EgglestonWorks Viginti loudspeaker

Michael Fremer | May 24, 2018

Viginti is Latin for twenty. It's also the name of a new loudspeaker from EgglestonWorks, to be produced in a limited edition of 250 pairs in celebration of the launch, 20 years ago, of the company's original Andra, on which the Viginti is based. The Viginti is a shapely and eye-pleasing 4' 2" tall, and weighs 255 lb—kind of heavy for its size.

A great thing about the Internet is that, in a print publication with limited space, there's no need to spend precious column inches recounting an otherwise necessary history of EgglestonWorks, which is based in Memphis, Tennessee. You can read all about it in the late Wes Phillips's review of the original Andra, in the October 1997 *Stereophile*—that issue's cover story. Three months later, in the December 1997 issue, the Andra was voted *Stereophile*'s Loudspeaker of the Year—and made that issue's cover as well. Paul Bolin reviewed the Andra II in November 2002. Later came the Andra III and the Andra III SE, which we didn't review.

If you're a fan of photographer and composer William Eggleston (one of his photographs graces the cover of Big Star's *Radio City*), EgglestonWorks was founded by his son, Bill Eggleston, who is no longer involved.

Description

All of the EgglestonWorks Andras were variations on the same basic theme. The Viginti, which costs $38,995/pair, strays farther from the original tune, beginning with its two 10" carbon-fiber woofers, made by Morel—previous variations had only a single, larger woofer. The magnet structure of the new woofer is said to be "enormous," though I didn't find my way inside to have a look.

Wayne E. Prather, PhD, of the National Center for Physical Acoustics, University of Mississippi, is a technical consultant for EgglestonWorks. According to a design study paper he sent me, Chief Designer Jim Thompson says the 10" drivers "function more as subwoofer drivers than as traditional woofers." The goal was to keep the midrange and lower-midrange frequencies away from the heavy-diaphragmed, long-excursion cones that, Thompson says, are "essential for superior low end bass but are less well-suited" for reproducing the middle frequencies. Makes sense to me.

The subwoofers are crossed over to the midrange drivers at 120Hz (low pass) and 110Hz (high pass). This produces a slight overlap between the two, which is said to provide a smoother overall response.

The Viginti is the first EgglestonWorks speaker to use a slot or shelf port. Thompson says that the port enables the design team to fix the bass tuning frequency with "pinpoint accuracy." It also improves the lower notes' "pitch-correctness" and "tightness." The enclosure behaves, he claims, as a sealed box down to the very low port tuning frequency of 30Hz, and that low tuning frequency puts the resulting group-delay phase shift in a region where our ears are minimally sensitive to phase errors.

The Viginti marks the first time that EgglestonWorks has used a midrange-tweeter-midrange (MTM) driver array. Correctly implemented, such an arrangement can act as a virtual point-source driver that, at the crossover frequency—2kHz in the Viginti's case—produces among the three drivers a uniform horizontal dispersion characteristic. The Viginti's crossover includes Mundorf's best silver/gold foil capacitors, and inductors, some of which are hand-wound in-house.

The 6" carbon-dome midrange drivers are also made by Morel, while, for the first time, EgglestonWorks uses a beryllium-dome tweeter, this one made by Scan-Speak. Of greater interest is the Viginti's transmission-line midrange loading. The design team paid particular attention to how to dissipate the energy the drivers radiate behind them. As you probably know, the back wave is equal to the front wave radiating into the room, with which it is 180° out of phase. In a rigid enclosure, the back-wave energy ricochets around inside the enclosure. EgglestonWorks says that this imposes on the speaker diaphragm distortions of both phase and level that are superimposed on the front wave—the soundwaves—that reach your ears.

While treating a speaker cabinet's insides with absorptive material can suppress and absorb high-frequency backwave energy, EgglestonWorks argues that, in the midrange and lower midrange, where our ears are most sensitive to distortion, the efficacy of these absorptive materials is much less.Therefore, the Viginti's two 6" midrange drivers are individually loaded into quasi–transmission-line chambers—tapered, heavily damped tubes that terminate in openings at the cabinet's rear. Absorptive material attenuates the backwave energy as it travels through the tube on its way out the back of the enclosure. What little energy is reflected back into the highly damped tube is further attenuated.

Thompson also claims that the residual back wave output produces a desirable "ambience," in the manner of a dipole speaker, though in the strictest use of the word the Viginti is not a dipole speaker. Because each midrange driver operates within its own isolated, tubular enclosure, the designers elected not to isolate the interior chamber behind the MTM array from the rest of the cabinet's interior, thus producing a woofer enclosure of considerably larger volume than would usually be possible in a cabinet measuring 50" high by 14" wide by 23" deep. Thompson doffs his mortarboard and dons his salesman's cap when he says "Although extremely expensive to implement, the 'Transmission Line' midrange porting design delivers midrange detail and purity, which to our knowledge, cannot be achieved in any other way."

The panels of the Viginti's well-braced enclosure each comprise two slabs of 5/8"-thick MDF glued together, for a total thickness of 1.25"; the platform to which all this is anchored is *four* such layers thick: 2.5". The internal braces are of HDF, as are the two midrange quasi–transmission lines.

The side panels of the upper section are fully braced, with panels of black-anodized aluminum, accented with carbon-fiber inserts. The piano-black lacquer applied to the MDF surfaces is finished to a very high standard. Two pairs of terminals are provided, for biwiring and biamping (I used jumpers). The Viginti is well constructed and looks mighty attractive.

Listening

The first few minutes with any new speaker are fairly scary: I've committed to the review. I've used floor jacks to raise my huge reference speakers, the Wilson Audio Alexxes, then replaced their spikes with casters and rolled them out of the way.

Now, for the next few months—*months*—I'm going to have to live with these new speakers.

The relationship doesn't always work out. Sometimes there's a personality conflict—I don't like the sound. Sometimes, the speakers just don't work in my room.

The EgglestonWorks Viginti's webpage says: "no lack of authoritative, effortless and pitch-perfect bass." They're not kidding. The first record I played made it clear that the bass went very deep *and* was tight—but not *too* tight, because then it wouldn't match what's above. Still, it took a while to get used to the differences between the Alexx's and Viginti's reproductions of the bottom end.

While I always have to let my ears and brain adjust to the new, after a few days it was clear that moving the Vigintis a bit farther from the front wall might be worth trying. A friend and I moved

them *slightly* forward. That did the trick.

With the speakers driven by my reference darTZeel NHB-458 monoblocks, the Viginti's bottom-end sound was sprung somewhat looser than the Alexx's, which gave it a richer, more visceral, more tactile bottom—an area in which the Alexx itself is not exactly shy. But it was way looser in the lower midbass, where it still sounded somewhat bloomy, even after we'd inched it forward.

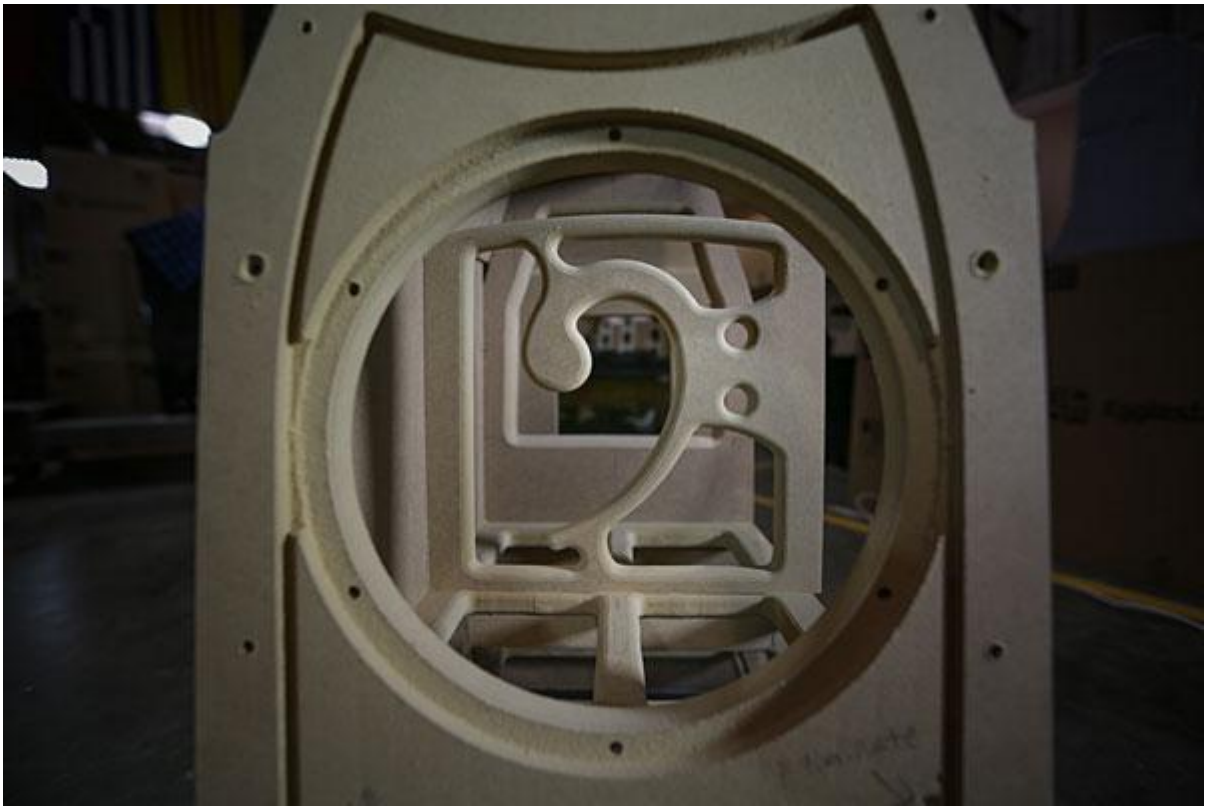
One evening, I played my original UK pressing of the Who's *Tommy*. In this case, "original" means Track Records 613 013 with a flat label (later Track pressings had a raised rim under the label), with a bright blue, laminated album jacket. I bought this copy 49 years ago, in spring 1969, and have been playing it ever since—you can be sure that for those first few years I played it incessantly. I saw the Who perform *Tommy* twice in concert: at the Boston Tea Party in fall 1969, in front of a few hundred people (the band wasn't all that popular at that point), and again in winter 1970, at Boston's Commonwealth Armory, from a seat in the front row. But this night I wanted to hear *Tommy*, and how the Vigintis might deliver whatever of Keith Moon's drums and John Entwistle's bass were left on my well-worn, half-century-old LPs.

I cranked up *Tommy*, expecting to like the IBC studio drum sound as I always have. But, texturally and *physically*, this was probably the best I'd ever heard Moon's drums—elastic, well textured, gut-punching. His tom fills were so slammingly perfect and believable that the only thing to do was to turn up the volume until it was at the level of *live* drums. Moon's cymbal splashes shimmered and rang convincingly—

they don't on any of the many digital versions of *Tommy* I own—and the attacks of Townshend's strummed acoustic guitar and the following sustains were as perfectly natural, satisfying, and physically impactful as I've ever heard them.

I knew it was coming, as it has a hundred or more times, but this time when Townshend let loose with "Captain Walker didn't come home, his unborn child will never know him," it startled me enough to make me jump and start my adrenalin flowing. Yet his voice wasn't harsh or bright. It was just sounded more spectacularly transparent and real than I'd ever heard it. Which was why I jumped. That 49-year-old LP's top end was entirely intact. It had never sounded as round and three-dimensional as it did that night through the Vigintis. I played all four sides of *Tommy* and went to bed with a smile on my face, 100% satisfied and transported.

That experience made me a believer in two things: 1) Records properly cared for and properly played do not wear out, even after a hundred or more plays; and 2) The EgglestonWorks Viginti may be the most enjoyable, most-fun-to-listen-to full-range speaker I have ever reviewed.



I ended up *loving* the Viginti's unabashed bottom-end swagger and out-of-the-box slam and drive, even as I conceded that part of what I liked may have been some lower-midbass bloom that probably wasn't strictly "accurate." But you know what? If you sit down, listen, and the best you can do is scratch your chin and say, "Hmmm.

This is damn . . . accurate," then you're not having too good a time. But when you say, "Wow! Crank it up and *take* me somewhere!," you're having fun. This hobby is about fun.

Yes—in my room, at least, there's still a bit of a lower-midbass bump, but even after switching to the Simaudio Moon 888 monoblocks (review in the works), I heard it only with some recordings that probably have an excess in that region to begin with—and it may still have been room-related anyway.

If the Viginti could effectively deliver singer Johnny Hartman's baritone from his *Once in Every Life* without sounding congested (LP, Bee Hive/Analogue Productions AAPJ-105)—an album I've been playing since 1981, when the original edition was released—it would pass the test. It did. What's more, Joe Wilder's horn in "Easy Living" has never sounded less like a trumpet and more like the flugelhorn it actually is.

The Viginti's response from above that lower-midbass bump to the very top of the audioband was liquid-smooth. The midrange was precisely as Wayne Prather advertised: "the 'Transmission Line' midrange porting design delivers midrange detail and purity."

Out of the blue, someone sent me two new XRCD24 releases, one of which was cellist Jacqueline Du Pré performing Dvorák's Cello Concerto with her husband, Daniel Barenboim, conducting the Chicago Symphony Orchestra (Associated Recordings Company ARCXRCD806). I have the same performance on a 1989 reissue (3 CDs, EMI) and wanted to hear any differences. I began with the XRCD. The sound of Du Pré's cello was so texturally and tonally enticing, the orchestra so lush and compelling, that I

lost interest in comparisons and played the disc all the way through.But when I did compare the new XRCD with the 1989 EMI, the Vigintis did not disappoint! The strings on the EMI set were as thin, metallic, and wiry as I'd remembered, and when things got loud, I wanted to leave the room. It was good to hear that the EgglestonWorks didn't "lush over" or homogenize the differences in the midrange.

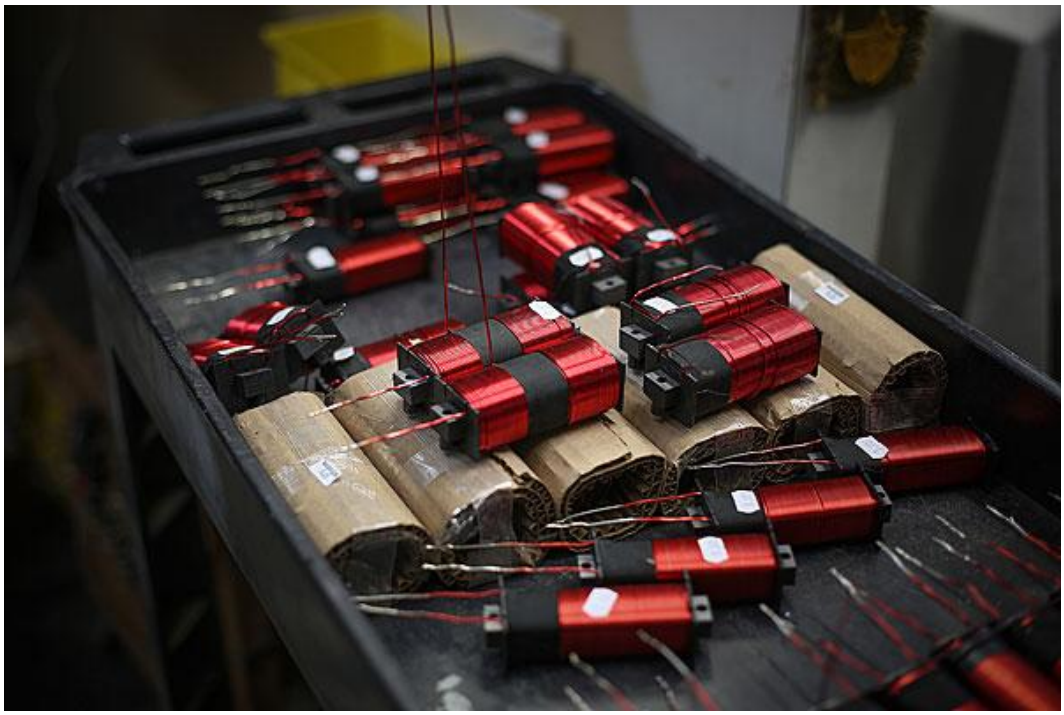
I then spent another evening in the digital domain, this time with both 16-bit/44.1kHz and high-resolution files playing both fine and awful recordings of music I like. Again, though with great recordings the Vigintis delivered pleasing smoothness and artifact-free liquidity, when the recordings got rough, so did the speakers.

Those who think that all metal-dome tweeters sound bright and/or hard should spend some time listening to the Viginti's smooth, sweet, yet airy sound. They'll eat their words.

Nothing's Perfect

For all the EgglestonWorks Viginti's supple, full-range strengths, unquestionable long-term listenability, musical generosity, and ability to produce slam-bang dynamic swings, it won't satisfy everyone.

The speaker's overall tonal balance was on the warm side. Its bass tuning produced a skosh more boom that might be too much for those who prefer lean, tight bass. Nor was the Viginti the last word in top-end air or retrieval of detail. Its reproduction of transients was ever so slightly smoothed over—if you like really sharp, fast transients and are willing to put up with really bad recordings to get everything out of the few great ones, you might not be satisfied.



If you like pinpoint, finely rendered images on vast, three-dimensional stages, the Vigintis give you some but not all of that. I'm spoiled by what the Wilson Alexxes do in those regards—in my experience, no flat-baffled speaker has ever managed it.

Early on, I occasionally heard an upper-midrange coloration that may or may not have been related to the quasi-transmission-line output that emanates from the back of the Viginti. It's also possible that this will be a nonissue in rooms in which the Vigintis aren't placed so close to the side and front walls. But those are my only criticisms of the Viginti, and I had to go looking for them.

Conclusions

I didn't ask, nor was I told, the price of the EgglestonWorks Viginti, and I deliberately kept myself ignorant of it for almost all of my listening—but I figured it was high. After all, the Viginti is almost a true full-range loudspeaker—I'd be surprised if its response in my room was anything less than 25Hz-20kHz. (EgglestonWorks claims "usable output" of 20Hz–40kHz.) Finally, just before I asked, I guessed: $60,000/pair?

Nope. A pair of Vigintis costs $38,995. In the world of high-performance audio, that price is ridiculously low for what you get. The Viginti has been thoughtfully and methodically designed, and is beautifully built of high-quality components. It produced a hypnotically lush yet honest midrange, and despite its generally warm overall balance, it was equally satisfying playing the Ramones from CD, The Clash from original vinyl, a new vinyl reissue of Cocteau Twins' *Head Over Heels* (4AD/Beggars Banquet CAD 3709, after which I played the original all the way through to compare), a mono edition of Bob Dylan's lumpiest record, *John Wesley Harding*, male and female jazz singers, and, of course orchestral music.

Every time I thought of a recording or musical genre that might not work well with the Viginti, it surprised me. I thought its slightly soft transients would make Julian Bream's lute recordings sound too soft, but damned if I didn't sit through every note of the Julian Bream Consort's *An Evening of Elizabethan Music* (RCA Victor Soria LDS-2655) and enjoy every pluck.

Of all the speakers I've reviewed, few, if any, have come close to matching the Viginti's long-term listenability. It is both a relaxing speaker and an exciting one—it lets me lie back and just enjoy the music, and engages me fully when that's appropriate. I guess you could say I like the EgglestonWorks Viginti.

Sidebar 1: Specifications

Description: Dynamic, floorstanding loudspeaker with rear slot-port loading. Drive-units: 1" beryllium-dome tweeter, two 6" carbon-dome midrange drivers, two 10" carbon-cone subwoofers. Crossover frequencies: 120Hz (low pass) and 110Hz (high pass), 2kHz. Frequency range: 20Hz-40kHz. Impedance: 6 ohms nominal, 3.5 ohms minimum at 29Hz. Sensitivity: 87dB. Recommended amplification power: N/A.
Dimensions: 50" (1270mm) H by 14" (355mm) W by 23" (585mm) D. Weight: 255 lb (116kg).
Finish: Piano Black, anodized aluminum side panels, carbon-fiber accents.
Serial numbers of units reviewed: V8837LE, V8838LE.
Price: $38,995/pair. Approximate number of dealers: 10.
Manufacturer: EgglestonWorks, 540 Cumberland Street, Memphis, TN 38112. Tel: (901) 525-1100. Web: www.egglestonworks.com.

Sidebar 2: Associated Equipment

Analog Sources: Continuum Audio Labs Caliburn turntable & Castellon stand; Kuzma 4Point 9", Swedish Analog Technologies tonearms; Lyra Atlas, Atlas SL, Atlas SL mono, Etna, Etna SL cartridges; Miyajima Laboratory Zero (mono) & Madake, Ortofon Anna & A95 cartridges.
Digital Sources: dCS Rossini CD player; Lynx Hilo A/D-D/A converter; Meridian Sooloos Digital Media System; Pure Vinyl, Vinyl Studio software.
Preamplification: Ypsilon MC-10L & MC-16L step-up transformers; CH Precision P1 (with X1 power supply), Ypsilon VPS-100 phono preamplifiers; darTZeel NHB-18NS, Ypsilon PST-100 Mk.II Silver preamplifiers.
Power Amplifiers: darTZeel NHB-458, Simaudio Moon 888 (both monoblocks).
Loudspeakers: Wilson Audio Alexx.
Cables: Interconnect: Chord Company Sarum T (S/PDIF), Stealth Indra & Sakra, TARA Labs Air Evolution & Zero & Zero Evolution, Teresonic Clarison Gold, Wireworld Platinum Eclipse. Speaker: TARA Labs Omega EvolutionSP, Wireworld Platinum Eclipse 7. AC: AudioQuest Dragon, Dynamic Design Heritage AE15 Digital.
Accessories: AudioQuest Niagara 7000 power conditioners; Oyaide AC wall box & receptacles; ASC Tube Traps; RPG BAD, Skyline, Abffusor panels; Stillpoints Aperture Room panels; Synergistic Research UEF products (various); Symposium Ultra platform; HRS Signature SXR, Stillpoints ESS stands; Finite Elemente Pagode amp stands; Audiodharma Cable Cooker; Furutech record demagnetizer &

deStat; Audiodesksysteme Gläss Pro, Loricraft PRC4 Deluxe record-cleaning machines.— **Michael Fremer**

Sidebar 3: Measurements

I used DRA Labs' MLSSA system and a calibrated DPA 4006 microphone to measure the EgglestonWorks Viginti's frequency response in the farfield, and an Earthworks QTC-40 for the nearfield and in-room responses. Because of the Viginti's bulk and weight, I took my measurement gear to Michael Fremer's place in New Jersey, where I performed the quasi-anechoic measurements on the speaker in his driveway. (It was one of the few days in March that was *not* cold, the sun *was* shining, and there was *no* wind!) Mikey and I lacked the strength to lift the 255-lb speaker off the ground, so the reflections of the drive-units' outputs from the ground between the speaker and the microphone occurred earlier than is usually the case with my measurements. The frequency resolution of the response graphs in the midrange is therefore reduced.

My estimate of the Viginti's sensitivity was a high 89dB(B)/2.83V/m, 2dB higher than the specified 87dB. The impedance is specified as 6 ohms, with a minimum value of 3.5 ohms at 29Hz. My measurement of the impedance magnitude (fig.1, solid trace) reveals that while the impedance lies above 8 ohms from the upper midrange up, there are minimum values of 4 ohms at 32Hz and 3.75 ohms at 76Hz. However, the electrical phase angle remains usefully low.

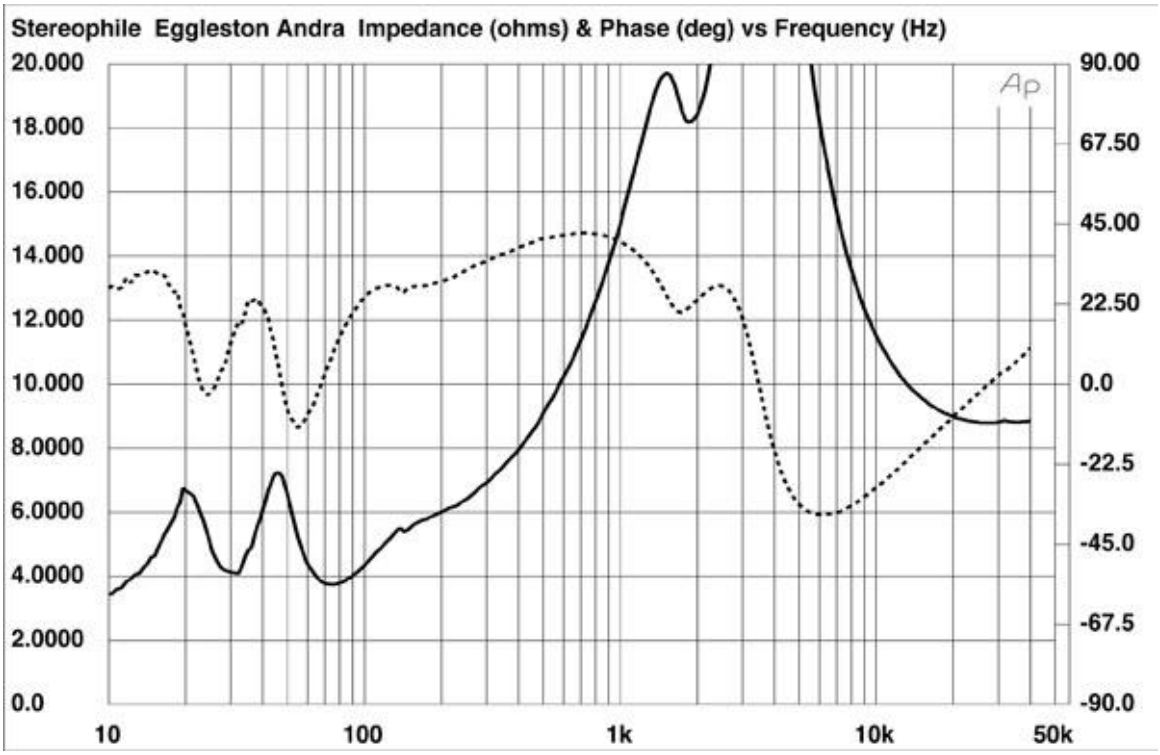


Fig.1 EgglestonWorks Viginti, electrical impedance (solid) and phase (dashed) (2 ohms/vertical div.).

A discontinuity is visible at 142Hz in the impedance traces; when I listened to the enclosure with a stethoscope, I did hear some resonant modes in the rear panel, and in the carbon-fiber inserts in the side panels.

The saddle at 30Hz in the impedance-magnitude trace implies that the large, rectangular port at the base of the rear panel is tuned to this frequency. The two woofers behave identically, and their combined output (fig.2, blue trace) has the expected minimum-motion notch at 30Hz. The woofers are crossed over to the midrange unit (green trace) at the specified 110Hz with low-order slopes, and their upper-frequency output rolls off relatively gently, with peaks visible between 500 and 600Hz, and others at 1.5 and 3kHz. When I was measuring the woofers' farfield output, I could hear these peaks as formants superimposed on the sound of the pseudo-random noise signal. I would have thought that this behavior would be masked by the output of the midrange units. However, it is possible that it correlates with MF occasionally hearing some upper-midrange coloration. The output from the vents on the rear of the midrange enclosure was clean and typical of a transmission line, mirroring the frontal radiation at a reduced level but out of phase with it. (Note that the nearfield output of the midrange units in fig.2 doesn't have the minimum-motion notch that would indicate reflex loading.)

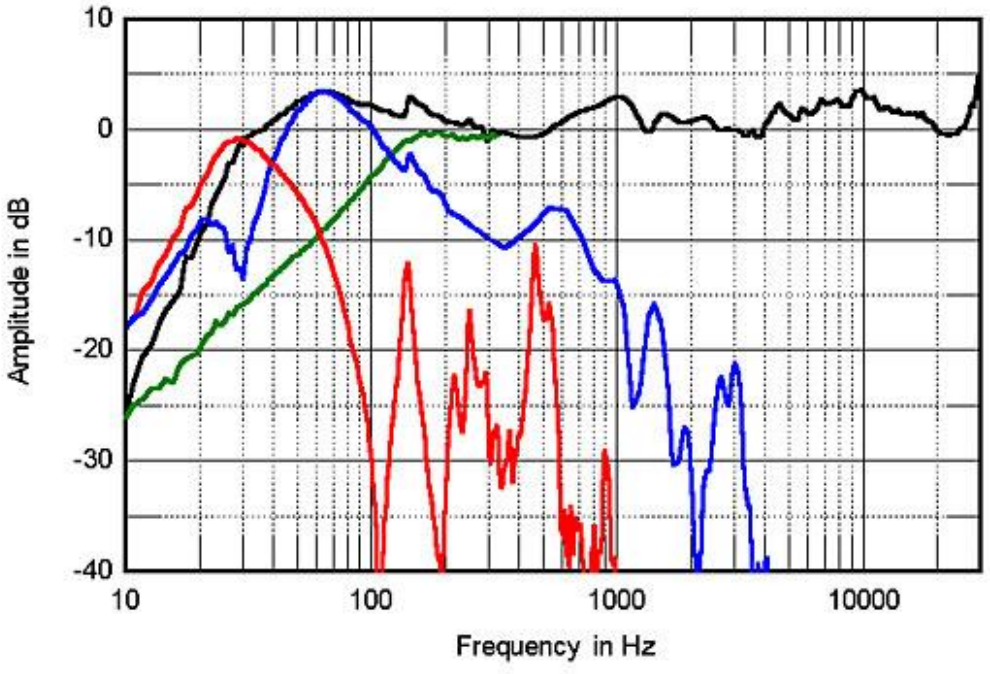


Fig.2 EgglestonWorks Viginti, anechoic response on tweeter axis at 50" (black) averaged across 30° horizontal window and corrected for microphone response, with farfield response of woofers (blue above 355Hz) and nearfield

responses of midrange unit (green), woofers (blue), port (red), and their complex sum (black), respectively plotted below 300Hz, 355Hz, 1kHz, and 300Hz.

The port's output, again measured in the nearfield (red trace), peaks between 20 and 50Hz, but its upper-frequency rolloff is marred by several peaks, the second strongest of which coincides with the discontinuity in the impedance traces. This behavior might correlate with Mikey finding there to be some midbass emphasis in the Viginti's balance. The sum of the nearfield outputs of the midrange, woofers, and port is shown as the black trace below 300Hz in fig.2; the apparent peak in the midbass is entirely an artifact of the nearfield measurement technique, which assumes that the radiators are mounted in a true infinite baffle—ie, one that extends to infinity in both planes.

The farfield response in fig.2 (black trace above 300Hz) was taken on the tweeter axis, averaged across a 30° horizontal window. Other than slight excesses of energy between 700Hz and 1.4kHz and in the upper treble, the speaker offers a respectably uniform output. Fig.3 shows the Viginti's lateral radiation pattern normalized to the tweeter-axis response, which therefore appears as a straight line. The speaker's horizontal dispersion is commendably even and well controlled, though the 1" dome does become relatively directional above 7kHz. In the vertical plane (fig.4), the response on the tweeter axis, which is 36" above the floor, again appears as a straight line, and changes little over a window of –5°/+10°.

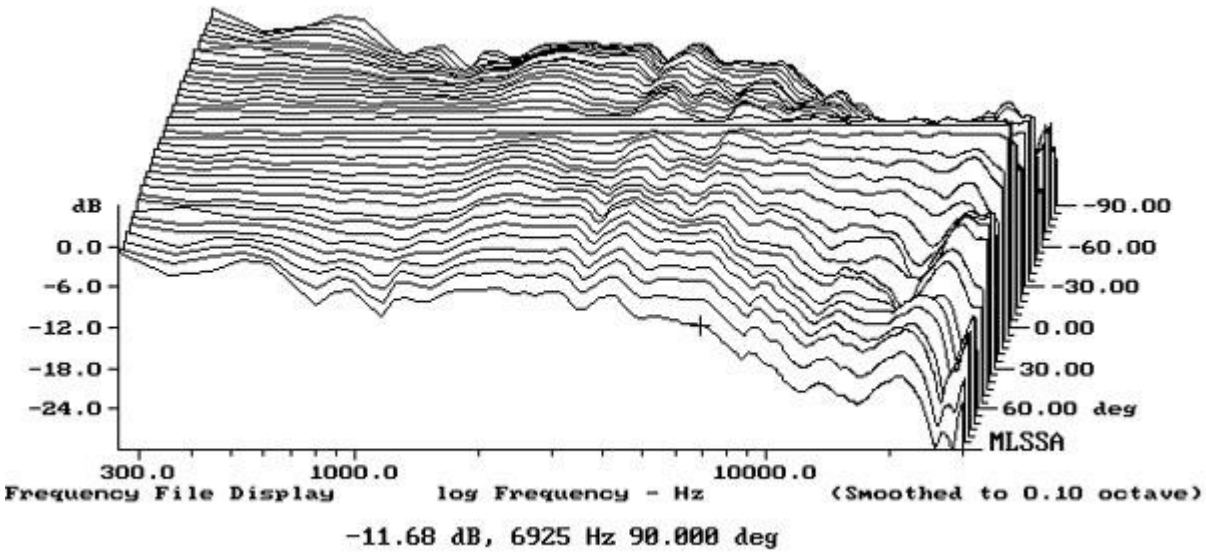


Fig.3 EgglestonWorks Viginti, lateral response family at 50", normalized to response on tweeter axis, from back to front: differences in response 90–5° off axis, reference response, differences in response 5–90° off axis.

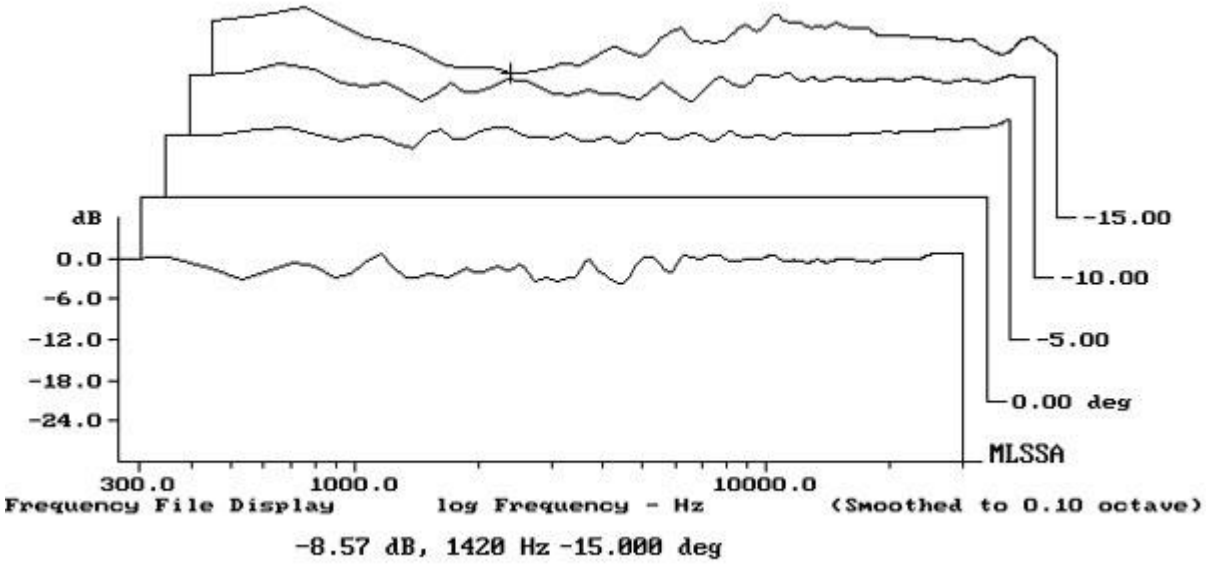
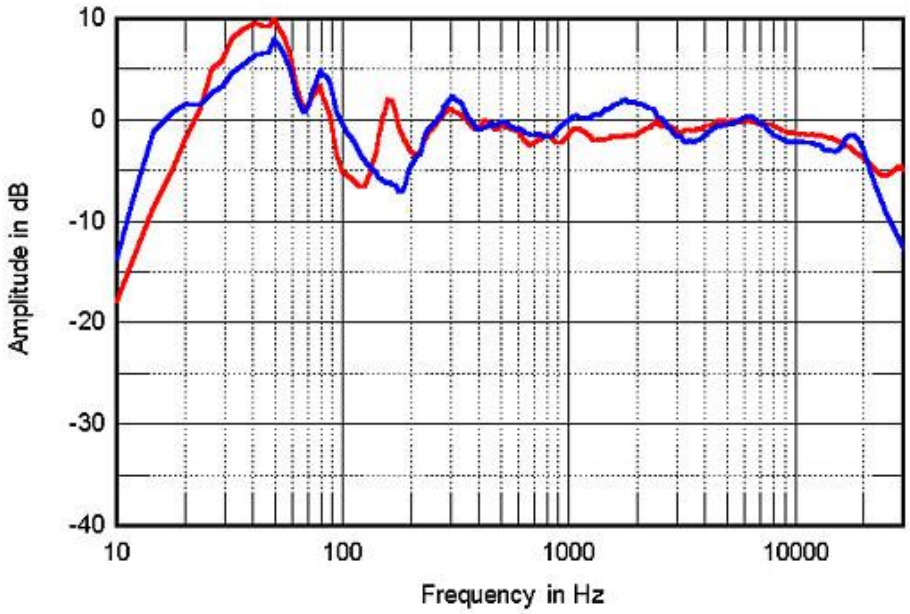


Fig.4 EgglestonWorks Viginti, vertical response family at 50", normalized to response on tweeter axis, from back to front: differences in response 15–5° above tweeter axis, reference response, difference in response 5° below tweeter axis.

The red trace in fig.5 shows the spatially averaged response in Mikey's listening room, while the blue trace shows the in-room response of the Wilson Alexx speakers he reviewed in May 2017, measured under identical conditions. (Using SMUGSoftware's FuzzMeasure 3.0 program and a 96kHz sample rate, I average 20 1/6-octave–smoothed spectra, individually taken for the left and right speakers, in a



rectangular grid 36" wide by 18" high and centered on the positions of Mikey's ears.)

The EgglestonWorks speaker's in-room response is remarkably smooth and even from the middle of the midrange through to the 30kHz upper limit of this graph. The Wilson speaker's response is not quite as smooth, and has more presence-region energy. The traces in this graph below 350Hz are disturbed by room modes that have not been evened out by the spatial averaging. However, while the room-corner placement of both speakers results in elevated low frequencies, the Vigintis produce more energy just below 200Hz and between 30 and 70Hz; the Wilsons offer slightly greater low-bass extension.

Fig.5 EgglestonWorks Viginti, spatially averaged, 1?/6-octave response in MF's listening room (red); and of Wilson Alexx (blue).

In the time domain, the step response on the tweeter axis (fig.6) indicates that the tweeter and midrange units are connected in inverted acoustic polarity, the woofers in positive polarity. The integration of the drive-unit outputs is well arranged, however. The cumulative spectral-decay plot on the tweeter axis (fig.7) is superbly clean in the treble.

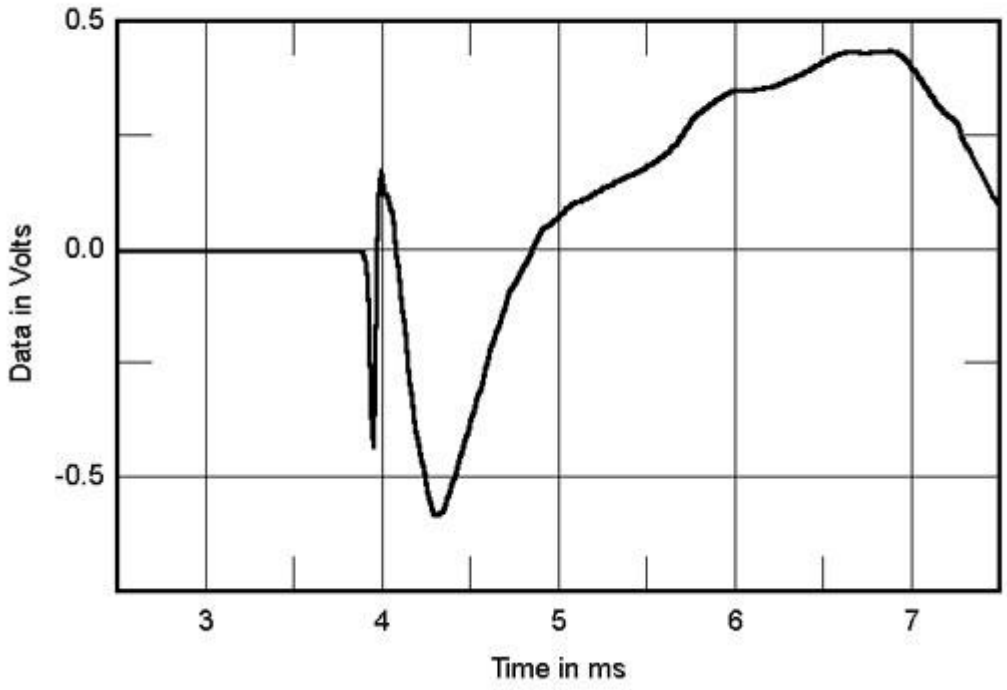


Fig.6 EgglestonWorks Viginti, step response on tweeter axis at 50" (5ms time window, 30kHz bandwidth).

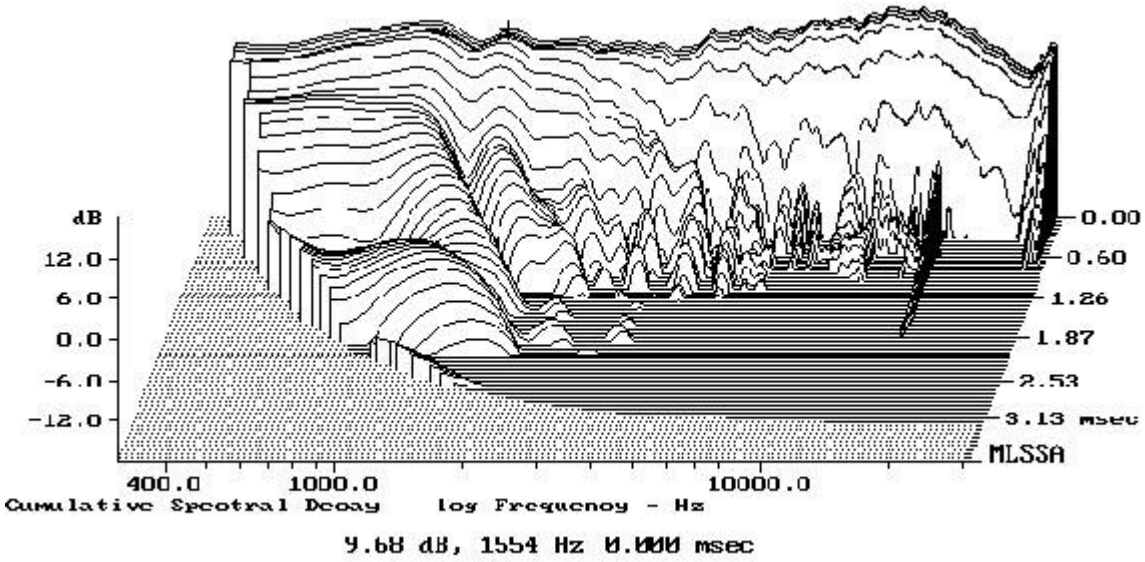


Fig.7 EgglestonWorks Viginti, cumulative spectral-decay plot on tweeter axis at 50" (0.15ms risetime).

Other than those peaks in the woofer and port outputs, EgglestonWorks' Viginti offers respectable measured performance.—**John Atkinson**