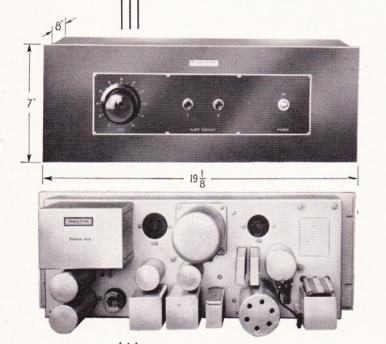
LINE AMPLIFIER

106A

## 106A Western Electric LINE AMPLIFIER



The 106A Amplifier is a two-stage, AC operated line amplifier for bridging or matching service where compactness and high quality amplification are desired. It is used to provide isolation between outgoing program lines fed from the same source and to compensate for output switching circuit and line equalization losses. It may also be used as a general purpose amplifier for applications where its gain and power level are adequate.

## TYPICAL PERFORMANCE CHARACTERISTICS

Frequency Range Source Impedance Internal Input Impedance Load Impedance Internal Output Impedance Gain

Gain Control

Output Power for less than 1% total harmonics Noise

Monitoring

Power Supply **Power Consumption** Plate Metering

30 to 15,000 cycles, within  $\pm$  1 db gain range.

600 ohms.

600 ohms or 10,000 ohms.

600 ohms.

600 ohms.

45 db when operated as a line amplifier between 600 ohm circuits; 20 db when operated as a high impedance (10,000 ohms) bridging amplifier across 600 ohm line. Nineteen 2 db steps (38 db reduction from maximum) and "off" position.

+30 dbm\* at fundamental frequency of 400 cycles;

+26 dbm\* at a fundamental frequency of 50 cycles.

-60 dbm\* Unweighted, for 45 db gain condition. (Signal to noise ratio 90 db for 30 dbm\* output.)

Separate winding on output transformer delivers voltage approximately 20 db below that of main output; useful for monitoring bus.

105/125 volts, 50 or 60 cycles, Ac.

Approximately 50 watts at 120 volts.

Two keys included for plate current measurement by KS-10003 external meter.

<sup>\*</sup>dbm = single frequency level in db referred to 1 milliwatt.

## MECHANICAL CHARACTERISTICS

Overall Dimensions

Length 19", Height 7", Depth 71/4" (see photograph).

Weight

Approximately 22 lbs.

Finish

106A-3 Rubber Finish Black Japan.

106A-15 Dark Aluminum Gray.

Mounting

Relay rack or equipment cabinet. Recessed panel construction. Panel has removable front mat to allow access to wiring and terminals in

recessed portion of panel.

Vacuum Tubes (Specify separately on order)

One W.E. 310B, one W.E. 336A and one W.E. 274A.

Additional information on the 106A Amplifier as well as information on other Western Electric Radio Broadcast Equipment and Sound Distribution Systems may be obtained from the nearest distributor listed below:

DISTRIBUTOR IN THE UNITED STATES

GraybaR

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

General Offices: 1620 Notre Dame Street, W. Plant: 1261 Shearer Street, Montreal, P. Q., Canada

TWENTY-THREE BRANCHES FROM COAST TO COAST