



ALLNIC AUDIO

L-10000 OTL/OCL LINE-STAGE PREAMPLIFIER



OWNER'S MANUAL

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Thank you for purchasing the Allnic Audio L-10000 OTL/OCL (Output Transformer-Less/Output Capacitor-Less) Line-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 L-10000 OTL/OCL Line-Stage Preamplifier 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 L-10000 OTL/OCL LINE-STAGE PREAMPLIFIER	4
WHAT'S IN THE BOX?	6
SAFETY	6
CLEANING Chassis Connectors	6
INITIAL SET-UP Location, Location, Location Power Connection Inputs Outputs Remote Control	7 8 8 8 8
INITIAL POWER ON	9
OPERATION	10
CURRENT METERS	10
TUBES	11
SPECIFICATIONS	12
WARRANTY	13
FIGURES	14

Please read about **SAFETY** before you attempt to use the L-10000 OTL/OCL Line-Stage Preamplifier - we care about our customers and the equipment, and we want you to enjoy this product for a long time!

INTRODUCING THE L-10000 OTL/OCL LINE-STAGE PREAMPLIFIER

Immerse yourself in the original recorded space. The L-10000 OTL/OCL (Output Transformer-Less/Output Capacitor-Less) is a triple gain stage, remote controlled, line-stage preamplifier, without transformers or capacitors in its single-ended signal path. It uses the 300B direct-heated, single-ended triode as its directly coupled output power tubes; i.e., there are no output transformers on the single-ended (unbalanced) outputs, so the 300Bs communicate the signal directly to the connected power amplifier or amplifiers. The 300B has justly won the reputation of being a superb output tube in single-ended amplifiers, and in the L-10000 OTL/OCL preamplifier they fully reveal their inherent accuracy and beauty.

In common circuits, output capacitors or output transformers are required to separate the AC music signal from the DC operating potential. If this is not done, the latter will destroy the power amplifier, the loudspeakers, or both. However, these two coupling devices also introduce their own influences on the transmission of the musical signal, adding their own character (colouration), increasing distortion, and consuming small signals, all as predicted by physical efficiency theory. In addition, they also limit signal dynamics. For these reasons, the elimination of output transformers and capacitors has been considered the best solution for the design of the most accurate amplifiers. Removal of these two coupling devices from the signal path achieves the best results possible:

- No colouration of the musical signal
- Extremely detailed expression, natural harmonics and subtle musical decay
- The lowest possible distortion
- The widest musical dynamics

In the L-10000, there is no coupling device between the preamplifier and the power amplifier; that is, the final gain/output tubes are directly connected to the power amplifier. Thus, the benefits listed above are fully present in the Allnic L-10000 preamplifier.

Some circuit experts might be concerned about DC potential in the music signal in an OTL/OCL design. However, the chance of this problem occurring can be 100% reliably eliminated by doing away with the potential for DC in the signal path. To do this, Allnic uses a “floating power supply circuit”, a design which deals with the theoretical issue by simply not creating any DC potential in the first place.

The L-10000's OTL/OCL circuit is basically SEPP, “Single-Ended, Push-Pull”, so a “cancellation circuit” is required to adjust the balance of signal between the upper and lower power output tubes' input grids. Allnic uses an extremely sophisticated “Active Balanced Positive and Negative Feedback Circuit”, in which the 6AN8 pentode perfectly controls the circuit's operation with extremely low distortion and incredible speed.

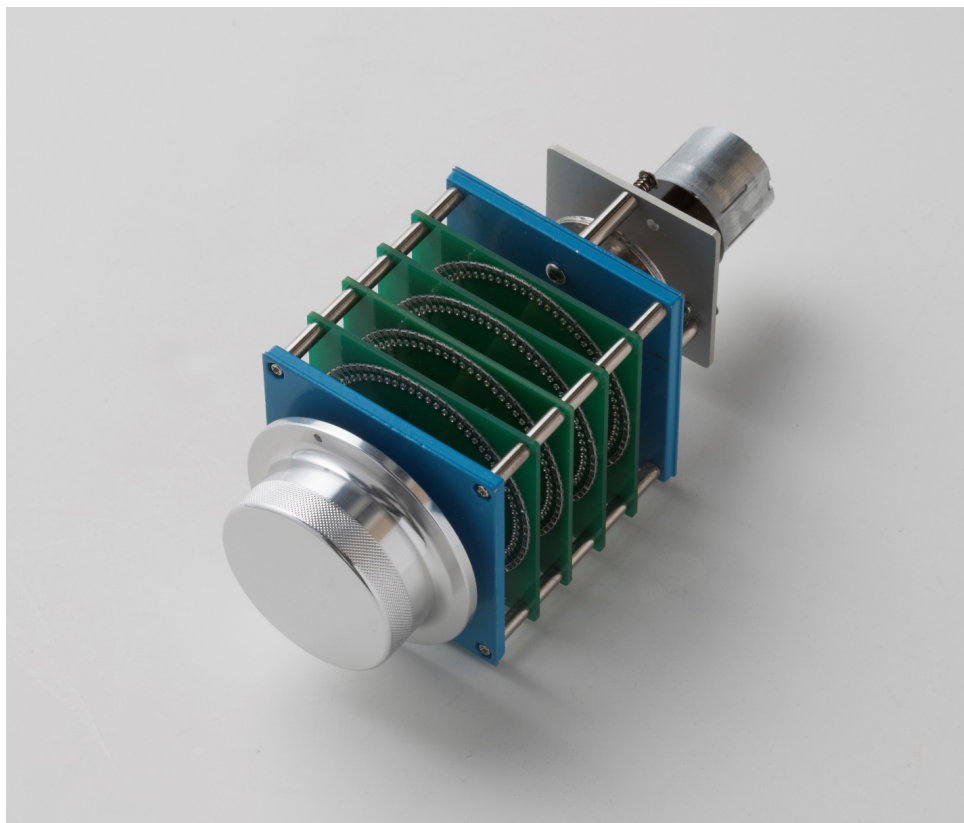
The L-10000 OTL/OCL is a world-class, reference level, line-stage preamplifier. It offers unbelievably realistic, holographic sound-staging combined with incredible resolution, clarity, micro-dynamics, and drive. Instrument and vocal tones and timbres are breathtakingly lifelike,

and the placement of instruments and bodies in three dimensions startling, life-size, and addictive. The L-10000 OTL/OCL has no voice of its own, none. It is silent, except for the music emanating from the blackest of backgrounds. In addition, the stunningly realistic sonic quality is matched by the simple elegance, flexibility and ergonomic functionality of the L-10000's casework and connection options. The L-10000 is truly a masterpiece, and is Allnic Audio's top line-stage preamplifier. Few preamplifiers can compete.

The L-10000 OTL/OCL has the following features:

- Pure single-ended, Class A operation
- **61 STEP CONSTANT IMPEDANCE BRIDGED TYPE ATTENUATOR - A world's "first of its kind" for Allnic Audio**

The L-10000 OTL/OCL does not employ a digital IC volume control or a low-cost carbon film volume control with a motor. The L-10000 OTL/OCL uses the WORLD'S FIRST 61 step, constant impedance, "bridged" type attenuator, standard on all units produced after May 2019. Allnic's new attenuator is now the most sophisticated on the market, and we believe, without a doubt, also the absolute best sounding. With fixed impedance and no (\pm 0db) channel imbalance at any volume level, this revolutionary and currently unique, oil clutched, motorized attenuator will astound users with its elevation of the fidelity and purity of any system in which it finds a home.



The Allnic 61 step constant impedance bridged type attenuator

- Minimal negative feedback
- For its balanced (XLR) outputs, permalloy transformers, like those used in Allnic's transformer-coupled preamplifiers, are employed.
- As are all Allnic Audio products, the L-10000 OTL/OCL 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 L-10000 OTL/OCL Preamplifier – in natural aluminum or black, depending on your order specification
- One (1) power cord
- One (1) remote control
- Two (2) x AAA batteries for the remote control
- One (1) Owner's Manual

Note:

- 1) The L-10000 OTL/OCL ships with the tubes installed.
- 2) The L-10000 OTL/OCL 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 L-10000 OTL/OCL in your system.**
- 3) **Be sure the L-10000 OTL/OCL 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 L-10000 OTL/OCL came in. It will be useful if you sell your L-10000 OTL/OCL or in the unlikely event you need to ship it for service.

SAFETY

- **CAREFULLY and SLOWLY remove ALL cardboard and Styrofoam cushioning material inside the tube chimneys before operation.**
- Disconnect the power cord by pulling the plug, not the cable.
- Keep the power cord away from any heat source.
- 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 unit into an AC connection.

- Do not attempt any repairs.
- Do not remove the chassis cover 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, meter glass 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, LOCATION

Like all audio products using tubes, the Allnic Audio L-10000 OTL/OCL needs to be placed on a solid stand in a location that provides for good air circulation around the preamplifier.

- DO NOT cover the top of the preamplifier.
- 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 L-10000 OTL/OCL on a set of after-market isolation feet or similar devices. Dropping one side of the L-10000 OTL/OCL, or the whole unit, is not a good thing.
- 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 unit’s 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 and interconnects, both inputs and outputs. The L-10000 OTL/OCL is a highly sensitive piece of electronic equipment designed for neutrality and will output what you put into it. **Allnic’s Zero Loss Technology power cables and MU metal shielded interconnects will work synergistically with the L-10000 OTL/OCL.**
- DO try to place the L-10000 OTL/OCL away from major sources of RFI and EMI; though well shielded, the L-10000 OTL/OCL will function best away from large power transformers and other sources of such interference.

B. POWER CONNECTION

The L-10000 OTL/OCL uses a standard three prong male 15 amp IEC connection for AC input. You need to use a power cord with a female three prong 15 amp IEC connector at one end.

To the left of the IEC connector (facing the left side of the unit as in Figure 1), there is a power on-off switch. Leave this switch in the OFF position – that means the switch is pressed “down” at the bottom - while you make all initial connections.

The L-10000 OTL/OCL you have purchased is set internally for 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.

C. INPUTS

There are five (5) inputs. Line 1 and Line 2 are balanced connections (XLR type connectors). The remaining three (3) line inputs are RCA type, single-ended connections. None of the inputs is intended especially for connection to any particular device.

NO PHONO STAGE - The L-10000 OTL/OCL is a line-stage preamplifier and does NOT have a built-in phono preamplifier section. You will need a phono preamplifier if you want to use a turntable with the L-10000 OTL/OCL. You can connect your phono preamplifier to any of the five inputs, provided you have the appropriate types of connections or adaptors.

The L-10000 OTL/OCL has been designed and manufactured to work most synergistically with Allnic Audio phono preamplifiers, pre-preamplifiers, equalization and power amplification products, and ZL Technology cables.

D. OUTPUTS

The L-10000 OTL/OCL has three pairs of outputs. One (1) pair is single-ended unbalanced, using RCA type connectors; two (2) output pairs are balanced (i.e., separate ground), using XLR connectors (see Figure 2). Only the RCA, unbalanced connectors are directly coupled to the 300B output stage. The balanced output connectors are coupled to a pair of permalloy output transformers.

You may use the balanced and single-ended RCA outputs at the same time; for example, if you run one pair to your stereo amplifier and the other pair, or pairs, to a powered subwoofer or a pair of them.

E. REMOTE CONTROL

The remote control provides the ability to remotely:

- Select the line source input using either the numbered selector buttons (1 to 5) or the channel up/down arrow buttons (Please see Figure 3).
- Control the volume level using the right (louder) and left (quieter) arrow buttons adjacent to the channel arrow buttons.
- Mute the volume using the button labeled “MUTE”. To raise the volume again after muting, press the Mute button to take the volume level to where it was prior to muting. In Mute mode, the light above the “operate” button on the front panel of the L-10000 OTL/OCL will not be illuminated; it will illuminate when the L-10000 OTL/OCL is unmuted again.
- Use the red power on/off button in the top left-hand corner of the remote control to power the L-10000 OTL/OCL on and off.

INITIAL POWER-ON

Once you have your L-10000 OTL/OCL in place and all connections have been made to your sources and amplifier(s) and the power cord is installed and plugged into an AC receptacle, you are ready to turn on the power for your L-10000 OTL/OCL. Before you power up the L-10000 OTL/OCL, though, be sure you have:

- **CAREFULLY AND SLOWLY removed ALL the cardboard 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).**
- turned the volume down on, or muted the L-10000 OTL/OCL
- checked that all your connections are snug

Also, be sure you have manually turned the volume control on the front panel to the extreme counter-clockwise position (minimum volume).

Push the power on-off switch to the left of the IEC connector (facing the left side of the unit as in Figure 1) so it is in the “on position”. That will power up the L-10000 OTL/OCL. From this point on, you need only use the far left hand button marked “power” on the front panel or the power button on the remote control to turn the L-10000 OTL/OCL on and off.

Once the power has been turned on, the following will happen on the front panel (Please see Figure 4):

- the light above the “power” button will illuminate
- the meters on the front panel will illuminate
- the light over the line source button that is depressed will illuminate
- after about 40 seconds, the light over the “operate” button will illuminate. The L-10000 OTL/OCL has a “soft start” delay for the tubes in order to extend tube life.

GAIN STAGE BALANCING USING THE CURRENT METERS - IMPORTANT!

There is one current meter for each channel on the front of the L-10000 (See Figure 4). These meters indicate the status of the current supply to the gain tubes in the L-10000 OTL/OCL. If the gain stages are set up and functioning properly, the needles of the meters should be in the centre between the two parallel lines in the middle of each meter.

The meters have two functions, but initially, and from time to time as may be necessary (this should be very infrequently, if ever, for example, when replacing the 300B tubes), they are used to balance the outputs of the third gain stage tubes for the right and left channels.

Using a small, flat blade screwdriver, turn the screw head located immediately above each of the meters on the L-10000's face (see Figure 4) clockwise and counter-clockwise until the meter's needle is centred between the parallel lines in the middle of the meter. The goal is to have the needles of both meters in the centre position between the two parallel lines. **Please be patient;** it could take some time to get the balance, but once set, it should rarely, if ever, move.

The Allnic Audio L-10000 OTL/OCL is now ready for operation. At this point, you can power on your sources and, finally, your stereo power amplifier or mono-blocks.

OPERATION

From this point on, operation is straight-forward. All functions are controlled from the front panel or the remote control. Of course, BE CAREFUL about differences in gain between your sources. Generally, disc players and tuners will have greater gain than phono stages. That means the volume setting for listening to your turntable might be too high for listening to digital disks or streaming devices.

To avoid surges to the speakers, it is best to change from input to input only with the "operate" button set to mute (the light above the button will not be illuminated when the button is in the "mute" position).

When you are finished listening, turn off your stereo power amplifier or mono-block amplifiers. Then turn off the L-10000 OTL/OCL by depressing the power button on the front panel. The power switch on the left side panel should stay in the "on" position – this will keep key circuitry warm, and your L-10000 OTL/OCL will be ready to play when the soft-start turns on the L-10000 OTL/OCL next time you want to listen. Turn off your sources last.

CURRENT METERS

There is one current meter for each channel on the front of the L-10000 (See Figure 4). These meters indicate the status of the current supply to the gain tubes in the L-10000 OTL/OCL. If the

gain stages are set up and functioning properly, the needles of the meters should be in the centre between the two parallel lines in the middle of the meters.

These illuminated meters perform two functions:

- First, the meters are used to balance the outputs of the third gain stage tubes for the right and left channels, as explained above in “Initial Set-up”. **Remember, when replacing the 300B tubes be sure to turn the screw for each meter so the needle is on or just below the left-hand parallel line on the meter’s face. The L-10000 must be powered off to remove and insert tubes.**
- Second, the meters are indicators of failure or damage to the function of the unit. Any failure of the tubes or circuits in one or the other of the L-10000 OTL/OCL’s channels is indicated by the needle on the meter for the respective channel moving out from between those two parallel lines.
 - If the needle has moved to the left of the parallel lines on either meter, it means that one or both of the third gain stage tubes (300B) for that channel is failing.
 - If the needle on either meter moves to the right of the parallel lines, it means that one or both of the first and second gain stage tubes (6AN8 or 12AU7) for that channel is failing.

In the case of any failure indicated by the meter, please contact Allnic Audio or its authorized representative for assistance.

TUBES

The L-10000 OTL/OCL uses the following tubes (see Figure 5):

- Two (2) x 6AN8
- Two (2) x 12AU7
- Four (4) x 300B

All consequences of changing or attempting to change tubes are borne by the user unless by express agreement between the owner and Allnic Audio or its authorized 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 L-10000 OTL/OCL, any of its parts, or tubes or replacement tubes resulting from the user changing or attempting to change tubes.

SPECIFICATIONS

FOR THE ALLNIC AUDIO L-10000 OTL/OCL LINE-STAGE PREAMPLIFIER

- Inputs: Line level × 5 pairs:
Balanced (XLR) × 2
Unbalanced (RCA) × 3
- Outputs: 3 pairs:
Unbalanced (RCA) × 1 pair
Balanced (XLR) × 2 pair
- Input Impedance: 10kΩ Balanced/Unbalanced
- Frequency Range: 5Hz to 100kHz
- Voltage Gain: +18dB
- THD (1kHz): Less than 0.03% (1kHz, 1V RMS)
- S/N Ratio: -100dB (CCIR, 1kHz)
- Maximum Output: 20V RMS (Non-clipping)
- Output Impedance: 200Ω Constant
- Power Consumption: 120W at 110/120V (60 Hz)
120W at 220/230V (50 Hz)
- Tubes: 6AN8 (no equivalent) × 2 (first gain stage)
12AU7 (equivalent to ECC82, ECC802, B749, CV491, CV4003, 5814, 5963, 6189, 6350, 6680, 7316, 7730) × 2 (second gain stage)
300B (no equivalent – contact your dealer for recommendations) × 4 (third gain stage)

- Fuse: 5A/120V; 3A/230V
slow blow
- Tube
chimney
screws: 2mm Allen head
- Dimensions: 430mm (16.95 inches) (W)
450mm (17.717 inches) including handles (D)
280mm (11.0236 inches) (H)
- Weight: 22 kg (48.4 lbs) unpacked.
27 kg. (59.5 lbs) packed in original
shipping material

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 1 – L-10000 OTL/OCL Left Side Panel View

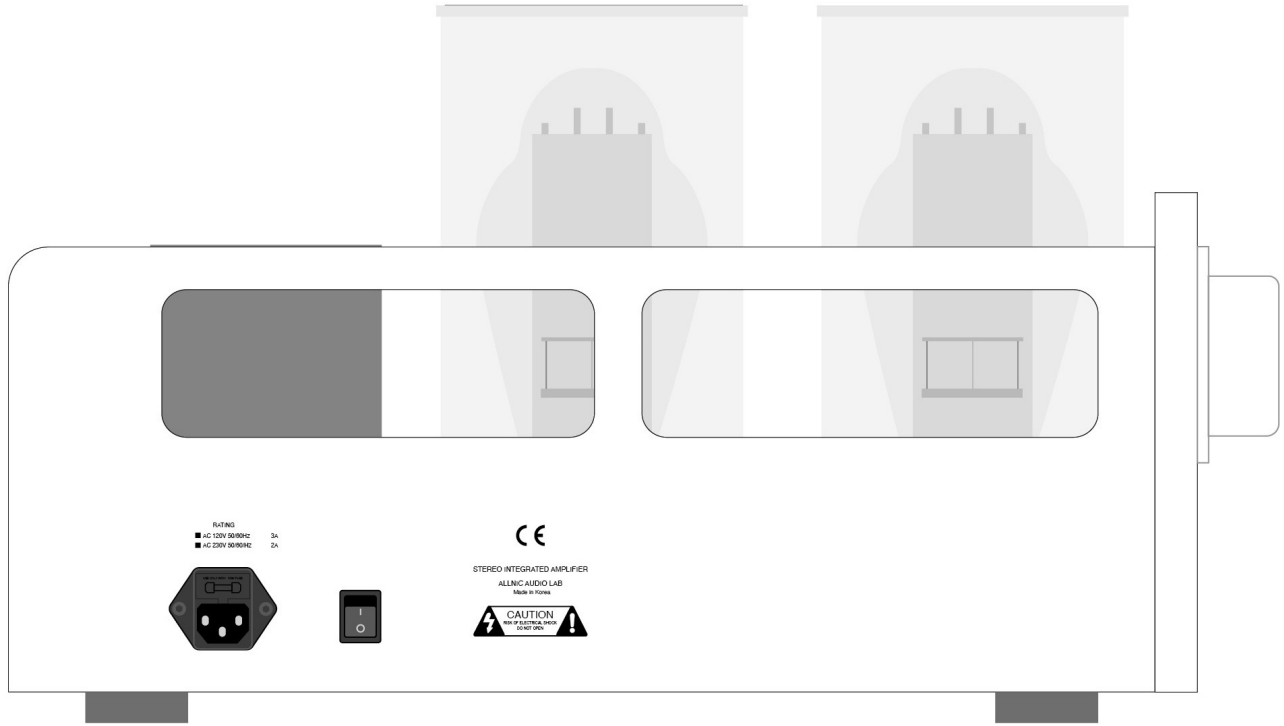


Figure 2 – L-10000 OTL/OCL Rear Panel View

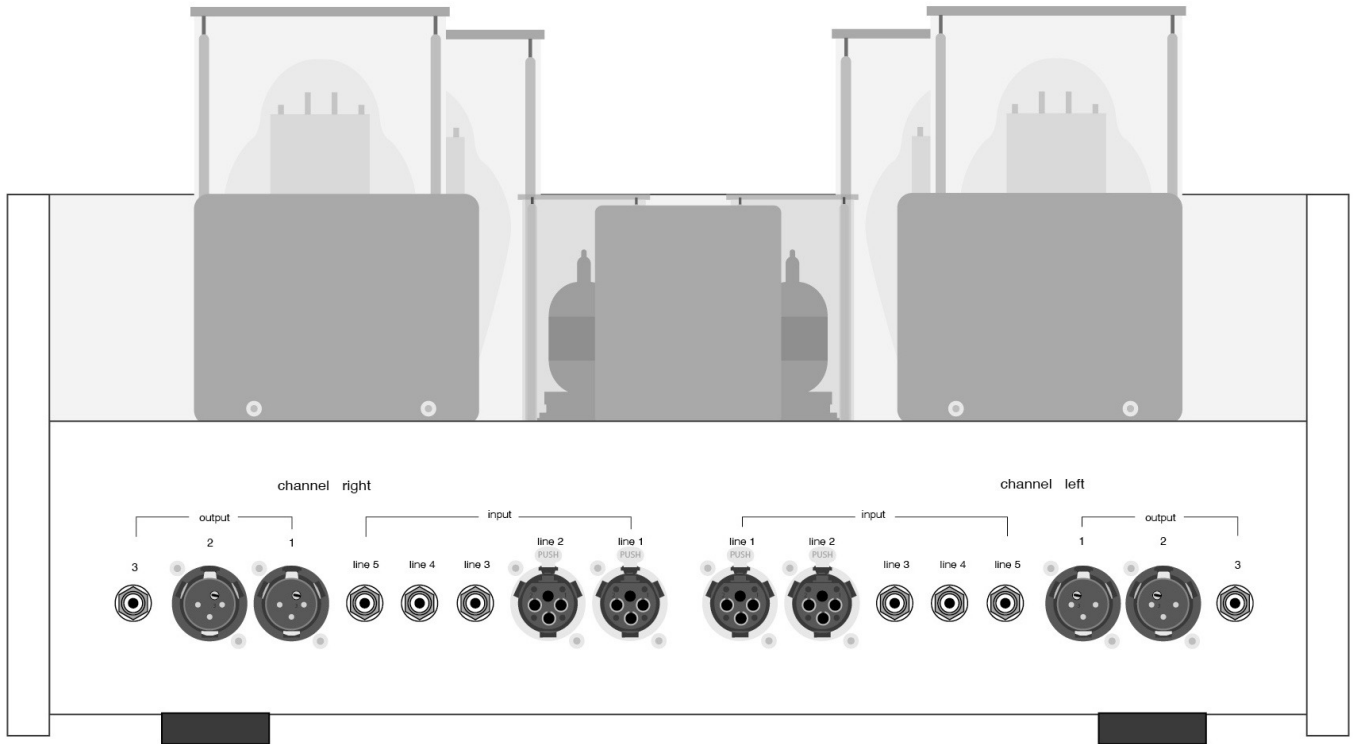


Figure 3 – L-10000 OTL/OCL Remote Control

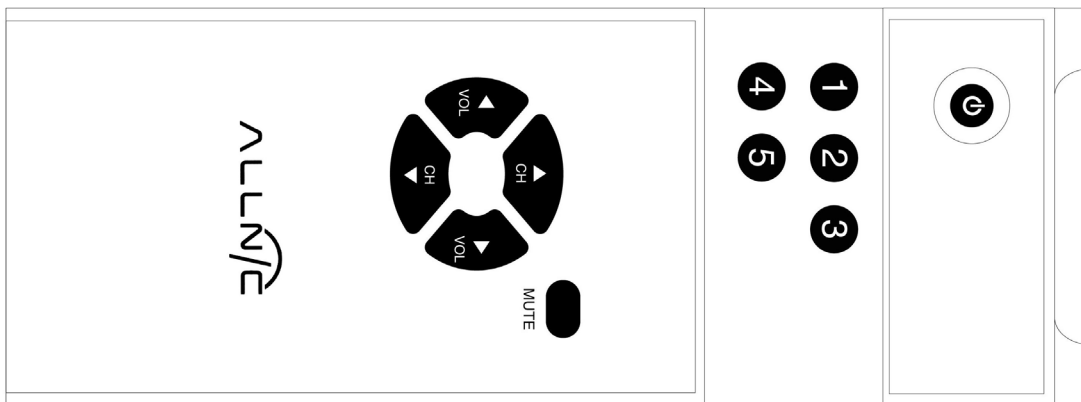


Figure 4 – L-10000 OTL/OCL Front Panel View

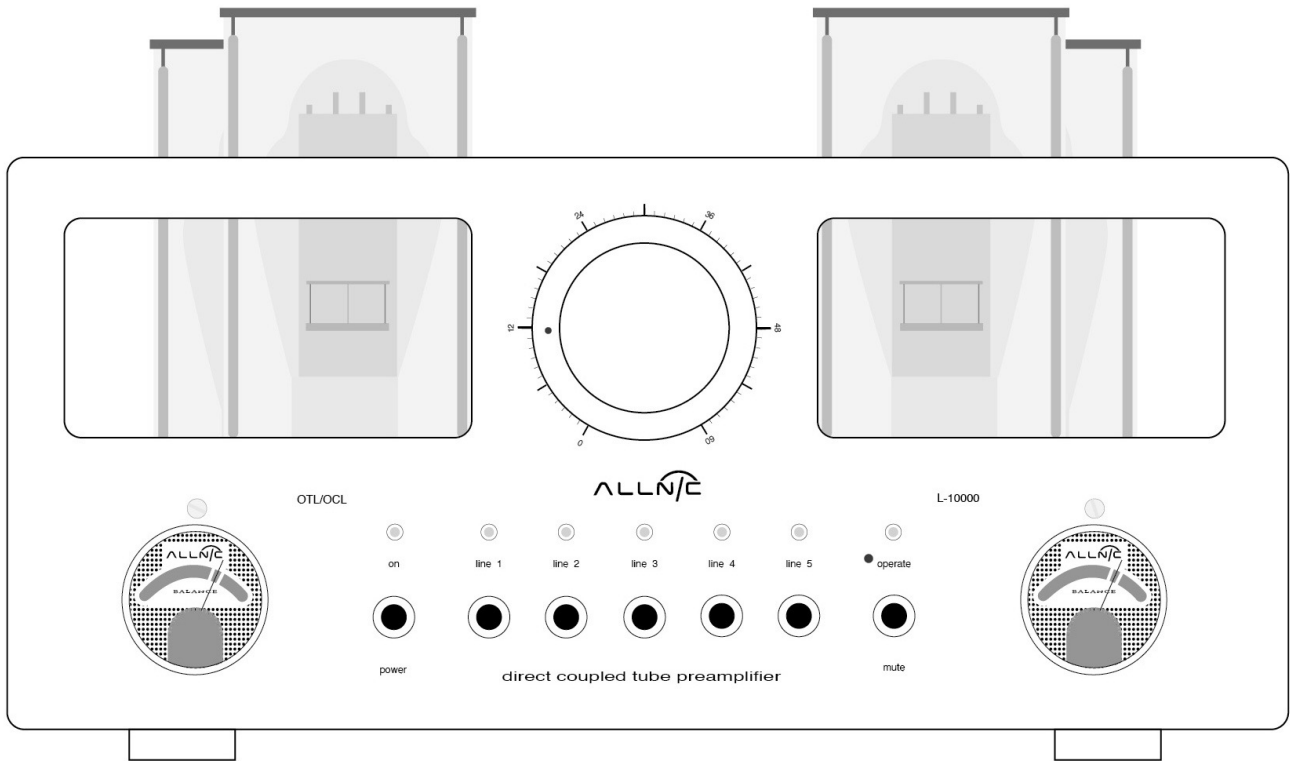


Figure 5 – L-10000 OTL/OCL Top View

