

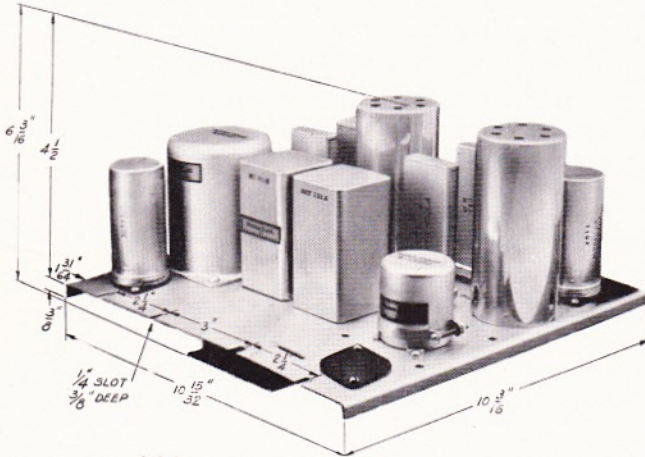
121A

LINE AMPLIFIER

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Western Electric

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The 121A Line Amplifier is an adaptable three stage unit for high quality performance as a speech input intermediate level amplifier. It is intended for use in speech input equipment and sound distribution systems.

TYPICAL PERFORMANCE CHARACTERISTICS

Frequency Range	30 to 15,000 cycles within ± 1 db gain range. 50 to 10,000 cycles within ± 0.5 db gain range.												
Source Impedance	30, 250 or 600 ohms.												
Internal Input Impedance	High impedance.												
Load Impedance	600 ohms.												
Internal Output Impedance	600 ohms.												
Gain	78 db maximum. 70 db by internal change. 45 db by eliminating first stages.												
Single Frequency Output	+28 dbm* at a fundamental frequency of 400 cycles.												
Power for less than 1% total Harmonics	+25 dbm* at a fundamental frequency of 50 cycles.												
Noise Contribution	At +28 dbm* output and gain condition as indicated: <table><thead><tr><th></th><th>78 db</th><th>70 db</th><th>45 db</th></tr></thead><tbody><tr><td>Unweighted</td><td>-42 dbm</td><td>-50 dbm</td><td>-75 dbm</td></tr><tr><td>Weighted</td><td>-52 dbm</td><td>-60 dbm</td><td>-85 dbm</td></tr></tbody></table>		78 db	70 db	45 db	Unweighted	-42 dbm	-50 dbm	-75 dbm	Weighted	-52 dbm	-60 dbm	-85 dbm
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Unweighted	-42 dbm	-50 dbm	-75 dbm										
Weighted	-52 dbm	-60 dbm	-85 dbm										
Power Required	Filaments, 6.3 volts, 2 amperes; plates, 275 volts DC, .03 ampere. Power normally obtained from Western Electric 18 or 20 type Rectifiers.												

*dbm = single frequency level in db referred to 1 milliwatt.

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MECHANICAL CHARACTERISTICS

Overall Dimensions	Length 10-3/16", Width 10-15/32", Height 6-3/16" (see photograph).
Weight	Approximately 10 pounds.
Finish	Bright aluminum lacquer on zinc plated steel.
Mounting	New type of basic amplifier unit designed for mounting in desks or other structures; also adaptable for relay rack or bay cabinet mounting through the use of 177 type mounting plates and 296 type panels. Insulation from the mounting plate, both electrically and mechanically, is accomplished by using ESO-613436-4 rubber supports.
Vacuum Tubes (Specify on order separately)	One W.E. 347A, one W.E. 348A and one W.E. 349A. Two 6J7G and/or one 6F6G (glass), or Two 6J7 and/or one 6F6 (metal).

Additional information on the 121A Amplifier as well as information on other Western Electric Speech Input Equipment and Sound Distribution Systems may be obtained from the nearest distributor listed below:

DISTRIBUTOR IN THE UNITED STATES

Graybar
ELECTRIC COMPANY

Executive Offices: 420 Lexington Avenue, New York 17, N. Y.

Offices in more than 80 principal cities

A NATIONAL ELECTRIC SERVICE

DISTRIBUTOR FOR CANADA AND NEWFOUNDLAND

Northern Electric Company
LIMITEDGeneral Offices: 1620 Notre Dame Street, W. Plant: 1261 Shearer Street,
Montreal, P. Q., Canada

TWENTY-THREE BRANCHES FROM COAST TO COAST