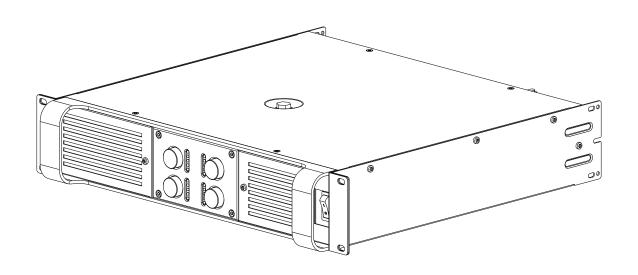


# 4600 四通道专业功率放大器 User's Manual 用户使用手册







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- 1. 阅读这些规定。
- 2. 保存好这本使用手册。
- 3. 注意所有警告。
- 4. 遵守这些规定。
- 5. 严禁在设备周围喷洒液体。请勿在产品上方放置液体容器,如花瓶等。 可使用干布及风枪进行清洁。
- 6. 要注意不要形成热风循环。 按建议方法进行安装。
- 7. 不要安装在热源附近,尽可能保证环境气温在35°C以下使用。
- 8. ②接地保护,该设备连接至电源插座时,应采取相应的接地保护措施。
- 9. 保护电线防止被踩踏或挤压,尤其要注意插头、电源插座及其连接设备处。

警告: 电源插头/设备耦合器作为电路切断装置应保持随时可用。

- 10. 必须按照以下开关次序来使用该产品:前级-功放(开)、功放(关)-前级。
- 11. 通电前必须确保供电电压符合该设备的要求。
- 12. 若输入信号并接超过三台功放,建议使用信号分配器,以确保输入信号不至失真。
- 13.不要将功放的某一个声道的输出接口接到另一个通道的输入接口。不要将功放的输出并联或串联到另一台功放的输出接口来使用。
- 14.设计系统配置功放的时候,功放的功率应比音箱在相同阻抗的标称功率大50%-100%,应小心使用桥接模式。
- 15. 在维修功放的时候,禁止在桥接状态下将示波器的探头连接到功放的输出端,以免损坏功放和示波器。
- 16. 建议: 1)由于输出到音箱的电流较大,建议使用质量有保证的NL4型音箱螺旋插头。
  - 2)多台功放使用时应计算好合适的配电,以确保达到合格的使用环境。



提醒用户本手册中有重要的信息。



小心触电,非拥有相关资质的人 员请勿擅自开盖维修。



本设备仅适用于非热带气候条件下安全使用。

## ▲警告

为避免着火或电击,不要将设备暴露在雨中或潮湿的环境中。

## 欢迎

非常感谢您购买蜚声演出器材制造有限公司产品。 4600系列产品,适合音乐,语音扩声使用,适宜使用 于小型演出,K房娱乐等场合使用,为了更好的发挥 产品的性能,请仔细阅读本手册。

## 拆包

请在拆开包装后,确认功放的外观没有在运输途中遭到损坏。确认功放的预设电压和你所在地的交流电压额定值匹配(详细信息见功放背板印刷)建议您保留包装箱,以便在需要退还产品时使用。

## 支持与服务

请直接联系蜚声演出器材制造有限公司在当地的分销商,以获得快速的售后服务和技术支持,如有技术问题需要直接与制造商联系,可以通过以下方式:

电子邮件: support@saechina.com

传真: +86-757-8568-8191

## 重要的安全注意事项

蜚声演出器材制造有限公司的产品设计已经考虑到安全使用的要求,并遵照相关的国家安全规定检验出厂产品,只有合格的产品才能出厂销售。但由于本户的部有危险高压和电量,因此要求用户必须认是阅读本手册的注意事项。如果产品跌落、凹入、浸湿或者里面有部件松动,则会大大增加人被电击的危险。当发生以上问题时,请马上切断电源,然后将本产品送还指定的经销商进行检查维修。

## 功率额定值

1% 削波时瓦数,双通道驱动功率(110V/120V)

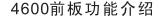
型号	8 欧姆**	4 欧姆**	2 欧姆**
4600	550	630	530

1% 削波时瓦数,双通道驱动功率 (220V/240V)

型号	8 欧姆**	4 欧姆**	2 欧姆**
4600	600	700	600







增益控制 通道CH1,CH2,CH3,CH4 衰减单位为dB。 对于正常使用,将控制器 保持在最大(0dB) 型号 4600功率额定值显 示在"技术指标"页上

品牌

> 功放开关机状态指示灯 ON表示开机状态 BRG PAR输出模式指示 PROT保护状态 SIG信号指示 CLIP削峰指示

机架安装孔 安装标准的19英寸机架,2U



电源开关在此拉手后 向上按开关打开功率放大器

通风口 内部风扇从此处吸入空气从后板排出 如果功放带重载使用,风扇会加速运转 可拆卸风网面罩便于滤尘网清理,请不 要堵塞通风孔,定期清理滤尘网

## 4600后板功能介绍

可恢复过流断路器220V/240V(15A) 110V/120V(20A)当功放瞬间过流或 功放内部有短路故障时自动切断 交流输入电源,故障排除后要人 工按下复位.



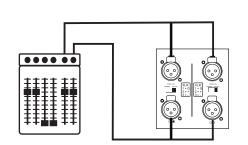


交流输入 电源线座

输出模式选择开关

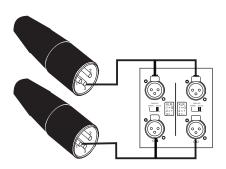


平衡XLR输入 CH1,CH2,CH3,CH4输入连接引脚2正极,引脚3负极,引脚1接屏蔽(接地). 建议用于放大器与信号源之间的长或短距离使用...... 风扇通风口 建议在使用过程中, 请不要堵塞出风口. 输入连接





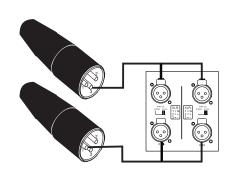
平衡接法 引脚2正极,引 脚3负极,引脚 1接屏蔽(接地)

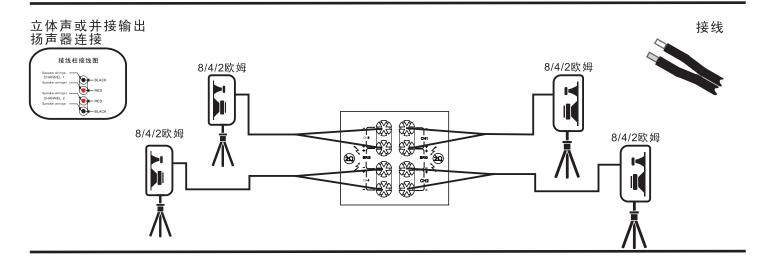


非平衡接法 引脚2正极,引脚1与引脚3接屏蔽(接地)。

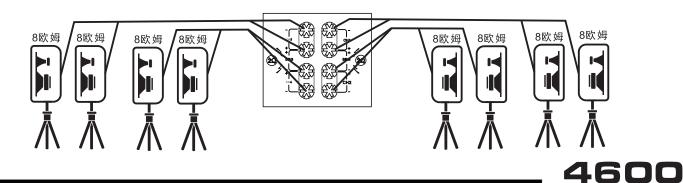
只能用于放大器与信号源之间的 短距离传输,且 在不同的应用环 境下可能会引入 噪声。

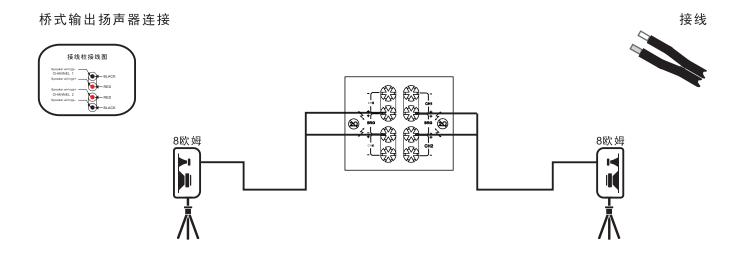
(不建议使用)



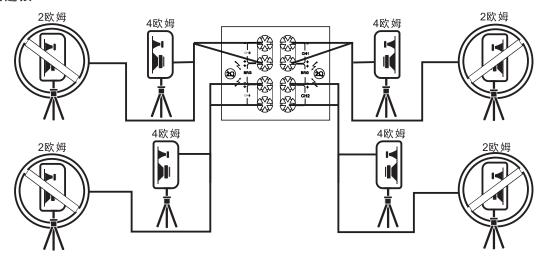


每一通道可连接两个8欧姆扬声器 立体声或并接输出扬声器连接

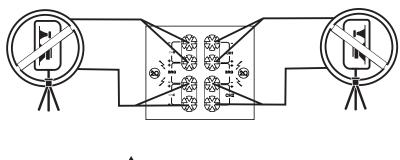




## 扬声器的错误连接1

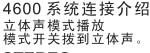


扬声器的错误连接2



A

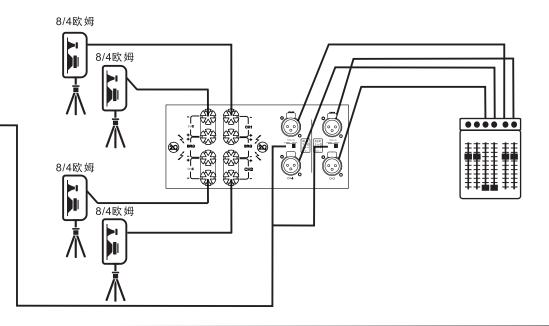
请不要将两通道的输 出都连接同一音箱!



## **STEREO**



将一个左右信号源分别连接到通道1和通道2。输出分别连接 接一个扬声器。

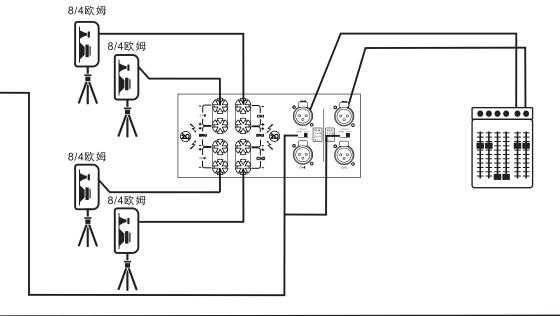


并接模式 模式开关拨到并接。

## **PARALLEL**



各通道输出连接 音箱。各通道输 出音量大小,由面 板音量旋钮控制!

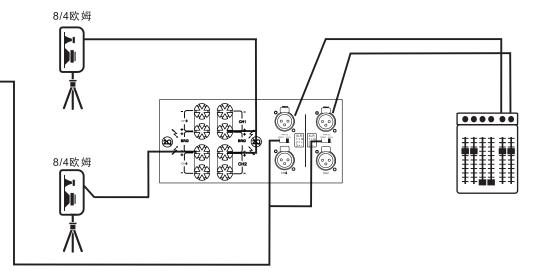


桥接模式 模式开关拨到桥接。

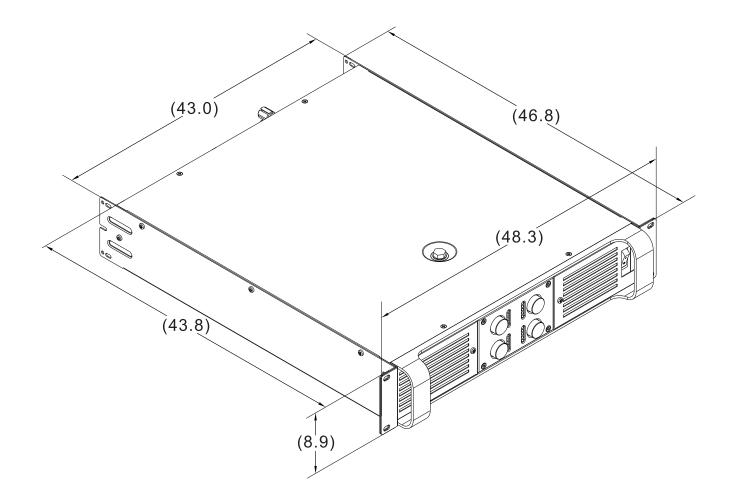
## **BRIDGE**



连接两通道的正极到 音箱。输出音量大小, 由面板CH1/CH3 音量旋钮控制!



# 机箱尺寸 (厘米)



型 목 4600

功率

550W 8 欧立体声功率\*\* 630W 4 欧立体声功率\*\* 530W 2 欧立体声功率\*\* 1550W 8 欧桥接功率\*\* 1500W 4 欧桥接功率\*\*

其他参数

20Hz-20KHz 频率响应 <0.05% 总谐波失真 >80dB 信噪比 >200 阻尼系数 >60dB 分离度 >13V/µs 转换速率 0.775V 输入灵敏度 10ΚΩ/20ΚΩ 输入阻抗(不平衡/平衡)

38dB 电压增益(8欧时) Class-I 功放拓扑结构

从前到后抽风 风路

保护功能 软启动、直流、短路、过载、失真限幅、过热、开机音量渐大

连接器

输入部分 平衡输入XLR母插座、平衡并接XLR公插座

输出部分 两位红黑接线柱

使用功能

面板指灯: 信号、削峰、保护、电源指示、桥接、并接 前面板功能

电源开关、音量控制旋钮

后面板功能 立体声\并接\桥接选择开关、输入灵敏度选择开关、高通开关、低通开关

尺寸/重量

产品外形尺寸(宽x 深x 高)(毫米) 483x492x89 (2U) 外包装尺寸(宽x 深x 高)(毫米) 620x585x170

总重(±2.5Kg) 25.5Kg

可拔插美标13A电源线 电源

AC110V/60Hz. ±10% AC120V/60Hz. ±10%

注意:

- . \*\*,此功率是使用40ms脉冲1kHz正弦波在1%总谐波失真下测量得出。 2、其他数据按: Q/SAE 1-2009标准测试得出。 3、带 "\*\*"的功率测试不可以直接用正弦波信号,有可能烧断机内直流保险或其它元件
- 4、SAE保留对以上参数的解释权,参数有所变动恕不再另行通告,最后参数以产品说明书为准。

型 목 4600

功率

600W 8 欧立体声功率\*\* 700W 4 欧立体声功率\*\* 600W 2 欧立体声功率\*\* 1600W 8 欧桥接功率\*\* 1500W 4 欧桥接功率\*\*

其他参数

20Hz-20KHz 频率响应 <0.05% 总谐波失真 >80dB 信噪比 >200 阻尼系数 >60dB 分离度 >13V/µs 转换速率 0.775V 输入灵敏度 10ΚΩ/20ΚΩ 输入阻抗(不平衡/平衡)

38dB 电压增益(8欧时) Class-I 功放拓扑结构

从前到后抽风 风路

保护功能 软启动、直流、短路、过载、失真限幅、过热、开机音量渐大

连接器

输入部分 平衡输入XLR母插座、平衡并接XLR公插座

输出部分 两位红黑接线柱

使用功能

面板指灯:信号、削峰、保护、电源指示、桥接、并接 前面板功能

电源开关、音量控制旋钮

后面板功能 立体声\并接\桥接选择开关、输入灵敏度选择开关、高通开关、低通开关

尺寸/重量

产品外形尺寸(宽x 深x 高)(毫米) 483x492x89 (2U) 外包装尺寸(宽x 深x 高)(毫米) 620x585x170

总重(±2.5Kg) 25.5Kg

可拔插美标13A电源线 电源

AC220V/50Hz. ±10% AC240V/50Hz. ±10%

注意:

. \*\*,此功率是使用40ms脉冲1kHz正弦波在1%总谐波失真下测量得出。 2、其他数据按: Q/SAE 1-2009标准测试得出。 3、带 "\*\*"的功率测试不可以直接用正弦波信号,有可能烧断机内直流保险或其它元件

4、SAE保留对以上参数的解释权,参数有所变动恕不再另行通告,最后参数以产品说明书为准。

## 通电后, 无任何反应

马上用万用表测量插座是否有电,在没有万用表时可用试电笔,但必须灯泡显示明亮,否则可怀疑电压不正常。若插座电压正常,供电无怀疑后,通电的功放仍然无任何反应,则可判断该功放有故障,需要专业人员进行进一步故障判断。

## 功放无声音输出

## 1、首先判断输入的信号是否正确

▲ 卡侬XLR的2/3脚有无反接的可能,地屏蔽线是否连接可靠。跟据输入线路的设计不同,可能在以上有些产品会表现正常,而有些则无声,请必须按照2+、3-的方式连接。不可以采用比对其他功放(包括同厂产品)的方式判断。

## 2、面板指示信号灯不亮

排除信号线问题后,若功放无输入信号反映,可判断功放 本身可能存在故障,需专业人员进行进一步故障判断。

## 3、输入信号正常但仍无声

正面的信号指示灯是否有闪动和根据音量大小而跳跃,若正常,而无声音输出,立即检查连接的NL4插头是否连接正确(±1,±2的连接问题)是否连接牢靠。若以上都无问题,仍然无声,可以尝试其它通道观察是否有相同的现象。若还是一样,请立即更换另一个NL4插头再作连接尝试。
▲ 跟据经验,可能有某些插头和该产品的插座接触不良导致的。

## 功放输出声音失真

1、失真表现为小声音已经很明显能听出声音有破裂声在排除信号本身和音箱的问题后,可判断为该功放可能存在故障。需专业人员进行进一步故障判断。

## 2、某个频段失真

首先判断音箱本身是否能承受该功放的输出功率,一般在95~105分贝时判断,再大的音量输出不作评论。本篇幅只讨论功放自身问题的排除。若是在中频段声音有轻微破裂尾音,并且在音量越小时表现为越明显,可判断为功放可能有交越失真,此失真声音比较容易和音箱本身高频激励器故障混淆,请做出判断前最好再连接其它判断为正常性能的音箱比较测试一下。

## 3、大声压时失真

在小声压时表现正常的情况下,首先判断音箱对所播放音乐信号的大动态时的承受能力。请在合适的音量下聆听判断,若功放削峰指示灯(CLIP)时常亮起,请再降低音量后判断。音箱和功放都有适用的范围,请在所能接受的范围内使用,在超大音量下失真则可能功放及音箱都已经进入饱和状况,请适当降低音量使用。

## 功放保护指示灯(PROT)点亮

此指示灯点亮表明功放进入保护状态。形势不妙! 1、可能是温度过高、有高于4K的连续正弦波输出超过 1秒、输出短路或接近短路等。以上情况可恢复的。并非 故障。等恢复后可继续使用。但过热会等待较长时间才 可恢复。并且出现过热时就必须检查产品的风扇是否运 作正常,空间温度是否过高等,须排除问题后才 可继续运作。若怀疑音箱短路,可以用万用表测量音 箱线两端直流电阻是否低于2欧甚至1欧。(因电阻较小, 为保证测试精度,请校准万用表后再测量)

### 2、此灯常亮,不可恢复

此类情况一般为功放本身故障导致,请联系维修人员跟进。

## 有交流声 (哼声或称之为电流声)

1、功放不插入任何信号就有交流声 请将功放搬离于系统电源地线隔离的位置继续测试,只 连接火零N/L,不连接地线。若输出还是有交流声,可判断 为产品本身有问题,请与维修人员联系。

## 2、连接系统后有交流声

此现象为系统各单元设备的地电位不同而产生的。多数出现在供电为三相电时,各设备连接不同的相线,甚至不同上庄电源,零线带电导致,并非功放故障。

解决办法超出本说明书叙述范围,这里附赠解决经验, 仅供参考,本厂不对此叙述负责!

A、梳理用电,尽可能使用同一配电箱的电源。

- B、在必须接地的情况下,将不同的接地点强迫接为一点,在此动作前,请判断地线电位必须为零,若地线本身带电,则表明地线可能与零线相连。请先解决此问题。 C、我们不建议浮地使用设备。

## 以下情况表示放大器需要维修

- 1. 产品冒烟或者发出严重烧焦味而不能使用时
- 2. 机箱严重凹陷或者变形
- 3. 产品浸入液体中
- 4. 内部部件松动
- 5. 加电时交流断路器自动跳开或保险管熔断

## 免责声明

制造商蜚声演出器材制造有限公司对于因疏忽或不当安装使用本产品而导致扬声器产品或其他设备所造成的任何 损坏不承担任何责任!

制造商蜚声演出器材制造有限公司对本产品提供2年有限质量保证。

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电话: 传真: 邮政编码:

528241 0757-8568-8191 0757-8560-8331

电子邮件: 品牌网址: 制造商网址:

support@saechina.com www.soundstandard.com www.saeaudio.com

## 产品物质拆分表

为满足中国《电子信息产品污染控制管理办法》(信息产业部第39号令)的相关规定和 要求,现对产品中有害物质,按部件分类,声明如下:

·····································		有毒有害物质或元素				
部件名称	铅(Pb)	汞(Hg)	镉(Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBED)
机箱	×	0	0	0	0	0
主板模块	×	0	0	0	×	×
电源模块	×	0	0	0	×	×
I/O板模块	×	0	0	0	×	×
控制模块	×	0	0	0	×	×
灯板	×	0	0	0	×	×

〇:表示该有害物质在该部件所有均质材料中的含量均在SJ/T11363-2006规定的限量要求下

表示该有害物质至少在该部件的某一均质材料中的含量超出SJ/T11363-2006规定的限量  $\times$  : 要求。

在中华人民共和国境内销售的电子信息产品上将贴上有"环保使用期限" (EPuP)符号。 圆圈中的数字代表产品的正常环保使用年限。

图示:



# Catalogue

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- 1.Read these instructions.
- 2.Keep this user manual.
- 3. Pay attention to all the notice.
- 4. Comply with these instructions.
- 5.It is forbidden to spray liquid around the equipment. Please do not place liquid container above the product, such as vases, etc.The dry cloth and air pressure gun can be used for cleaning.
- 6. Warning: Avoid the formation of hot air circulation. Installation as suggested way.
- 7.Do not install near heat, make sure the application temperature is below 35°C.
- 8. Ground protection measures should be taken when the equipment is connected to the power outlet.
- 9. Protect the wire from being trampled or extruded, especially the plug, socket and the connector of it. Warning: As a circuit to cut off the device, the power plug or equipment coupler should be kept available at any time.
- 10.Make sure the startup and turnoff procedure: Pre-amp Amplifier (Power on) Power amplifier (off) -Pre-amp.
- 11. Power supply voltage must be in accord with the requirement of the equipment before use it.
- 12. Signal distributor is advised to be used when the input signal paralleled with more than 3 amplifiers, to ensure the input signal without distortion.
- 13.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.
- 14. When equip the audio equipments, the power of the power amplifier should be 50%-100% more than the loudspeaker power. Be careful when in bridged mode.
- 15. When maintenance, don't connect the probe of the oscilloscope to the output interface under bridge mode in case of damaging the power amplifier and the oscilloscope.
- 16.Suggestions:
  - 1) Good quality NL4 Speakers screw plug is advised.
  - 2) Power distribution system should ensure the safety of applications of more than one amplifier.



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



The lightning bolt triangle is used to alert the user to the risk of electric shock.

Non-professional qualified technicians do not open TOP OR BOTTOM COVERS for maintenance



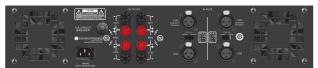
This equipment is only to use safely in the not tropical climate conditions

## **MARNING**

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

## Welcome

Thank you for purchasing our products. The 4600 series professional power amplifier, simple to operate, stable, high performance-cost rate. Special design for KARAOK ROOM, sound reinforcement, small performances, lectures and other places. Please take the time to study this manual so that you can obtain the best possible service from your amplifier.



## 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 it on the rear panel of the power amplifier). We suggest you retain the package in case you need them for further transportation.

## **Support and Service**

Please contact the local distributors of SAE directly in order to gain quick after service. If there is any technique problem, please contact the manufacturer by:

Email: support@saechina.com Fax: +86-757-8568-8191

## Important precaution

The design of SAE 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 chance 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.

## **Rated Power**

Output power @ 1% clip, double channels driving. (110V/120V)

Model	8 ohm**	4 ohm**	2 ohm**	
4600	550	630	530	

Output power @ 1% clip, double channels driving. (220V/240V)

Model	8 ohm**	4 ohm**	2 ohm**
4600	600	700	600

## 4600 function introduction of front panel

Model
The rated power of 4600

states in the "specification".

Gain control

channel 1, channel 2, channel 3, channel 4

attenuation unit stated : dB

For normal operation, please keep the controller at max (0 db).

LOGO

Handle



Indicators

BRG/ PAR- output operation mode indication

ON-open situation

PROT- protect situation

SIG- signal indication

CLIP- clip indication



Installation hole Install standard 19" cabinet, 2U

The power switch is at the back of the handle

Intake

Inter fan will soak the air flow from frontto rear. If the power amplifier is used with heavy load, the fan will run more quickly. Removable network mask make it easy to clean, please don't block the intake, clean the network mask regularly.

## 4600 function introduction of rear panel

Restorable over-current breaker 220V/240V(15A) or 110V/120V(20A)

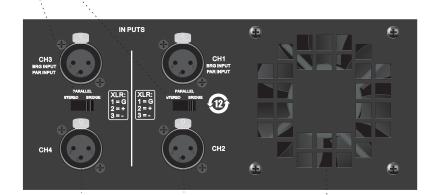
When there is sudden over current or short Circuit in the amplifier, it will automatically Cut the ac input power. Please press it again After the malfunction is settled.

Case 1 for speaker connection Binding posts Naked cable or terminal Insert into the side hole



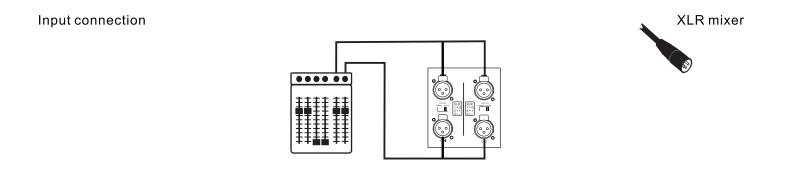
Ac input power cord socket,

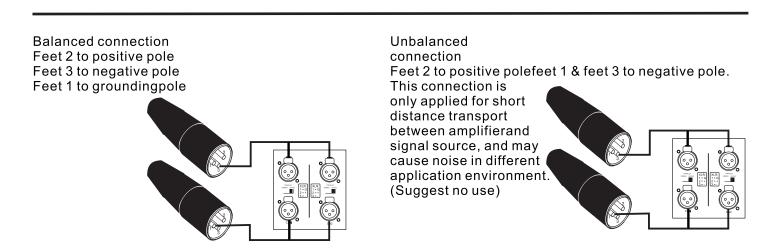
Output mode selector switch --

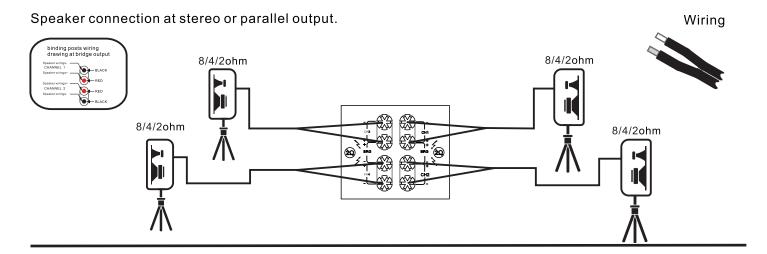


Balance XLR input
CH1,CH2,CH3,CH4 Input connection
Feet 2 connects positive pole,
Feet 3 connects negative pole,
And feet1 connects ground pole
It is recommended to adopt this
Way for operation in long or short
Distance between the amplifier and signal source.

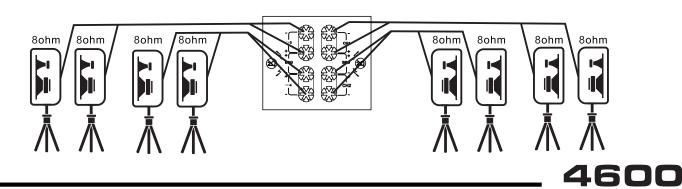
Vent
It is not recommended to block
The vent during operation.

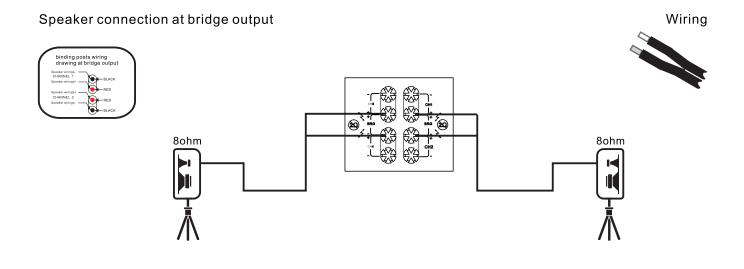




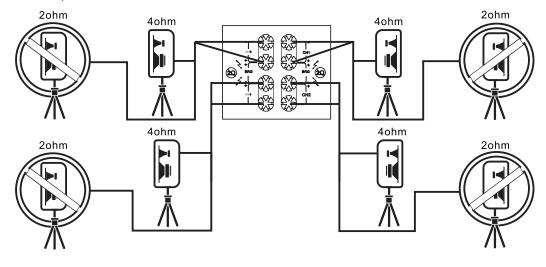


Each channel can respectively connect two 80hm speakers. speaker connection at stereo or parallel output.

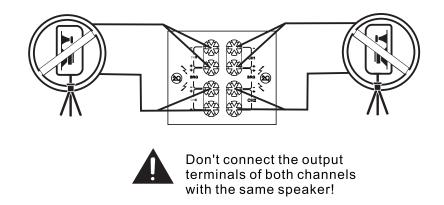




## Wrong connection of speaker 1



## Wrong connection of speaker 2



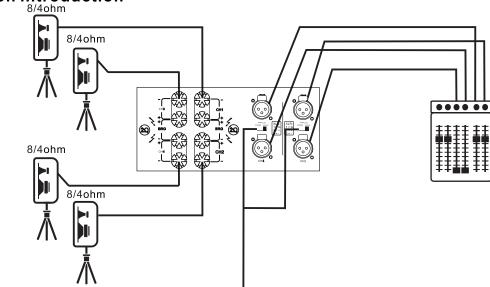


Stereo mode Move mode switch to stereo position.

## **STEREO**



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



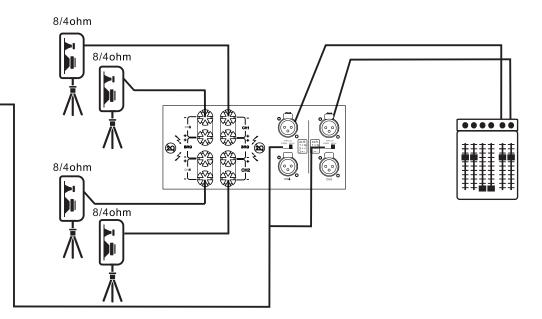
Parallel mode Move the mode switch to parallel position.

## **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.

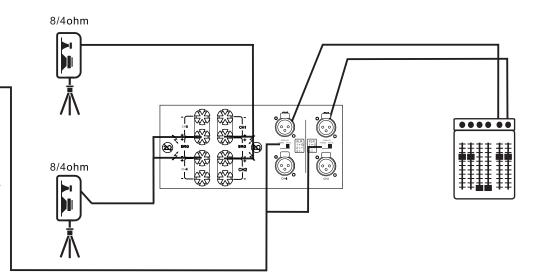


Bridge mode Move the mode switch to bridge position.

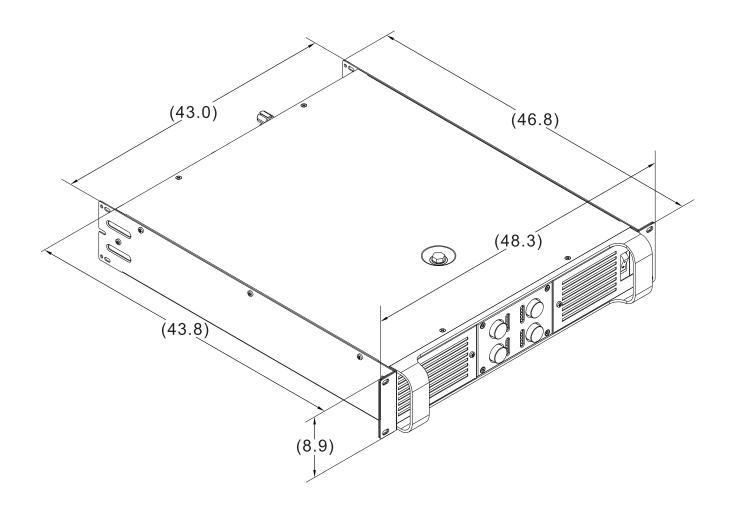
## **BRIDGE**



Connect the positive terminal of both channels to speakers. The output volume is controlled by CH1/CH3 volume knob at the front panel.



# Cabinet dimension (cm)



4600 Model

Power

550W 8ohm stereo power\*\* 630W 4ohm stereo power\*\* 2ohm stereo power\*\* 530W 8ohm bridge power\*\* 1550W 4ohm bridge power\*\* 1500W

## Other specification

Frequency response 20Hz-20KHz THD+N <0.05% S/N rate >80dB >200 **Damping Factor** Crosstalk >60dB Slew Rate >13V/us 0.775V Input Sensitivity

Input Impedance(Balance/Unbalance)  $10K\Omega/20K\Omega$ 38dB Voltage gain (sensitivity:8ohm)

Output circuitry Class-I

Cooling Air flow from front to rear

Protection Soft start, DC, short circuit, over load, clip limit, over heat, progressive

volume

Connector

XLR-F,TRS、XLR-F,XLR-M Input Output Two red and black Binding posts

Indictor

Front panel Front panel indicator: signal, clip, protect, power indicator, bridge, parallel

Power switch, volume control knob

Stereo/parallel/bridge switch, input sensitivity switch, low pass filter, Rear panel

high pass filter, grounding switch

## Dimension/weight

Product dimensions (W x D x H)(mm) 483x492x89 (2U) Packing dimensions (W x D x H)(mm) 620x585x170

 $G.W(\pm 2.5Kg)$ 25.5Kg

Removable american13A Power cord:

Power cord:

AC110V/60Hz. ± 10 % AC120V/60Hz. ± 10 %

- 1、\*\*The power is tested under the condition of 40ms burst, 1kHz sine wave and 1% THD.
- The power is tested under Q/SAE 1-2009 standard.
   Other data is tested under Q/SAE 1-2009 standard.
   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. SAE reserves the right to make changes in specification without prior notice. The final specification is subject to the user manual.

4600 Model

Power

600W 8ohm stereo power\*\* 700W 4ohm stereo power\*\* 2ohm stereo power\*\* 600W 8ohm bridge power\*\* 1600W 4ohm bridge power\*\* 1500W

## Other specification

Frequency response 20Hz-20KHz THD+N <0.05% S/N rate >80dB >200 **Damping Factor** Crosstalk >60dB Slew Rate >13V/us 0.775V

Input Impedance(Balance/Unbalance)  $10K\Omega/20K\Omega$ 38dB

Voltage gain (sensitivity:8ohm) Output circuitry Class-I

Cooling Air flow from front to rear

Protection Soft start, DC, short circuit, over load, clip limit, over heat, progressive

volume

Connector

Input Sensitivity

XLR-F,TRS、XLR-F,XLR-M Input Output Two red and black Binding posts

Indictor

Front panel Front panel indicator: signal, clip, protect, power indicator, bridge, parallel

Power switch, volume control knob

Stereo/parallel/bridge switch, input sensitivity switch, low pass filter, Rear panel

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 $G.W(\pm 2.5Kg)$ 25.5Kg

Removable american13A Power cord:

Power cord:

AC220V/50Hz. ± 10 % AC240V/50Hz. ± 10 %

- 1、\*\*The power is tested under the condition of 40ms burst, 1kHz sine wave and 1% THD.
- The power is tested under Q/SAE 1-2009 standard.
   Other data is tested under Q/SAE 1-2009 standard.
   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. SAE reserves the right to make changes in specification without prior notice. The final specification is subject to the user manual.

## After powered without any response

Measure the outlet with a multimeter to check if there is power available and when no multimeter, you can have a test pencil. If the power supply is normal and the amplifier still no response when powered then there is something wrong with the amplifier, need professional person to check it.

## No signal output

1.Frist check if the signal input is right.

♠ Check the connect of XLR, if the 2 and 3 reverted or the ground is reliable. Different circuitry design will have different connect way of the XLR, please follow the 2+、3- to soldering. It can not be judged by comparing with other amplifiers (including other amplifiers in the same factory).

2.The signal light don't lights up

If all the signal input is fine and the signal light don't lights up then may the amplifier has failure, you need to ask the professional person to check it.

3. Signal input normal but no sound

The signal light will flash with the change of input Volume, but now sound out, then you can check the connect of speakon if it is connect good and the wires are connect right(some times the problem of the wires connect, check its $\pm 1$  and  $\pm 2$  connect), after the check above if still no sound out, please change a speaker cable and check again. Because some times also caused by the bad quality of the Speakon connector problem of the amplifier.

Through experiences, it may caused by the bad connection of some plugs and the socket.

## **Output sound distortion**

1.After check the signal and loudspeaker they are fine and still can hear distortion when small sound, then may the amplifier has failure, need professional person to check it.

2. Some frequency band has distortion

First, check if the loudspeaker already overload, normally judge it in 95~105dB for higher SPL we don't comment here. Here we just think about the failure recovery of the amplifier. If in the middle have some rupture sound and more smaller volume more obvious, then it should be crossover distortion of the amplifier and this kind of distortion is easy to confuse with the failure of loudspeaker itself. If the amplifier have problem then you should send back to the manufacture for repair.

3.Distortion is High SPL

If the sound is normal when small volume and then you need to check the limit SPL of the loudspeaker. You can listen it in suitable volume and if clip light works, then you need reduce the output. Both loudspeaker and amplifier have limit, you should use them in their limit if in very high SPL they have distortion you should take care of them and reduce the output to the right position.

## The protection light blinks

When the PROT light works, the amplifier into the protection mode.

1.Maybe the temperature is too high or output short or near short and they are not failure they can recovery after you can use it normally. But over heat will take more time to recovery. Also when over heat happened you should check the fan and the temperature of the install environment, if does you should solve the problem then can use amplifier. If you think the speaker was short, you can with a multimeter to check if the resist is lower than 2 ohm or 1 ohm with DC(Please calibrate the multimeter to measure for accuracy because of the small resistance).

2. If the PROT light always light up then it should be the problem of amplifier, you should send it back to professional person for repair.

## Hum in the system

1. Hum exists even when there is no signal Please keep the amplifier away from earth wire of power supply cables, just connect the fire wire and zero wire, no ground wire. If the hum is still existing, it can be judged that there are some problems in the amplifier. Please get in touch with professionals.

2. Hum exists when the system is completely connected This is caused by the different ground voltages in difference devices in the system, mainly happens when the power supply is under three-phase distribution condition, each device is connected to different phase. This is not caused by amplifier.

Solution experiences, just for reference

- A. Combing the electricity, the power distribution box using the same one for all if possible.
- B. Make sure the grounding wire potential is zero and force the different grounding wire to the same level, if the grounding wire Itself charged, indicates that the wire may be connected with the zero line. Please solve this problem.
- C. If unavailable above, then only to disconnect the ground wires of all devices, which helps to reduce the AC. But this is not meet the safe use of electricity, users must know what will happen if to do in this way. We do not recommend the floating use.

# The amplifier is required maintenance in the condition below:

- 1. If the amplifier smokes or smells burning.
- 2. If the cabinet has severe indentation and deformation
- 3. If the amplifier are dipped into the water
- 4. If the internal components loosen
- 5. If AC breaker skips out when current increases.

## Disclaimer

SAE Audio Co., Ltd. is not responsible for any damage of loudspeakers or other equipments caused by negligence or improper installation.

SAE Audio Co., Ltd. offers 2 years warranty for this product.

SAE Audio Co., Ltd. guarantees that this product has no material / technical defect during two years from the sales date; if the damage caused under the normal installation and operation, SAE Audio Co., Ltd. shall change the defective component and repair faulty product for free according to this Quality Guarantee Agreement. However, users must send the product to our factory or any authorized maintenance points or designated distributors, affording the re-paid freight, together with buying proof (including customer copy of product warranty card and payment receipt or invoice copy).

As per this Quality Guarantee Agreement, the returned product must be judged having manufacturing defect itself after our inspection. This agreement doesn't apply for products with damage caused by any wrong operation negligence, accident, inappropriate installation or products with no date code and sequence no or damaged ones beyond recognition.

SAE Audio Co., Ltd. shall not afford responsibility for any damage caused by accident or indirect factors. The agreement authorized you specific legal rights.

## Address:

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support@saechina.com

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Website:

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