S.M.S.L

Hi·Res AUDIO

DS20

使用说明书/USER MANUAL/取扱説明書

本说明书的内容可能会随版本更改如有变动, 恕不另行通知
The contents of this manual may be changed with the edition, and are subject to change without notice.

Ver 1.0

安全注意事项

- 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。

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。

特点

- 使用4片Cirrus Logic公司最新音频解码芯片CS43131!

- 采用PLFC全平衡耳放电路设计;

- 全新第三代XMOS XU-316,PCM 支持到32bit/768kHz,DSD支持到DSD256;

- 支持MQA全解码,8倍展开;

- USB1.1与USB2.0两种模式选择,USB1.1方便用户连接PS5或者Switch等游戏机;

- 音频专用时钟处理电路,大大降低时钟抖动;

- 内置专门设计的低噪声电源;

- 使用大量的音频专用发烧级电阻电容;

- 日本音响协会(JAS)Hi-Res认证;

- 内置大容量高效锂电池。

技术参数

输入接口		USB
输出接口		3.5mm耳机、4.4mm耳机
输出电平	3.5mm耳机输出	3 Vrms
	4.4mm耳机输出	6 Vrms
输出阻抗	耳放输出	接近0Ω
耳放输出功率	16Ω	500mW ×2
	32Ω	500mW ×2
	64Ω	350mW ×2
	150Ω	240mW ×2
	300Ω	120mW ×2
	600Ω	60mW ×2
THD+N(不计权)	300Ω	0.0002%
动态范围	3.5mm耳机输出	126dB
	4.4mm耳机输出	126dB
信噪比	3.5mm耳机输出	126dB
	4.4mm耳机输出	126dB

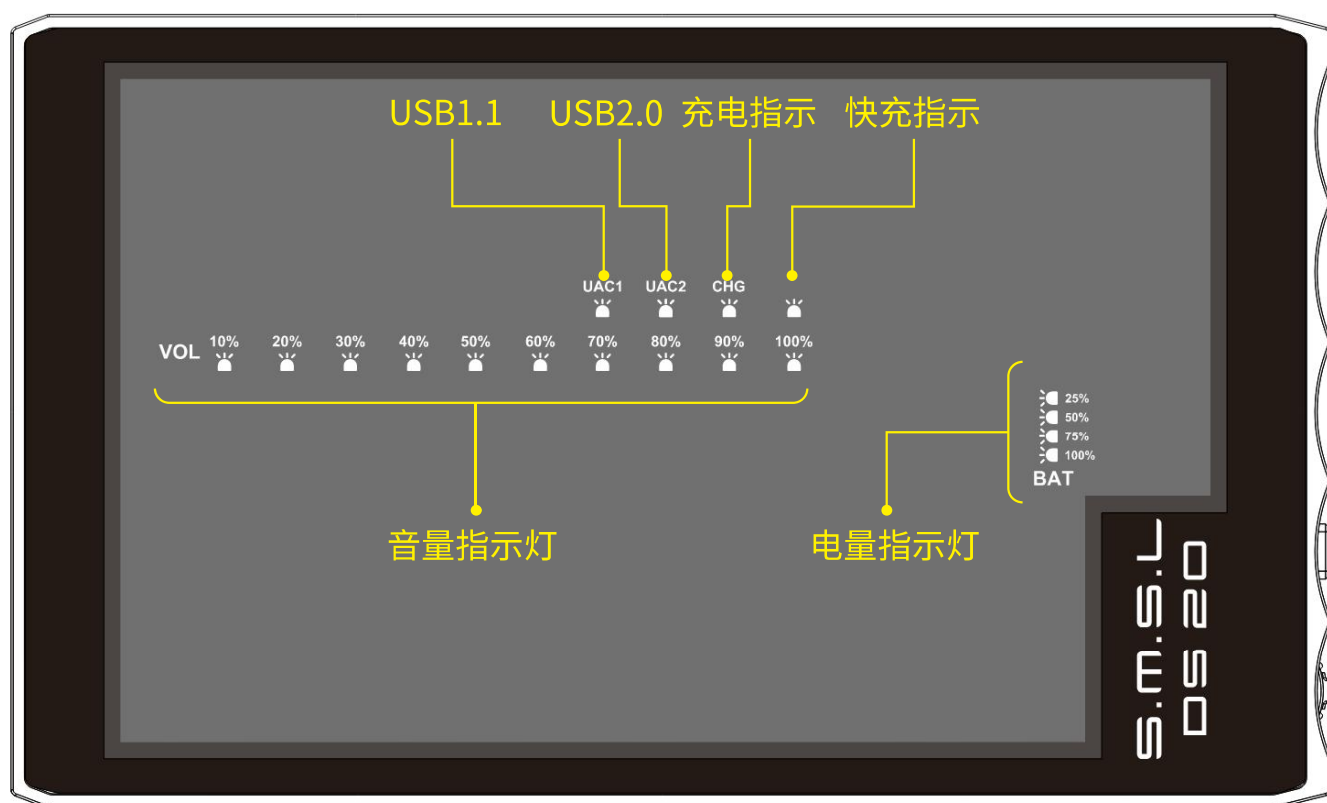|		
USB传输方式		异步传输
USB兼容性		Windows 7 / 8 / 8.1 / 10 / 11
		SONY PS4 / PS5 / 任天堂switch
		Android、iOS、Mac OSX、Linux
位深		1bit, 16~32bit
采样率	PCM	44.1~768kHz
	DSD	2.8224~11.2896MHz
电池容量		6000mAh(22.2Wh)
体积		71x17x118.5mm (WxHxD)
重量		275g

SMSL保留在不另行通知的情况下进行可能导致规格或特性更改的改进的权利。

部件介绍

❶ 功能按键

❷ 电源开关/长按彻底断电

❸ USB输入(5V=3A, 9V=2A, 12V=1.5A)

❹ 3.5mm耳机接口

❺ 4.4mm耳机接口

电池容量: 3.7V 6000mAh额定能量: 22.2Wh

❶ ❷ ❸ ❹ ❺

操作介绍

USB1.1　USB2.0　充电指示　快充指示

UAC1　UAC2　CHG

VOL　10%　20%　30%　40%　50%　60%　70%　80%　90%　100%

音量指示灯

25%
50%
75%
100%
BAT

电量指示灯

S.M.S.L DS20
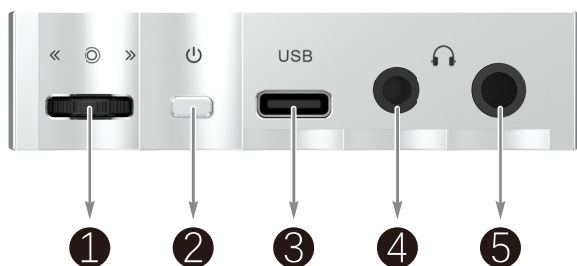
■ 查看电量：

• 短按一下[⏻]查看电池电量（在待机时）；

■ **开机/待机：**

• 长按[⏻]打开电源，开机后短按一下，进入待机模式（待机与开机电量指示灯会常亮）。

> 　　　**注意：**　•　当电池电量很低时，电量灯不会亮；
>
> 　　　　　　　　•　在无播放信号时，3分钟后机器会自动进入待机模式。

■ **彻底关机(断电)：**

• 长按电源按键3秒，关机并彻底断开电池供电，长时间不使用时，推荐这样操作！

■ **切换USB模式：**

• 长按一下[◎]菜单键进入USB 模式选择，此时对应指示灯闪烁，表示调节相关功能，通过 [≪][≫]音量加减的按键进行选择对应功能。

■ **普通充电：**

• 本机只有在待机模式下才能充电！

• 充电时充电指示灯闪烁，充满常亮。若使用快充时，快充指示灯会常亮。

■ **完全无电时充电：**

• 若在电池电量很低时，DS20已经无法开机时，接上电源会自动充至可以开机(未充满)，此时再进入待机，充至全满。

功能介绍

状态指示灯

- 绿色：　　　　MQA Authentic　　(MQA 认证)

- 蓝色：　　　　MQA Studio　　　(MQA录音室)

- 洋红色：　　　MQA OFS　　　　(MQA渲染)

- 白色：　　　　DSD

USB MODE(USB设置)

- UAC2
  (对应USB2.0模式。在连接WIN系统需要安装驱动, 支持高规格的采样率)

- UAC1
  (对应USB1.1模式)

  1. 可以免驱动连接所有USB设备。

  2. 可以支持多种游戏机的连接, 例如Switch,PS4, PS5等等。

  3. USB1.1 仅支持最大16bit/96kHz。

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。此机采用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

重要提示：
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如何播放MQA

- 此机的USB支持MQA解码！

- 此机的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。

- 在播放MQA文件时，显示屏显示的采样率为音频原始采样率。

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 alesperson 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

1.The Term of Service
Foshan Shuangmusanlin Technology Co., Ltd promises to offer good-quality products. If the product is broken in 7 days after purchasing when you use it normally, you can choose to send it back for return, replacement or repairing (only the product does not affect the second sales can be returned). Repairing for free in one year if you use it normally.

2.Date of purchase is in accordance with the date on invoice or receipt uesd by seller, and if you buy it on line, you can show the screenshot of trade.

3.If an inappropriate usage causes the unit damaged, the warranty will be void. As below.

- All damages by inappropriate use, including using it under non-normal working environment or without following the instructions.
- Dismantling, refitting, repairing by user in private.
- Causing damage by using some fittings instead of the designative or accredited ones.
- Cannot provide credible proof of purchase.

4.Sending it back to our company for repairing.

5.Contact your S.M.S.L Audio reseller for a return or replacement.

Features

- Using 4 pieces of Cirrus Logic's latest audio decoder chip CS43131!

- PLFC fully balanced ear amplifier circuit design.

- New third-generation XMOS XU-316, PCM support up to 32bit/768kHz, DSD support up to DSD256.

- Support MQA full decoding，8 x unfolding

- Two modes of USB1.1 and USB2.0 are for selection, USB1.1 is convenient for users to connect to game consoles such as PS5 or Switch.

- Special designed clock processing circuitry for audio, greatly reducing clock jitter.

- Built-in specially designed low-noise power supply.

- Uses a large number of audio-specific audiophile-grade resistors and capacitors.

- Japan Audio Society (JAS) Hi-Res certification.

- Built-in high-capacity and high-efficiency Li-ion battery

Technical Parameters

Input		USB
Output	3.5mm HP	4.4mm HP
Output level	3.5mm HP Output	3 Vrms
	4.4mm HP Output	6 Vrms
Output Impedance	HP Output	approach 0Ω
Output Power	16Ω	500mW ×2
	32Ω	500mW ×2
	64Ω	350mW ×2
	150Ω	240mW ×2
	300Ω	120mW ×2
	600Ω	60mW ×2
THD+N (UN Weighted)	300Ω	0.0002%
Dynamic range	3.5mm HP Output	126dB
	4.4mm HP Output	126dB
SNR	3.5mm HP Output	126dB
	4.4mm HP Output	126dB

USB transmission		Asynchronous
USB compatibility		Windows 7 / 8 / 8.1 / 10 / 11
		SONY PS4 / PS5 / Nintendo switch
		Android、iOS、Mac OSX、Linux
Bit depth		1bit，16~32bit
Sampling rate	PCM	44.1~768kHz
	DSD	2.8224~11.2896MHz
Battery capacity		6000mAh(22.2Wh)
Size		71x17x118.5mm (WxHxD)
Weight		275g

SMSL reserves the right to make improvements which may result in specification or
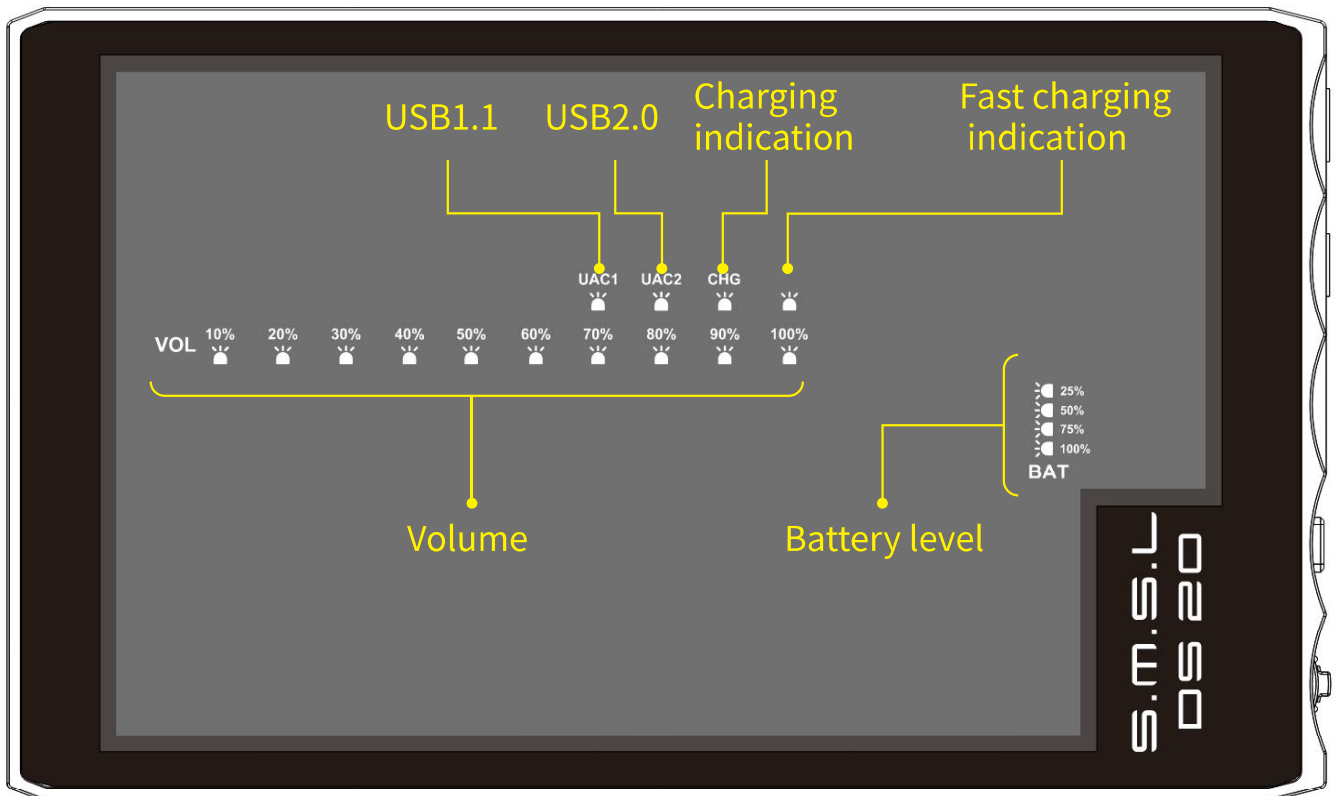feature changes without notice.

Function buttons

❶ Function buttons

❷ Power on/off/long press for complete power off

❸ USB Input(5V=3A, 9V=2A, 12V=1.5A)

❹ 3.5mm headphone jack

❺ 4.4mm headphone jack

battery capacity: 3.7V 6000mAh (22.2wh)

DS 20
USB DAC AND HEADPHONE AMP

S.M.S.L

Operation Introduction

USB1.1 USB2.0 Charging indication Fast charging indication

UAC1 UAC2 CHG

VOL 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

25%
50%
75%
100%
BAT

Volume   **Battery level**

S.M.S.L DS20
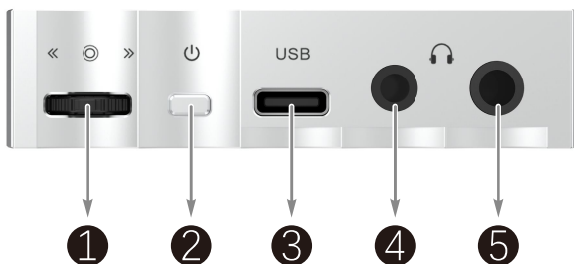
■ **Check the power level：**

• Short press [⏻] Check battery level (in standby)

■ **Power On/Standby：**

- Long press [⏻]Turn on the power, turn on the power and press it briefly to enter the standby mode (the power indicator will be always on when standby and power on)

  Note：
  - When the Battery power is very low, the power light will not be on;
  - When there is no playback signal, the machine will automatically enter standby mode after 3 minutes.

■ **Completely shut down (power off):**

- Press and hold the power button for 3 seconds to turn off the power and completely disconnect the battery power supply, which is recommended when it is not used for a long time!

■ **Switching USB Mode：**

- Press and hold[◎] menu button to enter the USB mode selection, at this time the corresponding indicator light flashes, indicating the adjustment of the relevant functions, through the volume up and down buttons to select the corresponding function.

■ **Normal Charging：**

- This unit can only be charged in standby mode!

- The charging indicator blinks when charging and lights up normally when full. If fast charging is used, the fast charging indicator light is always on.

■ **Charge when completely without power:**

- If the DS20 can no longer be turned on when the battery is very low, connecting it to the power supply will automatically charge it until it is turned on (not fully charged), in which case it will then go into standby and charge it to full capacity.

▚ **Function Introduction**

MQA indicator

- Green：   MQA Authentic

- Blue：   MQA Studio

- Magenta：   MQA OFS

- White: DSD

USB MODE

- UAC2
  (Corresponds to USB 2.0 mode, requires driver installation when connecting to WIN systems, supports high specification sampling rate)

- UAC1
  (Corresponds to USB 2.0 mode, requires driver installation when connecting to WIN systems, supports high specification sampling rate)

- Note about UAC1

  1. Connect all USB devices without driver.

  2. Support a variety of game consoles to connect, such as Switch, PS4, PS5

  3. Only supports up to 16bit/96kHz.

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 DL200 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 for more information.

Important Note
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How to play MQA

- This machine's USB support for MQA decoding!

- This machine MQA playback does not require the use of special playback software, such as foobar2000, Audirvanaplus as long as the support for ASIO or WASAPI audio output can be, and
  in the playback of MQA audio, it is best to turn the computer's volume to the maximum, in order to make the computer's audio output is the best state.

- When playing MQA files, the sample rate shown on the display is the original sample rate of the audio.

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