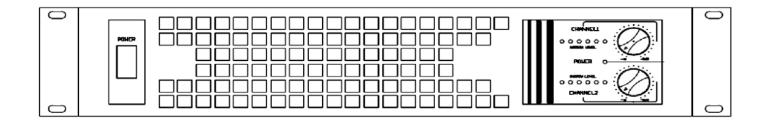
| You are alwa | ays our VIP! |      |      |
|--------------|--------------|------|------|
|              |              |      |      |
|              |              | <br> | <br> |

# Professional Power Amplifiers User Manual



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#### **Features**

This series adopts a professional circuit design, focusing on product stability under conditions of long-term continuous use at full power. As the PCB board uses double-sided wiring through-hole technology, which can reduce false welding of internal components during transportation and overcurrent to damage products by working at full power for a long time. The circuit layout designed by the computer simulation system can allow the amplifier to have over 110dB SNR.

To meet the requirement of touring sound applications, it has high efficiency with a high power output. The damping factor of This series of products can be up to 400 or more, the sound is strong and elastic.

#### High-powerful driving ability

Adopt an optimized cooling system and high-quality cooling fan to ensure stability for a long time working at high power.

The fan can speed up automatically by variations of temperature in the machine, (when connected with the load impedance is too low or the temperature is too high, the machine will automatically adjust the power supply to reduce the internal resistance. It can improve the sound quality and protect the machine effectively and highly improves reliability.

#### Low distortion, high slew rate, perfect sound quality, and higher resolution.

- Dual-channel can be bridged and connected.
- The fan can speed up automatically by variations of temperature in the machine.
- •Start-up delay, overload, short circuit, overtemperature, and load short-circuit protection.
- Limiting control.
- Independent input control.

## **Explanation of Graphical Symbols**









The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's closure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

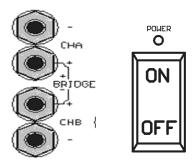
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

## IMPORTANT SAFETY INSTRUCTIONS

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- 7. Do not block any ventilation openings.
- 8. Do not install near any heat sources such as radiators, heat registers, or stoves.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for the replacement of the obsolete outlet.

# **WARNING**

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.



The lightning symbol indicates a dangerously energized terminal. Only qualified operators should connect this terminal to an extension cord or use special wires or cords that can be safely connected.

Remarks: Please turn off the power when connecting this terminal.

# **Instructions on Safe Operations**

#### Install:

- This unit should only be plugged into an AC outlet as specified in the user manual.
   Otherwise, it may cause a fire or an electric shock.
- Please don't scratch, bend, twist, pull, or heat the power cord, or may damage the power cord, and lead to fire or electric shock.
- Please don't open the device cover or may result in an electric shock. If you think there needs
  any internal inspection, maintenance, or repair, please contact your dealer.
- The device has a ventilation hole on the front and back, to avoid the internal temperature rising too high. Do not block the ventilation holes. Blocked ventilation holes may cause a fire.

## Operation:

- When connecting the device, please turn off all musical instruments, audio equipment, and speakers, pls use the correct cable, and connect the device as per instructions.
- For the supply voltage, please see the label on the back of the device.

## Connecting the needle socket Division:

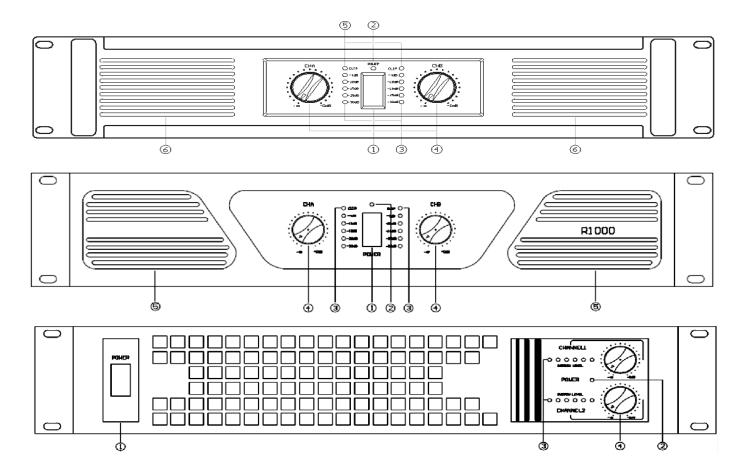
XLR-type connecting sockets should be wired as follows.



Pin 1: Ground Pin2: Hot (+) Pin3: Cold (-)

Note: Although this equipment has complete protection for short circuits and overload, to ensure long-term normal operation, pls try to avoid short circuits and overload for output.

## **Front Panel**



#### 1. Power ON/OFF

#### 2. Power Indicator

When the power is turned on, the indicator will blink repeatedly in 3-5 seconds to provide protection.

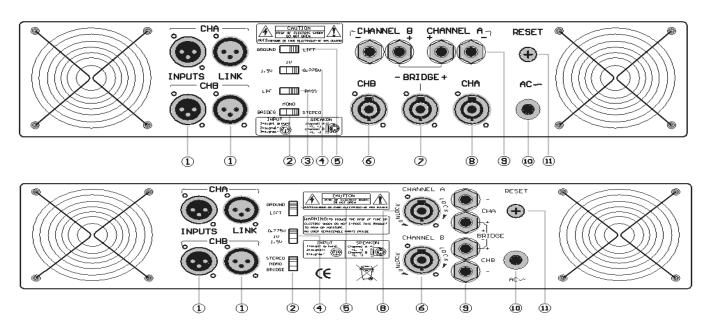
The inability of the speakers to output any audio signal means that the amplifier will automatically run a test before starting. Upon startup or troubleshooting, the indicator light is fully illuminated and normal operation will resume.

- 3. Signal LEDS
- 4. Input Attenuators
- 5. Clip LED
- 6. The exhaust hole

#### Remarks:

The fan will not start or run at low speed when power is initially applied, but will automatically start or speed up when the heat sink temperature exceeds 45°C. When the temperature changes, the fan speed is automatically adjusted accordingly.

## **Rear Panel**



#### 1.Input Jacks (Channel A, B)

Each channel is equipped with two jacks. Please note that the Channel A jack is valid when using bridge or mono mode.

#### 2.STEREO / MONO / BRIDGE

Stereo Mode:

Channel A and channel B operate independently (same as older stereo amplifiers). The input signal of channel A is output through the jacks of channel A, and the input signal of channel B is output through the output jacks of channel B.

•Mono Mode:

The input signal of Channel A is routed through the Channel A and Channel B output jacks. The Channel B input jacks do not function. The volume of channel A and channel B can be adjusted independently.

•BRIDGE Mode:

The input signal of Channel A is output from the BRIDGE output jacks. To adjust the volume, you must use the Channel A volume control knob.

#### 3. PASS / LPF

- LPF mode does not apply any filtering mode.
- PASS apply a low-pass filter, the range is 20Hz-180Hz.
- 4.0.775V / 1V / 1.5V. (Optional of switch for input level)

#### 5. GROUND / LIFT

This switch is used to select whether or not the ground circuit is connected to the cover plate and in the audio systems of many devices, ground or leave this terminal floating if there is always a hum or noise problem.

- 6.(CHB).
- 7. (BRIDGE).
- 8. (CHA).
- 9. (CHA / CHB / BRIDGE). Speaker output interface and anti-touch terminals.
- 10. AC ~ power cord with plug.
- **11. RESET** restorable protector for current overload.

# **Technical Parameters**

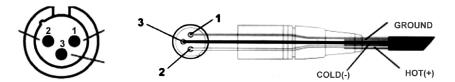
| Professional amplifiers  |   |           | 2U                               | 2U     | 2U    | 2U     | 2U     |  |  |
|--|---|-----------|----------------------------------|--------|-------|--------|--------|--|--|
| RATED  | Stereo  | power     | 350Wx2                           | 450Wx2 | 550x2 | 650x2  | 750x2  |  |  |
| OUTPUT   | (8ohm)  |           |                                  |        |       |        |        |  |  |
| POWER  | Stereo  | powerr    | 550Wx2                           | 650x2  | 950x2 | 1100x2 | 1400x2 |  |  |
| @1kHz,THD=0.5  | (4ohm)  |           |                                  |        |       |        |        |  |  |
| %  | Bridge (8d  | hm)       | 1000W                            | 1200W  | 1800W | 2000W  | 2500W  |  |  |
| Stereo Power   | =4Ω   |           |                                  | Bridge | e:    | =8Ω    |        |  |  |
| Input Socket: (XLR Male) / (XLR Female)                                      |   |           |                                  |        |       |        |        |  |  |
| Output Socket: NEUTRIK(NL4.+11)/ Anti-touch terminals                        |   |           |                                  |        |       |        |        |  |  |
| Frequencyresponse: 20Hz-20kHz@(0/-0.25dB)                                    |   |           |                                  |        |       |        |        |  |  |
| T.H.D: <0.05%@1kHz, 10%Rated Power   |   |           |                                  |        |       |        |        |  |  |
| IMD  | IMD <0.1%@60Hz/7kHz, 10%Rated Power   |           |                                  |        |       |        |        |  |  |
| Damping Factor:  | Damping Factor: \$\rangle 400:1@1kHz,8ohms                                      |           |                                  |        |       |        |        |  |  |
| CrossTalk:   | CrossTalk: =80dB  |           |                                  |        |       |        |        |  |  |
| Signal NoiseRatio:   | Signal NoiseRatio: >110dB(A)  |           |                                  |        |       |        |        |  |  |
| Switching rate:  | rate : >60V/us  |           |                                  |        |       |        |        |  |  |
| Input impedance:   | nput impedance: $10k\Omega$ (unbalanced inputs ) $/20k\Omega$ (balanced inputs) |           |                                  |        |       |        |        |  |  |
| Input Sensitivity:   |   |           |                                  |        |       |        |        |  |  |
| Workng Temperature: Workng Temperature -10℃~40℃ Storage temperature-30℃ ~85℃ |   |           |                                  |        |       |        |        |  |  |
| Environment temperature : =90%   |   |           |                                  |        |       |        |        |  |  |
| Voltage: See label at the back of device                                     |   |           |                                  |        |       |        |        |  |  |
| Size(mm)   | 482(W)X400(I  | D)X88.5(F | 5.5(H)mm 482(W)X492(D)X88.5(H)mm |        |       |        |        |  |  |
| Weight   |   |           | 18kg                             | 19kg   | 23kg  | 25kg   | 27kg   |  |  |
| Working Volt   | AC110V/220  | V-240V    | 50Hz/60Hz                        |        |       |        |        |  |  |

## **Correct Operation Instructions**

### **Function of connection pins**

XLR-type connectors should be wired as follows:

Pin 1: Ground Pin2: Hot (+). Pin3: Cold (-)

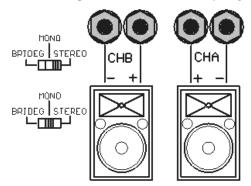


Balanced XLR signal connector

**Speaker Connections** 

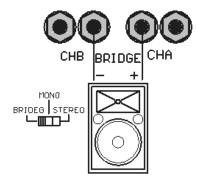
#### Speaker impedance

STEREO and MONO connection mode When using the anti-touch output jacks

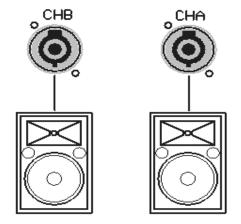


 $\label{eq:constraint} \mbox{Use the lowest impedance } 4\Omega \\ \mbox{When using the speaker connector socket}$ 

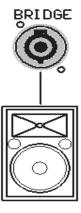
BRIDGE connection mode
When using the anti-touch output jacks



Use the lowest impedance  $8\,\Omega$  When using the speaker connector socket



Use the lowest impedance  $4\Omega$ 



Use the lowest impedance  $8\Omega$ 

Remarks: The products are constantly updated, when the appearance and parameters change, please refer to the updated products without prior notice.