

THE VOICE OF THE NIGHTINGALE

Test of the Aavik S-180 streamer

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The Aavik S-180 streamer is a component featured in the Aavik 180 series. This series also includes three other components: a DAC, an integrated amplifier and a phono pre-amp. In addition, with the 280 and 580 series, there are two larger siblings for each of the components. The 180 series is the most affordable series, although “affordable” may be put into perspective with a price tag of CHF 6000 for each component. We have already taken a closer look at the Aavik I-180 integrated amplifier.

The Aavik S-180, like most “high performance” streaming devices, is not limited to the streaming function. It also has an integrated DA converter and a very unique and equally eye-catching display on the front. This display is increasingly omitted on streaming devices, as it is redundant with the display on the app on the respective smart device. So why do we need another display?

Every device in the 180 series has the identical, large LED dot display, and it makes a stunningly good impression. The Aavik S-180, in particular, conveys a direct reference to the music that is currently playing. The smart device with the app is often put aside after starting a playlist. If you can then see the song title and artist on the large display at a glance, that’s an advantage you can definitely get used to.

The DA converter makes the Aavik S-180 a universal digital source. An external converter is not absolutely necessary, but certainly qualitatively advantageous. Those who cannot/do not want to spend their money on the Aavik D-180 DA-converter or any other DA-converter, will certainly get along well with the S-180, at least temporarily.

External USB-SSD/HDD drives can be used as storage media or, of course, storage locations in the network. You will not find a built-in hard drive, probably also due to the fact that the use of stored music is on the decline compared to the use of high-end streaming services. Moreover, USB drives are no longer a real investment – and if they should fail, it is much easier to replace them.

There are also arguments in favour of an integrated SSD drive: For example, you do not need a USB interface to use it. This can have advantages in terms of speed and digital noise, which is why other manufacturers swear by it. Aavik has decided not to use an internal SSD. That’s not surprising, because they have something else in their quiver. More on that later.



For the digital output, Avik relies exclusively on SPDIF. A BNC and a Toslink connection are available for this. For external storage media, there are 2 USB ports and, of course, an Ethernet port. Obviously, nothing works without Ethernet!

The connection panel on the back of the device reveals nothing out of the ordinary, except perhaps, the lack of an asynchronous USB digital output. Avik relies on the Sony-Philips standard SPDIF with a coaxial BNC output and an optical Toslink output. BNC plugs have an excellent reputation. The Avik D-180 DAC has a BNC input. Anyone who uses a DAC of their choice with an RCA-Cinch digital input as playing partner, can use an appropriate cable or a BNC/RCA adapter. The latter are much better than their reputation. The digital outputs can transmit 24 bits at a maximum sampling rate of 192 kHz. "Higher things" are dispensed with, which I can easily understand.

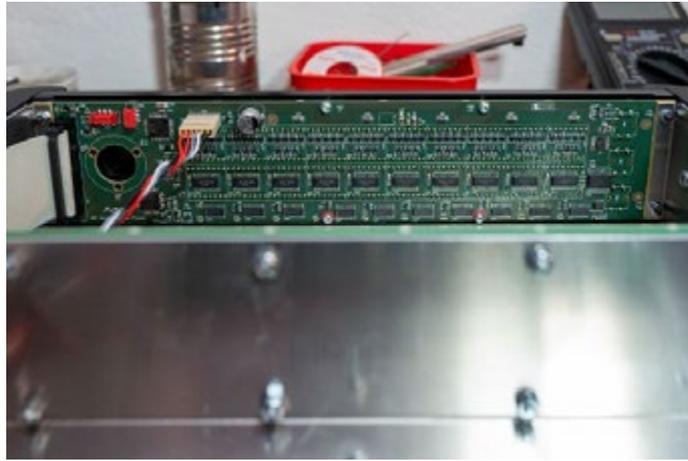
The device has two trigger outputs, which can be connected to other devices, e.g. the D-180 DAC and the integrated amplifier I-180, so all three devices can be switched on and off at the same time.



With three buttons on the device, the Avik S-180 (below) is amazingly easy to operate just like the Avik D-180 (above).

The three function keys can do a lot after a thorough study of the operating instructions including standby on and off, mute, pairing with an IR remote control from Apple, and access to various menu functions (settings).

To list a few of the more important settings: playback information such as format, source and sampling rate, brightness of the display, fixed or variable volume, gapless playback yes/no, and settings for MQA decoding, depending on the MQA support of the DA converter. Furthermore, also DSD mode DoP or PCM, network status, firmware update, and various functions related to WiFi, etc.



The generous and quite unique display requires a very elaborate circuit board.

As can be seen in the picture above, the elaborate LED dot display requires a complex PCB behind the front. The PCB is identical for all devices. The circular cut-out on the left is only needed for the volume control for the integrated amplifiers and has no function on the Aavik-S-180 streamer.



Streaming board, DAC and the power supply on the right: 2 encapsulated power supplies are used.

The somewhat inconspicuous looking switching power supplies (right half of the picture) for the six different paths of the power supply are quite something. Aavik uses so-called Resonant Mode Power Supplies. Their clock is not a square pulse, as usual, but a sine wave. This significantly reduces the creation of high-frequency distortion signals in the switching power supply.

To ensure an organic sound, Aavik has developed a casing of natural composite materials and minimized the use of aluminium. The resonance, caused by aluminium, adds a cold and harsh tone to the overall sound. Therefore Aavik uses only an absolute minimum amount of aluminium, necessary to provide adequate cooling.



Mysterious: The noise-cancelling technology propagated by Aavik, with so-called Tesla coils, is supposed to effectively suppress unwanted RF energy. It certainly doesn't do any harm, but it is costly.

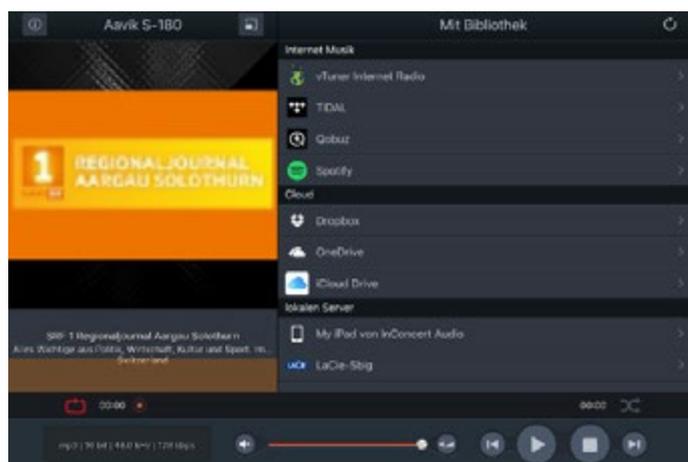
Ansuz Acoustics, Aavik's sister company, specializes in components and devices designed to compensate for noise in music streaming systems and networks. This so-called noise-cancelling technology is also used in the Aavik S-180. It is supposed to provide a flawless signal flow, because it is free of interference, and conducted and radiated interference. A total of three dozen Tesla coils are used for this purpose. They are clearly visible in the device on a separate circuit board. In addition, there are also 72 active Square Tesla coils and 5 so-called dither circuits.

For me, this is a bit problematic in that I imagine something quite different under a Tesla coil than what I see here. Also, the actual concept of an active Square Tesla coil is not clear to me. And by "dithering" I mean a method of mitigating the effect of quantization errors in digital audio. The "ground-breaking" technologies propagated by Aavik and Ansuz are sometimes not understandable to me neither from an electrical nor a physical point of view.

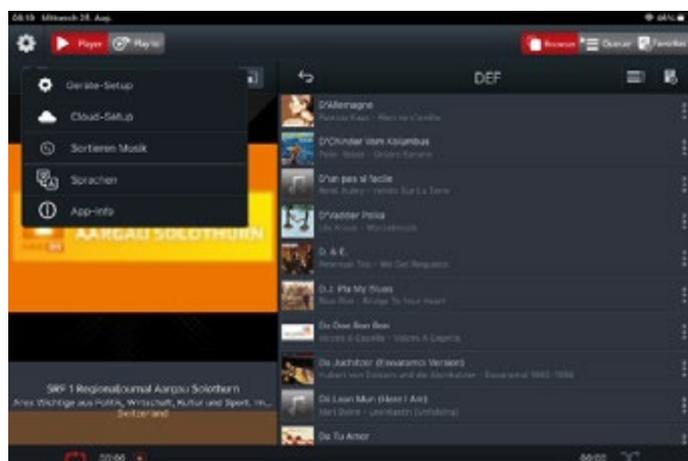
The manufacturer is not obligated to provide information about the exact operation of such innovations. But we are also not obligated to take everything at face value. We can simply take note that Aavik and Ansuz have gone to great lengths to perfect the signal flow with their proprietary technology.

The Aavik Stream App and Room

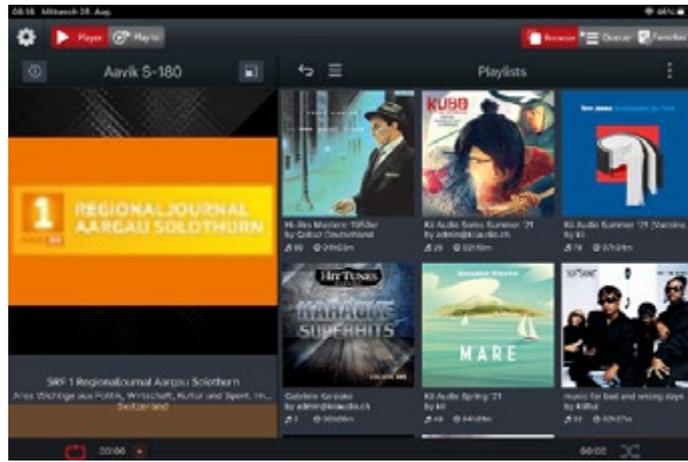
The easiest way to stream and play music is with the Aavik Stream app exclusively for iPads (Apple). The app is clearly, simply, and logically designed, without any frills and it works flawlessly. The Aavik S-180 integrates the streaming services Tidal, Qobuz, and Spotify. The tried and tested VTuner is available for Internet radio. You can, of course, also tap into cloud storage: Dropbox, OneDrive and iCloud Drive are available. Local servers are also available. My NAS and iPad immediately appeared on the screen. The operation is intuitive and illustrated in the following three images (as examples).



The very good Aavik Stream app: On the right, you can see from which sources you can stream music. At that moment, SRF1 was playing with the integrated vTuner. Below you can see the player.



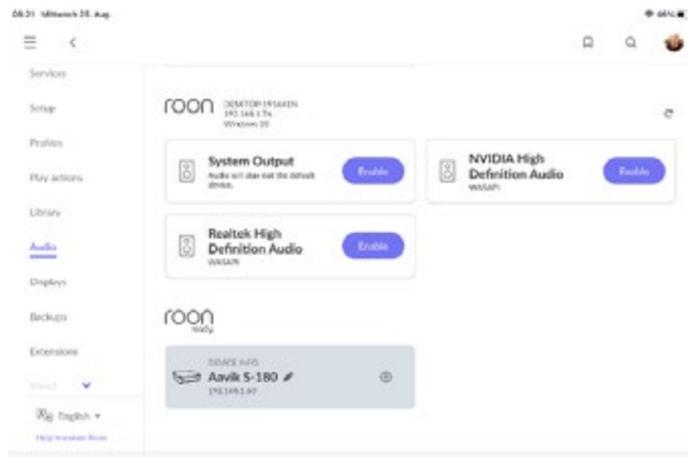
On the top left is the setup menu. On the right you can see some albums from the NAS.



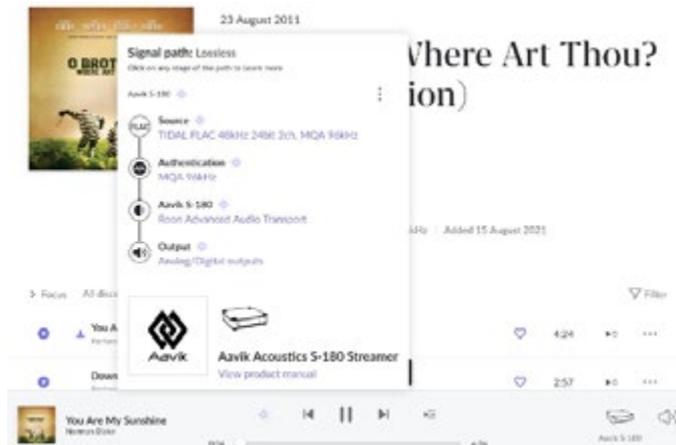
On the right you can see a selection of playlists.

For those who prefer Roon, the streamer Aavik S-180 is easy to use, as long as a computer with Roon core application somewhere in the network serves the streamer as endpoint. This can be, as you know, a PC/Mac or an Intel NUC or whatever is suitable for it. In my test environment, a Roon Nucleus powers any Roon Ready clients such as the S-180. You don't need to change anything in the Aavik Stream app to activate Roon mode. Just put it aside, open the Roon app instead and find the S-180 under Settings/Audio, and activate it.

If you don't own an iPad, you have the choice of buying an iPad or a Roon license. Roon can then be operated with all smart devices. Since all the system settings of the S-180 can be made without an app, it is also not mandatory for operational issues.



Roon Audio Settings: The Aavik S-180 becomes visible as an endpoint.



Signal path during playback of an MQA-encoded track from Tidal.

The operating concept and the Aavik Stream app are convincing. Please note the restriction on iPad (Apple). Those who want to use Roon will also be happy, and can then operate the streamer with all smart devices and integrate it into a multi-room system for this.

I tested the Aavik S-180 on a Kii THREE BXT system, a DSP-controlled full-range floor standing speaker, and used the SPDIF digital output (coaxial) for this. For comparison, I used the Innuos Statement music server. The Innuos Statement costs about twice as much as the Aavik S-180, but this is understandable due to the enormous amount of technology and effort in its functionality. Both devices drew music from exactly the same source via Roon, either stored content from my NAS or from Qobuz and Tidal.

With the Aavik S-180, I was also able to play and compare music via the Aavik Stream app or Roon. In this first comparison, I could not find any reproducible quality differences that had any relevance. It didn't always seem to sound exactly the same, but the differences I thought I detected seemed to quickly fizzle out again. They are impossible to validate and impossible to reproduce. Things got a little easier with the comparison to the Innuos Statement. The A/B comparison could be done directly by switching the source with my remote. There was no interruption from A to B and back.

The S-180 won me over with an impressive neutrality and order in the sonic fabric. There was never any nervousness – not even with the recordings of lower quality. One hears the music almost as if it were one a deeper level. The degree of relaxation that emanates from the music is clearly audible and means a higher level in quality and musicality. Thus, timbre of all kinds can be heard completely unveiled. An exact description of this emotional component is hardly possible. Compared to the reference unit, I could detect slight deficits in dynamics. This also led to a slightly perceptible reduction of the size of the soundstage. When it comes to “beauty”, however, the S-180 really shows off and ensures perfect relaxation when listening to music.



Streaming Galore!

Conclusion

With its beautiful music reproduction, the Aavik S-180 convincingly demonstrates how to carefully and thoughtfully get to grips with the manifold sources of interference and noise in digital music reproduction. This digital noise, caused by complex networks, can be effectively overcome, as the example shows – even if the chemistry and alchemy behind it is not always served in a comprehensible way. The Aavik S-180 is very convincing with a few restrictions and is also not off the mark in terms of price/performance. The device is very nicely finished and thus also suitable for the atmospheric ambience – and not only for the ‘martial’ HiFi rack.

Model: S-180

Profile: Network player (streamer) with integrated DA converter. System component of the 180 series matching the D-180 DA converter and the I-180 integrated amplifier.

Pros:

Sound quality and musicality

Operating concept

Aavik Stream App Room Ready

Cons:

No asynchronous USB output

Aavik Stream App only for iPad (Apple)

Price: 6,000.00 CHF

Manufacturer: Aavik Acoustics

Year: 2021

Distribution: AC Group AG

Dimensions: 102 x 384 x 380 mm

Weight: 5.2 kg

Colour: Black

Airplay: No

CD ripper: No

Chromcast: No

Room Ready: Yes

Spotify Connect: Yes

Analog output: RCA stereo

Audio Formats: All incl. DSD and MQA encoding

Digital Output: SPDIF coaxial and Toslink up to 24bit 192kHz

Display: LED dot display

Power consumption standby: 0.5 W

Multiroom Support: With Room

Music services: Qobuz, Tidal, Spotify

Remote App: Aavik Stream App

Storage media: External USB or on network

Onlinelink: <https://www.avguide.ch/testbericht/test-des-aavik-s-180-streamers-die-stimme-der-nachtigall>