

Matrox Axio

Release Notes
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Your notes

About these release notes

These release notes provide a list of new features and other important last-minute information applicable to Matrox Axio.utils version 3.1. This information supplements the *Matrox Axio Installation and User Guide* (September 12, 2007) and the Matrox Axio Readme.

What's new in this release?

Matrox Axio.utils 3.1 is recommended for all Matrox Axio users running Adobe Premiere Pro CS3 3.1, and includes the following new features:

- Improved overall stability.
- Support for the Canon HDV 25f mode.
- Support for playing back and exporting generic OP1a *.mxf* files in MPEG-2 I-frame, MPEG-2 IBP, and DVCPRO HD formats. This feature provides interoperability between Matrox Axio and the Omneon MediaDeck and Spectrum media servers, and MediaGrid active storage systems. For details on how to export your Adobe Premiere Pro sequence to a generic OP1a *.mxf* file, see “[Exporting to a generic OP1a .mxf file](#)” on page 2.
- Support for capturing up to eight embedded SDI audio streams on Axio LE. The audio can be captured to four stereo or eight mono *.wav* files.
- To improve performance when capturing embedded SDI audio on Axio LE, you can select an option to process only one audio pair for the capture. For example, if you experience dropped frames when capturing embedded SDI audio on Axio LE, you can set your audio source to **SDI (embedded audio) - One pair only**. You can then select any one of the four available SDI audio pairs to be captured.

Installing Matrox Axio.utils version 3.1


Matrox Axio.utils 3.1 is provided as an update to Matrox Axio.utils 3.0 only. Therefore, in order to update to Axio.utils 3.1, you must have Axio.utils 3.0 installed on your computer.

The Axio.utils 3.1 Updater will update your Axio.utils 3.0 software to version 3.1, including the Matrox WYSIWYG plug-ins for supported programs that are presently installed on your system. If you later want to install additional Matrox WYSIWYG plug-ins, you can run the Matrox WYSIWYG Plug-ins Setup program provided with the Matrox Axio.utils 3.1 Updater. You can download the Matrox Axio.utils 3.1 Updater from the Matrox Axio Support website at www.matrox.com/video/support.



Note If you choose to uninstall Axio.utils 3.1 and later want to re-install it, you'll have to first install Axio.utils 3.0 and then update to Axio.utils 3.1.

If you have problems updating Adobe Premiere Pro CS3

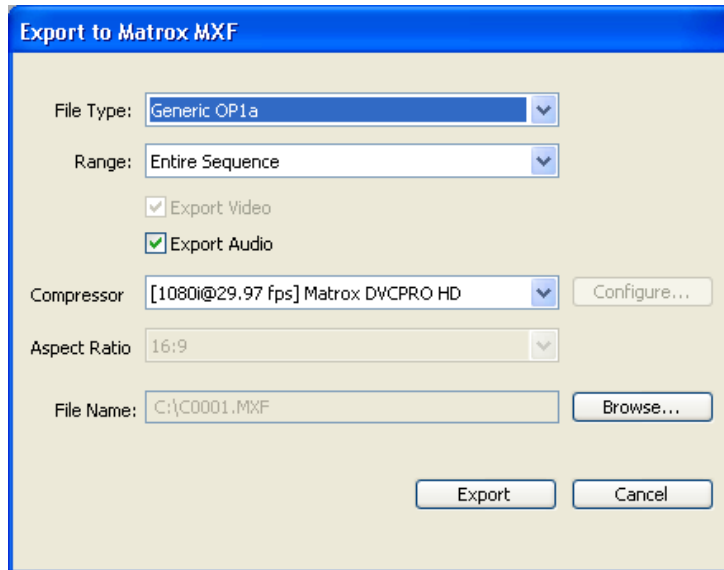
If you try to update Adobe Premiere Pro CS3 to a later version with Matrox Axio.util installed on your computer, you may receive a message that the update was unsuccessful. If this happens, you should temporarily stop the Matrox WYSIWYG plug-ins. To do this, right-click the  icon on your Windows taskbar and choose **Exit**. You can then run the Adobe Premiere Pro updater again. To restart the Matrox WYSIWYG plug-ins, choose **Start > All Programs > Matrox Axio.util > Matrox WYSIWYG Control Panel**.

If the Premiere Pro update is still unsuccessful after you've stopped the Matrox WYSIWYG plug-ins, you'll have to uninstall Matrox Axio.util, update your Adobe Premiere Pro CS3, and then re-install Matrox Axio.util.

Exporting to a generic OP1a .mxf file

You can export your Adobe Premiere Pro sequence to a generic OP1a *.mxf* file as follows:

- 1 Choose **File > Export > Matrox MXF**.



- 2 From the **File Type** list, select **Generic OP1a**.



Note Exporting to a generic OP1a *.mxf* file is supported only for NTSC, PAL, 720p @ 50 fps and 59.94 fps, and 1080i projects.

- 3 From the **Range** list, select **Entire Sequence** to export your entire Premiere Pro sequence, or **Work Area Bar** to export only the area selected by the work area bar.
- 4 Select **Export Audio** if you want to export both video and audio (the **Export Video** option is always selected because Matrox Axio does not support audio-only exports to an *.mx*f file).
- 5 From the **Compressor** list, select the compression format you want for the export:




Note The SD and HD formats available depend on your project's video format. The format is shown in brackets beside the codec name, such as [NTSC]. Only supported formats will appear in the **Compressor** list.

- **Matrox DVCPRO HD** Renders video to DVCPRO HD format (supported only for 1080i projects).
- **Matrox MXF MPEG-2** Renders video to MPEG-2 I-frame or IBP format using a selected MPEG-2 profile and data rate.

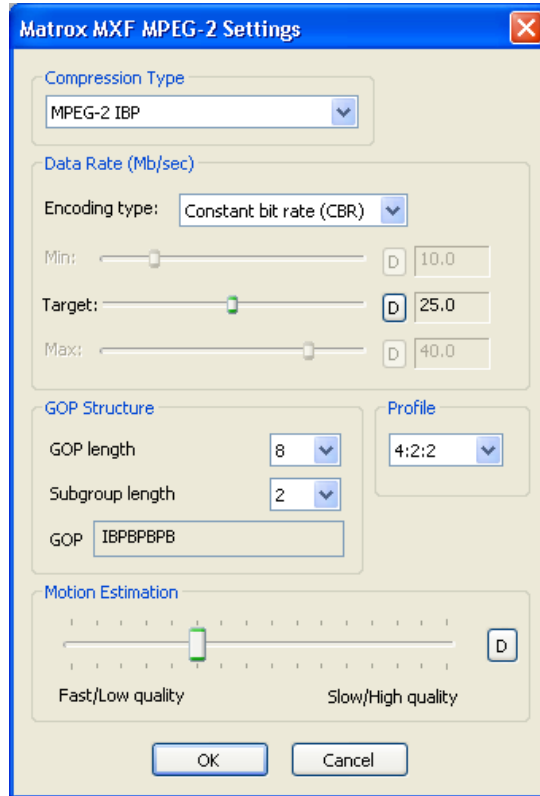


Note If you're exporting an NTSC or PAL project, the compressor will be set to **Matrox MXF MPEG-2**.

- 6 If you selected **Matrox MXF MPEG-2**, click the **Configure** button and from the displayed dialog box, select the settings you want for the video compression as explained in [“Selecting your MXF MPEG-2 settings”](#) on page 4.
 - 7 From the **Aspect Ratio** list, select the aspect ratio you want for your exported video:
 - **4:3** Exports video to the standard TV screen format. If you're downconverting HD video to NTSC or PAL, the video will be exported in letterbox mode.
 - **16:9** Exports video to the widescreen 16:9 format. If you're downconverting HD video to NTSC or PAL, the video will be exported as anamorphic (horizontally compressed 4:3) video.
-  **Note** When exporting to an HD format, the aspect ratio is set to 16:9.
- 8 Click the **Browse** button to select the drive, folder, and file name for the export.
 - 9 Click **Export** to perform the export. If you want to use the exported files in your Adobe Premiere Pro project, you will need to import the *.mx*f files manually to the **Project** panel.

Selecting your MXF MPEG-2 settings

When you select the Matrox MXF MPEG-2 format to export video to a generic OP1a *.mxf* file, click the **Configure** button to display a dialog box similar to the following:



- 1 Under **Compression Type**, select one of the following:
 - **MPEG-2 I-frame** Renders video to MPEG-2 intra-frame format.
 - **MPEG-2 IBP** Renders video to MPEG-2 IBP format.
- 2 Under **Data Rate (Mb/sec)**, you can select the encoding type and data rate for the MPEG-2 compression.
 - **Encoding type** From this list, select one of the following:
 - **Constant bit rate (CBR)** Video is compressed at your selected target data rate, which is useful when you need to limit or predict the size of your *.mxf* file. However, if your video is very complex (such as scenes with many colors or sharp edges), you'll need to select a high data rate to avoid having frames of very blocky video in your file.

- **Variable bit rate (VBR)** Video is compressed at varying data rates based on the complexity of the video. The target data rate you select is used as the average data rate for the compression.
- **Min, Target, and Max sliders** Use these sliders to select your desired data rate. The higher the target data rate you select, the better the video quality will be. Only the **Target** slider will be available if you selected **Constant bit rate (CBR)**. If you selected **Variable bit rate (VBR)**, all three sliders will be available so that you can set the minimum, target, and maximum data rates for the video compression.



Note The maximum target data rate varies for SD and HD video and depends on your selected encoding type and MPEG-2 profile (see below).

- 3 Under **GOP Structure**, you can customize the GOP structure for the MPEG-2 IBP compression as follows:
 - **GOP length** Determines the number of frames in the GOP (Group of Pictures).
 - **Subgroup length** Determines the subgroup length of B-frames and P-frames in the GOP, after the initial I-frame. For example, a subgroup of 3 appears as “BBP,” and a subgroup of 2 appears as “BP.” The available subgroup lengths depend on your selected GOP length.
- 4 Under **Profile**, select one of the following MPEG-2 profiles:
 - **4:2:0** This profile uses 4:2:0 luminance/chrominance sampling and is suitable for broadcast transmission and distribution on DVD.
 - **4:2:2** This profile uses 4:2:2 luminance/chrominance sampling and is suitable for high-quality distribution and archiving.
- 5 Under **Motion Estimation**, drag the slider to adjust the quality of the motion estimation used for the video compression. The default setting gives good results for most video. However, if you have a lot of fast motion in your video, such as fast-paced sports footage, you can get better results by dragging the slider to the right (towards **Slow/High quality**). This improves the quality of the motion estimation, but decreases the speed of the video compression. Alternately, if you have mostly slow-paced video, you may want to drag the slider to the left (towards **Fast/Low quality**) to decrease the quality of the motion estimation and speed up the video compression.
- 6 Click **OK** to save your settings.

Exporting to tape using Pipeline ProVTR RS-422 device control

The Pipeline ProVTR plug-in for Adobe Premiere Pro lets you control your VTR while performing export to tape operations. For information about setting up Pipeline ProVTR RS-422 device control, see your *Pipeline ProVTR User Guide*.



Note If Pipeline ProVTR is not bundled with your Matrox Axio system, you can purchase Pipeline ProVTR directly from Pipeline Digital, Inc.



To export your sequence to tape using ProVTR RS-422 device control:

- 1 Open the project and activate the sequence you want to export to tape.
- 2 Make sure your VTR is properly connected, turned on, and set to Remote mode.
- 3 Load a striped recordable tape into your VTR.
- 4 Choose **File > Capture** or press F5.
- 5 Click the **Settings** tab, and under **Device Control**, select **ProVTR 7.1** from the **Devices** list.
- 6 Click **Options** and make sure that the ProVTR setup options are correctly set as explained in your *Pipeline ProVTR User Guide*.
- 7 Click **OK** to close the **Options** dialog box, then close the **Capture** panel.
- 8 Select the sequence you want to export in the Timeline panel and choose **File > Export > Export to Tape**.

For more details about exporting your sequence to tape using Pipeline ProVTR device control, see your *Pipeline ProVTR User Guide*.



Important Before disconnecting your device, make sure that you turn off the ProVTR device control by setting the device control to **None** or selecting another type of device control. As well, make sure that your device is properly connected before you select the ProVTR device control. Otherwise, you won't be able to access the **File** menu in Adobe Premiere Pro.

Issues when working with long or complex projects

When working with long or complex projects in Adobe Premiere Pro, there are two types of issues that may occur: sluggish behavior of the user interface and low-memory issues. The following sections describe these issues and give some suggestions on how to help avoid them.

Sluggish user interface issues

While editing in Adobe Premiere Pro, such as when trimming clips or adjusting controls for a Matrox color correction, the user interface may be slow to respond and you may get the “Updating Timeline” message. For example, while trimming or scrubbing a clip or selecting new colors in the color balance graph, the video preview may freeze or be slow to update. Once this happens, you may have to wait up to two minutes for the video preview to resume.

Low-memory issues

There may also be times when your system is running low on memory. Each process in Windows XP can use a maximum of only 2 GB of memory, regardless of the amount of physical memory (RAM) you have in your computer. This means that whenever Adobe Premiere Pro needs to perform a very memory-intensive operation, there’s a chance that you’ll encounter one or more of the following symptoms of low memory:

- Non-realtime segments of the timeline are output as red video. This occurs when you preview clips, export clips to disk, or export clips to tape.
- You get errors or Adobe Premiere Pro crashes when you do any of the following:
 - Open a project, start Adobe Title Designer, start the Project Manager, or open the **Capture** or **Trim** panel.
 - Copy and paste large sections of a sequence.
 - Start an export to disk or a loop playback after a long editing session.

If you experience any of the above low-memory issues and you’re still able to work in Adobe Premiere Pro, immediately save your project or choose **File > Save As** to save a copy of your project, and then quit Adobe Premiere Pro.

Suggestions for dealing with sluggish user interface and low-memory issues

Here are some suggestions to help avoid sluggish user interface and low-memory issues:

- In Windows Control Panel, double-click the **System** icon, click the **Advanced** tab, click **Settings** under **Startup and Recovery**, and then click **Edit**. Depending on your Axio hardware, make sure that the following text is present in your *boot.ini* file on the line directly below [operating systems]:

For Axio HD or SD:
/3GB /USERVA=2500

For Axio LE:
/3GB /USERVA=2700

If needed, update the text or add it to the end of the line and save the file.



Note If you're still experiencing low-memory issues on an Axio HD or SD system with the /USERVA value set to 2500, you can try increasing the value to 2700, but be aware that this may cause your system to spontaneously restart or display a blue screen. If this happens, restart your system in safe mode and change the /USERVA value back to 2500.

- Break your large or complex project into multiple sequences, or into two or more separate projects.
- Trim your clips as you build your sequence. For example, after adding a few clips to the timeline, preview and trim the clips if needed before adding more clips. Try to avoid trimming clips in the middle of a sequence.
- While editing and before saving your project, make sure that you have only one sequence open on the timeline (preferably a small sequence). Open only the sequence you want to edit, and close it before opening another sequence.



Important To free up the system memory, you may need to save your project with only a small sequence open (not longer than about 15 minutes), then quit and restart Adobe Premiere Pro.



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