

## Using Adobe® Premiere® Pro CS5 with RED Digital Cinema content



### What's included:

- Adobe Premiere Pro CS5
- Adobe OnLocation™ CS5
- Adobe Encore™ CS5
- Adobe Device Central CS5
- Adobe Bridge CS5
- Adobe Media Encoder CS5

Adobe Premiere Pro CS5 is also available as a component of Adobe Creative Suite® 5 Production Premium and Adobe Creative Suite 5 Master Collection.



### Adobe Creative Suite 5 Production Premium combines:

- Adobe Premiere Pro CS5
- Adobe After Effects® CS5
- Adobe Photoshop® CS5 Extended
- Adobe Illustrator® CS5
- Adobe Flash® Catalyst™ CS5
- Adobe Flash CS5 Professional
- Adobe Soundbooth® CS5
- Adobe OnLocation™ CS5
- Adobe Encore CS5

### Additional components:

- Adobe Dynamic Link
  - Adobe Bridge CS5
  - Adobe Device Central
- Integrates with new Adobe CS Live online services\*.

Adobe Systems Incorporated and RED Digital Cinema Camera Company have collaborated to bring a truly native, color-rich, 4K tapeless workflow to Adobe Creative Suite® 5 software, allowing filmmakers to harness the full potential of high-resolution raw digital cinematography on the desktop.

Experience breakthrough performance and a faster, color-rich workflow for content created on RED cameras, with real-time editing and accelerated output thanks to the native 64-bit Mercury Playback Engine. Import R3D files directly into Adobe Premiere Pro software without transcoding or rewrapping, and easily switch among resolutions for playback to meet the performance and image quality needs of every post-production task. Support for the latest firmware, including FLUT Color Science, helps ensure the highest quality imagery as you edit and finish content in all common RED R3D file permutations, including 2K, 3K, 4K, 4.5K, 4K HD, 16x9, and 2x1, using a number of different frame rates.

RED Digital Cinema enables high-resolution tapeless cinematography through cameras that capture images with more than four times the resolution of the best HD cameras. The combination of RED cameras with Adobe Premiere Pro creates a 4K production and post-production workflow that is within reach of a wide range of digital cinema productions, and robust enough for the most demanding projects.

The ultra-high resolution of the images captured by the camera yield a depth of field equivalent to that of Super 35mm film cameras, a distinct benefit for cinematography. However, this high resolution also generates very large files—a distinct challenge for post-production.

Adobe Premiere Pro preserves the high resolution and high quality RED R3D images, while providing a powerful, flexible, and accessible means of editing, grading, and delivering those images.

### Advantages of using Adobe Premiere Pro CS5

Adobe Premiere Pro CS5 provides several specific benefits that make editing, finishing, and delivering RED R3D media easier, more flexible, and more efficient. As an Adobe Premiere Pro CS5 user, your workflow just got even better with compatibility updates included in the 5.0.2 updater.

Adobe Premiere Pro CS5, version 5.0.2 incorporates compatibility updates that keep pace with the ongoing evolution of the RED Digital Cinema cameras. This update enhances your RED workflow with the following features:

- **Support for RED Rocket in Adobe Premiere Pro and Adobe After Effects®**—RED Rocket handles the decoding of RED media on playback, which allows editors to free up the CPU enabling faster decoding. RED media playback is faster and more responsive, and the CPU is free to handle other processes such as effects.
- **Support for Mysterium-X and the latest color science**—This version incorporates firmware updates from RED.
- **Support for editing color-graded footage from REDCine-X tools**—With its support of RMD files, Adobe Premiere Pro allows you to save video footage color graded in REDCine-X as an RMD file and then import it directly into Adobe Premiere Pro, creating a tighter color workflow from camera to edit and making collaboration with others even smoother.
- **Support for enhanced native DPX format support**—Adobe Premiere Pro users can see and work with timecode data embedded within a Digital Picture eXchange (DPX) frame sequence which allows for even more control when working with the DPX format.

## True RAW cinematography workflow

Adobe Premiere Pro supports RED R3D content in its native form, eliminating time-consuming file transcoding and rewrapping. By selecting an appropriate RED R3D sequence preset, users can immediately start editing RED R3D with the real-time and robust Adobe Premiere Pro toolset. Adobe Premiere Pro decodes the RAW camera data that is captured by the RED camera. Editors can change a wide variety of decoding parameters for the content, including debayering detail, ISO, color balance, and more. This gives the ultimate flexibility in your workflow because it becomes possible to make critical decisions that affect how content will look on the screen much later during production.

## Real-time 4K editing

Playback performance can be dynamically adjusted using controls for decode resolution that, for example, allow editors to play back at one-quarter resolution but see the entire frame while paused. With such high resolution imagery, this lower resolution playback is easily sufficient for editorial work, while enabling real-time performance even on lower spec machines, while full-resolution decoding allows detail work during color correction of keying. Overall, the features provide either greater responsiveness or higher quality, depending on the user's needs.

## Accelerated editing workflows with the new Mercury Playback Engine

Work dramatically faster thanks to the revolutionary native 64-bit, GPU-accelerated Mercury Playback Engine. Open projects faster, scrub through HD and higher resolution footage more fluidly, and play back complex long-format and effects-heavy projects more reliably. With the Mercury Playback Engine, you can put 2-hour, multithousand clip projects together as easily as a high-impact trailer:

- Work in real time on complex timelines and long-form projects with thousands of clips—whether your project is SD, HD, 2K, 4K, or beyond
- Open projects faster
- Load and play multithousand clip projects fluidly
- Mix and match formats such as XDCAM, RED, P2, AVCHD, AVC-Intra, and DSLR cameras freely in the timeline without rendering
- Experiment fluidly in real time with multiple color corrections and effects and see results in real time even on complex timelines
- Use real-time keying on multiple clips at all resolutions using the new Ultra® keyer

## Broad RED R3D format support

Support for the latest firmware, including FLUT Color Science, helps to ensure the highest quality imagery as you edit and finish content in all common RED R3D file permutations, including 2K, 3K, 4K, 4.5K, 4K HD, 16x9, and 2x1, using a number of different frame rates. After a quick import into Adobe Premiere Pro CS5, RED R3D files are ready to use in your project and sequence.

## Mixed formats in sequences

Adobe Premiere Pro users can combine a wide range of sources in a single sequence without complex format conversions. For example, users can add XDCAM EX, DVCRPO HD, and HDV clips to a RED R3D sequence. And they can add RED R3D clips to a sequence created with presets for another format. Most mixed-format timelines can be edited in real time, with formats that don't match the sequence settings requiring rendering only at the time of final output.

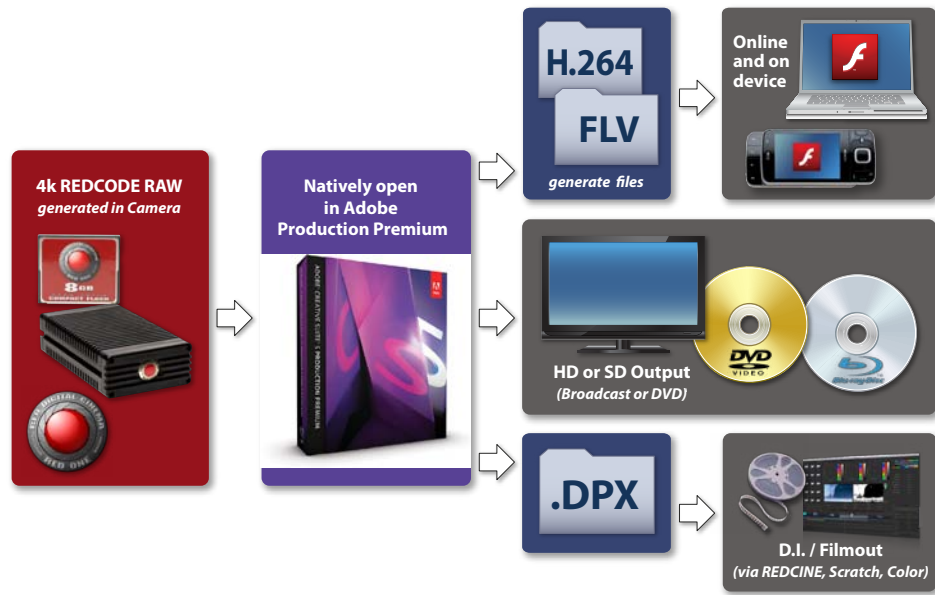
## DPX file import and export

New DPX file import and export offers users the ability to natively edit with 10-bit, uncompressed digital intermediate (DI) files. DPX provides a great deal of flexibility in storing color and other information, making it a popular film output format. It is also used for sharing projects between

The list of graphics cards that are compatible with Adobe Premiere Pro CS5 is updated on a regular basis. For an up-to-date list of supported cards, visit [www.adobe.com/go/64bitsupport](http://www.adobe.com/go/64bitsupport).

production facilities. DPX export gives you the ability to output 4K content directly from Adobe Premiere Pro without having to go through After Effects. (Previously, the recommended workflow for outputting high-resolution RED projects was to send Adobe Premiere Pro sequences to After Effects where they could be output as DPX, Cineon, or other 10-bit formats.) The combination of Adobe Media Encoder and Adobe Premiere Pro, both 64-bit applications in CS5, means that large, high resolution sequences can be outputted quickly and reliably.

Adobe Premiere Pro offers broad delivery options, so you can deliver your RED content virtually everywhere.



## Editing workflow

Adobe Premiere Pro enables an accessible, powerful, and comprehensive workflow for editing, grading, and delivering content created on RED Digital Cinema cameras. For the user, editing RED R3D content is like editing any other tapeless format supported by Adobe Premiere Pro. You select an appropriate project preset, quickly import files in their native format, edit and finish those native files with the robust Adobe Premiere Pro toolset, and then deliver to a wide variety of formats, including DPX and for D.I or Filmout via REDCINE, Scratch, or Color.

The essential challenge with editing content created on RED cameras involves making the extremely high-resolution and high-quality RED R3D files easily editable on standard computers and workstations. Working together, Adobe Systems and RED Digital Cinema Camera Company have met the technical challenge. That leaves users free to focus on crafting those images into compelling and visually stunning stories.

Adobe Premiere Pro helps enable real-time editing of RED R3D content on computers running either Mac OS or Windows® operating systems. Both modern high-end notebook computers and mid-range desktop computers can provide enough power to support realtime RED R3D editing. Adobe Premiere Pro CS5 and After Effects CS5 are only available for 64-bit systems.

### Select a sequence preset

After you create a new project, Adobe Premiere Pro software prompts you to select a sequence preset. Adobe Premiere Pro provides presets for all common permutations of RED R3D resolutions, aspect ratios, and frame rates.

### Import clips

Use the Media Browser to navigate to and select your RED R3D media. Because Adobe Premiere Pro software natively supports R3D, the files import in a few seconds.

The Media Browser panel also treats spanned clips as a single clip. If you drag and drop a RED clip from the Media Browser to the Project panel, you see a single clip representing all spanned media.

## Adjust the look

Adjust parameters such as White Balance, Color Space, and Color Matrix to achieve the desired look for any selection of clips in your sequence. To access settings for RED media, select one or more RED clip(s) in the Project panel, right-click, and in the contextual menu that appears, choose Source Settings. (The Source Settings command is also available in the Clip menu.)

The new RED R3D Source Settings dialog box in Adobe Premiere Pro CS5 offers extensive control over the look of RED RAW footage. In conjunction with the ability to change color settings per clip, you can save combinations of adjustments as custom presets, which can be applied to individual or multiple clips. The controls in the Source Settings dialog box include:

- **Debayer Detail**—Vary the level of detail extracted from the image sensor
- **Chroma**—Denoise the red/blue channels
- **OLPF Compensation**—Eliminate color Moire fringes by controlling the optical low-pass filter (OLPF) that refines edge detail
- **Maximum Bit Depth**—Use this global setting to choose between 32-bit float and 8-bit
- **White Balance**—Manipulate Kelvin, Tint, and Saturation levels
- **Timecode**—Select the timecode track to use from the R3D file
- **Color Settings**—Adjust the ISO setting, exposure, red, green, blue, brightness, contrast, and highlight levels
- **Color Space**—Select the desired color space from among Camera RGB for RAW; Rec 709, the standard color space for HD; and REDspace, a more saturated variation of Camera RGB
- **Gamma Curve**—Override the gamma curve selection using preset gamma curves
- **User Curve**—Use a custom curve created by the camera operator

## Modify playback settings

At any time after initial setup, you can easily switch among resolutions for playback, choosing the one most appropriate for the task at hand, be it editing, trying effects, or viewing final results. You can choose a lower resolution for greater speed during editing, a mid-level resolution for grading or effects, and full resolution for final preview. To adjust playback resolution, simply right-click the Source panel, and in the contextual menu that appears, choose from Full Resolution, Half Resolution, Quarter Resolution, Eighth Resolution, or Sixteenth Resolution.

The approach is somewhat analogous to offline editing, but without the need to recapture content at a higher resolution for online editing and finishing. Regardless of the sequence preset you choose, your RED R3D source files maintain their full resolution, and are not affected as you change playback resolution to suit your current task—from rough editing to finishing and export. You only need to import the RED R3D media once.

## Edit in the timeline

Once the RED R3D clips are part of your project, you can edit them with the full toolset available for any other supported format in Adobe Premiere Pro. And remember that you can mix formats in any sequence and then work with and preview these varied clips without any rendering required until you're ready for final output.

## Deliver to virtually any format

Adobe Premiere Pro enables you to deliver your work anywhere — for broadcast, disc, film, device, and mobile distribution. Adobe Media Encoder, a separate, 64-bit software application included with Adobe Premiere Pro CS5, saves you time by streamlining the process of creating multiple encoded versions of your source files and Adobe Premiere Pro sequences. Adobe Media Encoder features an intuitive user interface, providing more visual feedback to help you work faster. Save time with the new ability to start the encoding process directly from Adobe Premiere Pro without going to the batch list. Set up multiple items for batch encoding, manage priorities, and control advanced settings for each item individually. Batch encoding lets you use any combination of

sequences and clips as sources, and lets you encode to a wide variety of video formats, including FLV, F4V, Windows Media, QuickTime, and other popular codecs such as MPEG-2, MPEG-4, H.264, and—new in Adobe Premiere Pro CS5—AVC-Intra and DPX.

Adobe Encore CS5 software, also included with Adobe Premiere Pro CS5, is a rich set of creative tools for DVD, Blu-ray Disc, and searchable web-DVD authoring. You can maintain the pristine quality of your HD video all the way to distribution. Use Encore to create high-definition Blu-ray Discs with pop-up menus, dual-layer burning, and subtitles, working with the same interface and features used to create standard-definition DVDs. You can also easily publish your DVD and Blu-ray Disc projects to a web version with Encore in a single operation. Produce content compatible with the Adobe Flash Player runtime, complete with DVD interactivity and menus, without opening another application. Use metadata created throughout production to make your web-DVDs searchable.

## Summary

Through native, comprehensive, and flexible support for RED R3D files, Adobe Premiere Pro provides fast import of RED content without file transcoding or rewrapping images to another format, preserves image quality, and allows users to adjust playback resolution to meet the performance and image-quality needs of every post-production task. Native format support together with powerful real-time editing tools make Adobe Premiere Pro the hub of comprehensive, efficient, and flexible RED Digital Cinema workflows.

### For more information

Product details:

[www.adobe.com/premiere](http://www.adobe.com/premiere)



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