

User's Manual

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GENESIS TO MUSICAL INSPIRATIONS



www.geckoinstruments.com

GENESIS AG550S

IMPORTANT SAFETY INSTRUCTIONS

CAUTION: To reduce the risk of electrical shock, do not remove the top cover (or the rear section). No user serviceable parts inside; refer servicing to qualified personnel.

WARNING: To reduce the risk of electrical shock or fire, do not expose this appliance to rain or moisture. The apparatus shall not be exposed to dripping or splashing and no object filled with liquids, such as vases, shall be placed on the apparatus.



This symbol, whenever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure-voltage that may be sufficient to constitute a risk of shock.



This symbol, whenever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Please read the manual carefully.

- Read and keep these instructions in a safe place for future reference.
- Heed all warnings and follow all instructions.
- Do not use this apparatus near water.
- Do not attempt to clean this unit with chemical solvents as this may damage the finish. Clean only with dry cloth.
- Do not block any ventilation openings.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Do not defeat the purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for the replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Use only attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Always shut down power supply when not in use to save energy and for prolonged lifespan.
- **CAUTION** – These service instructions are for use by qualified service personnel only. To reduce the risk of electrical shock, do not perform any servicing other than contained in the operation instructions unless you are qualified to do so.

GENESIS AG550S

GENESIS Series Professional Audio Amplifier

- 2 x 550 Watts into 8 Ohms, 1650 Watts into 8 Ohms bridged operation.
- Dual channel, parallel or bridged mono operating mode for flexible application.
- Built-in soft start, middle-point DC drift, auto limiter and thermal overload control circuitry for extensive protection.
- 2 built-in low noise, automatic variable speed, heat-sensing fan and an oversize heatsink tunnel for efficient heat dissipation.
- Precise signal, clip, power and protection LED indicators to monitor performance.
- Professional SPEAKON® and banana-binding post outputs for secure operation.
- Balanced XLR inputs.
- Ultra-reliable and high-quality components.
- Exceptionally rugged construction with aluminum panel for durability and exclusive outlook.
- Oversized TOROID® toroidal transformer for absolute reliability and near-zero noise emission.
- Manufactured under ISO9000 certified management system.

Note: SPEAKON® and TOROID® are all registered trademarks of their respective owners, which are in no way associated or affiliated with **GECKO INSTRUMENTS**.

GENESIS AG550S

FOREWORD



Dear Friends,

Thank you very much for your confidence and support by purchasing quality products by **GECKO INSTRUMENTS**. I'm indeed very delighted that we have come this far, all the efforts that every member on the team has put in has borne fruits. All of our products are developed based on ideas, suggestions, feedbacks, and needs of musicians, recording artists, and sound engineers of this modern music world and recording industry.

We believe in giving the best of quality and features at the best affordable price. It's been our philosophy all this while that good sound can be achieved without having to burn a hole in your pocket. Our engineering team is constantly doing research and development to meet this objective. We thank God that with HIS grace, we have finally able to produce such high quality professional and studio grade audio equipment that is set to change mindsets.

Here, on behalf of **GECKO INSTRUMENTS**, I like to pledge our continuing commitment to uphold our traditions in serving communities around the world with more value-added quality products.

Thank you very much,

Daniel Foo
Founder/Chairman
GECKO Group of Companies

GENESIS AG550S

TABLE OF CONTENTS

1. INTRODUCTION	6
1.1 Before you get started	6
1.1.1 Shipment	6
1.1.2 Initial operation	6
1.1.3 Online registration	6
2. CONTROL ELEMENTS	7
2.1 Front panel	8
2.2 Rear panel	8
3. APPLICATIONS	9
3.1 Dual channel, parallel and mono bridged operating modes	9
4. SPECIFICATIONS	10
5. WARRANTY	11

GENESIS AG550S

1. INTRODUCTION

The GENESIS series power amplifiers were developed for professional live applications. The amplifiers were designed to achieve transparent sound reproductions at all operating levels. All the components used are of ultra-low noise characteristics. The outlook is designed to look chic, yet rugged enough to take the hardest drives on the road.

1.1 Before you get started

1.1.1 Shipment

Your GENESIS was carefully packed at the factory to protect the unit from any possible damage caused by mishandling. Nevertheless, we recommend that you carefully examining the packaging and its content for any signs of physical damage, which may have occurred during transit.

If the unit is damaged, please do **NOT** return to **GECKO INSTRUMENTS**, but notify your dealer and shipping company immediately. Otherwise, claims for damage and replacement may not be granted.

1.1.2 Initial operation

Please make sure the unit is provided with sufficient ventilation, and never placed your GENESIS amplifier on top of any heat-emanating equipment or in the vicinity of a heater to avoid the risk of overheating.

The mains connection is made via the enclosed power cord and a standard IEC receptacle. It meets all international safety certifications requirements.

Please make sure that all units have proper ground connection. For your safety please do not remove or disable the ground conductor from the unit or the AC power cord.

1.1.3 Online registration

Please do remember to register your new **GECKO INSTRUMENTS** equipment right after your purchase online at www.geckoinstruments.com and kindly read the terms and conditions of our warranty carefully.

Should your **GECKO INSTRUMENTS** product malfunction, our aim is to have it fixed in the shortest period of time. To arrange for warranty service, please contact the retailer from whom the equipment was purchased. You may also contact any one of our subsidiaries directly if there is no **GECKO INSTRUMENTS** dealer in your vicinity. Information of distributors can be found on our website, www.geckoinstruments.com. Registering your purchase of new **GECKO INSTRUMENTS** products with us will help expedite your repair claims.

GENESIS AG550S

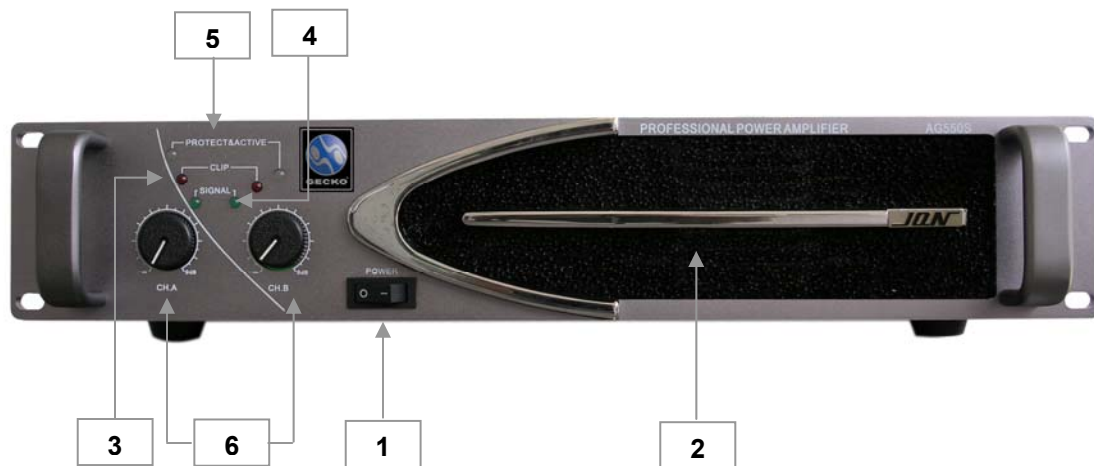
ATTENTION!

Extremely loud sound can damage both your hearing as well as your speakers. Please lower both gain (**CH.A** and **CH. B**) controls counterclockwise (all the way down to the left!) before powering up the unit. Be sure to keep the volume at an appropriate level.

2. CONTROL ELEMENTS

The following illustrations depict the various features found on the GENESIS.

2.1 Front panel



1 POWER. The main switch is used to power up the GENESIS. Please note that merely switching the unit off does not mean that it is fully disconnected from the mains. When not using the unit for prolonged periods of time, please unplug the unit's power cord from the power outlet.

2 These ventilation openings allow the flowing of fresh air into the unit. The ventilation openings contain dust filter, preventing unwanted micro-particles being sucked into the unit.

3 CLIP LED. Lights up when the signal is distorted. Should this occur, reduce the input level to the point that the **CLIP LED** stops lighting up.

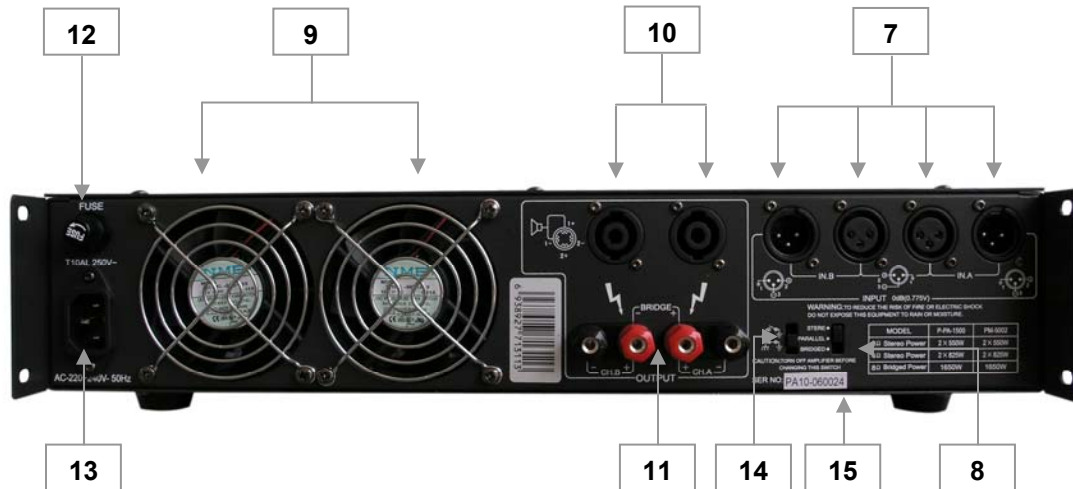
4 SIGNAL LED. The **LED** lights up as long as there is a signal present at the input.

5 PROTECT & ACTIVE LED. This **LED** lights up as soon as the unit is powered up. It also indicates the protective circuitry is in operation.

6 CH.A, CH.B. These are the controls used for setting up input gains.

GENESIS AG550S

2.2 Rear panel



7 These are the balanced XLR (male and female) inputs for **CH.A** and **CH.B** respectively.

8 This is the switch used to select different operating modes.

9 These are the ventilation fans. Fan speed adjusts automatically according to thermal level to ensure trouble-free operation.

10 These are the SPEAKON®-compatible outputs (**CH.A** and **CH.B**). When running the unit in mono-bridged mode, use **CH.A** output exclusively.

11 These are the banana plugs-acceptable output binding posts. When running in mono-bridged mode, please make sure to use both middle connectors to connect your loudspeaker.

12 This is the unit's fuse holder. It houses a T10 AL 250 V~ fuse.

13 Power is supplied via an IEC connector. The matching cable is provided with the unit. Power supply should be in the range of AC 200 V~240 V, 50 Hz.

GENESIS AG550S

14 This is the ground lift switch.

15 Serial number of your GENESIS is located here.

3. APPLICATIONS

The GENESIS is designed to take on various applications.

3.1 Dual channel, parallel and mono bridged operating modes.

Dual channel mode is the most common operating mode of amplifiers. Both channels operate fully independently from one another. In this operating mode, two independent speakers are connected at the outputs. The input signal of each channel will be driven to the output of respective channel. To activate this mode, select switch 8 to **STEREO**.

Running in parallel mode enables you to feed a signal via one of the inputs into both outputs. Each channel drives its own loudspeaker with independent amplification, filter and limit characteristics. To link the inputs, set switch 8 to **PARALLEL**.

Mono-bridged operating mode enables you to add up the respective voltage of both channels and use it to drive a single loudspeaker. The voltage is therefore doubled, the peak power is quadrupled, and the program power is approximately three times as high as that of the individual channels. The input, output, gain, filter and limiter controls belonging to **CH.A** are used when running in mono-bridged mode. The controls belonging to **CH.B** are not used. To prevent signal cancellation due to internal phase inversion, the gain control of **CH.B** must be turned to its leftmost position.

Use this operating mode to route the power from both channels to a single 8 Ω or 4 Ω load. To do so, set switch 8 to **BRIDGED** position. To use the binding posts as your output, you **MUST** use the two middle posts only.

Please note that the mono-bridged mode puts added demands on amplifiers and speakers. Excessive distortion may occasionally completely mute the amplifier's outputs as well as cause permanent damage to the speakers. Please assure that your speakers (minimum impedance 4 Ω) as well as the cables used can handle the extra power generated in this mode.

GENESIS AG550S

4. SPECIFICATIONS

Height / Panel	2 RU / Aluminium Panel
Rated Output	4 Ω : 820 W RMS per Channel 8 Ω : 550 W RMS per Channel 8 Ω : 1650 W RMS, Bridged mode
Noise	-100 dB (20 Hz – 25 kHz, A-Weighted)
Frequency Response	20 Hz – 25 kHz, +0.1, -0.3 dB
Distortion	< 0.02% @ 4 Ω , 20 Hz – 25 kHz
Input Sensitivity	+4 dB for Rated Output
Controls	Front: POWER Switch, Gain Control (CH.A, CH.B) Rear: GROUND LIFT Switch, MODE Switch
Output Offset	+/- 50 mV, Servo Controlled
Cooling	2 x Continuous Variable Speed Fans, Front to Back Airflow
Amplifier Protection	Mid-Point DC Drift, Short Circuit, Open Circuit, Thermal, HF
Dimensions / Weight	89 mm (H) x 483 mm (W) x 430 mm (D) / 25 Kg

Manufactured under ISO9000 certified management system.

Note: Specifications subject to change without notice.

GENESIS AG550S

5. WARRANTY

1. **GECKO INSTRUMENTS** warrants the mechanical and electronic components of this product to be free of defects in material and workmanship for a period of (1) one year from the original date of purchase, in accordance to the warranty regulations described below. If the product shows any defects within the specified warranty period, **GECKO INSTRUMENTS**, at its discretion, reserved the rights, either repair or replace the product using new or reconditioned parts. In the case that other parts are used which constitutes an improvement, **GECKO INSTRUMENTS** may, at its discretion, charge the customer for the additional cost of these parts.
2. Warranty services will be furnished only if the product is accompanied by an original copy of the retail dealer's invoice. Any product deemed eligible for repair or replacement under the terms of this warranty will be repaired or replaced. Product must be returned in original packing.
3. If the product needs to be modified or adapted in order to comply with applicable technical or safety standards on a national or local level, in any country which is not the country where the product was originally developed and manufactured, this modification/adaptation shall not be considered a defect in material or workmanship.
4. Free inspections and maintenance/repair work are expressly excluded in from this warranty, in particular, if caused by improper handling of the product by the user. This also applies to defects caused by normal wear and tear, in particular, of faders, cross faders, potentiometers, keys/buttons, tubes, guitar strings, illuminants, and similar parts.
5. Damages/defects caused by the following conditions are not covered by this warranty:
 - Improper handling, neglect or failure to operate the unit in compliance with the instructions given in **GECKO INSTRUMENTS** user or service manuals.
 - Connection or operation of the unit in any way that does not comply with the technical or safety regulations applicable in the country where the product is used.
 - Damages/defects caused by force of nature or any other condition that is beyond the control of **GECKO INSTRUMENTS**.
6. Any repair or opening of the unit carried out by unauthorized personnel (user included) will void the warranty.

GENESIS AG550S

7. If an inspection of the product by **GECKO INSTRUMENTS** shows that the defect in question is not covered by warranty, the inspection costs are payable by the customer.
8. Products which do not meet the terms of this warranty will be repaired exclusively at the buyer's expense. **GECKO INSTRUMENTS** will inform the buyer of such circumstance. If the buyer fails to submit a written repair order within six (6) weeks after notification, **GECKO INSTRUMENTS** will return the unit C.O.D. with a separate invoice for freight and packing. Such costs will also be invoiced separately when the buyer has sent in a written repair order.
9. This warranty is extended to the original buyer (customer of retail dealer) and is not transferable to anyone who may subsequently purchase this product. No other person (retail dealer, etc) shall be entitled to give any warranty promise on behalf of **GECKO INSTRUMENTS**.
10. Failure of **GECKO INSTRUMENTS** to provide proper warranty service shall not entitle the buyer to claim (consequential) damages. In no event shall the liability of **GECKO INSTRUMENTS** exceed the invoiced value of the product.
11. Log on to www.geckoinstruments.com for the list of **GECKO INSTRUMENTS** authorized distributors.