

## **ALLNIC AUDIO**

# HA-5000 ACTIVE PHONO HEAD AMPLIFIER (PHONO PRE-PREAMPLIFIER)



**OWNER'S MANUAL** 

### ALLNIC AUDIO HA-5000 ACTIVE PHONO HEAD AMPLIFIER (PHONO PRE-PREAMPLIFIER)

Thank you for purchasing the Allnic Audio HA-5000 Phono Head Amplifier. We are certain your trust in Allnic Audio and its dealers worldwide, 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 HA-5000 Active Phono Head Amplifier to the other components of your system and the wall outlet. Failure to follow the guidance in this manual may result in voiding the warranty.

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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 HA-5000 Active Phono Head Amplifier - we care about our customers and the equipment, and we want you to enjoy this product for a long time!

#### INTRODUCING THE HA-5000 ACTIVE PHONO HEAD AMPLIFIER

Thank you for purchasing the ALLNIC HA-5000 Active Phono Head Amplifier. The HA-5000 is a highly sophisticated and "purist" piece of audio technology. It is intended for experienced vacuum tube audio enthusiasts who understand and have the patience to appreciate the virtues of an innovative but "no bells and whistles" approach to circuit design and the superior sonic and "vintage" characteristics of New Old Stock (NOS) tubes. The HA-5000 is not a "plug, play and forget", massmarket device aimed at vinyl playback enthusiasts generally. Like all Allnic's toptier products, it is first and foremost a state-of-the-art example of "Tube Amp Done Right". Proper care and attention, partnering with other equally high-quality equipment, and following the guidance provided in this manual will facilitate easy use and a listening experience of essentially unequalled quality for many, many years.

The HA-5000 is Allnic Audio's phono pre-preamplifier, or "Head Amplifier". It is an active, tube based device for amplification of low voltage signals from moving coil cartridges to allow connection of moving coil cartridges to the moving magnet inputs of a phono-stage, such as the Allnic H-5500, H-6500, H-7000/V, H-8000 DHT and H-10000 OTL/OCL. The HA-5000 is an active phono pre-preamplifier, not a "step-up transformer" like Allnic's AUT-8000, which uses a transformer to boost the signal from the cartridge.

The HA-5000 has the following features.

#### Innovative Fixed Bias Circuit

In the HA-5000, two Nuvistor 7895 tubes, the smallest vacuum tube, perform as amplifying devices. They magnify the tiniest signal in audio, the output voltage of MC cartridges, to match to the MM input of phono stages. Allnic applies its innovative, fixed bias circuit to achieve quiet and stable operation of the extremely sensitive 7895 tubes. The fixed bias circuit eliminates the subsonics so harmful to phono stages and inherent in the characteristics of the R.I.A.A curve, which requires amplification of the lower frequencies. The fixed bias circuit applies a sustained negative DC voltage to the grid of the tubes and to the input coupling capacitors, blocking capacitor "crossover distortion". This distortion is a common phenomenon but, unfortunately, is often neglected in pre-preamplifiers. The result of no "zero crossover distortion" is, simply, clearer and more vivid reproduction of the music.

#### Very High S/N Ratio

The above mentioned characteristics of the R.I.A.A curve demand a hum-free pre-preamplifier and, therefore, a silent power supply circuit. Even one micro volt (1/1,000,000 of one volt) of hum noise (120Hz hum) in the output signal of a phono pre-preamplifier will result 63mV to the loudspeakers. That is unacceptable, and Allnic has overcome the issue through its automatic pure vacuum tube voltage regulation circuitry. This voltage regulation circuit minimizes power supply hum noise to inaudibility.

Extremely Wide Frequency Range

Though the HA-5000 has a single gain stage and no negative feedback, its frequency range capability extends from 15Hz to 125Khz(-3dB), revealing the full richness of the musical information on vinyl.

Ultra Flexibility

The capability to follow an unpredictable musical signal with ease is strongly believed to be the heart of musicality for audio equipment. This ability can be indicated by square wave response at high frequencies, especially at 10Kh and the even more rarely achieved 20Khz. Exceeding these expectations, Allnic's HA-5000 shows a response shape that is, even at 100Khz, in a word, beautiful.

• Micro-Phonic Free Tube Damping Know-how

Allnic's Absorb-Gel® tube damping know-how reaches its zenith in the HA-5000. In the HA-5000, an extreme version of this mechanical technology applied, reducing vibration induced noise in the sensitive tube amplification circuit to a level never before realized.

• Variable Input Load Impedances

The HA-5000 has four input load impedances: 50, 100, 200, and 500 ohms, selectable from a control on the front panel. This allows loading according to the output impedances of your MC cartridges. Furthermore, these loads are purely resistive, not compound as with a stepup transformer, resulting in a pure and clean sound.

 As are all Allnic Audio products, the HA-5000 is fully RoHS (EU Reduction of Hazardous Substances regulation) compliant in construction and materials.

The HA-5000 has been designed and manufactured to work most synergistically with Allnic Audio phono preamplifiers and ZL (Zero Loss) Technology cables.

#### WHAT'S IN THE BOX?

Please check that the shipping box contains the following:

- One (1) Allnic HA-5000 Head Amplifier in natural aluminum or black finish in accordance with your order
- One (1) Allnic HA-5000 Head Amplifier Power Supply Unit in natural aluminum or black finish in accordance with your order (umbilical cord attached)
- One (1) power cord
- One (1) Owner's Manual
- One (1) Hex/Allen key

#### Note:

- The HA-5000 ships with the tubes installed.
- The HA-5000 will work with most IEC type aftermarket power cords. The Allnic ZL-3000, ZL-5000 and ZL-8000 power cables will make an excellent match. Of course,

- only you can determine the power cord that works most synergistically with the HA-5000 in your system.
- Be sure the HA-5000 is labeled for the AC voltage of your location. If it is not, DO
   NOT connect it to your AC outlet. Please contact your Allnic dealer.

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

#### **SAFETY**

- Disconnect the power cord by pulling the plug, not the cable.
- DO NOT leave the HA-5000 turned on for extended periods of time NEVER 24/7, even for (an unnecessary) "break-in" period. This will greatly increase the likelihood of premature tube and/or internal failures. Power on the unit and let it warm up for some minutes; then, when finished a listening session, do a complete power off.
- Keep the power cord away from any heat source.
- Keep the units away from liquids do not allow any liquid to enter the interior of the units.
- When the units are moved from a cold to a warm environment, allow sufficient time for any condensation to evaporate before plugging the units into an AC connection.
- Do not attempt any repairs.
- Do not remove the chassis covers without specific authorization from your Allnic dealer.
- See the notes on "Location, Location, Location".

#### **CLEANING**

#### A. Chassis and glass

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

#### 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

Like all audio products using tubes, the Allnic Audio HA-5000 and its power supply need to be placed on a solid stand in a location that provides for good air circulation around the two head amplifier units.

- DO NOT cover the tops of the HA-5000 units.
- DO NOT place the units on carpet or foam.
- DO NOT subject the units to knocks and shocks as you move them around. This advice is
  meant particularly for those who may want to place the HA-5000 units on after-market
  isolation feet or similar devices. Dropping the HA-5000 may cause damage and void the
  warranty.
- DO NOT place the units near a strong light or heat source.
- DO NOT place anything heavy on the units.

- DO NOT allow rubber or vinyl materials to rest on the units' chassis for long periods of time. This could discolour the metal.
- DO place the units on a well-ventilated shelf or stand that is stable and not subject to vibration or sudden shock.
- DO consider using a high-quality power cord and interconnects, for both inputs and outputs. The HA-5000 is a highly sensitive piece of electronic equipment designed for neutrality and will output what you put into it. Allnic's ZL (Zero Loss) Technology cables will work synergistically with the HA-5000.
- DO try to place the HA-5000 away from major sources of RFI and EMI; though well shielded, the HA-5000 will function best away from large power transformers and other sources of such interference.

#### B. POWER CONNECTION

Be sure the HA-5000 power supply power button switch is in the "off" position ("out"- not depressed) before connecting the IEC equipped power cord to the rear of the power supply and the umbilical cable to the head amplifier unit. The HA-5000 power supply uses a standard three prong male 15 amp IEC connection for AC input. You need to use a power cord with a female three slot 15 amp IEC connector at one end (see Figure 1). Please note that use of a three phase AC power source or an AC regenerating power conditioner may cause hum.

The DC umbilical cable to the pre-preamplifier unit is fixed to the rear of the power supply and connects to the rear of the head amplifier unit. The umbilical cable must be inserted snugly into the connector on the rear of the head amplifier unit and then secured, using the screw collar around the connector (see Figure 3).

The HA-5000 you have purchased is set internally for AC 110/120 volt - 50/60 HZ operation or 220/230 volt - 50/60 Hz operation. There is no way to change this to another AC setting.

#### C. INPUTS

In the centre of the four RCA input connections on the rear of the HA-5000's chassis is a screw type connector. This connector is the ground connection for ground wires from cartridges and/or turntables. (see Figure 3).

There are two (2) pairs of single-ended (RCA) inputs (see Figure 1). The right and left channel input connections for the two pairs are the bottom four RCA connections, surrounding the ground connection. The left channel input connections are on the right of the unit, facing the HA-5000's rear panel (on the left if you are facing the front of the unit). The right channel input connections are on the left of the unit, facing the HA-5000's rear panel (on the right if you are facing the front of the unit).

#### D. OUTPUTS

The HA-5000 is equipped with one pair of single-ended (RCA) outputs on the rear of the head amplifier unit (see Figure 3). The right and left channel output connections are the top pair of RCA connections. The left channel output connection is on the right of the unit, facing the HA-5000's rear panel (on the left if you are facing the front of the unit). The right channel output connection is on the left of the unit, facing the HA-5000's rear panel (on the right if you are facing the front of the unit).

#### **INITIAL POWER-ON**

Once you have your HA-5000 in place, connected the DC power umbilical cable between the power supply and the head amplifier, properly mapped and secured all connections to your turntable and preamplifier or integrated amplifier's moving magnet inputs, and installed the power cord and plugged it into an AC receptacle, you are ready to turn on the power for your HA-5000.

**BEFORE** you power up the HA-5000, be sure you have:

- selected the input connections that you want to use, MC1 or MC2, using the button on the front of the head amplifier unit
- turned the volume down on or muted the preamplifier or integrated amplifier to which you have connected your HA-5000
- checked that all your system connections are properly mapped and secure

Turn on the HA-5000 by pressing the button on the front panel of the power supply unit down to the "on" position.

The running LEDs on the fronts of both the power supply and the pre-preamplifier unit will illuminate.

The Allnic Audio HA-5000 is now ready for operation.

#### **OPERATION**

At this point, if you have not already done it, turn the front panel load selection control knob to the loading factor that you think will work best for your moving coil cartridge.

The HA-5000 has four input load impedances: 50, 100, 200, and 500 ohms, selectable from a control on the front panel (see Figure 4). You may need to experiment with different load settings to find the one best suited for your cartridge.

From this point on, operation is straight-forward. Of course, always be sure you have turned the volume down to zero or otherwise muted your preamplifier or integrated amplifier before changing loads with the front panel control.

In the case of any failure, please contact your Allnic Audio dealer.

#### **TUBES**

The HA-5000 uses the following tubes:

- 2 x Nuvistor 7895 (equivalent 6CW4)
- 2 x 7233 (no equivalent) (2025 forward production will replace the 7233 tubes with 6C19P) NOT equivalent to 7233; 7233 and 6C19P ARE NOT INTERCHANGEABLE.
- 2 x 6BH6 (equivalent CV3908) (2025 forward production will replace 6BH6 with 5654)

#### TROUBLESHOOTING TUBES

Please contact your Allnic Audio authorized representative for assistance with the following.

If your HA-5000 loses audio output on a channel, it could indicate tube failure **BUT please check** your other equipment and connections first. If the issue is with the HA-5000, then if you have access to a properly functioning tube tester that can test the HA-5000's tubes, you can use it to determine which tube(s) failed.

#### **SAFETY!!** In all cases:

- POWER OFF and disconnect the HA-5000 power supply from the AC source and disconnect the DC umbilical cord from the preamplifier unit BEFORE!!! swapping and replacing tubes and checking/replacing the fuse.
- After checking/changing the tubes in the power supply, REPLACE THE COVER of the power supply BEFORE!!! re-connecting it to the AC source and the preamplifier unit.

If you do not have access to an appropriate tube tester, you can identify the failed tube(s) for replacement by swapping tubes between the right to the left channels. Carefully remove the cover from the preamplifier unit. Swap the R/L pair of Nuvistor tubes. If the problem "follows a tube" when you power up the HA-5000 again, replace the failed tube with a good one.

If swapping the Nuvistor tubes does not reveal the problem, then you can try swapping the 6BH6 tubes in the power supply. Carefully remove the cover from the power supply. Again, if the problem "follows a tube" when you replace the cover of the power supply and reconnect it to the AC source, replace the failed tube with a good one. If that does not reveal the problem tube, repeat this procedure with the 7233 tubes.

In the unlikely event that your HA-5000 has lost output on both channels, first check the fuse. If it has not failed, carefully remove the cover from the preamplifier unit and replace both Nuvistor tubes. If replacing the Nuvistors does not solve the problem, then repeat the procedure with the power supply, replacing first the two 6BH6 tubes and if that does not work, both the 7233 tubes.

If your HA-5000 has lost output completely and the fuse in the power supply unit has failed, replace the fuse with the spare in the IEC mount or an inexpensive one of the same rating to avoid risk if you are using a more costly aftermarket fuse. Then repeat the entire process above.

As experienced users of vacuum tube equipment know, any tube can be carefully machine tested and selected and re-tested under real use conditions at the factory but still fail early. Because of their age, vintage tubes can be especially fragile and more prone to fail prematurely in use despite intensive testing. Included tubes are guaranteed for the time and per the conditions in the Warranty section below. It may take shipping time, however, to transport replacements to you. As

many experienced users do, you may want to acquire at your own cost and risk a set of back-up replacement tubes to have on hand for immediate use "just in case".

Allnic Audio and its authorized representatives make no representations nor any warranty regarding the quality of tubes obtained from third parties and are not responsible for any issues or losses relating thereto. All consequences of changing or attempting to change tubes are borne by the user unless by express agreement between the owner and the owner's Allnic dealer. Allnic Audio and its authorized representatives are not liable in any way whatsoever for any damage to the HA-5000 or any injury or loss incurred by the user resulting from the user changing or attempting to change tubes.

#### **SPECIFICATIONS**

#### FOR THE ALLNIC AUDIO HA-5000 PHONO HEAD AMPLIFIER

• Inputs: MC (Moving Coil – single-ended RCA) × 2 pair

• Outputs: Single-ended RCA × 1 pair

• Ground: Screw Type x 1

• Frequency Response: 15KHz to 30KHz, flat

Voltage Gain: +30dB

• THD (1kHz): Output 0.3V, 0.06%

Output 1.0V, 0.16%

S/N Ratio: More than -100 dB (CCIR)

Maximum Input 530mV (20Hz ~ 20KHz) Non-Clipping

Voltage:

• Input Load Impedances: 50, 100, 200 and 500 Ohms selectable

Tubes:

Pre-preamplifier Unit: 2 x Nuvistor 7895 (equivalent 6CW4)

Power Supply: 2 x 7233 (no equivalent) (2025 forward production will

replace the 7233 tubes with 6C19P) **NOT equivalent to 7233**; **7233** and **6C19P ARE NOT INTERCHANGEABLE**. 2 x 6BH6 (equivalent CV3908; can substitute 5654, 6AH6 –

2025 forward production will ship with 5654)

• Fuse: AC 2A, 250V 5x20mm slow-blow for 110/120V regions

AC 1A, 250V 5x20mm slow-blow for 230/240V regions

Dimensions (Both units)

same): 215mm/8.5 in (W) x 290mm/11.5 in (D) x 115mm/4.53 in

(H)

Weight:

Head amplifier unit: 2.5 kg (5.5 lbs) unpacked. Power Supply: 5.8 kg. (12.7 lbs) unpacked

#### **WARRANTY**

#### FOR WARRANTY SERVICE, PLEASE CONTACT YOUR AUTHORIZED ALLNIC DEALER.

Except for the tubes, this Allnic Audio product is warranted against materials and manufacturing defects only for two (2) years from date of purchase. The tubes in this product are warranted against materials and manufacturing defects only for six (6) months from date of purchase. Date of purchase is the date indicated on the invoice issued by Allnic Audio or its authorized representative for original purchase of the new product. The warranty does not cover any damage occurring during product shipment at any time, nor any damage occurring as a result of any of this product's owner's or owners' negligence or willful mistreatment. Failure to operate or care for this product in accordance with instructions in this manual will be deemed negligent. For the warranty to be valid, this product must be returned first to Allnic Audio's authorized representative for warranty service prior to any unauthorized attempt to repair or modify it. Any repair done to or modification of this Allnic Audio product at any time performed without specific authorization from Allnic Audio or its authorized representative will void the warranty. Allnic Audio and its authorized representatives shall be the sole determiners of whether the warranty has been voided. Provided that the warranty has not been voided, the warranty is transferable for the balance of the original purchaser's warranty period.

The warranty covers parts and labour only. If required for warranty service, shipping of this product to and return to product owner from an authorized Allnic representative will be at product owner's sole cost. In the case of required factory warranty service, shipping to Korea shall be at product owner's sole cost. Provided that Allnic has determined that the warranty is not void, Allnic will pay the cost of return shipping to product owner. If Allnic determines that the warranty is void, return shipping to product owner will be at product owner's sole cost.

After expiry of the applicable warranty period or if the warranty is void, Allnic Audio and its authorized representatives are not responsible for nor obligated in any manner whatsoever to undertake, or to cover or reimburse the costs of any repairs or modifications to this product.

The warranty does not cover and Allnic Audio and its authorized representatives are not responsible for any incidental costs or damages to the person or property of original purchaser, any subsequent owner of this product, or any third party occurring as a result of any malfunction or misuse of this product however and whenever caused.

#### **FIGURES**

Figure 1 – HA-5000 Power Supply Rear View

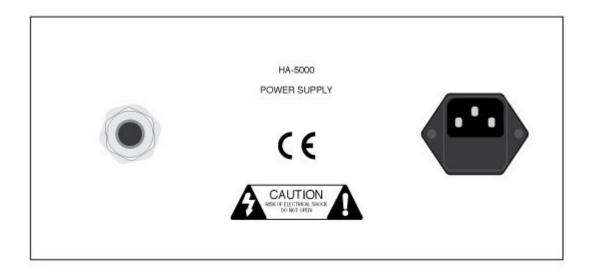


Figure 2 – HA-5000 Power Supply Front View

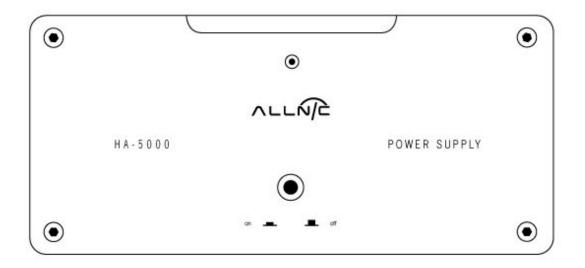


Figure 3 – HA-5000 Amplifier Unit Rear View

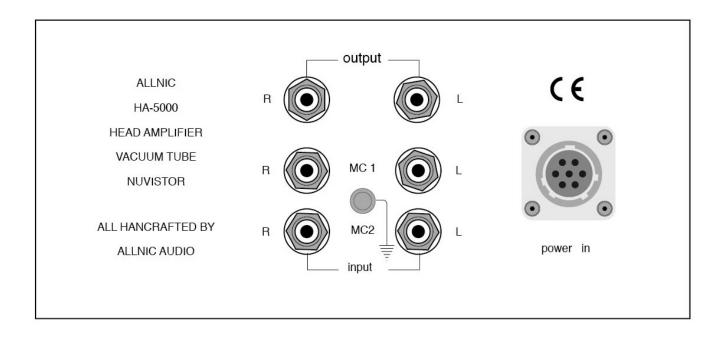


Figure 4 – HA-5000 Amplifier Unit Front View

