



One would like to call the La Fontaine a CD player. But that would be only a part of the truth – the least interesting one. Because in fact we deal here with a reference USB DAC, SACD player and a preamplifier. Can this super-integrated be worth 70000zł? SIGNUM TEMPORIS

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The company Audio Aero Design comes from the French province Aix. It is fairly new, because it was founded only in 1997. It is specialized in digital sources of two kinds, which were not even offered a few years ago. The first group, to which the tested La Fontaine belongs, is a “Music Center”, the second one – equally numerous (3 models) – is called “Music Controller”. This is a bit a hypertrophy of the form over contents – in fact those are digital to analog converters. But the first name is not exaggerated. Music Centers made by Audio Aero are the functional counterpart of the, reviewed not so long ago, Audiolab 8200CDQ, so they are CD/SACD players, universal DACs with asynchronous USB input and analog preamplifiers. In fact the best name for them would be (SA)CD/DAC/PRE. This sounds strange, overly technical and not suitable for marketing. Anyway, the name is not so important.

In short it is about being able to connect the integrated disc and file player directly to the power amplifier and not have to worry about (costly!) preamplifiers. It is obvious, that this solution shortens the signal path in comparison with the classic combination player-preamplifier-power amplifier. Besides only one pair of interconnects is needed instead of two. So it turns out, that buying a Mercedes you can even save money... But let's cut the joking. Somebody could say, that a similarly simple sound path would be created using an integrated amplifier. That is true, however integrated amplifiers reach only a certain quality (price) level, so the more wealthy audiophiles are limited to what we like best – a pre- power combination.

An interesting fact, giving some food for thought – especially to people skeptical to the new technologies – is the fact, that the top La Source and the tested La Fontaine can be purchased in a version without the drive. And those drives are not run-of-the-mill products – they come from Esoteric. The top model uses the VRDS-NEO VMK-5, while the La Source uses the cheaper, yet still very solid, metal UMK-5. Both are regarded as being better than the Philips CDM-Pro2 and both are manufactured in Japan.

It cannot be denied, that the propositions from St Foy Les Lyon are addressed to wealthy audiophiles. The top model La Source – the more expensive cousin of La Fontaine, on which the latter is based – costs 130 thousand zlotys. The cheapest DAC Prestige still costs over 20000zł. As you can see the access card for the (aero)club is not so cheap.



DESCRIPTION

The chassis of the La Fontaine reminded me – maybe not rightly – of a dCS player (Puccini), which I tested in 2009. This because of the crease of the thick aluminum fascia, similar to the ones of the British product. The middle part, covering the mentioned Esoteric drive with a softly moving tray, is protruding from the front panel. The sides are also not flat – along the whole depth of the unit, there are concave, brilliantly polished, channels. The complete chassis, including the thick, resonance free top cover, is made from aluminum. This is one of the reasons, of course not the only one, why the La Fontaine costs as much as a new Volkswagen Golf.

We can easily learn about the functionality of the device looking at the back panel, which is quite crowded. The number of connectors reminds of an A/V processor, and not an audiophile player-preamplifier. But we have to remember, that already 10 years ago there was a similar omnibus on the market. It was called Krell KPS25sc. I know about one unit – at least one unit – bought and still operational, which is in Poland. It did cost about 100 thousand zlotys, but today this amount does not shock anybody. But let's return to the Audio Aero. The La Fontaine received 5 digital inputs – one of each kind: USB (24/192), optical, RCA, BNC and AES/EBU. There is also a digital output – in case somebody would like to place a DSP (acoustics corrector) in the digital sound path of the player, explains the manual. In the lower row there are three pairs of analog inputs (2xRCA + XLR) and – finally – two pairs of outputs in RCA and XLR.

The manual does not promote the second outputs, what is reasonable, because the sound path is not balanced. The inside has a few surprises. The first one is a switching power supply, here covered with an openwork shield. It occupies the left side of the big (deep) cabinet – in fact a not so big part of it. When the switching power supplies find their place in players of this class, then it must mean, they have big potential. But it is enough to look inside the Linn Klimax DS for another example. The second solution, that can be surprising for the money, is a single DAC chip – a quite prosaic PCM1792. I'll just remind the skeptics, that the player Audio Research Reference CD8, which redefined my perception of authenticity in sound of the Compact Disc, also uses the same, single DAC chip. The complexity of the circuitry is not overwhelming. It is housed on 4 PCBs (not counting the power supply). Another thing is the amount of operational amplifiers. I did not notice even one discrete element in the sound path. Besides the mentioned, really solid, aluminum Esoteric drive, in the construction of this device we see solutions usually not associated with highest class products, but there are also some interesting things, that confirm the know-how of the French company.



UPSAMPLING 24/384

These include the upsampler S.T.A.R.S. (Solution for Time Abstraction Re Sampling), hidden in a plastic box, which is based on the Q5 solution from Anagram Technologies (a similar solution is used for example by the player Cambridge Audio Azur840C). This is a dual channel sampling frequency converter, utilizing a non-standard algorithm for sample interpolation based on polynomial adjustment, which is much more precise than line interpolators. This results in much lower conversion errors and much lower sensitivity for input signal jitter. The digital data from CDs and files are converted to 24 bit resolution and sampling rate of 384kHz. The S.T.A.R.S. module accepts also the 1-bit (2.8224MHz) DSD stream from SACD discs, converting it to PCM in the DSF Filtering process (also conceived by Anagram Technologies). To make the assets of upsampling fully exploited, a very precise clock had to be used, which – according to manufacturer – has less than 1ps time distortion.

USB24/192

USB inputs are currently more and more common in CD/SACD players, but rarely there is some technical sophistication behind them, which could be used for increasing the quality of sound from that input, rather than just boosting the paper specs. The Frenchmen tackled the problem seriously. They used a new design of the British company XMOS, which specializes in various kinds of signal processors. The unit used in the La Fontaine is built on the base of the XS1-L2 processor, and allows for asynchronous data transfer using the USB 2.0 Class Audio interface. This means, that it allows for transferring 24/192 files with only minimal levels of jitter, because it is the player – and not the computer – which plays the role of the master clock. The data from the processor goes over the I2S bus.

The company is not really explaining what you should do to exploit the full potential of this unit as an USB DAC. The manual only tells, that you can play 24/192 files without quality loss. Inside the packaging there was an envelope with a pendrive (USB) with the installer for the USB 2.0 Class Audio drivers, which are not present in the most popular OS – as is widely known. Unfortunately the files on the USB stick were incomplete. And due to this I could not install the driver on a computer working with the Windows 7 OS. This computer identified the La Fontaine as a USB 1.1 audio device and could play materials up to 24/96, but not those of higher density. Fortunately I could use the iMac with the newest version of the OS Snow Leopard, which has a built-in USB 2.0 Class Audio driver. Audio Aero mentions this asset of the Apple computers when used as a source for playing music over USB.

The presence of the asynchronous USB input, an advance upsampler, switching power supply and lots of chips does not mean, that we deal here with a computer. Usage of miniature vacuum tubes 6021 from Philips (soldered directly into the PCB) is a sign, that the French manufacturer things in many directions at once. Anyway, the opinions about their player Capitole (still manufactured in the Classic version – this is the only old-fashioned CD player still being offered) are still enthusiastic.



SOUND

The La Fontaine should be evaluated in three, or actually four, different levels: as a CD/SACD player, a “traditional” DAC, as a USB DAC and finally as a source connected directly to the power amplifier using the built-in preamplifier.

Probably most of you, the readers, are interested, how this device fares in the first role. The first impression, quite a clear one, after switching to it from Audionet ART G3, was the very pleasant, almost physiological, condensation of the sound in the area of lower midrange. In this subrange the French player seems to play with even more pep. I perceived this effect unanimously positive. The La Fontaine was even more dynamic and agile, but – what is interesting – dynamics was not the dominating element in the sound, it did not attract attention. On this level, and further on, the La Fontaine was outstandingly homogenous. Already in this phase of the listening session it was clear, that I am listening to a player, which is really extraordinarily musical and at the same time very dynamic and resolved in the whole frequency spectrum. Bass was splendid, but – to be frank – I did not find it superior to the reference player. However the treble was admittedly better – maybe not by a whole class, but by half of a class for sure. Another characteristic that acquired attention, was spaciousness – really splendid, but with minimally blurred focusing in the first plane. But the presence and palpability of the vocals and piano were plain brilliant. The player filled the room with a massive, dense, but also dynamic sound, which you cannot hear from a CD player for 20 or 30 thousand.

With big surprise, but at the same time with content, I noticed that the La Fontaine fares equally good as a DAC, when used with the same material. I would even say, that Audio Aero created a world class DAC with a built in CD drive (and a good one). I used as the source of the digital signal the streamer Linn Sneaky DS, with power amp section turned off. This is a very good transport – and capable of transmitting 24/192 signals, what is a required mode when working with a DAC of this class. Going over from ripped CDs to hi-res materials, in this configuration, resulted in a general increase in the sound quality, but similar to the Audionet player – it is not proportional to the mathematical increase of the amount of information in the file (24/96 files are almost 3 times as “dense” as CDs). Maybe this is the asset of the S.T.A.R.S. upsampler, or the limitations of the S/PDIF interface. Anyway, from the point of view of somebody already using hi-res music, or planning to do that in near future, the option of using a DAC and a streamer feeding it with the signal is very attractive. It is worth mentioning, that the La Fontaine is surprisingly insensitive to the kind of digital connection used. The neglected optical cable (not a very cheap one: Monster Cable 600DFO) was not worse, and sometimes I even had the impression, that it was even better, than the electrical connection, that was usually favored. I perceived this first link as more free, more relaxed and more dynamically engaging. However the limitation of the Toslink is lack of “transparency” for signals above 96kHz.

What I heard in the third configuration, when the La Fontaine worked as an USB DAC, shocked me, and made me blush (I think). Used as an USB DAC, connected using a non-standard USB cable (Audioquest Carbon) with the iMac computer, playing music from the built-in HDD using the

player Pure Music (quite expensive, but worthwhile, add-on for iTunes), the reviewed player simply buried its, seemingly basic, functionality of playing the silver discs placed on the Esoteric drive tray. Frankly speaking in each part of the sound analysis it reached a higher level. Such a combination of resolution, clarity, dynamics and speed with completely non-digital way of sounding, total smoothness of the decays I did not hear from any – and I repeat – from any of the digital sources. And although I am still impressed with the musicality of the ARC Reference 8 player, I have to confess, that the La Fontaine paired with the Mac and good music software is for me, for today, the absolute reference level in terms of a digital sound source. It creates a suggestive, massive, ultra-dynamic but at the same time free of any “digital” limitations, sound. Comparing that to the sound of the analog, we could of course find some very serious differences, but although in terms of spaciousness, freedom or generally perceived naturalness of sound, the best turntables, playing disc with reference quality may still be the ideal for many audiophiles, yet looking at the whole picture, the La Fontaine USB DAC is something clearly better sound source.

There were many changes compared to playing a CD or using it as a common DAC. Accumulated they confirmed the incredible class of this device. But two differences caught especially my attention. The first one, was the unexpected, and thus surprising, progress in definition of the bass. It carried over more subtle information. Listening to the line of the contrabass, or bass guitar from a CD, after listening to the USB DAC, I had the impression of quite clear washing out, of blunting. The sound was just less electrifying. The second thing was the focusing, or actually the distinctness of the sound sources, which were significantly sharper when played from CD rips via USB. The change was seemingly not significant, but in practice it meant, that some kind of micro-chaos disappeared from the sound – something what we initially do not hear (from the lack of reference to better sound), but when we hear it for the first time – we hear it always. I want to say that in 90-95% I would like to listen to music from the La Fontaine using a well configured computer, most probably from Apple. Also in the case, when I would not even have one hi-res album. I must say, that a combination with the 27” iMac (functional and aesthetic) is very attractive, although the smaller, 21.5” version seems more practical (and 2000zl cheaper). The La Fontaine performed best when fed with 24 bit material over USB, exactly as we would expect. The increase in quality when moving from CD rips to hi-res was higher, than when making similar comparisons using the S/PDIF input. The sound gained much more mass and palpability in the room, although I must confess, that I was not concentrating on those comparisons. I thought, that a more interesting comparison will be when comparing hi-res material played via USB 2.0 Class Audio with the same recording played from CD. To make it short: there is absolutely NO comparison. Everything I wrote above about the supremacy of the USB over the CD you have to multiply by 1.5. Actually it is interesting and surprising, that more progress could be achieved changing the way the music was played (CD drive -> USB) than changing the source material (16 bits -> 24 bits). Probably jitter is the culprit.

I wrote in the previous paragraph, that having this player I would listen to files for 90-95% of my time. What is with the missing 5-10%? Discs? Yes, but only Super Audio CDs (although Pure Music allows for playing DSD)! The sound, that is extracted from them by the Audio Aero player, can enchant in the same way as playing files over USB. The finesse of the treble, juicy presentation of timbres, were at reference level. It was superb to listen to classical music. Not having the opportunity for direct comparisons of hi-res PCM files with SACDs it is hard to assess, in which material the La Fontaine is better, but I have the impression, that those are the first ones. However the SACD tops – not by much, but still – playing CD rips by USB.

So we have still the issue of the built-in preamplifier. This will of course be depending on the class of preamplifier we have to compare it to. In my case it was the Conrad-Johnson ET2 – a device that has proven its class many times over. And this was also the case here. The Audio Aero connected directly to the power amplifier sounded thinner in terms of timbre, without the “musicality plus precision” magic. It was very analytical, more neutral, but without the homogeneousness of the classic combination.

IN OUR OPINION

I did not hear such a brilliant sound source before. The quality of the sound achieved by this player from FLAC/WAVE files, when connected to a computer with an USB 2.0 Class Audio drivers and appropriate musical software, is absolutely reference, going far beyond the minimum required for players to be classified in the A category (high-end). This is the reason, that in the USB DAC application this player is part of the A+ category, besides the ARC Reference CD8.

The quality of the sound from CDs is weaker, but still outstanding, on the level of the best of the best classic disc players. It is now clear, why the manufacturer offers the La Fontaine without the drive; a very solid one by the way. As you can see, kilograms of aluminum are not sufficient to beat the more modern, and clearly superior way of transmitting data, a properly implemented USB 2.0 interface and a computer optimized for music reproduction. While writing this article I did not know the difference in price of both versions. If it is significant, and I believe it is, then I would choose the DAC in a configuration with the iMac 21.5”.



Piękny, aluminiowy napęd Esoterica



Tradycyjne wejścia cyfrowe obsługuje scalak CS8414, zaś wejście USB – procesor firmy XMOS

Opisy zdjęć:

- Inside, the most surprising is the small section of the switching power supply
- The construction of the analog section is not especially sophisticated, but the quality of craftsmanship is at highest level (the PCB is manufactured in Switzerland). The miniature Philips vacuum tubes are soldered directly to the PCB.
- The “clou” of this construction is in the 24 bits/384kHz upsampler.
- The beautiful, aluminum drive from Esoteric
- The traditional digital inputs are handled by the CS8414 chip, while the USB input – by an XMOS processor.
- The back plate has everything, but the most important input is the asynchronous USB 2.0