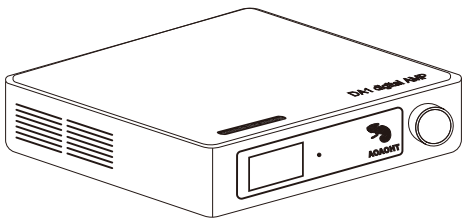




AOAOHT



DA1 纯数字功放

产品简介

感谢您购买 DA1 纯数字功放。

DA1 是市面少见的纯数字 HIFI 功放，既不是放大模拟信号，而是使用 DSP 技术直接放大数字信号，本机可以 USB 连接通过 XMOS 界面或 QCC3084 蓝牙提供高品质的数字信号再直接放大就可以欣赏到非常好的音质，省略了数模转换（DAC）的过程，从根本上解决了 D 类功放一直以来听感差的缺点，DA1 既有媲美传统 A 类功放温暖浑厚的听感，又有 D 类干净透明的声音特点，得益于超低的内阻设计对音箱的控制力也是远强于同尺寸的功放，特别设计专业设备才会拥有的 15 段 DSP EQ（每一段可以控制 $\pm 12\text{dB}$ ），可以个性化定制自己喜欢的任何声音风格而不损失音质，高成本的一体成型铝合金外壳，无论是外观，功能还是音质都可以说是同价位鹤立鸡群般的存在。

再次感谢您对 DA1 的支持，愿它为您的音乐之旅增添更多乐趣。

包装清单

DA1 纯数字功放

电源线

用户手册

遥控器

USB 线

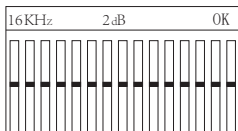
规格参数

机器型号	DA1 纯数字功放
输入	RCA, 同轴, 光纤, USB, 蓝牙
功放芯片	德州仪器 TI TAS5825Mx2
额定功率	100Wx2 4 Ω , 60Wx2 8 Ω
信噪比	$\geq 105\text{dB}$
动态范围	$\geq 105\text{dB}$
失真度	$\leq 0.05\%$
蓝牙芯片	QCC3084
USB	XU216
采样率	USB 24bit/96kHz OPT/COAX 24bit/96kHz
尺寸	198x42x176MM (宽 x 高 x 深)
含包装净重	1.3kg

菜单说明

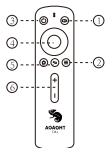


EQ 设置



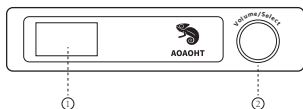
25HZ~16KHZ 有 15 段可选择，每一段可以调整±12dB，最右边的OK 选项退出

可以保存三段 EQ



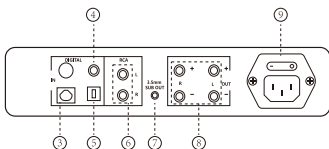
- | | |
|----------------------|-----------|
| ① 静音 | ④ 菜单 / 选择 |
| ② 输入选择 | ⑤ 返回 |
| ③ 短按 / 熄屏
长按 / 关机 | ⑥ 音量选择 |

产品概览



① 屏幕

② 音量 / 菜单选择



③ USB 输入

④ COAX 同轴输入

⑤ OPT 光纤输入

⑥ RCA 输入

⑦ 3.5mm 低音炮输出

⑧ 喇叭输出

⑨ 电源开关 / AC100~240V 电源输入

产品保修

产品自售出 7 日内,在正常使用情况下出现故障,客户可以无条件退换货。正常使用一年内出现故障,可以免费保修。购买日期以发票或收据日期为准,网上购买按订单日期为准。

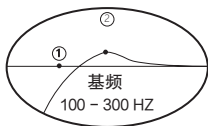
无法享受“三包”服务的情况:

1. 一切人为因素损坏,包括但不限于非正常工作环境下使用或者不按照说明书使用的;
2. 用户私自拆机、改装以及维修的;
3. 使用非指定或许可的配件造成损坏的;
4. 不能出示有效购机凭证的;
5. 不属于本公司产品的。

保修方式:

保修方式为送修,此条款只适用于官方销售渠道售出的产品,其他渠道请参考销售代理商的规定和当地国家法规关于质保的规定。

EQ 调音参考



- ①干净的人声，低切 100Hz 以下。
- ②人声的基频一般在 100-300Hz。
- ③基频处理不当会影响人声的情绪。
- ④适当提升基频可以使人声变得浑厚。
- ⑤衰减基频会让人声变得薄脆。
- ⑥对于有些歌手来说，基频是他的特色，过分衰减会让他失去辨识度！

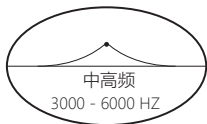


- ①人声中低频 (300-600Hz)，提升会让人声变得温暖。
- ② 过分提升会让人声变得浑浊，鼻音重闷、产生盒子音。
- ③ 适当衰减会让人声变得干净，消除鼻音，提升通透感。
- ④过分衰减会让人声变单薄，淹没在音乐中，不融合。
- ⑤记得用窄一点的频宽横向扫频精准位置适当衰减。



- ①中频 (1.5-3KHz)，提升会增加辨识度。
- ②人声咬字不清晰，可以通过 2kHz 左右改善。
- ③适当提升 2.5kHz 左右可以让人声更靠前、贴耳。
- ④最核心的人声区域，可以用大的频宽进行提升。

EQ 调音参考

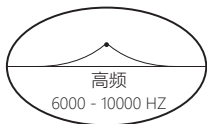


①人声中高频 (3k-6kHz) 提升会增加人声刺激度。

② 3.5kHz 是人耳最敏感的频率，需要轻微的处理。

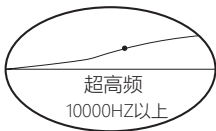
③中高频常常是人声齿音比较聚集的频段。

④可以用小的频宽适当衰减齿音很明显的频段。



①高频 (6k-10KHz) 提升会增加人声清晰度。

②衰减人声的高频会让人声逐渐变远，不清晰。



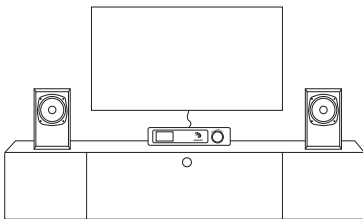
①超高频 (10kHz 以上) 空气感，人声质感。

②提升 10kHz 以上会让人声获得颗粒感。

③提升 14kHz 以上会让人声获得呼吸感。

④过分提升超高频，会让人声产生毛刺感。

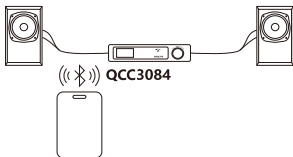
DA1 使用场景



客厅电视通过 COAX,OPT 连接 DA1



数播 / 解码器通过 COAX, OPT, RCA 连接 DA1



手机通过蓝牙连接 DA1



电脑通过 USB 连接 DA1

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party.

Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

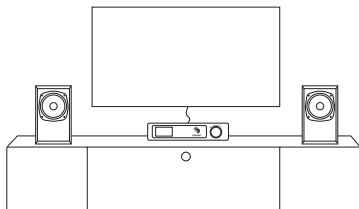
This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

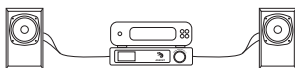
FCC Radiation Exposure Statement:

The equipment complies with FCC Radiation exposure limits set forth for uncontrolled environment. This equipment should be installed and operated with **minimum distance 20cm** between the radiator and your body.

Amplifier Scene



The living room TV is connected to DA1 through COAX and OPT



Music Streamer connects to DA1 through COAX, OPT, RCA

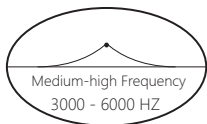


Mobile phone connects to DA1 via Bluetooth



Computer connected to DA1 via USB

EQ Tuning Reference



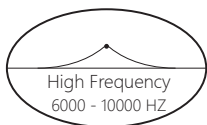
sounds are more concentrated.

④ Small bandwidth can be used to appropriately attenuate frequency bands where dental sounds are prominent.

① The increase in high-frequency (3k-6kHz) in human voice will increase the stimulation level of human voice.

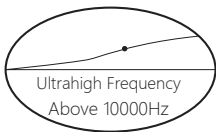
② 3.5kHz is the most sensitive frequency of the human ear and requires slight processing.

③ Middle and high frequencies are often the frequency bands where human and dental



① The increase in high frequency (6k-10KHz) will enhance the clarity of human voice.

② Attenuating the high frequency of human voice will gradually make it farther away and less clear.



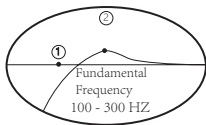
① Ultra high frequency (above 10kHz) air feel and vocal texture.

② Raising the frequency above 10kHz will give the voice a grainy sensation.

③ Raising above 14kHz will give the human voice a sense of breathing.

④ Excessive increase in ultra-high frequency can create a sense of spiciness in vocals.

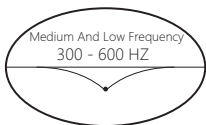
EQ Tuning Reference



- ① Clean vocals, low cut below 100Hz.
- ② The fundamental frequency of human voice is generally between 100-300Hz.
- ③ Improper handling of the fundamental frequency can affect the emotions of the voice.
- ④ Appropriately increasing the fundamental frequency can make the human voice more

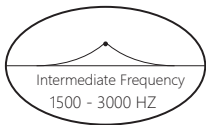
robust.

- ⑤ Attenuating the fundamental frequency will make the human voice brittle.
- ⑥ For some singers, the fundamental frequency is their characteristic, and excessive attenuation can make them lose their recognition!



- ① Low frequency (300-600Hz) in human voice, increasing it will make the voice warmer.
- ② Excessive elevation can make the voice cloudy, nasal heavy, and produce boxy sounds.
- ③ Appropriate attenuation will make the voice cleaner, eliminate nasal sounds, and enhance transparency.

- ④ Excessive attenuation can make the voice thin and drowned out in the music, without fusion.
- ⑤ Remember to use a narrower bandwidth to scan horizontally and accurately attenuate the position appropriately.



- ① Intermediate frequency (1.5-3KHz), improving it will increase recognition.
- ② The unclear pronunciation of human voice can be improved by around 2kHz.
- ③ Appropriately increasing the frequency by around 2.5kHz can make the voice more forward and close to the ear.

- ④ The core vocal area can be enhanced with a large bandwidth.

Product Warranty

Within 7 days of sale, if the product malfunctions under normal use, customers can unconditionally return or exchange the goods. If there is a malfunction within one year of normal use, it can be repaired for free. The purchase date is based on the invoice or receipt date, while online purchases are based on the order date.

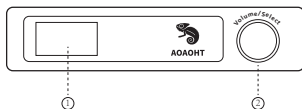
Unable To Enjoy The "Three Guarantees" Service:

1. Any damage caused by human factors, including but not limited to use in abnormal working environments or not following the instructions;
2. Users dismantle, modify, and repair machines without authorization;
3. Damage caused by the use of non specified or unauthorized accessories;
4. Unable to present valid purchase vouchers;
5. Not belonging to our company's products.

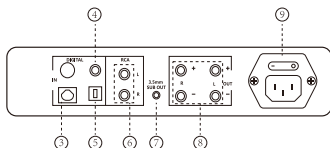
Warranty Method:

The warranty method is to send the product for repair. This clause only applies to products sold through official sales channels. For other channels, please refer to the regulations of the sales agent and local national regulations regarding warranty.

Product Overview



- ① screen ② Volume/menu selection

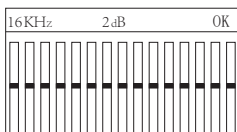


- ③ USB input
④ COAX input
⑤ OPT input
⑥ RCA input
⑦ 3.5mm SUB OUT
⑧ Speaker output
⑨ Power Switch/AC100V~240V power input

Menu Description



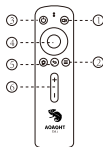
EQ Settings



There are 15 segments to choose from between 25HZ and 16KHZ, and each segment can be adjusted by 12dB. The OK option on the far right exits



Can save three EQ segments



- ① Mute
- ② Input selection
- ③ Press once/Lockscreen
Long Press/shutdown
- ④ Menu/Selection
- ⑤ Return
- ⑥ Volume selection

Specification Parameters

Machine model	DA1
input	RCA, COAX,OPTIC,USB,Bluetooth
Power amplifier chip	TI TAS5825Mx2
Rated power	100Wx2 4 Ω , 60Wx2 8 Ω
Signal to noise ratio	$\geq 105\text{dB}$
Dynamic range	$\geq 105\text{dB}$
Distortion degree	$\leq 0.05\%$
Bluetooth chip	QCC3084
USB	XU216
Sampling rate	USB 24bit/96kHz OPT/COAX 24bit/96kHz
Size	198x42x176MM (width x height x depth)
Net weight including packaging	1.3kg

Product Introduction

Thank you for purchasing the DA1 DSP Amplifier.

DA1 is a DSP HIFI amplifier in the market. It does not amplify analog signals, but directly amplifies digital signals using DSP technology. The device can be connected via USB through XMOS interface or QCC3084 Bluetooth to provide high-quality digital signals, which can be directly amplified to enjoy very good sound quality. The process of digital to analog conversion (DAC) is omitted, fundamentally solving the problem of poor listening experience of D-class amplifiers, DA1 not only has a warm and rich listening experience comparable to traditional A-class amplifiers, but also has the clean and transparent sound characteristics of D-class amplifiers. Thanks to its ultra-low internal resistance design, the control of the speaker is much stronger than that of amplifiers of the same size. It is specially designed with 15 DSP EQ segments (each segment can control $\pm 12\text{dB}$), which can be personalized to any sound style you like without losing sound quality. The high cost integrated aluminum alloy shell, whether in appearance, function or sound quality, can be said to be a standout presence in the same price range.

Thank you again for your support of DA1 DSP Amplifier. May it add more fun to your music journey.

Packaging List

DA1 DSP Amplifier

Power cord

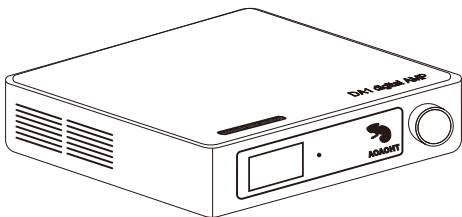
User's manual

Remote control

USB line



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DA1