ULTIMATE STUDIO EXPERIENCE

Enjoy your music precisely the way it was first recorded.
INSPIRED

What better way to mark 50 years of innovation than celebrate our collaboration with the BBC.

Begun in the early 1960s by KEF’s founder, Raymond Cooke, the relationship led to the world’s greatest compact studio speaker, the LS3/5a. Recognising KEF’s pioneering technology, the BBC asked us to provide cutting-edge drivers and crossovers that were key to its success. Advanced for its time, and designed without limitations, the LS3/5a became known as the ultimate “engineers’ speaker”. Its latest successor is the LS50.

Together with state-of-the-art technologies from KEF’s latest flagship loudspeaker, Blade, LS50 pays testament both to our past and the innovative spirit of today’s research and development team.

“I was determined to put into practice the many possibilities I could see for improving loudspeakers through more rigorous engineering.”

Raymond Cooke OBE (1925-1995), founder of KEF
RICHNESS

Unheard of in such a compact design, LS50 delivers a deeply rich, multi-dimensional ‘soundstage experience’ that is out of all proportion to its size. LS50’s bespoke Uni-Q driver array, capable of mastering an exceptional range of dynamic highs and lows, reveals original source sounds typically lost by other speakers. Designed using KEF’s cutting-edge acoustic modelling, LS50 is the ultimate mini monitor.
BREAKTHROUGHS

Creating a small housing capable of delivering such a spacious sound is the result of considerable research and development. In cabinet construction, baffle shaping and port design, LS50 breaks new ground with patent-pending technology. All this is made possible by KEF’s leadership in modern research (including techniques such as Finite Element Analysis and Computational Fluid Dynamics*). LS50’s unique technology offers by far the cleanest, most accurate studio-grade performance of any mini monitor.

Precision-made curved baffle
The special curved front provides smooth on- and off-axis response for crystal clear sound, while the ribbed rear surface avoids cavity resonance at the back of the driver.

Elliptical flexible port
Patent-pending technology designed using FEA*
Geometry fine-tuned to minimise port resonance.
Port flare design based on CFD* modelling to minimise turbulence.

CLD** Bracing
Controlled cabinet vibration is achieved through an additional damping mechanism used between walls, braces and driver. Secondary radiation is avoided by a greatly strengthened cabinet and the specially designed damping panels inside the enclosure.

* Finite Element Analysis (FEA) is used to simulate mechanical vibration and sound propagation. Computational Fluid Dynamics (CFD) is used to simulate fluid flow or air flow.

** Constrained Layer Damping
LS50 employs revolutionary technology developed for Blade, KEF’s latest flagship loudspeaker. Using the very latest Uni-Q driver, specifically designed for this model, LS50 radiates an extremely large listening sweet spot and delivers a remarkably fast, clean sound. And, because LS50 neither adds nor subtracts a single sound, it’s effortlessly natural and accurate too.

Optimum dome shape and stiffened dome technology
Creates a structure that is so stiff, it operates as a pure piston over its entire working range. The dome resonance for the tweeter is at 40kHz which is beyond audible range

Tangerine waveguide
Increases the dispersion of the tweeter. Energy is distributed more evenly across a wider angle, reducing the traditional “sweet spot effect”

Large neodymium magnet

Vented tweeter

Large ferrite magnet

Die-cast aluminium chassis

Break-up control
Damping of first HF break-up peak

Stiffened magnesium/ aluminium alloy cone
Light, stiff and physically smooth

Z-flex cone surround
Smooth physical transition between cone and cabinet front panel

LF/MF driver
**LS50 SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Model</td>
<td>LS50</td>
</tr>
<tr>
<td>Design</td>
<td>Two-way bass reflex</td>
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<tr>
<td>Drive units</td>
<td>Uni-Q driver array: HF: 25mm (1in.) vented aluminium dome LF/MF: 130mm (5.25in.) magnesium/aluminium alloy</td>
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<tr>
<td>Frequency range (-6dB)</td>
<td>47Hz - 45kHz</td>
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<tr>
<td>Frequency response (±3dB)</td>
<td>79Hz - 28kHz</td>
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<tr>
<td>Crossover frequency</td>
<td>2.2kHz</td>
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<tr>
<td>Amplifier requirements</td>
<td>25 - 100 W</td>
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<tr>
<td>Sensitivity (2.83V/1m)</td>
<td>85dB</td>
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<tr>
<td>Harmonic distortion</td>
<td>&lt;0.4% 175Hz-20kHz</td>
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<tr>
<td>2nd &amp; 3rd harmonics (90dB, 1m)</td>
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<tr>
<td>Maximum output</td>
<td>106dB</td>
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<tr>
<td>Nominal impedance</td>
<td>8Ω (min. 3.2Ω)</td>
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<tr>
<td>Weight</td>
<td>7.2kg (15.8lbs.)</td>
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<tr>
<td>Dimension (H x W x D)</td>
<td>302 x 200 x 278 mm (11.9 x 7.9 x 10.9 in.)</td>
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<tr>
<td>Finishes</td>
<td>High gloss piano white</td>
</tr>
<tr>
<td></td>
<td>High gloss piano black</td>
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LEGACY

50 Years of Innovation

Innovation has always set KEF apart. It’s why we were founded in 1961 and continues to inform everything we do today. Being first is why we continue to attract the world’s most gifted acoustic engineers. No other manufacturer can match KEF’s long list of breakthroughs.

To maintain consistent sound quality across the frequency range, for example, we pioneered the first use of synthetic materials for diaphragms and driver surrounds.

KEF was also first to use computers in loudspeaker testing and design. This unrivalled capability still underpins our technological supremacy and allows us to match pairs of speakers to within half a decibel. Models such as the 104A and 105 achieved worldwide acclaim on release. KEF’s latest flagship, Blade, is synonymous with acoustic excellence. While KEF continues to lead the way, we are always looking for the next breakthrough. After all, innovation is an ongoing quest. Not a final destination.

PROFESSIONAL SOUND... FOR THE HOME