

# Sabaj

## D5

高解析音频解码器



使用说明书

深圳市大号科技有限公司

## 安全注意事项

- 请将本音响系统安装在通风良好、阴凉、干燥、干净的位置，远离直射阳光热源、振动、灰尘、潮湿或寒冷。
- 只能使用本机指定的电压。使用高于指定数值的电压很危险，而且可能导致火灾，损坏本机或造成人身伤害。对于使用高于指定电压造成的任何损害，深圳市大号科技有限公司将不负任何责任。
- 不要试图自行改造或修理本机。如果需要任何服务，请就近与有资格的深圳市大号科技有限公司维修人员联系。不管有任何理由，都没有打开机壳的必要。
- 如果打算长时间不使用本机（比如度假时），请从墙壁交流电源插座上断开电源线的连接。

## 保修条款

### 一、服务期限

深圳市大号科技有限公司承诺产品的良好品质，产品自售出之后7天内正常使用情况下出现故障，客户可以选择退货或者保修（不影响二次销售才可退货）。正常使用一年内出现故障可以免费保修。

二、购买日期以销售商开出的购机发票或收据日期为准，多购可以交易截图为准。

### 三、有以下情况都不能享受“三包”服务

- 1.一切人为因素损坏，包括非正常工作环境下使用或不按照说明书使用。
- 2.用户私自拆机、改装、维修。
- 3.使用非指定或许可的配件造成损坏的。
- 4.机身的QC或保修贴损毁。
- 5.不能出示有效购机凭证。
- 6.不属于本公司产品。

### 四、保修方式为送修

此条款只适于中国大陆，其它地区请参考当地销售代理商的规定和国家法规。

## 特点

- 使用美国ESS公司高端ES9038PRO D/A芯片。
- 搭配使用ES9311,ESS高性能DAC专用电源芯片,电源噪声低至1uVrms,将ES9038PRO的性能推到极限。
- USB使用XMOS XU-208,真正的32bit USB方案,支持DoP和原生DSD PCM最高支持到768kHz, DSD支持到DSD512。
- 使用了超低相噪的晶振,并且使用了高速的CPLD进行时钟处理,以达到超低的时钟抖动!
- 全部输入口均支持DSD传输,同轴,光纤支持DoP64。
- 分立元件大功率超大电流驱动耳放电路,提供更大的耳机推力。
- 内置高效率低漏磁的环形的变压器,为解码器提供充足且低噪声的电源供应。
- 特别设计的分立元件线性稳压电源和多个低噪声稳压电源,为模拟电路提供低噪声电源。
- 使用4颗高端双运放OPA1612及大量发烧元器件。
- 日本音频协会(JAS)Hi-Res认证。

## 技术参数

输入方式 .....	USB / 光纤 / 同轴 / PS	
输出方式 .....	平衡耳放 / 单端耳放 / 单端线路 / 平衡线路	
THD+N .....	前级输出	0.0002%
	耳放输出	0.001%
动态范围 .....	平衡线路	127dB
	单端线路	124dB
信噪比 .....	前级输出	120dB
	耳放输出	110dB
USB传输方式 .....	异步传输	
USB兼容性 .....	Windows 7 / 8 / 8.1 / 10, Mac OSX10.6以上、Linux	
位深 .....	USB	1bit, 16 ~ 32bit
	光纤、同轴	1bit, 16 ~ 24bit
采样率 .....	USB/PS	PCM 44.1 ~ 768kHz
		DSD 2.8224 ~ 22.5792MHz
	光纤/同轴	PCM 44.1 ~ 192kHz
		DSD DSD64(DoP)
耳放输出功率 .....	平衡	1912mW(32Ω)
		1025mW(64Ω)
		455mW(150Ω)
		231mW(300Ω)
	单端	480mW(32Ω)
		265mW(64Ω)
		115mW(150Ω)
		58mW(300Ω)
消耗功率 .....	.8W	
待机功耗 .....	.0.6W	
体积 .....	245x50x210mm (WxHxD)	
重量 .....	.2.5kg	

## 关于遥控器

- 如果遥控器距离本机很近时操作仍无效，请用新电池更换。
- 如果要长时间不使用遥控器，请取出遥控器的电池。
- 按照电池处置的地方性法规处置废旧电池。

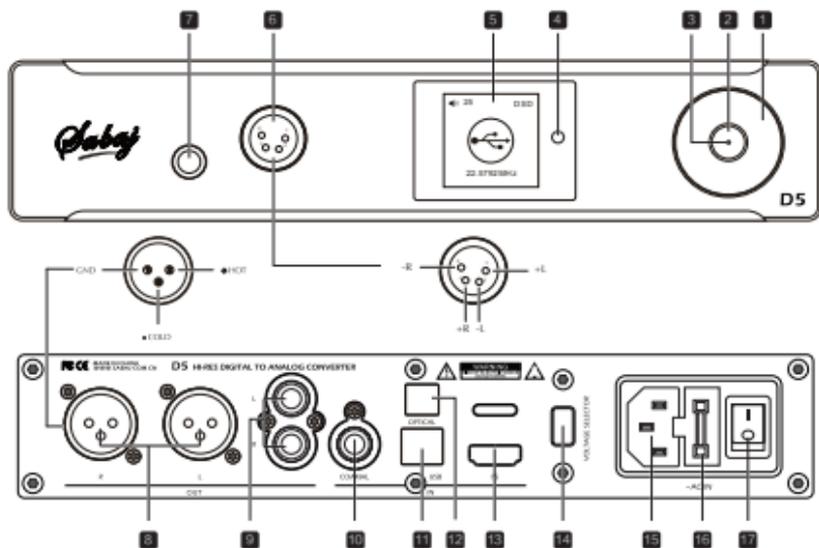
## 遥控器的使用



## 注意

1. 遥控器请使用2节7号(AAA)电池
2. 第一次操作 D5 时，先按 C 键

## 部件介绍



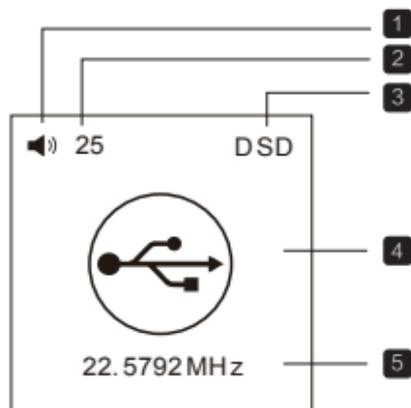
- |                        |                   |                 |
|------------------------|-------------------|-----------------|
| 1 旋钮 <sup>1</sup>      | 2 按键 <sup>2</sup> | 3 指示灯：待机红色，开机蓝色 |
| 4 红外遥控接收窗              | 5 显示屏             | 6 XLR 平衡耳机输出    |
| 7 6.35mm 非平衡耳机输出       | 8 平衡线路输出          | 9 单端线路输出        |
| 10 同轴输入                | 11 USB 输入         | 12 光纤输入         |
| 13 I2S 输入 <sup>3</sup> | 14 电压选择开关         | 15 电源插座         |
| 16 保险盒(内含一枚备用保险)       | 17 电源开关           |                 |

注：

- 1、旋钮：音量加减，菜单切换，功能选择
- 2、按键：短按，进入菜单，确认  
长按，退出菜单，开关机
- 3、I2S输入使用普通的HDMI线连接，不需要使用特制的线材。

## 界面介绍

### 1. 主界面



#### 1、输出方式显示

🔊 为前级输出，🎧 为耳放输出

#### 2、音量显示

#### 3、音频格式

#### 4、输入方式显示

#### 5、采样率显示（注：当启用静音时此处显示MUTING；当无信号输入时此处显示NO SIGNAL）

## 菜单功能介绍

### 2. 菜单界面

#### 1. INPUT (输入方式)

USB  
OPT1 (光纤)  
COAX (同轴)  
I2S

#### 2. OUTPUT (输出方式)

LINE OUT (路线输出)  
HP SE OUT (单端耳机输出)  
HP BAL OUT (平衡耳机输出)

#### SETUP MENU

▶ INPUT  
▶ OUTPUT  
▶ I2S MODE  
▶ I2S DSD L/R  
▶ FILTER  
▶ DIMMER  
▶ SYSTEM

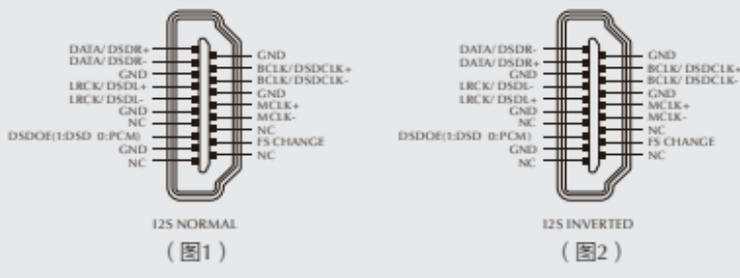
#### 3. I2S MODE

I2S NORMAL (正常)  
I2S INVERTED (反相)

- I2S模式设置，由于I2S接口并非一个真正意义上有统一标准的接口，因此不同厂家在引脚定义上会有不同，因此我们设计一级菜单用于改变这些模式：

1. Normal就是我们定义的接口定义，如下图1；
2. I2S INVERTED是LRCK和DATA两组型号的相位是相反的，如下图2；

#### I2S 接口引脚定义



## 菜单功能介绍

4. I2S DSD L/R (I2S输入DSD状态左右声道设置) 注: 由于不同的数字音源在DSD格式定义上不一定一致, 因此我们加入了这个菜单用于交换DSD播放时, 音频的左右声道。此设置仅对DSD信号有效, 不影响PCM播放时的声道设置。
- NORMAL (正常)
  - SWAPPED (左右声道交换)

### 5. FILMMER (PCM 滤波器)

- FAST LINEAR (快速滚降, 线性相位滤波器)
- SLOW LINEAR (慢滚降, 线性相位滤波器)
- APODIZING (切迹, 快速滚降, 线性相位滤波器)
- FAST MINIMUM (快速滚降, 最小相位滤波器)
- SLOW MINIMUM (慢滚降, 最小相位滤波器)
- FAST HYBRID (混合, 快速滚降, 最小相位滤波器)
- BRICKWALL (矩形滤波器)

### 6. DIMMER (显示屏亮度设置)

- LEVEL 1 ~ LEVEL 9

### 7. SYSTEM (系统版本信息)

- 本页菜单显示系统信息, 例如型号名称, 版本号等.....

## 恢复出厂设置

机器在未通电状态下, 按住开机键再通电, 直到显示屏显示logo之后, 松开按键。

# *Sabaji*

## **D5**

Hi-Res Digital To Analog Converter



USER MANUAL

Shenzhen DaHao Technology Co.,Ltd.

## Safety Notes

- Install this unit in a well ventilated, cool, dry, clean place-away from direct sunlight, heat sources, vibration, dust, moisture, or cold..
- Do not attempt to modify or fix this unit. Contact qualified Sabaj service personnel when any service is needed. The cabinet should never be opened for any reason.
- When not planning to use this unit for long periods of time ( i. e. when going onvacation), disconnect the power cable from the AC wall outlet.
- When not planning to use this unit for long periods of time (i.e. when going on vacation), disconnect the power cable from the AC wall outlet.

## Warranty Terms

### 1. The term of service

Shenzhen Sabaj technology Co.,LTD promise good quality products. If product is defective unit by normal use with in 7daysafterpurchasing. The customer can choose to return or repair warranty( does not affect the secondary sales afterthey can return). Faulty for free with in one year warranty normal use.

### 2. Date of purchase is in accordance with invoice date or receipt date issued by seller, online shopping can cut trade shots.

### 3. Following situation can not enjoy"Three Guarantees service"

- a. All damages by human factors, including use it under nonrml workingenvironment the and not following manual instruction.
- b. User privately disassemble, modification, maintenance.
- c. Use non-designated or approved accessories cause damage.
- d. QC or warranty stickers damage on cabinet.
- e. Can not provide a valid purchasing prove.
- f. Not belong to Sabaj product.

### 4. How to warranty

This term is only suitable for china mainland, other regionplease refer to the policy of the local sales agents and national regulations.

## Features

- The top performance D/A chip ES9038PRO from ESS Technology.
- The high-performance power supply chip ES9311, the noise of ES9311 is lower than 1uVrms, to pushed ES9038PRO to the limit.
- XMOS XU-208, true 32bit audio processing, support DoP and Native DSD, and reaches 32bit/768kHz and DSD512.
- Ultra-low phase noise NDK Japan crystal oscillator and high-speed CPLD is used for clock processing, to achieve very low Clock jitter.
- All inputs support DSD streaming, including coaxial and optical (DoP64).
- Special design of discrete components high current headphones amplifier for higher damping factor.
- Built-in high efficiency and low vibration transformer provides sufficient and low noise power supply.
- Special design of discrete components linear regulator for analog circuit.
- 4 high-end dual op-amps OPA1612 and a lot of audio grade components are used.
- JAS Hi-Res certification.

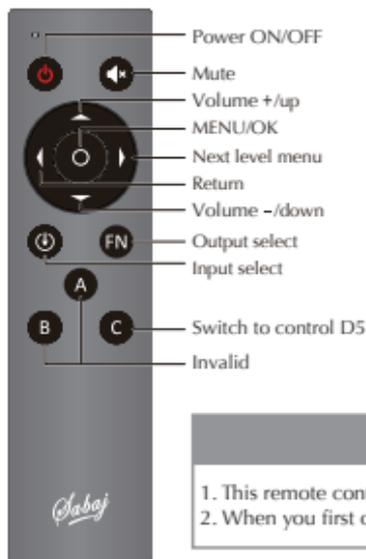
## Specifications

Input .....	USB / Optical / Coaxial / PS		
Output .....	Line (SE, XLR) / Headphones (SE, XLR)		
THD+N .....	DAC		0.0002%
	Headphones		0.001%
Dynamic range .....	XLR		127dB
	RCA		124dB
SNR .....	DAC		120dB
	Headphones		110dB
USB transmission .....	Asynchronization		
USB compatibility .....	Windows 7 / 8 / 8.1 / 10, Mac OSX10.6 or Later, Linux		
Bit depth .....	USB	1bit,	16 ~ 32bit
	Optical / Coaxial	1bit,	16 ~ 32bit
Sampling rate .....	USB/PS	PCM	44.1 ~ 768kHz
		DSD	2.8224 ~ 22.5792MHz
	Optical / Coaxial	PCM	44.1 ~ 192kHz
		DSD	DSD64(DoP)
Headphone amplifier output power .....	XLR		1912mW(32Ω)
			1025mW(64Ω)
			455mW(150Ω)
			231mW(300Ω)
	SE		480mW(32Ω)
			265mW(64Ω)
			115mW(150Ω)
			58mW(300Ω)
Power Consumption .....	.8W		
Standby power .....	.0.6W		
Size .....	.245x50x210mm (WxHxD)		
Weight .....	.2.5kg		

## Remote Control

- Install 2 x AAA batteries as instructions.
- When using the remote control, point it toward the remote control signal receiver on the main unit from a distance of 5 m (16 ft) or less. Do not place obstructions between the main unit and the remote control.
- The remote control might not work if the remote control signal receiver on the unit is exposed to direct sunlight or bright light. If this occurs, try moving the unit. Beware that use of this remote control could cause the unintentional operation of other devices that can be controlled by infra.

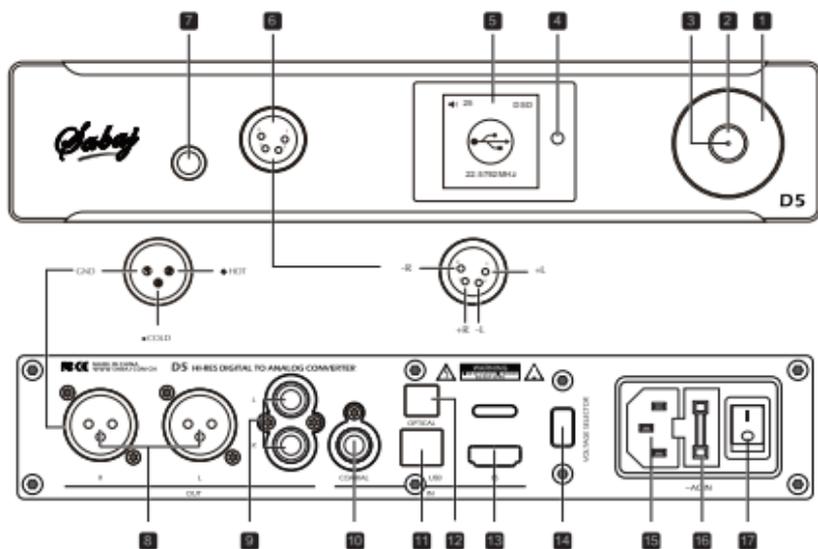
### Operating the remote control



#### Note

1. This remote controller use 2 x R03/AAA batteries.
2. When you first operate D5, press the C key first.

## Parts Name



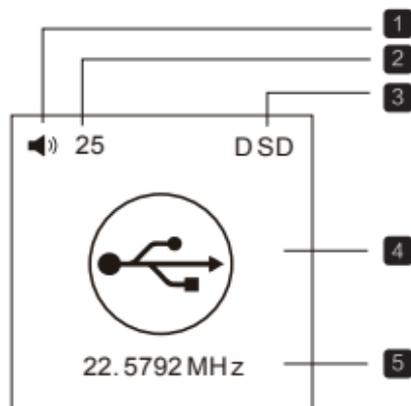
- |                                   |                       |                                |
|-----------------------------------|-----------------------|--------------------------------|
| 1 Konb <sup>1</sup>               | 2 Button <sup>2</sup> | 3 Power LED(OFF: RED, ON:BLUE) |
| 4 IR window                       | 5 Display             | 6 XLR phones jack              |
| 7 6.35mm phones jack              | 8 XLR line out        | 9 RCA line out                 |
| 10 Coaxial input                  | 11 USB input          | 12 Optical input               |
| 13 I2S input <sup>3</sup>         | 14 Voltage Selector   | 15 Power inlet                 |
| 16 Fuse(with a spare fuse inside) | 17 Power Switch       |                                |

### Note:

1. Konb: Volume/Menu up or down
2. Button: Press to Menu/Enter  
Hold to Return or Power ON/OFF
3. I2S input is connected by ordinary HDMI cable, and no special cable is required.

## User Interface

### 1. Main



1、 Output mode indicates

🔊 Line out, 🎧 Headphones out

2、 Volume Level

3、 Streaming Format

4、 Input mode indicates

5、 Current Sample rate (Display "NO SIGNAL" when unlcok or no connection, or display "MUTING" when it is muting)

## Setting Introduction

### 2. SETUP MENU

#### 1. INPUT

USB  
OPTI  
COAX  
I2S

#### 2. OUTPUT

LINE OUT  
HP SE OUT  
HP BAL OUT

#### SETUP MENU

▶ INPUT  
▶ OUTPUT  
▶ I2S MODE  
▶ I2S DSD L/R  
▶ FILTER  
▶ DIMMER  
▶ SYSTEM

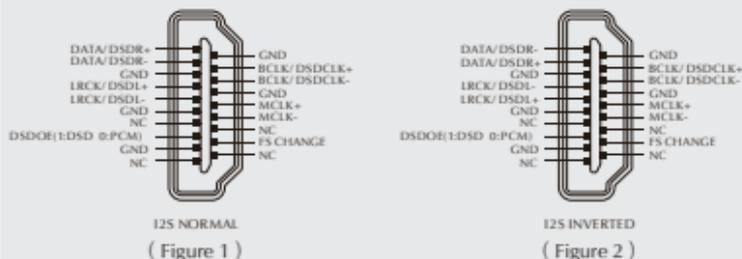
#### 3. I2S MODE

I2S NORMAL  
I2S INVERTED

- I2S mode settings, because this "I2S" interface is not really a unified standard interface, so different manufacturers will have different pins definitions, so we design a menu item to change these modes:

- "Normal" is the interface definition we defined, as Figure 1.
- "Inverted" is inverting the phase of "LRCK" and "DATA", as Figure 2.

#### I2S Pins Functions



## Setting Introduction

4. I2S DSD L/R  
NORMAL  
SWAPPED

Note: This setting is for some digital source DSD ports definition is different, if you using the I2S input and listening to DSD music and the L/R is wrong, try this setting!

5. FILTER  
FAST LINEAR  
SLOW LINEAR  
APODIZING  
FAST MINIMUM  
SLOW MINIMUM  
FAST HYBRID  
BRICKWALL

Note:

1. This unit has built-in 7 kinds of PCM digital filter, these filters are only valid when playback PCM music.
2. Different filter has different sound characters, try it on different kind of music.

6. DIMMER  
LEVEL 1 - LEVEL 9

7. SYSTEM

This page shows the system informations, model name, version...

## Factory Reset

Connect the power cord when pressing the power button, until screen shows logo.