iBasso Audio In Pursuit of Perfection

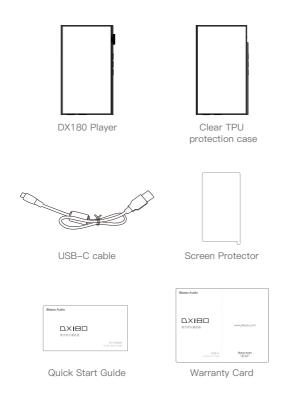


High Performance Digital Audio Player

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# Package Components



## Clear TPU protection case:

Use the TPU protection case to protect the DX180 chassis from scratches.

#### USB-C Cable:

Connect the USB-C cable to a computer for charging, data transfer, and USB-DAC function. The USB-C cable can also be used with a USB charger to charge the battery.

#### Screen Protector:

Use the screen protector to protect the DX180 screen from scratches.

#### Warranty Card:

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

#### Quick Start Guide:

This reviews the basic functions of the DX180.

## Tips for burn-in

The use of the cable is very straightforward. The burn-in cable is used to form the capacitors and to condition the rest of the circuitry. The method for burn-in is to use normal resolution music, as higher resolution causes more heat due to the higher demand on the system. Also, use a normal listening volume, as the higher volume will have a higher power consumption therefore more heat will be generated. While burning in the DX180, both the balanced and the single ended components are being affected and burned in.

The burn-in time can be from 100 to 200 hours and the burn-in doesn't have to be continual. You can power off the player and continue the burn-in process after a few days. It is also not mandatory to use the burn-in cable, we supply it as a convenience for when you are not listening to the DX180 and you would like to get your dap conditioned as soon as possible. You can also just listen to the player and enjoy the music as your player goes through this process while playing through IEMs or headphones.

# Main Features

- Quad CS43131 DAC Chipset matrix.
- In-house developed FPGA-Master 2.0 as the audio system controller, synchronizing and generating the signal to all audio clocks.
- 2 NDK ultra-low phase noise Femtosecond oscillators.
- Hardware FIR output mode.
- Bit for Bit playback with support up to 32bit/768kHz.
- Support of Native DSD up to 256x.
- 11nm Octa-Core Qualcomm Snapdragon 665 SoC.
- 3GB LPDDR4X + 32G ROM/4GB LPDDR4X + 128G ROM
- Sharp 5.0" IPS full screen (1080\*1920), with On-Cell capacitive touch panel.
- Support of QC3.0 and PD3.0 quick charge.
- USB digital output up to PCM 32bit/384kHz, Native DSD256, and DoP DSD128.
- Mini coaxial output that supports up to 24bit/384kHz and DoP DSD128.
- USB DAC function that supports up to 32bit/384kHz and native DSD256 input.
- Support of 2.4GHz and 5GHz WiFi and Bluetooth 5.0.

- Support of SDHC and SDXC Micro SD cards up to 2TB.
- Support of USB 3.1 Super speed transfer.
- 2 gain settings for hardware control.
- 100 step volume control.
- Removable back cover design.
- Audio Formats Supported: APE, FLAC, WAV, WMA, AAC, ALAC, AIFF, OGG, MP3, DFF, DSF, and DXD.
- Support for M3U playlists.
- 3.8V 3200mAh Li-Polymer battery.

# Specifications

3.5mm PO:

Maximum output level: 2Vrms (Low Gain)

3Vrms (High Gain)

Output Power: 525mW + 525mW@16ohm,THD+N< 0.1%

281mW + 281mW@32ohm,THD+N< 0.1%

Frequency Response: 10Hz~75kHz, -1 dB

S/N: 127dB

Dynamic Range: 127dB

THD+N: -116dB (0.000156%)@1kHz (600ohm Load)

Crosstalk: -118dB
Output impedance: 0.6ohm

4.4mm PO:

Maximum output level: 4Vrms (Low Gain)

6Vrms (High Gain)

Output Power: 690mW + 690mW@32ohm, THD+N< 0.1%

Frequency Response: 10Hz~75kHz, -1dB

S/N: 133dB Dynamic Range: 133dB

THD+N: -121dB (0.000087%)@1kHz (600ohm Load)

Crosstalk: -144dB Output impedance: 1.1ohm

#### 3.5mm LO:

Maximum output level: 2Vrms

Frequency Response: 10Hz~ 75kHz, -1dB

S/N: 125dB

Dynamic Range: 125dB

THD+N: -112dB (0.00025%)@1kHz

Crosstalk: -115dB

#### 4.4mm Line LO:

Maximum output level: 4Vrms

Frequency Response: 10Hz~75kHz, -1 dB

S/N: 133dB Dynamic Range: 133dB

THD+N: -121dB (0.00089%)@1kHz

Crosstalk: -130dB

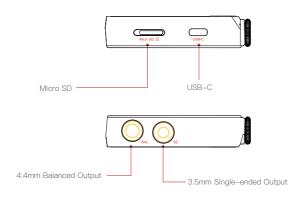
Average Play Time: PO low gain for 15.5 hours,

PO high gain 13 hours, Line Out 30 hours

(The play time varies with different resolutions, volume used and headphone/IEMloads.)

Charging Time: About 1.5 hours.

# Names of Parts & Functions



#### Coaxial Output Port:

Use the coaxial cable to play music stored in the DX180 on an external device with a coaxial input port. Mini coaxial output has the highest output priority which would close the phone out or line out when coaxial cable plugged in. The output of this port is up to 24bit/384kHz or DoP DSD128.



As shown in the picture above, users can choose TS, TRS,
TRS standard 3.5 sockets.
The first section "T" is the coaxial signal, and the last section "S" is ground.

#### USB-C Port

Connect the DX180 to a computer or a USB charger to charge the DX180.

Connect the DX180 to a computer to allow the DX180 to work as a card reader or an external storage.

Connect the DX180 to an OTG storage device to play music files stored in this OTG storage device.

Connect the DX180 to a Windows PC or a Mac computer to work as a USB DAC

#### 4.4mm Balanced output

When PO is selected on the output interface, plug in a 4.4mm balanced earphone and output sound through the 4.4mm BAL port.

When LO is selected on the output interface, plug in a 4.4mm balanced interconnect and output LO to an external amplifier.

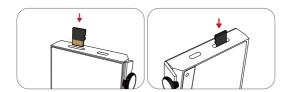
#### 3.5mm Single-ended Output

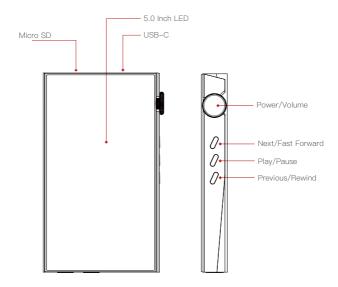
When PO is selected on the output interface, plug in a 3.5mm Single-ended earphone and output sound through the 3.5mm SE port.

When LO is selected on the output interface, plug in a 3.5mm interconnect and output LO to an external amplifier.

#### Micro SD Card Slot

Insert a Micro SD card into the DX180 to access its stored files.





#### Power:

Short Press – Power the LCD screen on and off. Long Press – To display the pop up window with three options that are Power off and Reboot.

#### Volume:

Rotate the wheel clockwise to increase the volume. Rotate the wheel counter clockwise to decrease the volume.

# 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:

- 1. Press and hold the power button to power on.
- 2. After the DX180 is powered on, a long press of the Power button to display the pop up window, press Power Off button to power off the DX180.

#### Power on/off the screen:

Single press the power button to power on/off the screen after the DX180 has been powered on.

#### Reset:

When the DX180 stops unexpectedly during operation and the keys are no longer responsive, press and hold the power button for 10 seconds to reset the DX180.

# Charging:

DX180 supports two quick charge protocols, QC3.0 and PD3.0. Charging can be done with a standard 5V USB charger or with quick charger that is compliant the stated 2 protocols. A full charge takes about 1.5 hours with the afore mentioned quick charge types.

#### Connecting to a computer to work as a USB DAC:

The DX180 can work as a USB DAC for Windows PC, Mac computer, and Linux computer. It is driver free on Mac computer and Linux computer. With Mac computers, the DX180 Supports PCM up to 32bit/384kHz and DoP DSD up to 128x. For Windows PC, one can download the driver from iBasso.com and install it following the steps, before using the USB DAC function. The DX180 supports up to 32bit/384kHz PCM, and native DSD up to 256x when be used as a USB-DAC on Windows OS.

# Android Basic Features Introduction

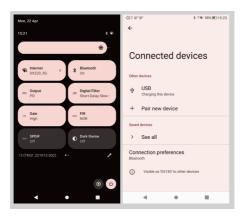


#### WiFi Connection:



- ① On the Android desktop, from the top, swipe down the screen to display the notification bar.
- ② Press the Wireless local area network(WLAN) to turn on the WiFi function. The first time you enter the WLAN, you need to choose the hot spot you will be using and enter the password. From this point forward your password for this hotspot will be remembered and you simply press the WLAN icon to connect to the WiFi internet.

#### Bluetooth Connection:



- ① On the Android desktop, swipe down from the top of the screen to display the notification bar.
- ② Press the Bluetooth icon to turn on the Bluetooth function. The DX180 will automatically search for the nearby Bluetooth device. At the same time, the DX180 will be visible to the nearby devices. Choose the device that you would like to pair with. After the device has been paired, you can use the DX180 in the Bluetooth mode.

#### APP Installation:

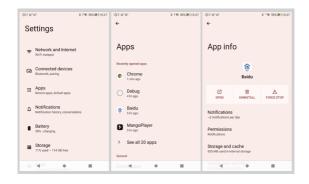


#### Method 1:

- ① APKPure and CoolAPK are pre-installed on the DX180. They are similar to Play Store.
- 2 Launch one of them.
- ③ Search for the APP that you would like to install.
- 4 Download the APP and install it.

#### Method 2:

- (1) Press the internet browser on the desktop.
- 2) Enter the website address of the APP.
- Find the download icon on the website and start the download.
- A Return to the desktop and open download manager.
- ⑤ Press the on downloaded app and install it.



- ① Press the Settings icon on the desktop and scroll down and press APPs.
- 2) Press the APP that you would like to uninstall.
- 3 Press uninstall to delete the APP.

#### **USB Connections:**



Connect the DX180 to the computer using the furnished USB-C cable. The DX180 will show on the computer as an external storage. Users can transfer files by copying and pasting.

<sup>\*</sup> If you are using a Mac computer, please make sure the MTP software Android File Transfer is installed.

#### Charge The Connected Device:

- (1) Connect the DX180 to a device.
- ② The USB option appears at the bottom of the notification bar drop down window
- 3 After pressing it, you can select the USB connection purpose.

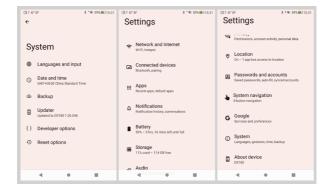
After turning on the function of charging connected devices, you can charge the devices connected to the DX180.

#### USB DAC:

Please refer to page13.

# System Settings:

Press Settings icon on the DX180 desktop to go into system settings.



## **Audio Settings:**

Press Settings Icon, then press Audio Settings.



- 1) Gain:
  - One of the two gains can be selected.
- Digital Filter:
   A total of five filters are available for user setting.
- ③ FIR Output: One of the three Outputs can be selected.
- Volume Limitation:
   This sets the volume to a maximum preset point.
- (5) Volume Control knob: The volume knob can be set according to needs.

#### NOS Filter

When using NOS filter, the pop sound when switching sample rates will be at a higher volume than the other four filters. This is part of the DAC chipset design and normal.

## Firmware Update:



#### Online Update:

- 1) Make sure the DX180 is connected to WiFi.
- 2 After online update is selected, press Check Update.
- ③ Press Download, the DX180 will start downloading the available update package.
- After the download complete, press Update Now to start the firmware update.



#### Local Update:

- ① Download the firmware file from our website. If it is a rar file, extract it.
- ② Press the icon located on the top right corner, then press Local Update.
- ③ Browse the folder where the firmware file is saved, and select the firmware file.
- 4 Press Update Now to start the firmware update.

#### Firmware Version:



- Press Settings icon, System, About DX180.
   Scroll down the page, the Build number is the firmware version

## Power Off And Reboot:



- ① Long press the power button for 2 seconds.
- ② There is a pop up window with three options.

#### **FCC Caution:**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna.
- -Increase the separation between the equipment and receiver.
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -Consult the dealer or an experienced radio/TV technician for help.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.