

YG Acoustics Kipod II Signature Loudspeakers



Written by Howard Kneller
 Sunday, 15 July 2012 00:00

If you fancy the audiophile rags (and if you're reading this, you likely do), chances are you've heard of high-end speaker maker YG Acoustics. A while back, YGA caused a stir with an ad campaign that proclaimed its speakers "The best . . . on Earth. Period."

That's a brash statement from any manufacturer, let alone one that's extremely small (YGA currently employs only about ten people) and is barely ten years old. Not surprisingly, lots of people, including many reviewers, were taken aback. However, after listening to the company's wares, more than a few people have concluded that the statement isn't entirely hype.

I had already heard YGA's Kipod II Signature (\$49,000 USD per pair) many times before I took on this review, and already knew that it at least rubs shoulders with the best loudspeakers in the world. But I'm not foolhardy enough to judge any speaker the best. There's just too much subjectivity involved in making such a determination. My job is to highlight the Kipod II Signature's technical underpinnings, explore its sound, and probe its strengths and weaknesses.

Features: not your recycled cans

The name of each of YGA's speaker models bears a connection to a family member of 34 year old Yoav Geva, the YG of YGA. In Hebrew, the word kipod means "hedgehog," the nickname Geva gave his daughter, for her hairstyle.

The Kipod II-series speakers replaced the original Kipods in 2011, and are just below YGA's Anat line (the flagship Anat III costs \$119,000/pair) and above the Carmel speaker (\$18,000/pair). Kipod IIs are sold in different configurations. In three-way form, each channel is handled by two modules: an upper Main Module for the tweeter and midrange-woofer, and a lower, sealed-box module for the active woofer. The smaller, two-way version consists solely of the upper Main Module. Those who go the latter route will probably augment the speakers with one or two subwoofers.

Regardless of which way you go, the Kipod II can be purchased in two versions: Studio or Signature, the latter involving the addition of a crossover package to the Studio's upper module. The Studio version is \$42,000/pair in three-way form, \$21,000/pair in two-way form. The Signature reviewed here costs \$49,000/pair in three-way form, \$28,000/pair in two-way form.

For all versions of the speaker, the Kipod II's upper modules come with biwire connections as standard gear. The lower modules of both three-way versions have line-level inputs that can accommodate both single-ended and balanced cables.

The Kipod II Signature includes a lot of technology that has been trickled down from the Anat. Interestingly, YGA says that the Kipod series offers a level of sound quality that's substantially the same as the Anat's, but on a smaller scale, and only at "reasonable" volume levels.

All YGA speakers are designed and manufactured at the company's headquarters and factory in Arvada, Colorado, just outside Denver. The Kipod II's textile-dome tweeter is made by Kurt Müller of Germany, and is used in conjunction with a magnet system produced by Scan-Speak. Before a tweeter is installed in a Kipod's upper module, YGA remachines its motor system, using computer-optimized technology to make them conform to highly sophisticated 3D geometries. The tweeter is crossed over to the midrange-woofer at 1.75kHz.

The midrange-woofer cone and, for the three-way version, the woofer cone, are manufactured in-house by YGA. Typically, woofer diaphragms are spun, cast, or pressed. YGA machines them from 16-pound slabs of solid, aircraft-grade 6061-T651 tempered aluminum alloy, which is extremely rigid and nonresonant. The significance of making the diaphragms in this way can't be overstated, says YGA; the result is high rigidity, and consistency of machining within extremely tight tolerances.

YGA cuts the 6061-T651 alloy with expensive milling machines, some of which are also used by Airbus to manufacture its jetliners. Though these machines are assisted by sophisticated computer software, the many steps involved in YGA's production process mean that their operation is quite labor-intensive.

Behind each woofer is a 400W class-D amplifier custom-designed, by Hypex Electronics of the Netherlands, for the



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impedance curve of the individual drive-unit it's wired to. It's not a true switching amplifier, having a linear rather than a switch - mode power supply. According to YGA, because the amp is matched to the impedance curve of a specific woofer unit, it can be customized to reduce negative feedback, which benefits transient and low-end control and allows the woofer to blend seamlessly with any power amplifier that might be used for the speaker's upper module.

On the rear of the bass module are controls for adjusting gain, phase, EQ level and frequency, crossover frequency, and input type (XLR or RCA). Also present are the line-level inputs, an IEC inlet, an On/Off switch, and a blue LED that illuminates when the module receives power.

The Kipod II's crossovers contain toroidal air-core inductors that are wound in-house by a CNC coil-winding machine. YGA states that the use of toroidal inductors reduces crosstalk between the crossover's high and low frequency sections, and reduces distortion, brightness, and sibilance. Moreover, says Dick Diamond, YGA's director of sales and marketing, the crossover's "secret



sauce" is that it's based on a proprietary algorithm, developed by Yoav Geva, that allows the speaker to simultaneously produce the best frequency response and the best relative phase of all speakers ever made. Diamond states that, absent the algorithm, getting one of those parameters right typically screws up the other.

The Kipod II's cabinet is slowly machined from solid billets of the same 6061-T651 alloy of which the driver diaphragms are made. YGA bolts together the Kipod II's cabinet with a "pressurized assembly" type of construction that's also used in the airline industry. This makes the cabinet's aluminum walls maintain a constant pressure against each other despite changes in temperature, humidity, and other environmental factors.

YGA states that the Kipod II produces usable output from 20Hz to above 40kHz, the latter frequency far beyond the limits of human hearing, which at best tops out at around 20kHz. The company also claims that the speaker's nominal and minimum impedances are 8 and 5 ohms, respectively. Since the Kipod II is of medium sensitivity (85dB), YGA recommends that it be driven with amplifiers that output at least 100Wpc. However, I've heard of systems in which very high-quality but somewhat lower-powered amps (e.g., 50Wpc in class-A) worked extremely well with the Kipod II, no doubt due to the speaker's powered woofer. The cost of very high-quality amplification can be astronomical. By using an active woofer, the Kipod II can be robustly powered for a fraction of the cost of amplification required by some of its competitors.

Each Kipod II Signature weighs an imposing 117 pounds and stands a little over 43"H (including feet) x 12"W x 17"D. The standard colors are matte-black or silver; other, custom colors are available.

Setup: ouch!

The Kipod II Signatures arrived in four large, steel cases. At YGA's factory and even in their showroom, speakers and cases are moved around by a large crane fitted with industrial-strength suction cups. Lacking such a contrivance, I moved the Kipods from curbside to listening room the old-fashioned way: I paid the trucking service that delivered them.

There are right and wrong ways to remove the Kipods from their cases and position them in the room. In addition to being very heavy, the Kipod has sharp edges that can be dangerous if handled incorrectly. I chose one of the wrong ways and ended up with a nasty cut on one hand. The next time I handle aluminum speakers, I'll wear gloves.

When the Kipods have been unboxed, their upper and lower modules must be screwed together. After doing so, I attached the spokes of the magnetic grilles to the outside edges of the midrange - woofer and woofer surrounds. I then connected the Kipod II's main modules to my Bryston 6B SST2 amplifier with Synergistic Research Element Copper-Tungsten-Silver speaker cables. From the bass cabinets' line-level inputs to my Esoteric C-03 preamplifier I ran a pair of Copper-Tungsten-Silver single-ended interconnects. Lastly, I replaced the Kipods' stock flat jumper pins with a pair of Synergistic jumper cables.

Visually, the Kipod is an ultramodern work of sculpted art. The fit and finish are impeccable, and nothing less than

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you'd expect of a product made with the precision equipment used to build jet aircraft.

After I'd listened for several months, Dick Diamond paid me a visit. He paced and crawled around my 22'L x12'W listening room for the better part of that afternoon and most of that evening. We wound up with the speakers about 23" from the sidewalls and 25" from the front wall. With a slight toe-in of perhaps 15 degrees the speakers almost entirely "disappeared" and sounded tonally best balanced, with good center fill and openness of soundstage.

Being able to adjust the output of the bass modules made lower-frequency anomalies easy to address during setup.

I won't detail the specific settings that Diamond selected for my room because, of course, those settings will be different for every room.

Suffice it to say that they were close to those suggested in the Kipod's manual. According to Diamond, this is the case 99% of the time.

Performance: headbangers need not apply

I've heard a handful of speakers that were in some ways as good as the YGA Kipod II Signature, but I've heard none that are better overall. And what struck me first was that the Kipod nailed realism.

Every audiophile knows of music that has the potential to emotionally move him or her. Often, that music is what we grew up listening to and have heard live many times. For me, it's the music of Yes. In "Perpetual Change," from The Yes Album (CD, Elektra/Rhino R2 73788-2), Jon Anderson's voice was reproduced with a tonality and timbre that were as true to his voice heard live as with any speaker I have heard. It wasn't too warm and muddy, as it is through some speakers, or dry and lean, as with others. But tonal honesty wasn't the only thing the Kipod II Signature got astonishingly right in Anderson's voice. It also displayed utterly remarkable clarity, translucence, inner detail, and liquidity. The result was nothing short of breathtaking, and nearly brought me to tears.

I then played Nina Simone's Let It All Out (CD, Verve PHS 600-202).

Simone is known for having been a master of vocal intonation and inflection. Indeed, throughout this album, she endlessly varies her pitch and tone, all based on her changing emotions. By fully unmasking these modulations, the Kipod II vividly communicated the extreme sadness of "The Other Woman" and, with a poignancy I've heard through no other speaker, juxtaposed that sadness with Simone's anger in her cover of Bob Dylan's "The Ballad of Hollis Brown." In short, the Kipod II communicated changes in mood and emotion that most speakers are too clumsy to recognize. These included shifts not only within songs and sentences, but extremely subtle changes within a single word.

The Kipod II unquestionably owned the midrange -- and the low end. It was surprisingly free from upper-bass boom and stray resonances, the result being startling clarity and articulation in that region. The drum on Guy G. Gauthreaux II's Open-Close-Open: American Contest Solos for Snare Drum (CD, GGG R 688144) sounded warm and woody while displaying jaw-dropping speed and transient snap. The definition was so finely drawn that it had to be heard to be believed. In "The Dancer," from Stanley Clarke's School Days (CD, Epic EK 36975), Clarke's opening thumb pops on electric bass displayed ear-opening extension, clarity, and rhythm. I've listened to this recording through a number of very good speakers, but had never heard thumb pops like that before. Later in the track, when Clarke works his piccolo bass, every bend of the instrument's strings was revealed.

Soundstaging, too, was magnificent. But it wasn't only that the Kipod IIs created an extremely wide and deep three-dimensional soundscape, nor that they solidly delineated the physical spaces between voices and instruments. Rather, it was the fact that, again and again, the speakers combined those strengths with other skills -- such as the ability to pass along dimensional and spatial information -- to believably re-create a live performance in my listening room.



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The YGAs demonstrated this with "Do You Feel Like We Do," from Peter Frampton's *Frampton Comes Alive!* (24-bit/44kHz FLAC, A&M Octane), by fully capturing the reverberant echoes of the now-famous "talkbox." For those not old enough to recall, this device is essentially an effects pedal that was used to route the sound of Frampton's guitar into his mouth via a tube taped to the side of his vocal mike. This allowed the sound to be modified by his speech. With the chatter and other sounds of the crowd in the background, I felt as if transported back to 1975, and the hall where this album was recorded.

But what most struck me was how the Kipod II put this all together with top-to-bottom seamlessness and flawless linearity. The crossovers drew absolutely no attention to themselves. Box colorations, frequency dips, phase-related distortions, and other anomalies were not on the menu. Even many otherwise world-class speakers aren't this linear. A remarkable achievement.

Not surprisingly, the Kipod II thrives on very high-quality amplification, and worked well with my Bryston 6B SST2 - so well that, when I played the Tsuyoshi Yamamoto Trio's "Midnight Sugar," from *The TBM Sounds!* (CD, LIM UHD 048), Dick Diamond remarked that the acoustic-piano notes were as weighty and impactful as he'd heard with any system. That statement was no manufacturer embellishment -- everyone else who heard the combination, including some very hardened audiophiles, agreed.

However, when I swapped out the \$8000 Bryston for the \$22,000 Esoteric A-02, the solidity of the piano notes somehow managed to improve. The presentation was so profound that the wakes of the struck keys now contained swells of air that seemed to endlessly resonate from the crisp attacks. Moreover, these notes, which before had sounded comparatively amorphous and ill defined, were now transformed into stunningly delicate crystalline structures. Against a cleansed backdrop, previously unheard aspects of harmonic structure, such as overtones and other instrument-related resonances, came alive.

Although it's a cliché to state that no speaker is perfect, that makes it no less true, and the Kipod II Signature, easily one of the best speakers I've heard, was no exception. YGA is the first to admit that the Kipod II is not a high-sound-pressure-level speaker (they have the Anat III for that). When I pushed the pair of them to extremes of volume with Rush's *Roll the Bones* (CD, Atlantic 82293-2), it was clear that if I drove them any harder, the drivers would distort. I don't recommend this speaker to anyone with a large listening room who subsists on a diet of headbanging metal music or requires the ultimate volume for large-scale orchestral works.

Still, in my room, the Kipod IIs easily produced SPLs at which no rational person would listen to music. Of course, YGA had to compromise somewhere. Creating a speaker that can do everything but blow your hair back seems a shrewd choice.

The Kipod II's dynamic range was slightly audible even when the volume wasn't set uncomfortably high. Primarily from the upper midband up, the speaker could sound a tad light -- especially when compared to the output of its powered woofer. Turning down the gain on the bass modules didn't help. I almost wished that the Kipod had more tweeters and midrange-woofers.

But when I say "slightly audible," I mean very slightly. Moreover, while some speakers, such as the larger Wilson, B&W, and JBL models, will give you more heft in the noted frequencies, they won't provide the shockingly linear and uncolored reproduction of the Kipod II.

Yoav Geva doesn't "voice" his speakers according to what sounds good to the human ear. Rather, he states that their performance is dictated entirely by measurements. A likely consequence of this design approach is that the Kipod II suffers no fools. Bad recordings will be neither candy-coated nor rescued by such euphonic artifices as a mid-frequency bump or an upper-end rolloff. Depending on what you want a loudspeaker to do, this may or may not be a criticism.

Comparison: box vs. panel/box hybrid

I compared the Kipod II Signature to the Martin Logan Summit X (\$14,995/pair). These are very different speakers. The Summit X is the result of a marriage between an electrostatic panel and a dynamically driven woofer. As reviewed, the Kipod II Signature is a three-way dynamic-driver design. Other than its wooden woofer cabinet, the ML has no box; the YGA's enclosure is made of aluminum. The X's sensitivity rating of 91dB makes it substantially more so than the 85dB Kipod, yet the X's nominal impedance of 4 ohms makes it more difficult to drive than the 8-ohm Kipod II. But most important, the Kipod II and the Summit X sounded very different.

The ML Summit X wears its renowned detailing prowess prominently, like a medal on its chest. After listening to one well-recorded track, I had no choice but to marvel in awe at this ability. The X unearthed subtle phrasings and other

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vocal tidbits in the title track of Shirley Horn's *Here's to Life* (CD, Verve 314 511 879-2) that had hitherto seemed almost hopelessly buried in the disc. Careful listening to this track through the Kipod II Signature demonstrated that it, too, missed nothing while capturing Horn's every breath, aspiration, and lip pucker. However, the YGA served up these informational snippets differently: It didn't toss them in my face, as some might say the ML does, but packaged them as part of a larger whole that didn't become apparent until I had also acknowledged the other aspects of Horn's voice, and the sounds of her band's instruments.

Further, the X gave a bit more energy to the music than did the Kipod. This was manifested in the X's sharper, even more "electronic" sound. In "The Golden Pheasant Flying Out of the Mountain," from Yim Hok-Man's *Master of Chinese Percussion* (CD, LIM K2 HD 033), percussive strokes flew from the Xes' panels like bats from hell. The effect was so profound that some would consider it overly theatrical, even caricatured. But what theater! With the right recordings, the Summit X demands to be respected, even held in awe.

In comparison, the Kipod II Signature presented those drum sounds in a slightly more laid-back manner. This doesn't mean that it was in any way boring or less impressive; rather, the Kipod II's sound was more organic, even more luxurious. While tastes in the above criteria may vary, there can be little dispute that the MartinLogan Summit Xes could not hold a candle to the YGA Kipod II Signatures in the abilities to "disappear," to reproduce realism, to immerse the listener in a three-dimensional soundscape. The Kipod IIs brought me into the stadium in which Frampton Comes Alive! was recorded and placed me there in a way the Summit Xes couldn't.

I know what you're thinking -- the Summit X must better the Kipod II in electrostatics' quintessential strengths of transparency, seamless, low distortion, lack of cabinet coloration, and pinpoint imaging. But despite being an electrostatic guy, I'm duty bound to report that the YGA gave up nothing to the ML in these areas.

Of course, the Kipod II Signature costs more than three times as much as the Summit X. While I found the YGA to be the better speaker, I won't be crossing the Martin Logan off my short list of favorite speakers any time soon. For the money, it's difficult to beat.

Conclusions

Like all other speakers, the YG Acoustics Kipod II Signature is not perfect. It makes a number of compromises, the most substantial of which is in the amount of sound it can put out. It is thus not optimal for all systems or musical tastes. For me, however, it communicated more emotion, beauty, and realism, and provided more sheer musical enjoyment, than any other speaker I've had in my listening room.

In most real-world applications -- i.e., those that don't require stupid SPLs -- the Kipod II Signature will redefine what the buyer thinks is possible in the art of reproducing music. It may even convince some that YGA's claim that it's the best speaker on Earth is not as audacious as it may seem. It's just that good. Period. And exclamation mark!

... Howard Kneller

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Associated Equipment

- Amplifiers -- Esoteric A-02, Bryston 6B SST2 • Preamplifier -- Esoteric C-03 • Sources/DAC -- Esoteric K-03, netbook computer running Windows 7 and JRiver Media Center 17
- Speakers -- MartinLogan Summit X • Interconnects -- Synergistic Research Tesla
- Digital cables -- Synergistic Research Tricon USB • Speaker cables -- Synergistic Research Tesla Apex
- Power cords -- all Synergistic Research: Tesla Hologram A (amplifiers) and D (source), Precision AC (speakers, power conditioner), Precision AC SE (power conditioner), T2 (preamplifier)
 - Power conditioners and distribution -- all Synergistic Research: Powercell 10SE Mk.II (power amps and preamp) daisy-chained to Powercell 4 (digital sources), QLS 6 and 9 power strips
- Isolation devices -- Bright Star Audio IsoRock reference platform, Synergistic Research MIGS, Mapleshade Heavy Hats, DIY amp stands
- Misc. -- all Synergistic Research: Galileo Universal interconnect and speaker-cable cells, Galileo MPCs on all signal cables and power cords

YG Acoustics Kipod II Signature Loudspeakers, Price: \$49,000 USD per pair. Warranty: Five years parts and labor.

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