PRE-MIXING AMPLIFIER

for use IN SPEECH INPUT or SOUND SYSTEMS

Mounting four identical two-stage amplifiers on a single compact chassis, the Western Electric 129A Amplifier provides four electrically separate high quality channels in which input from an equivalent number of low level sources such as microphones or reproducers can be simultaneously prepared for entry into a mixing network.

Each amplifier unit has been especially designed to afford maximum protection against thermionic disturbances which would otherwise be apparent at low operating levels. Adjustable clamping rings on the mounting plate permit rotating the input transformers to the position of minimum pickup as a further precaution against electromagnetic field interference.

BOOSTER AND ISOLATION AMPLIFIER APPLICATIONS

The four units of the 129A Amplifier comprise a thoroughly flexible equipment which can be adapted for use in combination pre-mixing-booster circuits, or operated as a group of isolation amplifiers. Their output power capacity is adequate for serving either main amplifier inputs or medium level bus systems without danger of overloading.

Power is supplied to these units from an external source.
TYPICAL ELECTRICAL CHARACTERISTICS FOR EACH OF THE FOUR AMPLIFIER ELEMENTS

Gain: 40 db
Gain Control: Not included
Operates From: 30, 250 or 600 ohms
Operates Into: 600 ohm load
Output Power: Normal .01 watt (+10 dbm*)
Maximum .038 watt (+16 dbm*) with approximately 1% total harmonic distortion
Output Noise: $-82 \text{ dbm}^*$ unweighted
$-87 \text{ dbm}^*$ weighted

Frequency Characteristics: Flat within ±1 db over the range 30 to 15,000 cycles

* (Ref. .001 watt)

POWER SUPPLY REQUIRED FOR COMPLETE AMPLIFIER — (four Pre-amplifiers)

Filament: 6.3 volts, 3.2 amperes
Plate: 275 volts, 30 milliamperes dc. (Pre-amplifiers A and B can be supplied from one source while C and D are supplied from another; 1.6 amp. filament and 15 milliamperes plate required for each half of amplifier.)

(Filament and plate supply may be obtained from 18 or 20 type Rectifiers.)
EQUIPMENT CHARACTERISTICS

Panel Size: 17 7/8 inches by 10 5/16 inches. The apparatus extends approximately 4 1/2 inches from the front and 2 1/4 inches from the rear of the panel.

Weight: 20 1/4 pounds

Mounting: Designed for mounting on a special 177 Type Mounting Plate. Flexible rubber mountings are furnished. One 129A Amplifier may be mounted on one plate, requiring 10 1/2 inches of vertical space on standard 19 inch racks or bay cabinets. A Special 296 type panel is required as a face mat for the Mounting Plate.

Vacuum Tubes:

The following vacuum tubes required for operation must be specified separately on the order:

4 — 1603 Vacuum Tube
4 — Western Electric 348A Vacuum Tube

In an emergency, if these tubes are not available, the following may be used:

6C6 or 77 in place of 1603
1620 or 6J7 in place of 384A

Accessories:

The following accessory equipment is recommended for use with the 129A Amplifier:

KS-10003 Meter (for measuring plate currents of vacuum tubes)
Western Electric Special 177 Type Mounting Plate (one mounts one 129A Amplifier)
Western Electric Special 296 Type Panel (blank mat for Mounting Plate)