


# peachtree



# Gan 1

## IMPORTANT SAFETY INSTRUCTIONS

- ① Read these instructions – All the safety and operating instructions should be read before this product is operated.
- ② Keep these instructions – The safety and operating instructions should be retained for future reference.
- ③ Heed all warnings – All warnings on the appliance and in the operating instructions should be adhered to.
- ④ Follow all instructions.
- ⑤ Do not use this apparatus near water – The appliance should not be used near water or moisture – for example, in a wet basement or near a swimming pool, and the like.
- ⑥ Clean only with dry cloth.
- ⑦ Do not block any 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 other apparatus (including amplifiers) that produce heat.
- ⑨ Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or 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.
- ⑩ Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the apparatus.
- ⑪ Only use attachments/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 from tip-over.
- ⑬ Unplug this apparatus during lightning storms or when unused for long periods of time.
- ⑭ Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way such as the power cord or plug is damaged. Other damage may occur if liquid or objects have been dropped or spilled into the apparatus. Dropping the apparatus, exposure to rain, and excessive moisture may cause additional damage.
- ⑮ Please keep the unit in a good ventilation environment.
- ⑯ CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.
- ⑰ WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and objects filled with liquids, such as vases, shall not be placed on apparatus.

- 18 **WARNING:** The mains plug/appliance coupler is used as disconnect device, the disconnect device shall remain readily operable.



- 19 The lightning fash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock.

**WARNING:** To reduce the risk of electric shock, do not remove cover (or back), as there are no user-serviceable parts inside. Refer servicing to qualified personnel.

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

- 20 No naked flame sources, such as lighted candles, should be placed on the apparatus.



- 21 **WARNING:** The terminals marked with symbol of “+ /-” may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the use of ready-made insulated leads or cords.

- 22 Correct disposal of this product. This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmentally safe recycling.

### Unpacking and Warranty

- 1 Please keep all packing materials for any potential shipping needs.
- 2 Please keep a copy of the sales receipt and note the serial number on it for warranty and insurance purposes.
- 3 Please register your product online at [www.peachtreeaudio.com](http://www.peachtreeaudio.com).



Marking by the “CE” symbol (shown left) indicates compliance of this device with the EMC (Electromagnetic Compatibility) and LVD (Low Voltage Directive) standards of the European Community.



Note: This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. The equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

# GaN 1

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## INTRODUCTION

Thank you for choosing Peachtree Audio. The GaN 1 is a revolutionary step forward in class-D power amplification. It is a stereo power amplifier that utilizes GaN-FETs (Gallium Nitride Field-Effect Transistors) to amplify the audio signal with remarkable accuracy and transparency. GaN-FETs started to gain attention as audio engineers realized that they were suitable for high frequency, high voltage, and high temperature applications. Compared to their MOS-FET counterparts, GaN-FETs switch on ~4 times faster and switch off ~2 times faster, reducing switching distortion (ringing) by several orders of magnitude. This, in-turn, allowed designers to use less (or in the case of the GaN 1...literally zero) global negative feedback to achieve the desired results. An audio amplifier with exceptional accuracy, transparency and musicality without the drawbacks of a high feedback design!

The GaN 1 is also a device with a digital input only and does NOT utilize a traditional DAC. The PCM (Pulse Code Modulation) digital audio input signal is translated internally into PWM (Pulse Width Modulation - on and off pulses of varying widths) to direct the GaN-FET outputs which are then low-pass filtered for the speaker outputs. That's it. No traditional DAC and an extremely short, simple and pure audio path from input to output with gain that retains remarkable transparency.

Please note that the GaN 1 does NOT have an internal volume control. The device connected to it MUST provide a volume control that affects the digital audio output connected to the GaN 1 input! Most current products do but many older products may not! Please double check yours before using the GaN 1 as using a full scale digital signal may cause speaker driver damage that will NOT be covered by Peachtree Audio and may not be covered under warranty by the speaker manufacturer.

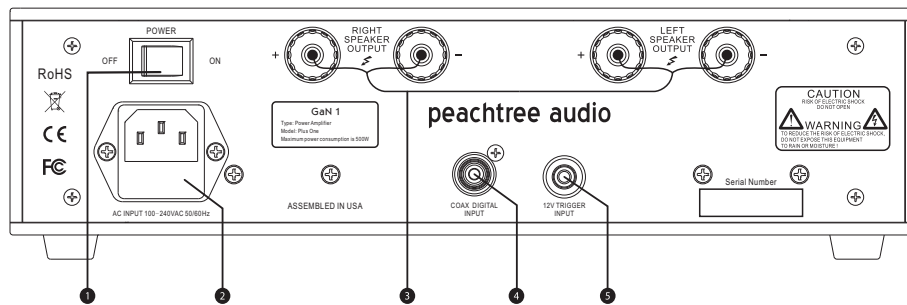
The GaN 1 utilizes a ultra-high performance 400-watt RMS regulated power supply to provide an impressive 200 watts-per-channel (both channels driven) into speaker loads ranging from 2.5 to 16 Ohms. The GaN 1 readily pairs with the vast majority of speakers available today, including low sensitivity ( " low efficiency") designs while delivering unmatched levels of musicality, neutrality and freedom from noise. The difference between the GaN 1 and typical MOS-FET amplifier is NOT subtle and should be audible even during a casual listen. To integrate with a streamer or other source device, the GaN 1 includes a 12V trigger input that powers the GaN 1 on and off automatically with the connected device.

Please take the time to read this manual and familiarize yourself with the GaN 1. If you visit [www.peachtreeaudio.com](http://www.peachtreeaudio.com) and register your GaN 1 with us, we will extend the standard warranty from 2 to 3 years parts and labor. Your contact information will NOT be shared or sold to anyone. Peachtree Audio will only contact you with updates or opportunities that are relevant to your purchase.

The GaN 1 is proudly designed and assembled in the USA at our facility in Matthews, North Carolina. We sincerely hope that it brings you many years of enjoyment. It represents the very best of what we do. Thank you again for choosing Peachtree Audio and happy listening!

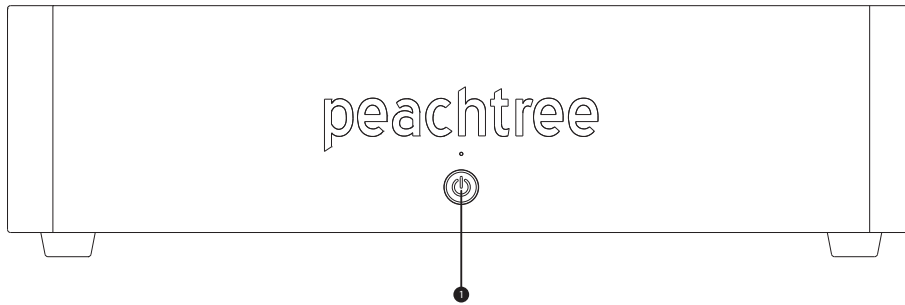
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## BACK PANEL



- ❶ **Power ON/OFF Switch:** Connects and disconnects AC INPUT to the unit when the power cord is connected between the AC INPUT and a 100–240VAC 50/60Hz AC outlet.
- ❷ **AC INPUT & Fuse Holder:** For connection to a 100–240VAC 50/60Hz AC outlet using the included power cord. The fuse can be replaced after turning the POWER switch OFF and removing the power cord from the AC INPUT. See the SPECIFICATIONS section for the specific fuse values required.  
**Caution:** using an improper fuse value may cause damage to the unit. Peachtree Audio accepts no responsibility for any damage caused by the use of improper fuse values.
- ❸ **RIGHT & LEFT SPEAKER Outputs:** Speaker binding post outputs that accept banana connectors (insert into hole on back of the post), spade connectors (loosen, position spade around post, tighten), pin connectors (loosen, insert pin through hole on post, tighten) or bare wire connections (loosen, loop around post or insert through hole on the post, tighten).
- ❹ **COAXIAL DIGITAL INPUT:** Coaxial digital input that accepts a S/PDIF audio signal from a digital audio device e.g. Bluesound NODE with a coaxial digital output.
- ❺ **12V TRIGGER INPUT:** Enables power on/off control from another product with a 12V trigger output. Insert one end of a 3.5mm cable into this input and connect the other end to a 12V trigger output of the controlling product. Once connected, both products should power on and off when using the on/standby controls of the connected product.

## FRONT PANEL



- ❶ **On/Standby Button:** With the AC power cord connected and the rear panel **POWER** switch set to **ON**, this button toggles the unit between On mode which lights the LED blue and Standby mode which lights the LED red.

## TROUBLESHOOTING

ISSUE	SOLUTIONS
The GaN 1 will not power on	Check that the power switch on the back panel is on. If it is, the on/standby LED on the front panel LED should be lit red. Check that the AC outlet is functioning correctly by plugging in a lamp or other device to confirm its operation. Check that the product controlling the GaN 1 is turned on if using the 12V trigger input feature of the GaN 1.
The GaN 1 powers on, but there is no sound	Check that the coaxial digital input is plugged in properly. Check that the device controlling the GaN 1 is turned on and the volume is set suitably.



### Interested in the Green Movement?

- The GaN 1 meets European RoHS standards for non-hazardous metals
- The GaN 1 draws less than half a watt of power in standby mode
- We are committed to continue exploring additional methods for making our products even more environmentally friendly

## WARRANTY AND REPAIR

### **International Warranty**

Peachtree Audio warrants this product for two (2) years, parts and labor, from the original date of purchase from an authorized Peachtree Audio re-seller. If you register your product online at [www.peachtreeaudio.com/support/product-registration.html/](http://www.peachtreeaudio.com/support/product-registration.html/), the warranty is extended to three (3) years, parts and labor.

Peachtree Audio reserves the right to refuse any warranty claims if coverage cannot be verified by a valid proof of sale or serial number.

Peachtree Audio assumes no responsibility for product failures caused by accident, neglect, misuse, modification or unauthorized repair.

Warranty does not cover shipping costs.

Visit [www.peachtreeaudio.com](http://www.peachtreeaudio.com) for complete warranty details.

### **Repair Process**

In the event that a product fails, please repack it in its original carton and contact an authorized Peachtree reseller for further instructions. If the reseller is unable to assist, please contact Peachtree Audio directly at [service@peachtreeaudio.com](mailto:service@peachtreeaudio.com) or +1-704-391-9337 to obtain a Return Authorization (RA) number prior to shipping the product.

Any products received without an RA number may be misdirected and repair delayed.

If an RA number is issued by Peachtree Audio, please ship the product using FedEx or UPS. Do not ship using a Postal Service.

Peachtree Audio assumes no responsibility for products in transit. Please insure the shipment for the product's replacement value in the unlikely event it is lost, stolen or damaged in transit.

US Shipping Address:

Peachtree Audio  
13087 Bleinheim Lane  
Suite C  
Matthews NC 28105  
USA  
RA# \_\_\_\_\_

[www.peachtreeaudio.com](http://www.peachtreeaudio.com)

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## SPECIFICATIONS

Compatible Speakers	2.5–16Ω
Output Power	200W/Chanel into either 8 or 4 ohms
Dynamic Range (A-weighted)	>110dB
Sample rate support (PCM)	44.1 to 192KHz, 16 and 24bits
Frequency Response (20 – 20kHz)	<+/-0.4dB
Inter-Modulation Distortion (SMPTE)	>70dB below fundamental
Total Harmonic Distortion	<0.04% THD+N (8Ω, 1W, 20Hz to 20KHz)
Channel Separation (1kHz, 8Ω)	>90dB
S/PDIF RCA input impedance	75 ohm
AC power	100–240v 50/60 Hz
Fuse size for 115v	6.3 amp 250v slow-blow
Fuse size for 230v	3.15 amp 250v slow-blow
Standby power consumption	<0.5 W
Idle power consumption	14W
Maximum power consumption	500 W (peak)
Height (including Feet)	84 mm   3.3 inches
Width	300 mm   11.8 inches
Depth (including power button and binding post)	362 mm   14.25 inches
Weight	Unit only 5.13kg   11.3lbs Shipping 6.8Kg   15lbs

All specifications subject to change without notice.

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