

## Douk Audio XZ-U3

# Douk Audio U3 Headphone Amplifier User Manual

Model: XZ-U3 | Brand: Douk Audio

## INTRODUCTION

The Douk Audio U3 is a mini Hi-Fi Class A headphone amplifier designed for home and desktop PC use. It features 6.35mm and 3.5mm headset compatibility, RCA input, and operates on DC 5V. This manual provides detailed instructions for setup, operation, maintenance, and troubleshooting to ensure optimal performance and longevity of your device.

## SAFETY INFORMATION

- Ensure the power supply voltage matches the device's requirements (DC 5-20V).
- Do not expose the device to water, moisture, or extreme temperatures.
- Avoid placing the device in direct sunlight or near heat sources.
- Do not disassemble or modify the device. Refer all servicing to qualified personnel.
- Unplug the device from the power source during lightning storms or when unused for long periods.
- Use only specified attachments/accessories.

## WHAT'S IN THE BOX

- 1 x U3 Headphone Amplifier
- 1 x USB to DC Cable
- 1 x 6.35mm to 3.5mm Headphone Adapter

# PACKING LIST



1×USB to DC Cable



1×6.35mm to 3.5mm Adapter



1×U3 Headphone Amplifier

Net Weight  
169g/0.37lb

Package Weight  
310g/0.68lb

Image showing the Douk Audio U3 Headphone Amplifier, a USB to DC cable, and a 6.35mm to 3.5mm headphone adapter, illustrating the complete package contents.

## PRODUCT OVERVIEW

### Front Panel



Front view of the Douk Audio U3 Headphone Amplifier, showing the 6.35mm headphone output, power indicator light, and volume control knob.

- **6.35mm Headphone Output:** Connect your headphones here. Use the included 6.35mm to 3.5mm adapter for 3.5mm headphones.
- **Power Indicator Light:** Illuminates when the device is powered on.
- **Volume Control Knob:** Adjusts the output volume for connected headphones. Rotate clockwise to increase volume, counter-clockwise to decrease.

## Rear Panel



## Always work in high voltage of 26V

Innovative circuit design, DC 5-20V wide input voltage but U3 can always work at a high voltage of 26V, the background noise index is very excellent. With wide frequency response extension, excellent transient response, excellent purity and transparency, and good dynamic range.

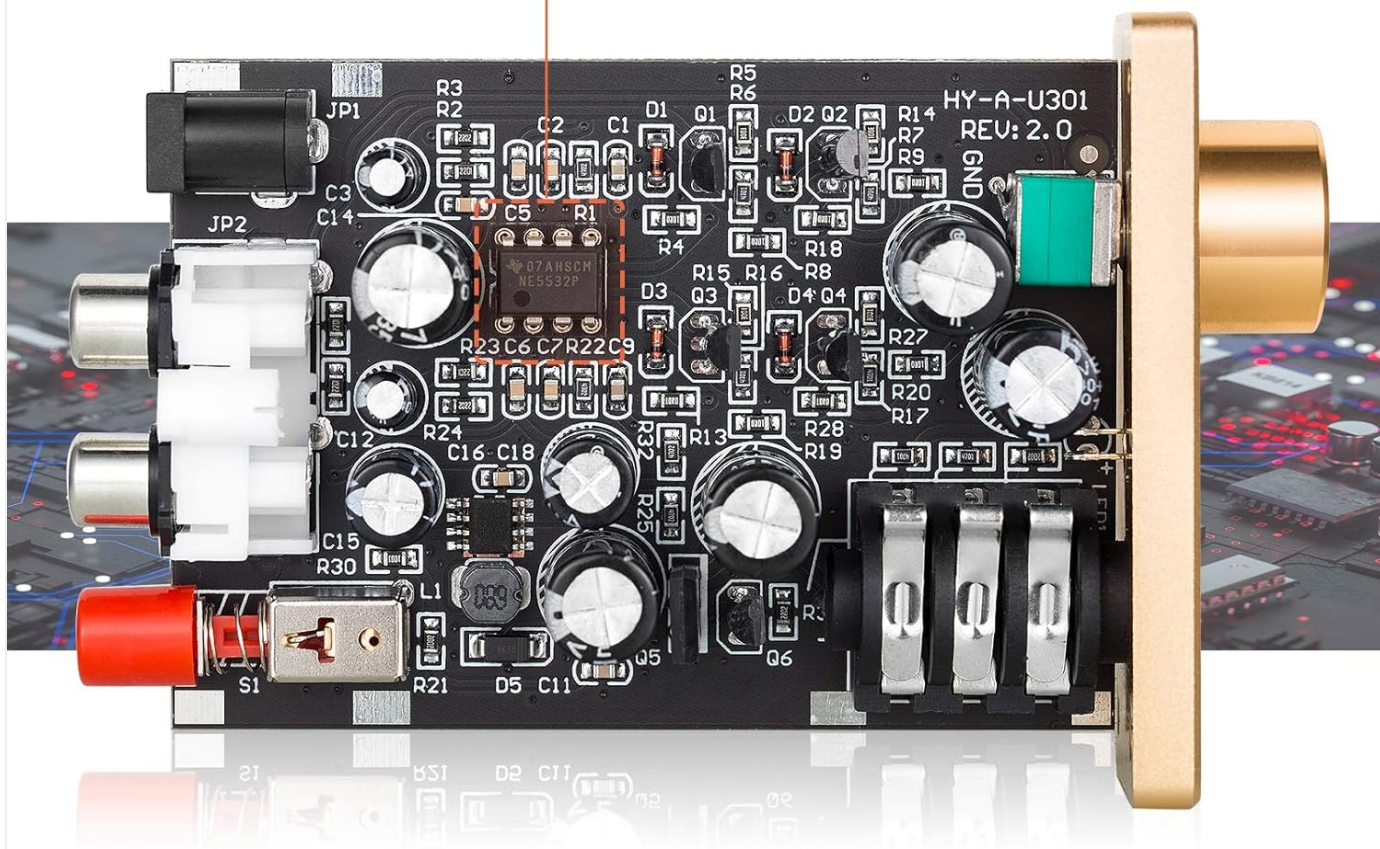
Rear view of the Douk Audio U3 Headphone Amplifier, displaying the DC 5-20V power input, RCA stereo input (L/R), and the power ON/OFF switch.

- **DC 5-20V Power Input:** Connect the provided USB to DC cable here and connect to a suitable power adapter (not included).
- **RCA Input (L/R):** Connect your audio source (e.g., PC, DAC, CD player) using RCA cables.
- **Power ON/OFF Switch:** Toggles the device power.

### Internal Components (Op-Amp)



Pluggable op amp socket design, convenient to upgrade different op amps and bring much DIY fun.



## TI-NE5532 op amp and replaceable

Adopting original TI-NE5532 classical op amp and transistor expanding current circuit, using 1300mA large current output transistor working in class A status, with ultra-low distortion, and the sound is warm and delicate, full and mellow.

An internal view of the Douk Audio U3, highlighting the pluggable op-amp socket design and the TI-NE5532 classical op amp, which allows for easy upgrades and customization.

The Douk Audio U3 features a pluggable op amp socket design, allowing users to easily upgrade or swap the operational amplifier for different sound characteristics. It comes equipped with an original TI-NE5532 classical op amp, known for its warm and delicate sound.

### SETUP

1. **Connect Audio Source:** Using RCA cables (not included), connect your audio source (e.g., PC, DAC, CD player) to the RCA Input (L/R) on the rear panel of the U3 amplifier.
2. **Connect Headphones:** Plug your headphones into the 6.35mm headphone output on the front panel. If your headphones have a 3.5mm plug, use the included 6.35mm to 3.5mm adapter.
3. **Connect Power:** Connect the provided USB to DC cable to the DC 5-20V power input on the rear panel. Plug the USB end into a suitable USB power adapter (e.g., phone charger, PC USB port) that provides 5-20V DC.
4. **Power On:** Flip the Power ON/OFF switch on the rear panel to the "ON" position. The power indicator light on the front panel will illuminate.
5. **Adjust Volume:** Start with the volume control knob at the minimum position and slowly turn it clockwise to your desired listening level.



The Douk Audio U3 Headphone Amplifier integrated into a desktop setup, showing connections to a computer and headphones, ready for use.



A top-down view of the Douk Audio U3, illustrating the RCA input connections from an audio source and the headphone output, providing a clear perspective of the setup.

## OPERATING INSTRUCTIONS

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Once the U3 amplifier is set up, operating it is straightforward:

- **Power On/Off:** Use the power switch on the rear panel to turn the amplifier on or off.
- **Volume Adjustment:** Rotate the volume knob on the front panel to control the listening volume. Adjust to a comfortable level to prevent hearing damage.
- **Headphone Compatibility:** The U3 is designed to drive a wide range of headphones, including high-impedance models such as HD580, HD600, HD650, K701, K702, Q701, DT880, T70, T90, SR225, SR325, and RS1e.





## Easily to drive most high-impedance headphones

Such as: HD580 / HD600 / HD650 / K701 / K702 / Q701 / DT880 / T70 / T90 / SR225 / SR325 / RS1e

The Douk Audio U3 Headphone Amplifier connected to a pair of high-impedance headphones, demonstrating its capability to power demanding audio equipment for an enhanced listening experience.

Your browser does not support the video tag.

This video demonstrates the Douk Audio U3 Headphone Amplifier, showcasing its features and how it can be integrated into an audio setup. It highlights the amplifier's ability to drive various headphones and its compact design.

## MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the amplifier. Do not use liquid cleaners or aerosols.
- **Ventilation:** Ensure the amplifier has adequate ventilation. Do not block the heat sinks on the sides of the unit.
- **Storage:** When not in use for extended periods, store the amplifier in a cool, dry place away from direct sunlight and dust.
- **Op-Amp Replacement (Advanced):** If replacing the op-amp, ensure the device is powered off and unplugged. Handle the op-amp carefully, aligning it correctly with the socket pins to avoid damage.

## TROUBLESHOOTING

Problem	Possible Cause	Solution
No sound output	Power not connected or unit off. Incorrect audio source connection. Headphones not properly plugged in. Volume too low.	Ensure power cable is connected and power switch is ON. Verify RCA cables are securely connected to both source and amplifier. Check headphone connection, ensure it's fully inserted. Increase volume using the front knob.
Distorted sound	Volume set too high. Poor quality audio source. Loose cable connections.	Decrease volume. Try a different audio source to isolate the issue. Check all cable connections for tightness.
Humming or buzzing noise	Ground loop issue. Interference from other electronic devices. Faulty power supply.	Try plugging the amplifier into a different power outlet. Move the amplifier away from other electronic devices. Consider using a ground loop isolator if the issue persists.

## SPECIFICATIONS



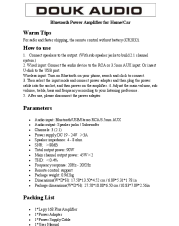
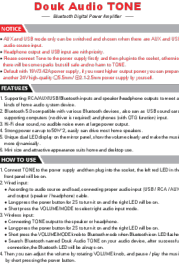

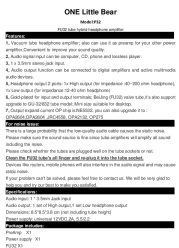
- **Model:** XZ-U3
- **Input Voltage:** DC 5-20V
- **Output Power:** 1.3W (Class A)
- **Headphone Impedance:** 18-600Ω (easily drives most high-impedance headphones)
- **Input Interface:** RCA Stereo
- **Output Interface:** 6.35mm Headphone Jack (includes 6.35mm to 3.5mm adapter)
- **Op-Amp:** TI-NE5532 (pluggable socket for upgrades)
- **Dimensions (L\*W\*H):** Approximately 93mm \* 67mm \* 30mm (3.66 \* 2.64 \* 1.18 inches)
- **Net Weight:** 169g (0.37lb)

## WARRANTY AND SUPPORT

Douk Audio products are designed for reliability and performance. For warranty information or technical support, please refer to the official Douk Audio website or contact your retailer. Keep your purchase receipt for warranty claims. For further assistance, you may visit the [Douk Audio Store on Amazon](#).





	<p><a href="#">Douk Audio U3, U3 PRO, U10 Headphone Amplifiers User Manual</a></p> <p>Comprehensive user manual for Douk Audio U3, U3 PRO, and U10 headphone amplifiers, detailing features, specifications, operation, and troubleshooting for these audio devices.</p>
	<p><a href="#">Douk Audio M10 Amplifier User Manual</a></p> <p>User manual for the Douk Audio M10 Hi-Fi Stereo Amplifier, detailing its features, connections, and operation for optimal audio performance.</p>
	<p><a href="#">DOUK AUDIO Lepy 168 Plus Bluetooth Amplifier for Home &amp; Car   Hi-Fi Stereo USB/AUX/RCA</a></p> <p>Discover the DOUK AUDIO Lepy 168 Plus, a versatile 2.1 channel Bluetooth power amplifier designed for home and car use. This mini Hi-Fi stereo amplifier offers 90W total output, multiple inputs (USB, SD, AUX, RCA), and remote control functionality. Includes detailed specifications and usage instructions.</p>
	<p><a href="#">Douk Audio TONE Bluetooth Amplifier User Manual and Specifications</a></p> <p>Comprehensive guide to the Douk Audio TONE Bluetooth amplifier, covering features, usage instructions, technical specifications, and connectivity options for home audio systems.</p>
	<p><a href="#">Douk Audio VU2: Multi-functional VU Meter and Audio Splitter User Guide</a></p> <p>Comprehensive guide to the Douk Audio VU2, a versatile analog VU meter and 4-way audio splitter/switcher. Learn about its features, usage instructions, and technical specifications for optimizing your audio setup.</p>
	<p><a href="#">ONE Little Bear P32 FU32 Tube Hybrid Headphone Amplifier</a></p> <p>Detailed overview of the ONE Little Bear P32 FU32 tube hybrid headphone amplifier by Douk audio. Features include vacuum tube amplification, multiple input/output options, upgradeable OP chips, and specifications for audiophiles.</p>