

KEF CHORALE III



Chorale III is a very compact two-way bookshelf loudspeaker which, despite its being unobtrusive, nevertheless produces the full-bodied detailed sound quality associated with larger KEF loudspeakers. Styling is simple and uncluttered with front baffle graphics for those who prefer to listen with the grille removed.

Efficiency is in the medium to high range at 87db/W/m and the output from a 60W amplifier can be handled safely under audiophile conditions. (See over)

The design of small loudspeakers is actually more difficult than for larger models. Every parameter is more critical and only a 'complete system' approach is likely to be successful. The performance of each component must be studied first in isolation and then in relation to the others because drive units, dividing network and enclosure all react together to produce a musically integrated sound.

Through careful optimisation of drive unit parameters effective bass output extends below 50Hz which is more than adequate for domestic applications. Low frequency characteristics have been determined so that natural sound balance will be obtained when the loudspeaker is placed with its back to a wall.

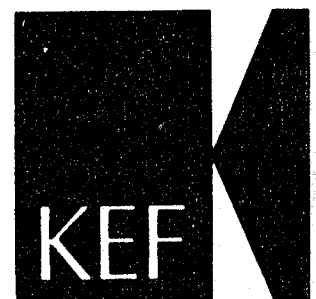
KEF system design techniques are completely vindicated by Chorale III. Computer optimisation programmes, listening tests and production quality control combine to produce a loudspeaker which offers astonishing performance in relation to its size and price.

Cabinet work is finished in top quality simulated walnut with brown textile grille.

See overleaf for full technical description and performance data.

DIGITAL RECORDINGS

Chorale III is perfectly suitable to reproduce compact disc and other types of digital recording with full dynamic range.



KEF CHORALE III

The unobtrusive appearance of Chorale III belies the tight, integrated sound which comes from this small box. The careful integration of bass and high frequency performance is achieved through a deceptively simple 7 element dividing network, skilfully designed using computer techniques.

The bass/midrange unit is fitted with a magnet system much larger than that frequently found in speakers of this size and price, thus affording the degree of control necessary to avoid 'boom' in a speaker which is likely to be used on a shelf or close to a wall. This drive unit has a nominal diameter of 160mm, with a plastics coated fibre pulp cone and PVC roll surround. The two-layer 25mm voice coil is bonded with high temperature resins to reduce risk of burnout.

With a nominal diameter of 30mm, the impregnated textile dome high frequency unit is driven by a two-layer voice coil 25mm in diameter. The air gap is filled with a special Ferrofluid which, by keeping operating temperatures lower, reduces variations in high frequency level at high volume caused by temperature related compression effects.

The cabinet is constructed from high density chipboard, providing bass loading with 9.4 litres of air in a sealed enclosure. Drive unit and cabinet parameters are carefully matched to optimise low frequency performance.

Chorale III is finished in simulated walnut high quality PVC foil with the grille board covered in a brown knitted textile.

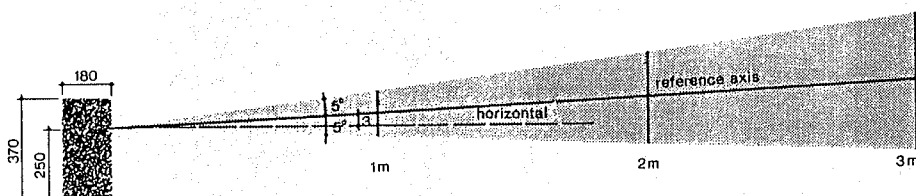
SPECIFICATION	TYPE SP 3022
Frequency range:	79Hz to 20kHz \pm 3dB at 2m on reference axis (-10dB at 50Hz and 30kHz)
Directional characteristics:	within 2dB of response on reference axis up to 20kHz for \pm 5° vertically up to 12kHz for \pm 20° horizontally
Maximum output:	105dB spl on programme peaks under typical listening conditions
Characteristic sensitivity level:	87dB 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 1% from 170Hz to 20kHz Third harmonic: less than 1% from 80Hz to 20kHz
Enclosure type:	Closed box
Internal volume:	9.4 litres
Nominal impedance:	8 ohms
Maximum amplifier power: (see explanatory note*)	normal 50W, audiophile 60W
Minimum amplifier power:	normal 10W
Weight:	4.7kg
Dimensions	370(h) \times 220(w) \times 180(d)mm

*Amplifier Power

The maximum power input that can be applied safely depends on the type of programme and conditions of use.

Normal use: programme with limited dynamic range, e.g. VHF transmissions, pre-recorded tape cassettes, compressed pop records, etc.
Conditions of use include loud listening levels with power amplifier often driven into clipping and tone controls or equaliser used to significantly boost low and high frequencies.

Audiophile use: reproduction of wide dynamic range recordings, e.g. direct cut discs, compact discs and digital tapes.
Conditions of use include 'flat' replay characteristics with only occasional overloading of power amplifier.



This sketch indicates the limits of the listening window, in the vertical plane, within which optimum tonal balance and stereophonic effects will be perceived.

For best results the reference axis should be directed towards the listeners. It is therefore preferable to raise the loudspeaker above the floor. KEF stand ULS 40 is suitable for this purpose.

KEF reserves the right to incorporate developments and amend the specifications without prior notice, in 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

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

