iBasso Audio
In Pursuit of Perfection

▢✕▢▢ DX120
High Performance
Digital Audio Player

USER GUIDE

Contents

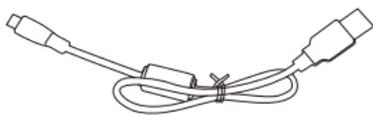# Package Components :

DX120

Clear TPU
protection case

Coaxial cable

Burn-in cable

USB type-C cable

Screen protector

Quick start guide

Warranty card

USB type-C cable:

Connect the USB type-C cable to a computer for charging, data transfer, and USB-DAC function. Connect the USB type-C cable to a USB charger, or quick charger for charging.

Coaxial cable

Connect the coaxial cable to an external DAC, to allow the DX120 working as a digital transport.

Burn-in cable:

Plug the burn-in cable into the PHONE out socket, and keep playing music to burn-in the DX120. The burn-in process helps the DX120's sound reach its full potential by forming the capacitors and stabilizing the electronic components used. Use a normal listening volume setting when using the burn in cable.

Clear TPU protection case

Use the Clear TPU protection case the DX120's chassis from scratches.

Screen protector:

Use the screen protector to protect the DX120's screen from scratches.

Warranty card:

The warranty will be requested at the time of warranty repair. Please retain the warranty card.

Quick start guide:

This reviews the basic functions of the DX120.

Main Features:

- Model: DX120 high performance digital audio player.

- OS: Mango OS.

- DAC: AK4495.

- Output Ports: 2.5BAL，3.5PO，3.5LO，3.5COAX.

- Screen: 3.2inch 480*800 IPS screen with capacitive touch.

- Sample Rate: PCM：8kHz–384kHz（8/16/24/32bits）native DSD: DSD64/128.

- System Clock: Fully synchronization technology with TXCO and PLL.

- Battery: 3.8V 3700mAh Li–polymer battery.

- Quick Charge: QC2.0, and MTK–PE quick charge, support 12V、9V/1.5A quick charge and compatible with BC1.2 USB charge.

- USB DAC Function: XMOS XU208, Thesycon USB driver.

- Micro SD: Supports SDHC & SDXC, up to 2TB.

- Size: 63mm*113mm*15mm（2.5inch*4.4inch*0.6inch）

- Weight: 165g（5.8oz）

- Average Play Time: 16 hours. (The play time varies with different resolutions and headphone/IEM loads.)

Specifications:

2.5mm Balanced:

Output Voltage：	3.6Vrms
Frequency Response：	10Hz-45kHz+/-1dB
THD+N：	0.00028%, -111dB (without load)
	0.00032%, -110dB (32Ω@2.4Vrms)
DNR：	-117dB
S/N：	117dB
Crosstalk：	-116dB

3.5mm Single Ended:

Output Voltage：	1.8Vrms
Frequency Response：	10Hz-45kHz+/-1dB
THD+N：	0.00042%, -107dB (without load)
	0.00056%, -105dB (32Ω@1.2Vrms)
DNR：	-115dB
S/N：	115dB
Crosstalk：	-115dB
Output Impedance：	0.24ohm

3.5mm Line Out:

Output Voltage：	1.8Vrms
Frequency Response：	10Hz-45kHz+/-1dB
THD+N：	0.00042%, -107dB (without load)
DNR：	-115dB
S/N：	115dB

Average Play Time: 16 hours. (The play time varies with different resolutions and headphone/IEM loads.)

Names of Parts & Functions:

Micro SD Card Slot

Coax

Coaxial Output Port   USB Type-C Port

LO   PO   BALANCED

2.5mm Balanced

Line Out Port   3.5 Single Ended

Coaxial Output Port:

Use the furnished coaxial cable to play music stored in the DX120.

Coaxial output has the highest output priority which would close the phone out or line out when coaxial cable plugged in.

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USB Type-C Port:

Connect the DX120 to a computer or a USB charger to charge the DX120.

Connect the DX120 to a computer to allow the DX120 to work as a card reader.

Connect the DX120 to an OTG storage device to play music files.

Connect the DX120 to a PC or a Mac computer to work as a USB DAC.

Micro SD Card Slot:

Insert a Micro SD card into the DX120 to access its stored files.

The following screen pops up after Micro SD card inserted.

Scan SD Card:

Press "YES" to fully scan the Micro SD card. The first media scanning will take more time as the DX120 is building the library for this card. The DX120 will create a folder called ".audio_data" in the Micro SD card after that. The speed of the media scanning the next time this card is inserted is much faster as the library is already built and stored on this card.
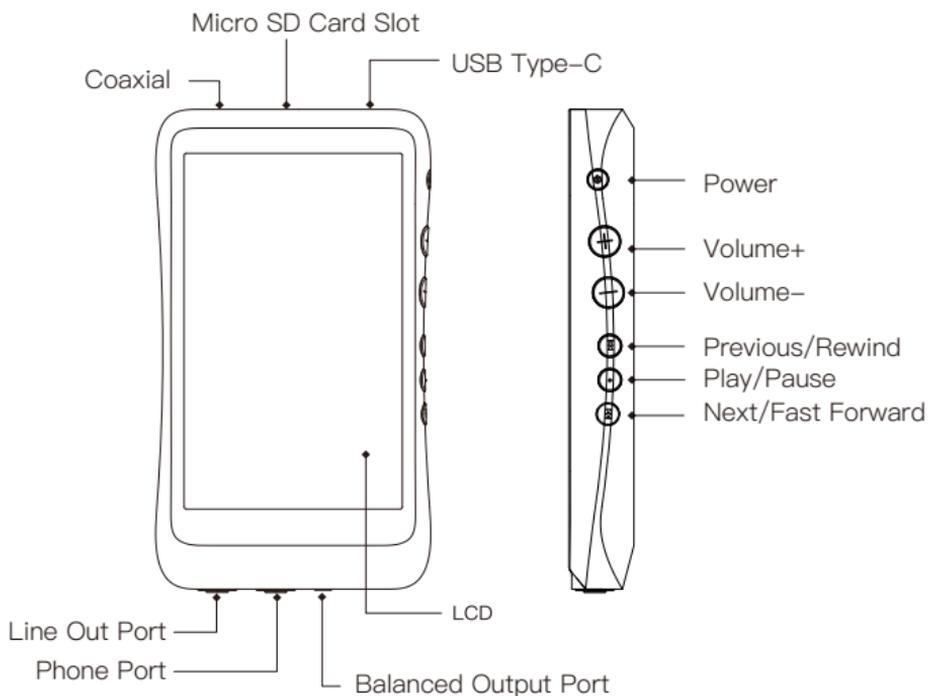
Browse Files:

Press "NO" to skip media scanning, and browse the Micro SD card in folder structure.

3.5mm Single Ended:/2.5mm Balanced:

Plug in the earphone and output sound through the phone jack.

Line Out Port:

Use a 3.5 to 3.5 interconnect cable to play music stored in the DX120 on an external amplifier with a line in port.

Micro SD Card Slot

Coaxial

USB Type-C

Power

Volume+

Volume-

Previous/Rewind

Play/Pause

Next/Fast Forward

Line Out Port

Phone Port

Balanced Output Port

LCD

Power:

Short Press – Power the LCD screen on and off.

Long Press – Power the DX120 on and off.

Volume+:

Short – press to increase one step of the volume.

Long – press to continuously increase until its maximum.

Volume–:

Short – press to decrease one step of the volume.

Long – press to continuously decrease until its minimum.

Previous/Rewind:

Short Press – Replay previous track.

Long Press – Rewind.

Play/Pause:

Short Press – Play/Pause.

Next/Fast Forward:

Short Press – Play the next track.

Long Press – Fast forward.

Basic Operation:

Power on/off:

Press and hold the power button to power on.

After the DX120 is powered on, a long press of the Power button to power off.

Powering the screen on/off:

Single press the power button to power the screen on/off after the DX120 has been powered on.

Reset:

When the DX120 stop unexpectedly during operation and the keys are no longer responsive, press and hold the power button for 10 seconds to reset the DX120.

Charging:

The DX120 supports Type-C QC2.0, and MTK-PE+ rapid charge. With rapid charge, the DX120 can be fully charged in two hours. The DX120 also can be charged by computer through the USB port or any USB charger with 5V output voltage and 1A or above output current.

Charging while the DX120 is powered on will extend the charge time and charging using other methods than the QC2.0 or MTK-PE+ rapid charge, will take longer than 2 hours.

Connecting to a computer to work as a USB DAC

The DX120 can work as a USB DAC for Windows PC, Mac computer, and Linux computer.

It is drvier free on Mac computer and Linux computer. For Windows PC, one can download the driver from iBasso.com and install it following the steps included with the download, before using the USB DAC function.

The DX120 supports up to 32bit/384kHz PCM, and native DSD up to 128x when be used as a USB–DAC.

The following are the instructions for USB DAC use:

1. Power on the DX120.

2. Select DAC on Settings/USB Settings.

3. Connect the DX120 to a computer via the furnished USB Cable.

4. The"USB DAC"screen will be shown on the DX120.

5. Select "iBasso DX120 Hifi device" or "Xcore Hifi device" as the audio output device. Then one can play music on the computer and listen it via the DX120.
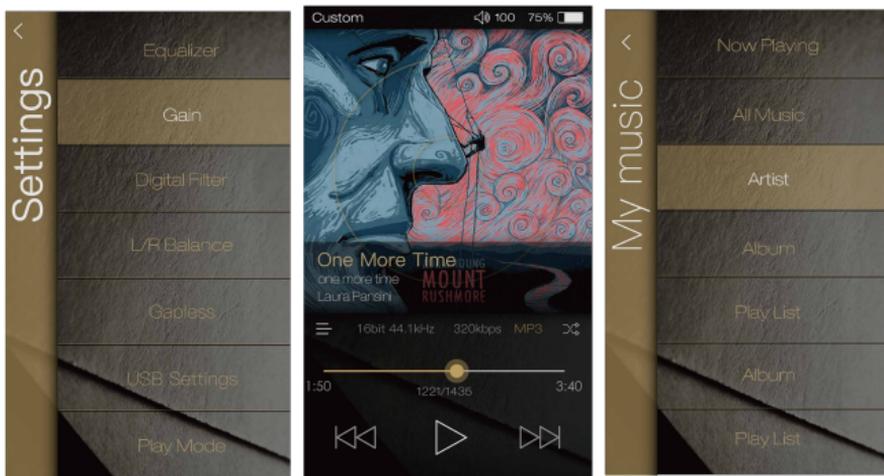
Disconnecting from a computer:

Make sure to safely remove the drive(s) from the computer before disconnecting the USB connection to the DX120.Click the icon displayed in the task bar or desktop of the computer to safely disconnect the DX120.
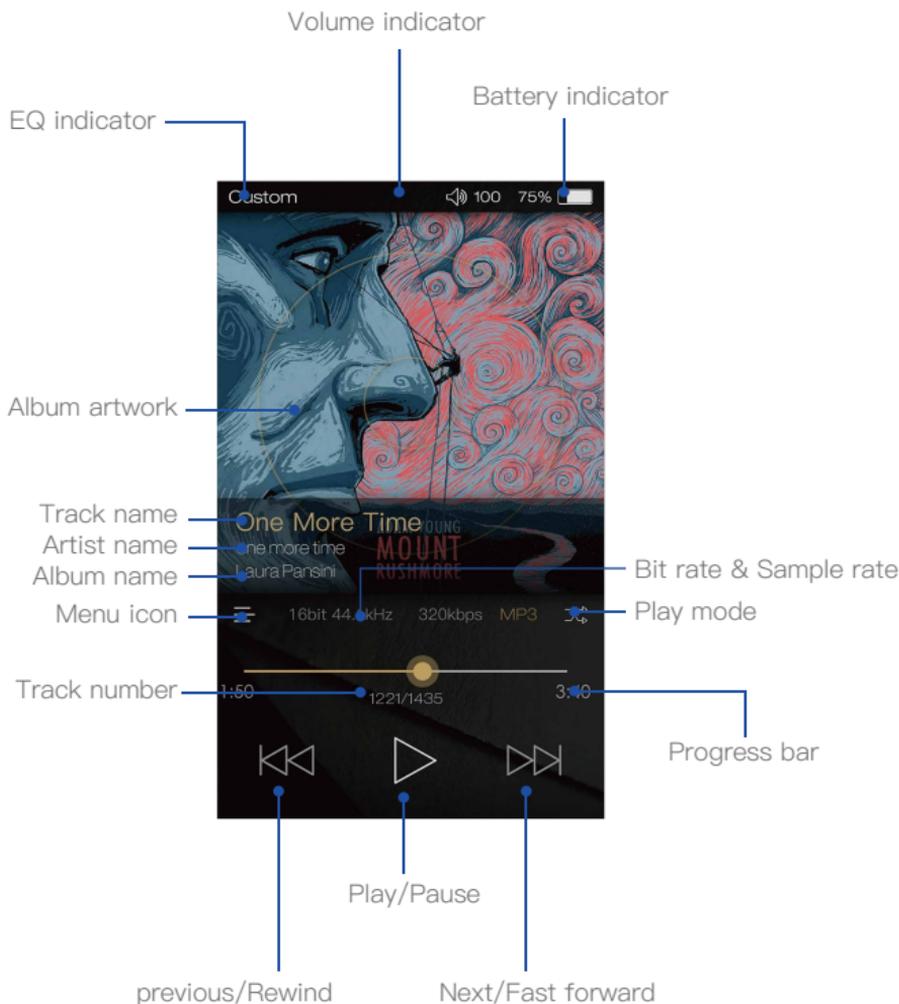
User Interface:

The DX120 User interface is composed of fours parts:Music playback screen (homepage), my music, settings, and quick setting menu.

On the homepage, one can swipe the screen to right for My Music, or swipe the screen to left for Settings. It does not matter what sub-menu you are on of My Music, one can swipe to the left to go back to homepage. When on any of the Settings sub-menu, swipe to right to go back to homepage. Press the menu icon (see page 13) to display the quick setting menu,which includes all of the frequently used options.

Music Playback Screen:

Volume indicator

Battery indicator

EQ indicator

Album artwork

Track name

Artist name

Album name

Menu icon

Track number

Bit rate & Sample rate

Play mode

Progress bar

Play/Pause

previous/Rewind

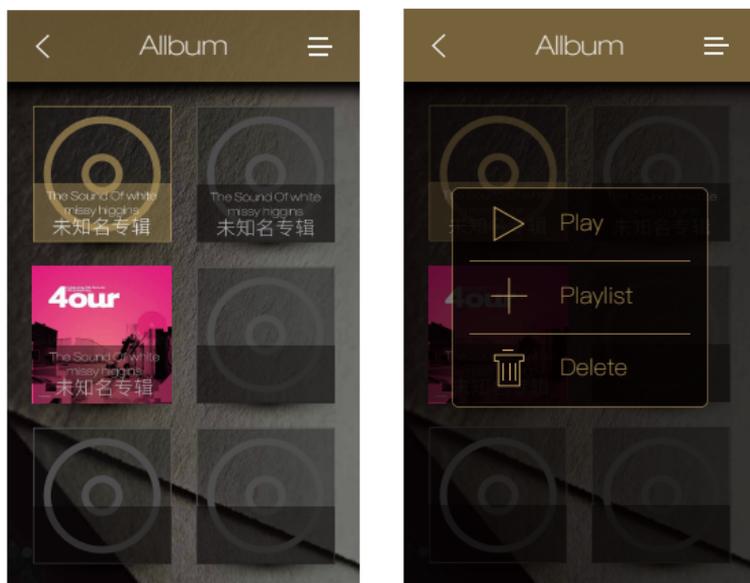Next/Fast forward

My Music:

Now Playing:

All Music:

Sorting Option:

Press the icon on the top right to unfold the options. One can choose to sort the songs by track title, album name, artist name, and added time.

Album:

Press the icon on the top right to switch to album artwork view.

All Music/Album/Artist/Genre:

Long press a row to pop up the option screen of play music, add to playlist, music info, and delete.
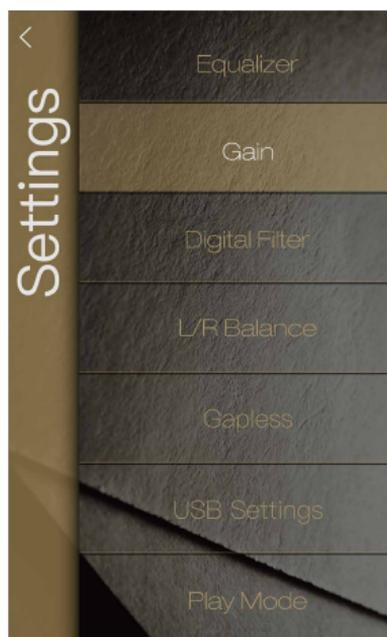
Now Playing:

Click the "Plus" button to create a new playlist.

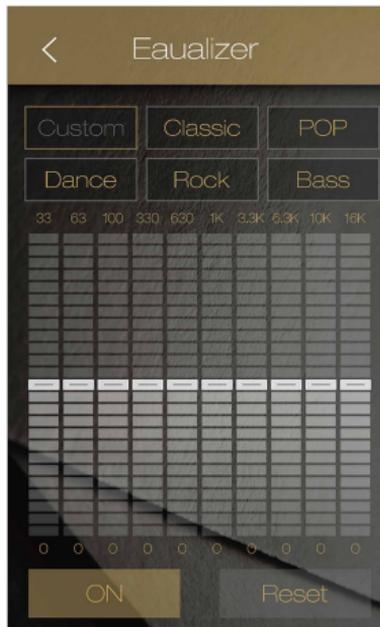The DX120 supports M3U playlist. Please see page 28 regarding to how to import and export the playlist.
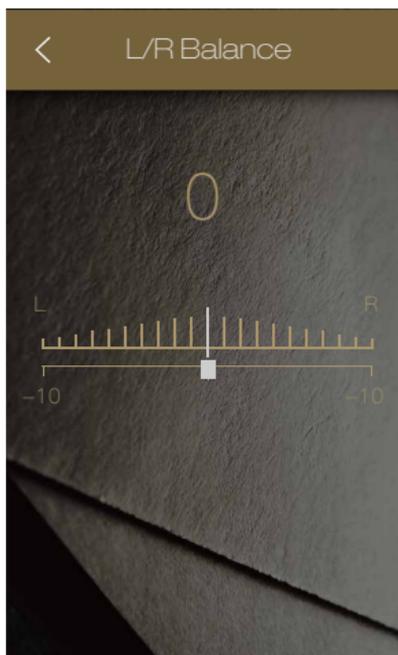
Settings:

Equalizer：

One can set the equalizer as desired. Press the "reset" to reset a pre–set EQ.
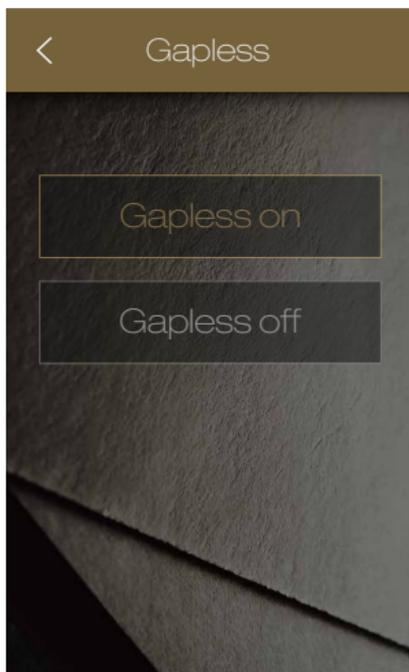
L/R Balance:

Slide to R to decrease the volume in the right Channel.

Slide to L to decrease the volume in the Left Channel.

Gapless:

One can enable the gapless to eliminate the gap between two tracks.

Song Info:

This shows the detailed information of the currently playing song.

USB Settings:

There are three options:

Card Reader, DAC, and Charge Only.

1. Card Reader:
Allows the DX120 to be used as a card reader.

2. DAC. :
Allows the DX120 to be used as a USB–DAC. Please see page 11 "Connecting to a computer for USB DAC function", regarding to how to use the DX120 as a USB DAC.

3. Charge Only:
With this option, the computer would charge the DX120 when the DX120 is connected.

Digital Filters:

There are five options:

Sharp roll off

Slow roll off

Short delay sharp roll off

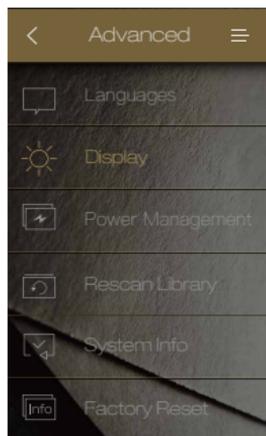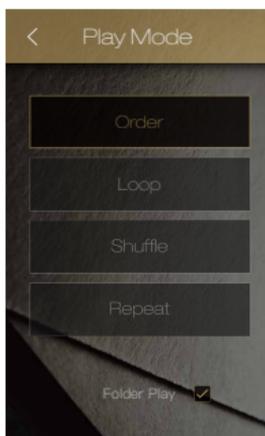Short delay slow roll off

Super slow roll off

Play Mode:

There are four options:
Order, Loop, Shuffle, and Single Repeat.

Folder Play:

To enable the folder play function, tick the box on the below picture and then select either the order play mode or loop play mode. After a full media scan, or rescan the library, you can go to Directory and select a song under a folder. After this folder is played, the DX120 will play the next folder.

Advanced:

To access to more system settings:

1. Languages：

The DX120 supports multiple languages.

2. Display:

Adjust the screen brightness, and change the wallpaper.

3. Power Management：

Auto Power Off: Set the amount of time to power off the DX120 when it stays idle.

Sleep Timer: Set the amount of time to power off the DX120, no matter if it is working or idle. The sleep timer would turn off after reboot.

Backlight Off: Set the amount of time to turn off the screen when there is nottouch operation or button operation.

4. Rescan Library:

This function is used to fully rescan the Micro SD cards. The Library would be re–built after that. This function helps when a scan problem arises.

5. System Info:

It shows the firmware version, external memory's available capacity.

6. Factory Reset：

Delete all user data and restore the device to its original factory settings.

Firmware Update:

1. Download the newest firmware from iBasso.com.

2. Extract the zip file, and copy the update.img into a micro SD card root folder.

3. Insert the micro SD card to SD card slot2. Please leave slot one empty.

4. Select Settings→Advanced→System update (the system update option appears only after the update.img is detected).

5. Click "OK" to start the firmware update.

6. The DX120 will reboot after firmware update completed.

7. Select Settings→Advanced→Factory Reset to reset the DX120. This is to avoid conflicts with residual settings from the previous firmware.

8. Delete the update.img.

FAQ:

1. My computer does not recognize the DX120.

The DX120 has to be turned on before connected to computer.

2. Where can I find the firmware version on my DX120?

Settings→Advanced→System Info.

3. All album artworks are not showing on my DX120.

Use the Rescan Library function under Settings/Advanced.

4. Can my cell phone/mobile phone's charger charge the DX120?

Yes.The DX120 supports Type–C QC2.0, and MTK–PE+ rapid charge. With rapid charge, the DX120 can be fully charged in two hours. The DX120 also can be charged by computer throught the USB port or any USB charger with 5V output voltage and 1A or above output current.

5. How can I play all songs from a specific artist or genre?

Under the Artist category or Genre category, long press a row to display the options, press "play" to play all songs from this artist or genre.

6. How can I change the wallpaper?

Please save your picture as a 480*800 pixel image file. Then copy and paste the image file into the micro SD card's wallpaper folder.Insert the micro SD card into the DX120, go to Settings–>Advanced–>Display, and you will find your wallpapers there. Up to 9 pictures can be recognized.

7. How can I see the entire title of the currently playing song on the music playback screen?

You can scroll the title right to left to reveal the missing parts. The album name and the artist name are also scrollable when they are too long to be shown on the screen.

8. Does the DX120 support exFAT format SDXC?

Yes, the DX120 supports both of exFAT and FAT32 formats SDXC.

9. My DX120 cannot be powered on. What should I check?

Usually, it is low battery issue. Charge it for a while, then you should able to power on the DX120. Email us if it is not a low battery issue.

10. How to use the import/export playlist function?

After the playlist is built in the DX120, go to My Music → Playlist, long press the playlist icon to pop up the option menu. Press "Export", then one can find a M3U playlist under the M3U folder under the Micro SD card.

To import a M3U playlist, load the M3U playlist into the internal flash or a Micro SD card. Then find the M3U playlist under Directory. Press the M3U playlist. There will be a pop up windows. Press "YES" to start importing the playlist.

Certifications::