



HPA 1204 / HPA2604
Multi-Impedance High Power Amplifiers



1601 Jack McKay Blvd. • Ennis, Texas 75119 U.S.A.
Telephone: 800.876.3333 • Fax: 800.765.3435

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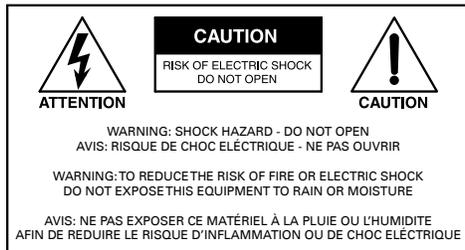
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Important Safety Instructions



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 product's 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 product.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this device near water.
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 device that produce heat.
9. Do not defeat the safety 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 third prong are 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 plugs, convenience receptacles, and the point where they exit from the device.
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 device. When a cart is used, use caution when moving the cart / device combination to avoid injury from tip-over.



13. Unplug this device during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the device has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled, or objects have fallen into the device, the device has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
16. **WARNING:** To reduce the risk of fire or electric shock, this device should not be exposed to rain or moisture and objects filled with liquids, such as a vase, should not be placed on this device.
17. To completely disconnect this equipment from the mains, disconnect the power supply cord plug from the receptacle.
18. The mains plug of the power supply cord shall remain readily operable.
19.  Protective earthing terminal. The apparatus should be connected to a mains socket with a protective earthing connection.



WARNING - When The Device Is In Use

- WARNING: For 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 leads or cords.
- WARNING: The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.
- WARNING: The mains plug is used as disconnect device, the disconnect device shall remain readily operable.
- To prevent electric shock, do not remove the product cover as there are high voltage components inside. Refer all servicing to AtlasIED.
- Should any of the following irregularities occur during use, immediately switch off the power, disconnect the power cord from the AC outlet and contact AtlasIED. Do not to attempt to continue operation with the product as this may cause fire or electric shock:
 - Smoke or strange smell coming from the unit.
 - If the product falls or the case is damaged.
 - If water or any metallic objects falls into the product.
 - If the power supply cord is damaged in any way.
 - If the unit is malfunctioning.
- Do not insert or drop metallic objects or flammable materials into the ventilation holes of the product's cover, as this may result in electric shock or fire.
- Do not place any containers with liquid or metallic objects on the top of the product. If any liquid spills into the unit, fire or electric shock may result.
- Never operate this product or touch the power supply cord during an electrical storm, electric shock may result.
- Never exceed the power rating on the product when connecting equipment. Fire and/or property damage may result.
- Operate the product only with the voltage specified on the unit. Fire and/or electric shock may result if a higher voltage is used.
- Do not modify, kink, or cut the power cord. Do not place the power cord in close proximity to heaters and do not place heavy objects on the power cord, including the product itself, doing so may result in fire or electrical shock.
- Ensure that the safety ground terminal is connected to a proper ground. Never connect the ground to a gas pipe as a catastrophic disaster may result.
- Be sure the installation of the product is stable, avoid slanted surfaces as the product may fall and cause injury or property damage.



CAUTION - When Installing The Product

- Plugging in or unplugging the power cord with wet hands may result in electric shock.
- Never move the unit with the power cord plugged into the wall, as damage to the power cord may result.
- When unplugging the cord from the wall, grasp the plug, NOT the cord.
- Never install this product in humid or dusty locations, nor in direct sunlight, near sources of heat, or in areas where sooty smoke or steam are present. Fire and electric shock may result.
- Keep all sides of the unit at least 3 1/2" away from objects that may obstruct air flow to prevent the unit's internal temperature rise.



CAUTION - When The Product Is In Use

- Never place heavy objects on the product, causing it to fall and/or break, resulting in personal injury and property damage. In addition, the product itself may fall and cause injury and property damage.
- Contact AtlasIED for instructions on cleaning the inside of the unit. Large accumulations of dust inside the unit may result in heat buildup and fire.
- Ensure that the power supply plug is securely plugged into the wall outlet. Never allow dust to accumulate on the power plug or inside the wall outlet.
- When cleaning the unit or the unit is not to be operated for an extended period, unplug the power cord from the wall.



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Introduction

Thank you for purchasing the AtlasIED HPA Series amplifier. The AtlasIED high power amplifier, "HPA" Series, is designed for use in either commercial 70V/100V distributed systems or professional applications that require amplifiers to handle multiple impedance loads. The HPA is compact and lightweight in comparison to other models delivering similar performance. The HPA Series features Generation II Class D Output topology that provides high efficiency with the sound quality of a Class AB amplifier. The power supply is a switch mode, global auto sensing design that maintains a stable output during fluctuating power conditions. The power supply and output stage collectively are designed to deliver exceptional dynamic high output voltage and current to virtually any loudspeaker load.

The HPA Series features front panel detented level controls with a security cover, remote turn on, balanced inputs, fault reporting and a rear panel accessory card slot for an optional Dante™ 4-channel digital audio interface. HPA Series amplifiers feature a unique output stage, low resistance direct coupled thermal transfer design that effectively maintains optimal temperature across all loads and output levels. HPA Series amplifiers are also energy efficient and meet Energy Star standards, drawing only 1W of power in standby mode.

Whether the application is a large distributed constant voltage sound system or a high SPL sound reinforcement system, the AtlasIED HPA Series is the answer for high power/cost effective amplification needs.

Key Features

- Four Channels
- 4Ω, 8Ω, 70.7V, & 100V Operation
- Balanced Inputs
- Dante™ Accessory Card Slot
- Fault Reporting
- Remote Turn On
- Detented Attenuators with Security Cover
- Stereo or Parallel Operation Capability
- Auto Sensing 100V-240V~ AC Mains Power Supply
- Meets Energy Star Standards 1W Standby Mode



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Front Panel



1. Channel Level Controls

Each channel of the HPA amplifier has an independent detented level control. When either of the potentiometers is turned down (left or fully counter clockwise) no signal will come out of the corresponding amp channel. When the potentiometer is turned up (right or fully clockwise) the amp will be set for maximum level.

2. Level Control Security Cover

The HPA Series comes with a tamper-proof level control security cover. There are two screws that hold the security cover in place covering all level controls.



3. Ventilation

HPA amplifiers have fan assist cooling that draws cool air in from the rear of the amp and exhausts the hot air out the front panel.

4. Status Indicators

- A. Power** - When AC mains power is applied to the amplifier and the AC Mains Power Switch is in the "ON" position this LED will illuminate blue indicating the amplifier is active and ready for use.
- B. Standby** - The Standby LED is a bi-color LED giving status of the amplifier power supply.
 - Illuminated amber - The HPA Amplifier is in Energy Save Mode and is not ready for use. The rear panel remote activation control port has to be triggered by applying 5-24DC Voltage or shorting the Contact Closure (CC) and ground (GND) pins together to activate the amplifier to ready status. **Note:** The HPA Amp is shipped with a shunt across the CC and GND contacts to activate the amp from Standby Mode. For the amplifier to be active or On, the Remote Turn On jumper must be in place and the amplifier switch must be in the "On" position. If the Standby LED is not illuminated and the front panel blue LED Power On is illuminated, the amplifier is active and ready to use. Refer to Remote Turn On for more information.
 - Illuminated red - If the Standby LED is illuminating red, the AC Mains voltage applied to the HPA Amplifier is out of the safe operating range. The HPA Amplifier cannot be turned on until the AC Mains voltage is between 95-264V~. Refer to AC Mains Input for more information. If the Standby LED is not illuminated and the front panel blue LED Power On is illuminated, the amplifier is active and ready to use.
- C. Temp** - This LED represents the temperature condition of the amplifier. This LED will illuminate yellow once the thermal protection level of any of the amplifier channels or the power supply is reached causing the unit to power off. **Note:** Also refer to the Protect LED.



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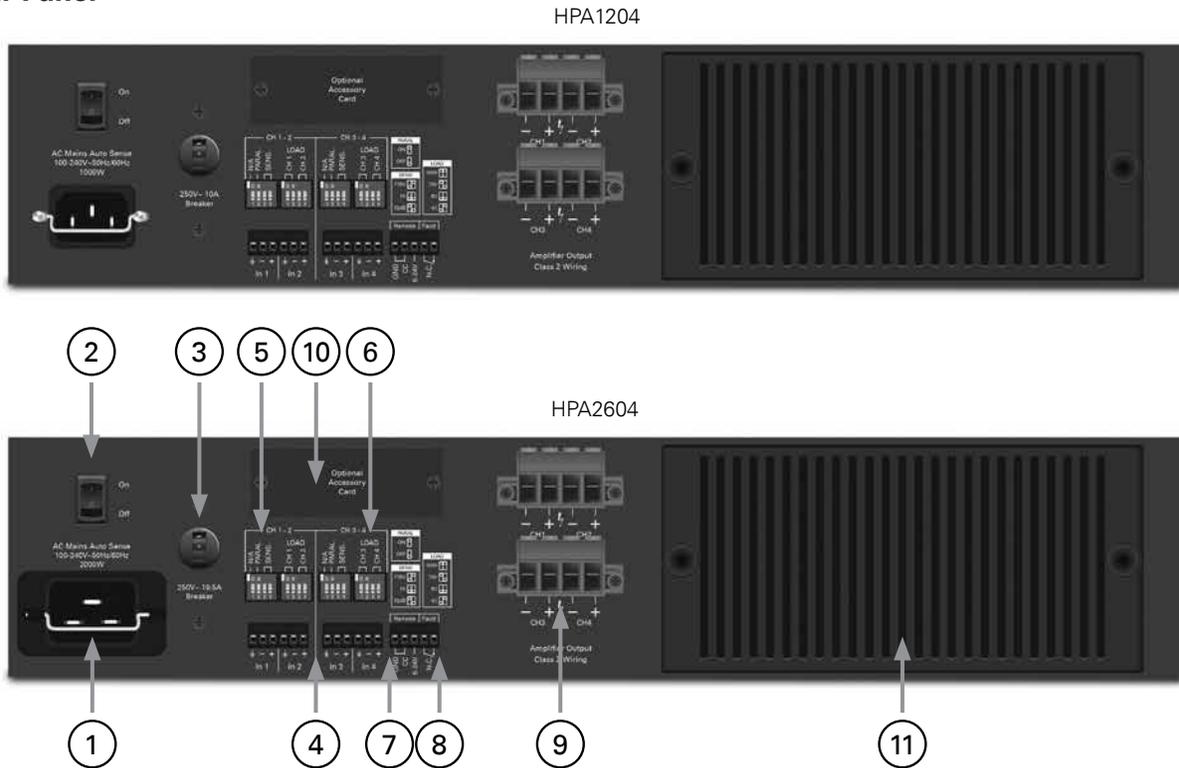
Front Panel

- D. Ready** - The Ready LED will illuminate green when the amplifier channels are stable and ready for use.
- E. Signal** - The Signal LED will illuminate green when the amplifier output signal produces at least 1-watt output.
- F. Limit** - The Limit LED will illuminate yellow when the maximum amplifier output level is achieved.
- G. Protect** - The Protect LED will illuminate red during one the following four conditions. No output will occur while this LED is illuminated. This condition will be reset after the protect condition has been corrected.
 1. Shorted loudspeaker output.
 2. Power Supply - If the amplifier exceeds its safe operating temperature, both output channels will be muted with both Protect LEDs illuminated to show the amp is in Protect Mode. The power supply will remain in protect Mode until the temperature returns to a safe operating temperature. **Note:** The Temp LED will also illuminate during this condition.
 3. Current Overdrive, if the amplifier channels are driving too low of a loudspeaker load.
 4. Failure of amp channel, if DC is present at the output the respective amp channel will go into protect mode.



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Rear Panel



1. AC Mains Input

The HPA1204 and HPA2604 feature a global, wide range AC Mains power supply that operates from 100V-240V 50/60Hz power sources. The HPA1204 has an IEC-600320-C14 receptacle with retainer clip and is provided with a removable 1.8 meter 14 gauge NEMA 5-15 power cord. The HPA2604 has an IEC-600320-C20 receptacle with retainer clip and is provided with removable a 1.8 meter 12 gauge NEMA 5-20 power cord. Insert the IEC connector of the power cord into the IEC receptacle of the HPA Series amplifier making sure it is properly secured using the retainer clip. For non North American applications, refer to local electrical code requirements to select the proper mating power cord.

2. Amplifier Switch

The amplifier switch turns the amplifier power supply from Standby mode to Active On mode. Up is "On" and down is "Off". When on and AC is present the front panel Power LED will illuminate blue. **Note:** In order for the amplifier to go from Standby mode to Active mode, the amplifier switch must be in the Up (On) position, with either the Contact Closure in place or DC voltage (5-24VDC) present. The unit is always connected to the mains whether the switch is in the "On" or "Off" position.

3. AC Mains Breaker

If the current drawn from the amplifier is greater than the rating of the AC Mains circuit breaker, the breaker will trip thus shutting the amplifier "Off." Turn the amplifier levels to minimum and reset the breaker to the up position to reset the breaker.

4. Balanced Input

Balanced line level signals connect to the (+) (-) and (G) terminals. **Note:** If connecting an unbalanced line level input, tie (short) the (G) and (-) terminals together.



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Rear Panel

5. Amplifier Sensitivity Select & Parallel Mode Dip Switches

Note: Switch 1 controls CH 1 and 2. Switch 3 controls CH 3 and 4.

DP SW #1 - N/A = Not Applicable (Not Used)

DP SW #2 - Parallel (Up) = Parallel mode internally combines Inputs 1 & 2 so only one connection is needed to send a signal to Outputs 1 & 2. In parallel mode both amplifier output channels have separate level controls.

DP SW #2 - Stereo (Down) = Stereo mode routes Input 1 to Output 1 and Input 2 to Output 2.

DP SW #3 & #4 - Input Sensitivity, 0.775V, 1V, 32dB. **Note:** The same setting effects both channels

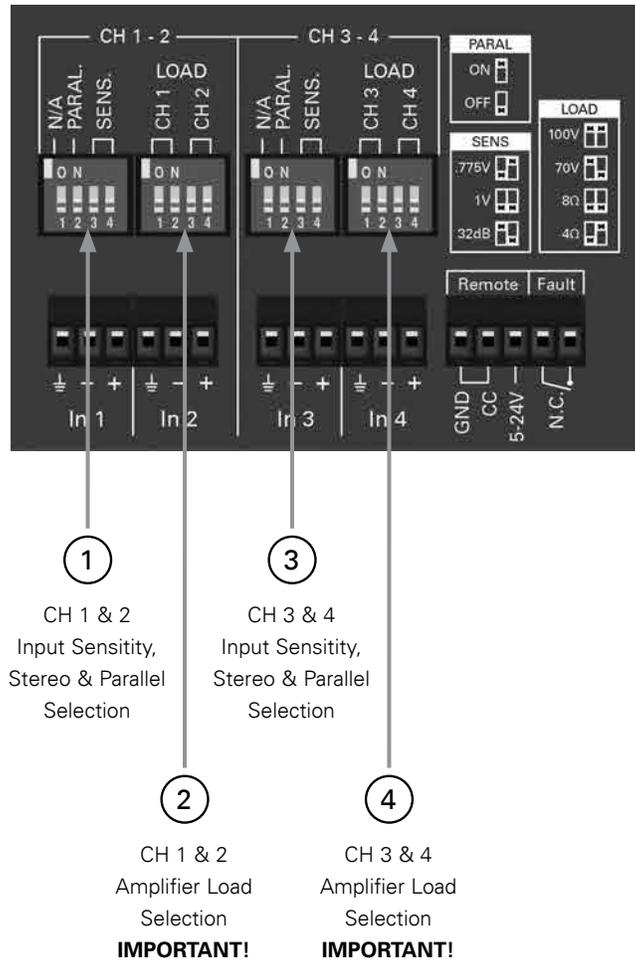
6. Amplifier Load Configuration Switches - IMPORTANT!

Note: Switch 2 controls CH 1 and 2. Switch 4 controls CH 3 and 4.

Note: Failure to choose the proper setting to the load applied may cause the amp to go into protect mode.

DP SW #1 & #2 - Load Selection for CH 1 to be 4Ω, 8Ω, 70V, or 100V operation.

DP SW #3 & #4 - Load Selection for CH 2 to be 4Ω, 8Ω, 70V, or 100V operation.



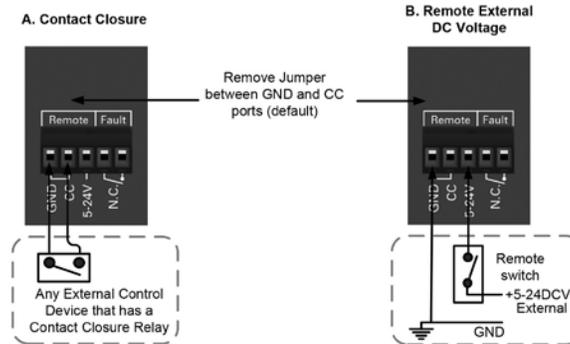
Rear Panel

7. Remote Turn ON Terminals

The HPA amplifier can be turned on or activated from a remote location. **Note:** In order for the amplifier to go from Standby mode to Active mode, the amplifier switch must be in the Up (On) position, with either the Contact Closure in place or DC voltage (5-24VDC) present. One of these two must be active to turn on the amplifier's power supply. If not, the Standby LED will illuminate amber. Factory shipping default includes a shunt applied across the Ground and CC terminals.

- A. **Contact Closure** - Using a latching contact switch short the Ground and CC ports together.
- B. **DC Voltage** - Apply 5V - 24V DC to these ports.

Remote Activation

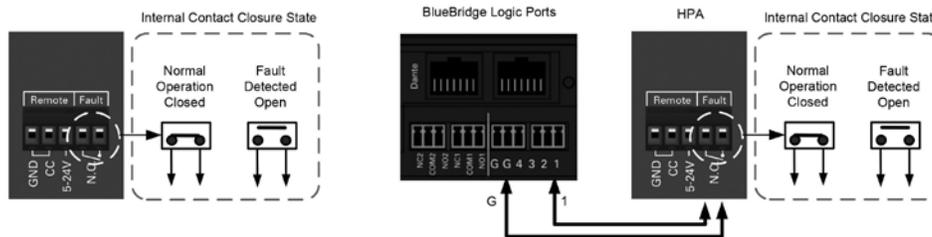


8. Fault Reporting Terminals

The HPA incorporates a fault reporting system to inform a system administrator if there is something wrong with the amplifier that needs to be attended to by a system technician. The ports are shorted together (NC, Normally Closed) when the amplifier is operating properly. The ports open up under the following conditions indicating there is an issue with the amplifier.

- A. Shorted loudspeaker output.
- B. Thermal, the temperature of the amplifier channel exceeds its safe operation.
- C. Current Overdrive, if an amplifier channel is driving too low of a loudspeaker impedance.
- D. Failure of an amp channel, if DC is present at the speaker output.

Fault Reporting



This example shows the HPA Remote Fault connected to a BlueBridge® Logic port to create an AMP Status Indicator on a Touchscreen.

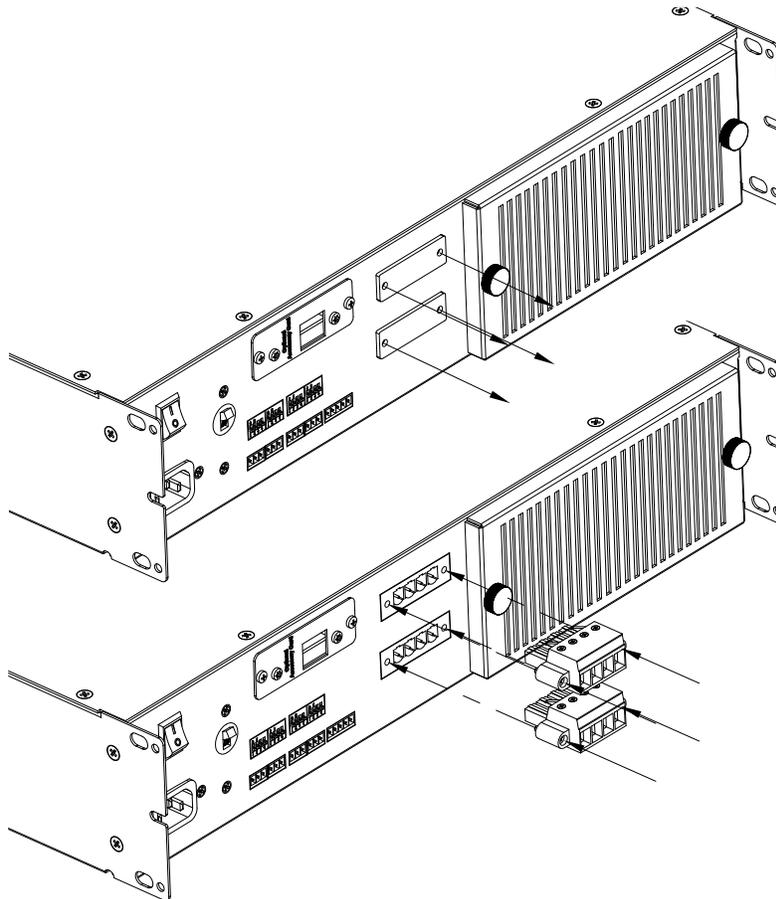


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Rear Panel

9. Loudspeaker Connections

The HPA Series amplifiers ship with a protective plate covering the loudspeaker terminal pins. This is required by safety approval agencies due to the high voltage levels produced. Remove this cover and install the Euro Block type connector to connect loudspeakers to the amplifier. Any connections to the Euro Block type connector are to be made by a qualified electrical technician. **Note:** Make sure the amplifier is unplugged from the AC mains source before starting the process due to the potential high voltage electrical shock. Discard the cover after it is removed and the loudspeaker terminal is installed. The removable Euro block connector is a 4 position, 7.62mm pitch design and is connected to the chassis by the 2 incorporated screws. It is recommended to use 12-gauge wire or larger for connection to the loudspeaker. The terminals can accept wire sizes of 6 - 18 gauge Class 2 wiring. Properly preparing the wire is critical to ensure a secure connection for safety and audio quality. First strip the wire back 0.250" (5mm). We do not recommend tinning (soldering the wire). Insert the wire into the terminal block slot and secure by tightening the screws firmly. Failure to do so, could cause shock or damage the amplifier.



10. Accessory Card Slot

The accessory card slot is for optional input cards such as the HPA-DAC4 (4 Channel Digital Audio Input Card). Contact AtlasIED for a full list of accessory cards. **Note:** Accessory card installation must be done by a qualified technician.

11. Air Inlet and Filters

The rear air inlet has a removable filter grill that is connected to the mains chassis via magnets. Filters are to remain clean at all times to assure proper air flow for amplifier cooling.



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Placement of the Amp

Turn off all equipment before making connections. Install the amplifier in a standard-width 19" rack. It can be mounted above or below anything that does not generate excessive heat. Although the unit's chassis is shielded against radio frequency and electromagnetic interference, extremely high fields of RF and EMI should be avoided.

Ventilation - The appliance should be situated so that its location or position does not interfere with proper ventilation. For example, the HPA amplifier should not be situated in a sealed cabinet or on a shelf with obstacles on it that may impede the flow of air through the ventilation openings. It is recommended that it be rack mounted into an equipment rack.

Heat - The HPA amplifier should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce excessive heat. Ambient temperatures should not exceed 95° F (35°C) when equipment is in use.

Cabling

The HPA amplifier can be used with either balanced or unbalanced sources, and the outputs can be used with either balanced or unbalanced loads, provided the proper cabling is used. A balanced line is defined as two-conductor shielded cable with the two center conductors carrying the same signal but of opposite polarity when referenced to ground.

An unbalanced line is generally a single-conductor shielded cable with the center conductor carrying the signal and the shield at ground potential.

Balanced Input - AtlasIED recommends using either 20 or 22-gauge two-conductor wire with shield for low level signals. Maintain the proper polarity, + to +, - to - and shield to ground. **Note:** The ground center pin of the Phoenix connector is common for both channels.

Loudspeaker Outputs - Use 2 conductor unshielded wire of the appropriate gauge. Contact AtlasIED technical support at 1-800-876-3333 with questions regarding wire gauge. The number of loudspeakers connected and their tap settings will be required for technical support to properly recommend wire.

Why choose 240V over 120V?

It is a good idea to provide an AC Mains voltage of 208-240V with a product that requires high amount of AC Mains current. Ohm's law states that when voltage is high the current is lower. An amplifier that requires 30A of current at 120V only requires 15A of current at 240V.

One major advantage is the cost savings in the wire required to provide the current from the electrical panel to the receptacle. The minimum wire gauge needed to deliver 30A is 10AWG. For longer distances of 50ft - 150ft, 8AWG should be used. For 240V, only 15A is required and the wire gauge needed for that is only 14AWG. The cost between 14AWG & 8AWG is significant. Both methods only need 3 conductor. 208V - 240V in the USA requires a dual breaker. The cost of a dual breaker is similar in cost to a 120V 30A breaker.

A second advantage is with less current draw or demand there is less voltage sag in the AC Mains line. With less AC Mains voltage sag the amplifier will be able to produce more dynamic audio power when required.

Either 120V or 240V will work equally well, but keep in mind for a 120V service, using the proper wire gauge is very important to get the maximum performance out of the amplifier.



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Connecting the HPA Amplifier to AC Mains

Do Not Do!

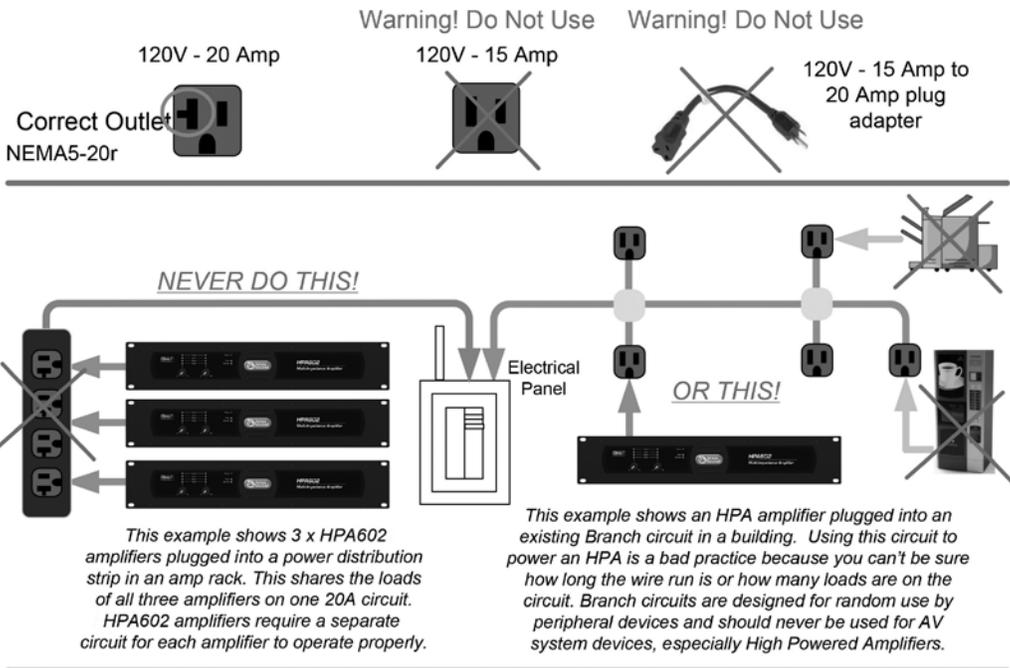
1. Never plug an HPA Series amplifier into a circuit without knowing what other products are connected to the same circuit.
2. Never plug an HPA Series amplifier into a power strip. Always connect directly to a dedicated circuit wall receptacle. Power strips are not designed to deliver high amounts of continuous or peak current.
3. Never plug an HPA Series amplifier into an extension cord.

Best Practices

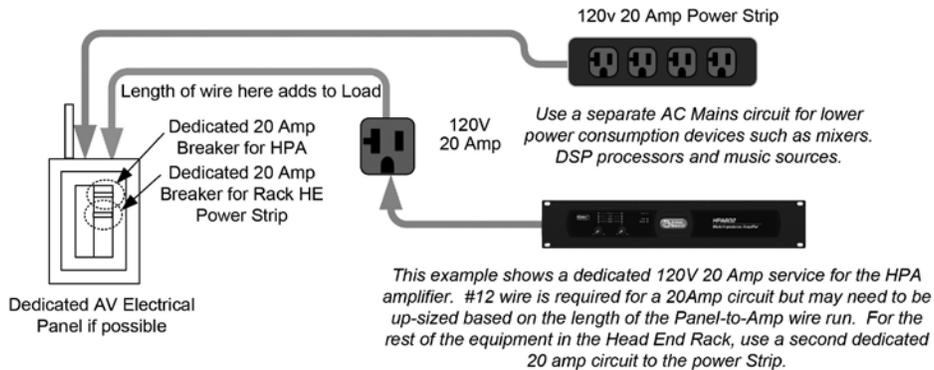
1. Each HPA Series amplifier should have its own dedicated AC Mains line.
2. Consider using a 208V-240V AC mains power source.

HPA (HIGH POWER AMPS) REQUIRE SPECIAL ATTENTION TO AC POWER

Know the type of outlet you are going to use and never use an adapter!



BEST PRACTICE

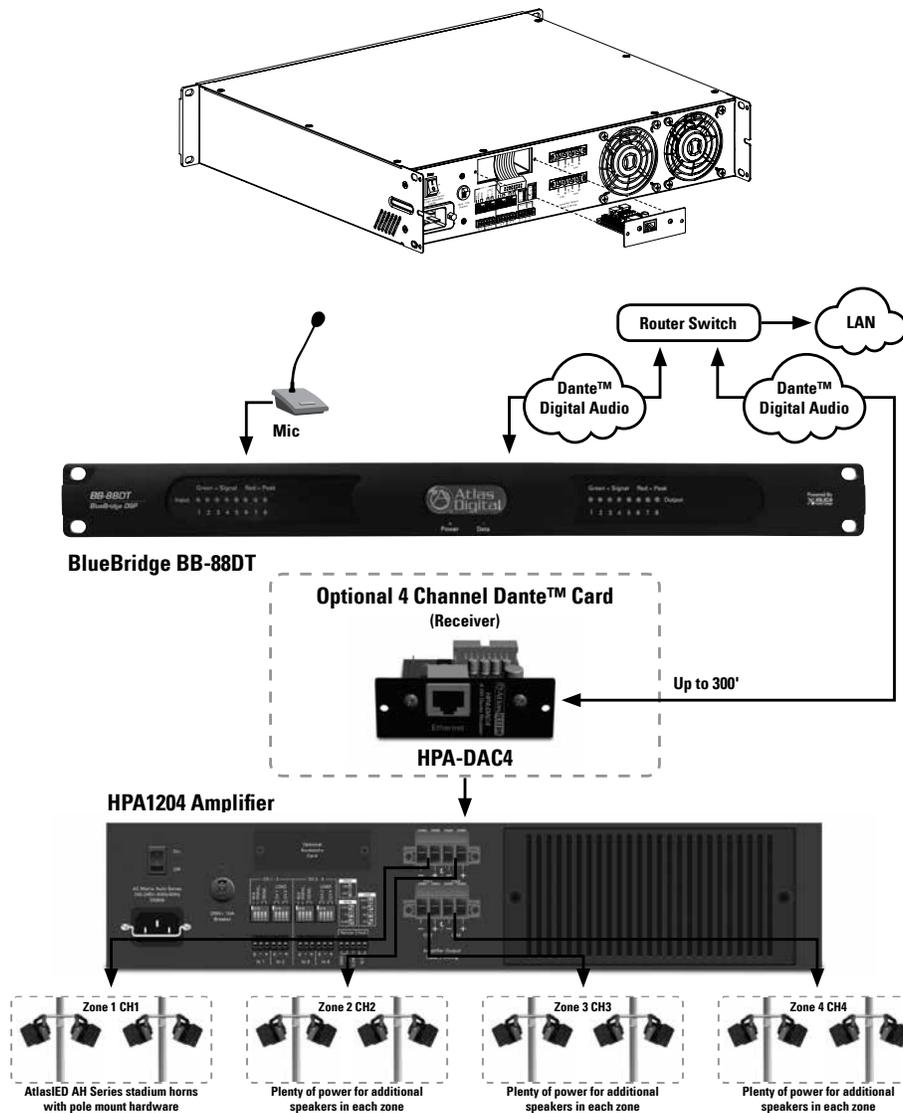


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HPA Amplifier Dante™ Accessory Card Installation

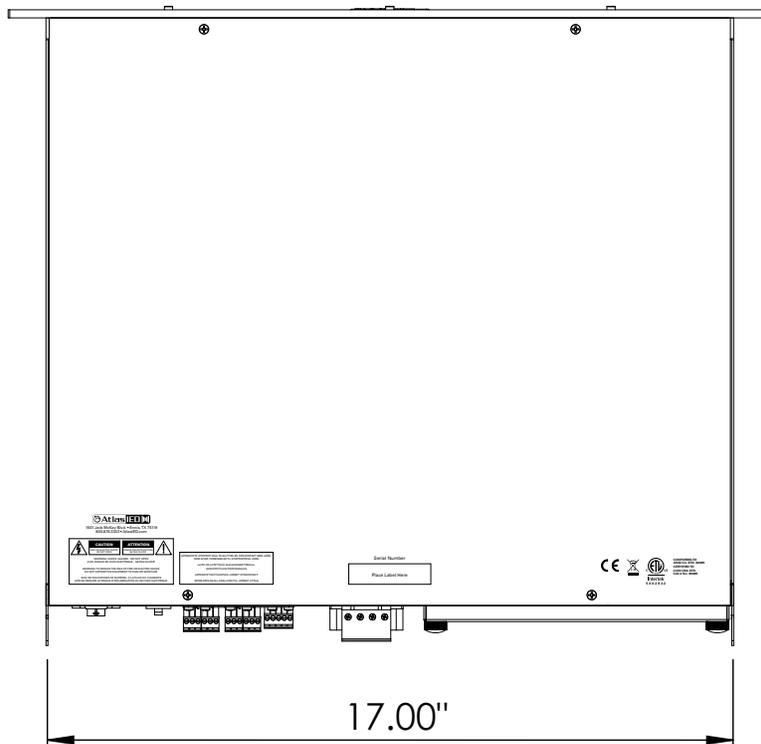
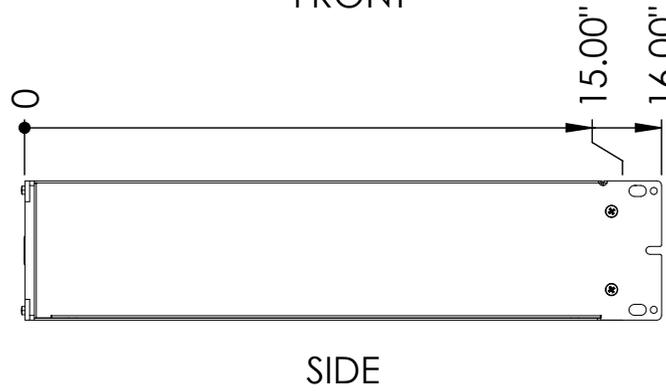
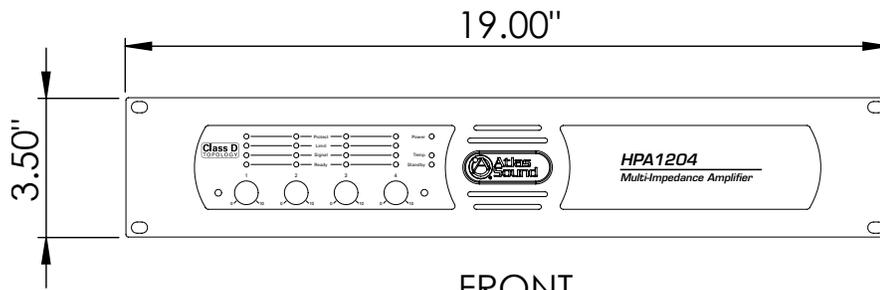
The HPA amplifier series allows for an optional HPA-DAC4 4-Channel Dante™ receiver card to be installed into the HPA amplifier. Contact AtlasIED for a list of accessory cards. **Note:** Accessory card installation must be done by a qualified technician.

1. Remove the HPA amplifier from the AC mains source.
2. Remove the two screws (M3 x 8mm Pan Head Black) holding the HPA accessory blank panel. Be careful and do not lose the screws.
3. Remove the ribbon cable from the cover plate PCB connector.
4. Connect the accessory card to the ribbon cable by carefully aligning the ribbon cable connector to the mating PCB connector. If aligned correctly the cable will mate easily.
5. Carefully guide the accessory card into the slot without forcing the PCB or cable.
6. After the card is inserted and the accessory panel is flush to the chassis, align the two screw holes and secure them together by using the M3 x 8mm screws.



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Dimensional Drawings



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System		
Type	Power Amplifier, 4 Channel	
Power Supply Type	Switch Mode - Wide Range- PFC	
Amp Topology	Class D	
Number of Fixed Inputs	4	
Accessory Inputs	4	
DSP Internal	No	
Network	No	
Optional Card Slot	Yes	
Output Power (Note 1)	HPA1204	HPA2604
100V x 4 CH	4 x 300W	4 x 650W
70.7V x 4 CH	4 x 300W	4 x 650W
8Ω x 4 CH	4 x 300W	4 x 650W
4Ω x 4 CH	4 x 300W	4 x 650W
2Ω x 4 CH	NA	NA
8Ω Bridged	NA	NA
4Ω Bridged	NA	NA
Factory Default Settings (As Shipped)		
Amplifier Configuration	4 CH	
Level Controls	Front Panel	
Control Ports (Rear Panel)	Remote Turn On / Off, Enable On	
Input Sensitivity	.775 / 0dBu	
Load Configuration	70V	
Inputs		
Input Quantity	4-Balanced Inputs, Expandable to 8 via Accessory Card	
Input Type	Balanced Line	
Input Connectors Type	3.5mm Euro Block	
Input Impedance	20KΩ (Balanced) 10KΩ (Unbalanced)	
Input Sensitivity	775mV / 1.0V / 32dB (Selectable)	
Maximum Input Level dBu & Vrms	24dBu, 12V (Accessory Slot Refer to Accessory Card Specifications)	
Accessory Slot	4 Input Dante™ Digital Card (HPA-DAC4 Optional)	
Level Control		
Front Panel	Rotary Detented Attenuators with Security Cover	
Status Indicators		
Power	Blue	
Standby	Amber	
AC Mains Out of Safe Operating Range	Red	
Temp	Yellow	
Ready	Green	
Signal	Green	
Output Limit	Yellow	
Output Protect	Red	
Bridge	NA	



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GPIO Ports (Rear Panel)			
Number of Ports	Qty 5		
Type of Connector	Euro Block 3.5mm		
Functions	Remote Turn ON via Contact Closure		
Functions	Remote Turn ON via DC Voltage 5-24V		
Functions	Fault Report		
Configuration Settings (Rear Panel)			
Input Sensitivity	.775V, 1V, 32dB per CH		
Parallel Inputs	Yes (Y Input)		
Bridge	NA		
Output Terminals (Speaker)			
Output Connectors Type	Removable Euro Block, 762mm Pitch, Locking		
Output Connectors Number of Terminals	Qty 2, 4 Position		
Wire Size	6-18 Gauge (Class 2 Wire)		
Current Rating	57A RMS per Terminal		
Electrical Specifications (General)		HPA1204	HPA2604
Total Harmonic Distortion 1 kHz and 1 dB Below Rated Power	≤0.15%		
Signal to Noise Ratio	>70dB Below Rated Output (A-Weighted)		
Frequency Response	20Hz - 20kHz (+0/-1.5dB)		
Input Impedance Balanced (Nominal)	100Ω Balanced Line to Line		
Input Sensitivity	0.775V / 1.0V / 32dB (Selectable)		
Slew Rate	>10V/μs		
Damping Factor (20Hz to 400Hz)	>200		
Gain	40dB (8Ω Factory Ship or 32dB Assignable)		
Crosstalk CH1-2 & CH 2-1	>70dB		
Max Voltage Per Output 8Ω	49V	71V	
Max Current per Output 4Ω	8.9A	12.9A	
Protection	Soft Start, Input RF, DC, Short Circuit, Current Overload, Clip Limit, AC Mains Under / Over Voltage Shut Off, Peak Current Limit, Over Temp		
AC Power Requirements			
Operating Voltage Auto Switch, 50/60Hz	100V - 240V		
Minimum Power-Up Voltage	95V		
Maximum Operating Voltage	264V		
Mains Connector	IEC C14 Lockable Receptacle	IEC C20 Lockable Receptacle	
Power Cord (Ships With)	IEC C13 Plug / 14AWG 1.8m Cord / NEMA 5-15 Plug	IEC C19 Plug / 12AWG 1.8m Cord / NEMA 5-20 Plug	
Power Consumption & Current Draw @ 120V AC Mains (HPA1204)			
	Amps	Watts	BTU / hr (Note 4)
Standby Mode	0.272A	0.35W	2.39 BTU
Idle Active	0.855A	79.3W	148.4 BTU
Average Power 4Ω, All CH Driven	2.1A	250W	511.8 BTU
Average Power 70.7V, All CH Driven	2.1A	250W	511.8 BTU
Max Power 4Ω, All CH Driven	13.13A	1575.6W	1279.5 BTU
Max Power 70V, All CH Driven	13.63A	1635.6A	1486 BTU



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Power Consumption & Current Draw @ 120V AC Mains (HPA2604)			
	Amps	Watts	BTU / hr (Note 4)
Standby Mode	0.272A	0.35W	2.39 BTU
Idle Active	0.915A	85.5W	170.6 BTU
Average Power 4Ω, All CH Driven	3.1A	370W	580 BTU
Average Power 70.7V, All CH Driven	3A	350W	511.8 BTU
Max Power 4Ω, All CH Driven	27.25A	3270W	2286 BTU
Max Power 70V, All CH Driven	26.9A	3225W	2132.5 BTU
Cooling			
Cooling System	Fan (Variable with Temperature)		
Air Inlet Filter	Yes, Rear, Washable		
Cooling Air Flow Direction	Rear to Front		
Dimensions and Weight		HPA1204	HPA2604
Rack Mount Requirements	2 RU, 19"		
Dimensions - Unit	19" W x 3.5" H x 15" D (483mm x 89mm x 381mm)		
Dimensions - Shipping	23" W x 6.5" H x 22" D (584mm x 165mm x 558mm)		
Weight - Unit	21.4 lbs. (9.7kg)	22 lbs. (10kg)	
Weight - Shipping	28.4 lbs. (12.9kg)	29 lbs. (13.3kg)	
Agency Approvals			
North America Agency	ETL		
Testing Standard North America	60065		
FCC Class A (Conducted & Radiated Emissions)	Part 15 of the FCC Rules		
CE	Yes (Includes RoHS & WEEE)		
Optional Accessories			
HPA-DAC2 - Dante™ Digital Audio Interface	4 Channel Receive (Only)- Field Installable		

Notes:

1. Power Level - Test is defined as follows: 1kHz sine wave signal burst of 20 cycles (20mS) at 1% THD+N, followed by 480 cycles of a 1kHz sine wave at 10% of the max power. Other power measurements available upon request. All power tests are done at 120V.
2. Power measured with optional Ethernet card connected. Without optional Ethernet card connected deduct 0.2W.
3. Average Power is defined as Pink Noise input signal applied to achieve 1/4 of the 4Ω or 70.7V power rating.
4. Max Power is defined as 1KHz input signal applied to achieve the maximum power output before clip into a 4Ω or 70.7V load.



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Limited Warranty

All products manufactured by AtlasIED are warranted to the original dealer/installer, industrial or commercial purchaser to be free from defects in material and workmanship and to be in compliance with our published specifications, if any. This warranty shall extend from the date of purchase for a period of three years on all AtlasIED products, including SOUNDOLIER brand, and ATLAS SOUND brand products except as follows: one year on electronics and control systems; one year on replacement parts; and one year on Musician Series stands and related accessories. Additionally, fuses and lamps carry no warranty. AtlasIED will solely at its discretion, replace at no charge or repair free of charge defective parts or products when the product has been applied and used in accordance with our published operation and installation instructions. We will not be responsible for defects caused by improper storage, misuse (including failure to provide reasonable and necessary maintenance), accident, abnormal atmospheres, water immersion, lightning discharge, or malfunctions when products have been modified or operated in excess of rated power, altered, serviced or installed in other than a workman like manner. The original sales invoice should be retained as evidence of purchase under the terms of this warranty. All warranty returns must comply with our returns policy set forth below. When products returned to AtlasIED do not qualify for repair or replacement under our warranty, repairs may be performed at prevailing costs for material and labor unless there is included with the returned product(s) a written request for an estimate of repair costs before any nonwarranty work is performed. In the event of replacement or upon completion of repairs, return shipment will be made with the transportation charges collect.

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Service

Should your HPA Series Multi-Impedance Amplifier require service, please contact the AtlasIED warranty department at 1-877-689-8055, ext. 277 or www.atlasied.com/support to obtain an RA number.

AtlasIED Tech Support can be reached at 1-800-876-3333 or www.atlasied.com/support.

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