QUADAPTOR™
ACCESSORY 4-DIMENSIONAL STEREO ADAPTOR

If you already own a stereo system, or wish to acquire one without built-in dematrixing, the easiest and most economical way to convert to four-dimensional stereo is with the new Dynaco Quadaptor™.

The Quadaptor™ is unique in that it does not require a second stereo amplifier. It is connected to the speaker outputs of a conventional stereo amplifier or receiver. The four speakers (one in each corner) are in turn connected to the Quadaptor™.

The front speakers (which should be identical) can be your present ones—8, 16 or 4 ohms; the rear speakers should be 8 ohms, matched and have somewhat similar sonic and efficiency characteristics to those in front. They should also preferably have as smooth an impedance characteristic as possible, such as that of the Dynaco aperiodic loudspeaker systems. The smaller the variation in impedance, the more accurate will be the dematrixing performed by the Quadaptor™.

Full-range speakers are highly desirable for the back as well as the front because the greater possible sense of space from four-dimensional playback is derived largely from the improved low frequency response of the entire system. Faithful high frequency reproduction from the back is also helpful in establishing the accurate location of the sound. Stated simply, the better the back speakers, the better the overall results.

The Quadaptor™ is more than just a junction box; it also contains the simple but essential circuitry to dematrix (recover) the four separate signals from the two stereo channels. The Quadaptor™ is passive, it adds nothing to the recording. It is not a synthesizer. Its function is to utilize fully all the material that has been recorded, whatever the stereo source may be.

The Quadaptor™ can be used with any Dynaco amplifier (it is redundant with the SCA-80Q) and virtually all other makes of amplifiers and receivers too.

A four-dimensional system with the Quadaptor™ will reveal new effects on many of your existing stereo recordings. And of course, new recordings made with the four-dimensional playback in mind (such as the Dynaco/Vanguard demonstration disc) provide predictable front-back as well as left-right directionality in addition to a degree of concert-hall presence you never thought possible before.

*The only rare exceptions are with some transistorized power amplifiers that cannot be used with 40 ohms between their output ground terminals. If you have such an amplifier—usually with separate power supplies for each channel—consult the manufacturer. There also must be a common ground somewhere else in the preamplifier or power amplifier circuit.

SPECIFICATIONS
Dimensions: 4¼” high (matches Dynaco control units) x 4½” wide x 6¾” deep.
Shipping Weight: 2½ lbs. (1.1 kg).
AC line requirements: None; the Quadaptor is passive.

PRICE: Kit $19.95
Assembled $29.95
APERIODIC LOUDSPEAKER SYSTEMS A-10, A-25 and A-50

The aperiodic (essentially non-resonant) design of the three Dynaco speaker systems not only makes any of them ideal for use with the Quadaptor™, but optimizes the efficiency of power transfer between the amplifier and the speakers. Unlike most other speaker systems, in which there are frequently 400% or more variations in impedance at the low frequencies, the impedance deviation in the Dynaco speakers is less than 2:1. Leading audio authorities agree that the Dynaco speakers provide extended low bass response coupled with superior transient response. As Julian Hirsch reported in Stereo Review, "when the music contained low bass . . . the Dynaco [A-25] left no doubt of its capabilities . . . nothing we have tested had a better overall transient response."

The A-25, Dynaco's first speaker system, was introduced to fill the need for an under $100 speaker system that fulfilled most listening requirements, the type of quality usually associated with speakers costing at least three times as much. How well we succeeded is indicated by Gordon Holt's statement in The Stereophile, "you'll have a hard time buying more musical naturalness at any price . . . [the A-25's] are quite probably the best buy in high fidelity today."

The new A-10's development was spurred by the requirement for a high quality, yet compact and low cost full-range speaker system for the back speakers of a four-dimensional playback system. The A-10 uses the same tweeter as the A-25, and its 6½" woofer has the same magnet structure as that of the 10" woofer of the A-25. Yet its compactness and light weight (under 12 lbs.) make it ideal for unobtrusive mounting on a back wall. Mounting receptacles are built into the rear of the A-10 (and A-25) cabinet to facilitate hanging each speaker on a wall. Except for the bottom ½ octave, its frequency response characteristics are virtually identical to that of the A-25. Their use as
main speakers in a budget system would result in extraordinary performance at minimal cost.

For those who have the space for larger speakers, the A-50 is the best speaker we know how to make. Unlike the A-10 and A-25, in which the acoustical resistance of the aperiodic chamber is vented to the outside, the inside of the A-50’s cabinet is divided into two parts. The two 10” woofers and single dome tweeter are mounted in the top half which is vented into the bottom half. In this way, the A-50 cabinet provides the benefits of variable volume in the critical 50-150 Hz spectrum, and the advantage of a larger, sealed box below 50 Hz. The result is, as Norman Eisenberg wrote in High Fidelity Magazine, “...we soon found ourselves...listening to the program material rather than to the equipment.” The shallow ten inch depth of the A-50 makes it uniquely adaptable for room divider installations. If wall mounting is desired, accessory hidden brackets for flush mounting are available. When the A-50 is placed free-standing on the floor, the location of all three drivers in the top half of the cabinet minimizes phase and interference problems and places the sound source close to the ideal ear level.

In each of the Dynaco speakers, the aperiodic feature is obtained by using a highly damped vent (not a reflex port) which is carefully controlled by filling a narrow slot with a critical density of fiber glass. Each speaker system is adjusted by observing the back EMF of a 5 Hz square wave which has been fed into the speaker system. Damping material is added and compressed until an optimum square wave is shown on an oscilloscope. Although no speaker system