



CONCERTO

MANUAL

KEF products incorporate the most advanced techniques ever developed for loudspeaker production. Every KEF diaphragm is manufactured from plastics or in the case of the larger KEF units, from metal and plastics. Conventional paper cones are not used at all. These special constructions obviate the wide variations in performance associated with ordinary loudspeakers and give considerably reduced colouration due to the absence of unwanted resonances within the diaphragm itself.

KEF design and build all their own drive units. Every vital component is made in KEF factories under stringent quality control. The units are fitted with large super-power magnet systems built to close mechanical tolerances and fabricated in KEF workshops.

Every speaker is acoustically compared with a laboratory maintained system to ensure strict control of production, consistency, reliability and sound quality.

KEF users include many great musicians, recording engineers, and highly critical audiophiles in all parts of the world. Leading press reviewers have consistently praised KEF speakers for their high technical quality and sound. In spite of so many accolades, research goes on at the KEF laboratories in an effort to improve on the already high standards. Using the most modern technical facilities and sophisticated instrumentation to investigate the properties of new materials, KEF's aim is simply to make more natural sounding reproducers with ever increasing ruggedness and reliability.

KEF offer you an excellent choice of loud speakers whatever your requirements. No matter whether you select the largest or smallest system all KEF's products have the same high standard of engineering and attention to detail which earned them the title KEF THE SPEAKER ENGINEERS.

The Concerto is a vented speaker box of 62 litres, fitted with three drive units.

This floor standing loudspeaker will realise the full potential of large high fidelity installations and can be used in large to very large rooms.

Firmly established over many years, Concerto is used by professionals throughout the world for critical sound appraisal.

Dimensions: 711 x 432 x 305 mm
28 x 17 x 12 in

Internal Volume: 62 litres

Weight: 25.4 kg 56 lb net
29.03 kg 64 lb packed

Nominal Impedance: 8 ohms

System Resonance: Reflex 35 Hz

Rated Max Power: 50 watts programme

Nominal Freq Range: 25–40,000 Hz

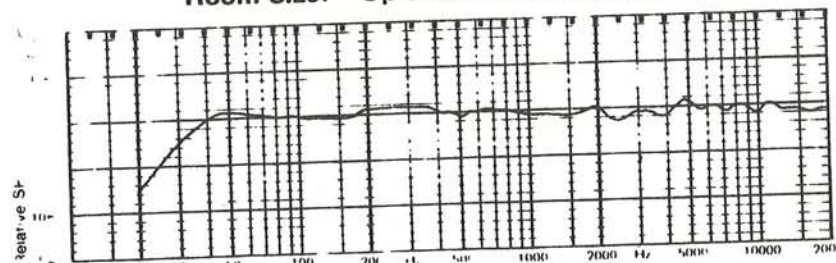
Specific Freq Response: ± 3 dB 35 Hz–30,000 Hz
measured at 1 metre on
axis of the HF unit
in anechoic conditions

Dividing Freq: 400 Hz and 3,500 Hz

Sensitivity: 9.5w into nominal 8 ohms produces
96 dB at one metre in anechoic
conditions.

Amplifier Requirements: 15–50 watts per channel
into 8 ohms

Room Size: Up to 280 cubic metres (10,000 cu ft)



FREQUENCY RESPONSE CURVE

Measured at 1 metre on axis of HF
unit in anechoic conditions utilising
swept sine wave

ELECTRICAL CONNECTIONS

The speakers should be connected to the amplifier using suitable, low resistance extension cables available from specialist hi fi retailers. Alternatively make up a new cable using 24/.02 lighting flex.

In cases where the 2 pin DIN connectors are inappropriate, connections may be made via the 4 mm sockets.

PHASING

For mono reproduction using one speaker, it does not matter which way round the loudspeaker terminals are connected: with a stereo installation it is essential to observe correct polarity. The positive terminals of all KEF speakers are marked with a plus (+) sign. This should be carefully carried through the wiring to the output terminals of the amplifier.

A quick check on phasing can be made by placing the speakers close together and playing a mono signal through both channels. Note the quality of the low frequency reproduction and then repeat after reversing the leads to *one* of the loudspeakers. The bass will be much fuller and rounder when the phasing is correct. An organ recording is often well suited for this test.

MOUNTING

The speaker may be used on shelves or other furniture, heights varying between 50 cm and 127 cm above the floor (20–50 inches). It may stand either vertically, i.e. KEF badge uppermost, or horizontally. In the latter event the tweeters (badge end) should be closest together in a stereophonic installation. The KEF badge may be easily rotated to suit the adopted cabinet position.

The speaker can also be used on the floor but to avoid over emphasis of the lower frequencies the cabinet should be raised by at least 22 cm (5 in) above the floor.

SPEAKER LOCATION

In almost all domestic installations the most suitable acoustical locations are precluded by either practical or aesthetic considerations. The choice of location is in any case usually limited and of necessity a compromise between many conflicting requirements. Initial tests should be made with long flexible leads, moving the speakers between all feasible locations whilst listening to voice reproduction and classical music played at a lifelike volume level. The speakers should be placed 2.5 – 4.5 metres (8–15 feet) apart depending on room size and listening distance.

The sharpest stereo image is usually obtained with the speakers angled slightly inwards so that the axes of the high frequency units intersect in the listening area. It is sometimes preferable to angle the speakers so that their axes intersect at a point well in front of the listeners. This arrangement often provides an acceptable stereo image over a wider area.

TEST RECORD

With a new installation it is a good idea to check that the electrical connections have been properly carried out in regard to phasing, etc. A suitable record for this purpose is the 'Enjoyment of Stereo', SEOM6, issued by EMI Records Limited.

ROOM SIZE

The Concerto is suitable for rooms varying in size up to 300 cubic metres (10,000 cu ft).

AMPLIFIER REQUIREMENTS

The Concerto can safely be used on normal programme material with amplifiers and receivers rated at up to 50 watts into 8 ohms (normally equivalent to 75 watts into 4 ohms).

Even larger amplifiers can be used provided that care is taken to avoid fault conditions, such as switching transients and instability during the 'warm-up' period.

DRIVE UNITS**LF RADIATOR B139 SP1044**

Effective diaphragm area: 354 cm² (55 ins²)

Voice coil diameter: 55 mm (2 ins)

Total flux: 111,000 Maxwells

Flux density: 8,500 Gauss

MF RADIATOR B110 SP1003

Effective diaphragm area: 92 cm² (14 ins²)

Voice coil diameter: 26 mm (1 ins)

Total flux: 58,000 Maxwells

Flux density: 11,000 Gauss

HF RADIATOR T27 SP1032

Effective diaphragm area: 4.52 cm² (0.70 ins²)

Voice coil diameter: 20 mm (¾ ins)

Total flux: 21,500 Maxwells

Flux density: 12,000 Gauss

DIVIDING NETWORK**DN12 SP1004**

Elements: 9

Dividing Frequencies: 400 & 3,500 Hz

Selected high stability components and low loss capacitors at all critical points.

WARRANTY

The quality of KEF speakers is under surveillance and control at all stages of production, commencing with the critical inspection of incoming raw materials and components. Frequent inspection of sub-assemblies at many subsequent stages ensures a very high standard of consistency and reliability. Final testing is carried out using the most sophisticated techniques involving many more criteria than the mere inspection of a frequency response curve, which in any case may give little assurance of consistently reliable performance.

The confidence assured by these stringently effective methods is confirmed by the extremely low percentage of field failures due to faulty manufacture. KEF give a FIVE year warranty to the original purchaser.

Your KEF speaker will give many years of satisfactory service if installed and operated according to these instructions. In the event of trouble you should notify the dealer, from whom you purchased the product, quoting the serial number and date of purchase.

The Warranty does not reduce your rights in Common Law but may facilitate rapid service.



KEF

KEF Electronics Limited Tovil Maidstone ME15 6QP ☎ 0622 57258

Registered in England No 702392

THE SPEAKER ENGINEERS

Australian Distributors:

AUDIOSON INTERNATIONAL PTY. LTD.
64 WINBOURNE ROAD, BROOKVALE, N.S.W.

Sydney
938 1186

Melbourne
329 6066

Adelaide
337 7000

Perth
25 9993