

Professional Power Amplifier

CLASS D

Digital Amplifier
Professional Audio Power Amplifier

- 1. The company has the right of final interpretation of the manual
- 2. To retain the right to modify this manual without prior notice
- 3. Such as the contents of this manual do not match your product, please prevail in kind
- 4. In the case of late reservations prior notice of the right to modify product specifications

USERS MANUAL

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6.Common problems and solutions

User manual

Fault phenomenon	No.	Elimination method			
	1	Check whether the machine power switch is turned on;			
	2	Check whether the power plug of the machine and the power socket are in good contact;			
Silent, the power indicator is off	3	Whether the power socket has AC 220-230V, 50/60Hz AC voltage;			
	4	Check whether the overload safety switch on the rear panel of this machine pops up.			
	1	Check whether the music signal cable connected to the machine is in good contact;			
Silent, the power indicator is normal, and the signal indicator is of f	2	Whether the power supply of the audio source providing the music signal is turned on and the volume is turned on;			
	3	Whether the volume potentiometer of this machine is turned on.			
	1	Whether the output amplitude of the sound source providing the music signal is too large;			
Overload indicator is always on,	2	Whether the gain switch on the rear panel of the machine is set reasonably or is set too high;			
the sound is abnormal	3	Check whether there is a short circuit fault in the output connection and whether the impedance of the connected load is correct. After checking, restart the computer.			
Other faults	1	Please refer to the manual to check whether the machine settings and connections are correct.			
Other faults	2	Please consult factory technical support or local special maintenance point.			

Product limited warranty

The company's professional audio amplifier guarantees that within a certain period of use, there will be no failures caused by design, material, and process defects. From the date of purchase, if there is a problem with the original product within one year of use, the company will provide product repair or replacement services free of charge.

The cases that are not included in the product warranty service items are:

- 1. Product appearance problems.
- 2. Items related to the problem statement have been included in the "Product Parameter Description" or "Product User Manual".
- The failure of the user to use the product beyond the scope of use stated in the "Product Parameter Description" or "Product User Manual".
- 4. Malfunctions caused by misuse of products or misuse.
- Failure caused by maintenance not performed by the company's product service department or its designated product service agent.

If users request product after-sales service, they must present sales documents, shopping invoices and other documents of related products as vouchers.

The limited warranty period of our products is subject to the time indicated on the warranty card.

The limited warranty of the company's accessories is subject to the time indicated on the warranty card.

8. Unpacking

As part of our quality system control, each product is strictly and carefully packaged before leaving the factory. After unpacking, please carefully check whether the contents of the package are complete and whether the product is physically damaged. Once the machine is found to be physically damaged, please notify the distributor immediately to provide Written proof of the situation. In order to facilitate future transportation and ensure product safety and performance, please save all packaging materials and items.

The contents of the factory box include: ■ Audio power amplifier ■ User manual

 □ Before connecting AC power, turn of the power switch of the amplifier. □ Before connecting the amplifier to the power outlet, make sure that the local grid voltage is the same as the voltage marked on the back of the amplifier. □ The minimum allowable working voltage of the amplifier is AC 90V, and the maximum allowable working power voltage is AC 260V. Beyond this voltage range, the amplifier may not work properly or even be damaged. □ Before connecting the amplifier to the power socket, please make sure that the socket is not damaged, the power cord is not damaged, and whether the power cord plug meets the specifications of the power socket. □ After the amplifier is connected to the power socket, use a cable tie or similar tool to fix the power cord to the rack handle. □ To ensure safety, when the amplifier is not used for a long time, please unplug the power cord broadcast head from the power socket. □ For the power capacity of the amplifier, please refer to the power consumption table in the appendix. We recommend that you reserve 1.5 times the power margin for actual use. Please use as short and thick AC cables as possible, and do not plug too many amplifiers into the same power outlet. □ This series model amplifier uses XLR input interface. We strongly recommend that you use a balanced □ connection first when connecting the signal source. 					
☐ The series of professional power amplifiers use balanced line design, which is beneficial to noise reduction when using the balanced line scheme. Please use the connection method on the right for the connection	Balanced connection Signal source outpu 1. Signal ground 2. Positive signal 3. The signal is negative 2. Q Q1 3. The signal is negative				
☐ When your signal source output device is unbalanced line design, please use the connection method as shown on the right.					
□ Note: The negative end of the signal in the two-core shielded wire can only be connected to ground at the signal source, not at the amplifier input.	Unbalanced connection Signal source outpu 1.Signal ground Amplifier input 2.Positive signal 3.The signal is				
☐ To avoid generating additional noise, even if the signal output device is an unbalanced line, do not use single-core shielded wire, so that,the same noise suppression effect as the balanced transmission can be achieved by using the connection method as shown on the right	negative 10 0.2				

Tag description	In the triangle, the "lightning" mark indicated by an arrow indicates that the user is warned that there is a dangerous voltage inside the machine, and you must pay attention to safety during use. The exclamation mark in the triangle reminds the user that it is an important operation, please strictly follow the instructions.
Do not open the body without permission	High voltage components are used in the body. Do not open the case and try to inspect or modify the body to avoid the risk of electric shock. Due to the user's modification, the performance of the machine is degraded or misused, which will not fall within the scope of product quality assurance
Do not damage the power cord	When plugging or unplugging the power cord, please hold the plug part of the power cord. Do not unplug or touch the power cord with wet hands. This may cause a short circuit or electric shock. Do not lay the power cord under the body and furniture, or between objects. Also, do not bundle the power cord with other power cords, do not let the power cord knot or place it where people often move.
Water droplets and foreign objects are strictly prohibited	Do not insert or drop metal objects such as hairpins, nails and coins, and flammable materials such as paper and matches from the ventilation holes or other openings of the body, as this may cause misoperation or fire and electric shock. In case water droplets or foreign objects enter the body, please ask the service center or dealer to do an inspection.
In case of abnormality	In case of abnormal noise or smell generated during use, please turn off the power immediately, unplug the power cord from the socket, and consult with the dealer or maintenance center to request an inspection
When not used for a long time	When you are not at home for a long time, such as traveling, etc. please turn off the power and unplug the power cord from the power outlet. This will prevent fires caused by unexpected conditions of the body.

User manual

The X series professional power amplifier is a new milestone of Class D power amplifier. It adopts advanced Class D power amplifier module and efficient SMPS power supply module, which makes the X series have extremely high efficient and reliability, and also have extremely high power density. A standard chassis space of 1U height and 9" depth can provide unprecedented power.

Features:

- 1.1U height 9" depth standard chassis, compact size, light and compact;
- 2.Class D power amplifier module with fixed switching frequency, soft switching LLC resonant switching power supply module;
- 3.Active power factor correction technology (PFC), which can work stably in the range of full voltage (90-264V);
- 4. Efficient speaker back electromotive force absorption system, unique peak clipping limiter and ripple elimination network;
- 5.Full circuit protection, including: soft start, DC, infra-sound, high frequency, overheat, short circuit, mute on/of;
- 6.The low frequency is thick and powerful, the dive depth is very low, the middle and high frequency are transparent, clear and pleasant;
- 7.The integrated design of power amplifier module and power module, more than 85% of the devices use mechanical automation to ensure product consistency.

Product application:

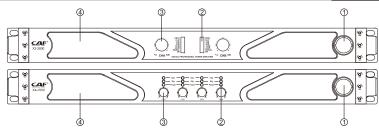
Mobile performance portable sound reinforcement KTV bar concert hall

Stadium/Arena

Basic performance parameters

Basic performance parameter

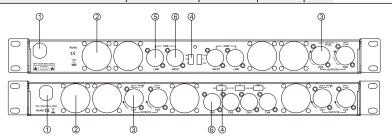
Model	X2-1000	X2-1800	X2-2800	X4-1000	X4-1500
8Ω(stereo)	1000Wx2	1800Wx2	2800Wx2	1000Wx4	1500Wx4
4Ω(stereo)	1600Wx2	2900Wx2	4500Wx2	1600Wx4	2300Wx4
2Ω(stereo)	2550Wx2	4650Wx2	5500Wx2	/	/
8Ω(bridge)	3200Wx1	5800Wx1	9000Wx1	3200Wx2	4600Wx2
Frequency response	20Hz-20KHz:±0.5dB				
THD			≤0.05%		
SNO	≥106dB				
Damping factor	≥600				
Separation	≥70dB				
Conversion speed	≥30V/US				
Input sensitivity	0.775V/1V/32dB				
Input resistance	20ΚΩ/10ΚΩ				
Output category	D				
Cooling system	Stretch				
Input connection	XLR M+XLR F			XLRF	
Output connection	Four-core speaker socket				
Product size (HxWxD)	50x483x343mm				50x483x436mm
Package size(HxWxD)	85x566x516mm				
Gross Weight	7.2Kg	7.9Kg	8.8Kg	7.8Kg	10.5Kg
Net Weight	9.3Kg	10Kg	10.9Kg	9.9Kg	12.6Kg
Power supply	AC100V-240V 50/60Hz				



- 1. Power switch: 1=on 0-off
- 2. The status indicator LED: ON light indicates that the channel is working normally, -3dB indicates that the output signal amplitude reaches the maximum value -3dB, CL IP indicates the operation of the compression circuit, PROT indicates the operation of any kind of protection circuit: -24dB indicates the distance from full power -24dB (and so on):
- 3. Volume potentiometer: turn to the left to decrease the volume, to the right to increase, in stereo, CH1, CH2, CH3, CH4 volume independent control, bridge/parallel mode: CH1 simultaneously controls the volume attenuation of CH1, CH2, CH3 Simultaneously control, CH3, CH4 two channel volume attenuation.

The volume control of CH2 and CH4 is invalid. Note that it is best to keep it at maximum (0dB) when working; Dust-preventing air inlet: Please keep this ventilation hole clear. The internal dust filter cotton needs to be cleaned in about half a year.

4. The function introduction of each part of the rear panel of the power amplifier



- 1. Power cord:
- 2. Fan vents:
- 3. Signal output terminal;
- Independent and bridge/parallel pull switch; ST is stereo, that is, each channel works independently, BRG and PAR are Bridge/parallel connection status:
- Signal pre-output;
- 6. Signal input XLR socket (XLR socket): for balanced input, pin1-signal ground, pin2-signal positive, pin3-signal negative; Note: In dual channel mode, it can work in 4~16 ohms, in bridge mode it can work in 8~16 ohms, it is not recommended to bridge 4 ohms, 4 ohms bridge is equal to each pass

If the channel is connected to 2 ohms, the service life of the power amplifier will be shortened, or unnecessary failures will occur.

On and off steps





For high-power systems, the power-on and power-off procedures are particularly important. Failure to follow the order may damage the equipment. Therefore, it is recommended to use a power sequencer for management.