

EQUIPMENT REPORT



YG Acoustics Kipod II Signature Loudspeaker

Full-Range Sound for Smaller Spaces

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Have you ever wondered if it is possible to get world-class resolution, imaging, and full-range frequency extension in a small-to-medium-sized room from a single pair of speakers? No DSP room-correction system, no large room-treatment devices, and no subwoofers. Just keep it simple with a pair of speakers and still not have bass-overload issues?

Because my listening room is small (12' x 6' x 17'), I have accepted the fact that its limited size precludes the use of a truly full-range speaker. The bass from large speakers in smaller rooms overwhelms the space with added emphases at certain frequencies, accompanied by a reduction of output at others. This highly colored bass pattern tends to mar the entire musical experience, not just in the bass, by “announcing” that something is inconsistent with live music in a fundamental way. A larger speaker also usually needs to be placed at a greater distance from the listener, not to mention from the room walls, to allow its disparate drivers to produce coherent sound at the listening position—distances we simply don’t have in smaller rooms.

There is a solution for those of us with full-range ambitions in smaller rooms, however. In my experience, the YG Kipod II Signature Passive is the full-range, small/medium room champion. It has all of the performance attributes one would look for in a state-of-the-art speaker specifically scaled to fit in less-than-ideal-sized spaces: stunning resolution, tonal neutrality, fantastic transparency to the upstream system, wall-defying soundstaging, deft imaging, seamless blending into the soundscape so that it effectively disappears as the acoustical source, and an in-room frequency response from 20Hz to 40kHz (according to YG). Best of all, it puts everything together in musically compelling ways. And, yes, I can confirm that it does not overwhelm my listening room with lumpy-sounding bass.

Any caveats to this list of fine performance attributes? By virtue of its design brief to perform well in small-to-medium-sized rooms, the svelte 41"-tall Kipod will not reproduce macro-dynamic swings with truly thunderous force or pump out low bass notes with the same amplitude as the big boys—such as its

much larger sibling, the Sonja 1.3. Though Kipod does reproduce very low notes, at the same time it sounds as if it has a fairly gradual roll-off in the bass and thus does not induce bloat as a result of the speaker/room interface. The low notes in *Rutter's Requiem* [Reference Recordings], for instance, extend almost as low as I have heard them sound with any large, full-range system, but do not have full power at the very bottom of the spectrum. The Kipod's bass always sounds balanced and integrated in ways reminiscent of how bass sounds at live orchestral concerts.

The Kipod does not *have* to be deployed in a smaller rooms to perform well. Its bass output is not predicated on close boundary reinforcement; in my room, the Kipod was placed 61" from the back wall (measured at the tweeter). I have heard it in the cavernous YG factory demo room and in larger rooms than mine at trade shows (like RMAF and CES), and it delivered tuneful, extended, well-defined bass in all instances. Other system-integration notes I can add here are that the Kipod really should be partnered with the best electronics, sources, and cabling one can put together to fully maximize its performance capabilities and also because it is quite revealing of upstream system flaws. It should be given at least 400 hours of break-in time. A fairly stout power amplifier (say, at least 150W with a stiff power supply) should be considered over a lower-powered one, as the Kipod seemed to be somewhat low in sensitivity (rated at 85dB). I had to turn up the volume a few more clicks than with any other speaker I have had in my system to achieve similar sound pressure levels, and the speaker just seemed to "come alive" when coaxed with a higher volume setting.

While the Kipod seemed to require more power than usual, it did not come across as difficult to *control* (stated impedance is 8 ohms, nominal; 5 ohms, minimum), and its macro-dynamic range and transients were better than any other speaker of its size I have heard. At no time did I ever detect any strain from the speaker itself, even during the most demanding musical passages. Both the Gamut M250i and Pass Labs X350.5 (review forthcoming) were well suited to powering the Kipod II Passive. I would think twice, though, about pairing it with a tube amp, unless it's a reasonably powerful one.

The potential for the Kipod to sound astonishingly good or merely good depends, to some extent, on its placement—at least this proved to be the case with the *passive* version. YG's Dick Diamond came out to my house and assembled the speaker by bolting the rectangular main module on top of the larger trapezoidal bass module. The main module is, essentially, a 40 pound mini-monitor (which can be purchased separately as a stand-mounted speaker) with a 6" YG aluminum-cone midrange driver and a YG waveguide-mounted soft-dome tweeter. (The waveguide aids in matching the dispersion pattern of the tweeter to that of the midrange unit.) The bass module is, essentially, a passive, 82-pound subwoofer with a 9" YG aluminum-cone woofer. After assembly, Diamond spent about two hours adjusting its placement in my room—a service all new Kipod purchasers receive from their YG dealers. Naturally, like any audio-obsessed person would, I later moved the Kipods around just to see if I could better Mr. Diamond's setup. I couldn't. I returned them to where Diamond had left them and later adjusted toe-in just a hair. The lesson: Let the professional do the setup. Break-in time also played a larger role than I anticipated. The Kipod sounded

fantastically detailed and dynamically alive when first set up in my system, but the sound tended to be localized around the cabinets themselves if too much toe-in was applied—and it didn't take much—which, in turn, gave me the impression that some loss of center image focus was sacrificed when only a little toe-in was applied. Also, before sufficient break-in occurred, there was a bit of upper-midrange hardness; the bass seemed overdamped and constricted; and there just wasn't the sort of "musical flow" I expected. Then, right around the 400-hour mark, *everything* improved, and not subtly, either.

Fully broken-in, the Kipod's overall performance is like that of a first-rate mini-monitor with great bass and expanded dynamics added to the package: an expansive soundscape (very deep, very wide, and with an apparent increase of height), a peer-into-the-recording resolution and transparency to upstream gear, well fleshed-out images (without etched image boundaries), and a corporeal solidity coupled with bass weight underpinning the entire presentation. The Kipod recreated a soundscape that, recording permitting, extended beyond the listening room walls. On the LP *Gershwin* [Slatkin, St. Louis, Reference Recordings], I could close my eyes, point to the outer edges of the soundscape,

SPECS & PRICING

Driver complement: 1" YG soft-dome tweeter, 6" YG BilletCore midrange (main module); 9" YG BilletCore woofer (bass module)

Woofer loading: Sealed

Impedance: 8 ohms nominal, 5 ohms minimum

Sensitivity: 85dB

Cabinet: Aircraft-grade aluminum; ballistic-grade-aluminum tweeter waveguide

Dimension: 7" x 16" x 13" (main module); 12" x 41" x 17" (bass module)

Weight: 122 lbs.

Price: \$38,800 per pair, available in silver or black

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ASSOCIATED EQUIPMENT

Analog Source: Basis Debut V turntable with Vector 4 tonearm, Benz-Micro LP-S cartridge

Digital Sources: Ayre C-5xeMP universal disc player, Sony VAIO VGN-FZ-490 running J River MC 17, Hegel HD2 and HD20 DACs

Phonostage preamp: Ayre P-5xe

Linestage preamp: Ayre K-1xe

Integrated amplifier: Hegel H200

Power amplifiers: Gamut M250i, Pass Labs X350.5

Speakers: Dynaudio Confidence C1 Signature, Aerial 7T

Cables: Shunyata Anaconda ZiTron signal cables, Audioquest Coffee USB and Hawk Eye S/PDIF, Shunyata Anaconda and Cobra ZiTron power cables

A/C Power: Two 20-amp dedicated lines, Shunyata SR-Z1 receptacles, Shunyata Triton and Typhon power conditioners

Room Treatments: PrimeAcoustic Z-foam panels and DIY panels



open my eyes again, and find I was pointing to positions about one foot beyond the room's sidewalls. On the studio-created soundscape of "Di Se Re" from the Bollywood soundtrack *Di Se* [A. R. Rahman, Venus], the soundstage was even wider. The same sort of performance applied to depth as well. This means the Kipod's effective soundstage extends considerably beyond the speakers' outer edges and as deep or deeper than the distance from the speaker to the backwall. The feeling of soundstage constriction, which too often accompanies listening in a smaller room, is thereby greatly reduced because the Kipod made it seem as though I were listening in a much larger space, one that would allow the speakers to be placed about ten feet apart instead of seven and a half—as is the case in my room.

Images were so well fleshed out that I could easily discern the locations and relative sizes of the various orchestral

sections—in some recordings—as well as hear enough of the individual instruments in massed string sections to avoid the perception of a homogeneous string sound. The recent Reference Recordings LP re-issue of *Exotic Dances from the Opera* [Oue, Minnesota Orchestra] was captivating with its realistic spatial portrayal of a full orchestra arrayed in a large hall. The Kipod made this recording sound so engaging and "present" that I stopped listening for reviewing purposes and simply listened more as I would at a live concert—always a good sign. Apparent listener perspective was generally neither forward nor recessed, but would change somewhat depending on how some recordings were made—an example of the Kipod's transparency to sources. Resolution? The Kipod has it in spades, and it doesn't hype up a particular aspect of audio reproduction to give you the impression of heightened resolution or make you suffer through poorly-made recordings as a price for all its resolving power. Its resolution comes across as pure, direct, and low in coloration. Somehow, the Kipod sounds neutral and "accurate" without sounding clinical or as though it is leaching out the human "give-and-take" of music-making in order to deliver its accuracy. This is one of those high-performing audio products that gives you the audiophile goods while still letting you enjoy a good deal of your music collection. You will hear recording flaws—and brilliant engineering, too, of course—but your less-than-stellar recordings won't necessarily be rendered unlistenable by the Kipod's even-handed resolution.

Sometimes, three-way floorstanding speakers with the sort of bass extension and dynamic range of the Kipod's can't quite deliver mini-monitor-like delicacy on small, intimate music. The subtleties in a piece like the title track from the Bobo Stenson Trio's *Indicum* [ECM] can escape lesser speakers and thereby sound lackluster or just plain uninteresting. The Kipod (especially together with the fabulous Gamut M250 monoblocks) dug deeply into this slow, moody, mysterious work and brought to life its subtle yet compelling sense of yearning and resolve. The percussion work of Jon Fält can sometimes sound a little too "free form" and detached from the other players on some systems. Here, the kind of detailed and *coherent* reproduction the Kipod brought to the equation seemed to imbue everything with musical intent, with human meaning—including Fält's slightly elusive percussion style. I could also clearly hear bassist Anders Jormin tap the body of his upright bass with his fingers (using it as a percussion instrument) at the beginning of "Indikon," adding an interesting resonant quality to Fält's percussion intro.

The whole reason YG's founder Yoav Geva got into the speaker business, in 2002, was to make speakers that simultaneously had good frequency vs. amplitude behavior and inter-driver phase (time) behavior. Geva found that most speakers at that time optimized either one or the other but usually not both. Through Geva's background in digital signal processing, he was able to develop an algorithm which he applied in the analog domain, specifically to crossover design and speaker-system modeling. Geva entered a speaker prototype, based on his algorithm, in the Israeli Ministry of Industry's annual Tnufa competition. (Geva

is half-German and half-Israeli and split his time between the two countries before incorporating YG in Colorado in 2004.) He won a Tnufa grant, which he then used to pursue his basic technology, called DualCoherent, into a commercially viable product line. Based on his extensive modeling of his concept, Geva knew he needed to build speaker cabinets from a more precise material than wood, or he would not be able to achieve the very close tolerances involved.

Thus began YG's extensive use of machined parts made from high-quality aluminum billet. Machined aluminum provides several advantages as a cabinet and cone-membrane material: good strength-to-weight ratio, relatively high resistance to environmental factors such as corrosion and high temperature (helpful when machining friction heats the stock), and the ability to be machined into a wide variety of custom shapes to very precise tolerances. It also has relatively good resonance damping characteristics when properly constructed. YG uses mostly aircraft grade 6061-T651 billet and some ballistic-grade aluminum for key parts like the tweeter waveguide. I have visited the YG factory outside of Denver in Arvada. Everyone at YG is very focused on delivering high-quality products, and the CNC machines at work are truly impressive. Each "BilletCore" driver cone takes hours to mill on a five-axis CNC milling and turning machine from Germany called Gildemeister CTX Beta 1250 TC. Many parts are machined to within 0.0008" tolerances (20 microns). Which brings me to the subject of the Kipod's price: \$38,800. Given the engineering, parts-quality (capacitors and inductors are top-drawer Mundorf), raw material costs, the nearly obsessive lengths YG goes to manufacture and deliver a high-performing product, and the high level of its overall performance, the asking price is justified.

The current Kipod II Passive incorporates many advances over the model previously reviewed in TAS by Robert Harley in Issue 199. First, the Kipod Studio Robert reviewed had an adjustable, on-board Class-D bass amplifier to power the woofer in the bass module, making the speaker system semi-active. The model in this review is fully passive. (YG is moving toward all-passive configurations, although customers can still get semi-active versions in all models except the Carmel.) Second, the former model used Scan-Speak midrange and woofer drivers with standard cones. The current Kipod uses YG-machined aluminum cones integrated with some Scan-Speak supplied parts. Third, the previous Kipod used a Scan-Speak ring-radiator tweeter. The current tweeter is a YG "ForgeCore" unit with an in-house-machined motor assembly and a proprietary YG soft-dome membrane. (Some of the more standard tweeter parts, like the back lid, are from Scan-Speak.) Fourth, the Kipod reviewed in Issue 199 did not have a high-pass filter on the midrange unit so some bass content below the midrange driver's bandwidth could apparently cause the speaker to sound stressed at higher volume levels. The current Passive model has a "Signature" crossover package that applies not only a high-pass filter on the midrange driver (expanding the loudspeaker's dynamic range) but also includes some components to improve the out-of-passband phase-matching between the midrange and woofer. This now brings YG's DualCoherent technology to both crossover regions, which was not possible in the semi-active configuration. Fifth, the earlier model had high-quality OEM inductors. The current

model uses in-house wound "ToroAir" toroidal inductors, which YG says reduce distortion and, more notably, cross-talk between drivers. Sixth, the two sealed (air-suspension) cabinet modules have been further optimized to reduce resonances; the tweeter waveguide has been improved; and the external cabinet screws have been replaced by internal joiners. The two modules of the earlier version of the Kipod weighed a combined 104 pounds; the current Kipod II Passive weighs 122 pounds.

The only other speaker I had available that came close to overlapping the Kipod's frequency and dynamic range was the very nice sounding Aerial 7T [\$9850, Issue 218], a ported, bass-reflex design. The Aerial 7T seemed much easier to drive, had fuller bass in its low register, but did not extend quite as low in the bass as the Kipod. The 7T also made some recordings sound slightly harsh in the 2–4kHz range if careful attention was not paid to speaker placement, particularly toe-in. Very careful placement was also needed with the 7T to mitigate bass overload in *my* room; in a larger room, the 7T's bass output was just right without much placement optimization. The Kipod's bass was more defined in pitch and better integrated with the midrange. The Kipod also imparted a good deal more resolution of fine detail and of timbre, and came across as generally more revealing and airy. It also sounded more tonally neutral and threw a larger soundstage. Of course, the price difference makes the comparison completely unfair to the 7T, but it is all I had on hand for direct comparison. I have heard quite a few systems with speakers costing more than the Kipod in people's homes and at consumer shows. While I hesitate to make definitive judgments based solely on those experiences, there is no question that the Kipod II Signature Passive is a truly accomplished speaker in its own right.

I have no significant sonic "gotchas" to report. Even though the main module is only 7" wide, I heard no power-range-robbing baffle-step issue, which can crop up on narrow-baffle designs, so I can't fault the Kipod there. Its treble was clear and extended, and had no harshness or graininess—still no glaring fault. All kinds of music were well served by the Kipod, from hard-driving rock to solo classical guitar to full orchestral works, so I can't call it a small ensemble or rock 'n' roll specialist. The Kipod's price puts it out of reach of a lot of music lovers, and it should be mated with high-quality associated gear and a fairly powerful amplifier, further raising the price of realizing its full potential. On the other hand, its build- and parts-quality and, indeed, its sound quality are in keeping with its price. Its low bass may sound just a bit reserved to listeners who are used to the more heavy-handed bass-reflex designs. A minor ergonomic note: The oval-shaped (YG logo) binding-post tightening nuts are spaced too closely together to fit your fingers around the nuts to tighten them, at least if one of the oval knobs is in a horizontal position.

The Kipod II Signature Passive is an impressive speaker all around. It is a detailed and musically engaging vehicle through which listeners can traverse their collections, no matter what kind of music they favor. With state-of-the-art mini-monitor-like resolution and soundstaging, coupled with a dynamic and frequency envelope a mini would envy, the Kipod II Signature Passive offers something I had all but given up on: a high performance, full-range speaker in a package skillfully scaled to fit in smaller rooms. Bravo. **tas**



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