

Link2 Max Manual

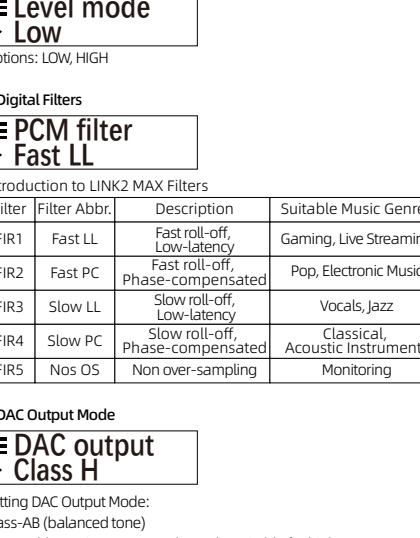
Product Introduction

Link2 Max is a USB DAC & balanced headphone amplifier designed for mobile phones and laptops, featuring a compact size and stylish appearance. It adopts a battery-free design, directly powered by a USB interface for plug-and-play use. It can be connected to the USB interfaces of iOS/Android smartphones or Windows/Mac computers for high-definition decoding. Its DAC uses two high-specification 32-bit chips CS43198, supporting up to PCM 32Bit/768kHz and DSD256 (11.2MHz), with higher resolution and extremely low noise floor. Even when paired with high-sensitivity and low-impedance in-ear earphones, almost no noise can be heard in a quiet environment. The headphone interface have 3.5mm(unbalanced) and 4.4mm (balanced) outputs, with a maximum output power of 550mW, easily driving most HIFI headphones on the market.

Product Features

- 1.Can serve as an external decoding amplifier (sound card) for mobile phones/computers to improve sound quality.
- 2.Supports iOS/Android mobile phones/tablets, Windows/Mac computers, as well as Switch and PS game consoles.
- 3.Equipped with an OLED display for convenient menu setup and real-time monitoring of working status.
- 4.The USB transmission operates in an asynchronous mode, supporting up to PCM 32Bit/768kHz and DSD256 (11.2MHz) sampling rates.
- 5.Uses two professional-grade DAC chips CS43198 with ultra-high audio parameters.
- 6.Adopts two high-performance operational amplifier chips SGM8262 for higher output power and dynamic range.
- 7.100-level digital volume adjustment for delicate, stepless control.
- 8.High/low gain adjustment adapts to headphones with different impedances.
- 9.Provides 3.5mm and 4.4mm headphone outputs, with a maximum output power of 550mW, easily driving most HIFI headphones on the market.
- 10.Detachable cable design for compatibility with more devices.
- 11.Compact size for easy portability.

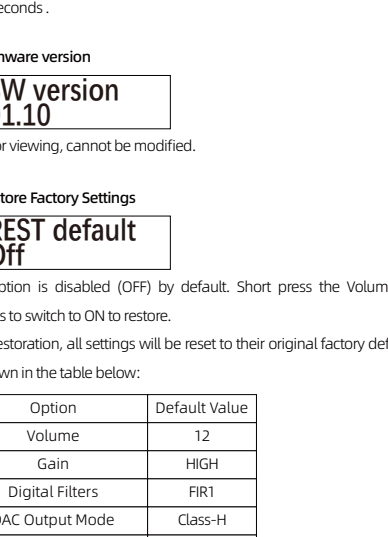
Parts and Controls



- ①**Display**
②**USB Audio In**
③**4.4mm Headphone Jack**
④**3.5mm Headphone Jack & Coaxial Interface (shared)**
⑤**Volume + Button:**
The button definitions differ in A/B mode (settings in the menu), as follows:
A Mode: Short press to increase volume; long press for 2 seconds to continuously increase volume.
B Mode: Short press to play the previous track; long press for 2 seconds to continuously increase volume.
⑥**Volume - Button:**
The button definitions differ in A/B mode (settings in the menu), as follows:
A Mode: Short press to decrease volume; long press for 2 seconds to continuously decrease volume.
B Mode: Short press to play the next track; long press for 2 seconds to continuously decrease volume.
⑦**Multifunctional Button:**
A: During playback, short press to play/pause; in the menu setting window, short press to switch to the next menu.
B: Double-press to turn on/off the display backlight.
C: Long press for 2 seconds to enter/exit the menu setting window.
D: Switch to UAC1.0: Long press this button, then connect USB to power on to enter UAC1.0 system (suitable for Switch and PS game consoles).

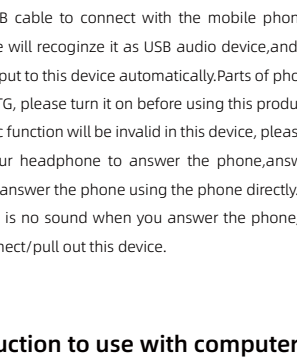
(*Note:Due to differences in Android phone systems from different brands, functions like play, pause, previous track, and next track may not work on some phones.)

UI Instructions



- ①**UAC System:** U1 is UAC1.0, and U2 is UAC2.0.
(Note: UAC1.0 is the USB1.0 working in low-speed mode, supporting a maximum of 16bit/48kHz, mainly for compatibility with Switch and PS game consoles; UAC2.0 is the USB2.0 working in high-speed mode, which can support higher sampling rates and DSD signal.)
②**Filter:** Settings for the DAC filter. FIR1-FIR5 are filter's name, and specific descriptions can be found in the "Digital Filters" section of the "Menu Setting" chapter.
③**Volume Button Definition Mode:** The buttons of A/B Modes can be found in the "Volume +/- Buttons" section of the "Parts and Controls" chapter.
④**S/PDIF (Coaxial) Output Status:**
"--" indicates output is off.
"SP" indicates S/PDIF is enabled, supporting a maximum of PCM 192kHz and DSD64 (DOP).
"SP" indicates S/PDIF is enabled, supporting a maximum of PCM 384kHz and DSD128 (DOP).
If the sampling rate of the song exceeds the maximum value, S/PDIF will have no output.
⑤**Gain:** L is low, H is high.
⑥**Volume:** 0-100 levels.
⑦**Audio Format/Sampling Rate:** Real-time display of the current audio format (PCM/DSD) and sampling rate.
⑧**S/PDIF Stop Output:** When S/PDIF (coaxial) output is enabled, if the sampling rate exceeds 384kHz or DSD128, S/PDIF will have no output, and the screen will display the "e" symbol.

(*Note: The pin definitions of S/PDIF (coaxial) are as follows.)



Menu Setting

Long press the multifunctional button to enter the menu setting window. Short press the multifunctional button to switch to the next menu, and use the volume +/- buttons (short press) to modify the setting values of the current menu.

- 1.**Gain**
Level mode
Low
Options: LOW, HIGH
- 2.**Digital Filters**
PCM filter
Fast LL
Introduction to LINK2 MAX Filters

Filter	Filter Abbr.	Description	Suitable Music Genres
FIR1	Fast LL	Fast roll-off, Low-latency	Gaming, Live Streaming
FIR2	Fast PC	Fast roll-off, Phase-compensated	Pop, Electronic Music
FIR3	Slow LL	Slow roll-off, Low-latency	Vocals, Jazz
FIR4	Slow PC	Slow roll-off, Phase-compensated	Classical, Acoustic Instruments
FIR5	Nos OS	Non over-sampling	Monitoring
- 3.**DAC Output Mode**
DAC output
Class H
Setting DAC Output Mode:
Class-AB (balanced tone)
Class-H (dynamic power supply mode, suitable for high-power scenarios)
- 4.**S/PDIF Output**
S/PDIF out
Off
Options: OFF, 192K/DOP, 384K/DOP
OFF: Turn off S/PDIF output.
192K/DOP: Supports PCM 44.1k-192kHz and DSD64 (DOP).
384K/DOP: Supports PCM 44.1k-384kHz and DSD64-128 (DOP).
(*Note: S/PDIF output does not support PCM 768kHz or DSD256 output.)
- 5.**USB Hardware Volume**
Host Vol Ctrl
Off
Enable/disable the USB hardware volume control function for music apps (some HIFI music apps on Android systems have this feature).
(*Note: If the music app does not have this function, this setting can be ignored.)
- 6.**Mute Time**
HW mute
Off
Set the mute duration when switching songs, with four options: OFF, 50ms, 100ms, 200ms.
(*Note: If noise occurs when switching songs in some music apps, enable mute to eliminate the noise. The mute duration can be set according to actual needs.)
- 7.**Volume Button Definition**
Key mode
Key A
Set the definition of the volume +/- buttons: In Mode A, a short press increases/decreases the volume. In Mode B, a short press switches to the previous/next track.
- 8.**Screen Brightness**
Brightness
4
Adjust the display brightness: 1-10 levels.
- 9.**Display Rotation**
SCRN Rotate
Off
Set the display to flip 180 degrees horizontally.
- 10.**Auto Screen Off**
SCRN saver
15S
Set the automatic screen-off time for the display, with options: OFF or 1-60 seconds.
- 11.**Firmware version**
SW version
01.10
Only for viewing, cannot be modified.
- 12.**Restore Factory Settings**
REST default
Off
This option is disabled (OFF) by default. Short press the Volume +/- buttons to switch to ON to restore.
After restoration, all settings will be reset to their original factory defaults, as shown in the table below:

Option	Default Value
Volume	12
Gain	HIGH
Digital Filters	FIR1
DAC Output Mode	Class-H
S/PDIF Output	OFF
USB Hardware Volume	OFF
Mute Time	OFF
Volume Button Definition	KEY-A
Screen Brightness	4
Display Rotation	OFF
Auto Screen Off	15S

Parameters

Unbalanced Output	Balanced Output
Output Power: 320mW@32Ω	550mW@32Ω
160mW@75Ω	600mW@75Ω
85mW@150Ω	310mW@150Ω
45mW@300Ω	170mW@300Ω
THD+N: 108dB@1kHz	110dB@1kHz
SNR: ≥126dB	≥130dB
Crosstalk: ≥75dB	≥123dB
Frequency Response: 20Hz~20kHz (±0.5dB)	
Size: 6.3*2.3*1.3cm	
Weight: 28g	

Accessories

- 1.Type-C to C cable *1
- 2.User Manual *1
- 3.Warranty Card *1

Instruction to use with mobile phone



1. Connect the headphone to the 3.5mm socket of Link2 Max.
2. Using the USB cable to connect with the mobile phone,most mobile phone will recognize it as USB audio device,and switch the audio output to this device automatically.Parts of phone has on/off USB OTG, please turn it on before using this product.

Note: ① The mic function will be invalid in this device, please don't use your headphone to answer the phone,answer the phone,answer the phone using the phone directly.
② If there is no sound when you answer the phone,please disconnect/pull out this device.

Instruction to use with computer

Use a USB cable to connect the computer's USB port to Link2 Max. After the computer recognizes the unit, set the Link2 Max as the default playback device in the computer sound options. Then,set the output device to the Link2 Max in the player setting options. And then play the music, you can listen to the wonderful music.

Note: MAC, LINUX and most Windows systems do not need to install drivers.If your Windows PC cannot recognize it, you can download the USB driver from the official website.

Attention

1. Please turn down the volume before playing the music,because the strong output powr of Link2 Max.
2. The supported sample rate may be vary because the Incomplete integrated UAC2.0 driver for the mobile phone version.
3. The product is not waterproof design, please don't use it at pout door or bathroom.If the environment temperature is lower than 0°C, please don't expose the product at outdoor, avoid the freeze of the cable.
4. Please don't use the high volume for long time, to avoid affect your listening.
5. For your safety, please don't use it when you are driving or cycling.

Statement:design and specifications may be changed without notice.

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