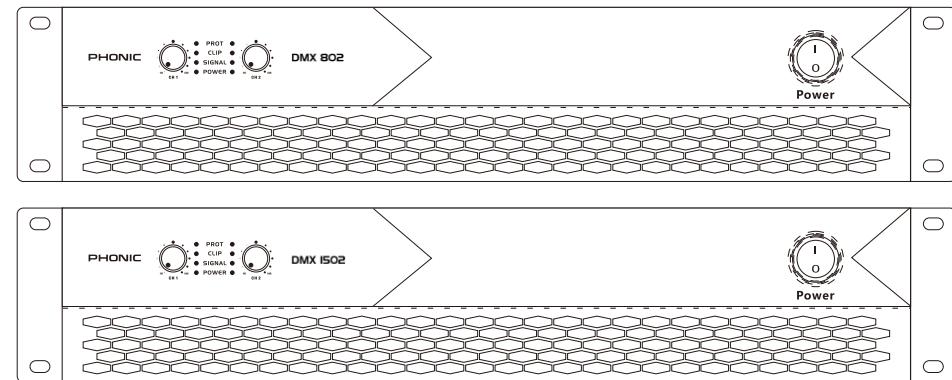


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DMX802
DMX1502
DMX2502
DMX5002

User's Manual
 用戶手册

User's Manual

DMX802
DMX1502
DMX2502
DMX5002

Power Amplifier 功率放大器

User's Manual

用户手册

Directory 目录

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Important safety instructions and safety symbols

- 1) Please read the use information(user's manual)
- 2) Please place this user's manual in a secure place during the use period of the amplifier. This user's manual is only a constituent part of the amplifier. The amplifier can only be resold with the user's manual. Please record any change of the amplifier in written form and give it to the buyer for reselling.
- 3) Please pay attention to all the warnings.
- 4) Please abide by all the instructions.
- 5) Do not use the amplifier near the water source(such as the humid indoors or near the swimming pool).
- 6) Clean it with a piece of dry cloth.
- 7) Do not block any air vent. Please install it according to the user's manual.
- 8) Do not install it around the heat source(such as radiator, heat reservoir, furnace and other equipment that can generate heat).
- 9) Please protect the power supply cord and prevent the damage caused by trampling, squeezing, etc. Pay particular attention to the plug contact and amplifier connector.
- 10) Please use the amplifier in compliance with the user's manual and abide by all the suggestions before using and in use, particularly the security suggestions listed in detail in the user's manual. The amplifier is used for amplifying the pulse audio signal, which can only be connected to the loudspeaker with indicated average impedance.



- 11) Do not place the amplifier in unsteady cart, table, tripod, support or table top. It may cause the serious human injuries in case of falling or severely damage the equipment.
- 12) We can only cut off the power supply by unplugging the plug contact. Please place the plug contact in the place with easy access at random. Please unplug the amplifier if it is exposed in the thunderstorm or not use for long.

- 13) Only qualified personnel can conduct the maintenance work.

Maintenance in case of the following circumstances.

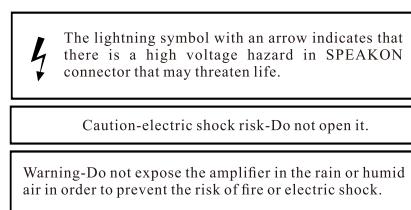
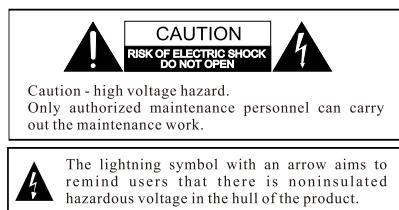
- Power supply cord or plug damage ■ Liquid or objects splashing or falling into the amplifier
- Amplifier exposed in rain or humid air ■ Amplifier falling or damage in any other ways
- Entirely different changes of amplifier to its normal function or performance

Warning: To reduce the risk of fire or electric shock, do not expose this unit to rain or moisture

Note: Any manipulation, adjustment or setting procedure not approved by this manual may generate dangerous electromagnetic radiation.

Only suitable for safe use in areas with an altitude of 2000m and below

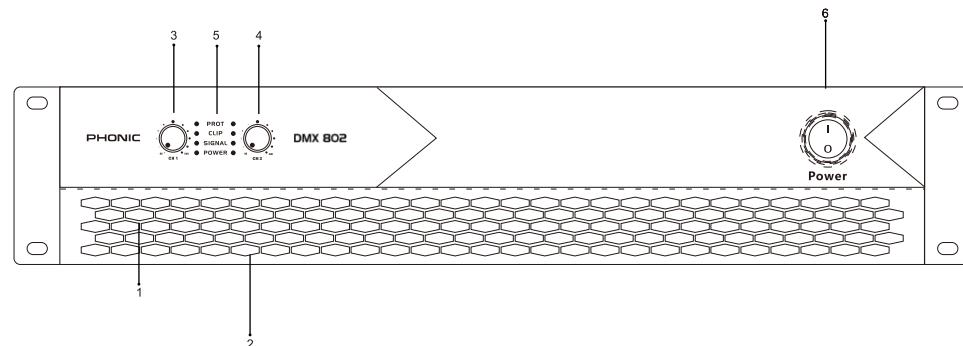
For safe use in non-tropical climates only



The exclamation mark aims to remind users that there are important notes about the maintenance in the attached text materials of amplifier.

Introduction to the function of front and rear panel

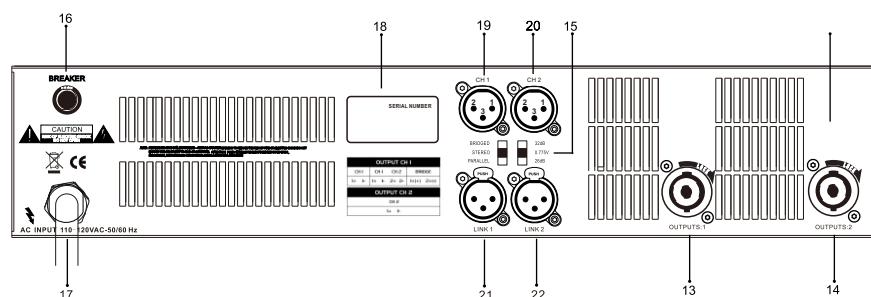
Introduction to the function of front panel



- 1 Channel cooling air inlet vent
- 2 Detachable air filtration system
- 3 Volume control channel A
- 4 Volume control channel B
- 5 A,B channel function prompt
- 6 Power switch ON/OFF switch

- "Protection" A,B (Protect) LED
- "Amplitude limit" A,B (Limit) LED
- "Signal level" A,B (-4dB -30dB)
- "Power indicator light"(POWER)

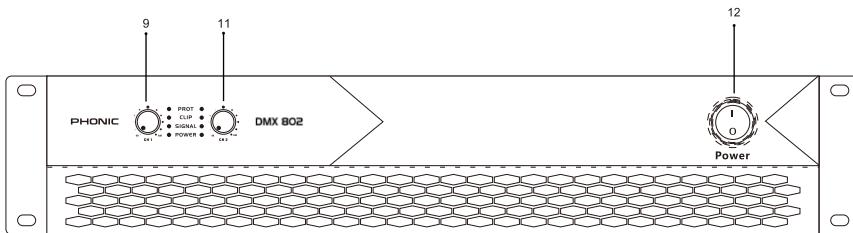
Introduction to the function of rear panel



- | | | | |
|-------------------------------|-----------------------------|----------------------|----------------------|
| 13 CH 1 signal output | 16 Recoverable AC fuse base | 19 CH 1 signal input | 22 CH 2 signal input |
| 14 CH 2 signal output | 17 AC input wire | 20 CH 2 signal input | |
| 15 Dial-up function selection | 18 Serial number | 21 CH 1 signal input | |

Factory setting

The front panel of amplifier is configured with the factory setting below before delivery.



Front panel:

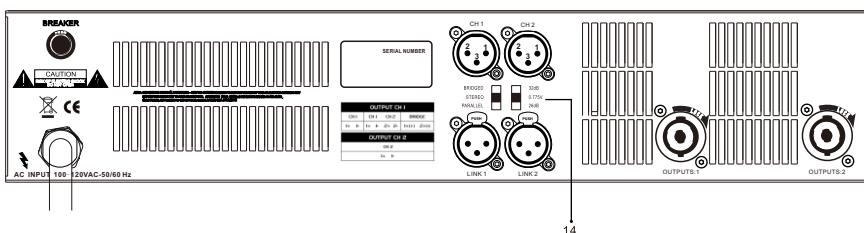
12 ON/OFF switch

Amplifier is in OFF status

9 - 11 Volume control

Volume control is set the minimum value

The rear panel of amplifier is configured with the factory setting below before delivery.



Rear panel

14 Function selector

Stereo, 26db

Earth conducting

Diagram



32dB
0.775V
26dB

Make sure that the ON/OFF setting is the necessary configuration for each special application.

Installation and connection

Power supply

Disconnect the power supply for the installation or connection of the amplifier. Please connect the amplifier to the corresponding AC circuit and outlet according to the requirements of second line indication of the nameplate.



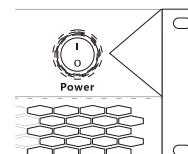
Applicable to the reference nameplate of 110 V~ 50/60 Hz power supply.

Notes: We can only select fixed 220V operation. It is prohibited to use the amplifier for long term beyond the specified range(rated voltage ±10%) because it will affect the overall performance.

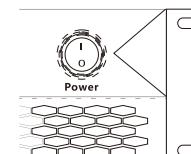
Notes: The rated power consumption and supply current consumption is 1/8 of the rated output power, namely, 2 x 150W is measured in circumstance of 800W*2. Pink noise represents the typical music signal. It depends on the valid output power. The power current and power can reach quite high(low) value.

Turn on/off switch

"ON/OFF" switch is rocker switch, which is located in the right side of the front panel. Turn on the amplifier and push the switch upwards. It starts by activating the surge current limiter. Wave clipping and signal LED will be lighted for several seconds during power connection period. Please push the switch downwards in order to turn off the amplifier.



Amplifier in ON status



Amplifier in OFF status

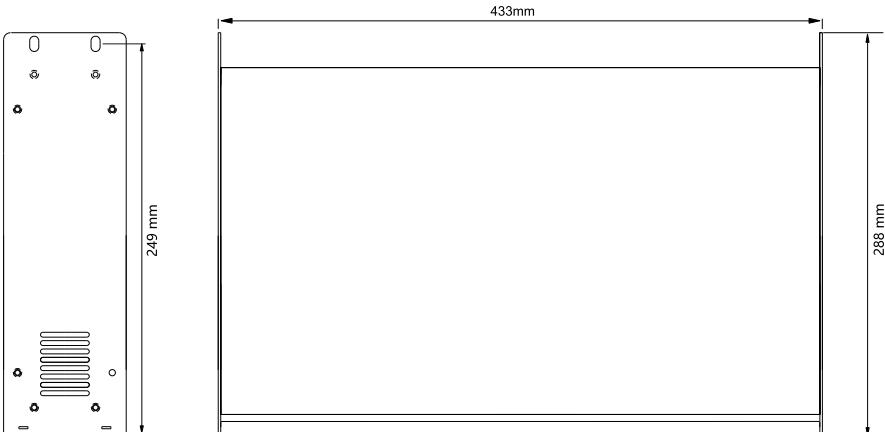
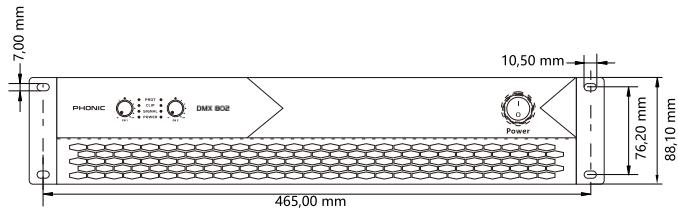
Notes: This switch does not disconnect the amplifier from the power supply cord.

The switch starts by activating the current limiting function. Immediately after the power amplifier is connected to the power supply, a voltage is supplied to the line filter and to the input of the fusible controllable rectifier. The amplifier can only be disconnected from the power supply by physically pulling out the power plug. So the power plug must be easily accessible. Pull the power plug from the amplifier during thunderstorms or when not in use for a long time. Alternatively, you can turn off the amplifier by disconnecting all external electrodes from the power supply.

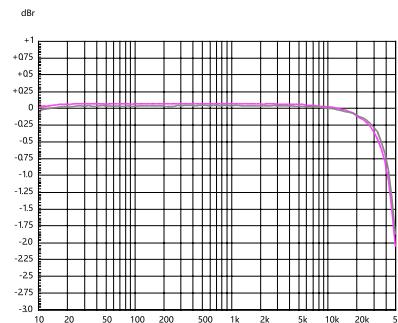
The amplifier will automatically restart after power restore and maintain all the settings before shutdown if the power supply is disconnected when the amplifier is turned on.

Introduction to cabinet installation

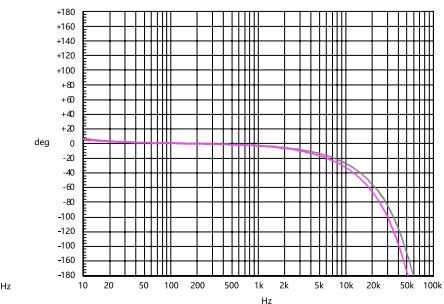
Install the amplifier front rack with four screws and cushion ring. We can use 19" installation component for the fixation of the amplifier because the amplifier is movable.



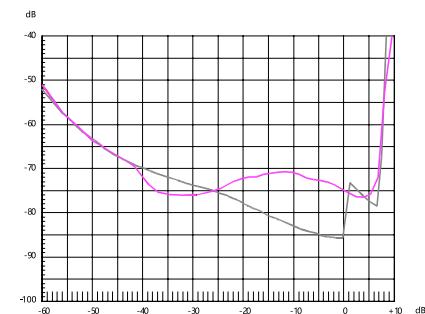
Typical performance map



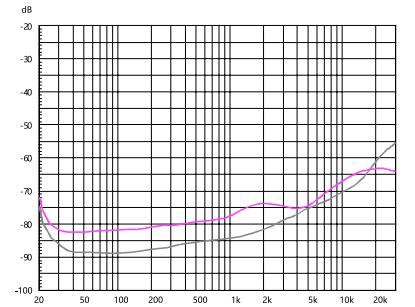
Gain and frequency (Class D)
(Typical performance measured value)



Phase and frequency (Class D)
(Typical performance measured value)



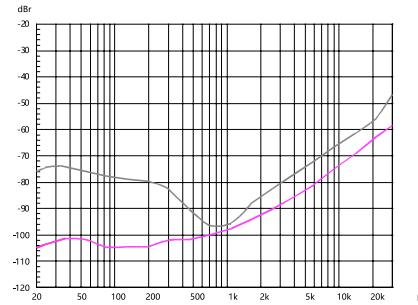
THD@1 kHz, 8Ω and input voltage(Class D)
(Typical performance measured value)



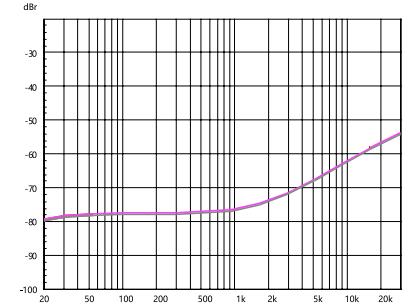
THD and frequency, absorbing wave and
below 10dB below clip, 8Ω (Class D)
(Typical performance measured value)

Typical performance map

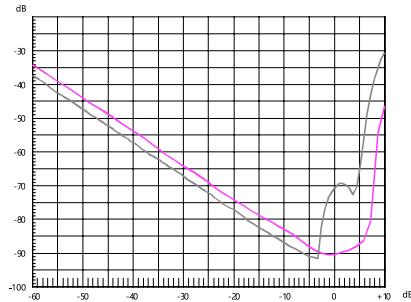
English



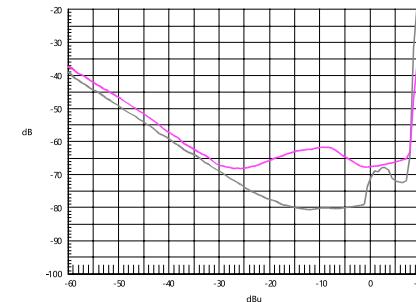
Channel separation and frequency @10W/4Ω Class D
(Typical performance measured value)



Common mode rejection ratio Class D
(Typical performance measured value)



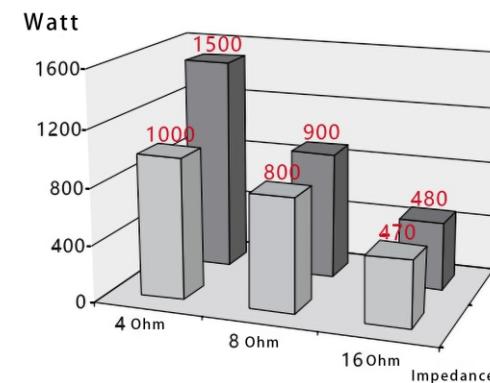
DIM intermodulation distortion
@8Ω and input level Class D
(Typical performance measured value)



SMPTE intermodulation distortion (60 Hz and 7kHz)
@8Ω and input level Class D
(Typical performance measured value)

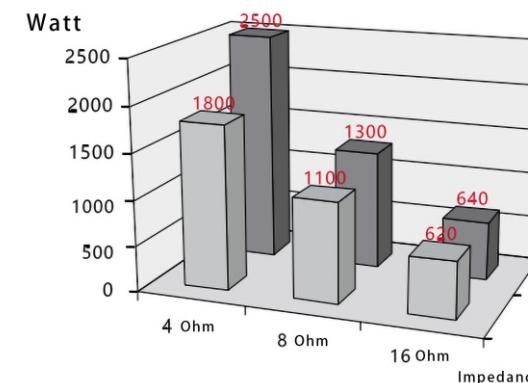
Typical performance map

English



650 W * 2 peak power
650W*2 distortion constraint
Output power(1%THD)

650W*2 (Typical performance measured value)



850 W * 2 peak power
850W*2 distortion constraint
Output power (1%THD)

850W*2 (Typical performance measured value)

Power amplifier specification performance index list

	DMX 802	DMX 1502	DMX 2502	DMX 5002		
Output power (1KHz, THD<1%, all channel drive)	8Ω stereo	200W*2	400W*2	850W*2		
	4Ω stereo	320W*2	560W*2	1190W*2		
	2Ω stereo	450W*2	780W*2	1490W*2		
	8Ω Bridge	480W	960W	2010W		
	4Ω Bridge	680W	1350W	2700W		
Amplifier Protection	DC protection	✓	✓	✓		
	Short circuit protection	✓	✓	✓		
	Sensitivity overheat management system	✓	✓	✓		
	Overheating protection	✓	✓	✓		
	Input overload protection	✓	✓	✓		
	over load protection	✓	✓	✓		
	Soft start protection	✓	✓	✓		
	Limiting protection	up to 10V	up to 10V	up to 10V		
	Frequency Response (1W, 8Ω, 20Hz, 20kHz)	(±0. 5dB)	(±0. 5dB)	(±0. 5dB)		
Sensitivity (8Ω, 1KHz)						
Connectors	Input/Link	XLR	XLR	XLR		
	Output	SPEAKON	SPEAKON	SPEAKON		
Input impedance	Balanced	20KΩ	20KΩ	20KΩ		
	Unbalanced	10KΩ	10KΩ	10KΩ		
Signal-to-Noise Ratio (A weight, rated power 8Ω)	≥105dB	≥105dB	≥108dB	≥108dB		
Damping factor (8Ω, 1KHz)	≥900	≥900	≥900	≥900		
Intermodulation Distortion(20Hz, 20kHz, half power)	≤0. 02%	≤0. 02%	≤0. 02%	≤0. 02%		
Total Harmonic Distortion(20Hz, 20kHz; half power)	≤0. 03%	≤0. 03%	≤0. 05%	≤0. 07%		
Phase Response (1W, 8Ω, 20Hz, 20kHz)	≤±1. 5°	≤±1. 5°	≤±1. 5°	≤±1. 5°		
Slew Rate	≥60V/μs	≥60V/μs	≥60V/μs	≥60V/μs		
Output Circuit Topology	AB		CLASS-D			
Installation space	2U					
Cooling	The fully intelligent system automatically adjusts to temperature changes					
Dimensions (WxHxD)	482×88×290mm					
Weight	9. 5 kg	10. 0 kg	14. 0 kg	18. 0 kg		

Statement: This user's manual is only for specification and instruction reference. Our company reserves the right to update the product or specification. Any product or specification update will subject to changes with no prior notice.

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For replacement parts, service and repairs please contact the Phonic distributor in your country. Phonic does not release service manuals to consumers, and advice users to not attempt any self repairs, as doing so voids all warranties. You can locate a dealer near you at <http://www.phonic.com/where/>.

WARRANTY INFORMATION

Phonic stands behind every product we make with a no-hassles warranty. Warranty coverage may be extended, depending on your region. Phonic Corporation warrants this product for a minimum of one year from the original date of purchase against defects in material and workmanship under use as instructed by the user's manual. Phonic, at its option, shall repair or replace the defective unit covered by this warranty. Please retain the dated sales receipt as evidence of the date of purchase. You will need it for any warranty service. No returns or repairs will be accepted without a proper RMA number (return merchandise authorization). In order to keep this warranty in effect, the product must have been handled and used as prescribed in the instructions accompanying this warranty. Any tampering of the product or attempts of self repair voids all warranty. This warranty does not cover any damage due to accident, misuse, abuse, or negligence. This warranty is valid only if the product was purchased new from an authorized Phonic dealer/distributor. For complete warranty policy information please visit <http://www.phonic.com/warranty/>.

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<http://www.phonic.com>

重要安全说明与安全符号说明

- 1) 阅读使用信息(用户手册)
- 2) 在放大器使用期间, 请将本用户手册放在安全的地方。本用户手册是放大器的一个组成部分。只有存在用户手册时才能转售放大器。转售时, 必须将对放大器所作的任何变动以书面形式记录下来并交给买方。
- 3) 请注意所有警告。
- 4) 请遵循所有说明。
- 5) 切勿在水源附近(例如, 在潮湿的室内或游泳池附近)使用此放大器。
- 6) 只能使用干布进行清洁。
- 7) 切勿阻塞任何通风口。请按照用户手册进行安装。
- 8) 切勿在热源(例如, 散热器、储热器、炉子或其它产生热量的设备)附近进行安装。
- 9) 保护电源线, 以防被踩踏、挤压或是遭到其它方式的破坏。要特别留心插头以及与放大器的连接处。
- 10) 必须遵照用户手册中提供的信息来使用放大器。在使用放大器之前和期间, 请确保遵照所有建议, 尤其是用户手册中详细列出的安全建议。放大器设计用来放大脉冲音频信号, 只能将其连接到具有所指示的平均阻抗的扬声器。



11) 切勿将放大器置于不稳定的推车、台子、三脚架、支架或桌面上。如果设备跌落, 可能会造成严重的人身伤害, 并会严重损坏设备本身。

- 12) 只能通过拔掉插头来切断放大器的电源, 插头必须置于可随时自由接触到的位置。在发生雷暴或长时间不使用的情况下, 请拔掉放大器的插头。

- 13) 请将所有维修任务交给有资格的维修人员。

当发生下列情况时需要进行维修:

- 电源线或插头遭到损坏;
- 有液体或物体溅入或落入放大器中;
- 放大器暴露在雨中或潮湿的空气中;
- 以任何其它方式跌落或损坏了放大器;
- 放大器出现了与正常功能或性能截然不同的变化。

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:任何未经本使用手册许可的操控, 调整或设定步骤都可能产生危险的电磁辐射。

仅适用于海拔2000m及以下地区安全使用

仅适用于非热带气候条件下安全使用



带有箭头的闪电符号提示用户, 在 SPEAKON 连接器中存在危险高压, 可能会危及生命。

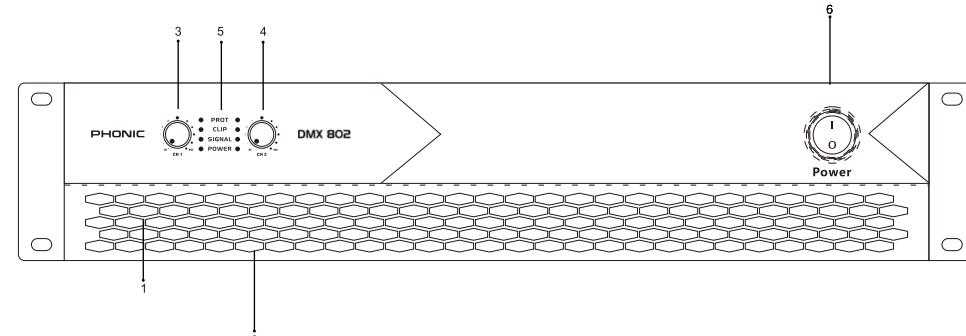
小心 - 电击危险 - 切勿开启。

警告 - 为防止发生火灾或电击的危险, 切勿将放大器暴露在雨中或潮湿的空气中。

只能将放大器连接到带有保护接地线的插座上。

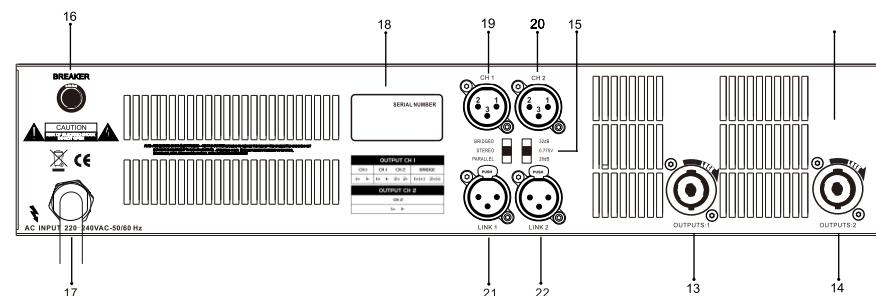
前面板. 后面板功能简介

前面板功能简介



- | | | |
|---------------|----------------|--|
| 1 通道冷却空气进口通风孔 | 4 音量控制通道B | ● “保护”A,B (Protect) LED |
| 2 可拆卸的空气过滤系统 | 5 A,B通道功能指示 | ● “限幅”A,B (Limit) LED |
| 3 音量控制通道A | 6 电源开关 打开/关闭开关 | ● “信号电平”A,B (-4dB -30dB)
● “电源指示灯”(POWER) |

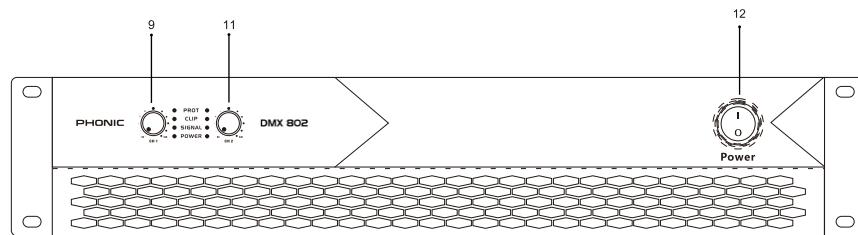
后面板功能简介



- | | | | |
|-------------|--------------|-------------|-------------|
| 13 CH 1信号输出 | 16 可恢复交流保险管座 | 19 CH 1信号输入 | 21 CH 1信号输入 |
| 14 CH 2信号输出 | 17 交流输入电线 | 20 CH 2信号输入 | 22 CH 2信号输入 |
| 15 拨码功能选择 | 18 序号 | | |

出厂设置

放大器在交付时前面板具有如下出厂设置：

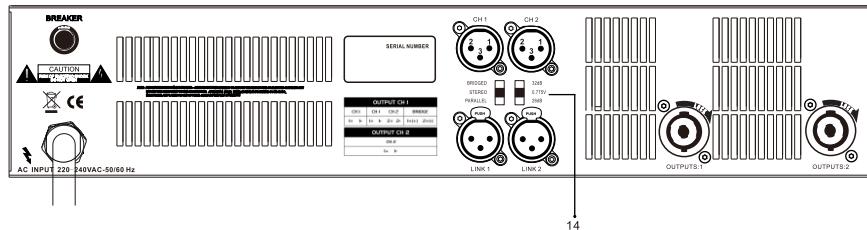


前面板：

- 12 打开/关闭开关
- 9 - 11 音量控制

放大器处于关闭状态。
音量设置为最小值。

放大器在交付时后面板具有如下出厂设置：



背面板

- 14 功能选择器
立体声, 26db
- 接地导通



确保将开关设置为每项特殊应用所需的配置。

安装与连接

电源

在安装或连接放大器时，始终将其与电源断开。根据标牌第二行所指示的要求，仅放大器连接到相应的交流电路和出口处。



适用于 220 / 240 V ~ 50 / 60 Hz 电源的参考标牌。

注意：只能选择固定的 220 V 或 240 V 操作。不应该在指定范围（额定电压 ± 10 %）之外长久使用放大器，因为这样做会影响总体性能。

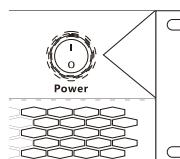
注意：额定功耗和电源电流消耗是在

额定输出功率的 1/8 即，对 800W*2 为 2 x 150 W
情况下测得，粉红噪声表示典型的音乐信号。

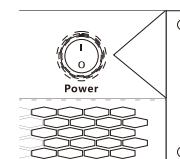
视有效的输出功率而定，电源电流和功率可达到相当高（或相当低）的值。

打开/关闭开关

“打开/关闭”开关为摇杆式开关。它位于前面板的右侧。要打开放大器，请将开关推向上方。即通过激活浪涌电流限制器开始启动。在电源接通期间，消波削波和信号 LED 将亮起几秒钟的红色。要关闭放大器，请将开关推向下方。



放大器处于打开状态。



放大器处于关闭状态。

注意：此开关并没有将放大器从电源上断开。

开关通过激活电流限制功能开始启动。将功率放大器连接到电源后，立即

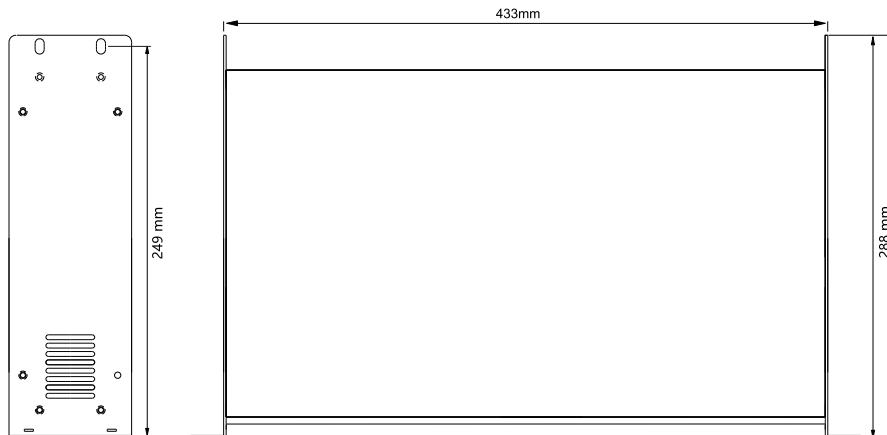
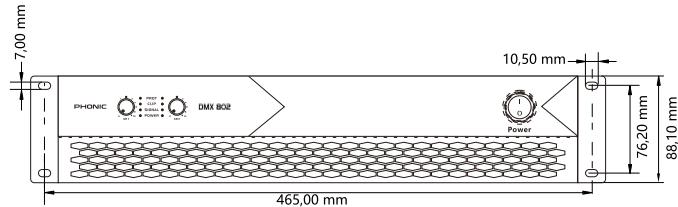
电源插头这种物理分离方式来完成放大器从电源上的断开。因此电源插头必须可以方便地接触到。在伴有雷电的暴风雨期间或者长时间不使用放大器时，请将电源插头从电源上拔出。或者，您可以通过从电源上断开外部的所有电极来切断放大器电源。

如果在放大器打开时切断电源，放大器将会在电源恢复后自动重新启动，并将保持在掉电操作之前的所有设置。

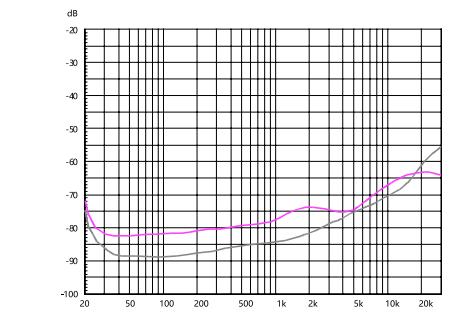
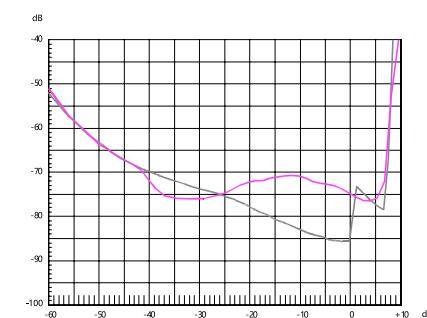
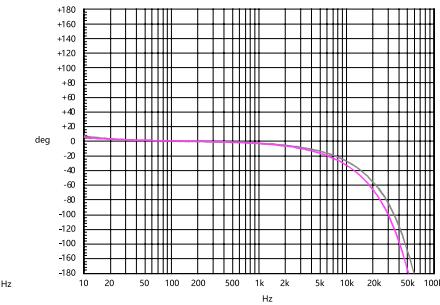
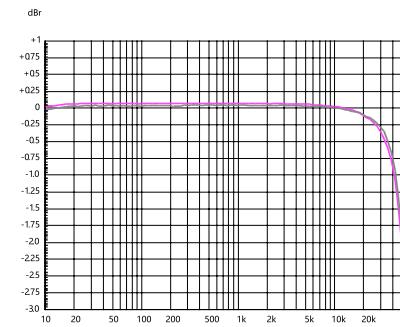
机柜安装简介

将放大器安装到前机架导轨时，将使用四个螺丝和垫圈。由于放大器可移动使用，因此还应该在背面板上使用 19" 安装元件来固定放大器。

简体中文

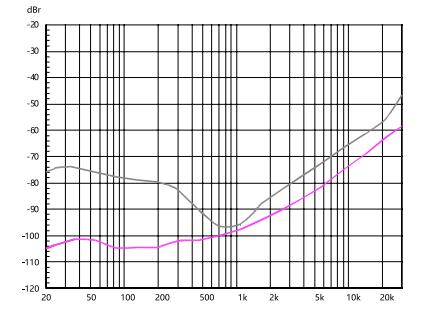


典型性能图

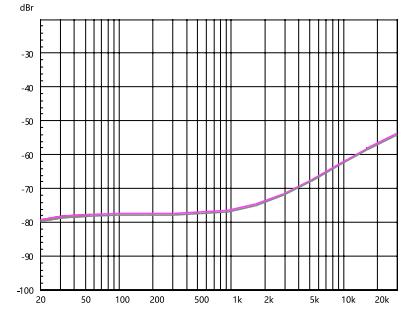


简体中文

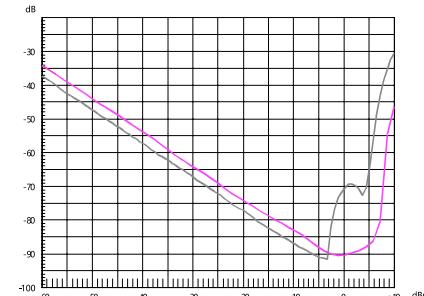
典型性能图



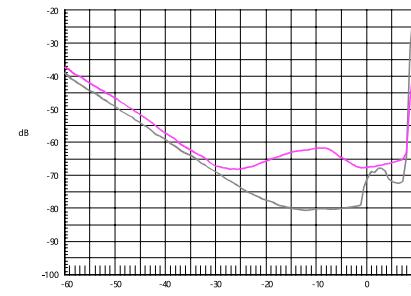
通道分离与频率 @ 10 W / 4Ω Class D
(典型性能测量值)



共模抑制比 Class D
(典型性能测量值)

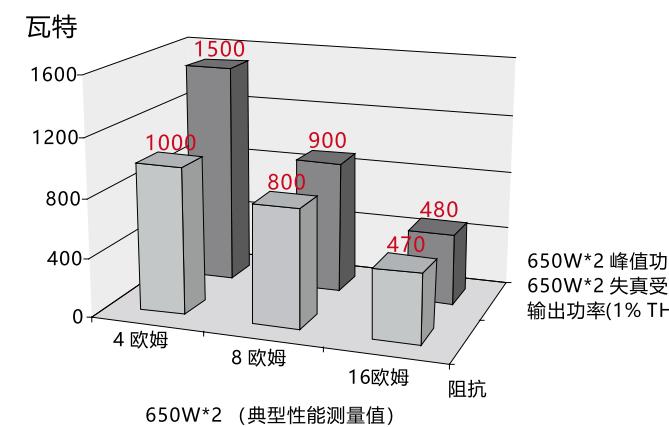


DIM 互调失真@ 8 Ω 与输入电平 Class D
(典型性能测量值)

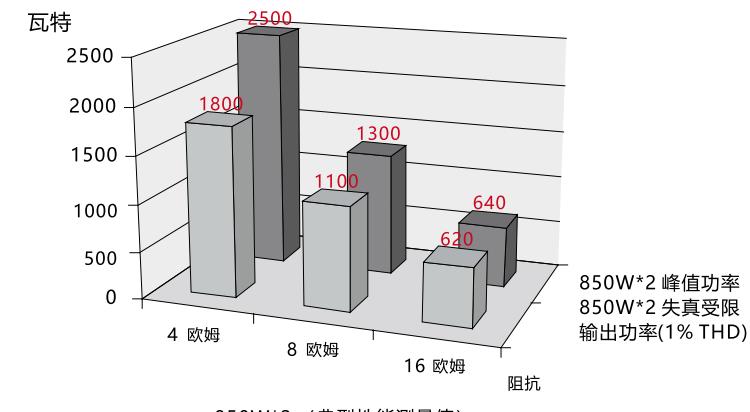


SMPTE 互调失真 (60 Hz and 7 kHz) @8Ω与输入电平
Class D
(典型性能测量值)

典型性能图



650W*2 (典型性能测量值)



850W*2 (典型性能测量值)

简体中文

功率放大器技术性能指标一览表

技术参数		DMX 802	DMX 1502	DMX 2502	DMX 5002			
输出功率 (1KHz, THD<1%, 所有 通道驱动)	8Ω 立体声	200W*2	400W*2	850W*2	1300W*2			
	4Ω 立体声	320W*2	560W*2	1190W*2	1850W*2			
	2Ω 立体声	450W*2	780W*2	1490W*2	2300W*2			
	8Ω 桥接	480W	960W	2010W	3500W			
	4Ω 桥接	680W	1350W	2700W	4200W			
安全 保 护 系 统	直流保护	√	√	√	√			
	短路保护	√	√	√	√			
	灵敏度过热管理系统	√	√	√	√			
	过热保护	√	√	√	√			
	输入过载保护	√	√	√	√			
	输出过载保护	√	√	√	√			
	软启动保护	√	√	√	√			
	限幅保护	可达到 10V	可达到 10V	可达到 10V	可达到 10V			
频率响应 (1W, 8Ω, 20Hz, 20kHz)		(± 0.5dB)	(± 0.5dB)	(± 0.5dB)	(± 0.5dB)			
灵敏度 (8Ω, 1KHz)		0.775v/26 dB/32 dB	0.775v/26 dB/32 dB	0.775v/26 dB/32 dB	0.775v/26 dB/32 dB			
链接端子	输入链接端子	XLR公、母	XLR公、母	XLR公、母	XLR公、母			
	输出链接端子	SPEAKON	SPEAKON	SPEAKON	SPEAKON			
输入阻抗	平衡输入	20KΩ	20KΩ	20KΩ	20KΩ			
	非平衡输入	10KΩ	10KΩ	10KΩ	10KΩ			
信噪比 (A计权, 额定功率 8Ω)		≥105dB	≥105dB	≥108dB	≥108dB			
阻尼系数 (8Ω, 1KHz)		≥900	≥900	≥900	≥900			
互调失真 (20Hz, 20KHz, 半功率)		≤0.02%	≤0.02%	≤0.02%	≤0.02%			
总谐波失真 (20Hz, 20KHz; 半功率)		≤0.03%	≤0.03%	≤0.05%	≤0.07%			
相位响应 (1W, 8Ω, 20Hz, 20kHz)		≤±1.5°	≤±1.5°	≤±1.5°	≤±1.5°			
转换速率		≥60V/μs	≥60V/μs	≥60V/μs	≥60V/μs			
输出电路类型		AB类	CLASS-D类					
安装空间		2U						
冷却系统		全智能系统随温度变化自动调节						
外形尺寸 (WxHxD)		482×88×290mm						
重量		9.5 kg	10.0 kg	14.0 kg	18.0 kg			

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