



Now with Metamaterial Absorption Technology

Since 1961, KEF has strived to reproduce pure sound precisely as it was meant to be heard. Decades of experience in acoustic innovation and the quest for music perfection come together in the R Series to deliver sound with more detail and deeper insight; sound that ignites excitement every time you experience it.

The R Series is a direct beneficiary of the technological innovations developed for The Reference, the class-leading series that continually set the benchmark for loudspeakers and sound reproduction. Combining with bespoke technologies, the R Series delivers an exceptional acoustic performance. The revolutionary Metamaterial Absorption Technology¹ (MAT™) has been incorporated into the latest iteration of the R Series, and the 12th generation Uni-Q® driver array has been refined to maximise the impact of this technological advance and ensure the best possible performance.

The result is an exceptional seven-model range of loudspeakers, engineered to deliver with exquisite detail and incredible insight. Whether your taste lies with traditional two-channel HiFi, multi-channel home theatre or both, the R Series reveals levels of detail that must be heard to be believed.

Revolutionary sound absorption with MAT™

At the heart of the latest R Series is Metamaterial Absorption Technology (MAT), a revolutionary innovation that takes the performance of the 12th generation Uni-Q driver array to another level in terms of accuracy and clarity.

MAT is a highly complex maze-like structure, where each of the intricate channels efficiently absorbs a specific frequency. When combined, the channels act as an acoustic black hole, absorbing 99% of the unwanted sound that comes from the rear of the tweeter, eliminating the resulting distortion and providing a purer, more natural acoustic performance.

Superior KEF sound

A bespoke 12th generation Uni-Q driver array with MAT is found in all seven models of the R Series and delivers an incredibly detailed performance. It's the result of decades of accumulated in-house knowledge and the application of cutting-edge simulation and analysis tools. The developments are many and all play a part in R Series' exceptional performance.

The Uni-Q driver array has been redesigned to maximise the performance improvements that MAT delivers. The conical waveguide that couples the tweeter dome to the new metamaterial absorber has been specially designed for the bespoke driver based on its depth. The re-engineered tweeter gap damper strategically places two rings of porous material to tame the resonances and imperfections effectively, thus greatly improving detail and clarity.

The ultra-low distortion midrange motor design uses a copper ring embedded into the motor gap to minimise inductance and variation of inductance with coil position. This lowers the midrange THD and reduces thermal compression, leading to improved efficiency.

The Flexible Decoupling Chassis first used on the latest Blade and The Reference loudspeakers is employed on the Uni-Q driver array to dramatically reduce coloration of the sound caused by midrange vibration transmission to the cabinet, while also solving the problem of additional sound created by the driver basket that occurs with traditional decoupling methods. It works by decoupling the massive midrange motor from the Uni-Q chassis, dissipating its vibration before it can travel to the cabinet and be radiated as unwanted sound.

Summary of features

- Metamaterial Absorption Technology (MAT™) eliminates 99% of high-frequency distortion for pure, natural sound
- Bespoke 12th generation Uni-Q with MAT driver array for exceptional acoustic accuracy
- Refined tweeter gap damper tames resonances for improved detail
- Flexible Decoupling Chassis prevents unwanted vibrations for better clarity
- Enhanced crossover design fine-tuned the signal path for pristine, clean sound
- Seven models: R11 Meta, R7 Meta, R5 Meta, R3 Meta, R6 Meta, R2 Meta, R8 Meta
- Available in Black Gloss, White Gloss and Walnut finishes, plus an exclusive Titanium Gloss Special Edition for R7 Meta and Indigo Gloss Special Edition for R3 Meta
- Microfibre grilles offer the perfect balance between driver protection, sonic performance and aesthetics
- S3 Floor Stand for R3 Meta is available as separate item



¹ Metamaterial Absorption Technology is a joint development with Acoustic Metamaterials Group.

The surround on the 12th generation Uni-Q driver array allows for longer excursion without causing diffraction and extending the frequency range of the midrange. The contours of tweeter dome, midrange cone and surround are all computer-optimised to ensure a perfectly smooth transition to the cabinet.

These innovations combine to ensure the R Series sound even more transparent and life-like than previously heard on this already exceptional range.

Shadow Flare for improved clarity

Shadow Flare is another feature originally designed for The Reference. It reduces harmful cabinet diffraction, allowing the 12th generation Uni-Q with MAT to work to its highest potential. Shadow Flare is a precision designed surface that extends the waveguide effect of the Uni-Q driver array. This means the tweeter no longer has line of sight of the cabinet edges, creating a 'shadow region' at the points where the potential for diffraction is highest, minimising the acoustic impact to negligible levels. The result is improved clarity and the reproduction of the fine details that make listening such a thrilling experience. The subtle nuances of plucked strings, the changes of vibrato in a voice, all of these are clearer on the R Series.

Deep, agile bass

Bass is a vital element of performance, and the low-frequency drivers of R Series have been engineered with acute care and precision. They are built using a two-part structure, where a shallow concave aluminium skin sits atop a paper cone. This stiffness combined with the cone's unique geometry reduces unwanted resonances and delivers the pistonic movement that makes these drivers time so well. The drivers' magnet system creates a broad, uniform magnetic field, while the suspension reduces harmonic distortion for a clean, precise sound. The result is exceptionally deep and agile bass that reveals every last bit of detail and punch available in the deep.

Flexible port for cleaner bass

We only want to hear the drivers, not the resonances or turbulence created by a bass port. The R Series' ports feature innovative flexible walls. Using computational fluid dynamics, the flare and profile of each port is calculated to delay the onset of turbulence, while the flexible port walls prevent longitudinal resonances from colouring the midrange. The advantages of this approach are twofold: better bass, and cleaner sound further up the frequency range in the vital lower midrange area.

Performance critical damping

Powerful drivers can easily cause the cabinet walls to make noise of their own - noise that was never in the recording in the first place. Working alongside the bespoke internal bracing layout, KEF's Constrained Layer Damping is a sophisticated bracing system that ensures the cabinet stays inert by connecting the bracing to the drivers and cabinet by a lossy interface. This material converts vibration into heat, ensuring that the cabinet makes the only sound it needs to - the sound of silence.

Strength and versatility in numbers

The R Series comprises seven models, providing listeners with a great versatility when building their ideal HiFi system. Whether that's a stereo or a home theatre set up, they can do so with the confidence that they will enjoy an immersive, realistic sound experience.

Stereo for music

A trio of floorstanding speakers including R11 Meta, R7 Meta and R5 Meta and a bookshelf speaker R3 Meta reproduce high-fidelity stereo sound for your favourite music irrespective of the dimensions of the listening space. Each of them will allow you to discover depth and detail in your music you never knew existed - from the scrape of a plenum on guitar strings to the sense of emotion and atmosphere in a live performance.

Home Theatre

The two centre speakers including R6 Meta and R2 Meta, which can also be used in LCR configuration, deliver brilliant dialogue clarity to the home theatre experience in different room sizes. Identically sized Uni-Q arrays are deployed on the centre speakers and all other models in the series. This creates a consistent sound character, therefore ensuring that the focus is entirely on the film and not the equipment around the room.

If you want to experience the glorious experience that is Dolby Atmos, then the R8 Meta surround speaker is an ideal addition to a surround system. It can be either wall-mounted or placed on top of another R Series loudspeaker, for sensationally immersive sound. With the addition of any of KEF's class-leading subwoofers, the whole cinematic experience is felt, from the deepest impact to the softest whispers.



Perfecting every detail

At KEF innovative engineering goes hand-in-hand with great design, and our product design team strives to create deceptively simple, elegant loudspeakers. While every design choice KEF makes is driven by acoustic performance, visual appeal is vitally important and the R Series proves that a loudspeaker can perfectly integrate into the room, both sonically and aesthetically.

This understated design aesthetic is complemented by carefully selected colour options. Conceived to be at home in either traditional or modern interiors, each model in the R Series comes in a choice of two sleek gloss finishes: Black Gloss, White Gloss and a classic wood veneer finish: Walnut. Two models also have their own signature finish option in the form of the Titanium Gloss Special Edition for R7 Meta and the Indigo Gloss Special Edition for R3 Meta.

The R3 Meta also features threaded inserts that allow the speaker to be mounted securely onto the top of the S3 Floor Stands, which also boast integrated cable management and a mass-loadable column.



Dedicated microfibre grilles

The R Series is engineered to perform its best with or without grilles. The dedicated microfibre grilles are crafted from multiple layers of material and the edges are burnished for a suede-like feel.

With 1801 precision-cut holes for each driver you experience fantastic performance even when the drivers are covered, which is great news if you feel the need to protect them. The magnetic fixings provide a secure and precise fit, in keeping with the clean styling of the R Series.



Black Gloss



White Gloss



Walnut



Titanium Gloss
Special Edition
(Exclusive for R7 Meta)



Indigo Gloss
Special Edition
(Exclusive for R3 Meta)

Specifications



Model	R11 Meta	R7 Meta	R5 Meta
Design	Three-way bass reflex	Three-way bass reflex	Three-way bass reflex
Drive units	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT MF: 125 mm (5 in.) aluminium cone Bass Unit: LF: 4 x 165 mm (6.5 in.) hybrid aluminium cone	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT MF: 125 mm (5 in.) aluminium cone Bass Unit: LF: 2 x 165 mm (6.5 in.) hybrid aluminium cone	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT MF: 125 mm (5 in.) aluminium cone Bass Unit: LF: 2 x 130 mm (5.25 in.) hybrid aluminium cone
Crossover frequency	330 Hz, 2.5 kHz	400 Hz, 2.4 kHz	400 Hz, 2.7 kHz
Frequency range (-6dB)	30 Hz - 50 kHz	33 Hz - 50 kHz	38 Hz - 50 kHz
Typical in-room bass response (-6dB)	26 Hz	27 Hz	29 Hz
Frequency response (±3dB)	46 Hz - 28 kHz	48 Hz - 28 kHz	52 Hz - 28 kHz
Harmonic distortion (90dB, 1m)	<1% 33 Hz and above <0.5% 80 Hz - 20 kHz	<1% 76 Hz and above <0.5% 110 Hz - 20 kHz	<1% 75 Hz and above <0.5% 110 Hz - 20 kHz
Maximum output	113 dB	111 dB	110 dB
Amplifier requirements	15 - 300W	15 - 250W	15 - 200W
Nominal impedance	4 Ω (min. 3.2 Ω)	4 Ω (min. 3.2 Ω)	4 Ω (min. 3.2 Ω)
Sensitivity (2.83V/1m)	90 dB	88 dB	87 dB
Weight *	36.5 kg (80.5 lbs)	29.3 kg (64.6 lbs)	24.5 kg (54.0 lbs)
Dimension (H x W x D) with terminal *	1249 x 200 x 384 mm (49.2 x 7.9 x 15.1 in.)	1062 x 200 x 384 mm (41.8 x 7.9 x 15.1 in.)	1025 x 175 x 344 mm (40.4 x 6.9 x 13.5 in.)
Dimension (H x W x D) with terminal with Plinth *	1296 x 311 x 384 mm (51.0 x 12.2 x 15.1 in.)	1109 x 311 x 384 mm (43.7 x 12.2 x 15.1 in.)	1072 x 272 x 344 mm (42.2 x 10.7 x 13.5 in.)
Finishes	Black Gloss / White Gloss / Walnut	Black Gloss / White Gloss / Walnut / Titanium Gloss Special Edition	Black Gloss / White Gloss / Walnut

* Measurement per unit



Model	R3 Meta	R6 Meta	R2 Meta	R8 Meta
Design	Three-way bass reflex	Three-way closed box	Three-way closed box	Two-way closed box
Drive units	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT MF: 125 mm (5 in.) aluminium cone Bass Unit: LF: 165 mm (6.5 in.) hybrid aluminium cone	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT MF: 125 mm (5 in.) aluminium cone Bass Unit: LF: 2 x 165 mm (6.5 in.) hybrid aluminium cone	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT MF: 125 mm (5 in.) aluminium cone Bass Unit: LF: 2 x 130 mm (5.25 in.) hybrid aluminium cone	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT MF/ LF: 130 mm (5.25 in.) aluminium cone
Crossover frequency	420 Hz, 2.3 kHz	500 Hz, 2.4 kHz	560 Hz, 2.5 kHz	2.6 kHz
Frequency range (-6dB)	38 Hz - 50 kHz	55 Hz - 50 kHz	58 Hz - 50 kHz	88 Hz - 19.5 kHz
Typical in-room bass response (-6dB)	30 Hz	40 Hz	43 Hz	-
Frequency response (±3dB)	58 Hz - 28kHz	65 Hz - 28 kHz	67 Hz - 28 kHz	97 Hz - 17.5 kHz
Harmonic distortion (90dB, 1m)	<1% 73 Hz and above <0.5% 90 Hz - 20 kHz	<1% 65 Hz and above <0.5% 93 Hz - 20 kHz	<1% 84 Hz and above <0.5% 95 Hz - 20 kHz	<1% 220 Hz and above <0.5% 320 Hz - 20 kHz
Maximum output	110 dB	111 dB	110 dB	106 dB
Amplifier requirements	15 - 180W	15 - 250 W	15 - 200W	25 - 150W
Nominal impedance	4 Ω (min. 3.2 Ω)	4 Ω (min. 3.2 Ω)	4 Ω (min. 3.2 Ω)	4 Ω (min. 3.2 Ω)
Sensitivity (2.83V/1m)	87 dB	88 dB	87 dB	85 dB
Weight *	12.4 kg (27.3 lbs)	17.8 kg (39.2 lbs)	15.4 kg (34.0 lbs)	4.5 kg (9.9 lbs.)
Dimension (H x W x D) with terminal *	422 x 200 x 336 mm (16.6 x 7.9 x 13.2 in)	200 x 625 x 339 mm (7.9 x 24.6 x 13.3 in.)	175 x 550 x 309 mm (6.9 x 21.7 x 12.2 in.)	174 x 175 x 259 mm (6.9 x 6.9 x 10.2 in.)
Finishes	Black Gloss / White Gloss / Walnut / Indigo Gloss Special Edition	Black Gloss / White Gloss / Walnut	Black Gloss / White Gloss / Walnut	Black Gloss / White Gloss / Walnut

* Measurement per unit

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