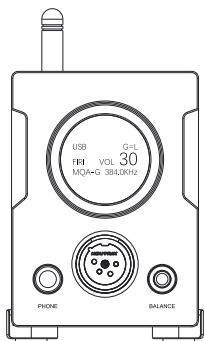




High Performance Balanced DAC & Headphone Amplifier

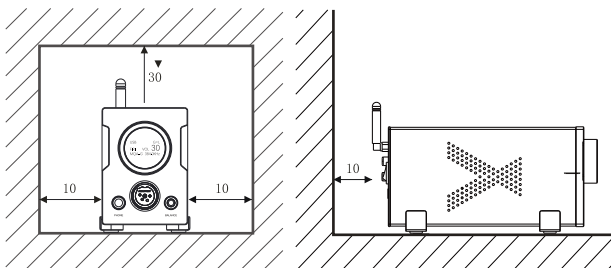


XA-10

Please read this Manual carefully before operating, and keep it for future reference

Safety Instructions

1. The amp should not be subject to water droplets or water splashes, the machine should not be placed with such as vases a class or filled with liquid items.
2. When this unit is working, because it is a Class A amplifier, it is normal for a little heat.
3. Do not disassemble the machine for repairing or modifying, this product does not have the parts or tools for the user to repair on their own, the maintenance of the machine requires qualified personnel to operate. Opening the shell or modifying the internal circuit will make the maintenance difficult, but also the performance or quality of the machine could be affected.
4. Please place the unit in a well-ventilated, cool and dry, clean place, away from direct sunlight, heat, vibration, dusty, damp or cold place. In order to be well ventilated, the machine should leave at least the following distance between the wall.



TOP:30CM SIDE:10CM

BACK:10CM

Operation Notes

1. Turn on the power

Before turning it on, please check again whether connections are correct and specifications of adapter are correct.

2. Using mobile phone

Using mobile phone near the amp may cause noise when playback. If this happens, move mobile phone away from the amp.

3. Move the machine

Please disconnect the power adapter and cables before moving the machine.

Product Description

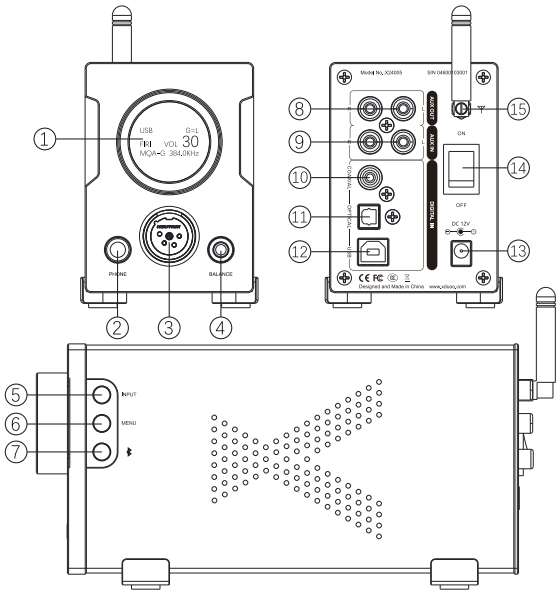
XA-10 is a high-fidelity small desktop balanced headphone amplifier that integrates USB, optical, coaxial, Bluetooth audio decoding and analog audio in, and is equipped with an OLED 0.96 inch display that can intuitively display various working status; USB audio decoder used XMOS' s XU216, which can support up to digital audio signal PCM 32bit/768KHz, MQA and DSD512. Optical and coaxial in support maximum PCM 24bit/192KHz, DSD64 (DOP). Bluetooth uses CSR8675, which support high-definition formats such as aptX, aptX_HD, and LDAC. The analog amplification part adopts a fully balanced small class A design structure that can bring delicate and soft vocals without losing the explosive power and sense of speed of the music, and is equipped with +/-15V power supply as a power amplifier, with strong load capacity, it can easily drive many kind headphones, and greatly enhance the dynamics of the sound field, which can restore the sense of reality of the concert.

Product Features

- ◆ The volume knob is integrated with the display, and the design is novel.
- ◆ The USB signal receiver adopts XMOS' s XU216 chip, supports MQA audio format.
- ◆ Supports Full MQA Decoder, and the MQA file can be fully unfold without the aid of a third-party player.
- ◆ Supports up to PCM32bit/768KHz and DSD512.
- ◆ Support ASIO, KS, WASAPI, DSD Native mode, greatly reducing delay and distortion.
- ◆ Optical /coaxial receiver adopts CS8422 chip, maximum support PCM 24bit/192KHz, DSD64.
- ◆ Bluetooth chip uses Qualcomm CSR8675, supports SBC, AAC, aptX, aptX_LL, aptX_HD, LDAC format transmission.
- ◆ Using dual active low-phase noise crystal oscillators, data shaping processing through FPGA achieves a unified clock and reduces jitter.
- ◆ DAC uses dual AKM' s AK4493EQ chips, with better decoding performance.
- ◆ Using transistors for class A circuit, with strong load capacity, it can easily drive many kind headphones.
- ◆ Adopt Japanese ELNA SILMIC(II) capacitors for audio coupling capacitors, the sound is transparent and sweet.
- ◆ Use Panasonic's KA professional audio capacitor for power filter capacitor, the sound is soft, warm and soft, and the high frequency is gorgeous.
- ◆ Fully balanced circuit design, using TI professional volume adjustment IC to ensure the same output of the left and right channels.
- ◆ Built-in output relay protection to avoid the “popo” sound of switching on and off, and to protect the earphone and machine under abnormal conditions.
- ◆ The shell is made of high-strength aluminum alloy material CNC integrated processing, which has excellent shielding characteristics.

Product Parameters

- 1. Screen& volume: Showing working information ; rotary knob to control volume; select menu.
- 2. 6.35 headphone out.
- 3. 4pin balanced headphone out.
- 4. 4.4 Balanced headphone out.
- 5. INPUT button: short press to select input channel (USB,optical,coaxial,Bluetooth,AUX in).



- 6. MENU button: setting GAIN and DAC’ s filter.

The filter types are as follows:

PCM filters:

FIR1:Sharp Roll-of;FIR2:Slow Roll-of;FIR3:Short Delay Sharp Roll-off;FIR4:Short Delay Slow Roll-off filter;FIR5:Super Slow Roll-off filter;FIR6:Low Dispersion Short Delay.

DSD filters:

FIR7:LOW-FILTER; FIR8:HIGH-FILTER.

- 7. Pairing (bluetooth) button: long press for 3 seconds to force into pairing state.

- 8. AUX Out: output from DAC.

- 9. AUX IN: analog signal input.

- 10. Coaxial IN.

- 11. Optical IN.

- 12. USB IN.

- 13. Power in, DC12V/3A.

- 14. Power on/off.

- 15. Bluetooth antenna.

Display Information

Other Information

- I .Bluetooth operation

1. connection: Press the INPUT key to select to Bluetooth input. When the Bluetooth is not connected, the Bluetooth symbol “X” flashes and displays unpair. You can Bluetooth of XA-10 (name XA-10) and connects. After the connection is successful, the Bluetooth symbol changes to “B” and displays connected.

2. Transmission distance: about 10 meters, if it is aptX, aptX HD, aptX LL, LDAC high-definition formats, the transmission distance may be shortened to about 5-6 meters
3. Every time Bluetooth is turned on, it will automatically search and connect to last connected device. If you want to connect to another device, you can long press the BT button for 3 seconds to cut off the currently connected device, then other devices can search and connected.
4. When your Bluetooth transmitter out of rang and disconnected, it will auto be connected when you come back within 10 minutes. (note: the iPhone can't be auto connected, because it has no this function)
5. After Bluetooth connection, the highest format of your mobile phone or Bluetooth device will be automatically selected (LDAC> aptX HD> aptX LL> aptX> AAC>SBC). If you want to change the Bluetooth format, you can select in the developer options of the your phone
7. If the Bluetooth cannot be connected, intermittent, short distance, low volume and other abnormal problems, you can try to clear the mobile phone Bluetooth connection record and reconnect.

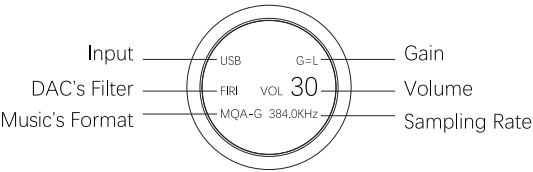
II . MQA (Master Quality Authenticated) format description

1. MQA is a new audio coding format. It uses multiple folding methods to compress high-resolution (up to 384khz) music file into small size as CD files (48KHZ). When decoding then unfold to the original high resolution for decoding. The advantage of this music format is that it saves storage space while maintaining high resolution, which is conducive to storage and online transmission.
2. The MQA playback in this unit does not require special playback software. At the computer can used FOOBAR2000 or Audirvanapulus, DITAL etc.
3. The formats and sampling rates of MQA are displayed on the bottom of the display. The descriptions of the various formats are as follows:

MQA_B: This version is confirmed by the recording engineer, producer or artist, which is the final version from the recording studio.

MQA_G: This version is also a genuine MQA, but the source may be uncertain, or it is not the final version, and it is uncertain whether it is an original recording version.

MQA_R: Indicates that the device is receiving the MQA stream, but the hardware cannot verify the source of the audio source, because the verification has been verified on the front-end decoder/player, the hardware cannot be verified.



Product Parameters

Power Supply: 12V3A adapter

Support sampling rate:

USB IN

PCM: 16-32Bit/44.1-768KHz

DSD: DOP/NATIVE, DSD64-512

DXD: 24-32 Bit/352.8-384KHz

MQA: 24 Bit/44.1-384KHz(Full MQA Decode)

Optical/Coaxial

PCM: 16-24Bit/44.1-192KHz

DSD: DSD64(DOP)

Bluetooth Format: SBC, AAC, aptX, aptX HD, aptX LL, LDAC

Output Power:

BLANCE: 4000mW(32ohms@1KHz)

PHONE: 3000mW(32 ohms@1KHz)

Gain: +18dB

THD: 0.0008%

S/N: BLANCE: 120dB

PHONE: 115dB

Crosstalk: BLANCE: 108dB

PHONE: 73dB

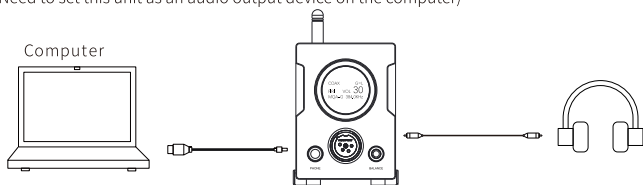
Suitable headphone impedance: 16-600Ω

Size: 22*7*10CM

Weight : 0.9Kg

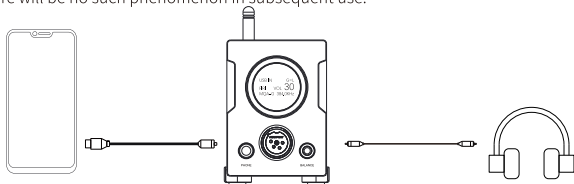
Connecting to the Audio Device

1.Pressing INPUT to the screen display USB IN, use the USB cable to connect to an Apple/win-dows/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)

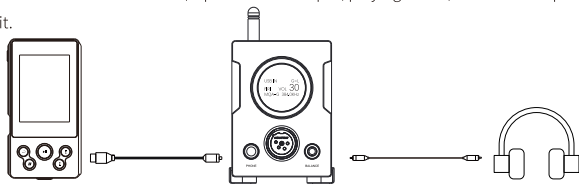


2. Pressing INPUT to the screen display USB IN, use the USB OTG cable to connect to USB audio out of an IOS/ Android phone, pad or HiFi player, connect headphone, then playing music, and enjoy it. (pay attention to pressing INPUT to the screen display USB IN).

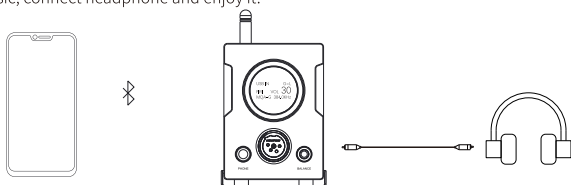
*Note: When you connect the phone for the first time, the phone will automatically turn down the volume, you need to manually set the volume of the phone to maximum. Only when there is sound, there will be no such phenomenon in subsequent use.



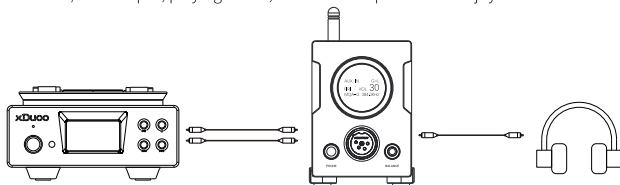
3.Pressing INPUT to the screen display COAXIAL/OPTICAL, use Coaxial/Optical cable to connect with player or CD which with Coaxial /Optical audio output, playing music, connect headphone and enjoy it.



3.Pressing INPUT to the screen display Bluetooth, connect bluetooth to phone or computer, playing music, connect headphone and enjoy it.



4. Pressing INPUT to the screen display AUX, use audio cable to connect with player or CD which with AUX/Line output, playing music, connect headphone and enjoy it.



Install USB Driver

1, When this unit is connected to the computer, the driver is required to be installed. (No need if your system is MAC.)

2, you can download the Driver from the official website, link: (<https://www.xduoo.net/firmware-download/>), choose XDUOO USB Drive, guiding is inside the package.

3, When using the device to play a high resolution audio files on the computer, we recommend using Jriver or Foobar2000 or TIDAL player.

Set Up In PC

When connecting to a computer to play music, if there is no sound, please check whether the PC audio output device settings are correct, the steps are as follows:

Click the PC start menu and select: Control Panel→Hardware and Sound→Hardware and Sound→Sound. After the computer pops up an interface, click the <Play> option, and then select <xDuoo USB Audio> to set it as the default playback device.

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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