

Use — A multi-purpose amplifier providing greater output power than most line amplifiers and less harmonic distortion than many lower-powered units of this type. Its versatility of application is outstanding in the sound system field.

Used as a line amplifier, the unit can either match or bridge 600 ohm impedances, and provides ample power capacity to feed heavily equalized transmission lines, complex switching systems or branching networks, contributing a minimum of harmonic distortion — less than is found in many lower-powered units.

As an isolation amplifier, it can be bridged on main circuits without noticeably affecting the main line transmission. Here again, power and gain are adequate for supplying even the highest level studio bus systems.

For general monitoring purposes, the 133A Amplifier has sufficient power for many studio applications. An output transformer with taps which will satisfactorily feed circuit impedances over a range from 1 to 1200 ohms has been included in its design.

Description — The 133A Amplifier is of the two-stage, push-pull type, incorporating stabilized feedback as a further assurance of high grade transmission. The unit is small in size, light in weight, permitting ready installation in new or existing systems. Resistors in cathode circuits are provided to permit easy tube checks.

Features

- Multi-purpose amplifier.
- Versatility of application, as line or isolation amplifier or for general monitoring purposes.
- Output transformer for feeding circuit impedances from 1 to 1200 ohms.
- Stabilized feedback for high grade transmission.
- Small size, lightweight.

Typical Specifications

Frequency Response: ±1 db, 50 to 15,000 cycles.

Output Noise: —65 dbm. —70 dbm with 5.2 db output pad connected.

Source Impedance: 600 ohms nominal matching, or high impedance (20,000 ohms) bridging.

Load Impedance: 1 to 1,200 ohms. See Figure 12.

Maximum Gain: 47 db with 600 ohm matching input; 21.5 db with bridging input.

Output Power: 4 watts (+36 dbm) with 1 per cent harmonics.

Power Supply: Filament 6.3 volts, 3 amperes, a-c or d-c; plate 275 volts, 66 ma., d-c.

VACUUM TUBES

Quantity Required	Western Electric	Commercial Receiver Type
2	348A	1620 (or 6J7)
2	349A	6F6
4		

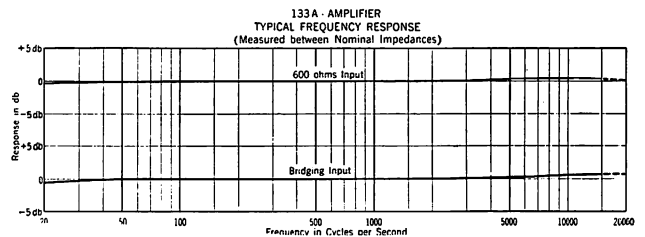
Mounting: Designed for horizontal or vertical desk mounting or for rack mounting on a 190 type or 206A Mounting Plate. For panels, see page 95, Components and Accessories.

Weight: 8 pounds.

Finish: Light gray.

Accessories: The following accessory equipment is recommended for use with the Western Electric 133A Amplifier:

- 1 — KS-10003 Meter (for measuring plate currents of vacuum tubes).
- 1 — Western Electric 18 or 20 type Rectifier.
- 1 — Western Electric 190 type or 206A Mounting Plate.



Frequency Response Curve, 133A Amplifier.