

**BOZAK**



© Brian Hershfield  
Archival Art Dept. 1999

*The Very Best In Sound...*



# The ideas and ideals behind the

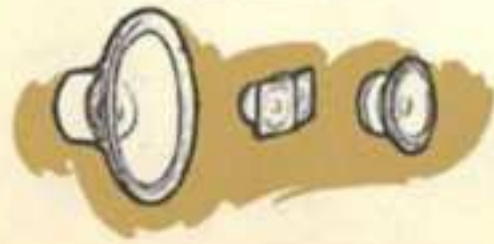
## ONE LINE - ONE QUALITY

There are only three basic Bostak Loudspeakers — the Bass, Mid-Range and Treble. Each is designed to cope with the special problems in its own range of frequencies and, at the same time, to work harmoniously with the others in two-way and three-way Speaker Systems. They are *one line, of one quality*; none is ever "outgrown" nor becomes obsolete — in fact, they improve with age and use. The Bostaks are compatible in their physical and acoustical characteristics and, like building blocks, combine easily into speaker systems of various sizes that differ in realism and power by reason only of the number of individual speakers and the size of enclosure employed. Any Bostak Speaker System can be enlarged at any time by simply adding more Bostaks and modifying the Crossover Network. Through *Systematic Growth*, not a penny invested in Bostak equipment need ever be lost.

All Bostaks are *direct-radiators*; that is, they never employ horns. Their velocities of sound propagation are equal, reflections gradual, levels balanced naturally, and tonal qualities similar. In a Bostak Speaker System the several ranges overlap broadly and imperceptibly so that there is no consciousness of separation of the sound into different frequency ranges or in points of origin on the speaker panel.

The vanishingly-low distortion, phenomenal transient response, outstanding balance, high overall efficiency, and broad spatial coverage of the Bostaks give them a realism and listening ease that assure you sustained satisfaction . . . pleasure that grows through the years with

*The Very Best in Sound.*



## HOW IMPORTANT IS EFFICIENCY?

Actually, efficiency is an extremely important aspect of loudspeaker performance. But first we must understand exactly what the word means, because the engineer and the layman have quite different definitions. The engineer applies the term to the ratio of the output power of a speaker to the input at any single frequency; to the layman, however, efficiency has come to mean merely the relative loudness of the sound from several speaker systems being compared at the same input (amplifier-gain setting), and the one that sounds loudest is thought to be the best "because it has the highest efficiency". This lay concept ignores the intimate and inseparable relationship between efficiency, balance and *music quality*; two other factors are also overlooked, the sensitivity of the human ear is greatest in the middle frequencies; and, unless a definite attempt is made to the contrary in designing a speaker, it too will have its greatest efficiency in the same range. This mid-range "bump" will be from 6 to 10 db above the level of the bass and treble, and what impresses the layman is the loudness of this narrow band of frequencies in the range of maximum hearing sensitivity.

Obviously, for good audio quality, the response of a loudspeaker must be *balanced*, or "flat"; that is, if you are to re-create sound naturally, the relative loudness of every audible frequency must be the same from the deepest bass to the highest treble. It requires anywhere from ten to 100 times the power to make the low frequencies as loud as the middle frequencies, so it is apparent that *balanced sound* requires not only *bass-power* from the amplifier but also *high bass-efficiency* in the speaker. The combination of unbalanced sound from an uncorrected speaker system, with the high mid-range efficiency of the ear, means a great deal of noise per Watt — but very little audio quality. And if the ampli-

fier, too, is poor in bass-efficiency, the quality of the sound is all the worse. In other words, what the layman calls "high efficiency" is, to the engineer, nothing but *unbalanced mid-range efficiency*.

It is difficult to produce a speaker that can handle the low frequencies efficiently and without distortion; it is also difficult to keep the middle frequencies in balance with the bass. Hence, the usual practice is to just build a speaker the easy way and rationalize the resulting *unbalanced mid-range and loudness* into a virtue that some call "efficiency."

But Bostak does it the hard way. The B-199A was designed, and is built, to have the highest efficiency, clearest response, and finest balance possible in a low-frequency speaker at the present state of the art. (More information on this will be found below). The B-209, the only available loudspeaker designed solely and specifically for the middle frequencies, is balanced in power against the bass foundation of the B-199A. The power of the Bostak Treble Speakers, too, is proportioned naturally so that of the others. Accordingly, in a Bostak Speaker System the loudness of the bass and treble in relation to the mid-range is far greater than in other speaker systems and the same as that in nature. Being the apparent loudness of the Bostak up to the same level as the mid-range "bump" in any other system, and the full beauty of its robust, true-pitch bass, crystal-clear mids, and sweet, natural highs — their relative loudness "naturalized" by the inherent qualities of the speakers — will be strikingly evident.

## HOW BIG SHOULD A WOOFER BE?

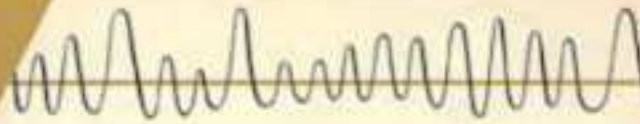
Cone-size in low-frequency speakers is another point usually argued with more heat than light. A loudspeaker is merely a highly-refined air pump: the volume of air it can move is the product of its *frontal area* and its *linear displacement*; and hence a small-diameter cone with great displacement will move as much air as a large cone with less displacement.

The small cone is inherently capable of cleaner response, because its lower mass and inertia enable it to follow the abrupt start-and-stop of transients with great





# BOZAKS — The Very Best in Sound



fathfulness. The difficulty lies in designing it for great movement, to develop power, without introducing distortions — but the rewards of success far outweigh the heartaches. Such a low-frequency speaker is the Bozak B-199A. Its medium-size 12" cone, with a displacement of a full quarter-inch, develops more and far cleaner power than even 15" commercial speakers. When increased power-handling capacity above 20 Watts, and extension of the bass range below 40 cycles, are required, the B-199A's are used in multiples without loss of the desirable qualities inherent in its smaller cone. Under *Variable-Density Cone* and *Magnet-Size* below you will find explanations of how the B-199A attains its phenomenal purity of tone without sacrifice of power.

## THE ECONOMICS OF MAGNET-SIZE

Loudspeaker quality is not always proportional to the size of the magnet. Some magnets are big because they have to do double duty, working with both bass and treble voice-coils in certain coaxial speakers; others are big because size is impressive, or for other reasons. As magnet-size increases a point of diminishing returns is reached — at which not only does the cost become unreasonable, but efficiency begins to increase more rapidly in the middle frequencies than in the bass, and balance begins to suffer. Magnet-size alone does not determine transient response, either: the proper proportioning of the weight of the moving system (cone plus voice-coil) with the compliance of the suspension and the characteristics of the magnetic field, control this factor. Since Bozak magnets work with only a single voice-coil, these three variables are balanced exactly as required for the very highest audio quality and a realistic cost in each of the three Bozak Loudspeakers.

## BAFFLED BY BAFFLES?

Many engineers are, too — even though they should know better. Keep it always in mind that the basic purpose of a baffle is simply to isolate the waves produced by the front of the speaker from those generated at the back, and that the design of the baffle can have a strong influence on the behavior of low-frequency waves.

Ideally, the response of a horn speaker should be as nearly perfect as possible, and the role of the baffle should be as passive as possible, neither adding nor subtracting anything in the pattern of waves. There are many types of "active" baffles intended to extend or smooth-out bass response, but they introduce harmonics and often deteriorate or destroy any transient response the speaker may possess. No "active" baffle should ever be used with the Bozaks.

The most passive of all baffles is the true infinite baffle (a very large wall). A second, and more practical in the average home, is the infinite *table enclosure* (a rugged, acoustically-lined, totally-enclosed box of adequate size). Neither of these will affect the phenomenal transient response or outstanding smoothness of the B-199A, and both permit use of its full bass range. Further, it permits mounting the Bass, Mid-Range and Treble Speakers on a single panel in one plane at equal distances from the ear, thus eliminating phasing problems and simplifying use of B-199A's in multiple. An infinite-baffle enclosure is simple in design and easy to build *well*, and only an infinite baffle will retain in a Bozak Speaker System the superb balance and purity inherent in the individual speakers.

## DIRECT RADIATORS

All Bozaks are *direct-radiators*. The fact that they do not propagate their sound through horns is a vital factor in their tonal quality. Bozak Sound is radiated directly from the diaphragms, which gives equal velocities of propagation and smooth spatial coverage in all ranges, as well as an esthetic unity that ties the entire audible range together. The mid-range and treble in a Bozak Speaker System are free of the distressing quality associated with horn-loaded drivers at high levels — no matter how loud the sound from Bozaks, you suffer no discomfort; you merely have to talk louder to make yourself heard.



## THE VARIABLE-DENSITY CONE,

originated by Bozak, was developed to achieve the smooth response that is characteristic of the B-199A and B-209. The special felted-paper pulp is compounded in the Bozak plant, with different formulations for the bass and mid-range speakers, and the cones are treated for maximum hardness at the apex and gradual softening toward the edges. This structure gives the cones low mass and inertia, with high effective stiffness, and prevents breakup ("flapping") and the radially-propagated waves that are the primary cause of "peaky" response. Their low resonance (below 40 cycles) is revealed by the "dead-zone" sound of the dull thud when flicked with a fingernail. In both the B-199A and B-209 the cones act virtually as perfect pistons within their respective ranges in a three-way system.

## TRANSIENTS WELCOMED

One of the most severe tests of any loudspeaker is its ability to handle *transients*, those intense, instantaneous surges of power that accompany the attack and decay of such instruments as the piano and bass drum and which give individuality to different instruments with similar harmonic characteristics. These vital, evanescent, components of sound can find no more gracious host than a Bozak Speaker System with infinite baffling. The superb transient response of the Bozaks is one of the secrets of their outstanding clarity and listening ease.

## JUDGE FOR YOURSELF

When you are comparing loudspeakers, remember that cursory listening can be misleading. Give them all a fair hearing. Listen to a wide variety of material, listen as long and as carefully to each as you can, so that you may distinguish the "spectacular" from the *realistic*. Trust your own ears and stand on your own feet when you make your choice. Regardless of the opinions of the "experts", the ultimate judge of your music system, and your speakers, is yourself — for it is you who must live with the sound.



B

O

Z

A

K

S P E A K E R

The Borak Speaker Systems shown here are all formed by various combinations of the three basic Borak Loudspeakers and Crossover Networks described on the pages following. They are mounted and wired ready for use, in the infinite-baffle enclosures illustrated. The cabinets are of heavy plywood, glued and screwed and braced internally to prevent cabinet resonance; heavy lining and curtaining with acoustical-damping material eliminate cavity resonance. All are available in beautifully finished mahogany, walnut or birch veneer, with harmonizing grille cloth of woven-plastic material that permits free transmission of all audible frequencies. Plans and instructions for building all Borak enclosures are available on request.

### THE SUPREME B-310

Long recognized as The Supreme Achievement in the Reproduction of Sound, the magnificent Borak four-wheeler three-way Speaker system reproduces the "biggest" and most powerful music with unsurpassed realism and listening ease. From a whisper to an orchestral crescendo . . . from the lowest notes of the organ to the shimmering overtones of the triangle . . . the B-310 preserves faithfully the precise dynamics and unique tonal character of every voice and instrument, with smooth coverage of the entire room.

**Equivalent**  
Crossover — Two 2-10's, one  
B-207, one B-208A, one B-209  
**Response** — 20 to 20,000 cycles  
crossover — 20 to 20,000  
**Dimensions** — 66" x 24" x 24" (net)  
**Weight** — 2 lbs.

**Power Rating** — 100 Watts con-  
tinuous, peaks to 200 Watts  
**Grilles** — 100" x 24" x 24" high  
40" x 24" x 24" high  
**Weight** — 22 pounds  
\*The B-208A is available with the  
B-207L.



### THE CHARMING B-305 PROVINCIAL

Authentically styled for period interiors, this wonderful twin of the Contemporary B-305 charms the eye as happily as it pleases the ear . . . add a grace note to the living room and a pure voice to a fine music system. Specifications of the Provincial are the same as of the Contemporary (far right), except that it is 40" wide, 20" deep and 21" high, and weighs 120 pounds.



**THE B-302A GEM** is an E-300 Enclosure, the minimum recommended for a single Borak woofer, this compact three-way speaker system delivers a quality of sound far above the promise of its size and price. From 40 cycles to 16,000 its response is clean and balanced . . . typically Borak in its realism and listening ease. Use a pair for hi-fi (two-channel stereophonic) program material, or for distributing musical sound throughout large rooms.

**Equivalent**  
Crossover — Two B-207's, one  
B-207L, one B-207  
**Response** — 40 to 16,000 cycles  
crossover — 40 to 200 cycles  
**Dimensions** — 20" x 20" x 21" (net)  
**Weight** — 2 lbs.

**Power Rating** — 25 Watts contin-  
uous, peaks to 50 Watts  
**Response** — 40 to 16,000 cycles  
crossover — 40 to 200 cycles  
**Weight** — 15 pounds

### B-300A

**Equivalent**  
Crossover — Two B-207's  
**Response** — 40 to 16,000 cycles  
crossover — 200 cycles  
**Dimensions** — 4" x 24" x 24"  
**Power Rating** — 10 Watts con-  
tinuous, peaks to 20 Watts  
**Response** — 40 to 16,000 cycles  
**Weight** — 20 pounds



# SYSTEMS

Structurally, these Speaker Systems differ only in the size and shape of their enclosures and in the number of loudspeakers employed: all Borak Loudspeakers are *one line*, of *one quality*, identical in the smallest and largest Speaker Systems alike. The power-handling capacities, bass ranges and realism of these Speaker Systems are detailed in the specifications. These same Systems are available assembled and wired on panels, as described on Page 8, for installation in a wall or existing infinite-baffle enclosure of adequate rigidity and volume; they may also be assembled from components purchased separately. From the B-300 to the B-310, there is a Borak Speaker System for any size of listening room and for any amplifier power. Each, in its class, is unrivalled for realism and listening ease — **The Very Best in Sound.**



The B-300 Enclosure is styled for beautiful simplicity with rounded edges. It is also available as a completely art for maximum enjoyment of your stereo system.

**THE LITTLE GIANT B-300** — With a B-307A two-way control in the B-300 Enclosure, this is the smallest Speaker System capable of delivering sound worthy of the Borak name. An opening is pre-cut for the B-209, closed with a removable wood panel. For easy conversion to a B-302A System for maximum precision in the mid-range.



## THE DISTINGUISHED B-400

For the first time — a *full* for Speaker System in a single cabinet! The five-way Borak Loudspeakers in this line offer, three in System, exquisite the most and finest of a full system, the most delicate details of a single instrument — with a realism approaching the original performance. The restrained elegance of its styling makes the B-400 "at-home" in contemporary and traditional interiors alike... and only the Borak B-310 rivals the "average" quality of its magnificent room-wide sound!

**Components** — Two B-307A, Two B-209, and B-209A, and B-209.  
**Speakers** — 10" x 10" (100 watts)  
**Enclosure** — 40" x 20" x 20" (100 watts)  
**Power Rating** — 100 watts (100 watts)  
**Dimensions** — 40" x 20" x 20" (100 watts)  
**Weight** — 200 pounds

## THE ELEGANT B-305 CONTEMPORARY

When the listening room will not accommodate one of the larger Boraks, this smartly-styled two-way three-way System will bring sustained satisfaction to the most critical music-lover. B-305 sound is clear and full throughout the entire audible spectrum — crystal-clear midbass balanced naturally against a robust, atmospheric bass and sweet, non-metallic highs, with a wide-angle listening area of 120°.

**Components** — Two B-307A, and B-209, and B-209.  
**Speakers** — 10" x 10" (100 watts)  
**Enclosure** — 40" x 20" x 20" (100 watts)  
**Power Rating** — 100 watts

**Power Rating** — 100 watts (100 watts)  
**Dimensions** — 40" x 20" x 20" (100 watts)  
**Weight** — 120 pounds



# BOZAK

# LOUDSPEAKERS

These Loudspeakers and Crossover Networks, are the "building blocks" from which are assembled all Bozak Speaker Systems. They are one line of one quality, and each is designed not only to do the best possible job in its own field but also to work perfectly in concert with its team-mates. All Bozaks are inherently matched in level and sound quality, and combine without level-

ing devices, tuning of the enclosure, or problems of phasing, into Speaker Systems with power-handling capacities from 15 Watts up. By merely adding more Bozaks and modifying the Network, any Bozak System can be increased in realism and power at any time; and as it grows, it remains always in balance and retains the listening ease that is the earmark of Bozak Sound.

## BOZAK B-199A BASS

for use in Bozak two-way and three-way systems

The clean, smooth, powerful low-frequency response of this unique 12-inch loudspeaker is unopposed by that of any other woofer available today, regardless of size. The required infinite-baffle mounting retains its superb transient response and freedom from peaking, and provides the robust, true-pitch, enveloping bass foundation for the balanced structure of Bozak Sound. The remarkable performance of the B-199A is the result of the very low mass of its variable-density cone . . . overhanging voice-coil . . . rubberized cloth edge suspension . . . powerful Alnico-V magnets . . . rugged cast-aluminum frame . . . correct resolution of the area, mass and displacement of the cone in relation to the built-in damping. In efficiency and purity of tone the B-199A exceeds even the largest commercial woofers . . . and where even greater bass-range, power-handling capacity and realism are required, they are met in multiples without loss of the qualities inherent in the individual units.

### MULTIPLE USE OF B-199A

No. of B-199A's	Minimum Enclosure Volume	Minimum Bass	Power Capacity
1	2 cu ft	40 cps	15 watts
2	8 cu ft	30 cps	30 watts
4	16 cu ft	20 cps	50-60 watts

Response — See Table above, 4000 cycles up in all cases.

Impedance — 8 Ohms 16-Ohm on special order.

Power Rating — See Table above.

Resonance — Below 40 cycles in free air.

Voice Coil — Ribbon wire on 1½" Alnico-V form.

Field — 1½ pound Alnico-V Magnet.

Weight — 2 pounds net.

Dimensions — 12½" OD, 3½" deep.

Mounting — 11" Diameter Cutout.

Enclosure — Infinite Baffle, lined acoustically and stress-braced, see Table above for volumes.

## BOZAK B-209 MID-RANGE

for use in Bozak three-way systems

The intelligibility of speech and individuality of musical instruments depend on the clarity of the mid-range. Design features of the B-209, found in no other loudspeaker, give it an unrivaled ability to reproduce the most nuanced tones with such precision that every instrument and tone retains the characteristics of its personality. The special structural features and heavy paper pulp of the variable-density diaphragm . . . rubberized cloth edge suspension . . . foam-rubber abraded upper cone dome . . . balance between the characteristics of the magnetic field and other variables . . . all combine for critical damping and superb transient response that retain the fullest subtlety of detail of all musical sounds. Its level and tonal quality match that of the other Bozaks, and its presence in a speaker system is betrayed by only the "transparency" and clarity of the middle frequencies.

Response — 200 to 2000 cycles.

Crossover\* — 400 for 600 and 2000 cycles.

Impedance — 8- and 16-Ohm models.

Power Rating — For use in 30-Watt Systems.

Resonance — None Audibly.

Voice Coil — Ribbon wire on 1½" Alnico-V form.

Field — 1½ lb. Alnico-V Magnet.

Weight — 4½ pounds net.

Dimensions — 4½" OD, 3½" deep.

Mounting — In center cavity or in 1-cu-ft lined enclosure.

3½" diameter Cutout.

\* — 10 Power 2-30,432

\*\* — Use in multiples for greater power and realism.

† — Recommended value.

## BOZAK B-200X TREBLE

for use in Bozak two-way and three-way systems

The direct-radiating paper-and-fiberglass cones of this half-unit high-frequency speaker give it a sweet, natural musical quality that harmonizes perfectly with the other Bozaks, and its angled mounting extends the smooth spatial coverage to a full 120°. Even with center-wall placement of a Bozak Speaker System the entire room can enjoy full-range realism. The exclusive patented\* rubber damping affords smooth, natural frequency response without the "peaking" and metallic harshness associated with so many "high-fidelity" systems. Both power-handling capacity and spatial coverage are increased by use of the B-200X in multiples and arrays such as the B-200XA.



Response — 2000 to 18,000 cycles.

Horizontal Coverage — 120° at 10 ft.

Impedance — 8 Ohms Two 16-Ohm Sections in parallel.

Power Rating — For 15-Watt Systems.\*\*

Field — Two Square Alnico-V Magnets.

Weight — 2½ pounds net.

Dimensions — 4½" wide, 2½" high, 2½" deep.

Mounting — Centrally on B-199A, or in separate cavity.

## BOZAK B-100 TWEETER SYSTEM

This handsome, discrete cabinet mounting of the B-200XA permits addition of the remarkable Treble Array to existing woofers enclosures when you desire the warmth, natural musical values, and broad spatial coverage that can be found in no other high-frequency speaker. In addition, no bagging or baffle boxes with harmonizing grille.

Specifications — See B-200XA for structural and electrical details.

Dimensions — 12½" wide, 12" high, 8" deep.





## BOZAK B-207A COAXIAL

a complete two-way system in itself —  
a basic component of the finest three-way systems

Here, in a single compact unit fitting over standard cabinets for 12" and 15" speakers, one Bass and two Treble Speakers on a cast-aluminum frame form a complete two-way wide-range Speaker System with all the features of Bozak Design and earmarks of Bozak Sound. A vital factor in the performance of the B-207A is the acoustical slot between the tweeters (a feature found in no other speakers), which disperses widely the upper-middle frequencies from the woofer. With infinite-baffle mounting and a fine 20-Watt amplifier, it is ready to reveal the full beauty of modern wide-range, low-distortion program material. Bozak power, precision and balance throughout the entire audible range causes you lasting listening pleasure — and, at the same time, provide a basis for *Extremes-to-Grow-into* larger Bozak Systems. Add an N-10102 Network and a Bozak B-208 Mid-Range — with, if you wish, more B-207A's — thereby increasing the power and realism of your Speakers.

**Response** — 45 to 16,000 cycles, extended downward by use in multiples.

**Impedance** — 8 Ohms.

**Power Rating** — 12 Watts continuous, peaks to 20 Watts.

**Dimensions** — OD 12", depth 2".

**Baffle Opening** — Fits standard cabinets for 12" and 15" Speakers.

**Weight** — 13 pounds.

**Features** — Infinite baffle; minimum 2 cubic feet, optimum 8 cubic feet. See Table at bottom of page 19.

## BOZAK B-200XA TWEETER ARRAY

for use in Bozak 50-Watt  
three-way systems.



No other high-frequency speaker of any type equals the B-200XA in true musical values, smoothness of coverage throughout the entire room, and warmth that makes listening a continuing pleasure at even the highest levels of volume. Here, truly, is nature's answer! Four B-200X Dual Tweeters, mounted on a sturdy cast-aluminum frame to form a sector of a sphere, distribute sweet, natural sound over a full 140° horizontally and with the widest vertical dispersion, with a balance and tonal quality completely compatible with the other Bozaks. It is available in an enclosure as the B-100.

**Response** — 1500 to 16,000 cycles.

**Horizontal Coverage** — 140° at 16 ft.

**Impedance** — 8 Ohms.

**Power Rating** — for use in 30-Watt Systems.

**Field** — Eight 8-ounce Alnico-V Magnets.

**Weight** — 17½ pounds.

**Dimensions** — 12½" wide, 4½" high, 5" deep.

**Mounting** — Outside woofer cavity.

## BOZAK N-25 CONDENSER BANK

Added to the N-10102, this unit now gives the 8-Ohm Crossovers at 400 and 2500 cycles needed for the B-215, B-216A and B-400.



## BOZAK CROSSOVER NETWORKS

These are all-electric devices, built ruggedly and honestly, that separate the audio spectrum into three ranges and distribute them to the proper speakers in a Bozak three-way system. Unlike conventional speaker systems, the Bozaks sending the adjacent ranges broadly, so there is no sense of "disembodiment" of instruments. The "size" built-per octave Bozak Networks are inherently free of transient distortion ("singing").

### BOZAK N-10102 CONVERTIBLE CROSSOVER NETWORK

This unit is engineered for easy conversion to facilitate systematic growth of a Bozak Speaker System from a B-207A into a B-208 by a simple change of taps, and to a B-210, B-216A, or B-400 by the addition of the N-25 Condenser Bank. The available characteristics are: For the B-202, 8-Ohm Crossovers at 400 and 2500 cycles; for the B-204, 16-Ohm Crossovers at 400 and 2500; for the B-210, B-216A and B-400, 8-Ohm Crossovers at 400 and 2500. Complete instructions are given in the special illustrated Bozak's upon request.

**Dimensions** — 2" wide, 2" deep, 2½" high.

**Weight** — 2 pounds.



### BOZAK N-103 CROSSOVER NETWORK

16 Ohms — 8 db per octave, 400 and 2500 cycles. FOR B-202, B-210, B-216A.

For the luxury of the subtle enhancement of the mid-range by a 6db/octave attenuator in the B-202.

**Dimensions** — 2" wide, 2" deep, 2½" high.

**Weight** — 2 pounds.



### BOZAK N-104 CROSSOVER NETWORK

8 Ohms — 8 db per octave, 400 and 2500 cycles. FOR B-210, B-216A and B-400. B-210, B-216A.

When the growth capabilities of the N-10102 are not required, substitute with a four-wound three-way Bozak Speaker System.

**Dimensions** — 2" wide, 2" deep, 2½" high.

**Weight** — 2 pounds.



SYSTEMATIC GROWTH WITH

**BOZAK**

The goal of everyone who has learned to appreciate the Bozaks is a B-310 or B-400 — finest of the Bozak Speaker Systems, unrivalled by any others. Bozak alone, with a capacity for Systematic Growth with compatible loudspeakers of uniform quality, enables you to achieve your goal by easy stages without the penalty of "scrapping" "outgrown" speakers and networks. You can start modestly with a wide-range two-way B-207A; then, by adding "one-line, one quality" Bozaks and modifying the crossover network, increase the power and realism of your speaker system step-by-step until you achieve The Supreme Accomplishment in The Reproduction of Sound — one of the magnificent four-woofers, 50-60 Watt giants of the Bozak family. Since the enclosure is an infinite baffle, it can be built for the largest system you expect ultimately to have, with a removable back and unused speaker-openings closed with removable panels; thus only a screwdriver, pliers and soldering iron are needed for enlargement of the system and there will be no problem of "tuning" the cavity or carpentry. The pictures at the right show graphically the simple process of Systematic Growth with Bozak Loudspeakers.

**BOZAK** Performance

*All Bozak Products are Designed and Manufactured by The R. T. Bozak Manufacturing Company*

All statements about the quality and performance of the Bozak Loudspeakers and Speaker Systems are predicated on their being mounted in a rigid, resonance-free infinite baffle enclosure of adequate size and rigidity, powered by associated equipment of the highest quality, and used with true wide-range, low-distortion program material.

**BOZAK** Guaranty

All Bozak products, provided they are registered with Bozak by the original purchaser, within one year and by means of the Registration Card supplied, are guaranteed for one year against failure due to defects of materials and/or craftsmanship. Be sure to fill out and mail your Registration Card promptly.

**THE R. T. BOZAK SALES COMPANY**

The Very Best in Sound

BOX 1166 • DARIEN • CONNECTICUT  
EXPORTS: ELECTRONIC MANUFACTURING  
EXPORT COMPANY, PLAINFIELD, NEW JERSEY



**B-200P**  
21" wide, 5 1/2" high, 5 1/2" dia.  
21 pounds



**B-300AP**  
21" wide, 5 1/2" high, 5 1/2" dia.  
22 pounds



**B-300P**  
24 1/2" wide, 24" high, 5 1/2" dia.  
47 pounds



**B-400P**  
48 1/2" wide, 20 1/2" high, 13 1/2" dia.  
55 pounds



**B-500P**  
51" wide, 47" high,  
15 1/2" dia., 82 pounds

## PANEL-MOUNTED BOZAK SPEAKER SYSTEMS

All Bozak Speaker Systems are available on heavy plywood panels, completely wired with Crossover Networks and ready for installation in a wall, an existing suitable infinite-baffle enclosure, or an enclosure you may build yourself. Their electrical and acoustical characteristics are the same as those of cabinet-mounted systems described elsewhere in this catalog.

**SOLD BY**