



SHENZHEN KAIBOER TECHNOLOGY CO.,LTD

Address: 21st Floor, Building 2, Qianhai Kexing Science
Park, Xixiang Subdistrict, Bao'an District, Shenzhen City,
Guangdong Province, China

E-mail: info@kaiboer.com

Tel: +86-755-83014160

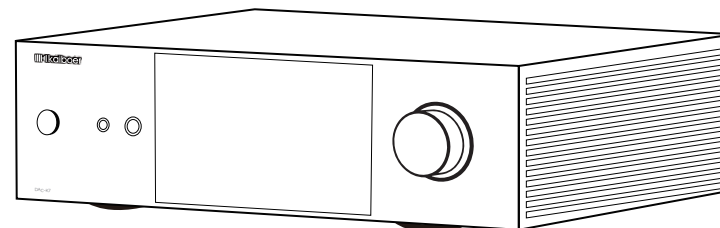
Web: www.kaiboer.com

Made in China

 **kaiboer®**
High-End Audio & Video
Established In 2007

DAC-K7 PRODUCT MANUAL

High-Resolution Audio DAC



www.kaiboer.com

We appreciate your purchase of Kaiboer DAC-K7
High-Resolution Audio DAC

You can reach us through the following channels for prompt
Unified service E-mail: info@kaiboer.com



Installation Guide & Driver Download

To enhance user experience, the company reserves the right to optimize, adjust, or add new features. In cases where hardware specifications or technical parameters may vary across production batches, the actual delivered version shall prevail. The manufacturer retains the authority to improve, modify, or remove features based on technological advancements or user needs. Users are encouraged to obtain the latest product information through official channels.

Start Exploring...

Contents

• Product Overview	Precautions Before Use	01-02
	Interface Description	03-03
	Technical Specifications	04-04
	Remote Control	05-05
• System Settings	Rear Panel Wiring Diagram	06-06
	Basic Operations and Settings	07-12
	Input Mode Selection	12-12
	USB Input Mode	13-13
	Optical (OPT) Input Mode	14-14
	Coaxial (COA) Input Mode	15-15
	AirPlay Input Mode	16-18
	Bluetooth Connection Mode	19-19
	HDMI IIS Input Mode	20-20
	HDMI IIS Pin Definition	21-21
	Kaiboer Warranty Card	23-24

Safety & Usage Precautions

ⓈTo avoid the risks of fire, electric shock or product damage, do not expose this unit to rain, moisture or dripping liquids, and do not place water-filled objects (such as vases) on top of the unit.

ⓈMaintain adequate ventilation. Do not install the unit in a bookcase, built-in cabinet or any other enclosed space. Keep curtains or other objects away from the ventilation openings to prevent fire or electric-shock hazards caused by overheating.

ⓈNever place naked flames (e.g. lighted candles) on the unit.

ⓈDo not open the cabinet; risk of electric shock. Only qualified service personnel may remove the cover.

Placement

ⓈPlace the player on a flat, level surface away from direct sunlight, high temperature, high humidity and strong vibration. Otherwise the cabinet and internal parts may be damaged and the service life shortened.

ⓈTo prevent distortion or abnormal sound, do not place heavy objects on the unit. Leave at least 15 cm clearance from surrounding walls.

Power

ⓈDo not use voltages higher than specified; this may overload the unit and cause fire. Connect the AC power cord correctly and make sure it is undamaged. Do not pull, bend or place heavy objects on the power cord.

ⓈDo not overload the wall outlet, extension cord or power strip; these may cause electric shock or fire.

ⓈDo not trap the AC cord between the player and a wall, shelf, etc.

ⓈTo prevent lightning damage, unplug the unit if it will not be used for a long period.

Moisture Protection

ⓈAvoid damp locations such as wet basements; moisture and condensation will damage the unit.

Service

ⓈNever attempt to repair the unit yourself. If it is serviced, disassembled or re-assembled by unqualified persons, electric shock or permanent damage may result.

If any of the following (or any fault not described in this manual) occurs, unplug the power cord immediately and contact your local dealer or service centre (Official email: info@kaiboer.com)

A、Abnormal picture or sound

B、Damaged power cord or plug

C、Liquid spilled or foreign objects inside the unit

D、Exposure to rain or water

E、Dropping or any other physical damage

F、Noticeably abnormal operation (usually indicates service is required)

ⓈWhen replacement parts are required, be sure the technician uses those specified by the manufacturer or parts with the same characteristics. Unauthorized substitutes may cause fire, electric shock or other hazards. After servicing, request a safety check to ensure the unit is operating correctly.

About This Manual

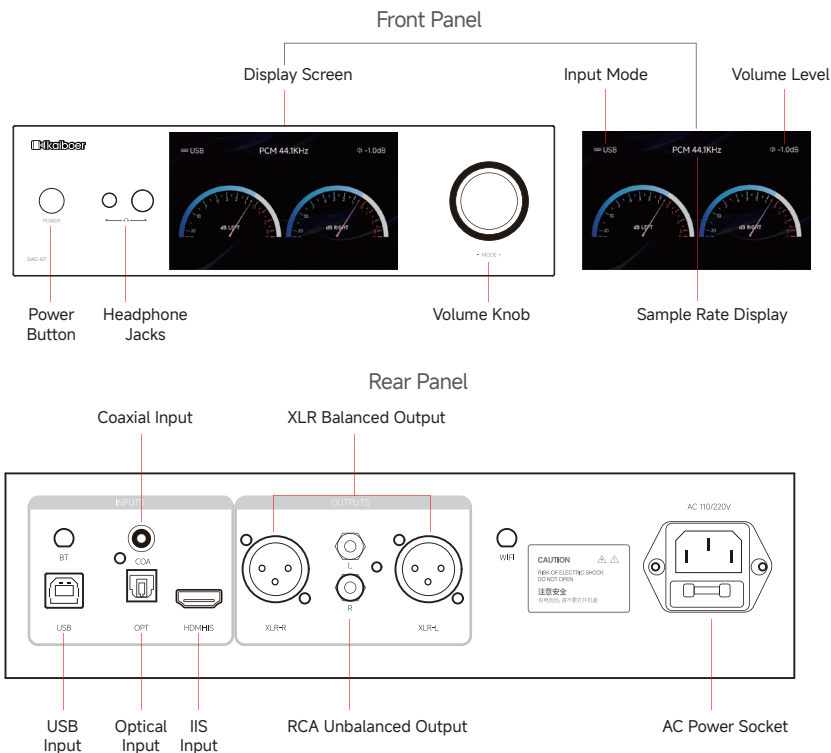
ⓈRead these instructions carefully, keep this manual in a safe place, and follow all operating procedures.

ⓈThe on-screen illustrations shown in this manual may differ slightly from the actual display due to software version differences.

01 | Product Description

Interface Description

The Kaiboer High-Resolution Audio DAC is equipped with a comprehensive array of audio input and output interfaces. Please refer to this manual for full layout details.



Cautions:

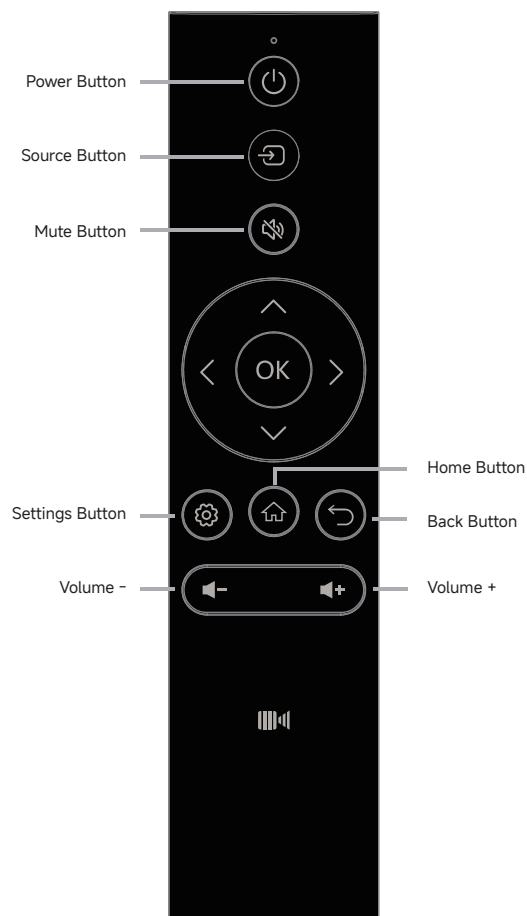
- *After pressing the power switch and powering on, adjust the volume to a suitable level before connecting devices for playback.
- *The input mode must match the mode displayed on the screen for normal playback. Also, ensure the source signal level is not too low, as this will affect speaker loudness.
- *To use Bluetooth and Wi-Fi functions, first tighten the antenna to the receiver base on the rear of the unit and position it upright.
- *When not using the unit, please turn off the power switch. For long periods of non-use, disconnect the power cord from the mains.
- *The sampling rate displayed on the screen corresponds to the sampling rate of the signal received from the connected player.

Specifications

Model	DAC-K7
Color	Black
Display Screen	4.3-inch LED Color Screen, 800*480P
Chassis Material	All Aviation Aluminum Alloy
DAC	ES9039PRO*1
Processor	3rd Gen XMOS Audio Interface 16-Core Processor XU316
Amplifier	OPA1612*8
Power Supply	High-quality Anti-interference Toroidal Linear Power Supply
Bluetooth Audio Input	Qualcomm QCC3084 Bluetooth Module, Bluetooth V5.4 Supports APTX, APTX-LT, APTX HD, LDAC, SBC, AAC
AirPlay Input	Dual-band Wi-Fi, supports AirPlay, Spotify, Tidal streaming
USB Compatibility	Windows 7-11, Mac, Android, iOS Systems
UI Interaction	Supports UI interactive operation, VU meter display, and switching
USB-B DAC Input	Up to Stereo DSD512, PCM 768KHz 32bit
HDMI IIS Input	Supports DSD512, PCM 768KHz 32bit
Optical Input	PCM 192KHz 24bit / Up to Stereo DoP64, PCM 192KHz 24bit
Coaxial Input	PCM 192KHz 24bit / Up to Stereo DoP64, PCM 192KHz 24bit
AirPlay Input	Up to Stereo DoP64, PCM 192KHz 24bit
Analog Audio Output	Preamplifier Output: XLR (Balanced) + RCA; Headphone Output: 6.35mm Single-Ended + 4.4mm Balanced
Control Methods	Remote Control, Knob Control
Recommended Impedance	16-500Ω (Single-Ended), 16-800Ω (Balanced)
XLR Output	Output Level: 4.0Vrms@0dB THD+N: -105dB@1kHz Noise: <2.0uVrms SNR: 115dB@1kHz Frequency Response: 20-20kHz(±0.08dB) CROSSTALK: -110dB DNR: 123dB@1kHz
RCA Output	Output Level: 5.0Vrms@0dB THD+N: -106dB@1kHz Noise: <3uVrms SNR: 115dB@1kHz Frequency Response: 20-20kHz(±0.08dB) CROSSTALK: -105dB DNR: 118dB@1kHz
Headphone 6.35mm Single	Output Level: 4.5Vrms@0dB Max Power: 1000mW@16Ω / 50mW@500Ω THD+N: -96dB@1kHz Noise: <3.5uVrms SNR: 115dB@1kHz-20kHz(±0.08dB) Frequency Response: 20-20kHz(±0.08dB) CROSSTALK: -105dB DNR: 113dB@1kHz
Headphone 4.4mm Balanced	Output Level: 4.3Vrms@0dB Max Power: 1000mW@16Ω / 23mW@800Ω THD+N: -91dB@1kHz Noise: <4uVrms SNR: 120dB@1kHz Frequency Response: 20-20kHz(±0.09dB) CROSSTALK: -105dB DNR: 108dB@1kHz
Power Input	AC110-120V~ / AC220-240V~, 50/60Hz
Rated Power	25W

Remote Control

Remote Control Button Descriptions

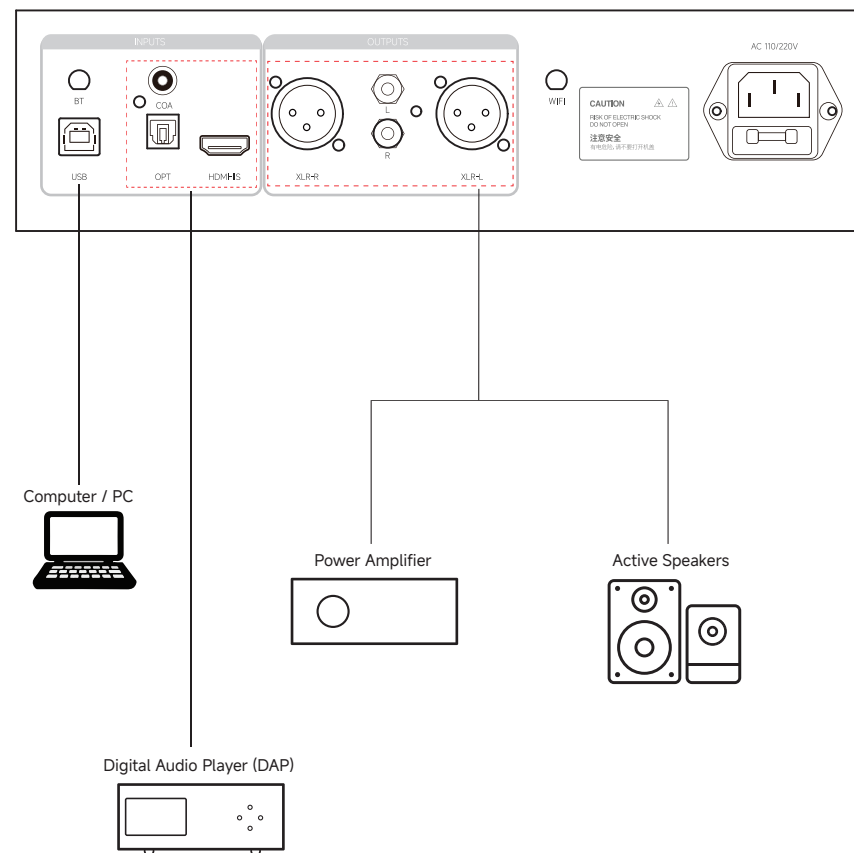


Cautions:

*Battery Installation: Press the black button at the bottom, then pull out the front slot to replace the battery.(Battery Installation: Press the black button at the bottom, then pull out the front slot to replace the battery.)

02 Product Setup & Operation

Rear Panel Connection Diagram



The illustration shows common connection examples;
the device actually supports a wider range of equipment.

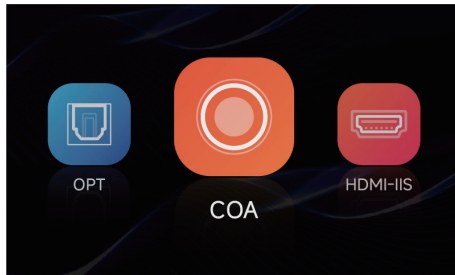
Cautions:

*Ensure the screen's input mode exactly matches the physically connected input port during use.

Basic Operation and Settings

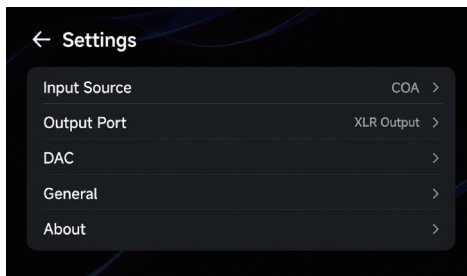
1.Source Selection

Long-press the volume knob on the unit and then rotate it to switch the input source, or press the "Source" button on the remote control.



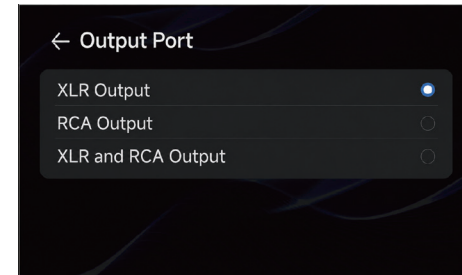
2.Settings

Short-press the volume knob on the unit or press the menu key on the remote to enter the settings menu.



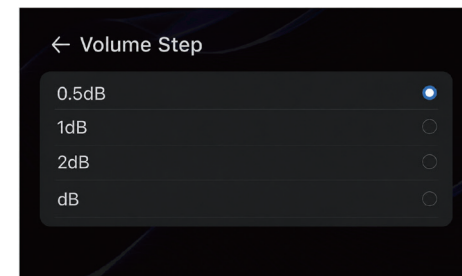
3.Output Port

Go to Settings Menu -> "Output Port". You can choose XLR Output Only, RCA Output Only, or XLR & RCA Simultaneous Output.



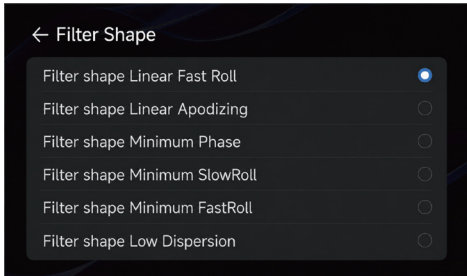
4.Volume Step

Go to Settings Menu -> "DAC" -> "Volume Step". This defines the volume adjustment increment per click/step. You can set a suitable volume increment based on your preference (e.g., 0.5dB, 1dB, 2dB, etc.).



5.DAC Filter Characteristics

Go to Settings Menu -> "DAC" -> "Filter Shape". You can select different DAC filter types according to your preference to achieve various audio signatures and satisfy personalized listening tastes.

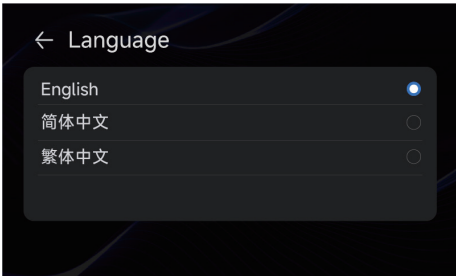


ES9039 Pro DAC Filter Types Introduction

Filter Name	Impulse Response	Characteristics	Distance	Edge	Type
Filter shape Linear Fast Roll		Low-frequency mixing, natural	Far	Medium	Vocal
Filter shape Linear Slow Roll		Low-frequency mixing, precise	Mid-far	Sharp	Monitor
Filter shape Linear Apodizing		Mid-frequency mixing, natural	Mid-far	Sharp	Vocal
Filter shape Minimum Phase		High-frequency mixing, warm	Mid-near	Medium	Slow Vocal
Filter shape Minimum SlowRoll		Mid-frequency mixing, warm	Mid	Medium	Heavy Editing
Filter shape Minimum FastRoll		High-frequency mixing, warm	Near	Sharp	Instrument
Filter shape Low Dispersion		High-frequency mixing, warm	Mid	Sharp	Medium

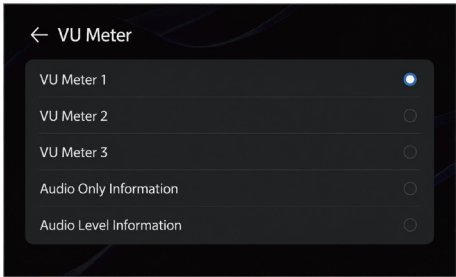
6.Language

Go to Settings Menu -> "General" -> "Language". Select your preferred interface menu language (English / Simplified Chinese / Traditional Chinese).



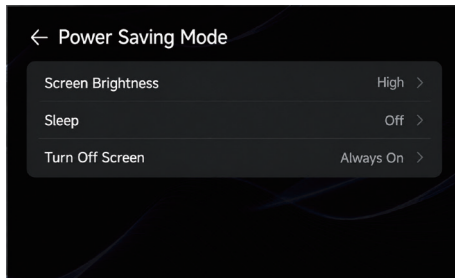
7.VU Meter

Go to Settings Menu -> "General" -> "VU Meter". Choose different VU meter styles for the playback interface based on your preference (VU Meter 1 / VU Meter 2 / VU Meter 3 / Audio Info Only / Volume Info Only).



8.Eco Mode (Power Saving)

Go to Settings Menu -> "General" -> "Eco Mode". You can configure Screen Brightness, Auto-Sleep when idle, and Screen Timeout.



Screen Brightness: Adjust the brightness level of the screen display according to your needs.

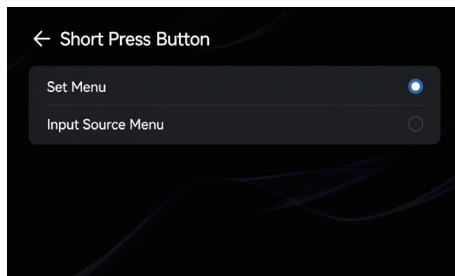
Sleep: If there is no audio playback for a specified duration, the device will automatically turn off the display and enter energy-saving sleep mode. It will automatically resume normal operation once an incoming audio signal is detected on the active channel.

Pressing the Power button can also wake it up instantly.

Screen Off: Automatically turns off the screen display after a period of user inactivity. Operating any control will restore the display.

9.Knob Settings

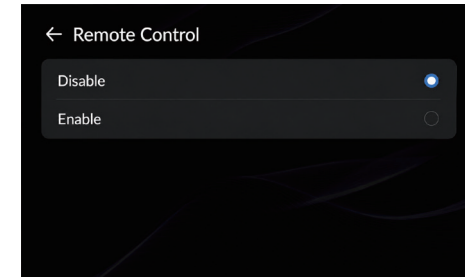
Go to Settings Menu -> "General" -> "Knob". Customize the action for a short press of the knob based on your user habits (e.g., popping up the System Settings Menu or the Input Source Menu).



10.Disable Remote Control

This feature is designed for users who own two or more Kaiboer DAC products used in the same environment. It prevents multiple units from being controlled simultaneously by allowing you to disable remote control capability for specific devices.

Go to Settings Menu -> "General" -> "Other" -> Remote Control: Disable / Enable.

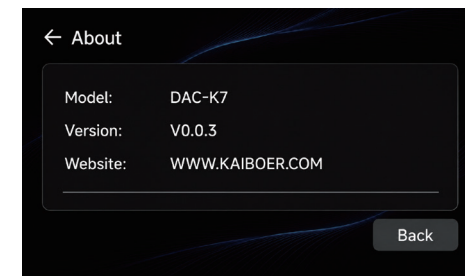


Cautions:

*If the remote fails to control the unit, please check if the remote control mode is set to "Enable".

11.Firmware Upgrade

Download the DAC-K7 firmware upgrade package from the official Kaiboer website and place it in the root directory of a USB drive. Adjust the volume to -45dB, navigate to Settings -> About, and long-press the OK/Confirm key on this screen for 5 seconds. A prompt box will appear, and the system will automatically upgrade. Wait for the machine to restart automatically after the upgrade is complete.



Cautions:

*The firmware file must be renamed to "ePDKv100.img" as required.

*The USB drive must be formatted to FAT32.

*A USB-B male to USB-A female or USB-C female adapter is required.

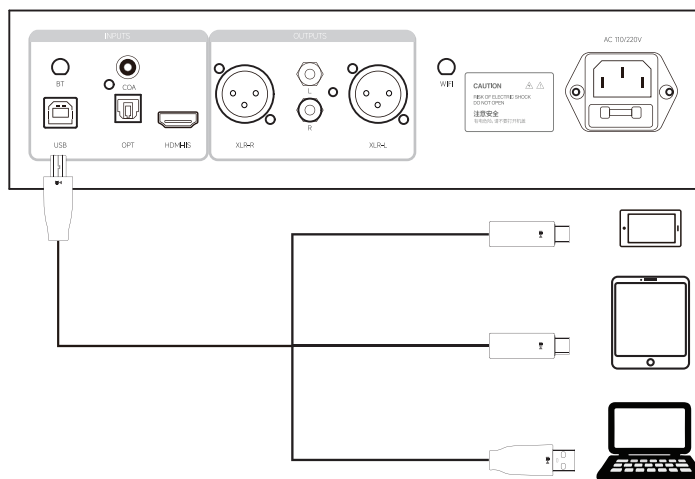
*Do not unplug the USB drive or power off the machine during the upgrade process.

Mode Selection and Settings

1.USB Mode

Typically used to connect computers, smartphones, or digital audio players that support USB output.

- 1.Connect the USB-B end of the audio cable to the USB-B female port on the rear panel of the DAC-K7, and connect the other end (USB-A or USB-C) to your computer or smartphone.
- 2.Switch the input mode to "USB" using the remote control or by rotating the knob.
- 3.For Windows PCs, after correctly installing the driver and playback software according to the tutorial, you can play up to DSD512 and PCM 768kHz/32bit audio files.
- 4.When connected to a smartphone's Type-C port, the phone can output audio directly to the DAC-K7 for decoding and playback.



The illustration shows common connection examples;
the device actually supports a wider range of equipment.

Cautions:

- *Windows OS computers require downloading and installing drivers from the official Kaiboer website (scan the QR code on the cover or to the right for video tutorials and downloads).
 - *Mac computers will install the driver automatically; simply select the USB audio device as the system's sound output.
 - *Models like OPPO/VIVO require going into Settings -> Additional Settings and turning on the "OTG Connection" switch before connecting.
- (Note: Windows XP does not support the driver. Please use Windows 7 or higher systems.)

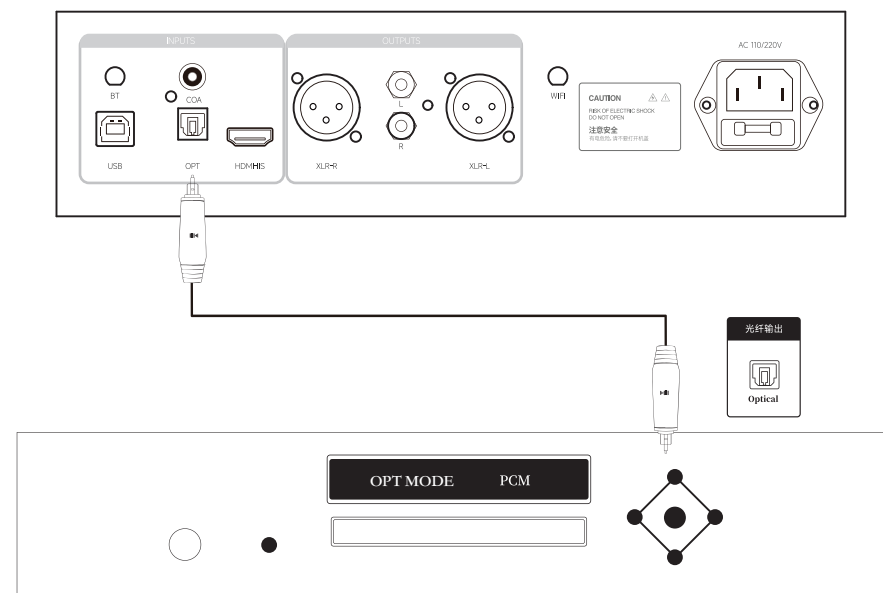


Installation Guide
& Driver Download

2.Optical (OPT) Mode

Steps:

- 1.Cable Connection: Please use a standard square-to-slink optical audio cable. Remove the dust caps before insertion. Note that the optical plug is directional; align it carefully and insert securely. Do not force it blindly to avoid damaging the cable and the female socket.
- 2.Switch the input mode to "OPT" using the remote control or by rotating the knob.
- 3.The source audio device must have its sound output configured to SPDIF/Optical output.files.
- 4.Select Stereo / PCM as the digital output format.



The illustration shows common connection examples;
the device actually supports a wider range of equipment.

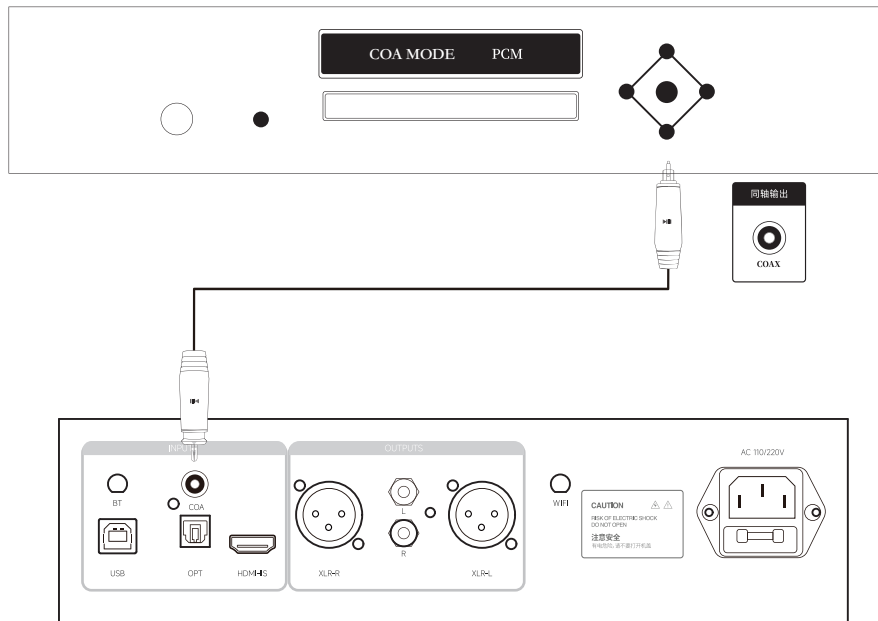
Cautions:

- *Ensure all cables are securely connected; remove the dust cap from optical fiber cable before plugging in.
- *Select OPT for optical input mode.
- *The display will show sampling rate (e.g.44K) once valid audio signal is received by DAC.
- *Note: Point IR remote toward the unit with sufficient battery power; unmarked buttons are non-functional.

3.Coaxial (COA) Mode

Steps:

- 1.Cable Connection: Please use a high-quality 75Ω shielded RCA digital audio coaxial cable.
- 2.Switch the input mode to "COA" using the remote control or by rotating the knob.
- 3.The source audio device must have its sound output configured to Coaxial / SPDIF output.
- 4.Select Stereo / PCM as the digital output format.



The illustration shows common connection examples;
the device actually supports a wider range of equipment.

Cautions:

- *Must use 75Ω constant-impedance digital coaxial cable for connection.
- *Set input mode to COA for coaxial audio input.
- *The display will show sampling rate (e.g. 44K) after valid audio signal is received by DAC.
- *Note: Aim IR remote control at the device with fully-charged batteries; unmarked buttons are non-functional.

4.AirPlay Mode

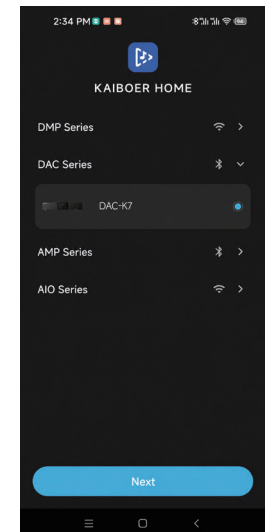
Both iOS and Android devices support audio streaming via AirPlay, Spotify Connect and Tidal Connect under this mode. You can control Spotify remotely from your smart-phone, tablet or PC.

For detailed operation, please visit spotify.com/connect.



Steps:

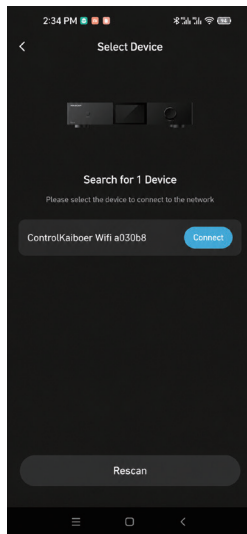
- 1.Install the configuration App on your phone first. For Apple devices, search for KaiboerHome directly in the App Store to download and install. For Android devices, use a web browser to scan the QR code on the right or visit the official Kaiboer website to download and install.
- 2.Switch the input mode to "AirPlay" using the remote control or the knob (ensure the DAC device's Wi-Fi is enabled/turned on).
- 3.Open the "KAIBOER HOME" App. Based on your product type, choose the corresponding product series (e.g., DAC Series, DMP Series, etc.), select your device model (e.g., DAC-K7), and click [Next] to enter the network configuration workflow.



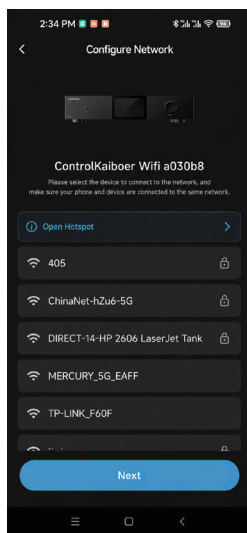
Cautions:

- *The Spotify Software is subject to third party licenses found here: <https://www.spotify.com/connect/third-party-licenses>.

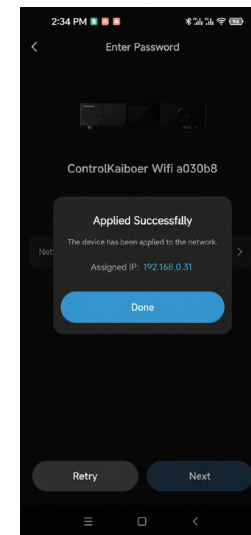
4.The App will automatically scan for Kaiboer devices within the local area network (ensure your phone's Bluetooth is turned on). Once the search is complete, tap your device's name in the list (e.g., ControlKaiboer Wifi_xxxxxx). After tapping "Configure" a confirmation prompt will pop up on the DAC screen. Press the OK button on the remote or press down on the volume knob to confirm. The App will then proceed to network settings.



5.On the network configuration page, select your home Wi-Fi network (ensure your phone and the DAC are connecting to the same local area network; 5GHz Wi-Fi is highly recommended). Enter the Wi-Fi password, tap [Next], and wait for the device to establish its network connection.



6.When the screen displays "Network Configuration Successful" along with the device's IP address (e.g., 192.168.10.51), the device has successfully joined the network. Tap [Finish] to exit the App. Apple users can now directly use the native AirPlay feature to stream audio.



Cautions:

*To use the AirPlay feature, you must install the antenna and stand it upright.

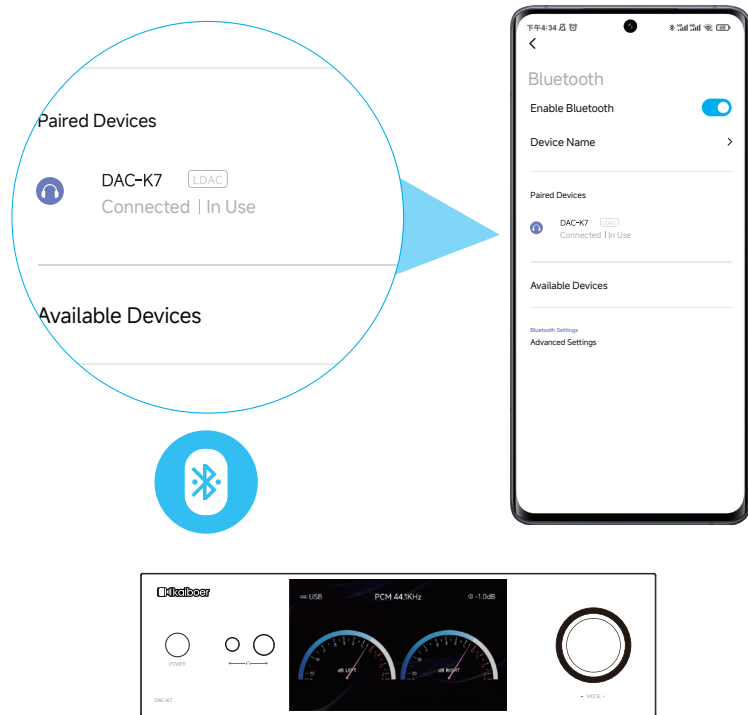
*When searching for the DAC via your phone, make sure the unit's Wi-Fi is enabled. You can check this under Settings -> General -> Wi-Fi. If it fails to show up after multiple attempts, tap the re-configure button.

*Network configuration only needs to be completed once in the same environment. For future playback via AirPlay, simply ensure your phone/source device and the DAC are connected to the same local area network.

5. Bluetooth Connection Mode

Steps:

1. Select "Bluetooth" as the active mode on the display screen.
2. Turn on Bluetooth on your smartphone, scan for devices, and select "DAC-K7" to pair and connect.
3. If certain smartphones produce no sound during music playback, you may need to configure the audio output routing inside the playback software.



The illustration shows common connection examples;
the device actually supports a wider range of equipment.

Cautions:

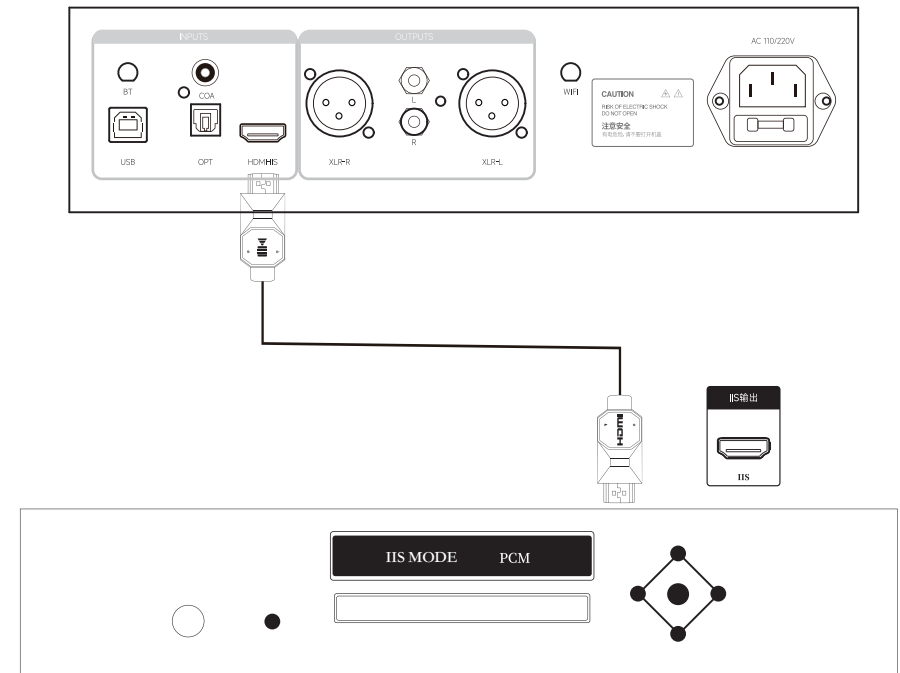
- *The rear Bluetooth antenna must be screwed tightly and stood upright. Do not place the device inside closed cabinets.
 - *Try to play locally downloaded music tracks on your phone. Online streaming is susceptible to network latency and may offer lower audio quality.
 - *Keep the unit separated from your wireless router, or switch your Wi-Fi to the 5GHz band. 2.4GHz Wi-Fi and Bluetooth operate on adjacent frequencies and can easily cause mutual interference.
- (Note: Once the smartphone is correctly paired via Bluetooth and music begins playing, the real-time sample rate value will show on the display screen.)

6. IIS Mode

Digital Audio Input Mode from Player (Note: Input, NOT Output)

Steps:

1. Cable Connection: Please connect using a high-quality shielded cable with standard HDMI connectors.
2. Switch the input mode to "IIS" using the remote control or by rotating the knob.
3. The source audio device must have its sound output configured to HDMI IIS output.
4. Select Stereo / PCM as the digital output format.



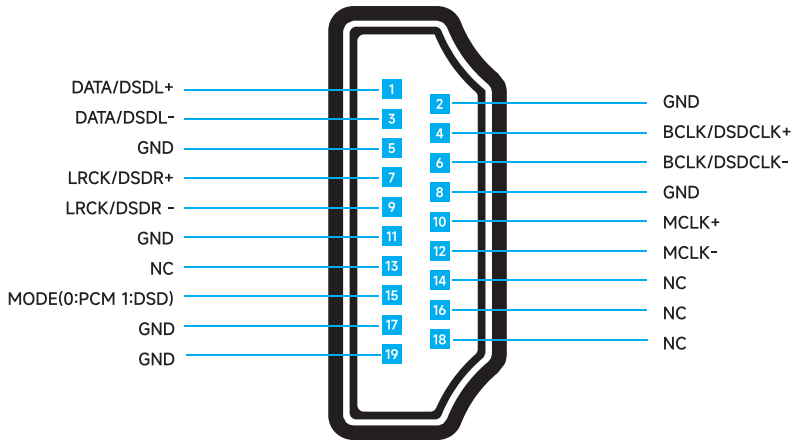
The illustration shows common connection examples;
the device actually supports a wider range of equipment.

Cautions:

- *IIS is NOT an HDMI high-definition video port. It is a specialized digital audio signal interface. The source player must possess this exact type of output pin-out definition to connect and function. Use high-quality branded HDMI cables for this connection.

HDMI IIS Pin Definition

The IIS port is not a video interface; it is a proprietary/custom digital audio transmission interface. It must perfectly match the IIS pin definition of your digital transport/turntable.



Cannot be connected to the HDMI ports of televisions.

Special Notice:

To enhance user experience, Kaiboer may release firmware updates from time to time.
The descriptions in this manual may differ slightly from the actual product.
Features or specifications are subject to change without prior notice.
For more detailed instructions, please visit the official website:
www.kaiboer.com.

Product Certificate Card

This product has been inspected and meets all technical standards,
and is hereby approved for shipment.

Kaiboer Guarantees Service:

Dear Kaiboer user:

Thank you for using Kaiboer products. In order to make our service more satisfactory to you, please read this description carefully and keep the product quality assurance card properly after purchase.

Warranty notes:

1. Please complete the information on this quality assurance card;
2. The Kaiboer brand products sold by our company to individual consumers implement one-year free warranty service;
3. The following factors are not within the scope of the free warranty service. For matters not covered by the warranty, the company will charge maintenance fees appropriately;

A.Products beyond the warranty period	B. Damage caused by force majeure (floods, fires, earthquakes, lightning strikes, typhoons, etc.) or misuse.
C.Unnatural loss caused by users' unauthorized inspection, repair, modification, change of components, modification of wiring, etc.	D. Unauthorized alteration of the warranty service card or product inconsistency.

4. If there is any quality problem with the Kaiboer product you purchased, please return the product to the dealer you purchased or contact our company directly.

5. Technical support and maintenance services:

- A.If you encounter problems during the use of Kaiboer products, you can consult the user manual, consult customer service or contact the dealer for answers;
- B. If you seek help through manual customer service, please be sure to clearly inform you of the product model, accessories, and failure details you use, so that the staff can help you more accurately and quickly determine the cause of the failure.



Warranty Card

Order ID:	
Personal or company's full name:	
Address/Postal Code:	
Telephone:	Email:
Purchase Date:	
Sales Platforms:	

Model:	Serial NO:
Product Quantity:	
Other Supplementary Notes:	

Thank you for choosing KALBOER. please contact us directly by emailing notice@kaiboer.com. To get better services, please fill in there quired information.

Respectfully

