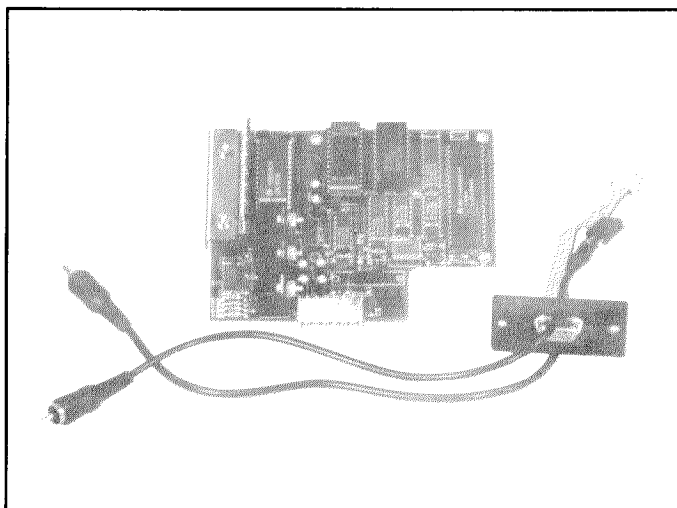




8751A Programmable Microaudio 14 Band Equalizer Module



KEY FEATURES

- ★ Convenient Plug-in Module
- ★ Wide Dynamic Range
- ★ Unique Filter Arrangement
- ★ Selectable Boost/Cut Steps

PRIMARY SPECIFICATIONS

Type:	Active analog filter set
Number of Bands:	14 bands located on ISO center frequencies from 80 Hz to 6.3 kHz.
Programmable Features:	
Boost/Cut of each band:	±12 dB in 1 dB steps ±6 dB in ½ dB steps
Input circuitry,	
Type:	Unbalanced
Impedance:	15 kΩ
Nominal Level:	0 dBu (0.775 V rms)
Maximum Level:	+18 dBu
Output circuitry:	
Type:	Unbalanced
Source Impedance:	10Ω
Nominal Level:	0 dBu (0.775 V rms)
Maximum Level:	+18 dBm (+24 dBu into 2 kΩ or greater load)
Frequency Response:	20 Hz - 20 kHz, +0 dB, -1 dB
Dynamic Range:	> 105 dB (peak signal to A-weighted background noise)

DESCRIPTION

The **8751A** is a fourteen band programmable MicroAudio equalizer module. The module plugs directly into a main-frame I/O port of an Altec Lansing **1700C** mixer/preamp, **1707C** mixer/power amplifier or **1715C** mixer/power amplifier. Two male RCA terminated leads extending from the rear connector panel allow the equalizer to be connected in the audio path between the pre-amp output and input of the power amplifier being used. The equalizer control is accessed only through a data port. This makes the equalizer tamper-proof. For more selectivity in equalization control, the **8751A** utilizes a variable, high Q filter circuit in each of the 14 bands.

The internal microprocessor controls the amount of boost or cut for the 14 bands in 1 dB steps over a ± 12 dB range. The equalizer module has a unique filter band arrangement. One-third octave filters are used for tuning of mid-band frequencies. The low frequencies and high frequencies are adjusted using one octave filters. The unique variable Q filter design arrangement and tamper-proof control provide an equalization function that enhances a 1700 series design without taking valuable rack space.

SYSTEM REQUIREMENTS

Any Altec Lansing 1700C series mainframes will accommodate the **8751A**. To program the **8751A** one of the various Altec Lansing programmers is needed. The programmers are the Altec Lansing **8055B** Hand-Held Programmer, the **8061A** PC Controller Card, and the **8063A** RS-232 Converter, each

available from Altec Lansing. The model **1700C** Mixer/Pre-Amp does not have a power amp section. If the equalizer module is used in this model, the equalizer will be used as an output to drive another power amplifier unit only.

8751A Specifications (continued)

Total Harmonic

Distortion: < 0.01% at unity gain from 20 Hz to 20 kHz

IMD (SMPTE 4:1): < 0.05% at unity gain

Noise Floor: < -90 dBm, A-wtd, all controls at zero dB

Connectors:

Audio: Male RCA type via 10" audio cable.

Data: 9-pin D-subminiature female connector

Non-volatile Memories: one

Power Requirements: 15 V dc bipolar supplied by the host mainframe

Operating Temperature

Range: Up to 50°C (122°F)

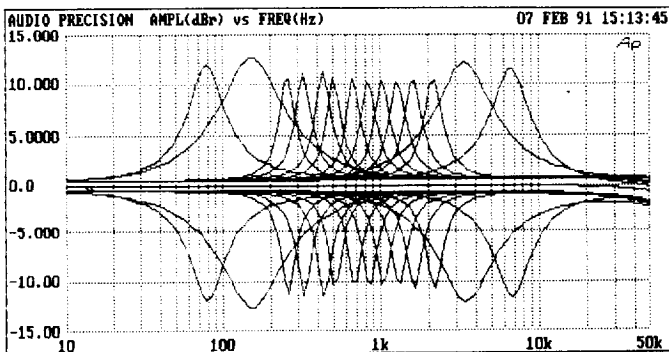
Weight,

Net: 1 lbs (454 grams)

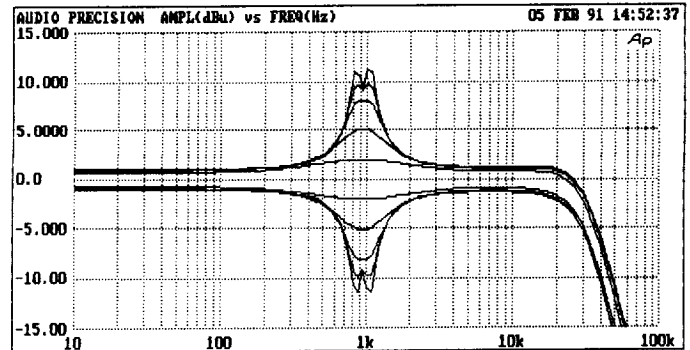
Shipping: 2 lbs (908 grams)

Included Accessories:

Input/Output connector panel connector, Operating Instructions.



Boost and Cut
Individual Filters



Two Adjacent Filters
Boost & Cut at
1 dB, 3 dB, 6 dB, 9 dB and 12 dB.

ARCHITECT'S and ENGINEER'S SPECIFICATION

The programmable plug-in Module shall have fourteen programmable filter bands at standard ISO center frequencies from 80 Hz to 6.3 kHz. The bands at 80 Hz, 160 Hz, 3.15 kHz and 6.3 kHz shall have low filter Qs to provide one octave spacing. The filter bands from 250 Hz to 2 kHz shall be spaced on 1/3 octave intervals. The unit shall be packaged on a single plug in card for use with the Altec Lansing 1700 series mixer and mixer/preamplifier main-frames. There shall be no external controls. The equalizer shall be microprocessor-controlled and shall only be programmable from an external controller. The unit shall have one non-volatile RAM memory for storing the equalizer setting.

Each of the fourteen band-pass filters shall be programmable from -12 dB to +12 dB in one dB increments. The unit shall be operate from a 15 V dc, bipolar power supply in the mainframe.

The unit shall meet the following performance criteria: Maximum input level: 6.16 V rms. Input impedance: 15 kohms or higher. Maximum output power level: +18 dBm. Output noise: less than -90 dBm A-weighted with all gains at unity. Dynamic range: at least 100 dB. THD: less than 0.01 % with all gains at unity. IMD (SMPTE 4:1): less than .05 % with all gains at unity. The plug-in equalizer shall be the Altec Lansing Model 8751A.



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