

# Using Adobe® Premiere® Pro CS6 with RED Digital Cinema Content



## Everything you need, everywhere you work

Buy Adobe Premiere Pro CS6 as a standalone desktop application or as part of an Adobe Creative Cloud™ membership. Adobe Creative Cloud\* is a creative hub where you can explore, create, share, and deliver your work using any of the Adobe Creative Suite desktop tools, plus Adobe Muse™ and other new applications. New internet-based services\* enable creation of high-impact content experiences for delivery across screens and devices—from interactive websites to stunning digital magazines. Adobe Creative Cloud redefines creativity, offering immediate and ongoing access to industry-defining tools and innovative technologies. Learn more at [www.creativecloud.com](http://www.creativecloud.com).

Adobe Creative Cloud also includes these valuable tools:

- Adobe Premiere Pro
- Adobe After Effects™
- Adobe Photoshop® Extended
- Adobe Audition™
- Adobe SpeedGrade™
- Adobe Prelude™
- Adobe Encore™
- Adobe Media Encoder
- Adobe Story Plus

Adobe Systems and RED Digital Cinema Camera Company have collaborated to bring a truly native, color-rich, 5K file-based workflow to Adobe Premiere Pro CS6 software, allowing filmmakers to harness the full potential of high-resolution RAW digital cinematography on the desktop.

Experience breakthrough performance and a faster 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 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 FLUT Color Science ensures the highest quality imagery as you edit and finish content in all common RED R3D file permutations, including 2K, 3K, 4K, 4.5K, 5K, 4K HD, 16x9, and 2x1, using a number of different frame rates.

RED Digital Cinema enables high-resolution file-based 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 5K 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 CS6

Adobe Premiere Pro CS6 provides several specific benefits that make editing, finishing, and delivering RED R3D media easier, more flexible, and more efficient.

Adobe Premiere Pro CS6 incorporates compatibility updates that keep pace with the ongoing evolution of the RED Digital Cinema cameras. Adobe Premiere Pro CS6 enhances your RED workflow with the following features:

- **Support for RED Rocket in Adobe Premiere Pro, Adobe After Effects, Adobe Prelude, and Adobe Media Encoder**—RED Rocket handles RED media decoding on playback and frees the CPU for other tasks, enabling faster decoding, playback, rendering, and export performance.
- **Support for media shot on any RED camera with any sensor, and the latest color science**—This version incorporates support for 5K footage from RED EPIC and RED SCARLET-X cameras.
- **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.
- **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. You 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. You can adjust a wide variety of decoding parameters for the content, including debayering detail, ISO, color balance, and more. This gives the ultimate flexibility in the workflow, because it becomes possible to make critical decisions that affect how content will look on the screen much later during production.

## Real-time 5K editing

Playback performance can be dynamically adjusted using controls for decode resolution. This makes it practical and convenient to edit R3D files natively at 1/4 resolution on a laptop while providing the flexibility to increase resolutions when using a capable workstation with a larger display. With such high-resolution imagery, this lower resolution playback is easily sufficient for editorial work and enables real-time performance even on lower-spec machines. Overall, the features provide either greater responsiveness or higher quality, depending on your needs.

## Accelerated editing workflows with the enhanced Mercury Playback Engine

The Mercury Playback Engine brought extraordinary performance and stability to Adobe Premiere Pro CS5 and CS5.5. In Adobe Premiere Pro CS6, performance and stability have been boosted yet again, thanks to sweeping optimizations and enhancements that let you smoothly play and scrub through multilayer, multiformat sequences that include HD, 5K, and even higher resolution footage that is steeped in effects. Dynamically scalable, natively 64-bit, GPU-accelerated, and optimized for today's lightning-fast multicore CPUs—and now with improved support for third-party hardware—the enhanced Mercury Playback Engine delivers astounding performance, with or without a GPU.

With the Mercury Playback Engine, you can put 2-hour, multi-thousand 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 5K
- Open projects faster
- Multi-thousand clip projects load and play fluidly
- Mix and match formats such as XDCAM, RED, ARRIRAW, Canon XF, P2, AVCHD, AVC-Intra, and DSLR camera footage freely in the timeline without rendering
- Experiment fluidly 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 Ultra<sup>®</sup> keyer
- Add a supported GPU to dramatically improve performance on dense, effect-rich projects

New support for OpenCL-based graphics card available with certain Apple MacBook Pro computers brings improved mobile workflows to Mac users. Support for new NVIDIA Maximus dual-GPU configurations delivers even more extreme performance for tackling the most demanding 5K workflows. NVIDIA Maximus-powered workstations combine the capabilities of NVIDIA Quadro<sup>®</sup> GPUs and the tremendous parallel processing power of NVIDIA Tesla<sup>™</sup> GPUs. This gives you the power to achieve greater levels of interactivity, explore new ideas, and see results in less time—all at your desktop.

Adobe Mercury Transmit gives Adobe I/O hardware partners, such as AJA, Black Magic Design, Bluefish444, Matrox, and MOTU, direct access to the Mercury Playback Engine, so you experience better playback performance than ever before. And when using external monitors, you'll get full-screen playback while maintaining all the real-time performance benefits of the Mercury Playback Engine.

### Supported NVIDIA<sup>®</sup> and AMD graphics cards

The list of graphics cards that are compatible with Adobe Premiere Pro CS6 is updated on a regular basis.

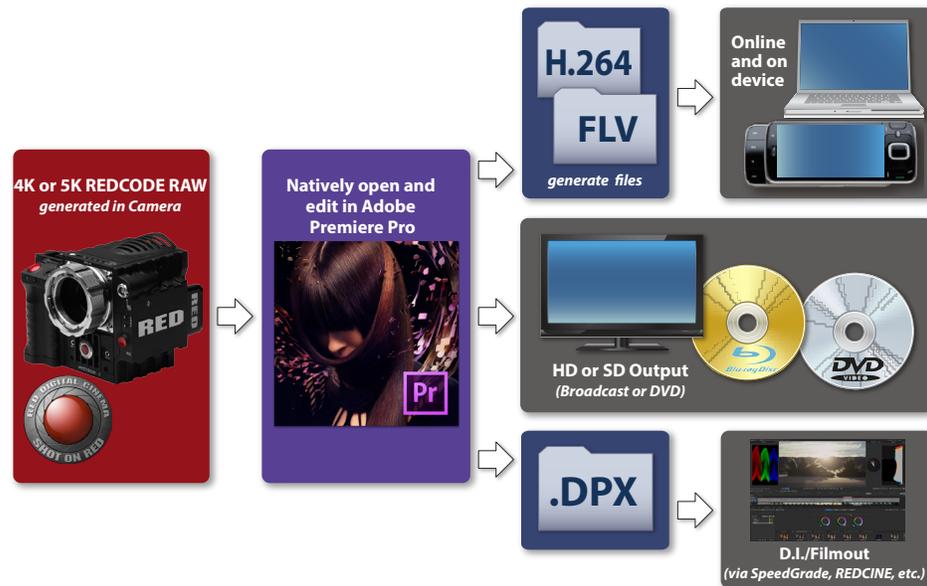
For an up-to-date list of supported cards, please see

[www.adobe.com/go/64bitsupport](http://www.adobe.com/go/64bitsupport).

For system requirements and compatibility, please see

[www.NVIDIA.com](http://www.NVIDIA.com).

Mobile Mac workflows can take advantage of GPU-accelerated performance, thanks to new support for AMD Radeon HD 6750M and AMD Radeon HD 6770M graphics cards with a minimum of 1GB VRAM that are available on MacBook Pro computers running OS X 10.7.



### Broad RED R3D format support

Support for the latest firmware, including FLUT Color Science, ensures the highest quality imagery as you edit and finish content in all common RED R3D file permutations, including 2K, 3K, 4K, 4.5K, 5K, 4K HD, 16x9, and 2x1, using a number of different frame rates. After a quick import into Adobe Premiere Pro CS6, RED R3D files are ready to use in your project and sequence.

### DPX file import and export

DPX (Digital Picture eXchange) 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 production facilities. DPX export gives you the ability to output 5K content directly from Adobe Premiere Pro. The combination of Adobe Media Encoder and Adobe Premiere Pro, both 64-bit applications in CS6, means that large, high-resolution sequences can be output quickly and reliably.

### 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 Adobe SpeedGrade, REDCINE, or DaVinci Resolve.

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 real-time RED R3D editing.

### Efficient ingest and logging with Adobe Prelude integration

Adobe Premiere Pro CS6 offers the ability to integrate with Adobe Prelude CS6 software (available separately as a component of Adobe Creative Suite 6 Production Premium, Master Collection, or

the Adobe Creative Cloud service). Adobe Prelude enables you to ingest full or partial RED R3D media including 5K footage from RED EPIC and SCARLET-X cameras, copy or transcode them to your preferred editing format during the ingest process, and view clip thumbnails in the Ingest dialog box as you work. While watching footage, you can create rough cuts by marking In points and Out points and add searchable temporal markers, comments, and tags to your clips. All of that information is stored as metadata in your media files, which flows directly into Adobe Premiere Pro when you import the files. And when you start editing, those searchable metadata-based markers, comments, and tags help communicate the producer's intentions as well as help you sift through mountains of footage to quickly find what you're looking for. Better still, that same metadata stays with your media assets throughout the production workflow, so you and your clients can keep track of vital details such as rights and permissions, and when finished projects are delivered online, your audience can more easily find your content via search engines.

## 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. Alternately, Adobe Premiere Pro CS6 offers a convenient Create Sequence From Clip command that creates a new sequence based on your source clip's settings. Plus, Adobe Premiere Pro CS6 automatically detects and notifies you when a clip dragged onto a timeline doesn't match the sequence settings, so you can easily choose to change the sequence settings to match the clip's settings or leave the sequence settings alone—Adobe Premiere Pro lets you freely mix formats, aspect ratios, and frame rates on the timeline.

## Import clips

Use the Media Browser to navigate to, preview, and select your RED R3D media. The Media Browser in Adobe Premiere Pro CS6 displays 16:9 thumbnails of your content that you can preview by using a clip playhead and J-K-L keyboard shortcuts as well as by hovering scrubbing. 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'll see a single clip representing all the spanned media.

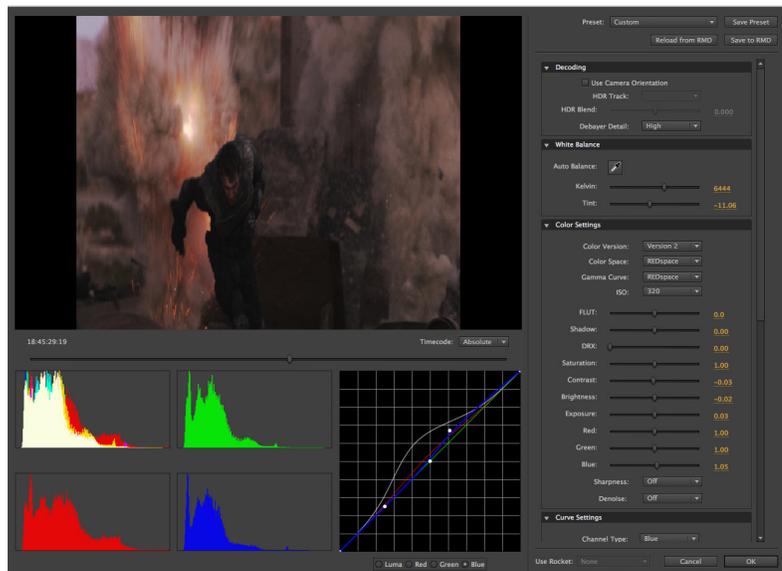
## Adjust the look

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 clips 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 RED R3D Source Settings dialog box in Adobe Premiere Pro CS6 offers extensive control over the look of RED RAW footage. In addition to the ability to save and load RMD files as well as create custom presets, you can pick a white point and use histograms and a five-point curves interface to adjust

The RED Source Settings dialog box controls include:

- **HDRx Control.** Work with expanded dynamic range by taking advantage of new RED HDRx workflows.
- **Debayer Detail.** Vary the level of detail extracted from the image sensor
- **Denoise.** Select the desired amount of noise reduction.
- **White Balance.** Manipulate Kelvin, Tint, and Saturation levels or use the Eye Dropper tool to select a white point
- **Timecode.** Select the timecode track to use from the R3D file
- **Color Settings.** Adjust the ISO setting, exposure, saturation, shadow, 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 that is a more saturated variation of Camera RGB
- **Gamma Curve.** Override the gamma curve selection using a number of preset gamma curves
- **Luma Curve.** Control over lift, gamma, gain as well as red, green, and blue color channels.



red, green, blue, RGB, or Luma values for a clip. It's possible to choose which Color Science version is used, and FLUTs are supported, as are Lift, Gamma, and Gain settings. Multiple RED clips can be adjusted simultaneously, and RMD settings can be applied in one step.

### **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 export. To adjust playback resolution, simply right click on 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 effected 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 intermediate rendering required until you're ready for final output.

### **Enjoy an advanced color grading workflow through integration with Adobe SpeedGrade (available separately)**

Adobe Premiere Pro CS6 offers the ability to integrate with Adobe SpeedGrade CS6 color grading software, available separately or as part of Adobe Creative Suite 6 Production Premium, Master Collection, or the Adobe Creative Cloud service. Open your RED files directly in Adobe SpeedGrade, or use the new Send To SpeedGrade command in Adobe Premiere Pro to send completed sequences directly to SpeedGrade, where an intuitive user interface guides you step by step through the workflow.

Adobe SpeedGrade lets you handle technical grading tasks like matching shots and creating consistent color across a scene. The GPU-accelerated, 64-bit Lumetri™ Deep Color Engine delivers real-time playback as you grade footage, regardless of its resolution or frame size. SpeedGrade supports file-based workflows, and includes support for RAW and HDR footage. High dynamic range support retains the bit-depth of your image files, while the ability to work directly with RAW images—recorded straight from the camera sensor—lets you pull details from blacks and highlights that might otherwise have been crushed or blown out.

SpeedGrade gives you the ability to apply primary and secondary correction layers, along with film-style filters, to your Adobe Premiere Pro sequences. These filters mimic chemical processes used by film labs to create stylized looks on celluloid, such as bleach bypass, the retro look of early Technicolor 2-strip or 3-strip color film processing, and day-for-night.

### **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 CS6, 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. Quickly 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 encode to virtually any device and video format, including FLV, F4V, Windows Media, QuickTime, and other popular codecs such as MPEG-2, MPEG-4, H.264, AVC-Intra, and DPX. Presets tailored for multiscreen delivery help further streamline the encoding workflow.

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

Adobe Encore CS6 is a standalone 64-bit application included with Adobe Premiere Pro CS6. Encore lets you 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 Blu-ray Disc interactivity and pop-up menus as well as transport, subtitle, and menu controls, all without opening another application.

## 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 CS6 the hub of comprehensive, efficient, and flexible RED Digital Cinema workflows.

## System requirements

### Mac OS

- Multicore Intel processor with 64-bit support
- Mac OS X v10.6.8 or v10.7
- 4GB of RAM (8GB recommended)
- 4GB of available hard-disk space for installation; additional free space required during installation (cannot install on a volume that uses a case-sensitive file system or on removable flash storage devices)
- Additional disk space required for preview files and other working files; 10GB recommended
- 1280x900 display
- OpenGL 2.0-capable system
- 7200 RPM hard drive (multiple fast disk drives, preferably RAID 0 configured, recommended)
- DVD-ROM drive compatible with dual-layer DVDs (SuperDrive for burning DVDs; Blu-ray burner for creating Blu-ray Disc media)
- QuickTime 7.6.6 software required for QuickTime features
- Optional: Adobe-certified GPU card for GPU-accelerated performance; visit [www.adobe.com/go/premiere\\_systemreqs](http://www.adobe.com/go/premiere_systemreqs) for the latest list of supported cards
- This software will not operate without activation. Broadband Internet connection and registration are required for software activation, validation of subscriptions, and access to online services.\* Phone activation is not available.

For updates to system requirements and more detailed information about video hardware compatibility, visit [www.adobe.com/go/premiere\\_systemreqs](http://www.adobe.com/go/premiere_systemreqs).

### Windows

- Intel Core™2 Duo or AMD Phenom™ II processor; 64-bit support required
- Microsoft® Windows® 7 with Service Pack 1 (64 bit)
- 4GB of RAM (8GB recommended)
- 4GB of available hard-disk space for installation; additional free space required during installation (cannot install on removable flash storage devices)
- Additional disk space required for preview files and other working files; 10GB recommended
- 1280x900 display
- OpenGL 2.0-capable system
- 7200 RPM or faster hard drive (multiple fast disk drives, preferably RAID 0 configured, recommended)
- Sound card compatible with ASIO protocol or Microsoft Windows Driver Model
- DVD-ROM drive compatible with dual-layer DVDs (DVD+-R burner for burning DVDs; Blu-ray burner for creating Blu-ray Disc media)
- QuickTime 7.6.6 software required for QuickTime features
- Optional: Adobe-certified GPU card for GPU-accelerated performance; visit [www.adobe.com/go/premiere\\_systemreqs](http://www.adobe.com/go/premiere_systemreqs) for the latest list of supported cards
- This software will not operate without activation. Broadband Internet connection and registration are required for software activation, validation of subscriptions, and access to online services.\* Phone activation is not available.

For updates to system requirements and more detailed information about video hardware compatibility, visit [www.adobe.com/go/premiere\\_systemreqs](http://www.adobe.com/go/premiere_systemreqs).

## For more information

Product details:

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



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