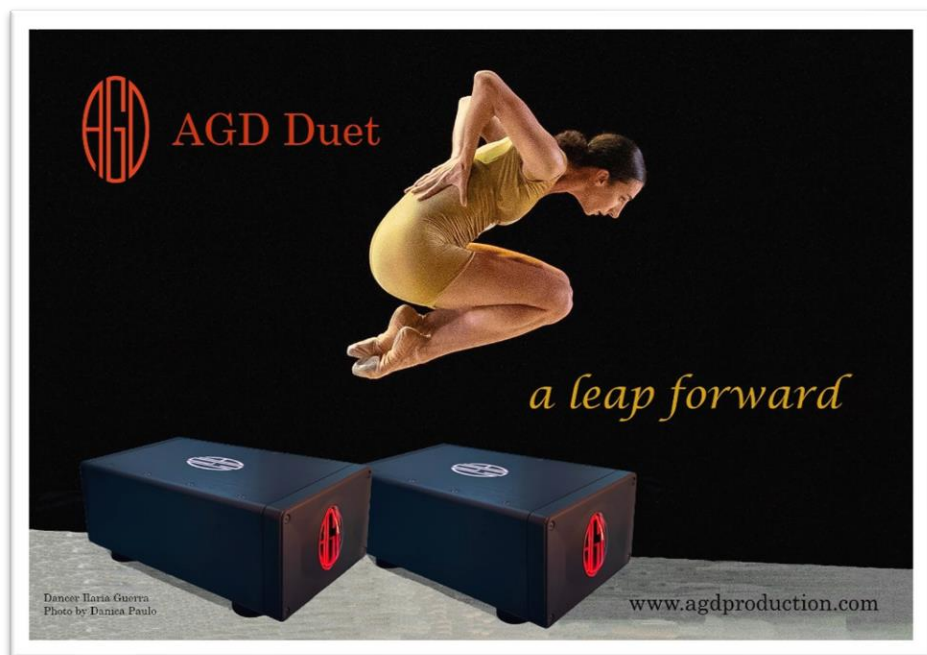






AGD Productions, Inc.



AGD “DUET” Mono-Block Amplifier With GaNSound™ Power Stage by AGD Productions, Inc.



AGD “Duet” Mono-Block Amplifier

by AGD Productions, Inc.

Operating Manual

Rev.2.0

Document Date, Jan 31st, 2024.

CAUTION

THE UNIT CONTAINS NO USER-SERVICEABLE PARTS.

DO NOT REMOVE THE PANELS OR ANY SCREWS OR CONNECTORS.

DO NOT OPERATE THE UNIT IF WET, NEAR WATER, OR IN UNCONTROLLED OUTDOOR CONDITIONS.

BE CERTAIN TO INSTALL IT IN A SECURE LOCATION WHICH IT CANNOT FALL OR TIP OVER.

TIME SPENT FAMILIARIZING YOURSELF WITH THIS MANUAL WILL BE WELL REWARDED.





Table of content:

1. About this document.....	page 5.
2. Letter from AGD Team	page 6.
3. Important Safety Instructions	page 7.
4. Product Introduction	page 8.
5. Specifications.....	page 9.
6. Unpacking the AGD Duet	page 9.
7. Installation of the AGD Duet	page 10.
8. Back Panel Description	page 11.
9. Installation	page 12.
10. Fault Conditions.....	page 15.
11. Fuse replacement.....	page 16.
12. Troubleshooting	page 18.
13. CE and FCC Certification	page 19.



1- About this document

This Owner's Manual covers unboxing, familiarizing yourself, and configuring your new amplifier.

This manual will enable you to optimize your amplifier's behavior and performance to fit your equipment and listening room preferences.

This user manual is integral to the AGD "Duet" and must be available and consulted before installing the equipment.

AGD "Duet" is designed to operate indoors and must be utilized uniquely for the scope of audio signal amplification within the specifications and conditions defined in the manual.

It is strongly recommended that you follow this manual in the order in which it is written to understand the safety considerations before configuring the amplifier.





Dear Customer,

I have always been driven by my passion for merging perfection and beauty in the art of Audio reproduction. Hence, it is so important for all of us at AGD to thank you for choosing the AGD Duet Monoblocks for your unique Hi-End audio experience. The AGD Duet is one of the market's most advanced Hi-End Power Amplifiers. The **AGD DUET MONOBLOCK** uses the same fundamental technology pioneered with the **AGD Gran Vivace**, **AGD TEMPO**, and **AGD AUDION**, the first true Hi-End amplifiers based on Gallium Nitride power MOSFET. The **NEW GaN-Power output stage**, based on a new set of discrete high voltage GaN MOSFETs, can operate up to **800kHz** and at elevated slew-rates, delivering the most sublime sound thanks to its ideal “by the book” oscillations-free switching performances. To maintain in time the full value of the product, a vital characteristic of all AGD amps, the GaN-based power stage module utilized in the AGD “DUET” is fully upgradable. Another important innovation is extending the use of high-voltage Gallium Nitride MOSFET to the power supply stage. This design choice enables the amplifier to produce higher output power and efficiency. The Duet is a leading-edge power electronics design integrated into a highly compact mechanical solution, delivering an unprecedented sublime and incredibly realistic audio reproduction experience. We are confident the AGD “Duet” will meet your expectations and will always support your needs and future requirements.

Sincerely,

Alberto Guerra

CEO, AGD Productions, Inc.

A handwritten signature in black ink, appearing to read 'Alberto Guerra', is written over a series of horizontal lines.



3- Important safety instructions:



READ ALL INSTRUCTIONS: All the safety and operating instructions for your AGD VICACE MONOBLOCK AMPLIFIER should be read before power is applied to the equipment.

RETAIN OWNER'S MANUAL: These safety and operating instructions should be retained for future reference.

READ WARNING: All warnings on the unit and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS: All operating and use instructions should be followed.

CLEANING: Unplug the unit from the wall outlet and leave for at least 10 min. - make sure the unit is not hot before you start cleaning. Use dry or damp soft cloth to clean the surfaces. Do not use corrosive/abrasive spray for cleaning.

VENTILATION: Do not block any ventilation openings. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including other amplifiers). The unit should not be installed in a built-in location such as a bookcase or rack unless proper ventilation is provided.

GROUNDING: Do not defeat the safety purpose of the grounding-type plug. A grounding-type plug has two blades and a third grounding prong. The third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

POWER CORD PROTECTION: Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

LIGHTNING: Unplug this apparatus during lightning storms or when unused for long periods of time.

SERVICING: Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as if the power-supply cord or plug is damaged, liquid has been spilled inside the appliance or it has been exposed to moisture, the appliance does not operate normally, or has been dropped.

DO NOT OPEN THE CABINET: There are no user serviceable components inside this product. Opening the cabinet may present a shock hazard and any modification to the product will void your warranty.



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



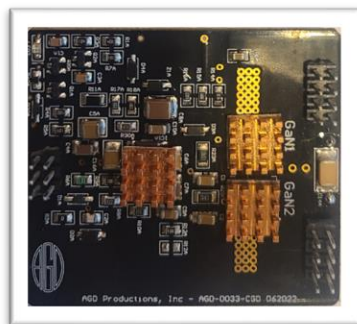
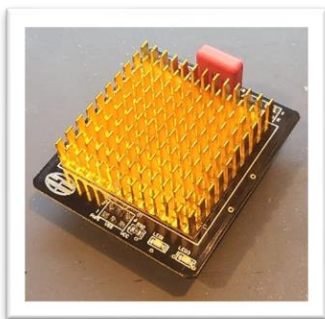
4- Product Introduction:

Design Philosophy

The AGD “DUET” MONOBLOCK Amplifier, is the newest addition to our state of the art Hi-End Power Amplifiers family.

The DUET is our first compact MONOBLOCK Amplifier utilizing 100% **Gallium Nitride Power MOSFET** design for both the output power stage and the power supply. The Duet is rated 300W, 4Ω.

To achieve these performances in such compact cabinets (available fully polished or anodized black), we have designed a new power supply utilizing the most advanced HV GaN MOSFET in the market today. The DUET also benefits of a new mother board with low noise linear supply rails and a superlative analog buffer stage. The DUET retains the feature of full upgradability of the GaNPower output stage module. At AGD we firmly believe our customers have the right to maintain the value of their investment by enabling the possibility to upgrade the GaN output stage module at time when a new GaN device delivers a performance and technological improvement.



The Duet GaNPower output module is based on a new set of discrete **high voltage GaN MOSFETs** and can operate up to **800kHz** at elevated slew-rates, delivering the most sublime sound thanks to its ideal “by the book” oscillations-free switching performances.

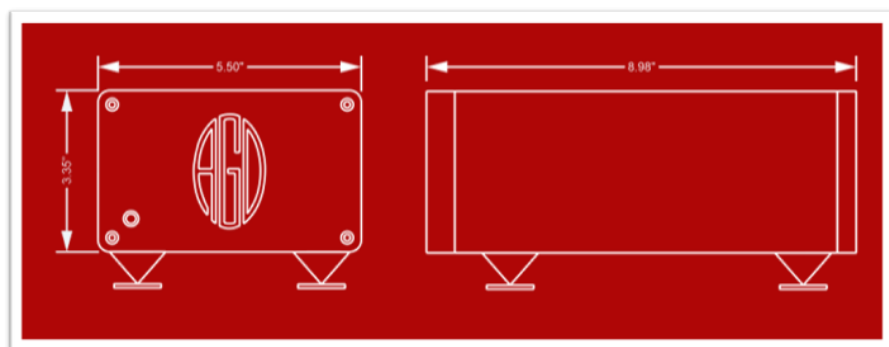
The higher PWM frequency operation is key to the overall outstanding sonic and musical performances with sublime mid-high range realism along with the unique tight and controlled bass register.



5- Specifications:

PARAMETERS

Nominal Output Power at 0.1% THD+N, 20Hz÷20KHz, 4Ω	300W
THD+N 10W/1KHz	<0.005%
Maximum Output Power at 0.1% THD+N, 20Hz÷20KHz, 8Ω	150W
Bandwidth ±3dB	5Hz÷80KHz
Input Impedance	40kohm
Efficiency%	>94%
Gain	23db
Dynamic Range	>120dB
Dimension	10x5.6x4.0in (254x142x100mm)
Weight	8.25lbs (3.75kg)
Input Voltage	110-240V, 50-60Hz



Note: Isolating feet may be different from drawing.



6- Unpacking

Unpacking

All AGD products' shipping boxes have been specially designed to protect their contents and special care has been taken to prevent damage under normal shipping conditions.

When unpacking your amplifier:

- Mishandling should be evident upon inspection of the shipping container.
- Carefully remove your new component from its packaging and examine it closely for signs of shipping damage.
- We strongly recommend saving all original packaging to protect your component from damage, should you wish to store it or ship it later.



CAUTION: In case of doubt DO NOT attempt to lift or move the power amplifier case without adequate assistance. The shipping weight of the amplifier may exceed what a single person should lift alone.



7- Installation

POWER REQUIREMENTS:

The amplifier is configured at the factory for 100, 115, or 220-240 VAC power operation at 50Hz or 60Hz. Before operating, ensure that the power label on the rear panel near the AC input connector indicates the correct operating voltage.

A detachable IEC power cable intended for use in the region where the unit is sold is included.



WARNING: The unit should be operated only at the rated voltage indicated on the power connector. If you are not sure what the main voltage supplied to your home is, consult with your unit dealer.

- Connect the power supply to the power source indicated on the rear panel.
- Avoid power conditioners or power extensions that float the ground pin.
- ALWAYS connect power cord to component before plugging it into an AC outlet and make sure that unit's main switch is set to the "OFF" position before making the final connection.
- For the best performance, try to position the power cord away from the input signal cables.
- Pay close attention to power quality and be aware that different power cords can alter the sound.
- For initial power-up, operate the main switch located on the back-panel power entry module.
- BE CERTAIN TO INSTALL THE UNIT IN A SECURE LOCATION FROM WHICH IT CANNOT FALL OR TIP OVER.
- Do not operate on carpet or any other surface that might block air flow.
- Do not allow the chassis to touch any metal parts, such as the frame of an equipment rack. This might create a parallel ground path that could degrade the sound of your system.
- Connect the source's cables to their appropriate inputs.
- Connect your speakers using the binding posts on the center of the back panel.



IMPORTANT: READ THE SECTIONS "BACK PANEL"



8- Back Panel

The AGD “Duet” back panel has the following features:

① Power entry module

- a. Plug the power cord securely before turning on the unit.
- b. Always unplug the unit from the wall outlet first.

② Fuse holder

③ ON-OFF Switch

④ 12V Remote trigger input

- a. Use 3.5mm jack mono only.

⑤ ⑥ Speaker binding posts

The binding posts can accept large speaker cables either via std. banana plugs or by locking the exposed copper wire directly.

Take extreme caution and make sure to always have a very secure and tight closure of the binding post to minimize contact resistance and maintain a stable connection.

⑤ + RED SPEAKER OUTPUT POSITIVE TERMINAL

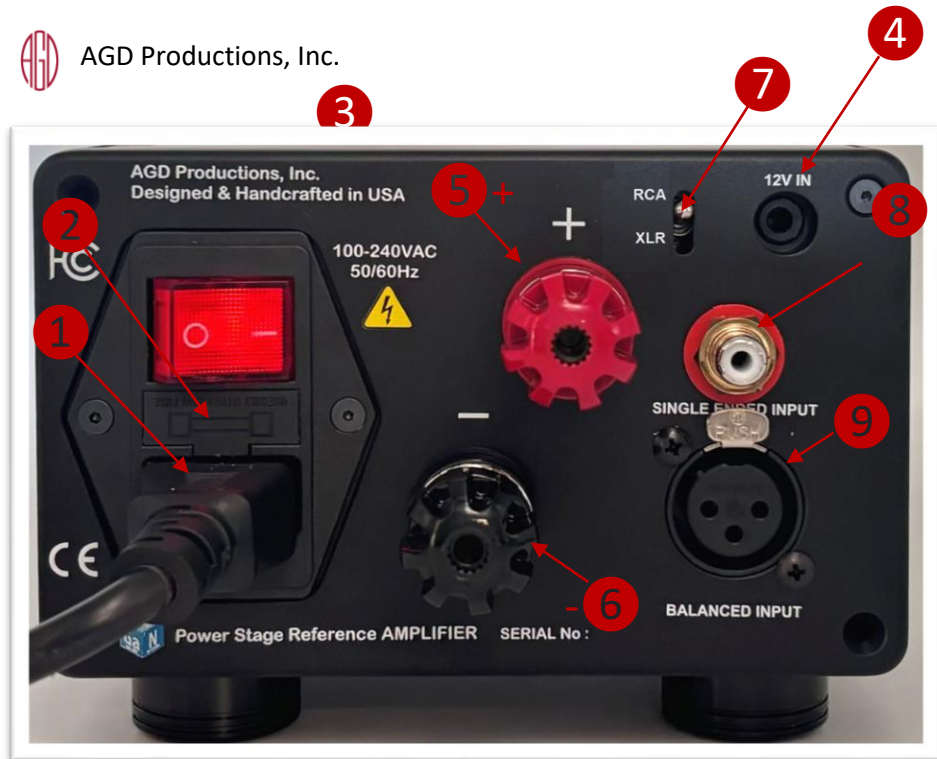
⑥ - BLACK SPEAKER OUTPUT NEGATIVE TERMINAL

⑦ Analog input selector switch

We recommend changing the input selection when the input signal is not present, or before powering up the unit.

⑧ RCA Single ended analog input.

⑨ XLR Balanced analog input.



The AGD Duet is delivered with two 1.5mt. power cords. (US or UK or EU IEC standard plug. The power cord provided as standard with all AGD amplifiers is an Audio Grade power cable manufactured and tested under specific stringent requirements. If the customer decides to utilize a different power cable to operate the units, please make sure that the cable is of the proper size for current handling and the signal norm is strictly observed. Please refer to the picture below.

Any alteration of the power entry module or the use of a cable non-conforming to international safety standard or the use of the unit without the proper ground connection can be dangerous, and among other things it can damage the unit itself with the consequence to null the terms of the manufacturer warranty.





9- Installation

POWER REQUIREMENTS:

The amplifier is configured for 100, 115, or 220/240 VAC power operation at 50Hz or 60Hz. Before operating, ensure that the power label on the rear panel near the AC input connector indicates the correct operating voltage.

A detachable IEC power cable intended for use in the region where the unit is sold is included.



WARNING: The unit should be operated only at the rated voltage indicated on the power connector. If you are not sure what the main voltage supplied to your home is, consult with your unit dealer.

- 1- Avoid power conditioners that float the ground pin.
- 2- ALWAYS connect power cord to component before plugging it into an AC outlet and make sure that unit's main switch is set to the "OFF" position before making the final connection.
- 3- For the best performance, try to position the power cord away from the input signal cables.
- 4- Pay close attention to power quality and be aware that different power cords can alter the sound.
- 5- For initial power-up, operate the main switch located on the back-panel power entry module.
- 6- BE CERTAIN TO INSTALL THE UNIT IN A SECURE LOCATION FROM WHICH IT CANNOT FALL OR TIP OVER.
- 7- Do not operate on carpet or any other surface that might block air flow.
- 8- Do not allow the chassis to touch any metal parts, such as the frame of an equipment rack. This might create a parallel ground path that could degrade the sound of your system.
- 9- Connect the source's cables to their appropriate inputs.
- 10- Connect your speakers using the binding posts.
- 11- Make sure to have the input selector positioned on the correct connector of choice (XLR or RCA).



- 12- For initial power-up, operate the main switch located on the back-panel power entry module.
- 13- Push the button ⑩ on the front panel, a LED will illuminate the logo. This push-button, if pressed again, will also place the unit on stand-by without the need to operate the main-power switch.



IMPORTANT: READ THE SECTIONS “BACK PANEL”



10- Fault Conditions

The unit is designed to prevent damage to itself and associated components. These extensive features protect both the critical circuitry of the amplifier itself and shield connected loudspeakers from serious damage due to high power levels.

Basic protections designed into the amplifier include fuses to protect against excessive current conditions, such as driving shorted outputs. Inrush limiting prevents premature aging of the power supply components during power-up; once the power supply has been charged, this feature goes offline until the amplifier is powered up again. The amplifier actively monitors operating temperature, output current demands, and the presence of DC on the outputs.

The amplifier will shut down under any of these conditions and report the fault via red LEDs.

NON-CRITICAL FAULTS

They are neither caused by nor harmful to the amplifier. Non-critical faults either clear themselves over time (such as over temperature) or are easily remedied by the owner without dealer or factory intervention (such as shorted speaker terminals). Examples of non-critical faults are:

- Heatsink or internal temperature is above safe operating limits.
- DC detected at the output terminals.
- Shorted speaker terminals or extremely low impedance load connected.

If a non-critical fault occurs, check the speaker cables and terminals and the operation of the preamp in the system.

Turn-off the AC power to clear the fault and then turn the unit on again after fixing the issue. If the amplifier is too hot, wait for it to cool down. When it reaches a safe operating temperature, you will be able to turn it on again.

If you are unable to remedy a non-critical fault condition, please contact your retailer or installer for assistance.



11- Troubleshooting

Incorrect operation is sometimes mistaken for malfunction.

If problems occur, see this section for troubleshooting information.

If problems persist, contact your authorized AGD dealer.

NO POWER

- Examine the power cord to ensure that it is connected to both the AC mains connector and a working, un-switched, electrical outlet.
- Make sure the amplifier is powered on with the rear-panel power switch. Examine the electrical circuit breaker to ensure that power is being supplied to the electrical outlet to which the amplifier is connected.
- Make sure the amplifier is not in fault condition.

NO SIGNAL AT THE OUTPUTS

- Examine all audio cables to ensure a solid connection between the amplifier and all associated components.
- Examine the speaker cables to ensure a solid connection between the amplifier and the speakers.
- Make sure that the connected speakers are operational.
- Make sure the volume is set to an audible level.
- Make sure the preamp is not muted.
- Make sure all associated components are connected to working electrical outlets and powered on.
- Make sure the source device connected to the amplifier's selected input is producing an output signal.

AUDIO HUM

- Disconnect components one at a time to isolate the problem.
- Once the problem is identified, make sure the problematic component is properly grounded and connected to the same electrical socket as the amplifier.

IF ALL ELSE FAILS...

Contact your authorized AGD Productions, Inc. Dealer and/or contact AGD Productions Customer Service at www.AGDproductions.com.



12- Fuse installation/replacement

The AGD “Duet” is configured to operate with the mains input voltage of any country, hence i.e., 100/110V for USA and Japan, 220/240V for Europe, China, UK, and all other countries. The main power switch entry module also contains the fuse holder, and it is easily accessible by opening the plastic cover that holds it as shown in the following picture. The plastic door and the fuse holder can be opened and extracted by hand; however, it is recommended to use a small flat screwdriver or the tip of a pen to facilitate the operation. The fuse is placed inside, and it is easily accessible once the fuse holder is fully extracted.

Please refer to the following picture:



The fuse holder can be opened and extracted by hand; however, it is recommended to use a small flat screwdriver or the tip of a pen to facilitate the operation. In case of a change of the input voltage of operation, please make sure the correct fuse is used. In case you need to replace the fuse, make sure to select only a version with the correct amperage as described:

- 5A Fast Blow for 220/240VAC.
- 10A Fast Blow for the 100/110VAC.



All operations that involve voltage input selection changes, or fuse replacement, must be done after disconnecting the power cord from the mains.



13- CE Compliance Certificate

UE Statement of Compliance

Manufacturer : **AGD Productions, Inc.**

2644 Via Valdes
Palos Verdes Estates
90274 CA (USA)

Product name: **AGD “DUET”**

Power Amplifier

Standards : EN 55032 : 2015 Class-B

EN 61000-3-2 : 2014

EN 61000-3-3 : 2013

EN 55024: 2010

EN 60950-1: 2006 + /A11:2009/A1:2010 + /A2:2013
+ /A12:2011

The manufacturer declares that the product complies with specified above and meets the essential requirements of the Directive: 2014/30/UE (EMC), 2014/35/UE (LVD), 2011/65/UE (RoHS)



Los Angeles, May 20th, 2023

Alberto Guerra, President and CEO AGD Productions, Inc.



Enjoy the music now!

