## EQUIPMENT REVIEW

# Devialet Expert 1000 Pro integrated DAC/amplifier

by Alan Sircom

company like Devialet seemingly churns through products at a fair lick. Since the launch of the D-Premier, there have been several different products launched, upgraded, uprated, and enhanced. And that's before we include the newer Phantom line. Add in changes in distribution, prestige stores, exotic advertising campaigns, and lots of venture capital driving the whole brand, and it's little wonder there is some confusion.

Let's backtrack and explain. The original D-Premier eventually became the Expert 250, and still remains (albeit with completely redesigned 'Pro' internals) in the catalogue to this day. When the D-Premier became an Expert, it was joined by two other models; namely the Expert 130 Pro and the 220 Pro. The 220 Pro and 250 Pro can upgraded with their own matching Companion models, and there are two twin-chassis only designs: the Expert 440 Pro, and the Expert 1000 Pro tested here. Users of older D-Premiers or Experts used to have an upgrade program, where their product was given completely reworked internals, but that upgrade path expired earlier this year. Between these launches, there was a short-lived but very significant special edition of the D-Premier – The Original d'Atelier. The significance of this product was that it incorporated many of the design developments that now go into the latest iterations of the main Devialet amplifiers, and in particular what lives inside the Expert 1000 Pro.

Internally, the differences between the Expert 1000 Pro and the older models are significant. The new amps deploy what Devialet calls ADH Intelligence in its patented Class A/Class D Hybrid amplifier design. This is effectively a redrawing of the amplifier circuit, effectively uprating the precision of the ADH core control architecture by a factor of four. This makes the ADH feedback loop faster, improves the resolving power of the Class A amplifier from eight to 10 bits, and this results in lower overall THD. Both the Class A and Class D amplifiers have been completely redesigned, with the Class A amplifier now a greatly simplified circuit, and the Class D amp pulled straight from that of the Original d'Atelier, with extensive beefing up.

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It's effectively added 50% more power to the previous models, and includes more filter inductors per channel. The analogue to digital conversion stage (Magic Wire in Devialet-speak) is new, too, knocking 6dB off the THD and cutting the noise floor by 2.5dB. Add in a power supply that can now deliver 4kW and a very sophisticated (and large) thermal management system, which includes a 2.5kg copper base plate, and it all becomes clear that this is not simply old wine in new bottles.

The Expert 1000 Pro arrives in two Devialet boxes. The amplifiers are functionally identical, except you are missing one controller. The inherently digital nature of the Devialet design means the two can be conjoined with a single cable.

As before, the Expert 1000 Pro is extremely adjustable, with an online configurator to access a host of changes to inputs and power output, as well as adjustments to the phono stage to best match your cartridge. And, like all analogue inputs on the Expert 1000 Pro, these inputs are almost immediately digitised inside the Devialet device. The configurator requires uploading a small chunk of code from the website to each of the master and slave amplifiers, using a pair of SD cards (supplied).

This is also an ongoing project. Regular operating system upgrades are flushed through the line of Devialet amplifiers, adding and refining key facilities. When last I reviewed a Devialet amp, the key feature of the moment was SAM (its speaker active matching system... more on this later), and the up-and-coming ones are adding Roon, UPnP/DNLA streaming and the potential for Expert and Phantom to work together as one. And Devialet's stumbling block then was wireless connectivity. Sadly, time doesn't heal all wounds, and it's not much better now. Devialet AIR is an ambitious project to stream high resolution signals from source to system that is probably more trouble than its worth. Avoid wireless unless absolutely necessary. SAM is more successful. Hundreds of high-end loudspeaker designs have now signed up to be measured by Devialet, and that includes Wilson Audio and the Duette II is on the list. As the acronym suggests, SAM reads the characteristics of the loudspeaker as a config file into the amplifier, which then tailors its output to closely follow that speaker's performance envelope. This results in both tighter, deeper bass, and better thermal protection for the loudspeaker. Note that this doesn't mean 'louder' as often it limits the maximum volume of the amplifier quite conservatively. It should mean 'better'.

In truth, I find SAM effective and audible, but not something I would use on a regular basis. The Wilson Duette II has more than enough bass for my room, it seems, and having a DSP-enhanced additional bass 'thwack' seems unnecessary. I also find SAM to be a little overawing, especially with a loudspeaker of the dynamic range of the Duette II. But you can adjust the intensity of SAM, or even switch it off altogether. In my room, with my speakers, 'off' was my preferred setting, but this is one of the most interesting aspects of the whole amplifier. 'Your Mileage May Vary' has never held so much truth.

I must also confess to continue to have something of a mixed relationship with the Devialet phono stage. It remains one of the clearest, cleanest, and quietest phono stages money can buy, but occasionally I want the 'sparkle' that a good analogue phono stage brings to the party. On balance though, I'd rate the Expert 1000 Pro's phono stage consistently somewhere between very good and excellent, especially as you dial in a cartridge's exact specification from the website, and many of the better known cartridges come pre-figured. So where applying load information about a cartridge might involve look-up tables and guesswork, here, you just point a mouse at 'Lyra' and you're done. The super-clean, super-detailed presentation of the Expert 1000 Pro is interesting. This is all the things about Devialet writ big. Really big. The first thing that hits you is an 'is it on?' silent background, followed closely by the most dynamic of dynamic ranges you'll have heard in years. SAM is a good option here as pulling a kilowatt of power could easily throw a driver across a room. You will turn it up too loud because of the absence of background noise, you will play whatever it was far too loud and you will quickly reach for the volume control with fruity language. Never mind 'edge of the seat' dynamics, this is 'jump out of your seat' rodeo dynamics.

Then you settle down to that Devialet sound, or rather absence of sound. This remains one of the most sonically transparent sounds around, except for a mild etched presentation around the upper mids. You have to really work your record collection to find this, but I got there with *The Shape of Jazz to Come* by Ornette Coleman [Columbia]. This hard, angular performance from jazz' golden year of 1959 is a seminal work, but it's not an easy one, and sometimes it goes down better with a little bit of sugar. The Devialet duo don't do sugar. Instead, that etched sound just made the album a little more 'difficult'. This was quicksilver, though, and hard to find again, especially when the amps had been powered up for a couple of hours.

Otherwise the Expert 1000 Pro is an exceptionally difficult amplifier to describe, because it pushes past a lot of the descriptive parameters. It's easier to just put the word 'excellent' on repeat and rattle off a series of questions about performance: imaging – excellent. Detail retrieval – excellent. Coherence – excellent. Vocal articulation... you get the message.

In discussing the sound quality, we might as well just hark back to the original D-Premier review again, just that all the D-Premier did this does more so and with greater authority thanks to the extra power and the better specifications. The Expert 1000 Pro remains outstandingly detailed and precise: the tiniest finger squeak on a fretboard, the smallest touch on a tam-tam, is all delivered to you perfectly. Not simply as a mild change in timbre, but in a sense of different physical solidity of the instrument that simply doesn't make it through the circuits of most amplifiers. The Expert 1000 Pro's inherent lack of character shines through on every recording by it altering the fundamental 'shape' of the acoustic or studio each time, as it should. There is a fundamental unflappability about the Expert 1000 Pro, too, more so even than its already unflappable little and older brothers. .

The first Devialet hit the ground running at the end of the last decade. It changed the face of audio. The Devialet Expert

1000 Pro pushes that performance to the very limit of what a loudspeaker can do. It might not make quite as big an impact as the first model because we are now all very used to seeing what they do in homes and stores. We already know what they can do and how well they can do it. We even know their obvious strengths and their much less obvious weaknesses. Expert 1000 Pro is a real star. Very strongly recommended!

### **TECHNICAL SPECIFICATIONS**

- Connections: 1× Optical Toslink, 1× combined Optical Jack & RS232 Mini 3.5mm, 1× USB for computer or USB-fitted turntable connection, 1× Ethernet RJ45 for connection to LAN, 1× AES/EBU input (XLR), 4× S/PDIF digital inputs on RCA (or two analogue line level inputs), 1× Phono input – Adjustable Gain and sampling frequency (96 or 192KHz, fully configurable, MM or MC, load, sensitivity, 1953 or 1976 RIAA standard), 1x trigger, speaker terminals and subwoofer output. Optional AIR wireless
- Power output: 2× 1000W into six ohms, adjustable from 50–1000W via online configurator
- ADC: PCM 4220, 24 bit/192 kHz upsampling of all content
- DSP: 400 MHz 4 channels 40 bit/192 kHz floating point Single Ultra High Precision clock, low jitter ADH Core (Analog Digital Hybrid) Devialet 'Magic Wire' DAC, to 24 bit/192 kHz Switch Mode Power Supply peak 4000W
- THD+N (harmonic distortion) at full power: 0.00025% IMD (intermodulation) SMTPE: 0.001%
- SNR (Signal-to-Noise ratio): 133 dB unweighted
- No measurable thermal distortion

Output impedance: <0.001 Ω

- Bandwidth, digital inputs @ 8 to 2 Ω load: DC–87kHz (-3dB), DC–60kHz (-1dB), DC–30kHz (-0.1dB); analog inputs: same except 0.1Hz (-3dB)
- Dark Chrome finish, single aluminium block case per chassis

Dimensions (W×D×H): 40 × 40 × 4cm Weight: 9.7kg, Companion 9.5kg Price: £22,900

#### Manufactured by: Devialet

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