



ALLNIC AUDIO

T-1500 MK2

300B SET STEREO INTEGRATED AMPLIFIER



OWNER'S MANUAL

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Thank you for purchasing the Allnic Audio T-1500 MK2 300B SET Stereo Integrated 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 your T-1500 MK2 300B SET Stereo Integrated 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 T-1500 MK2 300B SET Stereo Integrated Amplifier - we care about our customers and the equipment, and we want you to enjoy this product for a long time!

INTRODUCING THE T-1500 MK2 300B SET STEREO INTEGRATED AMPLIFIER

The T-1500 MK2 stereo amplifier is Allnic Audio's top of the line 300B SET stereo integrated amplifier model. Like all Allnic Audio products, the T-1500 MK2 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 T-1500 MK2 has the following features:

- 10 watts per channel of pure Class A, high power output. The T-1500 MK2 is a SET (Single-Ended Triode) power amplifier. Almost all other 300B amplifiers are under, and distortion, driven. This is a result of the use of conventional "Resistor-Capacitor" circuits, which give only up to around a 70V swing voltage, with high distortion. This means that an already distorted signal of a lower than optimum swing voltage is directed to the deep biased 300B grid. Allnic's powerful "Inductor Drive" circuit gives up to a 90V swing voltage, with very low distortion (about 0.3%). It is this drive delivered to the T-1500 MK2's 300B power tubes that allows for a higher output (10 watts) and lower distortion than what can often be expected from standard 300B circuits.
- The T-1500 MK2 uses the excellent and popular 6SL7 and 6SN7 tubes for its preamplifier and driver sections. There are many brands, both new and old, of these tubes, and the T-1500 MK2 is a "tube-roller's dream", as a result of its ability to use all the available brands of these tubes.
- Nickel alloy output transformer. Allnic uses sophisticated ratio mixed nickel permalloy PB cored output transformers. Because of their extremely high initial permeability, it is possible to use lower turns on the primary winding while retaining very high 'open circuit inductance". That means a resulting very wide frequency range and low distortion bass response. This is another reason why the T-1500 MK2 excels over other 300B integrated amplifiers. Allnic also use a very big nickel core, so as not to be magnetically saturated at a high current of level of 100mA.
- Long life and trouble-free operation. Allnic employs a "soft start circuit" to protect the tubes and other parts. It applies the high B+ voltage only after tubes are fully warmed-up.
- Auto-bias of the power tubes, with current meters for 300B monitoring. Auto-bias provides bias stability for the life of the power tubes. The associated current meter for each 300B indicates the status of tube, providing a clear indication of the tubes status. In conjunction with the auto-bias feature, the T-1500 MK2 can utilize any brand of 300B. The T-1500 MK2 can also use tubes such as the 300B XLS, though it will not drive those tubes to their full capability.
- Natural negative feedback. The T-1500 MK2 applies about -6dB of negative feedback. This is a very complimentary amount of negative feedback that differentiates the Allnic 300B single ended amplifier from the standard, which has a very coloured and weak speaker driving force.

With this natural feedback, the T- 1500MK2 has a relatively high “damping factor’, very low distortion, and a higher S/N ratio, without losing the signature single ended natural sound quality.

- Allnic uses a high quality 41 step silver contact attenuator (all resistors non-inductive) instead of a carbon filmed slide potentiometer.
- Beautiful 20KHz square wave response (See Figures 1-3).

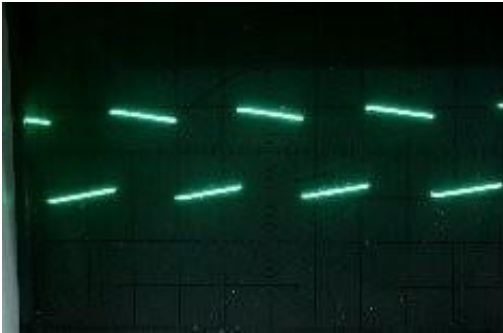


Fig.1 Square Wave 50Hz

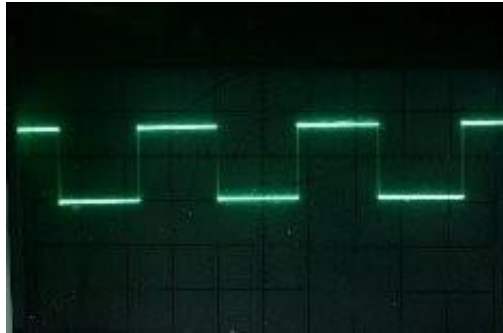


Fig.2 Square Wave 1KHz

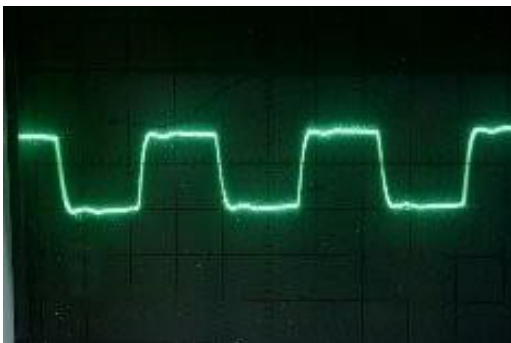


Fig.3 Square Wave 20KHz

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

- As are all Allnic Audio products, the T-1500 MK2 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 T-1500 MK2 300B SET stereo integrated amplifier
- One (1) Owner's Manual
- Power cord
- Remote Control
- One (1) Hex/Allen key

Note:

- 1) The T-1500 MK2 ships with the tubes installed.
- 2) The T-1500 MK2 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 T-1500 MK2 in your system.

3) Be sure the T-1500 MK2 is labeled for the AC voltage of your location (See Figure 2). 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 T-1500 MK2 came in. It will be useful if you sell your T-1500 MK2 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.**
- 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 an authorized Allnic representative.
- 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 T-1500 MK2 into an AC connection.
- Do not attempt any repairs.
- See the notes on "Location, Location, Location".
- **DO NOT leave the T-1500 MK2 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.**

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 T-1500 MK2.

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 T- 1500 MK2 needs to be placed on a solid stand in a location that provides good air circulation around, above and below the stereo amplifier.

- **DO NOT** cover the top of the T-1500 MK2.
- **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 T- 1500 MK2 on some kind of after-market

isolation feet or similar devices. Dropping one side of the T- 1500 MK2, or the whole of the 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 unit on a shelf or stand that is stable and not subject to vibration or sudden shock.
- **DO** leave at least 10 inches (25cm) of clearance above the T-1500 MK2 for ventilation.
- **DO** consider using a high-quality power cord, interconnects and speaker cables. The T-1500 MK2 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 T-1500 MK2.
- **DO** try to place T-1500 MK2 away from major sources and potential receivers of RFI and EMI. Though well shielded, the T-1500 MK2 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 of interference.

B. INPUTS

There are four (4) pairs of single-ended (RCA) female inputs and one (1) pair of balanced (XLR) inputs (See Figure 5). Facing the rear of the chassis, the input connections are to the right of the IEC power input and the Pre Out terminal pair. The left channel connector is the top one in each line input pair.

You can use the T-1500 as a power amplifier with a separate preamplifier by connecting the outputs of the preamplifier to one pair of the T-1500's inputs. HOWEVER, please use caution when you do this. **If you have both volume controls above zero on turn on, especially with signal, you could damage your speakers because of the extreme volume level from the combined gain of both the preamplifier and the T-1500. On initial turn on with a separate pre-amp, you should have the volume on BOTH units set to zero.** Then use the volume control on both the pre-amp and the T-2000 30th Anniversary to set the volume control on the T-1500 so that you can use preamplifier volume control as the main volume control – OR vice versa, as you prefer.

C. PRE OUT CONNECTIONS

The T-1500 has a pair of RCA type female Pre Out (Preamplifier outputs) connections on the rear of the chassis, between the IEC connection and the Line Inputs (See Figure 5). The Pre Outs are connected passively; therefore, when they are in use, the 6SL7, 6SN7 and 300Bs continue to draw power and operate. These connections are for use to connect to one or a pair of powered subwoofers or, for bi-amping, to an external stereo power amplifier or pair of monoblock amplifiers (preferably with the same gain as the T-1500 MK2).

D. SPEAKER TERMINALS

The T-1500 MK2 is equipped with two pairs of high-quality speaker terminals. These terminals are located at the left of the back of the chassis (the right, facing the front of the chassis – See Figure 5). The positive terminal for each pair is on top, the negative below. Between the pairs of terminals is a

vertically oriented toggle switch to select between either 4 or 8 ohm speaker impedance or 8 and 16 ohm impedance, as pre- specified by the owner. The T-1500 MK2 utilizes a circuit design that provides for full power from the output transformer regardless of the impedance selected with the toggle switch. Set the toggle switches to your preferred speaker impedance. Facing the rear of the chassis, the right pair are on the left outside left and the left channel pair are on the inside right. Facing the front of the chassis, the right channel pair is on the outside right and the left channel pair is to their left, on the other side of the impedance toggle. The terminals accept bare wire (not recommended) and spade and banana type connectors.

E. POWER CONNECTION

Connect the input interconnects and the speaker cables or the Pre Out connections before you insert the power cable into the receptacle at the centre of the chassis rear. The T-1500 MK2 uses a standard 15 Amp three prong male IEC connection for AC input (See Figure 5). You need to use a power cord with a female 15 Amp three prong IEC connector at one end. **Please note that use of a three phase AC power source or an AC regenerating power conditioner may cause hum.**

The T-1500 MK2 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 T-1500 MK2 matches your location's electrical system. For North American customers, the T-1500 MK2 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 T-1500 MK2 in place and all your system's connections have been properly mapped and secured, you are ready to turn on the power for your T-1500 MK2; before you power it up, though, be sure you have:

- **removed ALL the cushion materials from inside the tube chimneys;**
- **ensured the batteries are in the remote control – if not, insert the batteries (by removing plate on the bottom of the remote control).**
- checked that all tubes are snug in their sockets and, if you have removed the 300Bs in the process of removing the cushion materials, that the pin alignments for the 300Bs are correct (wide diameter pins and narrow diameter pins in the correct holes of the sockets. **This is essential.** Allnic Audio Labs and its authorized representatives are not responsible for any damage or loss to owner as a consequence of owner installing tubes incorrectly.
- ensured the interconnects and all your system's cables are properly mapped and secure.
- turned on your source(s) and zeroed their volume controls or muted them.
- lowered the T-1500 MK2's volume control to zero or muted its output.
- **turned the preamplifier's and T-1500 MK2's volume controls down to zero (if you use that combination)**
- securely and correctly fastened the speaker cables, ensured that they are also connected properly to the speakers, and set the impedance switch to match your speakers' impedance (see Figure 5).

Turn on the T-1500 MK2 by pushing the on/off vertically mounted rocker switch, located at the front

of the right side panel (facing the front of the unit) to the “on” position (See Figure 4). The “on” position is with the vertical line on the switch (the upper portion) depressed and the part of the switch marked with the “o” (the lower portion) in the raised position. Of course, the off position is the reverse. After about a brief delay (the soft start), the T-1500 will be powered on.

If you are using an external amplifier or amplifiers, using the T-1500 MK2's Pre Out connections, turn on the external amplifier AFTER turning on the T-1500-MK2.

OPERATION – CHASSIS AND REMOTE CONTROL

When the power is on, the current meters on the face of the chassis will illuminate. From this point on, the T-1500 MK2's operation is straight-forward. The face of the chassis has an input selector control knob, a volume control knob, and a pair of current meters (See Figure 7). The remote control (refer to Figure 6) will also control the input selections (using the number buttons or the buttons labelled “CH”) and the volume (using the buttons labelled “VOL” and “MUTE”). However, it will not control the power to the T-1500MK2, which must be switched on and off manually as described above. The power button on the remote control, at its top left hand corner (refer to Figure 6), is inoperative for the T-1500 MK2. Remove the screws on the bottom of the remote control to replace batteries.

When you are finished listening, first turn off any amplifiers connected to the T-1500 MK2's Pre Out connections; then turn off your T-1500 MK2 stereo integrated amplifier, and then turn off your sources.

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

THE CURRENT METERS

The illuminated meters indicate the current supply to each of the two 300B power tubes in the T-1500 MK2. In use, the needle of the current meter for each 300B should be between the two parallel lines on the meter face.

You may use any 300B type tube in the T-1500 MK2, including the newer higher voltage varieties (**300B XLS**), which will operate at their optimal specification if the needle of the illuminated meter is set to just inside the right-hand most of the meter's two parallel lines.

Any failure of a 300B tube is indicated by the needle on the meter dropping all the way to the left or right of these two parallel lines and loss of output in the affected channel.

SAFETY! BEFORE REMOVING OR REPLACING ANY OF THE T-1500 MK2'S TUBES OR THE MAINS FUSE, ALWAYS POWER OFF AND DISCONNECT THE T-1500 MK2 FROM THE AC SOURCE.

If a meter's needle moves to or below the left parallel line on the meter face during operation, this indicates a failure of the related 300B tube. Loss of output will likely also occur on the affected channel. You must turn off the T-1500 MK2 and replace the tube. Remember that the pin alignments for the 300Bs must be correct (wide diameter pins and narrow diameter pins in the correct holes of the sockets). This is essential. If the unit also lost power and this is not restored when the tube has been changed, you may also need to replace the mains fuse. First try a good, inexpensive one of the

same rating to avoid risk if you are using a more costly aftermarket fuse. If you have any questions about doing any of this, please contact your Allnic dealer for assistance.

If you experience apparent “tube noise” (humming, “spitting” or “whistling”) or loss of output in a channel and the current meter is not affected, first make sure the issue is not caused by a component or cable upstream of the T-1500 MK2. If it is not an upstream issue, then there could be a failure of the 6SN7 or 6SL7 tube. The best way to tell if one of these tubes has failed is to use a tube tester. If you do not have access to an appropriate tester, then you must remove and replace first one and then the other of the tube(s) with a good tube of the same kind to see if that solves the problem.

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 T-1500 MK2 or any injury or loss incurred by the user resulting from the user changing or attempting to change tubes.

TUBES

The T-1500 MK2 uses the following tubes:

300B x 2 – May use 300B XLS

6SL7 x 1

6SN7 x 1

SPECIFICATIONS FOR THE ALLNIC AUDIO T-1500 MK2 300B SET STEREO INTEGRATED AMPLIFIER

- Output Power: 10w + 10w (4, 8 or 16Ω load, at 1KHz)
- Distortion: 0.3% at 1KHz, 2.83V
- Frequency Response: 20Hz - 20KHz Flat
- S/N Ratio: -80dB (CCIR, 1KHz)
- Damping Factor: 10 at 8Ω load at 1KHz
- Voltage gain: +35dB
- Input Impedance: 10KΩ (single-ended, unbalanced)
- Input Sensitivity: 230mV for rated power
- Tubes: 300B X 2 (power triode) – May use 300B XLS
6SL7 X 1 (first gain stage) – equivalent
6SL7GT, 6SL7WGT, 5691, VT-229, CV1985
and others
6SN7 X 1 (second gain stage) – equivalent
6SN7GT, 6SN7W, 6SN7WGT, 5692, VT-231,
CV1988 and others
- Fuses: AC 3A, 250V 5x20mm slow-blow for 110/120V regions
AC 2A, 250V 5x20mm slow-blow for 230/240V regions
- Dimensions: (W x D x H) 430mm x 380mm X 240mm
- Weight: 22Kg net. / 26 Kg shipping weight

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 4 – T-1500 MK2 Right Side Panel View

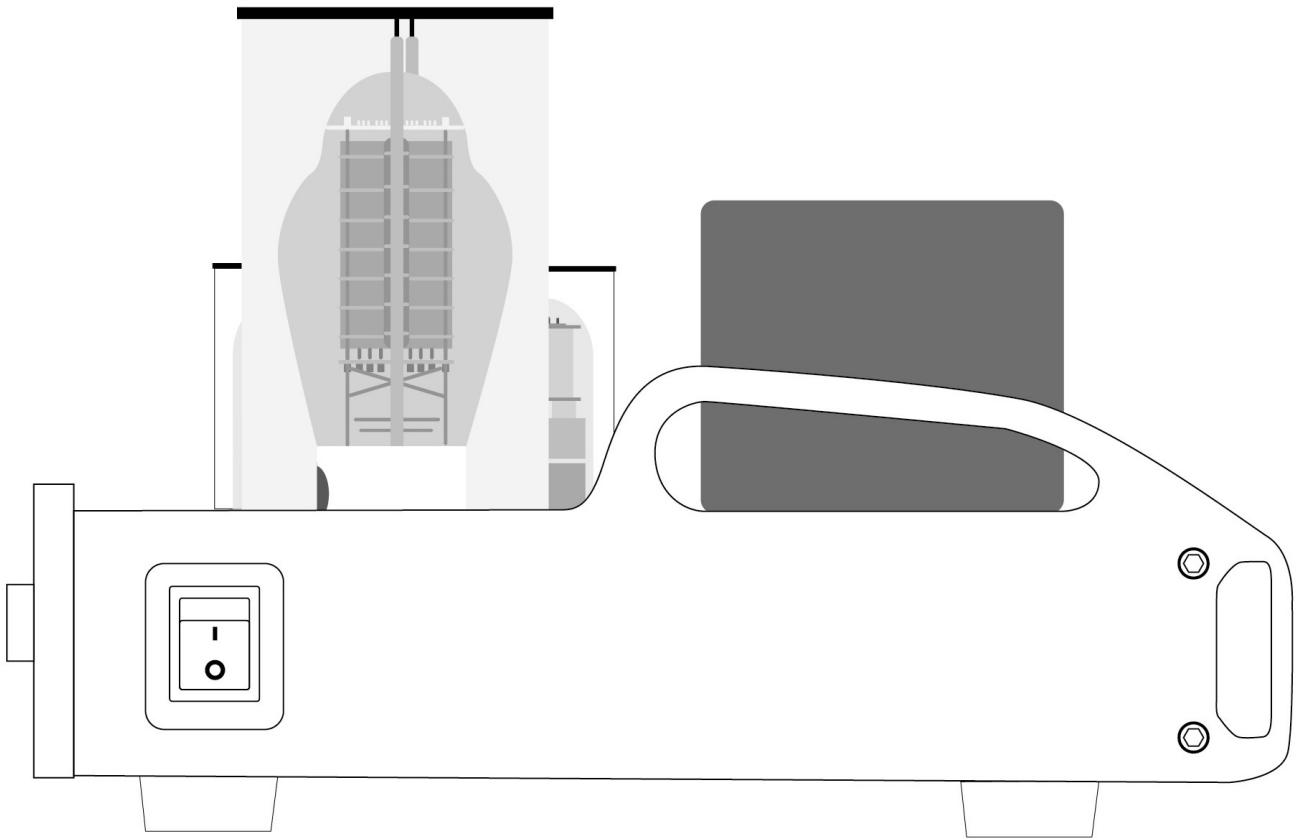


Figure 5 – T-1500 MK2 Rear Panel View

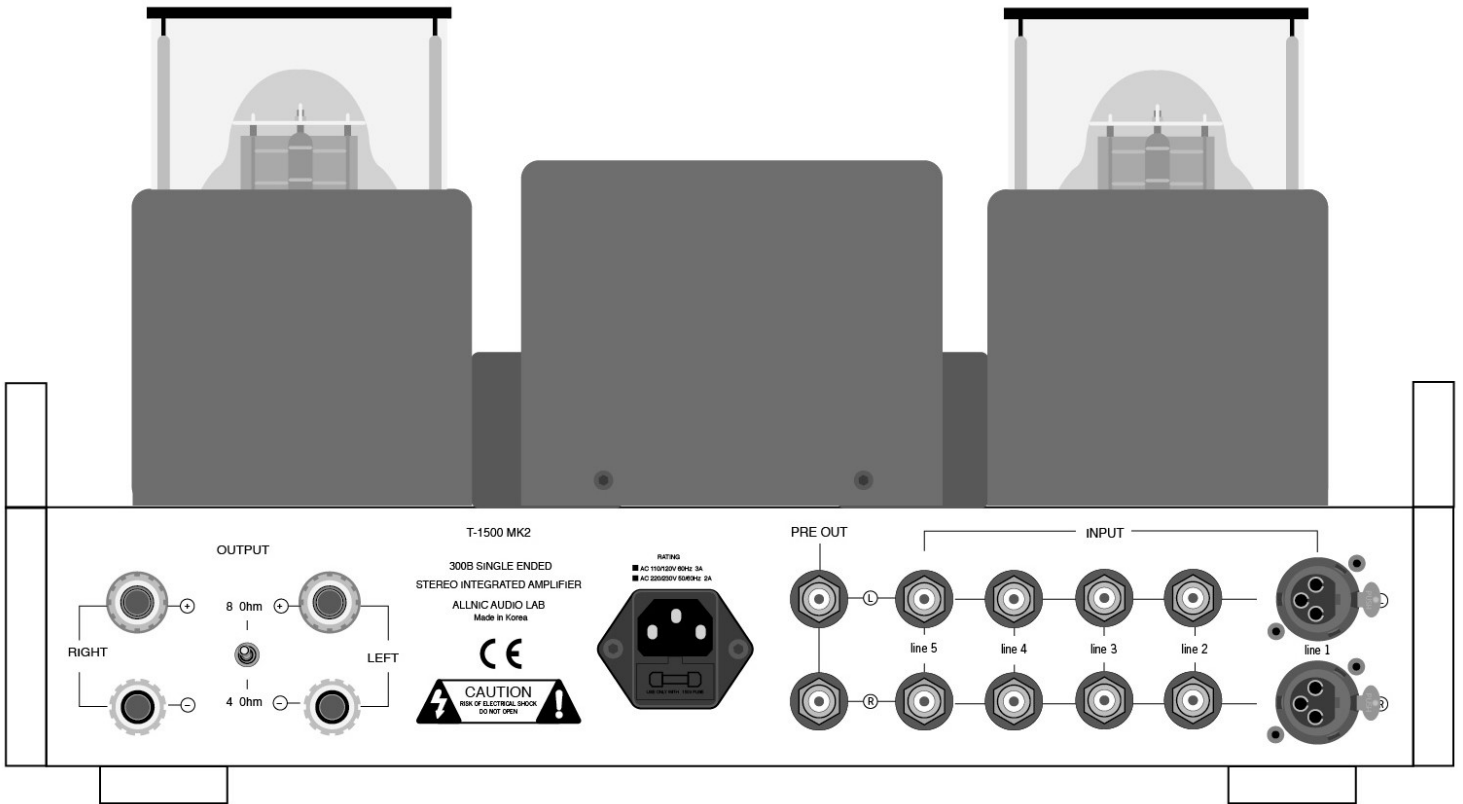


Figure 6 – T-1500 MK2 Remote Control

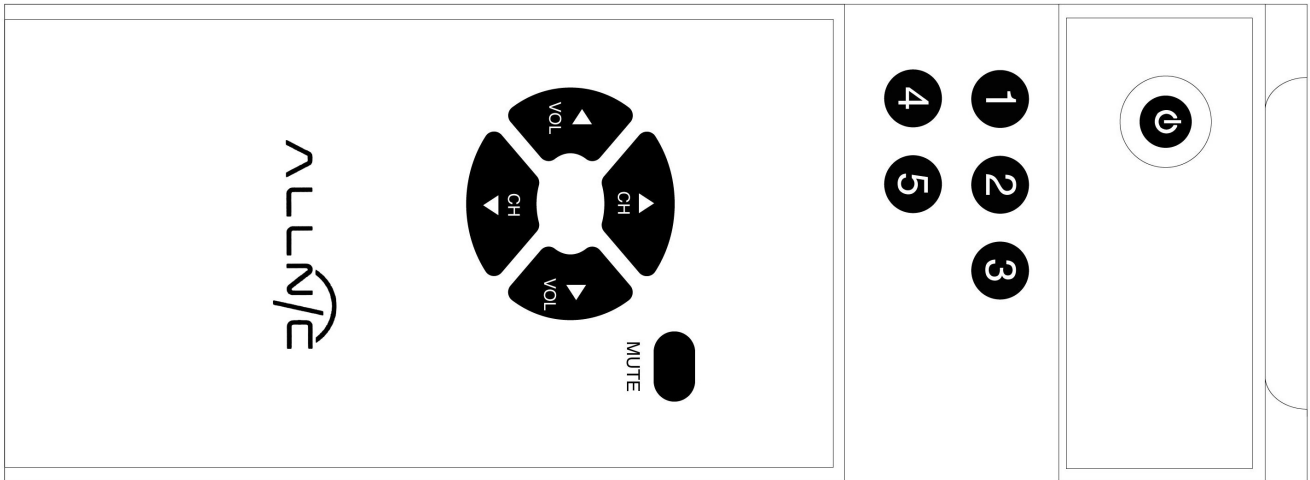


Figure 7 – T-1500 MK2 Front Panel View

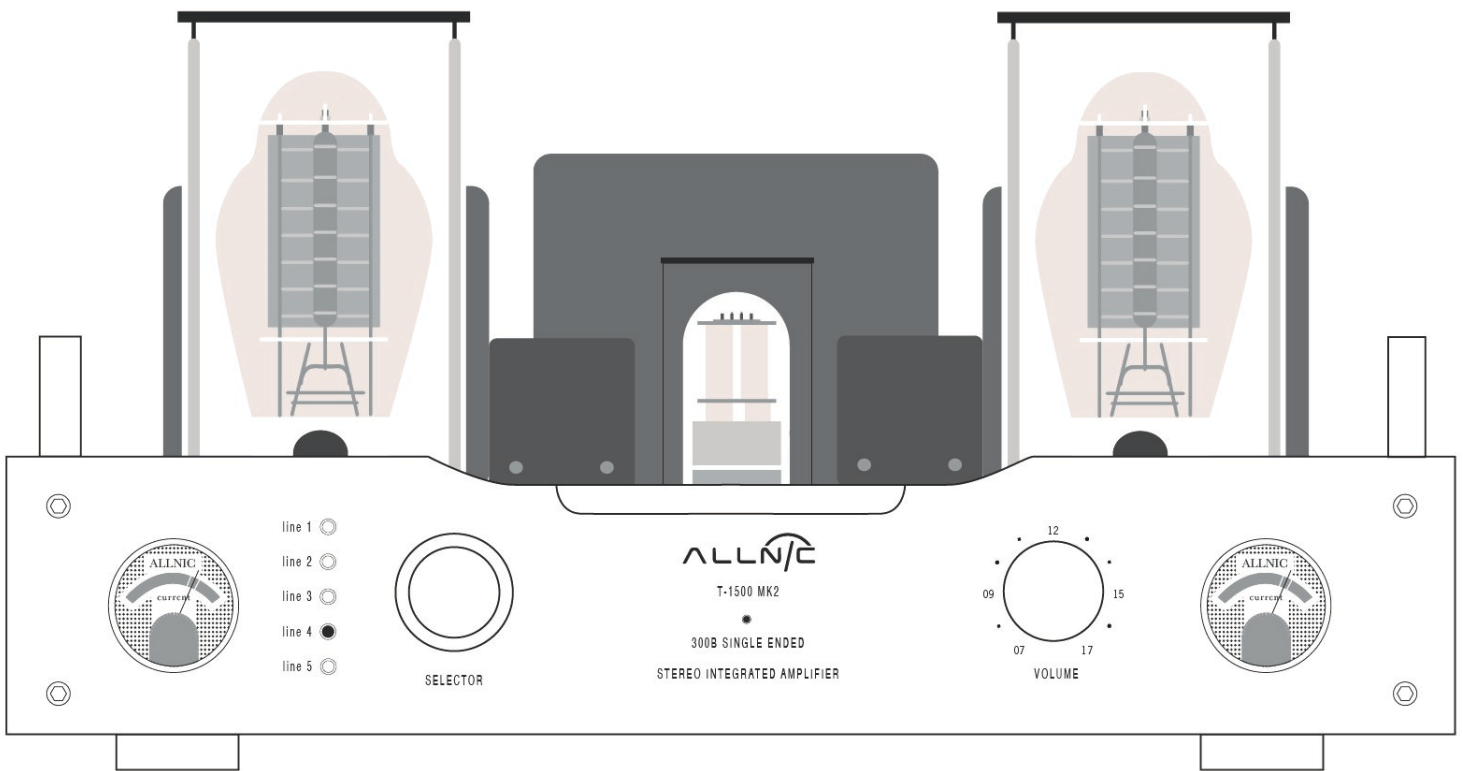


Figure 8 – T-1500 MK2 Top View

