YG Acoustics Sonja 3.2 Loudspeaker

Musically Immersive

Kirk Midtskog

One of my consistent equipment references for several years has been a YG Sonja speaker. I have reviewed the 1.2, 2.2, 2.2i, and now, the 3.2—as well as the Kipod II Passive and its successor, the Hailey 2.2. What I find compelling about the YG speakers I have evaluated is their clean, articulate, uncolored sound. All speakers have a sonic signature—a personality, if you will—but the Sonja models have always struck me as keeping their own editorial overlay to the music at a fairly low level. They have proven themselves to be straight-forward conduits of the signal they receive from upstream gear. And crucially, they do this without scrubbing the "soul" from the music. Sonja speakers have never sounded musically dry or analytical in my system; rather, they have sounded musically affirming and engaging. They have also checked off a list of listening criteria with aplomb: excellent resolution of fine details, wide frequency range, macro- and micro-dynamic facility, and peer-into soundstaging. With each update over the years, the overall sound quality of the Sonja has improved. The 3.2 under review here follows suit. It is a better speaker all around than the preceding 2.2i—which is still a very good speaker, I might add. (I will discuss the differences below.)

Since its founding in 2002 by Yoav Geva (who sold the company in 2017), YG's principal distinguishing technology has been called DualCoherent—now updated to Ultracoherent. To simplify matters a bit, both refer to YG crossovers' ability to simultaneously optimize frequency response and relative phase. Most other designs apparently sacrifice either frequency response or phase coherence for better outcomes in the other. The crossovers in Sonja models have been updated and refined over the years, and the resulting sonic improvements have been readily audible. (For more information about relative phase, please consult Editor-in-Chief Robert Harley's book, *The Complete Guide to High-End Audio*.) Other enhancements like better cabinet damping techniques and updated tweeters have also contributed to better performance over the years, but Ultracoherence remains a core technology.

Upper-level Reference line speakers, which includes the Sonja 3.2, all have YG-made aluminum cabinets and driver cones. The driver diaphragms are machined from solid blocks of aluminum. The company also makes its own custom toroidal inductors, internal braces, joiners, and other components, all manufactured in Arvada, Colorado, near Denver. YG uses high-quality materials for the parts it manufactures and top-quality components, such as Mundorf capacitors,

Specs & Pricing

Driver complement: One 1" YG Lattice hybrid tweeter, two 6" YG BilletCore mid/woofers (main module), one 10.25" YG BilletCore woofer (bass module)
Frequency response: Usable output extends from 20Hz to 40kHz
Sensitivity: 88dB (method unspecified)
Impedance: 4 ohms average, 2.8 ohms minimum
Recommended amplifier power: Minimum, 60 high-current watts
Crossover points: 90Hz and 1.85kHz

Cabinet: Aircraft-grade milled aluminum
Dimensions: 13" x 51" x 25"
Weight: 320 lbs. each
Price: $99,000 per pair, available in black or silver finish as standard; custom color matching available for an extra charge.

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Associated Equipment
Analog source: Basis Debut V turntable & Vector 4 tonearm, Benz-Micro LP-S MR cartridge
Phonostage: Simaudio Moon 610LP
Digital sources: Hegel Mohican CDP
Linestages: Hegel P30, Ayre K-1xe
Integrated amplifier: Hegel H390
Power amplifiers: Hegel H30, Gamut M250i
Speakers: YG Acoustics Sonja 3.2, Dynaudio Confidence C1 Signature
Cables: Shunyata Sigma V2 signal cables, Shunyata Sigma NR and Omega XC power cords
A/C Power: Two 20-amp dedicated lines, Shunyata SR-Z1 receptacles, Shunyata Everest 8000 and Typhon power conditioners
Accessories: PrimeAcoustic Z-foam panels and DIY panels, Stillpoints Ultra SS

for the parts it sources from others. This emphasis on manufacturing as much as possible in-house and sourcing the remaining specialty components from high-end vendors contribute to the speaker's price tag of $99,000. (For more background about YG as a company and some of its design elements, please see the YG Acoustics chapter in *The Absolute Sound's Illustrated History of High-End Audio, Volume One Loudspeakers*. Past YG reviews in TAS are other good sources for background info.)

The Sonja 3.2 has a main cabinet module attached atop a larger bass module. The upper module has two YG 6" BilletCore drivers, with "advanced neodymium magnet motors," and one waveguide-mounted YG Lattice hybrid tweeter positioned vertically in a mid-tweeter-mid configuration. The bottom module has one 10.25" BilletCore woofer with an "ultra-high field strength motor." Together, the two stacked modules weigh a hefty 320 pounds per speaker and stand 51" tall. As noted, the cones are milled from aluminum billet and have radial and concentric ribs on the back for low mass and high rigidity. The Sonja, and all models above it, have cabinet modules with an inner cabinet—complete with its own joined corners—that is carefully inserted into the outer cabinet to form cabinet-within-cabinet modules. This increases rigidity and reduces resonances more than one equally thick-walled or double-walled cabinet would.

YG's new Lattice hybrid tweeter has an "airframe" also milled from aluminum billet, composed of arms that form five, strong, lightweight, pentagonal-like support structures. A custom silk-dome membrane is attached over the airframe to form a silk-dome-over-metal-frame hybrid tweeter. The previous version (called BilletDome) used three arms that connected to a triangular support structure. The new Lattice hybrid tweeter dome is presumably more robustly supported and therefore less prone to flexing under extreme conditions like highly dynamic music passages at elevated sound pressure levels. This hybrid tweeter apparently withstands higher acceleration forces—and therefore maintains pistonic motion without deformation—than typical silk-dome tweeters and avoids the "metallic harshness" that is associated with some all-metal tweeters.

If you are a low-bass hound and you find the regular two-module 3.2 to sound a bit soft on bass-heavy music, or you have a large listening room that requires more bass reinforcement, the Sonja can be fitted with a subwoofer module bolted to the bottom of the speaker. (When configured as a three-module speaker, it becomes a Sonja 3.3.) I think most listeners will find the two-module 3.2 to be plenty "big" enough, with no need to upgrade to the three-module version. The two-module 3.2 performs its best in a system with at least 100 watts of high-current amplification on tap and situated in a medium/small to medium/large listening room.

The Sonja 3.2 is easier than most speakers its size to place in an average room. In my 12.5' x 17' room, no other speaker near its size (13" x 51" x 25") has been less fussy about placement. I have heard various Sonjas sound very good in other rooms as well, larger and smaller. All YG Reference speakers are sealed-cabinet designs. There is no port that can add to bass bloat if the speaker placement is not just right. Of course, if you put in the effort to optimize placement for frequency response smoothness, image precision, and soundstage expansion, the Sonja 3.2 will reward you with even better performance than a perfunctory placement process—a "start in a reasonable spot, adjust a bit, and start listening" approach. The optimal listening area is also large enough to allow you to relax about your head position in the listening chair. Some of my listening room guests have commented on how a reasonable soundstage is still portrayed even when they are seated off the optimal listening axis.

YG takes great pride not only in its ability to manufacture its products to very tight tolerances but also its ability to use extensive computer power to model multiple performance domains simultaneously. From YG's white paper: "Since 2020, YG has benefitted from industry-leading computational modeling to support technology development. This includes multi-domain models and large-scale parallel computing. Multi-domain models simply mean modeling several different 'domains' in parallel." Further: "Each part of the loudspeaker is modeled in detail: inside each driver, the cone, surround, suspension, the complex interaction of the magnet and voice coil; each part of the cabinet, and the enclosed air volume." YG has access to the computing power and knowledge necessary to do this kind of computational modeling through Dr. Matthew Webster, an astrophysicist and co-founder of Cambridge Acoustic Sciences in the UK. Dr. Webster is now the CEO of YG and brings his expertise in multi-domain modeling to technology development and manufacturing techniques at YG.

Turning to sonic performance, I think the Sonja 3.2 will appeal to many music lovers as a high-performing all-around speaker. It is not a specialist. It doesn't lean in with blazing leading edges or bombard you with overly heavy bass lines. It doesn't dazzle you with some initially impressive trait like hyper-resolution, only to wear poorly over extended listening. It simply plays music with a verisimilitude that is as close to live music as can be expected in a domestic setting and at its price. As alluded to briefly above, the Sonja 3.2 has excellent articulation of fine details, wide dynamic range, delicate dynamic shading, and nearly full-range frequency response. It doesn't necessarily draw one's attention to any one of those elements, though. Music sounds integrated and of a "complete whole," not a set of listening test criteria.

Soundstaging and imaging are excellent. The entire front of my listening room was filled with a large, focused, realistically proportioned soundfield. Depth was portrayed on a continuum instead of a few layers of partially fleshed-out figures. Individual images had refined boundaries, not fuzzy outlines, and carried a considerable level of solidity and "physical presence." Imaging, by itself, isn't all that interesting to me if there is little artistic life in the music. Without enough "musical interest" included with all that spatial accuracy, my mind will wander away from the music content after the second or third return listen—with days in between—to a given musical selection. That did not happen with the Sonja 3.2. I got lost in the ebb and flow, the sorrow, the joy, the grand sweep, the unfolding progression—the human element—evoked by the music tracks.

All kinds of music are served well by the Sonja 3.2. I spent hours reveling in grand organ pieces by Bach or the Poulenc *Concerto for Organ, Strings, and Tympani* [Martinon, Erato LP], for examples. Music from folks like Radiohead and Beyoncé had wonderful bass support, which lent a sense of power underpinning everything. Thankfully, much of the tizzy quality in the upper frequencies of some recordings was not distracting through the 3.2. The ability to convey delicate details while at the same time not shouting recording flaws at you is a trait that seems to come from excellent gear: Constellation Audio, Hegel Music Systems, Raidho Acoustics come to mind, among gear I have reviewed in recent years. YG falls right in line here. Small, intimate music from Bobo Stensen on the ECM label was sometimes achingly beautiful through the YG. Hard-driving rock, large symphonic works, small jazz combos, massive electronica, choral music, male and female vocalists...the Sonja 3.2 did it all.

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So, how does the current 3.2 compare to the preceding 2.2i? In broad terms, the newer model sounds more liquid, more coherent, and more resolving of fine details. These distinctions are not overwhelming, but the sum of the new version's sonic differences is significant enough to merit mention. The new Sonja has the same perceived bass extension as the 2.2i, but it sounds more robust in the bass in a general sense—fuller, if you will. This greater bass heft and the new hybrid tweeter's smoother response results in a more relaxed presentation. The neat thing about what YG has done here is that subtle details are not sacrificed to deliver all the enjoyable, musically affirming qualities I have been carrying on about. The newer Sonja seems to calm down a layer of underlying noise so that more subtle details are allowed to emerge more intact. It is possible that some listeners might miss some of the perceived transient snap of the previous 2.2i. I hear the newer 3.2 as simply having more precise upper-frequency behavior, and this helps to make everything sound a bit calmer and clearer overall. Sometimes, less precise can sound a little more exciting because it adds a bit of extra "zing" to things.

I identify with YG's apparent emphasis on technology, science, and manufacturing acumen in service to music listening in the home rather than audiophile brinkmanship. At the end of the day, producing a speaker that delivers so much realism without sounding stilted in an audiophile way is a great accomplishment. It is not easy to "simply play music." My listening experience with the Sonja has been one of musical immersion and exploration. I respect the Sonja 3.2 for its realism and thoroughly enjoy it for its ability to communicate the human element in recordings. Highly recommended. tas