

## **Ayon BlackFalcon - A Sunday feast menu**

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Only a short time ago the white ceramic drivers of the Thiel company (Accuton) provoked a medium sensation on the hi-fi-market. Though, these eye-catching drivers have a renown reputation that there are less difficult components for speaker manufacturing. Here real masters are required, such as the developers of Ayon Audio.

Who adjourns to the grounds of ceramic drivers really should know what he is endeavoring. If the cross-over is not exactly designed to the point, the ultra-rigid ceramic drivers can produce terribly nasty resonance effects. Obviously, Ayon Audio knows this very well, because for a couple of years already the Austrians make the scene happy with speakers which, to the best of my knowledge, implement ceramic material only for their drivers. The Ayon BlackFalcon belongs of the second generation of speakers, which (according to the manufacturer) is equipped with a significantly improved chassis technology and a newly designed crossover. Both goes hand in hand: the used chassis allow the developer to design the passive crossover simpler and hence more efficient. As it is the objective of Ayon to offer optimal working conditions also for tube amplifiers of notably low power. For this, as a basic principle for all three ways the 6 dB-crossovers have short signal paths and little losses, and especially the dedicated "Tube Amp" circuitry on the back of the cabinet. This shall optimize the crossover for operation with tube amplifiers – Ayon has investigated and analyzed different tube circuitries with their output transformers resulting in an "autarkic, parallel running crossover optimizing the mid- and bass-range especially for tube amplifiers". Also considering the neat efficiency of 92 dB/1W/1m there are no arguments left to even operate the speakers with single-ended-triodes from 7 watts onwards.

### ***Apparently easy***

At the first glance it may sound easier to design a "simple" crossover, but this is an erroneous belief. Why? Well, nowadays complex crossovers can easily be designed with a computer, they quite well filter and compensate the deficiencies of the applied chassis and the chosen design. But, the losses in efficiency are comparatively high, so that not rarely certain musical parameters get lost: fine dynamics, brilliance, and the 3-dimensional reproduction on the stage may suffer, a certain sterility and lifelessness may be the consequence. On the contrary, a spartan crossover must be capable to suppress artefacts without the help of complex ways of compensation. Actually, this can only work out well, when the whole design a priori has been developed close to perfection – or, in the words of Ayon, close to feasibility. I accentuate this wording for the special reason, because Ayon quite clearly expresses the expectations of its potential customers: "every speaker concept, no matter which, always is a compromise. There is no, and there will never be THE perfect speaker." Thus, the introductory statement of the technical Whitepaper of the new "Ceramic Line". Thank you for this candid clarification!

But now at last, let's have a concrete look at the Ayon BlackFalcon. As all its siblings, it can be recognized at the first glance as an Ayon loudspeaker. This is due to the equipment with the ceramic chassis: one ceramic-cell-invers calotte tweeter (2,5 cm), the 16 cm mid-range with an efficiency improved by 3 dB compared to the serial driver, and the three 17 cm bass drivers equipped with stronger magnets – but first of all the characteristically shaped cabinet. The front of the BlackFalcon cockily opposes to the paradigm of slender living-room friendliness – the cabinet is larger than deep – and the sidewalls are swung inward, pleasantly associating it with the curved silhouette of string instruments. Certainly, this association is intended, but the shape also has concrete physical reasons: Ayon wants to refrain as far as possible from the use of damping materials (scuffing energy and hence efficiency) inside the speaker, and the curved shape on the one hand provides for stability and, on the other hand, according to the manufacturer permits a controlled resonance of the cabinet. The same consist of the different kind of wood of different lamination strength, glued with a bone glue and subsequently are brought in shape under a pressure of 120 tons with the application of hot steam for 48 hours. The bass-drivers play on an airflow-damping-system, a mixed form of bass reflex and transmission line. The speaker cables find their connection via banana plugs or forked shoes on high-value terminals of WBT, and instead of the floor protectors also coupling spikes may be inserted.

Only the listening test can reveal whether this constructive effort is worthwhile – optically the Ayon BlackFalcon are a feast, rarely I had in front of me such a simply beautiful speaker with a perfect finish – not irrelevant for the enduring satisfaction with an acquisition in, if I may say so, quite a high price range.

### **Sound**

As so often with naturally sounding speakers, the first impression of the Ayon BlackFalcon is rather unspectacular. No glittering sparkling high-tone attacks, no room-filling boom-boom-bass, no self-related excitements. Instead, here the music flows so clean and pure, that unwillingly I do remember my last journey to Patagonia from where I recently returned. The landscapes of this really incredibly impressive part of our world have a reserved beauty concentrated on the essentials, much more emotionally impressive in its simple sensory power than any excessively designed computer animation trying to make a strong impact on the viewer. The Ayon BlackFalcon is like Patagonia, it really disappears completely from the stage as an acoustic body, virtually denies its physical presence and leaves mega-finely dissolved sounds seemingly from nowhere, absolutely not barking but cleaner than the ones I know from my Lansche Audio 3.1 speaker with its distortion-free plasma tweeter. The ceramic tweeter of the BlackFalcon does its job with a fascinating airiness and without the smallest tendency to nor soften nor sharpen the sound. For each instrument or synthesizer, the ceramic transports the particular inherent character of the sound completely independent from own preferences – significantly different from many other air motion transformers. Moreover, the high-range seamlessly homogeneous joins the extremely transparent and colorful mid-range acoustically isolating the voice of Lynni Treekrems on “Haugussa” almost like in a vacuum but still weaving it organically with the sound of the band. The stage magically performed in my listening room by these two speakers does not know limitations neither backwards nor at the side (it tends to appear rather behind than in front of the speaker base).

Until now I have experienced only a very small number of speakers producing such a holographic sound picture in our listening room. Methinks, that with my own hands I could touch the musicians of Ted Sirota's Rebel Sounds while playing "Geronimo's free" with utmost fervency. In the bass-range the incorruptible character of the Ayon BlackFalcon continues. Instead of an artificially inflated shambling carpet the Austrian also her produces an incorruptible candid, crispy punchy, always perfectly controlled deep sound without the slightest attitude of egomania. Depth is no problem, I easily believe in the 33 Hz as lower limit frequency. The ceramic 17" present complex structures in the deepest regions without the least grain of doubt. Dynamically all this happens frighteningly realistically, with an immediacy both hazzle-free and direct, and with the potential of physically sensible air motions if provided by the musical material. However, perhaps it is the greatest accomplishment of the Ayon BlackFalcon, that it fluently combines all its distinct strengths in such a coherent and subtly-perfect (oops, now I have used this expression!) character without the slightest vanity.

**That is what I would really call perfectly balanced and mature.**

S. 29 oben links: the front of the BlackFalcon is colored black. The varnishing is perfect.

S. 29 rechts das obere Bild: mid-range and tweeter are filtered very plainly against each other.

S. 29 rechts das untere Bild: clean and noble veneer with a thick layer of varnish: the shiny back side of the Ayon

S. 30: the very special shape of the cabinet of the BlackFalcon eliminates resonances of the cabinet and looks very good

S. 31 oben links: The mouth of the ventilation ends shortly above the floor; a round stand with screwed feet or spikes assures a safe stand

S. 31 oben rechts: every speaker has its individually labelled nameplate. Above it the switch for the impedance adaptation is mounted