

# Sonus Faber Guarneri Evolution loudspeaker

By Art Dudley • Posted: Jan 5, 2012



At present, my writing chores are divided between two fields: domestic audio and lutherie. Having invested considerable time in both, and having by now met a number of builders who are distinguished in one or the other, I can say with all confidence that the best share a simple, single point of view: *Everything* makes a difference.

There are dissenters, of course. In audio, some scoff at the notion of audible differences between, say, aluminum and steel amplifier cases, or between shellac and polymer coatings for transformer windings. In lutherie, the skeptics would have us know that a guitar with a mortise-and-tenon neck joint can sound just as good as one with a dovetail joint, and that the production advantages of catalyzed finishes on mandolin bodies far outweigh any "imagined" performance disadvantage.

Yet in both fields there are many quiet souls who quietly know better. In domestic audio, their number would seem to include Sonus Faber: an Italian loudspeaker manufacturer whose success has one foot in the world of lutherie, and whose efforts leave no stave unchiseled in a quest to make music sound more than just "silver-gray / Placid and perfect," as poet Robert Browning has the Renaissance painter Andrea del Sarto say.

The reference is more apt than I intended: The [first Sonus Faber Guarneri](#) loudspeaker was made on commission in 1993, for the Salon of the Violin in Cremona, Italy, where it remains on permanent active display, surrounded by the stringed instruments produced during that city's golden age. That model's full name was Guarneri Homage, for the obvious reason. After that came the [Guarneri Memento](#): slightly different finish, considerably different drivers—and a bit room-fussy, or so I'm told.

That brings us to the third and most recent iteration of something that was not, at first, intended to be a commercial product: the Sonus Faber Guarneri Evolution.

### Description

Outwardly, the Guarneri Evolution is a compact, two-way, stand-mounted speaker, albeit one whose earnest appearance suggests something more beneath the skin. Indeed, the Guarneri's enclosure isn't so much a cabinet as it is a combination of complex structures. A spare wooden frame incorporating a single lateral brace is fastened to a pair of sides that are formed in the manner of most archtop guitars (footnote 1): laminated from several thin sheets of tonewood and shaped into a graceful curve on a custom-made press. Those elements are clamped together with upper and lower plates machined from a proprietary aluminum alloy called Avional, then fastened to an Avional rear structure, the edges of which extend into a pair of sound-shaping fins.

As in lutherie, orientation of the grain in the Guarneri's wooden parts is taken into account during assembly. Similarly, construction techniques are chosen that control—rather than squelch altogether—resonant energy within various parts of the enclosure: A tuned mass-damper system comprising a short, thick truss rod and a concentric pair of metal discs is fastened to the top plate and adjusted to a precise (and not at all excessive) degree of tightness, while constrained-mode damping sheets with flexible alloy skins are applied to the inner sides, along with thick slabs of a woolly, felt-like material. Thinner pieces of the latter are also used to line a reflex port that's built into the Avional rear panel, while another type of damping sheet occludes the throat of the port, and yet another type of batting fills the area below. Finally, the entire upper half of the enclosure is stuffed with a sort of damping "pillow"—a 20"-wide black fabric bag filled with Bubble-Pak.

The baffle is made of 1"-thick MDF, precisely machined to incorporate chamfers on the outside and some strategic bracing on the inside. Every outward surface of the baffle is covered with a thin layer of supple black leather—even the facings for the driver flanges. I'm told the leather serves two purposes: blunting the bounce of stray high frequencies, and providing just the right, pliant grip—a single organic lock-washer, if you will—for the Torx-head woodscrews that hold the drivers



in place. Having removed and replaced one of the low-frequency drivers myself, I can attest to the latter function.

The Guarneri Evolution's two drivers are designed by Sonus Faber and custom-made for them. The low-frequency driver is a 7" ScanSpeak unit with a very soft rubber surround and a black cone of pulp resembling papier-mâché. (Sonus Faber describes the cone material as "real-time air-dried and non-pressed cellulose fiber." Italy's hyphen shortage is now explained.) The driver has a machined center hub (I can't quite call it a phase plug, since it doesn't protrude far enough into the apex of the cone to hinder the propagation of any waveforms), a very robust magnet, and a cast-alloy frame. The high-frequency driver, also beautifully made, is a 1" silk-dome tweeter designed by Sonus Faber cofounder Ragnar Lian for ScanSpeak. It incorporates a loading chamber of its own, made of plastic.

The hardwired crossover network sits at the bottom of the enclosure, apparently in direct contact with the lowermost Avional plate (though there also appears to be a plywood or MDF structure of some sort down there). Among the crossover elements are five very large Mundorf M-Cap capacitors and four hefty Jensen chokes, the latter obscured with a rubbery covering. In all, the crossover network takes up a good deal of real estate inside the cabinet. Stranded wires with clear-plastic insulation are used for connections where axial leads can't reach, and the two pairs of loudspeaker connectors—also fastened to the Avional rear panel—can be used for biwiring or even biamping, if so desired. The crossover frequency is stated as 2800Hz, and the computer-designed network is described as comprising composite slopes.



Back to the skin: The shape of the speakers in the Guarneri line has been likened by pamphlet and press alike to that of a lute. I don't quite see the resemblance, unless the shape one has in mind is the enclosure's cross-section, viewed from above: itself something of a stretch. But I won't quibble with the sheer beauty of the Guarneri Evolution's bent wooden sides, or with that shape's effectiveness in preventing the propagation of internal standing waves. The rich laminate of okoume, an African wood superficially similar in appearance to mahogany and commonly used in marine-quality plies, is inlaid with thin strips of ebony, then coated with multiple hand-rubbed layers of nitrocellulose lacquer (just like a you-know-what-al instrument), while the Avional pieces are all plated in rich, glossy nickel. These are damn nice-looking speakers.

There's more to the Guarneri Evolution than fits in its enclosure per se: The 31"-tall Evolution stand would seem to contribute generously to this loudspeaker's performance. (The two elements are nevertheless priced separately—\$20,000 for the speakers, \$2000 for the stands—to accommodate shoppers who *insist* on skipping the stands.) Key to the Evolution stand's performance is an internal lever-and-weight system—another tuned mass damper—that's used to counteract structural vibrations. Think of this as a pendulum complementing and stabilizing the *inverted* pendulum of a heavy speaker atop a comparatively flexible stand, much as we find in the best tall buildings.

Footnote 1: By contrast, the sides of most flat-top guitars, like the sides of most violins, mandolins, and lutes, are formed from single, solid pieces of wood, not laminates.

The Evolution stand is also a great deal fancier than average in the aesthetic sense, with an angled lower base of Italian marble and a circle of decorative elastic cords, fastened at top and bottom, that echo the loudspeaker's decidedly baleen-esque removable grille.

### **Setup and installation**

On the one hand, the Sonus Faber carton—actually, a wooden crate tucked inside an unprepossessing cardboard box—was the heaviest thing I've ever lifted by myself. On the other hand, no prospective Sonus Faber owner should be deprived of the pleasure of unpacking these speakers for himself. The crate was better built than my house. Something in the box—the wood, the grilles, the whatever—exuded a pleasantly exotic, almost turpentine-like aroma. It was love, already.

Setting up the Guarneri Evolutions proved slightly more challenging than average, and my own tentative first steps didn't get me where I wanted to go. Then Bill Peugh of Sumiko, Sonus Faber's US distributor, visited and took over the job, performing what his company refers to as the Master's Protocol: The installer begins by aligning a single speaker to the room, in an effort to maximize first bass extension, then bass output, then bass linearity. In the next step, the installer turns his attention to the other speaker, doing much the same. Finally, he adjusts the toe-in of the two enclosures, after which the rake angles of the two loudspeakers are aligned with one another. I was surprised by the importance of that last step: I expected its impact would be limited to the sort of fussy, head-in-a-vise, depth-obsessed imaging artifacts in which I have no interest whatsoever. In fact, "syncing" the speakers' rake angles was critical to locking in a perception of aural openness and scale from every listening position. Interestingly, the Evolution stands aren't spiked (good), and thus lack easy adjustability (bad). Peugh gamely compensated by using short lengths of cable under the front portions of the marble bases, rolling them slightly fore or aft to achieve just the right rake.

### **Listening**

A word about power: Although I've long admired the performance of the various Sonus Faber models I've heard



at audio shows, it was the company's US distributor that approached me regarding the possibility of a Guarneri Evolution review, rather than the other way around. I reminded Sumiko's Bill Peugh of my predilection for low-power amplifiers, and of the fact that the most powerful amp I own provides a modest (by most people's standards) output of 25Wpc. The review proceeded as planned, although when Peugh visited my home to fine-tune the installation, he observed—and I agreed—that the Guarneris' performance in my room might have been enhanced by another 25Wpc or so. I made an effort to borrow either a more powerful version of the Shindo Corton-Charlemagne or another pair of basic Corton-Charlemagnes, for biamping, but that didn't work out in time for my deadline.

That's germane, owing to a shortcoming I noted in the Guarneri Evolution's performance in my system: It didn't allow recorded music to "breathe" as well as other, more efficient speakers with which I'm familiar. Without question, that's the sort of thing that might have been coaxed along with a bigger stick.

That said, the combination of Sonus Faber Guarneri Evolution and Shindo Corton-Charlemagne was consistently engaging and emotionally effective, owing mostly to its superior way with musical timbres. While some loudspeakers are designed to excel at bass extension, or stereo imaging, or sheer touch and impact, it seemed that the Guarneri's *raison d'être* is *tone*: deep pools of pure, undiluted, richly textured, richly colored, real-life tone. If tone were a controlled substance, the pleasantly warm Sonus Faber-Shindo combination could prove lethal.

And what a way to go. Clarinets, cellos, bombards, violas da gamba—try almost any track on Musica Antiqua Vienna's fascinating *Le Jardin Musical* (LP, Supraphon 1 11 2126)—pianos, English tenors and English horns were all drenched in believable timbral color. The Sonus Fabers were also superb at getting across the percussive components of those natural sounds, as of the woodwinds, harp, double bass, and piano featured in the Woody Herman recording of Stravinsky's *Ebony Concerto* (LP, Everest SDBR 3009). Forgive this comparison for having more to do with merchandise than with music (and for my having used it a few times too many), but the Guarneri Evolutions presented sonic details in the manner of my Quad ESLs: not by dint of brightness, but with subtlety and the sort of warm clarity that suits my tastes, though I suppose it may confound listeners who prefer a lighter, perhaps more open presentation.

For all that, the Guarneri Evolution rocked quite nicely, with good momentum and musical flow, and surprisingly good freedom from timing distortions. Brisk tempos, as found throughout the dB's underrated *The Sound of Music* (LP, IRS 42055), came across well, as did the sound and impact of larger pop ensembles, as in Roxy Music's tear-jerking live cover of "Jealous Guy," from *The High Road* (LP, Warner/EG 23808-1B). Bass extension was notably less than that of my reference Audio Note AN-E/SPE HE speakers—the measured response was a couple of dB down at 40Hz, with some audible output at 31.5Hz—but satisfying nonetheless.

Large-scale classical music was handled exceptionally well by the Guarneri Evolutions—and their timbral warmth and innately good musical flow made CDs a bit more listenable than usual, encouraging me to sample some of the many opera recordings I have in that format. When I listened to my favorite stereo-era recording of Puccini's *Turandot*, with Renata Tebaldi and Jussi Björling, and Erich Leinsdorf conducting the Rome Opera House Orchestra (CD, RCA Victor 62687-2), the Sonus Fabers sounded clear and unstrained on massed voices, with enduringly good color and texture on strings and brass, and reasonably good weight on drums (as in "O, giovinotto"). Also impressive was the sheer *feel* of the pizzicato strings during the orchestra's dramatic accents in "Signore, ascolta!" and elsewhere. Dramatic contrasts and peak dynamic levels were limited compared to the more efficient speakers I'm used to, but that, too, could be expected to

improve—up to a point, given the natural limitations imposed by the speakers' size—with the application of more power.

Spatially, the Sonus Fabers were very much to my taste. Perhaps because of the overall tonal balance for which they were voiced—one in which treble extension appears to have been intentionally limited in order not to call attention to the lack of very deep bass—the Guarneris weren't among those speakers known for razor-sharp (and fussy, and ultimately unrealistic) delineation of instrumental and vocal images. Yet the Sonus Fabers did, indeed, "disappear" when optimally set up: When I walked into the room where they were playing, when I stood nearer one speaker than the other, and when I sat in the sweet spot, the speakers themselves seemed silent, a colorful and lovely stretch of sound appearing from just a short distance behind them.

Unusually for a pair of speakers that demand such care in terms of getting the cabinet angles precisely correct for both channels, the Sonus Fabers were tolerant of off-center listening. Yes, sitting at or near the sweet seat rewarded me with maximum clarity, openness, and imaging focus, but I found that I could move my seat, or even stand and walk about the room, without disrupting my listening pleasure. That was especially nice with larger pieces of music, such as my preferred recording of Richard Strauss's *Tod und Verklärung*, recorded in September 1957 by Artur Rodzinski with the Philharmonia Orchestra (LP, Seraphim S-60030). Scale was good—surprisingly so for such a small speaker—but not of the highest order. My reference Audio Note loudspeakers, which are still better in that regard, are unashamed of their means of sounding big: they use their own generously sized walls and those of the room to reflect the sound, helping the ears believe they're in the presence of something sizable. With their more-or-less absorptive baffles and their streamlined enclosures, the Sonus Fabers couldn't do quite the same trick—yet they managed nonetheless to produce a soundfield of reasonable size, when that was called for.

Drawbacks? Though consistently colorful, well textured, and possessed of relatively good impact (for a two-way, non-horn-loaded speaker of average sensitivity), the Sonus Fabers were somewhat program-dependent. XTC's *Nonsuch* (CD, Geffen GEFID-24474), auditioned as a rip of a "Red Book" CD through my computer-audio setup, sounded surprisingly rolled off, veiled, and unsatisfying through these speakers. Switching back to my Audio Notes, I was reminded that the recording has a somewhat soft EQ, without much in the way of transient snap in Colin Moulding's electric bass or drummer Dave Mattacks's drum kit: Somehow, the Sonus Fabers seized on those characteristics and exaggerated them. Similarly, the fine recording by Hilary Hahn and Colin Davis of Elgar's Violin Concerto (CD, Deutsche Grammophon 00289 474 8732), which is a bit dull-sounding under even the best circumstances, was unlistenable so through the Sonus Fabers: It took on the tonal profile of a 78rpm record, but without the format's redeeming presence and force. Still and all, the almost incomparably brilliant *The Boatman's Call*, by Nick Cave & the Bad Seeds (LP, Mute/Reprise 46530), which is not at all an airy, sparkly recording, sounded fine through the Guarneri Evolutions. Go figure.

### **Conclusions**

There are lots of positives here and relatively few negatives. Chief among the former is the realistic manner in which the Guarneri Evolution, working in the context of my system and my room, was able to suggest the natural textures and colors of musical sounds. Listening to its way with instrumental and vocal timbres was almost like viewing and touching a rare Sarouk rug, or drinking a 40-year-old Armagnac. For the listener who delights, above all else, in the rich, saturated, velvety tones of real instruments and voices, I can think of no more appropriate loudspeaker.

Obviously, there are loudspeakers that can scale greater dynamic heights with the sort of gear that I own—yet the vast majority of those are large and costly, and they ask the listener to make sacrifices in other performance areas. Viewed in the context of traditional high-end speakers, there's a lot of competition at or below the Guarneri Evolution's price. Of the models with which I'm familiar, the Quad ESL-2905 (\$12,499/pair), Vivid B1 (\$14,990/pair), and, especially, Wilson Audio Sophia 3 (\$17,600/pair) offer similar levels of musical involvement, albeit with different combinations of sonic strengths. Judged solely on the basis of technology for the dollar, all three would appear to offer greater value—though it's less easy to estimate the worth of the handcrafting that makes the Guarneri Evolution what it is.

Which brings us to where we began: Some people don't mind paying a premium for all the things that make a difference, as long as the difference is one that matters to them. For domestic audio enthusiasts who are pleased by golden, not gray, to whom the hue and the flesh are nearly everything (and musical momentum, flow, and touch are everything else), a device such as the Guarneri Evolution might be worth whatever Sonus Faber asks for it. **Warmly recommended.**

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<http://www.stereophile.com/content/sonus-faber-quarneri-evolution-loudspeaker>