






USER MANUAL


 
CERTIFICATION

Model

QA

Date




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PROFESSIONAL POWER AMPLIFIER

Specifications:



Rated output power (W) 1KHz, 0.5%THD+N						
Stereo model output power 8Ω	350W	500W	700W	900W	1200W	1500W
Stereo model output power 4Ω	450W	750W	1000W	1450W	1800W	2250W
Maximum bridged output power 8Ω	900W	1500W	2000W	2900W	3600W	4500W
Frequency Response (±1.0dB, 1W/8Ω)	20Hz-20kHz					
THD+N (standard measure condition: 8Ω/1kHz)	≤0.1%					
Signal to noise ratio (20Hz-20kHz full power)	≥100dB					
Input sensitivity (rated power @8W)	0.775V / 1.4V					
Input connectors	Input XLR					
Output connectors	Professional output connector					
Construction	Integrated steel, aluminum alloy panel with handle					
Input impedance	20kΩ / balanced, 10kΩ / unbalanced					
Resolution	≥65dB					
Input common-mode rejection ratio	60dB					
Maximum RMS voltage swing (@8Ω/0.775V)	x63	x81	x96	x110	x120	x142
Dimensions	88x483x305mm 3.5"x19"x12"	88x483x370mm 3.5"x19"x14.5"	88x483x426mm 3.5"x19"x16.7"			
Gross weight	13kg	14kg	16kg	18kg	19kg	23kg
Warranty	1 year*					

Please note: Every information is subject to change without prior notice.

PRECAUTIONS



WARNINGS

Installation:

- Connect power cord only to an AC outlet of the type stated in this User Manual or marked on the unit. Failure may cause a fire or electrical shock hazard.
- Keep the unit away from water or being wet. Otherwise, will cause an electrical shock hazard.
- Do not place containers with liquids or small metal objects on top of the unit. They will cause a fire and electrical shock hazard.
- Do not place heavy objects including the unit on top of the power cord, or covered it by a carpet. A damaged power cord cause a fire and electrical shock hazard.

Operation:

- Do not scratch, bend, twist, pull, or heat the power cord. A damaged power cord will cause a fire and electrical shock hazard.
- Do not remove the cover of the unit, you may suffer an electrical shock. If you need internal inspection, maintenance, or repair, please contact with your dealer.
- Do not modify the unit by your own, may cause a fire and electrical shock hazard.
- Turn the power switch off the unit and unplug the power cable plug from the electrical outlet as soon as possible when lightning occurs.
- Do not touch the power cable plug if still connecting during lightning, otherwise, will cause an electrical shock hazard.

In case any abnormalities occur during operation:

- If the power cord is damaged (i.e. cut or bare wire exposed), contact your dealer for a replacement. Using the unit with a damaged power cord cause a fire and electrical shock hazard.
- If the unit being dropped or the cabinet being damaged, turn the power switch off, remove the power plug from the AC outlet, and contact your dealer. If continue using the unit without following the instruction, cause a fire or electrical shock hazard.
- If you notice any abnormalities, such as smoke, odor, noise, or if objects or liquids get inside the unit, turn it off immediately. Remove the power cord from the AC outlet. Consult your dealer for repair. Using the unit under this condition will cause a fire and electrical shock hazard.



CAUTIONS

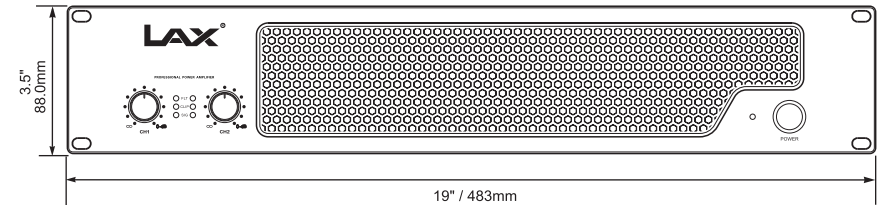
Installation:

- Keep this unit away from the following locations:
 - Locations exposed to oil splashes or steam, such as near cooking stoves, humidifiers, etc.
 - Unstable surfaces, such as a wobbly table or slope.
 - Locations subject to excessive heat, such as inside a car with all the windows closed, or places that receive direct sunlight.
 - Locations subject to excessive humidity or dust accumulation.
- Do not place the power cord close to a heater. It may melt, causing fire or electrical shock.
- Hold the power cord plug when disconnecting it from an AC outlet. Never pull the cord. A damaged power cord is a potential fire and electrical shock hazard.
- Do not touch the power plug with wet hands. Doing so is a potential electrical shock hazard.
- The unit has ventilation holes at the front and rear to prevent the internal temperature rising too high. Do not block them. Blocked ventilation holes are a fire hazard. In particular, do not
 - place the unit on its side or upside down,
 - place the unit in any poorly-ventilated location such as a bookcase or closet (other than on the dedicated rack),
 - cover the unit with a table cloth or place it on a carpet or bed.
- Allow enough free space around the unit for normal ventilation. This should be: 5cm at the sides, 10cm behind, and 10cm above. If the airflow is not adequate, the unit will heat up inside and may cause a fire.
- To relocate the unit, turn the power switch off, remove the power plug from the AC outlet, and remove all connecting cables. Damaged cables may cause fire or electrical shock.

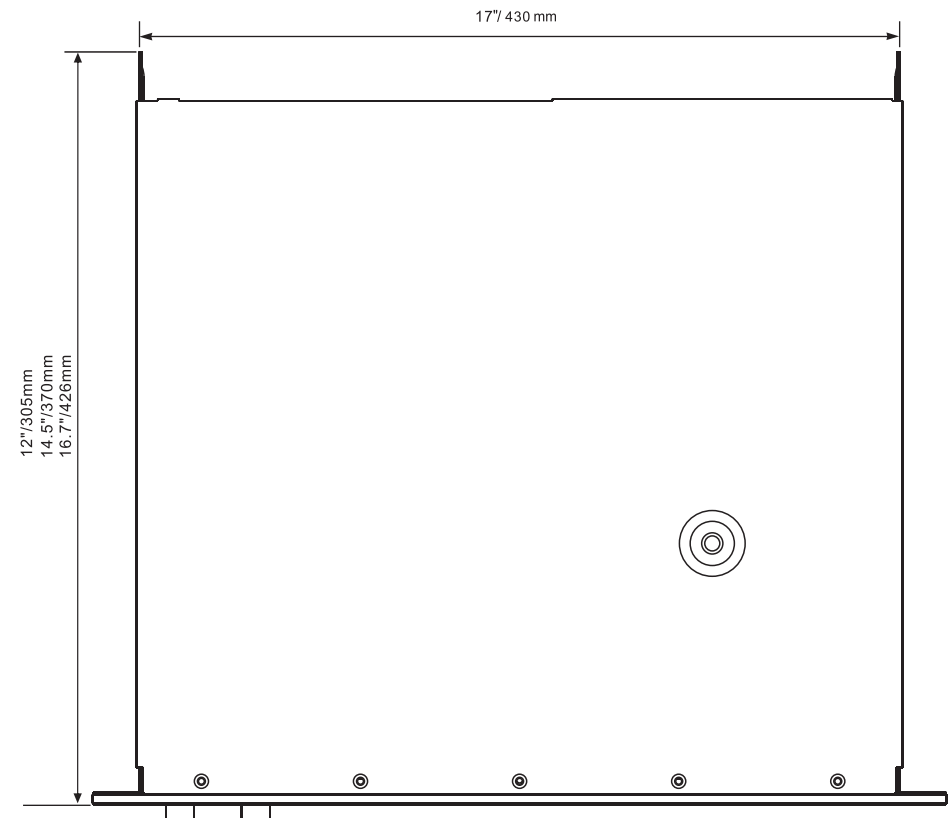
Operation:

- Use only speaker cables when connecting speakers to amplifier outputs. Using other types of cables is a fire hazard.
- Turn off all musical instruments, audio equipments, and speakers when connecting to the unit. Use the correct cables and connect as specified.
- Always lower the volume control to minimum before turning on the power of the unit. A sudden blast of sound may damage your hearing.
- Do not use the amplifier for any other purposes than driving loud-speakers.
- If you know you will not use the unit for a long period of time, such as when going on vacation, remove the power plug from the AC outlet. Leaving it connected is a potential fire hazard.

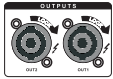
View
Front View



Top View

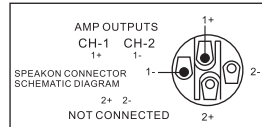


Rear panel:



Output Connectors

Power amp has two output channels. Channel 1 and Channel 2 is provided via which SPEAKON-type output connectors.



Selecting Stereo / Parallel / Bridge Mode

Stereo Mode

Each channel within the pair remains independent, and each may be used for a different signal.

Parallel Mode

This setting connects both inputs of a pair together. One signal feeds both channels. Do not connect different sources to each input. Each channel's gain control and speaker connection remain independent.

Bridge Mode

This setting combines both channels of a pair into a single channel with twice the output voltage. Use only the first channel's input and gain control. Set the second channel's gain control at minimum.

SENSITIVITY



Select switch of input sensitivity: 0.775V and 1.4V selected

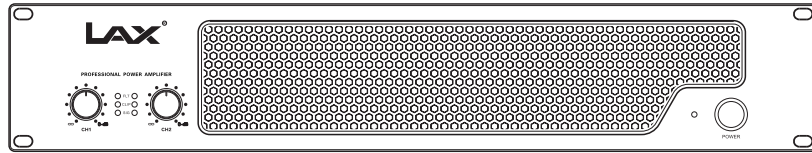
Introduction:

Congratulations! You choose lax product, you choose the right thing. Security regulations as stated before have to be obeyed when servicing the appliance. LAX professional audio amplifier, could meet the actual situation of amplified field. This product combine advanced circuits, outstanding cooling system and appliance which make sure the operational safety.

Functions and Features:

- High efficiency radiator, non-limited transmission cooling fan which make sure the unit is working under low temperature.
- Annular big transformer make sure enough powr supply.
- Solid crust, alnico panel, standard installing hole.
- Limiting protection, on/off avoiding lashing, DC protection, output short circuit protection, over heat protection, and so on.
- Inside limiter is a very effective protective circuit which avoids damaging the speaker.
- Very good audio frequency which has a very good signal conversion, for distortion and the trueness and natural soural sound performance..
- Working condition under Stereo, Bridge, Parallel.
- Fault on and audio output automatically stop when protection circuit done.
- Working status of operation light, signal light, limit light, protection light, display light.
- Level gain controlling of front panel.

Front Panel:



Power switch
Press to toggle the power on or off.



Fault LED
Lights up red to indicate that protection is in effect. Specifically, lights up if the heat sink overheats, or if a DC voltage is detected at the amplifier outputs. Also lights up for about three seconds at time of power-on, as the amp gets ready to operate. To provide protection, the unit will not output any sound from the speakers while this indicator is lit up. When Start-up is completed or the problem is corrected, the indicator goes off and normal operation resumes.



Clip LED
Lights up orange when the output signal distortion on the corresponding channel rises above 1% -indicating that "clipping" has occurred because the signal level is too high.



Signal LED
Normal indication: The -24dB indicator illuminates when the signal exceeds -24dB, and the -12dB indicator illuminates when the signal exceeds -12dB, and the -6dB indicator illuminates when the signal exceeds -6dB, and the -4dB indicator illuminates when the signal exceeds -4dB

If no indication: check gain settings and increase gain if necessary. Check input connections and audio source for signal. If the Clip LED illuminates with little or no signal indication, check the output wiring for shorts.

Abnormal indication: if all LED illuminates with no signals input, there may be system oscillations or some other malfunction. Disconnect the load and fully reduce the gain. If the LED remains on, the amp may need servicing.



Power LED
Normal indication: AC switch ON, LED will illuminate.

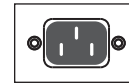
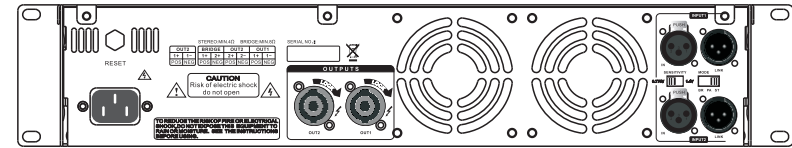
If no indication: Check AC outlet.



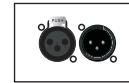
Gain Controls
Turn the gain controls clockwise to increase gain and counter clockwise to decrease gain. The maximum voltage gain of the amplifier varies depending on the model is shown of the designation. Maximum voltage gain for each model is shown on the front panel label in parentheses adjacent the 0dB attenuation setting.

The Gain controls are marked in dB of attenuation. There are 21 detents for repeatable adjustments. The upper 14 steps are about 1dB each, and settings should normally be made within this range. The range below -14 dB should not be used for normal program levels, as the input headroom could be exceeded, but can be used for testing at reduced levels. At the minimum setting, the signal is completely cut off.

Rear panel:



Mains Socket ~220-230V,50Hz ~110-120V,60Hz
Please, make sure to check whether the voltage selector shows the correct mains voltage that matches the local mains supply at the installation site. An appropriate mains cord is included in the package.



Input
The inputs INPUT 1 & INPUT 2 are connect to mixing consoles. The XLR-type connecting OUTPUT 1 & OUTPUT 2 are prepared for through-connecting input signals to additional external power amps. The input signal is directly routed to these output connectors. Accordingly, input and output connectors of the corresponding channel are interconnected in parallel, offering permanent electrical connection, without regard to the setting of the Power-ON switch.

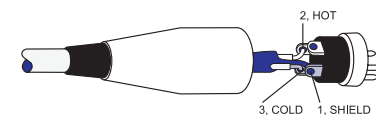
Although having XLR-type output connectors, some mixing console models provide unbalanced output connection only. when using mixers with unbalanced outputs, bridging PIN1 and PIN3 of the power amp s input connectors or leaving PIN3 of the cables plugs unconnected is necessary. Otherwise, when feeding in unbalanced audio signals via PIN3 (B,-, cold) and PIN2 (A, +, hot), strange humming and HF-interference may occur, which very likely will damage the power amplifier and/or the connected speaker cabinets.

NF- connection cords

Choosing high-quality balanced cables(two conductors for the audio signal plus separate shielding mesh) with XLR-type connectors is recommended for LF-signal connection. Although connecting unbalanced cables to the power amplifier inputs is possible as well, using balanced cables is always preferable. A great number of today's audio appliances employ balanced outputs. With balanced cabling, the shield connects all metal enclosure parts and therefore efficiently eliminates the introduction of external interference-mostly noise and hum.

XLR-type connector pin-assignment

XLR (male)



XLR (female)

