

# R SERIES



## R SERIES

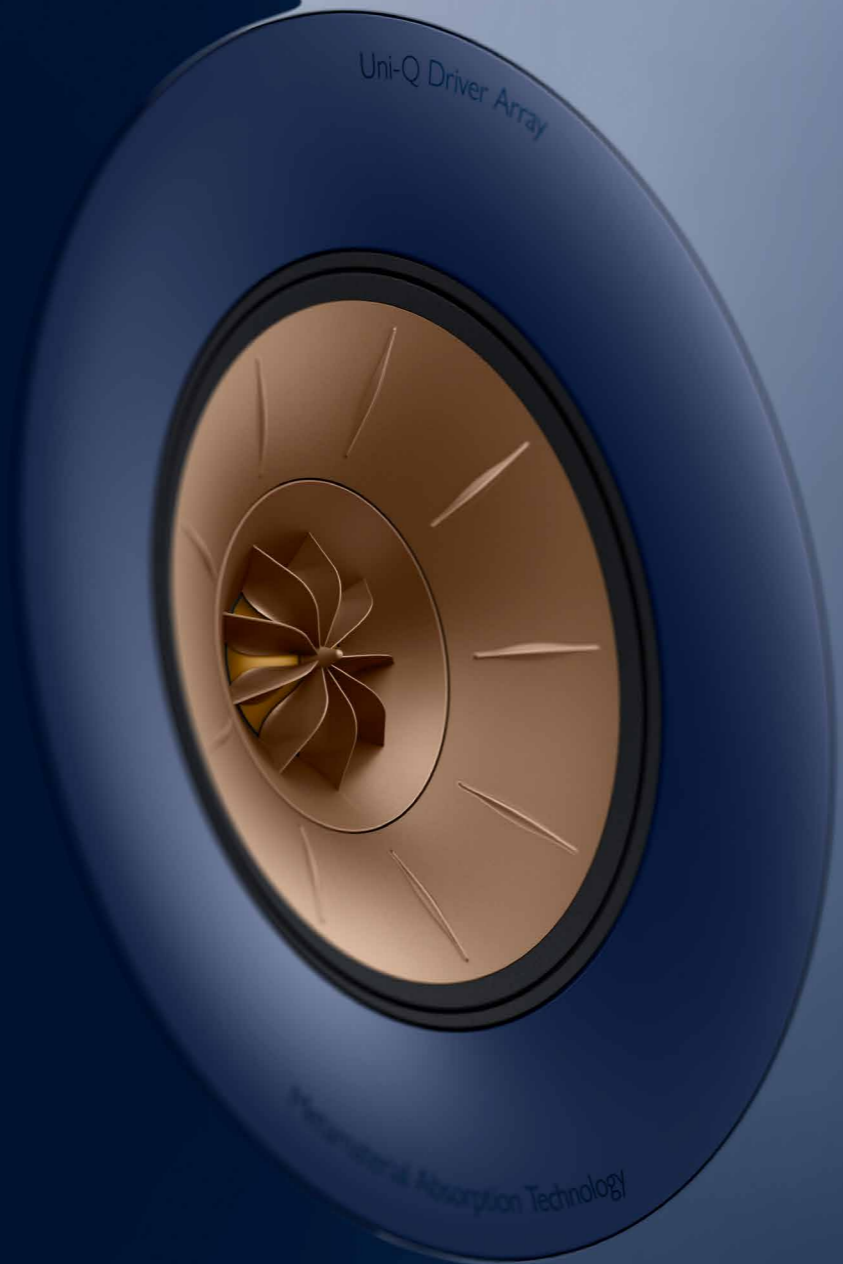
NOW WITH METAMATERIAL  
ABSORPTION TECHNOLOGY

Developed for KEF's flagship The Reference, a suite of the latest technologies has now made its way into the new generation of the R Series. Whether in stereo for music or in a home theatre set up, the R Series makes exceptional acoustic performance more accessible. Now with the groundbreaking Metamaterial Absorption Technology, the R Series reveals exquisite detail and incredible insight: truly an experience to savour.

The KEEF logo is positioned at the top of the speaker's baffle. It consists of the word "KEEF" in a bold, sans-serif font, with a small square icon to its left. The logo is rendered in a metallic gold color that matches the speaker's internal components.

KEEF

Uni-Q Driver Array



Acoustic Absorption Technology

**PERFORMANCE REDEFINED.**

AN ICON BORN FROM THE REFERENCE.

**R SERIES:  
BORN FROM THE REFERENCE**



Since 1961, KEF's quest to reproduce immaculate sound has led to many acoustic innovations. The Reference is a case in point. Distilling decades of experience into an acoustic performance that is nothing short of exceptional it is a design that continually sets the benchmark for loudspeakers and sound reproduction. Now the latest technological innovations have also made their way into the R Series.

Combined with bespoke technologies, the R Series makes high performance audio more versatile and accessible than ever – whether in stereo for music or in a home theatre set up. Now with the award-winning Metamaterial Absorption Technology (MAT), the range includes seven loudspeaker models, each designed and engineered to produce sound with exquisite detail and incredible insight.

KEF has developed the R Series for those who share our obsession with music perfection - pure and natural sound as it is meant to be heard.

## REVOLUTIONARY SOUND ABSORPTION WITH MAT™

A revolutionary tool in the KEF acoustic armoury, MAT™ breaks completely new ground in speaker design.

Metamaterial Absorption Technology 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 distortion and providing a more natural acoustic performance.

Metamaterials are specially developed structures that use existing materials in such a way that they exhibit new, desirable properties that are simply not found in naturally occurring substances.

A result of joint development with the Acoustic Metamaterials Group, using MAT breaks completely new ground in loudspeaker design, and demonstrates KEF's unrelenting passion for innovation and dedication to improving the listening experience for everyone.



"A clever way of absorbing unwanted sound waves."

What Hi-Fi? Innovation of the Year 2020



## SIT ANYWHERE, HEAR EVERY DETAIL

The building block of KEF signature sound, Uni-Q technology disperses sound more evenly throughout the room. By placing the tweeter precisely at the acoustic centre of the bass/midrange cone, both act together as a single point source, eliminating the limited 'sweet spot' and instead allowing everybody, no matter where in the room they are sitting, to experience and enjoy the same natural, detailed sound.

The latest 12<sup>th</sup> generation Uni-Q with MAT driver array is found in all seven R Series models. The bespoke driver array is the result of decades of acoustic experience and incorporates the very latest advances in acoustic simulation and analysis. The result is a performance of breath-taking realism and accuracy.

### 1 Flexible decoupling chassis

Derived from The Reference, the flexible decoupling chassis is incorporated to reduce vibration and colouration. It ensures that any vibrations generated by the mid and high-frequency motor system are not transmitted to the loudspeaker cabinet.

### 2 Ultra-low distortion MF motor

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

### 3 Tweeter gap damper

The tweeter gap damper has been re-engineered to strategically place two rings of porous material to tame any resonances and imperfections, greatly improving detail and clarity.

### 4 MAT tweeter absorber

The MAT tweeter absorber is a highly complex maze-like structure in which each of the intricate channels efficiently absorbs a specific frequency. When combined, the channels absorb 99% of the unwanted sound from the rear of the tweeter.

### 5 Conical waveguide

The conical waveguide that couples the tweeter dome to the new metamaterial absorber has been specifically designed for the bespoke driver based on its depth.

### 6 Tweeter dome

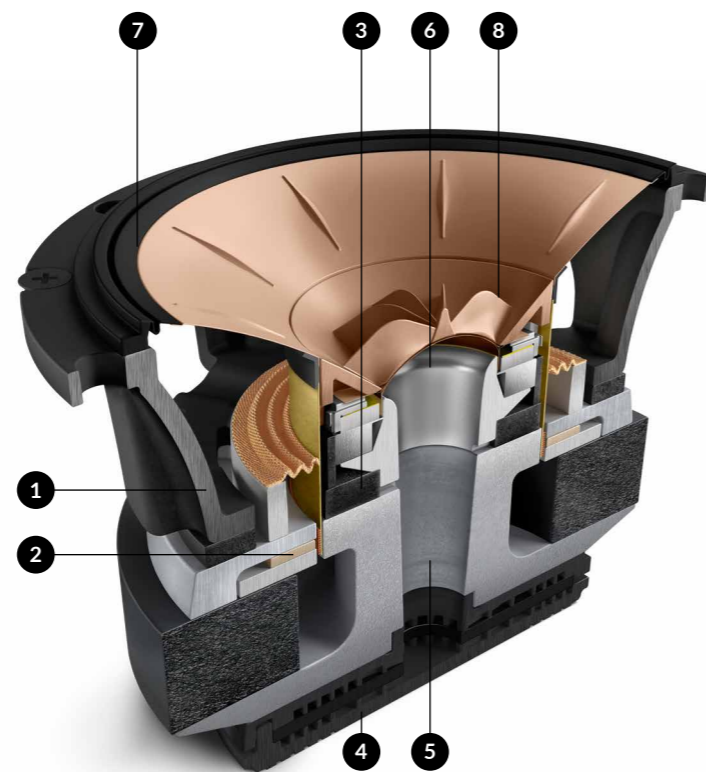
The stiffened aluminium tweeter dome that sits at the centre of the Uni-Q driver array can deliver a consistently sweet, lucid and lyrical treble at any volume.

### 7 Driver surround

The driver surround allows longer excursion without causing diffraction and extending the frequency range of the mid-frequency. Plus, the contours of the dome, midrange horn and surround are all computer-optimised to ensure a perfectly smooth transition to the cabinet.

### 8 Tangerine waveguide

The patented Tangerine Waveguide technology manages the airflow to recreate the wide, even spread of a natural sound field, dispersing the pure high-frequency imaging throughout the room.



## A FLARE FOR DETAIL

Derived directly from The Reference, the R Series incorporates Shadow Flare, a precision designed surface that extends the waveguide effect of the Uni-Q driver array and allows it to work to its highest potential.

Reducing harmful cabinet diffraction, 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 extraordinary clarity – with a noticeable difference especially in the fine details: the subtle nuances of plucked strings, other percussive sounds.

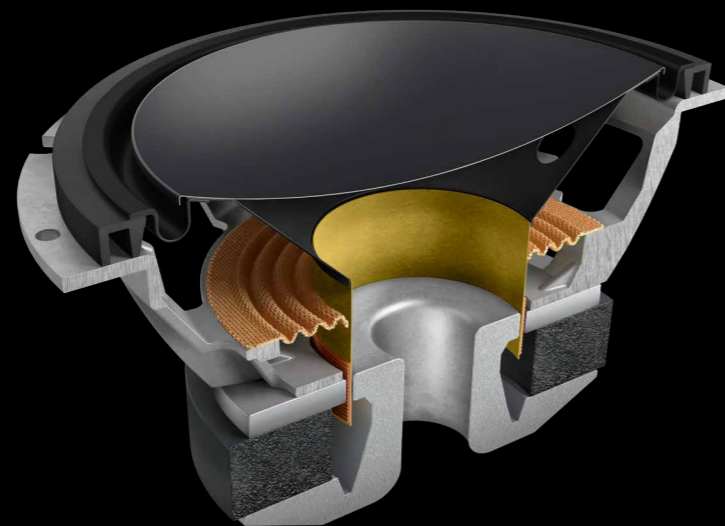


## TRUE BASS DEFINITION

When listening to music, the quality of the bass can define the whole experience. The low-frequency drivers of the R Series have been duly engineered with acute care and precision.

Built using a two-part structure, a shallow concave aluminium skin sits atop a paper cone. The metal's stiffness combined with the cone's unique geometry reduces additional resonances and delivers pure piston like movement that is timed with perfect accuracy.

The drivers' magnet system creates a broad, uniform magnetic field, while the suspension reduces harmonic distortion for an exceptionally agile, soulful bass and a deeper level of feeling.



## FLEXIBLE PORT FOR CLEANER BASS

When it comes to listening to music through a speaker, it should only be the drivers we hear, not the resonances or turbulence created by a bass port.

The innovative flexible walls of the R Series ports prevent longitudinal resonances from colouring the midrange. Meanwhile, using computational fluid dynamics, the flare and profile of each port is calculated to delay the onset of turbulence.

The advantages of this approach are twofold: better bass, and cleaner sound in the vital lower midrange frequency area too.



## PERFORMANCE CRITICAL DAMPING

Powerful drivers can easily cause the cabinet walls to make a noise of their own - noise that was never in the recording in the first place. For this reason, a solid platform is imperative.

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 material.

This material converts vibration into heat, ensuring that the cabinet makes the only sound it needs to: the sound of silence.









## PURE MUSIC IMMERSION

When we immerse ourselves in music, we don't just listen to it but feel it. Then it has the power to alter our moods, to move our souls, and can be one of the greatest pleasures in life. This feeling is the driving force behind KEF's quest to develop the ultimate loudspeaker – a goal that we have spent more than six decades in pursuit of.

You may have listened to your favourite music a thousand times or more, but through the R Series you will discover a depth and level of detail in any recording

that will likely make you love it more – from the scrape of plectrum on guitar string, the changes of vibrato in a voice, to the sense of emotion and atmosphere in a live performance.

Delivering sound that is natural and accurate – the performance as intended by the artist – the R Series consists of a trio of floorstanding speakers and a bookshelf speaker. Each reproduces high-fidelity stereo sound irrespective of the dimensions of the listening space.

## FLOORSTANDING SPEAKERS

For different size of room and configuration, a trio of room-filling floorstanding speakers is offered in R Series.



### R11 Meta

For a breathtaking listening experience, the R11 Meta is the R Series flagship floorstander. In a three-way design it boasts four 165mm (6.5 in) hybrid aluminium bass drivers, allowing it to dig deep into the sound and retrieve an exceptionally clean performance.

R11 can pick out the softest details with grace and refinement, while delivering raw power and strength. This is due to the 12<sup>th</sup> generation Uni-Q driver array with MAT nestled in the centre of the drivers, as well as the combination of the 125mm (5 in) midrange driver and 25mm (1 in) aluminium dome tweeter, together delivering a supremely natural midrange and treble.



### R7 Meta

The mid-sized floorstanding member of the R Series is as powerful as it is flexible. Featuring two 165mm (6.5 in) hybrid aluminium bass drivers for the most accurate, dynamic bass, the three-way design incorporates KEF's 12<sup>th</sup> Generation Uni-Q driver array with MAT combining a 125mm (5 in) midrange driver and 25mm (1 in) aluminium dome tweeter.

The result? A performance where full transparency makes for jaw-dropping realism.



### R5 Meta

KEF engineers do not believe in compromise. Designed specifically for a smaller space, or as surround speakers in the ultimate home theatre system, the R5 Meta maybe slightly smaller, but its 130mm (5.25 in) bass drivers still produce exceptionally clean bass.

The slim and elegant R5 Meta also contains the same Uni-Q driver array as its bigger brothers, with a 125mm (5 in) midrange driver and 25mm (1 in) aluminium dome tweeter producing incredible levels of detail.





## BOOKSHELF SPEAKER

A compact speaker with expansive sound, the bookshelf model and its optional floor stand are perfectly suited to a smaller listening space.



### R3 Meta

A compact speaker, the size of the R3 Meta belies its power. Defying all expectations, this true three-way speaker redefines stand-mount performance.

The R3 Meta share the same drivers as the range-topping R11 Meta. The 165mm (6.5 in) bass driver pushes bass performance to new extremes while the 125mm (5 in) midrange driver and 25mm (1 in) aluminium dome tweeter creates the 12<sup>th</sup> generation Uni-Q array, now with MAT for a cleaner and highly accurate performance.

The R3 Meta also features threaded inserts, allowing the speaker to lock onto the S3 Floor Stands. Especially designed with a mounting system that rigidly secures the speakers, the S3's dimensions have been dictated by KEF's engineers to ensure the ideal height for driver positioning.

With integrated cable management to ensure all cables are elegantly concealed and organised, a pillar that can be loaded with inert filler to further improve stability and spike discs to protect wooden floors, everything is considered. It's the smallest details that make all the difference.



## CINEMATIC SOUND

Listen, and be there. Whether 'there' is a white-knuckle chase through the backstreets of Bangkok, the cacophony of nature in a tropical rainforest or the royal box at the Vienna Philharmonic – the R Series transports you, delivering an immersive, meticulously engineered soundscape that will bring your entertainment to life.

Offering high performance acoustics in room friendly dimensions, the R Series is the ideal choice for a home theatre set up. Identically sized Uni-Q

arrays are deployed across all the R Series models, creating consistent sound character and making sure all the focus is on the film and not the equipment around the room.

With two centre speakers, speech and vocals are delivered with crystal clarity. Add a Dolby Atmos-enabled surround speaker and any of KEF's class-leading subwoofers to complete the cinematic experience and take your movie enjoyment to the next level.





## HOME THEATRE

Complete your home theatre set up to ensure you never miss a moment of the drama or dialogue.



### CENTRE SPEAKERS

#### R6 Meta

The flagship centre speaker of the R Series, the R6 Meta is a three-way design featuring the same 12<sup>th</sup> generation Uni-Q driver array with MAT as the R Series stereo models. This is a model that recreates every nuance, whilst matching the rest of the range tonally.

Designed to be used in an LCR configuration, the R6 Meta is effortlessly versatile. Thanks to twin, powerful 165mm (6.5 in) hybrid aluminium bass drivers, every sound is perfectly reproduced to ensure the audience doesn't miss a beat.



#### R2 Meta

Whether epic or intimate, the size of the room should never dictate the quality of sound. Designed specifically for a home theatre set up in smaller rooms, the R2 Meta centre speaker delivers the exact same high performance as its larger counterparts in the series.

Providing a truly immersive listening experience with crystal clear dialogue, the three-way design of the R2 Meta centre speaker boasts the latest generation Uni-Q driver array with MAT, two 130mm (5.25 in) hybrid aluminium bass drivers. A versatile speaker the R2 Meta centre can be used in an LCR configuration.



### DOLBY ATMOS SURROUND SPEAKER

#### R8 Meta

A truly immersive movie experience at home requires planning, or a multitasking solution. This is where the R8 Meta comes in. A highly flexible solution that can suit any room, the R8 Meta can serve as a surround or rear speaker with the integrated wall mount feature, or be placed upon another speaker for Dolby Atmos height to bounce sound off the ceiling, bringing Dolby Atmos to the room with no need for custom installation.

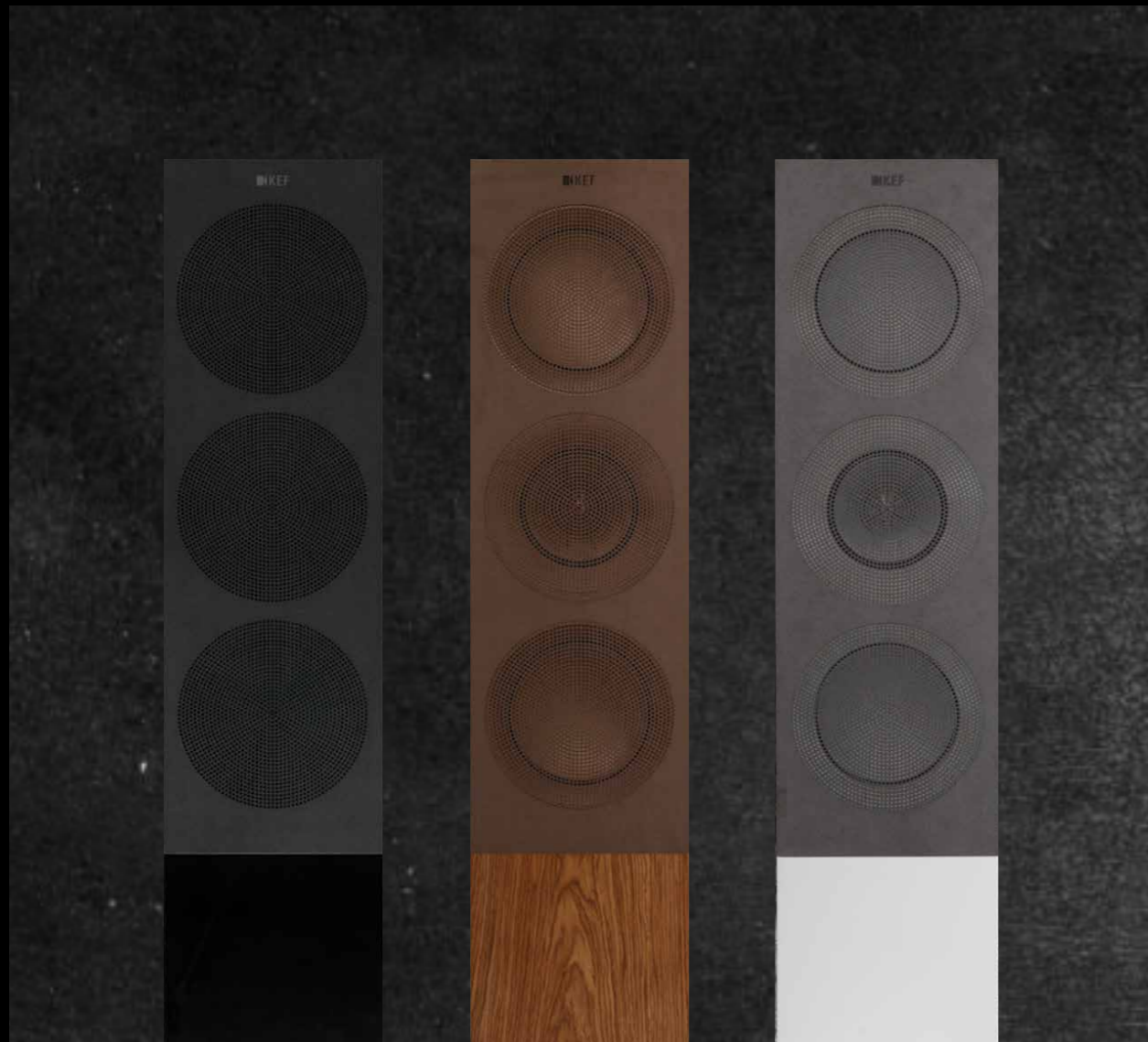
Fully equipped with 12<sup>th</sup> generation Uni-Q array with MAT, every detail of the audio is clearly described and steered around the listening space as the director intended.

## MICROFIBRE GRILLES

The dedicated microfibre grilles feature 1,801 precision-cut holes for each driver, delivering the uncompromised sonic performance even when the drivers are covered.

Compressed with heated pressure from multiple layers of material, they have a tactile, suede-like feel. The Magnetic fixings provide a secure and precise fit in keeping with the clean styling of the speakers themselves.

The R Series has been engineered to perform with or without grilles, which – though they look beautiful – have a negligible effect on sound performance.





## FINISHES

The R Series is designed to fit seamlessly and elegantly into any interior scheme, whether traditional, modern or contemporary. Understated and timeless, driven purely by acoustics, all engineering fixings have been concealed in a beautiful, minimal exterior.

Three carefully selected finishes include sleek Black Gloss or White Gloss, or classic Walnut, while special edition finishes include Titanium Gloss and Indigo Gloss for the R7 Meta and R3 Meta respectively.



Black Gloss



White Gloss



Walnut



Titanium Gloss Special Edition  
(Exclusive for R7 Meta)



Indigo Gloss Special Edition  
(Exclusive for R3 Meta)

# SPECIFICATIONS

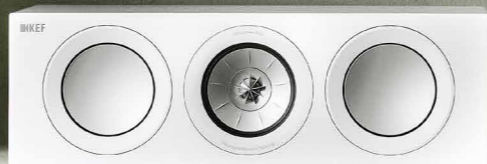
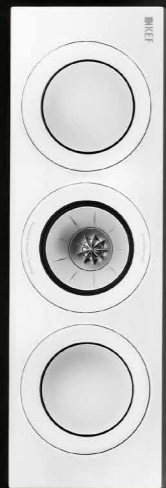


Model	R11 Meta	R7 Meta	R5 Meta
Design	Three-way bass reflex	Three-way bass reflex	Three-way bass reflex
Drive units	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT MF: 125 mm (5 in.) aluminium cone Bass unit: LF: 4 x 165 mm (6.5 in.) hybrid aluminium cone	Uni-Q Driver Array: HF: 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 (-6 dB)	30 Hz - 50 kHz	33 Hz - 50 kHz	38 Hz - 50 kHz
Typical in-room bass response (-6 dB)	26 Hz	27 Hz	29 Hz
Frequency response (±3 dB)	46 Hz - 28 kHz	48 Hz - 28 kHz	52 Hz - 28 kHz
Harmonic distortion (90 dB, 1 m)	<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 - 300 W	15 - 250 W	15 - 200 W
Nominal impedance	4 Ω (min. 3.2 Ω)	4 Ω (min. 3.2 Ω)	4 Ω (min. 3.2 Ω)
Sensitivity (2.83 V/1 m)	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

Model	R3 Meta	R6 Meta	R2 Meta	R8a 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 (-6 dB)	38 Hz - 50 kHz	55 Hz - 50 kHz	58 Hz - 50 kHz	88 Hz - 19.5 kHz
Typical in-room bass response (-6 dB)	30 Hz	40 Hz	43 Hz	-
Frequency response (±3 dB)	58 Hz - 28k Hz	65 Hz - 28 kHz	67 Hz - 28 kHz	97 Hz - 17.5 kHz
Harmonic distortion (90 dB, 1 m)	<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 - 200 W	25 - 150 W
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 (2.83 V/1 m)	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)	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.)
Dimension (H x W x D) with terminal with Plinth *	N/A	N/A	N/A	N/A
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

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



## EXPERIENCE R SERIES

Don't just take our word for it.  
The best way to really appreciate  
the power and potential of  
the R Series is to listen to it  
for yourself.

Experience how these speakers  
can immerse you in sound and  
transform your own audio and  
entertainment set up at home.

Find a retailer



