

### 103D AMPLIFIER



- Output Noise - - - - 8 dbm (unweighted).
- Frequency Response - See Frequency Response Curve.
- \* Gain Control - - - - 35 db continuously variable.
- Power Supply - - - - 105-125 watts, 50-60 cycles. Using 12-watt output, 1.1 amperes, 105 watts. Using 20-watt output, 1.25, 125 watts. Battery supply of 14-60 volts for relay. Standby power - approximately 55 watts.

#### EQUIPMENT CHARACTERISTICS

- Dimensions - - - - - 20-5/16" long, 9-1/16" high, 11" deep including controls.
- Weight - - - - - 40 pounds.
- Finish - - - - - Black crinkled enamel.
- Mounting - - - - - Desk, shelf, etc.

#### GENERAL

The 103D amplifier consists of a 124D amplifier (less mat and nameplates) mounted in a black finished metal cabinet, which also contains a standby relay and other miscellaneous apparatus to permit standby conditions at reduced voltages and instantaneous full power operation on energizing the standby relay. It is designed for use in high quality paging systems employing dynamic microphones.

#### ELECTRICAL CHARACTERISTICS

- Gain - - - - - 107 db.
- Source Impedance - - 15 to 60 ohms. 30 ohms nominal. May be reconnected for 60 to 250 ohms. 120 ohms nominal.
- Internal Input - - - High - unterminated input transformer. Impedance
- Internal Output - - 3/4 of nominal impedance. Impedance
- Load Impedance - - - 1.75, 7.5, 16, 30, 150, and 600 ohms. Also 70-volt loudspeaker distribution line. See OUTPUT CONNECTIONS Table on schematic.
- Output Level - - - - +41 dbm (12 watts), 2% total harmonics at 400 cycles. May be reconnected for +42 dbm (20 watts), 5% harmonic content.

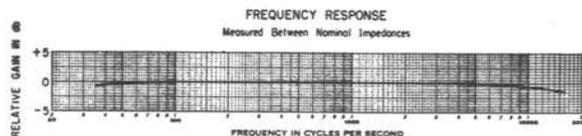
#### ELECTRON TUBES

(These tubes are not supplied with the amplifier and must be ordered separately.)

	<u>W.E.</u>		<u>COMMERCIAL</u>
2 - - - - -	348A	or	6J7 or 6J7G
2 - - - - -	350B	or	6L6 or 6L6G
1 - - - - -	274B	or	5T4 or 5U4G
1 - - - - -			1612

#### REFERENCES

- ES-676175 - - - - - Assembly and Stock Lists.
- ES0-676179 - - - - - Wiring Diagram.
- ESXX-676178 - - - - - Schematic.
- BSP 024-104-104 - - 124D Amplifier.
- BSP 024-104-501 - - 103 and 124-Type Amplifiers.



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