

AMP-2400 Power Amplifier User Guide



WARNING

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

CAUTION

"TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER - SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONAL."









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 products 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 appliance.



- Read Instructions All the safety and operating instructions should be read before the appliance is operated.
- **Retain Instructions** The safety and operating instructions should be retained for future reference. Check AMPED American website for most current version.
- **Heed Warnings** All warnings on the appliance in the operating instructions should be adhered to.
- Follow Instructions All operating and user instructions should be followed.
- Water and Moisture The appliance should not be used near water for example, near a bathtub, wash bowl, kitchen sink, laundry tub, in a wet basement or near a swimming pool, and the like.
- **Ventilation** The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow or air through the ventilation openings.
- **Heat** The appliance should be situated away from heat sources such as radiators, heat registers, stoves or appliances that produce heat.
- **Power Sources** The appliance should be connected to a power source only of the type described in the operating instructions or as marked on the appliance.
- **Grounding or Polarization** The supplied 3-prong power cord provides grounding and polarization. The grounding should not be defeated under any circumstance.
- **Power Cord Protection** The power cord should be routed so that it is not likely to be walked on or pinched by items placed upon or against it, pay attention to the cord at plugs, convenience receptacles and the point where it attaches to/exits the appliance.
- **Nonuse Periods** The power cord of the appliance should be unplugged from the outlet when left unused for an extended period.
- Object and Liquid Entry Care should be taken so that objects do not fall on to the appliance or are
 inserted through openings and liquids are not spilled into the appliance enclosure through the
 openings.
- **Damage Requiring Service** There are no user serviceable parts in the appliance. It should only be serviced by qualified service personnel.
- Servicing The user should not attempt to service the appliance beyond the described operating
 instructions. All other servicing should be referred to qualified service personnel.

riangle Precautions

 Warranty Card – The serial number is written on the rear panel of the appliance. Copy the serial number onto the warranty card and mail it to:

> AMPED America 216 Route 206 Suite 15 Hillsborough, NJ 08844

Alternatively, you can register the warranty online at the AMPED America website.

• Retain a copy of the original invoice/receipt/bill of sale for the appliance, you will need it if warranty service is ever required.

Power Warning – Before turning on the power for the first time, read the following section carefully:

- **Voltage Label** A label located on the rear panel will indicate the AC power input for the appliance. For the USA and Canada, the label reads AC 120V, 60Hz.
- Location Place the appliance in a well-ventilated location. Take special care to provide plenty of ventilation on all sides of the appliance when it is placed in an audio rack or other enclosure. If ventilation is blocked the appliance may overheat, malfunction and/or be severely damaged.
- **AVOID** Damp and/or dusty locations.
- CARE From time to time you should gently wipe off the front, top and side panels with a soft dry
 microfiber cloth or Swifter™. DO NOT use rough materials, thinners, alcohol, cleaners containing
 ammonia or other chemical solvents since these may damage the finish and/or remove the panel
 lettering.

Warranty

AMPED America products purchased from an authorized AMPED America dealer are warranted to the original owner for a period of five (5) years from the date of purchase.

What's Covered

In the event of a product failure due to product defect AMPED America will provide all parts and labor required to return the product to its original functional specifications and the cost of return shipping and insurance. At its sole discretion, AMPED America may choose to replace rather than repair the defective product.

Limitations

This warranty is limited to the original owner and is not transferable. In addition, this warranty is void if the amplifier is purchased or transferred from someone other than an authorized AMPED America dealer or if the serial number has been altered in any way. Authorized AMPED America dealers are listed on the AMPED America website. This warranty applies only to AMPED America products sold by authorized dealers in the USA and Canada.

Exclusions

This warranty specifically excludes cosmetic damage, fuses, batteries, cabinet, knobs, trim, lenses and damage due to accidents, catastrophes, rising or falling water, spills, lightning, neglect, tampering, alteration, attempts to service by unauthorized individuals, acts of war, civil uprising, acts of civil or military authorities, and damage due to improper connections, misuse, abuse or use for purposes other than as a component of a residential entertainment system. Further, AMPED America is not responsible for damages or costs associated with the loss of use, property damage of any kind or other incidental or consequential damages or losses of any kind.

Customer Costs

The owner is responsible for the cost of de-installation (and re-installation), packaging (if the original packaging isn't available), shipping charges and Insurance for shipment of the product to AMPED America or an authorized warranty service center designated by AMPED America.

How to obtain Warranty service

To obtain in-warranty service, the original owner must contact AMPED America and obtain a repair authorization. The original owner may be asked to provide documentation demonstrating that he/she is the original owner and that the product was purchased from an authorized AMPED America dealer.

At the owner's expense, the owner should arrange for de-installation, packaging, shipping and insurance for shipment of the product to the authorized service center listed on the repair authorization.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Features

The AMPED 2400 power amplifiers utilize independent Class D high performance amplifier modules with integrated power supply for each channel. The resulting sound provides an astonishingly warm and comfortable listening experience much like that of high-end tube amplifiers. Your AMPED 2400 will provide many years of listening pleasure.

- Audiophile Ultra Sonic Performance (AUSP™)
- Fully Protected High Efficiency Power Supply with Auto Selectable Mains (HEPS™)
- Power output 400 watts/channel at 8 ohms, 800 watts/channel at 4 ohms
- Balanced & unbalanced Inputs
- Gold plated audio input & output connectors
- 12V (4-15V) trigger wakeup
- 12V trigger out / passthrough
- Soft startup
- Output overcurrent and short circuit protection
- DC output protection
- Thermal protection

Front Panel Operation



Main Power Switch

- The main power switch is located on the rear panel. It should be in the ON position when you are using the AMP-2400 frequently. If you are not planning to use the AMP2400 for an extended period of time, such as when on vacation, and/or when events such as bad weather might cause power interruptions, surges etc, the main power switch should be set to OFF.

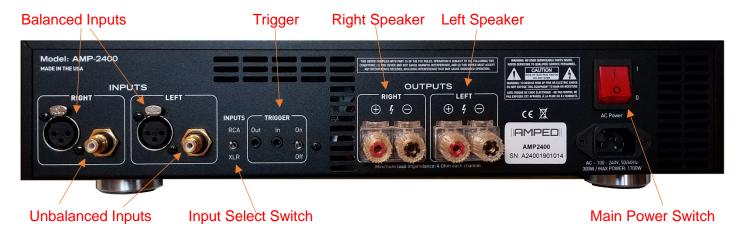
Front Panel POWER Switch

- To manually control the AMP-2400 power from the front panel, set the rear panel main power switch to **ON** and the rear panel Trigger Switch to **OFF**. Then you will be able to turn the AMP-2400 ON/OFF with the front panel power switch as needed.
- If your pre-amplifier has a 12V trigger OUT and you want the AMP-2400 to turn on automatically when you turn the pre-amp on, set the AMP-2400 rear panel Trigger switch to **ON**. Using the optional 12V Trigger cable, connect the pre-amp 12v Trigger OUT to the AMP-2400 Trigger **IN** on rear panel and leave the AMP-2400 front panel Power Switch in the **ON** position at all times.

Front Panel Power Indicator Light

- If the rear panel main power switch is ON, the Power Indicator Light will glow RED when the AMP-2400 is in Standby mode and will glow BLUE when the AMP-2400 is powered on. If the rear panel power switch is OFF and/or the AC power is disconnected, the Power Indicator Light will be off.

Rear Panel Connections & Operation



IMPORTANT - When making or changing connections on the power amplifier the AC power to ALL EQUIPMENT in your system should be turned OFF.

BALANCED Inputs – If your pre-amplifier has balanced outputs, connect them to the BALANCED Inputs on the amplifier and enable the BALANCED Inputs by setting the Input Select Switch to the XLR position.

UNBALANCED Inputs – If your pre-amplifier has unbalanced RCA outputs, connect them to the UNBALANCED Inputs on the amplifier and enable the UNBALANCED inputs by setting the Input Select Switch to the RCA position.

Right & Left Speaker Connections – When connecting the speakers be sure to observe the polarity of the connections. The + connection(s) on the amplifier MUST be connected to the + connection(s) on the speaker(s).

Trigger – The Trigger switch works in conjunction with Front Panel Power Switch. See the POWER Switch information on the Front Panel Operation page and set this switch as appropriate for your system configuration.

Trigger IN / OUT – See the POWER Switch information on the Front Panel Operation page for information on the use of the Trigger IN.

The 12V Trigger OUT can be used to extend the 12V Trigger from your pre-amp to another device. Connect a 12V Trigger cable from the 12V Trigger OUT on the amplifier to the 12V Trigger IN on the additional device.

Specifications

The AMPED 2400 is a two channel amplifier and the specifications below are per-channel.

Power Rating @ 1% THD+N @ 1kHz (AES17 filter): 400 WPC @ 8 ohms 800 WPC @ 4 ohms

Inter-modulation distortion (CCIF): SE, 18kHz and 19kHz, P0 = 10W, RL = 8 Ohms 0.0008%	
Transient IM Distortion (TIM): SE, P0=10W, @ 8 Ohms	0.002%
THD+ Noise (AES17 filter) @1kHz, 1W, RL= 8 ohms	0.003%
Dynamic Range: SE, un-weighted / A-weighted	118 dB / 120 dB
Output Idle Noise: SE, un-weighted / A-weighted	75uVrms / 55uVrms
Frequency Response:	3dB @ 8 Ohms, 5Hz – 70kHz
Gain	
Input Impedance:	
Balanced (XLR)	100k Ohms
Unbalanced (RCA)	
Damping Factor: SE, <1kHz>	

AC Voltage Range: 120Vac, 85-138Vac 240Vac, 170-265Vac

Max Power Consumption 1700 Watts

Standby Power: 3 Watts @120Vac, 6 watts @230Vac

Dimensions: 19"W x 3.5" H x 12.3"D (482mm W x 89mm H, 311mm D), Rack height -2U

Weight: 17.5 lbs / 8 Kg