

Avantone Pro CLA-10 Passive Studio Monitor System and CLA-200 Studio Reference Amplifier

Avantone recreates a classic, with a beefy power amp to match



Almost like looking at a reflection

A near-perfect match for the venerable Yamaha NS-10

The NS-10 is possibly the most used, most loved, and most hated monitor speaker of the modern recording era. I was first introduced to them in 1984 at Castle Recorders, when they went up on the meter bridge of the just-installed SSL console. These were the original NS-10 monitors, famous for needing 1-4 layers of tissue paper over the tweeters. The exact number of required sheets (and the preferred brand) varied from engineer to engineer, but I distinctly remember using two 'quilted' sheets most of the time (and I never used the cheap stuff).

There has already been plenty written about why these particular speakers somehow work for so many mixers (and so many mixes), and how they have survived the test of time, so I won't venture there. I will say that I'm a longtime fan of the original, and still use mine to this day (second generation M series). Even after 35 years of mixing with these babies, I still have not found a suitable replacement—until now.

REVIEW BY GILES REAVES

Avantone CLA-10

Endorsed by well-known mix engineer Chris Lord-Alge (thus the 'CLA' in the name), visually and physically these speakers almost exactly match the originals—the only giveaway is that they say 'CLA-10' on the front. In fact, the spec sheet reads pretty much line-for-line identical to the NS-10. Improvements have been implemented where feasible,

including an improved woofer cone design, improved connectors, and higher grade capacitors in the crossover.

Like the original, the CLA-10 is a passive design. Avantone offers the perfectly matched CLA-200 Studio Reference Amplifier, which will drive them with more than enough clean power.

Avantone CLA-200

Weighing in at 44 lbs. (20kg), this is one hefty amp. Avantone chose to go

'classic' with this amp's internal (and external) design. The CLA-200 uses a Class A/B topology, Japanese components, and a substantial toroidal transformer. It's air cooled, which adds a bit to its weight, but at the same time this allows it to be used in close proximity to the listening position if necessary. The small studio owner in me appreciates this.

Back panel: the inputs are non-locking XLR jacks. I would have much preferred locking XLR connectors, or better yet, XLR combo jacks.

The Plan

I was excited to finally get these monitors into the studio and compare them side-by-side with my originals. Note that my own NS-10 speakers are not fresh by any means. That is to say, they fall somewhere between *good as new* and *in dire need of replacement drivers*.

I worked on a fairly dense, aggressive-sounding mix with a strong, up-front vocal—in short, a perfect job for the venerable NS-10 or any possible replacement!

First Impressions

On the first listen, before breaking them in, I noticed that they're a bit brighter and tighter than the originals. This comes as no surprise, as I would expect brand new speakers to sound both brighter and tighter than twenty-plus year-old speakers. But even before the break-in, and within minutes of initially turning them on, I heard those easily recognizable and classic NS-10 characteristics. When switching back and forth between the CLA-10 and my original NS-10 monitors, I noticed only a minor top boost on the CLA-10, with all other characteristics being an excellent match.

Listening, comparing, and mixing

Rather than listen extensively and try to describe what I heard, and because



these monitors have the very specific design goal of *sounding like the NS-10*, I think it best to describe how the CLA-10 sounds *different* than the NS-10.

But wait—do they sound exactly alike, or not? As with almost all vintage gear, good luck finding two originals that sound exactly alike! That being said, the only difference I heard was in the top end response, which seemed a bit hotter on the CLA-10 even after burn-in. The difference is small but noticeable,

and totally easy to work around when switching back and forth between the two. I compared them using the same power amp, the CLA-200, to make sure that power amps weren't creating any differences. The difference I heard could also easily (and likely) be down to the age of my own pair of NS-10 speakers.

Comparing their responses side-by-side (with a swept sine technique), one can see a few places where the high end response deviates as heard and described

above. The bass response is quite a good match across the entire bottom half of the audible spectrum, and spot-on with the LF roll-off response curve. Low end roll-off is a big part of what makes an NS-10 an NS-10, in my opinion.

Related Products

There are a few other items in the Avantone product lineup worth mentioning. One is the availability of the woofer and tweeter as drop-in replacements for vintage NS-10 drivers that have gone past their prime. Avantone also provides a replacement crossover with the improvements mentioned above.

Additionally, there is an active version of the monitor, the CLA-10A, that adds some cool features, such as the ability to adjust the 'tissue paper' effect on the tweeter.



CLA-10 Monitor Specs:

Frequency Range: 60Hz-20,000Hz (accessible musical range)
Power Capacity: Program – 60W, Maximum – 120W
Sensitivity: 90dB SPL (1W, 1m on axis)
Low Frequency Driver: AV10-MLF 18cm cone
High Frequency Driver: AV10-MHF 3.5cm soft dome
Cabinet: 10.4-liter sealed design, 18mm MDF with real wood veneer
Dimensions: 15" x 8 1/2" x 7 3/4"
Weight: 13.9 Lbs. (each)

CLA-200 Amplifier Specs:

Frequency Response: 20Hz-20kHz +/- 0.5dB
Output power: 200W at 8 ohms
Distortion: <0.05%
S/N: >94dB
Input Impedance: 20KΩ (balanced) 10kΩ (unbalanced)
Damping Factor (100Hz, 8Ω): 250
S/N, A Weighted: >103dB
Class: AB
Slew Rate (at 1KHz): 28V/us
Input Sensitivity (1KHz): 0.775V (0 dBu)
Total Harmonic Distortion (1KHz): <0.1%
Intermodulation distortion (at 10% rated power 1KHz): <0.1%
Crosstalk: -70dB

Conclusions

I'm now flush with options for maintaining or replacing my beloved NS-10 studio monitors! I could choose to start by replacing my little power amp with the hefty CLA-200. I could also replace my aging drivers, and stuff in a new crossover while I'm at it. Or, I could just go all-in with the full suite, and keep my originals as spares!

Then there's the other option: check out the powered version, and see if they can beat them all. In my tight studio space, it would be nice to not need a separate power amp. Every inch counts! ➡

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Price: CLA-10 \$699 (pair);
 CLA-200 \$799
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