AN ART'S EXCELLENCE REVIEW

iFi Pro iDSD

seriously audiophile, seriously musical

MAX DELISSEN

iFi Pro iDSD

The iFi Pro iDSD is the most complex and most innovative device the British hi-fi manufacturer has ever brought to market. Fans of the brand had their patience tested for a while, but now that it's here the increasingly high expectations have all been met. Hi-fi reviewers will have a hell of a job working the impressive list of features that grace the iFi Pro iDSD into a comprehensive review. Because, well…goodness me, the thing can do a lot! So I decided to just listen to it at first, and when the initial surprise had worn off after two weeks I dragged myself to my desk to give it a try. Here we go…

What's in it and on it?

The header above might just as well have read 'what ISN'T in it and on it?'. A bit gratuitous, I'll admit, because it will not play vinyl, for instance, and going for groceries or walking the dog are out of the question as well. But the features that iFi's designer Thorsten Loesch incorporated in the the iFi Pro iDSD are not only a logical combination, they don't leave much to be desired either. The iFi Pro iDSD is a da-converter, an upsampler, a headphone amplifier, a (tube) preamplifier and a DLNA streamer. The Pro-enclosure does not come as a big surprise if you already know the iFi Pro iCAN or the Pro iESL. It's about the size of a hefty book, and at least as heavy, the iFi Pro iDSD weighs just under 2 kilograms and it feels very substantial. For an in-depth description of all the knobs and switches I usually refer to the manufacturer's website, but a summary of highlights feels appropriate.

The illuminated iFi logo on the left top corner of the front has different colours to indicate the status: green for warm-up, white for solid state output, orange for either of two tube outputs and red when something is wrong. On the rear right of the cover is a small round looking-glass. When the tubes are in use there is an orange glow emanating from it, but that comes from a coloured LED. Personally, I don't really care about these things, but the effect is quite subtle and I understand why they made the decision to do this. Be that as it may, they did use the correct colour. The round and easy-to-read OLED display on the front gives information about things like sample rate, filter and the resolution of incoming and outgoing signals. The rotary knob for source selection doubles as a push button for display brightness and polarity of the digital signal. The smaller rotary knob next to it is for selecting the digital PCM filters and upsampling, and as a push button it lets you choose between two resolutions of DSD upsampling. The headphone amplifier has a motorised analogue (Alps Blue Velvet) volume potentiometer that can be controlled with the supplied remote. There are three headphone outputs: 6.3mm and 3.5mm single ended, and 2.5mm balanced.

On the back you'll find the single ended and balanced line outputs, a recessed rotary switch for fixed and variable output for either of the line outputs, an RJ45 ethernet input, a USB-A input for an external hard-drive containing music, a Micro SDHC card slot, also for music, a connector for the Wi-Fi antenna, a USB-B digital input, a combined coaxial/optical s/pdif input (which cannot be used separately), an AES/EBU digital XLR input and a BNC s/pdif input that can also be switched as an input for three different external clock-systems for further improvement of the iFi Pro iDSD's accuracy. And finally there are a clock-output, a DC output and a DC input to which the Pro iDSD's bespoke iFi iPower is connected.

Filters and Upsampling

For a long time, audiophiles have had very limited opportunities to tweak the digital section of their system. If you wanted a different sound, you had to buy a different cd-player or converter. But today, the consumer has access to numerous possibilities to fiddle around. Flexibility is the magic word, and switchable filters are the wand. And as far as wands are concerned, the iFi Pro iDSD is a regular Albus Dumbledore. Besides the quadruple Burr-Brown converter chip (for the actual conversion) the iFi Pro iDSD has been equipped with an FPGA-chip (Field Programmable Gate Array) where iFi's own software for PCM and DSD upsampling resides. Straight out of the box the Pro iDSD is set to Filter 1 (Bitperfect) without DSD upsampling, and the tube output is off. And that already sounds fantastic. When you start comparing all the possible settings and combinations, you might as well sweep your calendar clean for the rest of the day, because there are a lot of them, and they all have their own character. When you include the switchable polarity of the digital signal, you have 28 settings to listen to. Some differences are subtle, some are quite substantial. Think about that for a moment, I'll get back to it later.

Listening...

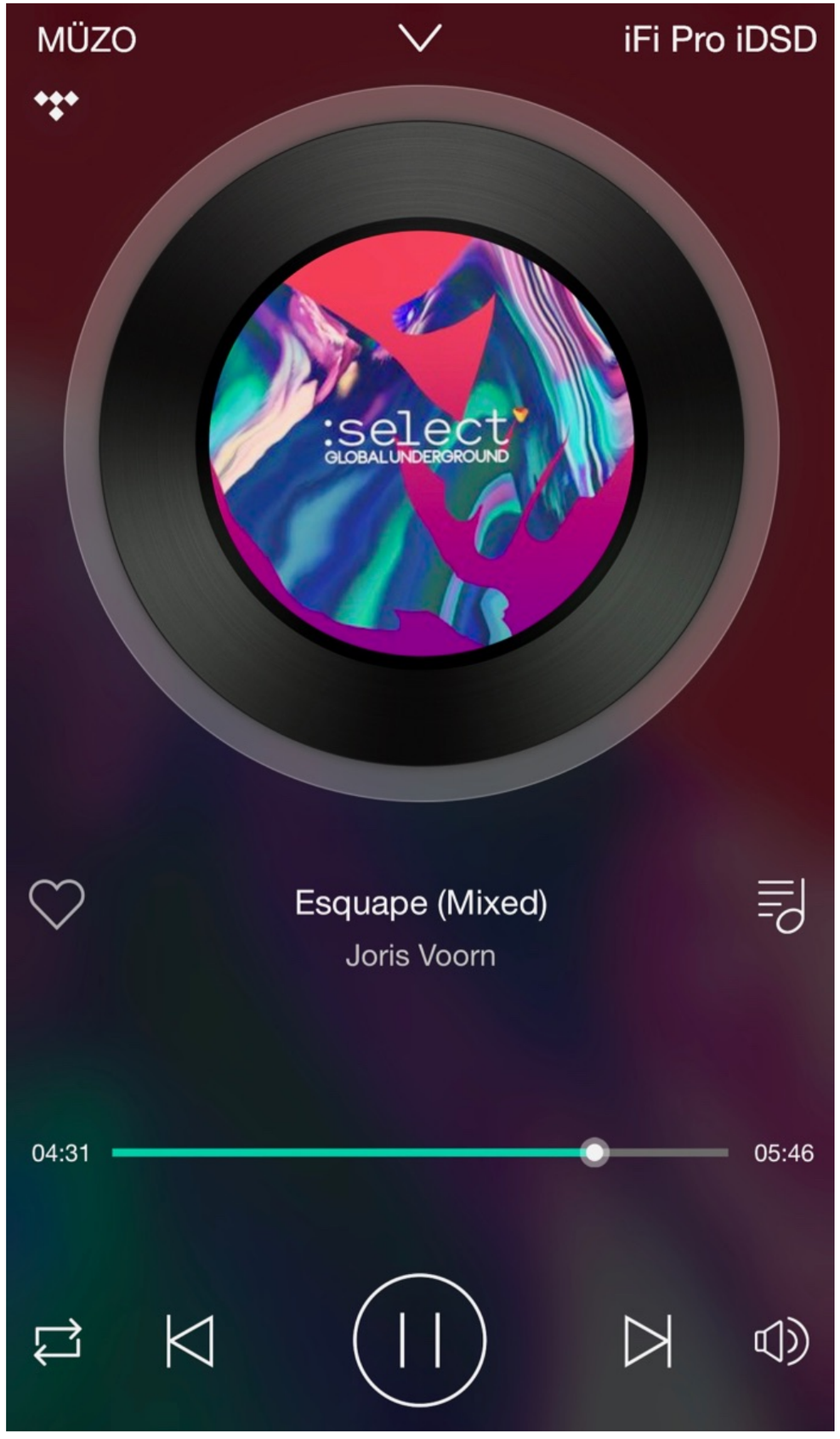
After a 24 hour warm-up playing internet radio, listening to the iFi Pro iDSD took place in several sessions. There are simply too many variables to do it in one go. Besides I thought it would be nice to review it's different features separately, so that users with different wishes can find out what the Pro iDSD has to offer them. How is it as a headphone amp? How is it as a preamp? How does the internal steamer perform? But all things considered, those are all great extras. The main focus of this review will be on the Pro iDSD as a stand-alone da-converter in a very good hi-fi system. Because that is what iFi designed it for, primarily.

As headphone amplifier

In this part of the review I will not elaborate much. First of all because the Pro iDSD as a headphone amp has had it's fair share of good (online) reviews already, but also because my personal fleet of cans isn't large and it isn't extremely demanding either. Nevertheless I'm glad to report that the Pro iDSD really made AudioQuest NightHawk Classic sing. All the nuances of the different settings were easy to distinguish. And even though the NighHawk is nog a difficult load to drive, it absolutely benefits from better amplification. And the colourfulness, dynamics and power it got from the unbalanced 6.3mm single ended output really hold a promise for balanced use with more expensive and more demanding high-end headphones. Also worth mentioning for those who dwell between the ear pads on a regular basis: the tube section in the iFi Pro iDSD is dead quiet. So if you prefer the sonic richness of tubes, but can do without the hiss and hum that is usually associated with it, the iFi Pro iDSD is your friend.

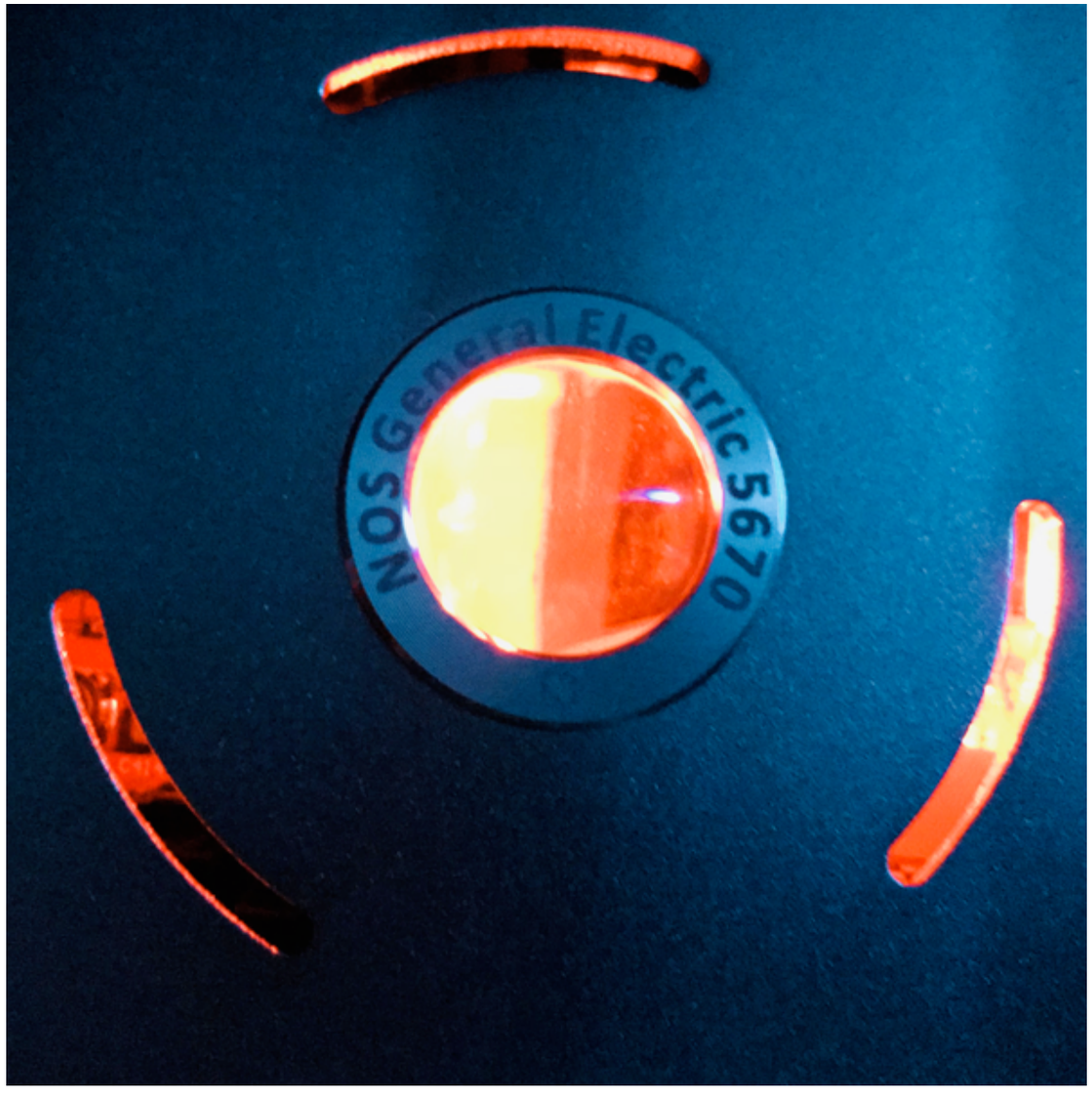
As a streamer

The iFi Pro iDSD has an on-board UPnP/DLNA streaming module that you have operate via the free MÜZO app. And even though I'm really not a fan of UPnP, I have to admit that the app looks good and works reasonable fast and stable. However, if you are used to Roon's graphical interface and search engine like I am, navigating a collection of almost 9000 albums becomes a cumbersome operation. However, I estimate that the app will be used mainly to operate online streaming services like Tidal, Qobuz and Spotify, or internet radio anyway, and they work just fine from the app. When connected to a switch or a router via a good quality ethernet cable, the sonic results are very refined. Streaming from a NAS is quite painless too, once you have located the album of your choice. The MÜZO app also lets you play music from your iDevice over Airplay, but only when both devices are connected to the same wireless network.



As a preamplifier

After a short stay in my office - for the headphone and streaming test - the Pro iDSD moved to the big system in my living room, where it took the place of my trusted NAD M51 da-converter. Mostly for reasons of convenience, I decided to treat the iFi iPower to the AudioQuest NRG4 that normally powers my M51, and left the supplied generic power chord in the box. Single ended AudioQuest Water interconnects were used to connect the Pro iDSD to my PrimaLuna Dialogue Premium HP Integrated tube amplifier, and it's digital input came though an AudioQuest Coffee USB from my dedicated Mac mini running Roon Server. Because the iFi Pro iDSD is galvanically isolated to the extreme, and all incoming digital signals are thoroughly de-jittered and re-clocked in the internal buffer of the Pro iDSD, additional signal purification with the likes of an iFi micro iUSB3.0 becomes completely superfluous. With it's rotary switch on the back set to Hifi (Var), the Pro iDSD was connected to the HT input of my PrimaLuna, which essentially becomes a power amp in that setting. That's when I found out that the iFi Pro iDSD can be a very capable preamplifier as well, with a magnificent and colourful sound that harbours lots of dynamics and detail. The tube stage gave a distinctly different but very pleasant musical image, where the 'normal' setting sounded a bit warmer and more relaxed, and the tube+ setting - because of the reduced local feedback and slightly increased even-order harmonic distortion - offered a more euphoric sound with more detail. There are those who call this My-Fi instead of Hi-Fi, but in the end this was the setting that I preferred. Sweet! Switching the tube output stage on gave smalll 'pop', but only in this preamp setting. Besides that there were absolutely no other gremlins like noise or hum. It is obvious that the General Electric NOS JAN 5670 tubes that iFi chose are of the



As DA-converter

It will be no surprise that I listened to a lot of different music during the weeks when the Pro iDSD resided in my big system, and it quickly became apparent that there are no musical genres it doesn't excel in. In reviewer-lingo we would be talking about power and agility, about transparency and detail without tizziness and about speed, natural tonal colour (in spades, mind you) and lots of musical involvement. Music was much more tangible than I was used to, and became more holographic and involving than I was used to with my personal reference. It's hard to describe the exact feeling, but I would say that the iFi Pro iDSD made more musical sense. It gave me a very comfy feeling of ease and correctness.

To determine the differences between the filters, upsampling and tube stage I narrowed the musical selection down to two tracks: Strange Feeling, from the album helping Hand by the French band Man (about which I wrote a review, but only in Dutch - unfortunately), and Happiness Is Easy by Talk Talk, from the DSD version of their sublime album The Colour Of Spring. Why no MQA? Simple: because at the time I was writing this MQA had not yet been activated in the Pro iDSD. It's in there alright, do not fear, but iFi is still diligently working on the new firmware version that will unlock MQA on the Pro iDSD. And when they're done, according to iFi, the Pro iDSD will actually become their first full core decoder and renderer, which means that you will no longer need software like Roon of Audirvana+ to perform the fist unfold. Be aware thought that the current 5.30 firmware version that brought MQA to iFi's other converters is NOT TO BE USED with the Pro iDSD! News will follow as soon as it is there, so keep an eye out for it.

Differences between Filters and Upsampling

Because there are so many possibilities, I will limit myself to primary impressions. In their own documentation on the Pro iDSD, iFi already gives a brief summary of the sonic results that you may expect with the various filters and upsampling settings.

Bitperfect. Actually this is not a filter at all, and there is no oversampling either. The sound was clean and balanced, with a hint of warmth, good dynamics and quite a lot of power and spaciousness.

Bitperfect+ is iFi's own take on Bitperfect, and it sounded marginally more open end brighter. Here, some filtering is applied, and because of that I got a better sense of space. But the overall sound was also a bit dryer and more measured, and there seemed to be a tad less energy in the bass.

Gibbs Transient Optimised (upsampling to PCM 705kHz) was clearly different, sounding more forward. In other da-converters this is called Minimum Phase filtering. There was more detail and more energy in the midrange and high frequencies. This upsampling setting sounded more spacious and more dynamic, with improved micro-dynamics and more energy in the bass.

Apodising (upsampling to PCM 705kHz) sounded a lot like Gibbs Transient Optimised, but the highest frequencies were cleaner and a bit less pronounced, and there was also more spaciousness. This setting also sounded a bit warmer in the mid frequencies, had even better micro-dynamics, sounded a bit rounder and deeper in the lowest frequencies and added a certain fluidity. This was beginning to show signs of analog.

Transient Aligned (upsampling to PCM 705kHz) had more ease and fluidity. With this combination of filtering and upsampling, had the cleanest high frequencies, and as far as I'm concerned, the music was very well balanced. More spaciousness, more micro-dynamics and more power. Bass had more depth, and the music got a very nice sense of realism. This setting gave the most 'analog' sounding reproduction of music.

DSD remaster: DSD512 (22MHz) brought more ease, but it also sounded more measured and the overall volume appeared to be a bit lower. Nevertheless, music sounded very spacious and fluid, high frequencies were relaxed and clean sounding and the bass appeared to be tighter and just a tad less powerful. In spite of that, overall dynamics were better.

DSD remaster: DSD1024 (45MHz) gave the best micro-dynamics and fluidity. Recorded 'space' was much better defined and the high frequencies sounded very clean and natural. The low frequencies were tighter and again they appeared to be a bit less powerful, but when DSD upsampling was switched off, the 'loss' of low frequencies turned out to be the result of (and relatieve to) an increased fullness in the midrange.

Concluding

With the Pro iDSD, iFi takes it's definite step into the Premier League of High End DAC's. What a machine! Don't let the breathtaking array of possibilities fool you, this is a seriously musical piece of audiophile kit. As a stand-alone da-converter the Pro iDSD doesn't miss a single beat, and as a headphone amp it plays in the highest echelon as well. Add the other 'goodies' to the equation and you know you have a winner. There is no other way to describe it. Does the Pro iDSD beat the Pro iCAN? When you only listen to headphones, and the rest of your setup is on par, I would have to say no. But when you are looking for something with a wider applicability, or when you feel like buying a new da-converter AND you always wanted to own a beautiful headphone amplifier as well, you search is over.

So no criticism whatsoever? As far as sound quality is concerned, no, but in a practical sense there are some minor considerations. Especially the lack of a more functional remote control, from which - besides volume - source input and filters could be selected from the listening position. When you use it at arm's length as a desktop headphone amplifier, you're fine. But when you put the Pro iDSD in your hifi set as a da-converter it becomes a bit of a problem. But according to iFi they are already thinking about this. Another function that would be nice is an adjustable fixed gain, where the volume control is still bridged, but the user would be able to choose from a few different fixed output settings. Not every amplifier you hook the Pro iDSD up to has the same input sensitivity, and it is easier to compensate for an output that is slightly low than for an output that is slightly high. To be honest, these are more 'personal preferences' than anything else. So why mention them anyway? Because the iFi Pro iDSD has gone straight to the top of my wish list, that's why. And that probably says it all.

Music and Information

For more information about the iFi Pro iDSD da-converter, please visit our webstore:

iFi Pro iDSD

Spotify

Man - Helping Hand
Talk Talk - The Colour Of Spring

Tidal

Man - Helping Hand
Talk Talk - The Colour Of Spring