

Plug-in Pre-amplifier

Type BA-1-H

FEATURES

- Plug-in construction permits easy removal for servicing
- Small, compact design. Six of these amplifiers can be mounted in 7-inch of rack space
- Simple two-stage circuit using printed-wire board makes parts easy to locate for maintenance
- Excellent plug-in contact efficiency. Unit uses Cinch-Jones "2400" series plugs
- Tubes are shielded by easily removed tube shields
- Transformers are of hum-bucking coil construction with magnetically shielded cases
- Chassis provides mounting hole to accommodate Type FA-35-G bridging volume control
- Uniformity of performance assured by use of printed-wireboard

WHERE TO USE

The General Electric Type BA-1-H plug-in pre-amplifier is designed for use as a microphone pre-amplifier or as a booster amplifier between mixer bus and the program amplifier of a studio-audio system. It can also be used as an isolation amplifier when provided with a suitable bridging resistance, such as Type FA-35-G bridging volume control.

This pre-amplifier, when used in conjunction with Type BA-12-C plug-in program/monitor amplifier, makes it possible to assemble a complete studio-audio system employing only two basic amplifier types.

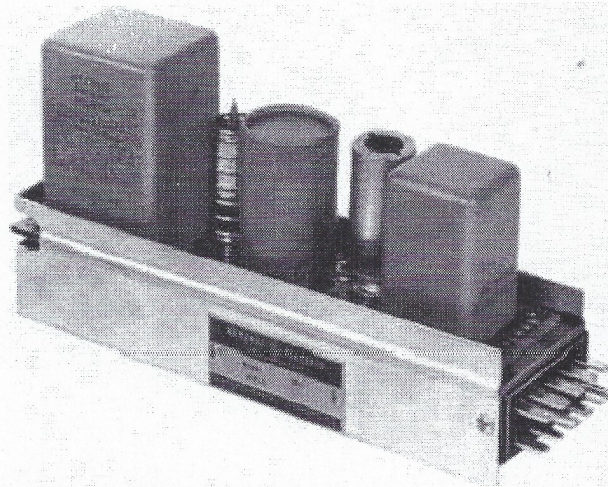
DESCRIPTION

The Type BA-1-H plug-in pre-amplifier consists of a single plug-in unit that utilizes a printed-wire board on which are assembled all the amplifier components. This assembly is mounted in a wrap-around frame incorporating a ten-pin Cinch-Jones "2400" series plug.

Electrically, the Type BA-1-H consists of two resistance coupled stages using Type 5879 tubes. A feedback loop is used around the two stages. Specially designed input and output transformers with hum-bucking coil construction and alloy shields are used.

An unloaded transformer input is employed to give maximum gain and optimum signal-to-noise ratio from high-quality broadcast microphones.

A Type FA-35-G bridging volume control is available as an accessory. This control may be mounted in a hole which is available for this purpose on the Type BA-1-H amplifier. When mounted, this control provides a 10,000-ohm input impedance for use as a bridging or continuously variable-input volume control.



Plug-in pre-amplifier, Type BA-1-H

MECHANICAL SPECIFICATIONS

UNITS

Type number covers single plug-in assembly.

DIMENSIONS

Height	4 $\frac{5}{8}$ inches	Width	2 $\frac{1}{8}$ inches
Length	10 $\frac{1}{4}$ inches	Weight	2 $\frac{1}{2}$ lbs

MOUNTING

Six of these pre-amplifiers or three pre-amplifiers and one Type BP-10-B plug-in power supply can be mounted on a Type FA-23-B shelf (accessory) for rack mounting. Up to seven pre-amplifiers can be mounted in a Type BC-11-A audio console.

OPERATING CONDITIONS

Maximum cabinet ambient temperature:	130 F (55 C)
Maximum relative humidity:	95 percent

ELECTRICAL CONNECTIONS

All connections are made via a 10-pin "2400" series Cinch-Jones plug, which is the standard plug used on all our plug-in units.

SAFETY PROVISIONS

No B+ power is applied to the unit unless it is plugged into its mating connector. The exposed soldered eyelet points on the top side of the board are protected with an insulating coating of resin varnish.

ELECTRICAL SPECIFICATIONS

PERFORMANCE

Frequency Response:	± 1 db 50-15,000 cps.
Gain:	40 db

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Harmonic Distortion: 0.5 percent or less at +18 dbm,
50-15,000 cps.
Noise -80 dbm or less.

POWER REQUIREMENTS

0.3 ma at 6.3 volts a-c (filament power)
Filaments biased at +20 to +50 volts d-c (supplied by BP-10-B power supply).

SIGNAL INPUTS

Input Impedance Unloaded transformer.
Source Impedance: 30/150/250/600 ohms connections
(150 ohms as shipped.)

SIGNAL OUTPUTS

Rated output, +18 dbm; output impedance, 600/150 ohms;
600 ohms as shipped.

TUBE COMPLEMENT

2 Type 5879

INTERCHANGEABILITY

Electrically and mechanically interchangeable with previous Type BA-1-F plug-in pre-amplifier.

COMPLIANCE

Complies with all applicable FCC and RETMA specifications.

HOW TO ORDER

When ordering, please specify: Type BA-1-H plug-in pre-amplifier (requires an external power supply).

ACCESSORIES

Type BP-10-B plug-in power supply, for Types BA-1-H's and/or BA-12-C's. (Type BP-10-B uses 200 watts at 110 volts a-c and will supply power for 25 Type BA-1-H pre-amplifiers or three Type BA-12-C program/monitoring amplifiers.)

Type FA-23-B shelf, for mounting various plug-in amplifiers. The Type FA-23-B shelf requires seven inches of vertical-rack space, and will accommodate six Type BA-1-H pre-amplifiers, or four Type BA-12-C program/monitoring amplifiers, or Type BA-9-A uni-level amplifiers; or two Type BP-10-B power supplies or combinations of these plug-in units.

Type FA-35-G bridging volume control, for use with Type BA-1-H and BA-12-C amplifiers. It is designed to convert a 600-ohm amplifier input to a 10,000-ohm balanced-bridging service and may be used on line levels up to +40 dbm. When used with the Type BA-1-F it is connected ahead of the input transformer.