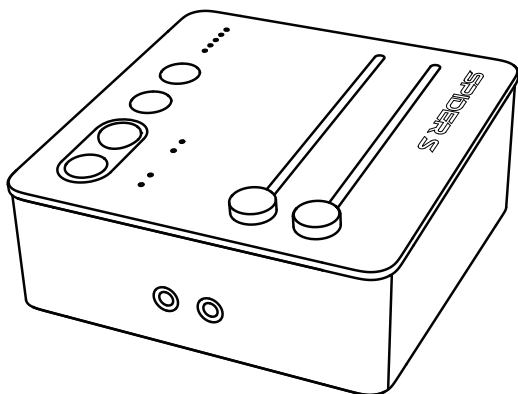




Fosi Audio



C3 User Manual

使用说明书

Version 1.0

Introduction

C3 is Fosi Audio's first AI-powered gaming sound card designed with a deep understanding of what gamers actually need—one that truly listens to the game. Its built-in AI model analyzes in-game audio in real time, intelligently identifying and prioritizing critical sounds. By dynamically enhancing footsteps, C3 helps you detect enemy positions earlier and react faster.

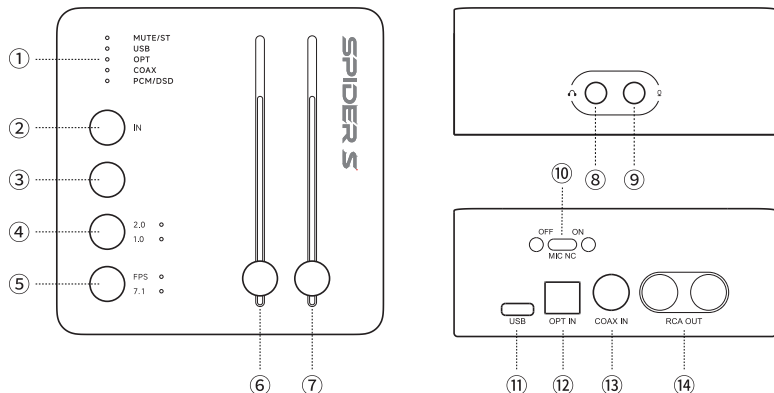
Unlike traditional EQ adjustments, C3's AI processing does not affect non-enhanced frequency bands such as ambient sounds or gunfire. Even in chaotic, high-intensity battlefield scenarios, it delivers more precise positional cues and a clearer, more competitive gaming experience.

On the hardware side, C3 features a Hi-Fi-grade DAC and a carefully engineered analog circuit design, providing improved soundstage separation, higher resolution, lower noise floor, and stronger driving capability. It also integrates hardware-level 7.1 virtual surround sound, creating a more realistic sense of space and immersion.

A dedicated companion app allows gamers to apply custom EQ settings or presets, and to share sound profiles with the community. In addition, C3 supports AI-based voice noise reduction, microphone monitoring, and independent volume control, fully covering everyday gaming and voice-chat needs. The full aluminum alloy chassis offers both durability and a premium, solid feel in hand.

We believe C3 will guide you into a new world of high-quality gaming audio. Thank you for choosing Fosi Audio. We remain committed to delivering premium audio solutions—so every user can enjoy an exceptional listening experience.

Product Overview



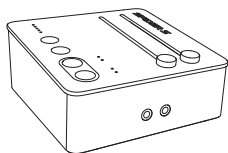
- ① Status Indicators
 - DSD: Blue indicator
 - PCM: Orange indicator
- ② Power / Input Mode Button
 - Short press: Power on
 - Press and hold for 1.5 seconds: Power off
 - Short press: Switch input modes (USB / Optical / Coaxial)
- ③ Mute / Monitoring Control (available in UAC 1.0 mode only)
 - Short press: Enable / disable microphone mute
 - Press and hold for 1.5 seconds: Enable / disable microphone monitoring (sidetone)
- ④ UAC Mode Switch (USB input mode only): Short press: Toggle between UAC 1.0 and UAC 2.0
- ⑤ Sound Mode Button: Short press to cycle through sound modes: PEQ, AI FPS, 7.1 Virtual Surround
- ⑥ Volume Control
- ⑦ Microphone Volume Control
- ⑧ 3.5 mm Single-Ended Headphone Output (Does not support voice communication with a 4-pole headset used alone)
- ⑨ 3.5 mm Microphone Input
- ⑩ AI Voice Noise Reduction Toggle (Available in UAC 1.0 mode only)
- ⑪ USB-C Port (Supports power supply and data input)
- ⑫ Optical Input
- ⑬ Coaxial Input
- ⑭ RCA Output

Specifications

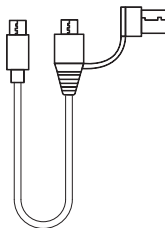
General Specifications		
Chipset	XMOS XU316+CS43131+TPA6120*2	
Maximum Sampling Rate	UAC 2.0	PCM 384kHz-32bit/ DSD256
	UAC 1.0	PCM 48kHz-16bit
	OPT	PCM 192kHz-24bit
	COAX	PCM 192kHz-24bit
Headphone Impedance	16-300Ω	
Input	Coaxial, Optical, USB-C (power & data), 3.5 mm Microphone Input	
Output	3.5 mm Headphone Jack, RCA Line Output	
Firmware Upgrade	Visit https://cc.fosiaudio.com , select C3, and update the firmware online via the web app.	
Input Voltage	DC 5V	
Web App	https://cc.fosiaudio.com	
USB Driver	A driver is required to play DSD files. For other playback, no driver is needed.	
	Windows 7 / 8 / 8.1 / 10 / 11 (driver required) macOS 10.6 or later, Linux (no driver required)	
Audio Performance		

3.5 mm Headphone Output Performance (UAC)	
Rated Output	$L+R \geq 320\text{mW} + 320\text{mW}$ ($32\Omega/\text{THD+N} < 1\%$)
SNR	123 (A-weighted)
THD+N	0.0004% (A-weighted)
Dynamic Range	123dB
Noise Floor	$\leq 3\mu\text{V}$ (A-weighted)
Frequency Response	20Hz-20kHz ($\pm 0.06\text{dB}$)
RCA Line Output Performance (UAC)	
Output Level	$\geq 2\text{V}_{\text{rms}}$
SNR	124 dB (A-weighted)
THD+N	0.0005% (A-weighted)
Dynamic Range	124dB
Noise Floor	$\leq 3\mu\text{V}$ (A-weighted)
Frequency Response	20Hz-20kHz ($\pm 0.06\text{dB}$)

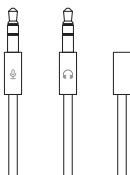
Package Contents



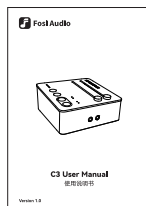
C3



USB-A / USB-C to
USB-C Split Cable



Microphone /
Audio Split Cable



User Manual

Usage Guidelines

1. Do not power on the device until all connections are properly completed.

2. Before playing audio, make sure the volume is set to a low level. Sudden high output levels may damage your speakers or cause hearing discomfort.

Power On / Off Operation

1. Press the power button once to turn on the C3. The USB indicator LED will light up in orange, indicating USB mode. By default, the C3 starts in USB input mode after power-on.

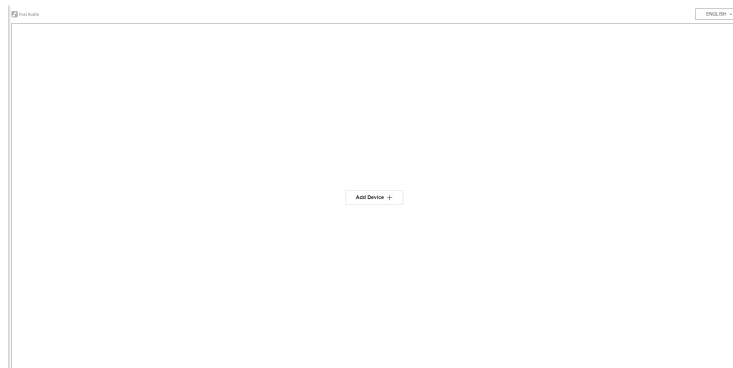
2. While the C3 is operating, press and hold the power button for 1.5 seconds to turn off the device. All indicator LEDs will turn off.

Web-Based App

1. Connect the C3 to your computer using a USB cable and power on the device. And make sure the C3 is set to USB input mode.

2. Open a web browser and visit: <https://cc.fosiaudio.com>

3. Click “Add Device”, select Fosi Audio C3, and you can then access and use the Fosi Audio web-based App.



Note: Supported on Windows and macOS only.

Output Modes

The C3 supports simultaneous headphone output and RCA line output, allowing you to connect headphones, active speakers, or other audio equipment at the same time.

Note:

Both outputs operate in parallel and cannot be enabled or disabled independently.

Sound Modes

The C3 offers multiple sound modes designed to significantly enhance gaming and multimedia experiences.

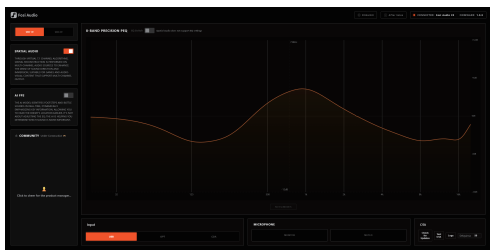
Sound modes can be switched either by pressing the EFFECT button on the device or by selecting the desired mode in the web-based App.

Hardware-Level 7.1 Virtual Surround Sound

For games and movies that support multichannel audio output, the C3 can receive native 7.1 or 5.1 surround signals. Using its spatial audio processing algorithm, the soundstage is reconstructed and rendered as a two-channel output with a 360° virtual surround effect, delivering a more immersive listening experience.

Notes:

- This mode is available only in UAC 1.0 mode.
- When 7.1 Virtual Surround is enabled, all other sound modes (AI FPS, PEQ) are automatically disabled.
- The corresponding indicator LED will light up orange.
- This function is not active when the input signal is stereo (2-channel).



AI FPS

AI FPS is an intelligent audio processing algorithm independently developed by Fosi Audio specifically for FPS games.

By collecting extensive raw in-game audio data across different titles and training proprietary AI models refined over years of development, AI FPS can identify and dynamically enhance critical sound cues, such as footsteps, in real time. This allows players to achieve more accurate positional awareness and a competitive advantage, even in complex and noisy gameplay environments.

Optimized Games

AI FPS has been specially optimized for the following games:

- PUBG
- Counter-Strike 2

More games will be supported through ongoing optimization.

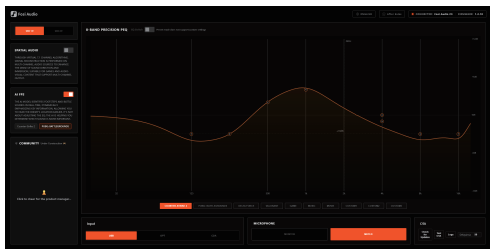
How to Use

- 1.Enable AI FPS in the companion app.
- 2.Select the corresponding game sound profile.
- 3.Launch the game to experience enhanced positional audio and improved gameplay awareness.
- 4.The PUBG AI audio algorithm is enabled by default, Other game modes can be selected via the web-based app.

When AI FPS is active, the corresponding indicator LED on the device will illuminate orange.

Notes

- AI FPS is available only in UAC 1.0 mode.
- When AI FPS is enabled, all other sound modes (7.1 Virtual Surround Sound、PEQ) are automatically disabled.
- For games that have not yet received dedicated optimization, enabling AI FPS does not guarantee a noticeable effect.



PEQ

In addition to the proprietary AI FPS algorithm, the companion App provides multi-band parametric EQ (PEQ) adjustment. Users can freely fine-tune the sound according to personal preference or select from built-in presets. Custom EQ profiles can also be shared within the App community.

To activate PEQ mode, short-press the EFFECT button on the device or enable PEQ in the App.

When PEQ mode is active, the device's indicator LED does not illuminate orange, indicating that PEQ is currently in use.

Notes

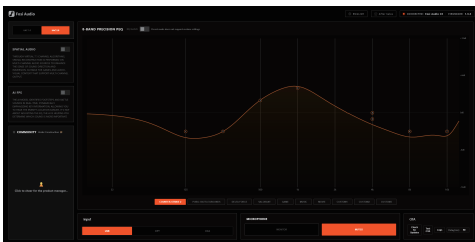
- PEQ is available in UAC 1.0, UAC 2.0, Optical (OPT), and Coaxial (COAX) input modes.
- When PEQ is enabled, all other sound modes (7.1 Virtual Surround Sound、AI FPS) are automatically disabled.



Bypass Mode

When no sound mode indicator is lit on the device and PEQ is disabled in the App, the C3 enters Bypass mode.

In this state, all internal EQ processing and sound effects are bypassed, allowing the original audio signal to pass through unaltered for output.



UAC 2.0 Mode

When the C3 is set to USB input mode, short-press the UAC button to switch to UAC 2.0 mode. The corresponding indicator LED will illuminate orange to indicate that UAC 2.0 is active.

UAC 2.0 mode supports high-resolution audio playback, with formats up to PCM 384 kHz / 32-bit and DSD256.

Notes:

1. When is a driver required on Windows?

On Windows systems, a driver is required when playing DSD audio files.

Exception:

If you use foobar2000 with its built-in WASAPI component to play DSD files, installing an additional driver is not required.

For detailed setup instructions, please visit the official website to download the foobar2000 installation guide.

2. To ensure compatibility with DSD audio playback, the C3 fixes the system volume at maximum, and system-level volume adjustment is disabled. Volume control must be performed using the C3 hardware controls or the music playback software. However, due to differences in system implementations, some operating systems may still allow system volume adjustment when no PCM audio is being played.

UAC 1.0 Mode

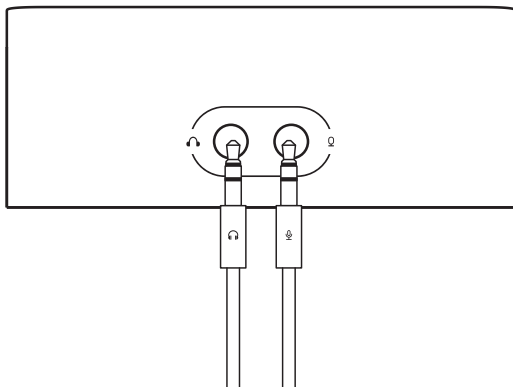
Short-press the UAC button to switch to UAC 1.0 mode. The corresponding indicator LED will illuminate orange when this mode is active.

UAC 1.0 mode supports microphone voice communication, with the output format fixed at PCM 48 kHz / 16-bit. This mode is compatible with gaming devices such as PlayStation 5 and Nintendo Switch.

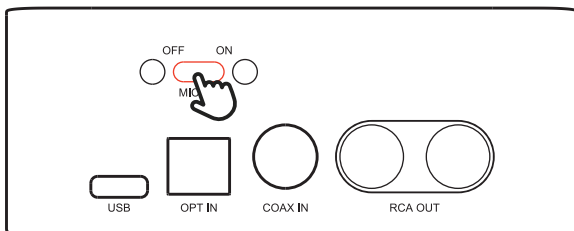
Using the included 2-in-1 audio splitter cable, connect it according to the printed icons to the 3.5 mm headphone output and microphone input on the C3. This allows you to listen to audio and communicate via voice simultaneously.

Note:

A headset with a built-in microphone is required for voice input. The C3 is responsible only for transmitting the voice signal and does not generate microphone input on its own.

**AI Voice Noise Reduction**

AI Voice Noise Reduction is a high-performance AI-based voice processing technology independently developed by Fosi Audio on the XMOS processor architecture. It effectively suppresses sudden environmental noises such as button clicks, keyboard sounds, and footsteps, significantly improving voice clarity during calls and in-game communication. Users can enable AI Voice Noise Reduction via the dedicated toggle switch on the rear panel of the C3.



Note: When this mode is enabled, voice communication latency may increase by up to 50 ms.

Microphone Volume Adjustment

Use the MIC slider to adjust the microphone volume for voice communication.

Microphone Mute

The C3 supports one-touch microphone mute. Short-press the "  " button to instantly mute the local microphone. When muted, the corresponding indicator LED will light up red. Short-press the button again to unmute.



Microphone Monitoring (Sidetone)

The C3 supports microphone monitoring (sidetone). Press and hold the "  " button for 1.5 seconds to enable this function. When activated, the corresponding indicator LED will light up orange, allowing you to monitor your own voice in real time with no perceptible latency. Press and hold the button again for 1.5 seconds to turn off microphone monitoring.

Warranty and Maintenance

Fosi Audio pledges to give a 24-month limited warranty and support from the date of purchase. If you encounter any problem when using our product, please contact our support team at support@fosiaudio.com.

About Us

Fosi Audio designs and builds innovative audio products with all your music in mind. Great sound, simple but elegant designs, high-quality components, and truly useful features are what Fosi Audio pursues. We sincerely hope you can get as much enjoyment from our products as we've had to create them!

Our Website: www.fosiaudio.com

Facebook Page: www.facebook.com/fosiaudioglobal

Youtube Channel: www.youtube.com/@fosiaudio

Whatsapp: +86 13716612254

After-Sales Service and Technical Support Email:

support@fosiaudio.com

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.



Support Page



Contact Us

