

The ALTEC 771B and 771BX Electronic Crossover Biamplifiers improve power handling and reduce distortion without requiring a high-power amplifier and separate crossover network.

Electronic Crossover with
Separate Power Amplifiers

Full Amplifier Power and Efficiency

Versatile Input
Connections

## Fail-Safe Protection for Output Transistors

These ALTEC biamplifiers include electronic crossover circuitry and separate low-frequency and high-frequency amplifiers in a single, compact package that can be mounted directly in the speaker enclosure. The electronic crossover circuit divides the input signal into separate bass and treble channels. A 60 -watt amplifier drives the low-frequency loudspeaker and a 30 -watt amplifier drives the high-frequency driver. With separate amplifiers for each speaker, extreme power demand of the low-frequency amplifier does not affect high-frequency reproduction.

Full amplifier output is distributed to the speakers because the electronic crossover circuitry is placed ahead of the power amplifiers.

Input connections may be made three ways:

1. High-impedance ( 80,000 ohms) paralleled phone-jack inputs for paralleling up to twenty 771B's.
2. High-impedance ( 80,000 ohms) connections at INPUT terminal board terminals 1 and 2.
3. Optional 600 -ohm balanced input by means of INPUT terminal board terminals 2, 3 and 4 and 15095 or 15356 transformers.

ALTEC's Active Dissipation Sensing Circuit provides fail-safe protection for the output transistors. The action of the sensing circuit is immediate and effective at all frequencies within the passband of the biamplifier, limiting only that portion of the program material that would damage or degrade the performance of the output transistors.

The ALTEC 771BX Biamplifier is similar to the 771B, except that voltage selection and fusing is provided for line power. The jack for connecting two or more biamplifiers into multiple systems is not provided.

## SPECIFICATIONS



## ARCHITECT'S AND ENGINEER'S SPECIFICATIONS

The electronic crossover biamplifier shall be a solid-state device with all transistors and diodes of the silicon type. The domestic model shall contain a power supply capable of operating from a $120 \mathrm{~V}, 50 / 60 \mathrm{~Hz}$ line. The export model shall contain a power supply with a voltage select switch to enable it to operate from a $50 / 60 \mathrm{~Hz}$ line of $95 / 105 \mathrm{~V}, 110 / 120 \mathrm{~V}, 125 / 135 \mathrm{~V}$ or $220 / 240 \mathrm{~V}$. The biamplifier shall contain electronic crossover circuitry, separate LF and HF power amplifiers and fail-safe protective circuitry for the output transistors. The biamplifier shall be capable of meeting the following performance criteria. Amplifier outputs; 60 watts bass, 30 watts treble. Bass gain at rated output; 52 dB with 15356 line transformer accessory, 66 dB with 15095 line transformer accessory. Treble gain at rated output; 49 dB with 15356 line transformer accessory, 63 dB with 15095 transformer accessory. THD, less than $0.5 \%$ at all frequencies from 20 Hz to 20 kHz . Input sensitivity for rated output; 0.5 V rms direct or with 15356 line transformer accessory, 0.1 V rms with 15095 line transformer accessory. Crossover frequency; 500,800 or 1500 Hz , selectable, with $12 \mathrm{~dB} /$ octave slope. Input impedance; 80,000 ohms direct, 600 ohms with line transformer accessory. Load impedance, 8 ohms nominal, each amplifier. Noise level, 80 dB below rated output. Each channel shall have a separate slide-type gain control, continuously variable from +6 to -15 dB . The biamplifier shall be mountable in a wide variety of speaker enclosures. Its overall dimensions shall be $6-1 / 2^{\prime \prime} \mathrm{H} \times 9-7 / 8^{\prime \prime} \mathrm{W} \times 9^{\prime \prime} \mathrm{D}$, its panel cutout dimensions shall be $5-1 / 2^{\prime \prime} \mathrm{H} \times 9-1 / 2^{\prime \prime} \mathrm{W}$, and its weight shall be 16 pounds.

The electronic crossover biamplifier for domestic use shall be the ALTEC Model 771B Electronic Crossover Biamplifier.

The electronic crossover biamplifier for export use shall be the ALTEC Model 771BX Electronic Crossover Biamplifier.

The line transformer accessory shall be the ALTEC Model 15356 Line Transformer or the ALTEC Model 15095 Line Transformer.

[^0]
[^0]:    NOTICE

