



## AUDIO REVIEWS

MAY 2017



# Avanti

COUNTRY OF ORIGIN



**Reviewer:** Srajan Ebaen

**Sources:** 27" iMac with 5K Retina display, 4GHz quad-core engine with 4.4GHz turbo boost, 3TB Fusion Drive, 16GB SDRAM, OSX Yosemite, PureMusic 3.01, Tidal & Qobuz lossless streaming, COS Engineering D1 & H1, AURALiC Vega, Aqua Hifi Formula, Fore Audio DAISy 1, Apple iPod Classic 160GB (AIFF), Astell&Kern AK100 modified by Red Wine Audio, Cambridge Audio iD100, Pro-Ject Dock Box S Digital, Pure i20, Questyle QP1R; *Metrum Adagio* [on review]

**Preamplifier:** Nagra Jazz, Esoteric C-03, Vinnie Rossi LIO with DHT module, COS Engineering D1, Wyred4Sound STP-SE Stage 2

**Power & integrated amplifiers:** Pass Labs XA30.8; FirstWatt SIT1, F5, F6, F7; S.A.Lab Blackbird SE; Crayon Audio CFA-1.2; Goldmund Job 225; ; Aura Note Premier; Wyred4Sound mINT; Nord Acoustics One SE UP NC500MB; *Linnenberg Audio Adagio* [on loan]

**Loudspeakers:** Albedo Audio Aptica; EnigmAcoustics Mythology 1; soundkaos Wave 40; Boenicke Audio W5se; Zu Audio Druid V & Submission; German Physiks HRS-120; Eversound Essence

**Cables:** Complete loom of Zu Event; KingRex uArt, Zu and LightHarmonic LightSpeed double-header USB cables; Tombo Trøn S/PDIF; van den Hul AES/EBU; AudioQuest Diamond glass-fibre Toslink; *Arkana Research XLR/RCA and speaker cables* [on loan]; *Sablon Audio Petit Corona power cords* [on loan], Black Cat Cable Lupo; Ocellia OCC Silver

**Power delivery:** Vibex Granada/Alhambra on all components, 5m cords to amp/s + sub

**Equipment rack:** Artesania Audio Exoteryc double-wide 3-tier with optional glass shelves, *Exoteryc Krion and glass amp stands* [on loan]

**Sundry accessories:** Acoustic System resonators

**Room:** Rectangular 5.5 x 15m open floor plan with two-storey gabled ceiling, wood-sleeved steel trusses and stone-over-concrete flooring

**Review component retail:** £4'280/pr standard finish, £5'010/pr upscale finishes

**You needn't be an Italian kid** to know what mum meant when she shouted "*avanti, avanti!*" Audio Physic's narrow Avanti tower—1.7" tweeter + 5.9" midrange visible, 8" long-throw woofer with downfire slot hidden inside—says the same. Even though the word's actual meaning is *forward* or *ahead*, "let's go, let's go!" is implicit. That's never about tomorrow or later. It's always now. If there's any truth in advertising, we'd not expect a poncified lazy transducer. We should get one that's quick and snappy to turn on a dime. If there again were a Roman numeral in the name as there was in the past, it'd be a IV to signal 4th-gen maturity as a single lifer; or fourth incarnation if you kept on coming back. Instead, this speaker reborn goes by Avanti; just Avanti.





The rendering shows porous open-cell ceramic foam dampers in strategic locations which include resistive damping for the holes of the window-pane braces and even the woofer's floor coupling interface. It also shows discrete chambers for the upper two drivers. Not apparent is the proprietary nature of these transducers which are manufactured for them by Wavecor on tooling developed and owned by Audio Physic.



Their 3rd-gen ceramic-coated aluminium *Hyper-Holographic Cone Tweeter* above 3kHz is not a ubiquitous dome at all but a cone with a dust cap...



... whilst the equally 3rd-gen *Hyper-Holographic Cone Midrange* with ceramic-coated aluminium membrane explores new mechanical ground with a dual-basket array that combines a die-cast aluminium outer for stiffness and thermal coupling with an optimally damped plastic inner frame [red in exploded drawing]. As the drivers are from their baffle and the filter boards from their supports, even the single-wire WBT terminals are elastomerically decoupled. With a claimed bandwidth of 31Hz-40kHz at 89dB/4Ω, the 29kg Codex takes up 17 x 39cm of floor space—actually a bit more with its outrigger stabilizers—and 108cm of air space. Finish options include five wood veneers and 12 high-gloss, yes *glass* skins. The latter not only increase weight but enclosure stiffness by becoming a hard outer layer.

The spike footers can be upgraded to Audio Physic's 'levitation' devices where counter magnets create better mechanical isolation from the floor. Alternately, there's also the optional base in black or white gloss as shown in the opening photo.

Right after that review, their UK importer Elite Audio offered me the next model up: the Avanterra III with 2 x 7" woofers per cheek in Audio Physic's classic force-cancelling sidefire array. Having been *tremendously* smitten with the bass system of the Codex which avoided *all* the usual port issues; and less so with the room integration of the Boenicke W11's sidefiring woofer... I instead asked for the Avanti to give exposed woofers a miss altogether. It retains the same tweeter, midrange and hidden-woofer bass. The latter simply shrinks from 10" to 8". Eliminating the 150-350Hz 7" mid/bass coupler of the Codex turns the Avanti into a classic 3-way. Its specs go narrower, shallower and shorter on dimensions and only 3 Hertz lighter on bass reach. The reach into your wallet is a lot lighter than just three quid, however. Given the superlative showing of the bigger sibling in our 100m<sup>2</sup> room below, I reckoned that the Avanti would be all anyone could want for a more standard 5 x 7m room. Luckily Elite were happy to accommodate my preference. I could learn how downsizing would sound out.





**Bassment.** With Avanti chief designer Manfred Diestertich's solution, both the woofer's front and rear wave encounter an *immediate* boundary. That creates very high radiation resistance or mechanical braking power. Within an inch, the front wave hits the main cab's inside wall. Within inches, so does the rear wave in its woofer chamber which is so shallow as to have the magnet protrude on the other side. The rear wave escapes downward through two ceramic foam tiles in the chamber's bottom. Those porous barriers exert higher resistance with rising SPL.

The frontal wave propagates through the available volume of the main enclosure, then escapes through a downfiring slot behind the front baffle. Its 'throat' gets its own ceramic foam damper to prevent chuffing even at elevated levels. In this way, both woofer exits hit the floor as their secondary close boundary. This adds to our non-ported alignment's highly pressurized behaviour for excellent self damping. It might even downshift the woofer's resonant frequency as Alex Riddtähler's Ripol® geometry does? Initially the hidden woofer was an experiment to combat dealer feedback over the model Classic 20's looks. Its original version used the firm's signature force-cancelling woofer array. That meant grills on each side which caused critique. As it happened, the sonic performance of the hidden woofer caught on big far beyond the resultant cleaner cosmetics

Likewise for the surcharge glass panels. Those can finish off the enclosure instead of the basic veneers. Initially a purely cosmetic option for the Classic range, they bond a very hard outer layer to the cabinet's softer MDF core. The resultant sandwich made for a quieter cab which made for superior sonics. As an added bonus, the lustre of glass—which in the case of veneers as shown above actually *encapsulates* them for total protection—is impervious to swirl marks. Unlike high-gloss lacquers, it retains its flawless appearance across the duration of actual ownership. Over the 1989 original and successors like the one at left, the Avanti 'IV', relaunched for the firm's 30th anniversary two years ago, renewed *everything*; including all drive units. The market must have fêted it for the later Codex to adopt the identical concept. I wanted to know whether the Codex was simply an über Avanti, hence the Avanti a baby Codex. Or, did each model have its very own personality profile to appeal beyond room size and budget to different listener tastes? Graciously, Elite Audio consented to dispatch my Avanti loaners before retrieving their Codex floor samples. I'd enjoy some strategic overlap. I wouldn't need memory but could conduct actual side-by-side comparisons; my very own in-house dealer demo if you will. Playing punter by proxy, which one would I buy; and why?





This photo shows clearly how the glass panels float. They leave small if very precise gaps. In effect, opting for the designer look adds *two* layers to the core MDF cabinet: medium hardness black porous adhesive and 5mm hard glass. The end result is a tri-laminate affair with all the usual resonance-attenuating properties which such bonding of dissimilar layers bestows. For once, more refined optics actually equal superior sonics. In this context, opting for a basic veneer seems churlish.

### The Avanti of 1993

What's more, the user can easily replace the cloth-less black baffle insert with the included cloth-covered version. Unlike conventional grills, this causes no sonic compromise. What surrounds the drivers by way of solid material and its geometry remains unchanged. Adding a grill creates no diffraction issues. Once more, cosmetics don't conflict with sonics. That smartly crosses the wires—kaboom—of those fossilized audiophiles (are there really any left?) who view upscale optics and refined sonics at inherent cross purposes.

Audio Physic's team clearly understand that the primary hurdle to finding good homes for speakers is rejection based on old-fashioned looks and size. Today's clientele has wised up. They don't distinguish between lifestyle and performance. To them, contemporary good looks are *part* of the overall performance package. They want more from less. With speakers, less means smaller, prettier and more room invariant.

Where the Avanti with its multi-colour skin choices goes the extra mile then is integrating more easily not just with a room's décor but its acoustics. By eliminating the older Avanti's lateral woofer array and port pipes, there's demonstrably less room interaction. The usual room triggers of particularly rearfiring ports and their self-inflicted pseudo modes have been silenced. This speaker thus goes more places including nearer the front wall. In that regard, it's closer to a sealed box though its load behaviour is kinder to amplifiers.



Let's consider the glaringly obvious. The Germans wouldn't have bothered with their 30th anniversary relaunch of an all-new Avanti if it weren't superior to its predecessors which, in a big way, helped put Audio Physic on the global map. It's of note then that the current model would accomplish with three drivers what the **Avanti III** at left needed seven for; and doesn't rely on its costly 'boat hull' back. Simplification from better parts, now that Audio Physic have their very own drivers, extends to wiring. Whilst the previous version used biwire terminals, the Avanti stays single but floats its WBT posts in a rubbery insert for vibration management. Eliminating the second pair of posts also eliminates having to split your cable budget for a superior wire into a pair of lesser versions; or having to contend with sonically compromised jumpers. Clearly 2017's Avanti does pursue more with less across the field. And to close the circle on mundane but always relevant cost, it demands half of what the Codex fetches. How would this math shake out in the listening seat?

Visually more petite, lighter on the scale to move about easier. Much of the very same attributes also factored at the ear.





As I wrote in my Codex review, "once playing, this manifested in what sounded like a livelier cabinet, becoming audible particularly in the woofer's upper end. By contrast, the power range wasn't as tautly controlled. Against the drier Codex, it was bloomier. By lacking the extra cone area in the vital transition between midband and bass, perceptual emphasis moved up. Because spec sacrifices in bass reach registered little, the tonal upshift and looser power zone textures caused a bit of hollowness and some whiff-of-port redolence. The upshot was that the Avanti sounded brighter and more forward. Neither was it as unflappable about concealing the mechanical pressure effects of its woofer. Its workings were more apparent whereas that of the Codex was for all intents and purposes invisible. I didn't hear its box. With the Avanti, I did in just the bass a bit, at the SPL our room liked during happy hour.



"In this instance, the old dawg of bigger speaker plus bigger room equals better results learned no new trick. Without question, for our 100m<sup>2</sup> space I'd pick the Codex. Of course, the law of diminishing returns already ticks with an apparent alarm set to annoy. What - for a somewhat bigger though clearly heavier cab, one extra driver and two extra inches of woofer span, twice the askance? The Avanti brings the same proprietary tweeter and midrange. Those are clearly premium issue. They deliver exactly the same purity and speedy reflexes. So a bit more material for a lot more bread? When presented with the cubic volume to stretch its legs, the costlier package delivered a different quality. It wasn't really about quantity though there was just a *bit* of that, too. The Avanti was the younger flashier arm candy; slightly brash and showy. The Codex was the more mature experienced self-assured companion. Its composure was calmer, its figure fuller, its presence deeper. Its reading manifested grander gravitas and emotiveness."

The more saturated weightier colours in this sunset shot stand in nicely for the Codex. The upper photo with its different white balance represents the Avanti. You appreciate that it's a brighter picture but not one that's bright per se; just by contrast. In our room, part of this was down to less bass mass—extension was virtually equal—part of it due to the loss of the mid/bass coupler's air displacement additions in the 100-350Hz range. What that extra driver contributed were the deeper colours and tighter transition to the bass. Of course I also said in the Codex review that "...once we stop being compadre with comparisons and take things on their own merit, we hop off the giant ferris wheel in the sky." To take the Avanti's measure on its own merit, we'll now leave comparisons behind except to still say that as an upshot of the above, it did live up to its name. And in typical Audio Physic tradition, it was the same soundstaging monster as the Codex.



Before jumping headlong into them thar dark waters, I had to chase the perfect amp. Thinking that perhaps class D's high power and ultra-low output  $\Omega$  with its resultant stiff damping would streamline the slightly loose bass, I leashed up our nCore 500 monos from Nord. Starting out with the warmer fuller Sparkos Labs discrete input buffer opamp was a complete and utter miss. In short, the bass grew into a woolly mammoth; one up from elephant if you didn't follow. Trying the leaner more lucid Sonic Imagery opamp instead benefitted overall transparency and shrunk the mammoth but did nothing for its woolliness. Goldmund's visiting €25'000 Telos 590 NextGen integrated became an instant return to normalcy. Bass quantity was correct again but quality still did not mark the Code X spot. The Pass Labs XA-30.8 didn't impact on it either but added more output again which was undesired. Ultimately I ended up with the Linnenberg Allegro monos which had so killed it on the Codex.



A complete loom of LessLoss C-MARC wiring dropped just then. Swapping in these Lithuanian copper Litz cables in lieu of our solid-core silver Ocellia loom with crushed crystal sleeving became the final fortuitous minor course correction. It calmed down the Avanti's youthful freshness to more mature mellowness. Without the big brother's colour saturation and complete gravitas, I now had things as on par as I could. Bass reach was surprising for a compact apparently just 2-way tower. On bass textures, I simply had to remind myself. Twice the ticket for the Codex really did buy something which the Avanti couldn't match. It's why Elite's Mark Cargill ended up with a Codex in his home. But, picking nits where mere mortals would spot nothing is a reviewer thing; or for those who can afford to complain at a very elevated level.

**Deep space.** No matter what else, visitors to mbl show demos invariably comment in awe about their gigantic panoramic vista and sound-all-over freedom. Rather than tones squeezing from cabs like dried toothpaste, they rain fully liquid from the ceiling. Whilst it would be hyperbole to suggest that the Avanti will duplicate that omni thing regardless of seated position... with an ultra-quiet wiring loom like the LessLoss; properly wide setup with breathing room from the front wall; and suitably resolved electronics that can mine the minuscule recorded venue data; the Avanti on the lmax meter can stand in as a poor man's mbl for the sweet spot. Like the classic the-geese-is-out Zen koan, the sound is truly and utterly out of the boxes. It's a common misconception that all speakers do that. Conjuring up sounds between the speakers is very basic by comparison. Getting them to transcend all remnants of boxiness becomes identifiable only by contrast. It's only the superior example—an open baffle perhaps; or a zero baffle like Eden's Tômei monitor—which maps out what 'box sound' actually sounds like and does.



*With HiFiStay HardPoint decouplers under the Avanti in lieu of their stock spikes.*

As befitting their semi-legendary status, the Avanti IV could pull off a real Houdini. They could jump out of their cabinets and leave them behind like shed snake skins. While superior small monitors can as well, they don't do this bass unless fortified by a sub. And that'll be mono unless there's two; and even then perfect integration isn't assured. Again, getting sound between and behind speakers is child's play. It's how stereo works. Getting it *outta* the box... that's a lot harder when you're actually using boxes. The Avanti did this very well. Before you protest that "well, hell, of course they would like you had 'em set up"... ahem, not! A far lesser vanishing act happens a lot in exactly the same spots. Don't confuse big staging with leaving the box behind. It's a different thing and perhaps best called in-room presence. Though the sound is still behind the speakers where it belongs, it's in the room as well. Your attention needn't move forward to make contact. The sound makes contact with you; right where you sit. Yet it's not sonic forwardness. Just like a band or orchestra (and not surround sound that wants to put you on stage encircled by musicians, yikes!) the musical action remains in front of you. Simultaneously, it simply fills the room with tangible energy. And that communicates and reaches out. "Avanti, avanti; ándale, ándale."

After capacious staging and filling the room, the second big draw made hay from the company's motto "no loss of fine detail". Like the Codex, the Avanti's ability to burrow deep into the digital grooves (I don't do vinyl!) was fantastic and rhythmically adroit. That and the accompanying speed are what can lead to perceived leanness and a whiff of brightness when ancillaries aren't happy mates. How easily this was addressed I alluded to earlier; replacing solid-core silver with Litz copper cable. The rest of the final rig was iMac, PureMusic, Aqua Formula, Wyred4Sound STP-SE II and Linnenberg Allegros. For very similar sound at equivalent coin, I could have used the Goldmund Telos 590 NextGen integrated and Soundaware SD card reader shown between the German monos above. But the actual chain had the edge so that's what I used. The upper midrange/treble region of the Avanti was so superbly articulated and extended that any amp swaps which stole just a skoch from it were instantly outed. In our arsenal, that included everything but the Linnenberg. Whilst their bass wasn't as heavy as with the Pass, control over its slightly bloomy attitude was actually better.



Tabula rasa? As I'd written about the Codex, this is a blank-sheet type transducer. It pretty much becomes whatever you write on it with your choices of gear and cabling. Such responsiveness indicates low coloration and only remnants of personality rather than a big signature. With Audio Physic's pre-stressing of their aluminium-alloy diaphragms, via a damper ring behind the surround, first break-up modes are upshifted well outside the pass band. As a result, these drivers behave/sound different than the famous Accuton ceramics. Add their black anodizing which disguises the makeup. Listeners without prior tech exposure will express surprise that they were listening to metal diaphragms. Whilst very precise enunciation/diction might have suggested those, absence of subtle hardness would have guessed against them. It's why ultra-wide bandwidth amplifiers à la Goldmund and Linnenberg worked so well. They tapped their innate speed without going nowhere fast. They also demonstrated how even premium class D's treble still plays second fiddle or third Bratsche. Though the Avanti's cachet doesn't include recognizable Accuton ceramics which show up in crazy-money boxes to inherit special status, they're none the less for it except money.



***Grill à la mode - with black glass; or cloth-covered MDF (included).***

Opening gambit. Game? Big game. For standard spaces of ~4 x 6m or 5 x 8m, the Avanti should indeed be all you'd want to play the actual room, not unrealistic ambitions. A good 50wpc like Linnenberg's Allegro are perfectly adequate. At \$1'699 delivered, a Goldmund Job INT would sing like the fat lady. Already at its fourth life, the sharp but simple-looking Avanti benefits from the 28 years of experience won during its prior three incarnations. Decisively streamlined over its precursor, it demonstrates top performance with fewer simpler ingredients - the firm's very own 3rd-gen hyper-holographic tweeter and midrange which are decoupled from their sub baffle via neoprene dowels. For an empty marketing word, that's actually rather descriptive. Set up properly, holographic is where these go and what they do. Where they eclipse your typical monitor speaker? With a cleverly loaded subwoofer-type 8" long-throw woofer that breathes in a bigger box than your stand(ard) mount, few of which are 3-ways to begin with. It adds reach and power which simply play it grander. In my book, that makes Audio Physic's latest Avanti a both smart and very stylish choice.