

KAL RUBINSON

Kii SEVEN

LOUDSPEAKER

I reviewed the Kii THREE digital active loudspeaker in the September 2017 issue of *Stereophile* and was totally smitten. Despite their compact size, they sounded open and well-balanced. They were capable of convincing, lively reproduction of solo voice, full orchestra and chorus, and anything in between. They were cutting edge in supporting analog and digital sources, direct-wired and network connections, and streaming. They were a pioneering effort in controlling loudspeaker radiation patterns to minimize the influence of room acoustics on reproduced sound.

Now Kii is offering a newer, smaller, less expensive yet equally appealing alternative, the Kii SEVEN. The same design principles are applied. Indeed, the Kii SEVEN is the spitting image of its big brother but smaller, intended for those with tight spaces or a need to put several speakers in a room. The only feature *not* carried over from the THREE to the SEVEN is a way of connecting a subwoofer or Kii's BXT Extension Speaker Module.

The most significant concession to its smaller size is that the three-way SEVEN incorporates just four drivers per side; the THREE incorporates six. The SEVEN lacks the THREE's two rear-mounted woofers which combine with the side and front drivers to create the cardioid dispersion pattern necessary to minimize the excitation of room modes. (The SEVEN has a similar facility but achieves it differently; see the sidebar on p.98.) Otherwise, the driver comple-



SPECIFICATIONS

Description Three-way standmount, sealed-box, powered loudspeaker with DSP control. Drive units: Two 6.5" woofers, one 5" midrange, one 1" waveguide-loaded tweeter. Crossovers: LR4 at 125Hz and 2kHz plus all-pass filters for phase correction. Amplification: 200W Purifi Eigentakt (tweeter), 200W Purifi Eigentakt with current feedback (midrange), 600W Pascal with current feedback (woofers). D/A conversion: 16-stage PWM FIR DACs

for mids, highs, sigma-delta converters for bass. Inputs: Analog: dual XLR-TRS (sensitivity -10dBv); Digital: AES3 (up to 24/192), DANTE/AES67 via two RJ45). Two KiiLink (RJ45) for Kii Control and master/slave. Streaming services supported: Spotify Connect, Tidal Connect, Qobuz Connect up to 24/192. Frequency response: 100Hz–10kHz, ±0.5dB; 100Hz–20kHz, ±1dB; -3dB at 40Hz; -6dB at 20Hz.

Dimensions 12.2" (310mm) H ×

8" (203mm) W × 12.2" (310mm) D. Weight: 30lb (14kg).

Finishes Fine Touch White, Fine Touch Dark Grey.

Serial numbers of units reviewed 88:A6:EF:90:12:F4, 88:A6:EF:90:F8. Manufactured in Germany. Warranty: Two years.

Price \$8990/pair; \$9885/pair with Kii Control. Approximate number of US dealers: 15. Available online through Front End Audio.

Kii Control Description Wired remote

control for input selection, volume, and setup for the Kii SEVEN. Inputs: USB (supports PCM up to 24/192, 24/352.8, 24/384, DSD to DSD128), TosLink, S/PDIF. Output: KiiLink (RJ45). **Serial number of unit reviewed** 3443. **Price** \$795. **Manufacturer** Kii Audio GmbH, Uhlandsweg 6b 46499 Hamminkeln, Dingden, Germany. Phone: +49 (0) 2852-94582-66. Email: info@kiiaudio.com. Web: kiiaudio.com.



Despite my familiarity, this recording seemed scrubbed fresh by the Kii SEVENs.

ment is the same: same acoustic-lens-loaded tweeter, same 5" midrange driver, both located on the front panel. Each SEVEN has three power amps. As Kii explains, the midrange and tweeter are so efficient that their Purifi Eigentakt amplifiers are never pushed near their 200W limits; what limits the speaker's maximum output is the woofers' 600W PASCAL amp.

Out of the box

The SEVEN is deceptively heavy, reassuringly sleek and solid. At first, bare of grilles, it looks like what it is, a speaker with its four drivers, but around back, it looks more like an amplifier, with vents for cooling, a power switch, a panel of LEDs and touch controls, and an array of input and output connectors, none bearing any resemblance to traditional multiway binding posts. From left to right below the control panel there is an IEC power connector, an XLR/TRS analog input jack, an AES3 input jack, a pair of RJ45 ports for KiiLink in and out, and, tucked under the edge of the control panel, a pair of RJ45 ports for audio over IP using the Dante/AES67 standard.

While the speaker control panel provides access to all the essential operations, its placement minimizes its usefulness. Fortunately, Kii provides two excellent options. The first is the Kii Home app, which supports setup, input selection, streaming, tone control, presets, and of course volume control, all settings accessible from the listening seat. The second is Kii Control, a wired remote control that adds USB, TosLink, and S/PDIF inputs and easy access to all the controls available on the rear panel and the Kii Home app. In addition, Kii Control offers a Pro submenu of options allowing control of latency, absolute polarity, and "Advanced Filters." These are primarily intended for studio use, but they may be of value to other users. Without doubt, the Kii Control is the preferred option.

In anticipation of the SEVENs, I purchased a pair of 27" Target stands from an internet vendor. I plugged in the AC cords and turned on the power. Since no setup guide or manual was provided,¹ I followed the cues in the Kii Home app, which located the two speakers, set them up as a "Zone," identified them as Left and Right, and set BoundaryEQ to 0dB for their free-field positions. I then opened Qobuz Connect on my phone and clicked on a favorite, *French Duets* (24/192 FLAC, Hyperion/Qobuz), with pianists Steven

¹ The major documentation is available online at <https://www.support.kiaudio.com/support-center-kii-seven>. However, while it deals clearly and in detail with the Kii Control and Kii Home app, it is merely descriptive about the SEVEN itself.

MEASUREMENTS

Before beginning any measurements, I connected the Kii Control unit to one of the loudspeakers and installed the Kii Home app—v.1.1.27 (build 60)—on my iPhone. When I powered up the speaker, the app found it via Bluetooth, and it allowed me to connect the speaker to my Wi-Fi network. I then connected my

MacBook Pro's USB port to the Control unit. Apple's AudioMIDI utility revealed that its USB port accepted 32-bit integer data sampled at all rates from 32kHz to 384kHz. The USB Prober app identified the Kii as "Kii Control" from "Kii Audio GmbH" with the serial number "415-001" and indicated that the USB port operated in the isochronous asynchronous mode.

I reset the loudspeaker's settings by pressing the appropriate button on its rear panel for more than 15 seconds, which disabled any equalization settings, set the LF Adjust and HF Adjust to 0dB, and set the Latency to Exact Phase. I then connected the analog output of my DRA Labs' MLSSA system to the appropriate XLR jack on the speaker's

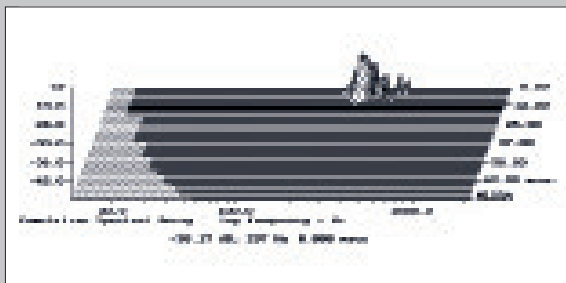


Fig.1 Kii SEVEN, cumulative spectral-decay plot calculated from output of accelerometer fastened to center of the top panel. (1V p-p input signal; measurement bandwidth, 2kHz).

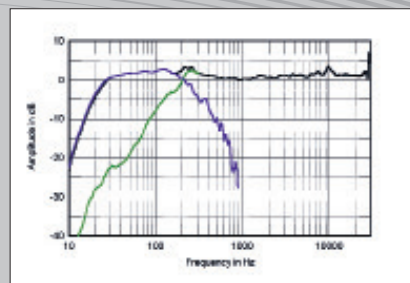


Fig.2 Kii SEVEN, anechoic response on tweeter axis at 50", averaged across 30° horizontal window and corrected for microphone response, with the nearfield responses of the woofers (set to free space), the midrange unit, and the complex sum of those responses plotted below 900Hz, 310Hz, and 310Hz.

rear panel, selected that input, and set its sensitivity to -10dBV. This input's impedance was 17.6k ohms across the audioband. I performed a complete set of measurements with this input, using a calibrated DPA 4006 microphone with an Earthworks microphone preamplifier for

Osborne and Paul Lewis. It took less than 10 minutes from power on to streaming music at 24/192.

That was impressive, but I don't listen enough to streamed music to feel comfortable using it to appraise sound quality. The SEVENS offer several alternatives, and I tried most of them: analog on XLR, AES3, and USB, the first two via direct connection, the latter via the Kii Connect in addition to streaming by Wi-Fi. In retrospect, comparing the sound via each of these options from sources up to 24/192, without up or down resampling or EQ, I had no preference; in fact I was unable to discern any difference. It was easiest to begin with the analog XLR: I simply unplugged the XLR cables from my Benchmark power amps and inserted them into the XLR/TRS jacks of the SEVENS.

Choosing a piece for first listen to a new loudspeaker is crucial because it can imprint an unconscious bias on the listener. The choice should be familiar. It should be well-recorded but not challenging in terms of extra-wide dynamics or frequency extremes; those tests come later. The first track played is like the opening line on a blind date. I chose a favorite piece, Liszt's "Vallée d'Obermann" from his *Années de pèlerinage*—specifically his own rapturous transcription for piano trio, which he retitled "Tristia" (S.723c). I played the performance by Trio Karénine (CD rip, *La Nuit transfigurée*, Mirare MIR 554).

This piece opens with just piano. The cello's entry is startling to those who know the original piece for solo piano. Later, when the violin joins, everything seems natural. Despite my familiarity, this

recording seemed scrubbed fresh by the Kii SEVENS. Each instrument had body and presence, and the ensemble seemed spread from speaker to speaker. Tonal balance was excellent, and the detail and timbre of the instruments was eminently satisfying.

Despite all that goodness, I was uncertain about something in the upper treble, though I could not put my finger on what it was. The Kii app lets you apply treble tilt, so I tried tilting it up a couple of dB, then tilting it down, but neither seemed right.

My next thought was, hey, this is a "digital" speaker. Feeding it an analog signal sourced from digital means inserting redundant conversions.² But switching the digital feed from the Hapi made no audible difference. Sure, the SEVENS were always remarkably clean and transparent and generally a pleasure to listen to, but I got another bug in my ear when I played Jane Ira Bloom's "Song Patrol," from *Early Americans* (24/96 PCM rip from a Sono Luminus Blu-Ray, SLE-70005). This bracingly clean recording is impressively tight, with well-extended bass, but, although the SEVEN provided weight and impact in the bass, it was damped and dulled. That could just be the price paid for the small box, or maybe I was doing something wrong.

Back to the front

Over the decades, I've gained the impression that unless there are explicit reasons to the contrary (acoustic, aesthetic, interpersonal, etc.), loudspeakers should be po-

² The ADC is a switched-cap 1-bit sigma-delta converter with a 120dB dynamic range. The input stage has a switchable gain for consumer and pro input levels.



measurements, continued

the farfield behavior and an Earthworks QTC-40 mike for the nearfield responses. I then repeated some of the tests using the AES3 input with the speaker set to Left. (This input locked to data with sample rates up to 192kHz and, like the analog input, preserved absolute polarity, ie, was noninverting.)

The Kii Home app indicated that the speaker's volume control was set to "50." Sending the speaker a pseudorandom noise signal with a 20kHz bandwidth and an amplitude of 100mV peak-peak gave an SPL of 72.5dB(C)/slow ballistics at 1m, measured with the Studio Six SPL Meter app on my iPhone. Setting the analog input's sensitivity to +4dBu increased the SPL by 14dB. Digital pseudorandom noise data at -20dBFS gave an SPL of 94dB(C).

The Kii's enclosure seemed inert when I rapped it with my knuckles. When I investigated the panels' vibrational behavior with a plastic-tape accelerometer,

the only resonant modes I found were at 328Hz on the side panels behind the woofers and at 293Hz on the top panel (fig.1). These modes were all extremely low in level.

The blue trace in fig.2 shows the summed nearfield response of the SEVEN's two side-firing woofers, which behaved identically. The 3dB rise in the mid- and upper-bass regions will be due to the nearfield measurement technique, which assumes that the drive units are mounted in a true infinite baffle.¹ The Kii's low frequencies are impressively extended for a relatively small loudspeaker, lying 6dB down at a moderate sound pressure levels. (A limiter operates at very high SPLs to protect the woofers.)

The woofers cross over to the midrange unit (fig.2, green trace) at 200Hz, which

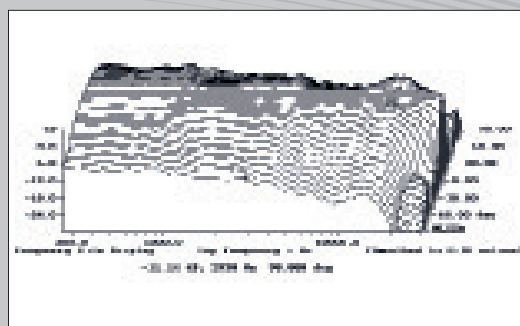


Fig.3 Kii SEVEN, lateral response family at 50°, normalized to the response on the tweeter axis, from back to front: differences in response 90°-5° off axis, reference response, differences in response 5°-90° off axis.

¹ This means that the loudspeaker is firing into hemispherical space rather than a full sphere. A speaker that has a truly flat response in the usual "4pi" space will therefore appear to have a boosted upper-bass output with a nearfield measurement, the center frequency of that boost depending on the physical dimensions of the speaker and the woofer alignment. See stereophile.com/content/measuring-loudspeakers-part-three-page-6.

sitioned away from room boundaries. That's where I always start, and it's usually where I end up. Sometimes a manufacturer makes recommendations, and sometimes the speakers have corrections/presets for different placements with regard to room boundaries, as do the SEVENs. Those tend to be generic solutions and inferior to measurement-based corrections.³

So, I was really pleased when, in a detailed response to a series of questions, Kii designer Bruno Putzeys wrote, "On the Kii Home app, the default labeling is just 'wall' or 'free.' But the *free space setting is not recommended.*" The emphasis is mine. "It's only there to accommodate customers who for some reason are unable or unwilling to place the speaker against the wall." Cardiod bass is Kii's *raison d'être*, and it requires reflection from the wall boundary. *Duh!*

I immediately moved the SEVENs to the top of a sturdy cabinet that spans the front wall of my listening room. I changed BoundaryEQ from 0dB to -6dB.

Da capo

I made a fresh start with the Kii Control connected to my WinPC running JRiver and Roon by USB. USB via the Kii Control supports DSD up to DSD128 and PCM up to 24/384—well beyond the 24/192 limit of the other sources.

A quick check back with the "Vallée d'Obermann" track by Trio Karénine was revealing. The treble was smooth and detailed all the way up, but, more significantly, the immediacy was enhanced, providing an almost graphic, visual illusion of the three instruments just behind the speaker plane. The bass on Jane Ira Bloom's "Song Patrol" was solid and full, while, in this new near-equilateral configuration, the soundstage gained in width and height.

As set up now, the Kii SEVENs were hard to criticize. The soundstage still spread only from speaker

to speaker, but by sitting closer, my perspective was wider, and larger forces were well accommodated. Listening to "St. Paul's Suite" (Manze, Royal Liverpool Philharmonic Orchestra, Onyx ONYX4258, CD, 16/44.1 download), the string orchestra was spread wide and deep, and I enjoyed the zesty interplay among the string choirs and the rich bass of the cellos and bass fiddles.

The Violin Concerto, Op.66 (1943) from the album *Thomas de Hartmann Rediscovered*, with Joshua Bell and the INSO-Lviv Symphony Orchestra of the Lviv National Philharmonic conducted by Dalia Stasevska (24/48 download, Pentatone PTC: 5187076) demanded much more from the SEVENs. This is the first recording

of this remarkable piece of music; it is worthy of being programmed more widely.⁴ Discovered recently by Bell, it is quite approachable: tuneful, rhythmic, sweepingly romantic, yet modern. Bell's violin was always up front and, via the SEVENs, engagingly sweet and full-bodied. The large orchestra filled the soundstage, and the bass was impactful, the bass drum in particular.

Big orchestra is one thing. Big ambience is another. Christina Pluhar and *L'Arpeggiata* have made more than two dozen recordings, all characterized by their entertaining repertoire, delightful performances, surprising sounds, and excellent representation of the sound of a small ensemble in richly resonant spaces. Their latest, *Terra Mater* (16/44.1 WAV download, Warner Classics/Erato 5021732533753), is no exception. It starts with some birdsong and nature sounds to set the mood. As reproduced by the SEVENs, the acoustic was bigger and more open than those of the two previous recordings I listened to. Even in a fairly close listening configuration, individual instruments were generously spaced.



³ See my review of the Technics SC-CX700 active loudspeaker system at stereophile.com/content/technics-sc-cx700-active-loudspeaker-system.
⁴ It was premiered by the New York Philharmonic last week with Bell and Stasevska!

measurements, continued

is a considerably higher frequency than the 125Hz that designer Bruno Putzeys mentioned in an email to Kalman Rubinson. However, while Putzeys said in that email that the free space/(0dB) setting is needed when doing standard loudspeaker measurements, which is why I set the LF Adjust to 0dB, he emphasized that the SEVEN is intended to be placed with its back very close to the wall behind

it. In that case, he wrote, "the energy that is radiated towards the wall comes back in phase, effectively boosting the frontal bass output by 6dB." The LF Adjust should therefore be set to -6dB for the wall placement, and if you visualize the blue trace in fig.2 lying 6dB lower in level, the crossover frequency will be exactly 125Hz.

The black trace below 310Hz in fig.2 shows the summed nearfield response

of the woofers and midrange unit. (The slight bump in the crossover region will disappear at the lower LF Adjust setting.) The black trace above 310Hz shows the Kii SEVEN's quasi-anechoic farfield response at a 50" microphone distance, averaged across a 30° horizontal window centered on the tweeter axis. Though there is a 1dB lack of energy in the upper midrange and a small peak centered on 10kHz, the response is otherwise extraordinarily even, falling within ± 1 dB limits.

Fig.3 shows the Kii SEVEN's horizontal dispersion, normalized to the response on the tweeter axis, which thus appears as a straight line. The radiation pattern is superbly even and well controlled, which correlates with accurate and stable stereo imaging. The Kii speaker's radiation pattern in the vertical plane, again normalized to the response on the tweeter axis, is shown in fig.4. The even response is maintained over a wide window, though a hint of a suckout at 2.4kHz appears 15°

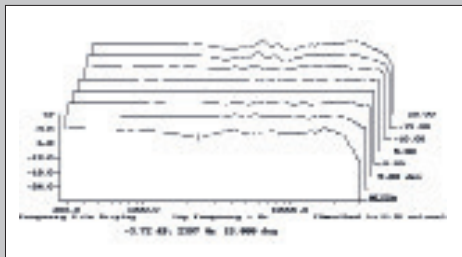


Fig.4 Kii SEVEN, vertical response family at 50", normalized to the response on the tweeter axis, from back to front: differences in response 20°–5° above axis, reference response, differences in response 5°–15° below axis.

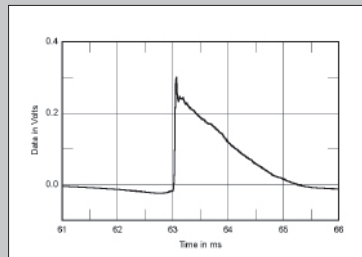


Fig.5 Kii SEVEN, latency set to Exact Phase, step response on tweeter axis at 50" (5ms time window, 30kHz bandwidth).

Bell's violin was always up front and, via the SEVENs, engagingly sweet and full-bodied.

Malena Ernman's voice, when it appeared on the second track, was strikingly close and almost in the room. All the instruments and Ernman's voice share the same generous ambiance.

The very different impacts *Waltz for Debby* by the Bill Evans Trio (24/192 FLAC download, Craft Recordings) and *Room on the Porch* by Taj Mahal and Keb' Mo' (16/44.1 download, Concord Records) have on the listener were never clearer than with the SEVENs. The Bill Evans album allows the listener into the space, to feel the presence of the performers and the other guests. Contrast that with Taj Majal on "Nobody Knows You When You're Down and Out": Taj Mahal is bursting out into your listening room, nearly on top of you center-front while the drums, bass, and background vocals billow out and back deep.

I've commented on the SEVEN's impressive bass, but the laws of physics limit what such small speakers can achieve. Kii acknowledges this by employing a "low corner frequency of 20Hz ... to preserve phase information and ambiance at normal listening levels," while noting that this "is not sustainable at high SPLs." Consequently, "A limiter shifts the corner frequency temporarily whenever the woofers are close to overloading." In other words, the speakers can go quite low at moderate listening levels, but as you increase the volume, their bass extension shrinks. I tried to get a feel for this by playing, at close to "party levels," Christopher Cerrone's rhythmic "Don't Look Down" for "traditional percussion instruments like drum set and vibraphone alongside found objects"—beer bottles, bike pumps, sandpaper blocks—and Conor Hanick's prepared piano (24/96 download, Pentatone PTC



measurements, continued

below the tweeter axis, which implies that the midrange unit crosses over to the tweeter in this region.

Turning to the time domain, fig.5 shows the Kii SEVEN's step response on the tweeter axis, with the Latency set to Exact Phase. While the step is delayed by almost 60 milliseconds, the speaker's DSP adjusts the timing of the drive units so that their outputs arrive at the microphone simultaneously. The step response is therefore a perfect time-coincident right triangle. I repeated this measurement

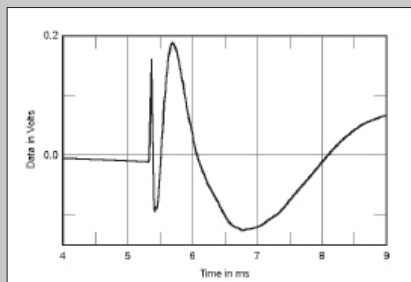


Fig.6 Kii SEVEN, latency set to Minimum, step response on tweeter axis at 50" (5ms time window, 30kHz bandwidth).

with the Latency set to Minimum, which the manual recommends when using a TV or set-top box that is not able to synchronize the video and audio. The resultant step response is shown in fig.6. While the tweeter's output now arrives first at the microphone, followed by that of the midrange unit, then that of the woofers, it arrives at 5.3ms rather than the usual 3.7ms that corresponds with a 50" microphone distance. The latency is therefore just 1.6ms in this condition, achieved by sacrificing the time-coincident

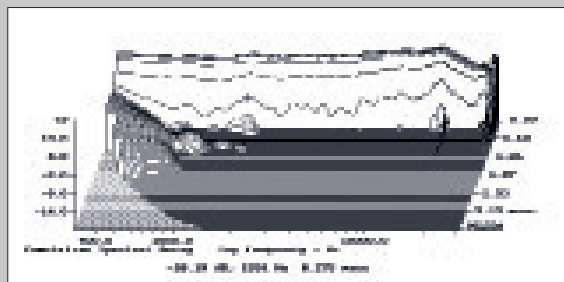


Fig.7 Kii SEVEN, cumulative spectral-decay plot on tweeter axis at 50" (0.15ms risetime).

behavior with the Exact Phase setting. However, the SEVEN's output is still time *coherent* in that the decay of each driver's step smoothly blends with the start of that of the next lower in frequency. (The Kii's frequency response on the HF axis with Minimum latency was identical to that with the time-coincident Exact Phase latency.)

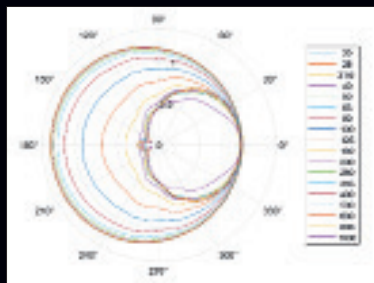
The Kii SEVEN's cumulative spectral-decay, or waterfall, plot (fig.7), taken with the Latency set to Exact Phase, is extraordinarily clean, with virtually zero delayed energy. (As always with my cumulative spectral-decay plots, ignore the ridge of delayed energy close to 16kHz, which is due to interference from the MLSSA host PC's video circuitry.)

Overall, the Kii SEVEN offers extraordinarily good measured performance in both frequency and time domains.—**John Atkinson**

BRUNO PUTZEYS ON DIRECTIVITY AND ROOM INTEGRATION IN THE KII SEVEN

"The midfrequency portion is reproduced both by the midrange and side woofers, but with a precise phase-amplitude relationship that causes output behind the speaker to be minimized. The low- and high-frequency bands are reproduced normally, by the side woofers and tweeter, respectively.

"Here's a polar plot of the mid and low bands combined. Note that these plots are made with the center of rotation directly in front of the midrange driver, hence the apparent rearward shift in the bass.



"Because the low-frequency band is simply reproduced by the side woofers, the speaker is omnidirectional in this range. In the midband, the speaker is cardioid. At the crossover point (125Hz), you can see that the directivity is precisely between omni and cardioid.

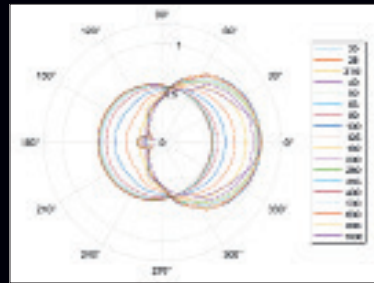
Now to some degree, any box speaker will transition between omni to (more or less) half-space radiation at some frequency. This is called the baffle-step frequency, and in conventional designs, this is determined by the width of the cabinet. What we've done here is to move that transition frequency down significantly. 125Hz corresponds to something like a 3' wide cabinet.

"We make quite a big deal about the fact that you can place the speaker with its back directly against the wall. This is in fact the preferred placement, and it's possible because the omni-half space

transition happens at a wavelength that's long compared to the size of the speaker. The energy radiated toward the wall comes back in phase, effectively boosting the frontal bass output by 6dB. So all we need to do to complete the picture is to cut the low-frequency band by 6dB. Once you back the speaker against the wall, the rearward output (left of the graph) flips over to the right and adds up, so you have an even bass response again.

"Measured in free space, the polar plot looks like this:

It's hard to overstate how different this is from traditional speaker design practice. Traditional speakers are flat when measured in free space (ie, anechoically) but radiate bass in all directions. The consumer is then expected to get rid of the unwanted energy behind the speaker. This is usually



not possible, so the band-aid solution is moving the speaker into the room and hoping that enough destructive interference occurs so that at the listening position you don't suffer from an enormous low-frequency boost. The damage this does to the in-room transient response is incalculable. But again, the free-space setting is not recommended.

"In short, the idea behind Kii speakers is to avoid putting unnecessary bass energy into the room. This means that room reverb in the bass is cut in half, and you get much drier bass."

5187403.). The sound was fabulous, punchy and immediate, and all the sound-producers had realistic weight throughout. For this music, the effect of the limiter was inconsequential.

Extended organ pedal tones present a different order of challenge. I played several pipe organ selections while observing the real-time analyzer on JRiver. Every tone down to 20Hz (the lower limit of the RTA) was seen on screen and heard, via the SEVENs, clearly and cleanly at healthy levels. What I saw but didn't hear was the ambient rumbling in that range and lower. On some live recordings, such as *Sweelinck, Mozart & Debussy: Live at the Royal Concertgebouw*, with Nicolas van Poucke on piano (24/176.4 download, TRPTK TTK 0123), such noise imparts an awareness of the size of the space and creates an impression of "being there" even before the music starts—a cheap thrill, perhaps, but I like it. The SEVENs also failed to play loud enough to evoke the structural vibrations or "load" the room on the orchestra and organ finale of Saint-Saëns' *Symphony No.3*. (I sampled from several recorded versions.) If that's what you need, you need bigger speakers, like the Kii THREE BXT.

A more convincing demonstration of the performance of the Kii SEVENs is Pink Floyd's *Dark Side of the Moon*. According to Discogs, 1470 versions of DSotM have been released worldwide. I enjoy the multichannel versions, but for stereo, I stick with the original 1973 Alan Parson mix via the 24/96 version, included in the 2011 "Immersion" box set (Blu-ray rip, EMI 50999 029431 2 1). With the SEVENs, the heartbeats began softly but firmly, but as they get louder, they pound my chest until, to my great relief, it passes into "Breathe (In the Air)" and a sigh. Through this and the rest of the album, the SEVENs were so powerful and precise that my attention was locked onto the music. The well-known special ef-

fects on "Time," "On the Run," and "Money" seemed fresh. Throughout, some voices sang directly to me while others soared in space. Bass and drums were solid. Guitars and synth weaved in and out. Yes, this album can get old, but if you hear it on the Kii SEVENs with the volume turned up, it's new again.

A comparison

The KEF LS60W towers, which are usually relegated to surround-channel duty, are a much better foil for the Kii SEVENs than my much larger mains. Both the LS60Ws and the SEVENs are DSP-enabled powered speakers. They have similar driver arrangements with HF and midrange on the front panel and woofers on the sides; the four KEF woofers are smaller, but they're mounted in a larger cabinet. The Kii offers useful cardioid dispersion, while the KEF is fairly omnidirectional from about 400Hz down. The Kii also offers a sophisticated parametric EQ and the capability of running completely wirelessly at 24/192, while the KEF requires an inter-speaker link at sampling rates above 24/96. Both can benefit from the addition of a subwoofer, but the KEFs make it easier.

I was surprised by how similarly the two speakers reproduced a solo voice or instrument. The ambience and soundstage cues are another matter. Consider the old chestnut *Eliot Fisk Plays Bach and Scarlatti* (SACD rip, Red Rose Music RRM 06). This is an intimate recording with negligible space around the instrument. With this album, there's very little difference in the presentation of the Kiis and the KEFs. It is almost like listening to test tones, which also sounded much the same.

But any recording with good spatial ambience revealed that the KEFs and Kiis are no more twins than Danny DeVito and Arnold Schwarzenegger. On "Tarrega's Capricho árabe," performed by Ste-

The SEVENs were so powerful and precise that my attention was locked onto the music.

fano Grondona on *La Guitarra de Torres* (CD rip, Divox CDX-29701), we hear everything from the touch of fingers on the strings, the strings themselves, and the resonant tones from the body of the instrument, all within a richly warm ambience. The SEVENs directed more attention to the early items on that list—the close-in, local things—while the KEFs made a stronger case for the ambience.

It comes down to how they interact with the room. With the SEVENs nearly against the front wall, listening from a seat fairly close to the speakers, the cardioid radiation minimizes the excitation of room modes and delivers a finely detailed soundstage defined by the width of the speaker pair. The KEFs sound best a few feet from the walls and from a listening position farther from the speakers than they are from each other. Under those conditions, the soundstage conjured is consistently wider than the speaker span. While their imaging is marginally less incisive than the SEVENs', they are somewhat better at separating the music from the speakers. Tough choice.

Conclusions

I am greatly impressed with the Kii SEVEN. Its sonic quality and character is attributable not only to the quality of the components—the drivers, amplifiers, and other hardware—but also to their controlled dispersion: that cardioid design and the consequently reduced influence of room modes on their sound. Whatever the reason, the Kii SEVEN has an uncanny ability to reveal every detail captured on a recording with precision and bal-

ASSOCIATED EQUIPMENT

Digital sources Custom Intel/Win11 and Mac mini M4 music servers running JRiver Media Center v34 and Roon 2, Merging Devices Hapi II DAC. QNAP TVS-873 NAS. Oppo Digital UDP-103 universal disc player.

Power amplifiers Benchmark AHB2 (3).

Loudspeakers Three KEF Blade 2 Meta (L/C/R) with IsoAcoustics GAIA II feet; KEF LS60 W (SL/SR); two KEF K92 and one SVS SB 2000Pro subwoofers.

Cables Digital: Mogami Gold AES TD DB25-XLR snake. Analog interconnects: Benchmark Studio&Stage XLR-XLR. Speaker cables: Blue Jeans speakON-terminated Canare 4S11.

Accessories Furman Elite 15 DM.

Listening environment 24' L × 14' W × 8' H, furnished with GIK Monster Bass Traps built into each side of the front wall and two PSI AVAA C214 Electronic Bass Traps in the front corners. Sidewalls lateral to L/R speakers have large Snowsound Acoustic damping panels. Front wall has large windows variably covered by solar shades. Rear of room opens into 10' × 7' foyer and a 12' × 8' dining area.—Kal Rubinson

ance. Instruments and ensembles have texture, just as they do live. Whether you hear the performance and its space as intimate or expansive will depend entirely on what is on the recording. All this makes the SEVEN suitable as studio monitors, but it also makes it, just like the THREE, a superb domestic loudspeaker for pure listening enjoyment. ■