## KEF Museum

# 300 Series

### **300 SERIES**

#### 301 (1981)

The 301 (also known as the Chorus/Capella) utilised a lightweight paper diaphragm for the bass driver, which coupled with a high efficiency cone tweeter, allowed for a system of high sensitivity and high output capability in a medium sized enclosure.

#### 302 (1981-83)

The 302 (also known as the Carina) was a two-way, three drive unit loudspeaker of high efficiency capable of producing high quality sound loud enough to satisfy the needs of those who like to listen at realistic, live volume levels.

The system format followed on from that used in the Concord IV – what we call today a  $2\frac{1}{2}$ -way system – where the two bass drivers operate together at the low frequencies but only the upper unit continues through the midrange to the crossover with the high frequency unit. The twin bass drivers bring advantages including higher maximum output and reduced distortion, making the 302 an ideal loudspeaker for heavy rock music as well as the newly developed digital compact discs with their extended bass response.

303.2 (1980-83)304.2 (1980-81)Models 303.2 and 304.2 were the export versions of the Celeste IV and Concord IV.

The Celeste IV and Concord IV were distinctive for their industrial design, the all-round black grille cloth and matching ULS 40 single pedestal stand allowing them to stand out from the conventional square wooden boxes of the time.

Celeste IV was an 8" two way closed box design with newly developed drivers and a sophisticated crossover network. Both models were designed for use with music centres and amplifiers with as little power as 10 watts per channel and benefited from KEF's total design concept and digital evaluation techniques.

The mark IV versions were different from the mark IIIs by virtue of the moulded plinth and top caps and a wide selection of coloured grille cloths.

The B200 bass drivers for the Celeste III/IV and Concord III/IV featured a new three-sided chassis specifically designed to be mechanically isolated from the cabinet – the first example of driver decoupling in the KEF range. They were also the first KEF bass drivers to use a paper diaphragm – by this time paper diaphragms were being manufactured with good consistency and the lower moving mass contributed to the high sensitivity target for these systems.

303.3 (1981-83)

304.3 (1980)

Unlike the 'all-round' grille covering of the mark 1 and 2, the mark 3 versions of the 303 and 304 used a standard wood finish cabinet and front fitting grille. Otherwise, the acoustical design was essentially the same

Specification	301	302	303
System Type	Two-way, bookshelf/stand- mount	2½-way, stand-mount	Two-way, bookshelf/stand- mount
Enclosure type	Closed box	Closed box	Closed box
Size	470 x 280 x 220mm (18.5 x 11 x 8.7 inches)	570 × 330 × 250mm (23.5 × 13 × 9.85 inches)	52.4 x 26.5 x 23cm (20.6x 10.5 x 9 inches)
Weight	/	9.4kg (20.7 lb)	8.1kg (18 lb)
Nominal Impedance	8 ohms	8 ohms	/
Input Impedance	/	/	8 ohms
Rated maximum power	50W programme	70 programme	50W programme
Amplifier Requirements	/	/	10-50 watts per channel into 8 ohms
System resonance	/	/	68Hz, Q=0.7
Frequency response	70-17,000Hz +/-3dB at 2m on design axis (-10dB at 50Hz and 22kHz)	55Hz to 20kHz +/-3.0dB at 2m on design axis (-10dB at 45Hz and 30kHz)	70-20,000Hz +/-3dB
Sensitivity	89dB at 1m for a pink noise input of 1W (anechoic conditions)	91dB at 1m/1W (anechoic conditions)	86dB spl at 1m for pink noise input of 1W

Maximum output	106dB on programme peaks under typical listening conditions	109dB on programme peaks under typical listening conditions	103dB spl on programme peaks under typical listening conditions
Finishes	/	/	Black or brown plinth and top
Grille	/	/	Black or brown grille fabric as appropriate. Beige, blue, red, green or grey available as optional accessories
System	SP3008	SP3009	SPI147
Drive units	bass unit (SP1078) and tweeter (SP1077)	2 x B200 bass unit (SP1079), T33 tweeter (SP1080)	B200 bass unit (SP1070), T33 tweeter (SP1074)
Crossover	SP2000	SP1183	SPI136

Specification	304.2	303.3	304.3
System Type	2½-way, bookshelf/stand- mount	Two-way, bookshelf/stand- mount	2½-way, bookshelf/stand- mount
Enclosure type	Closed box	Closed box	Closed box
Size	68 × 28 × 31.5cm (26.75× 11 × 12.4 inches)	52 x 26.5 x 23cm (20.6x 10.5 x 9 inches)	68 x 28 x 31.5cm (26.75x 11 x 12.4 inches)
Weight	4kg (3  lb)	8kg (18 lb)	4kg (3  lb)
Input Impedance	8 ohms	8 ohms	8 ohms
Rated maximum power	100W programme	50W programme	100W programme
Amplifier Requirements	10-100 watts per channel into 8 ohms	10-50 watts per channel into 8 ohms	10-100 watts per channel into 8 ohms
System resonance	68Hz, Q=0.8	68Hz, Q=0.7	68Hz, Q=0.8
Frequency response	60-20,000Hz +/-3dB	70-20,000Hz +/-3dB (-10dB at 50Hz and 25kHz)	60-20,000Hz +/-3dB
Sensitivity	87dB spl at 1m for pink noise input of 1W	86dB spl at 1m for pink noise input of 1W	87dB spl at 1m for pink noise input of 1W
Maximum output	107dB spl on programme peaks under typical listening conditions	103dB spl on programme peaks under typical listening conditions	107dB spl on programme peaks under typical listening conditions
Finishes	Black or brown plinth and top	/	/
Grille	Black or brown grille fabric as appropriate. Beige, blue, red, green or grey available as optional accessories	/	/
System	SP1148	SP3002	SP3003

Drive units	2 x B200 bass unit (SP1069),	B200 bass unit (SP1070),	2 x B200 bass unit (SP1069),
	T33 tweeter (SP1074)	T33 tweeter (SP1074)	T33 tweeter (SP1074)
Crossover	SPII37	SP2002	SP2003

# KEF MODEL 303 SERIES II



MODEL 303 SERIES II combines attractive, functional styling with the latest developments in loudspeaker engineering, for which KEF is renowned.

The result is a loudspeaker which offers abundant volume level for dance and popular music, as well as accurate reproduction and a precise and stable stereo image for the discriminating music lover.

#### **MODEL 303 FEATURES**

- High power handling capacity
- Compatible with amplifiers delivering 10 or more watts per channel
- High volume level capability
- Interchangeable grille covers: available in black, brown, beige, blue, red, green or grey

#### **MODEL 303 BENEFITS**

The addition of quality loudspeakers to an existing rack system – or even a portable radio – will dramatically improve sound quality.

As loudspeaker specialists, KEF concentrate on the design and production of high fidelity loudspeakers, and have employed the latest computer aided analysis techniques to develop MODEL 303. With an amplifier output of as little as

With an amplifier output of as little as 10 watts per channel, MODEL 303 will produce enough volume to fill a generous sized room. With larger amplifiers, considerably louder volume levels can be achieved whilst maintaining realistic tonal quality.



## KEF MODEL 303 SERIES II

KEF's computer aided design approach has enabled the broadest frequency response to be achieved with the optimum efficiency and from a surprisingly small enclosure.

MODEL 303 is a two-way system employing a 200mm bass unit and a 25mm dome HF unit. Of higher than average efficiency, MODEL 303 is capable of achieving output levels in excess of 100dB spl.

To allow the sound to reach the listener directly without troublesome reflections from walls, floor or ceiling the drive units are arranged within the 17 litre enclosure so that the full frequency response is enjoyed when the loudspeakers are positioned between 30 and 75cm (12 and 30in) from the floor.

An optional stand, the ULS 40, allows the speaker to be conveniently and elegantly positioned.

MODEL 303 can be easily matched to any home decor scheme with the moulded base and top available in either brown or black. In addition, interchangeable grille sleeves are supplied in a variety of colours.

SFECHICATION		
Frequency range	$70$ Hz to $20$ kHz $\pm 3$ dB at 2m on reference axis $(-10$ dB at $50$ Hz and $25$ kHz)	
Directional characteristics	Horizontal: within $\pm 2dB$ of reference axis response up to 10kHz for $\pm 20^{\circ}$ Vertical: within $\pm 2dB$ of reference axis response up to 20kHz for $\pm 5^{\circ}$	
Maximum output	103dB spl on programme peaks under typical listening conditions	
Characteristic sensitivity level	86dB spl at 1m on reference axis for pink noise input of 1W	
Distortion	Measured at 1m on reference axis at mean spl of 90dB, anechoic conditions Second harmonic: less than 2% from 20Hz to 150Hz less than 1% from 150Hz to 20kHz Third harmonic: less than 2% from 20Hz to 50Hz less than 1% from 50Hz to 20kHz	
Enclosure type	Closed box	
Internal volume	17 litres	
Resonance frequency	68Hz Q <sub>T</sub> 0.7	
Nominal impedance	8 ohms	
Programme rating	50W	
Maximum continuous sinusoidal input	20V rms from 20Hz to 2kHz reducing to 10V rms from 2.5kHz to 20kHz	
Weight	8.1kg (18lb)	
Dimensions	$\begin{array}{l} 524 \ (h) \times 265 \ (w) \times 230 mm \ (d) \\ 20^{5/s} \ (h) \times 10^{1/2} \ (w) \times 9^{1/sin} \ (d) \end{array}$	

S DECIEICATION



KEF reserves the right to incorporate developments and amend the specifications without prior notice, Line with continuous research and development.



KEF products are manufactured in England and distributed in the United Kingdom by: KEF Electronics Ltd Tovil Maidstone Kent ME15 6QP England Telephone: Maidstone (0622) 672261 Telex: 96140

Part No. PL 234 EN 02

Distribution in the USA by: Intratec PO Box 17414 Dulles International Airport Washington, DC 20041 USA Telephone: (703) 435 9100