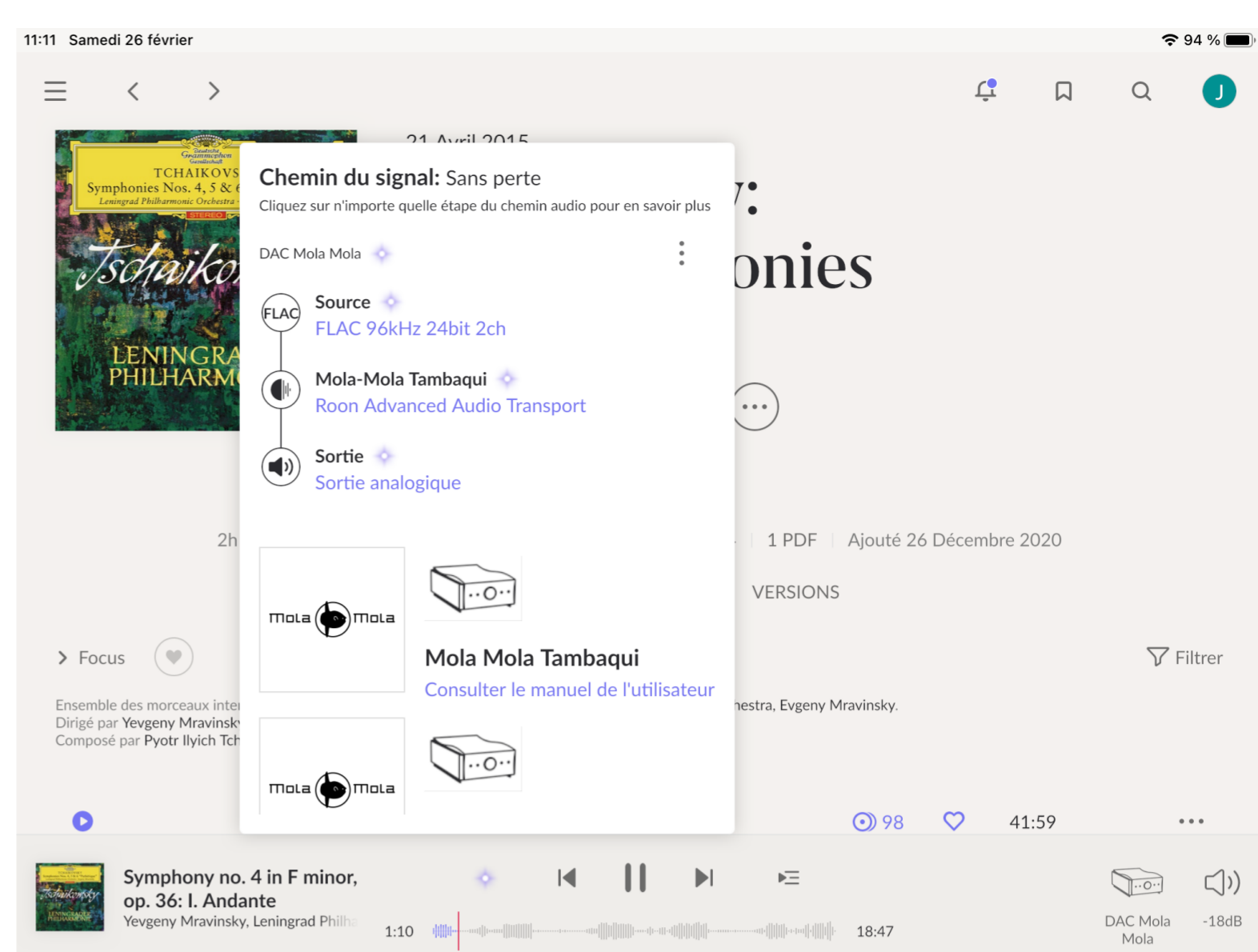
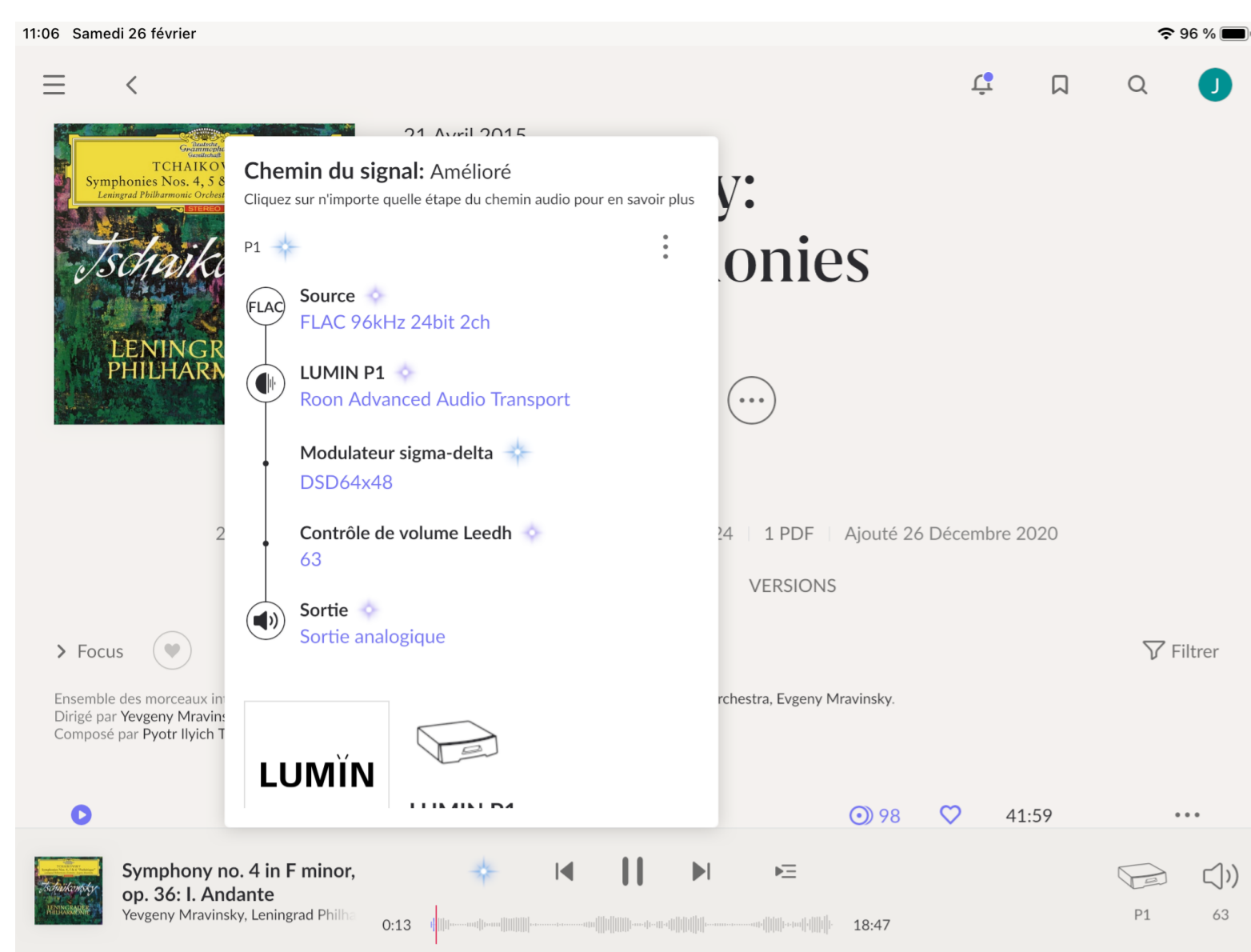


for mixed use, both audio and video, which will undoubtedly interest all those who wish to manage all their audio-video sources from one sole and single DAC.

Escaping from Lumin's realm, I have compared in a second step the Lumin P1 to the Mola Mola Tambaqui.

This time, I used my Roon server to compare both devices in playback mode, D/A conversion and volume control. The two DACs belong to the same price range, and, if the Dutch focuses on the sophistication of its circuitry, the Hong-





Konger counts on its greater versatility.

In an almost perfect world, we could consider combining the qualities of both devices by taking advantage of their respective strengths.

The bill nevertheless begins to rise seriously, and it is in my opinion more reasonable to define a hierarchy according to one's personal tastes and priorities. That's in fact what I tried to do.

Both devices were connected to the Lumin Amp with one pair of Grimm Audio TPM balanced interconnects.

Remaining on the 4th symphony of Tchaikovsky, on the first movement Andante, the supremacy of the Lumin P1 was quite obvious: a better soundstage, broader and higher, a more liquid sound, greater dynamics, and timbres on par with those of my Tambaqui.

Changing format for the quite controversial MQA with the 2L recording "Northern Timbre", the Lumin P1 provides an incredible presence. The attacks of both piano and violin are incredibly accurate.

This piano & violin duo delivers very addictive tones.

In comparison, the Tambaqui's soundstage remains stuck between the two loudspeakers, not as precise as the P1, with nevertheless an undeniable quality of timbres.

Passing on DSD recordings, the Lumin P1 unquestionably arises as a specialist in this matter. Listening to the Tambaqui, I felt like a kind of dynamic compression which disappeared completely when I switched to the Lumin P1.

On Oboist Pauline Oostenrijk's DSD128

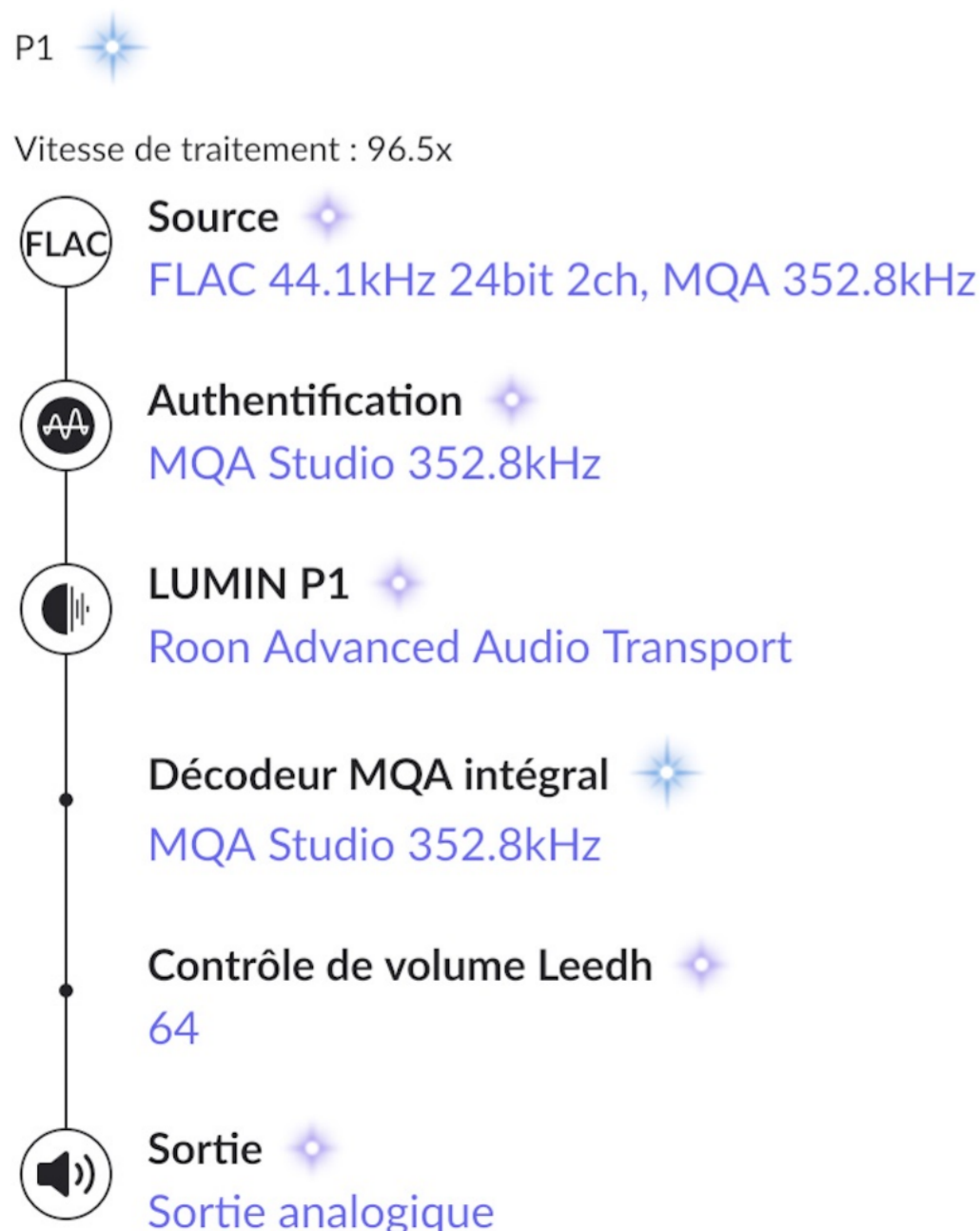
recording, playing with the Baroque Academy of the Netherlands Symphony Orchestra in Vivaldi's Concerti for oboe and strings, the violins sound silkier with the Lumin, as they become rough, quite pixelated, with my Mola Mola D/A converter.

Basically, the Lumin P1 sounds livelier, conveys me more into the music. There is a kind of natural tension, that one that makes you forget the possible downsides



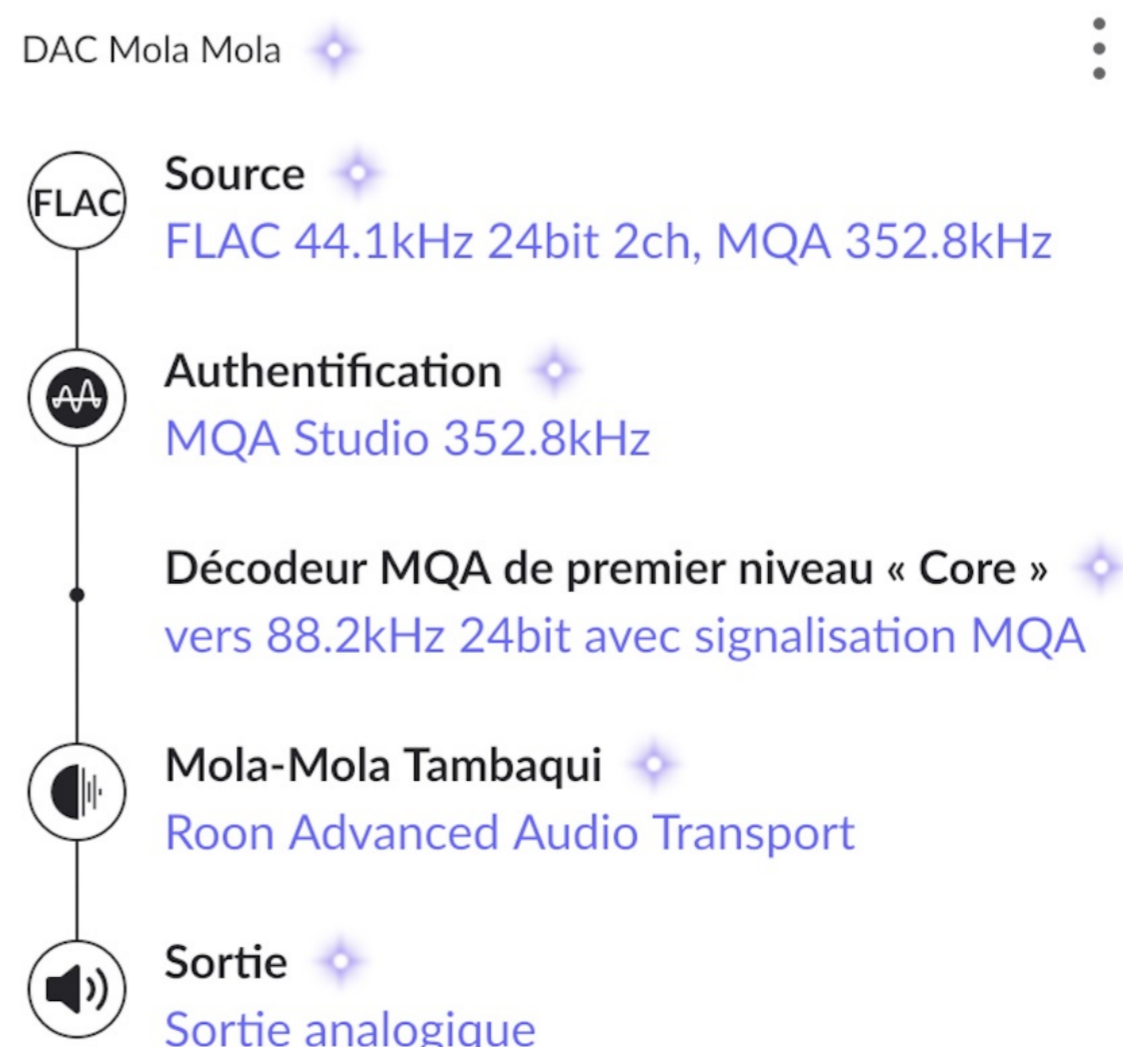
Chemin du signal: Amélioré

Cliquez sur n'importe quelle étape du chemin audio pour en savoir plus



Chemin du signal: Sans perte

Cliquez sur n'importe quelle étape du chemin audio pour en savoir plus





of your playback chain, to commit yourself to the simple pleasure of listening to music.

Same observation, perhaps a little less severe this time, with the DSD recording “Maurice Ravel orchestral works” released by Pentatone with Seiji Ozawa conducting the Boston Symphony Orchestra. The main difference between the two protagonists remains the level of tension and musical commitment in favour of the latest Lumin player.

So, what can we learn from this confrontation between the Lumin P1 and the Mola Mola Tambaqui?

No doubt the quality of the network playback printed circuit board and the excellence of the Leedh Processing offered by the Lumin P1 are apparently more efficient factors than the mere

sophistication of the digital conversion considered as a whole (digital processing + D/A conversion).



The P1 also offers this particular versatility which allows both outputs, balanced and unbalanced, as well as the use of the audio server of your choice (in

my case Minimsriver or Roon).

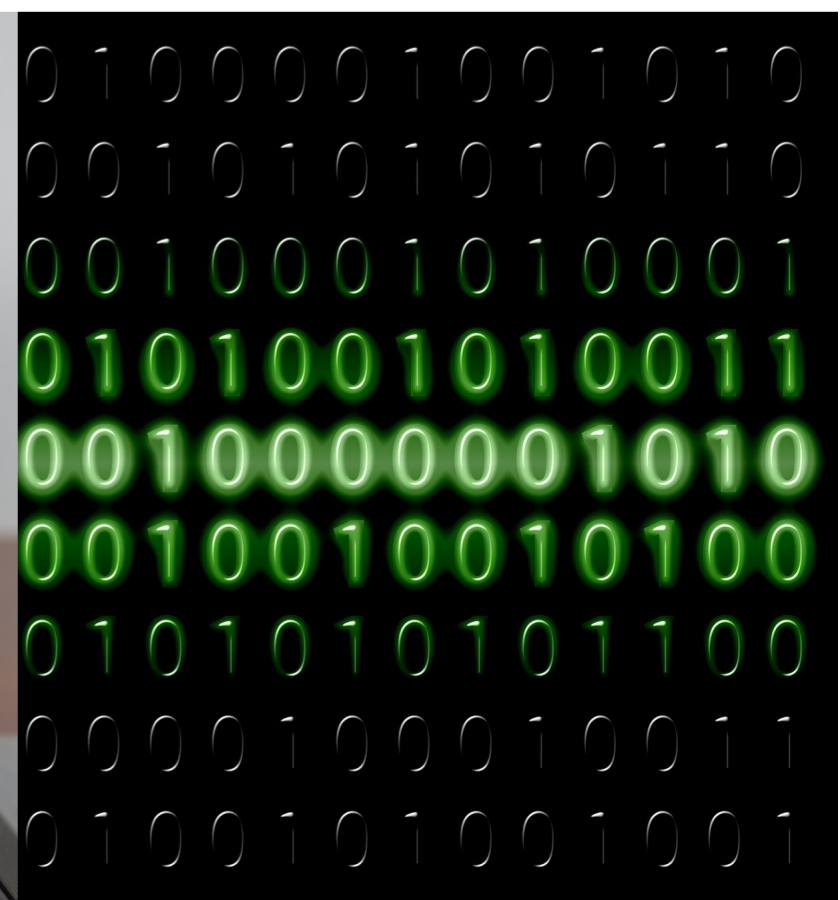
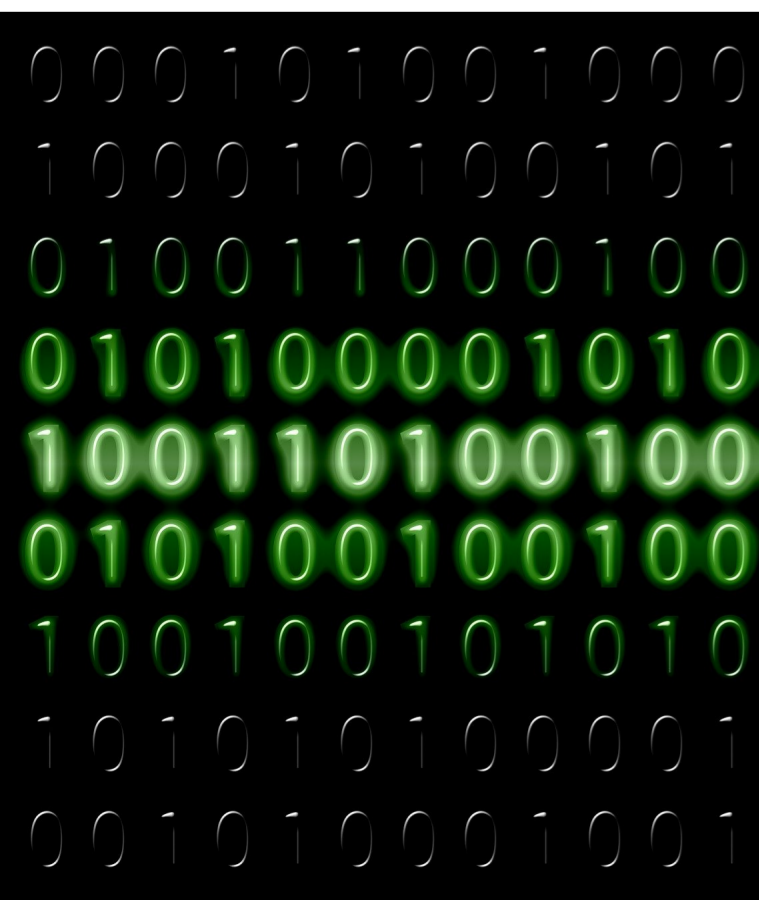
I have also found very few differences between Roon and Minimsriver. Minimsriver seems to offer a deeper and somewhat more focused stereo image than Roon's, but this level of subtlety would certainly struggle to pass a double-blind test...

I tried afterwards to assess the sole D/A conversion stage of both devices.

I used the fixed output (level set at 100 or - odB attenuation) and connected the P1 and the Tambaqui into my Coincident Statement Line Stage preamplifier.

This time, I used the USB input of my Dutch DAC fed by the Lumin X1.

This configuration significantly boosted the performance of the Tambaqui. I felt



immediately the tension that was lacking so far. The tonal accuracy increased also at a fewer magnitude. The soundstage was wider, and not stuck between the two loudspeakers.

Shostakovich's Symphony No. 15, recorded by Andris Nelson and the Boston Orchestra, became magical.

The Lumin X1 / Mola Mola Tambaqui combo provided me with the best of both worlds: the precision and the natural tension of live music usually brought by the Lumin player, and the transparency as well as the tonal beauty of the DAC designed by Bruno Putzeys.

For instance, the triangle at the very beginning of the Allegretto acquired more tonal complexity and sounded less metallic than with the sole P1.



The Lumin P1 could not compete this time in terms of naturalness.

Nevertheless, it was not completely outclassed either, and, perhaps, it brought 95% of what the X1 / Tambaqui combo did for a much more reasonable cost...

Indeed, the difference wasn't that huge, and many audiophiles would already have been completely satisfied with what the Lumin P1 offered in terms of subtlety and sound nuances.

And after one hour of complete listening with the P1, I must admit I didn't mind really about possible improvements to the sound, and I only focused on the music itself...

Sometimes, when the difference is quite important between two playback chains, it's quite impossible to forget the one with which you enjoyed the music so much.

But it wasn't the case, coming back to the sole Lumin device, and I assume that finally the gap is not so important.

Listening to the SACD recording "Memories Lost" by the Chinese pianist Chen Sa, I had to transcode on the fly the DSD files to a 24 bit / 176 kHz PCM signal to achieve satisfying results on the Mola Mola Tambaqui.

In fact, the Lumin P1 retains undisputed supremacy in terms of native DSD files playback, and this is certainly something



to take into account if you already have a large library of DSD files.

Finally, just to get an opinion about P1's capabilities in terms of A/D conversion (analogue to digital), I used my Esoteric K-03 SACD player with its analogue balanced output to enter into the XLR analogue input of the Lumin P1.

I thus compared the analog output of the Esoteric player directly on my Coincident Statement Line Stage preamplifier with the analog input of the Lumin P1, the two preamplifiers being connected to my Coincident Turbo 845 SE monaural amps.

There, no miracle, the double conversion A/D - D/A inevitably generates audible losses, even if the result remains decent. The preamplifier function of the Lumin P1



used on a stand alone basis is therefore of no particular interest for who expects high-end performance and will be more useful to connect devices with low sound quality for ergonomic reasons, such as TVs or internet media players.

On the other hand, the same Esoteric K-03 SACD player increased significantly the overall sound quality using its digital coaxial output connected to the P1's RCA digital input.

The digital preamplifier of the Lumin P1 may be then of particular interest when associated to the internal D/A converter, consenting to avoid spending so much for an external volume controller.

Price (France) :

Lumin P1 : 11.900 €

Website :

<https://www.luminmusic.com/>

Distribution :

<https://www.synergie-esoteric.com/>

CONCLUSION

The Lumin P1 represents a nice move towards higher versatility and compatibility with video devices.

Whilst it doesn't offer exactly the same level of audio refinement, it comes nevertheless very close to the X1 flagship. So, if you look for further transparency, clarity and resolution within a highly versatile device, the Lumin P1 tick all the right boxes.

I must also remind the P1 worked especially well when paired with the Lumin Power Amp, definitely a match

made in heaven.

Indeed, the P1 could easily claim to be the best bargain in the whole Lumin range of network players. As such, it clearly deserves our Grand Frisson Award !

JC



Audiophile-Magazine
Grand Frisson 2022