AN ART'S EXCELLENCE REVIEW

Astell&Kern AK70 and AK300

Portable High-End Music Players



AK70 and AK300

I am of the generation that went to school with a Sony DD3 Walkman in their pocket. As far as portable hifi went those days, that was the best you could get. The most expensive too. Another disadvantage was that you had to think carefully about which cassettes you wanted to expose to the dangers of taking them with you in your school bag. On average I took six, plus one in my walkman. So a maximum of 14 albums, and each had to be shorter than 45 minute too. Imagine that you could use a time-machine to go back to 1980, and give an Astell&Kern to your younger self, filled to the brim with fantastic and gloriously sounding HiRes music from the future. Now wouldn't you have been 'the man'? All joking aside, over the last 40 years we have come a long way with our portable music...



A closer look at...

The Astell&Kern AK70 and Astell&Kern AK300 in this review are the latest offerings from the South Korean company with the Western name. In many places where people are discussing head-fi, these newbies are the subject of heavy speculation. The AK70 is the new entry-level model that will replace the successful AK Junior, that much is clear. But what's going to happen to the AK100.2, AK120.2 and AK240? Because when you look at it's type number, the AK300 is going to be the new entry level for the highest-end 300-series. But it's pricing put's it below the 100.2. So is the AK300 supposed to be at least as good as the AK240? That would be quite a promise...

I do not want to delve into the technique too deep, but some of you may be interested to know that the Astell&Kern AK70 uses the same Cirrus Logic CS4398 DAC-chip as the AK100.2. The AK300 uses a single version of the Asahi Kasei Microdevices AK4490 (the AK320 and AK380 players use a double AK4490). But as far as I'm concerned, the bigger difference for most end users is in the practical features that the players offer. An ultra-precise clock function for instance, which causes much less jitter, so the music signal comes out much cleaner. The AK300 has a clock like that, and you will certainly hear that. Or a lossless digital volume control (both players have that). If you want to study the other specifications, you can look them up at the manufacturers website. Personally, I'm much more interested (like most of you, I'm sure) in how it behaves in real life and how it sounds. That is why I will include a short description of the tangible properties in my listening notes.



Listening to the AK70

The Astell&Kern AK70 has approximately the same form factor as the 300-series, but smaller and with a straight case. It is made from aluminum and it has a glass backside with a fancy diamond-shaped motif. There are two colours available: a unique light shade of 'Misty Mint' green and a stylish 'Obsidian Black'. The bright AMOLED touchscreen gives you very sharp images and it has a nice sensitivity. The player runs on a very basic but stable version of Android. Internal storage is 64GB, but the total storage can be expanded with a microSD card (maximium 128GB) to 192 GB. That's more than enough for mp3 and lossless files in cd-resolution, but when you start adding HiRes files or even DSD, you will run out of space quickly. Besides the normal 3,5mm stereo jack, you now get a balanced microjack output. Battery loading and file adding goes through a micro-USB port at the bottom. To add music, you will first have to download and install the Android File Transfer app, that ran flawlessly on my 2010 MacBook Pro. If so desired, you can also use the AK70 as an external USB DAC for your computer by selecting the USB function in the Settings menu. That is also where you set stuff like repeat and shuffle, and Gapless playback.



That function is set to Off out of the box, so keep that in mind. Astell&Kern probably employ the theory that playing gapless will put a higher load on the internal processor. It is often said that a higher processor load may degrade your sound quality, but differences are - if there at all - very hard to distinguish. If you play a lot of albums with tracks that flow into each other, you will need to switch the Gapless function to On from the menu.



To enable fast switching between players, I decided to use just one album: the very lovely and soulful Take Me To The Alley by jazz-singer Gregory Porter, in 24/96 Apple Lossless resolution. The built-in amplifier of the AK70 didn't have a very tough job driving my AudioQuest NightHawk, but it didn't really shine in the volume and dynamics department either. It sounded 'well', but even on a volume setting of 115 (of the 150 available 0,5dB steps) it was a bit

polite. The Bowers & Wilkins P3 on-ear player much more lively at 105 and

my old-faithful Ultimate Ears Triple Fi in-ears did even better at 95. With the Astell&kern AK70, the first track of the album (Holding On) sounded convincing and airy. There was reasonable 'pressure' behind the piano and double bass and Porter's voice had some good warmth and a lot of natural timbre. The track was running along very nicely. Timing was tight and had an excellent flow, which added some of that very desirable 'ease' to the music. The higher paced and more dynamic track Don't Lose Your Steam (with horns & hammond) also did well. I felt that it could have been just a tiny bit more dynamic, but the AK70 possessed a convincing 'drive' that justified it's noble heritage. If you add up the sound quality, the features and the specifications, the very affordable AK70 is actually an AK100.2 in a fancy minty green wrapper.





Listening to the AK300

If you have ever held an AK320 or AK380 in you hand, you will immediately get a Déja-Vu when you unpack the AK300. The aluminum case has the distinct left-leaning parallelogram shape of the 300-series, which is a lot bulkier than the AK70. It's also quite a bit heavier, but still a real pleasure to hold. The controls and inputs are identical to the AK70 in number and layout, except for 4 gold plated contacts on the bottom of the case, that are used to make a balanced connection to the separately available Cradle, Amp or Recorder. The AMOLED display is a lot bigger but just as nice, and below the screen is a touch-sensitive spot on the aluminum case that acts like a Home button. Wherever you got lost in the extensive settings menu, that 'button' will always bring you straight back to the home screen. Like



with the AK70, the Gapless function setting on the AK300 is set to Off out of the box, and it has the same internal memory and expandability as the AK70 (64+128GB). The bigger differences, however, are on the inside. The AK300 boasts a super-accurate 'femtoclock' with a deviation of only 20 femtoseconds. One femtosecond is 1/1000 of a picosecond. The da-converter in the AK70 has a deviation of 50ps, which is quite good already. But the AK300 is almost completely jitter-free. And you can hear that. You can also hear that the AK300 has the better AKM DAC chip and better components in the analogue part of the circuit.

At the very first note of Holding On, it is clear that this device is in a completely different league. The AudioQuest NightHawk was performing markedly better, and feeling very well by the sound of it. The better amplification resulted in more authority and ease, there was a lot more energy in the instruments and vocals, and timbres were more colourful and had greater presence. Dynamics left nothing to be desired. The horns in Don't Lose Your Steam were better defined and they really pierced through the mix. The bronze baritone of this exceptional soul singer flowed even more 'chocolate-esque' and everything sounded so natural that I actually got goosebumps. I got comparable results with the Bowers & Wilkins P3 and the Ultimate Ears Triple Fi. The difference between the AK70 and the AK300 was obvious from the start. As far as I'm concerned, that completely justifies the higher price of the AK300. And even though is has been quite a while since I last heard the AK240, I wouldn't be surprised if the AK300 plays just as good. So there you have it: the result of advancing technology at decreasing prices. I think that's what we call 'progress'...





An anecdote for a conclusion

Why an Astell&Kern?

Every now and then, I am asked if high-end audio players like these models from Astell&Kern still have a right to exist. The usual argument being 'that these days, we all carry a smartphone full of music with us'. My first counterquestion is if they are aware that an iPhone with a decent amount of internal memory costs a sweet 1000 euros, and then I ask if they know that the da-converter in those phones is an afterthought that costs less than 1 euro. "But..." they than mutter, a lot less self assured, "what if I add a nice portable DAC to the phone?" "Alright," I then say. "You can do that, and if you don't look at prices or sizes, those devices vary from pretty darn good to absolutely brilliant, but then there's the hassle of extra cables, two things in you inside pocket instead of one, and besides that, you can't use you smartphone as a very good external USB DAC with your computer. And when you get a phone call, your Astell&Kern will play on like nothing happened, but your smartphone will direct the caller-signal directly and ruthlessly to you headphones. After which you can tell the misses - in high end sound quality - that your train got delayed again and that the spuds will have to be wilting away in their little pan on the hotplate even longer..."

Usually, the penny drops by the time I get to the potatoes. But: why an Astell&Kern specifically? Because of their great looks? Because of their exceptional build and finish? Or because they can do more than just play music on the go? Yes, yes and yes. But most of all because of their superb musical performance. The AK70 is a true gem with a sound quality that would have been quite impossible - at this price - only a year ago. The AK300 is even more distinguished. It doesn't just feel like high-end, it also sounds like highend. And, just like it's smaller sibling, at a price that I would hazard to call 'accessible for almost everyone'. With no buts or ifs, I have established that both players offer extreme value for money.



Extra information

For additional information about the Astell&Kern AK70 or AK300 and for pricing, see our online shop:

Astell&Kern AK70 (not available anymore) Astell&Kern AK300 (not available anymore)

Spotify

Gregory Porter - Take Me To The Alley



Tidal

Gregory Porter - Take Me To The Alley

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