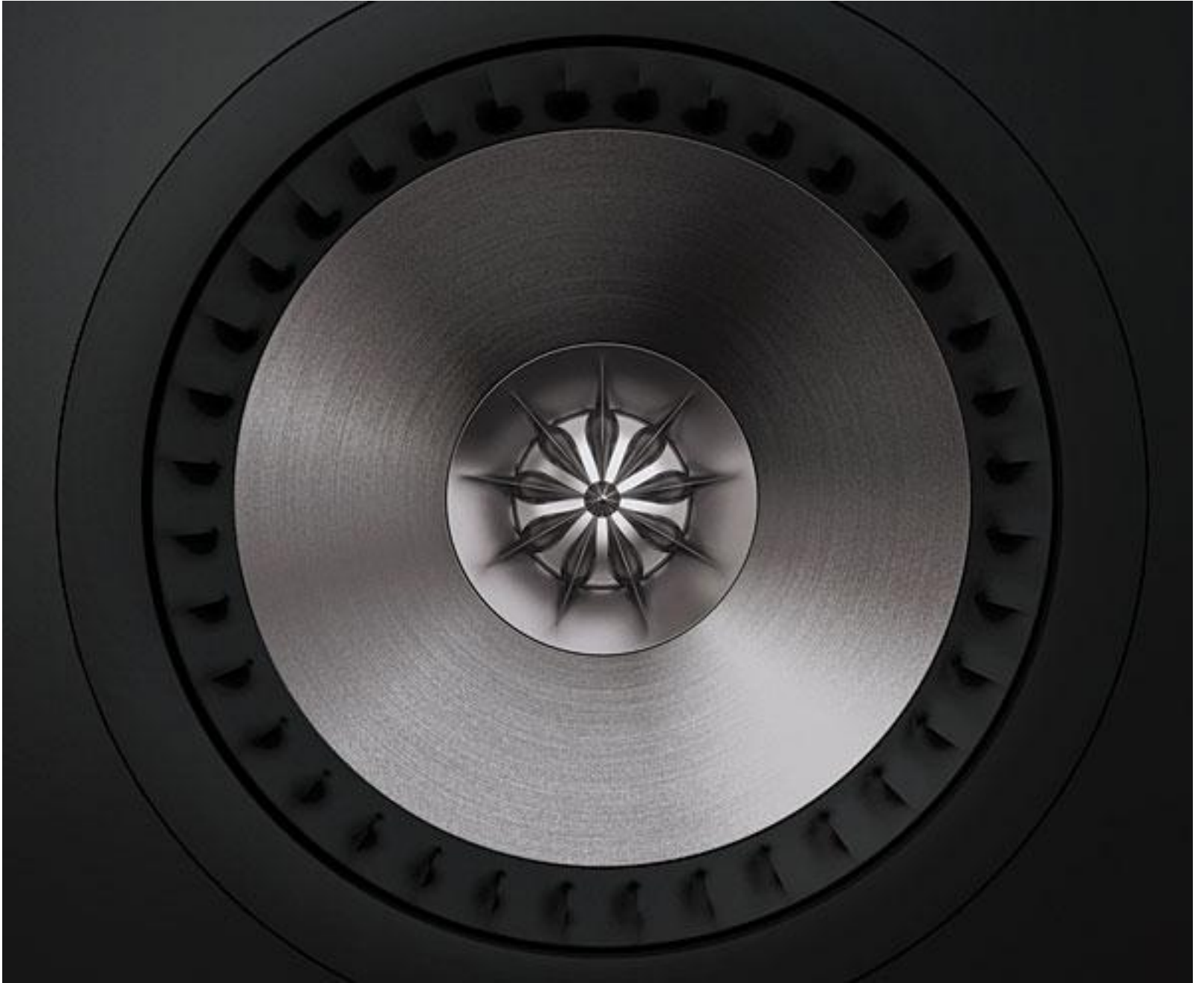


## KEF Q900 loudspeaker



KEF and I go way back. As a very young man in the 1960s, I was obsessed with building speakers, and that was just about the time that KEF founder Raymond Cooke was revolutionizing driver design by using new synthetic materials for cones and surrounds, and experimenting with such innovations as transmission-line-loaded midrange drivers. I found it all very heady and, by direct import from the UK, obtained versions of the oval, flat-diaphragm B139 woofer, the Bextrene-coned B110 and B200 woofers, and the T-15 and T-22 dome tweeters. Fifty years ago, this was all cutting-edge speaker technology.

In the years since, KEF has continued to push the drive-unit envelope with developments like the Uni-Q coaxial driver, and such spectacular loudspeakers as the Muon, the Concept Blade, and, of course, the KEF Reference models, which have been so well received in these pages. In February 2008, John Atkinson said that the [KEF 207/2](#) was "overall the best-sounding full-range speaker I have used in my current listening room," and in July of that year Wes Phillips described the smaller [201/2](#) as "an absolute gem—if not flawless, then damn close" (). And in February 2006, Robert J. Reina had been nearly as effusive about [KEF's midpriced iQ9](#).

Now, in recognition of their 50th anniversary, KEF has completely redesigned their lowest-priced Uni-Q models, the Q series, which extends from the smallest two-way, the Q100 (\$499/pair), to the subject of this review: the 2.5-way, floorstanding Q900 (\$1598.98/pair; sold singly for \$799.99). Despite the fact that these prices are in the range of the generic boxes cluttering the sales floors of big-box outlets, the Q series is chock-full of KEF's characteristic design innovations. That's what struck me when I saw the Q900 at the 2010 CEDIA Expo; the combination of technology and apparent high value stoked my interest in getting a pair shipped to my house in Connecticut.

The Q900 is a big speaker. More than 3.5' tall, 14.1" wide, and 12.7" deep, it weighs almost 50 lbs, sits on a sturdy base with lethal-looking spikes, and sports *FOUR* (count 'em) *FOUR* 8" aluminum-cone units. You'd expect it to play loud and deep. KEF maintains that the Q900's "rectilinear form" provides a larger internal volume than would be possible with curved panels, and of course, for a given footprint, this is so. However, the use of large, flat cabinet panels does raise a concern about panel vibrations—unless those panels are braced and/or damped.

Given the Q900's large size and relatively light weight, I suspected that KEF had approached this problem more by damping than by bracing. However, KEF told me that they determined, from listening and laser-Doppler vibration analysis, that the most important part of the cabinet in this regard is the front baffle—which, surprisingly, is 28mm (1.1") thick, this increasing to 35mm (1.4") in the area where the Uni-Q driver is mounted. I was able to detect some vibrations on all surfaces, but these seemed minor and uniformly distributed. KEF describes the cabinet's finish as a "paper veneer," which provides an eco-friendly and easy-care rendition of exotic woods. Well, my review samples looked just fine in Black Oak (English Cherry and European Walnut are also available), but they sure look like speakers, and won't turn any heads at the Milan Furniture Fair.

The rigid bases and sturdy spikes ensure a stable stance, and conveniently permit fine-tuning from above. However, since I usually set my main speakers on hardwood, just off the carpeted area, the absence of any alternative footers or protective pads for the Q900s had me scrambling for some old spike pads I'd buried deep in the equipment closet. Of course, \$2 worth of quarters would also have sufficed; until KEF provides another option, consider that a necessary additional expense.





Uppermost on the front panel is the 8" Uni-Q driver, at its center a 1.5" vented aluminum-dome tweeter. This tweeter's size—the other KEF Q models have only a 1" dome—permits a lower crossover point from the mids to the highs: 1.8kHz vs 2.5kHz or higher. It is fitted with the Tangerine waveguide developed for KEF's Project Blade, to prevent untoward changes in dispersion at the crossover frequency and above. The

Uni-Q's lower-frequency cone diaphragm and motor share their enclosure with an 8" aluminum-cone passive radiator. Below those is a second sealed enclosure, this shared by an 8" aluminum-cone woofer with 2" voice-coil and another 8" passive radiator. Thus all four cones, active and passive, contribute to the Q900's low-frequency output, but the lower woofer is rolled off in the low midrange to make this a two-and-a-half-way system.

The Q900 has two pairs of speaker terminals, to accommodate biwiring or biamping. I'm generally leery of ascribing any audible advantages to biwiring or passive biamping over the use of an adequately hefty cable or adequately powerful single amp. Nonetheless, KEF gives you the opportunity to follow your star, and has also provided a rather neat implementation in the form of two terminal linking controls that eliminates the use or potential loss of those fiddly metal links. The upper terminals connect only to the tweeter; the lower terminals connect to both the woofer and the Uni-Q driver's main motor. Rotating the linking control knobs to the right connects the two pairs of terminals to allow the use of a single cable; rotating it to the left disconnects them to allow biwiring or biamping.

### **Plug it in, plug it in**

I connected the KEF Q900s to my [Bryston 9B STT](#) power amp with Kubala-Sosna Fascination speaker cables, turned off the Audyssey room-calibration software in the preamplifier-processor, and set the pre-pro to Direct so that the KEFs would run full-range on their own, sans subwoofer(s).

All that cone area led me to expect a very full, rich balance—but that's not what I heard. My first impression of the Q900 was of a well-balanced sound that was, if anything, a bit lightweight. However, that reservation faded quickly, as I stopped comparing the KEFs to the Audyssey- and sub-assisted system they'd replaced.

I usually begin with vocal recordings because a) a good loudspeaker will permit the listener to make a human connection with a realistically reproduced human voice, and b) voices make me focus on the midrange, the part of the audioband that conveys most of the musical information provided by instruments and voices alike. In this regard the Q900 was remarkably good, reproducing a wide range of male and female voices with presence, and with no spatial distinction between fundamentals and sibilants. Solo voices, including that of Sara K. on her *Don't I Know You from Somewhere? Solo Live* (CD, Stockfisch SFR 357.6055.2), and the various voices on *Blue Coast Collection: The E.S.E. Sessions* (SACD, Blue Coast BCRSA 1012a, produced and engineered by Cookie Marenco) were uniformly coherent and realistic via the Q900s, and precisely placed on the soundstage.

The sound was similar with unaccompanied instruments, such as Rachel Barton Pine's



silvery violin on her *Capricho Latino* (CD, Cedille CDR 9000 124), or William Carter's warm, woody guitar on *Le Calme*, a disc of late works by Fernando Sor (CD, Linn CKD 380). Vocal ensembles did not sound homogenized, but had a satisfying clarity that revealed the individual voices. It may be possible that all this was due to the coaxial design of the Q900's Uni-Q driver, which is, in effect, a single-point source. On the other hand, some multi-driver systems can do this, so one must accept that crossover and enclosure design are also factors.

In addition to a stable and relatively deep central soundstage, the Q900s amazed me with the sheer breadth of image they presented. The bigger the ensemble, the wider the soundstage. A recent and outstanding recording of Mahler's *Des Knaben Wunderhorn*, with soprano Christiane Oelze, baritone Michael Volle, and Markus Stenz conducting the Cologne Gürzenich Orchestra (SACD, Oehms Classics OC657), was immersively spacious, with no loss of specificity of the vocal soloists. The KEFs did this sort of thing consistently, but without ever forcing a change in perspective on smaller ensembles.

I found the KEF's treble to be quite clean, detailed, and transparent, especially when fed good signals at reasonable levels. It was only when I really stressed the Q900 with very high levels that the Uni-Q tweeter became somewhat intolerant. I played Tchaikovsky's Symphony 5, in a new, spectacular performance by the Russian National Orchestra under Mikhail Pletnev (SACD, Pentatone PTC 5186 385), and found it spine-tingling but for the finale's cymbal clashes lifted me from my seat, the slam and splash weren't as clean as I've heard them through the very much-more expensive [B&W 800 Diamonds](#).

Yes, the mere sight of three 8" bass cones raised my expectations of robust and prominent lows, but the KEF exceeded those expectations. One of my favorite tests for musical bass is the concert harp, which covers a very wide frequency range, and whose plucked strings offer sharp transients way down into the bass. There's no shortage of detail or power on harpist Lavinia Meijer's solo recital *Fantasies & Impromptus* (SACD, Channel Classics CCS SA 31711), which includes works by Spohr, Fauré, Pierné, Saint-Saëns, and others. The bass here was very deep, taut, and precise, all the while emanating from Meijer's central stage position.

By the bye, I was comparing, at rather high levels, the sounds of two disc players playing the organ compilation *Pipes Rhode Island* (CD, Riago CD 101) when I realized that the Q900s were shaking the room with authority. This so impressed me that, just for kicks, I called on my two Paradigm subwoofers (one [Reference Servo-15](#), one [Studio SUB 15](#)) to assist below 40Hz, and thought it pretty close. Adding the EQ'd subs extended and amplified the shuddering, but not so much as would make them essential. Big bass-drum thwacks, such as in Pletnev's Tchaikovsky 5, had more

palpable impact with the subs or through the big B&Ws, but the KEFs were no slouches. Basically, even though they worked well with them, the Q900s did not need help from subs.

Switching to the Q900s from my resident [Paradigm Studio/60s](#) suggested that the KEFs sounded much more open and airy, something I confirmed when I then swapped them back. The difference was mostly in the midrange, where the Paradigms seemed a bit hooded and recessed in comparison. Experiments with Audyssey MultEQ Pro and taking some measurements confirmed that the Q900s had a wider, flatter frequency response in my room than did the Paradigms. The KEFs also presented a more open, more spacious soundstage than had the [PSB Imagine Ts](#) or [PSB Image T6s](#), at least according to my notes and my suspect memory.

## **Conclusions**

The KEF Q900 must be considered from a number of different aspects. Visually and physically, the speaker is unremarkable. Its construction is more than adequate, but hardly of the level KEF lavishes on their Reference line. The same can be said of the appearance and finish, which are clean and utilitarian but prosaic. However, I don't wish to overemphasize any of this; the potential buyer will instantly decide whether or not the Q900 is suitable.

A not-unrelated consideration is that KEF seems to have made many choices that take advantage of its historical strength in driver design, rather than encumber the bill of materials with costs related to appearance. The 8" Uni-Q aluminum driver, with its larger-than-usual tweeter and Tangerine waveguide, is a notable sophistication for a speaker at this price. The addition of three more 8" cones, one active and two passive, supports a bass extension that is also uncommon for the price.

But the most important thing—or, for the true audiophile, the only thing—to consider is the Q900's sound. That sound is wide-range, balanced, and spacious, and seems to neither favor nor disfavor any genre of music. I have been sampling small floorstanders in the under-\$2000 range for a number of years now, and there is no other speaker in that range that I prefer to the KEF Q900.