



SONCOZ[®]

The Power of Original Sound

QXD1

ENTRY-LEVEL FULLY-BALANCED DAC



User Manual V2.0

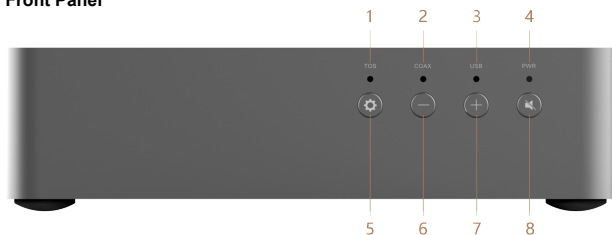
May. 2022

01 OVERVIEW

Welcome to QXD1, a high-performance DAC developed and manufactured by SONCOZ technology in Shenzhen, PRC.

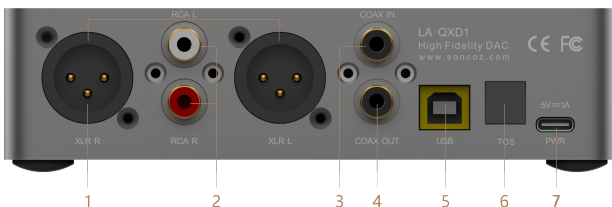
Please take a few moments to familiarize yourself with its operation.

Front Panel



- | | |
|---------------------------------|---------------------------------|
| 1 Toslink input indicator(TOS) | 2 Coaxial input indicator(COAX) |
| 3 USB-B input indicator | 4 Power/Mute(Flash) indicator |
| 5 Audio inputs switching button | 6 Volume down button |
| 7 Volume up button | 8 Mute button |

Rear Panel

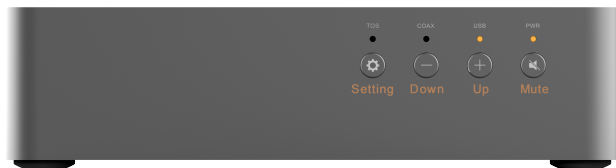


- 1 XLR output: 4.0Vrms @0dBFS
- 2 RCA output: 2.0Vrms @0dBFS
- 3 Coaxial input: 24-bit/192kHz
- 4 Coaxial output: 24-bit/192kHz
- 5 USB-B input: 32-bit/768kHz PCM/DSD512(Native)
- 6 Toslink input: 24-bit/192kHz
- 7 Power in: USB-C

02 OPERATIONS

1 Audio inputs switching

- Three audio inputs switching by press the setting button and the corresponding indicator LED will be turned on



2 Volume down and up (the default volume is -60dB)

- Short press the “-” or “+” button can adjust volume
- Long press the “-” or “+” button can adjust volume quickly
- When adjusting the volume, the corresponding input channel indicator will blink until the volume is adjusted to the maximum or minimum

3 Mute analogue output XLR/RCA

- Short press the “Mute” button QXD1 will mute output and press again will quit mute
- Mute only works for analogue output and the power indicator flashes in mute mode

4 Filter modes switching

- 7 kinds of filter modes, press the “Mute” button for 2 seconds to switch one of them
- From beginning to end: APOD/BRIC/FAM/FAL/HYER/SLM/SLL

03 SPECIFICATIONS

1 Dimensions: 149.3mm(W) x 87mm(D) x 37mm(H)

2 Weight: 475g

3 Power input: DC 5V $\overline{\text{---}}$ 1A

4 Power consumption: <4W

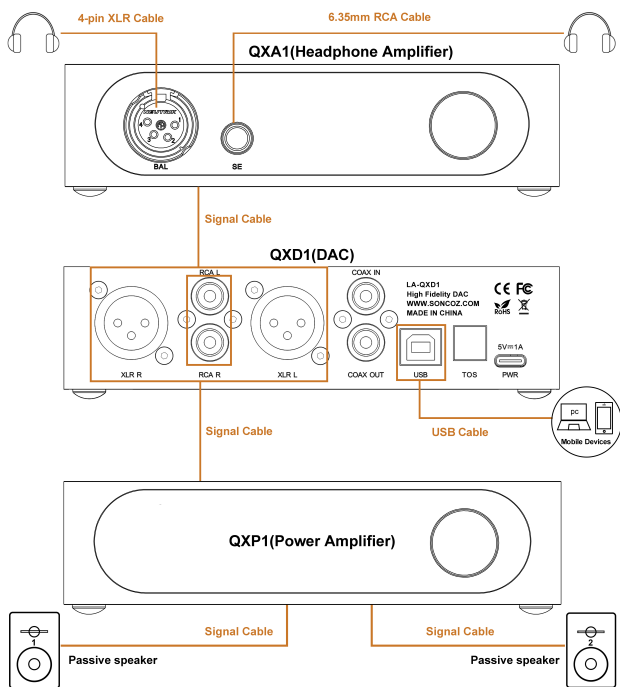
5 Signal input: USB-B/Toslink/Coaxial

6 Digital output: Coaxial

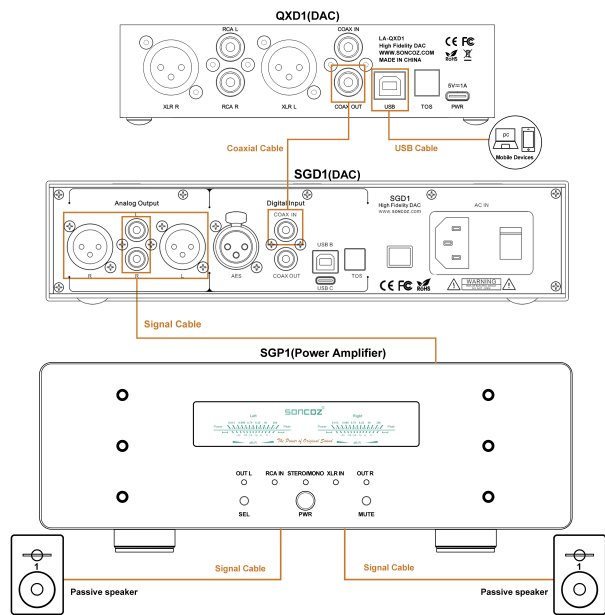
- 7 Line out: XLR/RCA
- 8 RCA: Coaxial input
- 9 Frequency response: 20Hz~20KHz(± 0.15 dB) XLR/RCA
- 10 Dynamic range: >124dB A-Weighted
- 11 Output voltage: 4.0Vrms XLR/2.0Vrms RCA
- 12 THD+N: <0.00015% @1kHz XLR/RCA
- 13 Crosstalk: >141dB @1kHz XLR/RCA
- 14 Output impedance: 200 Ω XLR/100 Ω RCA
- 15 Noise floor modulation: <4.3 μ Vrms

04 TYPICAL APPLICATIONS

1 DAC application



2 Digital interface application



05 CONTENTS LIST

1 QXD1 X 1 2 USB-B Cable X 1 3 USB-C Cable X 1

4 User's Manual X 1

Note: You can download drivers on SONCOZ website: www.soncoz.com

06 FAQS

Q1: Can I use the computer USB port to power QXD1?

A1: No. The PC's own USB port for power supply is not enough to support the normal operation of QXD1 (DC:5V@1A).

Q2: Can it remember the volume and different filter choices for each input?

A2: No. It will return to the default state after powering on/off.

Q3: How can I switch between the different filter modes of the QXD1 DAC?

A3: Long press the Mute button for 2 seconds to adjust the filtering mode.

Q4: How can I know which filter was selected?

A4: The three LED indicators of TOS/COAX/USB will be displayed in combination.

Refer to the QXD1 DAC filter mode truth table.

LA-QXD1 DAC FILTER MODE TRUTH TABLE					
LA-QXD1 DAC滤波模式设置真值表					
LED 1	LED 2	LED 3	1=LED ON, 0=LED OFF		
TOS/MODE	COAX/VOL-	USB/VOL+	FILTER MODE	INDICATOR	NOTES
0	0	1	APOD	USB INPUT	DEFAULT
1	0	0	APOD	1	7 FILTER MODE CYCLE SWITCH INDICATOR 7种滤波模式循环切换
0	1	0	BRIC	2	
1	1	0	FAM	3	
0	0	1	FAL	4	
1	0	1	HYER	5	
0	1	1	SLM	6	
1	1	1	SLL	7	
1	0	0	APOD	1	
1	0	0	APOD	TOSLINK INPUT & 1	DEFAULT 7 FILTER MODE CYCLE SWITCH INDICATOR 7种滤波模式循环切换
0	1	0	BRIC	2	
1	1	0	FAM	3	
0	0	1	FAL	4	
1	0	1	HYER	5	
0	1	1	SLM	6	
1	1	1	SLL	7	
1	0	0	APOD	1	
0	1	0	APOD	COAX INPUT	DEFAULT
1	0	0	APOD	1	7 FILTER MODE CYCLE SWITCH INDICATOR 7种滤波模式循环切换
0	1	0	BRIC	2	
1	1	0	FAM	3	
0	0	1	FAL	4	
1	0	1	HYER	5	
0	1	1	SLM	6	
1	1	1	SLL	7	
1	0	0	APOD	1	

Q5: How do I determine if the volume is turned up to the maximum?

A5: Press the "+" button to increase volume, while the corresponding LED flashes until it reaches the maximum to stop flashing.

Q6: Can I connect my headphones directly to QXD1?

A6: It is not recommended to use as a headphone amplifier.

Q7: What are the default volume and adjustment step of QXD1?

A7: The default volume is -60dB, the maximum volume is 0dB and the adjustment step is 2dB/Step.

Q8: Can I set the volume to the default maximum?

A8: Yes. Please refer to the QXD1 Upgrade Guide for details.



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QXD1

入门级全平衡解码器



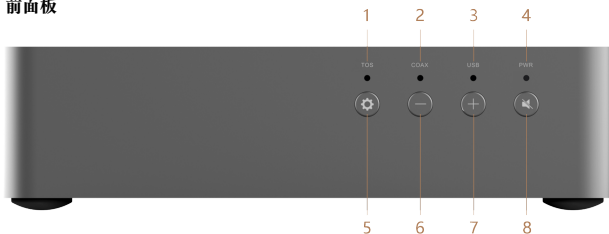
用户手册 V2.0

2022年5月

01 概述

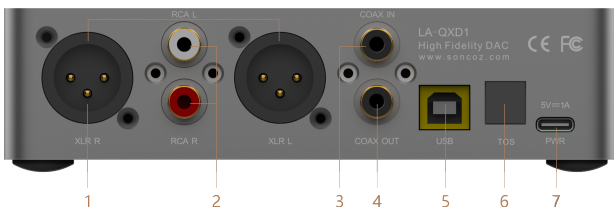
QXD1是一款由松果音视（深圳）科技有限公司（SONCOZ）开发设计与制造的高性能解码器。我们花几分钟时间来熟悉它的操作。

前面板



- | | |
|----------------|-----------------|
| 1 光纤输入指示灯(TOS) | 2 同轴输入指示灯(COAX) |
| 3 USB-B 输入指示灯 | 4 电源/静音（闪烁）指示灯 |
| 5 音源输入切换按键 | 6 音量减小按键 |
| 7 音量增加按键 | 8 静音按键 |

后面板

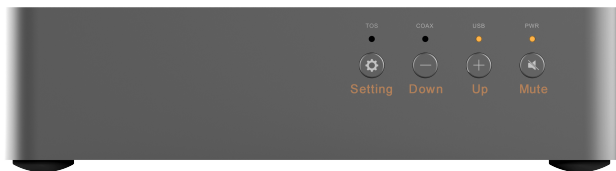


- 1 XLR 平衡输出：4.0Vrms @0dBFS
- 2 RCA 单端输出：2.0Vrms @0dBFS
- 3 同轴输入：24位/192kHz
- 4 同轴输出：24位/192kHz
- 5 USB-B 输入：32位/768kHz PCM/DSD512(Native)
- 6 光纤输入：24位/192kHz
- 7 电源输入：USB-C

02 操作和设置

1 音源输入切换

- 3种输入音源通过设置按键进行切换，同时相应的输入通道指示灯会亮起



2 音量减小与增加（默认音量为-60分贝）

- 短按“-”或者“+”按键可以调整音量
- 长按“-”或者“+”按键可以快速调整音量
- 调整音量的时候相应指示灯会闪烁直到音量调整到最大或者最小

3 模拟输出静音

- 短按“静音”按键QXD1模拟输出将静音，再一次短按退出静音
- 静音只对模拟输出有效，静音时电源指示灯会闪烁

4 滤波模式切换

- 7种滤波模式，每长按“静音”按键2秒切换一种
- 从开始到结束分别是：APOD（默认）/BRIC/FAM/FAL/HYER/SLM/SLL

03 规格参数

1 尺寸：149.3mm（宽）x 87mm（深）x 37mm（高）

2 重量：475g

3 电源输入：直流 5V $\overline{\text{=}}$ 1A

4 功率消耗：小于4W

5 信号输入：USB-B/光纤/同轴

6 数字输出：同轴

7 线路输出：平衡XLR/单端RCA

8 RCA接口：同轴输入

9 频率响应：20Hz~20KHz($\pm 0.15\text{dB}$) XLR/RCA

10 动态范围：A计权平衡XLR/单端RCA输出大于124dB

11 输出电压幅值：平衡XLR输出4.0V/单端RCA输出2.0V

12 失真加噪声：1kHz平衡XLR/单端RCA输出小于0.00015%

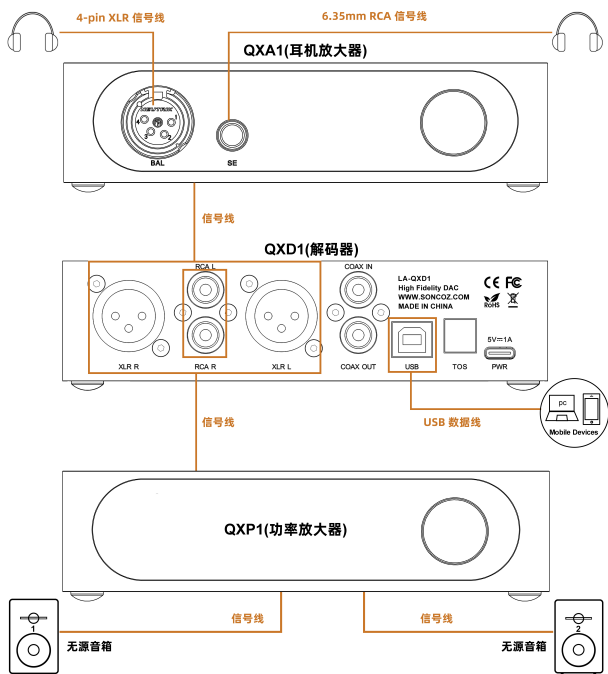
13 通道串扰：1kHz 平衡XLR/单端RCA输出大于141dB

14 输出阻抗：平衡XLR输出200 Ω /单端RCA输出100 Ω

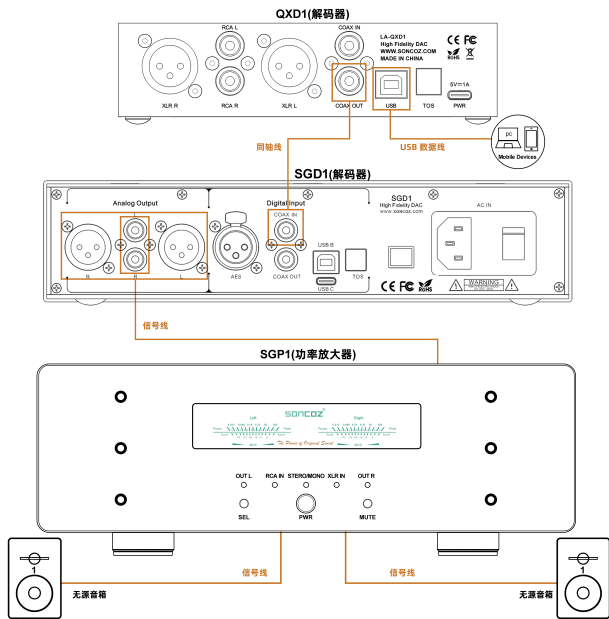
15 底噪：小于4.3 微伏

04 典型应用

1 纯解码及前级应用



2 数字接口/数字转盘



05 包装内容

- 1 QXD1主机一台
- 2 USB-B数据线一条
- 3 USB-C数据线一条
- 4 用户使用手册

注意：驱动可以在官网www.soncoz.cn下载

06 常见问题

问1：可以用电脑自带的USB口给QXD1供电吗？

答1：不建议使用PC电脑自带的USB口进行供电，PC自带的USB电流一般是500mA，不足以支撑QXD1的正常工作（DC:5V@1A）。

问2: QXD1能记忆音量以及滤波模式吗?

答2: QXD1不具备记忆功能, 断电开机回到默认状态 (USB口输入、默认滤波模式APOD、USB转数字同轴有效、音量-60dB)。

问3: 如何切换滤波模式?

答3: 每长按静音按键两秒切换一种滤波模式。

问4: 如何确认当前选择的滤波模式是哪一种?

答4: TOS/COAX/USB三个LED指示灯将组合显示, 参考QXD1 DAC滤波模式设置真值表。

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1	1	1	SLL	7	
1	0	0	APOD	1	

问5: 如何确定音量调到最大值?

答5: 长按音量“+”/“-”可以快速地调整音量大小, 调整音量时相应的通道指示灯会闪烁, 直到音量到最大或者最小时停止闪烁。

问6: 可以将耳机直接连接到 QXD1吗?

答6: 不建议用作耳机放大器。

问7: QXD1的默认音量以及调整步幅?

答7: 默认音量是-60dB, 最大音量0dB, 调整音量步幅是2dB/Step。

问8: QXD1可以设置默认最大音量吗?

答8: 可以刷新音量最大固件, 操作细节请参考QXD1升级说明。