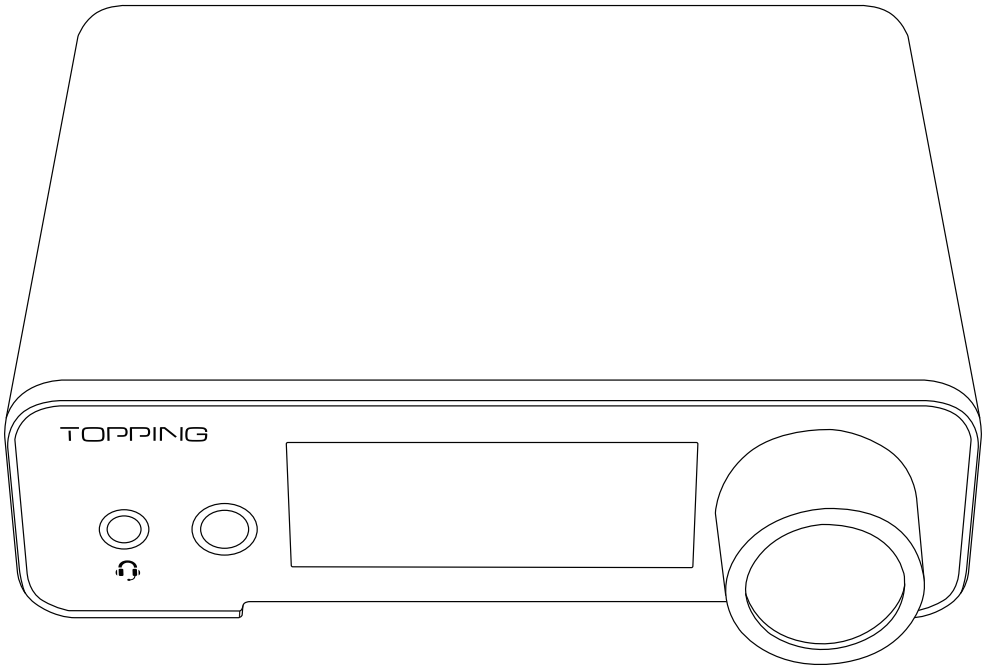
TOPPING

DX1II



Model: TP546
V1.2

User manual

Table of Contents

1. Package contents 4
2. Parts and names 4
   2.1 Front panel 4
   2.2 Display 5
   2.3 Rear panel 6
   2.4 Remote control 7
3. Connection 8
   3.1 Connect input source and power 8
   3.2 Optical output 9
   3.3 Connect to a power amplifier or active speakers 9
   3.4 Connect headphones / headset 10
4. Operation 11
   4.1 Power on / standby 11
   4.2 Volume settings 12
   4.3 Input selection 13
   4.4 Output selection 13
   4.5 Headphone gain 14
   4.6 How to set LO / OPT fixed 0 dB 14
5. Setup menu 14
   5.1 Auto standby & wake-up 15
   5.2 Brightness 15
   5.3 Auto display off time 16
   5.4 Resident display 16
   5.5 Remote control 16
   5.6 OPT input mode 16
   5.7 LO / OPT fixed 0dB 17
   5.8 Output selection 17
   5.9 PEQ output routing 17
   5.10 PCM filter 17
   5.11 Local PEQ 18
   5.12 Headphone gain 18
   5.13 LO / HP channel balance 18
   5.14 OPT channel balance 18
   5.15 Volume linkage 18
   5.16 Microphone volume 19
   5.17 Microphone switch 19
6. TOPPING Home WEB Control Center 19
7. Factory reset 20
   7.1 Reset all settings (excluding PEQ config) 20
   7.2 Reset PEQ config only 20

7.3 Restore using TOPPING Home WEB 20
8. Firmware Upgrade 21
9. Precautions 21
10. Troubleshooting 21
11. Attribute 21
12. Input range 22
13. Specifications 22

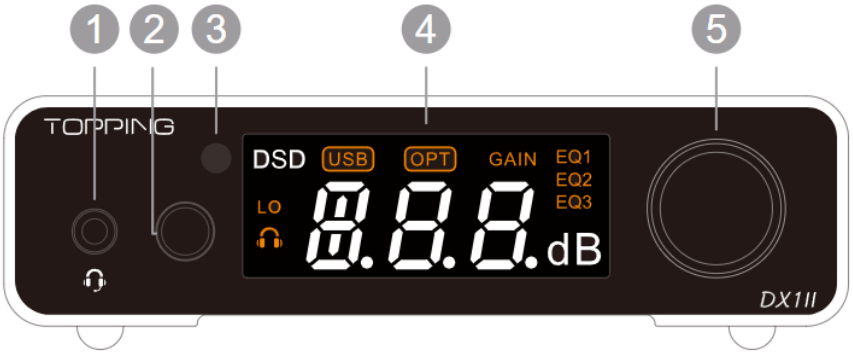
1. Package contents

DX1 II	x1
RC15C Remote control	x1
USB A-C cable	x1
USB C-C cable	x1
Product information card	x1

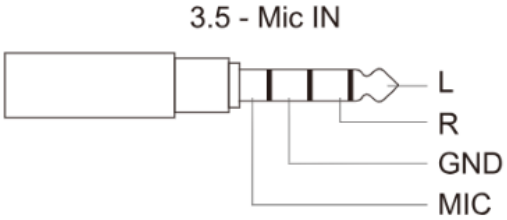
Windows Driver download: https://www.toppingaudio.com/supports?search=DX1+II&tab=drivers-software

2. Parts and names

2.1 Front panel



1. 3.5mm headphone / headset jack
3.5mm TRRS jack with 2.5V bias voltage, compatible with headphones or CTIA-standard headsets.



2. 4.4mm balanced headphone output jack

3. Remote control receiver

4. Screen

5. Multifunction knob

- **Rotate:** Adjust volume.
- **Short press:** Switch input by default. The function can be customized in TOPPING Home WEB.
- **Double press:** Switch output by default. The function can be customized in TOPPING Home WEB.

2.2 Display



1. DSD format indicator
Lights up when playing DSD. Off when playing PCM.

2. Input channel indicator
Displays the current input channel. The icon flashes when no input is connected or when no valid signal is detected.

3. Headphone gain indicator
Lights up in high-gain mode. Off in low-gain mode.

4. PEQ display

- **EQ1–EQ3 lit separately:** the corresponding local PEQ configuration is selected.
- **EQ1, EQ2, and EQ3 lit at the same time:** cloud EQ is selected or an AutoEQ effect is being previewed.
- **EQ indicator flashes:** The current audio sampling rate is outside the PEQ supported range.

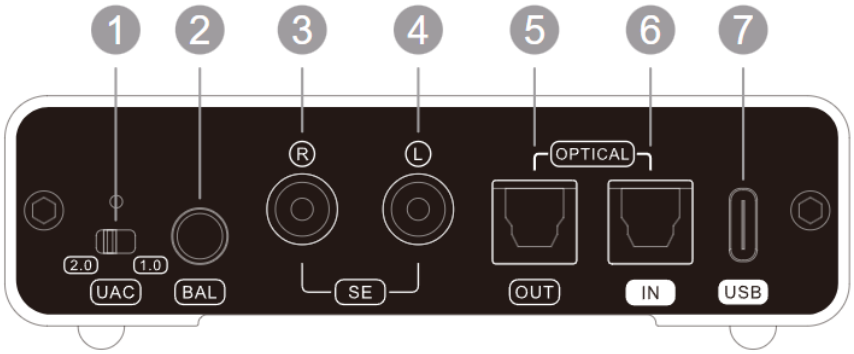
5. Output channel indicator

- **LO:** Line Out (Rear panel 4.4mm output and RCA output)
- **Headphone icon:** Headphone output (Front panel 3.5mm and 4.4mm headphone outputs)
- **LO and headphone icon lit simultaneously:** Line Out and headphone output at the same time
- The optical output does not have a separate indicator and is enabled by default. It can be disabled through TOPPING Home WEB.

6. Sampling rate / volume display

- **Normal status:** Displays volume by default. When switching sampling rate, the current sampling rate is displayed temporarily. The display mode can be changed to always show sampling rate in the setup menu.
- **Mute status:** “---” and the current displayed value flash alternately.

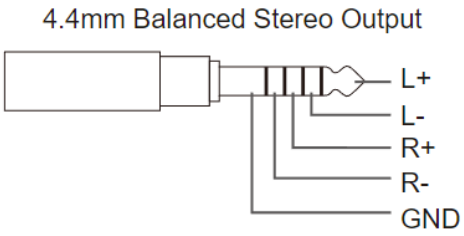
2.3 Rear panel



1. UAC mode switch
The USB input of this device supports USB Audio Class 1.0 / 2.0. The mode can be switched according to the connected device. UAC2.0 is recommended for general use. If connecting to devices that only support UAC1.0 (such as PlayStation), please switch to UAC1.0 mode.

Note: After changing the setting, you need to reconnect the USB cable for the setting to take effect.

2. 4.4mm balanced stereo output
This port is a Line Out output. Do not connect headphones to this port.



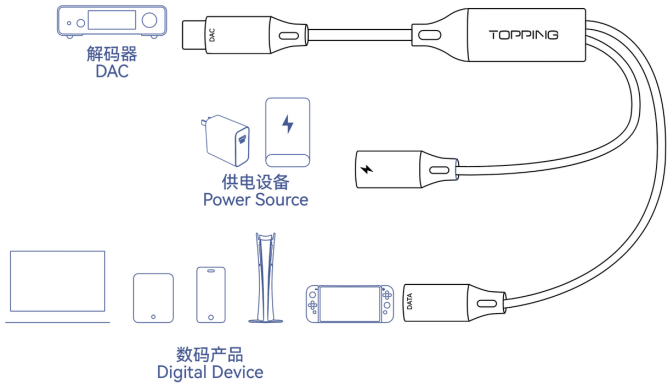
3. RCA single-ended output (Right)

4. RCA single-ended output (Left)

5. SPDIF optical output

6. SPDIF optical input

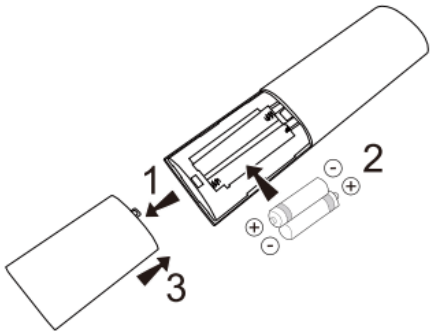
7. USB input & power input
The DX1 II USB port handles both audio data transmission and power supply. When connecting a USB device with sufficient power, use the included USB cable directly. When connecting a device with insufficient power, such as a phone or Nintendo Switch, use a USB Y-cable (not included) to connect the DX1 II to the signal source and an external power supply.



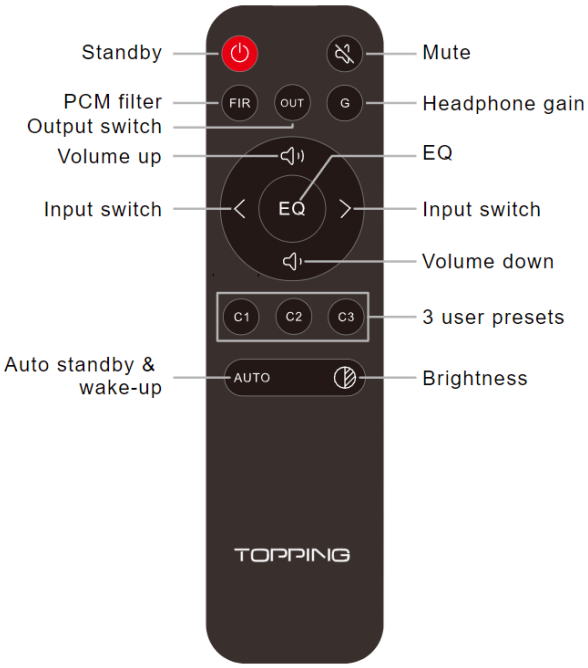
2.4 Remote control

Install remote control battery

Before using the remote control, install two AAA batteries (not included).



Remote control overview



C1, C2, C3 buttons

- **Operation:** Press and hold the C1/C2/C3 button for 3 seconds to save the current settings. Press the corresponding C1/C2/C3 button to recall the saved settings.
- **Saved settings:** The saved settings include the current input, output, volume, EQ, and other related settings.

Note: Cloud PEQ and AutoEQ preview effects, as well as the microphone volume, cannot be saved to user presets.
The saved settings include: input selection, OPT input mode, output selection, LO / OPT fixed 0dB setting, analog and OPT volume, LO / HP balance, OPT balance, volume linkage status, volume control target, GAIN, PCM filter, local PEQ, and PEQ output routing.

- **Description:** This function is suitable for users with more than one usage scenario. For example, the two scenarios below. Under different usage scenarios, the DX1 II will have different settings. When switching from Scenario 1 to Scenario 2, multiple settings need to be changed. In this case, you can use the C1 and C2 buttons to save the settings for each scenario. When switching to Scenario 2, simply press the C2 button to recall all settings instantly, without changing them one by one.

	Scenario 1: Headphone use	Scenario 2: Speaker use
Input channel	USB IN	OPT IN
Output channel	Headphone Out	Line Out
Volume	-30dB	-20dB
EQ	EQ1	Off

AUTO button
See “5. Setup Menu - Auto standby & wake-up” for details.

Mute button, < / > buttons
The functions of these buttons can be customized through TOPPING Home WEB.

Mute:
Device mute (Default)

Auto adaptive input:

- USB input: Play / Pause
- OPT input: Device mute

< / > buttons
Input switch (Default)

Previous track / Next track:

- Effective only for USB input
- No operation for OPT input

3. Connection

3.1 Connect input source and power

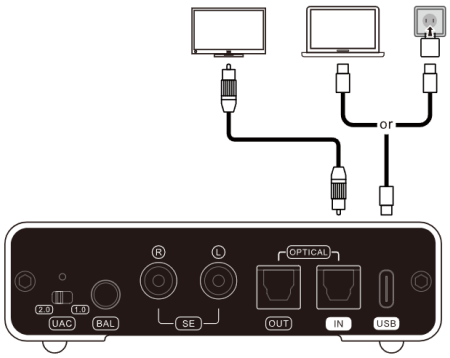
USB input: This port handles both audio data transmission and power supply for the DX1 II. When connecting a USB device with sufficient power, use the included USB cable directly. When connecting a device with insufficient power, such as a phone or Nintendo Switch, use a USB Y-cable (not included) to connect the DX1 II to the signal source and an external power supply.

Optical input: Used for connecting optical signal sources. When using this input, the device still requires a DC 5V power supply via the USB port.

If there is no sound, sound interruption, or abnormal playback, switch the optical compatibility mode in: “5. Setup Menu - OPT input mode”.

Mode 1 and Mode 2 are used for compatibility with different optical signal sources. These two modes are alternatives. Select the mode that works properly with your device.

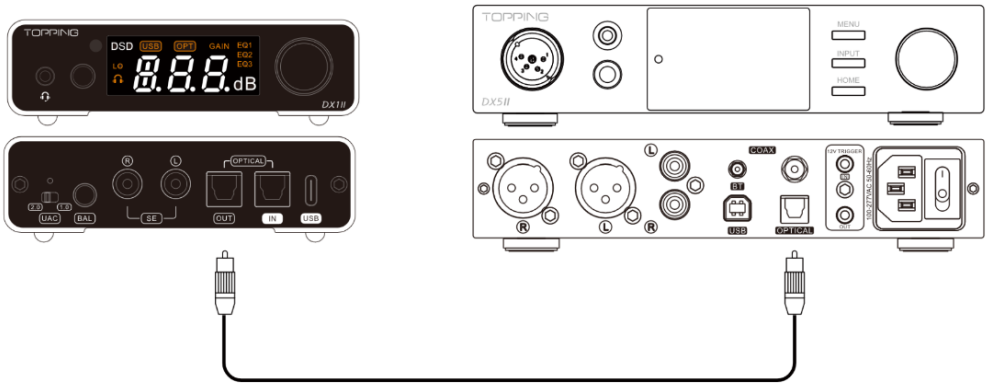
Note: Mode 1 does not support DoP64.



3.2 Optical output

The DX1 II also features an optical output, allowing connection to external devices such as DACs.

Note: The optical output volume is fixed at maximum by default and cannot be adjusted. Before connection or playback, please lower the volume of other devices first. To adjust the optical output volume, set volume link to **U-O** in the setup menu, or configure it in TOPPING Home WEB.

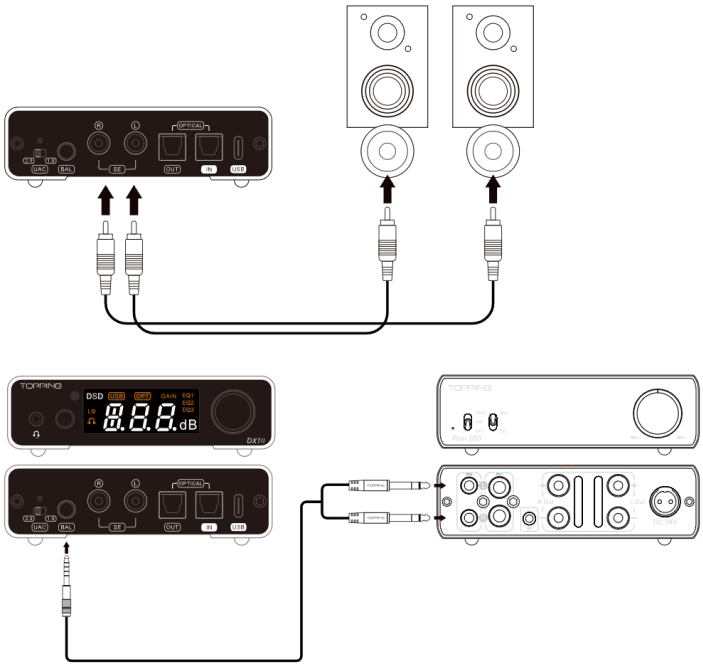


3.3 Connect to a power amplifier or active speakers

You can connect the DX1 II via its RCA single-ended output or 4.4mm balanced stereo output.

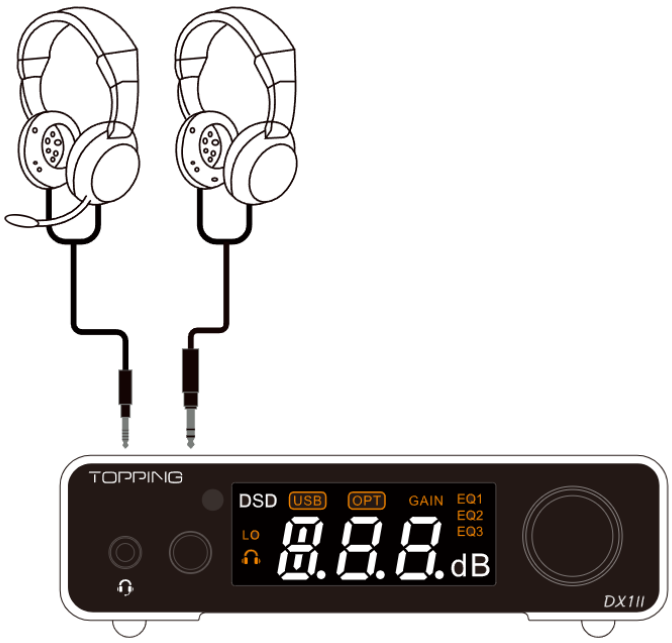
To prevent potential damage, please ensure the power amplifier or active speakers are turned off before making connections.

Note: The 4.4mm output on the rear panel is a Line Out output. Do not connect headphones to this port.



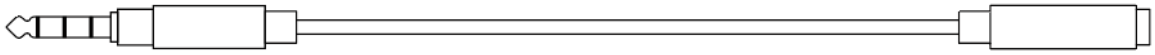
3.4 Connect headphones / headset

Supports both 3.5 mm and 4.4 mm headphone jacks. The 3.5 mm jack is compatible with CTIA-standard headsets.

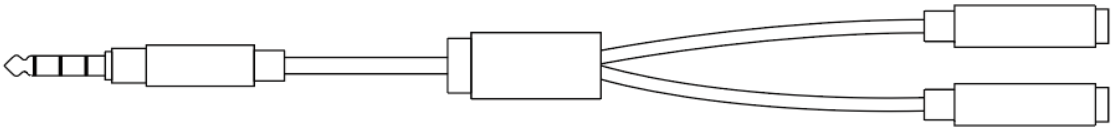


Headset / microphone connection:

- **4-pole CTIA-standard headset or standalone microphone:** Connect directly to the 3.5-Mic jack.
- **2-pole or 3-pole standalone microphone:** Usually requires a microphone adapter cable that converts it to CTIA TRRS.



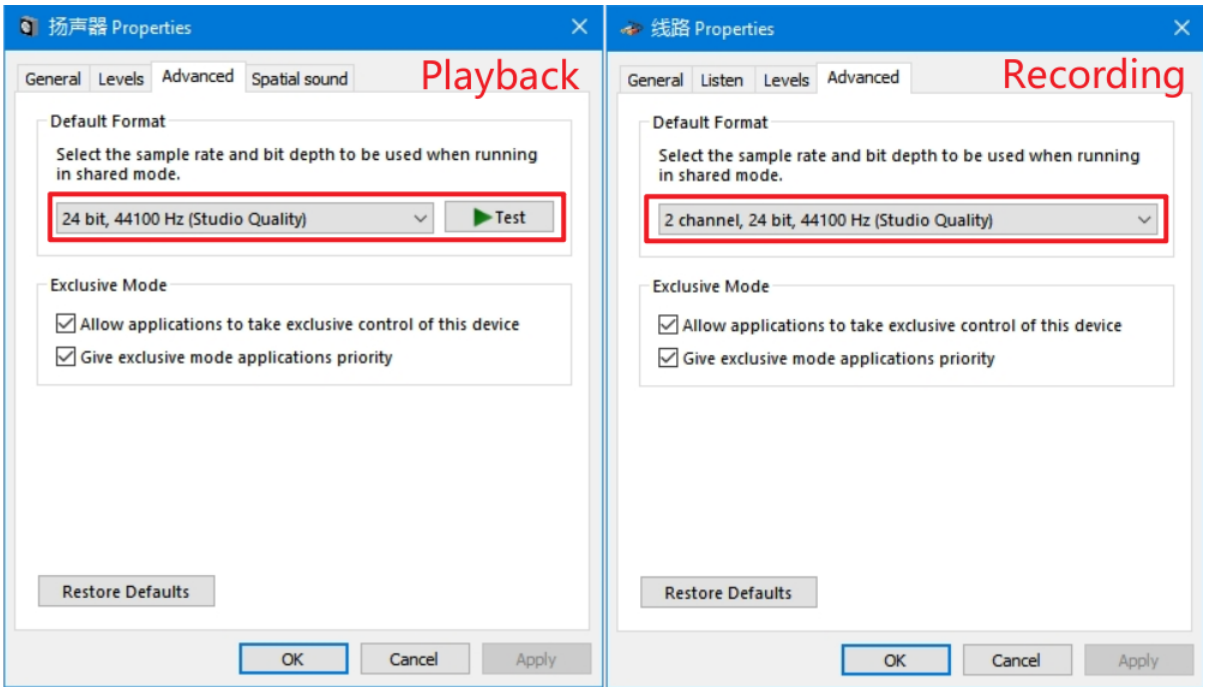
- **Standalone microphone and 3.5 mm headphones at the same time:** Use a headset splitter adapter.



The wiring, output level, and power requirements of different microphones may vary. Confirm the specifications with the microphone manufacturer before use. Actual compatibility depends on connection testing.

Notes:

1. The microphone volume can be adjusted in TOPPING Home or the device setup menu. It is not affected by the computer's recording volume or the TOPPING driver settings. If the microphone sounds abnormal, try lowering the microphone volume.
2. When using the OPT (optical) input, the microphone function is unavailable.
3. Microphone input supports a maximum sampling rate of 192 kHz.
4. In your computer's system audio settings, make sure the recording and playback sample rates for the DX1 II are set to the same value.



4. Operation

4.1 Power on / standby

- **Power on:** The device enters working state automatically once powered on.

- **Standby:** While the device is operating, press and hold the front panel knob to enter standby mode. When in standby, press the knob once to exit standby. You can also press the standby button on the remote control to enter or exit standby.





Note: The device supports auto standby. See “5. Setup menu - Auto standby & wake-up” for the standby time and operation details.

4.2 Volume settings

- **Volume link:** The DX1 II supports separate volume adjustment for the analog outputs (LO / headphones) and the optical digital output. Analog output volume is adjusted by default. You can change the volume control target (analog/digital) in TOPPING Home WEB. You can also enable volume link to adjust the analog and optical output volume together. The current volume difference is maintained while both outputs increase or decrease together. The display shows the volume of the louder output.
- **Mute:** Press the mute button to mute or unmute the current volume control target (analog output by default). When volume linkage is enabled, analog output and OPT output will be muted / unmuted simultaneously. In mute mode, the display will alternately flash “---” and the previous displayed value.



- **Volume adjustment:** You can adjust the volume using the front panel knob or by pressing the volume + / − buttons on the remote control. Press and hold the volume + / − buttons to adjust the volume quickly. Please operate carefully to protect your hearing. The device controls analog output volume by default. You can change the volume control target to optical output through TOPPING Home WEB, or enable volume linkage.

Note: When fixed 0dB mode (F-O) is enabled, LO and OPT outputs are fixed at 0dB. Volume adjustment is unavailable, and headphone output cannot be used.



4.3 Input selection

When the device is powered on, press the knob once or use the left/right buttons on the remote control to cycle through the input channels (USB / Optical).

The default function of the front panel knob short press and remote control left/right buttons is input switching. These functions can be customized through TOPPING Home WEB.



4.4 Output selection

When the device is powered on, double-press the knob or press the OUT button on the remote control to cycle through the output channels.

Since the device supports multiple output combinations, it is recommended to select commonly used outputs in the “Cycle range” setting in TOPPING Home WEB.

After setting, the knob or remote control will only cycle through the selected output combinations, improving switching efficiency.

The default output cycle range includes LO + OPT, HP + OPT, and LO + HP + OPT.

Output options:

- **LO:** Line Out (Rear panel 4.4mm output and RCA output)
- **HP:** Headphone output (Front panel 3.5mm and 4.4mm headphone outputs)
- **OPT:** Optical output
- **LO + HP:** Line Out + Headphone output
- **LO + OPT:** Line Out + Optical output
- **HP + OPT:** Headphone output + Optical output
- **LO + HP + OPT:** Line Out + Headphone output + Optical output





4.5 Headphone gain

The headphone gain can be switched using the G button on the remote control or the front panel knob. The custom button function can also be set to “Gain Switch” through TOPPING Home WEB.

Using the front panel knob: Press and hold the knob, then rotate it within 1.5 seconds to switch between high gain and low gain.

The GAIN icon on the screen lights up in high gain mode and remains off in low gain mode.





4.6 How to set LO / OPT fixed 0 dB

When the connected Line Out or optical output device has its own volume control, you can enable fixed 0 dB mode. In this mode, LO and OPT output at a fixed 0 dB level, volume adjustment is unavailable, and headphone output is disabled. Lower the volume of the connected device before enabling this mode.

Enter the “5. Setup menu”, set “LO / OPT fixed 0 dB” to F-O, then save and exit. When you switch back to F-C, the device restores the output combination, volume, volume link status, and volume control target from the previous F-O mode.

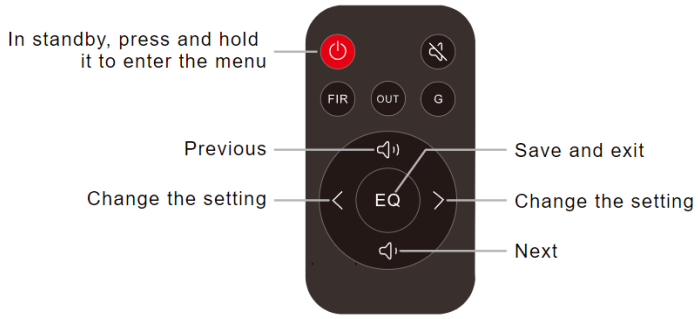
5. Setup menu

Enter menu and adjust settings

Using the front panel knob

- Enter menu: When the device is in standby, press and hold the knob for 3 seconds
- Choose setting item: Rotate the knob
- Change settings: Press the knob
- Save and exit: Press and hold the knob

Using the remote control



5.1 Auto standby & wake-up



- A01: 1 minute (Default)
- A05: 5 minutes
- A10: 10 minutes
- AOF: Disable auto standby

The device can automatically power on or enter standby mode according to the input signal status.

When an input signal is detected, the device automatically powers on. If no signal is detected continuously for the set time, the device will automatically enter standby mode according to the selected setting.

Whether auto standby is triggered depends on whether the source device stops outputting digital signals.

When a computer pauses playback, it usually continues to output signals, so auto standby will not be triggered. When the computer is powered off or enters standby mode, the DX1 II can enter standby automatically and resume operation when the signal is restored.

Some players stop outputting signals when playback is paused. In this case, the device can automatically power on when playback starts and enter standby when playback is paused.

5.2 Brightness



- L-1: Low
- L-2: Medium (Default)
- L-3: High

5.3 Auto display off time



- d05: 5 seconds
- d10: 10 seconds (Default)
- d30: 30 seconds
- d60: 60 seconds
- dOF: Never

After the set time with no operation, the display turns off completely. Operate the knob or remote control, or change a device setting, to wake the screen.

5.4 Resident display



- d-U: Always display volume. When switching sampling rate, the current sampling rate is displayed temporarily. (Default)
- d-S: Always display sampling rate. When adjusting volume, the current volume is displayed temporarily.

5.5 Remote control



- r-O: Enabled (Default)
- r-C: Disabled

5.6 OPT input mode



- OPT d-1: Mode 1 (Default)
- OPT d-2: Mode 2

This setting improves optical input compatibility with different optical signal sources.

The two modes are alternatives. Select the mode that works properly with your device.

Note: Mode 1 does not support DoP64.

5.7 LO / OPT fixed 0dB



- F-C: LO and OPT output volume adjustable (Default)
- F-O: Fixed 0dB mode. LO / OPT output fixed at 0dB, HP output unavailable

5.8 Output selection



L / H / P are fixed positions representing Line Out, Headphone output, and Optical output respectively. “-” indicates that the corresponding output is disabled.

- L--: Line Out (Rear panel 4.4mm and RCA outputs)
- -H-: Headphone output (Front panel 3.5mm and 4.4mm headphone outputs)
- --P: Optical output
- LH-: Line Out + Headphone output
- L-P: Line Out + Optical output
- -HP: Headphone output + Optical output
- LHP: Line Out + Headphone output + Optical output (Default)

5.9 PEQ output routing



- E-A: Analog (LO / HP)
- E-P: Digital (OPT)
- E-b: Analog + Digital (Default)

The same PEQ settings are applied to the selected output range. Separate PEQ settings are not saved for analog and digital outputs.

5.10 PCM filter



- F-1: Minimum Phase
- F-2: Linear Phase Fast Roll-Off Apodizing
- F-3: Linear Phase Fast Roll-Off
- F-4: Linear Phase Fast Roll-Off Low Ripple
- F-5: Linear Phase Slow Roll-Off (Default)
- F-6: Minimum Phase Fast Roll-Off

- F-7: Minimum Phase Slow Roll-Off
- F-8: Minimum Phase Slow Roll-Off Low Dispersion

5.11 Local PEQ



- EQ0: Disabled (Default)
- EQ1: Enable EQ1
- EQ2: Enable EQ2
- EQ3: Enable EQ3

EQ1 to EQ3 are three groups of local PEQ configurations. PEQ parameters can be adjusted through TOPPING Home WEB.

For PEQ supported formats, please refer to “12. Input range”.

5.12 Headphone gain



- GAIN OFF: Low gain (Default)
- GAIN ON: High gain

5.13 LO / HP channel balance



L9.5 dB ~ C ~ R9.5 dB (Default: Center balance)

The balance can still be adjusted when LO fixed 0dB mode is enabled.

5.14 OPT channel balance



L9.5 dB ~ C ~ R9.5 dB (Default: Center balance)

The balance can still be adjusted in fixed 0dB mode.

5.15 Volume linkage



- U-C: Disabled (Default)

- U-O: Enabled

The DX1 II supports separate volume adjustment for **analog output (LO / headphone output)** and **optical digital output**.

By default, the volume control target is analog output. The control target (analog / digital) can be changed through TOPPING Home WEB.

Volume linkage can also be enabled to adjust the analog output and optical output volume simultaneously.

When volume linkage is enabled, the current volume difference between the two outputs is maintained and both outputs increase or decrease synchronously.

During volume linkage, the display shows the higher volume value between the two outputs.

5.16 Microphone volume



Default: 30. Adjustable range: 0 to 100.

5.17 Microphone switch



- mON: Microphone enabled (Default)
- mOF: Microphone disabled

6. TOPPING Home WEB Control Center

Connect the device to a computer via USB, then open TOPPING Home WEB using a browser that supports WebHID (such as Chrome or Edge):

https://home.toppingaudio.com

In addition to all settings available on the device itself, TOPPING Home WEB provides the following extended functions:

- **Custom button functions:** Customize the functions of the remote control left/right buttons, mute button, and front panel knob short press / double press functions.
- **Set cycle switching range:** Customize the cycle options for output selection, PEQ output routing, PCM filter, local PEQ, and preset recall. When switching using the remote control or front panel knob, only the selected options will be cycled through.
- **Set volume control target:** Select analog output or OPT output as the volume control target.
- **PEQ settings:** The device itself only supports PEQ enable/disable and local preset selection. Detailed PEQ parameters need to be adjusted through TOPPING Home WEB.
- **AutoEQ:** Supports using AutoEQ to quickly generate or apply headphone EQ configurations, and further adjust PEQ parameters based on the generated configuration.

- **Community functions:** Share EQ configurations or apply configurations shared by other users.
- **Firmware upgrade:** Upgrade the device firmware online.

7. Factory reset

7.1 Reset all settings (excluding PEQ config)

In standby mode, press the **Volume −**, **Volume +**, and **Mute** buttons on the remote control in sequence to restore the factory settings. PEQ configurations will not be reset.

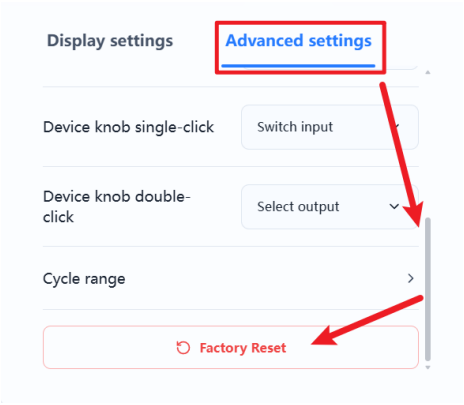


7.2 Reset PEQ config only

In standby mode, press the **Volume −**, **Volume +**, and **EQ** buttons on the remote control in sequence to reset the PEQ configurations.



7.3 Restore using TOPPING Home WEB



8. Firmware Upgrade

Click the link below to view the latest firmware, how to check the firmware version, and the firmware upgrade steps:

https://www.toppingaudio.com/supports?search=DX1+II&tab=firmware

9. Precautions

1. Do not keep the unit in a hot, humid environment or hit the unit strongly.
2. Opening the case will immediately void the warranty!
3. Indoor use only.
4. TOPPING is not liable for any loss or damage arising directly or indirectly from the use or failure of the DX1 II.
5. For product improvement, specifications are subject to change without prior notice.

10. Troubleshooting

If you encounter any issues during use, you can find the corresponding solutions at the following link:

https://www.toppingaudio.com/supports?search=DX1+II&tab=faq

If the problem still cannot be resolved, please contact us at: service@toppingaudio.com

11. Attribute

Dimensions	10.0cm × 10.0cm × 3.2cm (Include protruding parts)
Weight	275g
Power input	USB Type-C (DC 5V / 1.0A)
Digital input	USB/OPT (S/PDIF)
Analog input	3.5mm headset input (shared with headphone jack, with 2.5V bias voltage)
Digital output	OPT (S/PDIF)
Line output	4.4mm balanced / RCA single-ended
Headphone output	3.5mm single-ended headphone jack 4.4mm balanced headphone jack
Display	LED
UAC	1.0 / 2.0 (switchable)
Standby power consumption	0.8W (typical)
Power consumption	2.5W (typical)

12. Input range

Interface	PCM	DSD	PEQ
USB IN UAC 2.0	44.1kHz–384kHz / 16bit–32bit	DSD64–DSD256 (Native) DSD64–DSD128 (DoP)	44.1kHz–192kHz / 16bit–32bit
USB IN UAC 1.0	44.1kHz–48kHz / 16bit–24bit	—	44.1kHz–48kHz / 16bit–24bit
OPT IN	44.1kHz–192kHz / 16bit–24bit	DSD64 (DoP) (OPT d-2 mode only)	44.1kHz–192kHz / 16bit–24bit
OPT OUT	44.1kHz–192kHz / 16bit–24bit	—	44.1kHz–192kHz / 16bit–24bit

13. Specifications

DAC parameters (Line Out / USB In @ 96kHz)		
Output	**RCA SE**	**4.4mm BAL**
THD+N @1kHz (A-wt)	<0.00009%	<0.00007%
THD @20–20kHz (90kBw)	<0.0008%	<0.0005%
SNR @1kHz (A-wt)	125dB	128dB
Dynamic Range @1kHz (A-wt)	125dB	128dB
Frequency Response	20Hz–20kHz (±0.1dB) 20Hz–40kHz (±0.3dB)	20Hz–20kHz (±0.1dB) 20Hz–40kHz (±0.3dB)
Output Level	2.4Vrms @0dBFS	5.1Vrms @0dBFS
Noise (A-wt)	<1.3uVrms	<2.0uVrms
Channel Crosstalk	−126dB @1kHz	−140dB @1kHz
Channel Balance	0.3 dB	0.3 dB
Output Impedance	50Ω	100Ω
Output Coupling	DC	DC

*Note: All data above was measured by TOPPING Lab under DC 5V power supply.

Headphone Amplifier specifications (USB In @ 96kHz)		
	3.5mm headphone jack	**4.4mm headphone jack**
THD+N @1kHz (A-wt)	<0.0005% @Output=200mW (32Ω) <0.00015% @Output=22mW (300Ω)	<0.0010% @Output=850mW (32Ω) <0.0001% @Output=90mW (300Ω)
THD @20–20kHz (45kBW)	<0.0020% @Output=200mW (32Ω) <0.0003% @Output=22mW (300Ω)	<0.0050% @Output=850mW (32Ω) <0.0003% @Output=90mW (300Ω)
SNR @MAX OUT 1kHz (A-wt)	125dB @1kHz	128dB @1kHz
Dynamic Range @1kHz (A-wt)	125dB @1kHz	128dB @1kHz
Frequency Response	20Hz–20kHz (±0.1dB) 20Hz–40kHz (±0.3dB)	20Hz–20kHz (±0.1dB) 20Hz–40kHz (±0.3dB)

Headphone Amplifier specifications (USB In @ 96kHz)		
	3.5mm headphone jack	**4.4mm headphone jack**
Output Level	2.3Vpp @G=L, 11.5Vpp @G=H 0.8Vrms @G=L, 4.0Vrms @G=H 0.3dBu @G=L, 14.4dBu @G=H	4.6Vpp @G=L, 23.0Vpp @G=H 1.6Vrms @G=L, 8.1Vrms @G=H 6.3dBu @G=L, 20.4dBu @G=H
Noise (A-wt)	<0.9uVrms @G=L <1.9uVrms @G=H	<1.2uVrms @G=L <3.3uVrms @G=H
Channel Crosstalk	−102dB @1kHz	−140dB @1kHz
Gain	G=L −1.6dB (Vrms/FS) G=H 12.4dB (Vrms/FS)	G=L 4.4dB (Vrms/FS) G=H 18.4dB (Vrms/FS)
Channel Balance	0.3 dB	0.3 dB
Output Impedance	<1Ω	<2Ω
Output Power	800mW × 2 @16Ω THD+N<1% 510mW × 2 @32Ω THD+N<1% 260mW × 2 @64Ω THD+N<1% 58mW × 2 @300Ω THD+N<1% 29mW × 2 @600Ω THD+N<1%	730mW × 2 @16Ω THD+N<1% 1000mW × 2 @32Ω THD+N<1% 1000mW × 2 @64Ω THD+N<1% 230mW × 2 @300Ω THD+N<1% 115mW × 2 @600Ω THD+N<1%
Load Impedance	>8Ω	>8Ω

*Note: All data above was measured by TOPPING Lab under DC 5V power supply.