

# AJA Adobe Plugins

For Mac & PC

## Installation & Operation Guide

Version 12.4

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Adobe<sup>®</sup> Creative Cloud<sup>™</sup>

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# Notices

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## Contacting Support

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When calling for support, have all information at hand prior to calling. To contact AJA for sales or support, use any of the following methods:

*Telephone:* +1.530.271.3190

*FAX:* +1.530.271.3140

*Web:* <http://www.aja.com>

*Support Email:* [support@aja.com](mailto:support@aja.com)

*Sales Email:* [sales@aja.com](mailto:sales@aja.com)

# Chapter 1: Adobe Plugins Installation

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## Installation

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**IMPORTANT:** Please read the brief Release Notes PDF file that accompanies your AJA Software. The Release Notes describe important Features and Fixes. Also, always go to your AJA Utilities (on the Mac) or Windows Control Panel to uninstall existing AJA software before installing a new version. This will prevent hardware/software conflicts.

**NOTE:** Before proceeding, ensure that your Adobe software is installed as detailed in its user documentation. These applications should be installed prior to installing AJA software. The AJA software package adds required files to your Adobe application directories.

Download the latest KONA software from the AJA website to install necessary software drivers, plugins, and AJA's Control Panel. from our website at:

<http://www.aja.com/en/support/software/>

You cannot use AJA hardware with third-party applications until the AJA plugins software has been installed on the host computer.

If you add KONA supported applications at a later date and have not previously installed the appropriate plugins, you must run the install program again selecting the appropriate application support software to be installed.

# Chapter 2: Using Adobe Applications

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## Overview

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AJA provides plugins for both Mac and Windows versions of the Adobe Applications and their functions are mostly the same. This chapter will describe the Windows menus and note exceptions for the Mac.

AJA hardware is tightly integrated with Adobe Premiere Pro, Photoshop, and After Effects. This allows a user to capture supported Premiere Pro compressed formats and provides plug-ins and drivers that add functionality to the Premiere Pro application.

The manual you are reading does not provide operational information for Adobe except as related to AJA hardware operations. Please read the Adobe user documentation for Premiere Pro, Photoshop, After Effects configuration and operation.

The chapter you are reading addresses configuration and setups supported by KONA. Topics covered include:

- Adobe Premiere Pro
  - Beginning a Project with Adobe Presets
  - KONA/lo Capture Options
  - KONA/lo Playback Options
- Using Adobe Photoshop
- Using After Effects

## Using Adobe Premier Pro

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### Beginning a Project with Adobe Presets

Opening Adobe Premiere Pro, you will select New Project from the File Menu and choose an AJA Capture Format from the pulldown menu, name the project, and click OK. When the Premiere Pro project has launched, refer to Adobe documentation to open the New Sequence setup panel with presets. Or in the Capture window, click the AJA Settings button to customize your workflow Capture Options panel "[Premiere Pro Capture Settings on page 9](#)".

Figure 1. Adobe Premiere Pro New Project panel

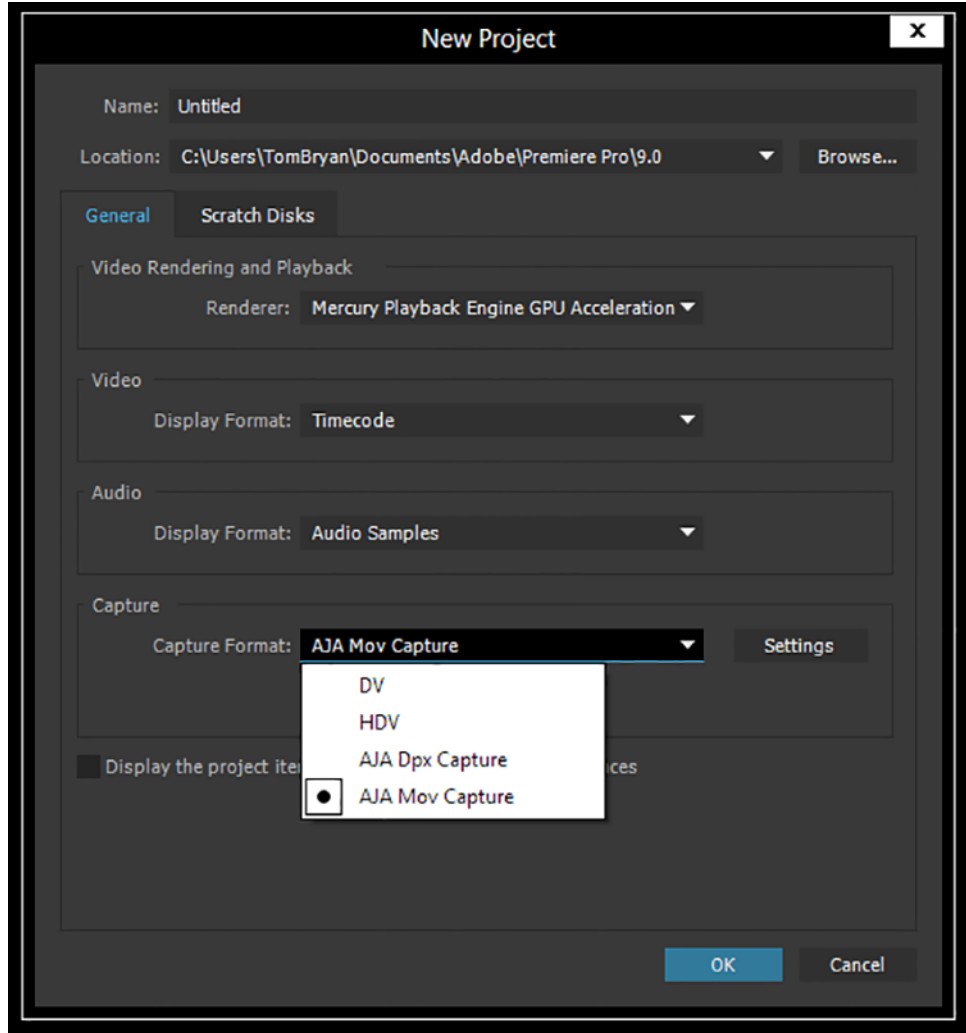
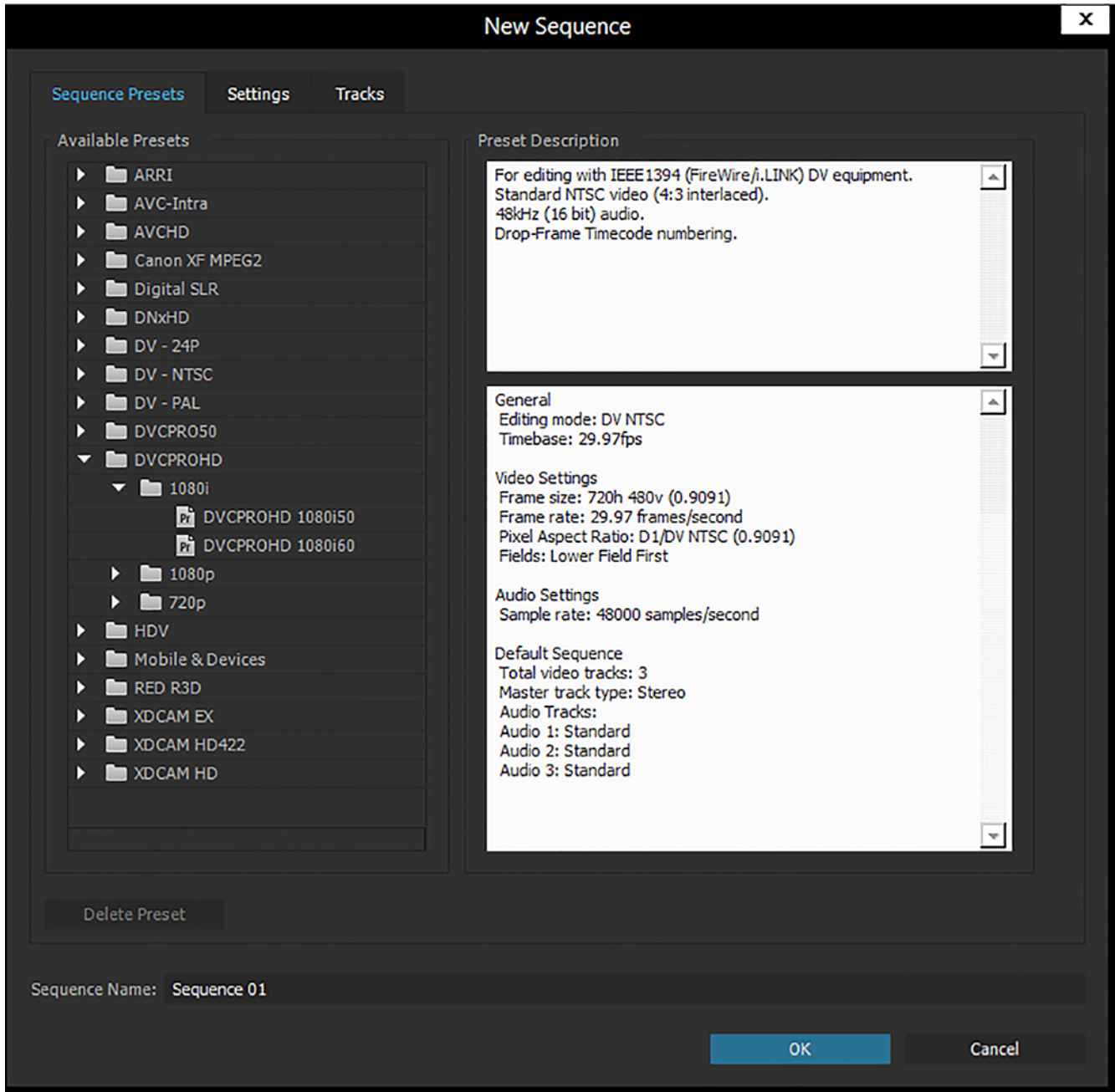


Figure 2. New Sequence Setup Panel



Using the New Sequence Setup panel, you can select from any Adobe Presets. The Presets offer typical project settings. This differs from some earlier versions of AJA plugins for Premiere, which required AJA specific sequence presets.

## Options Set in Premiere Pro Preferences

Some settings that determine both capture and playback characteristics for AJA hardware are accessed through Premiere Pro Preferences.

In Adobe Premiere Pro Preferences (under Premiere Pro>Preferences for Mac, and under Edit>Preferences for Windows,) you can set up global (default) settings for:

- Audio Hardware

- Audio Output mapping
- Device Control
- Playback Settings (see "[Premiere Pro Playback Preferences on page 12](#)").

**NOTE:** *There are two important audio configurations you must consider for Playback performance:*

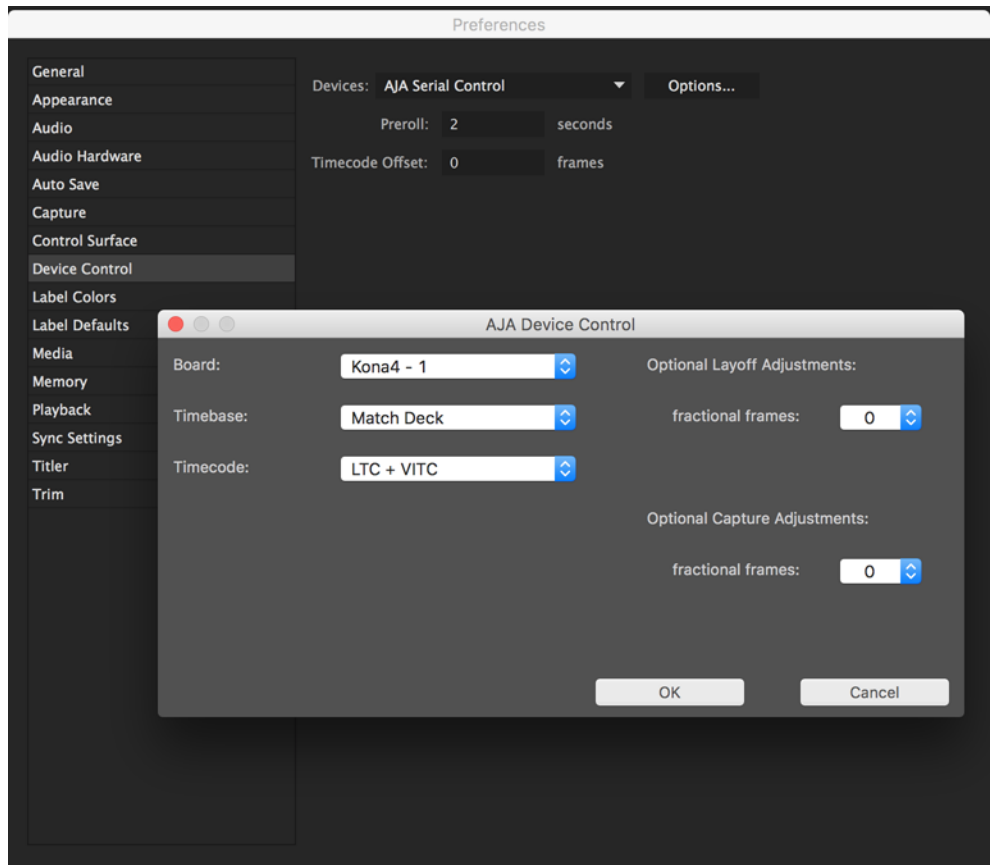
- Standard audio setup with optimum A/V sync output
- Voice-over audio setup that uses the AJA hardware as an audio input for the Premiere Pro voice-over tool (does not guarantee precise frame-accurate sync)

*Reference the Playback Settings section for Standard and Voice-over audio setup instructions.*

## Device Control

Device Control Options are settings for Export to Tape and Capture functions using the RS-422 machine control interface on AJA KONA/lo hardware (not applicable to T-Tap). Always use the AJA Serial Control setting and the KONA/lo RS-422 port for capture. There are two ways to access Device Control in Premiere Pro—in Preferences (shown below) and in the Capture window Settings tab.

**Figure 3. Preferences>Device Control>Options**



Enter the desired value for:

**Preroll:** 0 to 15; the number of seconds required to start the source machine before capture. AJA recommends 4 seconds of preroll for device control.

**Timecode Offset:** -30 to +30; timecode adjustment (in seconds) forward or back to compensate for discrepancies between the source's burned-in timecode and that of the captured sequence.



Always verify Premiere Pro and AJA offset settings for Capture and Export are in agreement. Device Control settings made in the Capture window or Export window menus may override Preference settings.

## AJA Device Control Options

Click on the Options button to pull up the AJA Device Control window.

**Board:** This menu allows you to select from multiple KONA/IO devices if you have them installed in your system.

**Timebase:** Use this pull-down to select the timecode base supported by your VTR.

- Match Deck—this is the AJA default setting. It accesses the connected VTR deck to get the current framerate of the tape.
- Base 24
- Base 25
- Base 29.97 NDF (no drop frame)
- Base 29.97 DF (drop frame)
- Base 30

The timecode format is used for both monitoring the RP-188 timecode embedded in the digital data stream and for selecting a timecode offset (if required) for the attached VTR (connected to KONA's RS-422 port).

**IMPORTANT:** *Not all decks support the default **Match Deck** function. If you are using a Panasonic deck (especially a D5) you should set the frame rate match manually.*

**Timecode Source:** Choose between a separate-channel Longitudinal Timecode (LTC) or Vertical Interval Timecode (VITC) transported in the video signal's vertical interval or include both (LTC + VITC).

**Optional Layoff Adjustments:** The fractional frames settings (1/10 frame increments) are available as optional offset adjustments that can be applied in situations where layoffs are intermittently off by a frame. For example, if a Layoff deck is missing its edit in point 1 out of 10 times, try adjusting the layoff by .1 frames and see if it locks in the accuracy.

**NOTE:** *If you find an adjustment that works consistently with your deck, reporting that information to AJA support can allow AJA to hard code that adjustment for that specific deck into future versions of the plugin.*

**Optional Capture Adjustments:** Same as above, but applies to adjusting fractional frames for capture

## Premiere Pro Capture Settings

In Premiere Pro you can access Capture settings in a number of ways. For initial project settings, go to File> Project Settings> General and set AJA Capture Format and settings.

To access the Adobe Capture Settings panel, do one of the following:

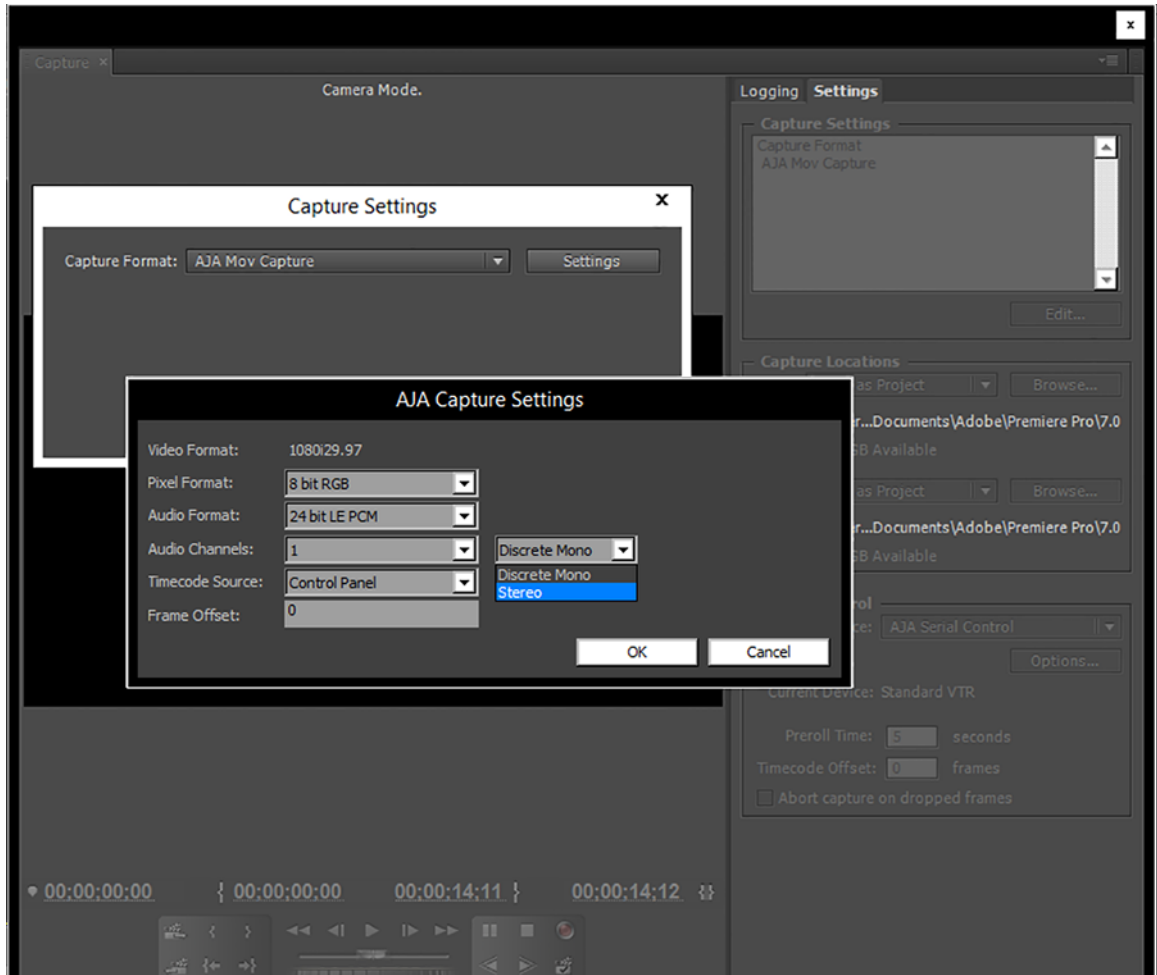
- Go to Window>Capture (or F5 function key) to launch the Capture Window and click on the Settings tab>Edit
- Use the Flydown menu >Capture Settings
- Right-click in the Capture window for context-sensitive menu.

In the Capture settings, you can select either AJA Dpx or AJA Mov file format for the capture. Click on Settings to see that Premiere Pro detects the current video input Format and then allows you to set:

- Pixel Format

- Audio Format
- Audio Channels (mono or stereo)
- Timecode Source
- Frame Offset

**Figure 4. AJA Capture Settings panel**



**Pixel Format Choices** Supported pixel formats are shown in the following table.

**NOTE:** Available Pixel Format will vary according to the video input resolution. For example, if the AJA device has an HD input, the DV/DVCPRO formats won't be displayed but the DVCPROHD formats will.

**Table 1. Available Pixel Formats**

<b>DPX format</b>	
10-Bit BE (big endian) RGB	
<b>MOV formats</b>	
8-Bit RGB 8-Bit RGBA 10-Bit BE RGB 8-Bit Uncompressed 10-Bit Uncompressed MC DV25 MC DVCPRO50 MC DVCPRO HD	Apple ProRes 4444 Apple ProRes 422 (HQ) Apple ProRes 422 Apple ProRes 422LT Apple ProRes 422 (Proxy) Avid DNxHD HQX Avid DNxHD HQX Avid DNxHD HQ Avid DNxHD SQ Avid DNxHD LB Avid DNxHD 444 Avid DNxHR HQX Avid DNxHR HQ Avid DNxHR SQ Avid DNxHR LB Avid DNxHR 444  Note: Apple ProRes capture available on Mac OS only

**Audio Formats** Use the Audio Formats pull-down menu to select the appropriate signal type for your input.

- 16-bit LE (little-endian) PCM (audio compression)
- 24-bit LE PCM
- 32-bit LE PCM
- 32-bit LE float PCM

**Audio Channels** Select the number of audio channels to be captured, KONA and Io devices vary in the number of audio channels they support. Audio channels can be captured as discrete mono channels or stereo pairs.

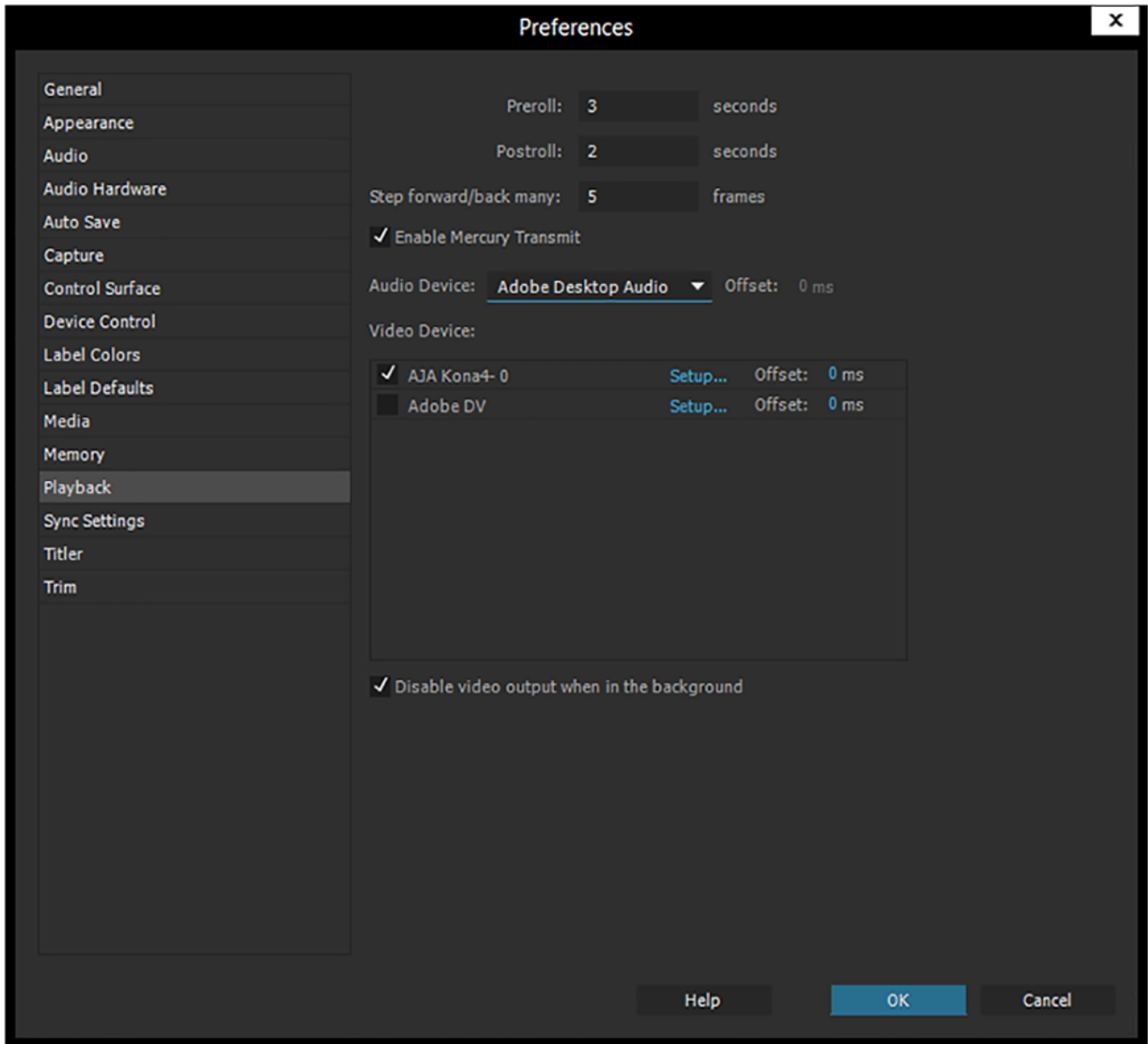
**Timecode Source** This setting tells the Capture plugin where to get the timecode information for insertion into the file.

- Control Panel–(default setting) uses the user-defined setting in the AJA Control Panel
- Device Control–uses the timecode from the RS-422 port
- Time of Day–use the computer time of day information
- Premiere–asks Premiere for timecode information

# Premiere Pro Playback Preferences

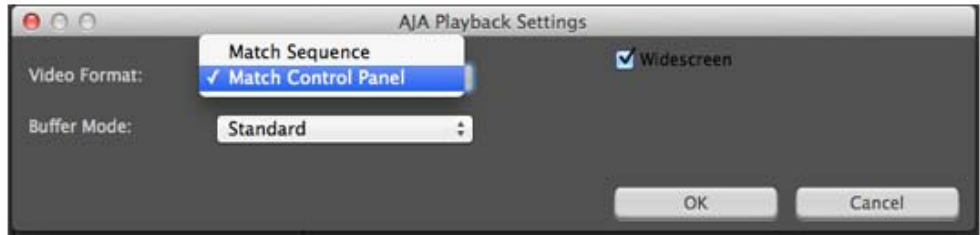
To access AJA Playback settings, in Premiere Pro, go to PremierePro>Preferences>Playback (Mac) or Edit>Preferences>Playback (Windows) to access the screen below.

**Figure 5. Player Settings Panel in Premiere Pro Preferences**



**Video Device Setup** For Video Device, select the AJA device you are using and click Setup.

**Figure 6. Premiere Pro Preferences Playback Format Settings**



**Video Format** The default setting (expected to be what most users will want and use) is *Match Sequence*. When *Match Sequence* is selected, the transmit plugin will try to put the card in a mode that matches the resolution and frame rate of the timeline you're working with. Alternatively, you can use *Match Control Panel* and then select a "hard-wired" video format from the AJA Control Panel menu of available formats.

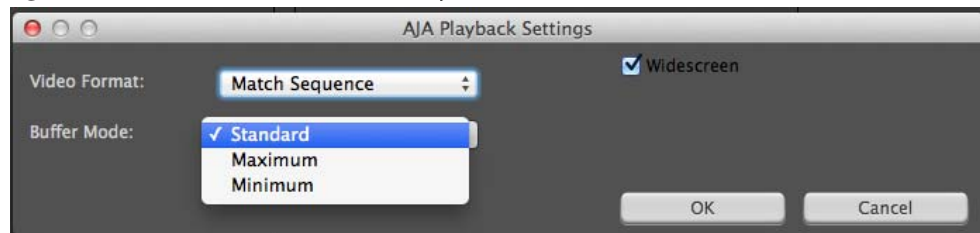
*NOTE:* Even with *Match Sequence* selected you can make other parameter adjustments (such as color space or up/down/cross conversions) using the AJA Control Panel.

*Offset Settings:* The AJA Transmit plugin always works to perfectly sync audio and video output from the AJA hardware. In doing this, a buffer is created which may cause a slight delay (generally around 1-2 frames) compared to the Program Monitor or Source Monitor on your desktop. These Offset settings have been provided by Adobe to tweak that delay, and match up the video on the desktop to the video and audio coming out of the AJA hardware.

*IMPORTANT:* A video offset set here can cause a missed frame when laying off to tape. Be sure to set this offset to zero before layoff ([refer to your AJA Mac or Windows release notes for the latest information](#)).

**Buffer Mode** Use the Buffer Mode menu to choose Standard, Minimum, or Maximum frame buffering.

**Figure 7. Premiere Pro Preferences Playback Buffer Modes**



This mode determines how many frames of buffering are to be used in the AJA hardware:

- *Standard*, will store 8 frames
- *Maximum* will store either the maximum number of frames allowed by the hardware or 14, whichever is smallest.
- *Minimum* will store 3 frames

*Minimum vs. Standard Mode:* The *Minimum* setting will provide the best scrubbing and JKL keyboard control performance on the timeline. The *Standard* setting insures that frame drops are less likely by providing more frame buffering.

For editing, KONA and Io users should use *Minimum* mode most of the time. Then, when mastering a tape or playing out live (to air or theater) where no scrubbing will occur, you can switch to the *Standard* mode to avoid frame drops.

For T-Tap users, *Standard* mode is preferred in both cases.

Use **Standard** mode for any projects in which the sequence framerate does NOT match the framebuffer framerate. The most common examples of this are using **720p23.98, 25,** and **30**. These formats don't exist on SDI so the card will switch to **720p50 or 60** automatically. Users, in these cases, should use the **Standard** buffer mode.

**Widescreen Checkbox** Check the Widescreen box if the project is widescreen standard definition NTSC or PAL format.

**Playback Resolution** For best output resolution from KONA, use Full as your Playback Resolution setting. Use the fly-down menu in the Premiere Pro Program Sequence to set Playback Resolution.

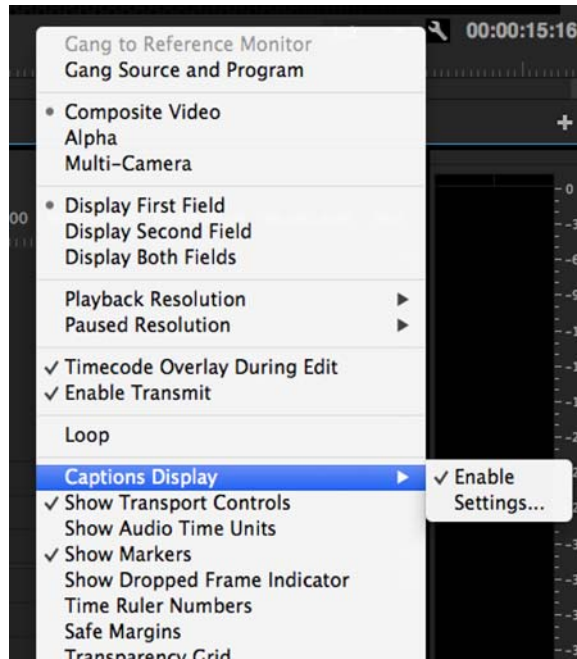
**4K Output in Premiere Pro** If you are using KONA 4K/3G in 4K Mode, true 4K will be output on the SDI outputs. If the KONA device you are using does not support 4K, KONA in Premiere Pro Match Sequence mode will automatically output the best resolution available.

## Closed Caption Support

To capture and output Closed Captions, use the fly-down menu in the Premiere Pro Program Sequence to select Captions Display>Enable. This will enable closed captioning output from any file type that Premiere Pro can read.

For Closed Captioning Capture, Io4K or KONA 4 is required. If closed captions are present in the Ancillary Data, the AJA capture plugin in Premiere Pro will detect them, and write them into a file. For Quicktime capture, the captions will be written into the QuickTime track of the file, and an .scc and .mcc file will be created as well. For DPX capture, only .mcc and .scc files will be created.

**Figure 8. Enable Captions**



**NOTE:** If your AJA device is a KONA 4 or Io 4K, Closed Captions will always be active for capture and playback. If, however, you are using earlier KONA or Io models, you must enable vertical ancillary data (**VANC**) using the AJA Control Panel (see KONA/Io documentation).

## Audio Setup

This section describes the two important audio configurations you must consider in setting up the AJA transmit plugin for Premiere Pro playback. Standard audio setup with optimum A/V sync at the output and Voice-over output that does not guarantee precise frame-accurate sync at the output. For Voice-over, see "[Audio Voice-over Setup on page 16](#)".

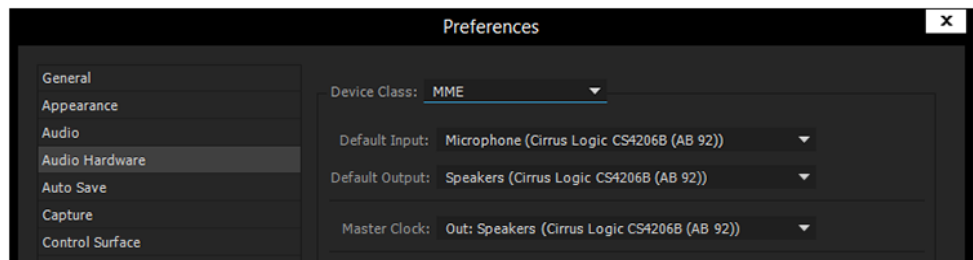
### Standard Audio Hardware Setup

The following setup is most often used and guarantees accurate AV output sync.

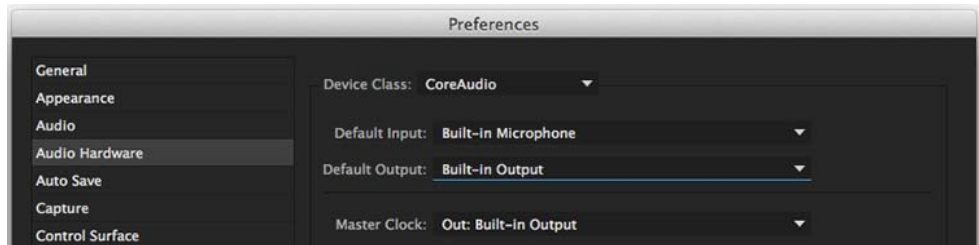
In Audio Hardware, Adobe Desktop Audio menu for Windows, select the Premiere Pro default for *Device Class*. Do not select "ASIO" for use with KONA/lo.

**NOTE:** *If you hear static on the KONA/lo output, adjust the audio buffer size in the Audio Hardware Preferences. The optimal size may vary for different systems or different setups based on CPU, RAM, and running applications.*

**Figure 9. Audio Hardware Preferences, Windows**



**Figure 10. Audio Hardware Preferences, Mac**

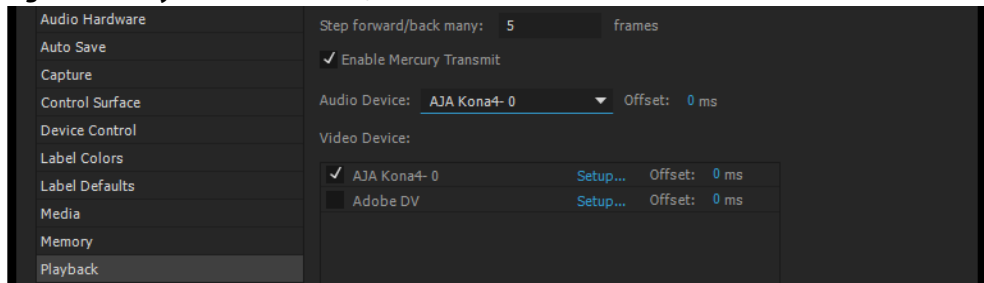


**Audio Output Mapping:** In this Preferences window you can also map Stereo or 5.1 audio out channels. With your AJA device selected in the Map Output menu, simply drag and drop the right/left or 5.1 channel icons to the desired KONA/lo channel 1–16.

### Standard Playback Audio Device

In Playback Preferences you will select your KONA/lo device in the Audio Device menu.

**Figure 11. Playback Preferences, Windows or Mac**



## Audio Voice-over Setup

You can use one of the KONA/I/O audio inputs (selected on the AJA Control Panel) to add a voice-over track to your project timeline. For example, if your KONA/I/O device supports analog audio input your source could be a microphone input to your KONA breakout panel.

**NOTE:** *Voice-over mode should not be used when precise A/V sync is required on the output. A slight, measurable, delay may be induced.*

**Windows Voice-over Setup:** In Premiere Pro Preferences (Edit menu>Preferences), go to:

1. Audio Hardware and choose AJA Device from the Default Input and Default Output menus
2. Playback and choose Adobe Desktop Audio from the Audio Device menu

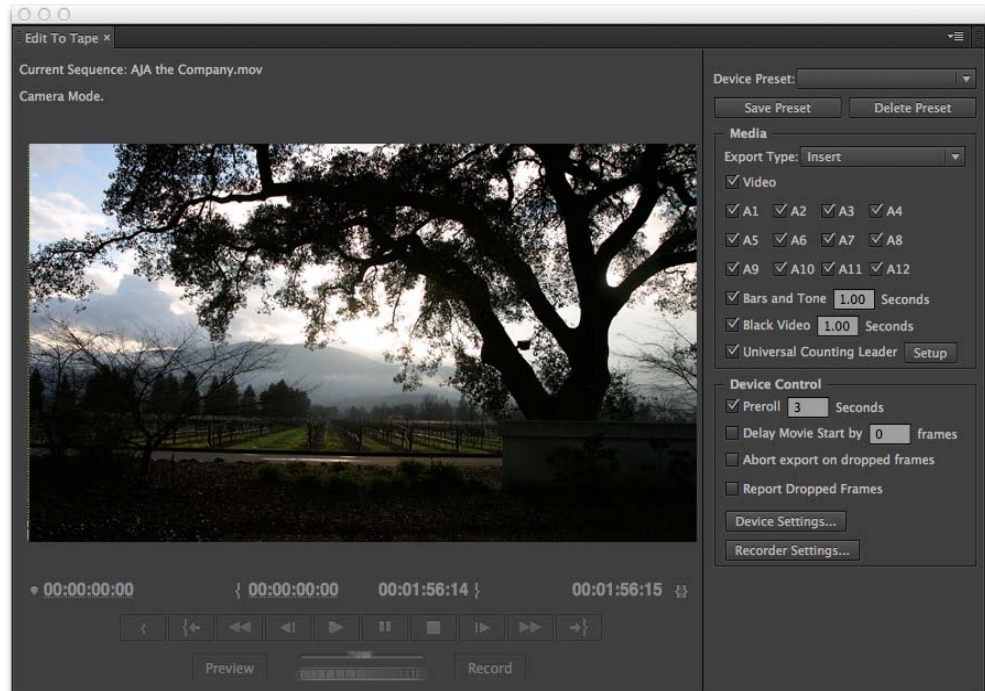
**Mac Voice-over Setup:** For Mac Voice-over, go to Playback in the Premiere Pro Preferences (Premiere Pro menu>Preferences>) and then:

1. In Playback preferences, choose Adobe Desktop Audio from the Audio Device menu
2. In Audio Hardware preferences, choose AJA Device from the Default Input and Default Output menus

## Export to Tape

To setup and Export to Tape, select (make active) the desired sequence in Premiere Pro and then go to File>Export>Tape (Serial Device). This will bring up the following Premiere Pro Serial Device panel which allows you to interface with the target tape machine through AJA serial control. Export to Tape using AJA Serial Device

**Figure 12. Edit to Tape Screen**



In this window you will set up the following:

- Export Type:**
- Insert—add new material from the timeline to tape with existing content, Video and Audio tracks are selectable and no timecode is written.



- Assemble—requires deck in regeneration mode, uses existing timecode from the tape to begin lay down, and generates new timecode from that point on using the deck's timecode clock.
- Print to Tape—outputs directly to tape without regard to existing timecode.

You also have access to these AJA device settings:

- Device Control Settings—AJA Device Control (see "[Device Control on page 8](#)").
- Recorder Setting— AJA Capture Settings (see "[Premiere Pro Capture Settings on page 9](#)").  
Premiere Pro uses the AJA Capture plugin to display video from the tape deck.

**NOTE:** *For precise A/V sync accuracy your audio setup should be in Standard configuration ("[Video Device Setup on page 12](#)").*

**IMPORTANT:** *Do two or three test insert edits to establish a frame offset BEFORE doing a real insert. The frame offset may differ for different decks and even for different resolutions and frame rates on the same deck. You should test this before setting the offset. Also, note that the capture frame offset may not be identical to the layoff frame offset ([refer to your AJA Mac or Windows release notes for the latest information](#)).*

- In Point, Out Point, and Duration when in applicable print mode
- Standard tape machine function controls

As noted above, you should use Preview mode to test your deck offset to verify accuracy and avoid latency problems. Also, the more performance resources (processor and storage speed) the better for "realtime editing."

## Using Adobe Photoshop

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Adobe Photoshop (not included with KONA) accepts KONA plugins and drivers to closely integrate the KONA/Io Export function into the application.

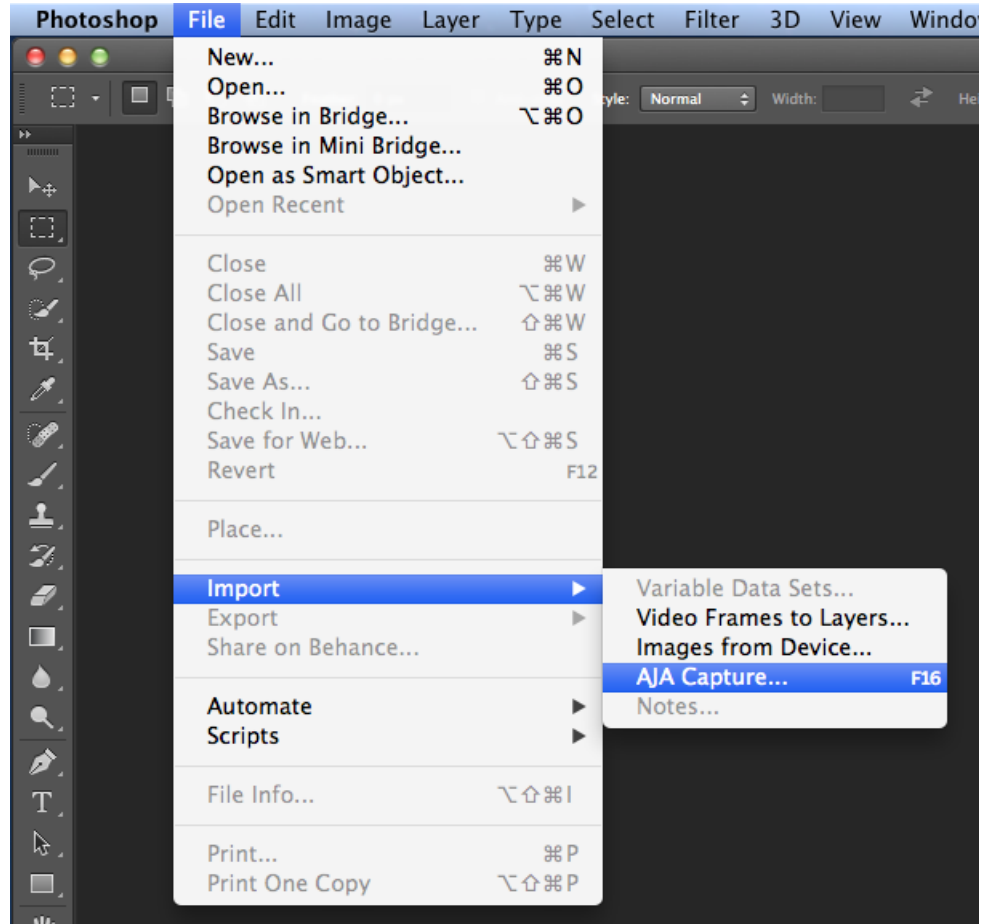
**NOTE:** *Setup of Input and Output formats for KONA/Io are now performed using the AJA Control Panel rather than menus within the Adobe Plugins.*

The manual you are reading does not provide operational information for Adobe Photoshop. Please read the Photoshop user documentation provided with the application for information on configuration and operation. The chapter you are reading addresses configuration and setup unique to use of KONA with Adobe Photoshop.

## AJA Capture

With Photoshop open, go to the File pull-down menu and select Import>AJA Capture. Selecting AJA Capture performs an immediate capture of the current frame in the KONA/Io frame buffer.

**Figure 13. AJA Image Capture in Photoshop, File>Import Menu**

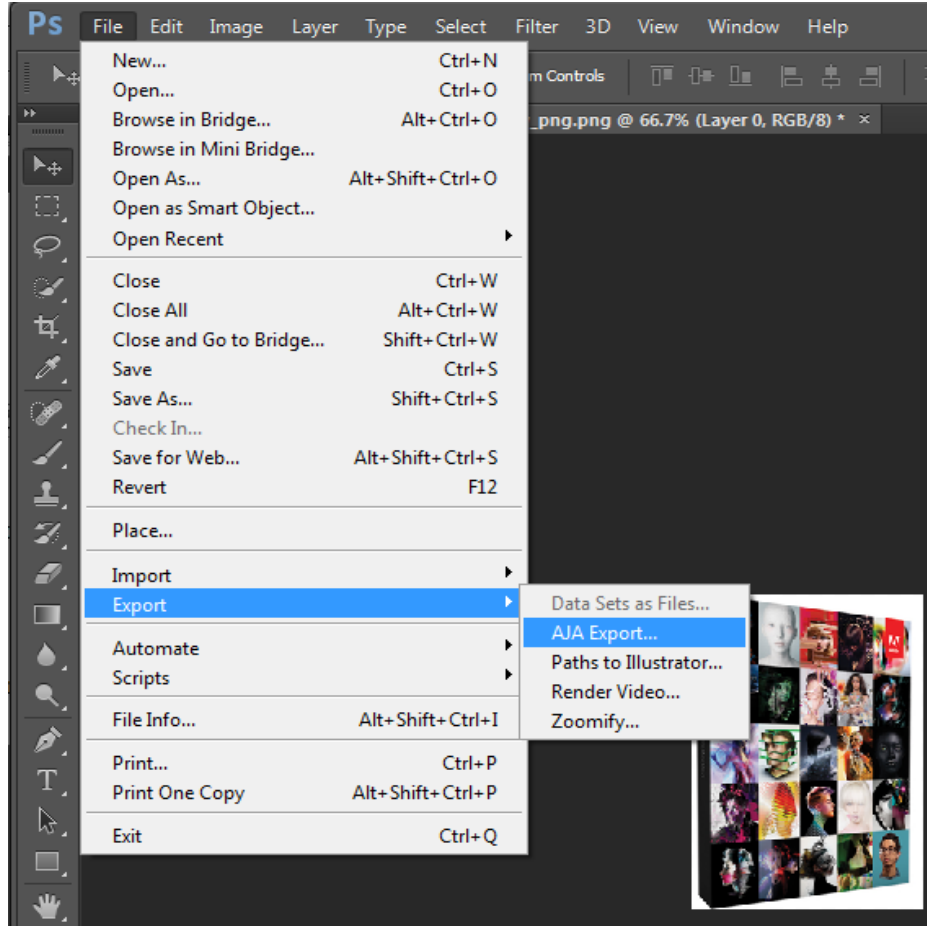


If you use the capture function regularly, we recommend that you set up a Keyboard Shortcut to trigger the capture (see Photoshop documentation).

## AJA Export

To use the AJA Preview function, go to Export and choose AJA Export.

**Figure 14. AJA Image Export in Photoshop, File>Export Menu**



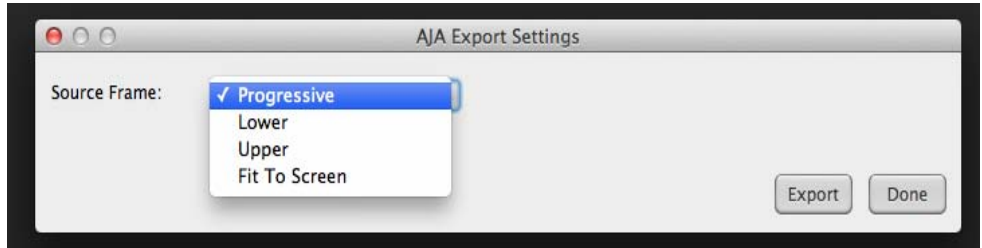
The specific options available to you are determined by the AJA KONA/lo device that is installed in your workstation and you are currently controlling. This section will describe all options for the Photoshop plugin when used with KONA/lo.

Use the AJA Control Panel to set Video Format and Pixel Format for your desired output.

**Source Frame Setting:** To setup Preview options, go to the Window menu and select AJA Preview. Select a Source Frame mode to define the video interlace for your image. Progressive is the default.

**NOTE:** *If your source video is interlaced, you may select the appropriate (lower or upper) initial field to maximize KONA/lo output performance. This setting tells the KONA/lo which type of frame format it is receiving.*

**Figure 15. AJA Photoshop Export Setting Menu**



In Fit To Screen mode, KONA/lo automatically scales the image geometry until one of its borders fills the monitor screen. No cropping or distortion occurs.

When your Export Settings are selected, click on the Export button to output your image through KONA/lo.

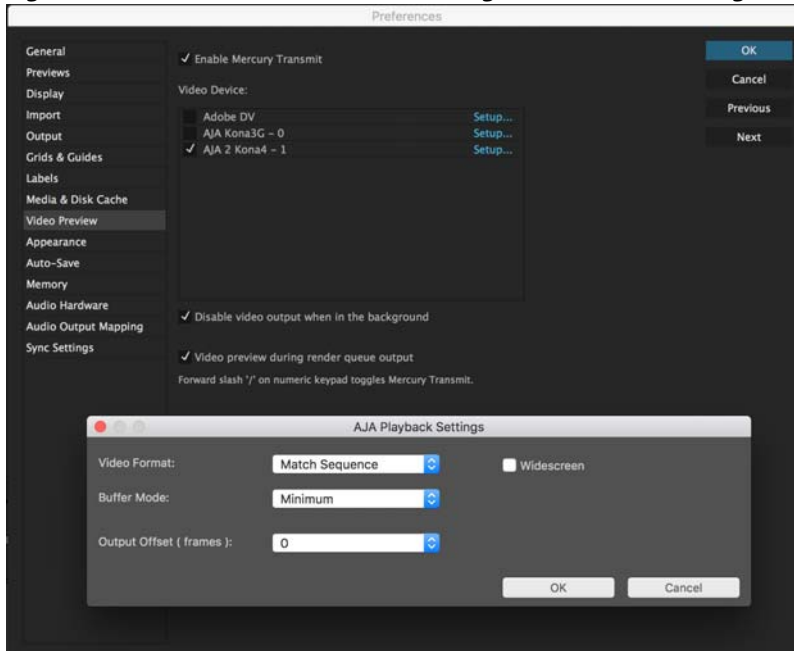
**NOTE:** *When you output in Video + Key mode (set in AJA Control Panel), Video is output via SDI 1 and the Key channel is output on SDI 2. (This does not apply to KONA 4K Mode operation, see the KONA manual.)*

## Using Adobe After Effects

**NOTE:** *In AJA's v12.4 Retail Software package, support for Adobe After Effects has changed. Previously two different plugins were being installed. The 'Blithook' plugin is the legacy plugin and is no longer installed by default. It must be deliberately chosen as an option in both the Mac and Windows installer. The Transmit plugin is installed with the default installation options.*

## AJA Transmit Plugin

**Figure 16. AJA After Effects Preview Settings Menu, Transmit Plugin**



**Video Format** The default setting (expected to be what most users will want and use) is *Match Sequence*. When *Match Sequence* is selected, the transmit plugin will try to put the card in a mode that matches the resolution and frame rate of the timeline you're working with. Alternatively, you can use *Match Control Panel* and then select a "hard-wired" video format from the AJA Control Panel menu of available formats.

*NOTE:* Even with *Match Sequence* selected you can make other parameter adjustments (such as color space or up/down/cross conversions) using the AJA Control Panel.

*Offset Settings:* The AJA Transmit plugin always works to perfectly sync audio and video output from the AJA hardware. In doing this, a buffer is created which may cause a slight delay (generally around 1-2 frames) compared to the Program Monitor or Source Monitor on your desktop. These Offset settings have been provided by Adobe to tweak that delay, and match up the video on the desktop to the video and audio coming out of the AJA hardware.

*IMPORTANT:* A video offset set here can cause a missed frame when laying off to tape. Be sure to set this offset to zero before layoff ([refer to your AJA Mac or Windows release notes for the latest information](#)).

**Buffer Mode** Use the Buffer Mode menu to choose Standard, Minimum, or Maximum frame buffering. This mode determines how many frames of buffering are to be used in the AJA hardware:

- *Standard*, will store 8 frames
- *Maximum* will store the maximum number of frames allowed by the given hardware
- *Minimum* will store 3 frames

*Minimum vs. Standard Mode:* The *Minimum* setting will provide the best scrubbing and JKL keyboard control performance on the timeline. The *Standard* setting insures that frame drops are less likely by providing more frame buffering.

For editing, KONA and Io users should use *Minimum* mode most of the time. Then, when mastering a tape or playing out live (to air or theater) where no scrubbing will occur, you can switch to the *Standard* mode to avoid frame drops.

For T-Tap users, *Standard* mode is preferred in both cases.

Use **Standard** mode for any projects in which the sequence framerate does NOT match the framebuffer framerate. The most common examples of this are using **720p23.98, 25,** and **30**. These formats don't exist on SDI so the card will switch to **720p50 or 60** automatically. Users, in these cases, should use the **Standard** buffer mode.

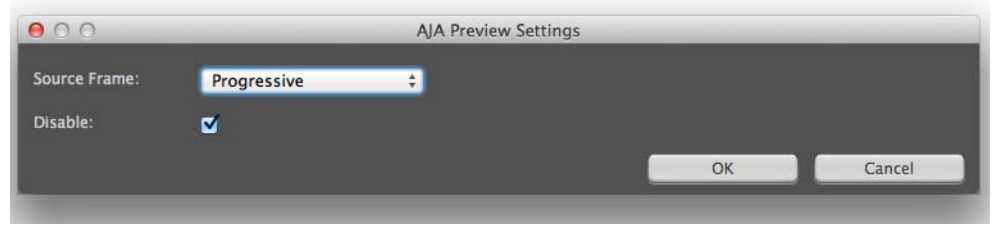
**Widescreen Checkbox** Check the Widescreen box if the project is widescreen standard definition NTSC or PAL format.

**Legacy AJA Preview Plugin** The Legacy Preview plugin allows you to view the current frame of your working timeline in various formats on a monitor connected to a KONA/Io output.

*Video & Pixel Format:* Use the AJA Control Panel to set Video Format and Pixel Format for your desired output. After Effects does not set these parameters within the application.

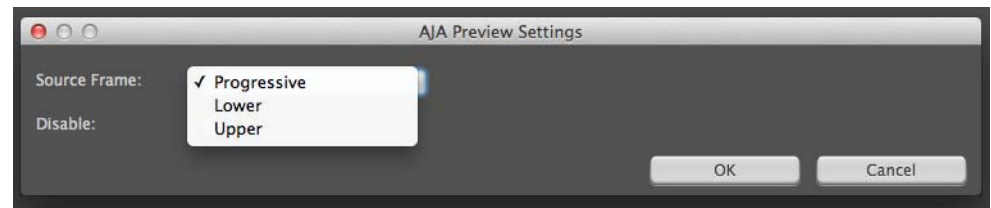
*Source Frame Setting:* To set up Preview options for After Effects, go to the Window menu and select AJA Preview.

**Figure 17. AJA After Effects Preview Settings Menu, Legacy Plugin**



Here you can choose to disable the AJA Plugin by checking the Disable box or select a Source Frame mode to define the video interlace for your video input. Progressive is the default.

**Figure 18. AJA After Effects Source Frame Setting Menu, Legacy Plugin**



**NOTE:** If your source video is interlaced, you may choose to select the appropriate field dominance (lower or upper) to maximize KONA/lo output performance. This setting tells the KONA/lo which type of frame format it is receiving.

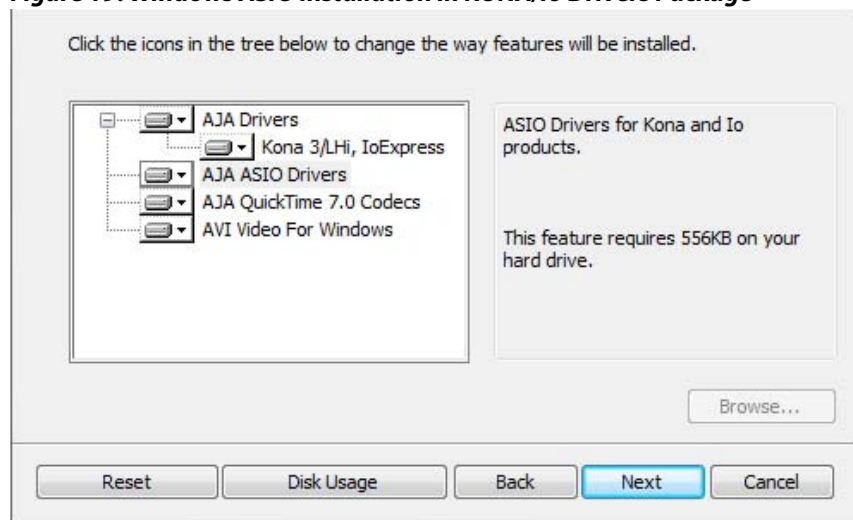
## Audio Hardware Selection

In the After Effects Preferences you can also select the AJA KONA/lo audio hardware for output.

### Windows Audio Output:

To setup After Effects audio in Windows, you must have installed the ASIO drivers during AJA KONA/lo driver installation. ASIO is not part of the default installation. Refer to the KONA/lo installation manual for details. The ASIO Drivers installation selection is shown below.

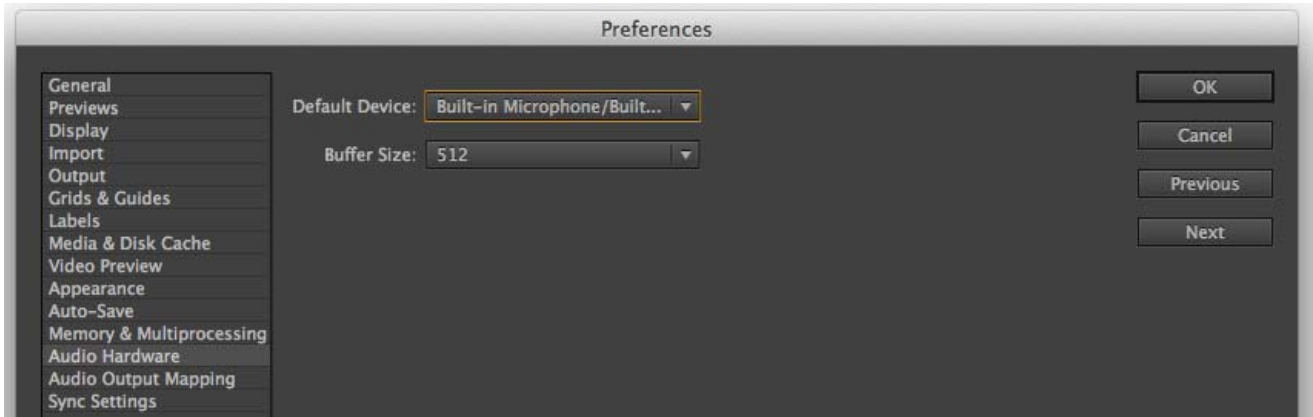
**Figure 19. Windows ASIO Installation in KONA/lo Drivers Package**



Go to Audio Hardware Preferences to select KONA ASIO for audio output.

**Mac Audio Output::** For Mac Audio go to the After Effects Preferences>Audio Hardware and select System Default Input/Output and then set the Mac OS System Preferences>Sound Input and Output to the AJA KONA/lo device.

**Figure 20. AJA After Effects Mac Audio Hardware Preference**



**NOTE:** For both Windows and Mac, you should set the Audio Buffer size to 512. If you hear static on the KONA/lo output, adjust the audio buffer size from this setting. The optimal size may vary for different systems or different setups based on CPU, RAM, and running applications.

### **After Effects Real-time Performance**

RAM Preview should be real-time for HD in After Effects. 4K RAM preview may even be possible with a high performance workstation. Please ensure you have the following settings for proper RT RAM preview.

1. Make sure that the frame buffer format of the AJA Control Panel matches the resolution and frame rate of your After Effects Composition. This can be set by launching AJA Control Panel, clicking on 'Format' in the left hand column, and selecting the correct resolution and framerate in the 'format' drop down menu.
2. Next, please ensure that the "Resolution" setting for "Time Controls" is set to "Full" in After Effects. If not set to "Full", the image that the AJA Preview Panel receives and sends to the KONA board during RAM Preview will not be sent at "Full Resolution" and thus will either be software resized to Full Resolution before sending to the KONA Board for display, or will be center cropped before sending.
3. If RAM Preview is still not real-time, you can try some of the following – setting your Zoom to "100%" in your AE Composition, making sure the "Frame Rate" of the AE Time Controls" matches the frame rate of the "Primary Format" in the AJA Preview Panel, and muting audio in the AE Time Controls.

**NOTE:** In some cases the available bandwidth of the motherboard limits the cards ability to output realtime video. AJA tech support can show you how to use AJA System Test to test the bandwidth you are getting between the card and motherboard.

# Using Adobe SpeedGrade

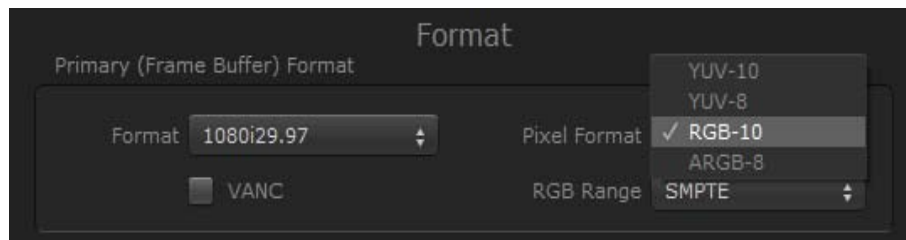
## AJA Display Setup

AJA Adobe Plugins are closely integrated into Adobe's SpeedGrade color correction and color grading software. You can use your AJA device for Display output in SpeedGrade by going to the AJA Control Panel and SpeedGrade Preferences and performing the following:

1. Go to your AJA Control Panel and select the *Format* screen. Here you will choose the *Pixel Format* you wish to display.

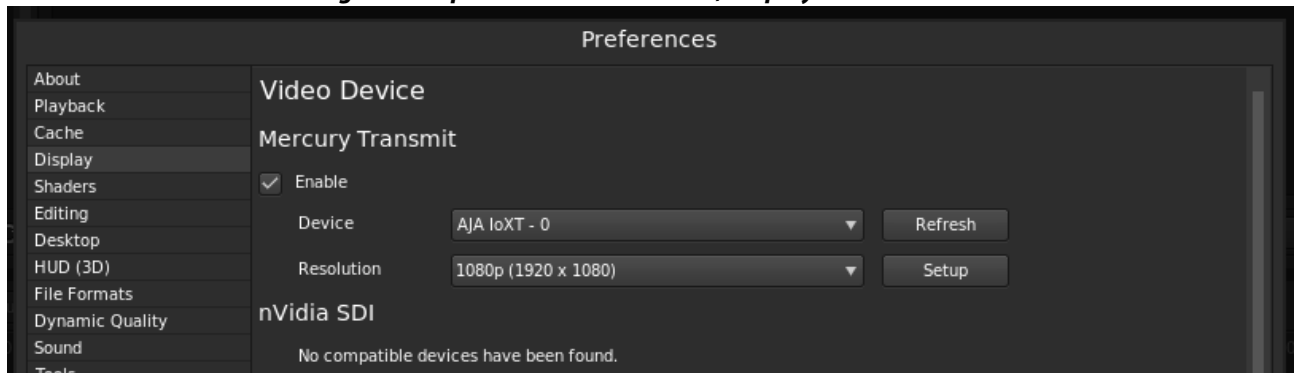
**NOTE:** *RGB-10 or ARGB-10 are the best options if they are available through your AJA device and appear in the menu.*

**Figure 21. AJA Control Panel Pixel Format Setting**



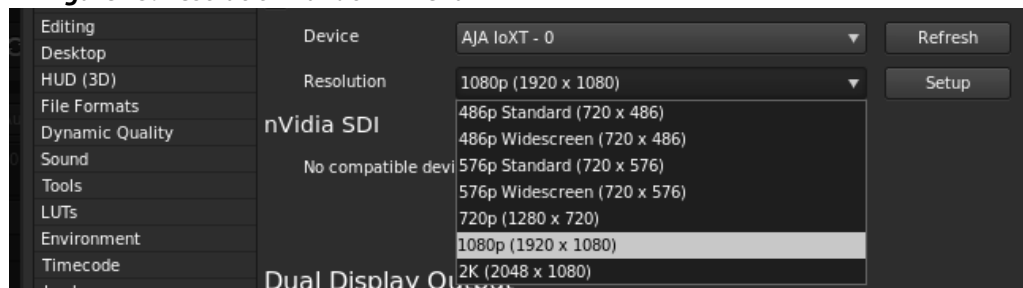
2. Go to the SpeedGrade *Preferences* screen > *Display* tab, and choose your AJA unit in the *Device* pulldown menu and check the *Enable* checkbox to the left.

**Figure 22. SpeedGrade Preferences, Display**



3. Select the resolution that you want the AJA transmit engine to use.

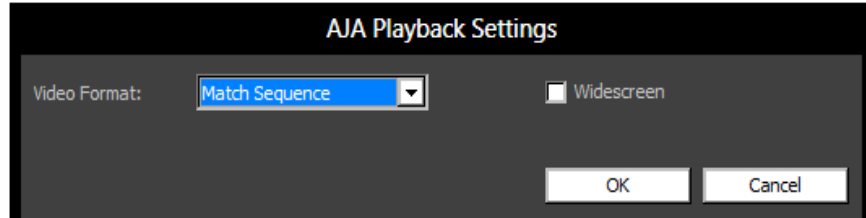
**Figure 23. Resolution Pulldown Menu**



4. Click the *Setup* button to verify that *Match Sequence* is selected (default).



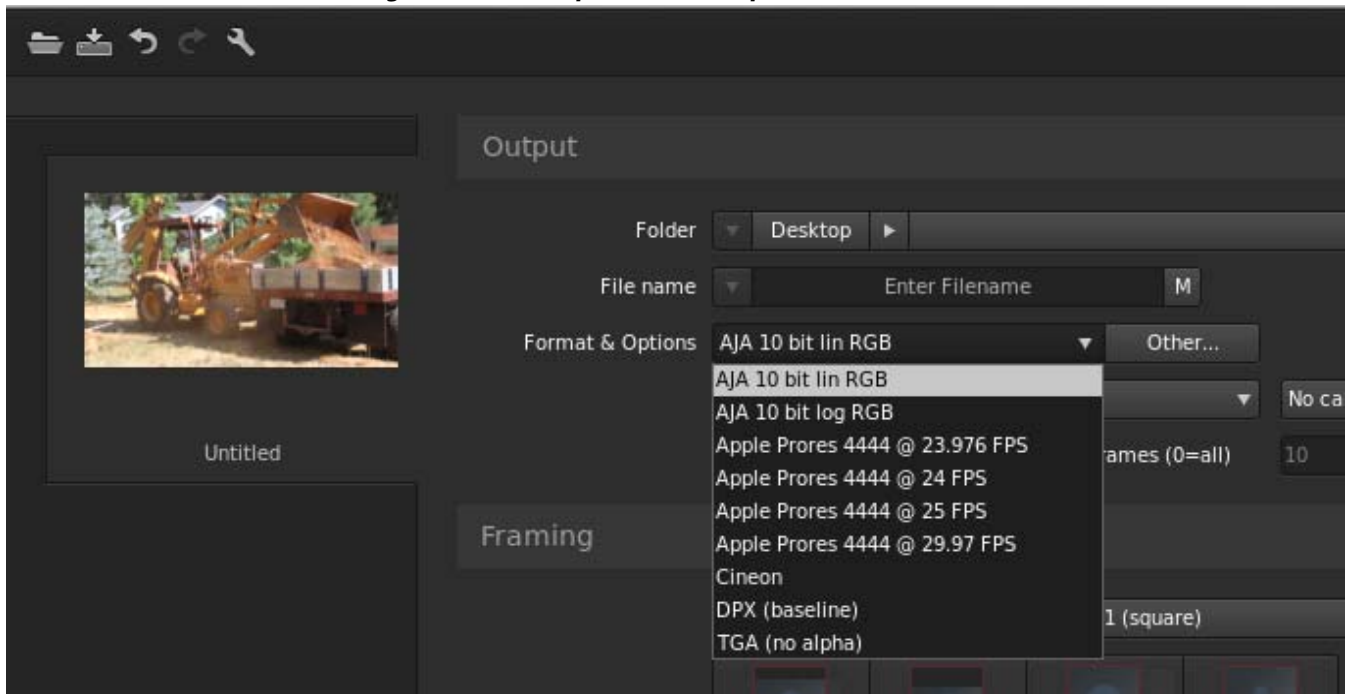
**Figure 24. Match Sequence Setting Verification**



## Using AJA Codecs for File Generation

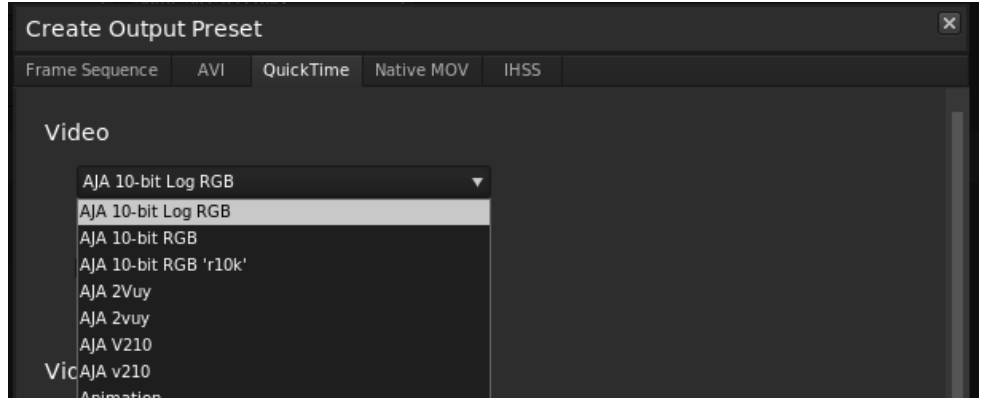
In SpeedGrade, under the Render tab you can choose to use the AJA Quicktime codecs for file generation. Access the *Format & Options* pulldown menu to select the desired AJA Format.

**Figure 25. AJA Output Format & Options Menu**



If you click on the *Other* button to the right of *Format and Options*, you will see the following screen where you can select an AJA video format, give it a Preset name, and save it to recall for any subsequent project.

**Figure 26. Create a SpeedGrade Output Preset**



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