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# Stereo Professional Amplifier

**ixeon**  
Next Gen Sound Solution®

**BA2500N**



**USER MANUAL**

## Packing list

List	Quantity
Stereo Professional Amplifier .....	1
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Power Cable .....	1

## Performance

Model	BA2500N
Rated Output/Per Channel, 8Ω	1000W
Rated Output/Per Channel, 4Ω	1500W
Rated Output/Bridged, 8Ω	3000W
Output Interface	2Speakon for Stereo&Bridge Output
Input Sensitivity	1V
Input Impedance	20kΩ/balanced, 10kΩ unbalanced
SNR	≥98dB
Damping Factor/8Ω, 1KHz	>230
Frequency Response	20Hz-20kHz (±1dB)
Distortion	<0.1%
Channel Crosstalk	<-62dB
Turnover Frequency (TOF)	15V/us
Power Supply	AC220-240V/50Hz
Protection	Soft start-up, load short circuit, voltage limit, DC output, power on & off, over temperature
Machine Size	(L×W×H) 484×425×88mm
Package Size	(L×W×H) 550×550×165mm

## Safety Precautions

**Warning!** To reduce the risk of electric shock or equipment damage, please follow the following requirements:

- Please do NOT connect this device to the power source, before the system is correctly wired.
- It is important to ensure that input voltage to the device is the same as required voltage of the device; otherwise the device may be damaged.
- There is dangerous voltage in the device, which may cause personal electric shock. Please do NOT open the case without permission, to avoid potential risks of electric shock.
- The device is not completely disconnected from power source when it is switched "OFF". For sake of safety, please disconnect the device from the socket if it is not in use.
- Please do NOT place the device where it is extremely cold or hot.
- Good ventilation must be provided in the working environment of the device, to avoid excessive temperature during its operation, which may cause damages to the device.
- Please unplug the device from power socket in raining and wet days or if the device is not in use for a long time.
- Please disconnect the power plug from sockets, to ensure the device has been completely disconnected from power source, before any component is removed from or re-installed in the device or before any electric connector of the device is disconnected or reconnected.
- In case of any failure of the device, please do NOT open the case and repair without permission from a professional personnel, to avoid accident or additional damages to the device.
- Please do NOT place any corrosive chemicals near or on the device.

Please note the following symbols:



Lightning triangular symbols are used to alert the user to the risk of electric shock.



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

When the device is working in stereo mode, it can be connected using the SPEAKON socket with the following connections: 1+; 2+. 1-; 2-.

⑤. Amplifier Output Terminal

⑥. Recoverable fuse

When the power amplifier fails, the fuse will automatically disconnect and stop working. After clearing the fault, press the fuse button to restore the connection to ensure normal operation.

⑦. Power Input Socket

⑧. Cooling Air Outlet

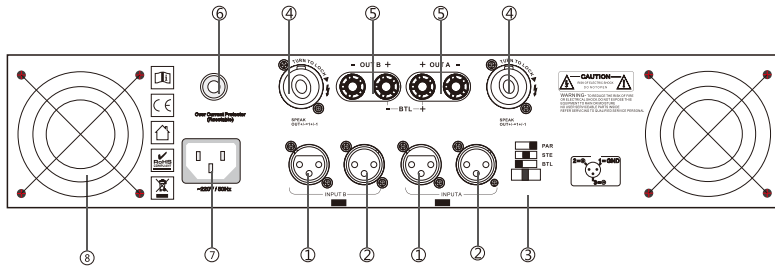
Do not block the cooling air outlet under any circumstances.

- 1) When the output power of the power amplifier reaches the maximum value and clipping is about to occur, the indicator light is on. At this time, please pay attention to appropriately reduce the input level.
- 2) When there is a signal input but there is no sound from the speaker, and the indicator light is continuously on, it is determined that the load is short-circuited, and the power amplifier should be turned off, clear the short-circuit problem, and then resume work.

**SIG:** CH1/CH2 output signal indicator (green). When the power amplifier enters the normal working state and there is a signal output, the indicator light is on.

**ACTIVE:** Power indicator light.

## Rear panel



### ① CH-1/CH-2 Input Socket

CH-1/CH-2 input adopts standard XLR (female socket), and its wiring method is:  
1 pin: signal ground 2 pin: signal + 3 pin: signal -. (Please pay attention to the instructions on the back panel of the machine when using it.)

### ② CH-1/CH-2 Output Socket

The CH-1/CH-2 outputs use standard XLR (male) sockets, which can be connected to the same XLR (female socket) to output the same signal to another power amplifier device.

The wiring method is: 1 pin: signal ground 2 pin: signal + 3 pin: signal -. Please pay attention to the instructions on the back panel of the machine when using it.

### ③ Function Mode Switch

Used to select a stereo mode, bridge mode, or parallel mode.

PAR:parallel output mode

SET: Stereo mode

BTL: Bridge mode

### ④ CH-1/CH-2 Professional SPEAKON speaker socket

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## Introduction

Thanks for using our products. All our products are tested strictly before leaving the factory, with guaranteed quality.

Our products are widely used in such places as schools, gymnasiums, square halls, parks, parking lots, railway stations, airports, villa communities and mall supermarkets, etc., and they will be your ideal choice for public address system.

For better installation, commissioning and use of the product, please read this manual in detail before installation.

## Profile of Product

### Product features

- Two-channel stereo professional power amplifier;
- New appearance design, standard chassis, suitable for standard cabinet installation;
- A series of high-power amplifiers can be selected arbitrarily to meet different needs;
- Three operating modes to choose from: stereo, parallel and BTL bridged, with operating mode switch selection;
- Individually adjustable volume for each channel;
- Minimum load impedance of  $4\Omega$  for stereo operation,  $8\Omega$  for BTL operation;
- XLR signal input connector (female connector) and XLR signal output connector (male connector) are available for flexible and convenient use;
- Amplifier output has common binding posts and professional SPEAKON speaker sockets (only in stereo mode);
- With short-circuit protection, DC protection, power on and off various protection and alarm functions;
- Each channel is equipped with LED working status, low noise design;
- Suitable for language transmission and sound reinforcement in many different occasions.
- The panel with LCD display shows the working temperature inside the machine at a glance.

### Front panel



#### 1. CH-1 Input Level Adjustment Knob

Adjust this knob to the desired volume level. When you are far away from the speaker and you cannot hear the volume directly, you can adjust the volume by referring to the scale on the panel. (Only use this knob in bridge or parallel mode)

#### 2. Power Switch

When this button is pressed, the soft-start anti-surge shock circuit of the power amplifier starts to work. After about 3~4 seconds, you can hear a "click" sound, and the soft start-up work is completed. After another 1~2 seconds, you can hear a "click" sound. The power amplifier has been connected to the speaker, and it has entered the work state at this time.

#### 3. CH-2 Input Level Adjustment Knob

Adjust this knob to the desired volume level. When you are far away from the speaker and you cannot hear the volume directly, you can adjust the volume by referring to the scale on the panel. (Only use this knob in bridge or parallel mode)

#### 4. Work Status Indicator Light

**PRO:** CH-1, CH-2 protection indicator (red). There are three situations where the indicator light will be on.

- 1) 2~3 seconds after power on and after power off, the power amplifier is disconnected from the speaker when the power amplifier is unstable.
- 2) When the operating temperature of the power device exceeds 90 degrees.
- 3) When the power amplifier is abnormal.

**CLIP:** Peak indicator (yellow). There are two situations when the indicator light will be on.