

the new

Bozak

bi-amplification system

"tenth row center" sound



bi-amplification

Bozak, Inc. pioneers in the design and manufacture of High Fidelity equipment, is constantly evaluating and developing ideas to increase high fidelity and realism in sound reproduction to the highest level that the state of the art will allow.

To this end Bozak constantly tests traditional methods and rule-of-thumb against present technology. New standards evolve; old ones revised. New measurements are made to describe new performance factors. A generation of amplifiers has been born having improved operational characteristics. In the use of this new breed of power amplifiers, it has been found that the bi-amplification concept becomes increasingly more advantageous than it has been in the past. The bi-amplification system is a system which amplifies high and low frequencies separately through individual amplifiers and feeds the respective signals directly through to the loudspeakers by passing the conventional high level cross-over network. This system reduces cross-modulation distortion between high and low frequencies in a single amplifier and improves both phase and amplitude control over the loudspeakers by the total utilization of the much higher damping and peak power now available in more recent high quality solid state amplifiers. The resulting spaciousness in the sound quality is caused by increased clarity combined with a much better definition in the placement of instruments heretofore not possible with conventional cross-over networks.

An integral part of the bi-amplification system is the electronic cross-over network which separates the frequencies prior to power amplification. Bozak now makes available the Model N-106A electronic cross-over network which has been designed specifically for Bozak three-way systems. The N-106A and its companion, the N-107, make it a simple matter to convert any Bozak three-way system. Now you will realize the truly great potential that is possible from your Bozak's!

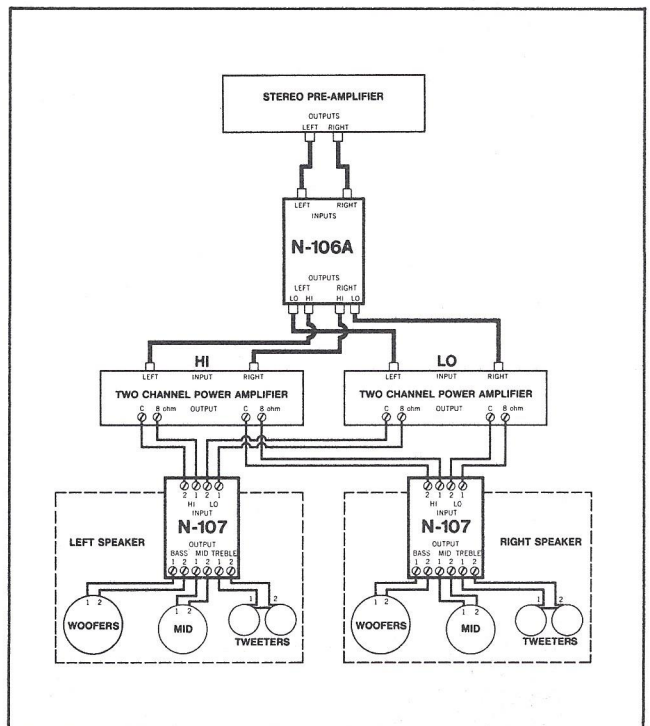
system interconnection

The drawing shows the proper connections for a bi-amp system using Bozak equipment.

1. Connect the outputs from the pre-amplifier/control unit to the inputs of the N-106A Two-Way Crossover, using pinjacks with shielded cables of lengths suitable for your installation. Be sure the left channel output of the pre-amp is connected to the left channel input of the N-106A, the right pre-amp output to the right N-106A input.
2. Connect the left channel low frequency output from the N-106A to the left channel input of the low-frequency power amplifier and the right channel low frequency output from the N-106A to the right channel input of the power amplifier. (Note that this dual amplifier handles both left and right channels of the low frequencies.)
3. Similarly, connect the high frequency outputs from the N-106A to the corresponding inputs of the high frequency

power amplifier. (This second dual power amplifier handles left and right channel high frequencies.)

4. Connect the left output of the low frequency power amplifier to the "Lo Amp" input of the N-107 on the left speaker system. Be sure that the "8-ohm" amplifier terminal is connected to the "2" terminal on the N-107 and the "common" or "ground" tap on the amplifier is connected to the "1" terminal on the N-107. Similarly, connect the right output of the low frequency power amplifier to the "Lo Amp" input of the N-107 on the right speaker system.
5. Connect the left output of the high frequency amplifier to the "Hi Amp" terminals on the N-107 on the left speaker.
6. Connect the right output of the high frequency power amplifier to the "Hi Amp" terminals on the N-107 on the right speaker.
7. At left speaker connect the N-107 to the respective speakers — bass to woofer, mid to midrange and treble to tweeter — observing phasing procedure, i.e., connect #1 terminal of the network to the #1 terminal on the speaker, and so on.
8. At right speaker, connect the N-107 to its respective speakers.
9. Be sure that the N-106A is plugged into the A.C. power receptacle on the pre-amplifier.



electrical

Crossover Point	400 Hz, smooth 6 dB/octave, both low-pass and high-pass amplifiers simultaneously
Outputs	Left and right channels, low and high pass amplifiers rated 5 volts R.M.S. Immune to short circuits.
Output Loading	Minimum 10k Ohms (Emitter Follower Output)
Distortion	Less than .5% at rated output.
Insertion Loss	Less than 1 dB.
Input Impedance	50k Ohms.
Noise	More than 80 dB below rated output.
Solid State Complement	6 transistor, 4 diodes
Power Requirement	120V, 60Hz, 5 watts

mechanical

Overall Dimensions	8" x 5" x 2"
Weight	2 ¹ / ₂ lbs.
Finish	Instrument Black



Designed and manufactured by
Bozak, Inc.
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