



matrox MXO2™



matrox MXO2 Rack™

## What's new in Matrox MXO2 release 1.3 and 1.3.1

### Matrox MXO2 release 1.3 features:

- Scaling on the input for capture
- Improved support for 720p workflows
- ProRes 422 720p capture on a MacBook Pro
- Improved support for 1080p workflows
- Support for 1080p at 23.98 fps via the HDMI output
- Preservation of 23.98 fps when cross converting from 720 to 1080
- RGB component output
- Apple Xserve support
- Matrox MXO2 Rack support

### Matrox MXO2 release 1.3.1 features:

- HD-SDI closed captioning support
- RED workflow support

### Scaling on the input for capture

Matrox MXO2 now offers even more flexibility. With release 1.3, you can choose to capture to a different format than your source video. MXO2 will use high-quality 10-bit hardware scaling to either upscale, downscale, or cross-convert to the desired capture format. Through the Matrox Control Panel, you identify the input source then select the resolution in Final Cut Pro that you would like to capture. Matrox MXO2 will scale prior to capturing to your codec of choice. The scaled video can be monitored on all Matrox MXO2 outputs during capture. Options for 4:3 and 16:9 source input from SD sources are available. The following conversions are supported on capture (frame rates must match).

SD to 720 (not applicable to HDMI input)  
SD to 1080 (not applicable to HDMI input)  
720 to 1080  
720 to SD  
1080 to 720  
1080 to SD

You can benefit from MXO2's high-quality 10-bit hardware scaling to conform all your various source footage to a single format up front, before you begin to edit. Currently when you mix formats you spend time rendering your timeline to conform your footage to a single format to share with other editors, send for final color grading, or deliver to your client. With MXO2's ability to scale the input during capture, you save time bypassing the usual rendering step. This feature is also useful for converting SD archive footage for HD broadcast.

### Improved support for 720p workflows

Capture – Edit – Deliver at 23.98! Matrox MXO2 now supports capturing 720p at 23.98 fps video from a 720p at 59.94 fps source. If you shoot at 720p at 23.98 fps, you'll now be able to capture and edit your footage at that frame rate, saving disk space. Cameras that support 720p at 23.98 fps transport the video at 59.94 fps despite having only 23.98 original frames. The rest of the frames are redundant frames. Previously, MXO2 users had to capture all frames including the redundant ones, using up storage space. Now MXO2 can capture just the 23.98 original frames.



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### ProRes 422 720p capture on a MacBook Pro

Capture full raster 4:2:2 720p HD on a MacBook Pro! Matrox MXO2 now supports ProRes 422 when capturing to 720p at 23.98 fps in real time on a MacBook Pro with a 2.4 GHz or faster Core2 Duo CPU.

### Improved support for 1080p workflows

Capture – Edit – Deliver at 23.98! Matrox MXO2 now supports direct capture of 1080p video at 23.98 fps from cameras and devices. If your camera outputs 1080p at 23.98 fps, you'll now be able to capture and edit your footage at that frame rate.

### Support for 1080p at 23.98 fps via the HDMI output

See your footage on your HDMI monitor in the way you actually shot it! If your vision is the “film look”, you can now monitor on an inexpensive HDMI display at 23.98 fps.

### Preservation of 23.98 fps when cross converting from 720 to 1080

Matrox MXO2 now provides more cross conversion flexibility. You can convert 720 to 1080 and maintain the original 23.98 fps frame rate.

### RGB component output

RGB component video output is now supported so you can preview your work on an RGB monitor. The Matrox MXO2 Control Panel lets you choose to output RGB or YUV.

### Apple Xserve support

Matrox MXO2 can now be used with the Apple Xserve systems commonly used in OB vans, broadcast environments, and networked facilities.

### Matrox MXO2 Rack support

Matrox MXO2 Rack is a new 2RU-sized unit designed for broadcast news operations, OB vans, and other environments where heavy-duty, rackmountable equipment; more audio inputs and outputs; and genlock loop through are required.

### HD-SDI closed captioning support

You'll no longer need to spend time and money recreating HD captioning data that is typically lost when you edit projects in Final Cut Pro. In release 1.3.1, Matrox MXO2 offers a unique patent pending workflow to capture, playback, and preserve closed captioning data while editing projects in Final Cut Pro. Nothing is destroyed.

The workflow is as follows:

**Capture** - If you have an HD-SDI video source that contains digital closed captioning data in the VANC (vertical ancillary data space), Matrox MXO2 lets you capture the closed captioning data along with the video using MXO2's HD-SDI input.

**Edit** – Matrox MXO2 will preserve your closed captioning data throughout the editing process. You can use Final Cut Pro to trim, add effects such as color correction, and add titles or credits while maintaining your closed captioning data. With Matrox MXO2, your original closed captioning data is not destroyed.

**Output** - When using Matrox MXO2's HD SDI output for playback, you can choose to maintain and output the digital closed captioning data that was captured using MXO2. The closed captioning data is inserted into your video's VANC.

Even if you need to scale on capture or output, you can count on Matrox MXO2 to preserve your closed captioning data throughout your production.



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In addition, Matrox has worked with CPC, the closed captioning software leader, to develop an innovative solution that allows the MacCaption HD software to encode and decode HD captions to and from HD decks using Matrox MXO2. You can save time and money by encoding HD captions directly on your video editing system, without any additional hardware and with zero generation loss. It is no longer necessary to send HD master tapes to a separate deck-to-deck hardware caption encoding system. Now, instead of hiring a closed captioning service, you can bill your customers for the extra value you give them in producing their final project with closed captioning included. For more information, visit [www.cpcweb.com](http://www.cpcweb.com).

### **RED workflow support**

Matrox MXO2 can benefit RED users on location and in the post suite.

#### **Capture, monitor, and playback on set**

Matrox MXO2 provides an inexpensive way to manage your RED shoots. It can easily be taken on set and connected to the HD 720p SDI output of the RED camera. You can then capture while shooting; you can monitor on an HD SDI or HDMI monitor while shooting; and you can instantly playback the shot. This saves time and production costs by allowing your DP to instantly approve shots and scenes. At the end of the day, you can quickly create SD and HD dailies or rushes taking advantage of MXO2's realtime 10-bit hardware scaling feature.

#### **Edit, monitor, and output in post**

Back in the post suite, you can use Matrox MXO2 to work with 1K and 2K RED timelines in either 16:9 or 2:1 aspect ratio, and output to SD, 720, or 1080 via MXO2's realtime 10-bit hardware scaling feature. This lets you use HD or SD monitoring equipment you may already own, or you can get great results using inexpensive HDMI monitors. Matrox MXO2 lets you adjust and control an HDMI monitor exactly like you would a broadcast monitor. Controls for hue, chroma, contrast, brightness, and blue-only are provided. This unique control gives you accurate color representation so that you can use your HDMI monitor with Apple Color to begin the first phase of color correction. Matrox MXO2 also makes it easy for you to output EDLs, dailies, and rushes in record time.