

Professional Power Amplifier

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TV True Voice

PA

PA SERIES POWER AMPLIFIER

PA-1500 / PA-2400 / PA-7200



TECHNICAL PARAMETER'S CHANGERS ARE NOT INFORMED.

PROFESSIONAL POWER AMPLIFIER

Our product is improving. When the external form and parameter changes, please refer to the material object. We will not inform you especially.

OWNER'S MANUAL

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This manual does not include the information of all the design, production, or variations of the equipment, nor cover every possible situation that may arise during installation, operation or maintenance. If you need special assistance beyond the scope of this manual, please contact our Technical Support Group.

CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**

TO PREVENT ELECTRIC SHOCK DO NOT REMOVE COVER OR BACK. NO USER SERVICEABLE PARTS INSIDE. REFERS SERVICING TO QUALIFIED SERVICE PERSONNEL.

MAGNETIC FIELD

CAUTION! Do not locate sensitive high-gain equipment such as preamplifiers or tape decks directly above or below the unit. Because this amplifier has a high power density, it has a strong magnetic field, which can induce an induced hum into unshielded devices that are located nearby. The field is strongest just above and below the unit. If an equipment rack is used, we recommend locating the amplifier(s) in the bottom of the rack preamplifier or other sensitive equipment at the top.

WATCH FOR THESE SYMBOLS:



The lightning bolt triangle is used to alert the user to risk of electric shock.



The exclamation point triangle is used to alert the user to important operating or maintenance instructions.



WARNING
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE!

ONE. Brief Introduction

PA Series Amplifier, developed by **TV True Voice**, is a kind of professional amplifier with high power multi-function, high quality, beautiful tone and stable performance for indoor and outdoor performance. In order to achieve recognition structure, circuit design and tone expression. The outstanding tone analysis and expression performance of the product remain leading in profession, and is capable of comparing with imported famous brand amplifiers. The stability of the whole machine is also implemented with repeatedly breaking tests. The complete application functions thoroughly show the human-oriented design of PA series Amplifier. That is achievements of the constant living spirit of **TV True Voice** people.

TWO. Cautions

1. Do not stack goods on the amplifier.
2. It is necessary to provide power with a dedicated and capable power supply socket.
3. Do not continuously and repeatedly turn on/off the machine, do not block the ventilation outlet of the case.

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11. A/B channel high/low filter (high 130-20KHz/low 20-180Hz, cut off the signal outside the channel. Independently use A/B channel under emergency.
12. Input sensitivity selector switch input sensitivity consists of three levels for matching diversified pre-set signal processor.
 - 1) When input signal is 0.755V, full power output.
 - 2) When input signal is 1.0V, full power output.
 - 3) When input signal is 1.5V, full power output.
13. B channel professional NL4 speaker 4 contacts plug output (latest international standard, wider contact, assure smooth power supply). Connection mode: +1-1
14. A channel professional NL4 speaker 4 contacts plug output (latest international standard, wider contact, assure smooth power supply). Connection mode: +1-1 or +2-2.
15. CH-A binding output.
Red+ black-
16. CH-B binding output.
17. power cords.

SPECIFICATIONS

Model	PA-1500	PA-2400	PA-7200
Stereo power 8 Ω	850W	1200W	1200W
1KHz 0.1% THD 4 Ω	1000W	1400W	2000W
2 Ω	1200W	1800W	2400W
Bridge mono Power 8 Ω	1500W	2000W	3000W
1KHz 0.1% THD 4 Ω	2000W	2400W	3600W
Signal to noise	106dB	106dB	106dB
Slew Rate	80V / us	80V / us	80V / us
Damping Factor	550:1	550:1	550:1
Frequency response	+/-0.1dB, 20Hz-20kHz		
THD	≤0.01% Rated Power @ 8 Ω 1kHz		
IMD	≤0.01% Rated Power @ 8 Ω		
Input sensitivity	0.775V, 1.0V, 1.55V		
LPF	20Hz-180Hz Valid		
HPF	130Hz-20KHz Valid		
Input impedance	10K/20K Ohms, unbalanced / balanced		
Input CMRR	≤-75dB		
Cross talk	≤-70dB		
LED indicator	Signal, Protect, Clip/Limiting		
Main power supply	AC 220V 50/60Hz FUSE:T12A	AC 220V 50/60Hz FUSE:T15A	AC 220V 50/60Hz FUSE:T15A
Weight	~24kg	~25kg	~25kg
Dimensions (mm)	483Wx490Dx88H		



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- 1.A channel speed changing fan.
- 2.Circuit Breaker (automatically cut off power supply in case of over current,the amplifier can fast and conveniently reset with this switch)
- 3.A channel cannon(XLR)input (Apply imported socket for assuring prefect signal connection). Wiring mode:1pin :signal ground(PIN 1 Ground) 2 pin:Signal +(PIN2Hot) 3 pin:signal - (PIN 3 Cold)
- 4.A channel cannon(XLR) output (Apply imported socket for assuring prefect signal connection). Wiring mode:1pin :signal ground(PIN 1 Ground) 2 pin:Signal +(PIN2Hot) 3 pin:signal - (PIN 3 Cold)
- 5.B channel cannon(XLR)input (Apply imported socket for assuring prefect signal connection). Wiring mode:1pin :signal ground(PIN 1 Ground) 2 pin:Signal +(PIN2Hot) 3 pin: signal - (PIN 3 Cold)
- 6.B channel cannon (XLR)output (Apply imported socket for assuring prefect signal connection). Wiring mode:1pin :signal ground(PIN 1 Ground) 2 pin:Signal +(PIN2Hot) 3 pin:signal - (PIN 3 Cold)
- 7.B channel speed changing fan (automatic run when the temperature exceed 35°C.The speed changes according temperature,prevent noise interference when working)
- 8.Suspending/Grounding Switch
When the switch remains suspending,the insulation resistance of the grounding wire and machine Shell exceeds1M Ω .where it remains grounding,the grounding wire is connected with the shell.
- 9.Limit Mode
4 Ω 8 Ω limit mode switch(select appropriate mode according to the impedance of loading)
- 10.Function Mode Switch(3 output modes are available)
 - 1)Bridge connecting mono track work mode:the output voltage is doubled,please use 4 Ω or higher impendece load.
 - 2)Mono track parallel mode:both tracks output the same signal and drive two speakers respectively.
 - 3)Stereo mode.

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- 4.Input level is adjusted by plus potentiometer of independent channel.
- 5.Please connect the machine with professional Speakon plug-type connection method .
- 6.When using stereo, bridge connecting nono track,same-phase out,the connection of out shall be the same as switch.
- 7.When continuously output high power, the amplifier is warm and the rotating speed of fan increases, there will be low noise in the case, which is normal.
- 8.Please do not block the ventilated slot on rear panel of the machine. When cleaning the case,please unplug power supply and wipe it with dty fabric. Do not clean the machine with corrosive solvent.
- 9.The machine shall not contact water or corrosive solvent.
- 10.Please immediately turn off the machine, unplug power supply and contact the distributor if there any abnormal.

THREE. Characterstics of PA Series Amplifier

- 1.With outstanding tone and performance of  True Voice , it is the precise amplifier with high performance.
- 2.Original appearance,precisely manufacturing and reliable quality.
From general design to details,the precisely manufacturng of PA Series thoroughly shows the eternal style of  True Voice , and the stability of the machine is also perfect
- 3.Reliable protection circuit.
The stability of the whole machine depends on reliable protection circuit.
 - 1).The protection circuit of PA Series not only focus on DC protection to speaker,what is more important is that the machine can work in bad work environment.
 - 2). PA Series applies complete temperature control protection circuit which perfectly prevent fatal damage caused by overheat,When the temperature in the case reach 90°C , the amplifier will automatically cut off the connection will speakers,when the temperature drops to 88°C , it can automatically recover normal work.
 - 3).The short circuit protection of PA Series can reliably protect the machine and speakers under mistaken operation or other accidents.

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4. Amplitude Limiter

It is the effective protection circuit for preventing speaker damaged, when the amplifier is overload, it can generate adequate harmonic wave energy which may damage the speaker as a result of overload. Therefore, PA Series Amplifier is installed with a non linear comparator. once the signal is clipping, it can immediately adjust the work state of amplifier circuit till the clipping is eliminated.

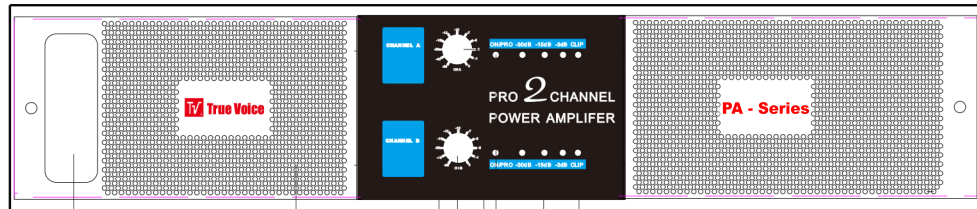
5. Favorable Audio Frequency performance

PA Series Amplifier have extremely good signal transition performance. It features extremely low harmonic wave distortion (THD), inter modulation distortion (SMPTE-IM) and instantaneous inter modulation distortion. Pure and natural tone presents pure and perfect music.

6. Machine off, soft start, anti-surge impact protection.

7. Machine off mute protection. Protect the speaker from intensive impact current which may generate noise.

FOUR. Front Panel Operation



1. State indicator (When turning on the machine, red/green indicator flashes by turns, after detecting and working normally, green indicator lights on, when protecting red/green indicator flashes by turns)
2. Power Switch (Apply touch switch, convenient, flexible and durable) When turning on this switch, the soft start anti-surge circuit of the amplifier is activated, after soft starting, amplifier connects with the speakers, and the machine is standby.

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3. A channel 20-digit step level control (apply special dust device, effectively prolong the life) Under bridge connection or mono track parallel connection mode, only this knob is used.

4. A channel signal indicator (Green LED indicator lights on to indicate corresponding level. When the red LED (CLIP) indicator lights on, it means amplifier output is distorted.)

5. B channel signal indicator (Green LED indicator lights on to indicate corresponding level. When the red LED (CLIP) indicator lights on, it means amplifier output is distorted.)

6. B channel 20-digit step level control (apply special dust device, effectively prolong the life)

7. Volume positioning indicator (Blue LED indicator can accurately indicate the volume of the level knob)

8. Air Outlet (Cool air is inhaled from rear and hot air is exhausted front for assure that the amplifier and is cool)

FIVE. Rear Panel Operation

