

FiiO Q15

FiiO Q15 Portable DAC/Headphone Amplifier User Manual

Model: Q15 | Brand: FiiO

1. INTRODUCTION

Thank you for choosing the FiiO Q15 Portable DAC/Headphone Amplifier. This device is designed to provide high-fidelity audio playback from various sources, offering both portable and desktop-grade performance. This manual provides essential information for the proper setup, operation, and maintenance of your Q15.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Advanced DAC Architecture:** Features AK4191EQ+AK4499EX DACs with DWA Routing Technology for detailed and natural sound.
- **High Output Power:** Delivers up to 1600mW at 32Ω in Desktop Mode for driving demanding headphones.
- **Versatile Connectivity:** Supports USB DAC, Bluetooth 5.1 (LDAC, AAC, SBC, aptX, aptX HD), and Coaxial inputs.
- **High-Resolution Audio:** Supports up to 768kHz/32bit PCM and native DSD512 decoding.
- **Global PEQ:** Customizable parametric equalizer with 7 presets and 3 user-defined slots, available in Bluetooth and USB DAC modes.
- **Dual Power Modes:** Dedicated Type-C power input for Desktop Mode, bypassing the battery for enhanced performance.
- **Comprehensive Protection:** Includes over-heating, over-voltage, and DC protection mechanisms.

2.2 Device Layout

Familiarize yourself with the various ports and controls on your FiiO Q15.



Image 2.2.1: Top View. This image displays the top of the FiiO Q15, featuring the balanced and single-ended headphone output jacks, and the central volume control knob.



Image 2.2.2: Bottom View. This image shows the bottom panel of the FiiO Q15, highlighting the COAX IN port, USB data port, POWER IN port, and the ON/OFF switches for Phone Mode and Desktop Mode.



Image 2.2.3: Back View. This image presents the back of the FiiO Q15, displaying the model number (Q15), DAC and Headphone Amplifier designation, and regulatory information.

3. SETUP

3.1 Charging the Device

Before initial use, fully charge the FiiO Q15. Connect a USB-C cable to the **POWER IN** port on the bottom of the device and connect the other end to a USB power adapter (not included) or a computer's USB port. The charging indicator will show the charging status.

3.2 Connecting to a Source Device

The Q15 supports multiple input methods:

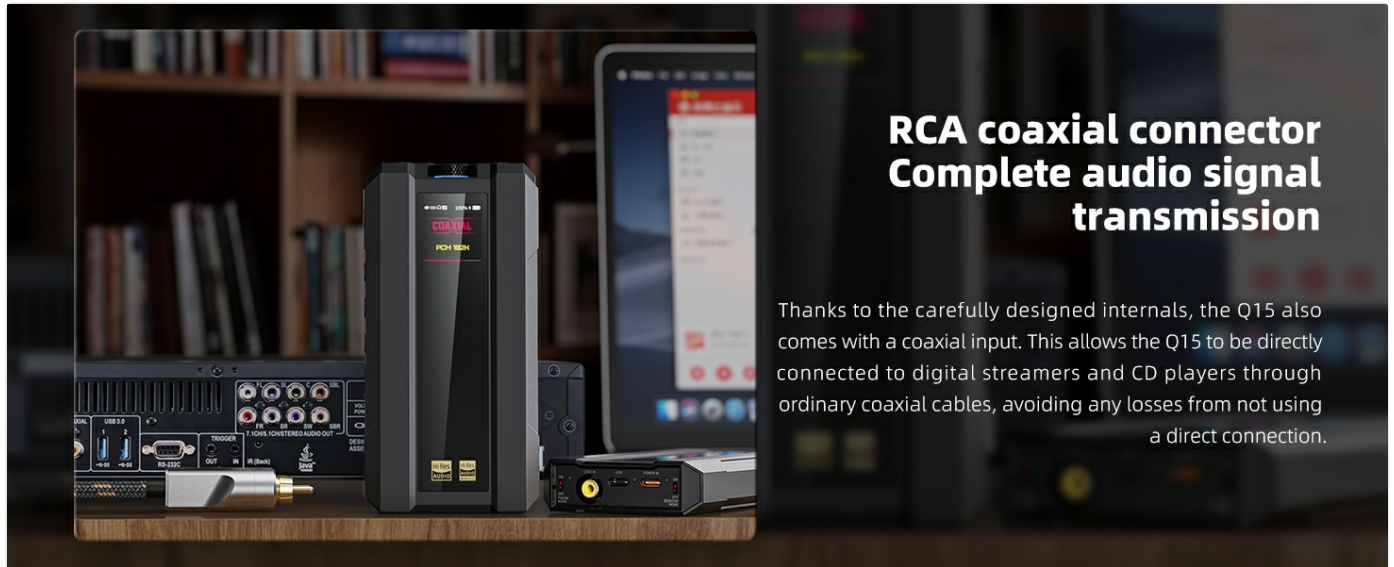
- **USB DAC Mode:** Connect the Q15 to your computer, smartphone, or tablet using a USB-C to USB-C or USB-A to USB-C cable via the **USB** port. Ensure the appropriate drivers are installed on your computer if necessary (usually plug-and-play for most modern OS).
- **Coaxial Input:** For digital audio players or other devices with coaxial output, connect a coaxial cable to the **COAX IN** port on the Q15.
- **Bluetooth Mode:** For wireless connection, refer to section 4.3 for Bluetooth pairing instructions.

USB/Bluetooth/coaxial decoding



Image 3.2.1: Connectivity Examples. This image illustrates the FiiO Q15 connected to a laptop via USB, paired wirelessly via Bluetooth to

a smartphone, and connected to a digital audio source via coaxial cable.



RCA coaxial connector Complete audio signal transmission

Thanks to the carefully designed internals, the Q15 also comes with a coaxial input. This allows the Q15 to be directly connected to digital streamers and CD players through ordinary coaxial cables, avoiding any losses from not using a direct connection.

Image 3.2.2: Coaxial Connection. The FiiO Q15 is shown connected to a home audio system via its RCA coaxial input, ensuring complete audio signal transmission.

3.3 Connecting Headphones

Connect your headphones to the appropriate output jack on the top of the Q15. The Q15 supports both single-ended (3.5mm) and balanced (4.4mm) headphone connections.

3.4 Phone Mode and Desktop Mode

The Q15 features a switch to toggle between Phone Mode and Desktop Mode:

- **Phone Mode:** When the **OFF PHONE MODE** switch is set to ON, the Q15 will be powered by its internal battery, preventing it from drawing power from the connected phone. This is ideal for portable use with smartphones.
- **Desktop Mode:** When the **OFF DESKTOP MODE** switch is set to ON and a dedicated power supply is connected to the **POWER IN** port, the Q15 will bypass its internal battery and draw power directly from the external source. This enables the maximum 1600mW output power for driving high-impedance headphones. If connecting to a computer, ensure Phone Mode is OFF to allow the computer to recognize the Q15 as a DAC.



Phone mode switch With just one touch

FiiO engineers implemented a "Phone Mode" switch to make the Q15 better suited for use with phones. Turn on Phone Mode* and the Q15 will be powered by the built-in battery, not consuming the phone's battery.

*If you need to connect to a computer, turn off Phone Mode.

Image 3.4.1: Phone Mode. The FiiO Q15 is shown connected to a smartphone, with the 'Phone Mode' switch engaged to prevent battery drain from the phone.

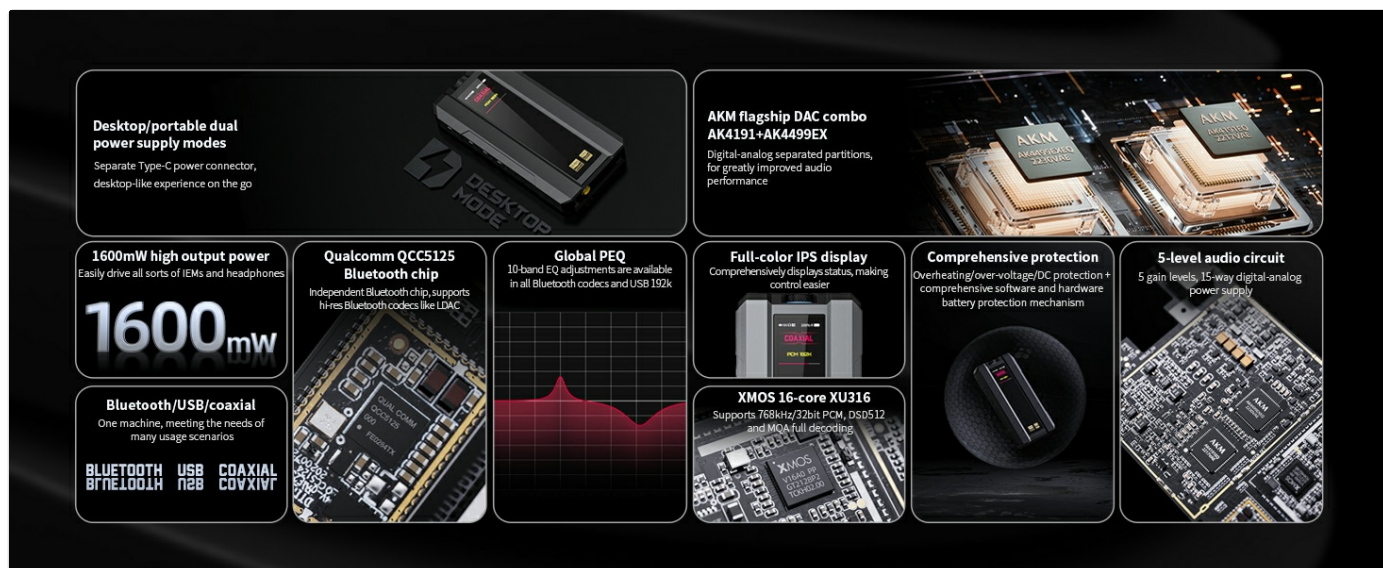


Image 3.4.2: Desktop Mode. The FiiO Q15 is depicted in Desktop Mode, connected to an external power adapter via its dedicated Type-C power connector, providing a desktop-like audio experience.

4. OPERATING INSTRUCTIONS

4.1 Power On/Off

Press and hold the power button (usually integrated with the volume knob) for a few seconds to turn the device on or off. The screen will illuminate upon power-on.

4.2 Volume Control

Rotate the multi-function knob on the top of the device to adjust the output volume. Adjust to a comfortable listening level before placing headphones on your ears.

4.3 Bluetooth Pairing

1. Turn on the FiiO Q15.
2. Navigate to the Bluetooth settings on the Q15's display or through the FiiO Control App.
3. Enable Bluetooth pairing mode on the Q15.
4. On your source device (smartphone, tablet, etc.), search for available Bluetooth devices and select "FiiO Q15".
5. Confirm pairing. The Q15 supports LDAC, AAC, SBC, aptX, and aptX HD codecs.

4.4 Input Selection

Use the device's menu system (accessed via the multi-function knob and buttons) to select the desired input source: USB, Coaxial, or Bluetooth.

4.5 Parametric Equalizer (PEQ)

The FiiO Q15 features a Global PEQ function, allowing you to customize the sound profile. This can be accessed via the device's menu or the FiiO Control App.

- The Q15 comes with 7 EQ presets and 3 customizable PEQ presets.
- PEQ can be used in both Bluetooth mode and USB DAC mode.
- Through FiiO's self-developed PEQ algorithm and user interface, you can adjust specific frequencies, gain levels, and bandwidth to fine-tune the audio.
- *Note: Customizable PEQ and PEQ under coaxial input may require subsequent firmware upgrades. USB DAC PEQ*

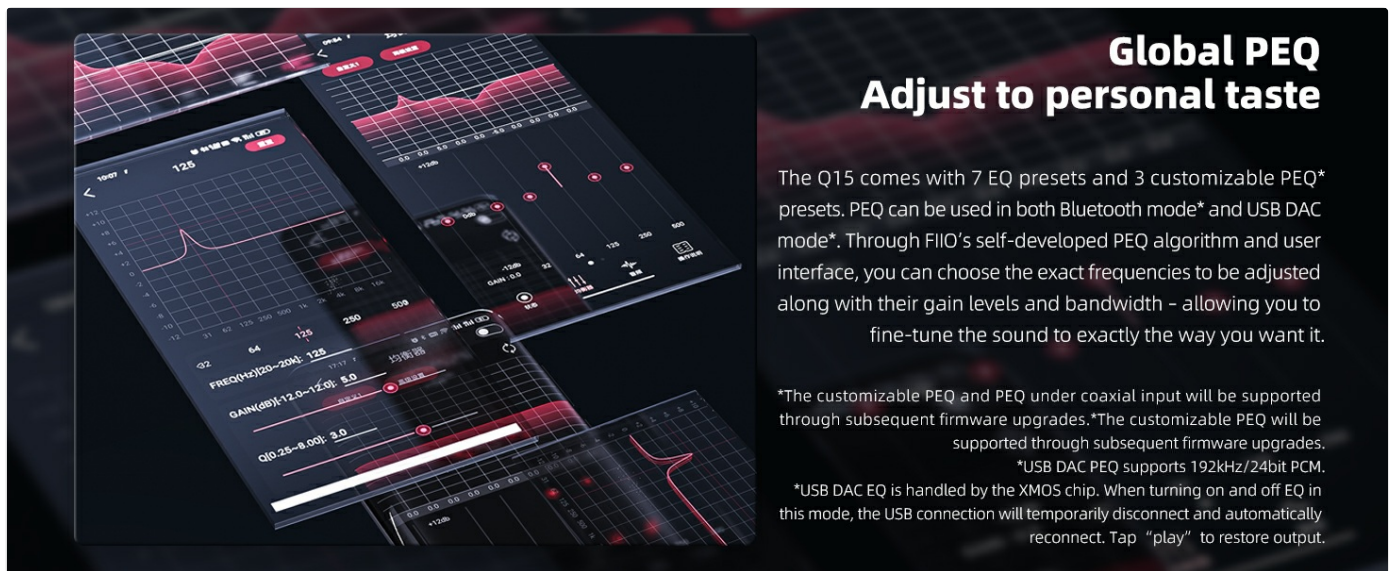
supports up to 192kHz/24bit PCM. When turning on and off EQ in USB DAC mode, the USB connection will temporarily disconnect and automatically reconnect.

Global PEQ

Adjust to personal taste



Image 4.5.1: Global PEQ Interface. This image displays the FiiO Q15's screen interface for the Global Parametric Equalizer, showing frequency, gain, and Q-factor adjustments.



Global PEQ Adjust to personal taste

The Q15 comes with 7 EQ presets and 3 customizable PEQ* presets. PEQ can be used in both Bluetooth mode* and USB DAC mode*. Through FIO's self-developed PEQ algorithm and user interface, you can choose the exact frequencies to be adjusted along with their gain levels and bandwidth – allowing you to fine-tune the sound to exactly the way you want it.

*The customizable PEQ and PEQ under coaxial input will be supported through subsequent firmware upgrades.*The customizable PEQ will be supported through subsequent firmware upgrades.

*USB DAC PEQ supports 192kHz/24bit PCM.

*USB DAC EQ is handled by the XMO5 chip. When turning on and off EQ in this mode, the USB connection will temporarily disconnect and automatically reconnect. Tap “play” to restore output.

Image 4.5.2: PEQ Adjustment. A visual representation of the Global PEQ settings, demonstrating how users can adjust frequencies, gain, and bandwidth to customize their audio experience.

5. MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the device. Avoid using harsh chemicals or abrasive materials.
- **Storage:** Store the Q15 in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Care:** For optimal battery life, avoid fully discharging the device frequently. If storing for an extended period, charge the battery to approximately 50-70%.
- **Port Protection:** Keep all ports free from dust and debris.

6. TROUBLESHOOTING

6.1 Device Does Not Power On

- Ensure the device is sufficiently charged. Connect it to a power source and allow it to charge for at least 30 minutes before attempting to power on again.
- Verify that the power button is pressed and held for the required duration (typically a few seconds).

6.2 No Sound Output

- Check headphone connections to ensure they are fully inserted into the correct output jack.
- Verify the volume level on both the Q15 and the source device.
- Confirm the correct input source (USB, Coaxial, Bluetooth) is selected on the Q15.
- If using USB DAC mode, ensure Phone Mode is OFF if connecting to a computer, as Phone Mode prevents the Q15 from drawing power from the source and may affect data transfer.
- For Bluetooth, ensure the Q15 is successfully paired and connected to your source device.

6.3 Connection Issues (USB/Bluetooth)

- **USB:** Try a different USB cable or port. Ensure any necessary drivers are installed for your operating system. If using a computer, ensure Phone Mode is OFF.
- **Bluetooth:** Unpair and re-pair the Q15 with your source device. Ensure no other devices are interfering with the Bluetooth signal.

6.4 Firmware Updates

Periodically check the official FiiO website for firmware updates. Firmware updates can resolve bugs, improve performance, and add new features. It is recommended to update the firmware directly from the FiiO website rather than relying solely on in-app notifications, as the app may sometimes be behind the latest available versions.

7. SPECIFICATIONS

Feature	Specification
DAC Chipset	AK4191EQ + AK4499EX
XMOS Processor	16-core XU316
CPU	TI Cortex M4
Bluetooth Chipset	Qualcomm QCC5125
Supported Bluetooth Codecs	LDAC, AAC, SBC, aptX, aptX HD
Max Sampling Rate (USB)	768kHz/32bit PCM, DSD512
Output Power (Desktop Mode)	Up to 1600mW @ 32Ω
THD+N	<0.0004% (LO/1kHz/10kΩ)
Inputs	USB-C, Coaxial, Bluetooth
Outputs	3.5mm Single-Ended, 4.4mm Balanced
Weight	0.59 Kilograms



Image 7.1: Key Features Summary. This image provides a comprehensive overview of the FiiO Q15's main features, including its dual power modes, high output power, decoding capabilities, and advanced chipsets.

AKM flagship DAC combo AK4191EQ+AK4499EX

The Q15 features AKM's newest DAC combination - the AK4191EQ+AK4499EX. When working in tandem with the newly developed "DWA Routing Technology", audio performance is greatly improved. The result is a more detailed, yet natural and realistic sound that makes the listener think they have been transported to the concert site.

$\geq 123\text{dB}$ (A-weighted)

S/N

$< 0.0004\%$ (LO/1kHz/10k Ω)

THD+N

PO $< 3\mu\text{V}$ (A-weighted)

LO $< 1.6\mu\text{V}$ (A-weighted)

BAL $< 4.8\mu\text{V}$ (A-weighted)

Noise

*Above parameters results from actual tests.



Image 7.2: AKM DAC Combo. A detailed view of the AK4191EQ and AK4499EX DAC chips, highlighting their role in achieving high audio performance with low noise and distortion.

Self-developed digital cores Stable and efficient operation

Featuring digital components on the same level as those of the FIIO Q7, the Q15 relies on the ARM processor to realize USB /coaxial/Bluetooth decoding in one, capable of processing digital audio signals with low latency and high efficiency.

XMOS 16-core XU316

Supports 768kHz/32bit PCM, DSD512 and MQA full decoding

TI Cortex M4 processor

Ensures stable and efficient operation of various systems

Qualcomm QCC5125 Bluetooth chip

Independent Bluetooth chip supporting hi-res Bluetooth codecs like LDAC

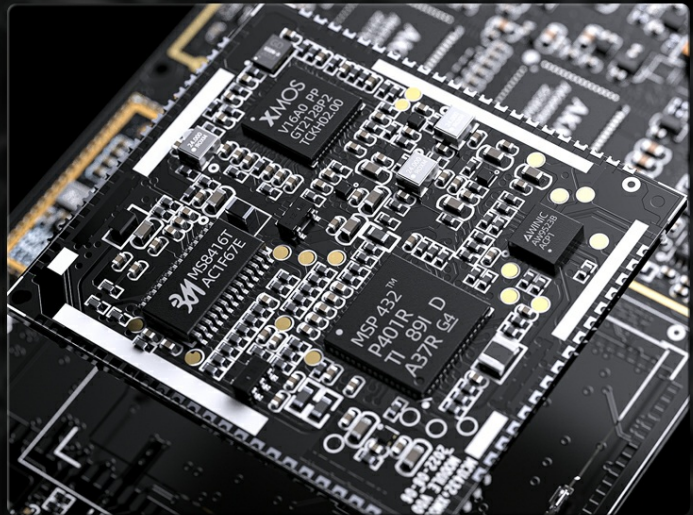


Image 7.3: Digital Cores. This image showcases the internal digital components of the Q15, including the XMOS 16-core XU316, TI Cortex M4 processor, and Qualcomm QCC5125 Bluetooth chip, ensuring stable and efficient operation.

High-precision and low-noise An expert in audio restoration

FIIO engineers specially selected 60 1% precision, low-temperature drift resistors, and 28 wide temperature range NPO capacitors for the Q15, allowing it to faithfully reproduce high-quality audio with the utmost fidelity even in the most demanding conditions.

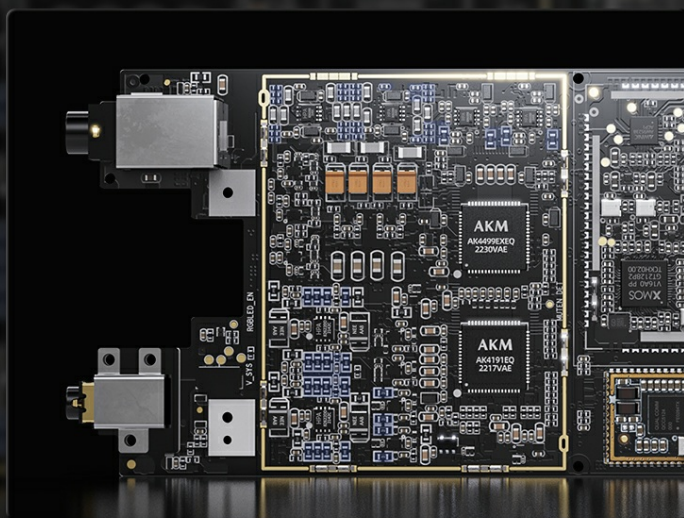


Image 7.4: High-Precision Components. An internal view of the Q15's circuit board, emphasizing the use of high-precision, low-temperature drift resistors and NPO capacitors for accurate audio reproduction.



Comprehensive protection Comprehensive peace of mind

FiiO engineers have implemented a multitude of hardware and software-controlled protection mechanisms, allowing you to enjoy great sound without worries.

Max volume limit, to avoid hearing damage; Durable high temperature resistant battery + dynamic charge and discharge temperature-based control+ charging protection + battery isolation, all work together to prolong battery durability; The over-heating, over-voltage, and DC protection mechanism allows the Q15 to stably output power by ensuring the audio circuit works properly and ensures the safety of the connected headphones.

Image 7.5: Comprehensive Protection. This image illustrates the various hardware and software-controlled protection mechanisms integrated into the FiiO Q15, such as over-heating, over-voltage, and DC protection, to ensure device longevity and user safety.

8. WARRANTY AND SUPPORT

The FiiO Q15 comes with a manufacturer's warranty. Please refer to the warranty card included with your product or visit the official FiiO website for detailed warranty terms and conditions specific to your region.

For technical support, troubleshooting assistance, or service inquiries, please contact FiiO customer support through their official website or authorized service centers. Providing your product model (Q15) and purchase details will help expedite the support process.

Official FiiO Website: www.fiiio.com

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

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After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question