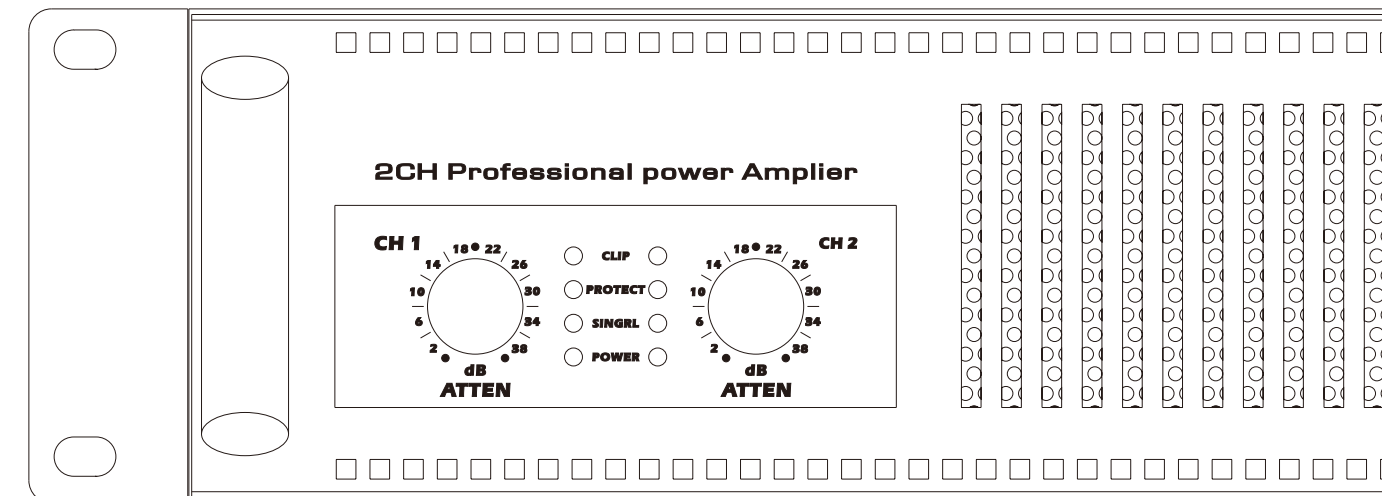


**LYINTL**

## User's manual

### Dual Channel Professional Amplifier

H-M200/H-M250/H-M350/H-M350/H-M500  
H-M650/H-M850/H-M1000/H-M1200/H-M1400/H-M1600



If any change of the technical parameters and product appearance will without notice, to anyone by using all or part of the description, pictures to lose suffered without responsibility. Color and technical parameters for the different products are a little bit difference, our products only sell by authorized dealers. Our company reserves the copyright of this manual. Without written permission of my company no matter for what reason, any part of this manual are not can be transmitted in any form of electronic or mechanical, including copying and recording.

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Before using the product, please read the instructions

## Safety Precautions



Please read the operating and maintenance instructions in the user manual.



Warning: this product has a "dangerous" voltage insulation shell, will happen click the danger to human body, The amplifier must need to connect to the grounding socket.



Note: the output voltage of the power amplifier has would be dangerous. In order to avoid electric shock, when the amplifier is working; don't touch the speaker any exposed wires: do not connect or pull out the speaker wires. For all the connect wires before you close the voltage amplifier. External wiring connected to the speaker in the side to be operated by qualified personnel; In addition, in order to safe operation and meet the requirements of the electrical products should be in the speaker terminal cover protective cover.




Note: The amplifier power strong, may cause certain danger to speakers and human, excessive operation will make the speakers were damaged. Frequently to check the last peak function's ability of the speaker, although the amplifier domain reduction device can be used to reduce the overall gain, But the increase of the input signal will lead to full power output, This could damage to link the speaker.



Note: This equipment can produce radio frequency energy, if not in accordance with the instruction for installation and use, may cause interference to radio communication. However, we do not rule out in the possibility of a specific installation conditions will produce interference. If this equipment caused harmful interference to radio or television reception (turned off and then open the equipment by can be determined), suggest user try to take the following one or more of the measures to eliminate such interference:

Transformation of receiving antenna toward or reinstall.  
Increasing the equipment and receiver distance directly.  
The power socket equipment use separated from socket used in the receiver.  
Consult dealer or experienced a radio or TV technician for help.



Note: In order to fully ventilated, equipment around the minimum distance of about 20 cm; Vent can't cover items such as newspapers, tablecloths and curtains and obstruction of ventilation;  
This equipment is suitable for use in tropical and temperate climates.  
The equipment shall not suffer water or water splash, Shall not be placed on the equipment corrosion gas, liquid and shall not put the vase on the equipment category of objects filled with liquids.  
It is dangerous to the terminal of the device labeling  charged warning, the terminal link of external wires need guidance by a personnel to install or use the ready-made wire, soft wire.



Warning: to avoid electric shock, please don't open the lid. For internal parts, the user can't repair, please contact the qualified professionals for repair.



Warning: to avoid fire or electric shock, do not use equipment exposed to rain or damp environment. For safety and reliable operation, the former board and backboard plate dust filter should be cleaned regularly. If dust filter upkeep is not good, there will be a security risk. For example, internal high temperature dust could ignite or start a fire. Any problem or produced by dust filter maintain undeserved and fault are not within the scope of the warranty.



Please only use manufacturers carts, shelves, tripod, bracket and table or device be sold together with the goods. If you use a cart to move the equipment, please pay attention to safety place equipment, so as not to fall and cause damage.

## Technical specification

The following technical parameters for this series, the data is accurate when printing, but please noted if any changing of the data, will without prior notice.The following is the most accurate and the latest information at present

mode l	H-M200	H-M250	H-M350	H-M500	H-M650	H-M850	H-M1000	H-M1200	H-M1400	H-M1600				
8Ω stereo output	200Wx2	250Wx2	350Wx2	500Wx2	650Wx2	850Wx2	1000Wx2	1200Wx2	1400Wx2	1600Wx2	450Wx4	600Wx4	850Wx4	1000Wx4
4Ω stereo output	400Wx2	450Wx2	620Wx2	910Wx2	1180Wx2	1540Wx2	1800Wx2	2170Wx2	2530Wx2	2890Wx2	800Wx4	1100Wx4	1540Wx4	1800Wx4
8Ω bridge output	400W	500W	700W	1000W	1300W	1700W	2000W	2400W	2800W	3200W	900Wx2	1200Wx2	1700Wx2	2000Wx2
frequency response	20Hz~20KHz (±0.5)													
T.H.D(8Ω/1KHz)	≤0.5%													
swap the distortion	≤0.35%													
conversion rate	>10V/μs													
crosstalk	-75dB (at 1KHz) / -59dB (at 20KHz)													
damping(400Hz-1KHz)	>600Ω													
input sensitivity	0.775; 1.4V; 32dB													
input impedance	Unbalanced 10kΩ/balance 20kΩ													
voltage gain(8Ω/1khz)	33dB/36dB/39dB/41dB													
interface section	import:XLR (M.*2+F.2); output:speakeron*2+1/4" (TRS)*4													
signal to noise ratio	≥100dB													
the protection function and cooling mode	Mute switch:DC fault interrupt.distortion.short circuit,open circuit,RF overload,overheat protection.(frequency intellignet fan)													
product size(W*H*D)	483mmx101mmx418mm						483mmx101mmx485mm							
weight														

## Brief Introduction

Thank you for choosing the T series power amplifier.We are confident that you will satisfied for this series amplifier performance, configuration flexibility, reliability.

This user manual for the T series amplifiers operation features and functions as a comprehensive introduction. Please read this manual and are familiar with the various configuration options and line protection.

1.The main characteristics  
This series amplifier adopts many advanced technologies, many of them are special to protect the best performance and reliable operation, familiar with the technology of your operating a series of amplification system is of great help.

2.Voltage Peak Limiter  
The peak voltage limiter (VPN) is user adjustable, each channel can choose independent peak output voltage, which is the biggest of the function, of output.This function makes the amplifier can be very convenient to drive the different power of the size of the speaker.

3.The protection and performance optimization  
Appropriate and stable power amplifier is very important to any audio system.Improper or wrong power assembly damages to the speaker,In some cases, can cause damage to the amplifier itself as well. In order to prevent any damage or interrupt function, this series amplifiers provide cash technology to protect the internal wiring and link load,These features in extreme conditions to protect the power of the overload fuse.The following is a brief description of this series amplifier built-in protection function:

- CPL (The power peak limiter) , ensure the safety of the amplifier output will not exceed amplifier current parameters.
- Temperature protection, amplifier will not be damaged by overheating.
- Average power limiter, according to the power supply and power supply circuit breaker's contribution to limit the maximum power consumption.
- Power supply phase dislocation protection, when the equipment after 110V or 380V power supply automatic protection, to ensure that equipment and electricity safety.
- DC protection, ensure that harmful DC signal does not appear in the output of the amplifier.If this happens, the fuse will cut o ffof the internal error instructions will be displayed.
- Low impedance (short circuit), when the input signal dysfunction or output short circuit, error warning light will light up, and then shut down output.
- High resistance, when the output signal is large and measuring less than current consumption, and high impedance will warn you.That may appear in not connected speakers or amplifiers break down.
- Low starting current open at the same time ensure that several power amplifier, power circuit breaker can't jump.

## Installation

### 1.Cooling

Amplifier used before to after the forced air cooling system, keep within the prescribed limits for operation at low temperature. In almost all applications, the former to the air is cooler air flow in the front. Don't try to change the direction of flow.

To ensure that in front of the amplifier has enough airflow, at the same time, the back of the amplifier should have enough space to release the air. If the amplifier installed on the bracket, not in the front or back cover.

When the temperature of the radiator is overheating, induced current will reduce overheating channel temperature. If power supply overheating, a sensing circuit will decrease until the power supply output fell to a safe operating temperature.

Make sure the back of the plate in front of the detachable dust filter clean, in order to ensure the biggest circulation of air.



Note: if the amplifier failure caused by the dust filter is not clean, is beyond the scope of the warranty.

### 2.Operating voltage

Panel in the back of the power cord after the amplifier, there have a label, the label indicates the voltage of AC voltage amplifier is 220V. Just follow label to connect power. Such as equipment failure caused by the error link power supply is beyond the scope of the warranty.

Amplifier use the primary relay switching. Because the power supply directly in front of the transformer is rectified. So no induction frequency for amplifier power. It can be linked the power supply to the 50 to 60Hz, when in fact it is in operation from dc to 400Hz frequency.

If the factory installed power plug is not suitable for your country, it can be pulled out and load in the right place on the wire.

If you feel your ability to install the power cord is not absolutely confident, please seek help to qualified personnel.

Once the appropriate power cord link, click the switch button on the front panel, the amplifier will open. Amplifier will self-test line and soft-start. Before closing, will remain the high-speed rotating blades, at the same time, the power lights.

The amplifier is no connect the ground lift switch or port, the signal ground wire is always suspended from the chassis resistance path, therefore, the grounding system is automatic.

For safety's sake, don't pull on the power cord grounding rods.

Please use the balance input connection to avoid noise and interference.

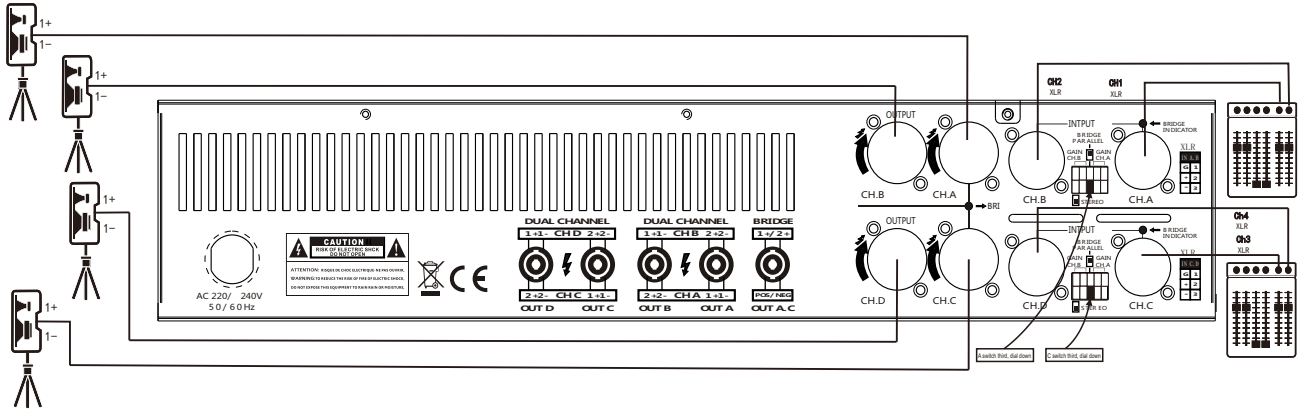
Please correct laid the power cord, make its are not stepped on or sharp stab, especially pay attention to the power plug and connected devices.

There are storms thunderstorm or not using this equipment for a long time, please pull out the power plug.

## User guide

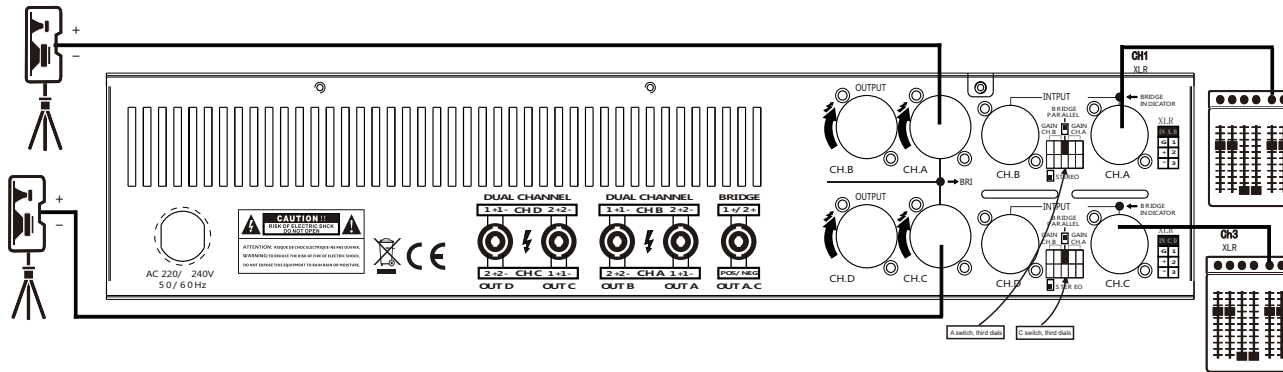
### Rear panel link 2 :

#### Dual stereo mode



in this case, The output console from the CH1, CH2, CH3, CH4 each input amplifier. The switches ③ be plug out, and the amplifier is in the stereo state. The sound output can be controlled separately by CH.A/CH.B/CH.C/CH.D four potentioneers. The output of 4 square blocks can be connected to the 4 speakers.

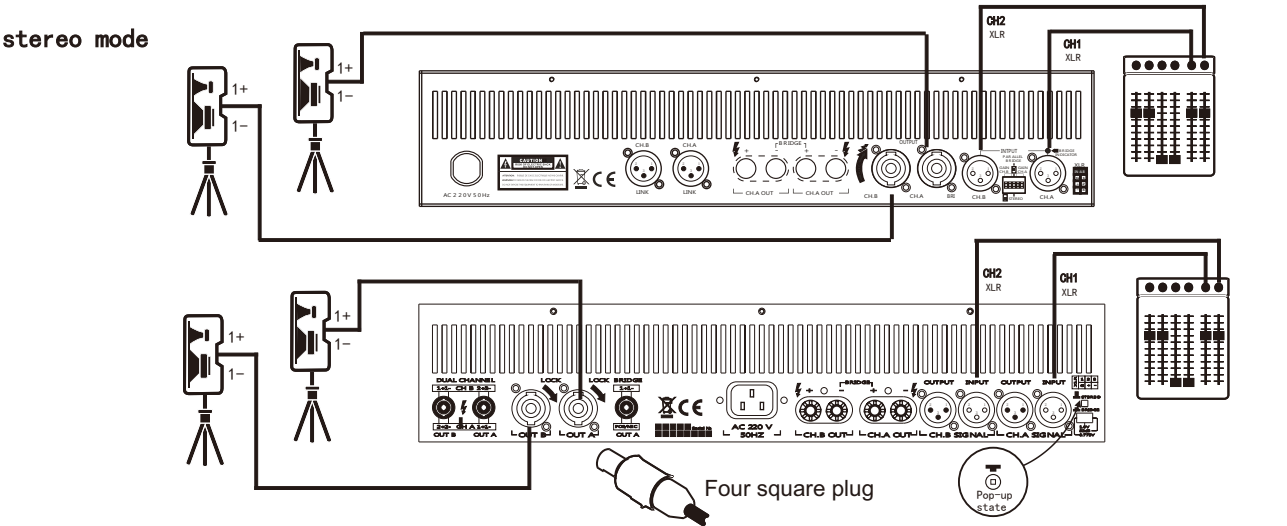
#### Bridge/mono mode



In this case, the output console from the CH1 and CH3 input amplifier. The switches ③ be plug in, and the amplifier is bridged/ mono mode. Sound output by CH.A and CH.C respectively, the corresponding control potentiometer. OUT A and OUT C are output interfaces of bridge mode, Connected to the speaker.

User guide 6

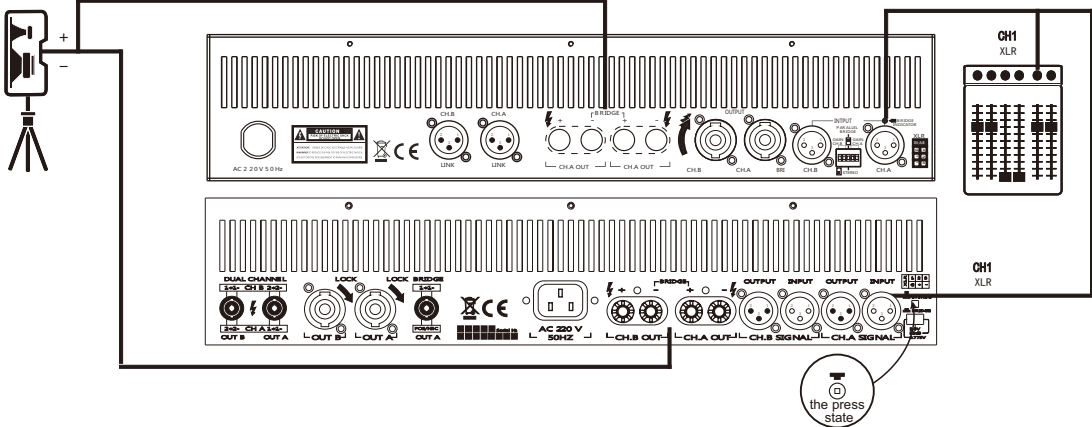
Rear panel link 1:



In this case, the output console from the CH1 CH2, each input power amplifier and the switches ③ be plug out or BRIDGE will switch to the left of the amplifier in stereo sound output. You can use the CH.A CH.B potentiometer control alone. The output of the 2 small seats can be connected to 2 speakers.

NOTE: when connecting the same signal source to multiple input channel, please pay attention to the channel output source drive limit. The output of a typical source (e.g DSP exchange unit) in front of the external line driver buffer signal can drive up to four amplifier channel.

Bridge mode



In this case, the output of the mixer is input from the CH1 amplifier. Switch the BRIDGE switch or switch 3 to the middle, when the amplifier is bridged. CH.A sound output control potentiometer. The negative pole of the terminal seat channel 1 and the negative electrode of the channel 2 are the output groups of the bridge mode, and are connected to the speaker.

Protection, fault and warning

This series amplifier consists of a set of advanced and comprehensive protection features

VHF protection:

This series of amplifier has a protection circuit to detect the contents of the input signal for very high frequency. If a VHF signal is detected, the input will decay before retested 6 seconds, once detect continuous VHF signal, the output will stop falling back to normal operation

Peak output current limiter:

The peak current limiter (CPL) to ensure that the amplifier by forces beyond the limits of the transistor current input to the output end and damage. Keep the amplifier safety work area

DC protection:

Applied to each output dc protection, in order to protect the connection of the speaker. On the output side, attenuation and dc protection trouble light shine. Said any dc protection on the output end of a hardware damage, the amplifier needs maintenance

High resistance warning:

When tested the above - 29 db input signal, not connect the speaker at the same time, this time, would be the high impedance state, indicator will turn on

Power supply fault protection

Power supply fault protection can effectively prevent the equipment due to incorrect input voltage caused damage, when the input voltage below than 180V and above than 240V equipment will operate to protect and prevent damage to the equipment.

Low impedance protection warning:

When electricity consumption (high peak current limiter) and at the same time the output signal is low (- 4 db indicator emit light) low impedance or short circuit warning. When this happens, protect the amplifier through attenuation output and bypass circuit to protect the output, the grass indicator will turn on

Overheating protection:

High temperature measurement point in each output channel and power supply. If more than the preset temperature level, these tips will overheat warnings.

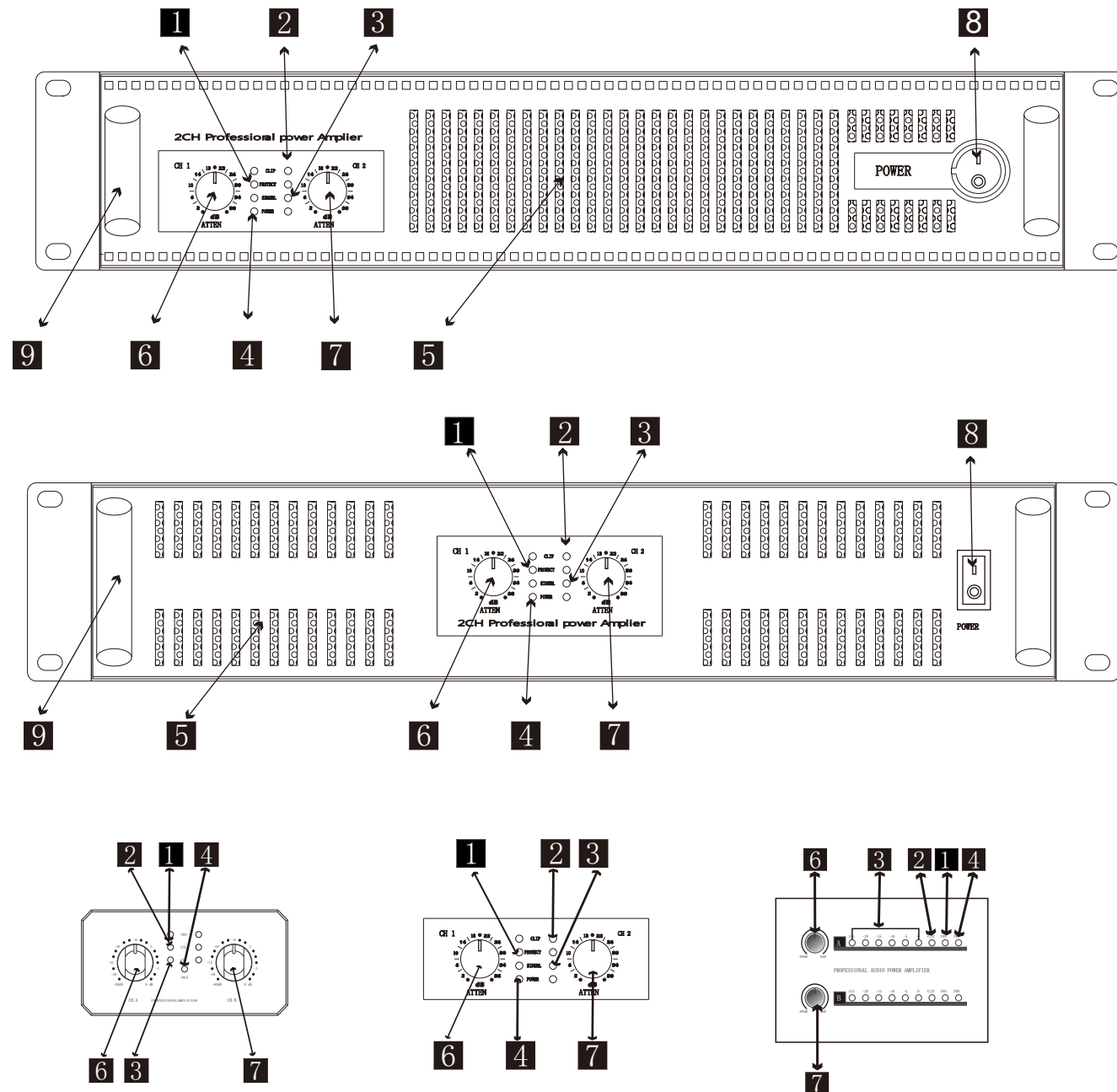
When the amplifier to the thermal protection threshold, warning will begin with short pulses "on time". If amplifier overheating and close to the temperature limit, bright will be more and more long pulse "on time", when protect mode start

soft start:

The influx of inappropriate restrictions make high power amplifier in the power supply into a lot of current conduction. This will make quick power breaker tripping. This is not the series amplifier will happen. Because this type of amplifier capacitor charging at slow speed, so the amplifier with low into power, to ensure that the circuit breaker will not trip

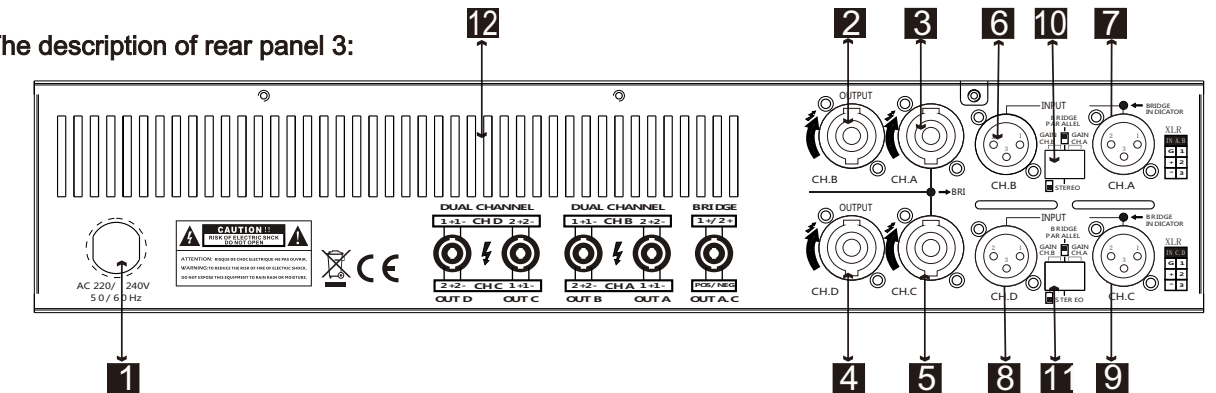
# User guide 1

The description of Front panel 1:



# User guide 5

The description of rear panel 3:



## 1. Interface of power line

Connect 220 volt power supply equipment before use to check whether the power supply is 220 volts.

## 2. Channel B audio output

Channel B audio output is a professional four core small square, small square seat has 1, -1, 2, -2 four lines, the correct wiring should be: 1, -1. connected to the required professional speakers.

## 3. Channel A audio output

Channel A audio output is a professional four core small square, small square seat has 1, -1, 2, -2 four lines, the correct wiring should be: 1, -1. connected to the required professional speakers.

## 4. Channel D audio output

Channel D audio output is a professional four core small square, small square seat has 1, -1, 2, -2 four lines, the correct wiring should be: 1, -1. connected to the required professional speakers.

## 5. Channel C audio output

Channel C audio output is a professional four core small square, small square seat has 1, -1, 2, -2 four lines, the correct wiring should be: 1, -1. connected to the required professional speakers.

## 6. XLR of channel B input

This is XLR seat of channel B input, make sure the audio equalization effectively transferred to the amplifier output before the connection of various levels of equipment export.

## 7. XLR of channel A input

This is XLR seat of channel A input, make sure the audio equalization effectively transferred to the amplifier output before the connection of various levels of equipment export.

## 8. XLR of channel D input

This is XLR seat of channel D input, make sure the audio equalization effectively transferred to the amplifier output before the connection of various levels of equipment export.

## 9. XLR of channel C input

This is XLR seat of channel C input, make sure the audio equalization effectively transferred to the amplifier output before the connection of various levels of equipment export.

## 10. A, B channel bridge switch / gain switch

## 11. C, D channel bridge switch / gain switch

③it is bridge and mono, dual choose power.

Usage method :

Switch up mean bridge and mono mode  
Switch down mean double sound mode  
When Power amplifier are in bridge and mono mode, so they can accept the signal of CH1(A) or CH3(C), also can accept the potentiometer control CH1(A) or CH3(B) of front panel

①②is Sensitivity selector switch of CH2(B) /CH4(D)

④⑤is Sensitivity selector switch of CH1(A)/CH3(C)

Usage method :

①②is 0.775v when it switch down at the same time

①switch up and ②switch down is 1v ;

①② is 2v when it switch up at the same time ;

switch down and switch up is 1.4v ;

④⑤is 0.775v when it switch down at the same time

④switch up and ⑤switch down is 1v ;

④⑤ is 2v when it switch up at the same time ;

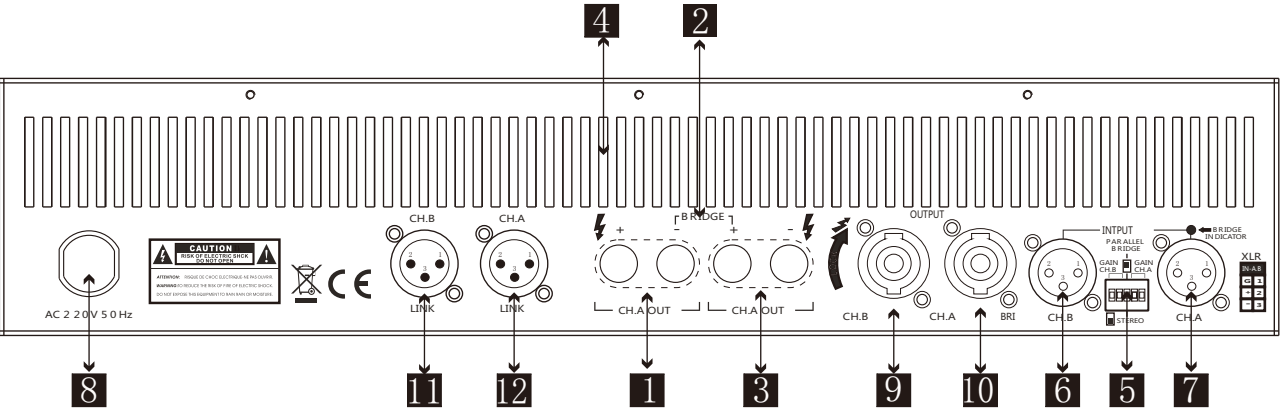
④switch down and ⑤switch up is 1.4v.

## 12. air outlet

Here is the outlet of the amplifier, can not plug. When the amplifier works, the machine parts will heat, and then the cooling system will work, if blocked, poor heat will cause unnecessary failure

User guide 4

the description of rear panel 2:



1. Wire holder

Here is the amplifier channel 2 output port, you can meet the required professional speakers.

2. Bridged

This is the bridge output interface, when you press the BRIDGE button in the rear, the amplifier is connected to the bridge mode, channel 1 and channel 2 for positive output group.

3. Wire holder

Here is the amplifier channel 2 output port, you can meet the required professional speakers.

4. air outlet

Here is the outlet of the amplifier, can not plug. When the amplifier works, the machine parts will heat, and then the cooling system will work, if blocked, poor heat will cause unnecessary failure

5. bridge switch / gain switch

③it is bridge and mono, dual choose power. Usage method:

Switch up mean bridge and mono mode  
Switch down mean double sound mode  
When Power amplifier are in bridge and mono mode, so they can accept the signa of CH1(A) , also can accept the potentiometer control CH1(A) of front panel  
①②is Sensitivity selector switch of CH2(B)  
④⑤is Sensitivity selector switch of CH1(A)  
Usage method:

①② is 0.775v when it switch down at the same time

①switch up and ②switch down is 1v;

①② is 2v when it switch up at the same time;  
switch down and switch up is 1.4v;

④⑤is 0.775v when it switch down at the same time

④switch up and ⑤switch down is 1v;

④⑤ is 2v when it switch up at the same time ;  
④switch down and ⑤switch up is 1.4v.

6. XLR input of channel 2

This is the XLR input of channel 2, which enables audio equalization to be effectively transmitted to the amplifier and connected to the output ports of various front level devices.

7. XLR input of channel 1

This is the XLR input of channel 1, which enables audio equalization to be effectively transmitted to the amplifier and connected to the output ports of various front level devices.

8. Interface of power line

Connect the 220V power supply equipment, before use to check whether the power supply is 220V.

9. Channel 2 audio output

Channel 2 audio output is a professional four core small square, small square seat has 1, -1, 2, -2 four lines, the correct wiring should be, 1-1, connected to the required professional speakers.

10. Channel 1 audio output

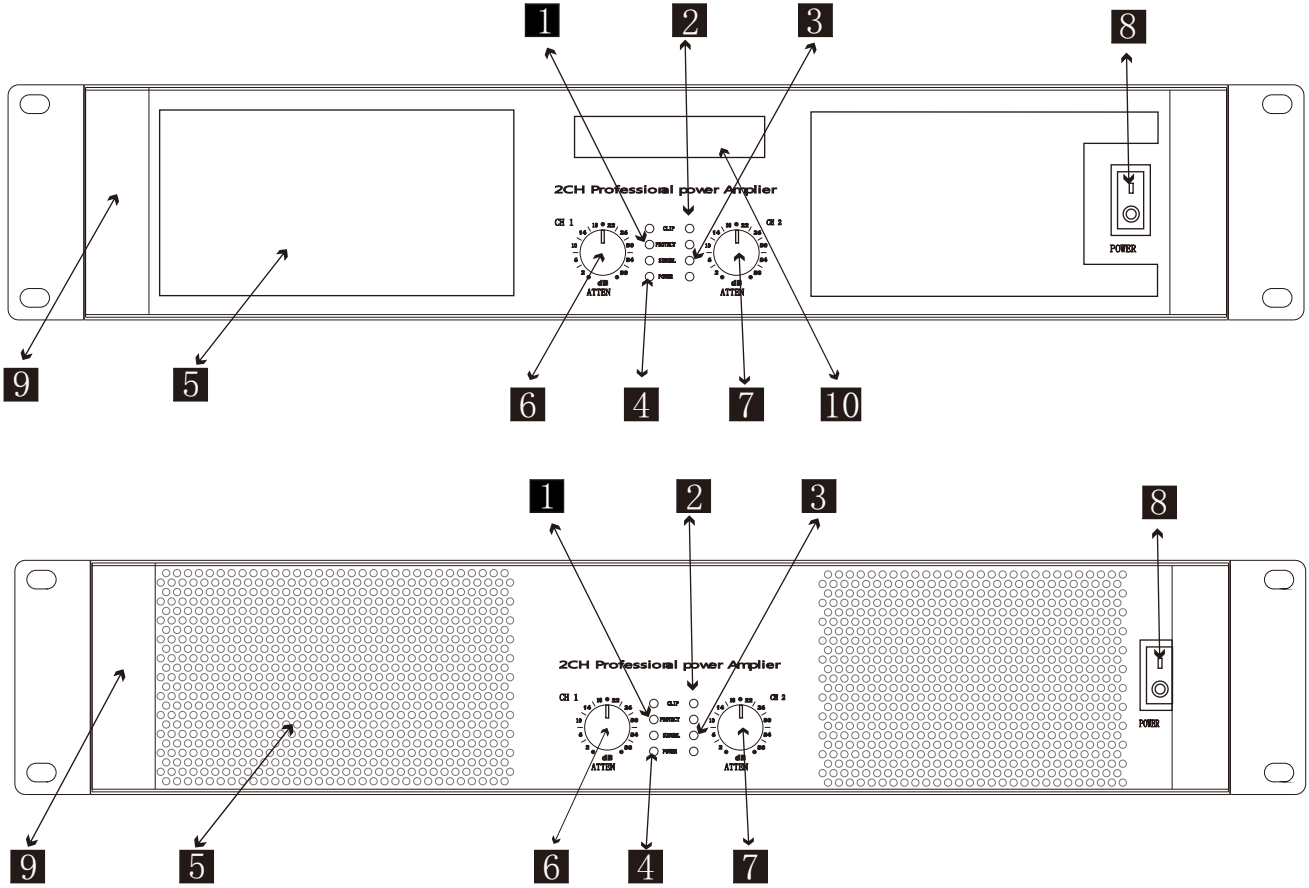
Channel 1 audio output is a professional four core small square, small square seat has 1, -1, 2, -2 four lines, the correct wiring should be, 1-1, connected to the required professional speakers.

11. Channel 2 connection socket

This is a XLR balanced connector that can be used to connect another amplifier, pin 1 to ground, pin 2 to the positive pole, and pin 3 to the negative pole.

12. Channel 1 connection socket

This is a XLR balanced connector that can be used to connect another amplifier, pin 1 to ground, pin 2 to the positive pole, and pin 3 to the negative pole.



1.The lamp failure detection

This light long on, the machine automatically detects a fault, to cut o fthe output.

2. The peak current limiting lamp

When it is flashing, the output signal has reached the upper limit, The maximum current consumption is reached. When it is flashing, it shows that the output short-circuit or low operating impedance causes excessive current consumption.

3.Signal level lamp

According to the output signal level in the normal operating range

4.The power indicator light POWER light

green indicator, said power supply open;  
Go out, turn o fthe power.

5. air intake

After the amplifier is turned on, the cooling fan starts to run, and from this point into the fresh air, the machine cooling.

6. Channel 1 volume control

Under the condition of the stereo, the potentiometer can adjust the input level of channel 1, under the condition of the bridge, the potentiometer can adjust output channel 2 at the same time.

7.Channel 2 volume control

Under the condition of the stereo, the potentiometer can adjust the input level of channel 2

8. power light

Power light green light, said the power on.  
Said out, turn o fthe power.

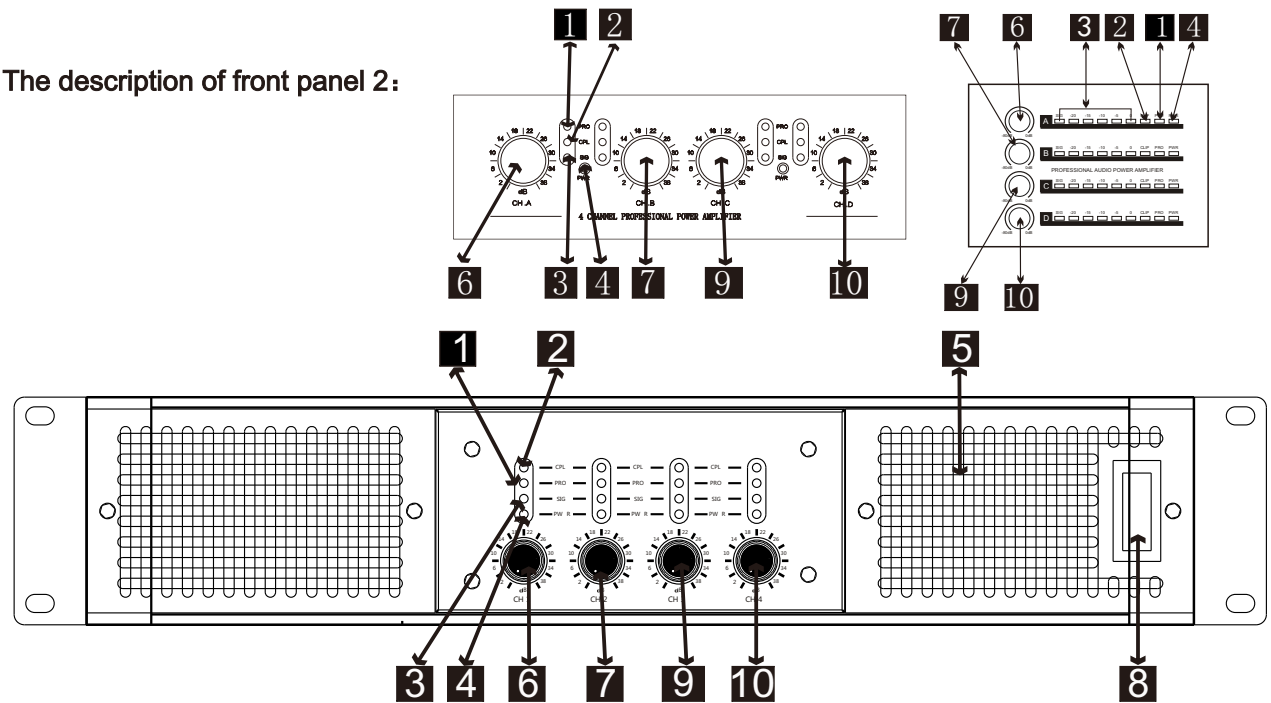
9. handheld

this power amplifier have aluminum handheld so that easily to install and move

10. display

User guide 2

The description of front panel 2:



1, fault detection lamp

When the lamp is bright, the machine automatically detects trouble in the machine, Cut off the output by itself

2, peak current limit (function)

When the flashing, show that the output signal has reached the limit, reaching the maximum current consumption, if amplifier overheating or detect harmful frequency potential will be shining.

When the lights, show that the output short circuit or low impedance operation caused by excessive current consumption.

3, signal level lamp

Represents the level of the output signal in the normal range of operation

4, power indicator light

POW light green indicator light, indicating power on, out, means switching off the power

5, air intake

After the amplifier is turned on, the cooling fan in the machine starts to run. At this time, it enters the clean air from some places to cause the heat dissipation of the machine

Note: the air inlet has an object block and do not run the amplifier

6, channel A volume control

In the case of stereo, this potentiometer can adjust the input level of the channel A, and panel 1 can adjust the B output at the same time as the bridge / parallel / single sound switch is pressed (panel 2/3 switch is switched on)

7, channel B volume control

In the case of stereo, this potential can adjust the input level of the channel B

8, the power switch

This is opened and used to turn on the amplifier's power supply (indicating "open" means "off")

9, channel C volume control

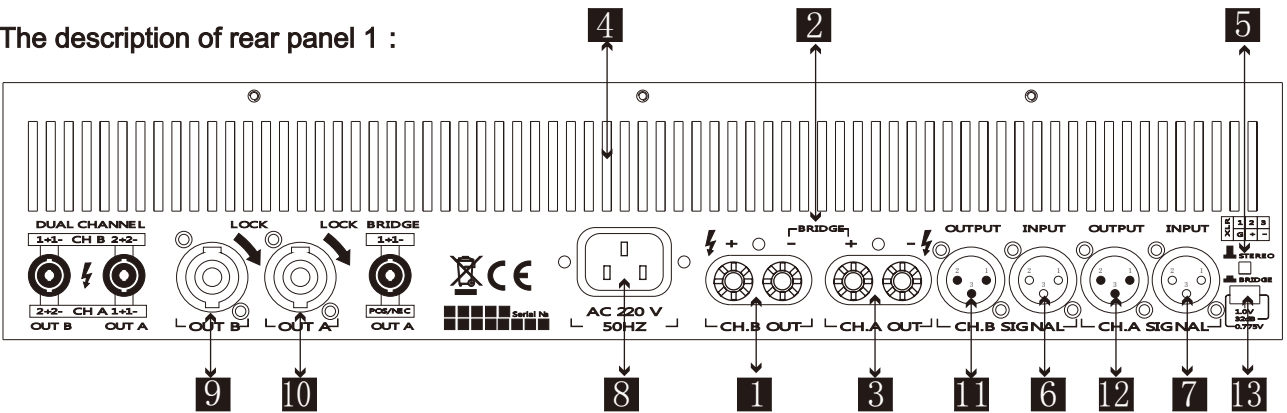
In the case of stereo, this potentiometer can adjust the input level of the channel C, and panel 1 can adjust the D output at the same time as the bridge / parallel / single sound switch is pressed (panel 2/3 switch is switched on)

10, channel D volume control

In the case of stereo, this potential can adjust the input level of the channel D

User guide 3

The description of rear panel 1 :



1. Wire holder

Here is the amplifier channel 2 output port, you can meet the required professional speakers.

2. Bridged

This is the bridge output interface, when you press the BRIDGE button in the rear, the amplifier is connected to the bridge mode, channel 1 and channel 2 for positive output group.

3. Wire holder

Here is the amplifier channel 2 output port, you can meet the required professional speakers.

4. air outlet

Here is the outlet of the amplifier, can not plug. When the amplifier works, the machine parts will heat, and then the cooling system will work, if blocked, poor heat will cause unnecessary failure

5. Bridge selection button

This is the bridge selection button. The amplifier sets up the stereo mode. When you press this button, the amplifier is in bridge mode. Click again, the button will bounce and resume the stereo state

6.XLR input of channel 2

This is the XLR input of channel 2, which enables audio equalization to be effectively transmitted to the amplifier and connected to the output ports of various front level devices.

7.XLR input of channel 1

This is the XLR input of channel 1, viwhich enables audio equalization to be effectively transmitted to the amplifier and connected to the output ports of various front level deces.

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Channel 2 audio output is a professional four core small square, small square seat has 1, -1, 2, -2 four lines, the correct wiring should be, 1-1, connected to the required professional speakers.

10.Channel 1 audio output

Channel 1 audio output is a professional four core small square, small square seat has 1, -1, 2, -2 four lines, the correct wiring should be, 1-1, connected to the required professional speakers.

11.Channel 2 connection socket

This is a XLR balanced connector that can be used to connect another amplifier, pin 1 to ground, pin 2 to the positive pole, and pin 3 to the negative pole.

12.Channel 1 connection socket

This is a XLR balanced connector that can be used to connect another amplifier, pin 1 to ground, pin 2 to the positive pole, and pin 3 to the negative pole.

13. Gain toggle switch

This is a gain toggle switch. Select 0.775v or 1V to gain according to the need.