



Just When You Thought It Was Safe...
To Go Back Into An Audio Store –

The Avantgarde Uno SD Loudspeaker

by Roy Gregory

We live in an era of disrupters. There was the high-end, falling into the sort of ordered and recognisable pattern that makes the industry, audiophiles and customers feel comfortable: big names were producing ever-bigger and more expensive boxes, each claiming to redefine the state-of-the art before spinning off more affordable versions with a familiar predictability. Then along came Avantgarde, gleefully tossing an audio hand grenade into proceedings, shredding the status quo and accepted notions of the price/performance equation in one joyous, colourful and disturbingly stylish explosion of musical energy. By combining current-drive amplification (the Holy Grail of amplifier design) with their well-established expertise in horn-loading (and driver design to go with it), they produced a cutting-edge high-end design that didn't just match or exceed the competition in terms of musical performance, it crushed it on price.

Okay, so a hand grenade isn't exactly an H-bomb and it doesn't have the same instantly cataclysmic impact. But the Trio has both rocked the established order and opened the way for other 'alternative' challengers, like the Clarisys speakers. The earlier emergence of products like the Stenheim and Göbel Divin speakers had already undermined the complacent superiority of the big-name brands that have dominated the last decade. The Trio's arrival rent a gaping crack in their already crumbling façade, a structural chasm that should leave them seriously worried. With the arrival of the Uno SD, they should be petrified!

Any market has its benchmark or gateway products, accepted waypoints against which others are judged. For years, a pair of Wilson WATT/Puppies (in all their various guises) has been the twin gateposts at the



▶ entrance to the long drive leading to ultimate high-end performance. They defined not just a performance level but a price that was just about attainable and a size that could generally be entertained. They mark the point where serious hi-fi gets serious and they do it by dint of their price tag. Currently, any company looking to establish a complete line of high-end speakers needs to confront the price/performance benchmark represented by what has become the Sasha V. Avantgarde's latest, active Uno does exactly that. Meeting the Wilson speaker head-on in terms of price, it confronts reputation and longevity with technology and a performance that is, on paper (and in practice) impressively potent.

The Trio G3 might have gone off like a hand grenade: the impact of the Uno SD could be a whole lot more seismic...

The Uno SD is the most affordable and compact model in Avantgarde's range of high-end loudspeakers. Like the Duo and Trio above it in the line, it exists

in both passive and active forms. Like the larger models, the active option offers by far the best value. The iTron amplification delivers astonishing musical communication, clarity and dynamics, performance that would challenge the conventional alternatives at many times its (comparatively) modest asking price. That's no surprise, given the huge theoretical advantages that the current drive approach implies, the reality of which

you can read about in my Trio review https://www.theaudiobeat.com/equipment/avantgarde_trio_g3.htm. In the case of the Uno SD, the differential between passive and active models is €28,640 versus €41,340



(in basic finish and including 20% sales tax). That €12,700 increase in price doesn't just buy you four channels of amplification and a whole bunch of tuning options: it buys you four channels of the very best ▶▶

▶▶ amplification available at any price, at least as far as this speaker is concerned.

While we are on the subject of price, the €12,700 price differential between passive and active is also the upgrade price from one to the other. The review speaker cabinets were finished in a flawless piano black – a €4,700 option – although truth be told, I've

can quite possibly be used with an existing amplifier and can be upgraded later. In some cases, running an existing amplifier might just ameliorate the 'shock of the new' (you know, that sinking feeling you get when you realise just how bad your existing system actually is) although, in a situation where you've got speakers and an amp to trade in, I'm not sure the economics



always been happy with the mat black finish on other Avantgarde speakers. The trumpets are available in three standard, high-gloss finishes (grey, black or the review red) with the cost option to specify alternative metallic or ultra mat paint finishes.

The active/passive question is worth a moment's consideration. On the one hand, the price/performance equation offered by the unique iTron amplifier package is hard if not impossible to beat. On the other, the passive option costs less initially,

will ever support the passive route. So to me, it makes more sense as a stepping-stone than a way of avoiding buyer's remorse. Just remember that the Unos present an 18Ω load, so some amps are going to be far more comfortable with that than others...

Looking more closely at the speakers themselves, the Uno SD shares its basic form factor with the larger Duo SD, the 160mm treble and 500mm midrange horns piercing the front-panel of the rectangular cabinet. This move away from the skeletal ▶▶

▶▶ space frame construction of earlier models affords a number of advantages, in terms of simpler and more easily controlled construction, a larger volume for bass loading and greater surface area for dissipating the heat generated by on-board electronics. The Uno's entire rear panel is a ribbed heat-sink and even with all that radiating area, the active version still runs noticeably warm to the touch. The bottom quarter contains the inputs and control panel for the bass driver, powered whether you run the rest of the speaker active or passive. That bass driver is itself an object lesson, not just about Avantgarde's serious commitment to their craft, but also how different this speaker is to the average box. The 10" paper-coned unit uses a 6" voice coil, a massive motor and is connected to a 500Watt amplifier! Run it passive and it will run on a speaker level input (via binding posts) or at line-level via an XLR. As well as the various controls and the status display on the rear panel, there's also an XLR 'daisy chain' output and a pair of RJ45 Ethernet sockets. The network connections allow you to hook up the bass amp(s) to control software loaded onto a PC or MAC, delivering usefully precise control of the speakers' bottom end, the features and functionality of which I'll get to in a moment.

The upper reaches of the rear panel are populated with either the bi-wired binding posts for passive connection (at the top) or the XLR input and dip-switches for the separately powered iTron active amplification and crossover. Those dip-switches allow adjustment of relative level between the mid and treble units, as well as the overall gain of the horns'

output relative to the bass section. And yes, you got that right: driven active, the Uno SD does require two separate power cords. In this case, signal connection would be made using a single XLR lead, normally connected to the bass amp and then, via the 'daisy chain' socket and a second XLR interconnect to the iTron section. The excellent outrigger feet that I first encountered on the Duo GT are included here, a welcome sight as they make the critical process of set-up significantly easier.

One thing that the Uno SD does share directly with the Trio G3 is its bass control system and software. When I reviewed the Trios, the Space Horns were software controlled with an incredibly complex programme that allowed remarkably precise adjustment at the expense of an impenetrable interface. That software has developed substantially in the intervening period and now operates on a dual-level basis – a clear and intuitive control panel for everyday use and users and



a password protected level for professional installers with the training and measurement equipment required to use it without totally screwing things up. It's a near perfect arrangement. Run one Ethernet cable between the speakers and a second to the laptop you'll be using, open the Avantgarde software (downloaded from





▶▶ their website: there's a Software tab in the Support section) and it will search for and connect to each of the bass sections on the network – whether that's the two Unos or a quartet of Space Horns. Click on a bass unit and you get the control panel you'll see in the pictures. You can adjust each of the speakers individually, or pair them so that adjustments are shared.

The control panel gives you the ability to adjust overall bass level, the crossover point and bass 'tilt', along with clear explanations as to what these functions do and what you should expect to hear. There are two 6dB/3dB notch filters that can be set for frequency (to help combat dominant room nodes) and an eight-band graphic equaliser – although it's the three lowest bands at 30, 40 and 60Hz that are likely to prove most useful. Using these options along with the timed low-frequency sweep and discrete low-frequency tones on the Nordost test disc (to first identify key frequencies and then adjust or accommodate them) it was astonishingly easy to integrate and optimise the Unos' bottom end. Sitting with the lap-top at the listening seat, at first I tried adjusting them as a pair, but ultimately it was easier and more productive to run and fine-tune each speaker in turn with a mono signal. Dialling in sub-woofers is a familiar and always demanding task. The

Avantgarde software package made it considerably easier and more intuitive. Could taking things to the next level improve results? Quite possibly – especially in a difficult room. But I was astonished not only by how easy and effective the Avantgarde approach was, but the quality of the results achieved. It's a perfect example of that old audio conundrum: building performance potential into a product is one thing; making it deliverable in the real world is quite another. When it comes to adjusting and integrating the bottom-end of their latest speakers, Avantgarde have pretty much nailed it.

Unfortunately, as clever as they've been with the Unos bottom end, there's not much that the company can do about the exacting demands imposed by spherical horns. When it comes to positional and attitudinal precision, horns are just as demanding as other loudspeakers. But it is the clarity with which they expose any imprecision that in turn imposes its own, extreme demands on placement and set up. It's to be expected on a speaker system with the complexity and cost of the Trios. I suspect it might take more than a few Uno owners by surprise. Any imprecision in placement or alignment will be obvious in a terms of an off-set or truncated soundstage and/or a lack of musical cohesion. With that in mind, here's the set up protocol and order of priorities that I followed... ▶▶



▶▶ With the speakers set flat (so no electrical adjustment of bass or relative level) look for initial placement and listening position that delivers the best sound. That puts you in the ball-park, which is where the precision set up starts – and where it deviates from the approach I adopt with more 'normal' speakers. The first thing to do is adjust the distance and angle of each speaker to the listening seat. That's going to mean moving at least one of the cabinets, but you need to arrive at as near to an isosceles triangle as possible. The closer you get to that ideal (equal distance/equal angular offset, toe in to point each speaker at the listener's nose) the easier things will become. Think millimetres, not centimetres! That normally involves laser or tape measures, low-tack tape and a lot of Sharpie notations. (I actually cleared the floor and marked out a precise triangle as a starting point...) Once you've achieved that, level the speakers so that each cabinet is vertical and then re-set the listening distance as precisely as possible.

Step two is to set the height of the speakers using a laser level. In most rooms that will result in the two

speakers being different heights off of the floor. But remember, the bottom end of the speaker is as easily and precisely adjustable as the feet make adjusting its height off the floor and you can compensate here far more easily than you can correct for a different listening axis on the left or right horn drivers.

With the speakers properly located, you can finally set about adjusting rake angle. This is arguably the single most critical adjustment of all – hence all that effort to get the centre of each high-frequency driver to exactly the same height and distance from the listening seat. You can assess listening axis by the simple expedient of raising or lowering yourself in the listening seat. Using a digital level, you can then dial in the appropriate rake angle, ensuring that it is exactly the same for each speaker.

One Trio owner (who takes set up just as seriously as he should) has cut an MDF disc that fits over the tweeter horn on his speakers. Using the same lathe, he cut a hole through the exact centre of the disc and perfectly perpendicular to it. In this hole he has mounted a laser that can be used along with a fixed ▶▶

▶▶ target to precisely align the speakers, individually and one to the other. It gives you an idea of the accuracy with which the Avantgarde speakers can and should be aligned – and just how audible such precise set up is when it comes to the musical performance that results. Pay the appropriate care and attention to angular and positional matters and it isn't difficult to extract great performance from the Unos, simply exacting. But you'd better believe that the more effort you put in, the greater the musical rewards.

Once you've refined rake angle and offset angle, you are finally ready to dial in the bass and relative levels, adjust azimuth and make minute tweaks to toe-in to really lock in the sense of musical presence and projected energy, the things that makes the Unos so special. Just be careful to keep any such physical adjustments small. At this stage, even tiny shifts can have a pretty dramatic impact on the sense of musical focus, clarity and coherence. This is one situation in which close enough simply isn't good enough! The steps I've described could be executed in a couple of hours. But just because you could, it doesn't mean that you should. All told, really optimising the Unos took me the best part of three days, constantly revisiting

and refining each part of the process (and its onward implications). I achieved really enjoyable and engaging musical results – but I also know that there's more in there to be got out, given the time and opportunity. Each and every time that I refined the geometrical accuracy of the set up, I was rewarded with clear improvements in musical performance. Fail to do so and you'll be selling the speakers and your investment in them, seriously short.

Are there any other considerations when it comes to set up? There certainly are. The speakers are supplied with small but robust casters, which makes moving their not inconsiderable weight considerably easier. However, they can be a double-edged sword. Quite tall, they fit into the bottom of the same threaded carrier that accepts the much shorter spikes. That means that they are useful (even essential) for initial positioning, but no more than that. In particular, if anybody EVER tries to demonstrate the speakers with the wheels fitted, ask to have them removed. Otherwise you'll have no chance of hearing what the Unos can do...

Secondly, ancillaries matter. That means that cable quality (power cables and interconnects) is clearly



Axis alignment disc attached to the front of a trio tweeter module.



The lazer sight fixed in its centre...



...and the spot /target marked on tape at the listening position. Careful adjustment and spot and target coincide exactly.

▶ audible and that you need to run the same cables from the preamp to each speaker, between their active sections and supplying AC. With plenty of cable length available and aesthetics a secondary consideration, I chose to feed the iTron section direct and daisy chain to the bass amp. This delivers a little more midrange immediacy, presence and snap, at the expense of visually untidy trailing cables. I ran identical power cords (both type and length) to all four powered modules and grounded each cabinet to its own QKore I. I also used large, HRS damping plates on the top surface of each cabinet, which introduced a welcome increase in clarity and separation as well as a worthwhile reduction in grain. You are also going to need a serious line-stage. It will have to be quiet and capable of running long XLRs. I used the CH Precision LI (dispensing with an XI on this occasion, in deference to the price of the Unos).

With all that taken care of, it's finally time to sit back and face the music. Fortunately, it's well worth the wait.

Sit in front of a dialled-in set of Uno SDs and you simply can't miss the concentrated energy, solidity and presence they bring to recorded music. Play rock or pop and it's like hearing the band on their best night on their best tour. Play 'Jumping Someone Else's Train from the Cure's *Boys Don't Cry* (Fiction 2442 178) and

the propulsive power and urgency of Lol Tolhurst's drumming, the meaty solidity of the drum sound doesn't just set your toes tapping, it pins you to the seat, encouraging (daring?) you to advance the volume



control. There's a slashing edge and wilful abandon to Robert Smith's guitar, a combination of poise and recklessness that reminds me just how under-rated a guitarist he is. (Those in doubt should check out



▶▶ Siouxsie and the Banshees' live album *Nocturne* [Polydor 815979-1] with Smith guesting on lead after Siouxsie fired yet another guitarist on the eve of the tour. Shorn of vocal responsibilities, his playing rises to a new level, especially the fractured brilliance of 'Dear Prudence'. The more measured beat of 'Three Imaginary Boys' emphasises the solid presence of the drum sound, the way it plants the foundation for the sculpted bass and guitar lines. After that, there's nothing for it – *Nocturne* just has to get an outing...

This infectious, engaging quality runs through whatever you play. A recently acquired UHQ-CD transfer of the Bernstein/VPO Shostakovich *Symphony No. 6*, (UCCG-90588, originally recorded for DGG) is totally different, yet musically speaking, just as compelling. The jaunty opening to the second movement in this live concert recording is alight with life and vitality, before transitioning to a darker, brooding atmosphere, the building threat and the shattering crescendo that once more clears the air. The lively woodwinds are pipe-ingly impressive, but it's the substantial textures of the bowed bass and hollow pounding of the drums in the climax that really drive home the full dynamic and emotional range in the music. Art Pepper's *Straight Life* (Galaxy 802/98.175) immediately finds its groove, pulling you in so that, by the time you reach 'September Song' and the Pepper-penned 'Make A List' you track the band's musical meanderings without ever losing the trail. Pepper's alto is breathy and immediate, as expressive as it is intimate, but once again it's the band's internal

chemistry, the prompts and contrasts from the rhythm section that bind the tracks together: Red Mitchell's tactile bass smooches through its long, swooping lines or pulsing, repetitive pushes, while Tommy Flanagan's crisply weighty piano figures flit and dart above them. Whether it's Pepper or Bernstein, The Cure or The Communards, there's a holistic coherence to the Uno's musical output, a sense of substance and purpose.

But there's more to the Unos than a healthy dose

of dynamic enthusiasm and musical meat and potatoes. This is where all that TLC you poured into aligning the speakers comes together. Avantgarde have paid considerable attention to aligning the acoustic centres of the different drivers and, assuming you've got that alignment correct with the listening seat, the speakers' temporal accuracy locks in. So it's not just energy and substance, it's all that musical intent arriving at just the right time, while as already described, the speakers' dynamic coherence ensures the right sense of purpose and direction hitched directly to that rhythmic integrity. It helps explain why the



Cure tracks have such a compelling and engaging sense of musical drive (headlong or more measured), an almost metronomic rhythmic intensity, long before drum machines and sequencing became the norm. It also explains just how the sporadic structures and disparate phrases that characterise the Shostakovich hang together in such a holistic fashion.

But if you want to encapsulate the Uno SD listening experience in a single album, look no further than Elvis ▶▶

▶▶ Costello's astonishing debut, *My Aim Is True*. It's possible to make a strong case that the late '70s, which saw the conjoined the vibrant energy of New Wave with the autumn of analogue recording, represented a high-point for UK rock and pop recording. The musical attack, attitude and unleashed talent of the artists was captured on two-inch tape, with the result that the recordings still sound just as fresh and pointed today. The Unos deliver tracks like 'Welcome To The Working Week' or 'Blame It On Cain' with all the expected snap, vigour, intent and impact you'd expect. But it's the more reflective 'Alison' and the haunting, sardonic, reggae-tinged 'Watching The Detectives' that show the Unos' uninhibited expressive range and more sensitive side. When the music calls for a dynamic jump or a metaphorical slap in the face, the Unos are only too happy to oblige: just witness the jagged guitar licks and rolling cannonade of drums that announce the opening track. But from the opening bars of 'Alison' you are suddenly in a very different emotional and musical place. The deft subtlety of the sparse percussion work, the gently insistent pulsing of the bass guitar and the mournful elegance of the beautifully figured guitar line dove-tail perfectly with the vocal, accenting and underlining, offering support and emotional emphasis by turns. It's a beautiful song that is beautifully played and, on the Unos it reaches the level of connection and emotional intensity normally reserved for far, far more expensive rigs.



In this pre-Attractions recording, 'Watching The Detectives' steers you in a different direction again, the musical fabric resting firmly on the pitch-perfect, tactile, Trenchtown trip of producer Nick Lowe's bass guitar. Would anyone but a bass guitarist have taken this path? Who knows – but it certainly ranks as one of Lowe's finest moments. The halting, gappy rhythm and undulating melody he lays down creates the space for occasional guitar and keyboard interjections, all working

around the central vocal. But it's the clarity and intelligibility in the voice that is really arresting, a lyric that really hits home, given that strange combination of space and support by the carefully constructed arrangement. But as impressive as the musical performance and impact is, it's only half of the story here. In this case, what I'm playing is not the original, fresh, crisp sounding Stiff Records release (remember the slogan, 'If it isn't Stiff, it isn't worth a ****!'). What I'm playing is the Mo-Fi 200g reissue (MFSL I-329) with its heavy, turgid, murky sound and constipated dynamics. Yet the Unos manage to excavate and resuscitate the performance, projecting it

whole, vivid and brimming over with angst and attitude, straight into your listening room. It's an ability that's not to be underestimated or dismissed. For all the musical excitement they can generate, the effortless volume they can produce, the sheer substance of the musical performance they deliver, what marks the Uno SD apart from other amplifier/speaker systems at its price point, is their ability to squeeze the musical juice from even the most unpromising pressing or recording. ▶▶

▶▶ Time and again, they breathed life into discs I'd all but abandoned (but in the way of these things, never got around to discarding) until, after a while it became a challenge, even a crusade to discover some forgotten disc that might upset the Unos' musical equilibrium. I'm still searching...

I've talked about the Avantgarde's dynamic and temporal qualities, as well as the sense of substance and easy musical organisation that goes with them. But one

the driver and the neck of the horn have all gone a long way to eliminating traditional horn artefacts. Listen to the Unos with the correct rake angle and attitudinal adjustment and not only will the sound be contiguous, it will be properly proportioned with a natural perspective, as well as devoid of honk or piping colourations. The overall tonal balance is tuneable within reason, by varying the bass level and cross-over point, but push that too far and you'll destroy



other facet of their performance is a mighty contributor to that musical integrity. One major challenge that faces any hybrid speaker system (and the Unos are a 'double-hybrid' in that they don't just mix driver types, they mix amplifier technologies too) is achieving a natural sense of integration and musical proportion. For all their considerable virtues and attractive paper performance, this is exactly where earlier Avantgarde hybrids came unstuck, with the result that I never heard the earlier Duo models (with the honourable exception of the 'all-horn' Duo-Mezzo) achieve the same levels of musical communication and impact that came so effortlessly to the Trios.

That changed with the latest, active Duo GT and it's a change that extends to the Uno SD too. This speaker is not just capable of superbly seamless, top-to-bottom continuity, it is considerably easier to achieve, thanks to the elegant active bass management system. The G3 revisions to drivers, horns and the interface between

the overall musical balance, undermining the rhythmic and temporal integrity if you run it too high, eroding the weight and substance if you stretch too low. But in between, with experience, trial and error you'll hit the musical sweet spot for you, your room and your system.


Play Isabelle Faust's beautifully realised recording of Locatelli *Concerti (il virtuoso, il poeta* – with Antonini and Il Giardino Armonico – Harmonia Mundi HMM 902398) and the soundstage is nicely proportioned, albeit without having the transparency, walk in dimensionality or scale achieved by the Trios. But the instruments are tonally natural and naturally proportioned, the playing is vigorous yet precise and Faust delivers the solo part with incisive musical agility and an unerring sense of rhythmic rigour. The dance-like quality in the music and the cohesive ensemble playing both gain from the stable solidity of the staging and the tonally and dynamically contiguous performance of the speakers. There are no jarring notes or discontinuities ▶▶

▶▶ to rip the fabric or destroy the illusion. Sir Thomas Beecham famously remarked that, "There are two golden rules for an orchestra: start together and finish together." It's a sentiment that applies equally to audio systems, especially speakers. In fact, it sums up the Avantgarde Unos perfectly. Listen to these speakers and you really do get a sense of everything (musicians and drivers) moving together, in concert, in step and in the same direction. Because of that, as great as the Unos are at squeezing the last drop of music from some desiccated recording, feed them the good stuff and they really spark to life.

Historically speaking, the two-way hybrid Avantgardes, whether Unos or the various Duos, always represented a left-field choice: A choice that offered some significant strengths (in terms of dynamics, efficiency and headroom) but also some equally obvious weaknesses (largely in terms of colouration and continuity). Living with those models was always something of a compromise, a case of working to maximise the benefits without allowing the flaws to become too intrusive. The G3 iterations have changed all that. After the conspicuously successful Duo SD, the Uno SD takes the step-change in performance even further – not because it's better, but because it matches the overall character and mirrors the capabilities of the Duo, in a smaller package at a far more approachable price. Refinements in the driver horn interface, as well as the horns themselves, that superb, configurable bass and, of course, the iTron amplification and active topology have created not just a step-change in performance but a dramatically more balanced product. The Uno SD is a speaker that has come from left-field to stand firmly in the centre-circle, with traditional hi-fi qualities that are directly comparable to its price peers and performance benefits that take it onto another level entirely. The speaker's overall balance and seamless integration place the Uno firmly in the mainstream: just as firmly as its looks and superior musical properties separate it from and lift it clear of the 'me-too' herd.

But what is the Uno's competition? Looking at the active speaker, I can't think of a single, conventional amplifier that's going to challenge the performance of the iTron package and costs even close to the right

side of €20K. You might find a tube amp that brings something you prefer, or leans the system sound in your preferred direction, but then try and find a €20K speaker that can live with the dynamic range, bandwidth and headroom of even a passive Uno. Any way you cut it, the Uno SD is an awful lot of speaker and amplifier, but even more music, for the money. If you are in the business of building speakers in the 20 to 30K price range, be afraid; be very afraid. If you are shopping for speakers in that price range (or even higher) beetle along to your nearest Avantgarde dealer. You could be in for a very pleasant surprise indeed!

Which brings me to something that seems almost intuitively obvious but still came as a wonderful surprise. Musically, I've left the best 'til last. These speakers just love Miles! Anything from *Birth of The Cool* to *Some Day My Prince Will Come*, *Workin'* through to *TuTu*, the injection of life and vitality, musical articulation and tonal brilliance triggers a renewed fascination in these familiar recordings. Of course, they love Dizzy and Cannonball and John too and I've already spoken about Art: but Miles – with Miles it's something special. Over Christmas I found myself working my way right through my considerable collection of Davis discs – and enjoying them immensely. If you are going to listen to the Unos, take Miles along with you. You might just rediscover his music the same way I did. It's kinda what the Unos do... 

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Prices and availability

Avantgarde Uno SD (Passive)	from €26,840
Avantgarde Uno SD (iTron Active)	from €41,340
Upgrade from Passive to Active	€12,700
All prices including 20% sales tax	