

KEF REFERENCE SERIES
MODEL 101|2 and 102|2



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MODELS 101/2 AND 102/2

Models 101/2 and 102/2 are two new compact speaker systems, both designed for operation on stands, against a wall, or on a shelf, and both incorporating a 160mm Uni-Q driver with 19mm tweeter. Either may be used with the optional KUBE 200 equaliser.

The concept of achieving high performance from minimum size is compellingly attractive to both audiophiles and speaker engineers. For audiophiles particularly, small size means the ability to locate speakers where they perform best without undue concern for their impact on the listening room.

Taking advantage of their remarkable Uni-Q coincident-source driver and, in the case of 102/2, coupled-cavity bass loading technology, so successfully employed in landmark speakers such as Models 107/2, 105/3 and 104/2, KEF engineers have taken a fresh and penetrating look at the possibilities for high performance in true bookshelf speakers.

Model 101/2

In the smallest speaker in the Reference Series, Model 101/2, KEF have put the powerful results of their previous Reference Series engineering achievements to work in a speaker that represents the maximum possible performance in the minimum possible size. Realistic sound levels, deep powerful bass with refined high frequency extension, result in satisfying reproduction by any musical standard. Model 101/2 makes an ideal high-quality speaker for a small system, and a near-perfect second or dialogue speaker for use in surround-sound or multi-room applications, where its 'boundary' balance is a positive benefit. Compatibility with KUBE 200 means that it may be used in another room as extension to a main system including, say, a 105/3 and KUBE 200. The 101/2's single Uni-Q driver allows it to be placed vertically or horizontally on a bookshelf without detriment to response.

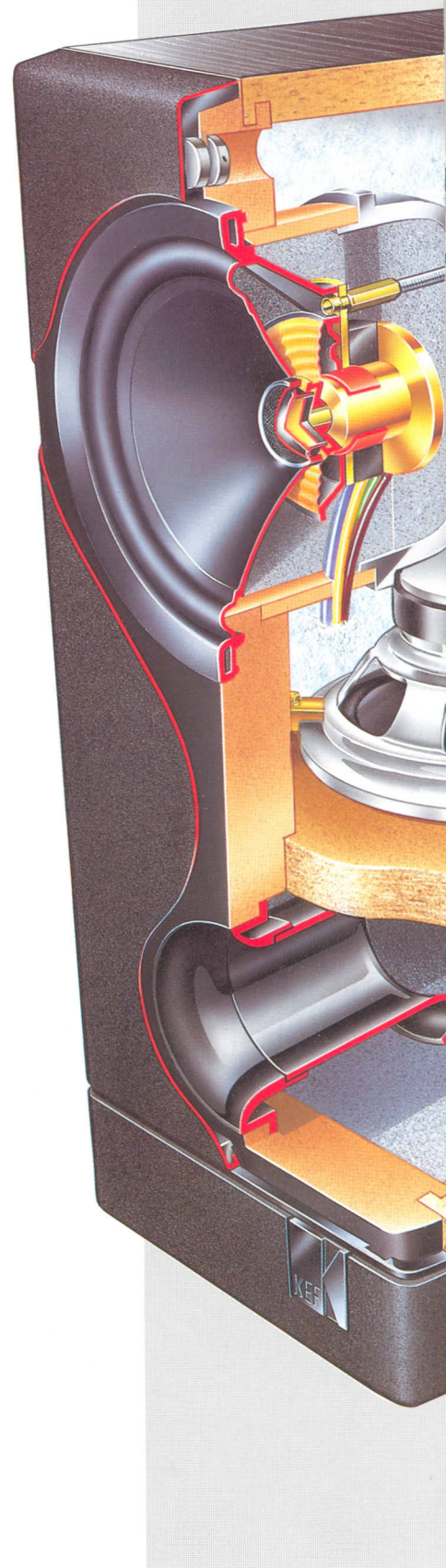
Model 102/2

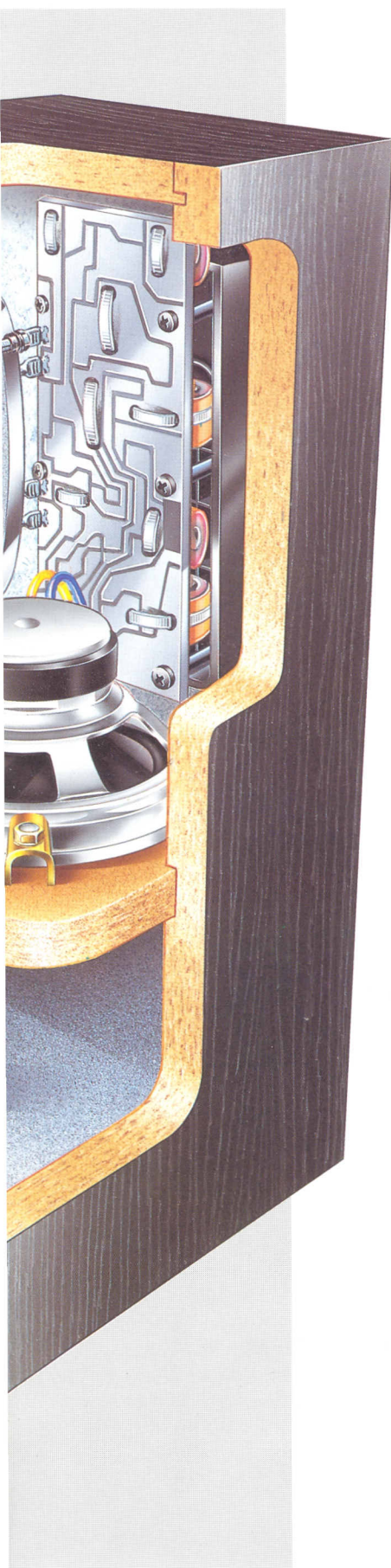
This is an entirely new compact three-way single coupled-cavity speaker. The cabinet is the same width and depth as 101/2, but is 170mm (6.75") taller. The enclosure contains a 160mm Uni-Q unit similar to that used in 101/2 together with a 160mm paper cone/foam surround bass unit mounted inside the cabinet, venting through a contoured port on the front baffle below the Uni-Q driver.

Whilst the overall response and sound characteristics of the two models are similar, Model 102/2's three-way coupled-cavity design combined with higher sensitivity, gives increased power handling and greater output capability.

The Uni-Q Driver

Key to the superb sound quality and overall performance of both models is the incorporation of KEF's remarkable Uni-Q two-way coincident driver. This radical KEF development realises the long held ambition of loudspeaker designers to create a drive unit where all the sound appears to radiate from a single point source. The use of a newly-discovered magnetic alloy, Neodymium-Iron-Boron, which has ten times the energy product of conventional ferrite, enables the placing of a tiny, but immensely powerful,





19mm soft-dome tweeter at the apex of the 160mm woofer driver's polypropylene cone, inside the woofer's voice coil. The result is that the two drivers' acoustic centres are perfectly coincident, delivering smooth, flat response over a wide angle. Because woofer and tweeter have the same directivity, the Uni-Q driver is free from the frequency response and dispersion discontinuities at the crossover point that usually result from separating the woofer and tweeter; the effects of room reflections are minimised because the sound reaches the listener in phase; clarity and stereo imaging are greatly improved.

The Uni-Q driver's exceptionally uniform radiation is independent of its orientation, meaning that either model can be set vertically or horizontally as needed and yet deliver identical performance.

Boundary assisted alignment

Model 101/2 employs KEF's newly researched third order low-frequency shelving alignment. This response shape, derived from the speaker's measured mean forward hemispherical response, gives a more accurate and extended bass response, when the speaker is correctly placed close to, or against, a wall or other boundary.

Model 102/2 uses a single coupled-cavity bass loading arrangement, giving higher efficiency and power handling, whilst still designed for boundary placement.

Reference Series Craftsmanship

Both 101/2 and 102/2 enjoy the same standards of craftsmanship and finish found in all KEF Reference Series speakers including computer controlled pair matching to within 0.5 dB. Made from 18mm-thick particle board, the side walls and rear panel are covered with genuine wood veneers of rosewood, walnut or black ash. The 28mm-thick front baffle, computer-routed from solid MDF contains the precisely inset Uni-Q driver, mounted flush with the baffle for diffraction-free response. The lightweight grille is acoustically transparent, yielding interference-free sound transmission and is held firmly in place by a single high-energy magnet. With grille removed there are no fixings visible for grille or driver. The badge may be rotated to suit vertical or horizontal placement.

101/2 and 102/2 offer complete flexibility, with an input connector system that makes possible both conventional speaker wire connections and audiophile-level bi-wired or bi-amplified connections. Large three-way gold-plated binding post terminals assure secure connections and optimum signal transfer whatever cable termination is used.

Ideal Choice

Aside from their function as principal speakers, the 101/2's compact size and full-range, high fidelity performance make it the speaker of choice in the rear or centre channels of a home theatre surround-sound system. These same qualities make either model ideal as an extension speaker, offering musical performance comparable to that of the largest primary systems and perfectly complementing larger KEF speakers. Both may be used with KEF's optional KUBE 200 active equaliser which extends bass response and offers precise control of the speaker's acoustic balance, largely independent of location or room furnishings.

specifications



Model	101/2	102/2
Type	SP3123	SP3124
Effective * Frequency Range	50Hz – 20kHz, -6dB at 38Hz measured at 2m on reference axis	
Maximum Output *	106dB on programme peaks under typical listening conditions	110dB
Characteristic Sensitivity Level *	86dB spl at 1m on reference axis for pink noise input of 2.83Vrms band limited 50Hz-20kHz (anechoic conditions)	89dB spl
Amplifier Requirements (into 4 Ω)	50-150W	50-200W
Impedance	4 Ω	4 Ω
Internal Volume	10.3 litres 628 cu in	LF 16.2 litres 998 cu in MF/HF 1.25 litres 76 cu in
Net Weight	7.2kg (15.8lb)	11kg (24.2lb)
Dimensions h x w x d	330 x 215 x 262mm 13 x 8 ¹ / ₂ x 10 ³ / ₈ in	500 x 215 x 262mm 19 ³ / ₈ x 8 ¹ / ₂ x 10 ³ / ₈ in
* Corrected for wall or shelf placement		



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