



Manuals.plus /

› JadeAudio /

› JadeAudio/FiiO JM21 Hi-Res Music Player User Manual

JadeAudio JM21

JadeAudio/FiiO JM21 Hi-Res Music Player User Manual

Model: JM21
Brand: JadeAudio

1. INTRODUCTION

Welcome to the user manual for your JadeAudio/FiiO JM21 Hi-Res Music Player. This guide provides essential information for setting up, operating, and maintaining your device to ensure optimal performance and a superior audio experience. The JM21 combines advanced audio technology with the versatility of Android 13, offering a powerful and user-friendly portable music solution.

2. WHAT'S IN THE BOX

Please verify that all items are present in your product packaging:

- JM21 Hi-Res Music Player
- USB Cable
- PET Film Screen Protector (pre-applied)
- Transparent Case
- Quick Start Guide
- Warranty Card

Parts list

- ①-----JM21*1
- ②--PET film screen protector (pre-applied)*1
- ③-----Transparent case*1
- ④-----USB cable*1
- ⑤-----Quick start guide*1
- ⑥-----Warranty card*1



① ②



③



⑤



④



⑥

Figure 2.1: Included components with the JM21 player.

3. PRODUCT OVERVIEW

The JadeAudio/FiiO JM21 is designed for portability and high-fidelity audio. It features a sleek, compact body with a responsive touch screen and intuitive physical controls.

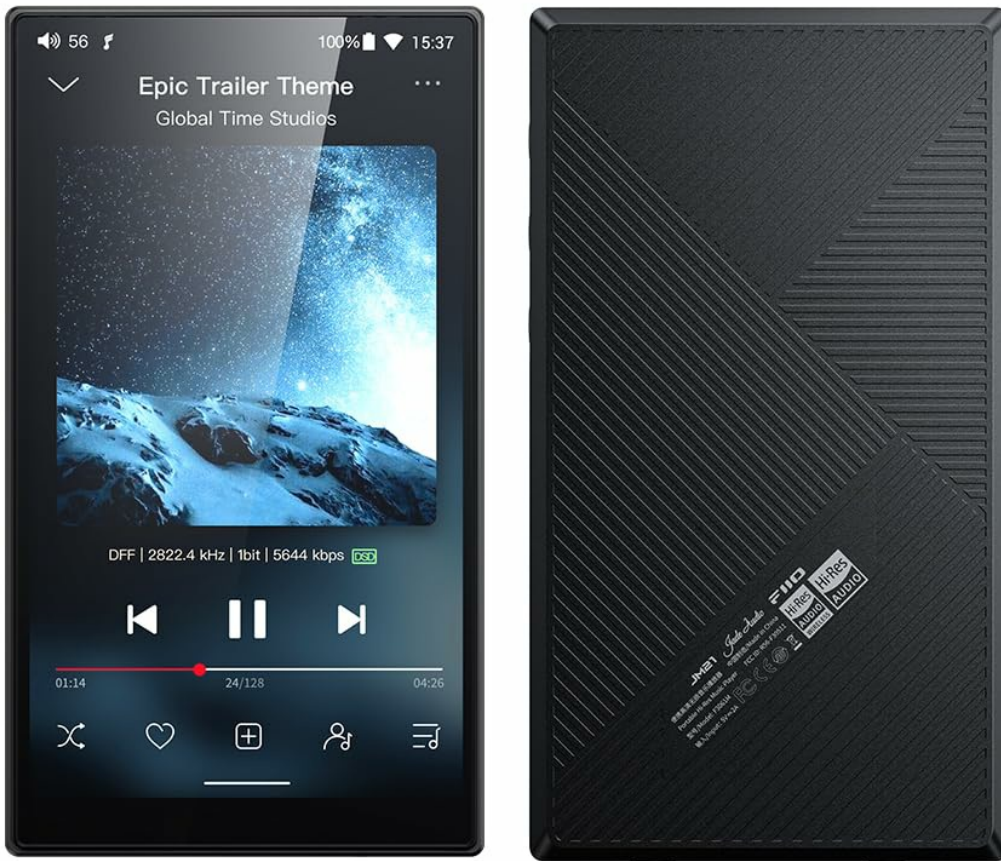


Figure 3.1: Front view of the JM21 player.

Powerful penetrating sound 700mW power output

A specially-designed and tuned audio circuit allows the JM21 to achieve a balanced power output of up to 700mW+700mW within an ultra-thin body of only 13mm thickness. This ensures that it drives all kinds of headphones with ease.



Figure 3.2: Side view with controls and ports.

Physical Features:

- **Display:** 4.7-inch LCD or IPS touch screen for clear visuals and easy navigation.
- **Buttons:** Dedicated physical buttons for power, volume, and playback control.
- **Ports:** USB-C port for charging and data transfer, 3.5mm and 4.4mm audio output jacks.
- **MicroSD Card Slot:** For expandable storage.

4. SETUP

4.1 Initial Charging

Before first use, fully charge your JM21 player. Connect the provided USB-C cable to the player's USB-C port and the other end to a compatible USB power adapter (not included) or a computer's USB port. The charging indicator will show the charging status.

13mm ultra-lightweight body 12.5H Battery life



Figure 4.1: Connecting the JM21 for charging.

4.2 Power On/Off

- **To Power On:** Press and hold the Power button on the side of the device until the FiiO logo appears on the screen.
- **To Power Off:** Press and hold the Power button until a power-off menu appears. Select 'Power off'.
- **To Sleep/Wake:** Briefly press the Power button to put the device into sleep mode or wake it up.

4.3 Inserting a MicroSD Card

The JM21 supports expandable storage via a MicroSD card (up to 2TB). Locate the MicroSD card slot on the side of the device. Gently insert the card until it clicks into place. To remove, push the card inward until it springs out.

5. OPERATING INSTRUCTIONS

5.1 Android 13 System Navigation

The JM21 runs on a customized Android 13 operating system, providing a familiar and intuitive user experience. Navigate the interface using touch gestures on the screen, similar to a smartphone.

Simply smooth Custom Android 13 OS

The deeply customized Android 13 operating system is both intuitive and smooth. It also allows you to install major streaming music apps or any other kinds of apps.



Figure 5.1: JM21 displaying music playback.

5.2 Music Playback

Use the pre-installed FiiO Music app or download other streaming applications like Spotify or Apple Music from the app store. The player supports various audio formats including MP3, AAC, FLAC, and WAV.

5.3 Connecting Headphones

- **Wired Headphones:** Connect your headphones to either the 3.5mm single-ended output or the 4.4mm balanced output for optimal sound quality.
- **Bluetooth Headphones:** Enable Bluetooth in the settings menu. Pair with your Bluetooth headphones or speakers. The JM21 supports two-way Bluetooth 5.0 with LDAC for high-quality wireless audio.

Dual flagship CS43198 DAC Fully balanced design

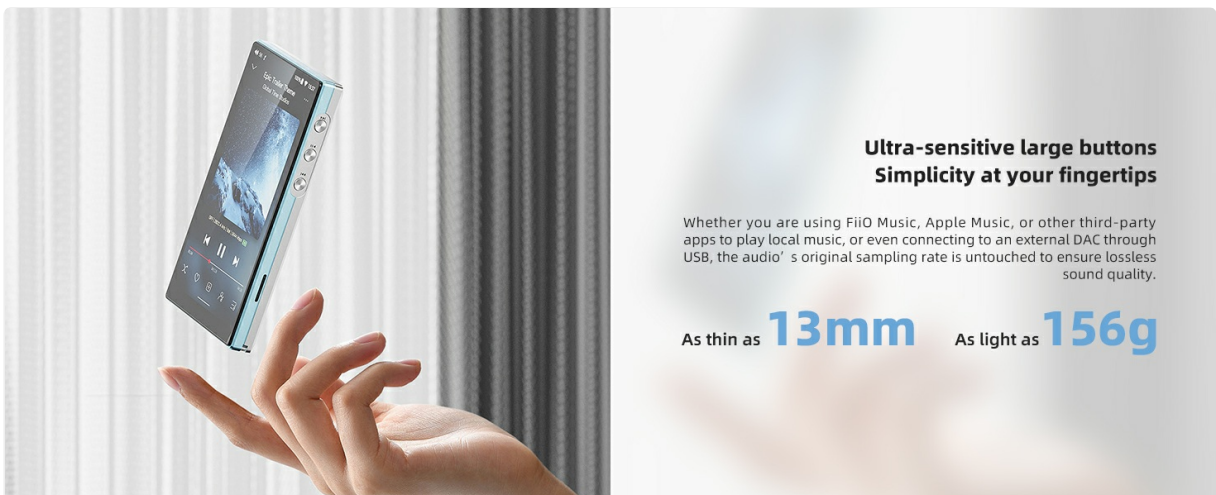
Two Cirrus Logic flagship CS43198 DACs are paired with two high-performance SGM8262 op-amps in a fully balanced audio design. Thanks to our learnings from the development of numerous previous products, we have further optimized the segmented power supply as well as the front and rear stage gain stages for wider dynamic range and enriched musicality.



Figure 5.2: JM21 connected to wired headphones.

5.4 USB DAC Mode

The JM21 can function as an asynchronous USB DAC when connected to a computer (Windows or macOS). This allows your computer's audio to be processed by the JM21's high-quality DACs, supporting up to 384kHz/32bit audio. Connect the JM21 to your computer using the USB-C cable and select USB DAC mode on the device.



Ultra-sensitive large buttons
Simplicity at your fingertips

Whether you are using FiiO Music, Apple Music, or other third-party apps to play local music, or even connecting to an external DAC through USB, the audio's original sampling rate is untouched to ensure lossless sound quality.

As thin as **13mm** As light as **156g**

Figure 5.3: USB DAC functionality.

6. KEY FEATURES

6.1 Qualcomm Snapdragon 680 Processor

The JM21 is powered by the Qualcomm Snapdragon 680 processor, built on a 6nm advanced process. This 8-core Kryo 265 architecture, with a clock speed of up to 2.4GHz, ensures smooth and responsive operation, enhancing overall performance and power efficiency.



Figure 6.1: Snapdragon 680 processor details.

6.2 Custom Android 13 Open-Source System

The deeply customized Android 13 open-source system provides a fluid and intuitive user experience. It allows for the installation of various streaming apps and other applications, offering flexibility in how you access and enjoy your music.

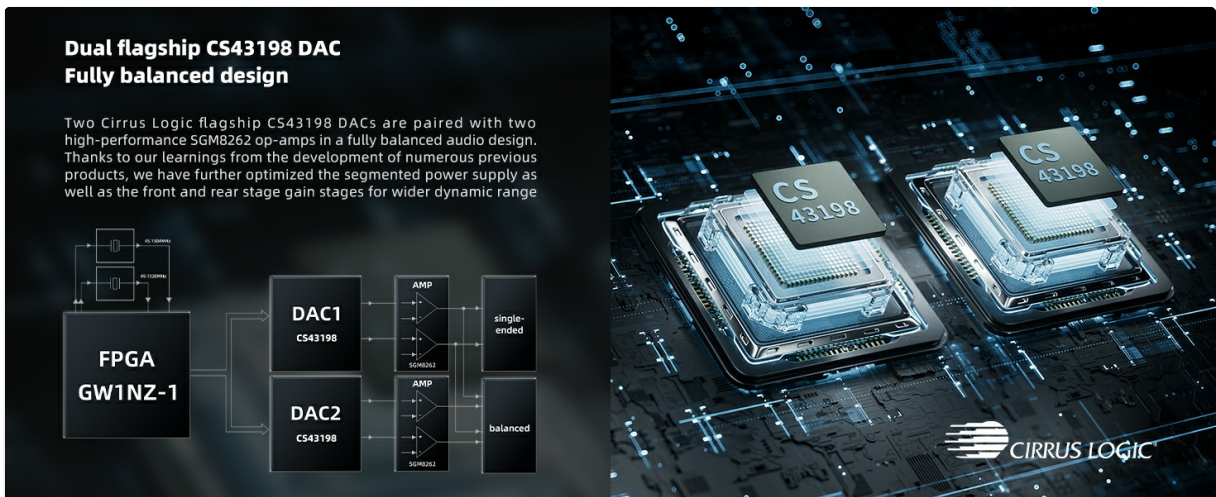


Figure 6.2: Android 13 OS interface.

6.3 Dual Flagship CS43198 DACs with 700mW Output

The JM21 features a fully balanced audio architecture with two Cirrus Logic CS43198 DACs and two high-performance SGM8262 operational amplifiers. This design delivers a balanced output power of up to 700mW + 700mW, providing robust drive for various headphones and exceptional sound quality.



Figure 6.3: Dual DAC architecture.

6.4 Proprietary DAPS (Digital Audio Purification System)

The self-developed DAPS, combined with a fifth-generation FPGA and custom dual femtosecond crystal oscillators, ensures that both local playback and output to an external USB DAC maintain the original audio sampling rate. This guarantees lossless audio quality for a pristine listening experience.



Figure 6.4: DAPS system overview.

6.5 SRC Audio Degradation Solution

The JM21 addresses Sample Rate Conversion (SRC) audio degradation. Whether using FiiO Music, Apple Music, or other third-party apps for local playback, or connecting to an external USB DAC, the audio's original sampling rate remains untouched, preserving lossless sound quality.

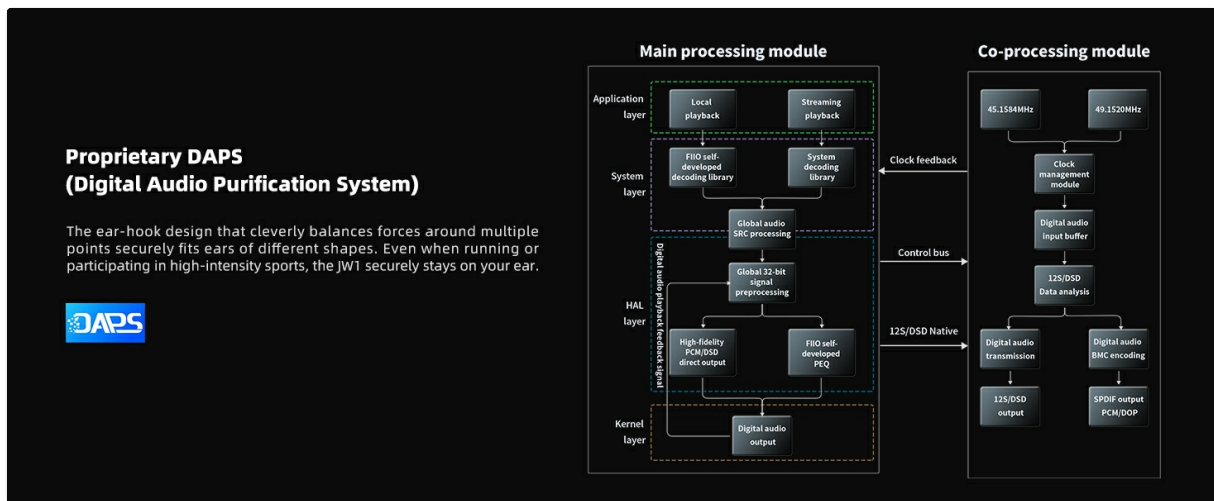


Figure 6.5: Lossless audio experience with various apps.

6.6 Portability and Battery Life

Weighing only 156g and with a thickness of 13mm, the JM21 offers a comfortable one-handed grip. It provides approximately 12.5 hours of battery life, ensuring extended listening sessions without frequent recharging.

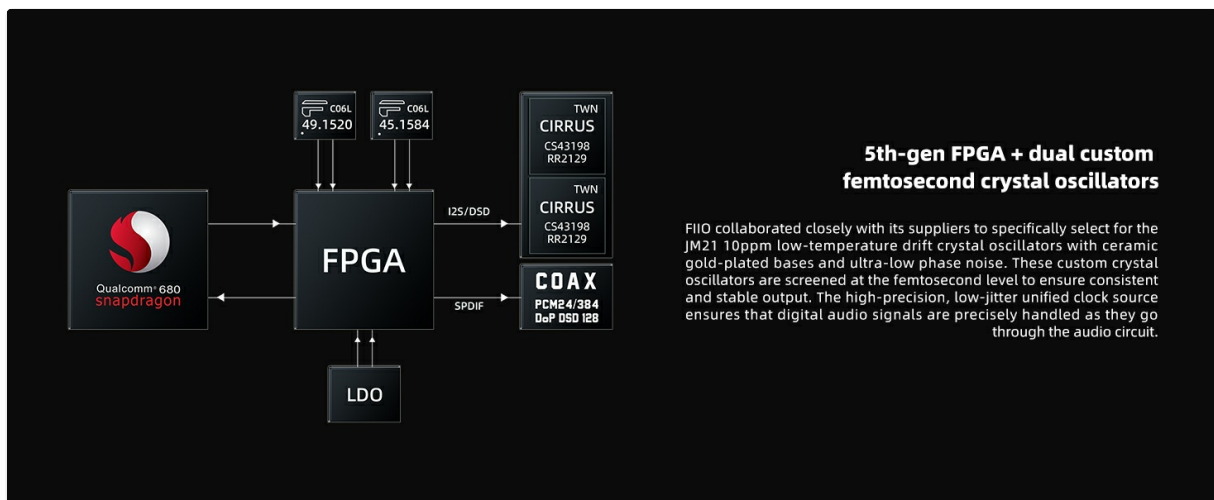


Figure 6.6: Portability and battery life.

6.7 Two-Way Bluetooth Connectivity

The JM21 supports two-way Bluetooth 5.0, allowing it to both transmit and receive Bluetooth signals. This feature ensures stable and high-quality Bluetooth audio connections, supporting codecs like LDAC.

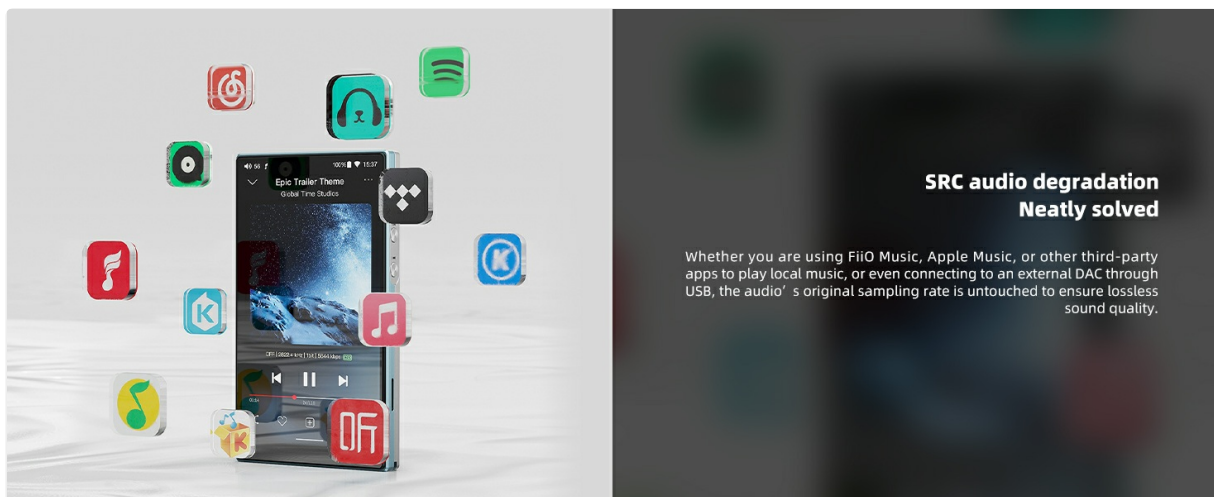


Figure 6.7: Two-way Bluetooth connection.

6.8 Official Product Video

Video 6.1: An overview of the JadeAudio/FiiO JM21 Android 13 Hi-Res Music Player, highlighting its features and design.

7. MAINTENANCE

7.1 Cleaning

To clean the device, use a soft, dry, lint-free cloth. Avoid using abrasive cleaners, solvents, or aerosol sprays, which may damage the screen or finish. Do not expose the device to excessive moisture.

7.2 Software Updates

Periodically check for software updates to ensure your JM21 has the latest features and performance improvements. Connect to Wi-Fi and navigate to the system settings to check for and install available updates.

8. TROUBLESHOOTING

If you encounter issues with your JM21, please refer to the following common solutions:

- **Device not powering on:** Ensure the device is fully charged. Connect it to a power source and try again.
- **No sound output:** Check headphone connections, volume levels, and ensure the correct output mode is selected. For Bluetooth, ensure proper pairing.
- **Apps crashing or slow performance:** Close background applications, clear app caches, or restart the device. Ensure sufficient storage space is available.
- **Connectivity issues (Wi-Fi/Bluetooth):** Restart the device and your router/Bluetooth accessory. Ensure you are within range.
- **MicroSD card not recognized:** Reinsert the card. Ensure the card is formatted correctly and not damaged.

For more detailed troubleshooting or persistent issues, please visit the official JadeAudio/FiiO support website or contact customer service.

9. SPECIFICATIONS

Brand	JadeAudio
Model Name	JM21 (F30511)
Special Feature	Hi-Res Audio, Touch Screen
Connectivity Technology	Bluetooth, Wi-Fi
Memory Storage Capacity	32 GB (expandable via MicroSD)
Color	Black
Screen Size	4.7 Inches
Compatible Devices	Headphones
Display Technology	LCD or IPS
Supported Standards	MP3, AAC, FLAC, WAV (and more)
Battery Average Life	12.5 Hours
Item Weight	0.3 Kilograms (156g)
Manufacturer	JadeAudio

10. WARRANTY AND SUPPORT

10.1 Warranty Information

The JadeAudio/FiiO JM21 comes with a **1-year warranty** from the date of purchase. This warranty covers manufacturing defects and malfunctions under normal use. Please retain your proof of purchase for warranty claims. The warranty does not cover damage caused by misuse, accidents, unauthorized modifications, or normal wear and tear.

10.2 Customer Support

For technical assistance, product inquiries, or warranty service, please contact JadeAudio customer support. You can find contact information and additional resources on the official JadeAudio website:

Visit the [JadeAudio Store on Amazon](#)

Please refer to the included Quick Start Guide and Warranty Card for specific regional support details.