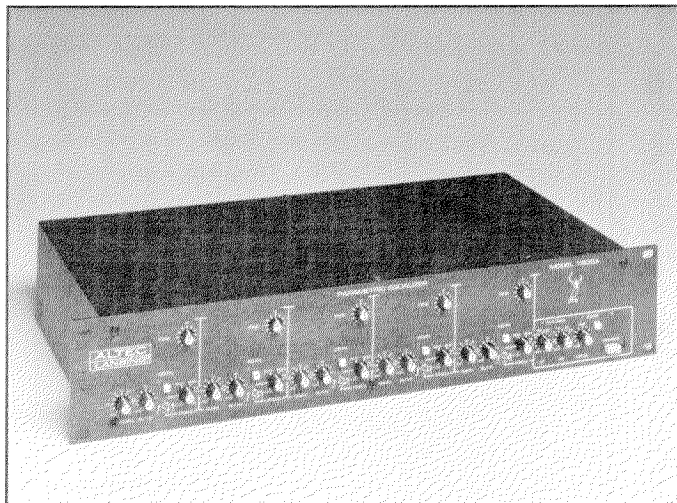




1905A Variable Bandwidth 5 Band Parametric Equalizer



KEY FEATURES

- ★ Five bands of equalization with variable frequency range
- ★ Variable bandwidth
- ★ Variable low-pass and high-pass filters

KEY SYSTEM SPECIFICATIONS

Frequency Ranges:	
Coarse:	17 Hz - 130 Hz 170 Hz - 1.3 kHz 1.7 kHz - 13 kHz
Fine:	16.5 Hz - 205 Hz 165 Hz - 2.05 kHz 1.65 kHz - 20.56 kHz
Maximum Boost/Cut:	+15/-25 dB
Bandwidth:	Variable from 1/12 - 2 octaves
Low-Pass Filter:	2.5 kHz - 30 kHz, 12 dB/octave
High-Pass Filter:	15 Hz - 300 Hz, 12 dB/octave
Frequency Response:	20 Hz - 20 kHz, ± 1.5 dB
Distortion (@ +4 dBm):	< 0.01 % @ 1 kHz
Equivalent Input Noise (20 Hz - 20 kHz, unweighted):	< -90 dBm

DESCRIPTION

The Altec Lansing **1905A** is a boost and cut five band Parametric Equalizer whose primary use is for tuning the overall frequency response of a sound reinforcement system, both to increase gain-before-feedback and to compensate for the deficiencies in the acoustic environment and the sound system.

The ability to control both the bandwidth and center frequency of a bank of filters as well as the degree of boost or cut opens up a new dimension in equalization allowing filter correction and creative filtering capabilities of unparalleled accuracy and precision.

Each of the five parametric filters allows a range from +15 dB of boost to -25 dB of cut at variable frequencies per band.

A high-pass filter control, with a variable corner frequency range of 15 Hz - 300 Hz and 12 dB per octave slope, is located on the front panel along with a low-pass filter control, with a variable corner frequency range of 2.5 kHz - 30 kHz and 12 dB per octave slope. A master level control allows the signal to be boosted up to 6 dB or cut to $-\infty$. A master EQ-IN switch allows the user to remove the equalizer from the signal path.

The **1905A** can be used as a stand alone parametric equalizer, or can be utilized in conjunction with the TEF 20 and AcoustaEQ software. This allows a higher degree of accuracy in the equalization process.

1905A Specifications (cont'd)

Inputs: One
Type: Balanced (electronically)
Impedance:
 Balanced: 20 k Ω
 Unbalanced: 10 k Ω

Outputs: One
Type: Balanced
Min. Load Impedance: 600 Ω
Source: < 60 Ω
Maximum Level: +22 dBm

Performance:
Channel Separation: > 80 dB @ 1 kHz
Overall Gain: +6 dB
Overload Indicator: +19 dBu

Connections:
Input: 3 pin XLR female
Output: 3 pin XLR male

TEF-20 Interface:
Input: Two BNC
Outputs: BNC
Power: 3 pin IEC

Power Requirements:
Voltage: 110/120/220/240V, 50/60 Hz
Consumption: < 15 VA

Weight:
Net: 9.92 lbs (4.5 kg)
Shipping: 15.44 lbs (7 kg)

Dimensions:
Width: 19 inches (482 mm)
Depth: 9.25 inches (235 mm)
Height: 3.5 inches (89 mm)

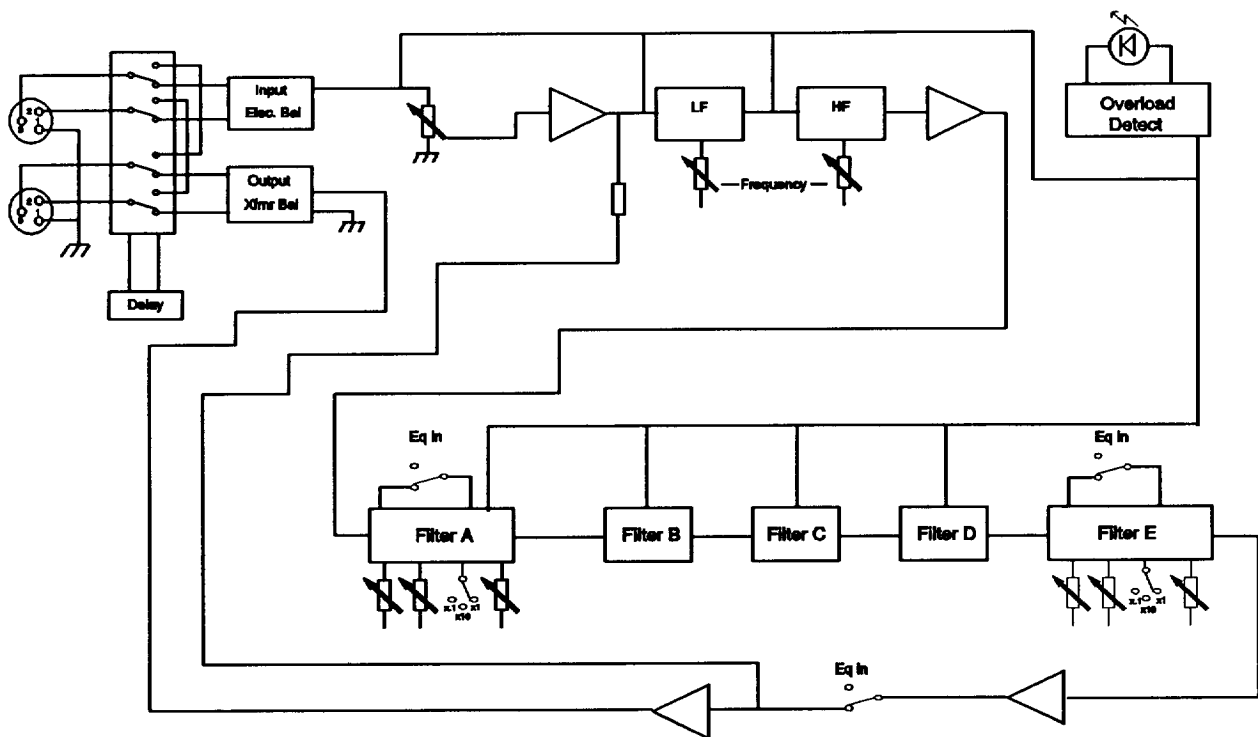


Figure 1 Block Diagram of the 1905A

ARCHITECT'S and ENGINEER'S SPECIFICATION

The equalizer shall have 5 bands with a coarse adjustable frequency range of 17 Hz - 13 kHz, and a fine range of 16.5 Hz - 20.56 kHz. Furthermore, the filters shall provide a variable boost/cut of +15/-25 dB per band.

The front panel shall have the following controls per band: a gain control that is variable from +15 dB to -25 dB; a bandwidth control which is variable from 1/12 to 2 octaves; a coarse frequency control which is variable from 170 Hz and 1.3 kHz; a fine frequency control that is variable between 165 Hz and 2.05 kHz; a multiplier switch which changes the overall frequency by .1x, 1x, or 10x; an equalizer in/out switch with LED indicator. The front panel master controls shall be: a low pass filter variable from 2.5 kHz to 30 kHz, 12 dB/octave; a high pass filter variable from 15 Hz to 300 Hz, 12 dB/octave; a master gain control variable from $-\infty$ to +6 dB; a master equalizer in/out switch with LED indicator; an overload indicator; and an on/off switch.

The rear panel shall have input and output

connectors, input and output connectors for use with the TEF-20, a ground lift switch, an IEC connector, and a 5x20 mm fuse holder.

The input shall be electronically balanced through a 3 pin female XLR. The output shall be balanced through a 3 pin XLR. The TEF-20 connectors shall be BNC type.

The equalizer shall meet or exceed the following performance specifications: frequency response at unity gain, 20 Hz - 20 kHz, ± 1.5 dB; an input noise level of less than -90 dBm; balanced input impedance of 20 k Ω ; a maximum output level of +22 dBm into loads greater than or equal to 600 Ω .

The equalizer shall operate on 110/120/220/240 Vac, 50/60 Hz, and consume less than 15 VA. The chassis shall be steel with a black front panel and top, bottom, sides, and back with white nomenclature. The chassis shall have the following dimensions: Height: 3.5 inches; Depth: 9.25 inches; Width: 19 inches. The weight shall be 9.92 lbs.

The equalizer shall be the Altec Lansing model **1905A**.



a MARK IV company

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