## **Q Series** HiFi Speakers



The successors to our renowned, award-winning HiFi speaker range, the Q Series has evolved once more in its 9th iteration since 1991. Now incorporating the revolutionary Metamaterial Absorption Technology ( $MAT^{TM}$ ) and a suite of innovative acoustic technology derived from our flagship HiFi speakers, high fidelity sound is more accessible than ever. Leveraging the latest  $12^{th}$  generation Uni-Q driver array and cutting-edge analysis techniques, the Q Series has been carefully fine-tuned. This includes a crossover redesign that refines the signal path response for a more natural, detailed sound. The result is a comprehensive lineup of eight speakers that can be easily tailored to your space and desired set up. Whether for stereo music or multi-channel home cinema, the Q Series offers a solution for everyone.

#### Revolutionary sound absorption with MAT™

The crucial new advancement in the Q Series is the integration of Metamaterial Absorption Technology (MAT) $^1$ , a revolutionary innovation that takes the performance of the latest  $12^{th}$  generation Uni-Q driver array to another level in terms of accuracy and clarity.

MAT is a highly complex maze-like structure, in which 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. This eliminates the resulting distortion for a purer, more natural acoustic performance.

#### **Superior KEF sound**

The latest 12<sup>th</sup> generation Uni-Q driver array with MAT is found in all eight models of the Q Series and delivers an incredibly detailed performance. It's the result of decades of accumulated in-house knowledge and the application of state-of-the-art simulation and analysis tools. The developments are many and all play a part in the Q Series' impressive 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 metamaterial absorber has been specially designed for the 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, greatly improving detail and clarity.

The tweeter motor system has been redesigned to maximise the transmission of energy from the rear of the tweeter to the MAT absorber. The area of the tweeter rear chamber vent is increased by 250%, allowing more sound to reach the metamaterial absorber and therefore its effectiveness. This also significantly reduces the acoustic pressure behind the dome, allowing the tweeter to operate more linearly leading to lower distortion still<sup>2</sup>.

The Flexible Decoupling Chassis first used on the flagship Blade and The Reference loudspeakers is employed on the Uni-Q driver array to dramatically reduce colouration of the sound caused by midrange vibration transmission to the cabinet, while also mitigating the potential 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<sup>3</sup>.

These innovations combine to ensure the Q Series sounds more transparent and lifelike than ever.

## **Summary of features**

- Metamaterial Absorption Technology (MAT™) eliminates 99% of high-frequency distortion for pure, natural sound
- 12<sup>th</sup> generation Uni-Q with MAT driver array for exceptional acoustic accuracy
- Enhanced crossover design with fine-tuned signal paths for pristine, clean sound
- Three-way design for enhanced clarity and detail (Q11 Meta, Q7 Meta, Q Concerto Meta, Q6 Meta)
- Hybrid aluminium cone LF driver for deep and powerful bass (Q11 Meta, Q7 Meta, Q Concert Meta, Q6 Meta)
- Eight models: Q11 Meta, Q7 Meta, Q Concerto Meta, Q3 Meta, Q1 Meta, Q6 Meta, Q8 Meta, O4 Meta
- Available in Satin Black, Satin White and Walnut finishes
- Magnetic grilles offer the perfect balance between driver protection and aesthetics
- Optional B2 Wall Bracket provides wall-mounting solution for Q3 Meta and Q1 Meta
- SQ1 Floor Stand for Q Concerto Meta, Q3 Meta and Q1 Meta is available as separate item
- Optional PQ1 Plinth Spike Kit for Q11 Meta and Q7 Meta is available





<sup>&</sup>lt;sup>1</sup>Metamaterial Absorption Technology is a joint development with Acoustic Metamaterials Group.

<sup>&</sup>lt;sup>2</sup>Applicable to Q8 Meta, Q4 Meta, Q3 Meta and Q1 Meta.

<sup>&</sup>lt;sup>3</sup> Flexible Decoupling Chass is available on Q11 Meta, Q7 Meta, Q Concerto Meta and Q6 Meta.

#### An extra half way

The evolved Q Series has been upgraded from a 2.5-way to a 3-way speaker design<sup>4</sup>. This updated configuration separates the frequency ranges, with the Uni-Q driver handling the high and midrange frequencies, and a newly designed bass driver dedicated to the low frequencies management.

The optimisation of the drivers for their respective frequency bands allows the 12<sup>th</sup> Uni-Q driver to perform even better. By minimising the motion of the mid-frequency cone, the tweeter can transmit high frequency sound over a smoother and more stable surface. This reduction in movement leads to a diminished distortion in the lower midrange frequencies, resulting in a significant improvement in detail and clarity.

### Deep and clean bass

The Q Series features a new bass driver design<sup>4</sup> – a hybrid structure with a shallow, concave, aluminium skin atop a paper cone – which gives stiffness to achieve a piston-like movement for better bass punch and speed. Combined with a 3D FEA-optimised surround geometry, this significantly improves linearity at higher excursions. This results in a precise and agile bass management even at high output.

Additionally, the flared port, modelled with computational fluid dynamics, minimises turbulence and reduces chuffing noise. This enables the ported speakers to produce bass that is cleaner and more controlled.

#### Refined crossover from 1000 measurements

A critical component of the Q Series is the refined crossover, which ensures seamless integration of all speaker parts. To achieve this, our engineers take more than 1,000 specific measurements for each speaker model using a custom-built reference microphone array in our anechoic chamber in Maidstone, UK. These extensive on and off-axis measurements allow our team to thoroughly understand each model's acoustic interactions, enabling precise crossover design through advanced simulation and prototyping. This meticulous process draws from the development of the LS50 Meta and has been further enhanced through the creation of the latest Blade, The Reference and R Series, allowing each speaker model for precise signal path optimisation and the best possible performance.

## **Shadow Flare for improved clarity**

Derived from the flagship models, Shadow  $Flare^4$  is a further upgrade for the evolved Q Series. It reduces unwanted cabinet diffraction, allowing the  $12^{th}$  generation Uni–Q with MAT to work at 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 a line of sight to the cabinet edges, creating a 'shadow region' where the potential for diffraction is highest, minimising the acoustic impact to negligible levels. The improved clarity and reproduction of fine details make listening a thrilling experience. Subtle nuances, such as the delicate brushwork on cymbals or the intricate overtones of a piano, are clearer on the Q Series.

## Perfected for your enjoyment

The Q Series comprises eight distinct models. The range extends from compact bookshelf speakers to powerful floorstanders, as well as a slender on-wall speaker and high-performance home cinema models. Whether installed in a spacious living room or a cosy corner, the diversity of form factors and capabilities within the Q Series allows you to curate your desired HiFi set up to suit your space and listening preferences, from music to movies and gaming.

#### **Multi-dimensional music**

Lose yourself in a symphony, rock out to your favourite band, or curate a mood-boosting playlist – the Q Series speakers are primed to deliver a captivating audio experience. There are two 3-way floorstanding models – Q11 Meta and Q7 Meta – which provide refined detail and powerful bass to bring your music to life. If you want to place the speakers on a cabinet or shelf, the Q Series provides a selection of bookshelf speakers including the 3-way Q Concerto Meta, as well as the more compact Q3 Meta and Q1 Meta. Designed for Q Series bookshelf speakers, the SQ1 floor stand creates a sturdy platform for them to perform. For those with constraints on floor or shelf space, the Q3 Meta and Q1 Meta can be easily wall-mounted using the optional B2 Wall Bracket. Additionally, the slender Q4 Meta is specifically designed as an on-wall speaker solution. It can also be used as an LCR (left, centre, right) speaker for a more expansive soundscape without taking up any floorspace.







#### Movie moment, maximised

The Q6 Meta 3-way centre speaker features the same Uni-Q driver as the main speakers, providing a perfect tonal match and a seamless soundstage. This ensures voices are crisp and clear, delivering excellent dialogue clarity. This versatile closed-box speaker is also designed to be used as an LCR (left, centre, right) speaker that can be positioned in cabinets and alcoves.

Sense everything from every direction with the addition of surround sound to create an immersive and atmospheric experience. The flexible Q4 Meta on-wall speaker is ideal for use as a surround speaker. The Q8 Meta can serve as a surround or rear speaker with the integrated wall mount feature. Alternatively, it can be placed upon another main speaker for Dolby Atmos height to bounce sound off the ceiling, bringing Dolby Atmos to the room without the need of custom installation. Pair the Q Series with KEF subwoofers for even more extraordinary impact. Whether it's the subtle rustle of leaves in a forest scene or the dynamic swell of a suspenseful scene, the Q Series will ensure you don't miss any important moments.

## **Detail by design**

The Q Series speakers feature a contemporary minimalist design with a satin finish that offers a premium, subtle glow. Available in Satin Black, Satin White, and Walnut finishes with carefully selected colour driver units, they are designed to blend effortlessly into any interior.

Dedicated grilles are included with the speakers, providing the option to protect the drivers if needed. These colour-matched grilles maintain the cohesive aesthetic, while the magnetic fixing provides a secure and precise fit, in keeping with the clean and seamless styling of the Q Series.



Satin Black



Satin White



Walnut

# **Specifications**





Model	Q11 Meta	Q7 Meta	
Design	Three-way bass reflex	Three-way bass reflex	
Drive units	Uni-Q Driver Array: HF: 19 mm (0.75 in.) vented aluminium dome with MAT MF: 100 mm (4 in.) aluminium cone	Uni-Q Driver Array: HF: 19 mm (0.75 in.) vented aluminium dome with MAT MF: 100 mm (4 in.) aluminium cone	
	LF: 3 x 165 mm (6.5 in.) hybrid aluminium cone	LF: 2 x 165 mm (6.5 in.) hybrid aluminium cone	
Frequency range (-6dB)	37 Hz - 20 kHz	39 Hz - 20 kHz	
Typical in-room bass response (-6dB)	26 Hz	28 Hz	
Frequency response (±3dB)	44 Hz - 20 kHz	46 Hz - 20 kHz	
Crossover frequency	480 Hz, 2.7 kHz	440 Hz, 2.3 kHz	
Amplifier requirement	15 - 225 W	15 - 200 W	
Sensitivity (2.83V/1m)	89 dB	87 dB	
Harmonic distortion (90dB, 1m)	<2% 29 Hz and above <1% 31 Hz - 20 kHz	<2% 35 Hz and above <1% 38 Hz - 20 kHz	
Maximum output	113 dB	110 dB	
Impedance	$4~\Omega~( ext{min.}~3.2~\Omega)$	4 Ω (min. 3.2 Ω)	
Weight *	22.5 kg (49.6 lbs.)	18.4 kg (40.6 lbs.)	
Dimensions (H x W x D) with terminal *	1061 x 210 x 380 mm (41.8 x 8.3 x 15.0 in.)	950 x 210 x 315 mm (37.4 x 8.3 x 12.4 in.)	
Dimensions (H x W x D) with terminal & plinth *	1112 x 317 x 380 mm (43.8 x 12.5 x 15.0 in.)	1001 x 317 x 315 mm (39.4 x 12.5 x 12.4 in.)	
Finishes	Satin Black / Satin White / Walnut	Satin Black / Satin White / Walnut	

<sup>\*</sup> Measurement per unit







Model	Q Concerto Meta	Q3 Meta	Q1 Meta
Design	Three-way bass reflex	Two-way bass reflex	Two-way bass reflex
Drive units	Uni-Q Driver Array: HF: 19 mm (0.75 in.) vented aluminium dome with MAT MF: 100 mm (4 in.) aluminium cone	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT LF/MF: 165 mm (6.5 in.) aluminium cone	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT LF/MF: 130 mm (5.25 in.) aluminium cone
	LF: 165 mm (6.5 in.) hybrid aluminium cone	-	-
Frequency range (-6dB)	40 Hz - 20 kHz	42 Hz - 20 kHz	47 Hz - 20 kHz
Typical in-room bass response (-6dB)	36 Hz	39 Hz	42 Hz
Frequency response (±3dB)	48 Hz - 20 kHz	49 Hz - 20 kHz	51 Hz - 20 kHz
Crossover frequency	430 Hz, 2.9 kHz	2.0 kHz	2.1 kHz
Amplifier requirement	15 - 180 W	15 - 150 W	10 - 150 W
Sensitivity (2.83V/1m)	85 dB	87 dB	86 dB
Harmonic distortion (90dB, 1m)	<2% 37 Hz and above <1% 91 Hz - 20 kHz	<2% 110 Hz and above <1% 135 Hz - 20 kHz	<2% 140 Hz and above <1% 170 Hz - 20 kHz
Maximum output	108 dB	109 dB	108 dB
Impedance	$4 \Omega$ (min. 3.2 $\Omega$ )	4 Ω (min. 3.2 Ω)	4 Ω (min. 3.2 Ω)
Weight *	9.5 kg (20.9 lbs.)	8.2 kg (18.1 lbs.)	6.1 kg (13.4 lbs.)
Dimensions (H x W x D) with terminal *	415 x 210 x 315 mm (16.3 x 8.3 x 12.4 in.)	357 x 210 x 305 mm (14.1 x 8.3 x 12.0 in.)	302 x 180 x 277 mm (11.9 x 7.1 x 10.9 in.)
Finishes	Satin Black / Satin White / Walnut	Satin Black / Satin White / Walnut	Satin Black / Satin White / Walnut

<sup>\*</sup> Measurement per unit

# **Specifications**







Model	Q6 Meta	Q8 Meta	Q4 Meta	
Design	Three-way closed box	Two-way closed box	Two-way bass reflex	
Drive units	Uni-Q Driver Array: HF: 19 mm (0.75 in.) vented aluminium dome with MAT MF: 100 mm (4 in.) 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	Uni-Q Driver Array: HF: 25 mm (1 in.) vented aluminium dome with MAT MF/LF: 130 mm (5.25 in.) aluminium cone	
	LF: 2 x 165 mm (6.5 in.) hybrid aluminium cone	-	-	
Frequency range (-6dB)	52 Hz - 20 kHz	96 Hz - 20 kHz	52 Hz - 20 kHz	
Typical in-room bass response (-6dB)	36 Hz	90 Hz	44 Hz	
Frequency response (±3dB)	63 Hz - 20 kHz	105 Hz - 20 kHz	65 Hz - 20 kHz	
Crossover frequency	560 Hz, 2.7 kHz	2.7 kHz	1.8 kHz	
Amplifier requirement	15 - 200 W	10 - 150 W	10 - 150 W	
Sensitivity (2.83V/1m)	86 dB	86 dB	86 dB	
Harmonic distortion (90dB, 1m)	<2% 20 Hz and above <1% 68 Hz - 20 kHz	<2% 145 Hz and above <1% 170 Hz - 20 kHz	<2% 145 Hz and above <1% 170 Hz - 20 kHz	
Maximum output	109 dB	109 dB	108 dB	
Impedance	4 Ω (min. 3.2 Ω)	4 Ω (min. 3.2 Ω)	4 Ω (min. 3.2 Ω)	
Weight *	14.1 kg (31.1 lbs.)	4.5 kg (9.9 lbs.)	5.7 kg (12.6 lbs.)	
Dimensions (H x W x D) with terminal *	210 x 629 x 303 mm (8.3 x 24.8 x 11.9 in.)	176 x 180 x 259 mm (6.9 x 7.1 x 10.2 in.)	400 x 250 x 142 mm (15.7 x 9.8 x 5.6 in.)	
Finishes	Satin Black / Satin White / Walnut	Satin Black / Satin White / Walnut	Satin Black / Satin White / Walnut	

<sup>\*</sup> Measurement per unit