Ayre EX-8 2.0, integrated (hub) amplifier

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The Ayre EX-8, in version 2.0, is presented by the manufacturer as an integrated hub. Integrated nature is highlighted thanks to its modularity, because in addition to a preamplifier and an output amplifier with three analog inputs, it can be configured to contain up to 6 digital inputs (Ethernet, USB, AES/EBU, S/PDIF, and two Toslinks), which makes it, well, a hub, i.e. a digital hub for home audio playback. In addition to the above, the Ayre EX-8 has a fully balanced input to output design, uses no negative feedback in amplifier stages, and is completely made from descreet parts.

Let's go back a bit to the hub feature of Ayre: the built-in Ethernet module, or streamer, makes Ayre ready to play from Roon (Roon-ready), but also from Spotify, Qobuz and Tidal, all through the integration of these services through the mControl application. In addition, it is also compatible with the UPnP/DLNA protocol, so it can be used in this way as well. As they say in the commercial, that's not all, because in addition to all of the above, the customer also gets a high quality headphone output through balanced and unbalanced outputs on the front of the device, right next to the volume control. The output stage of the power amplifier delivers 100W at 8 ohms, or 170W at an impedance of 4 Ohms. Ayre calls this circuit Double-Diamond, and it allows, thanks to a pure linear power supply from which it draws voltage and current, high quality reproduction, which we are going to talk about later.

The digital part of the circuit is built around the ESS ES9038Q2M DAC chip, with Ayre's own master clock. Of the other digital treats, it is evident that Ayre took only the conversion from the Sabre chip, while the minimal phase digital filter and 16x digital filter are of its own design and implementation. This explains the character of the Ayre sound, which we do not associate with many other devices that use Sabre DACs. The volume control is done in analogue domain.

As we mentioned earlier, the EX-8 2.0 is a modular integrated amplifier which comes in the basic version only as an analog device, with three analog inputs – one balanced and two single-ended (8,590 EUR). The next option through the digital base includes the aforementioned analog and 4 SPDIF inputs – one balanced AES/EBU, one RCA and two Toslinks (which, by the way, are asynchronous, through Ayre's own technology – 9,890 EUR). The USB option includes the aforementioned SPDIF inputs in the digital base and USB type B input for asynchronous connection to a computer or appropriate transport (10,490 EUR). The NET version consists of an Ethernet input and SPDIF inputs (10,790 EUR). The last available option is the Full version, which includes everything listed in the digital base and two additional USB ports for connecting music storage media and an external Wi-Fi adapter included with the amplifier. We had this version for the review, at a price of 11,290 EUR.

The USB port is able to accept signals of up to 24/384 kHz resolution and DSD128 (DoP), while SPDIF and network inputs accept 24/192 and DSD64 (DoP).

The headphone output is able to deliver 4.0 Vrms in balanced mode and 2.0 Vrms in unbalanced mode. The line input impedance is 40/20 kOhms (balanced/unbalanced).

The device is relatively light (11 kg) with reasonable size for this category: 44cm x 33cm x 11.5cm. However, when placing it, it is necessary to think about ventilation because the amplifier gets rather warm and heating the environment, therefore the manufacturer recommends a minimum of 75 mm of free space above the top panel.

The back of the amplifier is quite crowded, and here we will mention the excellent speaker terminals accepting spades (note: unusually the speaker output negative leg is not the same as the equipment ground, so be careful when connecting other devices to the speaker terminals, e.g. subwoofers, if that device input connector is grounded it might cause trouble).

The control of the Ayre EX-8 is comprehensive and detailed, it is possible to program the gain of individual inputs, the mode of operation of the output options (preamplifier, output amplifier, both, subwoofer...), display shutdown time, etc. Some of the amplifier options can only be programmed via the mConnect Control app. The display is relatively small, but informative enough, so interacting with the amplifier should not become a hassle after a while.

It should be noted that the Ayre WX-8 is well designed and executed. In the absence of Roon, the built-in streamer is also controlled via the mControl app, which combines both Tidal service and server playback. The DLNA protocol works great, and since the device does not have Tidal Connect functionality or an MQA decoder, when it comes to MQA over Tidal it only plays up to 24/48 resolution. When controlling the volume via mConnect, the preamp potentiometer also rotates. Otherwise, the control is a bit dehumanized, it feels like you're interacting with an absent and distant machine, which you actually are, but maybe we're asking for too much.

Also, the volume control is of too low resolution and gradation, so the playback is often either too loud or too quiet. Digital adjustment of the gain of digital inputs (0dB, -6dB, -12dB) can help to some extent.

Sound quality

As far as sound is concerned, Ayre entered the system after the Pass INT-25 integrated amplifier, which is about 50% cheaper, but does not have as many inputs, streamer or DAC. Therefore, it is not as versatile as Ayre. The basic, analogue version of the Ayre EX-8 is similarly priced to the INT-25, with options depending on the particular market.

Before we move on to the sound characteristics of the Ayre, let's mention that the combination of Pass + Qutest + Metrum Ambre, with additional power supplies and cables, costs about 13000 EUR. Ayre with full options, like the one in the review, costs 11290 EUR, which means that the Ayre's DAC + Streamer option goes for an extra charge of 2700 EUR compared to the basic version, but is still cheaper than the equivalent high quality system we used for comparisson. But let's start in order.

The integrated amplifier itself, regardless of the source, always sounds smooth, precise, with a super-fast midrange and an open, clear, clean and precise treble. The smoothness with which Ayre goes out into the world is especially captivating, because the sound has absolutely never been aggressive or strenuous, quite the opposite. Compared to the Pass INT-25, it feels like the Ayre breathes easier on louder passages, although the difference in power is actually not that big. In turn, the Pass has a better recreation of space left to right and in depth, although these differences are not so large and significant, but we list them as identified elements distinguishing these amplifiers. Also, the Pass sounds more closed in the treble range, darker and slightly stronger in the midrange. This is less about differences in the quality of reproduction and more about the character of the sound, but the dominant characteristic of Ayre is in any case openness and speed, with smoothness and fluidity retained.

To control the capabilities of the digital part of the Ayre, we used a Chord Qutest with a Wireworld Silver Eclipse 8 interconnect and a Metrum Ambre, which we later used as a streamer directly plugged into the AES/EBU input in the DAC of the Ayre.

Compared to the Qutest/Ambre, Ayre's DAC (via built-in streamer) sounds slightly more open in the midrange, with hints of a bit more details and better lit midrange than the Chord. The middle is a bit cleaner, while the Chord sounds a little more natural and convincing in the timbre and in the bass, which is more controlled, but not as rich and full of content as in Ayre. We can always argue which one is more accurate.

These characteristics were easily audible from number to number - the demonstration of a smooth and bright midrange always brought points to the DAC built into the Ayre on the first listen. After listening for a long time and mastering and adopting the sound of each DAC, the differences were mostly canceled out. Only the most striking differences remained - the smooth detail, openness and airiness of Ayre and the precision, accuracy, rhythm, musicality of the Chord.

Christian Mc Bride's album Converstaions (HDTRACKS, 24/96, FLAC) Fat Bach and Greens, sounds big, with beautifully marked individual instruments, and it is a pleasure to follow the music as a whole, but also each individual instrument. The amplifier is neutral and smooth, the bass is deep and controlled.

On Paul Chambers' (Tidal) album Bass on Top, this huge wooden instrument sounds natural and simple, but the amount of detail that comes out of the recording from many years ago is astonishing. Ayre also deserves credit for this, because it made a seamless, detailed and ear-pleasing package out of this content.

Comparing the streaming performances of Ayre with Metrum's Ambre, we find out that Metrum is just a little more open and detailed, but not so much that it would compromise the usability of the package and question the concept of "all in one box". The Metrum is a little richer here and there, but Ayre makes the overall sound more listenable.

Bill Charlap, Uptown Downtown (HDTracks), brings a bit more detail through Ayre's streamer, especially in the midrange, but it doesn't have the solidity and energy of Metrum, which neverdeless suits and follows the philosophy of its sound and is in line with the character of the Ayre EX-8 2.0.

It was a real pleasure to listen to Janos Starker's Bach Cello Suite (Mercury Living Presence, 24/176) and a very transparent reproduction with excellent recreation of the space and a good sense of the ambience in which the music was recorded. With timbre, warmth of tone and impressive bow strokes on the cello strings, listening was a privilege.

Conclusion

With the EX-8 model in its second version, Ayre managed to make an amplifier, sorry, an integrated hub, which, soundwise, can satisfy even those who until yesterday swore by the superiority of separate components. The price seems high, but when you put on paper the price of separate components of the corresponding or similar sound, then the cost/benefit ratio seems quite high. Personally, I could live happily ever after with this device, because it sounds extremely fast, detailed, natural and musical, and the functionality is on a rather high level. **We do not usually stick labels to equipment of this pricepoint, but in certain circumstances we could easily attach the Best Buy label to the Ayre EX-8 2.0.**

Specifications:

Audio inputs:	USB: 44,1 / 48 / 88,2 / 96 / 176,4 / 192 / 352, 8 i 384 kHz, PCM 16, 20 i 24 bit, DSD64 i DSD128 (DoP)
	Optical/SPDIF/AES/EBU: 44,1 / 48 / 88,2 / 96 / 176,4 / 192 kHz, PCM 16, 20, 24 bit, DSD64 (DoP)
	Network: 44,1 / 48 / 88,2 / 96 / 176,4 i 192 kHz, PCM 16, 20 i 24 bit, DSD64 (DoP)
Power output:	100 W / 8 Ohm 170 W / 8 Ohm
Input impedance:	40 kOhm (balanced) 20 kOhm (unbalanced)
Dimension (WxHxD):	440 x 115 x 330 mm
Mass:	11 kg
Price (Croatia):	EX-8 2.0 analog - 8.590,00 € EX-8 2.0 digital base (analog + S/PDIF) - 9.890,00 € EX-8 2.0 USB (Asynchronous USB + digital base) - 10.490,00 € EX-8 2.0 Net (Ethernet + digital base) - 10.790,00 € EX-8 2.0 Full (USB + Ethernet + digital base) - 11.290,00 €
INFO:	Distributer (Croatia): Media audio, tel. +385 21 323 550, www.mediaaudio.hr **Manufacturer:** Ayre Acoustics, Inc. tel. +1 303 442 7300, www.ayre.com