

SpacEND ONE

解码、前级与动圈耳机放大器一体机

使用说明书

设计简述

SpacEND ONE 解码、前级与动圈耳机放大器一体机采用全平衡线路，音量调节采用日本四联电动遥控电位器，数字输入 USB 界面采用定制 XING 音频工作室专用 USB 界面，windows 系统需要安装驱动程序（详见说明书 U 盘），数字解码采用二片 PCM1794（支持 24Bit/192k），解码输出采用全平衡设计，模拟线路电压放大采用 LME49720、LME49724、OPA1612，输出采用八颗 2021 年推出的 COMS 运算放大器 OPA1678 驱动定制输出高低阻抗的坡莫合金输出变压器，整机采用一体化设计，兼顾平衡前级输出功能。

机箱采用全铝设计，主变压器都采用环氧树脂灌注英国 Talema 变压器，确保整机的震动控制在最小范围内

主电源设计，采用二片最新的“理想”型电源模块 LT4320 驱动八颗大功率 COMS 管完成高效率的交流转换直流，为提高整机信噪而引入了扼流圈的 CLC 滤波线路，外加二级 LT317、LT337 全线路稳压电路，电解电容采用日本尼吉康发烧电容，确保纯净、高速、充沛能量的放大器供电

SpacEND ONE

Integrated decoder, front stage and dynamic headphone amplifier an instruction manual

Design Introduction

SpacEND ONE The decoding, front stage and dynamic headphone amplifier all-in-one machine adopts a fully balanced line, the volume adjustment adopts a Japanese quadruplex electric remote control potentiometer, the digital input USB interface adopts a customized XING audio studio dedicated USB interface, the windows system needs to install driver software (see the U disk in the manual for details), the digital decoding adopts two PCM1794 chips (supporting 24Bit/192k), the decoding output adopts a fully balanced design, and the analog line voltage amplification adopts LME49720 LME49724, OPA1612, eight COMS operational amplifiers OPA1678 introduced in 2021 are used for output to drive the customized high and low impedance permalloy output transformer. The whole machine is designed in an integrated way to balance the front output function.

The chassis is of all aluminum design, and the main transformers are all epoxy resin filled Talema transformers in Britain to ensure that the vibration of the whole machine is controlled within the minimum range. The main power supply is designed with two latest "ideal" power modules LT4320 to drive eight high-power COMS tubes to achieve high efficiency AC to DC conversion. CLC filtering circuit with choke is introduced to improve the signal noise of the whole machine, plus secondary LT317, LT337 full line voltage stabilizing circuit. Nijikang fever capacitor is used

as the electrolytic capacitor to ensure the power supply of pure, high-speed and energetic amplifier

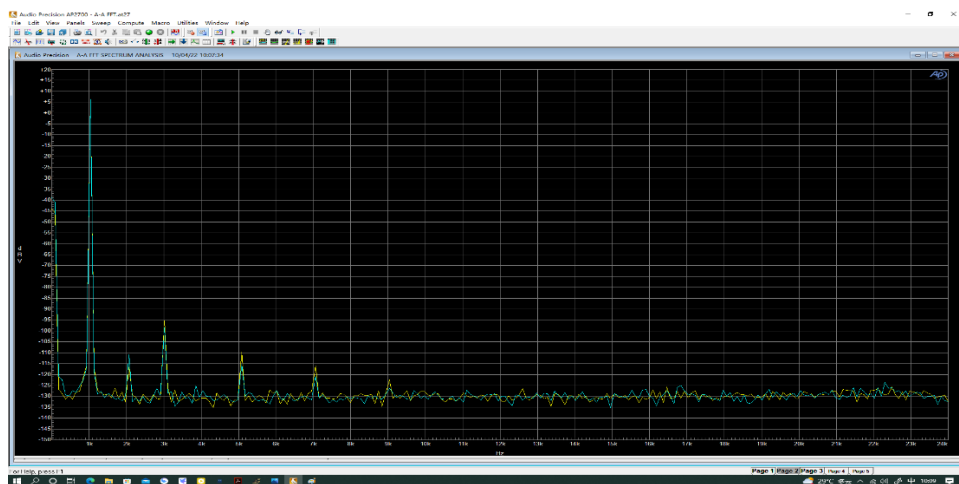
技术参数

适配耳机：高/低动圈耳机

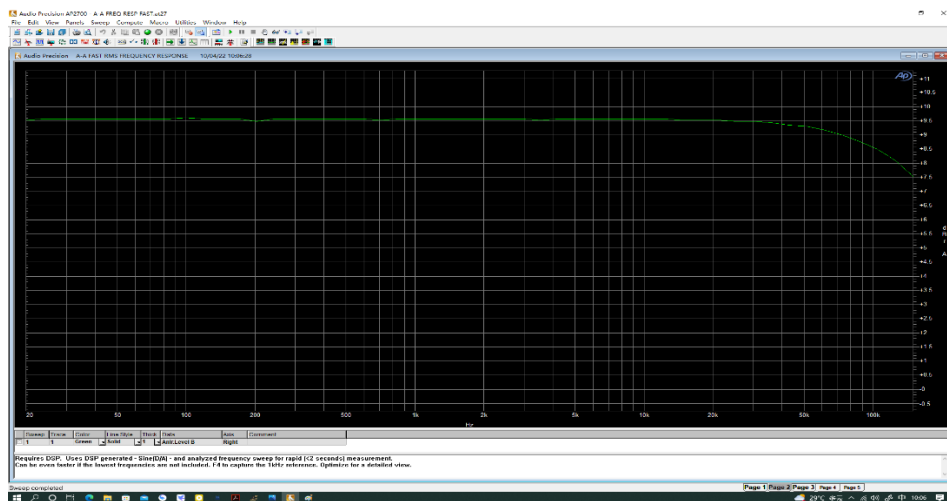
IC 型号：LT4320*2、LME49720*2、LME49724*2、OPA1612*8、OPA1678*8、PCM1794*2

频响：20Hz-20kHz，+0/-0.25dB；20Hz-120kHz，+0/-2dB

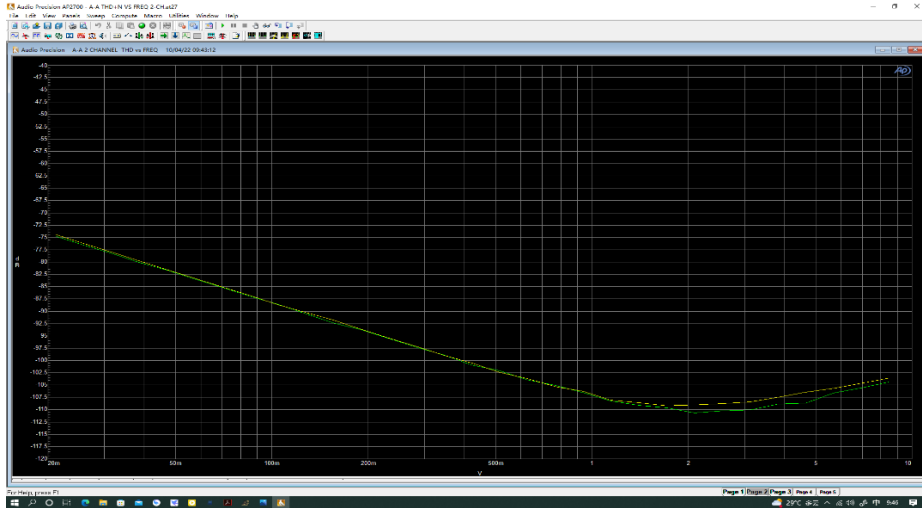
测试条件 XLR Input 4V，Volume Max，load 100K ohms



FFT 20-2K



Freq-response



THD+N VS Output, BW(0-22K)

THD+N : -110dB

测试条件 XLR Input 1V , Volume Max , load 100K ohms , 1KHz , 10-22KHz

增益调整 (J12/J12_1) : 0dB、+3dB、+6dB 三挡 (出厂默认+3dB)



+3dB

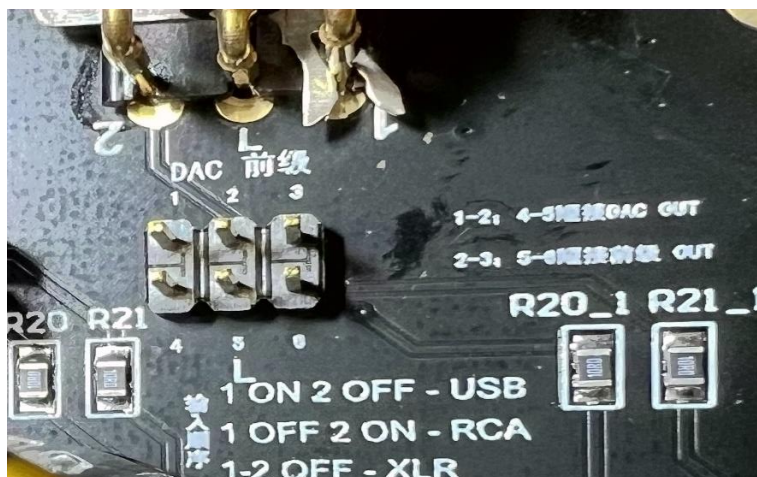


0dB



+6dB

输出调整 : 通过内部跳线分二种模式, 输出一种纯解码输出, 另一种带音量前级输出



阻抗调整 : 30/150 欧

信号输入 : USB、XLR 平衡输入与 RCA 单端输入各一组

信号输出 : XLR 平衡输出 (**注：不能接单端**)

耳机输出 : 6.35*1、四芯平衡*1

耳机输出功率 : 400mW

输入电压 : AC 110-220V 可切换



图一所示：220v 供电模式

通过电源主机的输入电压开关调整输入电压。**注意！开机前请确认当前本地工作**

电压，调整动圈耳机放大器交流电源输入电压与本地电压一致后开机使用

电源保险丝 : AC 220V (0.5A) ; AC 110V (1A)

整机消耗功率 : 18W

主机净重 : 5KG

主机机箱尺寸 : 330mmx228mmx61.5mm

Technical Specifications

Adaptable Headphones : High / low dynamic headphones

IC model : LT4320*2、LME49720*2、LME49724*2、OPA1612*2、OPA1678*8

Frequency : 20Hz-20kHz , +0/-0.25dB ; 20Hz-120kHz , +0/-2dB ;

Testing Conditions XLR Input 1V , Volume Max , load 100K ohms

THD+N : -110dB

Testing Conditions XLR Input 1V , Volume Max , load 100K ohms , 1KHz , 10-22KHz

Gain adjustment(J12/J12_1) : 0dB, + 3dB, + 6dB third gear (factory default + 3dB)

Output adjustment : There are two modes through the internal jumper, one is pure decoding output, and the other is pre level output with volume

Impedance adjustment : 30 / 150 ohm

Signal input : One set of XLR balanced input and one set of RCA single end input

Signal Input : USB、XLR balanced output (**Note: single terminal cannot be connected**)

headphone output : 6.35 * 1. Four core balance * 1

Headphone output power : 400mW

Input Voltage : AC 110-220V

The input voltage is adjusted by the input voltage switch on the back of power supply. **Attention! Confirm the current local power voltage first and adjust the input voltage switch to the right voltage before turning on**

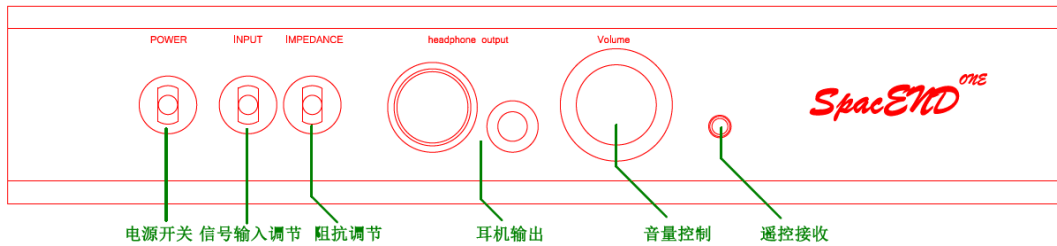
Power Fuse : AC 220V (0.5A); AC 110V (1A)

Power Consumption : 18W

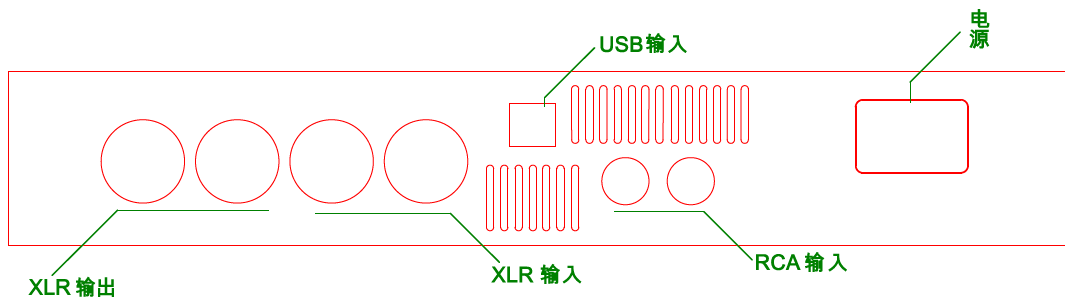
Net weight of main engine : 5KG

Main Unit Size : 330mmx220mmx61.5mm

前后面板 (Front & Rear Panel)



图二



图三

保修条款

整机保修一年，机器停产后负责维修五年

附件清单

- 1、 解码、前级与动圈耳机放大器一体机主机一台
- 2、 遥控器一个
- 3、 7号电池二枚(1.5v);
- 4、 备用保险丝一枚
- 5、 U盘使用说明书一枚
- 6、 美标电源线一条

警告

解码、前级与动圈耳机放大器一体机电源未完全接通前，**严禁**开启工作电源
(AC220/100 伏)

Warranty

The whole machine is guaranteed for one year, and the machine is

responsible for maintenance for five years after shutdown

Accessories

1. Main unit *1
2. remote control *1
3. 7 batteries(1.5V) *2
4. Spare fuse *1
5. User manual *1
6. One American standard power cord

Warnings

Do not turn on the working power supply (AC220 / 100V)until the power supply of the dynamic headphone amplifier is fully connected

SpacEND 音响工作室

Made in Shanghai

www.yeaudio.com