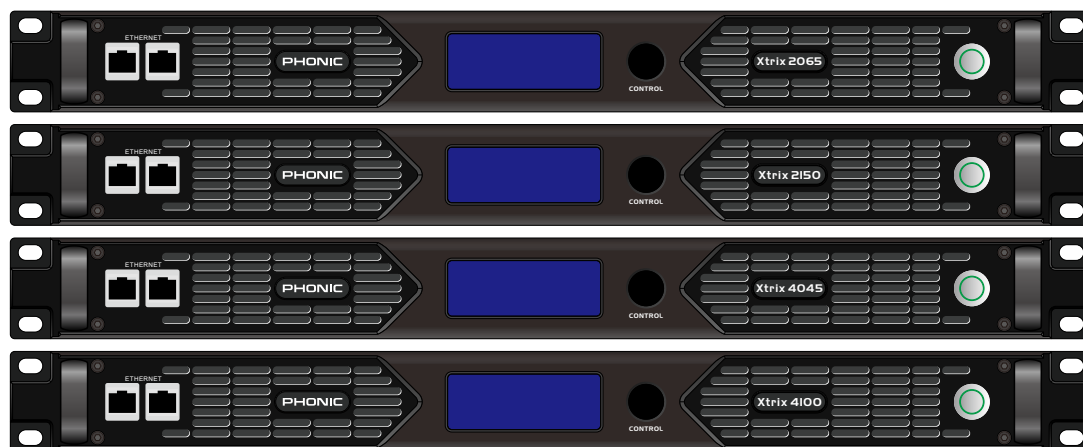


PHONIC



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English

简体中文

Xtrix 2065

Xtrix 2150

Xtrix 4045

Xtrix 4100

User's Manual

使用手册

Xtrix 2065

Xtrix 2150

Xtrix 4045

Xtrix 4100

Professional Digital Power Amplifier

专业数字功率放大器



ENGLISH |

简体中文 ||

English

简体中文

User's Manual

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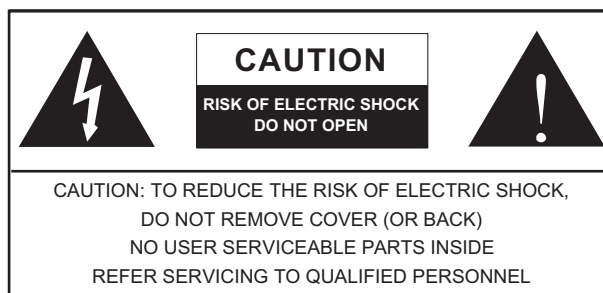
Phonic preserves the right to improve or alter any information within this document without prior notice

IMPORTANT SAFETY INSTRUCTIONS

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus. The MAINS plug is used as the disconnect device, the disconnect device shall remain readily operable.

Warning: the user shall not place this apparatus in the confined area during the operation so that the mains switch can be easily accessible.

1. Read these instructions before operating this apparatus.
2. Keep these instructions for future reference.
3. Heed all warnings to ensure safe operation.
4. Follow all instructions provided in this document.
5. Do not use this apparatus near water or in locations where condensation may occur.
6. Clean only with dry cloth. Do not use aerosol or liquid cleaners. Unplug this apparatus before cleaning.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with 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 replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



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.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

CAUTION: Use of controls or adjustments or performance of procedures other than those specified may result in hazardous radiation exposure.



It is suitable for use in areas with an altitude of 5000m or less



Suitable for use in tropical climates

INTRODUCTION

The Xtrix series digital power amplifiers feature constant resistance and constant voltage output, an integrated DSP, an integrated switch, support for the UDP protocol, and the ability to monitor the power amplifier through an ethernet network cable.

The Xtrix series power amplifiers utilize the company's proprietary multi-loop regulation technology and boast excellent technical specifications, particularly the power amplification technology optimized for low impedance and high current, which results in a power amplifier with a greater than 90% efficiency and excellent stability.

The switching power supply utilizes active PFC and soft switching technology.

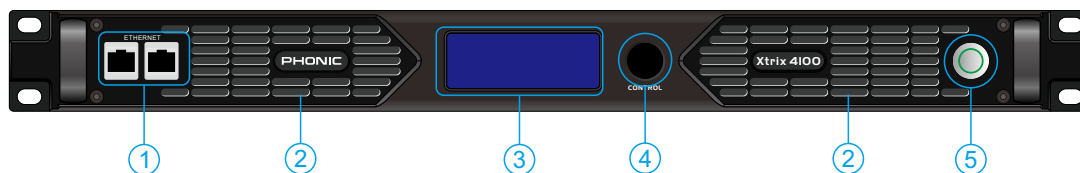
FEATURES

- The input delay of each channel is 30ms, the output delay is 20ms, and the step is 0.01ms;
- Audio input level matching $\pm 18\text{dB}$;
- 4x4 audio route mixing, mixing ratio $-80\text{dB} + 18\text{dB}$;
- 8-segment input parameter EQ, 5-segment output parameter EQ, high-low pass filter;
- Support FIR filters of order 512 and below;
- Volume, mute, phase adjustment, and mode selection;
- Output average value, peak limiter;
- Save / retrieve parameters between machines;
- Speaker parameter configuration;
- User / parameters / factory permission setting.

PREPARATION

1. Before turning on the power supply, be sure to adjust all the volume of the power amplifier to the minimum to prevent damage to the equipment or harsh noise caused by incorrect wiring. When turning on the volume, adjust it slowly until the effect is stable.
2. Please check the AC voltage before connecting the AC power supply.
3. When the current is overloaded, this series of power amplifiers can protect the circuit automatically. When a fuse blows, remove it from the fuse box and replace it with the specified model.

FRONT PANEL

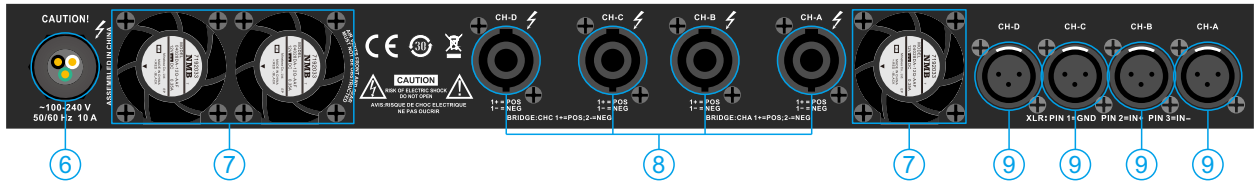


1. Ethernet interface: dual RJ45 network interface, built-in switch and support UDP protocol.
2. Cooling vent: the forced air flow from front to back passes through the dust screen.
3. LCD control panel: integrated LCD control panel with backlight.
4. Control knob: rotate to select DSP menu and press to confirm.
5. Power switch: used to turn the power supply on and off.

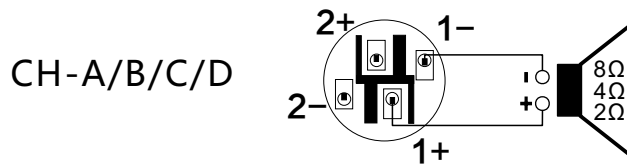
The power is turned on when the switch is pressed, and the light ring on the switch is always on.

Adjust all volume controls to the lowest setting before turning on the power to prevent damage to the machine caused by incorrect wiring.

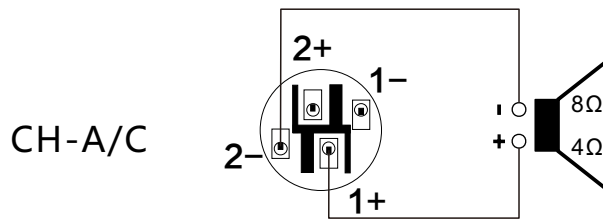
REAR PANEL



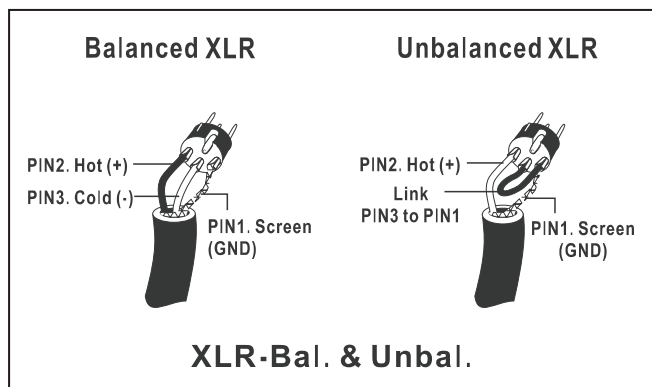
- 6. AC Power input: configure different specifications of power line depending on the amplifier's output power.
- 7. Fan: provide forced ventilation from front to back for cooling.
- 8. Output interface: speaker socket. In stereo or single channel mode, use the following method to connect the speaker to the socket:



In bridge mode, use the following method to connect the speaker to the socket:



- 9. Analog audio interface: balanced sound signal input plug. XLR input can be connected as follows:

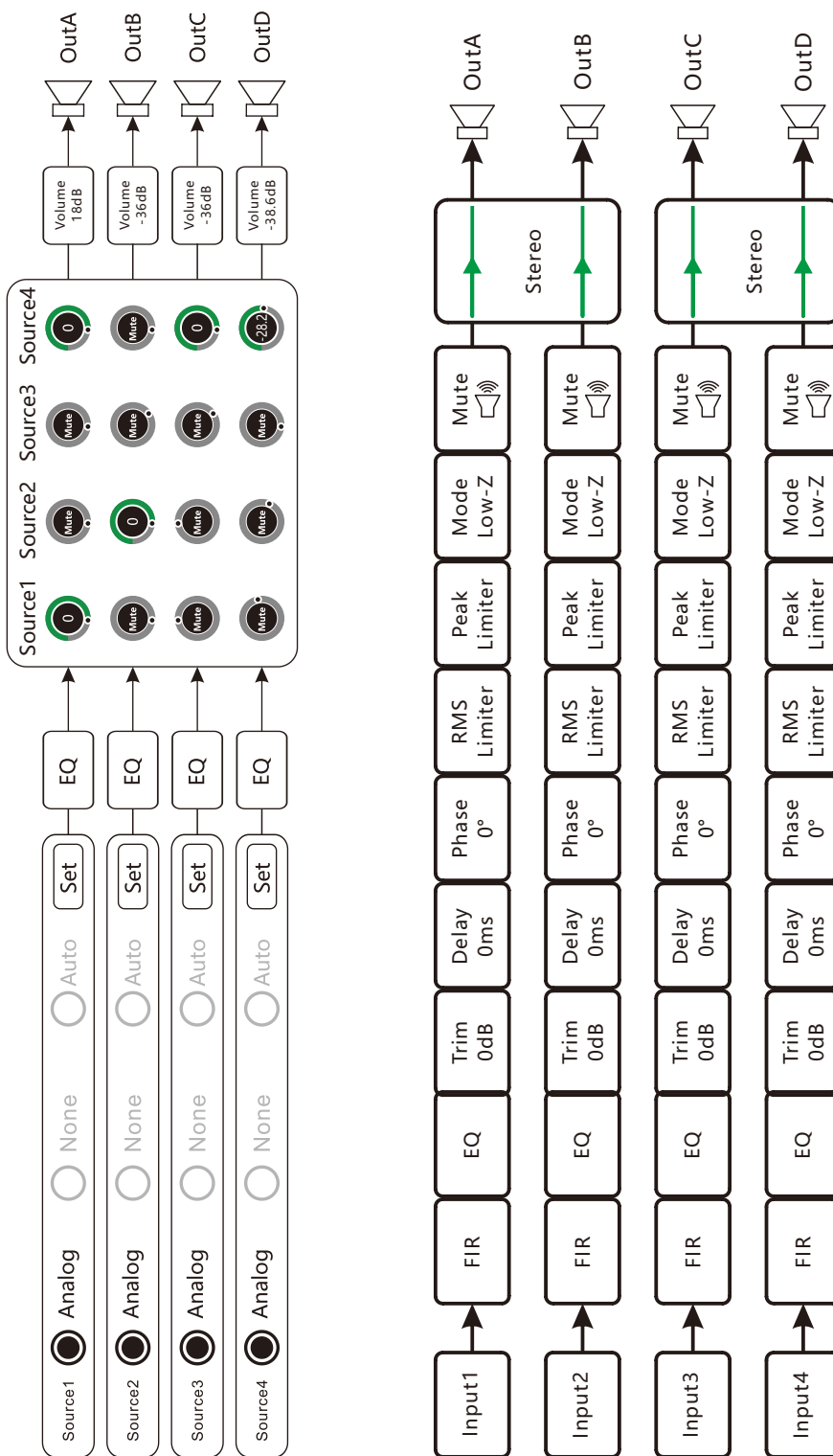


SPECIFICATIONS

	Xtrix 2150	Xtrix 4100	Xtrix 2065	Xtrix 4045
8Ω/Stereo	2X1500W	4X1000W	2X650W	4X450W
4Ω/Stereo	2X2550W	4X1700W	2X1100W	2X765W
2Ω/Stereo*	2X3580W	4X2990W	2X1880W	2X1300W
16Ω/Bridge	1X3000W	2X2000W	1X1300W	1X900W
8Ω/Bridge	1X5100W	2X3400W	1X2200W	1X1530W
4Ω/Bridge*	1X7140W	2X5780W	1X3740W	1X2600W
100VHi-Z	2X2500W	-	-	-
70VHi-Z	2X2400W	4X1700W	4X1100W	-
Output RMS voltage (Rated Power, 1kHz)	109.5V	89.4V	72.1V	60.0V
Maximum input level	8.7Vrms(+21dBu)(Default Gain)			
Gain(Rated Power, 1kHz)	23dB	21dB	19dB	18dB
Default Gain (Rated Power, 1kHz)	23dB~41dB	21dB~39dB	19dB~37dB	18dB~36dB
THD+N	Typical:0.05%(10% Rated Power, 1kHz, 8Ω)			
Crosstalk	≥90dB(20Hz-1kHz, below Rated Power, 8Ω)			
Frequency response	Typical:+0,-0.5dB(10% Rated Power, 20Hz-20kHz, 8Ω)			
Input impedance	20kΩ (Balance), 10kΩ (Unbalance)			
Damping factor	≥1000(8Ω, 20Hz-200Hz)			
SNR	≥105dB(Default Gain, A weighted, 20Hz-20kHz, 8Ω)			
Main power	100~240VAC±10%, 50/60Hz			
Protection	Protection: Under voltage, DC, Over temperature; Limiter: Over temperature, Over load, Short .			
Size(WxHxD)	483x45x465mm 19"x1.77"x18.3"	483x45x370mm 19"x1.77"x14.56"	483x45x370mm 19"x1.77"x14.56"	483x45x370mm 19"x1.77"x14.56"
Net weight	12kg/26.5lbs	9kg/19.9lbs	9kg/19.9lbs	9kg/19.9lbs

* This power is measured using 20ms pulse 1kHz sine wave at 1% total harmonic distortion.

DSP SIGNAL PROCESSING FLOW



Service and maintenance

For replacement parts, service and repair, please contact the phonic agent in your country. Phonic doesn't workThe user shall provide the maintenance manual and advise the user not to repair the machine without authorization, otherwise he will not be able to obtain any warranty service.You can log in [http://www .phonic. COM](http://www.phonic.COM) / where / find your nearest agent.

Guarantee

Phonic promises to provide perfect warranty service for each product. Depending on the region, the warranty period orThere is an extension. Since the date of original purchase, phonic has strictly followed the operation specifications of the operation manual,Provide at least 1-year warranty service for problems caused by product material and workmanship. P Honi C according to the warrantyExample: repair or replace defective products at your own choice. Please be sure to keep the purchase certificate properly in order to obtain warranty service. For applications without RM a number (return authorization), phonic will not handle return or repair services. guaranteeThe service is only applicable to problems arising from normal use. Users should use the product correctly in strict accordance with the operating instructions, Any problems caused by wanton damage, unauthorized maintenance, accidents, wrong use or human negligence are not allowedWithin the scope of warranty acceptance. In addition, warranty repair only applies to valid purchases at authorized agents. if needFor all warranty information, please log in [http://www .phonic. com/warranty/](http://www.phonic.com/warranty/) .

Customer service and technical support

Please visit [http://www .phonic. com/support/](http://www.phonic.com/support/) . From this website, you can get various common informationAnswer questions, technical guidance, Download product drivers, get return guidance and other useful lettersRest.

support@phonic.com
<http://www.phonic.com>

PHONIC

使用手册

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保留未经通知即可修改此文件中所含任何信息的权利。

English

简体中文

重要安全说明

1. 请在使用本机前，仔细阅读以下说明。
2. 请保留本使用手册，以便日后参考。
3. 为保障操作安全，请注意所有安全警告。
4. 请遵守本使用手册内所有的操作说明。
5. 请不要在靠近水的地方，或任何空气潮湿的地点操作本机。
6. 本机只能使用干燥布料擦拭，请勿使用喷雾式或液体清洁剂。清洁本机前请先将电源插头拔掉。
7. 请勿遮盖任何散热口。确实依照本使用手册来安装本机。
8. 请勿将本机安装在任何热源附件。例如：暖气、电暖气、炉灶或其它发热的装置(包括功率扩大机)
9. 请注意极性或接地式短板讨厌插头的安全目的。极性电源插头有宽窄两个宽扁金属插脚。接地式电源插头有两支宽扁金属插脚和第三支接地插脚。较宽的金属插脚(极性电源插头)或第三支接地插脚(接地式电源插头)是为安全要求而制定的。如果随机所附的插头与您的插座不符，请在更换不符的插座前，先咨询电工人员。
10. 请不要踩踏或挤压电源线，尤其是插头、便利插座、电源线与机身相接处。
11. 本机只可以使用生产商指定的零件/配件。
12. 本机只可以使用与本机搭售或由生产商指定的机柜、支架、三脚架、拖架或桌子。在使用机柜时，请小心移动已安装设备的机柜，以避免机柜翻倒造成身体伤害。
13. 在雷雨天气或长期不使用的情况下，请拔掉电源插头。
14. 所有检查与维修都必须交给合格的维修人员。本机的任何损伤都须要检修，例如：电源线或插头受损，曾有液体溅入或物体掉入机身内，曾暴露于雨天或潮湿的地方，不正常的运作，或曾掉落等。



这个三角形闪电标志是用来警告用户，装置没得非绝缘危险电压足以造成使人触电的危险性。



这个三角形惊叹号标志是用来警告用户，随机使用手册中有重要操作与保养维修说明。

警告：为减少火灾或触电的危险性，请勿将本机暴露于雨天或潮湿的地方。

注意：任何未经本手册许可的操作，调整或设定步骤都可能产生危险的电磁辐射。



适用于海拔5000m及以下地区安全使用



适用于热带气候条件下安全使用

PHONIC CORPORATION

简介

Xtrix系列数字功率放大器支持定阻定压输出、内置DSP、内置交换机、支持UDP协议，可通过一根网线实现功放监控。

Xtrix系列功放采用公司自主开发的多环路调控技术，拥有出色的技术指标，特别针对低阻抗、大电流研发的功率放大技术，令功放拥有超过90%的效率和出色的稳定性；开关电源采用有源PFC和软开关技术，并针对音频功率放大器做了优化设计，能适应恶劣的电网环境为功放提供持续澎湃的能源供给。

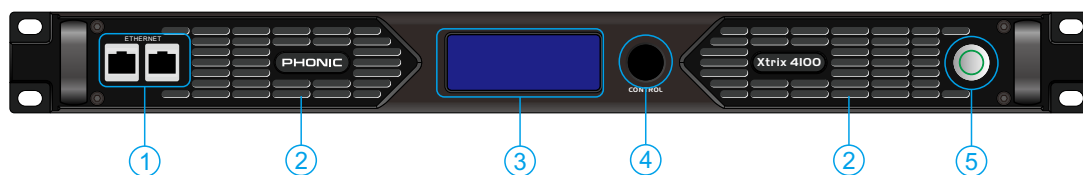
功能

- 每通道输入延时30ms，输出延时20ms，步进0.01ms；
- 音频输入电平匹配+-18dB；
- 4x4音频路由混音，混音比例-80dB~+18dB；
- 8段输入参量EQ，5段输出参量EQ，高低通滤波器；
- 支持512阶及以下FIR滤波器；
- 音量、静音、相位调节，模式选择；
- 输出平均值，峰值压限器；
- 各机器间参数保存/调取；
- 扬声器参数配置；
- 用户/调试/工厂权限设置；

准备工作

1. 打开电源前，务必将功率放大器的所有音量调节至最低，以防不正确的接线造成对设备的损伤，或产生刺耳的噪音。打开音量时，应缓慢调节，直至效果稳定。
2. 连接AC电源前请先检查AC电压。
3. 此系列的功率放大器可在电流超载时自动熔断保险丝以保护电路。保险丝熔断时，请打开保险丝盒盖，换以指定型号。

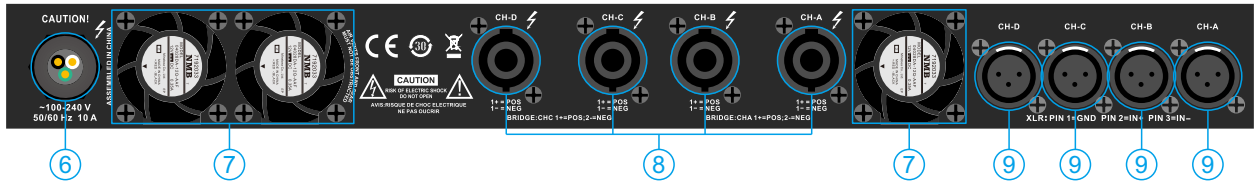
前面板



1. 以太网接口：双RJ45网络接口，内置交换机，支持UDP协议。
2. 冷却通风口：从前到后的强制气流通过防尘网。
3. LCD控制屏：带有背光灯的集成LCD控制屏。
4. 控制旋钮：旋转选择DSP菜单，按下确认。
5. 电源开关：用于电源的开启和关闭。开关被按下时，电源接通，开关上灯圈常亮。

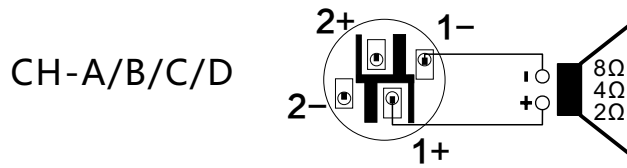
开启电源前将所有的音量控制调至最低，以防不正确的接线造成对机器的损伤。

后面板

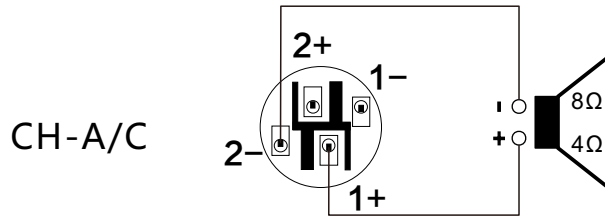


- 6. 电源输入线：根据功放功率配置不同规格的电源线。
- 7. 风扇：提供从前到后的强制通风以用于冷却。
- 8. 输出接口：扬声器插座。

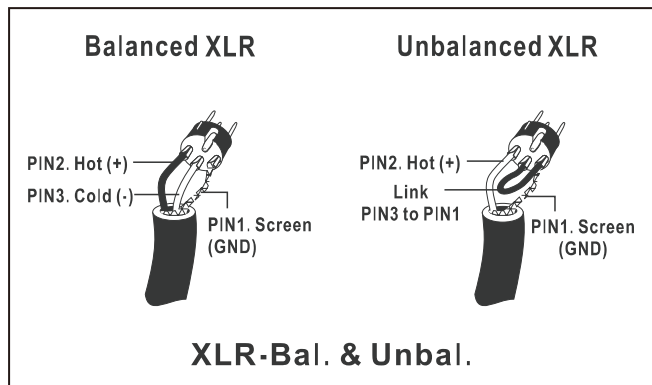
立体声或单通道模式下，使用下面的方法将扬声器与插座连接：



桥接模式下，使用下面的方法将扬声器与插座连接：



- 9. 模拟音频接口：平衡式声音信号输入插头。XLR输入可按以下手法连接：

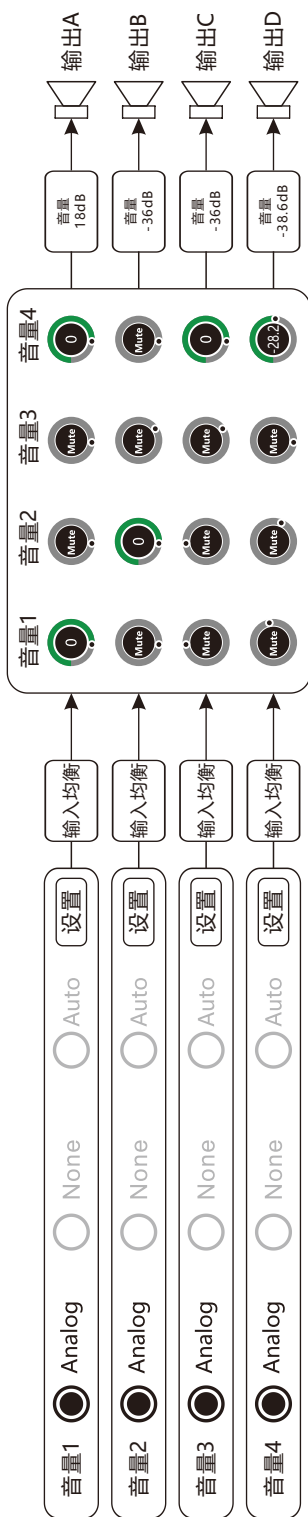


规格

	Xtrix 2150	Xtrix 4100	Xtrix 2065	Xtrix 4045
8Ω/立体声	2X1500W	4X1000W	2X650W	4X450W
4Ω/立体声	2X2550W	4X1700W	2X1100W	2X765W
2Ω/立体声*	2X3580W	4X2990W	2X1880W	2X1300W
16Ω/桥接	1X3000W	2X2000W	1X1300W	1X900W
8Ω/桥接	1X5100W	2X3400W	1X2200W	1X1530W
4Ω/桥接*	1X7140W	2X5780W	1X3740W	1X2600W
100V定压	2X2500W	-	-	-
70V定压	2X2400W	4X1700W	4X1100W	-
RMS输出电压(THD=1%,1kHz)	109.5V	89.4V	72.1V	60.0V
最大输入电平	8.7Vrms(+21dBu)(默认增益)			
默认增益(额定输出功率,1kHz)	23dB	21dB	19dB	18dB
增益范围(额定输出功率,1kHz)	23dB~41dB	21dB~39dB	19dB~37dB	18dB~36dB
THD+N	典型值:0.05%(10%额定输出功率,1KHZ,8Ω)			
串扰抑制	≥90dB(低于额定功率,20Hz-1kHz,8Ω)			
频率响应	典型值: +0,-0.5dB(10%额定输出功率,20Hz-20kHz,8Ω)			
输入阻抗	20kΩ(平衡),10kΩ(非平衡)			
阻尼系数	≥1000(8Ω,20Hz-200Hz)			
信噪比	≥105dB(默认增益,A计权,20Hz-20kHz,8Ω)			
电源要求	100~240VAC±10%,50/60Hz			
保护功能	电源欠压保护、功放输出直流保护、过热保护、温度功率控制、过载功率控制			
尺寸(WxHxD)	483x45x465mm 19"x1.77"x18.3"	483x45x370mm 19"x1.77"x14.56"	483x45x370mm 19"x1.77"x14.56"	483x45x370mm 19"x1.77"x14.56"
净重	12kg/26.5lbs	9kg/19.9lbs	9kg/19.9lbs	9kg/19.9lbs

* 此功率是使用20ms脉冲1kHz正弦波在1%总谐波失真下测量得出。

DSP信号处理流程



服务与维修

如需更换零件，服务和维修，请联系您所在国家的Phonic代理商。Phonic不向用户提供维修手册，且建议用户不要擅自维修机器，否则将无法获得任何保修服务。您可登录<http://www.phonic.com/where/> 查找离您最近的代理商。

保修

Phonic 承诺对每件产品提供完善的保修服务。根据所在地区的不同，保修时间或有延长。自原始购买之日起，Phonic 即对在严格遵照使用说明书的操作规范下，因产品材质和做工所产生的问题提供至少1年的保修服务。Phonic 可根据保修条例自行选择维修或更换缺陷产品。请务必妥善保管购买凭证，以此获得保修服务。对未获得RMA 编号(退货授权)的申请，Phonic 将不予办理退货或维修服务。保修服务只适用于正常使用下所产生的问题。用户需严格遵照使用说明书正确使用产品，任何因肆意损坏，擅自维修，意外事故，错误使用或人为疏忽所造成的问题，都不在保修受理范围之内。此外，担保维修只适用于在授权代理商处的有效购买。如需了解全部的保修信息，请登录<http://www.phonic.com/warranty/>。

客户服务和技术支持

敬请访问<http://www.phonic.com/support/>。从该网站上，您可获得各种常见问题的解答，技术指导，并可下载产品驱动，获得有关退货指导以及其它有用的信息。

support@phonic.com
<http://www.phonic.com>

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