

Use — Recommended where it is desirable to feed two programs through a single program production unit simultaneously. May also be used to provide one regular and one emergency transmission channel. Each amplifier element is arranged for its own interstage gain control, which is intended as the master gain control for that channel.

Description — Two identical, electrically separate, three stage amplifiers are mounted on a common chassis. In operation, cross talk between the two channels is held below audible levels through careful circuit design and expert selection of components.

By the same means a high signal-to-noise ratio and low harmonic distortion characteristic, comparable to that featured in units of the single channel type, have been achieved in this equipment. Resistors in cathode circuits are provided to permit tube checks.

Features

- Handles two programs simultaneously.
- Twin, electrically separate, three stage amplifiers.
- Crosstalk held below audible levels.
- High signal-to-noise ratio.
- Low harmonic distortion.
- Stabilized feedback.

Typical Specifications

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

Output Noise: —37 dbm.

Source Impedance: 150 or 600 ohms matching. For bridging add proper input pad.

Load Impedance: Main output 600 ohms. Monitor output 40 ohms (approximately).

Maximum Gain: 81 db.

Gain Control: Requires two (one for each amplifier unit) 100,000 ohm potentiometers mounted externally; low capacity wiring for interconnection must be used as this is a high impedance interstage gain control.

Output Power: +24 dbm (250 milliwatts), for frequen-

cies between 100 and 5,000 cycles less than 1 per cent harmonic distortion; +22 dbm (160 milliwatts) at 50 cycles, 1 per cent harmonic distortion. Monitor output 20 db less than main output. (Isolation between main and monitor output is 20 db).

Power Supply for Complete Amplifier (2 amplifier units): Filament 6.3 volts, 3.6 amperes, a-c or d-c. Plate 275 volts, 65 milliamperes, d-c.

VACUUM TUBES

Quantity Required	Western Electric	Commercial Receiver Type
2		1603
2	348A or	1620 (or 6J7)
2	349A or	6F6
6		

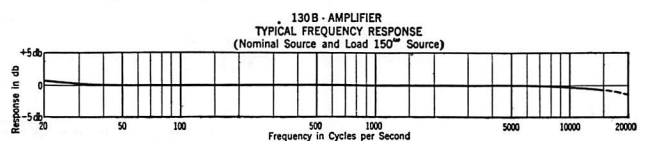
Mounting: This amplifier is designed for mounting in desks or other structures. It is also adaptable for relay rack or bay cabinet mounting thru the use of a 190 type Mounting Plate (one per plate). For panels, see page 95, Components and Accessories.

Weight: 17¼ pounds.

Finish: Light gray.

Accessories: The following accessory equipment is recommended for use with this amplifier:

- 2 — 100,000 ohm potentiometers, Western Electric BA-73987-3 or BA-73987-4 (for gain controls).
- 1 — KS-10003 Meter (for measuring plate currents of vacuum tubes).
- 1 — Western Electric 18 or 20 type Rectifier.
- 1 — Western Electric 190 type Mounting Plate (one mounts one 130B Amplifier).



Frequency Response Curve, 130B Amplifier.

