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Avantgarde Acoustic UNO SD Hornspeaker Review

The luckiest I've ever felt was when reviewing the UNO SD speakers.

Review By Tom Lyle

In the mid to late 1990s, I heard a pair of Avantgarde Acoustic horn loudspeakers (hornspeaker) for the first time at a local high-end audio showroom. I don't remember the model of the speakers I was hearing, but I do recall that they were powered by a pair of Single-Ended Triode (SET) monoblock amplifiers. I assumed that these amps were a perfect match for these sensitive speakers.

Sadly, I was not impressed with what I heard that day. The speaker's biggest sin was an exaggerated midrange, epitomizing the "cupped hands" sound. Fast-forward to 2024, when I was offered a pair of Avantgarde UNO SDs for review in *Enjoy the Music.com*. I was skeptical, fearing I would experience something similar to what I had heard at that local dealer many years ago.

Before these speakers arrived, I shared my experience with Avantgarde's North American distributor, American Sound of Canada, about my experience with their horn speakers. The representative I spoke to reminded me that those speakers I heard at the dealer were made more than 25 years ago. Since then, Avantgarde Acoustics has been ceaselessly in their German headquarters, performing some severe R&D, which led to many design modifications. I was told that the UNO SD speakers I was sent for review were a different animal than the models I had heard so long ago.



Avantgarde's UNO speakers are available in both self-powered and passive models. The speakers I was sent for review were the passive models named the UNO SD. However, both the passive and active possess an internal 500-Watt powered subwoofer. The subwoofer's volume can be adjusted using two buttons on the sub's back panel DSP display. The subwoofer can also be connected to an equalizer via the speakers' back panel LAN port.

Stunning

The UNO SD's appearance was stunning. The review samples' cabinets were finished in an attractive piano-black lacquer. This lacquer, says Avantgarde, is reinforced with carbon fiber inserts. Besides piano-black, the cabinet is also available white satin, tiger rosewood, and zebrano (zebra wood). The two horns on the UNO SD are available in 12 different colors. The high gloss color of the horns on the review sample was a high-gloss grey that Avantgarde calls Andromeda.



The cabinets of UNO SC are made of a composite wood material and are heavily braced. On their website, Avantgarde says that the material of the UNO's cabinet "has the property of eliminating distortion" and can also reduce "mechanical influences," says Avantgarde, especially hysteresis. Very briefly, hysteresis is defined as a lag in the response time of the signal due to forces such as magnetism.

The speaker cabinet is equipped with rear panel ports, the tuned bass ports are calibrated for "musically relevant frequencies," and the tweeter is vented because air pressure builds up – and the ports compensate for this pressure.

Power

These hornspeakers' 107dB/W/m sensitivity is typical for horn speaker design and engineering. I used many different amplifiers to power the UNO SDs. I listened to the speakers with two different vacuum-tube powered amplifiers; for a short time, I used the 25 Watts per channel (Wpc) triode setting on the Margules Audio U-280SC 30th Anniversary tube amplifier that was still in the system after I reviewed it, published in the October 2023 issue of *Enjoy The Music*. The other tube amp was the PrimaLuna DiaLogue Six monoblock amplifier, also used in their triode mode, with an output of 40 Wpc. I also used two different solid-state amps to power the UNO SDs, including, for a short time before I had to return them, the Bella Audio Hanalei monoblock amps that were still in my system after their review. Their output was a massive 400 Wpc. The other was my reference Pass Laboratories X250.8 power amp with 250 Wpc.

I always assumed that a speaker with this high a sensitivity rating would not sound very good with a high-powered amp, yet the Pass Labs amp sounded great with the UNO SD speakers, although the Bella Audio's power was a bit too much of a good thing. The Pass Lab fared much better and spent much time powering the UNO SDs during the review period. The rest of the review system was the same as my last review in *Enjoy The Music*: the vacuum tube-powered Nagra Classic Preamp and the solid-state, two-chassis Pass Labs XP-27 linestage. The tubed Nagra line stage sounded best in this system, maybe because of its vacuum tubes or design; it costs almost twice as much as the Pass Labs' line stage.

Long-time readers should be familiar with my reference system's analog and digital front-ends. But as a reminder, the analog front-end consisted of a Basis Audio Debut V turntable, with the magnificent Top Wing Suzaku "Red Sparrow" MC phono cartridge mounted on a Tri-Planar 6-tonearm. The tonearm's integral interconnect was connected to the herculean Pass Labs dual-chassis XP-27 phono preamp. The digital front-end was comprised of a computer-based music server, its USB output connected to an EMM (Meitner) DA2 digital-to-analog converter. I sometimes used a Benchmark DAC3 HGC converter, which sounds fantastic yet is much less expensive than the EMM DAC. For 5" silver discs such as SACDs and DVDs, I used a now discontinued but excellent OPPO BDP-203 Blu-Ray/universal disc player. I connected the OPPO's analog outputs to the linestage when listening to anything other than SACDs or DVDs. When playing CDs or one of the rare times I stream through the OPPO, its digital output was connected to the EMM converter.

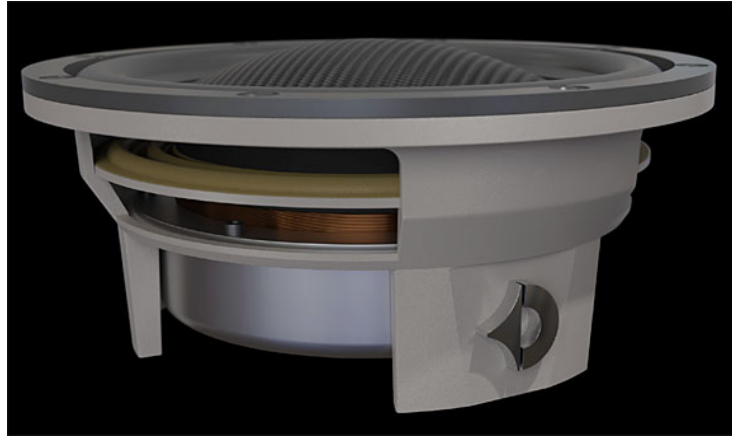
Powered

Thanks to the UNO SDs' powered subwoofer, the bass response of these speakers was superb. Their published specifications claim that the bass reached a subsonic 18 Hz, and I believed it. It has 10" drivers made of laded paper with a ferrite magnet. This bass did not sound "separate" from the speaker's other drivers. There were no sonic seams between the drivers.

I usually use a pair of SVS SB16-Ultra in my system, they are rather large, and each has a 16" driver. When the Avantgarde UNO SD speakers arrived, I soon realized there was no need to connect my subwoofers to the review system.

The Avantgarde UNO SD has two ABS pressure molded horns. The large midrange horn is at the top of the speaker's cabinet. It is about 19.5" in diameter and projects about one foot from the speaker's front baffle. The soft mesh midrange 5" driver has a double-ferrite magnet.

The smaller tweeter horn is in the middle of the front of the cabinet. It is about 5" in diameter but is practically flush with the speaker's baffle. Its laded paper driver is about an inch in diameter and has a ferrite magnet.



Album

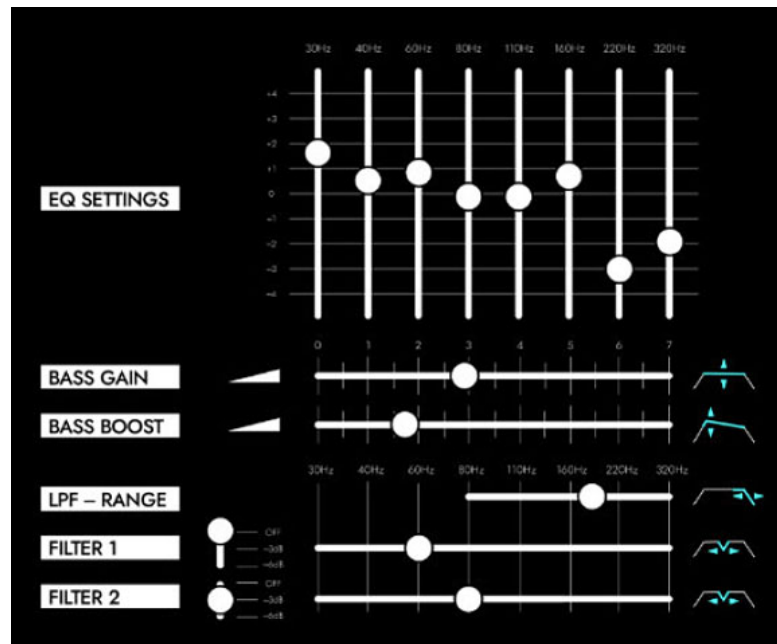
I've been listening to Frank Zappa's 1973 album *Over-Nite Sensation*, credited to the band Frank Zappa And The Mothers, since I was a pre-teen. My first copy was bought new at the mall, a domestic pressing on the Discreet Music record label. For those unfamiliar with *Over-Nite Sensation*, it is a showcase for not only Frank Zappa's complex musical compositions but also the musical talents of his band members. The music on this album seems to combine every genre that Zappa likes, and includes genres such as rock, jazz, and pop, and all their sub-genres, but most listeners describe this album as a twisted version of jazz / rock fusion.

Some of the names on this album should be familiar, including violinist Jean-Luc Ponty, George Duke on keyboards, and on two tracks, an uncredited Tina Turner, and the Ikettes singing background vocals. Zappa also relies heavily on the talent of the husband-and-wife team of Ruth and Ian Underwood. Ruth Underwood plays vibraphone and marimba, and Ian Underwood plays flute, clarinet, and tenor sax.

I've heard some claim that the popularity of this album is predominantly due to the lyric's risqué subject matter on just about every track. Sex sells. But as a very young listener, much of this erotica went over my head. But I fell in love with the complex jazz-rock fusion/progressive rock amalgam, especially the talented musicians' ability to play anything Frank Zappa composed, regardless of its complexity, and the seemingly telepathic communication between band members. I've been in love with this album all my adult life.

A recently released two-LP 45 rpm pressing of *Over-Nite Sensation* is spectacular. When listening to this album during the review period of the Avantgarde UNO SD I was convinced that this album possessed every positive sonic trait I could have ever hoped for. If you have ever heard a rock band play live (and I hope you have), with the volume of my linestage set to nice and loud, the bass response of the UNO SD came awfully close to replicating the real thing. Not only could I hear the lowest bass frequencies, I could *feel* them.

I attempted to tweak the sound of the bass of the Avantgarde UNO SD with the self-powered subwoofer's equalizer, accessible via the speaker's rear panel LAN port, but improving the sound of the bass in my listening room by adjusting the level of specific frequencies was a lost cause. I could change the sound of the bass, but I couldn't improve it. This may or may not have been due to the many acoustic treatment panels on the walls and ceiling of my listening room.



I set the power subwoofers' volume by ear to what I thought was the correct volume. I didn't have to touch the control since then. Tom Fowler's bass guitar on this Frank Zappa And The Mother's album sounded like a bass guitar, period. I really couldn't ask for more.

One of the joys of being an audiophile is hearing musical selections I have been listening to practically all my adult life come alive. *Over-Nite Sensation* is one of those musical selections. I love the two-LP version of this album, but. *Over-Nite Sensation* is also available as a lossless Hi-Res Music 24-bit/96kHz download, and its 40th-anniversary edition comes with many extra tracks. The extended version includes the original album, outtakes, alternate mixes, etc., and two live shows recorded in 1973.

Now and then, I joke that I am happy my linestage has a volume control (an attenuator), as an actual rock band playing in my medium-sized listening would be sonically overwhelming. Even when listening at a low volume, I was blown away by the UNO SD's reproduction of bass frequencies. Not only did the bass reach sub-sonic levels, but the low frequencies sounded nearly perfect, with a very tight midbass, a mighty sounding deep bass, with a transient response that added to the speakers' realistic portrayal of low-frequency sounds.

This album offers a complex *mélange* of styles and playing. The UNO SD was able to separate each instrument and place it within a gigantic soundstage. The midrange prowess of these speakers made it so each instrument in this huge soundstage sounded extremely realistic, making it so I felt I had entered a sonic time machine, sitting on a couch in the studio listening to the playback of the multitrack master tapes. What was also amazing was that each driver and the subwoofer created a sound that made the speakers almost disappear, the location of each of the drivers was inconsequential.



Versions

I have both mono and stereo versions of the Sonny Rollins album *Saxophone Colossus*. My copy of the stereo version is on LP, a relatively early pressing on Prestige Records. But it is much less enjoyable to listen to than the mono version. One reason for this is that this version was ripped from an SACD, and those DSD files were stored on a hard drive connected to my music server. Its sound quality was outstanding.

Perhaps I'm exaggerating a bit to make my point, but the Avantgarde UNO SD speakers transformed the Sonny Rollins digital audio signal into something magical. One might think the mono recording would group all the instruments between the two speakers. Yes, there was plenty of center fill, but the music on this album created a soundstage that filled the entire front of my listening room, with each instrument separated from the other into discrete pockets of sound - remarkably close to how a mic'd jazz ensemble might sound live.

The midrange of the UNO SDs was the main component of the vast soundstage that these speakers produced. The instruments on the album appeared as distinct entities within this cloud of sound that filled the space between the speakers and went way back behind them. The reverb applied to many instruments created a sonic nebula, and I could "see" this image surrounding each sound in the vast soundstage.

The two-foot-in-diameter midrange horn that faces forward into my room can create a soundstage that extends to each side wall and beyond the front wall of my listening room. I tried not to wonder about the science behind this and instead focused on the masterful music being fed to these speakers and into my ears. Thank you Avantgarde!

Sonny Rollins's sax sounded incredibly lifelike; the reverb surrounded his instrument like a sonic aura. Thanks to the UNO SDs, all the instruments on the celebrated jazz album from 1957 sounded excellent. On this album, only a trio of musicians supported Sonny Rollins, but these were not just any musicians. The celebrated Max Roach was on drums, Doug Watkins played the bass, and Tommy Flanagan was on piano.

Saxophone Colossus begins with "St. Thomas," a calypso of sorts. It is now considered a jazz standard, thanks in large part to drummer Max Roach, who seems to defy physics with his complex and engaging patterns. The UNO SDs let me hear the nuances hidden beneath his complex syncopation and flashy drumming. I also like the second side of the album even more. Its last track, "Blues 7," has quite a knotty melody, but at the same time, the "head" of this song is very catchy.

This album acted as a showcase for the UNO SD's midrange and treble. Rollin's sax was, of course, front and center in the mix. The ping of Max Roach's ride cymbal had such an incredibly lifelike sound, making me wonder what type of engineering sorcery was occurring at the Avantgarde factory! Tommy Flanagan's piano was at the rear of the soundstage; the UNO SD's midrange prowess made it so a mental picture of his piano formed in my ear-brain.

In case you were wondering, the "cupped hands" midrange anomaly of the Avantgarde speakers I heard in the 1990s was nowhere to be found. In fact, the midrange was one of the strongest characteristics of UNO SD.

Because I was wearing my reviewer's hat, or perhaps because I love the sound of deep bass, my mind kept returning to the UNO SD's self-powered subwoofer. If I dropped my guard and simply listened to the music, the bass never drew attention to itself unless this was the musicians' intention. The low-end sound of Doug Watkins' bass and Max Roache's drum kit was very close to perfect, mimicking the sound of a live jazz ensemble. The amount of bass was never an issue; I could enjoy this album as if I were hearing it for the first time. It was as if the speakers had disappeared, and all that remained was the sound of Sonny Rollins's quartet playing music that was genius in the form of sound waves.

Fortunate

I've been reviewing high-end audio equipment for over 35 years and have been fortunate enough to hear many different types of speakers – large, small, dynamic, electrostatic, horned, bi-directional, omnidirectional... you name it. One of the luckiest I've ever felt was when reviewing the Avantgarde UNO SD speakers.

Yes, the Avantgarde UNO SDs are large, and they might not fit every room's decor. Plus, one's spouse or partner might need some convincing before these speakers become part of one's system. But, if I were in the market for a new pair of speakers and could raise enough funds, I'd purchase the UNO SD (or a model higher up in Avantgarde's line). I'd have no problem making the UNO SD my new reference loudspeakers... that should say hornspeakers.



Specifications

Type: Three way hornspeaker with active woofer.
Frequency Response: Satellite 290 Hz to 22 kHz
Subwoofer 18 to 350 Hz
Sensitivity: >107dB/W/m
Crossover Frequency: 290 / 2800 Hz
Nominal Impedance: 18 Ohm
Recommended Amplifier Power: >10 Watt
Coplanar Driver Alignment: Yes
Omega Drive: Yes
AirGate: Yes
NatureCap Incl. PolarizationPlus Circuitry: Yes
Drivers: Tweeter 1"
Midrange 5"
Woofer 10"
Bass Amplifier: 500 Watt
Digital Crossover: DSP
Equalizer: Eight Band EQ
Digital Room Adjustment: Yes
Inputs: Loudspeaker leads and balanced XLR
ITRON Electronics: ITRON V/C Converter Technology: Yes
Fully Balanced Circuits: Yes
Power: Two channels @ 100 Watts
Semi-Active Version: Yes
Fully Active Version with ITRON Amplifier: Yes
Dimensions: 19.5" x 24.2 x 53.3" (WxDxH)
Weight: 180 lbs.
Price: \$48,800

Manufacturer

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