

[Cary Audio DMS-700 netwerkspeler](#) [Ladder DAC supremacy anno 2022](#)

Author: René van Es

If you are on the hunt for a network player, Cary Audio may not be the first name that jumps to mind. Tand wrongly as it turns out, Cary Audio makes very high-quality players additional to their other activities. I myself know the name Cary Audio most of the most from amplifiers for stereo playback, especially the tube amplifiers. In addition, the 100% American company from North Carolina makes transistor amplifiers, home cinema equipment, DACs, headphones and phonoamplifiers. Of the network players, the most extensive has been delivered, the DMS-700. The slightly Spartan look with press may not suggest the beauty of technique, Cary Audio clearly prefers to spend its money on electronics rather than milled housings made of a block of aluminum. The extensive possibilities and the display qualities do not make you long for embellishments, but for more and more music.

DMS-700 met ladder DAC

The digital heart of the DMS-700 is formed by an AKM AK4499EQ digital to analog converter. Without forgetting the importance of the other electronics around the DAC chip, the AK4499EQ is clearly a decisive factor in the display quality due to its internal architecture. The AK4499EQ has a series of resistors on board and thus makes it a ladder DAC. Ladder DACs are starting to recapture the world on the 1-bit DACs, they are expensive but often play a lot more musically than other solutions. Ladder DACs fell into disgrace because of the higher price and because they did not get further than 16-bit due to their structure, effectively often only 14-bit. The current state of the art and the making of chips is many times better than what was possible in the previous millennium. Added to that, the use of the FPGA, a programmable processor, has taken off to control a ladder DAC and optimally distribute the signal among the resistors. So that 24 and even 32-bit is feasible with an R2R (resistor to resistor) DAC chip. Now famous ladder DACs include: dCS Ringdac, Linn Organik, Metrum Acoustics DAC3, Naim ND 555 and Esoteric Master Sound. Not only the DAC chip is important, behind it Cary Audio has installed strong analog buffer circuits with its own over-the-top dimensioned power supplies.

The streaming electronics have not been forgotten in the DMS-700 and can handle streams up to DSD512 and PCM 32/768, has a full MQA implementation, does not turn the hand around for Tidal, Qobuz, Spotify, vTuner (internet radio) and is fully Roon Ready. Used as a DAC, the DMS-700 has an AES/EBU ingang, Toslink, twice S/PDIF and three times USB. As an extra an SD card reader for the purist. Wi-Fi and wired Ethernet is usable, Bluetooth both receiving and transmitting, which can be ideal for headphones. Analog outputs are available for RCA and XLR and digital outputs are both optical and coaxial. Those who like to use it can use the DMS-700 as a preamplifier in a system. There is an extensive volume control. The only thing to do is that Cary Audio clearly states that the purest reproduction is achieved at the maximum volume setting, whereby the volume control is completely bypassed. Which still argues for an external, high-quality preamplifier or the use of the DMS-700 with an integrated amplifier.

App and specs

A Crytek clock oscillator ensures minimal jitter. Seven independently controlled power circuits provide a stable voltage and current for the various parts of the player. A dimmable display with a resolution of 1660x1200 dpi shows what is playing, at what resolution, from which input and whether the signal is natively converted or first converted to a higher sample rate or even to DSD. All operation is done with an extensive remote control or with Cary's own App. An App that excels in

clarity and convenience, usable on a smartphone or a tablet. The App is clearly made for a smartphone and looks so large on a 12.9" iPad that the player-imitated display is shown in full size. Of course, Roon takes over part of the controls when that's where the music comes from.

Listing all the specifications goes too far it's quite a few. It is important to know that the highest resolution is only possible via a USB input. Toslink, RCA and AES/EBU are stuck as always at 24/192 PCM. Bluetooth is 4.0 aptX HD 24/48. A dynamic range is achieved from 124dB at 1kHz. The output signal is optimal at +8dB, which corresponds to 3Volt. File extensions that are processed are: .dsf, .dff (DSD64, 128, 256, 512), .aif, .aiff, .alac, .flac, .m4a, .mp4, .wav, .ape, .mp3, .aac, .wma, .ogg and .asf. An incoming signal can only undergo upsampling up to PCM 32/768 or up to DSD256, downsampling is not possible. This can be set via the App while playing. MQA decoding cannot be turned off if an MQA file is offered.

Environment

A Cary Audio DMS-700 belongs in a decent system given its price tag of € 8,900 and therefore came into its own in the large listening room. Power supply there is via an AudioQuest Niagara 5000. Amplifiers are from Audia Flight: Strumento No.1 pre and FLS4 end. Speakers include Sendor Classic 2/3 on Custom Design open frames and Townshend Podium's. With a Townshend Maxium Supertweeter on the speaker. For a network player, the Ethernet environment is important, as is the bron of themusic. Well, all the music is on a Melco N10, is picked up with Roon and sent to the DMS-700. Central switch between NUC, storage and player is a Melco S100-B with SBooster power supply. Ethernet cables are AudioQuest Vodka. The DMS-700 is connected with 808 XLR from Driade Flow. Just like his counterpart: a combination consisting of an Auralic Aries G2.1 streamer, AudioQuest Diamond AES/EBU cable and behind it a Metrum Acoustics Pavane DAC3 converter. Other cables: CrystalConnect for power and speakers. Yter XLR interlink between pre and power. Additionally, it was played with Tidal and vTuner, directly from Cary Audio's own App.

Arabella in Mozart

Anyone who, like me, manages to keep up with two hours and 19 minutes of concentrated listening to Arabella Steinbacher and her music from "Mozart – Violin Concertos" in one piece, knows just like me that the network player used is of high quality. In a sweet violin playing compositions are presented from the period 1775 to 1781, first violin and orchestra. The stage is large enough, the reproduction has no point of irritation and is brought lively. Against a quiet and quiet background, so that concentration goes entirely to the music and not to the technique. When switching to the own system, after first equalizing the playback volume of both players in the preamplifier, I can not express a preference. There are differences, but after 2 to 3 minutes of listening without switching, the differences per device are no longer noticeable as such. The same goes for upsampling, the display becomes a bit different, as long as the PCM remains a bit more pointed and a bit balder as a higher rate is applied, when converting the original FLAC 24/96 file to DSD256 a bit warmer and more floppy. Honestly, I prefer not to convert the file and play it natively. That even applies to 16/44.1 CD rips. I can imagine that a listener prefers the upsampling, however, the internal ladder DAC and the filters used are of such quality that it is not necessary. Actually, that also applies to the use of the Cary Audio streaming software versus the use of Roon. Ease of operation, extra information and the visual enjoyment of Roon are more important to me than the minimal display difference. Those who do not use Roon do not have to worry about that at all and just use the Cary Audio App and a NAS with music server software o.i.d.

What I want to hear in piano playing are long-held notes, which slowly die away in oblivion. I want to hear the torso sing, hear how the strings are struck and I want dynamics. Beethoven's "Für Elise" played under the hands of Lang Lang has all that in it and the Cary Audio network player knows how

to bring out detail by detail. Hard-played notes sing through the room, the lows have power in them, enough to make it difficult for low-power amplifiers. From the softest note to a powerfully struck keyboard, the Cary follows the game. Nowhere do I get the impression that the Cary is limiting the music dynamics. The very dynamically recorded work, in which the loudness war has fortunately been omitted, splashes off the cone. Another intensely beautiful piano playing comes from the acoustic CD of Silje Nergaard. Especially in the first track with the title "Be still my heart" the piano is an essential part of the beauty. Large and wide set at an appropriated distance for me. Where in the stereo image it is clearly recognizable that Silje is a whole piece in front of the piano. The depth, width and height image are no problem for the DMS-700 to place them in a believable way in the listening room. The Cary Audio is a bit brighter in sound than my reference, pulls you a little closer into the music, at the same time the intensity is such that the volume has to be turned down a dash. Otherwise, the music will come to me very much.

Oldies but goodies

Little gold of old, Dire Straits with "Planet of New Orleans". Beautiful spatial intro with the guitar far back. After which the music will come to the fore in a spacious stereo image. Knopfler word for word. Spread out bass to carry the music. Playful, fast and rich in detail are key words that keep coming back in the notes. Music plays easily, colorfully and full of details, without tiring. Not even after prolonged listening to many types of music. The DMS-700 has what it takes to hold the listener. Switching interlink to the Cary Audio, from a Driade Flow 808 XLR to a Yter XLR, ensures a somewhat quieter image with a bit more emphasis on small details. A bit further away from the listener, but does not give a dramatic difference. That leads to the conclusion that the output of the DMS-700 is designed in such a way that the capacity and induction of the cables used do not have a shocking effect. Building quality is a requirement, that also belongs to a player in this class, they are nuances that shift slightly with changing interlinks. Back to Silje, with Yter the piano tones are just a bit rounder and that is nice not to press too much on the ears. Even more gold from old, Jennifer Paige with "Crush", 1989 pop with a nice bass, polyphonic vocals in a solid rhythm. Not mother's prettiest in terms of recording, but that too must be playable and not only the modern, high res recordings.

It was on Facebook that "Mul mantra" by Snatam Kaur was mentioned as a beautiful recording. The meditative music, probably played a lot during yoga classes, does indeed have class when it comes to determining the display quality of a system. Moreover, even if you are far removed from yoga and other forms of meditation, the music is still worth it. There is an immersive rhythm that the DMS-700 effortlessly brings forward, so that the feet automatically move along with the rhythm. The second voices appear behind the singer, are setback. A played flute moves from front to back, from solo to accompaniment. During the almost eight minutes that the song lasts, it does not get bored for a second on this beautiful network player. From Kaur to the Bobo Stenson Trio is quite a transition, but with their album "Serenity" I also give jazz in a small setup the chance of the DMS-700. Music in which piano again plays a leading role, together with a plucked bass and soft drums. An opportune time to go back to the Driade Flow 808 interlink and experience how the midrange is emphasized and the bass has less intensity left. The stereo image is at the same time somewhat smaller, kept more within the arrangement of the speakers. Now this is not a review of interlinks but of a network player. I just want to indicate how the image of a player can change within a system. If the player with multiple cables, in multiple setups, still manages to please as the Cary Audio DMS-700 does, then you know that the basics are in order and the player can be purchased with peace of mind.

All added up

What you like about the Cary Audio DMS-700 is first of all the playback quality. The used AKM converter with its internal ladder DAC is largely responsible for this, I estimate. I like the way of displaying a ladder DAC. Direct, involved, intense and dynamic. A live feeling quickly arises, being

present at the recording. The return to the basic architecture of a DAC is expensive, see my comment from other players who are often in an even higher price range, but with integration in a chip still accessible. Not only the AKM converter plays a role, it is the entire set-up of the DMS-700 that cooperates. The streaming part, the analog part, the power supply, up to the housing on the heavy feet, everything is part of the whole. The Cary Audio network player is extremely complete as evidenced by the many inputs and outputs. Is flexible in design and those who settle for a very small step back in reproduction quality can use this player as a preamplifier, directly connected to a power amplifier. The operation has proven to be flawless, the App and the remote control work fine. The large display is informative and even readable at important points at some distance. The housing is functional, although the price level does not radiate from it. A choice, a slick appearance drives up the price and generally adds little to playing music. In short, here is a network player that is fully worth its money and can easily compete with other integrated network players, or with separate high-end streamers and DACs.

Price:

Cary Audio DMS-700 in silver of zwart €8.900,-

Distributor:

ERCT

Phone +31 646736557

www.erct.nl

Pluses:

- High-quality display
- Ladder DAC
- Many inputs and outputs
- Can be used as a preamplifier for digital sources
- Good working App
- Extensive remote control
- Informative display
- Room ready

Cons:

- Cosmetically well finished, but no beauty (taste issue)
- Can't think of any other points

Stars:

Five!