

FIDELITY 64

MUSIK UND HIFI



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Aavik S-580





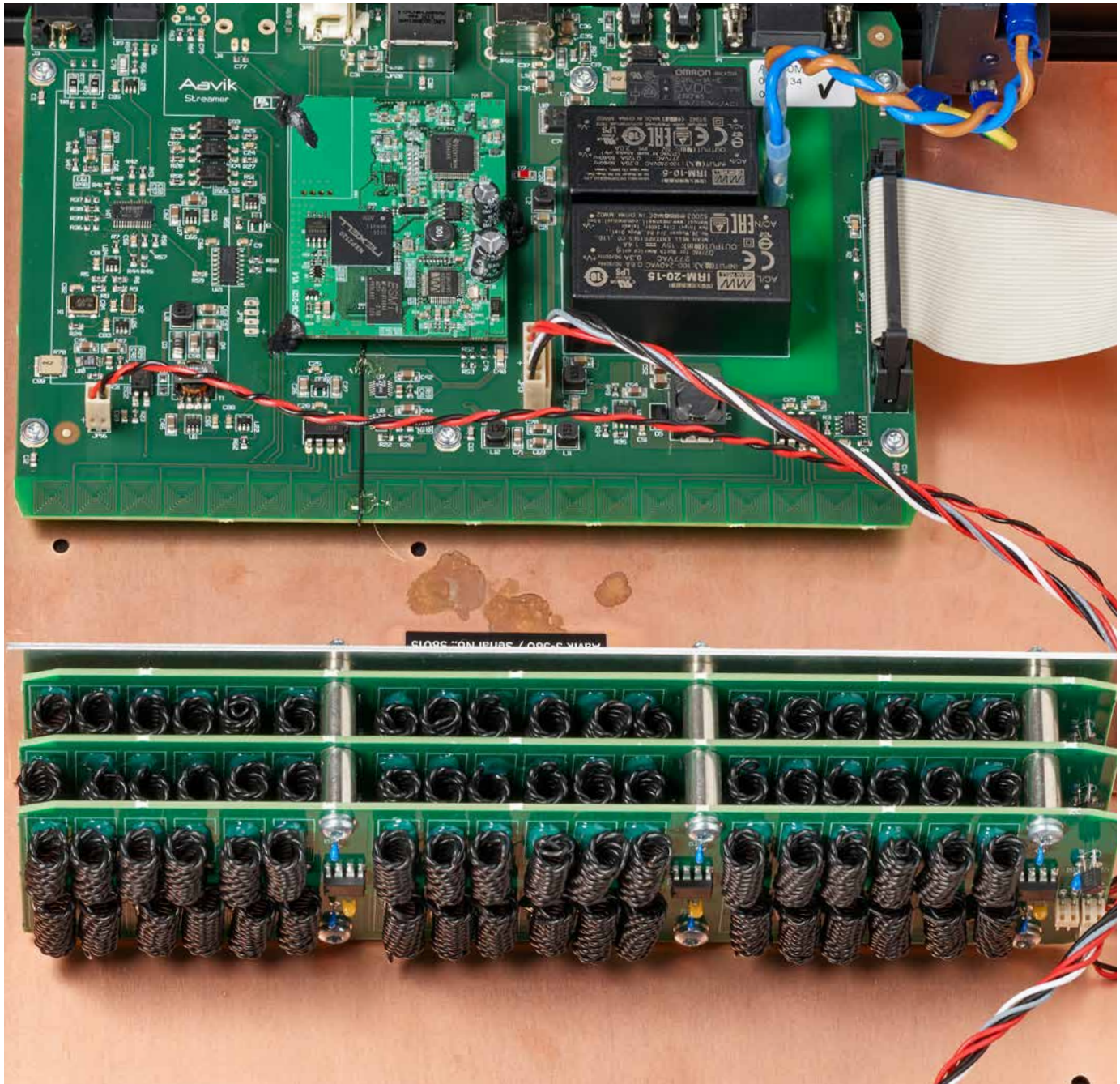
Aavik S-580

STREAMING DANISH-STYLE

By Michael Vrzal. Photography: Ingo Schulz



COMPONENTS BUILT BY AAVIK ARE
EQUIPPED WITH UNIQUE NOISE
CANCELLATION CIRCUITRY. FOR THE
S-580, AAVIK'S LARGEST STREAMER, THIS
TECHNOLOGY ALLOWS THE DEVICE TO
REACH NEW HIGH-END HI-FI HEIGHTS.



The dithering circuitry of the S-580 immediately catches your eye. The three boards in the photo contain 108 of the small Tesla coils. And there are even more coils beneath the streamer's motherboard (the soldering points are clearly visible).

The number 580 doesn't conjure up any particular connotations. No slightly ominous undertones of a 13, nor the whimsical associations of a 42. 580 is a number like any other for most people—with the notable exception of hi-fi enthusiasts. They know that it designates Aavik's flagship models. Right up to the launch of the new 880 amplifier, the Danish manufacturer sold its electronic components

in ranges of three models that were differentiated by their numbers: the 180 for the entry-level devices, the 280 was the mid-level device, and the 580 was the top-of-the-range device. Therefore, its designation reveals that the Aavik S-580 is the manufacturer's largest streamer. And well-informed audiophiles know precisely what this means. Although equipped with precisely the same signal processing technology as its smaller siblings, this top model boasts even more proprietary

noise canceling assemblies, known as Tesla coils and dither circuits. And it's these inventions of head developer Michael Børresen that ultimately decry the differences between the models.

In fact, making a difference was one of the guiding principles behind the development of the Aavik S-580 (and its siblings). The developers approached it differently in almost every way, starting with the enclosure. Whereas other manufacturers opt for CNC-milled

Michael Børresen has previously explained how his “Tesla coils” work through this analogy: radar systems on ships gliding through the waves can “see” farther than those in planes flying unhindered in the sky. The modulation of the viewing angle enhances the information that the radar system receives. And this is precisely what the numerous Tesla coils in this component do: they modulate the complete audio signal along the time axis.




aluminum plates, Aavik uses a wood fiber material similar to HDF. The metal components on the S-580's exterior are titanium. On the inside, the bottom and sides of the chassis are lined with pure copper.

Most streamers come with one of two types of front panel: a fine-resolution touch-display, providing for full control and comprehensive information, or no display at all, being controllable only through an app. However, the S-580 has both: an app as well as a (red!)

dot-matrix display that covers the entire front panel. This is truly a godsend for an author who's approaching 50 and has just bought his first reading glasses! The huge display is readable even if you're standing several meters away.

Yet the rear of the device is somewhat shocking for those of us familiar with other streamers: Why are there two USB-A connections? What's with the analog outputs? Why does the DIGITAL OUT section provide merely

an optical output and a BNC output? When asked about this last port, Michael Børresen replies with his own indignant question: “Have you ever actually compared USB and S/PDIF?” For him, the standard computer interface is completely out of the question. Why not I2S then, which is considered by many to be the “gold standard” for digital interfaces due to how it separates data and clock signals? Not robust enough, says Børresen. The I2S specification is only intended for really short ▶



An enclosure sandwich: like its siblings, the 580 cabinet is made of a wood composite. And the interior of the streamer is lined with copper sheets that shield the electronic components from interference.

cables up to ten centimeters in length. He's an S/PDIF fan, and in particular prefers the uncomplicated way that this interface has been implemented.

The analog output is due to the choice of streaming hardware. Aavik chose a circuit board made by the specialists at Converse Digital, and this is also equipped with a DAC. It's gratifying that Børresen is enough of a realist to admit that the RCA connectors were a marketing decision. However, he does emphasize that the signal quality is still astoundingly

good. Despite not permitting DAC connection, the two USB sockets are anything but superfluous. For example, they can be used to attach a mass music storage device or Wi-Fi dongle. In principle, Wi-Fi functionality could have been provided via the streaming board, but the company obviously decided against this, presumably to avoid interference. Even though there are probably only a few potential users of this component who don't have LAN cables, Aavik has allowed for them to add Wi-Fi functionality with minimal effort.

The Aavik S-580 interior is remarkably uncongested. The streaming board sits on top of a motherboard that takes up less than a third of the total enclosure. Two compact SMTPs provide the power, with Michael Børresen stressing that these were chosen because of their favorable harmonic spectrum. One PSU powers signal processing, and the other serves the control functions and the display. Your eye is immediately drawn to the vertically arranged boards in the middle of the enclosure, fitted with Aavik's typical coils.



The small groove in the 580's metal feet is a noticeable feature. It accommodates the stainless steel balls that decouple it from the housing of the company's other components. For stacking purposes, every Aavik device has four of these metal fixtures to accommodate the balls.

The twisted wire coils (known as “active Tesla coils”) are supplied with a weak power charge. According to the manufacturer, this charge interacts with any noise spikes to reduce potential sound interference. Aavik’s flagship streamer houses three of these boards, with the smaller devices in the range possessing one or two in line with their designs. The active square Tesla coils embedded on the motherboard are further proprietary noise cancellation features, and they operate similarly to the twisted wire coils. The

copper-lined base beneath the circuitry is designed to combat time-related distortion to the useful signal caused by hysteresis.

Using an app on a tablet computer is the best way to control the S-580. Converse Digital has created a suitable DLNA/UPnP app called “mconnect Control” that can be downloaded from your usual app store in a matching Aavik design. Because the streamer is Roon Ready certified, I can also control it using my favorite software—a real bonus.

I decided to test whether the S-580’s analog outputs are simply there for appearance’s sake. So I carefully insert the slim RCA plugs of my Fadel Art Aphrodite cable into the fragile-looking, narrowly-spaced sockets on the back of the streamer. But the resulting sound is fluid, subtly complex, endowed with genuine musicality and thoroughly pleasant. I would have liked greater dynamism and a more powerful output level—the preamp needed a high setting to achieve an adequate result. But I’m hardly criticizing the 580 ▶

Some might insist on a streamer that can display a high-resolution image of an album cover. But we much prefer this dot-matrix display. The information is clearly legible even from the other side of the room. We wish more manufacturers would choose this display type.



for this. After all, the device's analog outputs are only really intended for use in an "emergency". In its natural habitat, this component will function as a network bridge attached to a separate DAC.

Moving on to this scenario, I could hardly believe my ears. I perceived the sound more intimately than any other streamed music I've experienced. There was no need for comparative tests: I didn't need to connect my Innuos Zenith Mk III to instantly appreciate the remarkably easy-going suppleness of the Aavik S-580. Turning to Qobuz, I chose a new recording of César Franck's Violin Sonata with the violinist Lisa Batiashvili (Deutsche Grammophon). This production surrounded the piano and violin with an enormous amount of spatial information, creating an absolute feast for high-end fans. Moreover, Lisa Batiashvili

plays with incredible elegance and delicacy without losing her focus for a single second—no easy thing in this meandering, panoramic duet for two soloists. Her violin is perfectly separated from the accompanying piano, and both instruments are firmly anchored depth-wise, without displaying any stiffness. The crystal-clear sound of this romantic piece is captivating, making the listener want to put away their note pad and simply immerse themselves in the music for days at a time. In a direct head-to-head contest, the sharpness of the Innuos device doesn't stand a chance. However, this information is of limited value without the caveat that the two competing components use different connection technologies. Innuos only equips its streamers with USB connections. On the other hand, Aavik relies solely on S/PDIF.

In an astounding turn of events, my turntable was revealed to be an even more worthy opponent for the S-580. It was up against my dps 3 with Bauer tonearm, the Lyra Kleos MC cartridge, an MC transformer from Consolidated Audio and the jumbo phono preamp from Jim Hagerman. The total price tag for this configuration, including cables, is approximately the same as that of the Aavik S-580. Now this may be something of a bizarre comparison, but regarding sound level, it's a real Champions League game. I listen to the Qobuz stream of a recording by the US duo Rachael and Vilray. Their original compositions, in the airy and entertaining Swing-style of the 1920s, are performed so tastefully that every number comes across as a classic all its own. I own a vinyl version of the recording (and a CD version too!), and it isn't easy to decide on a winner between

RCA only! Because Aavik places great importance on asymmetric circuitry (“Why bother with symmetry if it’s only adding an extra feature to your specifications?”). There are no XLR ports. Both USB ports can be used to attach hard disks or data sticks.



the LP and the stream. The vinyl recording is a touch fresher and brighter, and maybe even more forthright.

On the other hand, the stream from the Aavik S-580 to my DAC is extremely compelling. Rachael’s voice has presence, but no hint of sharpness. It engages in an intimate acoustic tête-à-tête with the listener, perfectly detached from Vilray and his guitar—conjuring a vast sound with an almost infinitely fine resolution. This was flawlessly homogeneous and precise without turning arduous.

Once again, Michael Børresen’s unconventional technical approach has successfully blown my socks off. How his flagship streamer manages to be this good clearly remains a mystery to me. However, in this case, perhaps we must simply forget everything we think we know about materials, digital high-end and

weight-price conventions. The Aavik S-580 is the best signal source for a DAC that I’ve ever experienced. Kudos to the developers! ■

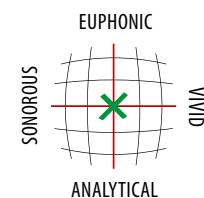
Streamer | Aavik S-580

Concept: Roon Ready certified streamer with DAC | **Inputs:** 1 x Ethernet (RJ45), 2 x USB A | **Digital outputs:** 1 x S/PDIF (BNC), 1 x optical (Toslink) | **Analog outputs:** 1 x RCA | **Supported streaming protocols:** Roon Endpoint, UPnP/DLNA | **Maximum resolution:** 24 bit/192 kHz | **Special features:** IR remote control (Apple), RS-232 interface for firmware updates, 2 x triggers for remote activation, USB for WiFi dongle and hard disk, fitted with interfaces for Anszu Darkz, no power cable provided | **Finish:** Black/titanium | **Dimensions (W/H/D):** 40/10/38 cm | **Weight:** 7 kg | **Warranty period:** 2 years | **Price:** approximately €20,000

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Aavik S-580

Streaming at an analog level of quality. If you think this is an exaggeration, you’ve obviously never been introduced to Aavik’s flagship. It’s a costly investment, but a truly wonderful experience



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ACCOMPANYING EQUIPMENT

Turntable: Bauer Audio dps 3 | **Tonearm:** Bauer Audi Tonearm | **Cartridge:** Lyra Kleos | **Phono preamplifier:** Hagerman Trumpet Wood | **MC transformer:** Consolidated Audio Silver/Nano | **CD player:** Electrocompaniet EMC 1 UP | **Music server:** Innuos Zenith Mk III | **DAC:** Aqua La Voce S3, Falcon DuDAC | **Switch:** Silent Angel Bonn N8 | **Preamplifier:** Silvercore linestage two | **Power amplifier:** Rowland Model 2 | **Power conditioning:** AudioQuest Niagara 3000 | **Loudspeakers:** Ayon Seagull/c | **Cables:** Fadel Art, Anszu, Sun Audio, AudioQuest, Solidcore | **Accessories:** Rack Creativ Trend