

# ALLNIC AUDIO

## HPA-5000 STEREO HEADPHONE AMPLIFIER



## OWNER'S MANUAL

# ALLNIC AUDIO HPA-5000 STEREO HEADPHONE AMPLIFIER

Thank you for purchasing this Allnic Audio HPA-5000 Stereo Headphone Amplifier. We are certain your trust in Allnic Audio and Hammertone Audio, as well as your appreciation for the sound of this high-quality device, will be rewarded by its excellent operation for years to come.

Please read this entire manual before you connect the HPA-5000 to the other components of your system and the wall outlet.



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**\*\* Information and specifications for the Allnic Audio product described in this manual are subject to change without notice.**

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Please read about **SAFETY** before you attempt to use the HPA-5000 - we care about our customers and the equipment, and we want you to enjoy this product for a long time!

## INTRODUCING THE HPA-5000 STEREO HEADPHONE AMPLIFIER

The HPA-5000 is Allnic Audio's stereo Headphone Amplifier. The HPA-5000 is an Output Transformer-less (OTL) and Output Capacitor-less (OTC) amplifier design, utilizing a true balanced Positive-Negative cancellation circuit.

The HPA-5000 has a voltage gain of +28dB, and a maximum output of 5 watts. It works best with headphones having an impedance of from 30 to 50 ohms.

The HPA-5000 has the following features:

- High-quality, NOS tubes
- True OTL/OCL design
- Pure Class A operation
- New vacuum tube damping technology – Allnic Audio's patented "Absorb GEL tube damper" technology prevents harmful vibrations from reaching the driver tubes and, therefore, prevents micro-phonic noise propagation in the tubes. The Allnic Audio Absorb Gel damper technology effectively solves a problem that plagues most tube amplification systems. Provided other tube components do not introduce micro-phonic noise into your system, with the Absorb Gel damping system, you will enjoy a degree of transparent sound that will surprise and please you.
- As are all Allnic Audio products, the HPA-5000 is fully RoHS (EU Reduction of Hazardous Substances regulation) compliant in construction and materials

## WHAT'S IN THE BOX?

Please check that the shipping box contains the following:

- One (1) Allnic HPA-5000 Headphone Amplifier – in natural aluminum or black, depending on your order request
- One (1) IEC type power cord
- One (1) Owner's Manual

Note:

- 1) The HPA-5000 ships with the tubes installed.
- 2) The HPA-5000 will work with most IEC type aftermarket power cords. Of course, only you can determine the power cord that works most synergistically with the HPA-5000 in your system.
- 3) Be sure the HPA-5000 is labeled for the AC voltage of your location. If it is not, please contact Hammertone Audio (See Figure 1).

We advise that you keep the box and other packing materials that your HPA-5000 came in. It will be useful if you sell your HPA-5000 or in the unlikely event you need to ship it for service.

## SAFETY

- **Remove ALL protective cushioning material inside the tube chimneys before operation. The tube chimneys should contain NOTHING except the tubes.** You may experiment with the tube damping rings, on or off.
- Disconnect the power cord by pulling the plug, not the cable.
- Do not attempt any repairs. Do not remove the unit's chassis covers without specific authorization from Hammertone Audio.
- Keep the power cord away from heat sources
- Keep the unit away from liquids – do not allow any liquid to enter the interior of the unit.
- When the unit is moved from a cold to a warm environment, allow sufficient time for any condensation to evaporate before plugging the HPA-5000 into an AC connection.
- See the notes on "Location, Location, Location".

## CLEANING

### A. Chassis

Use only a soft, lint-free cloth dampened slightly with water only (NO cleaning fluids!) to clean the faceplate and chassis of the HPA-5000.

### B. Connectors

You may use any good quality contact cleaner recommended for such applications to clean the contacts from time to time, as you deem appropriate.

## INITIAL SET-UP

### A. LOCATION, LOCATION, LOCATION

Like all audio products using tubes, the Allnic Audio HPA-5000 needs to be placed on a solid stand in a location that provides good air circulation around the Headphone Amplifier.

- DO NOT cover the top of the HPA-5000 Headphone Amplifier or tube chimneys. Make sure the unit is in a place with good ventilation (see Figure 3). The HPA-5000 is about 165mm (6.5 inches) tall and requires at least 30mm (~1 inch) clearance for good air flow above it.
- DO NOT place the unit on carpet or foam.
- DO NOT subject the unit to knocks and shocks as you move it around. This advice is meant particularly for those who may want to place the HPA-5000 on some kind of after-market isolation feet or similar devices. Dropping the HPA-5000 is not a good thing to do and may void the warranty.
- DO NOT place the unit near a strong light or heat.
- DO NOT place anything heavy on the unit.
- DO NOT allow rubber or vinyl materials to rest on the unit's chassis for long periods of time. This could discolour the metal.
  
- DO place the unit on a shelf or stand that is stable and not subject to vibration or sudden shock.
- DO consider using a high quality power cord and inter-connects, for both inputs and outputs. The HPA-5000 is a highly sensitive piece of electronic designed for neutrality and will output what you put into it.
- DO try to place the HPA-5000 away from major sources of RFI and EMI; though well shielded, the HPA-5000 will function best away from large power transformers and other sources of such interference.

### B. POWER CONNECTION

The HPA-5000 uses a standard three prong male IEC connection for AC input. You need to use a power cord with a female three prong IEC connector at one end (See Figure 1).

The HPA-5000 power supply you have purchased is set internally for AC 110/120 volt – 60 HZ operation. There is no way to change this to another AC setting without return of the unit to the factory for re-wiring, at the owner's cost,

including transport both directions.

### C. INPUTS

There are two (2) pairs of single-ended (RCA) inputs. These two pairs are located on the rear of the HPA-5000 (See Figure 1) Facing the rear of the HPA-5000, the left hand pair of inputs is labeled "2"; the right hand pair is input pair "1". Each pair of inputs is aligned vertically, with the left channel inputs at the top and labeled "L", and the "right" channel inputs on the bottom and labeled "R".

The inputs are selected for listening by using the button on the left of the front panel of the HPA-5000, with the input icon below it. Having the button out selects input pair 1; pressing the button in selects input pair 2.

The HPA-5000 has been designed and manufactured to work most synergistically with Allnic Audio phono preamplifiers.

### D. HEADPHONE OUTPUT

The HPA-5000 is equipped with a single headphone output or "jack". This one quarter inch (1/4 inch) headphone output connection is just to the left of the HPA-5000's volume control knob. Below the jack is a headphone icon (see Figure 2). Above the jack is a light that indicates that the jack is "live". The light illuminates at power on.

### E. VOLUME CONTROL

The HPA-5000's volume control is the large knob in the centre of the HPA-5000's front panel. It rotates clockwise (gain increased) and counterclockwise (gain reduced). Below the knob is a "wedge" icon indicating that the furthest extent of the counterclockwise turn is the lowest gain, while the furthest extent of the clockwise turn is the highest gain. The numbers correspond to the hours on a clock for easy gain setting reference and recall.

#### NOTE:

BE CAREFUL about differences in gain between your sources. Generally, disc players and tuners will have greater gain than phono pre-amplifiers. That means the volume setting for listening to your turntable might be too high for listening to CDs.

Please set the HPA-5000's volume control at "0" when switching between inputs 1 and 2.

## INITIAL POWER-ON

Once you have your HPA-5000 in place and all connections have been made to your source, you are ready to turn on the power for your HPA-5000. Before you power up the HPA-5000, though, be sure you have:

- **removed ALL the cushion materials from inside the tube chimneys.**
- turned the volume control of the HPA-5000 down to zero by rotating the single knob on the front of the HPA-5000 counterclockwise until it stops.
- checked that all your connections are snug

To turn on the HPA-5000, press in the button switch on the right of the front panel. Pressing the power button again will power down the HPA-5000 (See Figure 2). Above the headphone jack is a light that indicates that the jack is “live”. The light illuminates at power on.

## OPERATION

Operation is straight-forward. Volume is controlled by the volume knob and inputs are selected with the input button, as explained above.

When you are finished listening, first turn off your HPA-5000 by pressing the power switch on the right hand side of the unit’s front panel; then turn off your sources.

In the case of any failure, please contact Hammertone Audio for assistance.

## TUBES

The HPA-5000 uses the following tubes (See Figure 4):

- Four (4) x NOS 7233 triode
- Two (2) x NOS E180CC double triode
- Two (2) x NOS 6AN8 triode-pentode

All consequences of changing or attempting to change tubes are borne by the user unless by express agreement between the owner and Hammertone Audio. Allnic Audio and Hammertone Audio are not liable in any way whatsoever for any injury or loss incurred by the user or for damage to the HPA-5000, any of its parts, or tubes or replacement tubes resulting from the user changing or attempting to change tubes.

## SPECIFICATIONS FOR THE ALLNIC AUDIO HPA-5000 HEADPHONE AMPLIFIER

Inputs:	Two (2) pairs unbalanced (RCA)
Headphone Output:	One (1) one-quarter inch (1/4”)
Frequency Response:	20Hz ~ 20KHz (±0.3db)
Voltage Gain:	+28dB
Optimum Headphone Impedance:	Thirty (30) to fifty (50) ohms
Output Wattage:	Five (5) watts
Maximum Input Voltage:	Five (5) volts RMS
THD (Total Harmonic Distortion):	Less than 0.03% (1KHz, Output 1V)
S/N Ratio:	-68db (CCIR, 1KHz)
Power Consumption:	70 Watts
Tubes:	6AN8 – New Old Stock – first gain stage – no equivalents  E180CC - New Old Stock - Second gain stage - approximately electrically (not sonically) equivalent: CV8431, 7062, 5965, 12AV7, 6414, 6829  7233 – New Old Stock – no equivalents
Fuse:	AC 2A, 250V
Dimensions:	230mm (~9.1 inches) x 380mm (~12.3 inches) x 165mm (~6.5 inches) (W x D x H)
Weight:	
Unpacked:	9 Kg (~19.9 lbs)
Packaged:	11 Kg (~24.26 lbs)

## WARRANTY

All Allnic Audio amplifier products are warranted against materials and manufacturing defects for parts, excluding tubes, and labour for two (2) years from date of purchase. Tubes are warranted against materials and manufacturing defects for one (1) year from date of purchase. The warranty is transferable for the balance of the original purchaser's warranty period, provided, as stated below, no unauthorized repairs or modifications have been performed on the product. Date of purchase is the date indicated on the invoice for the product issued by Hammertone Audio.

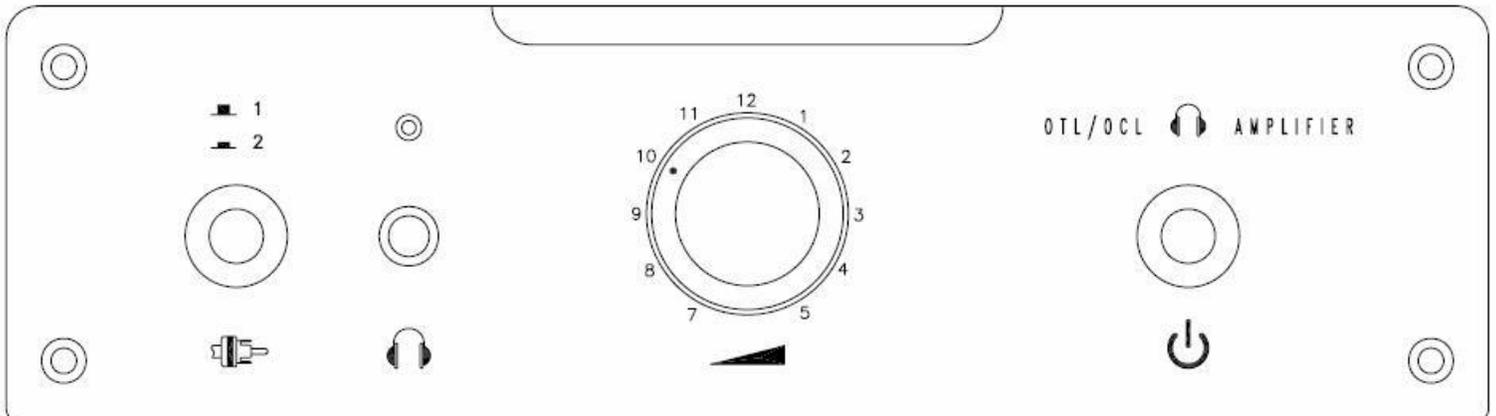
For the warranty to be valid, a defective product must be returned to Hammertone Audio for service prior to any unauthorized attempt to repair. Any repair work on an Allnic Audio product not specifically authorized by Hammertone Audio will void the warranty on the product.

## FIGURES

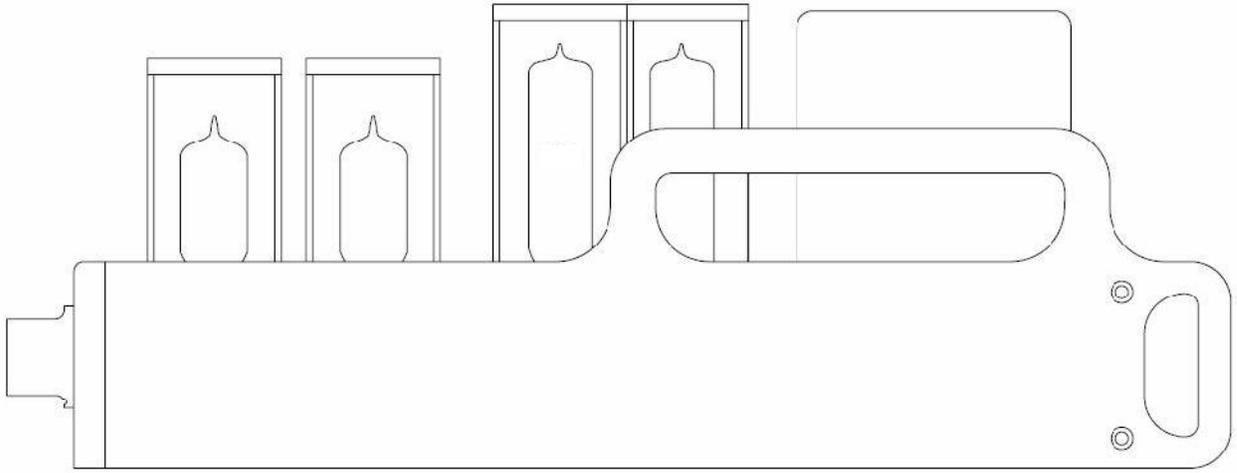
Figure 1 – HPA-5000 Rear Panel View



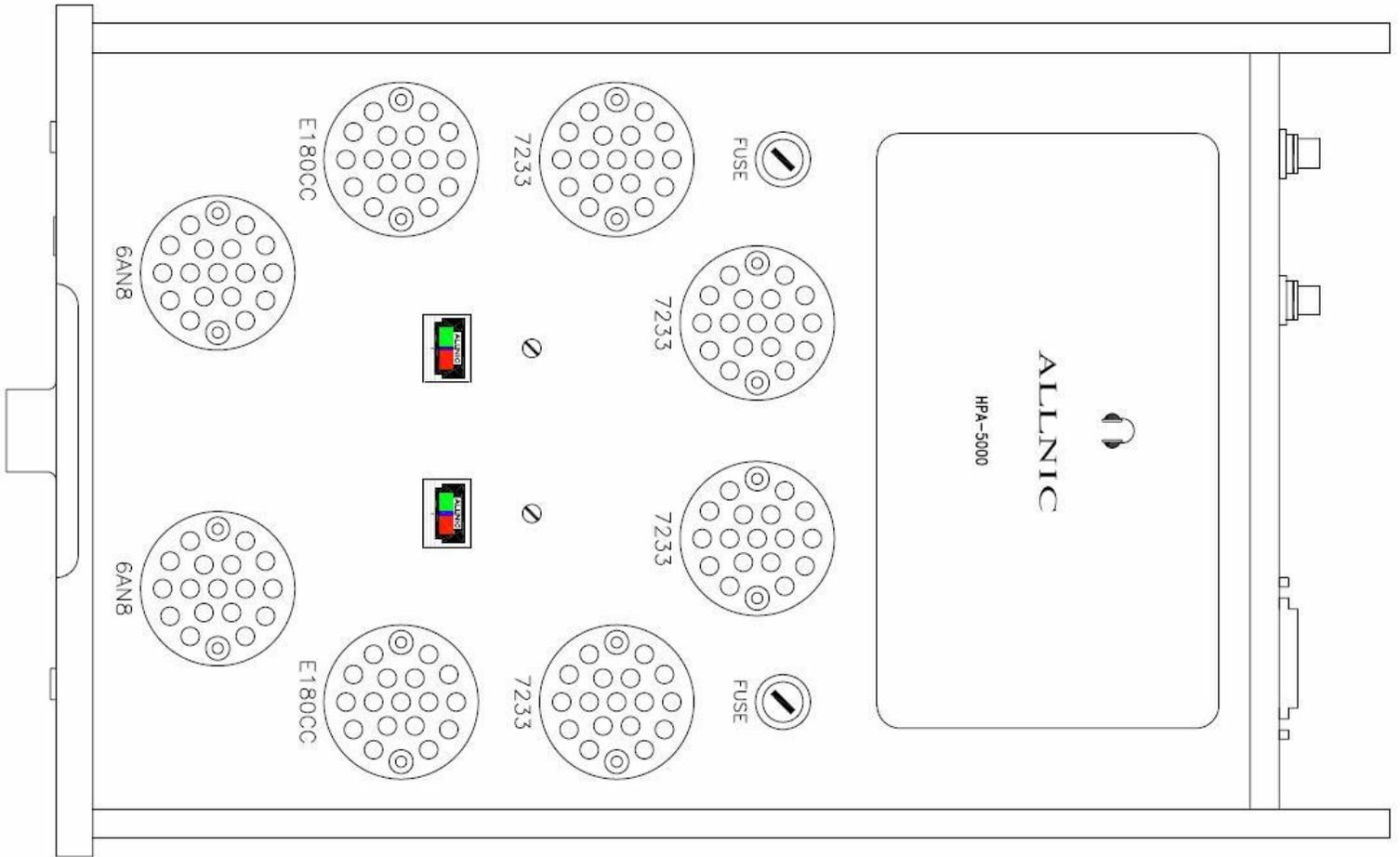
Figure 2 – HPA-5000 Front Panel View



**Figure 3 – HPA-5000 Chassis Side View**



**Figure 4 – HPA-5000 Chassis Top View**





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