Professional Series

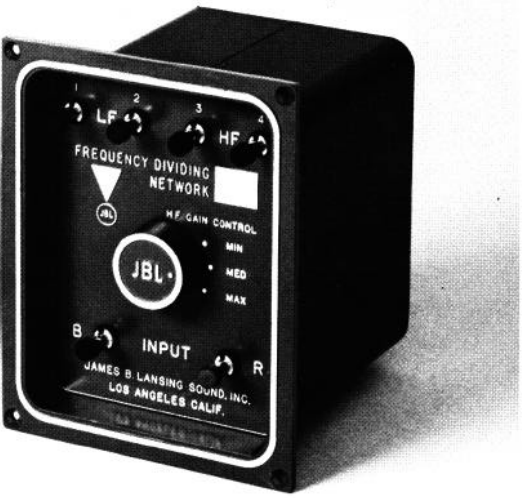
Frequency Dividing Networks

Models

3105	
3106	3120
3110	3152A
3115	3182A

High Power

General Application



JBL professional frequency dividing networks are intended for use with many high and low frequency driver combinations. The networks use 12 dB per octave parallel L-C circuits with additional conjugate elements to cancel the inductive reactance of the low frequency loudspeaker. Highest quality electronic components are used throughout—non-inductive, non-polarized capacitors having high AC current capacity built expressly for use in dividing networks; individually calibrated low-loss inductors, and oversize switches and resistors. High frequency shelving of networks crossing over below 7 kHz is accomplished with tapped autotransformers rather than conventional pads. The 3152A and 3182A are high power networks designed primarily for theater, auditorium or reinforcement installations; the others are for general applications.

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Architectural Specifications

The high level dividing network(s) shall be of the 12 dB per octave type with provision for attenuating the high frequency driver in discrete steps. The circuitry shall consist of L-C sections with special provisions for minimizing the low frequency driver reactance. The inductors shall be wound on cores made of grain-oriented silicon steel laminations. In addition, networks crossing over below 7 kHz shall have a tapped inductor which allows autoformer action to be obtained for attenuation of the high frequency output. Compensating parallel resistors shall be automatically selected for each tap so as to present a constant impedance to the input of the network when the high frequency driver is connected to the network. The network(s) shall be capable of handling 50 (75) (100) (250) Watts of program material power without overheating or clipping.

Model	Crossover Frequency	Watts Continuous Program[1]	Impedance Low Frequency	Impedance High Frequency	High Frequency Attenuation
3105	7000	50	16	16	Continuously Variable
3106	8000	50	16	16	Continuously Variable
3110	800	100	8-16	16	6-8-10 dB, Switch
3115	500	100	8-16	16	6-8-10 dB, Switch
3120	1200	75	8	16	0-3-6 dB, Switch
3152A	500	250	8	16	0-2-4-6-8 dB, Strap
3182A	800	250	8	16	0-2-4-6-8 dB, Strap

[1]Continuous program power is defined as 3 dB greater than continuous sine wave power (RMS). It is a conservative expression of the network's ability to handle normal speech and music program material.

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