

## **ALLNIC AUDIO**

# H-5500 PHONO-STAGE PREAMPLIFIER



**OWNER'S MANUAL** 

## ALLNIC AUDIO H-5500 PHONO–STAGE PREAMPLIFIER

Thank you for purchasing this Allnic Audio H-5500 Phono-Stage Preamplifier. 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 H-5500 Phono-stage Preamplifier 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 H-5500 Phono-Stage Preamplifier - we care about our customers and the equipment, and we want you to enjoy this product for a long time!

#### INTRODUCING THE H-5500 PHONO-STAGE PREAMPLIFIER

The H-5500 is the successor to Allnic Audio's H-1202 phono stage preamplifier and sits just below the H-6500 model. Like all Allnic Audio products, it uses Permalloy (iron and nickel alloy) for its output transformer cores. Allnic is grateful to Mr. G.W. Elmen of Western Electric for inventing Permalloy for transformer core use, and in so doing, providing an enormous service to recorded music listeners everywhere.

The H-5500 has the following features:

- High-quality, NOS E180CC twin triode tubes
- CR type RIAA equalization, precisely compensated within +/- 0.3dB
- Automatic, all tube voltage regulation circuit, ensuring exceptionally stable and quiet operation
- High quality Moving Coil Step-up Transformers with Permalloy cores
- MC transformers variable gain (+22dB, +26dB, +28dB and +32dB)
- No negative feedback design
- Pure Class A operation
- As are all Allnic Audio products, the H-5500 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 H-5500 phono stage in natural aluminum or black, depending on your order request
- One (1) IEC type power cord
- One (1) Owner's Manual
- One (1) Hex/Allen key

#### Note:

- 1) The H-5500 ships with the tubes installed.
- 2) The H-5500 will work with most IEC type aftermarket power cords. Allnic's ZL-3000, ZL-5000 and ZL-8000 power cords will provide excellent results. Of course, only you can determine the power cord that works most synergistically with the H-5500 in your system.
- 3) Be sure the H-5500 is labeled for the AC voltage of your location. If it is not, DO NOT connect the H-5500 to your AC mains. Contact your authorized Allnic representative (See Figure 1).

We advise that you keep the box and other packing materials that your H-5500 came in. It will be useful if you sell your H-5500 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,
  if any, on or off.
- DO NOT leave the H-5500 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.

- 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 an authorized Allnic Audio representative.
- Keep the power cord away from heat sources.
- Keep the unit away from liquids do not allow any liquid to touch the tubes or 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 H-5500 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 H-5500 and its power supply.

#### 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 H-5500 needs to be placed on a solid stand in a location that provides good air circulation around the phono-stage.

- DO NOT cover the top of the H-5500 phono stage or tube chimneys.
- 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 H-5500 on some kind of after-market isolation feet or similar devices.
   Dropping the H-5500 may cause damage 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 have contact with the unit's chassis for long periods of time. This could discolour the metal.
- DO place the unit on a shelf or stand that allows sufficient ventilation, 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 H-5500 is a
  highly sensitive piece of electronic designed for neutrality and will output what you put into it. Allnic's Zero
  Loss (ZL) Technology cables will work synergistically with the H-5500.
- DO try to place the H-5500 away from major sources of RFI and EMI; though well shielded, the H-5500 will function best away from large power transformers and other sources of such interference.

#### B. POWER CONNECTIONS

The H-5500 uses a standard 15 Amp, three prong male IEC connection for AC input. You need to use a power cord with a 15 Amp female three prong 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 H-5500 power supply you have purchased is set internally for your region, either AC 230/240 volt – 60 HZ OR AC 110/120 volt – 60Hz operation. There is no way to change this to another AC setting.

#### C. INPUTS

There are four (4) pairs of single-ended (RCA) inputs, two for Moving Coil (MC) cartridges and two for Moving Magnet (MM) cartridges. These four pairs are located in the middle of the rear of the H-5500 with the ground screw between the two MC pairs and the two MM pairs (See Figure 1). The input pairs are labeled MC 1 and 2 and MM 1 and 2, with the number of each pair on the vertical axis between the top (left channel) and bottom (right channel) RCA input connectors. Facing the rear of the H-5500, the two left-hand pairs of inputs are the MC cartridge inputs, with pair 1 closest to the centre ground screw. The two right-hand pairs of inputs are the MM inputs, with pair 2 closest to the centre ground screw and pair 1 next to the IEC connection.

When you are facing the front of the H-5500, the input connections are in the centre of the unit, with the MC connections on the right and the MM connections to the left, next to the IEC connection.

The H-5500 has been designed and manufactured to work most synergistically with Allnic Audio products, including line-stage preamplifiers, pre-phono stages and ZL Technology cable products.

#### D. OUTPUTS

The H-5500 is equipped with one set of single-ended or "unbalanced" (RCA) outputs. Facing the rear of the H-5500, the right channel RCA output connection is just to the left of the MC RCA input pairs (when facing the front of the H-5500, to their right). Facing the rear of the H-5500, the left channel RCA output connection is just to the right of the MC RCA input pairs (when facing the front of the H-5500, to their left (See Figure 1).

#### E. MOVING COIL (MC) TRANSFORMER CONTROLS

Facing the front of the H-5500, the MC step up transformers are on the H-5500 deck immediately behind the four E180CC tubes. The right channel transformer is on the right, closest to the outside edge of the chassis (See Figure 4). On top of each transformer cylinder, there is a rotating control (See Figure 3). Turn the control knob to select from four gain factors: +22dB, +26dB, +28dB and +32dB. Combined with the H-5500's 40dB native gain, for MC there is 62dB, 66dB, 68dB and 72dB of gain available. Each of the second set of indicators on the top of the transformers marks the impedance tied to the gain setting diagonal to it. The impedance at each of ×13, ×20, ×26 and ×40 on the control knob is equivalent to  $278\Omega$ ,  $117\Omega$ ,  $69\Omega$ , and  $29\Omega$  and respectively. The impedance and gain relationships are not user adjustable. You should experiment with the gain settings to find the best setting for your cartridge. Use identical settings for both transformers to avoid channel imbalance.

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

Once you have your H-5500 in place and connections to your turntable and preamplifier mapped properly and secure, you are ready to turn on the power for your H-5500. Before you power up the H-5500, be sure you have:

- removed ALL the cushion materials from inside the tube chimneys. You may experiment with the tube damping rings, if any, on or off.
- turned the volume down or muted your preamplifier
- muted the H-5500 by ensuring that the button switch labeled "mute" on the right-hand side of the front panel of the H-5500 is in the "out" position (i.e., it is not "depressed") (See Figure 2)
- rotated the single knob labelled 'Selector" on the right front of the unit to the appropriate input, corresponding to the input you will use initially, either MC 1 or 2 or MM 1 or 2. The MC 1 and 2 and MM 1 and 2 input labels are at 10 o'clock, eleven o'clock, 1 o'clock, and 2 o'clock, respectively (See Figure 2).
- if you are using a moving coil cartridge, set the MC transformer controls on the top of the chassis to the factor that you will try initially (See Figure 3).
- checked that all your system connections are properly mapped and secure.

To turn on the H-5500, press in the button switch labelled "power" just to the right of the current meter on the left of the front panel. Pressing the power button again will power down the H-5500 (See Figure 2).

#### **OPERATION**

The H-5500 has a "soft start". After pushing in the power button, the H-5500 will take a short time to be ready for play. Each time the H-5500 is powered on, the current meter and the light in the middle of the front panel will both illuminate. The light will be red. It will change to orange while the needle of the current meter moves up to between the two parallel lines at its top. **Note:** if the mute button is in the "mute" position (button "out") when you power on the H-5500, the light will illuminate red and stay red until the mute button is pressed "in", unmuting the H-5500 and causing the light to change from red to orange.

#### **CURRENT METER**

The current meter indicates correct operation of the H-5500. If the meter falls to the right outside the two parallel lines that it should sit between, a failure of the voltage regulator or voltage corrector tube (or both) is indicated. If the needle falls to the left outside the parallel lines, a failure of one or more of the E180CC tubes is indicated. Such a failure will likely be accompanied by a loss of output in one or both channels. To restore correct operation, change the tube(s) that have failed, using the same or equivalent tube (only as specified in this Manual). No biasing is required. SAFETY — you must power off and disconnect the H-5500 from the electrical source before removing and replacing tubes or the fuse.

To determine whether a 5654 or 7233 has failed, you can test the tubes if you have access to a tester, or replace first one, then the other, if necessary, with a good tube. To determine which E180CC tube(s) has failed, again you may test the tubes, or swap first one tube from the failed channel with one tube from the functioning channel. If the first swap does not make the failure switch channels, swap the other two tubes between the channels.

If the mains fuse has failed, POWER OFF and disconnect the H-5500 from the AC source and replace the fuse with the spare in the IEC mount or first with a good, inexpensive one of the same rating to avoid risk if you are using a more costly aftermarket fuse.

#### **TUBES**

The H-5500 uses the following tubes:

E180CC x 4 (2025 forward production will ship with 6414)

7233 x 1 (2025 forward production will ship with 6C19P – **NOT equivalent to 7233; 7233 and 6C19P ARE NOT INTERCHANGEABLE.**)

5654 x 1

As experienced users of vacuum tube equipment know, any tube can be carefully machine tested and selected and retested 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 H-5500 or any injury or loss incurred by the user resulting from the user changing or attempting to change tubes.

#### SPECIFICATIONS FOR THE ALLNIC AUDIO H-5500 PHONO-STAGE PREAMPLIFIER

Inputs: Two (2) pairs Moving Coil (MC) unbalanced (RCA)

Two (2) pairs Moving Magnet (MM) unbalanced (RCA)

Output: One (1) pair unbalanced (RCA)

Ground: One (1) x screw type terminal

Frequency (RIAA): 20Hz ~ 20KHz (±0.3dB)

Voltage Gain: MM: +38dB (1KHz)

MC: Variable: +22dB, +26dB, +28dB, +32dB (1Khz)

Input Impedance: MC up to  $278\Omega$ 

MM  $47k\Omega$ 

Maximum Input Voltage

(MM, non-clipping): 20Hz / 30mV

100Hz / 60mV 1KHz / 300mV 10KHz / 500mV THD

(Total Harmonic

Distortion): Less than 0.3% (1KHz, Output 1V)

Output Impedance:  $1.2K\Omega$  (on-off method)

S/N Ratio: -68dB (CCIR, 1KHz)

Power Consumption: 20W / 220V @ 60Hz

Tubes: E180CC x 4 - New old stock - (electrically equivalent: 6414, CV8431, 7062, 5965, 12AV7, 6829)

gain tubes. (2025 forward production will ship with 6414.)

7233 x 1 - New old stock (no equivalent) - voltage regulator. 2025 forward production will ship with 6C19P – **NOT equivalent to 7233; 7233 and 6C19P ARE NOT INTERCHANGEABLE.** 5654 x 1 - New old stock (equivalent to 5654W, 6AK5, 6AK5W, CV4010, M8100, 6096,

E95F, EF95, E905F) - voltage corrector.

Fuse: AC 2A, 250V, 5x20mm Slow-Blow for 110/120V regions

AC 1A, 250V, 5x20mm Slow-Blow for 230/240V regions

Dimensions: 430mm (~17 inches) x 260mm (~10.25 inches) x 170mm (~6.7 inches)

 $(W \times D \times H)$ 

Weight:

Unpacked: 8.2 Kg (18 lbs) Packaged: 11 Kg (24 lbs)

#### 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 – H-5500 Rear Panel View

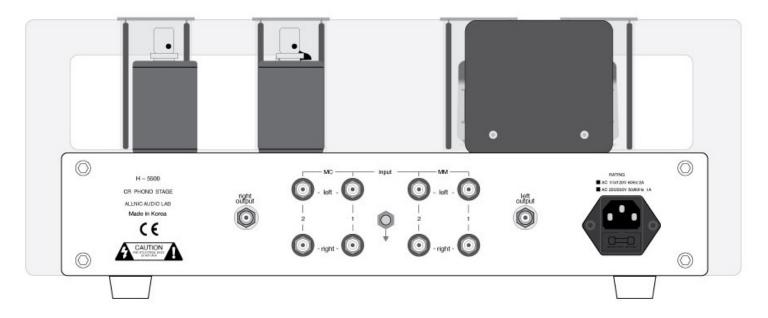


Figure 2 – H-5500 Front Panel View



Figure 3 – H-5500 Chassis Top View - MC Transformer Controls

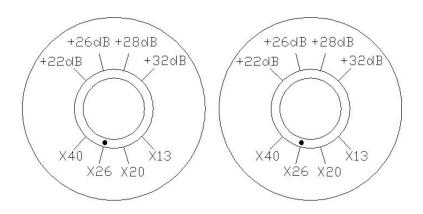


Figure 4 – H-5500 Top View

