



AKG
STEREO
DYNAMIC HEADPHONES

unexcelled in
transmission quality
and comfort

AKG K-240 sextett "cardan"

Stereo Headphone par Excellence.

Media reviews report:

....*"The K-240 sextett cardan is without competition."*



DESCRIPTION:

The AKG K-240 stereo headphone represents a major—and innovative-breakthrough in the continuing search for perfection in high-fidelity sound reproduction. Based on extensive investigations into the nature of human hearing, the K-240 is quite literally a "first" in headphone technology, and goes far beyond the capabilities of even the finest of today's other "state-of-the-art" headphones. Simply stated, the K-240 is the first headphone to permit the listener to hear sound in a natural manner, very similar to the way in which he hears live sound at a concert or recorded sound through loudspeakers. That is, with the stereo image in front of him, and with natural, unexaggerated stereo separation and depth perception.

THE COMPLETE FREE-FIELD HEADPHONE:

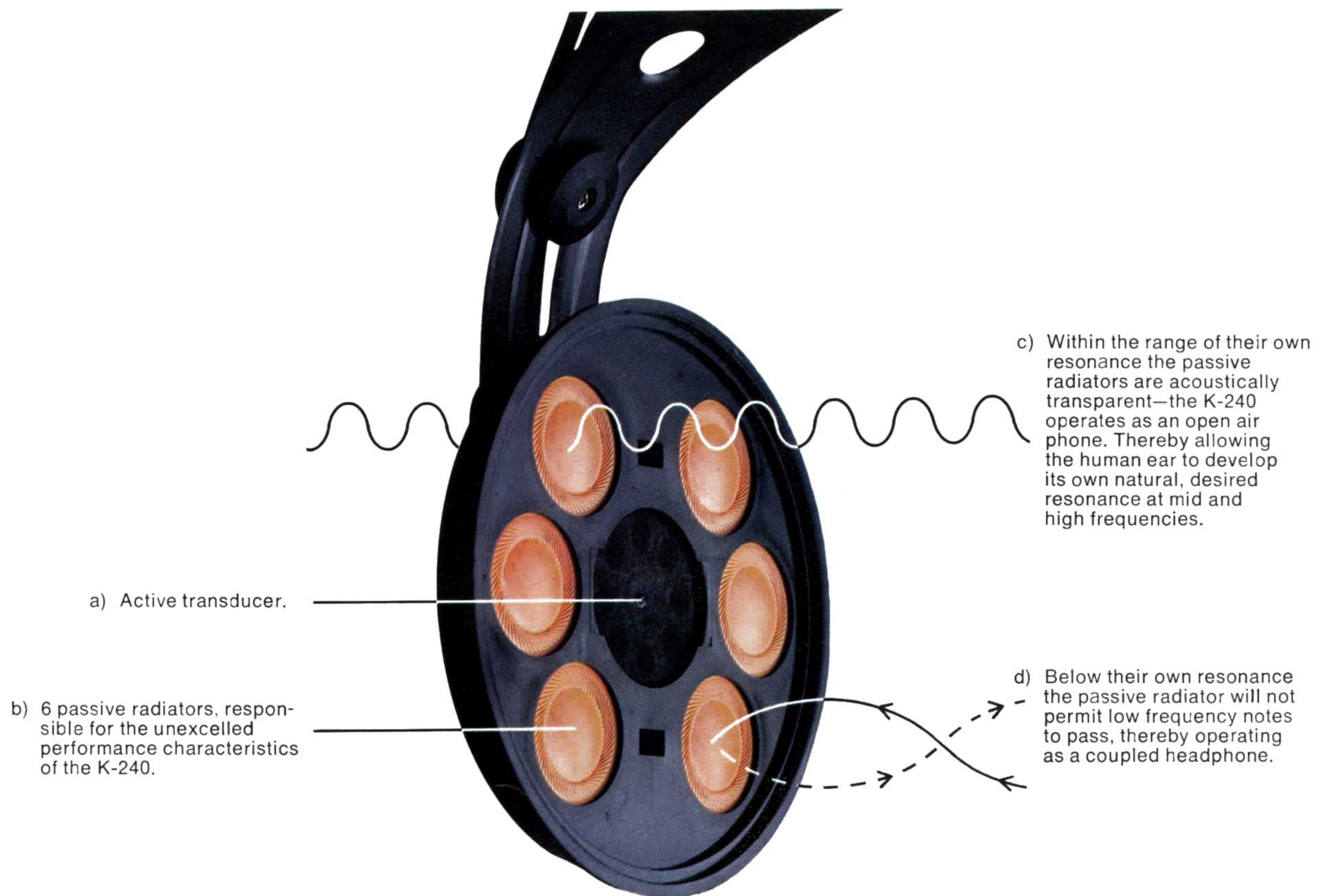
The K-240 is the first totally sound- and comfort-engineered headphone—incorporating all the features necessary for complete listening enjoyment: accurate stereo imagery, outstanding fidelity of reproduction at all listening levels, extreme comfort with virtually no fatigue under prolonged use, and uncomplicated ease of use.

Consequently, the K-240 surpasses every other headphone in accurately recreating the directional and spatial content of stereo recordings, tapes, and broadcasts.

At frequencies from 200 Hz down, the K-240's unique passive diaphragms contribute to the K-240's outstandingly smooth and extended bass response. In this region, a typical circumaural-type headphone normally has a profound low-frequency resonant peak in its electroacoustical response, causing boominess at that frequency and rapidly diminishing bass response below that frequency. In the K-240, however, the compliance of the passive diaphragms, combined with acoustical resistances, forms a controlled, highly damped vent to counteract and flatten out the resonant peak. This eliminates boominess and extends linear response down to a lower frequency than would otherwise be possible.

PASSIVE RADIATORS:

The key to the K-240's natural stereo reproduction is readily visible through the grille in each



earpiece—six passive radiators, mounted on the same coupling wall as the active-driver transducer, encircling the driver, and spaced at 30-degree intervals. These passive radiators (or “slaves”) are activated by the sound-pressure waves produced by the active driver, and perform two important functions:

At upper-middle and moderately high frequencies (above 200 Hz), the slaves are acoustically transparent enough to let the ear listen in a virtually “free field.” (At these frequencies, the high compliance of the slaves effectively vent-couples the ear to a nearly free-air environment.) This property yields two distinct advantages: First it eliminates the unwanted mid and high frequency cavity self-resonances of conventional circumaural headphones; and second, it allows the ear’s own natural, desired resonances to develop unimpeded (unlike conventional supra-aural headphones).

The K-240’s unusual construction improves wearing comfort, reduces weight, and totally eliminates annoying user adjustments. Its soft, perforated support band shapes easily to the head and simultaneously self-positions the headphone driver elements comfortably on the ears. At the same time, AKG’s exclusive Cardan (universal-joint gimbal) earpieces automatically, independently, and correctly self-adjust to each ear for optimum listening contact.

The K-240 is supplied complete with a 3 m ($\approx 9\frac{3}{4}$ ft) four-conductor cable having a standard three-conductor $\frac{1}{4}$ inch phone plug at its free end. Plug size and wiring convention conform to IHF standards, ensuring compatibility with the vast majority of headphone jacks included on receivers, control amplifiers, preamplifiers, and tape decks.

TECHNICAL DATA:

Transducer Type:
Dynamic moving-coil

Frequency Range:
16-20,000 Hz

Impedance:
600 ohms \pm 20% per channel,
over band from 16-20,000 Hz

Sensitivity:
13 μ bar/volt (\approx 96.5dB SPL at
1 volt) per channel

Normal Power-Level Requirements:
1 mW (0.775 V) \approx 10 μ bar
(94 dB SPL) per channel
50 mW (5.5 V) \approx 72 μ bar
(111 dB SPL) per channel

Maximum Continuous-Power Level
for \leq 1.0% THD at 100 Hz:
200 mW (11 V) \approx 143 μ bar
(117 dB SPL) per channel

Cable:
3m (9.8 ft.) 4-conductor cable,
3-conductor, $\frac{1}{4}$ -inch
telephone plug.

Weight:
10 $\frac{1}{2}$ ounces, with cable
and plug.

AKG K-140 "cardan"

The first integrated open headphone of world-wide success.

DESCRIPTION:

The AKG K-140 is a bio-acoustically-engineered high fidelity headphone. Its unusual construction eliminates annoying user adjustments, reduces weight and improves wearing comfort. The extended bass response is not affected by natural variations in outer ear cavities, nor by air leaks between ears and cushions.

This unique system uses microphone-derived dynamic transducers designed to integrate with the complex acoustical properties of the ear cavities. The new driver elements are headphone application compensated to maintain natural bass and wide-range music response despite differences in ear shape, cushion contact pressure, open spaces and changes in ear-to-transducer distance. The result is a synergetic system for stereo headphone reproduction, equaled only by expensive studio-monitor loudspeakers.

The AKG K-140 is totally sound- and comfort-correlated with all of the features most important for complete enjoyment of the intimate, personal listening experience. Extreme comfort, superb bass, transparent music reproduction and uncomplicated ease of use are combined in one, advanced systems-concept stereo headphone for all audiophile and professional applications.

TECHNICAL DATA:

Transducer Type:
Dynamic moving-coil

Frequency Range:
20-20,000 Hz

Impedance:
600 ohms \pm 20%, each channel
over band from 20 to 20,000 Hz

Sensitivity:
15 μ bar/V (\approx 97.5 dB SPL)

Normal Power-Level Requirements:
0.75mW (0.67V) \approx 10 μ bar 94dB
SPL 50mW (5.5V) \approx 80 μ bar
 \approx 112dB SPL

Maximum continuous-power level
for \leq 1.0% THD at 100 Hz
240mW (\approx 12V), producing
approximately 119dB SPL
per system

Cable:
3m (9.8 ft.) 4-conductor cable,
3-conductor, 1/4-inch
telephone plug

Weight:
6.2 ounces



AKG ACOUSTICS

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