

S.M.S.L

**THX**  
TECHNOLOGY

Hi-Res  
AUDIO



SP400

使用说明书

Ver: 1.0

## 安全注意事项

- 请将设备安装在通风良好、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，我司将不负任何责任。
- 不要试图自行改造或修理本机。如果需要任何服务，请与销售或者我司客服人员联系。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。

### 重要提示：

本说明书所提到的产品规格和资讯仅供参考。如有内容更新，恕不另行通知。

## 保修条款

### 一、服务期限

佛山双木三林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，网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。

## 产品特点

- 美国THX公司的THXAAA-888耳机放大电路,并取得THX认证和授权 ;
- 超紧凑设计, 非常适合桌面耳机系统 ;
- 平衡立体声耳机输出 ;
- 平衡前级线路输出 ;
- 平衡立体声线路输入 ;
- 高精度低温漂电阻,以适应温度变化 ;
- 高品质继电器和无冲击声设计 ;
- 高精度低噪声256级继电器音量控制 ;  
\*实际使用时为了音量更加线性, 屏蔽了多余的级数。
- 16欧姆输出功率达12W, 32欧姆时达到6W ;
- 0.1 Hz至500 kHz ( -3dB ) 频率响应 ;
- 高中低三档可切换增益控制 ;
- 耳机放大器具有DC, 过压, 过流, 短路和热保护的全面保护 ;
- 高效超低噪声电源 ;
- 1.9吋的液晶显示屏。



经THX公司许可制造, THX和THX商标已经在美国和其他司法管辖区注册, 版权所有。

## 技术参数

### ■ 音频部分:

输入方式:	平衡 x1, 非平衡 x1
输出方式:	平衡耳机 × 1, 非平衡耳机 × 1, 前级平衡输出 × 1
输出功率:	
平衡耳机	12W x 2 (16 Ω) 6W x 2 (32 Ω) 880mW x 2 (300 Ω) 440mW x 2 (600 Ω)
非平衡耳机	6W x 2 (16 Ω) 3W x 2 (32 Ω) 440mW x 2 (300 Ω) 220mW x 2 (600 Ω)

信噪比:	133dB, A-Weighted
剩余噪音:	1.9uV, A-Weighted
THD+N:	-123dB, 0.00007% (1kHz, 32 Ω)
THD+N:	-117dB, 0.00013% (20-20kHz, 32 Ω, -3dB)
THD:	<-125dB, 0.00006%
输入阻抗:	47kΩ
输出阻抗:	接近0Ω
频率响应:	0.1Hz - 500kHz(-3dB)
增益:	

增益控制表

SE IN/BAL OUT	BAL IN/BAL OUT	SE IN/SE OUT	BAL IN/SE OUT	SE IN/PRE OUT	BAL IN/PRE OUT
6.5dB@GAIN=L 9.5dB@GAIN=M 11.6dB@GAIN=H	6.5dB@GAIN=L 9.5dB@GAIN=M 11.6dB@GAIN=H	0dB@GAIN=L 3.5dB@GAIN=M 5.3dB@GAIN=H	0dB@GAIN=L 3.5dB@GAIN=M 5.3dB@GAIN=H	6dB@GAIN=L 9dB@GAIN=M 11dB@GAIN=H	6dB@GAIN=L 9dB@GAIN=M 11dB@GAIN=H

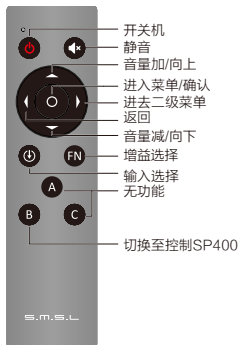
### ■ 其他:

电源电压/电源频率:	AC100-240V, 50-60 Hz
能量功耗(EN60065):	<40 W
待机功率:	<0.1W
尺寸:	220X215X43mm(WxHxD)
包装尺寸:	354X276X80(mm)
重量:	1330g

## 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。

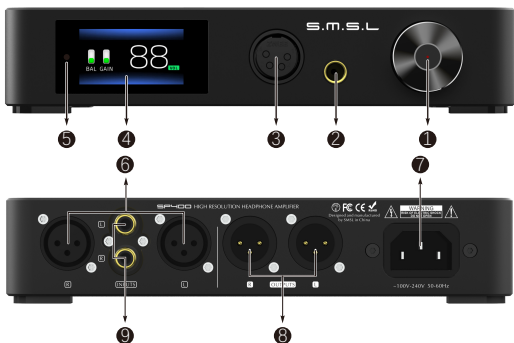
## 遥控器的使用



## 注意

1. 遥控器请使用2节7号(AAA)电池
2. 第一次操作SP400时，先按B键

## 部件介绍



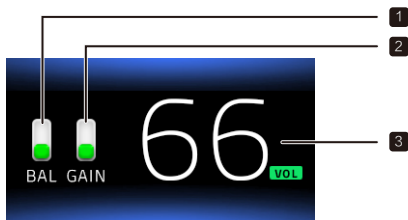
- |            |                      |                |
|------------|----------------------|----------------|
| 1 功能旋钮     | 2 6.35mm耳机接口(SE OUT) | 3 平衡耳机接口       |
| 4 屏幕       | 5 红外接收窗              | 6 XLR平衡输入      |
| 7 AC电源输入插口 | 8 前级平衡输出接口(PRE OUT)  | 9 RCA输入(SE IN) |

\*注：功能旋钮

- 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，开机  
长按，退出菜单，关机

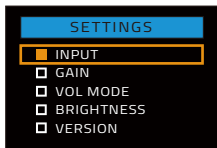
## 操作说明

### 1. 主界面



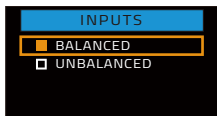
- 1、输入模式(BAL/RCA)
- 2、增益(高/中/低)
- 3、音量

## 操作说明



有5页的设置，屏幕如下图所示

1. INPUT (输入选择)
2. GAIN (增益控制)
3. VOL MODE (音量控制模式)
4. BRIGHTNESS (亮度)
5. VERSION (版本号)



输入菜单

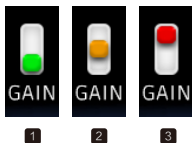
1. BALANCED (平衡输入)
2. UNBALANCED (非平衡输入)



增益菜单

1. LOW (低)
2. MID (中)
3. HIGH (高)

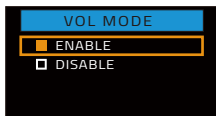
注：增益在低中高不同档位时显示的颜色不一样



- 1 绿色 低
- 2 黄色 中
- 3 红色 高



## 操作说明

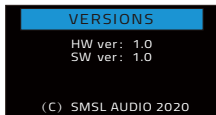


### 音量控制模式:

1. 开启: 音量继电器会间隔变动, 以避免继电器动作过于频繁, 延长继电器寿命!
2. 关闭: 快速旋转音量旋钮时, 继电器逐级跳至设定音量。



亮度调节范围: LEVEL 1~6



版本号

### ■ 恢复出厂设置

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

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**THX**  
TECHNOLOGY

Hi-Res  
AUDIO



**SP400**  
USER MANUAL

Ver: 1.0

## Safety Notes

- Install this unit in a well ventilated, cool, dry, clean place-away from direct sunlight, heat sources, vibration, dust, moisture, or cold..
- Use the voltage specified on this unit Only. Using this unit with a higher voltage than specified is dangerous and may cause fire , damage to this unit, or personal injury. Our company will not be held responsible for any damage resulting from the use of this unit with a voltage other than that specified.
- Do not attempt to modify or fix this unit by yourself. Contact a person or customer service 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 on vacation), disconnect the power cable from the AC wall outlet.

### **Important note:**

The product specifications and information mentioned in this manual are for reference only. The content of this manual is subject to change without notice.

## Warranty Terms

### Warranty Terms

- 1.The term of service Foshan Shuangmusanlin Technology Co., Ltd. promises good quality products. If the product is defective by normal use within 7 days after purchasing, the customer can chose to send it back for returning or repairing (only the product does not affect the secondary sales can be returned ). Faulty for free within one year warranty normal use.
- 2.Date of purchase is in accordance with the date on invoice or receipt used by seller, on line shopping can show the screenshot of trade.
- 3.Following situation can not enjoy“Three Guarantees service”
  - a.All damages by human factors,including use it under non-normal working environment the and not follow manual in structions.
  - 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 guarantee These terms only suitable for China mainland, other region please refer to the policy of the local sales agents and nations.

## Features

- THXAAA-888 Headphone Amplifier with THX AAA Technology;
- Ultra-Compact Design, Perfect for Desktop Systems;
- Balanced Stereo Headphone Output ;
- Pre-amplifier application ;
- Balanced Stereo Line Input;
- High Precision Resistors for Temperature Stability ;
- Pop-less Design with High-Quality Relays;
- High precision and low noise 256 level relay volume control;  
\*In actual use, in order to make the volume more linear, the extra levels are shielded.
- 12 Watts into 16 Ohm, 6 Watts into 32 Ohm ;
- 0.1 Hz to 500 kHz(-3dB) Frequency Response ;
- 3 Positions Switchable Gain Control ;
- Fully Protection with DC, Over-Voltage, Over-Current, Short-Circuit and Thermal Protection on Headphone Amplifier ;
- High-Efficiency Ultra-Low-Noise Power Supply .
- 1.9 inch LCD display.



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## Specifications

### ■ Audio Section:

Inputs:	Balanced x1, Unbalanced x1
Outputs:	Balanced x1, Unbalanced x1, Pre-balanced output x1
Output Power:	
Balanced	12W x 2 (16 $\Omega$ ) 6W x 2 (32 $\Omega$ ) 880mW x 2 (300 $\Omega$ ) 440mW x 2 (600 $\Omega$ )
Unbalanced	6W x 2 (16 $\Omega$ ) 3W x 2 (32 $\Omega$ ) 440mW x 2 (300 $\Omega$ ) 220mW x 2 (600 $\Omega$ )
SNR:	133dB, A-Weighted
Output Noise:	1.9uV, A-Weighted
THD+N:	-123dB, 0.00007% (1kHz, 32 $\Omega$ )
THD+N:	-117dB, 0.00013% (20-20kHz, 32 $\Omega$ , -3dB)
THD:	<-125dB, 0.00006%
Input Impedance:	47k $\Omega$
Output Impedance:	Near 0 $\Omega$
Frequency Response:	0.1Hz - 500kHz(-3dB)
Gain:	

Gain Control Chart

SE IN/BAL OUT	BAL IN/BAL OUT	SE IN/SE OUT	BAL IN/SE OUT	SE IN/PRE OUT	BAL IN/PRE OUT
6.5dB@GAIN=L	6.5dB@GAIN=L	0dB@GAIN=L	0dB@GAIN=L	6dB@GAIN=L	6dB@GAIN=L
9.5dB@GAIN=M	9.5dB@GAIN=M	3.5dB@GAIN=M	3.5dB@GAIN=M	9dB@GAIN=M	9dB@GAIN=M
11.6dB@GAIN=H	11.6dB@GAIN=H	5.3dB@GAIN=H	5.3dB@GAIN=H	11dB@GAIN=H	11dB@GAIN=H

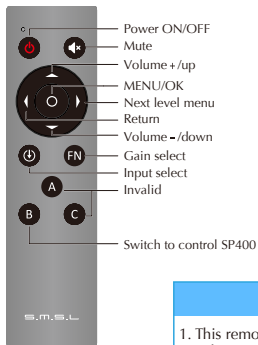
### ■ General Section:

Power supply voltage/frequency:	AC100-240V, 50-60 Hz
Power consumption(EN60065):	<40 W
Power consumption in standby mode:	<0.1W
Size:	220X215X43mm(WxHxD)
Packing size:	354X276X80(mm)
Weight:	1330g

## 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 SP400, press the B key first.

## Display Interface and Instructions



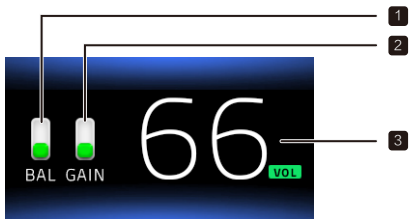
- |                  |                                 |                           |
|------------------|---------------------------------|---------------------------|
| 1 Knob           | 2 6.35mm headphone jack(SE OUT) | 3 Balanced headphone jack |
| 4 Display        | 5 Remote window                 | 6 XLR input               |
| 7 Power AC input | 8 Analog output(PRE OUT)        | 9 RCA input(SE IN)        |

\* Note: Knob

1. Knob: Volume / Menu up or down
2. Button: Press to Menu / Enter / Power ON  
Hold to Return or Power OFF

## Operating instructions

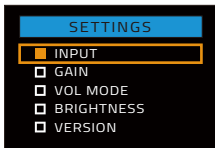
### 1. Main



- 1、Input mode (BAL/RCA)
- 2、Gain (High / Middle / Low)
- 3、Volume

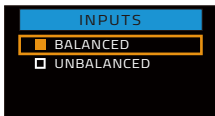


## Display Interface and Instructions



There are 5 pages of settings in this menu.

1. INPUT
2. GAIN
3. VOL MODE
4. BRIGHTNESS
5. VERSION



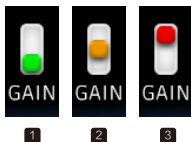
### INPUTS

1. BALANCED
2. UNBALANCED



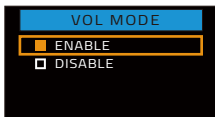
### GAIN

1. LOW
2. MIDDLE
3. HIGH



- GREEN      LOW
- YELLOW      MIDDLE
- RED      HIGH

## Display Interface and Instructions

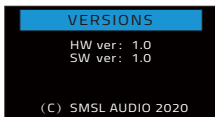


### VOL MODE

1. ENABLE: Reduce the frequency of relay operation and increase the service life of relay.
2. DISABLE: When the rapidly rotating volume knob, the relay jumps to the set volume step by step.



**Brightness Level:** 1 ~ 6



### VERSIONS

#### ■ Factory Reset

Connect the power cord when pressing the power button, until the screen shows the logo. Then stop pressing and restart the unit.