

MOTU 2408mk3 Overview

This box contains everything you need to turn your computer into a powerful 24-bit/96kHz digital audio workstation. The 2408mk3 provides 8 channels of pristine 96kHz analog recording and playback, combined with 24 channels of ADAT and Tascam digital I/O - the most ever offered in a single rack space audio interface. Connect up to four interfaces to the included PCI-424 card for an expanded system capable of 96 simultaneous active input and output connections at 96kHz.



The 2408mk3 is ideal for both the computer-based studio with no mixing board and more elaborate studios built around a digital mixer of any size.

For the computer-based studio, the included PCI-424 card features CueMix DSP™, a flexible DSP-driven mixing and monitoring matrix that eliminates the need for an external mixer or patch-bay. Connect all of your studio gear, including synths, keyboards, and even effects processors. Then control it all from your desktop with no audible monitoring latency and no processor drain on your computer.

With 24 channels of digital I/O, the 2408 is ideal for connecting your computer to a digital mixer. Both ADAT lightpipe and Tascam TDIF digital connections are supported at any sample rate up to 96kHz.

And here's another 2408mk3 first: built-in video and SMPTE synchronization. Slave your entire workstation directly to video or SMPTE time code with sub-frame accuracy—without a dedicated synchronizer.

The 2408mk3 provides cross-platform compatibility with Macintosh, Windows 98SE/Me/2K/XP and all of your favorite audio software and host-based effects via WDM/ASIO/Sound Manager drivers. Or you can use the included AudioDesk workstation software for Macintosh, with 24-bit recording/editing and 32-bit mixing/processing/mastering.

The 2408mk3 upgrades the award-winning 2408 with many significant improvements including 96kHz support, SMPTE synchronization, support for four interfaces and a 96-channel DSP-driven monitor mixer.



MOTU 2408mk3 Interactive Tour

Point to an item to learn more about it.



Comprehensive Metering
Bright, five-segment LEDs show analog I/O level and internal routing.

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MOTU 2408mk3 Legacy Compatibility

The PCI-424 card included with 2408mk3 core systems is fully compatible with legacy MOTU interfaces originally designed for the PCI-324 card. Connect any MOTU PCI interface, including the 2408, 2408mkII, 1296, 1224, 24i, and 308. Mix and match new and legacy interfaces as you please.



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MOTU 2408mk3 CueMix DSP

The PCI-424 card features CuemixDSP™, a powerful processor dedicated to creating a custom tailored monitor mix of up to 96 channels of 96kHz audio. Because the mixing takes place on the card itself, instead of making the round trip from the PCI bus to the host processor, the 2408mk3 system provides the same near-zero latency performance as today's latest digital mixers. CueMix DSP completely eliminates the buffer latency associated with monitoring on host-based systems. Because the DSP is mixing for you, your computer's CPU is free for other tasks.

Cuemix DSP is the most flexible Cuemix ever, allowing you to mix multiple channels into multiple mix busses or directly assigned outputs. Manage your monitor mix with the enhanced Cuemix Console software included with the 2408mk3.

Cuemix console greatly now provides independent level and pan controls for each input on every mix. Also, CuemixDSP does not limit you to four stereo mixes. You can configure a unique mix for every physical stereo output you have available. This means you can have up to 48 separate stereo mixes on a 96 output system.

Because the mixing takes place on the PCI-424 card, any MOTU Audiowire interface, including the original 2408, can take advantage of Cuemix's flexible monitoring.



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MOTU 2408mk3 Expansion

A core 2408mk3 system provides 24 inputs and outputs, but it also offers the most expansion ever offered in a single PCI card. Up to four interfaces can be connected to the PCI-424 for up to 96 channels of simultaneous input and output at sample rates up to 96kHz.

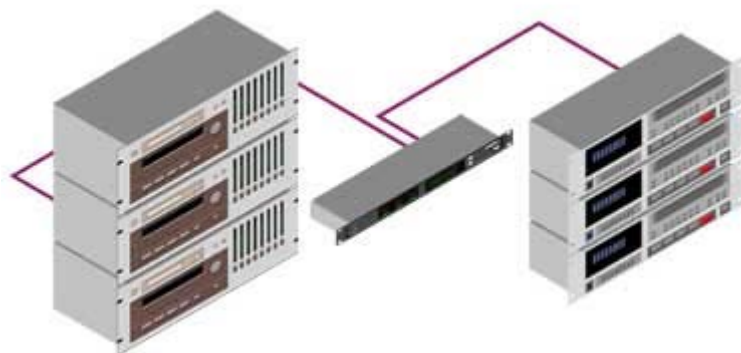
Think about the possibilities: you could connect 12 ADATs and 12 DA-88s to your computer, along with 32 channels of analog I/O, and simultaneously record and play as many tracks of audio as your computer allows. If you have a digital mixer, the 2408mk3 provides up to 96 channels of digital I/O at 44.1 or 48kHz, and 48 channels at 88.2 or 96kHz.



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MOTU 2408mk3 MDM Connectivity

The 2408mk3 also operates as a stand-alone audio format converter. You can convert audio from any one of its formats to any other, in banks of 8 channels. For example, if you connect three Alesis recorders and three Tascam recorders, you can digitally transfer 24 channels from one format to the other in one pass.



If you expand your 2408mk3 system to four 2408mk3 I/O rack units, you can simultaneously connect 96 channels of ADAT optical, 96 channels of Tascam TDIF, and then transfer 96 channels of material in a single pass!

The 2408mk3 makes the distinction between the two digital I/O formats more transparent than ever; you can freely work with either format.

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MOTU 2408mk3 Digital Mixer Integration

Your digital mixer is an ideal companion for the 2408mk3 with its ability to integrate 24 channels of digital I/O with a single unit.

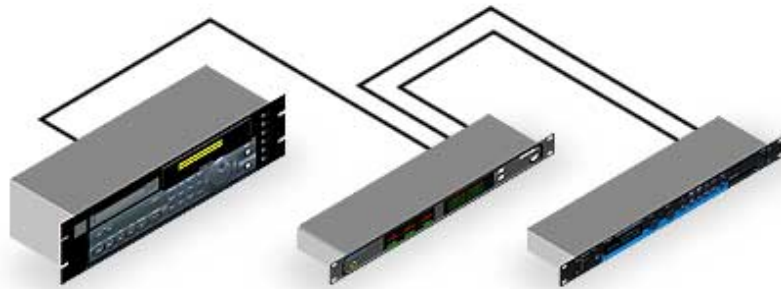
For example, the Yamaha DM2000 provides an automated moving fader interface, additional real time digital audio effects, mic preamps and DSP power. Connect the DM2000 to your 2408mk3, and now you have 24 channels of pristine digital I/O between the mixer and your computer. If you need more channels, you can add additional 2408mk3 interfaces to support digital transfers as large as 96 channels at 48kHz or 48 channels at 96kHz. The 2408mk3 is the perfect bridge between your digital mixer and your computer audio workstation, and it supports both the ADAT optical lightpipe format and Tascam's TDIF format.



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MOTU 2408mk3 S/PDIF

The 2408mk3 provides S/PDIF digital I/O so that you can exchange digital audio with a wide variety of other devices via this industry standard format. But the 2408mk3 takes S/PDIF one step further than most other systems by providing an extra S/PDIF stereo output of the main mix. You can use this extra stereo digital output for whatever you want. For example, you can leave it connected to a DAT machine so that at any time you can record a stereo mix of the project you are working on - without having to swap cables with another S/PDIF device that may be connected.



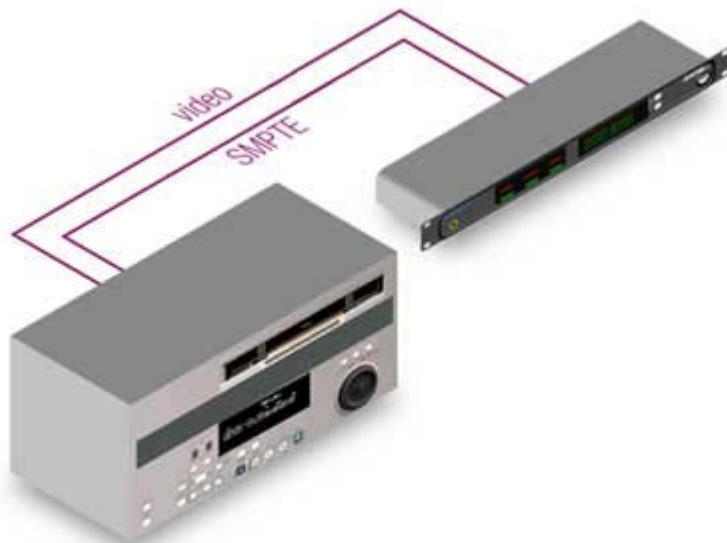
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MOTU 2408mk3 SMPTE and Word Clock

The 2408mk3 is the first audio interface to provide on-board video and SMPTE time code synchronization features. These features allow you to slave your 2408mk3 system to video, SMPTE time code or both - without a dedicated synchronizer. The PCI-424 card provides a DSP-driven phase-lock engine with sophisticated filtering that provides fast lockup times and sub-frame accuracy.

The 2408mk3 interface provides a dedicated RCA timecode input and output, but with the PCI-424 on-board DSP, any analog input can be a SMPTE input and time code can be sent to any output – analog or digital. The included software also provides a complete set of tools to generate SMPTE for striping, regenerating or slaving to other devices to your computer. Resolve your 2408mk3 system to NTSC video, PAL/SECAM or blackburst. Like Cuemix DSP, the synchronization features are cross-platform and compatible with your favorite audio sequencer software.

With the 2408mk3, you have everything you need to sync to SMPTE and video.



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MOTU 2408mk3 Feature Summary



2408mk3 Features

- 8 analog inputs/outputs with 24-bit, 96kHz converters on balanced/unbalanced 1/4" TRS jacks.
- Three banks of ADAT optical provide 24 channels of ADAT optical input/output at 44.1/48kHz
- 12 channels at 88.2/96kHz.
- Three banks of Tascam TDIF provide 24 channels of TDIF (Tascam digital) input/output
- 12 channels at 88.2/96kHz.
- Stereo S/PDIF in/out (with an extra stereo out).
- Provides stand-alone format conversion
- transfer any format to any other, up to 24 channels at a time.

PCI-424 Features

- Expandable to 96 active inputs/outputs at sample rates up to 96kHz.
- Drivers for Mac & PC
- 24 simultaneous inputs/outputs for all popular Macintosh and Windows audio software (ASIO/WDM/GSIF/MAS/Sound Manager).
- 100% compatible with all host-based effects processing in today's popular audio programs.
- CueMix DSP
- this on-board mixing and monitoring matrix allows you to mix up to 96 channels of 96kHz audio with the same near-zero latency as today's latest digital mixers and no processor load.
- Resolve your entire system directly to word clock or SMPTE time code with sub-frame accuracy. No separate SMPTE synchronizer required.
- Includes AudioDesk full-featured, sample-accurate workstation software for MacOS 9 with recording, editing, mixing, real-time 32-bit effects processing & sample-accurate sync.
- Provides word clock and ADAT Sync – achieves sample-accurate digital transfers between digital tape decks and the computer.

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MOTU 2408mk3 Specifications

- 8 analog inputs/outputs with 24-bit, 96kHz converters on balanced/unbalanced 1/4" TRS connectors
- 108dB S/N ratio (A-weighted)
- 24 channels of ADAT optical input/output
- 24 channels of TDIF (Tascam digital) input/output
- 2 channels of S/PDIF in and 4 channels out
- 16, 20 and 24-bit recording at 44.1, 48, 88.2 and 96kHz kHz
- ADAT sync input on PCI-424 card
- Word clock in and out
- Includes cross-platform PCI-424 card

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MOTU 2408mk3 FAQ

Can I use Cuemix DSP for effects processing?

No. CueMix DSP is dedicated to monitor mixing. Host-based effects such as those included with Digital Performer are designed to run on your computer's CPU. However, Cuemix DSP allows you to integrate external effects processors with the same near-zero latency performance as a dedicated digital mixer. You can also combine Cuemix DSP monitoring with signals processed by host-based effects.

Can I use my original 2408 with the PCI-424 card included with the 2408mk3 core system?

Yes, older legacy MOTU Audiowire interfaces (2408, 2408mkII, 1224, 308, 24i, 1296) are fully compatible with the PCI-424. Even the new Cuemix DSP and synchronization features can be used with legacy interfaces.

Can I buy a 2408mk3 expander to use with my PCI-324 card?

No, the 2408mk3 only works with the latest generation design of the PCI-424.

Can I use the digital I/O on the 2408mk3 with my 96kHz digital mixer?

Yes. The 2408mk3 supports the TDIF and lightpipe 96kHz standards which halve the number of channels in order to accommodate the additional bandwidth. Therefore, a 2408mk3 supports up to 12 channels of 96kHz digital audio over TDIF and lightpipe.

Can I still use my MTP-AV or Digital Timepiece with the PCI-424?

Yes, use the sample accurate ADAT sync connector on the PCI-424.

What operating systems are supported by the 2408mk3?

MacOS 9, Windows 98SE, 2K, Me, XP

Does the 2408mk3 support OS X?

Yes! Download the drivers from the downloads section of the MOTU web site.

What is the difference between a core system and an expander?

A core system includes the PCI-424 card and Audiodesk software.

Can I plug my MOTU 828 or 896 Firewire interfaces into the PCI-424 card?

No. Like the PCI-324, the PCI-424 is an Audiowire interface only.

MOTU 2408mk3 Compatibility

Great performance with your favorite software

Regardless of which software you use, the 2408's unique and efficient driver design produces optimum performance.

Mac OS X Software CoreAudio

AudioDesk	x
Cubase	x
Digital Performer	x
GarageBand	x
Live	x
Logic	x
Nuendo	x
Peak	x
Reason	x
Soundtrack Pro	x

Mac OS 9 Software ASIO MAS Sound Manager

AudioDesk		x	
Cubase	x		
Digital Performer	x	x	x
Live	x		x
Logic	x		
Nuendo	x		
Peak	x		x
Reason	x		

Windows Software ASIO WDM GSIF

Acid	x
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CakeWalk		x	
Cool Edit Pro		x	
Cubase	x		
Gigastudio			x
Live	x		
Logic	x		
Nuendo	x		
Reason	x		
Samplitude		x	
Sonar	x	x	
Sound Forge		x	
Vegas		x	

MOTU 2408mk3 Tech Notes

<http://www.motu.com/products/pciaudio/2408/technotes.html>