

DEEP BLUE



Independent of its reference line, KEF every now and then puts out design pieces which also show reference qualities. The „Blade Two“ project is definitely one of them.

As Hi-Fi editor, I've found that speaker tests usually deal with wooden boxes outfitted with drivers – that's not a value judgement, just an observation. And of course there are good reasons for this: rounded corners, conically tapered housings, curved walls, yes, even mitres and 'lean back' front baffles are pretty expensive. For this reason, sculpted speakers like DALI's Fazon, a Vivid, or the KEF Muon or Blade are both rare, and a very welcome sight.

But why is this KEF line called „Blade“? Take a look at the lateral silhouette of the speaker then, as I did, consider Japanese sword play and you will get it. The eye of a Kendo or Iaido practitioner can easily recognize the shape of the blade and even the floor plate as the Tsuba, the handle protection, of a Japanese or Chinese sword.

Or, if you're more mechanically-minded, take a look at the blades of an old aeroplane's propellor, lovingly hand-sculpted by a craftsman from wood, and you might just see another reason for the name.

As with almost every speaker KEF makes, the approach here is defined by the company's Uni-Q drive unit, refined over almost 30 years as the ideal point source. In the Blade version, a 25mm aluminium tweeter dome, its dispersion controlled by a proprietary 'Tangerine' waveguide and damped to the rear with a separate housing, sits at the centre of a structured 12.5cm alloy cone midrange driver.

Uni-Q creates a common acoustic center with coincident sound generation centers covering the range from bass to high treble. This gives the speakers in which it's

KEYWORD
Coincident driver (Uni-Q):
 special speaker design in which drivers responsible for different frequency ranges are nested in each other with a common acoustic core, to create a 'point source'.

used outstanding timing: the drivers for the different frequency ranges work completely synchronously and have zero offset in time and space. In the Blade Two, this principle of a point source is pursued further with the positioning of the additional side-mounted bass drivers: there are four of these 16.5cm units, mounted together in horizontally opposed pairs in what KEF calls a 'Force-Cancelling' configuration.

We found setting up the Blade Two uncomplicated: with the two speakers placed the same distance from the wall (measured precisely with a meter stick) and very slightly turned inward it played perfectly, as was proven in our measurements.

Construction particularities

We will need a little aside to discuss the bass equipment and arrangement, not least because, placing the woofers on the sides of the enclosure instead of a forward-firing acoustic baffle assembly can lead to special structural problems which affect the phase behavior and thus the timing of a speaker.

Just in terms of space, a woofer and/or its sound generation center usually sits behind the already faster treble and tweeters. But this can be compensated with electronics if the designer wants to do so and takes the corresponding steps. The frequency response of the Blade 2, which we measure as standard, proves that the KEF engineers did exactly that – and with success. The five drivers (six, including Uni-Q) form a practically coherent unit.

Another particularity of the Blade construction lies in the use of four bass drivers with somewhat smaller membranes rather than a single generously dimensioned unit. In fact, the membrane surfaces add up, but with the advantage that each individual driver can be lighter, more agile, and easier for an amplifier to control, than a large one.

Some will object that even when coupling several smaller chassis, one cannot achieve the same depth as with one large driver, but it seems this is also wrong: the Blade 2 can get down to 30 Hz, and unleashes tremendous physical pressure. It is probably a question of coordinating the suspension defined by weight, travel, and spring stiffness and thus the effective resonance frequency as well as the wiring through the crossover. This construction,



▲ The terminal block is designed with a special link mechanism to enable it to do without 'jumper bars' for single-wiring.

which makes an essential contribution to the slender look of the Blade 2, can safely be deemed a „success“.

Form follows function

The shape of the Blade 2 is the result of a co-operation between the KEF designers and New York-based Ecco Design, and of course has a method to it. The extremely rigid housing, with two generous bass reflex openings to the rear, is made of very low-resonance material – unlike the „boxes“ mentioned in the beginning. The curved shape prevents standing waves, and the structure is self-damping, avoiding negative effects through housing resonances.

The 'cabinet' of the Blade not only looks like a sculpture, it also stays completely out of the way of the music. Only the drivers create sound: the housing is acoustically dead.

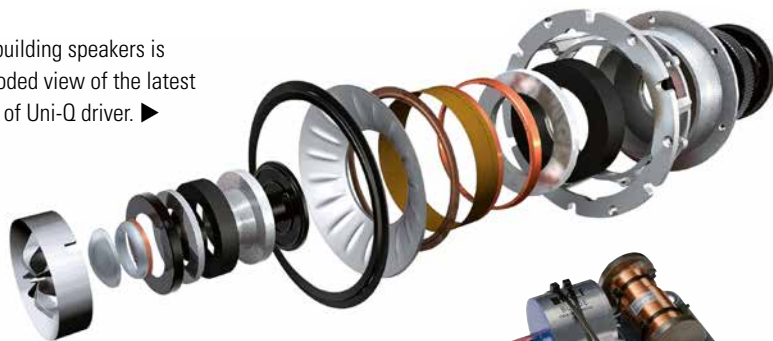
The original Blade was and is a bit larger and equipped even more generously with four 22.5cm bass drivers, but – to be honest – the Blade Two impressed me more here than any performance of its big sister I have heard so far. And it's more practical: it handles realistic spaces like the 20m² STEREO sound booth, whereas the larger version apparently requires a tremendous amount of breathing room.

The bass drivers may be smaller, but the „Two“ is no wallflower in the lower registers. The bass is very precise and makes the room shake at high volumes while massaging your stomach rather pleasantly. In contrast to some competitors, this superbly springy bass has no problem keeping up.

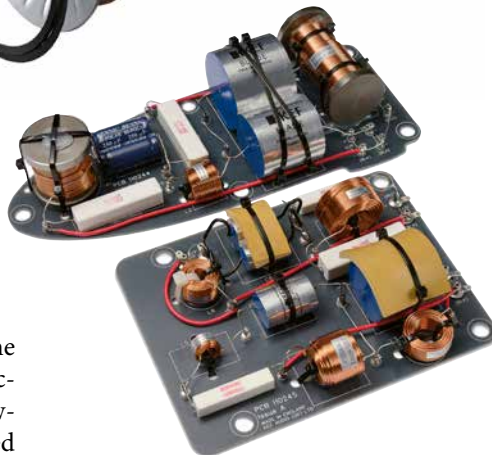


▲ The Blades come with a comprehensive package of manual, warranty information, tool kit, and accessories.

Who said building speakers is easy? Exploded view of the latest generation of Uni-Q driver. ▶



The quality of the components in the two-part crossover shows the attention to detail in the Blade 2 design. ▶



Pleasant timbre

The overall timbral coordination of the KEF, in common with its totally convincing timing, is well very balanced. However, the developers apparently decided to give it a slightly warmth, minimal from bass to high range, and continuously decreasing. Reminiscent of the old „Klangwaagen“ proposal of Hi-Fi journalism grandfather Karl Breh, it creates a pleasant impression, meaning the speaker never feel analytic, sterile, or even nervous. Instead, the Blade – for all its vivacity, detail, and color – is as integrated as it is passionate and organic.

It is striking how much the Blade Two ‘steps back’ when playing music, becoming virtually invisible and allowing the sound to unfolds clearly above the Uni-Q as well as to the left and right of the baseline. This this effortless matter-of-factness and authenticity astonishes, showing what good timing can do. For example, Eva Cassidy’s voice is incredibly soild: at turns delicate, then again radiant and colorful.

The incredible bass sequences in „Oh Yeah“ by Yello leave the Blade entirely unperturbed but impressively „physical“, while further illumination sets in when the input is complex – say with a Dvorák symphony. The KEF accepts the challenge, simply showing the resolution it can offer while projecting a breathtaking and clearly delineated depth in time and space.

I have to admit that this speaker fascinates me – visually, acoustically and technically. It’s a huge success and a top selection in its price class!

Tom Frantzen

◀ The Blade Two in white, open, and as CAD model: the sword shape becomes very clear here.



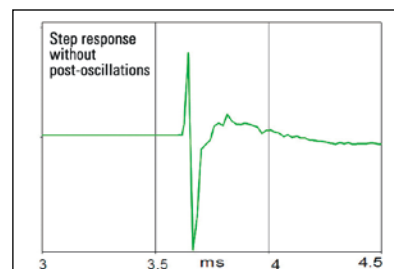
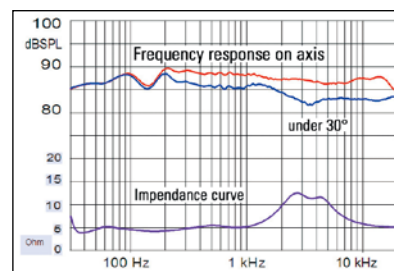
KEF BLADE TWO



Pairs starting at €20,000
Dimensions: 34x146x47.5 cm (WxHxD), Guarantee: 5 years, Contact: GP Acoustics, Phone: +49 201/170390, www.gpaeu.com

The „Blade“ concept, scaled down but also improved in details (especially the Uni-Q driver), is designed as a point source, optimized in time and space. It gets out of the way of the music and in doing so shows its great musicality. Superb!

MEASUREMENT RESULTS



Nominal impedance	4 Ω
Minimal impedance	3.2 Ω at 35 Hertz
Maximum impedance	17.5 Ω at 2600 Hertz
Nominal sound pressure (2.83 V/1 m)	86.4 dB SPL
Power for 94 dB (1 m)	16.8 W
Lower cutoff frequency (-3 dB)	33 Hertz
Distortion at 63 / 3k / 10k Hz	0.3 0.1 0.1 %

LAB COMMENTS

On axis, the Blade displays a balanced response up to a slight dip around 150 Hz, with a steady characteristic rolling off only very minimally toward the high treble. The step response, which displays the timing, shows the drivers working together very well, and without reverberations. The impedance remains within the 4-Ohm norm, but as the minimum lies in the low bass, good amplification is required.

STEREO -TEST

SOUND QUALITY 97%

PRICE/PERFORMANCE

★★★★☆
EXCELLENT