XD05 Basic2
Quick Start Guide
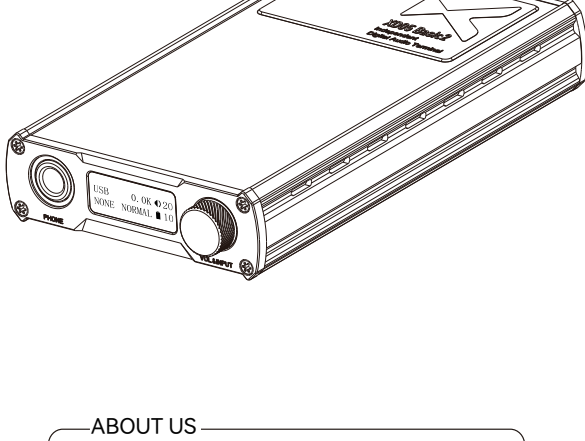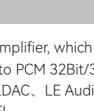
Introduction

XD05 Basic2 is a portable high-fidelity DAC & headphone amplifier, which integrates USB, Bluetooth decoding and headphone amplifier. USB supports up to PCM 32Bit/384kHz, MQA 8X and DSD256; Bluetooth supports aptX、aptX_HD、aptX_AD、LDAC、LE Audio and high-definition formats, so that make wireless audio become HIFI.

The DAC chip uses CS4131, which have extremely low noise and higher resolution, which greatly improves the quality of sound. The amp circuit adopts the OP+BUF architecture, the output power reaches 750mW, and the power is strong, which can easily drive many kinds of headphones.

It has Gain, Bass and DAC filter setting functions, add a lot of adjustment fun. This product is suitable for connecting PCs, mobile phones, tablets, HIFI players and other devices that can play audio to obtain high-quality audio output and feel the atmosphere of a live concert.

Features

1. With an OLED display, real time display digital information flow.
2. The USB receiving chip adopts XMOS's XU316, supports up to PCM32 Bit/384 kHz, DSD256 and MQA 8x.
3. Use USB OTG cable, Supports IOS and Android system mobile phones or players.
4. Bluetooth 5.4, supports aptX、aptX_HD、aptX_AD、LDAC、LE Audio formats.
5. DAC chip uses CS4131, with better decoding performance, extremely low noise and higher resolution.
6. It adopts 3K Clock structure design, ensures the DAC to obtain a first class sound performance. 3 correspondence level clocks are high precision, individually control multiple of 44.1KHz, multiple of 48KHz and USB signal transmission, dedicated for USB asynchronous transmission, and reduced Jitter to undetectable level.
7. The amp circuit adopts the OP+BUF architecture, the output power reaches 750mW, can easily promote many kinds of headphones.
8. The amp chip can be replaceable by yourself, different chips bring different sound quality.
9. It has a bass boost switch to meet different listening needs.
10. It has a gain switch and can adapt to headphones with different impedances.

Parameter

Power Source: built-in 3.7v/3000mAh lithium polymer battery
Screen: 0.91 inch OLED screen
Compliant OS: Windows, Linux, Mac OS X, IOS, Android system
Frequency Response: 20Hz~20KHz (±0.5dB)
Sampling Rate Support:
PCM: 16~32Bit/44.1k~384kHz
DSD: DORNATIVE、DSD64~DSD256
DXD: 24-32Bit/352.8k~384kHz
MQA: 8X
Bluetooth Formats: LE Audio: LC3、aptx_Lite、aptx_AD
          Classic Audio: SBC、AAC、aptX、aptX_HD、aptX_Adaptive
                  (aptX_Low Latency、aptX_High Quality、aptX_Lossless)、LDAC
Gain: 0/+6dB
Bass: 0/+6dB

Headphone output Parameters:
Output power: 750mW (32Ω load)
THD+N: 0.0006%@1kHz
SNR: 124dB
Crosstalk: ±74dB

AUX OUT Parameters:
Output level: 2.0Vrms
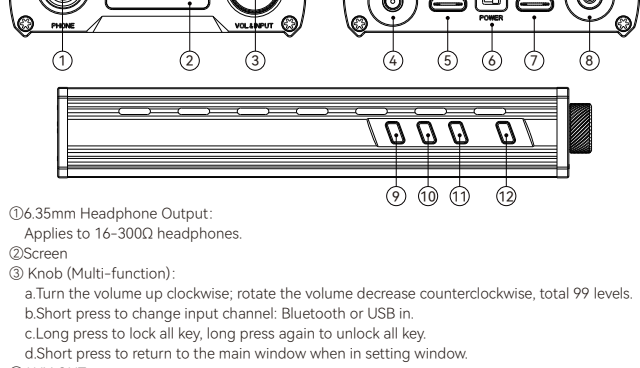THD+N: 0.0003%@1kHz
SNR: 125dB
Crosstalk: ±107dB

Battery life: about 11H (USB IN), about 14H (BT IN)
Charging time: 3H (Quick charge), 5H (slow charge)
Size: 13.6x7.5x2.3cm
Weight: 250g

Parts and Controls

①6.35mm Headphone Output:
   Applies to 16-300Ω headphones
②Screen
③ Knob (Multi-function):
   a.Turn the volume up clockwise; rotate the volume decrease counterclockwise, total 99 levels.
   b.Short press to change input channel: Bluetooth or USB in.
   c.Long press to lock all key, long press again to unlock all key.
   d.Short press to return to the main volume when in setting window.
④AUX OUT
⑤USB Audio Input:
   Compatible IOS/ Android /Win/Linux system computer
⑥Power Selection:
   BAT: work on batteries. EXT: work with DC 5-12V in.
⑦Charging or DC in(Type-C):
   The input power specification is 5-12V/2A
⑧Charging or DC in (DC Φ5.5*2.5):
   The input power specification is 5-12V/2A.
⑨Pairing&play (bluetooth) button:
   a.Short press to Play/pause: double press to play next song, three press to play previous song.
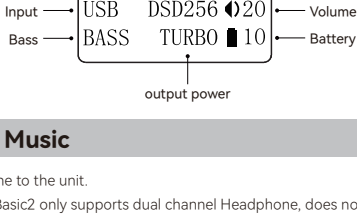   b.long press for 3 seconds to force into pairing state.
⑩Bass&Filter:
   a.short press to turn on bass(NONE: off、BASS: on).
   b.Press and hold to enter the filters setting window. Then press briefly to select a filter (PCM1: Fast roll-off, PCM2: Slow roll-off).
⑪Mode key: NORMAL (Low) / TURBO (High) output power.
⑫Power button: Press and hold to turn on/off.

Display Information

Listening to Music

1. Connect headphone to the unit.
   *Note: The XD05 Basic2 only supports dual channel Headphone, does not support the mono Headphone or Headphone with remote control function or microphone function.
2. Connect audio device with the unit. For details, see "Connecting to the Audio Device".
3. Turn on the power, for the first time the unit connect with the computer would be taking some time.
4. Play music with the connected audio device.
5. Play music with the connected audio device.
6. You can set the MODE or BASS of this unit according your headphone.
7. Bind your audio device with the unit with silicon tape to facilitate carrying.


Connecting to the Audio Device

1. Pressing volume button to the screen display USB IN, use the USB cable to connect to an Apple/windows/Linux system computer, connect headphone, playing music on computer and enjoy it. (Need to set this unit as an audio output device on the computer!)
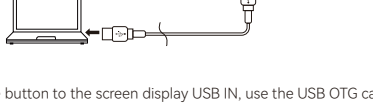
2. Pressing volume button to the screen display USB IN, use the USB OTG cable to connect to USB audio out of an IOS/ Android phone, pad or HiFi player, connect headphone, then playing music, and enjoy it. (pay attention to pressing INPUT to the screen display USB IN).


3. Pressing volume button to the screen display Bluetooth, connect Bluetooth to phone or computer, playing music, connect headphone and enjoy it.
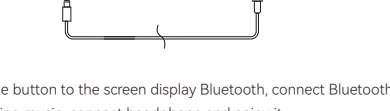
Install USB Driver

1. When this unit is connected to the computer, need to be install a USB driver if it's system is Windows.
2. you can downloaded the Driver from the official website,
   link: https://xduoo.net/firmware-download/ choose XDUOO USB Drive, guiding is inside the package.
3. Using your computer to play a high resolution audio files on the computer, we recommend using Jriver or Foobar2000 player.

Charging the unit
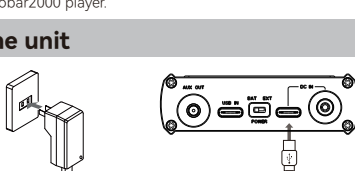
1. Set the Power Selector switch to the BAT position before charging.
2. You can use mobile phone fast charger, or an adapter with output 5~12V/2A (or more current).
3. The red light flashes when slow charging, the yellow and green light flashes when fast charging, and will always on when fully charged.
4. About 3-6 Hours for a full charging.
5. If use PC USB power to charge, it will take 11 hours.
6. It can work while charging, but it will take longer to fully charge. Therefore, it is recommended to charge while the device is turned off.
7. If this unit is not used for a long time, charge the battery once every six months to avoid excessive battery discharge.

Package List

1. XD05 Basic2   1 pc
2. Type-C USB Cable   1 pc
3. Type-C to C OTG cable   1 pc
4. 6.35 to 3.5 Converter   1 pc
5. Rubber Feet   10 pcs
6. Silica band   2 pc
7. Warranty Card   1 pc

Warranty Information

Our products can enjoy 12-month free warranty services from the date of the sale, if the warranty period is expired, our company will charge parts cost depend on the product fault conditions. Accessories are not covered under warranty.

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