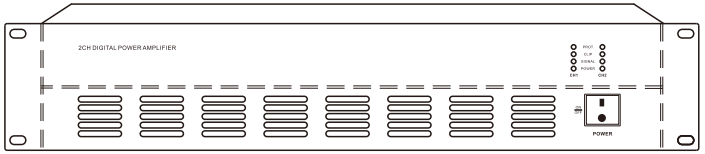
PUBLIC ADDRESS SYSTEM

CAUTION:Do not open the equipment cover arbitrarily,
so as not to electric shock.Please contact the professionals
to maintain if necessary .

# User Manual




## 2CH DIGITAL POWER AMPLIFIER

**2x120W**
**2x240W**
**2x350W**
**2x500W**

Thank you for purchasing the **2CH Digital Power Amplifier**.
Please carefully follow the instructions in this manual to ensure long, trouble-free use of the equipment.

## Accessories

AC power cord .....1
User manual .....1
Audio cable .....1

## Safety Precautions



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure 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 appliance.

**⚠ CAUTION** Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

- Before installation or use, be sure to carefully read all the instructions in this section for correct and safe operation.
- Be sure to follow all the precautionary instructions in this section, which contain important warnings and/or cautions regarding safety.
- After reading, keep this manual handy for future reference.





## LIMITED WARRANTY

We warrant that the hardware products it manufactures will be free from defects in materials and workmanship.
The warranty term,beginning on the date of invoice,is one year for Parts replacement,two years for parts repair and six months on accessories.
This warranty does not cover damage or failure caused by alterations, mishandling, abuse, misuse, neglect, accident or resulting from any cause other than a product defect.
In case of defects in material and workmanship under normal use and conditions,we will replace or repair products covered under this limited warranty that are returned to our facility.
To request warranty service, you must contact our international sales team within the warranty period, ship the products back to us in their original or equivalent packaging (freight prepaid). If we repair or replace a product, its warranty term is not extended.

## DISCLAIMER

Information contained in this manual is subject to change without prior notice and does not represent a commitment on the part of the vendor. We shall not be liable for any loss or damages whatsoever arising from the use of information or any error contained in this manual.
It is recommended that all services and repairs on this product be carried out by us or its authorized dealer.
This product must only be used for the purpose it was intended by the manufacturer and in conjunction with this operating manual.
We cannot accept any liability whatsoever for any loss or damages caused by service,maintenance or repair by unauthorized personnel,or by use other than that intended by the manufacturer.

**Specifications**

| | | | | |
|---|---|---|---|---|
| Model | | | | |
| Rated Power | 2*120W | 2*240W | 2*350W | 2*500W |
| Output Mode | Line voltage 70V/100V, Low impedance 4 ohms (Ω) | | | |
| Input Terminal | Phoenix terminal | | | |
| Output Terminal | Phoenix terminal | | | |
| Input Sensitivity | 2.7KΩ 0.775V~1V, balanced signal | | | |
| Aux Output | 0.775V (0 dBV) | | | |
| Fre. Response | 100Hz~18kHz (±3dB) | | | |
| THD | <0.3% at 1kHz, 1/3 rated power | | | |
| S/N | ≥85 dB | | | |
| Cooling | DC24V FAN | | | |
| Indicators | POWER, SIGNAL, DISTORTION, PROT | | | |
| AC Fuse | T2.5A | T5A | T6.3A | T8A |
| Controls | 2 Volume control, 1 Power on/off | | | |
| Power Input | PFC POWER,AC100V~240V,50/60Hz | | | |
| Consumption | 288W | 576W | 840W | 1200W |
| Dimension | 89(H)×483(W)×366(D) mm | | | |
| Net Weight | 8.5kg | 10.5kg | 11.5kg | 12.5kg |





※ Do not cut, kink, otherwise damage nor modify the power supply cord. In addition, avoid using the power cord in close proximity to heaters, and never place heavy objects -- including the unit itself -- on the power cord, as doing so may result in fire or electric shock.

※ Be sure to replace the unit's terminal cover after connection completion. Because high voltage is applied to the speaker terminals, never touch these terminals to avoid electric shock.

※ Be sure to ground to the safety ground (earth) terminal to avoid electric shock. Never ground to a gas pipe as a catastrophic disaster may result.

※ Avoid installing or mounting the unit in unstable locations, such as on a rickety table or a slanted surface. Doing so may result in the unit falling down, causing personal injury and/or property damage.

**When the Unit is in Use**

※ Should the following irregularity be found during use,immediately switch off the power,disconnect the power supply plug from the AC outlet and contact your nearest dealer.Make no further attempt to operate the unit in this condition as this may cause fire or electric shock.

·If you detect smoke or a strange smell coming from the unit.

·If water or any metallic object gets into the unit.

·If the unit falls, or the unit case breaks.

·If the power supply cord is damaged (exposure of the core, disconnection, etc.)

·If it is malfunctioning (no tone sounds.)

※ To prevent a fire or electric shock, never open nor remove the unit case as there are high voltage components inside the unit. Refer all servicing to your nearest dealer.

※ Do not place cups, bowls, or other containers of liquid or metallic objects on top of the unit. If they accidentally spill into the unit, this may cause a fire or electric shock.

※ Do not insert nor drop metallic objects or flammable materials in the ventilation slots of the unit's cover, as this may result in fire or electric shock.

# CAUTION

**When Installing the Unit**

※ Never plug in nor remove the power supply plug with wet hands, as doing so may cause electric shock.

※ When unplugging the power supply cord, be sure to grasp the power supply plug; never pull on the cord itself. Operating the unit with a damaged power supply cord may cause a fire or electric shock.

※ When moving the unit, be sure to remove its power supply cord from the wall outlet. Moving the unit with the power cord connected to the outlet may cause damage to the power cord, resulting in fire or electric shock. When removing the power cord, be sure to hold its plug to pull.

※ Do not block the ventilation slots in the unit's cover.
Doing so may cause heat to build up inside the unit and result in fire.

※ Avoid installing the unit in humid or dusty locations,in locations exposed to the direct sunlight, near the heaters,or in locations generating sooty smoke or steam as doing otherwise may result in fire or electric shock.

**When the Unit is in Use**

※ Do not place heavy objects on the unit as this may cause it to fall or break which may result in personal injury and/or property damage.In addition,the object itself may fall off and cause injury and/or damage.

※ Make sure that the volume control is set to minimum position before power is switched on. Loud noise produced at high volume when power is switched on can impair hearing.

※ Do not operate the unit for an extended period of time with the sound distorting. This is an indication of a malfunction, which in turn can cause heat to generate and result in a fire.

※ Contact your dealer as to the cleaning. If dust is allowed to accumulate in the unit over a long period of time, a fire or damage to the unit may result.

※ If dust accumulates on the power supply plug or in the wall AC outlet, a fire may result. Clean it periodically. In addition, insert the plug in the wall outlet securely.

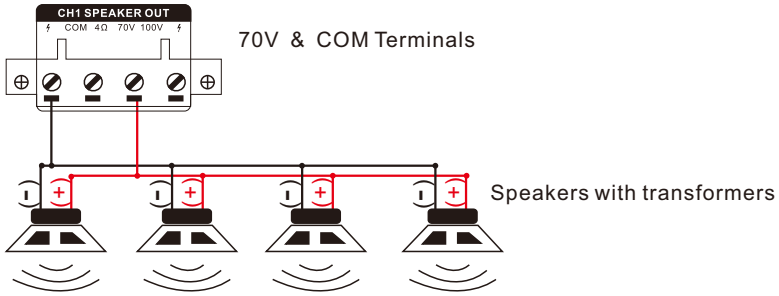
※ Switch off the power, and unplug the power supply plug from the AC outlet for safety purposes when cleaning or leaving the unit unused for 10 days or more.
Doing otherwise may cause a fire or electric shock.





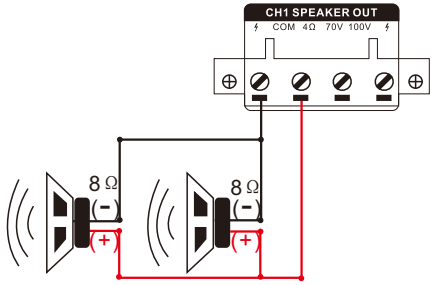
**70V line output**

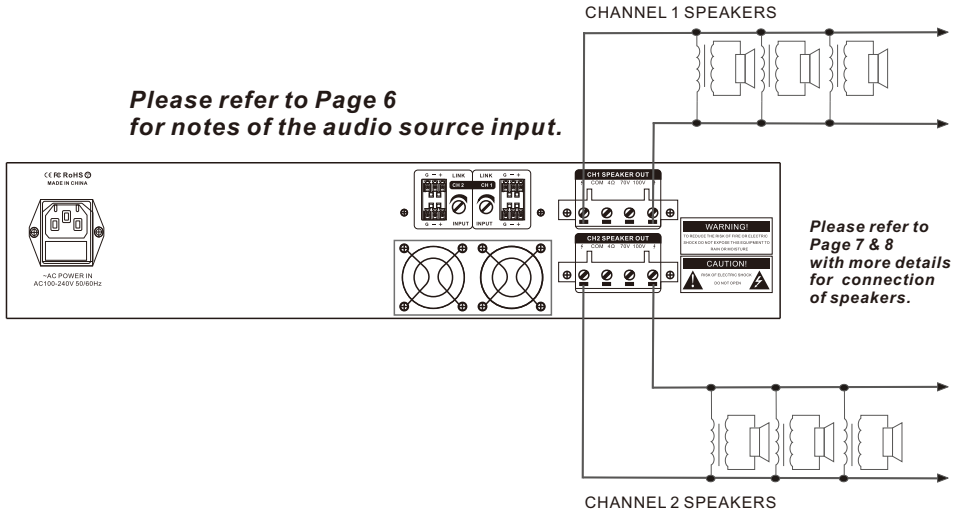
This system is common in the USA, it operates on the same principles as 100 V line except that at rated output power the amplifier has 70V RMS on its output terminals.




**4Ω low impedance output**

This output allows connection of low impedance loudspeakers without transformers, When two or more loudspeakers are used ensure that they are wired in a way that total load impedance remains between 4Ω.





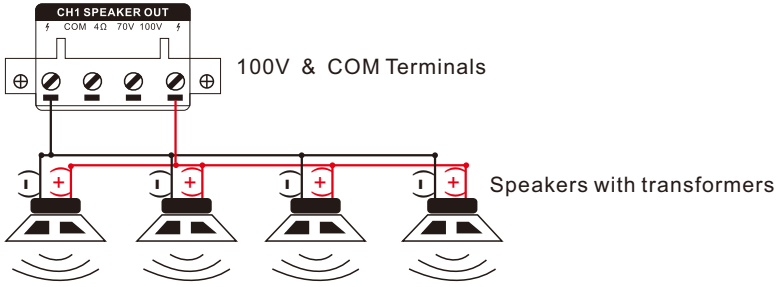

## Connections of Speakes

**Important Notes**

This amplifier has different loudspeakers outputs of 100V,70V and low impedance 4Ω.
**It's only possible to use one output at the same time,connecting more than one may damage internal parts of the amplifier.Each of 100V,70V,4Ω terminals must work with COM.**

**100V line output**

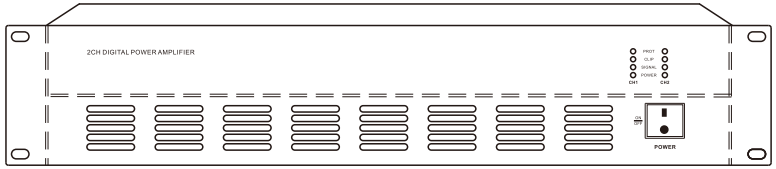
This system is most commonly used in for PA system. Only use 100 V line loudspeakers with transformers. All loudspeakers are wired in parallel and the sum of their power must not exceed the rated output power of the amplifier. **It is advisable not to load the amplifier at more than 70% of its rated output power when using music sources.**








## Descriptions & Features



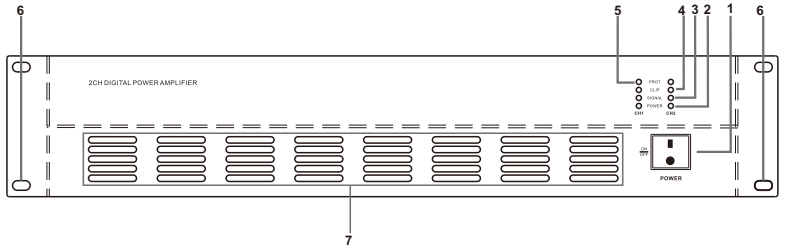

This series of professional grade 2-channel amplifier can deliver output power(Watts) options that are 2*120W, 2*240W, 2*350W and 2*500W. Line 70/100-volt and low impedance 4 ohms(Ω) output loads are provided.

The front panel includes a power switch, LED indicator lights include Power,Signal,Clip and Protection.The back panel includes 2 channels of signal inputs with gain controls that can be used to increase or decrease input levels on both channels.

This rack-mountable commercial amplifier features Class D amplification technology that is extremely energy efficient but also capable of producing a powerful output signal for large, medium, or small audio systems such as restaurants, meeting halls, sports venues, and other spaces where multiple speakers are needed.

※ Standard 19" 2U rack-mounting housing.
※ Built-in 2 channels of Class D amplifier.
※ 2 channels of 70/100-volt output load.
※ 2 channels of 4 ohms(Ω) output load.
※ Equipped with 2 channels of audio inputs with gain control.
※ Audio loop outputs that provide to additional amplifiers.
※ LED indicator lights include Power,Signal,Clip and Protetion.
※ Protections of short circuit,overload,high temperature.

## Front Panel




**1. Power switch:** Switch off the amplifier before make connection.

**2. Power indicators:** Lights blue when the power is switched on.

**3. Signal indicators:** Lights green when signal is input.

**4. Clip indicators:** Lights yellow when an output signal clips (distortion occurs).

Note: If clipping occurs trun the gain control down on the back of the amplifier.

**5. Protection indicators:** Lights red when protection circuitry activated.

**6. Rack mounting holes**

**7. Ventilation panel (Air Vent):** A filter is located inside the ventilation panel.

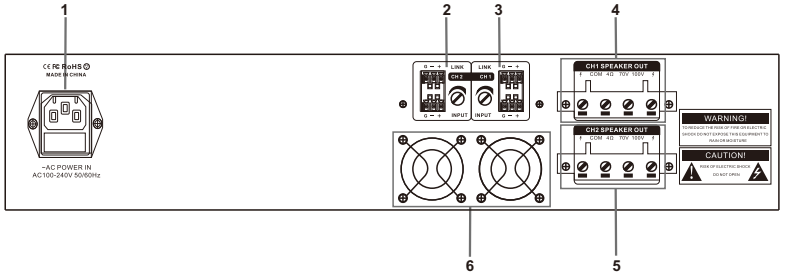
### Protection Operation List

| Failure | Protection | Operation Indicator | Remedy | Recovery |
|---|---|---|---|---|
| Overcurrent due to overload | Current limiter activated when impedance drops below the specified value. | Peak indicator lights. | Remove overload. | Connecting a correct load automatically restores normal operation. |
| Short circuit | Current limiter activated. Load disconnected. | Protection indicator lights. | Check speakers and lines for short circuit. | Turn off the power switch. Correct the load, then switch on the power. |
| Rise in amplifier unit temperature (over 85 ℃) | Load disconnected. | Protection indicator lights. | Check the unit for correct ventilation and overload. | Operation automatically returns normal when the temperature decreases. |





## Rear Panel




**1. AC power inlet:** Connect the supplied power cord to this inlet.

**2. CH2 signal input/output & control:** Please refer to details in this page.

**3. CH1 signal input/output & control:** Please refer to details in this page.

**4. CH1 speaker connectors:** Please refer to page 7 & 8 for more details.

• Do not use both the 4Ω,70V and 100V terminals at the same time.

• Impedances indicated in the figures represent the total speaker system (load) impedances.

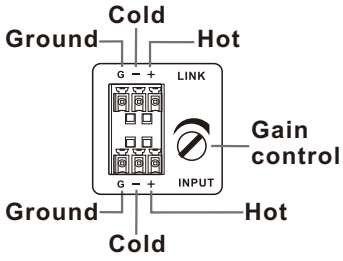
**5. CH2 speaker connectors:** Please refer to page 7 & 8 for more details.

• Do not use both the 4Ω,70V and 100V terminals at the same time.

• Impedances indicated in the figures represent the total speaker system (load) impedances.

**6. Ventilation outlet**

**Notes of Signal Input & Output:**




**LINK: Ground, Cold, Hot**

These connectors send audio to the other channel or output to other components.

**INPUT: Ground, Cold, Hot**

These connectors receive audio source signal.

**CAUTION !**

**When use BALANCED signal:**
**Please connect the Ground,Cold,Hot wiring separately.**

**When use UNBALANCED signal:**
**Please make the Ground and Gold being connected together.**