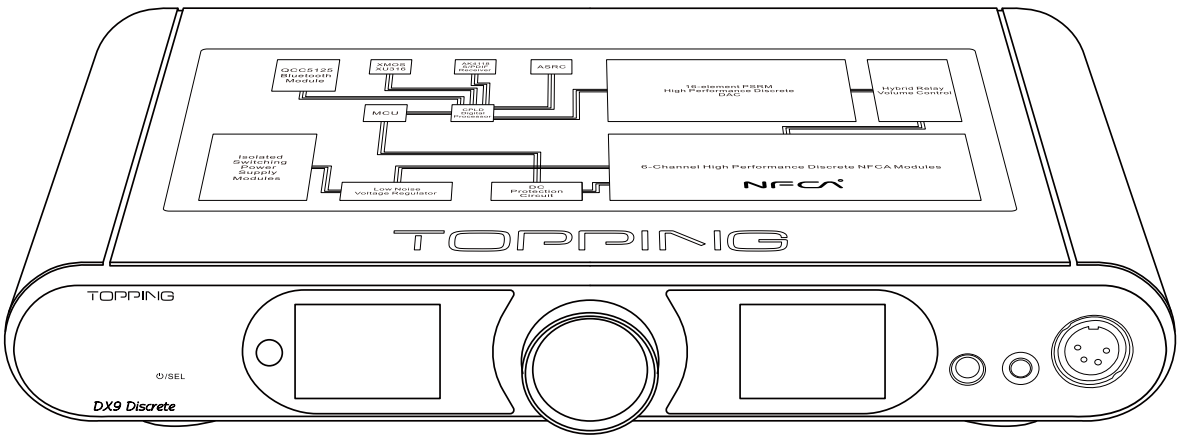
TOPPING

DX9 Discrete



使用指南

User manual

Model: TP737
V1.1

Table of Contents

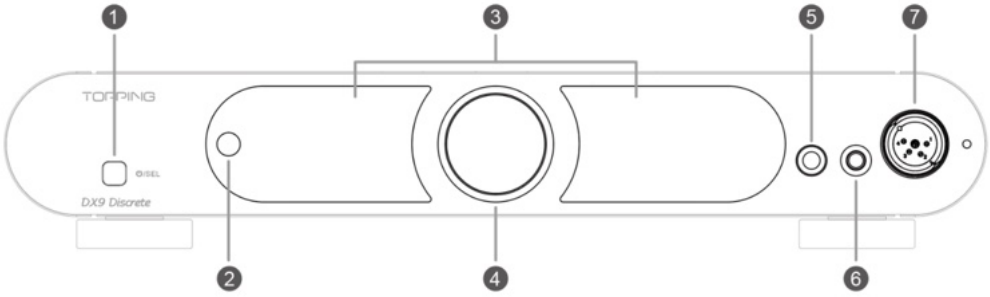
1. Contents list

DX9 Discrete	x1
RC23 Remote control	x1
USB cable	x1
6.35mm to 3.5mm adaptor	x1
AC cable	x1
Bluetooth antenna	x1
Product information card	x1

You can download the driver on https://www.toppingaudio.com/downloads.

2. Parts and names

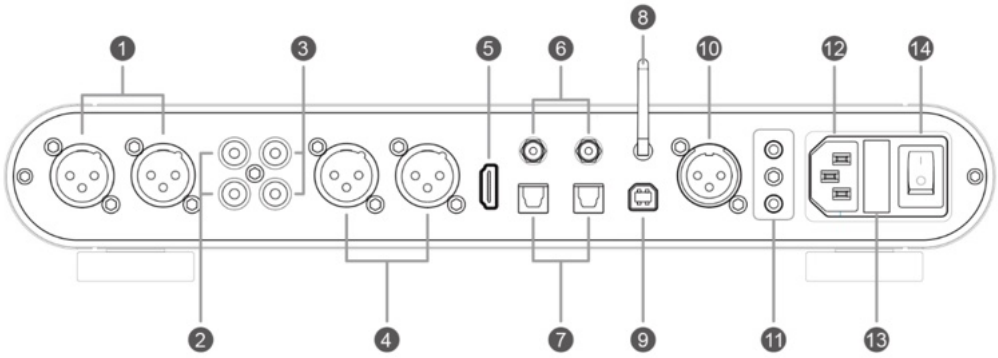
2.1 Front panel



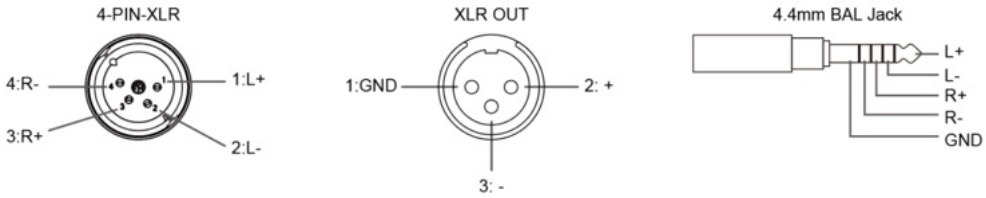
1. Multifunction button
2. Remote control receiver
3. Screen

4. Volume knob & User-defined button
   Rotate the knob: Adjust the volume.
   Press the knob: User-defined function. Please set it at [Setup Menu-Advanced-Knob press].
5. 6.35mm headphone output jack
6. 4.4mm balanced headphone output jack
7. 4-PIN-XLR headphone output jack

2.2 Rear panel



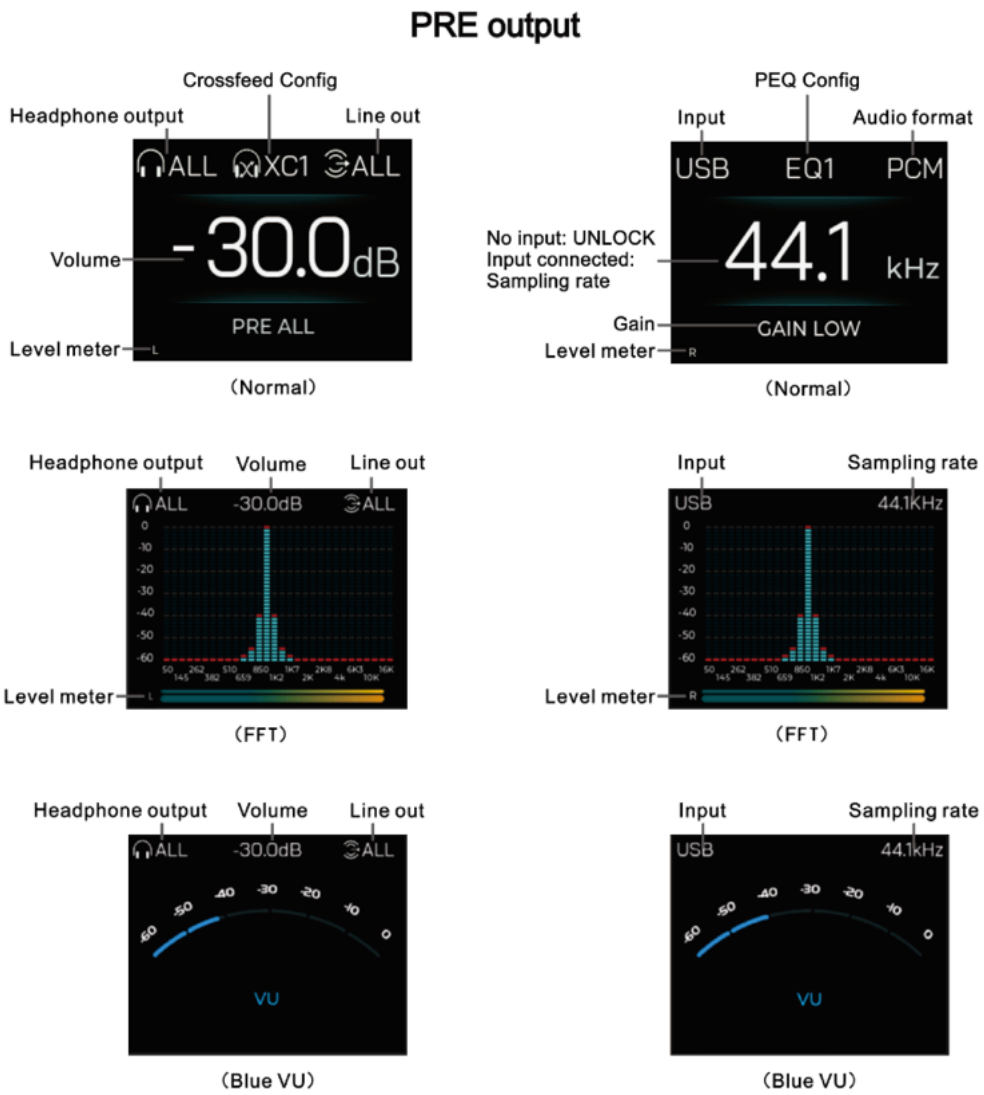
1. XLR balanced preamp output
2. RCA single-ended preamp output
3. RCA single-ended Lineout output
4. XLR balanced Lineout output
5. IIS input
6. Coaxial SPDIF input
7. Optical SPDIF input
8. Bluetooth input
9. USB input
10. AES input
11. 12V Trigger IN/OUT (3.5mm jack)
    See "3. Connection - Connect 12V Trigger", below.
12. Power input (AC 100-240V 50Hz/60Hz)
13. Fuse
14. Power switch



2.3 Display

There are three types of homepage display: Normal, VU and FFT, which are set in the menu [Setup - Display - Home].

There are two types of VU Meter styles: classic and blue, which can be switched in the menu [Setup - Display - VU style].

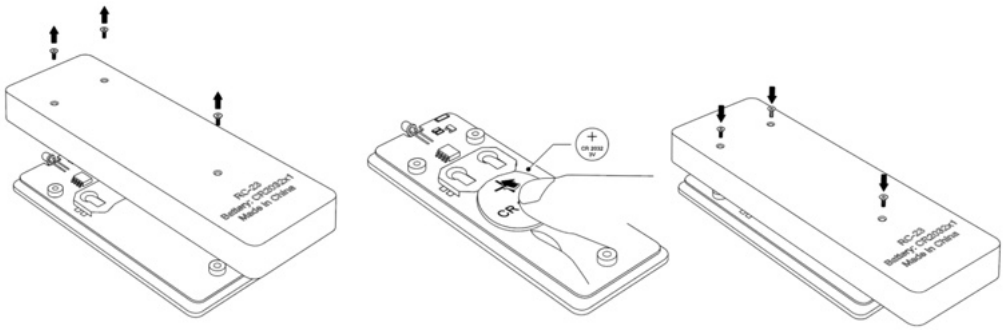


Note:

- The left and right VU meters, Level meter, and FFT displays respectively show the balanced output levels of the Line Out for the left and right channels under the current input.
- The 0dB in the blue VU meter, Level meter, and FFT is 4.2Vrms, and the 0dB in the classic meter is +4dBu or +10dBu. It can be set in the menu [Setup Menu-Display-Classic VU 0dB]

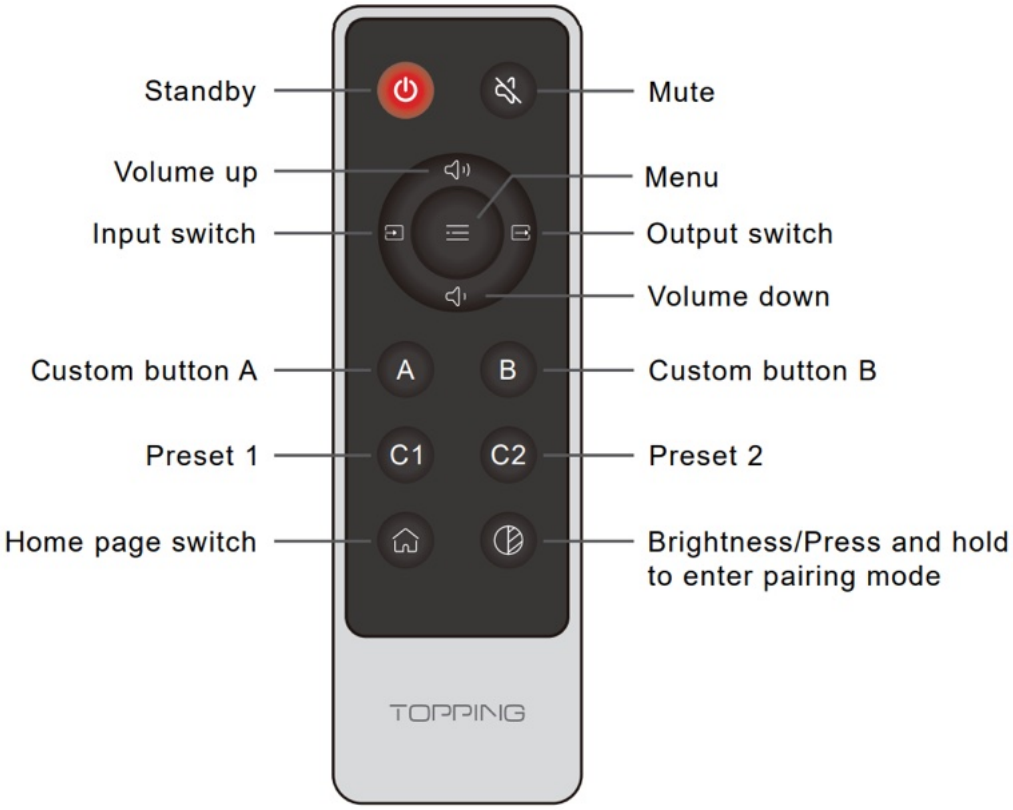
2.4 Remote control

2.4.1 Install remote control battery



1. Use the included H1.27 screwdriver to remove the three screws on the back.
2. Insert the CR2032 button cell (not included) in the direction of the arrow .
3. Install according to the original path.

2.4.2 Remote Control Overview



After installing the battery, if the remote control still doesn't work, try pressing and holding both the "Standby" and "Mute" buttons simultaneously until the indicator light flashes twice to complete pairing.

A B buttons：

The function of these two buttons is customizable. See "Advanced" in the "Setup Menu", below.

C1 C2 buttons：

Operation: Press and hold the C1/C2 button for 3 seconds to save the current settings. Short press the C1/C2 button to use the corresponding settings.

What was saved: Volume and all settings in the setup menu, such as input channel, output channel, etc.

When to use: This feature is suitable for users who have more than one usage scenario, such as the two shown below. Using C1&C2 buttons to save and load settings may free you from changing settings one by one when you want to change usage scenario.

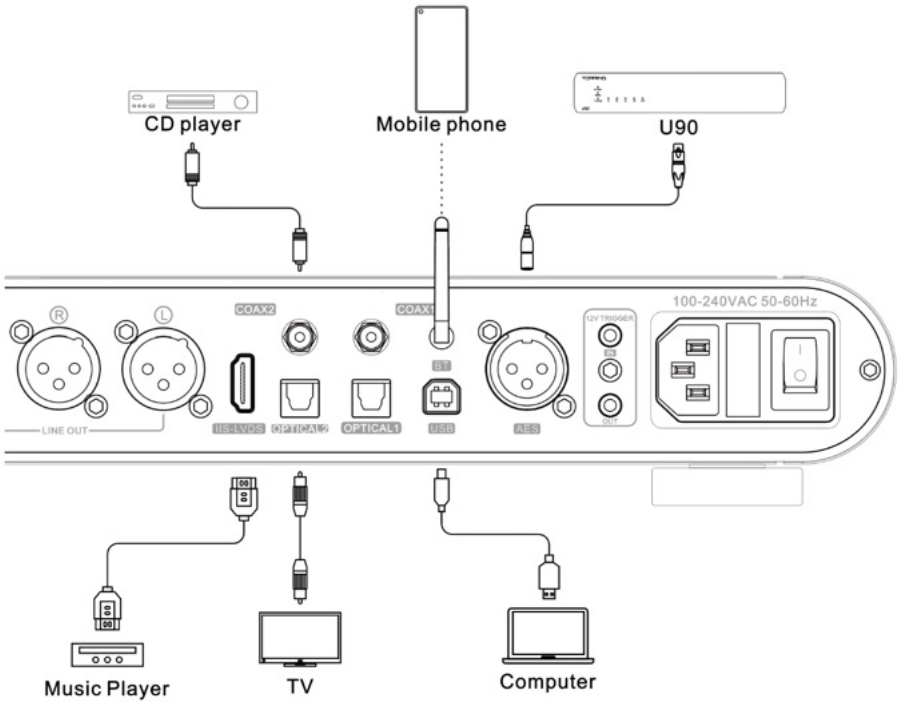
DX9 Discrete	Usage scenario 1: Connect with Headphone	Usage scenario 2: Connect with power amplifier
Input channel	USB IN	BT IN
Output channel	HPA ALL	PRE ALL
Volume	-30dB	-10dB

If your settings are accidentally changed, don't worry. Simply press the C1 or C2 button to instantly restore your previously saved configuration — fast and reliable.

3. Connection

3.1 Connect to the input source

Support IIS, USB, Coaxial, Optical, Bluetooth, AES input.

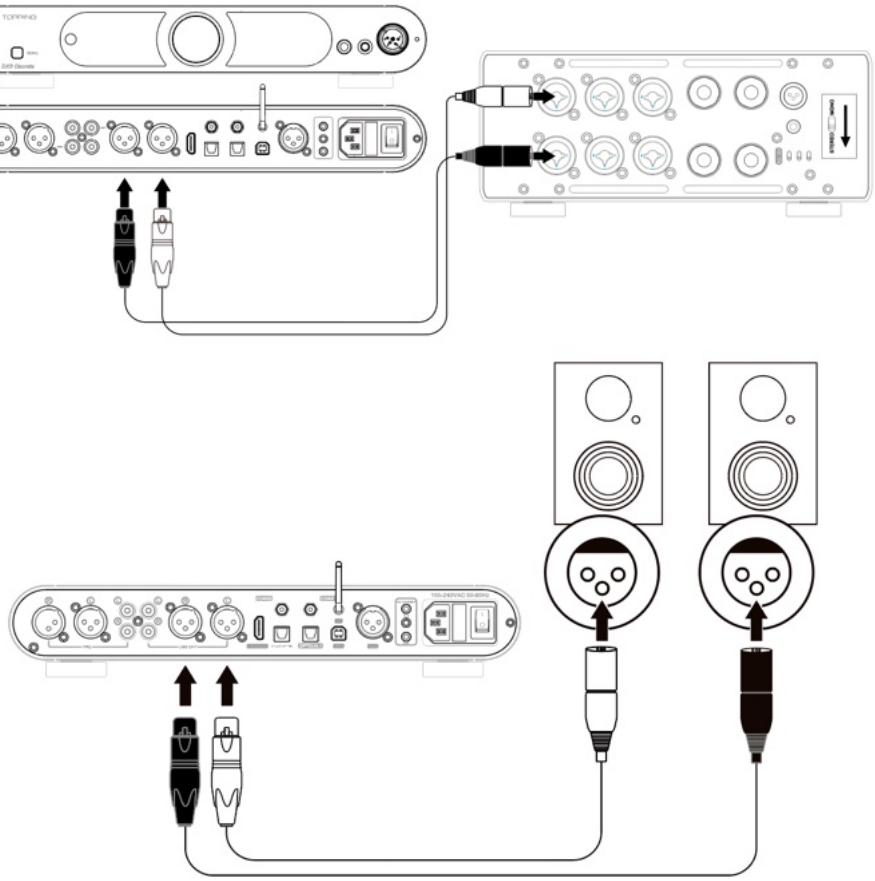


3.2 Connect to headphone

Three types of headphone jack are available: 4-PIN-XLR, 4.4mm and 6.35mm.

3.3 Connect to amplifier or active speaker

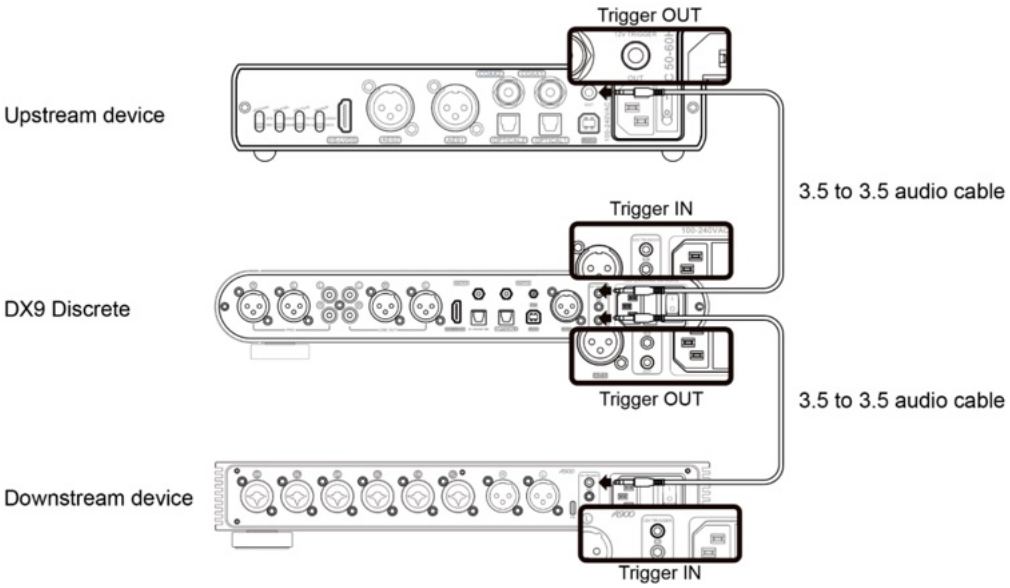
Use XLR or RCA cables to connect to power amplifier or active speakers. In order to avoid damage to your devices, please turn off the amplifier or active speakers before you connect them to DX9 Discrete.



3.4 Connect 12V Trigger

The 12V Trigger IN/OUT allows the DX9 Discrete to be activated by other devices or to activate other devices via a 3.5mm AUX cable. The upstream device connected to Trigger In can control the power on/standby of DX9 Discrete, and the downstream device connected to Trigger Out can be controlled by DX9 Discrete.

*Before using the Trigger IN function, you need to set the On/Off trigger mode to "12V" in the setup menu. [Setup menu-Advanced-On/Off trigger]

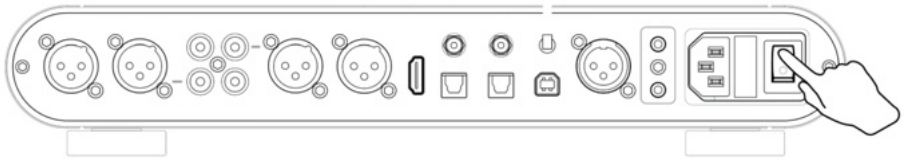


4. Operation

4.1 Power on & off / standby operation

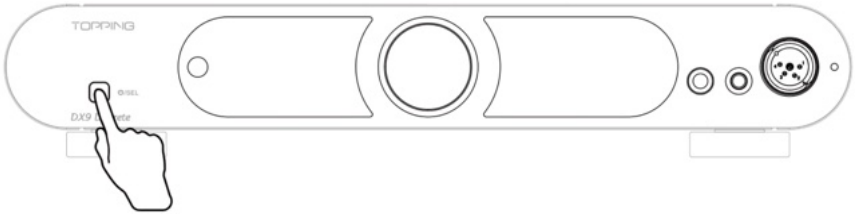
4.1.1 Power on & off

Press the power switch on the rear panel to turn the DX9 Discrete on or off.



4.1.2 Standby setting

When it is working, press and hold the button on the front panel to enter standby state and press to exit standby state when it is standby. Or you can use the remote control.



4.2 Volume setting

4.2.1 Mute and unmute

Press the mute button on the remote control to mute DX9 Discrete, press the mute button again or adjust the volume to exit mute state.

4.2.2 Volume adjusting

You can press the volume knob on the front panel or press the "volume+" or "volume-" on the remote control to adjust the volume. Note that long pressing the "volume+" or "-" button on the remote control will quickly change the volume, so please be careful in order to protect your hearing.

Special Note: When the DAC mode is set to DAC and the output is Line Out only, the volume is fixed at 0 dB, and volume adjustment will be disabled. [Setup - Output Settings - Output select - LO & Output Settings - DAC Mode - DAC]

4.3 Input settings

4.3.1 Input option setting

Since the device supports multiple input channels, switching between them may take some time. To improve efficiency, it is recommended that you preselect frequently used input channels in [Setup menu-Input settings-Input

option]. This can help reduce the time required for switching input sources. The system supports two configuration methods: Auto-detect and Manual. You may choose either based on your actual usage needs.

- Auto-detect

  The system will automatically detect whether a valid signal is received at each input port. If a valid signal is detected, the corresponding input channel will be added to the input options list. During input switching, the system will cycle through these channels.

- Manual (Default)

  You may also manually select the input channels you wish to use. Once selected, the system will only switch between these specified channels during input switching.

Available input channels include:

☐ USB
☐ OPT1 (Optical1)
☐ OPT2 (Optical2)
☐ COAX1 (Coaxial1)
☐ COAX2 (Coaxial2)
☐ AES
☐ IIS
☐ BT (Bluetooth)

4.3.2 Input channel switching

After configuring the input options, you can press the volume knob on the front panel or press the "input switch" button on the remote control to switch the input circularly.

4.4 Output settings

4.4.1 Output option setting

Since the device supports multiple output channels, switching between them may take some time. To improve efficiency, it is recommended that you preselect commonly used output channels in [Setup menu-Output settings-Output option], which will help reduce the time required for switching.

Available output channels include:

☐ ALL
☐ LO ALL
☐ PRE ALL
☐ HPA ALL
☐ LO SE
☐ LO BAL
☐ PRE SE
☐ PRE BAL
☐ HPA 6.35
☐ HPA 4.4
☐ HPA XLR-4

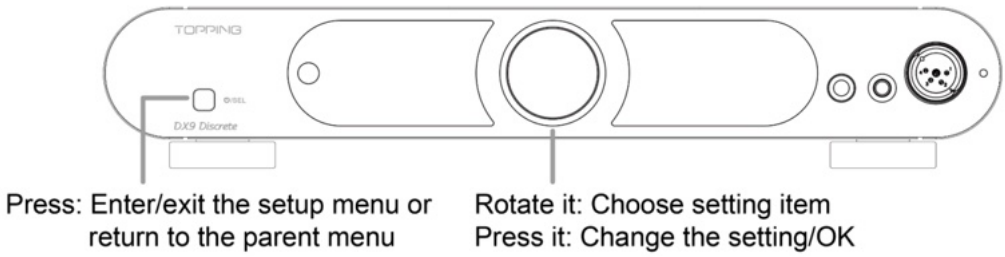
4.4.2 Output channel switching

After configuring the output options, you can press "output switch" button on the remote control to switch the output circularly.

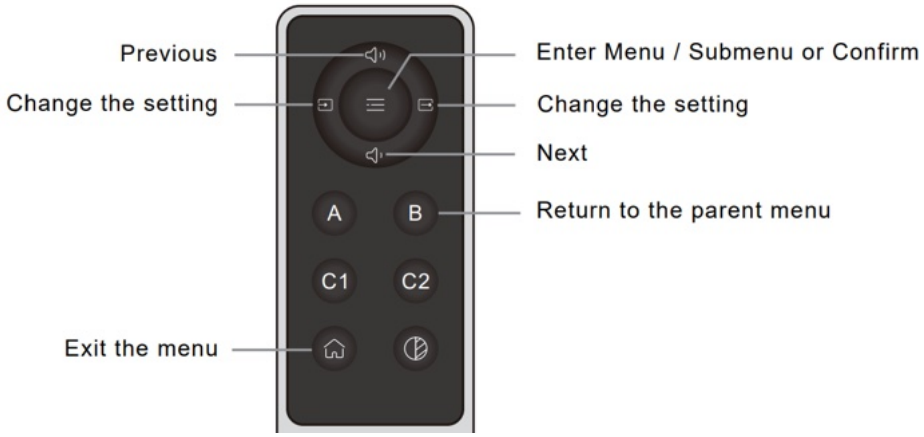
5. Setup Menu

5.1 Enter menu and change settings

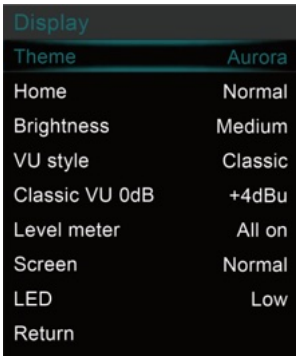
5.1.1 Buttons on front panel



5.1.2 The remote control



5.2 Display



Theme

Multiple options available, default Aurora.

Home

Choose home page Normal (Default), VU, FFT

Brightness

Low, Medium (Default), High, Auto
Auto has the same brightness as Medium. The difference is that when there is no operation after 30 seconds under Auto mode, the screen will be automatically turned off and only display the current input. You can press any button to light up the screen.

VU style

Select VU meter style Classic (Default), Blue

Classic VU 0dB

Set 0dB reference voltage for VU meter. For example, if set to +4dBu, when the pointer swings to 0dB, the current output level of DX9 Discrete is +4dBu.
+4dBu (Default), +10dBu

Level meter

All on (Default), Normal page, FFT page, All off

Screen

Switch left and right displays

Normal(Default), Inverted

LED

Low, Medium (Default), High, OFF

5.3 Input settings

Input select

USB(Default)/Input option

Input option

Since the device supports multiple input channels, switching between them may take some time. To improve efficiency, it is recommended that you preselect frequently used input channels in [Setup menu-Input settings-Input option]. This can help reduce the time required for switching input sources.

- Auto-detect
  The system will automatically detect whether a valid signal is received at each input port. If a valid signal is detected, the corresponding input channel will be added to the input options list. During input switching, the system will cycle through these channels.
- Manual (Default)
  You may also manually select the input channels you wish to use. Once selected, the system will only switch between these specified channels during input switching.

Available input channels include:

☐ USB
☐ OPT1 (Optical1)
☐ OPT2 (Optical2)
☐ COAX1 (Coaxial1)
☐ COAX2 (Coaxial2)

☐ AES
☐ IIS
☐ BT (Bluetooth)

UAC

UAC2.0 (Default), UAC1.0

Bluetooth

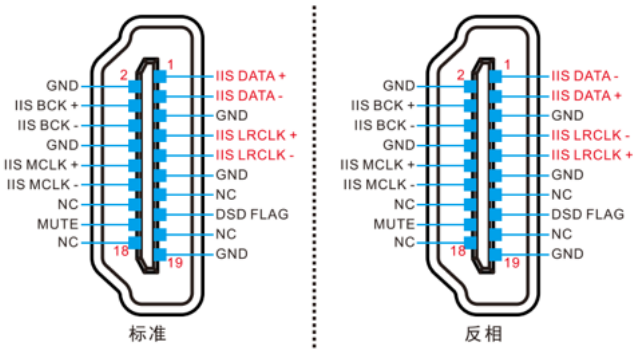
Enabled (Default), Disabled

Bluetooth aptX

Enabled (Default), Disabled
The DX9 Discrete supports multiple Bluetooth codecs. When set to OFF, the APTX-Adaptive will be disabled, allowing the use of other codecs (depending on the phone).

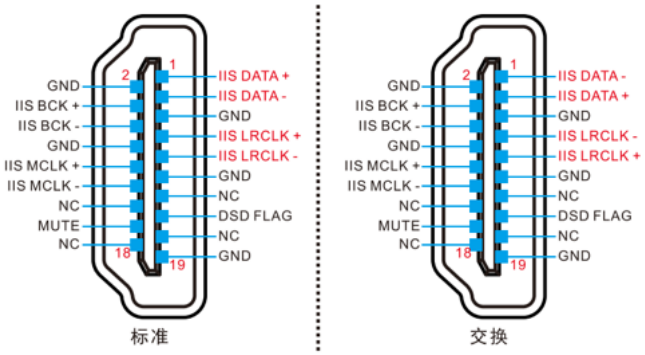
IIS phase

Standard (Default), Reverse



IIS DSD chennael

Standard (Default), Swap

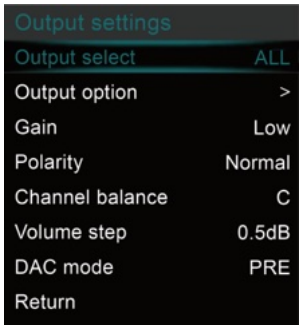


DSD MUTE

Active high (Default), Active low, Off

When using the IIS interface, noise appears when switching the sample rate. You can choose Active high/low to eliminate the noise.

5.4 Output settings



Output select

ALL(Default)/Output option

Output option

Since the device supports multiple output channels, switching between them may take some time. To improve efficiency, it is recommended that you preselect commonly used output channels in [Setup menu-Output settings-Output option], which will help reduce the time required for switching.

Available output channels include:

☐ ALL
☐ LO ALL
☐ PRE ALL
☐ HPA ALL
☐ LO SE
☐ LO BAL
☐ PRE SE
☐ PRE BAL
☐ HPA 6.35
☐ HPA 4.4
☐ HPA XLR-4

Gain

Set the gain of the HPA output and PRE output.
Low (Default), High

Polarity

Normal(Default), Reverse

Channel balance

Setting range: C (Balance), L+0.5~9.5dB or R+0.5~9.5dB. (Default: C)
When using the knob on the front panel, press the knob to enter the setting, rotate the knob to set the value, and press the knob again to exit the setting.

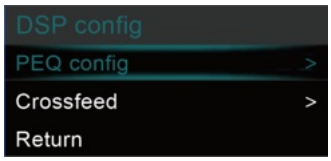
Volume step

0.5dB (Default), 1dB
When 0.5dB is selected, short press the remote volume+ - to adjust the volume by 0.5dB, and long press to adjust it in 1dB steps.

DAC mode

PRE (Default), DAC
Note: This mode is only effective for line output. When DAC mode is selected, the maximum volume output will be fixed. [Setup Menu - Output settings - Output option - LO ALL/LO SE/LO BAL]

5.5 DSP config



PEQ config

PEQ

Disabled (Default), Enabled

PEQ Support Range	
USB/IIS IN	44.1kHz-192kHz/16bit-24bit
COAX/OPT/AES IN	44.1kHz-192kHz/16bit-24bit
BT IN	44.1kHz-96kHz/16bit-24bit

Config

There are 5 built-in default preset configurations for users to choose from, which can be modified via the Topping Tune software. Additionally, users can save 5 custom configurations to the DX9 Discrete through the Topping Tune software, allowing the DX9 Discrete to use these configurations offline.

Crossfeed

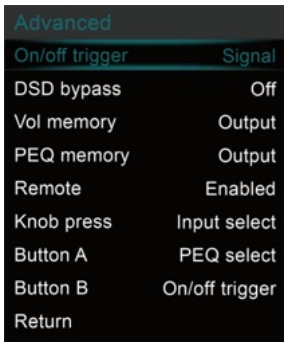
Type

Convolution、Sample、Off (Default)
Note: This is valid for all input and output interfaces (44.1kHz-48kHz/24bit-32bit)

Config

There are corresponding preset configurations built in for different Crossfeed types, and you can choose according to your preferred listening experience.

5.6 Advanced



On/Off trigger

- **Signal:** Input signal will trigger the device to turn on, but if the current input is not connected or input signal is invalid in 1 minute, it will automatically enter the standby state. Once having detected valid signal, it will automatically return to working state. (Default)
- **12V:** 12V signal will trigger the device to turn on. When DX9 Discrete's Trigger In is connected to another device's 12V Trigger Out, DX9 Discrete's on/standby state can be controlled through this device. The DX9 Discrete will remain in standby state until Trigger In detects the signal change from 0V to 12V. When changing back to 0V, the DX9 Discrete will return to standby state.
- **Off:** Disabled this function.

DSD bypass

Enabled, Disabled (Default)

DSD Bypass Support Range	
USB/IIS IN	DSD64-DSD256 (Native) , DSD64-DSD256 (DoP)
COAX/OPT/AES IN	DSD64 (DoP)
BT IN	Unsupported

Vol memory

- **Output:** Memorizes the volume of each output channel when it was last used. The next time the channel is used, the volume will automatically revert to the volume of its last use. (Default)
- **Input:** Memorizes the volume of each input channel when it was last used. The next time the channel is used, the volume will automatically revert to the volume of its last use.
- **Disabled:** Disabled this function.

PEQ memory

- **Output:** Memorizes the PEQ configuration used the last time for each output channel, and automatically switches to that configuration the next time the same output channel is used. (Default)
- **Input:** Memorizes the PEQ configuration used the last time for each input channel, and automatically switches to that configuration the next time the same input channel is used.
- **Disabled:** Disabled this function.

Remote

Enabled (Default), Disabled

Knob press

Customize the function of the press knob.

Input select (Default), Output select, Gain, Home select, Brightness, Dim screen, On/Off trigger, PEQ On/Off, PEQ select, Crossfeed type, Crossfeed cfg, Mute

Button A

Customizable function for remote control button A

Input select, Output select, Gain, Home select, Brightness, Dim screen, On/Off trigger, PEQ On/Off, PEQ select (Default), Crossfeed type, Crossfeed cfg, Mute

Button B

Customizable function for remote control button B

Input select, Output select, Gain, Home select, Brightness, Dim screen, On/Off trigger (Default), PEQ On/Off, PEQ select, Crossfeed type, Crossfeed cfg, Mute

5.7 Language

English, 中文

5.8 Factory reset

Select factory reset will have a pop-up, select Yes/No (Selected with color), then press the middle button on the remote or the front-panel knob to confirm.

6. Trouble shooting

If there are problems during use, please find the corresponding solutions through the following links.

https://www.toppingaudio.com/faq

Finding Method: Window OS enters the search by pressing Ctrl and F (Mac OS presses the command and F). Then enter the device model to jump to FQA of the device.

If you still have problems or questions, please contact us: service@tpdz.net

7. Precautions

- Do not keep the unit in a hot, humid environment or hit the unit strongly.
- Opening the case instantly voids the warranty!
- Indoor use only.
- Topping accepts no liability for any loss or damage arising directly or indirectly from the failure of DX9 Discrete.
- For improvement purposes, specifications subject to changes without prior notice.

8. Attribute

Measured	34.0cm x 22.5cm x 6.0cm (Include protruding parts)
Weight	2750g
Power input	100-240VAC 50Hz/60Hz
Signal input	USB/BT/OPT1/OPT2/COAX1/COAX2/AES/IIS
Line Out output	XLR/RCA
PRE output	XLR/RCA
Headphone Amplifier output	1 x 6.35mm headphone output jack 1 x 4-PIN-XLR headphone output jack 1 x 4.4mm headphone output jack
Other connectors	12V Trigger In (3.5mm jack) 12V Trigger Out (3.5mm jack)
Display	Two 2.0-inch LCDs
Standby power consumption	<2.5W
Power consumption	<18W

9. Input range

USB IN	PCM	44.1kHz-768kHz/16bit-32bit
	DSD	DSD64-DSD512 (Native) , DSD64-DSD256 (DoP)
	PEQ	44.1kHz-192kHz/16bit-24bit
IIS IN	PCM	44.1kHz-768kHz/16bit-32bit
	DSD	DSD64-DSD512 (Native) , DSD64-DSD256 (DoP)

	PEQ	44.1kHz-192kHz/16bit-24bit
COAX/OPT/AES IN	PCM	44.1kHz-192kHz/16bit-24bit
	DSD	DSD64 (DoP)
	PEQ	44.1kHz-192kHz/16bit-24bit
BT IN	AAC/SBC/APTX/APTX HD/APTX-Adaptive/LDAC	
	PEQ 44.1kHz-96kHz/16bit-24bit	

10. DX9 Discrete Specifications

DAC parameters（Line Out/USB In@96kHz）		
Output	**RCA**	**XLR**
THD+N @1kHz (A-wt)	<0.00007%	<0.00006%
THD @20-20kHz (45kBw)	<0.0004%	<0.0003%
SNR @1kHz (A-wt)	128dB	131dB
Dynamic Range @1kHz (A-wt)	128dB	131dB
Frequency Response	20Hz-20kHz(±0.6dB) 20Hz-40kHz(±2.0dB)	20Hz-20kHz(±0.6dB) 20Hz-40kHz(±2.0dB)
Output Level	2.5Vrms @0dBFS	5.2Vrms @0dBFS
Noise (A-wt)	<1.1uVrms	<1.6uVrms
Channel Crosstalk	-125dB @1kHz	-136dB @1kHz
Channel Balance	0.3 dB	0.3 dB

Output Impedance	50Ω	100Ω

Headphone Amplifier specifications (USB In@96kHz)		
	Single-end headphone jack	**Balance headphone jack**
THD+N @1kHz (A-wt)	<0.00007% @Output=550mW(32Ω) <0.00007% @Output=60mW(300Ω)	<0.00007% @Output=550mW (32Ω) <0.00007% @Output=60mW (300Ω)
THD @20-20kHz (45kBW)	<0.00050% @Output=550mW(32Ω) <0.00050% @Output=60mW(300Ω)	<0.00050% @Output=550mW(32Ω) <0.00030% @Output=60mW (300Ω)
SNR @MAX OUT 1kHz (A-wt)	130dB @1kHz	131dB @1kHz
Dynamic Range @1kHz (A-wt)	130dB @1kHz	131dB @1kHz
Frequency Response	20Hz-20kHz(±0.6dB) 20Hz-40kHz(±2.0dB)	20Hz-20kHz(±0.6dB) 20Hz-40kHz(±2.0dB)
Output Level	15Vpp @G=L 24Vpp @G=H	15Vpp @G=L 48Vpp @G=H
AP measured noise level (A-wt)	<1.3uVrms @G=L <1.6uVrms @G=H	<0.8uVrms @G=L <2.4uVrms @G=H
Actual noise level* (A-wt)	<1.1uVrms @G=L <1.4uVrms @G=H	<0.5uVrms @G=L <2.1uVrms @G=H
Channel Crosstalk	-130dB @1kHz	-133dB @1kHz
Gain	G=L 12.5dB(Vrms/FS) G=H 18.5dB(Vrms/FS)	G=L 12.5dB(Vrms/FS) G=H 24.5dB(Vrms/FS)
Channel Balance	0.3 dB	0.3 dB
Output Impedance	<0.1Ω	<0.1Ω

Output Power	3300mW x 2 @16Ω THD+N<1% 2120mW x 2 @32Ω THD+N<1% 1190mW x 2 @64Ω THD+N<1% 270mW x 2 @300Ω THD+N<1%	10000mW x 2 @16Ω THD+N<1% 7080mW x 2 @32Ω THD+N<1% 4250mW x 2 @64Ω THD+N<1% 1060mW x 2 @300Ω THD+N<1% 540mW x 2 @600Ω THD+N<1%
Load Impedance	>8Ω	>8Ω

***Note:**The actual noise level is obtained by boosting the noise of DX9 Discrete by 40dB using a low noise amplifier in front of the APx555B then dividing the measured noise by 100 times.

Pre-amplifier specifications (USB In@96kHz)		
	RCA	**XLR**
THD+N @1kHz (A-wt)	<0.00007%	<0.00007%
THD @20-20kHz (45kBW)	<0.0004%	<0.0003%
SNR @MAX OUT 1kHz (A-wt)	130dB @1kHz	131dB @1kHz
Dynamic Range @1kHz (A-wt)	130dB @1kHz	131dB @1kHz
Frequency Response	20Hz-20kHz(±0.6dB) 20Hz-40kHz(±2.0dB)	20Hz-20kHz(±0.6dB) 20Hz-40kHz(±2.0dB)
Output Level	15Vpp @G=L 24Vpp @G=H	15Vpp @G=L 48Vpp @G=H
AP measured noise level (A-wt)	<1.7uVrms @G=L <2.0uVrms @G=H	<0.8uVrms @G=L <2.1uVrms @G=H
Actual noise level* (A-wt)	<1.1uVrms @G=L <1.4uVrms @G=H	<0.5uVrms @G=L <2.1uVrms @G=H
Channel Crosstalk	-113dB @1kHz	-135dB @1kHz
Gain	G=L 14.4dB(Vrms/FS) G=H 20.1dB(Vrms/FS)	G=L 14.4dB(Vrms/FS) G=H 26.5dB(Vrms/FS)

Channel Balance	0.3 dB	0.3 dB
Output Impedance	50Ω	100Ω

***Note:**The actual noise level is obtained by boosting the noise of DX9 Discrete by 40dB using a low noise amplifier in front of the APx555B then dividing the measured noise by 100 times.