



ALLNIC AUDIO

A-2000

25th Anniversary

**KT150 PUSH-PULL STEREO POWER
AMPLIFIER**



OWNER'S MANUAL

**ALLNIC AUDIO
A-2000 25th ANNIVERSARY
STEREO POWER AMPLIFIER**

Thank you for purchasing the Allnic Audio A-2000 25th Anniversary Stereo Power 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 A-2000 25th Anniversary Stereo Power Amplifier to the other components of your system and the wall outlet.

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

***** *For a list of Allnic Audio distributors around the world, please visit Allnic Audio's website:***

<http://allnicaudio.com>

TABLE OF CONTENTS:

INTRODUCING THE A-2000 25 th ANNIVERSARY KT150 PUSH-PULL STEREO POWER AMPLIFIER	4
WHAT'S IN THE BOX?	5
SAFETY	5
CLEANING Chassis Connectors	6
INITIAL SET-UP Location, Location, Location Inputs Speaker Terminals Power Connection	6 6 7 7
INITIAL POWER ON	7
OPERATION	7
TUBES AND TUBE BIAS	8
SPECIFICATIONS	9
WARRANTY	10
FIGURES	11

Please read about **SAFETY** before you attempt to use the A-2000 - we care about our customers and the equipment, and we want you to enjoy this product for a long time!

INTRODUCING THE A-2000 KT150 PUSH-PULL STEREO POWER AMPLIFIER

The A-2000 25th Anniversary KT150 Power amplifier is Allnic Audio's top of the line, push-pull stereo power amplifier model. Like all Allnic Audio products, the A-2000 has Permalloy (iron and nickel alloy) for its 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-2000 25th Anniversary is an updated version of the original A-2000. It uses the new, powerful and musical KT150 power tube, with requisite changes to transformers and several minor circuit elements. The A-2000 25th Anniversary has the following features:

- 100 watts of high power output in pentode mode, 50 watts in triode. The A-2000 is a push-pull, triode/pentode switchable stereo power amplifier.
- Powerful Driving Circuitry. Allnic believes in the importance of using high-quality, low noise and powerful driving circuitry in all its amplifying devices. Therefore, in the A-2000, we employ the E282F tube in triode mode as the second stage driver tube, with a load of about 5K ohms, and using 20mA of current. The listener can easily hear and even "feel" the differences between this design and other, more conventional, ones. Please imagine, as you listen to the A-2000, its sound compared to the sound of an amplifier with conventional 12AU7 or 12BH7s used as drivers, with a load of about 47K ohm, and using 2 to 3mA of current.
- "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 (114 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.
- "Soft-start" Circuitry. Allnic uses soft start circuitry that, after sufficient warm-up only, provides the high voltage supply to the plate of each tube. This protective design results in prolonged tube life and fewer and less frequent issues with tube performance.
- Analogue Power Tube Current Monitors. In order to provide constant current (bias) monitoring for the power tubes, the A-2000 has a separate analogue current meter for each pair of power tubes. The meters make it exceptionally easy to see the status of each tube at any time and to respond immediately to any variation in bias by use of the bias control knob for the relevant tube. The meters offer a simple, unambiguous indication of each tube's status compared to conventional LED bias monitors.

- "On-the-Fly" Triode/Pentode Switching. Switching between triode and pentode operation can be done "on-the-fly" at any time while the amplifier is in use.
- Beautiful 20KHz square wave response. See Figures 1-3.

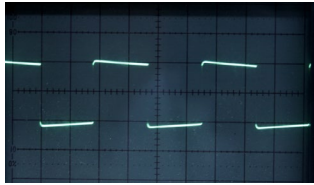


Fig.1 Square Wave 50Hz*

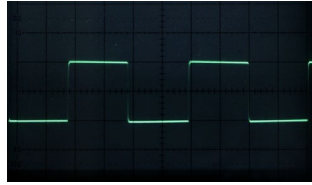


Fig.2 Square Wave 1KHz*

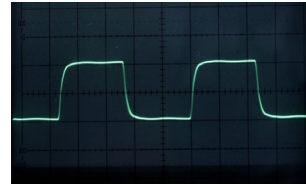


Fig.3 Square Wave 20KHz*

*Measured by LEADER LAG-126 Audio Signal Generator and KENWOOD CS-4125 Oscilloscope.

- As are all Allnic Audio products, the A-2000 25th Anniversary is fully RoHS (EU Reduction of Hazardous Substances regulation) compliant in construction and materials.

WHAT'S IN THE BOX?

Please check that the pair (assuming you purchased a pair) of shipping boxes contain the following:

- One (1) Allnic A-2000 25th Anniversary Stereo Power Amplifier
- One (1) each 15 amp IEC type power cord
- One (1) Owner's Manual

Note:

- 1) The A-2000 ships with the tubes installed.
- 2) The A-2000 will work with most 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-2000 in your system.
- 3) **Be sure the A-2000 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 boxes and other packing materials that your A-2000 came in. It will be useful if you sell your A-2000 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; 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-2000.

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-2000 needs to be placed on a solid stand in a location that provides good air circulation around, above and below the A-2000 25th Anniversary stereo power amplifier.

- DO NOT cover the top of the A-2000.
- 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 A-2000 on some kind of after-market isolation feet or similar devices. Dropping one side of the A-2000, or the whole of the unit, is not a good thing to do.
- 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 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, inter-connects and speaker cables. The A-2000 is a highly sensitive piece of electronic designed for neutrality and will output what you put into it. Allnic's Zero Loss Technology cables will work synergistically with the A-2000.
- DO try to place A-2000 away from major sources and potential receivers of RFI and EMI. Though well shielded, the A-2000 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 unit is moved from a cold to a warm environment, allow sufficient time for any condensation to evaporate before plugging the A-2000 into an AC connection.
- Do not attempt any repairs.

B. INPUTS

There are two (2) pairs of female inputs for each channel. One pair accepts balanced cables with a male XLR connector; the other pair accepts cables with a single-ended, RCA type male connector. These input connections are located on the right (facing the back) rear of the chassis, with the balanced inputs closest to the side edge. Between the inputs, there are two (2) switches to select one of two pin configurations for each of the balanced cable pairs (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). The top connection for each pair of inputs is for the left channel.

C. SPEAKER TERMINALS

The A-2000 is equipped with two pairs of high-quality speaker terminals, one for each channel. These terminals are located to the left of the IEC input (facing the rear of the amplifier) on the rear panel of the A-2000 chassis. The right channel terminals are closest to the chassis' outside edge. For each pair, the terminal for the live connection is marked positive (+) and is the top terminal; the lower terminal is the return connection and is labeled negative (-). Between the two pairs of channel 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 interconnects and speaker cables before you insert the power cable into the receptacle in the centre of the rear of the chassis. The A-2000 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.

The A-2000 you have purchased is set internally for either AC 110/120 volt – 60 HZ, or 220/230 volt – 50 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.

INITIAL POWER-ON

Once you have your A-2000 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-2000. Before you power up the A-2000, 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.)**
- selected the input connection that you want to use, single ended (RCA) or balanced (XLR), on the switch on the back of the chassis and have the interconnect firmly attached.
- turned on your source(s) and your preamplifier, and turned the preamplifier's volume control down to zero or otherwise muted its output
- securely and correctly fastened the speaker cables and ensured that they are also connected properly to the speakers
- checked that all tubes are snug in their sockets

Turn on the A-2000 by pushing in the power switch button located on the right side panel of the A-2000's chassis (facing the front of the unit) to the "on" position. 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-2000 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 meters on the top plate of the chassis will illuminate. From this point on, operation is straight-forward. When you are finished listening, turn off your A-2000's power first; then, turn off your preamplifier and sources. **If the A-2000 is in triode mode at turn-off, it will produce a sound through the speakers as the amplifier's relays turn off. Though this sound is harmless to speakers, some users may prefer not**

to hear it. To avoid the sound, simply switch the A-2000 to pentode mode prior to turning it off (see the “On-the-Fly Triode/Pentode Switching section below).

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

“ON-THE-FLY” TRIODE/PENTODE SWITCHING

You can use the Triode/Pentode “Mode Selector” button at any time during operation to switch back and forth from Triode to Pentode operation. Press the mode selector button on the left side of the front panel down to have the A-2000 operate in Triode mode; press the button again so it is in the raised position to have the A-2000 operate in Pentode mode.

THE CURRENT METERS

The illuminated meters on the chassis’ top plate indicate the current supply to each of the four KT150 gain tubes in the A-2000. There is one current meter for each channel’s pair of KT150 power tubes. There is also a potentiometer (bias control screw) and a fuse for each KT150.

When you turn on the A-2000, the needle of each current meter should be between the two parallel lines on the meter face. Any error of current supply to or failure of a KT150 tube is indicated by the needle on the KT150 tube’s respective meter moving out from between these two parallel lines.

TUBES AND TUBE BIAS

The A-2000 25th Anniversary Stereo Power amplifier uses the following tubes:

- Four (4) x KT150
- Four (4) x E282F
- Two (2) x 6AK6

Because of the individual bias for each KT150, it is not necessary to use a matched quad of these power tubes in the A-2000.

There is a switch on the top plate of the chassis between the front and back KT150s for each for the right and left channels. Flipping the switch toward the rear of the chassis sets the meter to read the rear KT150 for that channel. Flipping the switch toward the front of the chassis sets the meter for the front KT150 for that channel. As noted above, the needle of the meter should always be between the two lines in the centre of the meter. The position of the needle should be the same for all four KT150s. You may adjust the needle’s position between the lines by turning the potentiometer screw clockwise or counter-clockwise using an appropriately bladed screwdriver. The position of the needle between the lines will alter the sound.

The needle should always be between the two lines. If the needle of a current meter for a KT150 has moved to the left of the parallel lines on the meter face, using an appropriately bladed screwdriver, adjust the potentiometer screw adjacent to that tube by turning the screw clockwise until the needle has returned to 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 potentiometer screw counter-clockwise to correct.

If a meter’s needle drops to the left limit of the meter’s face during operation, this indicates a failure of the related KT150 tube. You must turn off the A-2000 and replace both the fuse (0.5A, 250V, 20mm slow-blow) for that tube

and the KT150 itself. To replace a fuse, using a screwdriver, simply turn the top of the fuse cap counter clockwise. 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 AC mains fuse, located at the IEC input, has failed, it can be replaced with the spare fuse (5A, 250V, 20mm slow-blow) 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 KT150, first turn the bias screw counter-clockwise 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-2000, any of its parts, or tubes or replacement tubes resulting from the user changing or attempting to change tubes.

SPECIFICATIONS FOR THE ALLNIC AUDIO A-2000 25th ANNIVERSARY KT150 STEREO POWER AMPLIFIER

- Output Power:
 - 100w (8Ω load, at 1KHz) Pentode
 - 50w (8Ω load, at 1KHz) Triode
- Distortion:
 - 0.17% at 1KHz at 10w
- Frequency Response:
 - 20Hz - 20KHz Flat
- S/N Ratio:
 - -80dB (CCIR, 1KHz)
- Damping Factor:
 - 8 at 8Ω load at 1KHz
- Voltage gain:
 - +26dB
- Input Impedance:
 - 100KΩ (single-ended, unbalanced)
- Input Sensitivity:
 - 1.3V for maximum rated power
- Fuses:
 - 0.5A, 250V, 20mm slow-blow (KT150s)
 - 5A, 250V, 20mm slow-blow (IEC Mains)
- Tubes (per chassis):
 - KT150 X 4 (power triode)
 - E282F X 4 (second stage drivers)
 - 6AK6 X 2 (first stage driver equivalent to A4361 and CV1762)
- Dimensions:
 - (W x D x H) 430mm (16.93 inches) x 430mm (16.93 inches) X 240mm (9.45 inches)

- Weight:
 - 40Kg (88.2 lbs) net
 - 45Kg (99.2lbs) shipping weight

WARRANTY

FOR WARRANTY SERVICE, PLEASE CONTACT YOUR AUTHORIZED ALLNIC DEALER.

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

Figures

Figure 4: A-2000 Rear View

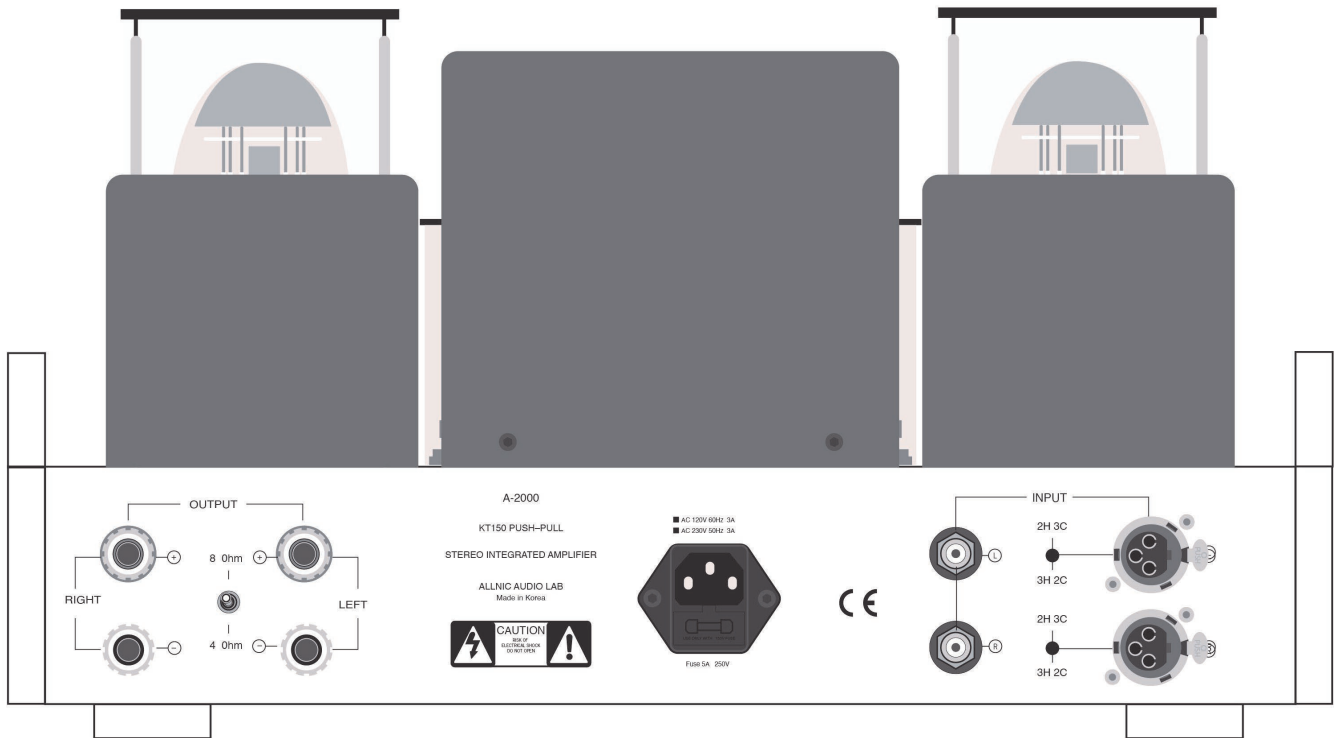


Figure 5: A-2000 Right Side View

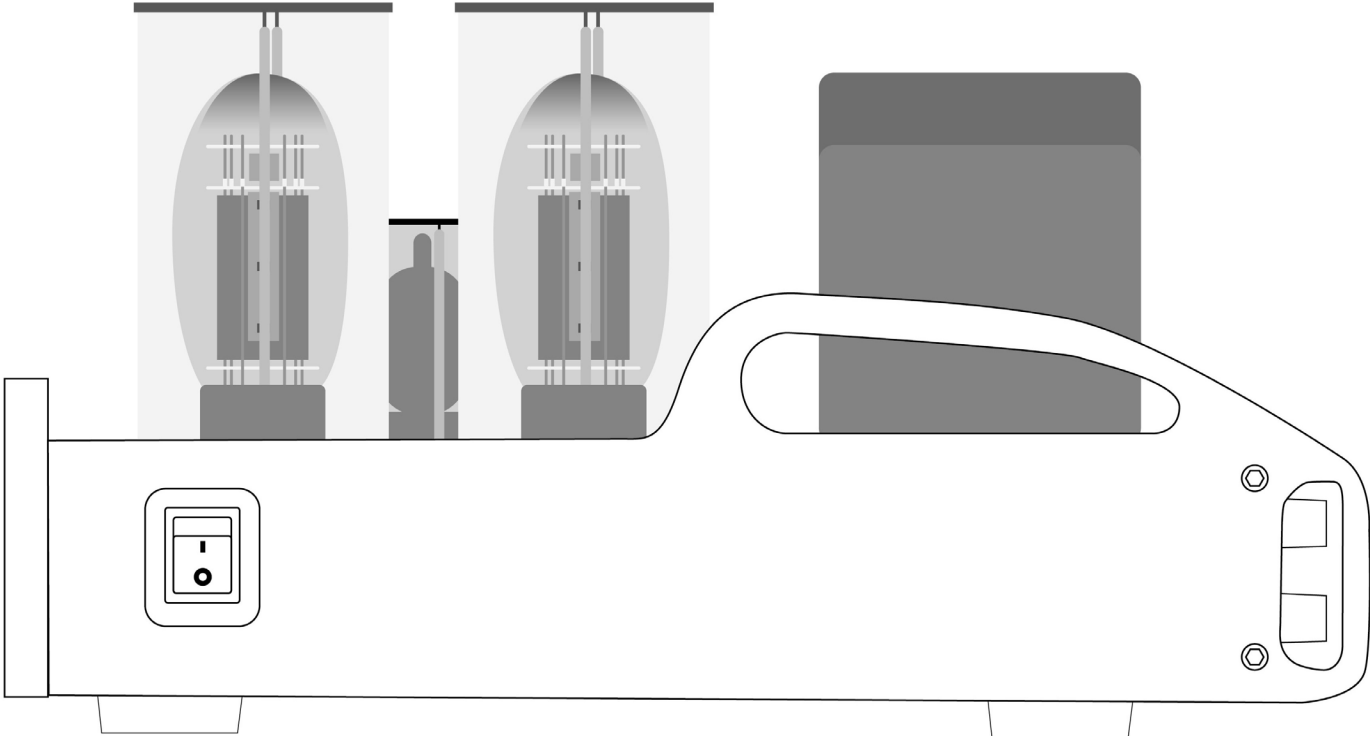


Figure 6: A-2000 Front View

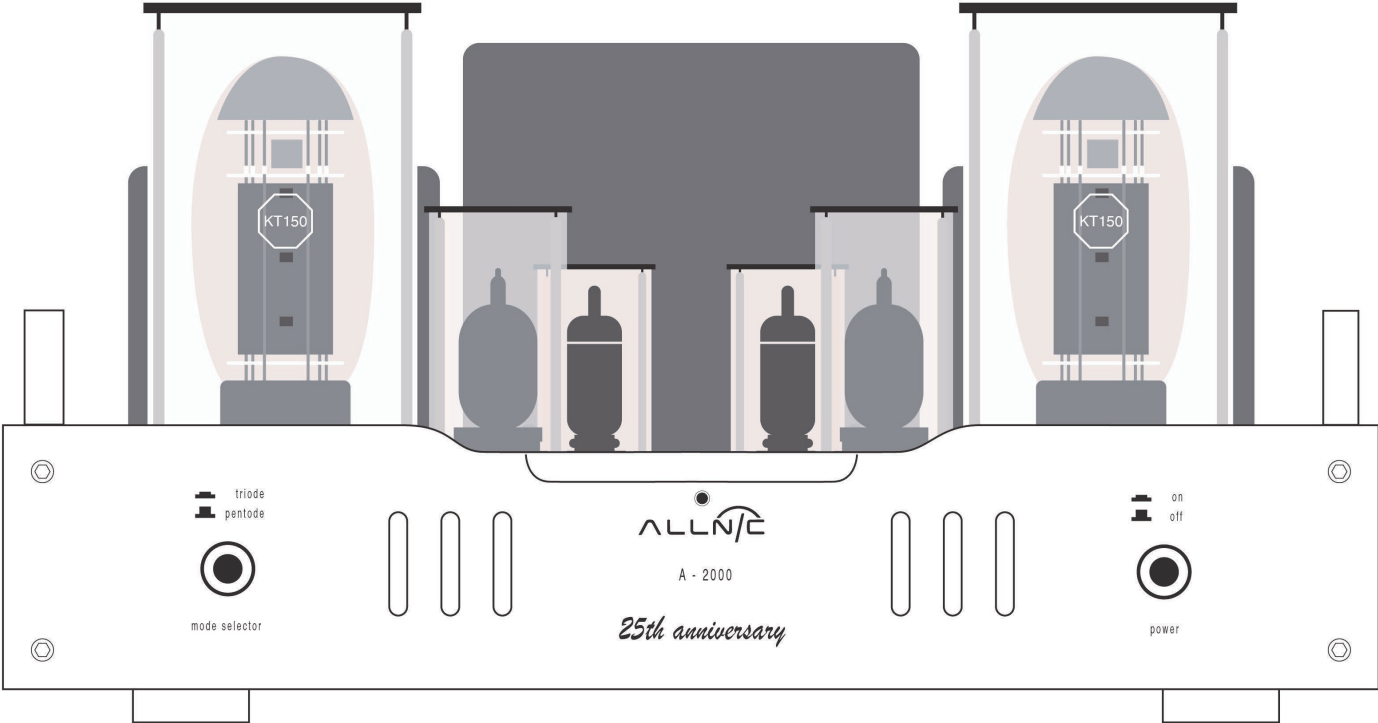


Figure 7: A-2000 Top View

