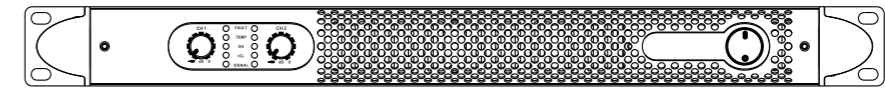


Q TWO CHANNELS POWER AMPLIFIER USER'S MANUAL



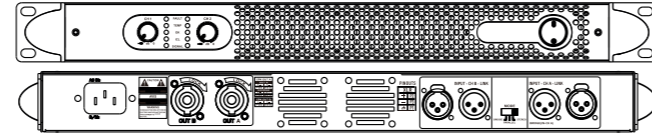
CLASS D

Q TWO CHANNELS POWER AMPLIFIER
CLASS D



WELCOME

Thank you very much for purchasing our products.
The two channels professional power amplifier made from our patent technique Class D.
It is suitable for small scale performance,Karaoke room, entertainment club, etc. In order to make better operation, please read this manual carefully.

**TO UNCLOSE THE PACK**

Please make sure if the appearance of the power amplifier was damaged or not during the transportation after you opened the package. Please make sure the preset voltage is matched with your local AC voltage (please check into it on the real panel of the power amplifier). We suggest you retain in package in case you need them for further transportation.

IMPORTANT PRECAUTION

The design of products has already taken the safe requirement in to consideration and all the finished products have been tested under the requirement of the government before sale. Users should read the notice in this manual before operation as there is dangerous high voltage and electricity inter the products. It will increase the change of getting shock by the electricity if the product falls down, recess in the appearance,soaked or there were some parts loose internal. If there are problems above,please turn off power immediately and send the defective units to local distributor for service.

IMPORTANT PRECAUTIONS AND SIGN EXPLANATION

- 1.Read these prescripts.
- 2.Keep this user manual
- 3.Pay attention to all the notice
- 4.Comply with these prescripts
- 5.Warming:to avoid causing fire or hit by the thunder,don't put the equipment in the rain or in the wet environment.
- 6.Wiped by dry cloth
- 7.Don't wall up the intake
- 8.Don't install near the heat headstream like radiator,heat adjust setting,camp stove etc.(including amplifier)
- 9.Don't make the grounded plug invalidation,this equipment should be connection to the plug through protective grounded plug.
- 10.Protect the wire from being trampled or extruded,especially the plug,power plug and the connector of it.
- 11.Please turn off the power amplifier power before take off the electronic wire,signal wire or to change the switching of input mode and cut the limiter.
- 12.Please use under suitable voltage remarked on the back panel. If the equipment is damaged because of using the wrong voltage,we will charge from service.
- 13.If one signal is used in more than one power amplifiers,suggest using signal assigner.
- 14.Don't connect the output interface of one channel to the input interface of another channel in the power amplifier. Don't connect one power amplifier to another one by connecting their output in series or parallel connection.
- 15.To matching with the power amplifier,the power of the power amplifier should be 50%-100% more than the loudspeaker power.
- 16.When mend the power amplifier,don't connect the probe of the oscilloscope to the output interface under bridge in case of damaging the power amplifier and the oscilloscope.
- 17.Please use the sequence power if more than one power amplifiers are used at the same time.



Warning:there is important information in this manual users.



There are non-insulated parts with dangerous voltage,which can make people get an electricshock in the equipment. So please don't open the cover. If maintenance is needed,please ask the professional for repair or return to the factory.

No response

Make sure that the AC cord is completely inserted in the socket with electricity. Try to use other equipment to test the AC power, like the lamp. Check whether the power switch at the front panel is on or not. If yes, then the amplifier is in need of maintenance.

Amplifier loses voice

If the amplifier over loads too much, fans runs in full speed and increasing temperature will automatically reduces the circuitry and volume so as to prevent mute error caused by overheat. After the input signal decrease appropriately, amplifier will return to normal gain in 1-2 minutes. The protect light in the front panel turns off the maintenance is required.

input of channel 2 seems of no avail.

Check whether the mode switch at the rear panel is at the stereo position. With parallel and bridge, input of channel 2 is of no avail.

Sensitivity for both channels is inconsistent

Make sure whether the setting of volume controller is consistent or not.(suggestion:turn the volume to 0 dB at the normal operation.) Make sure whether the impedance of output speaker is consistent or not.

Amplifier sound is distorted

If the red CLIP LED is flashing, that means the amplifier works beyond the normal rated power. Clip circuit will appropriately reduce the volume to avoid a serious overload, but if the input signal continues to increase, limiter may be crossed, resulting in increase distortion. If the speaker or the speaker cable suffers short circuit or malfunction, and the loading is below the normal level, the amplifier will get distortion or no sound, and the red clip LED light will flicker more, or the protect LED light will be on. The other speakers or cable should be used for inspection.

If impedance of each channel is less than 2 ohm, connecting too much speakers will be very easy to get the amplifier overload and burnt.

If the sound is distorted or not clear, but the red CLIP LED does not flicker, thus there is no distortion within the amplifier. Speaker may be damaged or input signal gets distortion.

- 1.Use other equipment to check the whether the speaker is in good condition or not.
- 2.If the amplifier's gain control sets over low, it may lead to input over load and over-loaded operation of input source. Thus reduce the volume until the distortion disappears, and raise the amplifier gain to idea level.
Generally, it is better to set the gain at the max level(0dB)or close to max level.
- 3.Check all input connection. Don't connect two different sound source with the same channel. Suggest using mixer to mix the sound resource.

No sound, only with green "OK" LED lighting.

Confirm if the gain control is turned on. Confirm if both ends of the input cable is installed correctly. Confirm if to check or connect other amplifier to present sound source to check.

No sound but signal LED with slight light states that the amplifier has signal output,so sound shall be heard if connect the speaker. Use other to check the connection of speaker.

No sound with TEMP light on

When opening or closing, the amplifier is in temporary silence so as to avoiding acoustical shock. If amplifier is with serious over heat and in silence as well, keep the amplifier as it is until it turns cool. The fans will run in full speed, but the sound will be recovered in a minute. If the amplifier touches hot, and the fans don't work, maintenance for amplifier is required.

Amplifier drones

Balanced XLR cable is more suitable for long distance operation. If the unbalanced connection(signal-core cable) is adopted, drone may be a problem since generally the signal-core leads in interference.

According to the different connecting type, drone may appear earlier in the signal chain. If the total power is not too large, it will benefit a lot to make all plug in the same AC jumper.

Finally, moderate drone sometimes can be reduced throng decreasing amplifier gain and raising high source gain for compensation. But the sound source must be guaranteed offering large enough sound so as not to cause over load distortion. If the drone isn't reduced, perhaps it is from sound source.

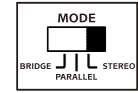
Below are the connections when power amplifier needs service:

- 1.Amplifier smoked or smelled burning.
- 2.Cabinet has severe indentation and deformation.
- 3.Amplifier are dipped into the liquid.
- 4.Internal components loosen
- 5.The circuit breaker on the rear panel skips out when current increases.

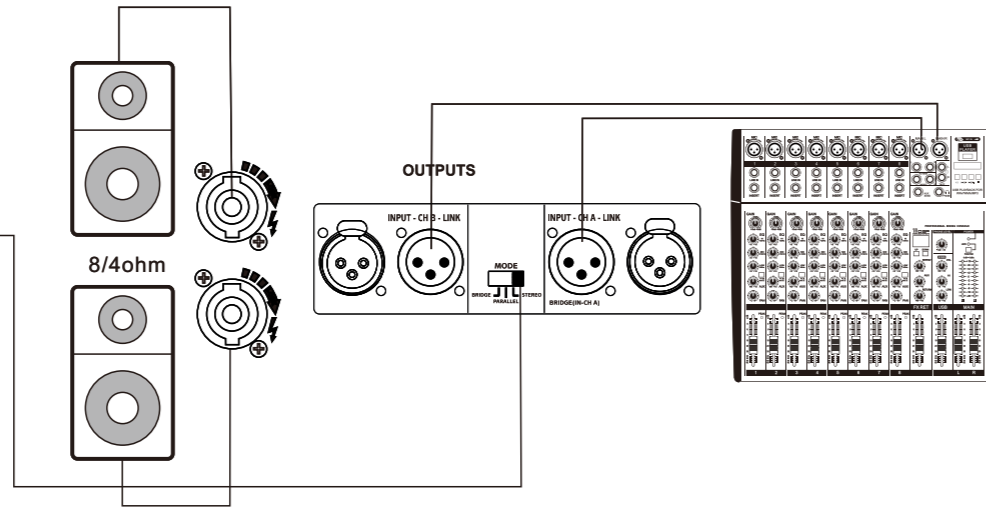
SYSTEM CONNECTION INTRODUCTION

Stereo mode
move mode switch to stereo position

STEREO

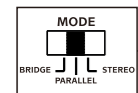


Respectively connect the left & right signal source with CH1 and CH2.
The output terminals respectively connect with a speaker.

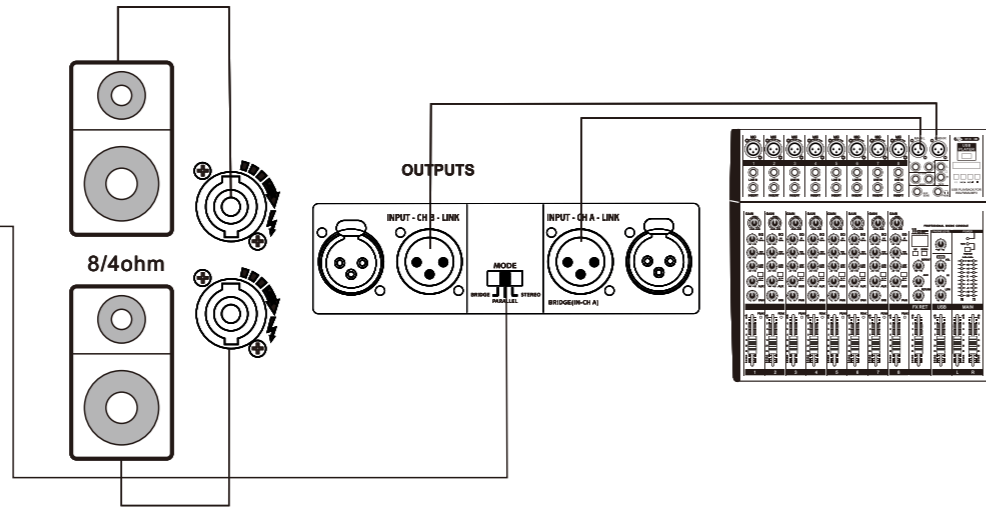


Parallel mode
Move the mode switch to parallel position.

PARALLEL

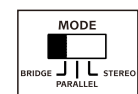


The output terminal of each channel
Respectively connect speaker
The output volume of each channel is controlled by the volume knob at the front panel.

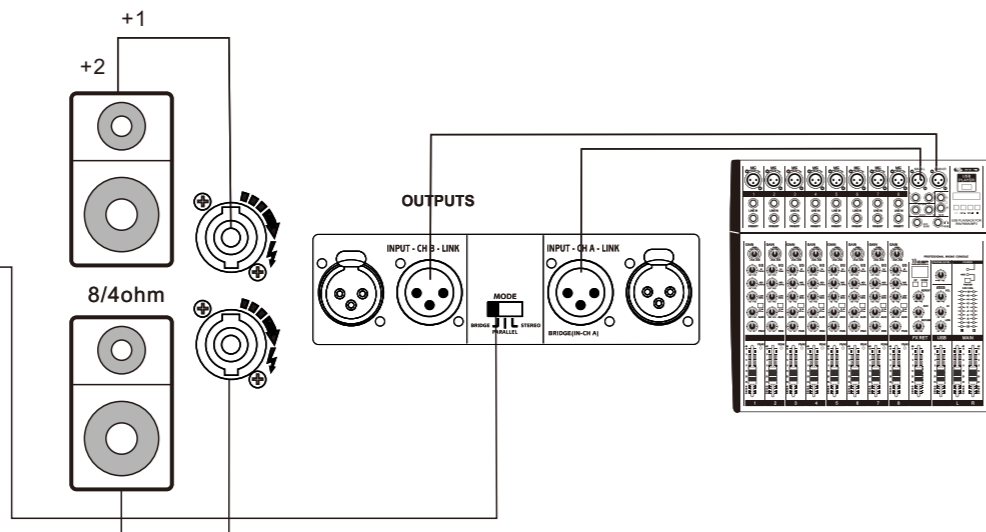


Bridge mode
Move the mode switch to bridge position.

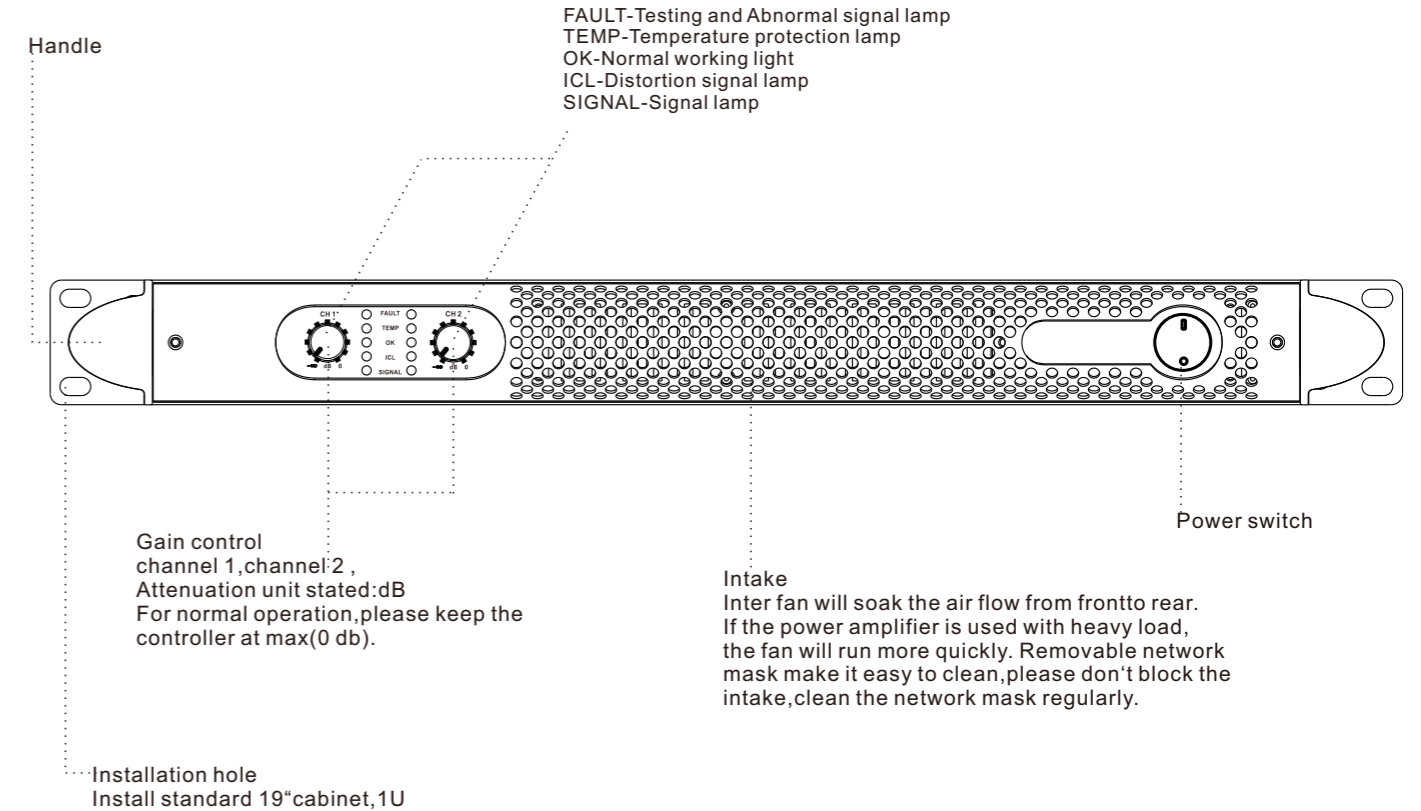
BRIDGE



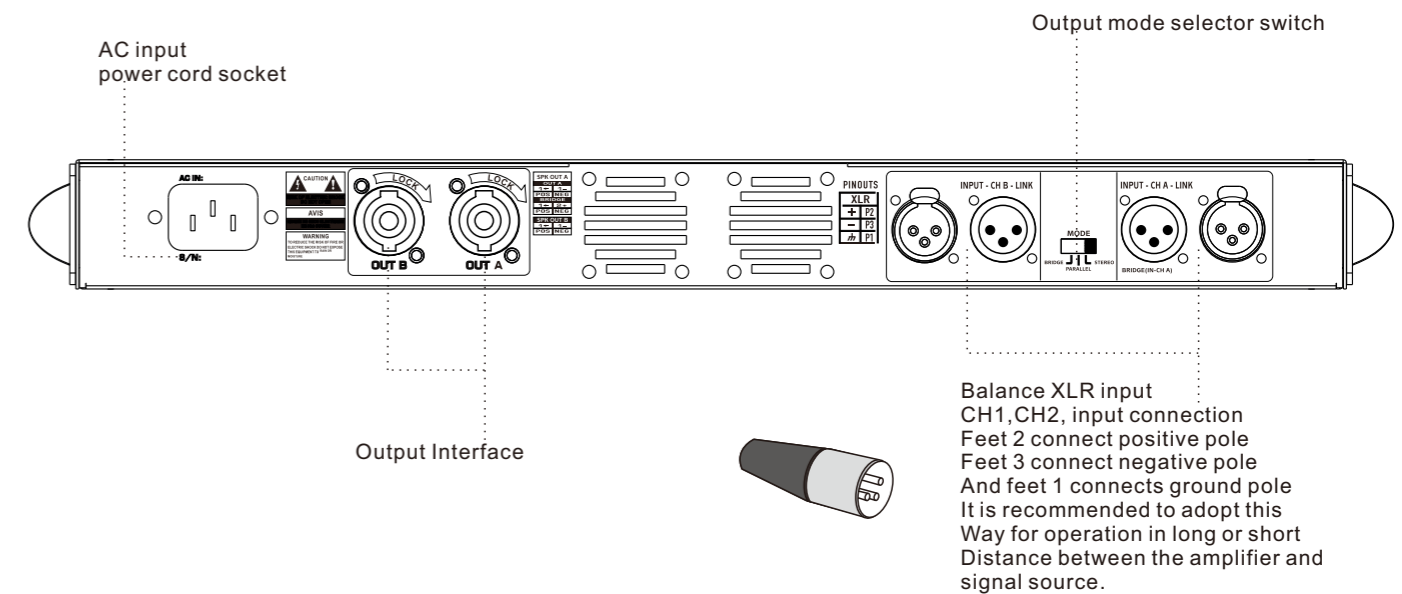
Connect the positive terminal of both channels to speakers.
The output volume is controlled by CH1/CH3 volume knob at the front panel.
SPEAKON caron socket or terminal
Connection mode:+1+2.



FUNCTION INTRODUCTION OF FRONT PANEL



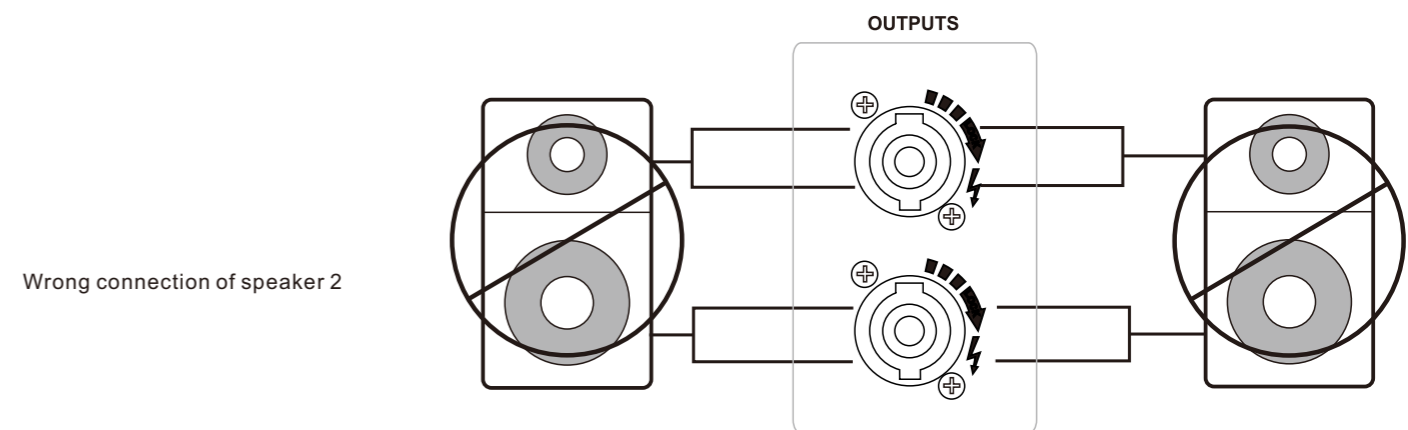
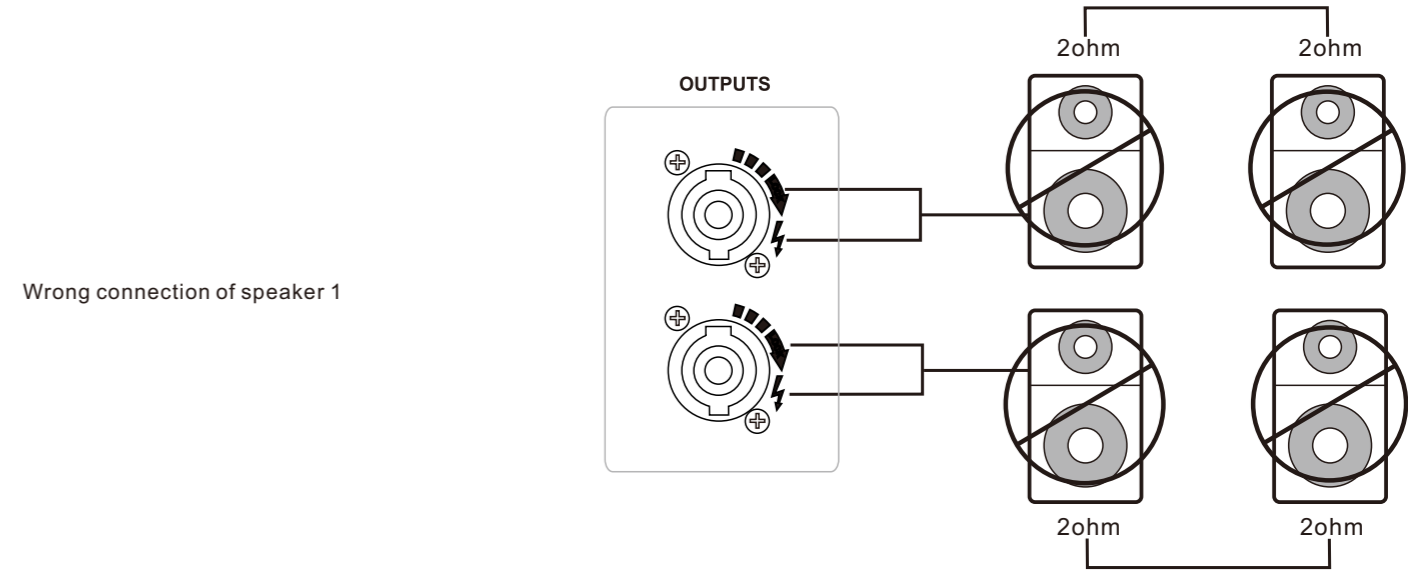
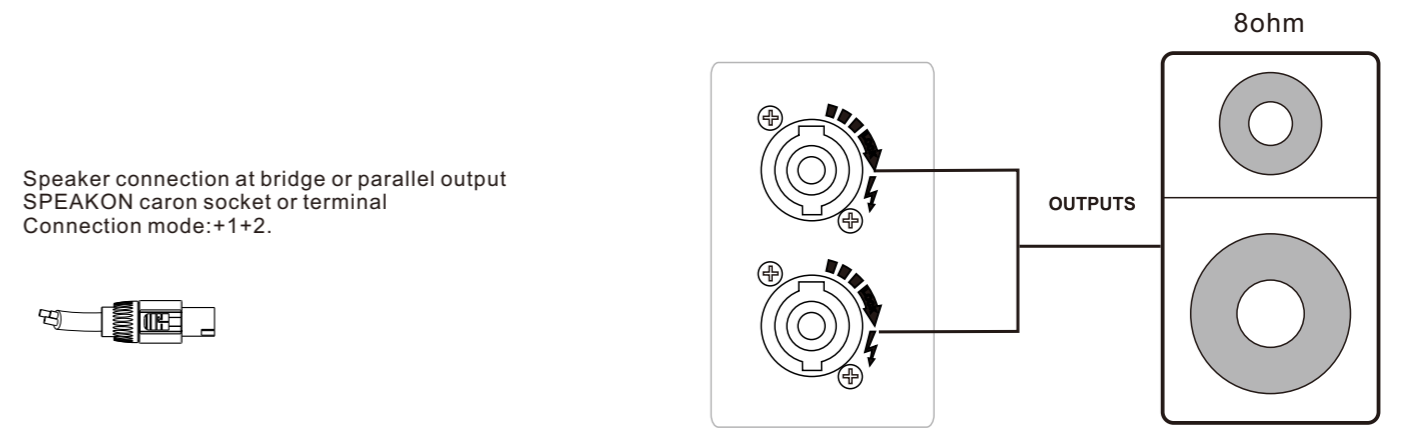
BACK PANEL FUNCTION INTRODUCTION



Model	Q3	Q5	Q7
8 ohm stereo power**	300Wx2	500Wx2	700Wx2
4 ohm stereo power**	450Wx2	750Wx2	1050Wx2
2 ohm stereo power**	600Wx2	1000Wx2	1400Wx2
8 ohm bridge power**	900W	1500W	2100W
4 ohm bridge power**	1200W	2000W	2800W
Other specification			
Frequency Response	20Hz-20KHz±0.3dB		
THD+N	<0.03%@8Ω 1KHz		
S/N Ratio	>95dB		
Slew Ratio	40V/μS		
Damping Factor	>500		
Crosstalk	>70dB@8Ω 1KHz		
Input impedance(balance/unbalance)	10KΩ/20KΩ		
Voltage gain(sensitivity:8ohm)	38dB		
Output Circuitry	Class D		
Cooling	Air flow from front to rear		
Protection	Soft start,DC, short circuit,over load,Clip limit,over heat,progressive volume		
Indicator			
Front panel	Front panel indicator:signal,clip,protect,power indicator,bridge,parallel power switch,volume control knob		
Rear panel	Stereo / parallel / bridge switch,input sensitivity switch,low pass filter,high pass filter, grounding switch		
Dimension/weight			
Product Dimensions (L*W*H)	483*382*45(1U)		
Packing Dimensions (L*W*H)	570*453*74		
G.W(±2KG)	9KG	9.5KG	10KG
Power cord	removable american 13A AC110V/60HZ.±10% AC120V/60HZ.±10%		

Remark:

1. The power is tested under the condition of 40ms burst, 1khz sine wave and 1% THD.
2. Other data is tested under CE / ROSH standard.
3. The power test marked with can't be used the power sine wave signal directly to test, or the DC insurance and other components may be broken.
4. The final specification is subject to the user manual.



Don't connect the output terminals of both channels with the same speaker!