

# OPERATORS MANUAL

**Model HPA Jr**  
**Single Channel Headphone Amplifier**

## APPLICATIONS

The HPA Jr headphone amplifier is a compact, battery/external Vdc powered amplifier designed to interface your favorite full-sized professional headphone to a variety of audio input sources. Now you won't be limited to small, poor quality in-ear or "walkman" type headphones for your monitoring or listening needs. The HPA Jr will allow you to drive headphones of many impedances to more than adequate listening levels with a full, rich sound not obtainable at low output levels or with lightweight personal earpiece / headphones. You can use the HPA Jr for such professional purposes as increased monitor levels from: mixers, portable VCR's, tape recorders or R-DAT's, personal listening to keyboards and synthesizers or monitoring of home studio gear. You can have fun using an HPA Jr to produce "concert hall" sound from your "walkman" type player, VCR, CD player or tape deck or from any source with a headphone or line out signal.

## FEATURES

**Stereo/Mono Selector Switch:** allows you to hear a monaural source in both ears or to "mono-up" a stereo (or two channel) source.

**Input Sensitivity Switch:** allows selection of either -10dBm or -30dBm input levels so you can match the HPA Jr to your input source.

**Battery/External DC Operation:** you can power the HPA Jr with either two 9 volt transistor radio type batteries or with any 12-18 Volt dc source through the "EXT +12Vdc" 3.5mm jack.

**Standard 1/4" Tip/Ring/Sleeve (stereo) I/O Connectors:** Both input and output connectors are the commonly available 1/4" TRS type... NO ADAPTERS NEEDED for most headphones!

**Power Switch With LED Indicator:** a convenient pushbutton switch for power on/off, along with a red LED power on indicator.

**Belt Clip:** for convenient hands-free operation.

## INSTRUCTIONS FOR USE

**Battery Power:** Install two 9 Volt batteries (Duracell MN1604 or equal) in the battery clips provided, using the two polarized connectors. Access to the battery compartment is gained by removing the four phillips head screws (two on the sides, two on the bottom) on the unit and sliding off the back cover. When the power switch is pressed, the red LED will glow showing correct battery installation. Fresh battery life is approximately six hours of continuous operation.

**External DC Power:** Connect a tip/sleeve (mono) 3.5mm plug to the "EXT +12Vdc" jack on the bottom of the unit. IMPORTANT NOTE: Please observe proper polarity when using external power - the TIP of the plug should be "+" and the SLEEVE "-". 12-18Vdc may be applied, either from external batteries or via an ac/dc converter like the GOLD LINE model BE1. A switch in the jack disconnects the internal batteries when external Vdc is applied.

**Input/Output Connectors And Gain Setting:** Always begin with the HPA Jr sensitivity set to its lowest (-10dBm) gain setting. (The sensitivity switch positioned AWAY from the red dot.) The sensitivity switch is located inside the HPA Jr. For access to the sensitivity switch, see Battery Power above. Connect the input source to the INPUT jack using a 1/4" tip/ring/sleeve plug: TIP is left channel in, RING is right channel in and SLEEVE is common/shield. Connect the headphones to the OUTPUT jack, again using a standard 1/4" TRS plug (usually found on most headphones). A slight rushing sound in the headphones when the power switch is depressed (with no input signal applied) will indicate that the HPA Jr is functioning. With the level controls at their fullest counter-clockwise positions (off), apply the input signal. Adjust the level controls for a comfortable listening/monitoring level. If it is not possible to produce enough gain from the input source being used, turn the power off and reset the sensitivity switch to -30dBm (red dot) position. Apply power and repeat adjustment of the level controls, always beginning at the off (counter-clockwise) position to protect the headphones and your ears. The HPA Jr's high input impedance allows you to connect it to a variety of sources without loading them, thus you can plug into the headphone jack of most consumer equipment as well as the line out of tape decks, synths., and home studio recording equipment. HELPFUL HINT: If your input source has its own output level or volume control, you can use it to fine tune the resolution of the HPA Jr's level controls. Set the source's level/volume control to the point where you can obtain the most comfortable control range (resolution) with the HPA Jr's level controls. Also use any source level/volume control to trim the input to the HPA Jr to prevent overload distortion, especially if the input signal exceeds -10dBm.

## SPECIFICATIONS

Frequency Response:..	5Hz - 30kHz $\pm$ 1/4dB			
Nominal Impedance:...	50k $\Omega$ or higher			
Output Impedance:.....	4 $\Omega$			
Input Sensitivity:.....	@1kHz for maximum output			
(Selectable)	-10dBm or 245mV			
	-30dBm or 25mV			
	Power Supply	Output Z	Output Power	Output Voltage
Total Output Level:....	12V	600 $\Omega$	120 $\mu$ W	6V
	12V	8 $\Omega$	3W	3.5V
	18V	600 $\Omega$	160mW	7V
	18V	8 $\Omega$	5W	4.5V
Power Requirements:..	12-18Vdc; internal batteries (2 @ 9V) or External DC source			
"Y" Cable Hookup:....	HPA Jr will drive 2 headphones on a "Y" cable but the total load impedance should not be less than 8 $\Omega$ .			
Approvals:	Emissions: - EN 55022 B - FCC Class B			
	Immunity: - EN 55024 B			

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Pursuant to Part 15 of the FCC rules, any changes or modifications not expressly approved by Gold Line may cause harmful interference and void the FCC authorization to operate the equipment.

### WARRANTY and Factory Service

GOLD LINE products are proudly made in the USA and are covered by a one year limited warranty. For details of this warranty, consult the enclosed warranty registration card or your local dealer.

GOLD LINE Customer Service will help you get the most from your new amplifier. For answers to questions regarding use of the unit, or for information not covered in this manual, please write us. If you are experiencing difficulties with your amplifier, please consult your dealer regarding factory service. If factory service is needed, you may call or fax us between 9:00am and 4:30pm US Eastern Time for instructions and a return authorization.

**Enter your serial#** \_\_\_\_\_ **date of purchase** \_\_\_\_\_

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