

S.M.S.L



M500

使用说明书

双木三林科技有限公司

## 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，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。

## 保修条款

### 一、服务期限

佛山市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，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

- 支持MQA解码；
- 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ES9311, 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；
- 使用了超低相噪和优化的时钟处理电路处理, 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；
- 独立耳机音量设计, 与前级音量互不干扰；
- 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；
- 使用钢化玻璃显示面板, 更高的透光率, 更长的使用寿命；
- 内置带屏蔽, 低噪声电源处理, 同时提高电源效率, 功耗更低；
- 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；
- 高品质镀金输入输出连接端子；
- 使用3颗高端双运放OPA1612及大量发烧元器件；
- 2.19吋的LG液晶显示屏；
- 日本音频协会(JAS)Hi-Res认证；
- 配备遥控器和全功能遥控。

## 技术参数

输入方式 .....	USB / 光纤x2/同轴
输出方式 .....	单端耳放/单端线路/平衡线路
THD+N .....	0.00015%
动态范围 .....	平衡线路 125dB 单端线路 120dB
信噪比 .....	120dB
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 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 .....	570mW(32Ω) 290mW(64Ω) 125mW(150Ω) 65mW(300Ω)
消耗功率 .....	5W
待机功耗 .....	<0.5W
体积 .....	85x88x197mm (WxHxD)
重量 .....	0.91kg

## 温馨提示

固件及驱动下载：

<http://www.smsl-audio.com/cn/download.asp>

## 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。

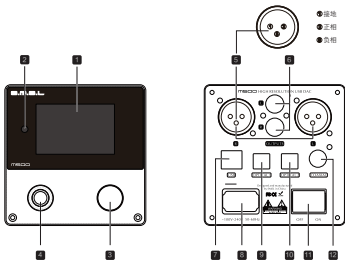
## 遥控器的使用



### 注意

1. 遥控器请使用2节7号(AAA)电池
2. 第一次操作M500时，先按 C 键

## 部件介绍



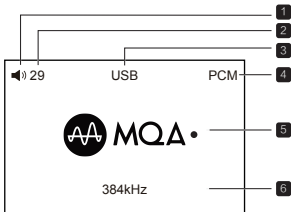
- |              |          |          |
|--------------|----------|----------|
| 1 显示屏        | 2 红外接收窗  | 3 功能旋钮+  |
| 4 6.35mm耳机输出 | 5 平衡线路输出 | 6 单端线路输出 |
| 7 USB输入      | 8 电源输入   | 9 光纤1输入  |
| 10 光纤2输入     | 11 电源开关  | 12 同轴输入  |

\*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  
长按，退出菜单，开关机

## 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、输入源

#### 4、DAC解码格式

#### 5、音频显示格式\*

#### 6、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）

\*注：

当PCM格式音频大于等于88.2kHz时，显示“”。

当播放音频格式为MQA时，显示“”。

当播放音频格式为DSD时，显示“”。

## 关于MQA

MQA (Master Quality Authenticated) 是一项屡获殊荣的英国技术, 是一种兼有极高的采样率和足够小的文件体积的高解析音频编码技术。M500采用MQA技术, 可以接收并解码MQA音频, 提供母带级别的声音。

有关更多信息, 请访问<https://www.mqa.co.uk/how-it-works>

## MQA文件播放

- M500只有USB接口支持MQA解码,其它接口不支持!
- M500的MQA播放不要求使用特殊的播放软件,例如foobar2000,Audirvanaplus只要支持ASIO或者WASAPI的音频输出就可以了,并且在播放MQA音频时,最好将电脑的音量调到最大,以使得电脑的音频输出是最佳状态。
- MQA商标旁边的指示灯为绿色或蓝色亮起,表示设备正在解码并播放MQA音频或文件,并且确保输出音质与源素材一致。它呈蓝色亮起,表示它正在播放MQA Studio文件,该文件已经由艺术家/制作人或者版权所有人获得授权。当MQA商标旁边的指示灯发出红色,表示该机器正在发送MQA音频或文件,这就是MQA文件的最后一步。
- 在播放MQA文件时,显示屏显示的采样率为音频原始采样率。



## 菜单功能介绍

### 2. 菜单界面

#### 1. INPUT (输入方式)

- USB (USB输入)
- OPT11 (光纤 1 输入)
- OPT12 (光纤 2 输入)
- COAX (同轴输入)

#### SETUP MENU

- ◀ INPUT
- ◀ OUTPUT
- ◀ FILTER
- ◀ DIMMER
- ◀ SYSTEM

#### 2. OUTPUT (输出方式)

- LINE OUT (线路输出)
- HP OUT (耳机输出)

\*线路输出时，平衡和单端同时输出

#### 3. FILMMER

(PCM 滤波器, 这项设置只对非MQA的PCM格式有效, 当正在播放MQA格式音频时, 根据MQA方面要求, 数字滤波会切换到MQA特别定制的滤波算法! 更好的匹配MQA的音频特性!)

- 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)
- 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)
- Apodizing (切迹, 快速滚降, 线性相位滤波器)
- Fast Hybrid (混合, 快速滚降, 最小相位滤波器)
- Brickwall (矩形滤波器)

#### 4. DIMMER (显示屏亮度设置)

LEVEL 1 ~ LEVEL 9

#### 5. 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, 后重启机器。

**S.M.S.L**



**M500**

**USER MANUAL**

<http://www.smsl-audio.com/>

## 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.

## 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

- Supports MQA decoding;
- The top performance D/A chip ES9038PRO from ESS Technology;
- The high-performance power supply chip ES9311, the noise of ES9311 is as low as 1uVrms, to push ES9038PRO to the limit;
- XMOS XU-208, true 32bit audio processing, supports DoP and Native DSD, and reaches 32bit/768kHz and DSD512;
- Ultra-low phase noise and optimized clock processing circuit are used to achieve ultra-low clock jitter;
- All inputs support DSD streaming, including coaxial and optical (DoP64);
- Independent headphone volume design, does not interfere with the preamp volume;
- Special design of discrete components high current headphones amplifier for higher damping factor;
- Use tempered glass display panel for higher light transmission and longer service life;
- Built-in shielded, low noise power supply processing, while improving power efficiency, lower power consumption;
- High quality gold-plated input and output jacks;
- 3 high-end dual op-amps OPA1612 and a lot of audio grade components are used;
- 2.19 inch LG TFT LCD display;
- JAS Hi-Res certification;
- Equipped with remote control and full-function remote control.

## Specifications

Input .....	USB / Opticalx2 / Coaxial		
Output .....	RCA Headphone Amplifier/ RCA /XLR		
THD+N .....	0.00015%		
Dynamic range .....	XLR	125dB	
	RCA	120dB	
SNR .....	120dB		
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	PCM	44.1 ~ 768kHz
		DSD	2.8224 ~ 22.5792MHz
	Optical / Coaxial	PCM	44.1 ~ 192kHz
		DSD	DSD64(DoP)
Headphone amplifier output power .....			570mW(32Ω)
			290mW(64Ω)
			125mW(150Ω)
			65mW(300Ω)
Power Consumption .....	5W		
Standby power .....	<0.5W		
Size .....	85x88x197mm (WxHxD)		
Weight .....	0.91kg		

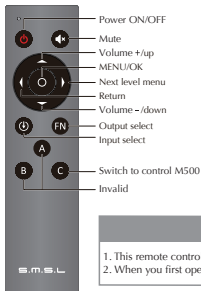
## Note

Firmware and driver download:  
<http://www.smsl-audio.com/cn/download.asp>

## 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.

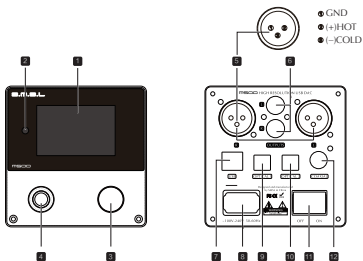
## Operating the remote control



### Note

1. This remote controller use 2 x R03/AAA batteries.
2. When you first operate M500, press the C key first.

## Display Interface and Instructions



- |                         |                   |                   |
|-------------------------|-------------------|-------------------|
| 1 Display               | 2 Remote window   | 3 Knob+           |
| 4 6.35mm headphone jack | 5 Balanced output | 6 RCA output      |
| 7 USB input             | 8 AC IN           | 9 Optical 1 input |
| 10 Optical 2 input      | 11 Power switch   | 12 Coaxial input  |

\* Note: Knob

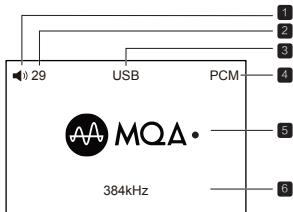
1. Knob: Volume/Menu up or down

2. Button: Press to Menu/Enter

Hold to Return or Power ON/OFF

## User Interface

### 1. Main



#### 1、Output indicator and volume level

🔊 Line out, 🎧 Headphones out

#### 2、Volume Level

#### 3、Input source

#### 4、Stream indicator

#### 5、Audio format indicator\*

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

\*Note :

When the PCM audio is 88.2 kHz or even more, it will display "HIFI AUDIO".

When it is MQA audio, it will display "MQA".

When it is DSD audio, it will display "DSD".



## About MQA

MQA (Master Quality Authenticated) is an award-winning British technology that delivers the sound of the original master recording. The master MQA file is fully authenticated and is small enough to stream or download. The M500 includes MQA technology, which enables you to playback MQA audio files and streams, delivering the sound of the original master recording.

Visit [How it works https://www.mqa.co.uk/how-it-works](https://www.mqa.co.uk/how-it-works) for more information.

## MQA files playback

- The M500 supports MQA decoding on the USB interface.
- M500's MQA playback does not require additional software. You can use foobar2000 or Audirvana for MQA playback as it supports ASIO or WASAPI audio output. When playing MQA audio, it is suggested to adjust the volume of the computer to the maximum for the best audio output.
- The M500 LED next to MQA logo glows green or blue to indicate that the unit is decoding and playing an MQA stream or file, and denotes provenance to ensure that the sound is identical to that of the source material. It glows blue to indicate it is playing an MQA Studio file, which has either been approved in the studio by the artist/producer or has been verified by the copyright owner. The M500 LED next to MQA logo glows magenta to indicate that the unit is rendering an MQA stream or file. This delivers the final unfold of the MQA file.
- When playing an MQA file, the sampling rate of the original master recording is displayed.

## Setting

### 2. SETUP MENU

#### 1. INPUT

- USB
- OPT1 1
- OPT1 2
- COAX

#### 2. OUTPUT

- LINE OUT
- HP OUT

\*Note: The output of circuit is both RCA and SLR output.

#### SETUP MENU

- ◀ INPUT
- ◀ OUTPUT
- ◀ FILTER
- ◀ DIMMER
- ◀ SYSTEM

#### 3. FILTER

- Fast Linear
- Slow Linear
- Fast Minimum
- Slow Minimum
- Apodizing
- Fast Hybrid
- Brickwall

(This setup is only valid for non-MQA PCM format. Products with a full MQA Decoder unfold the file to deliver the highest possible sound quality. At this level of playback you are hearing what the artists created in the studio – with precise file and platform-specific DAC compensation and management.)

#### 4. DIMMER

- LEVEL 1 ~ LEVEL 9

#### 5. SYSTEM

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

## Factory Reset

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