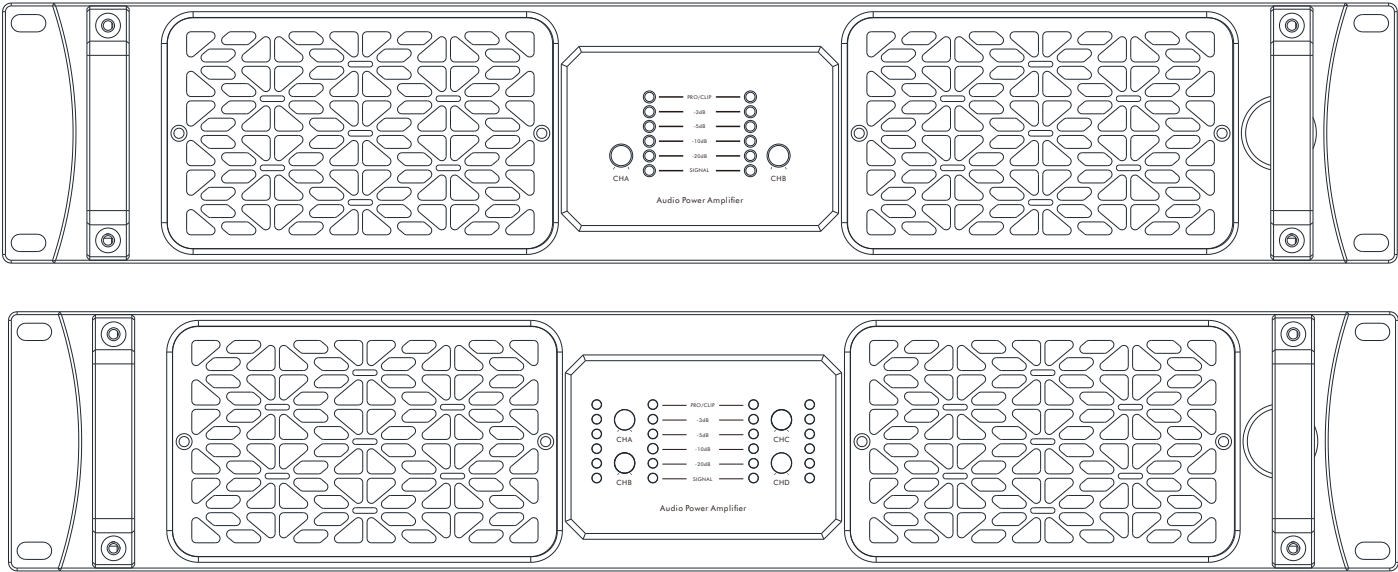


Operational Manual **EN**

APD Series
Audio Power Amplifier

APD-16000 APD-28000 APD4-10000 APD4-14000



ANNOUNCEMENT



CAUTION

Installation

- Users can only connect this apparatus into the AC power socket which is indicated in this operation manual or shown on the specifications of the adapter. Otherwise it may cause fire or electric shock.
- DO NOT put this apparatus into water or expose them to moisture. Otherwise it may cause fire or electric shock.
- DO NOT put the container filled with liquid or small metallic items on this apparatus. Otherwise the spilled liquid or fallen of small metallic items into this apparatus may cause fire or electric shock.
- DO NOT put heavy weight (including this apparatus) on the power cord. Otherwise it may cause the damage of the power cord and lead to fire or electric shock. Specially noted that DO NOT put a heavy weight on the power cord covered by a carpet.

Operation

- DO NOT scratch, bend, twist, stretch or heat the power cord. Otherwise it may cause damage of power cord and even cause fire or electric shock.
- DO NOT open the cover of this apparatus. Otherwise it may cause electric shock. If you need inner overhaul, maintenance or repair, please contact the local distributor.
- Do not revamp the apparatus arbitrarily. Otherwise it may cause fire or electric shock.
- If there is a lighting and thunder strike, turn off the power of this apparatus as soon as possible and pull out the power cable's socket from the convenience receptacle.
- If there is a possibility of lightning, do not touch the power cable's plug when it is connected. Otherwise it may cause electric shock.

When exceptions occur during the process of operation:

- If the power cord is damaged (such as being cut or core wire is exposed), contact the local distributor and require for a new one. Keep using the damaged power cord may cause fire or electric shock.
- If this apparatus falls from height or the box is broken, turn off the power amplifier as soon as possible, and then pull out the plug from AC convenience receptacle. Contact the local distributor for maintenance. Failing to comply with this item and keeping using the broken apparatus may cause fire or electric shock.
- When finding out any problem, such as smoking, peculiar smell, noise, enter of foreign materials or liquid into the apparatus, turn off the power amplifier as soon as possible and pull out the power plug from the AC receptacle. Contact the local distributor for maintenance. Keep using this apparatus may cause fire or electric shock.



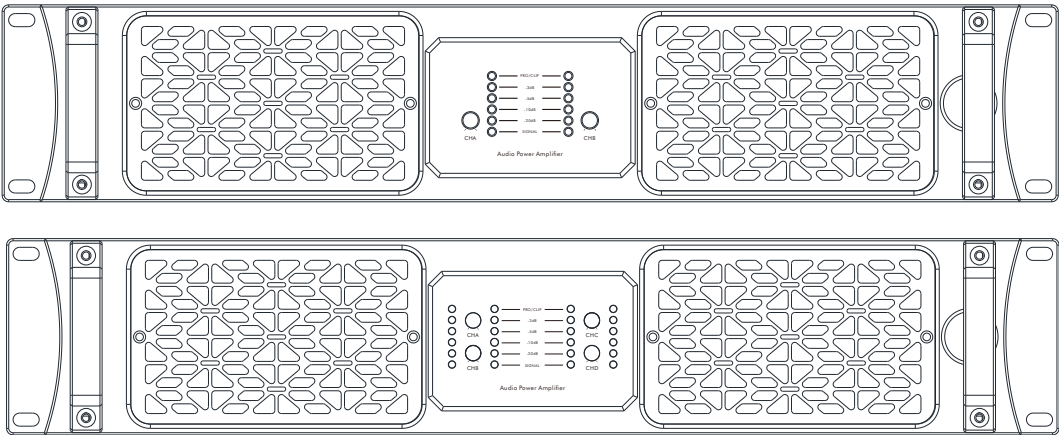
ATTENTION

- Avoid using this apparatus in the following situations:
 - exposed in the environment of splashing oil or steam, for example, near to the kitchen stove or humidifier, etc.
 - on the unstable surface, such as the shaky table top or oblique surface
 - exposed under the overheated environment, such as the inner space of a car with closed windows or the place under direct sunlight
 - exposed under the extreme moist or place with accumulated dust
- DO NOT place the power cable near the heat. Otherwise it may lead to melt or even fire.
- Grasp the head of plug when pulling out the power plug from AC receptacle. DO NOT drag the cable directly. Otherwise it may cause damage of the power cord and even fire or electric shock.
- DO NOT touch the power plug with wet hands. Otherwise it may cause electric shock.
- There are ventilation holes on the front and back of the amplifier in order to avoid the overheat inside. Do not block any ventilation holes. Otherwise it may cause fire. Pay a special attention to the followings:
 - DO NOT side lay or upend this apparatus.
 - DO NOT put this apparatus in the places of insufficient heat dissipation space, such as bookcase or closet(or wall mounted brackets)
 - DO NOT cover this apparatus with a tablecloth or put it on the carpet or bed.
 - Leave enough space around this apparatus so as to guarantee the normal heat dissipation. The heat dissipation space should be at least 10cm for two sides and the above.
 - If there is insufficient airflow, the inner temperature will warm up, which may lead to amplifier's faulty and even fire.
 - If users intent to move this apparatus, firstly unplug the power plug from the AC receptacle and then pull out all the connected cables. Otherwise it may cause damage of the cables and even fire or electric shock.
- Specialized cable can only be used when connecting the speaker with power amplifier. Otherwise it may cause fire.
- Before connecting this apparatus, turn off all the audio apparatus and speakers. Use the suitable cable and conduct the connection in accordance with the instructions.
- Before the power amplifier is turned on, do remember to turn the volume controller on the panel to the minimum first. Otherwise the burst of sound may cause hearing impairment.
- If this power amplifier is not used for a long-time, do remember to pull out the power plug from the AC receptacle. Otherwise it may cause fire.



Put all the accessories of this power amplifier (such as the machine legs, instruction manual and plastic bag) to the places where children can not reach.

Product Introduction



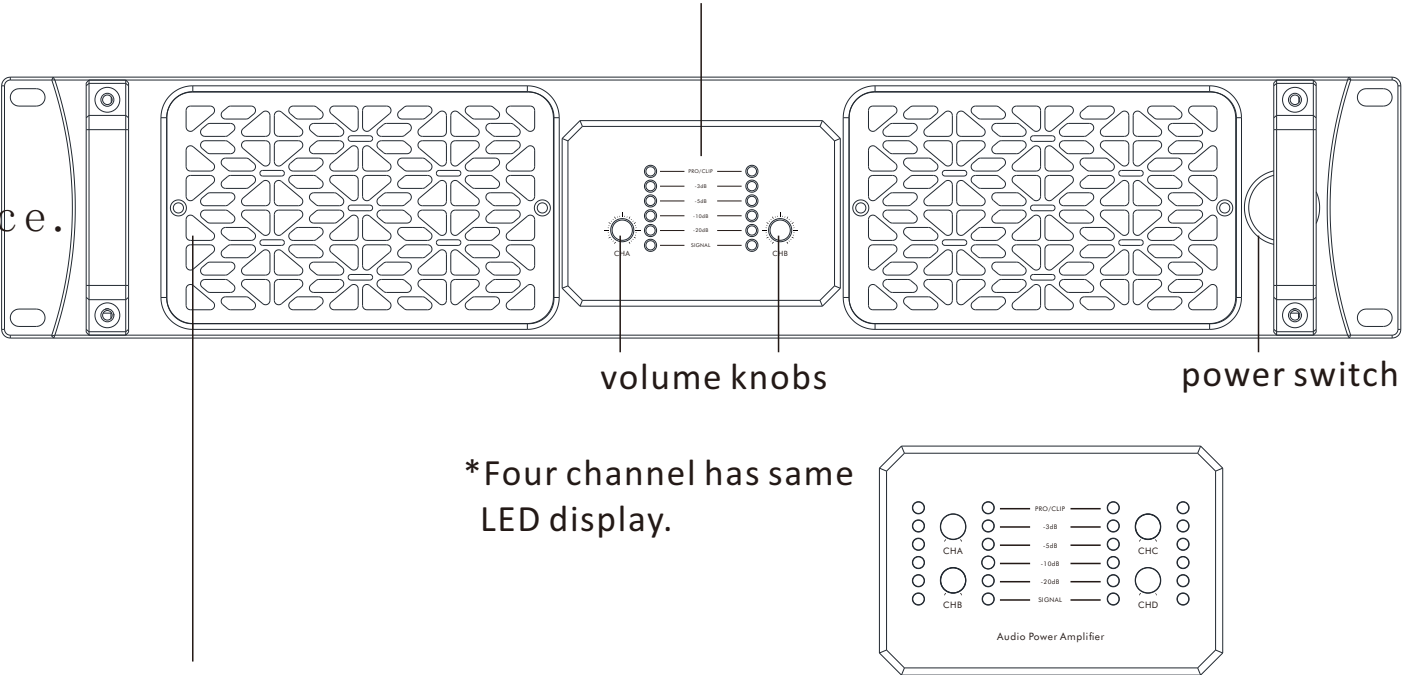
APD High Power Series-2&4 Channel Models

Designed for sound systems demanding for strong driving force.

- ✓ PFC (Power Factor Correction), power supply AC 100~240V(±10%) 50/60Hz compatible, ensures a minimum of harmonics of current in the power supply from the power grid.
- ✓ RMS output power, 2 ohms stable, high load capacity, effortlessly to drive 24 inch speakers.
- ✓ Power supply part applies the full bridge design, allows it to reach higher output voltage from the same AC input and load;
- ✓ Third generation semiconductor-Sic application enables faster switching, more durable when operate under demanding conditions, lower heat, astonishing performances under high temperature,high voltage and high frequency operation.
- ✓ High power density, dynamic LF response, low distortion.
- ✓ Lighter weight, 2U compact size, high efficiency, less energy wasted as heat.
- ✓ Overall scientific cooling system, 2 dual ball bearing temperature-controlled speed fans, airflow from front to rear panel.
- ✓ Comprehensive protection: Clipping, over AC voltage, DC output, VHP, short circuit, overheat protection (>70°C) .

Front panel introduction

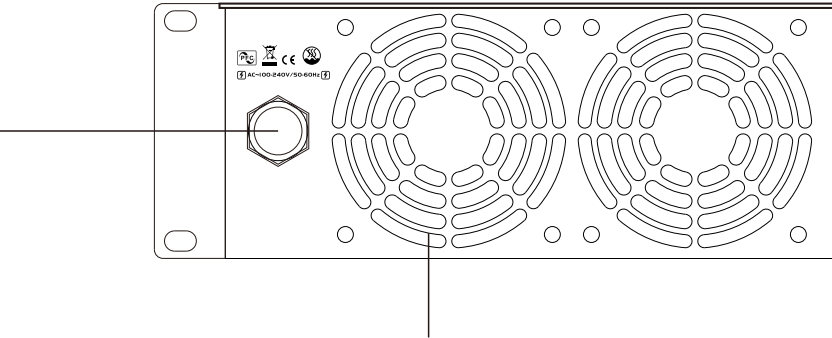
- LED display:
 - PRO: If the amplifier enter the protection state, it turns red, users must stop using and contact dealer for repair.
 - CLIP: If it clips and flashes yellow occasionally, it's normal ; if it keeps turning on yellow, user must reduce the input signal to avoid damage for the loudspeakers.
- Signal level: -3dB, -5dB,-10dB,-20dB.
- SIGNAL: Signal indicator for each channel.



- ! Ventilation holes: DO NOT BLOCK it during usage!
Air flow: from front to rear panel.
Leave enough space for air cooling.
Clean or change the foam behind the grille regularly.
Users can take off the foam by losing the screws on the grille conveniently.

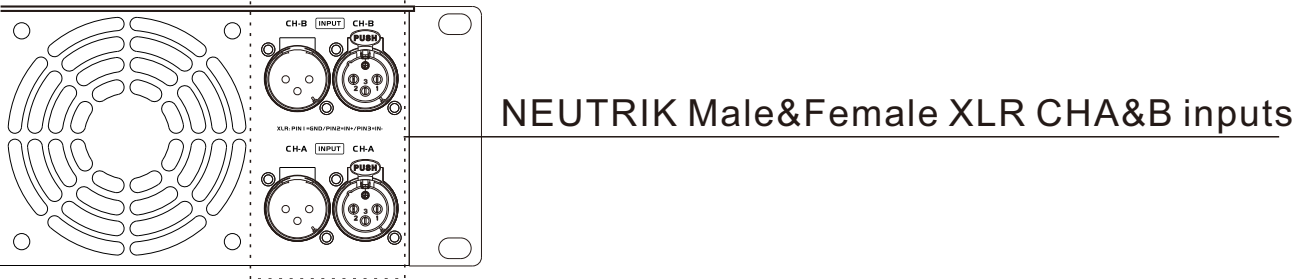
Rear panel introduction

Power cord inlet
PFC, Power supply:
AC 100~240V(±10%)
50/60Hz



- ! Ventilation holes: DO NOT BLOCK it during usage!
Air flow: from front to rear panel.
Leave enough space for air cooling.

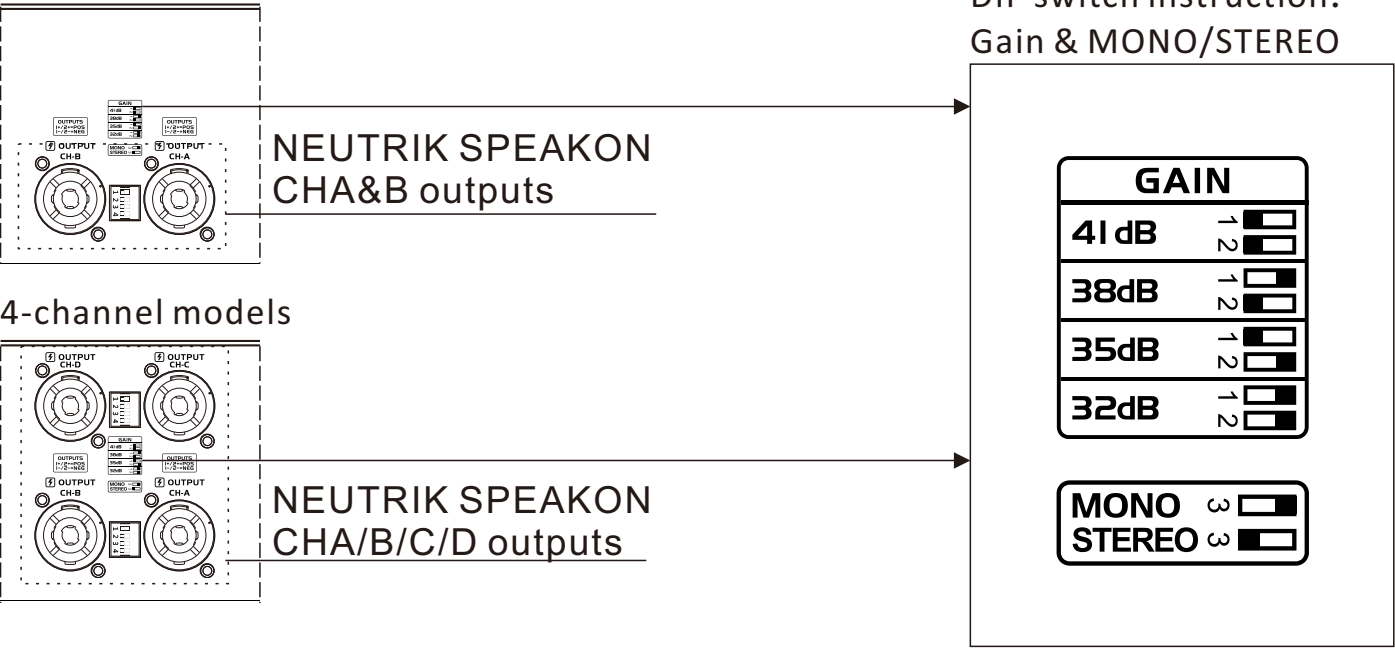
2-channel mdoels



4-channel models



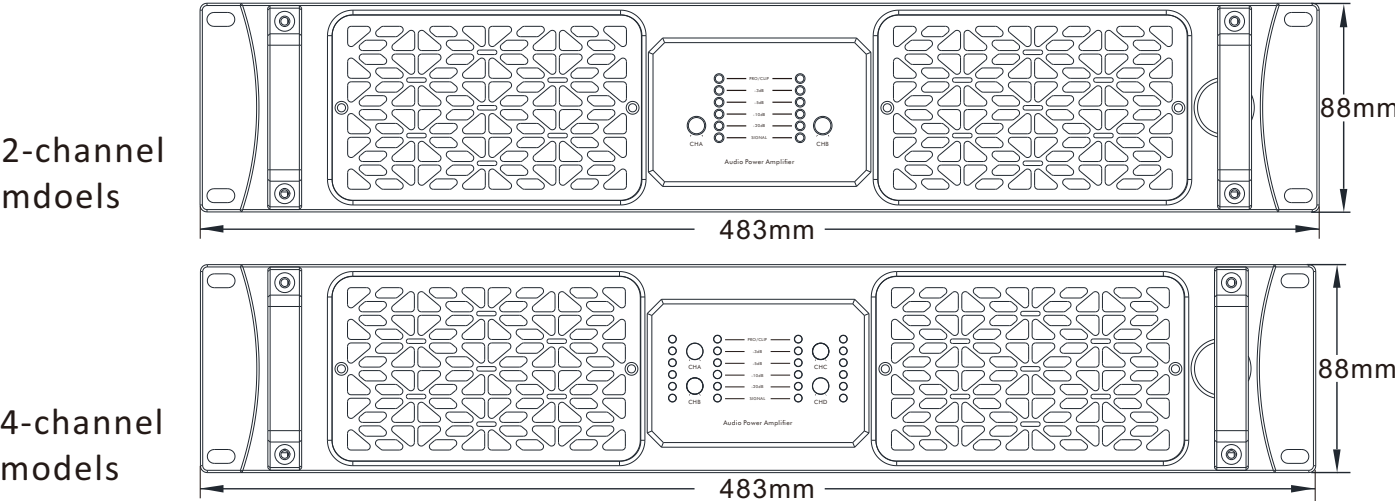
2-channel mdoels



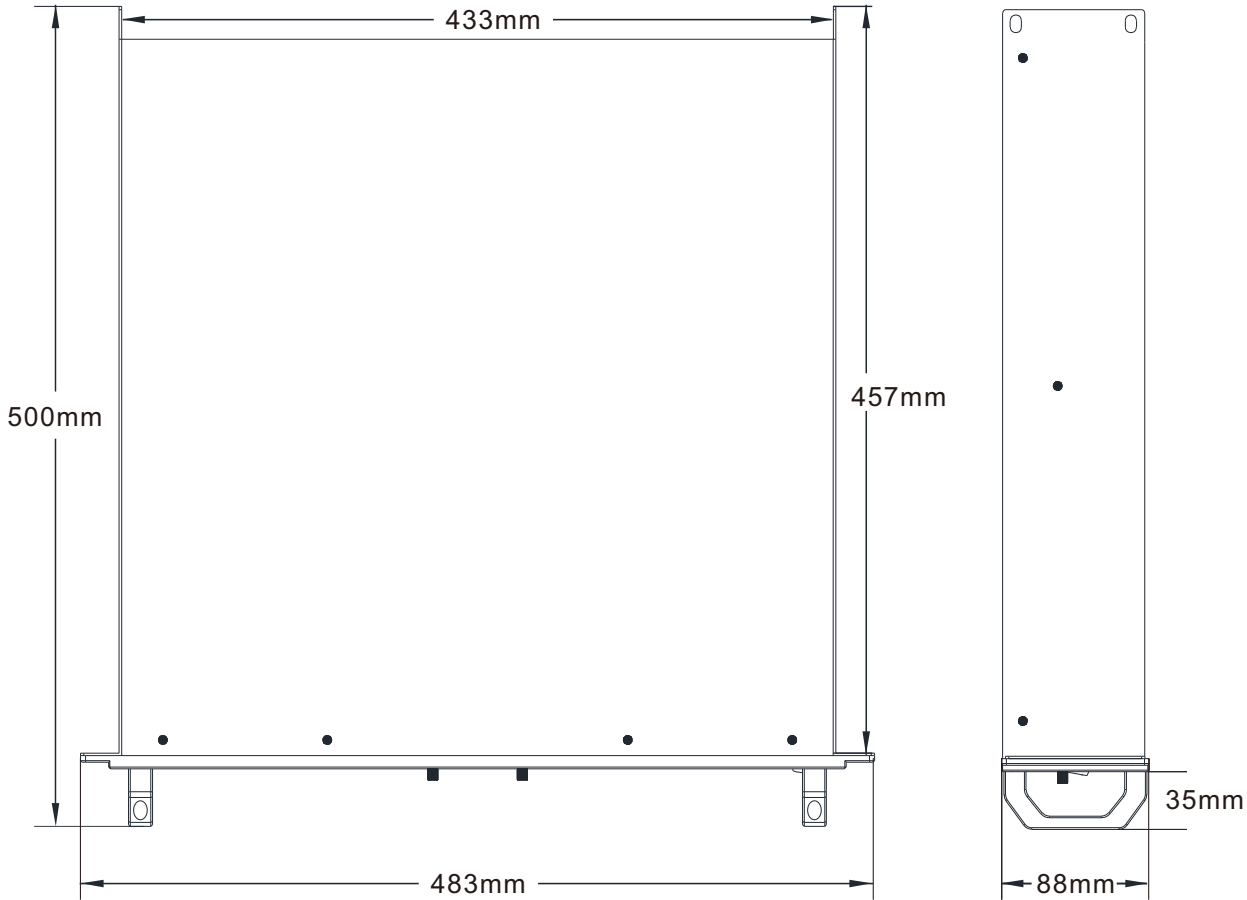
4-channel models



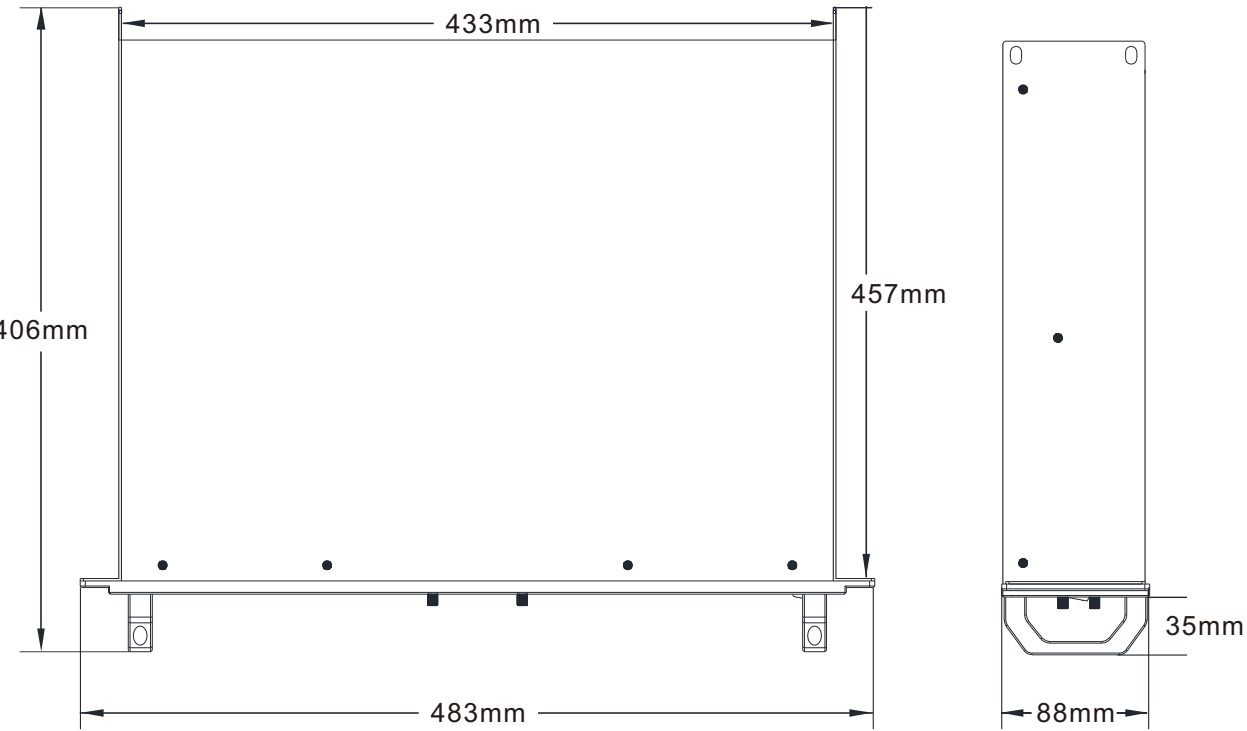
Mechanical drawings



2-channel mdoels



4-channel models



Wiring

1. Input XLR:PIN1=GND ,PIN2=1N+, PIN3=IN-
2. For 2-channel models:
- Stereo mode: CHA input → CH A output
CHB input → CH B output
- Mono mode: CHA input → CHA and CHB outputs
- 3.For 4-channel models:
- Stereo mode: CHA input → CH A output
CHB input → CH B output
CHC input → CH C output
CHD input → CH D output
- Mono mode: CHA input → CHA and CHB outputs
CHC input → CHC and CHD outputs

4.Output connection:

MODE	INPUT	OUTPUT	AMPLIFIER CONNECTION	SPEAKER CONNECTION
STEREO	CH-A	CH-A	PIN 1 +	+
	CH-B	CH-B		
	CH-C	CH-C		
	CH-D	CH-D		
MONO	CH-A	CH-A	PIN 1 -	-
		CH-B		
	CH-C	CH-C		
		CH-D		



- 1.The output of CHA and CHB(or CHC and CHD) are PROHIBITED to be connected to the GROUND at the same time, or be connected to the testing instrument at the same time, otherwise it will cause burn.
2. NO BRIDGE FUNCTION!
3. Output cable required $\geq 4\text{mm}^2$.
- 5.Use NEUTRIK NL4FX for speaker connector ONLY!

Specification Table:

Amplifier Model	APD-16000	APD-28000	APD4-10000	APD4-14000
Rated Output Power				
8ohm	2*4000W	2*8200W	4*1400W	4*2380W
4ohm	2*7000W	2*14000W	4*2400W	4*3550W
2ohm	2*7000W	2*12000W	4*2400W	4*4600W
***NO BRIDGE MODE!				
Performance Specifications				
Frequency Response	20Hz-20kHz,+0/-1dB			
Total Harmonic Distortion(THD)	<0.5%, 20Hz-20kHz			
Inter Modulation Distortion(IMD)	<0.05%			
Signal to Noise Ratio(SNR)	>110dB(20-20kHz A-weighted@8ohm)			
Crosstalk(1 KHz)	-75dB			
Damping Factor	>1000			
Slew Rate	50V/us			
Input Impedance	10k ohm balanced			
Gain	32dB,35dB,38dB,41dB			
Operational Mode	Stereo/Mono			
AC Line Voltage and Frequency	AC 100-240V(±10%), 50/60Hz			
Input	NEUTRIK FEMALE XLR		NEUTRIK MALE&FEMALE XLR	
Output	NEUTRIK SPEAKON			
LED display	SIN(signal), -20dB,-10dB, -5dB,-3dB, PRO(protect),CLIP			
Ventilation	2 fans, temperature-controlled speed, from front to rear panel			
Physical Specifications				
Panel Finish	Anodized aluminum front panel			
Chassis Finish	Black powder-coated steel body			
Product Size	W483*D500*H88mm(2U)		W483*D406*H88mm(2U)	
Net Weight	15.2KG	16.7KG	11.7KG	12.0KG
Packing Size	W617*D613*H143mm		W597*D595*H170mm	
Gross Weight	18.3KG	19.8KG	14.4KG	14.7KG