



TSA-300 Stereo Power Amplifier Owner's Manual





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SAFETY PRECAUTIONS



WARNING: A tube amplifier chassis contains lethal high voltage even when unplugged.

DO NOT REMOVE THE COVER. NO USER SERVICEABLE PARTS INSIDE.

DO NOT ATTEMPT TO OPEN THIS DEVICE.

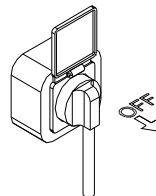
IN CASE OF MALFUNCTION CONTACT YOUR DEALER OR THE MANUFACTURER.

THIS EQUIPMENT MUST BE GROUNDED. IT SHOULD NOT BE NECESSARY TO REMOVE ANY PROTECTIVE GROUND OR SIGNAL CABLE SHIELD CONNECTIONS TO PREVENT GROUNDLOOPS.

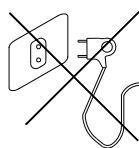
USE ONLY THE VOLTAGE INDICATED ON REAR PANEL

WARNING: Before any maintenance or placement, disconnect the device from the electrical outlets.

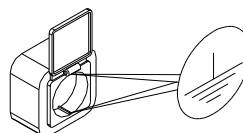
WITH THE POWER SWITCH TO OFF DISCONNECT THE DEVICE THE WAY THAT THE ARROW SHOWS



WARNING: Never use electrical outlets without earth



WARNING: Use only electrical outlets that are earthed.



DISPOSAL: Disposal According to the Directive 2002/96/EG of the European Parliament used consumer-electro technical appliances have to be disposed separately and have to be indicated with the following



symbol. In the case of disposal of this component please do so in conformity with legal and environmental regulations.

TLA PROFILE

TLA was founded by Velissarios Georgiadis back in 1995, but its real origin goes back much further than this. It was back in 1957 when Velissarios' father Aristomenis, a transformer technician, started his own company, with the aim to make transformers under order for telecommunications, broadcast, medical, military and industrial implementations. It was just after 1980 when Velissarios, who was already experienced in transformer building having being taught all his father's know-how, he started to apply the additional knowledge which he gained from his university degree on Chemistry and Electronics as to develop transformers that would excel in audio applications of reference standard.

Velissarios developed, built and tested over, countless amplifiers before he transferred all this experience in **TLA** products on the year 1995. The name TrueLife Audio was chosen to underline the target market of **TLA** The search for True Life sound, where the listener would experience music at home as never before, In a True Life manner!

In the year 2005, young Aristomenis Georgiadis the second (son of Velissarios, named after his grandfather), finished his studies in Electrical Engineering and having received in the meantime all his grandfather's and father's experience in making audio transformers and amplification circuits that would excel in performance, joined the company as to assist in further improvements and the achievement of new levels for realistic sound.

"When we come with a new product, we make it for ourselves first" Velissarios says... A **TLA** amplifier starts its life with the innovative circuit it integrates being tested in the lab and optimized. Then, after the lab tests have been finalized and we are sure that our elegant innovation measures up to reference standards if compared with hi-end devices from other makers that are established in the market for their quality, we proceed to the next level which is to transform this same electronic device, into a musical instrument. As a consequence, our elegant innovations are made so that they age to improve all the time... much like a bottle of good wine... or a gorgeous guitar of the 50s!



INTRODUCTION

Your decision to own this **TSA-300 Power Amplifier** of the **TLA's** "True Series" ranks you at the very top among discriminating music listeners. You now have "The Best." The **TLA's** dedication to "Quality," is assurance that you will receive many years of musical enjoyment from this unit.

This level of accuracy and overall performance is a new achievement in the playback of music. I invite you to play your favorite recordings and experience it as you may never have before.

If I have brought you closer to the music, the artists and the full musical experience (the moments that we as audiophiles and music lovers cherish the most) then I have succeeded in my goal.

Please take a short time to read the information in this manual. We want you to be as familiar as possible with all the features and functions of your new **TSA-300**.

I thank you once again for your investment on **TLA's** team development of the "True Series"

Sincerely,

Aristomenis Georgiadis



TSA-300 DESCRIPTION

TSA-300 Stereo Power Amplifier, based on SSA-350 Mono Blocks is a hybrid design, designed to deliver exceptional sound to difficult loads. Using both tube and solid state circuits, combines virtues of both technologies to achieve the end result.

Dual Mono Design with 2 completely separate hybrid amplifiers in one chassis.

Each of these amplifiers has 2 separate Linear Power supplies. 4 power supplies in total.

First power supply is using a custom designed EI, low loss lamination transformer and a custom designed choke. It supplies the High Voltage and the Heater Voltage required for the 12AU7 tube front stage.

The second power supply is using a unique custom designed UI, low loss lamination transformer. Combined with high speed rectification and quality filter capacitors delivers dual polarity voltage and high current needed for the solid state and output sections.

The audio signal is connected directly to an 12AU7 Tube front stage supplied by its dedicated power supply.

Ultra linear solid state circuitry takes over further amplification of the signal and delivers the signal to current amplifier circuit that delivers the power to the load. Only bipolar transistors are used in the circuit. Semiconductors as well as resistors and capacitors are closely matched.

There is only one high quality copper, film capacitor in the signal path from input to output.

A Mosfet protection circuit is used to connect the load to the amplifier. After power up the protection circuit will wait aprx 13 sec before connecting the amp to the speaker, giving time to the tube heaters to warm up.

DC fault protection and high temp protection.

High quality PCBs. All boards are hand assembled. All parts of the amplifier are hand wired.

Highest quality components are used throughout the circuit. Each component is handpicked, tested and matched to serve the design.



PREPARATION AND INSTALLATION

Budget a suitable space in which to place the TSA-300 Amplifier.

This space should also be free of excessive heat or dust and large enough to permit easy flow of cool air to the top, bottom and sides of the unit. Avoid locating the **TSA-300** Amplifier where it will be exposed to direct sunlight, excessive humidity or moisture.

WARNING: To reduce risk of fire or electric shock, do not expose this appliance to rain or moisture.

Before Power-up

Check and make sure the power buttons are switched off and the Logo light is off, then attach the grounded IEC power cable jacks to the IEC plugs. Keep the power off until all other system connections are completed.

Check that the mains voltage printed on the back of the unit corresponds to the line voltage of the territory you intend to connect your **TSA-300** Amplifier.

Delayed Turn On and Protective Circuitry

To avoid the turn-on transients generated by some preamplifiers, the **TSA-300** provides a 13 second delay before connects the output terminals. The protective circuit will also disconnect the load if significant DC is present at the output. In case of heat sink overheating, the unit switches off (power off) and does not turn on again until the temperature drops to normal.

Input Connections

Conventional shielded RCA (Unbalanced) or XLR (Balanced) type cables should be used to connect the amplifier's input jacks to the preamplifier's output

Good quality connectors provide added assurance against signal degradation due to contact corrosion. Regardless of cable or connector material, verify that the contacts are clean, and that the plug's outer shield is tight on the jack, to avoid hum.

On long cable runs, keep the left and right cables close together, and avoid running them parallel to AC power wiring to minimize hum pick up.

Output Connections

To preserve the high damping factor of the **TSA-300** Amplifier and to minimize power loss, the use of at least 16 gauge speaker wires is recommended, especially for speakers of less than 8 ohms impedance, or for wire runs of 5 meters or more.

Your dealer can advise you on the wide variety of premium cables available from specialty manufacturers. The gold plated output binding posts on the **TSA-300** are of the "2-way" type, and will accept single banana plugs, spade plugs.

Be sure to follow proper phasing relationships when connecting the speakers, FOR STEREO OPERATION, the amplifier "+", or RED terminal, must be connected to the speaker's "+", or RED terminal, and the amplifier's "--", or BLACK terminal must be connected to the speakers "--" or BLACK terminal. Speaker cables identify one conductor from the other by the wire color, or by marking or coloring the insulation.

How to Avoid Damages

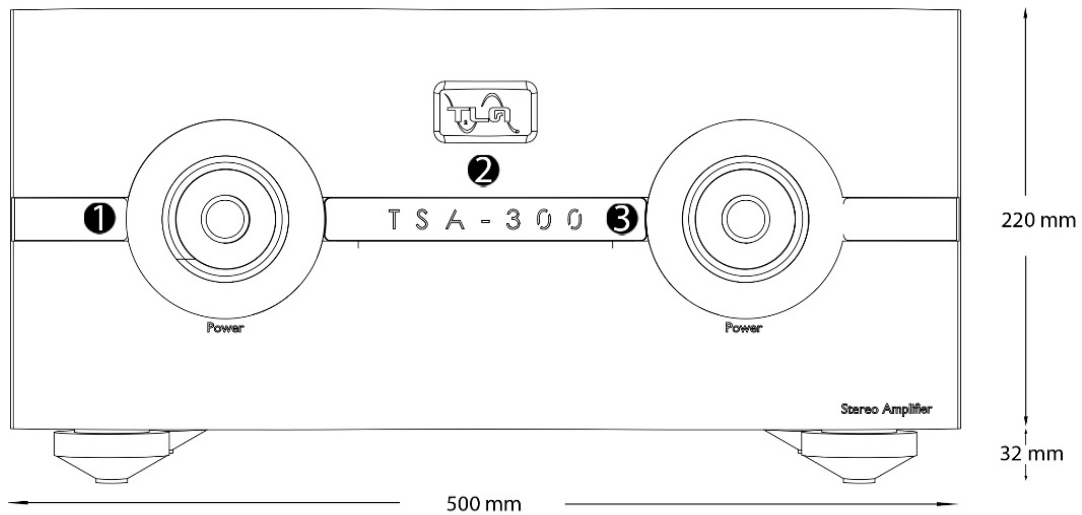
A good operating practice is to turn off all equipment before any connections or disconnections are made.



Do not, under any circumstances, connect or disconnect equipment when power is turned on. If you insist on connecting or disconnecting while power is turned on, you should be aware that the design of the RCA plug generates a large transient when inserting the plug.

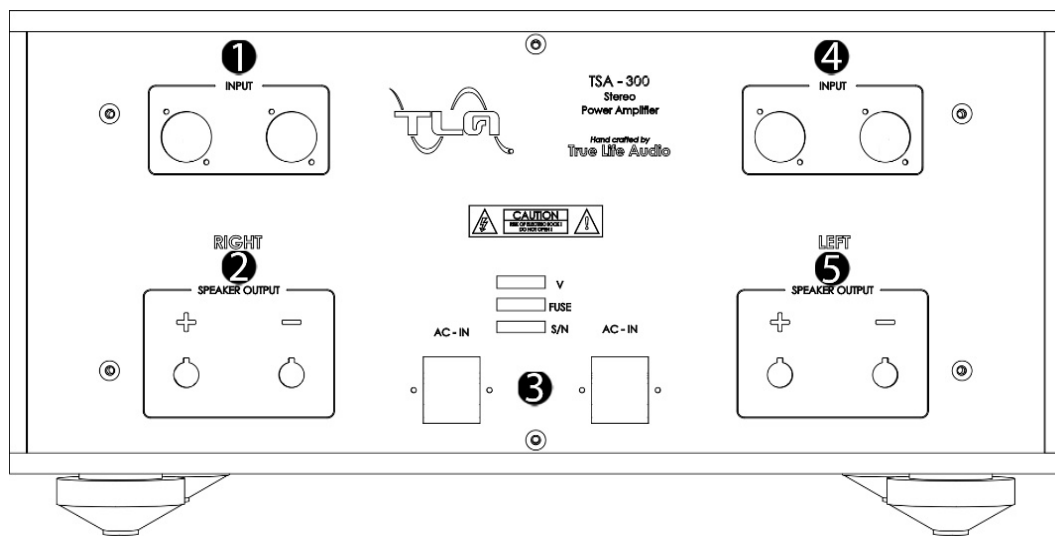
This could damage both the speakers and the amplifier.

FRONT VIEW



1. Power switch for Left Channel
2. Logo and Model lights up when power is on
3. Power switch for Right Channel

BACK VIEW



1. Line Input Connectors for Right Channel. RCA Unbalanced Input & XLR Unbalanced Input
Upon request 2 XLR (Female & Male) can be installed.
2. Speaker Output (Right Channel) for Spade Lug or Banana plug
3. IEC C14 Male Power Inlet & Fuse Holder
4. Line Input Connectors for Left Channel. RCA Unbalanced Input & XLR Unbalanced Input
Upon request 2 XLR (Female & Male) can be installed.
5. Speaker Output (Left Channel) for Spade Lug or Banana plug



SPECIFICATIONS

- **Maximum Voltage Input:** 1.5 Vrms
- **Output Power:** 300W RMS @ 4Ohm, 150W RMS @ 8Ohm
- **Input Impedance:** 100K
- **Gain:** 27 dB
- **Frequency Bandwidth:** 300KHz
- **Tubes used:**
2 X 12AU7
- **Voltage Options (Factory Set):**
230-240VAC
110-120VAC
- **Fuses (5x20mm):**
2 X T3.15A (Slow Blow): 220V-240 VAC
2 X T6.3A (Slow Blow): 110-120 VAC
- **Color Options (Front Plate):**
Silver
Black
- **Unit Dimensions (W x H x D):** 500 X 252 (with feet) X 520 mm
- **Unit Weight:** 55 Kg
- **Shipping Dimensions (W x H x D):** 610 X 300 X 620mm
- **Shipping Weight:** 65 Kg



WARNINGS AND MAINTENANCE

The **TSA-300** Amplifier will run warm.

Due to the power transistors and the vacuum tubes used in the **TrueLife Audio** design, it is normal that the unit feels warm. Proper ventilation will be needed as described in section preparation for installation.

Replacing the Tubes

Before you take any action and with the power switch to OFF operating condition please unplug the power cable of the unit from the mains. After unplugging let at least one hour to pass before you proceed with the replacement of the tubes.

Your **TSA-300** power amplifier uses two tubes, a tube type 12AU7 per channel is used. In the case that the tubes need to be replaced, follow the steps in the paragraph bellow.

Please use only premium quality tubes otherwise you may degrade the sound quality of the amplifier. Replacement tubes you can purchase from the local **TLA** dealer or directly from the manufacturer.

Mains

Unplug your power amplifier from the mains connection in the following cases:

- before you manipulate with cables
- before you clean your amplifier
- during thunder storms or
- before you leave for longer periods

Cleaning

Please use a soft towel for the cleaning of your power amplifier. We recommend the use of a nonabrasive micro fiber towel. Please do not employ any solvents.

Security advice

Liquidity is not allowed to enter the power amplifier. The electronic may be damaged seriously.

Packing

Please keep the original packing for future transports. The original packing is optimal protection against potential damages.

Service Policy

If service is needed

Your dealer will have all relevant information about the service centres in your area, and will ensure that your unit is serviced without delay. It is our general policy to have your unit returned to you within 20 working days. This is an average time, and could vary locally, depending on the workload at the service centre.

If, for some reason, there are no service facilities available in your country, please ship the **TSA-300** Amplifier to the following address:

**TrueLife Audio (TLA)**

Address: Ippokratous 13, Keratsini 18756, Athens, Greece

Phone: +30 210 5757605

+30 694 8787510

You are responsible for all shipping charges, insurance, re-importation to your country, and duty arrangements. When shipping a product to the factory for service, always include the following:

- 1) A sales slip or other proof of purchase if repair is claimed under warranty.
- 2) A proforma invoice with value of the goods, stating that the **TSA-300** Amplifier is returned to Greece for repair.
- 3) An accompanying note describing faults, symptoms, or problems with the **TSA-300** Amplifier.
- 4) Always ship the **TSA-300** Amplifier in the original box and packaging material to prevent damage in transit.

TrueLife Audio will not cover damages incurred in transit.

If you require further information concerning the **TSA-300** Amplifier operation, or if you have any questions related to service, please do not hesitate to contact your dealer or national **TrueLife Audio** let distributor.

WARRANTY

All **TrueLife Audio** equipment is covered by a limited warranty against defects in materials and workmanship for a period of 3 years from date of purchase to the original purchaser only.

Proper registration is made by filling out and returning to the factory the warranty card attached to this general warranty statement, along with a copy of the original sales receipt as proof of the original date of purchase. Only 1 card is issued with each unit, and the serial number is already recorded on it.

If the warranty registration card has already been removed then this is not a new unit, and is therefore not warranted by the factory. If you believe this to be a new unit then please contact the factory with the details of purchase.

This warranty is provided by the dealer where the unit was purchased, and by **TrueLife Audio**.

Under the terms of the warranty defective parts will be repaired or replaced without charge, excepting the cost of tubes. No warranty is offered on tubes, unless:

1. A **TrueLife Audio** preamplifier is used with the **TSA-300** Amplifier, and
2. The warranty registration card is filled out.

In such a case a 6 month warranty on tubes is available with the correct recording of the serial number of the amplifier on your warranty registration card.

If a **TrueLife Audio** product fails to meet the above warranty, then the purchaser's sole remedy shall be to return the product to **TrueLife Audio**, where the defect will be repaired without charge for parts and labour.

The product will then be returned via prepaid, insured freight, method and carrier to be determined solely by **TrueLife Audio**. All returns to the factory must be in the original packing, accompanied by a written description of the defect, and must be shipped to **TrueLife Audio** via insured freight at the customer's own expense. Charges for unauthorized service and transportation costs are not reimbursable under this warranty, and all warranties, express or implied become null and void where the product has been damaged by misuse, accident, neglect, modification, tampering or unauthorized alteration by anyone other than **TrueLife Audio**.

The warrantor assumes no liability for property damage or any other incidental or consequential damage whatsoever which may result from failure of this product. Any and all warranties of merchantability and fitness implied by law are limited to the duration of the expressed warranty. All warranties apply only to **TrueLife Audio** products purchased thru **TrueLife Audio** directly, an authorized dealer or national **TrueLife Audio** let distributor.



WARRANTY REGISTRATION CARD

We ask that you please fill out this registration form and send it to:

TrueLife Audio (TLA)

Address: Ippokratous 13, Keratsini 18756, Athens, Greece

Phone: +30 210 5757605

+30 694 8787510

Email: info@truelifeaudio.com

or email to info@truelifeaudio.com with all the info requested below and a note stating this is Warrantee Registration.

Registration entitles you to product support, full warranty benefits, and notice of product enhancements and upgrades. You **MUST** complete and return the following to validate your warranty and registration.

Thank you again for choosing **TrueLife Audio**.

MODEL _____ SERIAL No. _____

PURCHASE DATE _____ SUPPLIER _____

NAME OF OWNER _____

ADDRESS _____

CITY, STATE, ZIP _____

TELEPHONE NUMBER _____

FAX _____

EMAIL _____



TrueLifeAudio



CONTACT INFORMATION

Address: Ippokratous 13,

Keratsini, 18756

Athens, Greece

Phone: +30 210 5757605

Email: info@truelifeaudio.com