

FiiO K9

FiiO K9 Desktop Headphone Amp/DAC - AKM Edition User Manual

Model: K9 | Brand: FiiO



1. INTRODUCTION

The FiiO K9 AKM is a high-end desktop Digital-to-Analog Converter (DAC) and headphone amplifier designed to significantly enhance the audio quality of various devices. It serves as a central hub for your audio setup, connecting to computers, mobile phones, tablets, and HiFi players.

Equipped with the new flagship DAC combination of AK4191EQ and AK4499EX, the K9 AKM effectively improves the signal-to-noise ratio and reduces various amplitude noises, delivering a more realistic, detailed, and natural sound transmission. Its robust design features a full aluminum alloy body, ensuring durability and an elegant aesthetic.



Figure 1.1: Front view of the FiiO K9 AKM Desktop Headphone Amp/DAC.

2. SETUP GUIDE

This section outlines the steps for setting up your FiiO K9 AKM for optimal performance.

2.1 Unpacking and Initial Inspection

Carefully remove all components from the packaging. Verify that all accessories are present and inspect the device for any signs of damage. If any items are missing or damaged, contact FiiO customer support.

2.2 Connecting to Power

Connect the provided power cable to the AC input on the rear panel of the K9 AKM. Ensure the voltage switch (AC 100-120V / 220-240V) is set correctly for your region before plugging the unit into a power outlet.



Figure 2.1: Rear panel connections, including power input and various audio inputs/outputs.

2.3 Connecting Audio Sources

The K9 AKM supports five input options: USB, Optical, Coaxial, LINE (RCA), and Bluetooth. Choose the appropriate input based on your source device:

- **USB Input:** Connect your computer, mobile phone, or tablet via a Type-C or Type-B USB cable to the corresponding USB port on the K9 AKM. This allows for high-quality music playback and supports up to 768K/32Bit PCM decoding and DSD512.
- **Optical/Coaxial Input:** For digital audio sources like CD players, TVs, or game consoles, use an optical or coaxial cable.
- **LINE Input (RCA):** For analog audio sources, connect via RCA cables.
- **Bluetooth Input:** For wireless connection, pair your mobile device with the K9 AKM via Bluetooth. The device supports high-definition Bluetooth formats such as LDAC, aptX Adaptive, and aptX HD.

Connect via a Type-B cable to a desktop or notebook computer



Figure 2.2: Connecting the FiiO K9 AKM to a computer via Type-B USB cable.

2.4 Connecting Headphones or Speakers

The K9 AKM offers multiple output options for headphones and speakers:

- **Headphone Outputs:** Connect your headphones to the 6.35mm single-ended, 4.4mm balanced, or XLR-4 balanced output ports on the front panel.
- **Speaker Outputs:** Use the RCA or XLR balanced outputs on the rear panel to connect to active speakers or a power amplifier.

Basic specifications

DAC: AK4191EQ+AK4499EX

Decoding chip: XMOS XUF 208

Amplifier: Dual THX AAA 788+

Bluetooth chip: QCC5124, Bluetooth 5.1

Bluetooth format support: LDAC/atpX Adaptive/aptX HD/aptX/aptX LL
AAC/SBC

Outputs: 6.35mm/4.4mm/XLR-4/RCA/XLR

Inputs: Type-B/Type-C/OPT/COAX/RCA/4.4mm

Output power 1: $L+R \geq 2000\text{mW} + 2000\text{mW}$ (32Ω balanced/THD+N < 1%)

Output power 2: $L+R \geq 780\text{mW} + 780\text{mW}$ (300Ω balanced/THD+N < 1%)

SNR: $\geq 128\text{dB}$ (A-weighted, UAC)

Noise floor: PO < $3\mu\text{V}$ (A-weighted, UAC); BAL < $5.7\mu\text{V}$ (A-weighted, UAC)

Output impedance: < 1Ω (32Ω load)

Weight: About 2660g

Dimensions: 200x224.5x72mm (excluding feet)

Figure 2.3: Detailed view of input and output ports on the FiiO K9 AKM.

3. OPERATING INSTRUCTIONS

Once set up, the FiiO K9 AKM provides intuitive controls for managing your audio experience.

3.1 Power On/Off

Press the power button located on the rear panel to turn the device on or off. The front panel indicators will illuminate upon power-on.

3.2 Input Selection

Use the input selector button on the front panel to cycle through the five available input options: USB, Optical (OPT), Coaxial (COAX), LINE, and Bluetooth (BT). The active input will be indicated by an LED.

3.3 Output Mode Selection

The K9 AKM features three output modes: LO (Line Out), PRE (Pre-out), and PO (Phone Out). Select the desired

output mode using the dedicated switch on the front panel:

- **LO (Line Out):** Fixed volume output, suitable for connecting to a dedicated power amplifier.
- **PRE (Pre-out):** Variable volume output, suitable for connecting to active speakers or a power amplifier with volume control.
- **PO (Phone Out):** Headphone output, controlled by the volume knob.

3.4 Gain Adjustment

The K9 AKM offers three levels of hardware gain: High, Medium, and Low. Adjust the gain setting using the switch on the front panel to match the impedance and sensitivity of your headphones, ensuring optimal volume and sound quality without distortion.



Figure 3.1: Front panel controls for input selection, output mode, and gain adjustment.

3.5 Volume Control

Rotate the large knob on the front panel to adjust the volume. The illuminated ring around the knob indicates the current volume level.

3.6 FiiO Control App

The FiiO K9 AKM is compatible with the FiiO Control App, which provides extended functionality and customization options. Connect the K9 AKM to your phone via Bluetooth to access the app. Through the app, you can:

- Control six types of digital filters.
- Adjust EQ settings (only works in Bluetooth mode).
- Manage channel balance.
- Monitor status indicators.
- Switch between UAC1.0 and UAC2.0 modes for USB DAC.

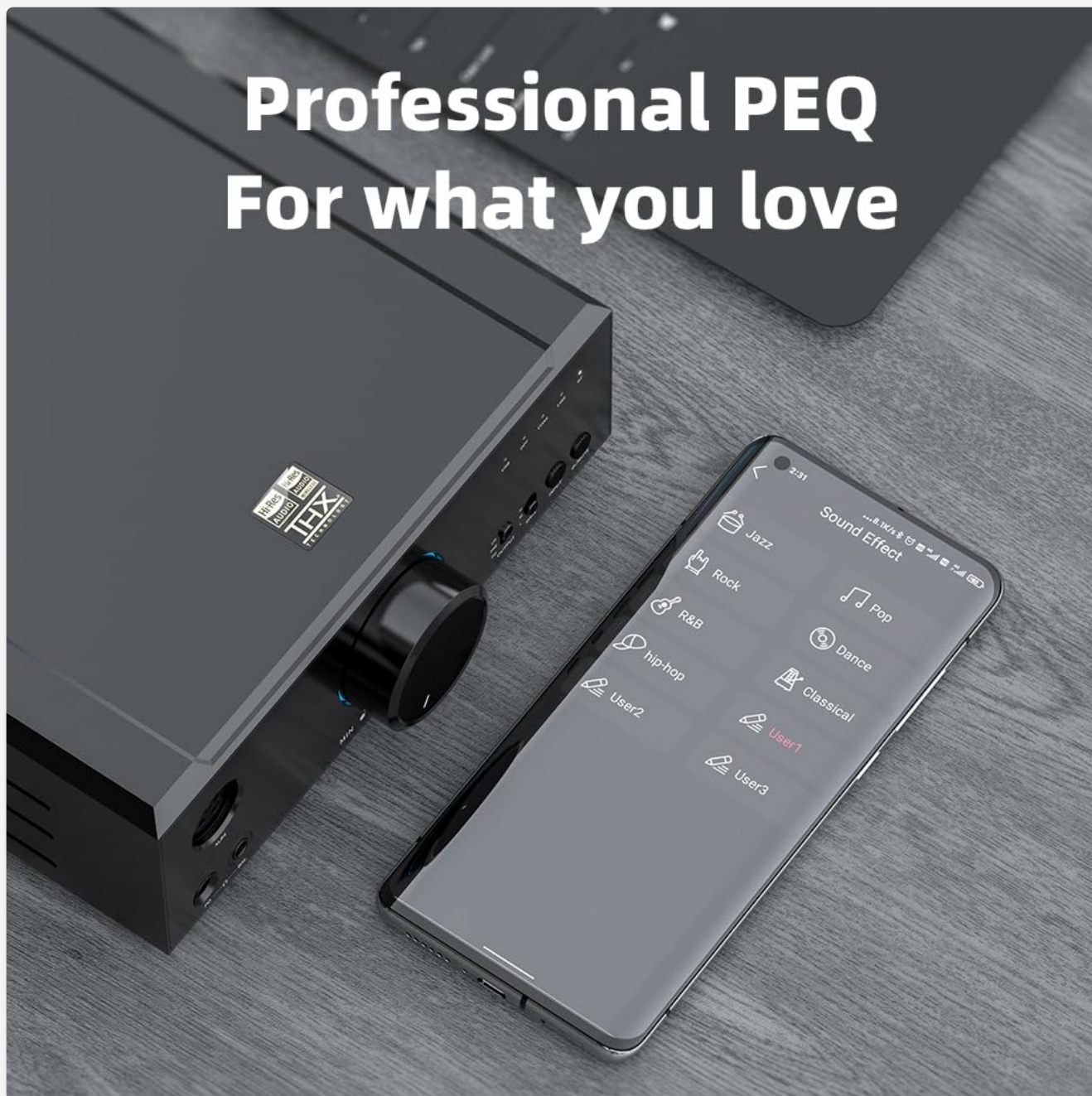


Figure 3.2: Using the FiiO Control App for advanced settings and equalization.

4. MAINTENANCE

Proper care and maintenance will ensure the longevity and optimal performance of your FiiO K9 AKM.

4.1 Cleaning

Use a soft, dry, lint-free cloth to clean the exterior of the device. Avoid using abrasive cleaners, solvents, or chemical sprays, as these can damage the finish or internal components.

4.2 Storage

When not in use for extended periods, store the K9 AKM in a cool, dry place away from direct sunlight, extreme temperatures, and high humidity. Disconnect the power cable before storage.

4.3 Handling

Handle the device with care. Avoid dropping it or subjecting it to strong impacts. Do not block the ventilation holes, as this can lead to overheating.

5. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your FiiO K9 AKM.

5.1 No Sound Output

- **Check Power:** Ensure the device is powered on and the power indicator is lit.
- **Input Selection:** Verify that the correct input source (USB, OPT, COAX, LINE, BT) is selected on the front panel.
- **Output Mode:** Confirm that the output mode switch is set to the appropriate position (PO for headphones, PRE/LO for speakers).
- **Volume Level:** Increase the volume knob. Ensure it is not at minimum or muted.
- **Cable Connections:** Check all audio cables for secure connections at both the K9 AKM and your source/output devices. Try re-seating them.
- **Headphone/Speaker Functionality:** Test your headphones or speakers with another device to ensure they are working correctly.

5.2 Distorted or Poor Sound Quality

- **Source Quality:** Ensure the audio source itself is of high quality.
- **Gain Setting:** Adjust the gain level. If the sound is distorted, try a lower gain setting. If it's too quiet, try a higher gain.
- **Cable Integrity:** Inspect audio cables for damage. Replace if necessary.
- **Interference:** Keep the K9 AKM away from strong electromagnetic interference sources.
- **FiiO Control App Settings:** If using the app, check EQ settings or filters that might be affecting the sound.

5.3 Bluetooth Connection Issues

- **Pairing Mode:** Ensure the K9 AKM is in Bluetooth pairing mode (indicated by the BT LED).
- **Device Proximity:** Keep your Bluetooth device close to the K9 AKM.
- **Previous Connections:** Disconnect the K9 AKM from any previously paired devices before attempting to pair a new one.
- **Restart Devices:** Try restarting both the K9 AKM and your Bluetooth source device.

5.4 Device Overheating

The K9 AKM is equipped with over-temperature protection. If the device feels excessively hot, ensure it has adequate ventilation and that its vents are not obstructed. Allow it to cool down before continued use.

6. SPECIFICATIONS

Below are the key technical specifications for the FiiO K9 AKM Desktop Headphone Amp/DAC.

Feature	Specification
DAC Chip	AK4191EQ + AK4499EX
Decoding Chip	XMOS XUF 208
Amplifier	Dual THX AAA 788+
Bluetooth Chip	QCC5124, Bluetooth 5.1
Bluetooth Format Support	LDAC, aptX Adaptive, aptX HD, aptX, aptX LL, AAC, SBC
Outputs	6.35mm, 4.4mm, XLR-4, RCA, XLR
Inputs	Type-B, Type-C, OPT, COAX, RCA, 4.4mm
Output Power 1 (32Ω balanced)	L+R ≥ 2000mW + 2000mW (THD+N < 1%)
Output Power 2 (300Ω balanced)	L+R ≥ 780mW + 780mW (THD+N < 1%)
SNR	≥ 128dB (A-weighted, UAC)
Noise Floor (PO)	< 3μV (A-weighted, UAC)
Noise Floor (BAL)	< 5.7μV (A-weighted, UAC)
Output Impedance	< 1Ω (32Ω load)
Weight	Approx. 2660g (5.86 lbs)
Dimensions (excluding feet)	200 x 224.5 x 72mm
Package Dimensions	14.09 x 12.99 x 6.1 inches

Basic specifications

DAC: AK4191EQ+AK4499EX

Decoding chip: XMOS XUF 208

Amplifier: Dual THX AAA 788+

Bluetooth chip: QCC5124, Bluetooth 5.1

Bluetooth format support: LDAC/atpX Adaptive/aptX HD/aptX/aptX LL
AAC/SBC

Outputs: 6.35mm/4.4mm/XLR-4/RCA/XLR

Inputs: Type-B/Type-C/OPT/COAX/RCA/4.4mm

Output power 1: $L+R \geq 2000\text{mW} + 2000\text{mW}$ (32Ω balanced/THD+N < 1%)

Output power 2: $L+R \geq 780\text{mW} + 780\text{mW}$ (300Ω balanced/THD+N < 1%)

SNR: $\geq 128\text{dB}$ (A-weighted, UAC)

Noise floor: PO < $3\mu\text{V}$ (A-weighted, UAC); BAL < $5.7\mu\text{V}$ (A-weighted, UAC)

Output impedance: < 1Ω (32Ω load)

Weight: About 2660g

Dimensions: 200x224.5x72mm (excluding feet)

Figure 6.1: Basic specifications as provided by the manufacturer.

7. WARRANTY INFORMATION

FiiO products are rigorously tested and designed for reliability. The FiiO K9 AKM comes with standard manufacturer's warranty against defects in materials and workmanship. For specific warranty terms, duration, and claim procedures, please refer to the warranty card included with your product or visit the official FiiO website. Keep your proof of purchase for warranty service.


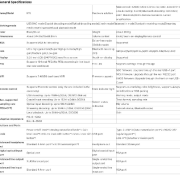


The product is equipped with over-temperature, overload, and DC protection mechanisms to ensure user safety and product longevity.

8. SUPPORT

For further assistance, technical support, or service inquiries regarding your FiiO K9 AKM, please visit the official FiiO website or contact their customer service department. You can find contact information and FAQs on their support page.



Related Documents

	<p>FiiO K9 Desktop DAC and Amplifier Quick Start Guide</p> <p>Concise guide to setting up and using the FiiO K9 flagship desktop DAC and amplifier, covering connections, controls, and specifications for optimal audio performance.</p>
	<p>FiiO K15 Desktop DAC and Amplifier: Technical Specifications</p> <p>Detailed technical specifications for the FiiO K15 Desktop DAC and Amplifier, covering hardware, audio parameters, connectivity, and performance metrics.</p>
	<p>FiiO BTR3K Quick Start Guide: Bluetooth Headphone Amplifier</p> <p>Get started with your FiiO BTR3K portable high-fidelity Bluetooth amplifier. This guide covers setup, operations, indicator lights, and precautions for seamless audio experiences.</p>
	<p>FiiO Q7 DAC and Headphone Amplifier User Guide</p> <p>Comprehensive user guide for the FiiO Q7 DAC and Headphone Amplifier, detailing setup, operation, features, troubleshooting, and compliance information.</p>