KGUSS DAC-X3PRO

KGUSS FX-Audio DAC-X3PRO USB DAC Headphone Amplifier User Manual

Model: DAC-X3PRO

1. PRODUCT OVERVIEW

The KGUSS FX-Audio DAC-X3PRO is a high-performance Digital-to-Analog Converter (DAC) and headphone amplifier designed to enhance your audio experience. It features an OP Amp diffuser circuit for improved sound quality and driving force, ASRC USB transmission technology, and supports various digital inputs. This device is suitable for use with smartphones, desktops, DVD players, CD players, and televisions.

Key Features:

- Integrated Headphone Amplifier with OP Amp diffuser circuit.
- ASRC USB transmission technology supporting up to 24Bit/96kHz sampling rate.
- Adaptive USB power supply, with option for direct DC power.
- Smartphone OTG drive support for portable HiFi audio.
- High-quality components including CS8416, ESS9023 DAC, and NE5532 op-amp.

Front view of the FX-Audio DAC-X3PRO, showcasing its compact design and controls.

The DAC-X3PRO connected to high-impedance headphones, demonstrating its capability to drive a wide range of headphones (16-300Ω).

2. PACKAGE CONTENTS

Please verify that all items are present in the package:

- 1 x DAC-X3 PRO Unit
- 1 x USB Cable
- 1 x Power Input Line
- 1 x DC 5V1A Power Adapter
- 1 x User Manual & Warranty Card

Product List

DAC-X3 PRO

USB cable

Power input line

DC 5V1A

User manual & Warranty card

An illustration of the DAC-X3PRO unit and its included accessories: USB cable, power input line, DC 5V1A adapter, and user manual/warranty card.

3. SETUP INSTRUCTIONS

3.1 Front Panel Controls

Product Function

1. Multi-function Button: On/Off, Input switching
   (short press to turn on, short press again to switch signal input, long press to turn off for 3 seconds)
2. Signal indicator
3. 3.5mm headphone output jack
4. Volume control knob

Phone/Talblet/MP3/DVD/Laptop/PC/TV

Amplifier   Passive speaker   Active speaker

Detailed diagram of the DAC-X3PRO front panel, indicating the multi-function button, signal indicators, 3.5mm headphone output jack, and volume control knob.

1. **Multi-function Button (SELECT / ON/OFF):** Short press to turn on or switch input sources (COA, OPT, USB OUT). Long press for 3 seconds to turn off the device.
2. **Signal Indicators:** LEDs indicating the currently selected input source (COA, OPT, USB OUT).
3. **3.5mm Headphone Output Jack (PHONE):** Connect your headphones here.
4. **Volume Control Knob (VOLUME):** Rotate to adjust the headphone output volume.

3.2 Rear Panel Connections

1. **Multi-function Button:** On/Off, Input switching
   (short press to turn on, short press again to switch signal input, long press to turn off for 3 seconds)
2. Signal indicator
3. 3.5mm headphone output jack
4. Volume control knob

Diagram illustrating the rear panel of the DAC-X3PRO, showing PC-USB, Optical, Coaxial inputs, RCA L/R outputs, and the DC 5V power input. It also shows connections to an amplifier with passive speakers and active speakers.

- **PC-USB Input:** Connect to a computer for audio playback. No driver installation is required; the device is plug-and-play.

- **Optical Input (OPTICAL IN):** Connect to devices with an optical audio output.

- **Coaxial Input (COAXIAL IN):** Connect to devices with a coaxial audio output.

- **RCA Outputs (OUTPUT L/R):** Connect to an external amplifier or active speakers.

- **DC 5V Power Input (POWER):** Connect the provided 5V DC power adapter.

3.3 Power Supply

The DAC-X3PRO utilizes adaptive USB power supply technology. If a USB cable is inserted separately, it can automatically convert to USB power for the entire unit. For higher power demands or stable operation, it is recommended to supply power directly from the DC 5V socket using the included power adapter.

3.4 Connecting to a Computer (PC-USB)

HIGH RESOLUTION TO RESTORE REALITY
24Bit/48-192KHz

PC-USB IN	OPTICAL IN	COAXIAL IN	USB uses ASRC
24Bit/96KHz	24Bit/192KHz	24Bit/192KHz	

**PC-USB does not need to install the driver,
Can be used immediately after it is plugged.**

USB power supply adaptive technology,when the USB cable is inserted separately,
it can be automatically converted to USB power supply for the whole machine,
when necessary,it can be directly powered from the DC socket,with very high playability.

USB adopts ASRC asynchronous transmission technology
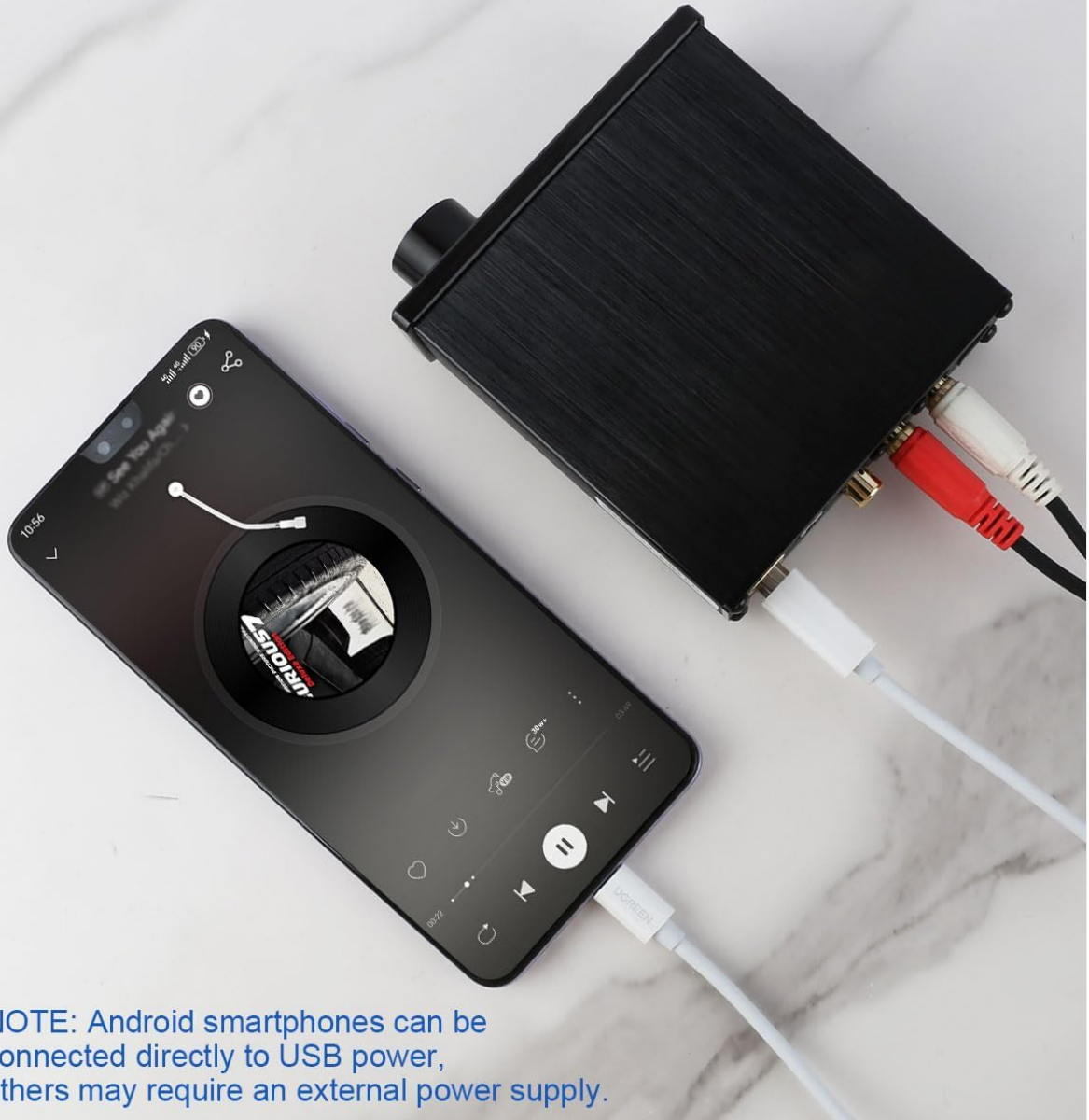to achieve the integrity of the transmission data without loss.

The DAC-X3PRO connected to a laptop via its PC-USB input, illustrating the plug-and-play functionality without requiring additional drivers.

Connect the DAC-X3PRO to your computer using the provided USB cable. The device will be recognized automatically by most operating systems without the need for driver installation. Select the DAC-X3PRO as your audio output device in your computer's sound settings.

3.5 Connecting to a Smartphone (OTG)

Support Smartphone OTG Drive

Support smartphone OTG drive, it can meet
to listen HiFi music anytime and anywhere.
DAC-X3PRO is a high-performance decoding
headphone amplifier for mobile phone/desktop/DVD/CD/TV.

NOTE: Android smartphones can be
connected directly to USB power,
others may require an external power supply.

A smartphone connected to the DAC-X3PRO via an OTG cable, enabling high-fidelity audio playback from mobile devices. Note that some smartphones may require an external power supply for the DAC.

The DAC-X3PRO supports smartphone OTG drive. Connect your smartphone to the PC-USB input using an appropriate OTG cable. This allows you to listen to HiFi music directly from your mobile device. **Note:** Android smartphones can often be connected directly to USB power, but other devices may require an external power supply for the DAC-X3PRO.

4. OPERATING INSTRUCTIONS

4.1 Power On/Off

To power on the device, short press the multi-function button on the front panel. To power off, long press

the multi-function button for approximately 3 seconds.

4.2 Input Selection

After powering on, short press the multi-function button repeatedly to cycle through the available input sources: Coaxial (COA), Optical (OPT), and USB. The corresponding LED indicator will illuminate to show the active input.

4.3 Volume Adjustment

Rotate the volume control knob clockwise to increase the headphone output volume and counter-clockwise to decrease it. Ensure the volume is set to a low level before connecting headphones to prevent sudden loud sounds.

5. MAINTENANCE

To ensure the longevity and optimal performance of your DAC-X3PRO, follow these maintenance guidelines:

- Keep the device in a clean, dry environment, away from direct sunlight, heat sources, and excessive moisture.
- Clean the exterior with a soft, dry cloth. Avoid using abrasive cleaners or solvents.
- Do not block ventilation openings.
- Avoid dropping or subjecting the device to strong impacts.

6. TROUBLESHOOTING

If you encounter issues with your DAC-X3PRO, please refer to the following common troubleshooting steps:

- **No Power:** Ensure the DC 5V power adapter is securely connected to both the device and a working power outlet. If using USB power, ensure the USB cable is properly connected to a powered USB port.
- **No Sound Output:**
  - Verify that the correct input source is selected (COA, OPT, USB) using the multi-function button.
  - Check headphone connections and ensure they are fully inserted into the 3.5mm jack.
  - Adjust the volume knob to an audible level.
  - Ensure your source device (computer, smartphone, etc.) is playing audio and its volume is not muted or too low.
  - If using RCA outputs, ensure your external amplifier or active speakers are powered on and correctly connected.
- **Distorted Sound / Popping Noises:**
  - Ensure all cables are securely connected and not damaged.
  - Try a different audio source or cable to rule out external interference.
  - If using USB, ensure your computer's USB port is stable and not experiencing power fluctuations. Using the dedicated DC 5V power adapter may resolve issues related to USB power instability.
  - Reduce the volume level on both the DAC-X3PRO and the source device.
- **Device Not Recognized by Computer:**

- Try connecting to a different USB port on your computer.
- Restart your computer.
- Ensure the USB cable is functioning correctly.

If the problem persists after trying these steps, please contact customer support.

7. SPECIFICATIONS

Product Specifications

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Brand and Manufacturer: FX-AUDIO-
Model: DAC-X3 PRO
Working Voltage: DC5V1A
Chip: ASRC USB+CS8416+ESS9023+NE5532
Signal input: USB/OPT/COAX
Headphone Amp output: 1 x 3.5mm headphone output jack
Line out output: 1 x RCA (L+R)

Input range

USB IN:16Bit-24Bit/44.1KHZ-96KHZ
COAX/OPT IN: 16Bit-24Bit/44.1KHz-192KHZ

DAC-X3 PRO Decoding parametes (USB In@96kHz)

THD: 0.04%
SNR: 106dB
Dynamic range: 105dB
Frequency Range: 20Hz-20KHz
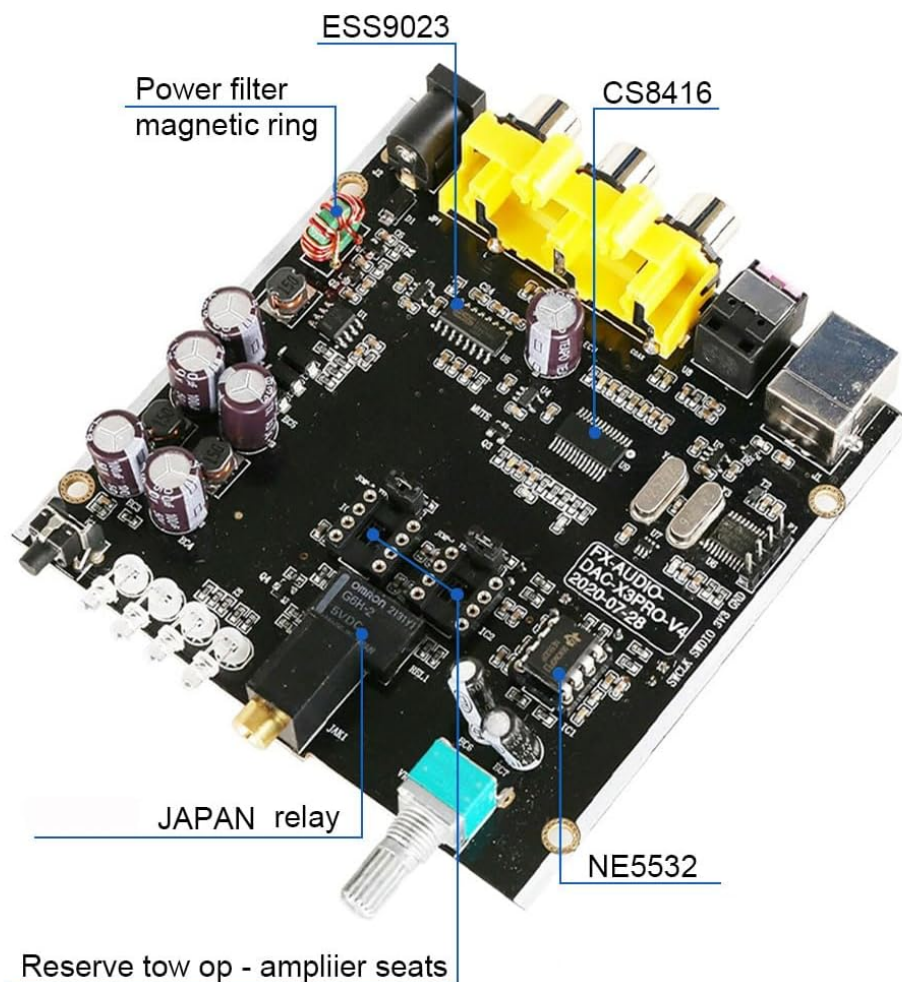RCA output level: 2Vrms
RCA output impedance: ≥100ohm

DAC-X3 PRO Headphone Amplifier specifications

Output Power: 45mW@16Ω, 85mW@32Ω, 160mW@64Ω,
50mW@120Ω, 65mW@300Ω

Noise: -110dB

Output level: 4Vrms

Headphone matching impedance: 16-300Ω

A table detailing the technical specifications of the DAC-X3PRO, including decoding parameters and headphone amplifier specifications.

General Attributes

Attribute	Value
Brand and Manufacturer	FX-AUDIO-
Model	DAC-X3 PRO
Working Voltage	DC5V1A
Chipset	ASRC USB + CS8416 + ESS9023 + NE5532
Signal Input	USB / Optical / Coaxial
Headphone Output	1 x 3.5mm Headphone Output Jack
Line Output	1 x RCA (L+R)
Package Dimensions	9 x 4 x 2.7 inches
Item Weight	1.52 pounds

Input Range

Input Type	Sampling Rate
USB IN	16Bit-24Bit / 44.1KHz-96KHz
COAX/OPT IN	16Bit-24Bit / 44.1KHz-192KHz

DAC-X3 PRO Decoding Parameters (USB In@96KHz)

Parameter	Value
THD	0.04%
SNR	106dB
Dynamic Range	105dB
Frequency Range	20Hz-20KHz
RCA Output Level	2Vrms
RCA Output Impedance	≥100ohm

DAC-X3 PRO Headphone Amplifier Specifications

Parameter	Value
Output Power	45mW@16Ω, 85mW@32Ω, 160mW@64Ω, 50mW@120Ω, 65mW@300Ω
Noise	-110dB
Output Level	4Vrms

Parameter	Value
Headphone Matching Impedance	16-300Ω

High-Class Components

ASRC USB+CS8416+ESS9023+NE5532

ESS9023

Power filter magnetic ring

CS8416

FX-AUDIO.
DAC-X3PRO-V4
2020-07-28

JAPAN relay

NE5532

Reserve tow op - ampliier seats

- DAC-X3 PRO has OP AMP socket, DIYer could change the OP amp to get different sound.
- DAC-X3 PRO electrical parameters wil change if use other OP.

An internal view of the DAC-X3PRO circuit board, highlighting key components such as the ESS9023 DAC, CS8416 receiver, NE5532 op-amp, and power filter magnetic ring. It also shows the OP Amp socket for potential DIY modifications.

8. WARRANTY AND SUPPORT

The manufacturer provides a warranty for this product. Please refer to the included warranty card for specific terms and conditions. Key aspects of support include:

- More than 1 year of quality restoration, covering repair and shipping costs.

- 24/7 customer support available to answer any questions you may have.

For further assistance or to explore other products, please visit the KGUSS Store on Amazon.

Related Documents - DAC-X3PRO

Fosi Audio K5 Pro User Manual	**Fosi Audio K5 Pro User Manual: Setup, Specifications, and Troubleshooting** Comprehensive user manual for the Fosi Audio K5 Pro Mini Stereo Gaming DAC. Includes detailed product specifications, step-by-step setup guides for USB and optical/coaxial inputs, control functions, troubleshooting tips, comparison with DAC Q4, and warranty information.
musician PEGASUS R2R DAC User's Manual	**MUSICIAN PEGASUS R2R DAC User Manual: Features, Specifications, and Operation** Comprehensive user manual for the MUSICIAN PEGASUS R2R DAC. Details technical specifications, features, front and back panel layout, driver installation, operating instructions, and warranty information.
Fosi Audio XR-D5 User Manual	**Fosi Audio XR-D5 DAC Headphone Amplifier User Manual** Comprehensive user manual for the Fosi Audio XR-D5 DAC headphone amplifier. This guide covers product description, detailed specifications, step-by-step operation instructions for both headphone amplification and decoder pre-amp modes, frequently asked questions, warranty information, and details about Fosi Audio. Learn how to connect and optimize your audio experience with the XR-D5.
ZEN DAC Quick Start Guide	**iFi ZEN DAC 3 Quick Start Guide: Setup and Operation** Get started quickly with the iFi ZEN DAC 3, a premium desktop USB DAC and headphone amplifier. This guide covers setup, features, and basic operation for optimal audio performance.
	FiiO E17K Portable DAC/Amplifier Quick User Guide Comprehensive guide to the FiiO E17K portable digital-to-analog converter and headphone amplifier, detailing its features, specifications, connectivity options, and operational instructions for enhanced audio experiences.
AIYIMA AUDIO 3.5MM Headphone Amplifier DAC Decoder	**AIYIMA DAC-A2 3.5mm Headphone Amplifier DAC Decoder User Manual** User manual for the AIYIMA DAC-A2, a 3.5mm headphone amplifier and DAC decoder. Features include PC-USB input, optical/coaxial input, RCA output, and detailed specifications and operation instructions.