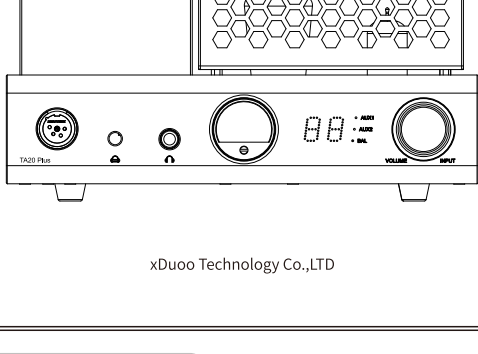




High Performance Balanced Tube Headphone Amplifier

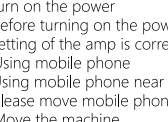
TA20 Plus User Manual



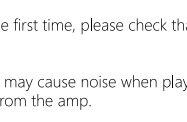
xDuoo Technology Co.,LTD

Safety Instructions

1. Please do not sprinkle water on the amp, please do not place vases or items filled with liquid on the machine.
2. The amp is working, the tube will be very hot, please do not touch with your hands.
3. Please do not open the amp for maintenance or modification by yourself. Opening the machine and arbitrarily modifying the internal circuit will make it difficult for maintenance personnel to repair the amp, and will affect the performance of the amp.
4. Please place this unit in a well-ventilated place, avoid direct sunlight, and the machine should leave at least the following clearances.



Top:30CM Side:10CM



Back:10CM

Operation Notes

1. Turn on the power
Before turning on the power for the first time, please check that the voltage setting of the amp is correct.
2. Using mobile phone
Using mobile phone near the amp may cause noise when playback, please move mobile phone away from the amp.
3. Move the machine
Please disconnect the power cables before moving the machine.

Product introduction

TA20 Plus is a desktop balanced tube headphone amplifier. It has rich input and output interfaces, with two RCA and one XLR balanced input, has 6.35mm unbalanced, 4.4mm balanced and 4-pin balanced headphone output, suitable for many kinds of headphone plugs. The pre-stage of the amp uses two 12AU7 tubes

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as signal amplification, and the post-stage uses high-quality transistors as class A buffer, so the "Tube + transistors" structure can make the voice of singer show delicate and soft, but also retain the explosive power and sense of speed of the musical instrument, and it's strong output power can easily drive many kinds of headphones. The power supply circuit of this unit adopts tube for rectifier, which makes the sound more "tube" sense. From input to output using fully balanced circuit, its crosstalk, resolution and SNR have been greatly improved, so that you enjoy an unparalleled listening sensation.

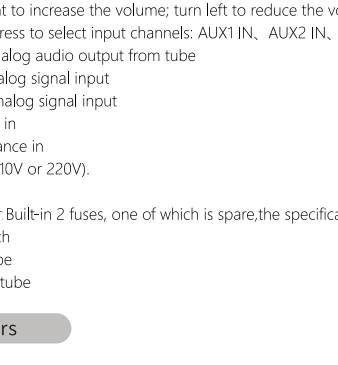
This product is suitable for people who have relatively high requirements for sound quality, suitable for home use or using in office, can be connected with a variety of high-end player sound sources to get high-quality sound quality, perfect reproduction of the sound field.

Product introduction

1. It is a fully balanced circuit from input to output, which greatly improves the Crosstalk, resolution, sound field and SNR.
2. Adopt 5Z4P tube for rectification, make the sound more "tube" sense.
3. Using double 12AU7 tube to amplify audio signal, make the sound sweet and refined.
4. Adopt transistors for class A buffer, so it can easily drive many kind headphones with strong output power.
5. Adopt the metal polyester film capacitor customized by xduoo as the coupling capacitance of tube output.
6. Adopt the special enthusiast Japanese ELNA SILMIC(II) capacitance as the coupling capacitance, have transparent and sweet sound.
7. Adopt the special enthusiast Japanese NICHICON FW(M)capacitance as the main filter capacitance, have smooth and warm sound, and splendid high frequency.
8. It is used digital volume adjustment chips to solve the problem of unbalanced left and right channels at low volume.
9. It built-in mute circuit when turn on amplifier to avoid POP noise and make sure the tube is worked at its best condition.
10. Adopts the high-quality E type transformer with low noise and low leakage flux specially for audio amplifiers.
11. Use aluminum shielded case to prevent external interference noise.

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Parts and Controls



1. 4-pin XLR balanced headphone out
2. 4.4mm balanced headphone out
3. 6.35mm headphone out
4. VU meter
5. Display: displays the volume value, up to 99 levels; but if there is a circuit failure, will be displayed "EE".
6. Input channel indicator
7. Knob combination:
 - 1) Turn right to increase the volume; turn left to reduce the volume.
 - 2) Short press to select input channels: AUX1 IN、AUX2 IN、BALANCE IN
8. AUX OUT analog audio output from tube
9. AUX1 IN: Analog signal input
10. AUX2 IN: Analog signal input
11. XLR Balance in
12. 4.4mm Balance in
13. AC switch(110V or 220V).
14. AC IN
15. Fuse holder Built-in 2 fuses, one of which is spare,the specification is 250V/2A
16. Power switch
17. Rectifier tube
18. Amplifying tube

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Parameters

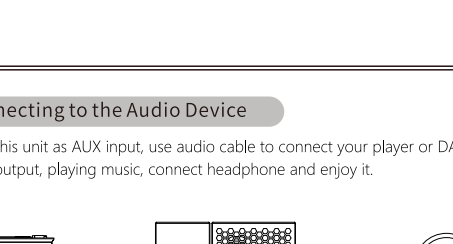
1. Power Source: AC 110V(100-120V)/220V(220-240V)
2. Gain: +18dB
3. 6.35mm Headphone Output Parameters:
 - ① Output Power: 2000mW(32Ω load)
 - ② Frequency Response: 10Hz~80kHz(±0.5dB)
 - ③ Crosstalk:74dB
 - ④ SNR:113 dB
 - ⑤ THD+N:0.05%
4. 4.4mm/XLR balanced Headphone Output Parameters:
 - ① Output Power: 2600mW(32Ω load)
 - ② Frequency Response: 10Hz~80kHz(±0.5dB)
 - ③ Crosstalk:95dB
 - ④ SNR:113 dB
 - ⑤ THD+N:0.05%
5. Suitable Headphone Impedance: 16Ω~600Ω
6. Size: 26x17.7x15.3cm
7. Weight: 4.3KG

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About Replace the Tubes

This amp can be replaced the same model or the same parameters of the tube, the replacement steps are as follows:

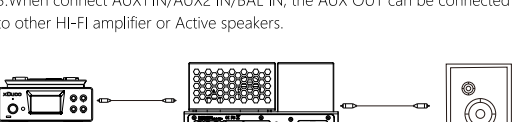
1. Turn off the power and wait for the amp and the tube to cool.
2. Take off the tube cage: lift it up with slight force;
3. Unplug the tubes: pull it up directly, and if it's too tight, shake it slightly from left to right and then pull it out.
4. Replace the new tube: aim the tube pin at the hole tube socket, insert the tube firmly into the bottom, and make sure that all pins are inserted into the hole
5. Power on confirmation: turn on the power and wait for the display screen to show normal volume, if so, connect the headphones to listen to the sound properly; if the "EE" number is displayed, turn off the power immediately and reconfirm whether the tube is installed correctly.
6. Install the tube cage: aim the feet of the cage at the hole, and then insert it to the end.



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Connecting to the Audio Device

1. Set this unit as AUX input, use audio cable to connect your player or DAC's AUX output, playing music, connect headphone and enjoy it.



2. Set this unit as BALANCE input, use balanced audio cable to connect your player or DAC's Balanced output, playing music, connect headphone and enjoy it.



3. When connect AUX1 IN/AUX2 IN/BAL IN, the AUX OUT can be connected to other HI-FI amplifier or Active speakers.



Note: Do not tie the audio cable together with the power cable to avoid noise.

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Accessories

AC Cable	1pc
User's Manual	1pc
Warranty Card	1pc
6.35 to 3.5 converter	1pc

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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