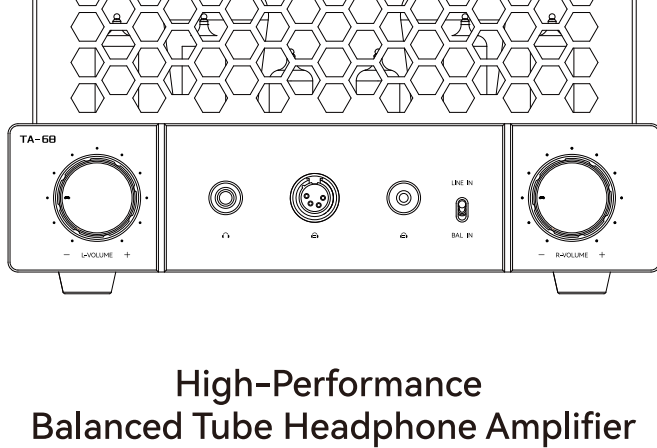




High-Performance Balanced Tube Headphone Amplifier

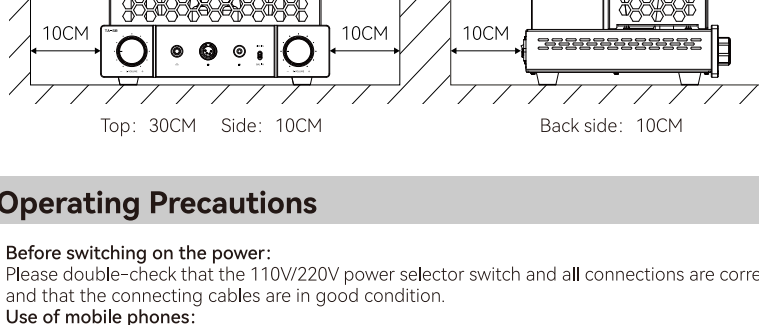
*Note: Sponge is installed inside the tube shield to protect vacuum tubes during shipping.

Remove the sponge before use, otherwise it may cause equipment damage or fire.

Please read the user manual carefully before use.

Safety Instructions

1. If the unit is not to be used for an extended period, disconnect the power plug from the AC outlet.
2. The surface of this unit becomes hot during prolonged operation. Do not block the ventilation openings, and place the unit in a well ventilated area. Poor ventilation may cause overheating inside the unit, which could result in malfunction or fire.
3. During operation, the vacuum tubes become extremely hot. Do not touch them with your hands directly.
4. Do not operate this unit without a load, as this may damage the unit.
5. This unit must not be exposed to dripping or splashing water. Do not place objects filled with liquid, such as vases, on the unit, to avoid electric shock or damage to the unit.
6. Do not open or modify the unit for repair by yourself. There are no user serviceable parts inside this product. Repairs must be performed by qualified personnel. Opening the unit or modifying the internal circuits without authorization will not only complicate future repairs but also impair the performance and quality of the unit.



Operating Precautions

1. **Before switching on the power:**
Please double-check that the 110V/220V power selector switch and all connections are correct, and that the connecting cables are in good condition.
2. **Use of mobile phones:**
Using a mobile phone near this unit may cause noise during playback. If this occurs, use the mobile phone away from the unit.
3. **Moving the unit:**
Disconnect the power cord from the power outlet, and disconnect all cables connected to other system equipment before moving the unit.

Product Introduction

The TA-68 is a high-performance fully balanced all-tube headphone amplifier. It adopts an all-tube circuit with tube rectification, amplification and current expansion, delivering authentic, rich tube sound.

It comes with versatile ports: RCA unbalanced, 4.4mm and XLR balanced inputs. For headphone output, it supports 6.35mm unbalanced, 4.4mm and 4-pin XLR balanced connectors, compatible with most headphones on the market.

Two 12AU7 tubes serve as preamps for separate left and right channel amplification. Four 6C19 power tubes (two per channel) form the fully balanced output stage, while a pair of 5U4G tubes handles full-wave rectification to supply clean high-voltage power for pure classic tube tone. Featuring classic capacitor coupling at the output, it fully retains original tube characteristics and performs excellently when driving high-impedance dynamic headphones.

Product Features

1. Fully balanced input & output design enhances channel separation, resolution and soundstage with ultra-quiet background.
2. Dual 5U4G tubes for Anode-voltage rectification deliver rich, authentic tube tone.
3. Adopt 12AU7 tubes act as preamplifiers, presenting sweet and delicate sound.
4. Two 6C19 power tubes per channel for current amplification produce mellow, pleasing audio.
5. Two low-noise, low-flux EI power transformers with independent power supply for left/right channels eliminate crosstalk.
6. Classic capacitor-coupled output preserves the original sonic character of vacuum tubes.
7. Premium VISHAY coupling capacitors bring transparent and smooth sound.
8. Nippon Chemi-Con audio-grade filter capacitors offer warm, smooth tone and lush natural treble.
9. Versatile inputs: RCA unbalanced, 4.4mm and XLR balanced.
10. Complete headphone outputs: 6.35mm unbalanced, 4.4mm and XLR balanced, compatible with mainstream headphones.
11. Independent volume control for left and right channels avoids channel imbalance.
12. Built-in output protection relay eliminates power-on/off pops and safeguards headphones under abnormal conditions.
13. High-strength aluminum alloy chassis provides excellent electromagnetic shielding.

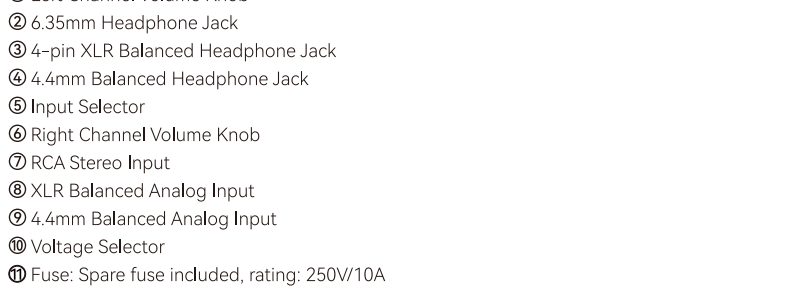
Parameters

Power Supply: AC 100–120V / 220–240V
 Balanced Headphone Output Power: 120 mW (75Ω)
 160 mW (150Ω)
 200 mW (250Ω)
 330 mW (300Ω)
 240 mW (600Ω)
 Unbalanced Headphone Output Power: 60 mW (75Ω)
 100 mW (150Ω)
 130 mW (250Ω)
 210 mW (300Ω)
 160mW (600Ω)

Frequency Response: 10Hz ~ 80kHz (±0.5dB)
 THD: ≤0.1% (1kHz, 300Ω)
 SNR (A-weighted): 116dB (Balanced), 110dB (Unbalanced)

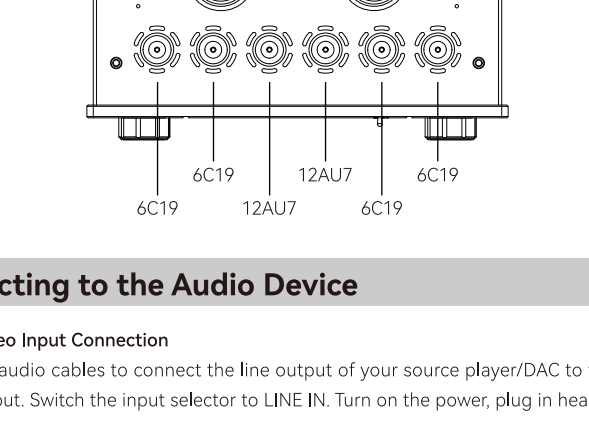
Applicable Headphone Impedance: 60 ~ 600Ω
 Dimensions: 33×30×18.5 cm
 Weight: 11.0 kg

Parts and Controls



- ① Left Channel Volume Knob
- ② 6.35mm Headphone Jack
- ③ 4-pin XLR Balanced Headphone Jack
- ④ 4.4mm Balanced Headphone Jack
- ⑤ Input Selector
- ⑥ Right Channel Volume Knob
- ⑦ RCA Stereo Input
- ⑧ XLR Balanced Analog Input
- ⑨ 4.4mm Balanced Analog Input
- ⑩ Voltage Selector
- ⑪ Fuse: Spare fuse included, rating: 250V/10A
- ⑫ Power Switch

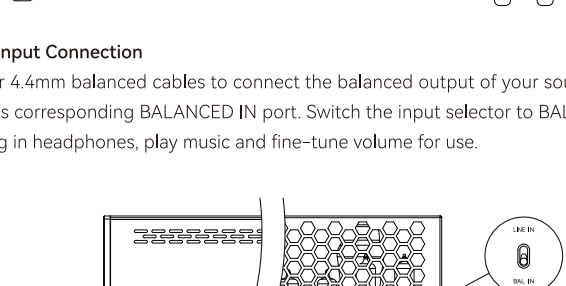
Vacuum Tube Installation Diagram



Connecting to the Audio Device

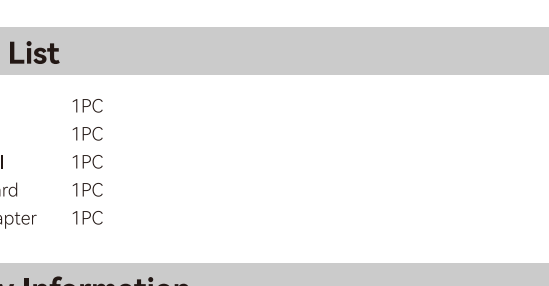
1. RCA Stereo Input Connection

Use RCA audio cables to connect the line output of your source player/DAC to the unit's RCA stereo input. Switch the input selector to LINE IN. Turn on the power, plug in headphones, play audio and adjust volume as needed.



2. Balanced Input Connection

Use XLR or 4.4mm balanced cables to connect the balanced output of your source player/DAC to the unit's corresponding BALANCED IN port. Switch the input selector to BAL IN. Turn on the power, plug in headphones, play music and fine-tune volume for use.



Package List

- | | |
|-------------------|-----|
| 1. TA-68 | 1PC |
| 2. Power Cord | 1PC |
| 3. User Manual | 1PC |
| 4. Warranty Card | 1PC |
| 5. 6.35mm Adapter | 1PC |

Warranty Information

Our product is provided with a **12-month free warranty service** starting from the date of sale. If the product is used beyond the 12-month warranty period from the date of sale, we will charge a reasonable cost for parts based on the actual fault condition of the product.

Company Name: xDuoo Technology Co.,LTD
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 XiXiang Town,Bao'an District,ShenZhen,China