

Linar Audio

A105

Stereo Class A

MOSFET Power Amplifier

User Manual

Important Safety Instructions

- 1. Read carefully these instructions.
- 2. Keep these instructions in a safe place.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- 7. Do not block ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves or another apparatus that produces heat.
- 9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other (North American standard). A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for safety. If the provided plug does not fit into the outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments and accessories specified by the manufacturer.
- 12.

Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury.

- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power cord or plug has been damaged; liquid has been spilled or objects have fallen into the apparatus; or the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. No naked flame sources, such as candles, should be placed on the apparatus.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.





The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage " within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Please read completely and observe all instructions and precautions in this owner manual before operating your Linar A105 Amplifier. Retain this owner's manual for future reference

- 1. ALWAYS disconnect the AC main power cord mains before connecting or disconnecting any cables.
- 2. ALWAYS use three-connector AC main power cord including a protective grounding protection.
- **3. NEVER** use "ground lifting" and ground plug must be left intact. Failure to comply will void the warranty and could pose a serious risk to your health and safety.
- 4. ALWAYS provide a minimum a 10 cm (4inches) of clearance above the amplifier to allow for heat dissipation.
- 5. NEVER use flammable or combustible chemicals for cleaning audio components.
- 6. **NEVER** wet the inside of this product with any liquid.
- 7. NEVER pour or spill liquids directly onto this unit.
- 8. **NEVER** block air flow through ventilation slots or heatsinks.
- 9. NEVER bypass any fuse.
- **10. NEVER** replace any fuse with a value or type other than that specified.
- **11. NEVER** attempt to repair this product. If a problem occurs, contact your Linar Audio dealer.
- **12. NEVER** remove the top cover. Internal components can store electricity and could result in serious electrical shock or injury. There are no user-serviceable parts.
- **13. NEVER** expose this product to extremely high or low temperatures.
- 14. NEVER operate this product in an explosive atmosphere.
- **15. ALWAYS** unplug sensitive electronic equipment during lightning storms.

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Introduction

Thank you for choosing the Linar Audio A105, Stereo Class A Amplifier.

Linar Audio products are the fruit of extensive research and development in the audio field. Linar Audio Amplifiers are designed to provide the world-class performance.

The Linar A105 Amplifier is designed with J-FET transistors in the input stage and MOSFET transistors in the output stage, without negative feedback, making the amplifier extremely stable under capacitive load. The circuitry is fully complementary from input to output.

Aesthetically stunning and sonically spectacular, the Linar A105 is a perfect match for your high-end 2 channel sources.

As with many high-end audio products, your Linar Amplifier will require a significant break-in period. This process can take up to 200 hours of use.

Familiarize yourself with the material contained within this manual prior to using in order to get the full benefit of your investment. If you have any uncertainties, contact your Linar Audio dealer.

Given proper use and care, your Linar Audio Amplifier should provide you with many years of exceptional music reproduction and listening pleasure.

Unpacking

Unpack your Linar A105 Amplifier carefully as it is quite heavy. Keep all packaging to ensure safe transport in the future. Accessories included with your amplifier are:

✓ AC Power Cord

✓ This Owners Manual

After you have completed unpacking, perform a thorough inspection of the amplifier and report any damage to your dealer immediately. It is recommended to allow the unit to acclimatize to the temperature and humidity conditions in your home prior to operation.

Please write below the serial number of your Linar Audio Model A105 Stereo Amplifier located on the rear panel for future reference.

Serial number: _____

Rear Panel

All connections are accessible from the rear panel of the amplifier. Familiarize yourself with the layout of the rear panel prior to placing your amplifier on a shelf or in a cabinet. Ideally, you should have easy and open access to the rear panel to make connections easier, and to reduce any crimping or pressure on your cables.

Connections should be made with all system components turned off! The performance of the system can be significantly improved by using high quality interconnect and speaker cables.

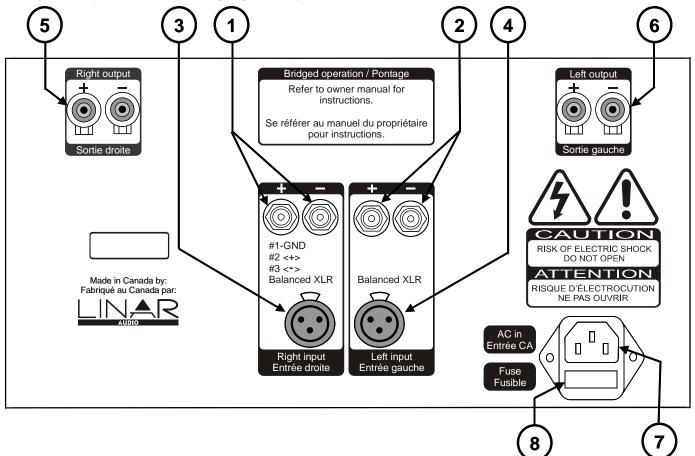


Figure 1. Linar Audio A105 Amplifier Rear Panel

Connections

1 and 2 RCA Jacks

The Linar A105 Amplifier has 2 sets of single-ended inputs. Each single-ended input is composed of a pair of RCA jacks labelled + and -. This arrangement allows bridging of the amplifier as discussed in a following section.

Single ended operation: One RCA jack is used per side, insert the interconnect cable to the + RCA jacks. Shorting plugs are supplied and <u>must be placed in the unused RCA jacks.</u>

Ensure you properly connect the left and right channel inputs to your pre-amplifier output.

3 and 4 XLR Balance Input

These are labelled BALANCED XLR, AND +/ - INPUT . Ensure you properly connect the left and right channel inputs to your Pre-amplifier output.

Balanced operation: Use the XLR inputs connectors before be sure to <u>remove the</u> shorting plugs on the –RCA jack.

Pin No 1: Ground Pin No 2: + input (Non-inversing input) Pin No 3: - input (Inversing input)

5 and 6 Speaker Connections

The Linar A105 Amplifier has two sets of binding post for speaker connections. There are Left and Right Output Speaker connections. Ensure you connect the correct speaker to the correct output for proper system performance. Follow each speaker wire from the amplifier to the appropriate speaker to make certain you have connected them properly. The + outputs are coloured red and the – outputs are coloured black. Ensure all + outputs from the amplifier match the + inputs of your speakers so you will not encounter phase problems.

The speaker outputs will accept most common wire connectors, including banana plugs, spades, and bare wire. Under no circumstances should your speaker cables be allowed to short-circuit the amplifier by contacting the + and - outputs simultaneously.

7 and 8 AC Line Cord Receptacle and Fuse Holder

The Linar A105 Amplifier has an "IEC" type AC power connector. Insert the supplied AC power cord into connector prior to plugging the cord into the AC wall receptacle.

The AC main fuse is accessible below the IEC receptacle. If you suspect that the fuse has blown, disconnects the AC Line Cord and pull out the fuse holder with a small flat screwdriver inserted in the slot accessible by the IEC receptacle. Replace the fuse by the following type:

Main Voltage 120VAC Fuse type: 5mm x 20mm slow blow Rating: 8A 125VAC or 250VAC

Main Voltage 230VAC Fuse type: 5mm x 20mm slow blow Rating: 4A 250VAC

Bridged Mono Operation

In Bridged mode two channels are used to amplify a single channel, therefore you require two amplifiers for stereo. The Linar A105 Amplifiers may be configured for bridged operation without the use of external or internal switches or jumper. Refer to figure 2 for set-up. To use this mode you will need a Y adapter so that you can feed the same signal (one of the preamplifier's two channel) into two jacks : the right + jack and the left – jack. The supplied shorting plugs shall be inserted into the unused jacks. The speaker is then connected between the two red output terminals. Nothing must be connected to the black terminals.

If you wish to maintain correct absolute polarity, the red speaker cable should be connected to the right red terminal.

Note that, using two amplifiers in this way, you can obtain about four times the normal power.

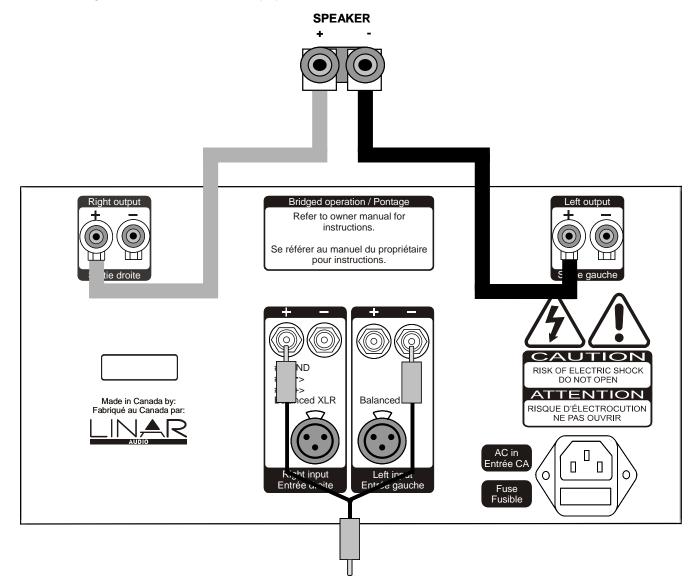


Figure 2. Connection for bridge mono operation

Front Panel

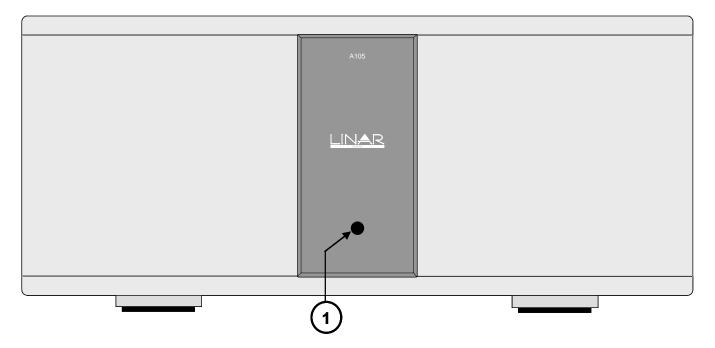


Figure 3. Linar A105 Amplifier Front Panel

Front Panel

1 On/Off Power and LED Indicator

Always press the Power button to turn on or off the amplifier. There is a soft start circuitry preventing large in-rush current during power on. You will hear a click from relays when you turn on the Linar A105 Amplifier. A blue LED illuminates the transparent Lexan ® panel when the amplifier is powered.

Specifications of Linar A105 Amplifier

Output power at 8 ohms 50 watts/ch Output power at 4 ohms 100 watts/ch Output power at 2 ohms 200 watts/ch

Total Harmonic Distortion (rated power) Total Intermodulation Distortion Signal to noise ratio	Typically 0.05% - Note 1
Frequency Response	
Input impedance	
Output impedance	0.016 Ω
Damping Factor	> 500
Input sensitivity RCA inputs	0.73 V rms (for max power)
Balance input sensitivity	. 0.37 V rms (for max power)
Gain	27,4 times the input signal or 28,8dB
Channel separation	. > 100dB
Class of operation	A
Power consumption at idle	. 200 W
Power Supply	
Weight	
Dimensions (WxHxD)	457mm x 200mm x 300mm (18.0"x7.87"x15.38")

Note 1 - According to IHF-A202 standard, for the purpose of this standard, F1 shall equal 60Hz and F2 shall equal 7000Hz, the low frequency sine wave having an amplitude 4 times greater than that of the high frequency sine wave. The measurements of Linar Amplifiers are in respect of this standard but with any frequency combination in any ratio.

Service and Warranty

Linar Audio A105 Amplifier is guarantied for a period of 5 years against manufacturing defects. This warranty includes parts, labour, and return shipping to the original and subsequent owners. In the unlikely event you experience technical problems with your Linar Amplifier, please contact your dealer for troubleshooting tips. If no solution can be found, please contact Linar Audio using the contact information provided below. If there is no authorized service technician in your area, a Return Authorization may be given to you. Only after obtaining a Return Authorization should you send your Amplifier to the manufacturer. Linar Audio will either repair or replace your amplifier at their discretion.

This warranty will be considered void if any defect, failure, malfunction, or other damage is deemed to have been caused by mistreatment of the amplifier. Mistreatment includes, but is not limited to, abuse, tampering, servicing of the amplifier by unauthorized technicians, and failure to conform to operating instructions listed in this manual.

There are no user serviceable parts in the Linar Audio A105 Amplifier. Servicing should only be performed by factory-authorized technicians, or by Linar Audio.

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