

Product Information Sheet

January 1996

THE LINN KELTIK AKTIV LOUDSPEAKER SYSTEM

The Linn Keltik Aktiv Loudspeaker system is the culmination of many years of experience in driver construction, cabinet fabrication, and active electronic crossover design.

The Keltik is an active system; each drive unit is powered by a separate amplifier. Rather than using a conventional internal passive crossover, the Keltik system employs an active electronic crossover located before the power amplifiers. The Linn Keltik Aktiv Electronic Crossover divides the musical signal into three frequency bands and corrects phase, amplitude and time alignment to match precisely the characteristics of each individual drive unit and feeds each frequency band to the appropriate amplifier.

The Keltik may be powered with a minimum of three power amplifiers, one for each frequency band. Additional performance advantages may be achieved by employing a fourth amplifier to allow each of the Isobarik bass drivers to be driven independently. For most accurate reproduction we recommend the use of Linn power amplifiers from LK100 upwards.

The Keltik employs four Linn-designed drive units. The ferro-fluid ceramic tweeter provides exceptionally low distortion performance even at high signal levels and incorporates an integral airtight enclosure.

The midrange unit features a carbon-loaded cone and strong die cast chassis. This driver is mounted in its own irregularly shaped (no parallel sides) Ku-Stone loaded compartment that isolates it from the pressure changes generated by the bass units.

The two bass drivers are used in Linn's patented Isobarik* configuration and employ die cast chassis, stiff carbon-loaded cones, large diameter aluminum voice coils and magnets that are nearly twice the size of those employed in Linn's original Isobarik loudspeaker.

The front baffle is machined from Topan and the front surface is sculptured to reduce diffraction effects. The enclosure is extensively reinforced and veneered inside and out for added strength and stability.

The combination of active electronics, Isobarik bass loading, and Linn's devotion to preserving the integrity of the musical signal sets the Keltik Aktiv Loudspeaker System apart from the competition and provides a level of performance never before possible.

Technical Information

Keltik Loudspeaker Technical Information

<u>Type</u>	Three-Way Active, Isobarik Loading
	Ceramic coated tweeter, accurate midrange driver & Isobarik bass system *
Frequency Response	20Hz-20kHz -/+ 1db
Weight & Dimensions	
Width	320mm
Depth	370mm
Height	1037mm
Weight:	52Kg each
Input Impedance	8 ohms nominal per drive unit

* In 1974, Linn patented the Isobarik bass system, which was first used in the Linn Isobarik loudspeaker. This method of loading employs a second bass driver located inside the cabinet. A small sealed enclosure couples this hidden drive unit to the bass driver mounted on the front baffle. Because these drivers work in phase with each other, the air pressure in the small enclosure between the drivers remains nearly constant (hence the name Isobarik). The primary bass driver, seeing less change in back pressure, behaves as if it were in a significantly larger box. The technique of Isobarik loading gives an extended and tightly controlled bass response.

Keltik Aktiv Crossover Technical Information

Factory setting – Bass

Туре	Three way active crossover driving three or four stereo power amplifiers (one or two amplifiers can be used to drive bass) Electronic low frequency response extension
<u>Weight & Dimensions</u> Width Depth Height Weight	320mm 326mm 80mm 4KG
<u>Electronic</u> Input Impedance Output impedance	5Kohm 60ohms
Acoustic On axis frequency response Recommended Amplifier Power	+/- 1dB 20Hz – 20KHz 70W per channel minimum 300W per channel maximum
<u>Adjustments</u> Treble adjustment Bass Adjustment Factory setting – Treble	0 to +6dB at 0.5dB steps -6 to +6dB at 1dB steps -3dB

0dB