Fly me to the Muon

hi-fi news EDITOR'S CHOICE

KEF MUON

KEF's statement floorstander is a shining obelisk to the art of loudspeaker design

Numbers for the Muon are impressive even before you get to its price tag. It stands 2m tall, weighs 115kg, has eight drivers – nine if you separate the Uni-Q drive unit into its cone midrange and dome tweeter sections – and incorporates a massive four-way crossover including impedance correction elements, distributed across two large circuit boards. To describe it as a statement product is superfluous: it shouts its intent to be the best KEF loudspeaker ever, from the moment you set eyes on it.

KEF has taken the opportunities afforded by aluminium superforming to create a cabinet which is not only aesthetically arresting but also structurally and acoustically superior to a conventional box cabinet. The gently curved back panels add stiffness, while the pronounced waisting of the cabinet around the upper midrange and Uni-Q drivers serves to control diffraction effects.

Aluminium is a good loudspeaker cabinet material in terms of stiffness but not in respect of self-damping, so over much of the interior KEF kills two birds with one stone by bonding to the cabinet walls porous bags of activated carbon that exploit its ACE (acoustical compliance enhancement) technology. These dampen cabinet vibrations and increase the apparent internal volume of the cabinet by a factor of two. Another familiar KEF technique, compliant driver mounting, is used to suppress cabinet output still further.

The Muon was conceived as a way to exploit improvements made to the revised 165mm Uni-Q driver. As in previous Uni-Qs, this comprises a dome tweeter, now with a vented titanium diaphragm, mounted coaxially in the centre of a midrange cone driver, where the dust cap or phase plug would normally be, to form a coincident driver pair.

Directivity of the two drivers is the same at crossover, thereby avoiding the step-change in off-axis output that often occurs in speakers with separate mid and treble drivers. Their coincidence also prevents the off-axis lobing that can occur when some types of crossover are applied to non-coincident drive units.

ALL YOU'D EXPECT

A problem with all loudspeakers having prodigious bass capability is how to prevent room modes clouding and colouring the low frequency output. KEF has addressed this in the Muon by placing two of the six bass drivers on the rear of the cabinet, which can be used to create an optional cardioid LF directivity pattern. Preference will probably depend on room and system circumstances as well as individual taste. In our listening we found that cardioid mode removed some upper-bass thickening in KEF's listening room and made the bass more tuneful overall, but it also lessened bass weight and warmth.

All told, the Muon is everything you would expect and hope a statement KEF loudspeaker to be. Its visual impact is unquestionable, yet that striking aluminium cabinet's beauty is more than skin deep. Our listening impressions bear out that this hi-tech recipe has been cooked with consummate skill and care.

VERDICT

Throughout its 47-year history, KEF has produced a series of Reference flagship speakers, but these were mere sailboats to the streamlined super-yacht that is the Muon. As much elegant architecture as state-of-the-art loudspeaker, the Muon is destined for residence in capacious, high-ceilinged rooms populated with similarly high-end sources and amplification. Stunning to behold and no less captivating to hear, the Muon sets new standards in the neutral and yet unmistakably tuneful and emotive reproduction of music, regardless of its colour, creed or genre.

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AUDIO FILE

Floorstanding four-way, eight-driver speaker with aluminium cabinet and cardioid bass option

Made and supplied by: KEF Audio (UK)

Telephone: 01622 672261

Web: www.kef.com

HI-FI NEWS SPECIFICATIONS

Sensitivity (SPL at 1m for 2.83Vrms input)	89dB
Impedance modulus min/max (20Hz–20kHz)	3.2ohm @ 18.9kHz 27.2ohm @ 2.3kHz
Impedance phase min/max (20Hz–20kHz)	–50° @ 4.8kHz/+40° @ 1.8kHz
Frequency response error (200Hz–20kHz)	±2.4dB
LF extension (–6dB re. 200Hz)	33Hz
HF extension (–6dB re. 10kHz)	>40kHz
THD 100Hz/1kHz/10kHz (for 90dB SPL at 1m)	0.2% / 0.2% / 0.1%