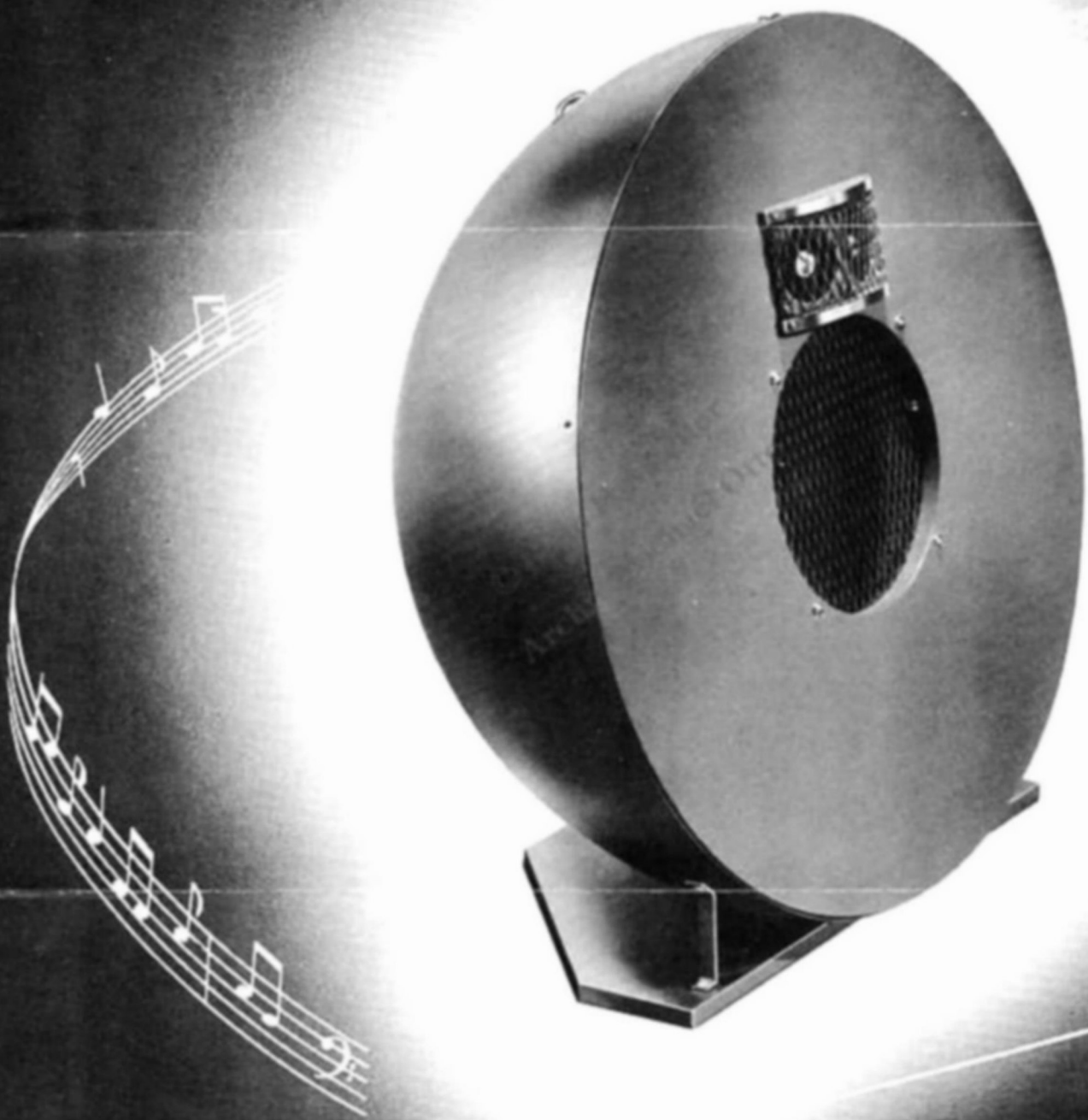
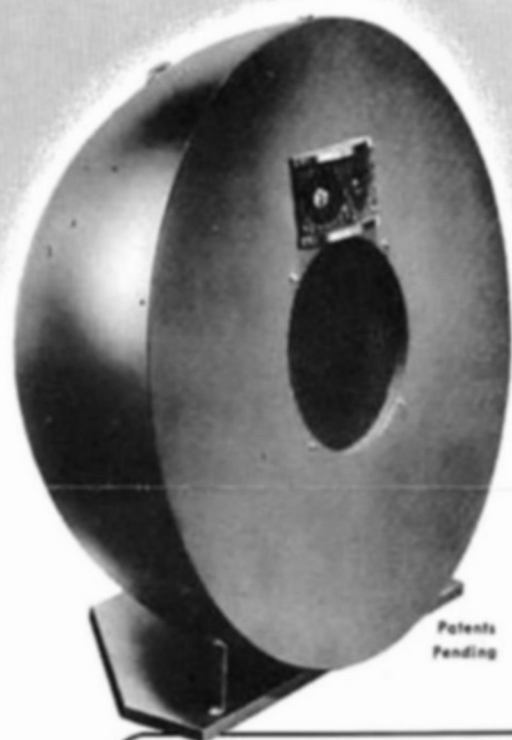


*A New Concept In Sound*



*Speakers by* **BOZAK**

# UNSURPASSED IN REALISM AND LISTENING EASE



Patents Pending

## BOZAK

## KETTLE DRUM SPEAKER

The distinctive hemispherical shell of the Bozak Kettle Drum Speaker is not just an attractive enclosure, not just a rigid baffle, but an integral, functioning part of a new concept in sound reproduction. Actual comparative tests (photographs below) are substantiated by critical listening in proving that the acoustically treated Kettle Drum baffle is unsurpassed in tonal realism and listening ease.

Unlike conventional enclosures, the Kettle Drum does not have a sharply peaked cavity resonance. Thus, all types of sound, instrumental and vocal, are heard without muffling or other distortion. Only a hemispherical baffle is devoid of standing waves. Only the Bozak Kettle Drum employs a hemispherical "tympani" baffle.

- True Pitch, True Tympani Bass
- Distinctly Natural Treble
- Exceptionally Low Resonance
- Outstanding Transient Response
- Attractive, Self-contained Enclosure

32" dia. spun steel acoustically treated baffle with lifting handle, circular panel and tripod base.

### MATCHED BOZAK TEAM RECREATES AUDIO SPECTRUM

—From one end of the useful audio spectrum to the other, from the plucked string of a bass viol to the uppermost coloratura tones, only true, undistorted pitch is reproduced by the Kettle Drum. The 12-inch Bozak woofer, noted for its robust, life-like bass, and the Bozak dual tweeter, distinguished for its non-piercing highs, combine in the "tympani" shell to offer a tonal depth and balanced roundness that is best described as a "3-dimensional" effect.

**LET YOUR EAR COMPARE**—For all applications demanding highest quality sound reproduction at moderate power levels, try the speaker that makes you feel *you are there*—Bozak Kettle Drum, Model B-201. If you have not yet had the opportunity to let your ear compare, let your eye compare the following characteristics with those of speakers costing 2-3 times as much.

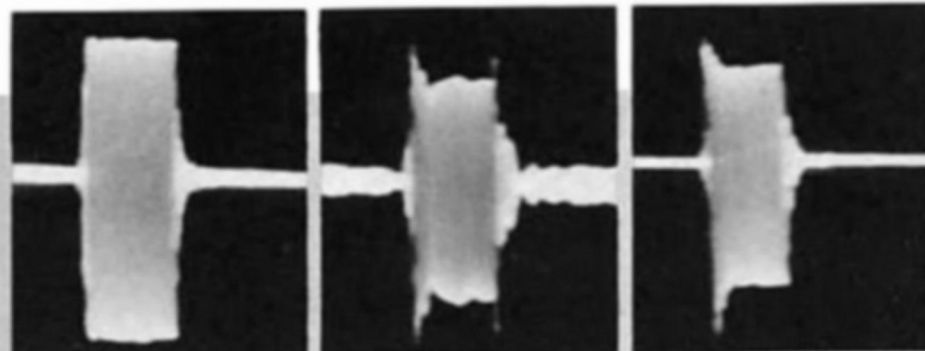
### EFFECTIVE CROSSOVER BUILT IN, NO EXTRA NETWORK NEEDED

—Response characteristics of the specially damped woofer and dual tweeter are such that an elaborate crossover filter is unnecessary. A built-in 4 mfd. condenser, used in series with the tweeter comprises the crossover network. This simplification is made possible because identical velocities of propagation of both highs and lows permit no annoying phase distortion.

#### MODEL B-201

Response: 40-13000 cycles with useful response to 16000; Crossover: 2000 cycles; Input: 12 watts, peaks to 18 watts; Input Impedance: 8-8 ohms; Horizontal dispersion angle: 120° at 10kc; Overall height: 33"; depth front to back: 19½"; Weight: 49 lbs. net.

TYPICAL TONE BURST RESPONSE (1600 cycles)

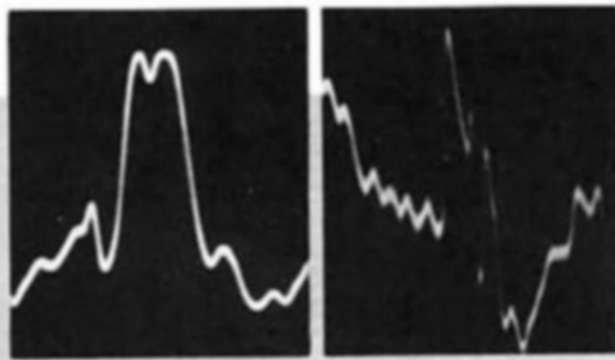


BOZAK KETTLE DRUM

SPEAKER A

SPEAKER B

TYPICAL SQUARE WAVE RESPONSE (600 cycles)

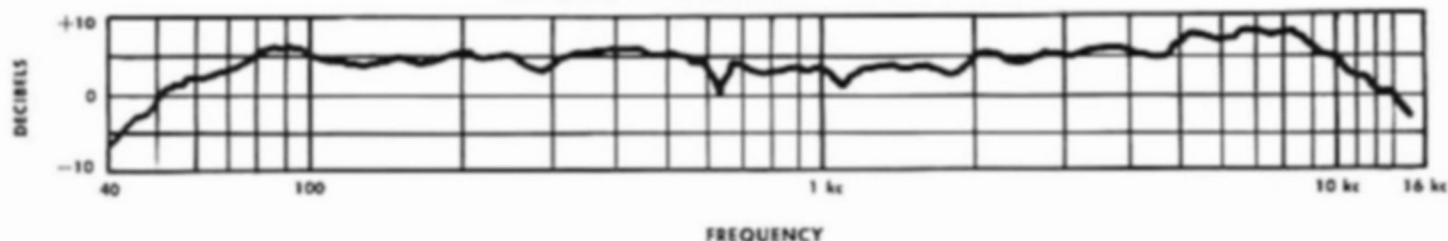


BOZAK KETTLE DRUM

SPEAKER A

NOTE: Speaker A is a 2-way system selling at three and a half times the price of a Bozak Kettle Drum Speaker. Speaker B is a 2-way system selling at one and a half times the price of a Bozak Kettle Drum Speaker. (Actual oscillograms taken in free space, using a dynamic microphone, at 2.5v input to speakers.)

FREQUENCY RESPONSE — KETTLE DRUM



# ROBUST, LIFE-LIKE BASS RETAINS MUSICAL QUALITY



The Bozak Model B-199 Woofer, with its true pitch, un-muffled tone, adds a new sense of orchestral fullness to the lower musical registers. The molded, specially felted paper cone eliminates the taut "drum head" characteristic so common to large speakers, without sacrificing necessary rigidity. Designed strictly for the ultimate in listening pleasure, the cone texture, density and cross-sectional shape accomplish high damping of break-up and elimination of edge reflection.

- **Minimum non-linear distortion**
- **High density field (13000 gauss)**
- **Moisture resistant cone and centering suspension**
- **Low mass, low resonance cone**
- **Durable, "non-temperamental" construction**

**LOW MASS, LOW RESONANCE**—The B-199 is characterized by its low mass and low resonance features. Low mass overcomes phase distortion and thus improves transient response, while low resonance and large displacement make possible the true bass.

**ALL PARTS TAILORED FOR YEARS OF HIGH FIDELITY SERVICE**—The heavy, cast, machined frame permanently aligns the cone and special Dural voice coil form. Because of an exceptionally large cone displacement at low frequencies, the non-warping voice coil is extra long for minimum non-linear distortion. For utmost utilization of voice coil volume, the coil is layer-wound with ribbon wire.

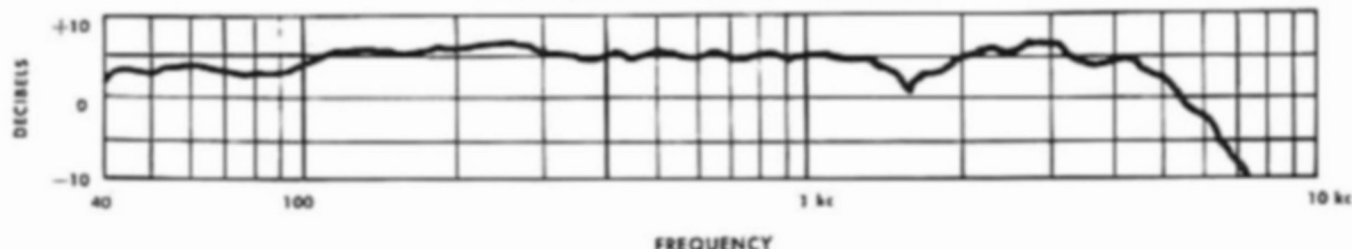
**CONSTRUCTION DETAILS UNOBTAINABLE IN OTHER SPEAKERS**—Exclusive with Bozak speakers, flexible silvered leads are attached to the voice coil. Failures due to crystallization, failures common to solid wire leads on the cone, are thus forestalled. Another Bozak exclusive, designed for longer working life, is the unique rubber-treated cone suspension.

**MODEL B-199**

Response: 40-4300 cycles with gradual roll-off; Input: 12 watts, peaks to 18 watts; Voice Coil: 1 1/2" dia. on Dural form; Resonance (Fundamental): 40 cycles, + or - 10%; Field: 22 oz. Alnico V with special low carbon cast pole pieces; Mounting: 4 equally spaced holes on 1 1/2" circle; Depth front to back: 5 1/8"; Required baffle opening: 10 1/4" dia.; Weight: 8 lbs. net.

While Bozak Woofers and Tweeters are available separate from the Kettle Drum, their use in combination with each other is recommended for best results.

FREQUENCY RESPONSE — WOOFER



Above characteristic was taken in an infinite baffle

# NON-PIERCING HIGHS MAKE CLOSE LISTENING A PLEASURE



## BOZAK

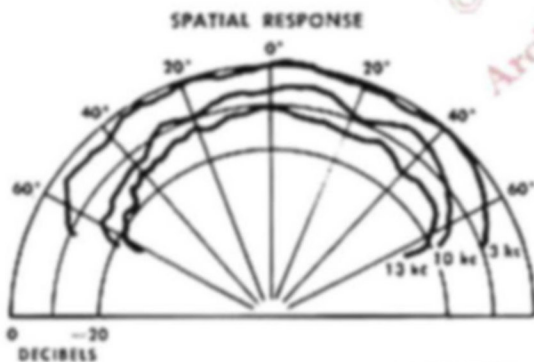
## DUAL TWEETERS

An experience in listening pleasure awaits those who have not yet heard high frequency tones radiate from a Bozak tweeter completely free from the shrill, brazen quality associated with high fidelity systems. Model B-200 direct radiator tweeter has been designed and fabricated to eliminate all spurious peaks and allow only a smooth response to be reproduced. A unique system of rubber damping is largely responsible for the unusual degree of smoothness, while wide angle dispersion and a velocity of propagation matched to that of the Bozak woofer give unequalled realism.

- Useful highs to 16000 cycles
- 120° horizontal dispersion angle
- Smooth, peak-free response through cone and motional damping
- Exclusive method of attaching flexible leads to non-warping voice coil form
- Combination paper cone and die-formed metal apex

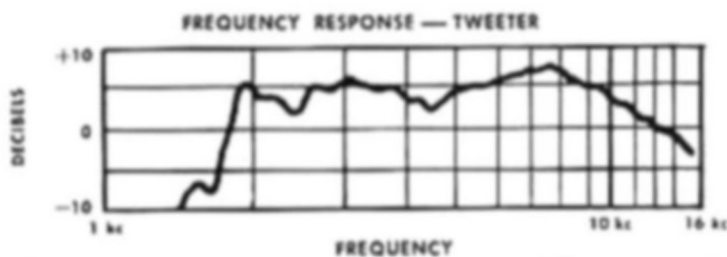
**GREATER SPATIAL COVERAGE AND INCREASED HANDLING CAPACITY** — This permanent magnet dual unit consists of a matched pair of 2½" speakers arranged to cover a field of 120 degrees and to handle an input of 5 watts with peaks to 8 watts. Perhaps to even better purpose than in the woofer, all Bozak tweeters employ an exclusive method of attaching voice coil flexible leads, avoiding a frequent cause of tweeter failure.

**AVAILABLE IN COMBINATION WITH WOOFER OR SEPARATELY** — While it is true that Model B-200 speakers are at their best in combination with B-199 woofers in the Bozak Kettle Drum, they are available separately for improving existing systems.



### MODEL B-200

Response: 1500-12000 cycles with useful response to 16000 cycles; Input: 5 watts, peaks to 8 watts; Voice coil: ½" dia., 16 ohms per section; Horizontal dispersion angle: 120° at 10 kc, 100° at 13 kc; Field: two 7 oz. Alnico V permanent magnets; Weight: 2½" lbs. net.



NOTE: All measurements shown were made at constant input of 2.5 volts in free space 15 feet above ground.

While Bozak Woofers and Tweeters are available separate from the Kettle Drum, their use in combination with each other is recommended for best results.

Good loudspeakers, like good musical instruments, are the result of proper materials being brought together and fashioned by skilled artisans. They are designed and built for use only with the highest quality sound sources for those who appreciate and demand highest quality reproduction.

The goal toward which we have worked for more than a decade, and firmly believe we have attained in our Kettle Drum, woofer and tweeter, is a high degree of tonal realism through clean, natural reproduction of all frequencies commonly available.

All Bozak units are standardized at custom levels of quality, receiving careful attention in all stages of fabrication and testing. We make and control all vital elements, including specially compounded pulp for the cones.

— R. T. Bozak

Designed and Manufactured by **R. T. BOZAK CO.** 90 Montrose Ave., Buffalo 14, N. Y.