



Quantum Leap of Sound

Devialet

1000 Pro Dual Mono

TEXT | Martin Leung(馬田)

Devialet from France was regarded as an unconventional digital amplifier manufacturer at first. Even after six years, many audiophiles still mistaken that the amplifier technology their Expert series adopted was pure Class D. In fact, Devialet's ADH technology is Class A and Class D operating in parallel. The Class A part amplifies low power signal and transmits it to DSP. The Class D part amplifies the signal in the output stage. When I first studied about Devialet's ADH technology, it was novel to me. However, I soon realized that ADH shares common characteristics of conventional amplifier circuitry. For example, temperature and acoustic performance have a close relationship. The higher the power of the volume, the higher the temperature produced by the circuit, and to certain extent, the better the sound. This is common to Class A amplifiers. In my opinion, ADH technology appeared to be unconventional because of its innovative implementation which shadows its very high-end nature. Having celebrated its 5th anniversary, Devialet has improved the use of materials and build quality, which demonstrated that they are following a high-end path. Those who were doubtful about the Expert series should refresh their views now!



A short sweet moment

Recently I was given an opportunity to review the new Expert amplifier, 1000 Pro. The shipment of the sample unit to our office was directly arranged by Devialet's headquarter in France. As it was a pre-production unit and the only one shipped to Asia, Julien Bergere, the Asia Pacific General Manager of the company, requested us to stay low profile during the review. There were two implications from his words. On the one hand, it showed how much respect Devialet has given to Audiotechnique as we are the first magazine worldwide reviewing the product. On the other hand, because we had very limited time to check out the product as the manufacturer had to ship it to other countries for demonstration. We made proper arrangement to give it a priority review. We were given only 2 weeks to evaluate the product. Although the time was very limited, I had no problem understanding the

details of the 1000 Pro as I am familiar with the full range of Devialet's products.

The twins

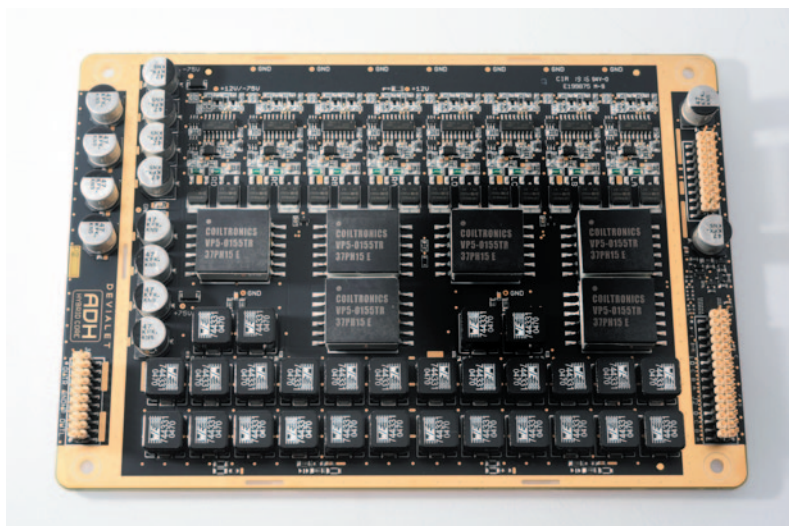
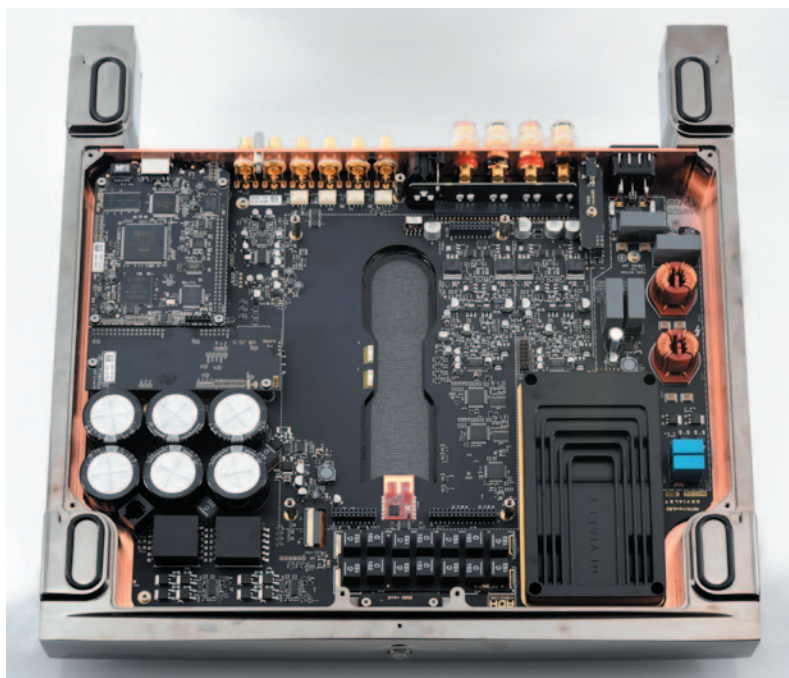
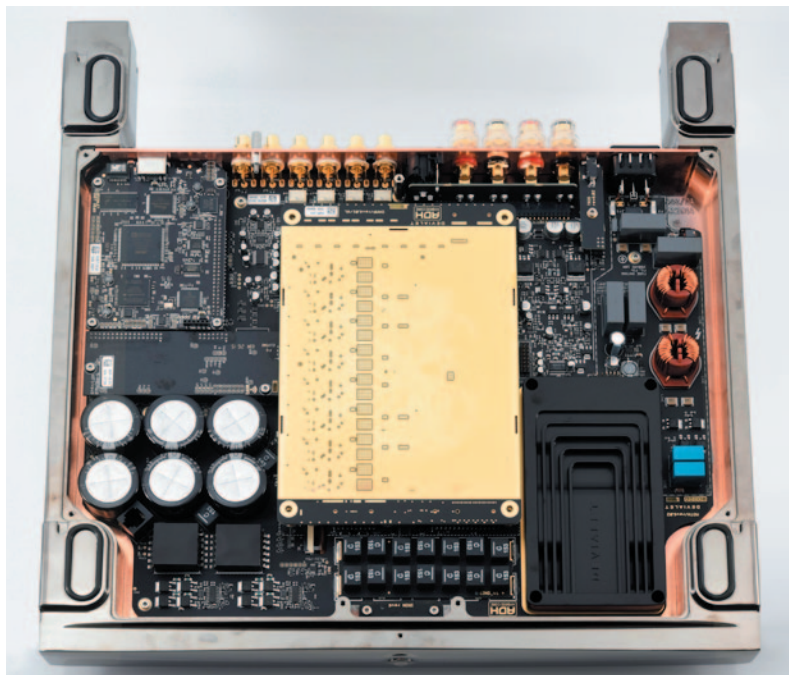
I was under the impression that the chassis of the Expert series would not undergo any significant change. The previously upgrade, the 5th anniversary edition, has only the coating on the chassis surface changed. I was under the impression that the manufacturer was not intended to change the exterior design significantly. Instead, Original d'Atelier was core upgrade. As 1000 Pro was an extension of the anniversary edition, Original d'Atelier remained to be the core. The output power is upgraded from 900W x 2 to 1000W x 2. Besides, the manufacturer emphasized a number of other enhancements. They include ADH coherence accuracy, class A and class D amplification, Magic Wire, power supply and temperature control etc. When I compared 1000 Pro with Original d'Atelier, the main differences are the power supply and the ADH circuit. The new generation has a power supply of 2800W, the peak output is up to 4000W. The load transients are handled 2 times faster. On the other hand, class A amplification for processed signal has been upgraded from 8 bit / 256 steps to 10 bit / 1024 steps. The accuracy is 4 times better.

The internal layout of 1000 Pro is similar to that of Original d'Atelier, the bottom of the internal frame was made of brass. There is another brass plate on top of the ADH circuit. This circuit design looks similar to Original d'Atelier too. Even though I haven't had a chance to compare them in detail, I would imagine any difference would not be significant. Similar to the previous model, 1000 Pro allows the user to configure it as mono block for single channel output or typical stereo outputs. When configured as mono block, I would separate the two blocks as putting one on the other will affect acoustical performance. If there is a real need to stack them up, I would add a set of insulators between them. Products like Oyaide INS series which are available as graphite and crystal give promising results. The sound stage will be more open. For this reason, when I tested 1000 Pro, I used a set of insulators in both sample units. To achieve ideal results, I emptied two rack spaces to accommodate them. They were sitting side by side with



1000 Pro Specification:

■ Output Power: 1000W x 2 ■ THB Distortion : 0.00025% ■ S/N Ratio : 133dB ■ Frequency Response : 20Hz-20kHz ■ Connectors : AES/EBU x 2 / SPDIF x 6 / Analog RCA x 2 / Toslink x 3 / USB x 2 / Ethernet x 1 / Wi-Fi x 1 ■ Dimension (W x H x D) : 383 x 40 x 383mm / unit ■ Weight : 5.65kg / unit ■ Listed Price : HK\$268,000.



dCS Vivaldi CD transport and clock. The loudspeakers are Crystal Cable Arabesque Minissimo Diamond and Subissimo subwoofer. As this is a 2.1 channels setup, 1000 Pro was configured to connect to a subwoofer. The crossover frequency is set at 100Hz which I thought would better coherence. Cross over frequency can also be adjusted if there is too much bass. It can easily be done through the Expert user interface.

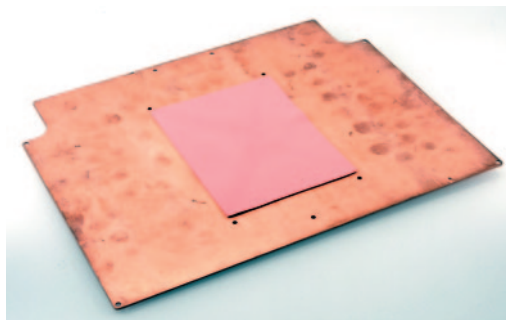
Massive Power

The system setup was very straightforward. It took me and other Audiotechnique staff only half an hour to get it right. The first sound track I played was from a Chinese drum music album ("The Drums of Jiangzhou Shanxi") which is an excellent tester for bass. At first, the bass drum did not sound right. There was too much bass, which was more than enough to shake my chair. The sound image was also very vague. There must be something wrong. I adjusted the volume of the subwoofer from 3'o clock to 12'o clock position. The cross over frequency was set to 120Hz/24dB. I played the track again and everything became fine. The players' yell and the sound of drums from both sides became much clearer. I could hear that the drums were hit very hard. The low frequency sound was rich and fast. It was as earth quaking as a pair of massive speakers, which is absolutely unforgettable!

Excellent temperature control

After warming up both sample units, I examined their temperature. The class A circuit was 38°C. The class D circuit was similar. From my experience, ADH need to be 40°C in order to achieve optimal performance. The high frequency will be smoother and more delicate. In order to achieve my expected performance, I raised the volume to -10dB and continuously played some symphonic music for extended period. The first album on top of my head was "Tutti!". Several hours later, I examined the temperature again. The reading was still 39°C. Hence I made a second attempt. I played the first track "Holding on" from Gregory Porter's "Take me to the alley" LP. This time the subwoofer looked very busy. No wonder audiophiles often consider LP the most effective way to break in loudspeakers. I carefully listened to the changes in the break-in process. The drum music became warmer. Porter's voice became more magnetic and saxophone sounded more crystal clear.

The music was definitely much more charming. The temperature of ADH finally reached 40°C. However, when I switched back to CD, the temperature dropped very quickly. I cared so much about the temperature because I thought temperature was important for the performance. But after a second thought, isn't it more important to have stable operating temperature to give the best performance? 1000 Pro was in fact equipped with 192 heat vents to cool down the transistors. The brass plate inside the chassis also helped. As there seemed no way to raise the temperature, I concentrated on the music instead!



Sensational feeling

Every time I reviewed Devialet products, I often used music with extraordinary dynamics to test them. This time, Hugh Masekela's "Stimela" from "Burmester CD III" was my favorite choice. The volume of this track is lower than normal. I dialed the volume to 0dB to give the most satisfactory performance. The volume appeared to be very high but in reality it was just right. Both voices and instruments sounded very real. The sound stage was also extremely deep. Masekela was standing in the middle. The backdrop was the sound stage was dead silence. Even though the volume was as high as 0dB, I could hear no noise, which was not something easily achievable. With the superb silence of the audition room, the music was extremely three dimensional and I could notice every bit of details in the music. For example, when Masekela intimated the steam sound of train, I was almost mistaken it for real. The transient response of 1000 Pro was also very impressive. The sound was far from the dry and stiff sound from typical class D amplifiers. The trumpet sounded smooth and sleek. Each note was clear. When playing a passage of percussion, the drum sound was breathtakingly fast and intensive. I was getting extremely excited. My heart was beating so fast and my palms were wet for the entire track. When Masekela yelled in the very last note, the residual sound and airy feeling resembled a tube amplifier. Honestly speaking, this is something I have never experienced before. Is it simply typical to today's technology or something specific to ADH? I don't know. But I feel comfortable to say that 1000 Pro has got all the elements that an high-end product ought to have. This is a verdict not just made by me but also the audiences who joined the Devialet VIP demonstration held by Audiotechnique!



Conclusion

The only conclusion I would like to draw is that 1000 Pro gave me surprises no less than Original d'Atelier. Its fast transient response was one of the primary keys to minimizing distortion, as speed is really important to retain every bit of the music. Devialet's ADH technology is also mature enough to deliver flawless performance.

If you have never experienced Devialet Expert before, I strongly recommend making a booking with the dealer for an audition session or pay a visit to the forthcoming Hong Kong High End AV Show. I'm sure you will appreciate the quantum leap Devialet has made. 音

