Manuals+
Q & A | Deep Search | Upload

MOTU M4

MOTU M4 4x4 USB-C Audio Interface User Manual

Model: M4

1. Introduction

This manual provides detailed instructions for the setup, operation, maintenance, and troubleshooting of your MOTU M4 4x4 USB-C Audio Interface. The MOTU M4 is designed to deliver professional audio quality for recording, mixing, and monitoring, offering versatile connectivity and intuitive controls.
The MOTU M4 features 4 inputs and 4 outputs, including two microphone preamps, hardware monitoring, an LCD screen for metering, and loopback functionality, making it suitable for various audio production environments on Mac, PC, and iOS devices.

Image 1.1: Front perspective view of the MOTU M4 4x4 USB-C Audio Interface.

2. Setup

Follow these steps to set up your MOTU M4 audio interface.

2.1. System Requirements

- **Operating System:** macOS (10.11 or later), Windows (7 or later), iOS (compatible devices).

- **Connectivity:** Available USB-C or USB-A port (with adapter).
- **Software:** Internet connection for driver and software downloads.

2.2. Driver Installation

1. Visit the official MOTU website (motu.com/download) to download the latest drivers for your operating system.
2. Run the installer and follow the on-screen instructions. Restart your computer if prompted.
3. For iOS devices, ensure your device is updated to the latest iOS version. Drivers are typically not required for iOS.

2.3. Hardware Connection

1. Connect the MOTU M4 to your computer using the supplied USB-C cable. The device is bus-powered, so no external power supply is needed.
2. Connect your studio monitors to the **Monitor Out (L/R)** jacks on the rear panel.
3. Plug in your headphones to the headphone jack on the front panel.
4. Connect microphones, instruments, or line-level sources to the appropriate input jacks on the front or rear panel.

Image 2.1: Rear panel connections of the MOTU M4, including USB-C, MIDI In/Out, Line Out, Monitor Out, and Line In.

Image 2.2: The MOTU M4 connected to a computer, demonstrating typical studio setup with microphones and headphones.

3. Operating the MOTU M4

This section details the functions of the MOTU M4's controls and connections.

3.1. Front Panel Controls

Image 3.1: Detailed view of the MOTU M4 front panel controls.

- **IN 1L / IN 2R (Mic/Line/Guitar Inputs):** Combo XLR/TRS jacks for connecting microphones, line-level instruments, or guitars.
- **GAIN Knobs:** Adjust the input level for IN 1L and IN 2R.
- **48V Buttons:** Engage +48V phantom power for condenser microphones on respective inputs.
- **MON Buttons:** Enable direct hardware monitoring for inputs 1-2, allowing you to hear your input signal with zero latency.

- **INPUT / PLAYBACK Mix Knob:** Blends the live input signal with the playback signal from your computer for monitoring.
- **INPUT MONITOR MIX (3-4) Button:** Enables direct hardware monitoring for inputs 3-4 (Line In on the rear panel).
- **LCD Screen:** Displays precise metering for all inputs and outputs.
- **MONITOR Knob:** Controls the main output volume for your studio monitors.
- **Headphone Output & Knob:** 1/4-inch stereo jack and dedicated volume control for headphones.

3.2. Rear Panel Connections

- **Power Button:** Turns the unit on or off.
- **MIDI IN / OUT:** Standard 5-pin DIN connectors for connecting MIDI devices.
- **USB-C:** Connects to your computer or iOS device. Provides power and data.
- **LINE OUT (1-4):** Balanced 1/4-inch TRS outputs for connecting to external gear.
- **MONITOR OUT (L/R):** Balanced 1/4-inch TRS outputs for connecting to your main studio monitors.
- **LINE IN (3-4):** Unbalanced RCA inputs for connecting line-level sources.

3.3. Key Features in Operation

- **Hardware Monitoring:** The MON buttons and INPUT/PLAYBACK Mix knob allow for zero-latency monitoring of your input signals, crucial for recording.
- **Loopback Functionality:** The M4 includes loopback channels, enabling you to route computer output back into your recording software. This is useful for podcasting, live streaming, and capturing computer audio.
- **High-Resolution Audio:** The M4 supports audio resolutions up to 192 kHz, ensuring high-fidelity recordings and playback.

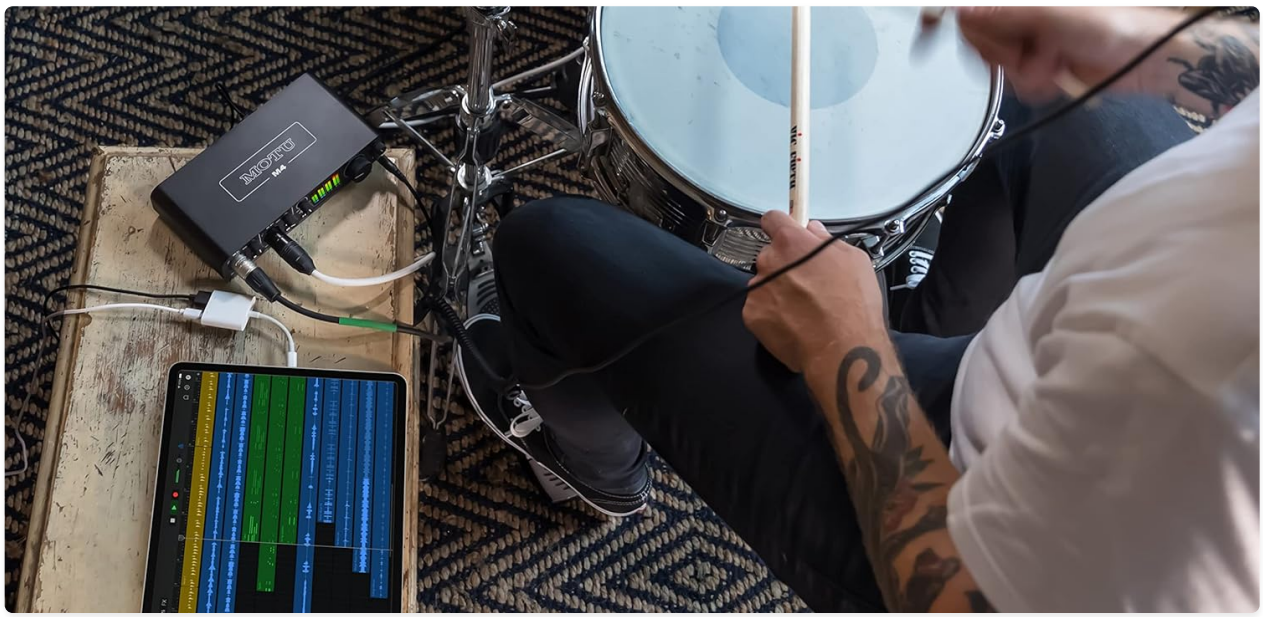


Image 3.2: The MOTU M4 in use with an iPad and drum kit, highlighting its compatibility with iOS devices for mobile recording.

Image 3.3: The MOTU M4 connected to a MIDI keyboard, illustrating its use with various musical instruments.

4. Maintenance

Proper maintenance ensures the longevity and optimal performance of your MOTU M4.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Avoid abrasive cleaners or solvents.
- **Storage:** Store the M4 in a cool, dry place away from direct sunlight and extreme temperatures when not in use.
- **Firmware Updates:** Periodically check the MOTU website for firmware updates. Keeping your device's firmware current can improve performance and add new features.
- **Cable Management:** Ensure all cables are neatly organized and not under strain to prevent damage to connectors and ports.

5. Troubleshooting

If you encounter issues with your MOTU M4, refer to the following common troubleshooting steps.

5.1. No Sound Output

- Check all cable connections (USB, monitors, headphones).
- Ensure the MONITOR and Headphone volume knobs are turned up.
- Verify that the M4 is selected as the audio output device in your computer's sound settings and your Digital Audio Workstation (DAW).
- Confirm that the LCD screen shows output metering activity.

5.2. No Input Signal

- Check input cable connections.
- Adjust the GAIN knobs for the active inputs.
- If using a condenser microphone, ensure +48V phantom power is engaged.
- Verify that the M4 is selected as the audio input device in your computer's sound settings and your DAW.
- Confirm that the LCD screen shows input metering activity.

5.3. Connection Issues

- Try a different USB-C port on your computer.
- Ensure the USB cable is securely connected at both ends.
- Restart your computer and the MOTU M4.
- Reinstall the MOTU M4 drivers.

For further assistance, please refer to the official MOTU support resources.

6. Specifications

Feature	Detail
Brand	MOTU
Compatible Devices	Personal Computer, iOS Devices
Supported Software	Performer Lite, Live Lite production (and any Core Audio/ASIO compatible DAW)
Connectivity Technology	USB-C
Number of Channels	4-in/4-out (8 total channels including loopback)
Microphone Preamps	2 (with +48V phantom power)
Monitoring	Hardware Monitoring, Input/Playback Mix
Display	Full-color LCD metering
Power	USB Bus-powered

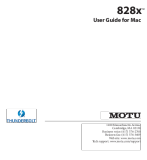
7. Warranty and Support

The MOTU M4 4x4 USB-C Audio Interface comes with a manufacturer's warranty. Please refer to the warranty card included with your product or visit the official MOTU website for detailed warranty terms and conditions. For technical support, driver updates, and additional resources, please visit the official MOTU support page:

MOTU Support Website

Before contacting support, it is recommended to review the troubleshooting section of this manual and the FAQ section on the MOTU support website.

Related Documents - M4

	MOTU 8pre USB User's Guide for Mac OS X Comprehensive user guide for the MOTU 8pre USB audio interface and analog-to-digital converter, covering installation, setup, operation, software configuration, troubleshooting, and safety precautions for Mac OS X users.
	MOTU 8D User Guide: Setup, Features, and Operation Comprehensive user guide for the MOTU 8D digital audio interface, covering setup, hardware and software installation, AVB networking, DSP mixing, effects, and troubleshooting. Learn to connect, configure, and utilize the 8D for professional audio applications.
	MOTU 896HD User's Guide for Macintosh Explore the comprehensive user's guide for the MOTU 896HD, a powerful 19-inch rack-mountable FireWire audio interface designed for Macintosh computers. Learn about its extensive connectivity, high-quality audio performance, and integration with professional audio software.
	MOTU UltraLite-mk4 User Guide: Professional Audio Interface Explore the capabilities of the MOTU UltraLite-mk4, a high-performance 18x22 USB audio interface. This comprehensive user guide details its advanced features, including a 48-channel digital mixer, powerful DSP effects, wireless control, and exceptional audio conversion. Learn how to set up, connect, and operate the UltraLite-mk4 for studio recording, live sound, and more. Discover its extensive I/O options, intuitive web app control, and flexible routing capabilities to enhance your audio production workflow.
	MOTU UltraLite-mk5 User Guide: Setup, Operation, and Specifications Explore the MOTU UltraLite-mk5, an 18x22 USB audio interface and mixer. This guide covers setup, hardware and software installation, front panel and CueMix 5 operation, troubleshooting, and technical specifications for professional audio recording.
	MOTU 828x User Guide: Professional Thunderbolt/USB Audio Interface Manual Detailed user guide for the MOTU 828x, a 28x30 Thunderbolt and USB 2.0 audio interface. Learn about installation, setup, CueMix FX, and advanced features for Mac and Windows.