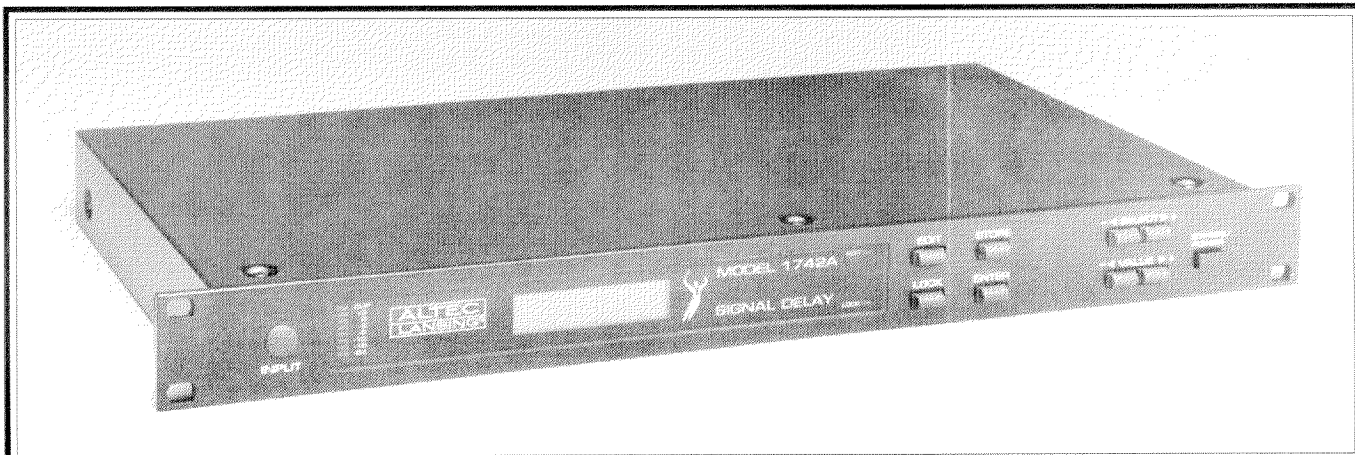




1742A Audio Signal Delay



- ★ Single Input/Two Delayed Outputs
- ★ 16 Bit AD/DA Conversion
- ★ Balanced Input and Outputs
- ★ Control Functions Lock-out

KEY SPECIFICATIONS

| | |
|-------------------------------|---|
| Frequency Response: | 20 Hz to 20 kHz, +0.5/-2 dB (Ref. 1 kHz, 0 dBm output, 500 kHz measurement bandwidth) |
| %(THD+Noise): | < 0.02%, 20 Hz to 1 kHz < 0.12%, 1 kHz to 20 kHz 0 dBm output power. |
| Signal to Noise Ratio: | >86 dB nominal. |
| Dynamic Headroom: | 106 dB |
| Input Impedance: | |
| Balanced: | 10,000 ohms |
| Unbalanced: | 10,000 ohms |
| Output Impedance: | 150 ohms |
| Nominal Input Level: | 0 dBu |
| Maximum Input Level: | +21 dBu |
| Nominal Output Power: | 0 dBm |
| Maximum Output Power: | +21 dBm |
| Input Topology: | Electronically-balanced |
| Output Topology: | Electronically-balanced |

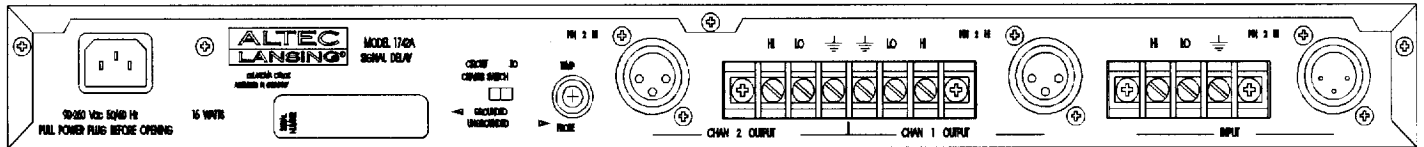
DESCRIPTION

The ALTEC LANSING model **1742A** Signal Delay is a single input/two output delay unit. Its primary use is for time synchronization of multiple loudspeakers in both cluster type and distributed sound systems. It is suitable for use in any professional or industrial application.

The **1742A** features two independent signal delay sections with individual output level controls. The delay can be measured and set in milliseconds, microseconds (for cluster alignment), feet, inches, meters, and centimeters. Up to 1086 milliseconds of delay is available for each output.

The lockout function of the **1742A** protects against unauthorized operation of the unit. Other features include an adjustable input level with VU, shelving EQ with a gain of ± 14 dB, automatic ac dropout bypass, output muting to suppress turn on/off transients, balanced input and outputs, XLR and barrier strip input and output connectors.

The universal switching power supply accepts voltages from 90 to 260 Vac, 50/60 Hz, without user intervention. Two optional plug-in isolation transformers, the model **15550A** input transformer, and the model **15560A** output transformer are available. The **1742-TMP** is an optional plug-in, positive going temperature probe.



1742A Rear Panel Layout

SPECIFICATIONS (continued)

Measurement Conditions

1. 0 dBu = 0.775 Vrms
2. 0 dBm = 1 mW = 0.775 Vrms across 600 load.
3. Measurements are referred to a 1 kHz, 0 dBu sinewave input signal unless noted.
4. Measurement bandwidth is restricted to 30 kHz unless noted.
5. No isolation transformers installed.

Equalization (shelving type):

EQ-Low: ±14 dB at 100 Hz
 EQ-High: ±14 dB at 10 kHz

Polarity:

A positive going signal applied to pin 2 of the XLR-F or the '+' terminal of the input barrier strip produces a positive going signal at pin 2 of the XLR-M and the '+' terminal of the output barrier strip.

Data Format:

16 Bit Linear, Internal 24 Bit

Display:

2 line × 16 character backlit LCD

Propagation Delay:

0.14 mS
 (Ref. delay time at 0 mS)

Connectors:

Input: 3-terminal barrier strip,
 XLR female
 Output: 6-terminal barrier strip,
 Two (2) XLR male.

Power Requirements:

90-260 Vac 50/60 Hz, 15W
 Automatically selected by unit
 without user intervention

Ground Lift:

Lifts signal common from chassis

Enclosure:

EIA standard rack-mount chassis,
 0.22" aluminum front panel.

Dimensions:

Height: 1.75 inches (4.44 cm)
 Width: 19.0 inches (48.26 cm)
 Depth: 8.13 inches (20.65 cm)

Weight:

8.0 lbs.

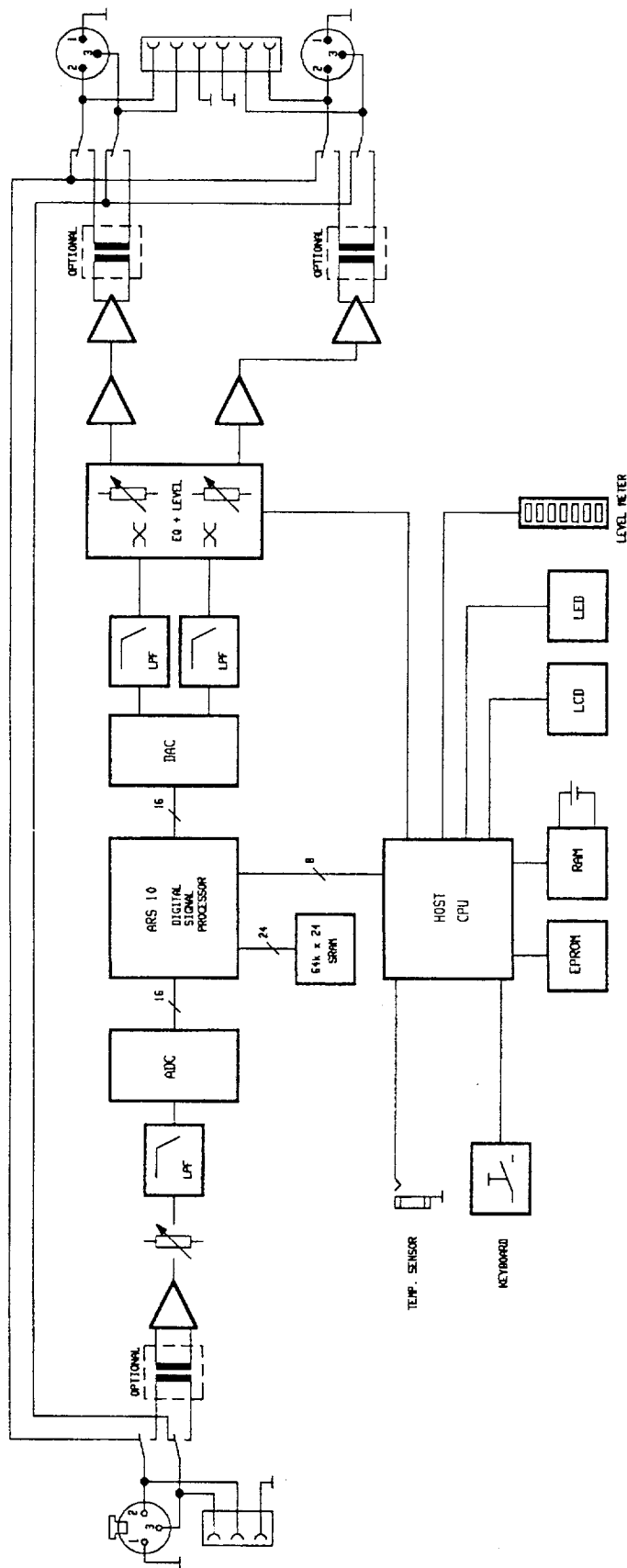
Included Accessories:

Rack-mount Hardware Kit,
 IEC power Cord,
 Operating Instructions

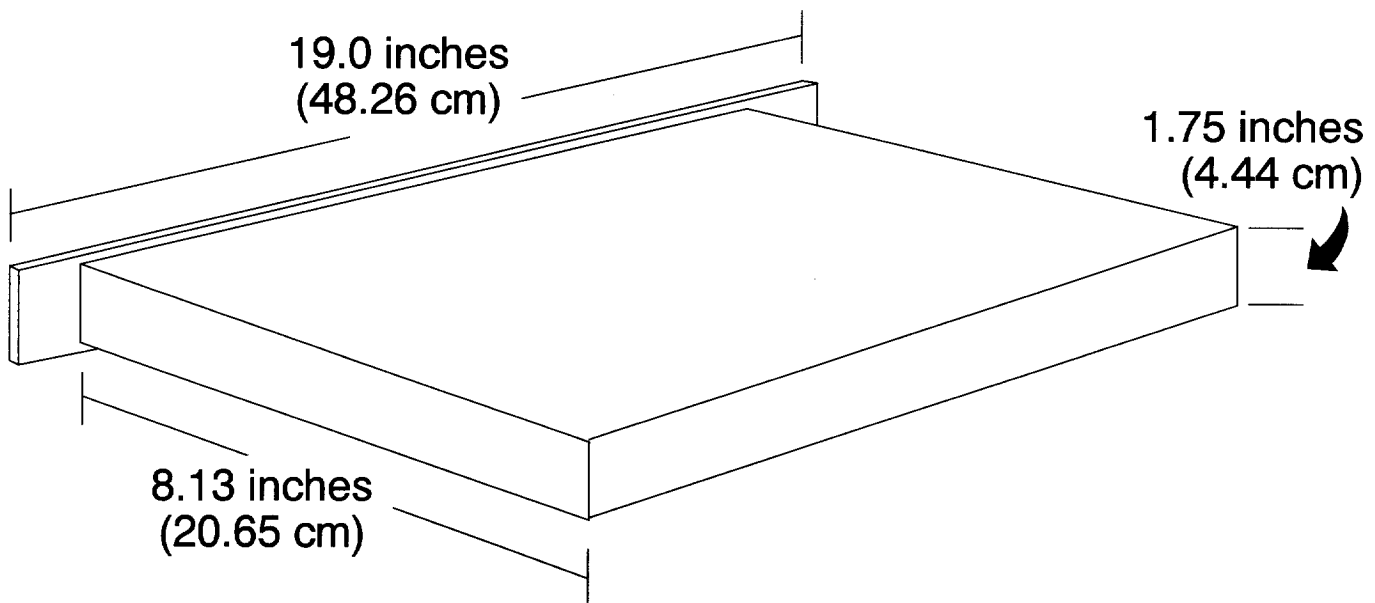
Optional Accessories:

15550A plug-in input
 isolation transformer
15560A plug-in output
 isolation transformer
1742-TMP plug-in positive
 going temperature probe

Altec Lansing continually strives to improve products and performance. Therefore specifications are subject to change without notice.



Block Diagram of the 1742A



1742A Dimensions

ARCHITECT'S and ENGINEER'S SPECIFICATIONS

The signal delay shall have two independent signal delay sections and individual output level controls. Furthermore, the unit shall have control functions lockout, automatic AC dropout bypass, and output muting.

The front panel shall have the following attributes: a variable input control with VU; a 2 x 16 character LCD readout; edit, lock, store, enter, select, value, and bypass/power switches.

The rear panel shall have input and output connectors, a temperature probe input, a ground lift switch, and an IEC connector.

The input connectors shall be balanced and consist of a 3-terminal barrier strip and female XLR connector. The output connectors shall be balanced and consist of a 6-terminal barrier strip and male XLR connector.

The signal delay shall meet or exceed the following specifications: frequency response, 20 Hz - 20 kHz, +0.5/-2 dB; signal to noise ratio greater than 86 dB; dynamic headroom of 106 dB; balanced input impedance of 10 k Ω ; a maximum output level of +21 dBm into loads greater than or equal to 600 Ω .

The signal delay shall operate on voltages between 90 and 260 VAC, 50/60 Hz, which will be selected by the universal switching power supply. 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: 1.75 inches; Width: 19.0 inches; Depth: 8.13 inches. The weight shall be 8.0 lbs.

The signal delay shall be the Altec Lansing model 1742A.



a MARK IV company

P.O. BOX 26105 • OKLAHOMA CITY, OK 73126-0105 • U.S.A.

Phone: 405/324-5311 or FAX: 405/324-8981

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