



ALLNIC AUDIO

A-2500

**211/845 SINGLE-ENDED TRIODE
MONOBLOCK POWER AMPLIFIERS**



OWNER'S MANUAL

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A-2500

211/845 SINGLE-ENDED TRIODE (SET) MONOBLOCK POWER AMPLIFIERS

Thank you for purchasing the Allnic Audio A-2500 SET Monoblock Power Amplifiers. 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 A-2500 SET Monoblocks 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 A-2500s - we care about our customers and the equipment, and we want you to enjoy this product for a long time!

INTRODUCING THE A-2500 211/845 SINGLE-ENDED TRIODE MONOBLOCK POWER AMPLIFIERS

The A-2500 is Allnic Audio's most powerful, power tube flexible, single-ended monoblock power amplifier model. Like all Allnic Audio products, the A-2500s have Permalloy (iron and nickel alloy) for their 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 A-2500s use the superbly musical 211 or 845 (customer's choice on ordering) power tubes in single-ended configuration to provide the special musicality of the 211/845 tubes. The A-2500s have the following features:

- The A-2500s are single-ended triode monoblock power amplifiers. Each monoblock provides 20 watts of pure Class A, continuous power with either the 211 or 845 tube.
- Powerful Driving Circuitry. Allnic believes in the importance of using high-quality, low noise and powerful driving circuitry in all its amplifying devices. Off-the-shelf design is not a part of the magic of these amplifiers. Tubes and transformer characteristics are closely matched to complement each other to achieve the most accurate and satisfying sound. In the A-2500s, we employ a new old stock (NOS) 6CM7 (for the 211 power tube) and a 6DR7 (for the 845 power tube) triode as the input tube for the choke-transformer driving circuit. The listener can easily hear and even "feel" the differences between these designs and other, more conventional ones. Please imagine, as you listen to the A-2500s, its sound compared to the sound of an amplifier using conventional, for example, 6SN7, 6922, 12AU7 or 12BH7s.
- Fixed bias of both the 211 and 845 tubes for more power and less distortion.
- Direct-heated Vacuum Tube Rectification. The A-2500s use a 5R4 full-wave rectifier tube rather than a semiconductor diode in the rectification circuit. This provides both sonic benefits and improved protection for the 211/845 power tubes.
- Point-to-point hard-wired circuitry.
- "Full Engagement" Output Transformers. Conventional output transformers use pre-set secondary windings to accommodate 4, 8 and 16 ohm loudspeaker loads. However, these conventional transformers utilize only one secondary winding at a time, while the other secondary windings remain "idle". This approach has two adverse effects. First, the output transformers are not working at their maximum efficiency, reducing their output relative to their potential. Second, the "idle" windings are not actually "idle"; they are subject to parasitic oscillations, producing their own "signal". This undesirable electrical information is additive to the transformer's output, distorting the amplified signal going to the loudspeaker. Allnic's "Full Engagement" transformers address these issues by having 4 independent, secondary windings that are always fully connected, never "idled". This means that all secondary windings are always connected to your loudspeakers, regardless of which output switch position you use (4 ohms or 8 ohms or 8 ohms or 16 ohms, depending on the factory configuration you

have selected). The result is that there is neither a loss of transformer output efficiency, nor the introduction into the output signal of distortion from parasitic oscillations of the secondary windings.

- Large Nickel/FeSi Core Output Transformers. As with our other models, Allnic uses very large output transformers (105 mm) with nickel, mixed with FeSi, cores. This provides for higher inductance with fewer windings than other designs can provide and results in the great benefit of an extremely wide range of output frequencies.
- Analogue Power Tube Current Monitors. To provide constant current (bias) monitoring for the power tubes, Allnic uses an analogue current meter to provide extremely accurate monitoring of the 211/845 tube. The meter makes it exceptionally easy to see the status of the tube at any time and to respond immediately to any variation in bias by use of the top-mounted bias control screw. The meter offers a simple, unambiguous indication of the tube's status compared to conventional LED bias monitors.
- As are all Allnic Audio products, the A-2500s are fully RoHS (EU Reduction of Hazardous Substances regulation) compliant in construction and materials.

WHAT'S IN THE BOX?

Please check that each shipping box contains the following:

- One (1) Allnic A-2500 monoblock power amplifier. **NOTE: the A-2500s are mirror imaged.** Each amp should be the mirror image of the other, with the rectifier tubes on the right side on one and on the left side on the other.
- One (1) 15 amp IEC type power cord

One (1) Owner's Manual is also provided.

Note:

- 1) The A-2500s ship with the tubes installed.
- 2) The A-2500s will work with most 15 amp, IEC type aftermarket power cords. The Allnic ZL-3000 and ZL-5000 power cables will make an excellent match. Of course, only you can determine the power cord that works most synergistically with the A-2500s in your system.
- 3) **Be sure the A-2500s are labeled for the AC voltage of your location. If they are not, DO NOT connect them to your AC outlet. Please contact your Allnic dealer.**

We advise that you keep the boxes and other packing materials that your A-2500s came in. It will be useful if you sell your A-2500s or in the unlikely event you need to ship it for service.

SAFETY

- **Remove ALL protective cushioning material (cardboard around the tubes) inside the tube chimneys before operation. The tube chimneys should contain NOTHING except the tubes**

(It is optional to leave the “O” rings on the small tubes, if any; some prefer the sound with the O rings on).

- Disconnect the power cord by pulling the plug, not the cable.
- Do not attempt any repairs. Do not remove the unit’s chassis cover without specific authorization from your Allnic dealer.
- 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.

CLEANING

A. Chassis and glass

Use only a soft, lint-free cloth, dampened slightly with water only (NO cleaning fluids!), to clean the faceplate, chassis and tube chimneys of the A-2500s.

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 A-2500s need to be placed on a solid stand in a location that provides good air circulation around, above and below the monoblocks.

- DO NOT cover the tops of the A-2500s.
- DO NOT place the A-2500s on carpet or foam.
- DO NOT subject the A-2500s to knocks and shocks as you move them around. This advice is meant particularly for those who may want to place the A-2500s on some kind of after-market isolation feet or similar devices. Dropping one side of the A-2500s, or the whole of a unit may cause damage and may void the warranty.
- DO NOT place the unit near a strong light or heat source.
- DO NOT place anything heavy on the unit.
- DO NOT allow rubber or vinyl materials to rest on the chassis for long periods of time. This could discolour the metal.
- DO place the A-2500s on a shelf or stand that is stable and not subject to vibration or sudden shock.
- DO consider using a high-quality power cord, inter-connects and speaker cables. The A-2500s are highly sensitive electronic devices designed for neutrality and will output what you put into them. Allnic’s ZL (Zero Loss) Technology power and interconnect cables will work synergistically with the A-2500s.
- DO try to place A-2500s away from major sources and potential receivers of RFI and EMI. Though well shielded, the A-2500s will function best away from large power transformers and

other sources of such interference and from other equipment that could be susceptible to such forms/sources of interference.

- When the A-2500s are moved from a cold to a warm environment, allow sufficient time for any condensation to evaporate before plugging the A-2500s into an AC connection.
- Do not attempt any repairs.

B. INPUTS

There are two (2) female inputs (See Figure 2). One accepts a balanced cable with a male XLR connector; the other accepts a cable with a single-ended, RCA type male connector. On one chassis, these input connections are located on the right (facing the back) rear of the chassis, with the balanced input closest to the side edge. The inputs are on the left rear of the chassis on the other A-2500. Between the inputs, there is a switch to select one of two pin configurations for a balanced cable (i.e., it changes the phase). The top position is for pin 2 "hot" and pin 3 "cold"; the bottom position is for the reverse (in both cases, pin 1 is ground).

C. SPEAKER TERMINALS

Each of the A-2500s is equipped with one pair of high-quality speaker terminals (See Figure 2). These terminals are located in the middle of the rear panel of each A-2500 chassis, with the red marked terminal for the live connection labelled positive "+" on the right, and with the return connection labeled negative "-", to the left (facing the chassis rear). Between the plus and minus terminals is a switch that provides for either 8 or 4 ohm impedance, as your speakers may require. The upper position of the switch is for 8 ohm operation; the lower for 4 ohm operation. 8 and 16 ohm terminals are available by special order. The terminals accept bare wire (not recommended), spade and banana type connectors.

D. POWER CONNECTION

Connect the input interconnect and speaker cables before you insert the power cable into the receptacle at the left (facing the back) rear of the chassis on one A-2500, and on the right on the other (See Figure 2). The A-2500s use a standard 15 amp three prong male IEC connection for AC input. You need to use power cords with a female 15 amp, three prong IEC connector at one end. The Allnic ZL-3000 and ZL-5000 power cables will make an excellent match.

The A-2500 will be set internally for your location's electrical system characteristics. Please check the setting for electrical input on the label on the rear of the unit to confirm that your A-2500 matches your location's electrical system. For North American customers, the A-2500 is set internally for AC 110/120 volt – 50/60 Hz. For customers in other regions, the unit is set for 230/240V – 50/60 Hz operation. There is no way to change to another AC setting.

INITIAL POWER-ON

Once you have your A-2500s in place and all connections have been made to your source(s) and preamplifier, you are ready to turn on the power for your A-2500s. Before you power up the A-2500s, though, be sure you have:

- **removed ALL the cushion materials (cardboard) from inside the tube chimneys. (It is optional to leave the “O” rings on the small tubes; some prefer the sound with the O rings on.)**
- checked that all tubes are snug in their sockets
- ensured the input connectors that you are using, single ended (RCA) or balanced (XLR), are firm and secure and if using XLR, that the switch on the back of each chassis is set to the appropriate pin configuration
- securely and correctly fastened the speaker cables, ensured that they are also connected properly to the speakers, and set the speaker impedance switch to match your speakers’ impedance
- turned on your source(s) and your preamplifier, and turned the preamplifier’s volume control down to zero or otherwise muted its output

Turn on the A-2500s by depressing the power switch button located (facing the front of the unit) on the right side-panel (on one chassis and on the left side on the other) to the “on” position (See Figure 1). The “on” position is with the top of the button switch depressed. Of course, the off position is the reverse. After about a thirty to forty (30 - 40) second delay (the soft start), the A-2500s will be powered on. After warm-up and application of full plate voltage, not all tubes may bias at the same rate. Allow one or two minutes for all the tubes to reach full operating specification.

OPERATION

When the power is on, the current meter on the front of the chassis will illuminate (See Figure 3). From this point on, operation is straight-forward. When you are finished listening, turn off your A-2500 monoblocks first; then, turn off your preamplifier and sources.

In the case of any failure, please contact Your Allnic dealer for assistance.

THE CURRENT METER

The illuminated meter indicates the current supply to the 211/845 power tube in the A-2500. There is a screw-type potentiometer control on the chassis top in front of each 211/845.

When you turn on the A-2500s, the needle of the current meter should be centred between the two parallel lines on the meter’s face. Any error of current supply to or failure of a 211/845 tube is indicated by the needle moving out from between these two parallel lines.

TUBES AND TUBE BIAS

Each A-2500 monoblock uses the following tubes (See Figure 4) **TUBES ARE NOT INTERCHANGEABLE BETWEEN 211/845 VERSIONS** (except 5R4 rectifier):

- One (1) x 211 or 845 SET power tube
- One (1) x 6CM7 (211 power tube version)
- One (1) x 6DR7 (845 power tube version)
- One (1) x 5R4 rectifier tube

To bias the power tube properly by centering the meter's needle between the meter's main parallel lines, use an appropriately bladed screwdriver to adjust the bias control directly in front of the 211/845 by turning the yellow plastic screw clockwise or counterclockwise. If the needle of a current meter for the 211/845 has moved to the left of the parallel lines on the meter's face, adjust the bias control by turning the plastic screw clockwise until the needle has returned to centre between the meter's parallel lines. If the meter needle has moved to the right of the parallel lines on the meter face, turn the bias control counterclockwise to correct.

If the meter's needle drops to the left limit of the meter's face during operation, this indicates a failure of the related 211/845 tube. You must turn off the A-2500 and replace the 211/845 and, probably, the protection fuse (0.5A, 250V, 20mm slow-blow) for the tube. To replace the fuse, using a screwdriver, simply turn the top of the fuse cap (located just behind the 211/845 tube – see Figure 4) counterclockwise. It will spring out holding the fuse. Replace the fuse, push the fuse cap down and turn it clockwise; it will lock itself. If you have any questions about doing this, please contact your Allnic dealer for assistance.

If the 5.0 Amp AC mains fuse, located at the IEC input, has failed, it can be replaced with the spare fuse provided in the tray in the IEC mount. Again, if you have any questions about doing this, please contact your Allnic dealer for assistance.

Of course, you will have to adjust the bias back into the area between the two parallel lines of the meter for a tube when it is replaced. When replacing a 211/845, first turn the bias control counterclockwise slightly to reduce current, in case the bias is set too high for the new tube (since the old tube may have required additional bias). Bring the bias up gradually to the middle between the two lines on the meter.

All consequences of changing or attempting to change tubes are borne by the user unless by express agreement between the owner and an authorized Allnic representative. Allnic Audio and its authorized representatives are not liable in any way whatsoever for any injury or loss incurred by the user or for damage to the A-2500s, any of their parts, or tubes or replacement tubes resulting from the user changing or attempting to change tubes.

SPECIFICATIONS FOR THE A-2500 SINGLE-ENDED TRIODE MONOBLOCK POWER AMPLIFIER

- Output Power: **211 or 845:** 20 watts
- Total Harmonic Distortion: 0.3% at 5W/1KHz
- Frequency Response: 20Hz - 20KHz, +/- 0.5dB
- S/N Ratio: -80dB (CCIR, 1KHz)
- Damping Factor: 4 at 8 Ω load at 1KHz
- Voltage gain: +28dB (211 version); +26dB (845 version)
- Input Impedance: 100K Ω (single-ended, unbalanced)
- Input Sensitivity: 0.7V for maximum rated power
- Fuses:
 - IEC Mains:
 - For 110 – 120V AC regions 5A, 250V, 20mm slow-blow;
 - For 210 – 230V AC regions, 3A, 250V 20mm slow-blow.
 - 211/845 protection: 0.5A, 250V, 20mm slow-blow
- Tubes (per chassis):
 - 211/845 X 1 (power tube)
 - 6CM7 X 1 for 211 version; 6DR7 X 1 for 845 version (input stage)
 - 5R4 X 1 (rectifier) **TUBES ARE NOT INTERCHANGEABLE BETWEEN 211/845 VERSIONS** (except 5R4 rectifier)
- Dimensions: (W x D x H) 440mm (17.3 inches) x 370mm (14.6 inches) X 260mm (10.3 inches)
- Weight: 20Kg (44.1 lbs) net per monoblock.
25Kg (55 lbs) shipping weight per monoblock

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

NB. *The monoblocks are mirror images of each other.*

Figure 1: A-2500 Side View - Switch

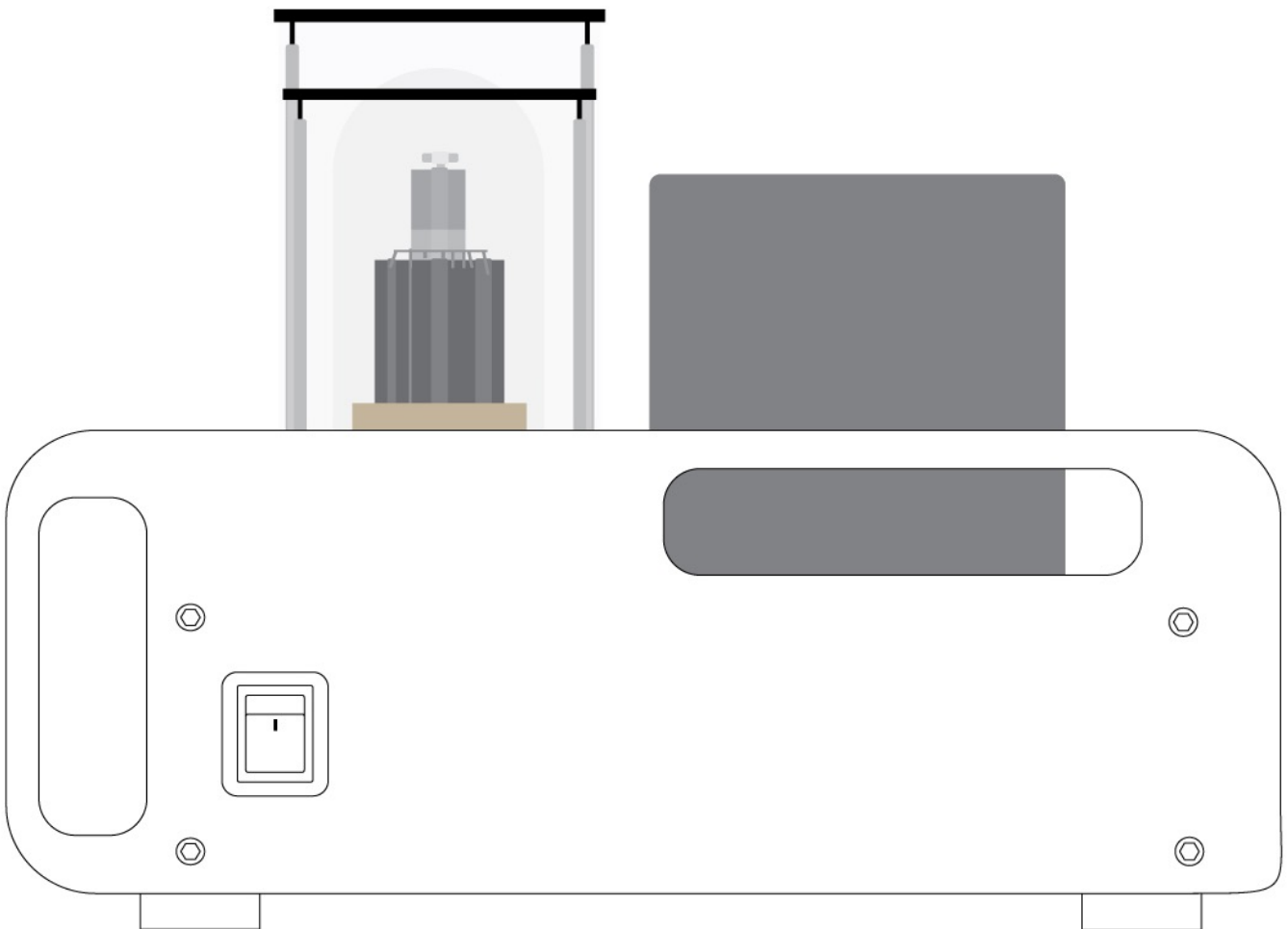


Figure 2: A-2500 – Rear View

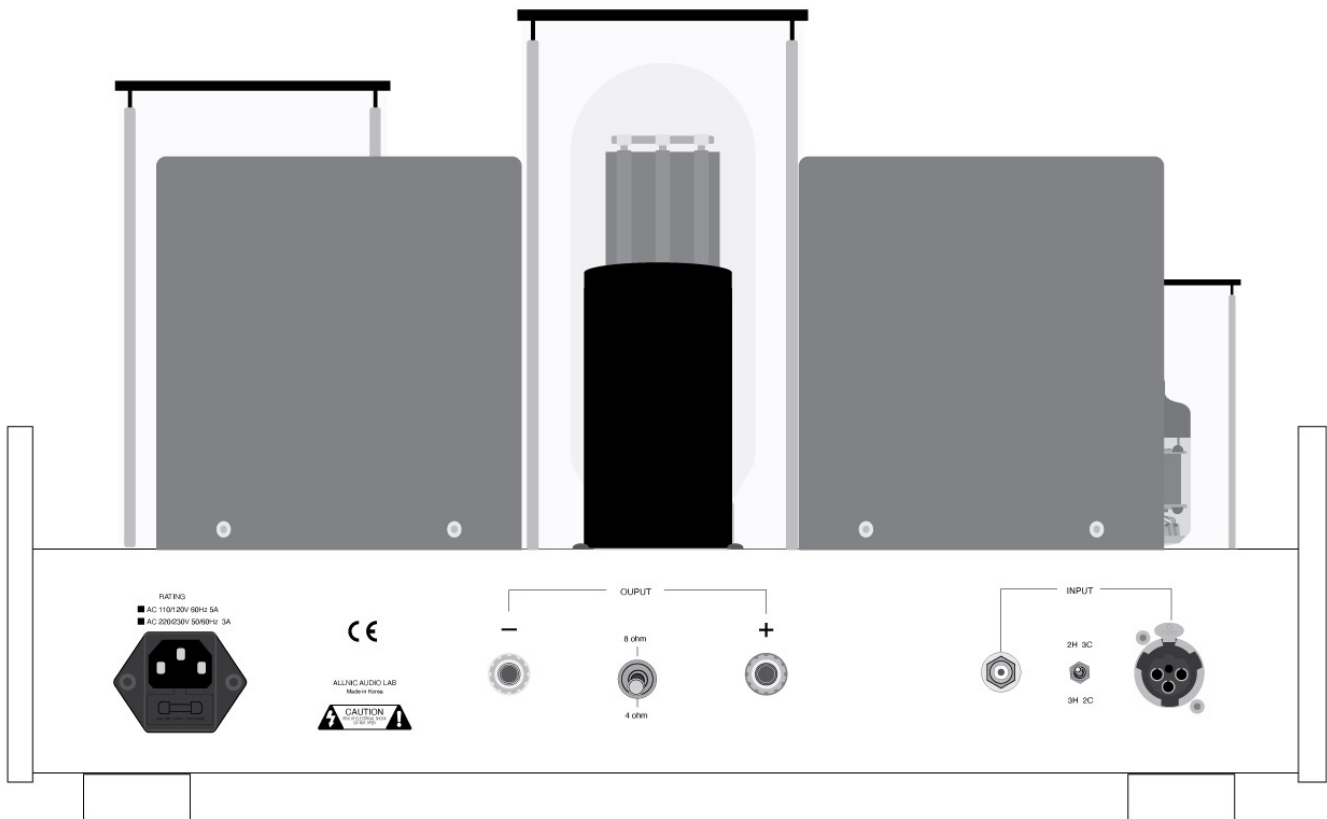


Figure 3: A-2500 – Front View



Figure 4: A-2500 – Top View

