# BLADE & BLADE TWO



BLADE IS AN ATTITUDE.

IT'S ABOUT EXPLORING

THE ART OF THE POSSIBLE,

WITHOUT PRECONCEPTIONS.

PUSHING BOUNDARIES.

exaggeration, without artifice."

— Raymond Cooke, OBE

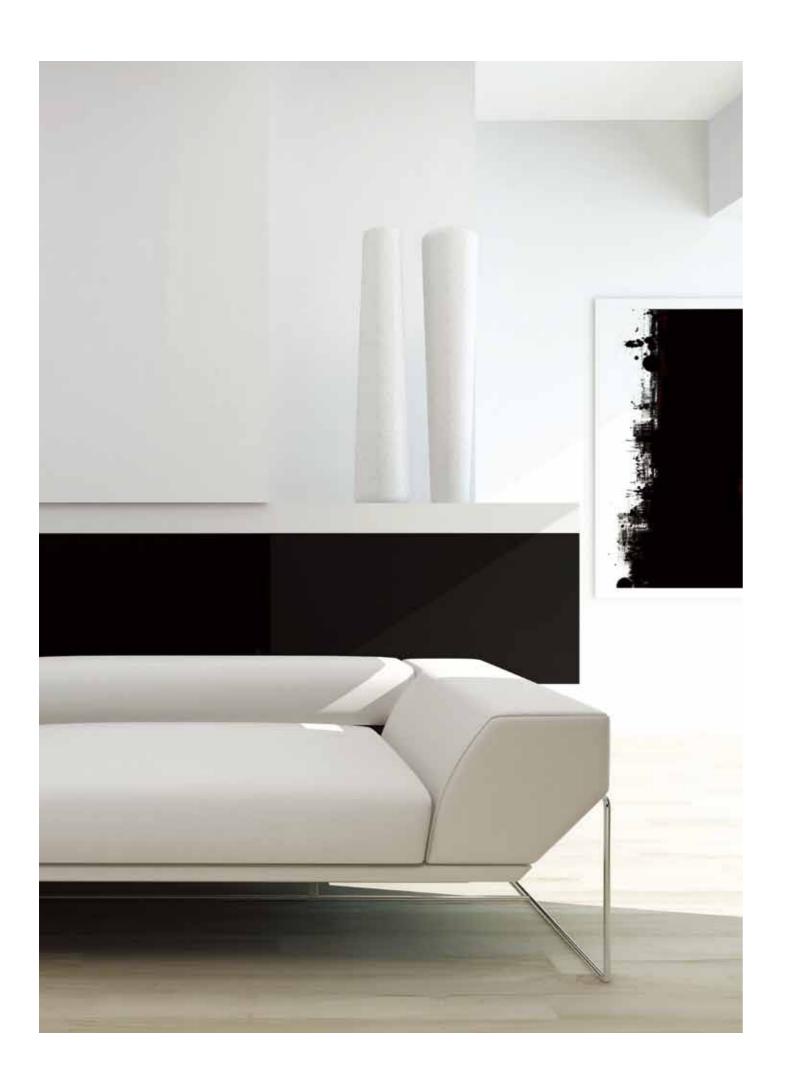
For audiophiles all over the world, KEF has for more than half a century stood for innovative acoustic engineering in pursuit of outstanding sound purity. We have the awards and reputation to prove it: no other manufacturer has done more to advance the state of the art.

Ever since loudspeaker guru Raymond Cooke founded KEF in 1961, we've been leading the field – and as a high-end expression of this passionate engagement with fresh ideas, advanced materials and new technologies to enhance the pleasures of recorded music, Blade and Blade Two are pure KEF.



Founder Raymond Cooke's vision holds true today, in a brand driven by original thinking and engineering integrity rather than passing fads.

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So we gave our most talented engineers carte blanche to create the best speaker they can, with no design or cost restrictions. After years of research and testing, what they came up with looked and sounded like no other speaker: Concept Blade. Its startling acoustic precision was so acclaimed when it first broke cover that we spent two more years refining the concept to produce an edition that serious audiophiles could own and enjoy.

The result was so well received – and scooped so many prestigious awards to prove it – that we decided to take things even further and expand the Blade range. With all of Blade's acoustic prowess and iconic design on a slightly smaller scale, Blade Two is easier to place in environments where space is at a premium, and where Blade's extreme bass extension would be superfluous.

Blade Two. Same DNA. Same striking aesthetic. Same advanced driver technology and unique single apparent source configuration. And above all, the same lush, phenomenally realistic sound.



The result of three years of research – Concept Blade realised 2009



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A painstaking refinement of the concept made the impossible a reality – Blade realised 2011

Like the original Blade, Blade Two is based on the advanced materials and innovative technologies we developed to replicate the shattering performance of the prototype, and the same method of forming the sensuous parabolic cabinets. The drivers on both models share the sophisticated enhancements responsible for the concept's magical acoustics.

Whichever model you choose, you get a unique synthesis of cutting edge audio technology and inspired design – and yet, while the technologies involved are anything but, the simplicity of the original vision remains. Every single component operates so comfortably within its performance envelope that they work together as a single, flawlessly coherent unit – in effect, each speaker performs as a giant full-range Uni-Q driver array.

It's a spectacularly warm and expansive sound, wherever you sit.

Seamless. Totally natural, even when played loud. Effortlessly accurate in every tiny detail, and as emotionally true as a live performance.

If you're into your music, you'll soon see that the years it took to make the dream a reality were well worth it.



Expanding the range with a smaller model that packed the same technology and engineering excellence – Blade Two realised 2014

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KEF has always been obsessed with perfecting the reproduction of recorded sound, with a continuous stream of technical innovations that have shaped the evolution of loudspeaker design.

KEF was the first to apply computer analysis to optimising sonic performance, using aerospacederived modelling techniques such as finite element analysis. We pioneered driver decoupling. Pair matching. Coupled cavity bass loading. Conjugate load matching. Acoustic compliance enhancement. But of all these breakthroughs, the most influential is KEF's signature Uni-Q 'point source' driver array.

Uni-Q's outstanding clarity and exceptionally broad dispersion

characteristics deliver immaculately defined sonic imagery over a listening area far larger than is possible with any conventional speaker. Painstakingly refined through no less than eleven iterations, the latest Uni-Q driver arrays on both Blade models are essentially the same as those on KEF's Ross Lovegrove-designed Muon – a contender for the best consumer loudspeaker ever made.



Blade set out to extend the boundaries of what high end audio can achieve. Its exceptional acoustic integrity derives from the combination of carefully chosen components, new high performance drivers designed to behave with no break-up or resonance over their required frequency range and an inert, radically shaped cabinet engineered never to interfere with the uncompromised

to hear that familiar tracks sound noticeably sweeter and more involving as a result, or that the bass sounds fuller, cleaner and better controlled. But if you are, Blade and Blade Two are investments in a lifetime of pleasure.

# KENT ENGINEERING AND FOUNDRY EDITIONS

When the visionary electrical engineer Raymond Cooke set out to perfect the reproduction of recorded sound in 1961, he set up his first research lab on the banks of the river Medway in the Garden of England, in a wartime Nissen hut formerly occupied by Kent Engineering and Foundry. Hence the name: KEF.

To celebrate KEF's unrivalled heritage of continuous innovation in the half century since, and the part that the iconic Blade loudspeakers have played in consolidating KEF's reputation among serious audiophiles, we've commissioned two bespoke editions.

With two striking special finishes – Frosted Blue, hinting at the blue of the original KEF logo, and Frosted Copper Black – the Kent Engineering and Foundry editions combine the latest Blade technology with an aesthetic that subtly evokes this rich pedigree.







FROSTED COPPER BLACK

To celebrate over five decades of KEF innovation, we've created a special Frosted Copper Black finish for Blade and Blade Two that pays homage to the iconic LS50. World class acoustic integrity, then as now.





# KENT ENGINEERING AND FOUNDRY EDITION



FROSTED BLUE

From lapis lazuli artefacts of antiquity to blue anodised aerospace components, ultramarine has always been prized for its purity. No wonder the Frosted Blue finish works so well on Blade and Blade Two, its seductive sheen emphasising the taut contours of the cabinet while hinting at the sophistication of the engineering within. Like listening to one voice rather than many, sound from a single source is inherently clearer.

In Blade, not only do the HF and MF drivers in the Uni-Q array share an identical axis, but the four superlative LF drivers are mounted symmetrically equidistant on either side, so that their acoustic centres occupy exactly the same point in space. This single apparent source configuration is what makes Blade speakers so coherent right across the frequency range, with noticeably more precise imaging than is possible from any conventional speaker. What you hear sounds as if it's being performed live in front of you.



Single Apparent Source, clean sound radiation from one point in space.



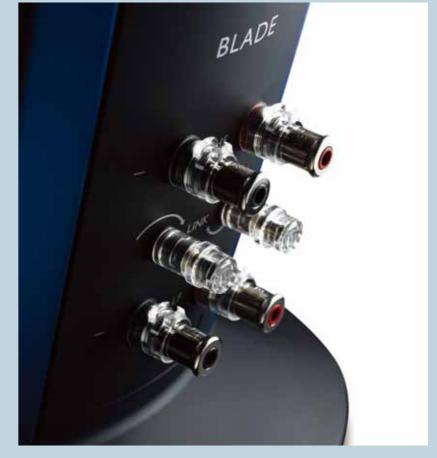
With speakers as ambitious as Blade and Blade Two, everything has to be as right as it can possibly be.

### TERMINALS & TERMINAL LINKS

Two pairs of the finest audiophile quality WBT connectors allow bi-wiring or bi-amping to ensure lossless transmission and to optimise the retrieval of low level detail in the music. The patented screwin linking plugs are to full audiophile specification (as well as simplifying set-up by eliminating fiddly wiring links).

### LOW ORDER CROSSOVERS

The simple low order crossovers employ the best components available, carefully selected by rigorous auditioning so that every part of the signal path is fine-tuned for maximum clarity.









Unique technologies configured in a radical new single apparent source architecture.

## Midrange

### I HYBRID CONE

So light and rigid that it never reaches its natural break-up point, Blade and Blade Two's hybrid MF cone has a lithium/magnesium/aluminium alloy outer skin braced at the back by a precision-engineered skeleton of liquid crystal polymer, which increases rigidity while venting the space behind to eliminate distortion effects from compression. By optimising sensitivity and transient response, this unique combination reproduces upper midrange frequencies with an accuracy that allows you to enjoy the full subtlety of emotionally nuanced performances, especially with vocals and keyboards.

# 2 MF CONE SHAPE WITH SMOOTH SURROUND

Both the shape of the tweeter dome and the contours of the midrange horn are optimised to flatten HF response compared to a conventional baffle, and the surround is calculated to provide a perfectly smooth transition to the cabinet. The Uni-Q array is fully decoupled to prevent unwanted vibrations from muddying the sound you hear, allowing the harmonics of live vocal and instrumental performances to be reproduced in flawless detail.

# 3 LARGE VOICE COIL WITH NODAL DRIVE

To boost power handling and minimise thermal compression effects, the midrange cone is driven by a much larger voice coil than normal, playing more loudly and more cleanly than any previous Uni-Q driver array and investing the music with superb dynamics, especially with high energy tracks. Consequently because this large voice coil further stiffens the cone by bearing on the exact point of its first resonant mode, it contributes

to the cone's reassuringly high breakup frequency.

### 4 'TANGERINE' WAVEGUIDE

The segmented waveguide designed using KEF's own pioneering computer modelling software manages the airflow so as to widen the dispersion of high frequencies; instead of beaming forwards, it recreates the wide, even spread of a natural soundfield, minimising traditional sweet spot effects so that the astonishingly pure HF imaging is shared by everyone in the room.

### Tweeter

### 5 HF DRIVER

With its stiffened, computer-optimised dome and patented 'tangerine' waveguide, the vented tweeter operates pistonically over its entire working range for the greatest clarity and transparency, with nothing added to or subtracted from the sound originally recorded. Whatever type of music, at whatever volume, HF response is consistently sweet, lucid and lyrical.



The tweeter is vented to eliminate distortion and pressure behind the tweeter dome.

### Bass

### I LF DRIVER

After two years of intensive development, the four powerful LF drivers (225mm/9-in. for Blade, or I 65mm/6.5-in. for Blade Two) are perfectly integrated with the Uni-Q for exceptionally deep, clean and authoritative bass response – delivering seismic punch when required, while retaining the delicacy and musicality you would experience if you were in the room with the original artists.

### 2 VENTED COUPLER

Distortion effects caused by trapped turbulent air have been engineered out by venting the spacer above the voice coil to allow the air to escape freely, however hard they are driven. LF performance therefore remains lucid, clean and involving when played loud.

### 3 DECOUPLED DIAPHRAGM

Instead of using high order crossovers to prevent the LF cone from reaching its break-up frequency, decoupling the

voice coil from the diaphragm allows both Blade models to benefit from the acoustic advantages of low order crossovers: purer sound and silkier bass response, irrespective of volume.

### 4 FORCE CANCELLING

To avoid such potent bass drivers exciting the cabinet at high volume, the large kinetic forces involved are cancelled out by mounting the drivers rigidly together, back-to-back. By eliminating cabinet colouration, this contributes to Blade and Blade Two's natural-sounding and engagingly musical response.

### 5 DISCRETE BASS CHAMBERS

The twinned pairs of bass drivers are mounted in discrete chambers. By increasing the frequency of any internal standing waves beyond the crossover point the need for damping is reduced, which can otherwise impair bass quality. Nothing has been overlooked in the quest for clarity, right across the frequency range.









As curvaceous and as effortlessly authoritative as a concert grand, Blade and Blade Two look spectacularly elegant in classic Piano Black, with sinuous highlights reflected in the deep, ultra-high gloss lacquer finish. More than mere speakers, these are objects of desire.





22 23 **DESIGN AND DESIGNERS** 



Eric Chan, ECCO Design Inc.

The challenge was to design an acoustically efficient enclosure for a speaker whose unique driver configuration demanded large capacity at the upper portion, without looking remotely bulky.

Initially, KEF engineers worked with Eric Chan of New York-based ECCO Design to create a distinctive look to match Blade's towering performance capabilities. As functional as they are beautiful, the resulting cabinets are like works of art in their own right – indeed, their form was inspired by the great sculptor Brancusi's forming the complex parabolic curves Modernist masterpiece, Bird in Space. Tapering gracefully from top to bottom and from front to rear, the slim

proportions made possible by the orientation of the bass drivers give Blade speakers a sculptural presence, with a single continuous keyline describing a taut, seamless curve along the back edge and over the top.

This award-winning form was dictated by acoustic considerations rather than mere styling: the gentle radius of the front face presents the sound with no discontinuity to mar its clarity. The cabinets are constructed from an ultra-high density polymer, an inert and exceptionally rigid material for that help to eliminate standing waves that might otherwise blur the output.



It took years of painstaking development to refine the revolutionary innovations in Concept Blade for the Blade and Blade Two models that audiophiles could own and enjoy.

PERFECTION NEVER ENDS 24

Today's models are even better. Purer. Closer to the acoustic ideal, subjectively as well as objectively. How perfect is perfect?

The quest for perfect sound reproduction goes on, of course. As new materials and technologies emerge, KEF research engineers are constantly pioneering new ways of achieving the ultimate in acoustic response. Compromise is not a KEF word – and given the freedom to ignore the limitations that others accept, they create loudspeakers acknowledged to be among the best anywhere, at any price.

The Ross Lovegrove-designed Muon, for example, whose staggering performance is matched only by its extraordinary sculptural form. Blade and Blade Two, the world's first single apparent source loudspeakers, combining groundbreaking performance technologies with another equally innovative design vocabulary. Bold, clever ideas, executed with passion and obsessive attention to detail.

This is the spirit that first inspired the original Reference forty years ago, which is why so many of the originals are still prized. Today's models are even better. Purer. Closer to the acoustic ideal, subjectively as well as objectively.

How perfect is perfect?

### MUON

Few projects in this world dare to aim for the ultimate. But this was precisely the goal when KEF combined its state-of-the-art acoustic engineering capabilities with the genius of visionary designer Ross Lovegrove. Lovegrove sculpted the sound by sheathing KEF's most advanced technologies in a sensual, organic form that evolved naturally from a radical rethink of what a 21st century speaker could be. The result is one of the most extraordinary audio speakers ever made – an art object in its own right, and a celebration of functional excellence and aesthetic delight in flawless harmony.



### BLADE & BLADE TWO

When our engineers came up with the revolutionary Concept Blade prototype the world's first single apparent source loudspeaker – its sonic capabilities were so impressive that we created an edition that serious audiophiles could actually own. Just as KEF's philosophy has always been to innovate in pursuit of the most accurate and realistic sound, Blade speakers are about refining a ground-breaking concept to enrich the pleasures of people who really love music. Whatever your taste, Blade and Blade Two are supreme expressions of a simple idea: to make the enjoyment of sound as good as it can possibly be.

### THE REFERENCE

Perfect reproduction of recorded sound is what KEF's legendary Reference Series has always stood for. After forty years of continuous development, it has earned its name as the benchmark of audiophile loudspeaker performance. The Reference exemplifies the relentless attention to detail of KEF's 'Total System Design' approach. Some details you can see, some you can't – but because apparently minor details can otherwise be a limiting factor, every one has to be of the same impeccable standard. That's why, if you're a perfectionist when it comes to movies or music, one name towers above the rest: The Reference. It speaks for itself.







Design

Drive Units

Frequency range free field (-6dB)

Frequency range typical in room bass response (-6dB)

Frequency Response (±3dB)

Crossover Frequencies Amplifier Requirements

Sensitivity (2.83V/1m)

Harmonic distortion 2nd & 3rd harmonics (90dB, 1m)

Maximum output (peak sound pressure level at 1m with pink noise)

Impedance

Weight

 $(H \times W \times D)$ 

Kent Engineering and Foundry Edition finishes Standard finishes

### BLADE

Three-way bass reflex, Single Apparent Source driver configuration

Uni-Q driver array: MF: I25mm (5in.) Li-Mg-AI/LCP hybrid cone

HF: 25mm (Iin.) Al dome

LF: 4 × 225mm (9in.) with force cancelling

28Hz – 45kHz

20Hz

40Hz - 35kHz ±3dB (-6dB at 28Hz)

350Hz, 2.3kHz 50 - 400 W

91dB

<0.5% 40Hz – 100kHz <0.2% 200Hz - I 0kHz

II7dB

4Ω (min. 3.2Ω)

57.2 kg (126 lbs)

1590 × 363 × 540 mm (62.5 × 14.3 × 21.2 in.)

Frosted Blue, Frosted Copper Black

Piano Black, Snow White, Racing Red, Warm Metallic Grey, Light Metallic Silver



### BLADE TWO

Three-way bass reflex, Single apparent source driver configuration

Uni-Q driver array:

MF: I 25mm (5in.) Li-Mg-AI/LCP hybrid cone

HF: 25mm (Iin.) Al dome

LF: 4 × 165mm (6.5in.) aluminium with force cancelling

34Hz – 45kHz

25Hz

40Hz – 35kHz

320Hz, 2.4kHz

50 - 400W 90dB

<0.5% 40Hz – 100kHz <0.2% 200Hz - I 0kHz

II6dB

4Ω (min. 3.2Ω)

35.3 kg (77.8 lbs)

1461 × 338 × 475 mm (57.5 × 13.3 × 18.7 in.)

Frosted Blue, Frosted Copper Black

Piano Black, Snow White, Racing Red, Warm Metallic Grey, Light Metallic Silver



Blade and Blade Two's taut, sculptural contours assert the modernity of what's inside, with a strikingly individual design language that makes a bold statement in any interior. All you have to do is choose which of the extensive palette of sumptuous finishes you prefer: Piano Black, Snow White, Warm Metallic Grey, Light Metallic Silver, Racing Red, Frosted Copper Black or Frosted Blue.

Given time, we'll even match any colour you specify. Like everything else about the Blade and Blade Two, it's about getting every last detail absolutely right.

Just as KEF's philosophy has always been to use innovation to find more accurate and realistic ways of reproducing sound, Blade speakers are about perfecting a groundbreaking concept for the enjoyment of people who love music. Whatever your taste, Blade and Blade Two are what all great design aspires to: being the best it can possibly be.





KEF reserves the right, in line with continuing research and development, to amend or change specifications. E&OE

FINISHES 28

# BLADE & BLADE TWO Frosted Copper Black –

Frosted Copper Black – Kent Engineering and Foundry Edition





Performance plinth and spike set

The distinctive copper finish acknowledges KEF's 50th anniversary colour combination, in honour of the now iconic KEF LS50 model.

Li-Mg-Al/LCP Hybrid cone – Uni-Q driver array



A unique composite resin plinth and performance spike set feature as standard.

BLADE & BLADE TWO Frosted Blue –

Kent Engineering and Foundry Edition



The striking blue Uni-Q driver that complements the Frosted Blue cabinet evokes the colour of the original KEF logo.





A unique composite resin plinth and performance spike set feature as standard.

Performance plinth and spike set



**FINISHES** 30

### BLADE & BLADE TWO Cabinet colours

### Piano Black Snow White









Li-Mg-Al/LCP Hybrid cone – Uni-Q driver array

An aluminium silver Uni-Q driver array is standard on all cabinet finishes.



Performance plinth and spike set





# BLADE AND BLADE TWO

ARE WHAT ALL GREAT DESIGN

ASPIRES TO: BEING THE BEST

IT CAN POSSIBLY BE.

