

# Using Adobe<sup>®</sup> Premiere<sup>®</sup> Pro CS6 with Canon Digital Video Cameras



Adobe Premiere Pro CS6 includes: Adobe Premiere Pro CS6 Adobe Encore CS6 Adobe Media Encoder CS6

Adobe Premiere Pro CS6 is also available with an Adobe Creative Cloud<sup>¬</sup> subscription\* and as a component of Adobe Creative Suite<sup>®</sup> 6 Production Premium and Adobe Creative Suite 6 Master Collection.

Adobe Creative Suite 6 Production Premium combines:

- Adobe Premiere Pro CS6
- Adobe After Effects<sup>®</sup> CS6
- Adobe Photoshop<sup>®</sup> CS6 Extended
- Adobe Audition<sup>®</sup> CS6
- Adobe SpeedGrade<sup>™</sup> CS6
- Adobe Prelude™ CS6
- Adobe Illustrator<sup>®</sup> CS6
- Adobe Encore CS6
- Adobe Flash<sup>®</sup> CS6 Professional Additional components:
- Adobe Dynamic Link
- Adobe Media Encoder CS6
- mocha for After Effects
- Adobe Bridge CS6

Adobe Premiere Pro CS6 software provides a powerful, flexible toolset for editing video shot with Canon digital video cameras. Broad native support for high-definition video formats maintains the pristine quality of your footage, while the native 64-bit, GPU-accelerated Mercury Playback Engine lets you edit demanding HD projects in real time. In addition, Adobe Premiere Pro CS6 lets you mix and match formats freely and add high-quality editorial effects directly in the timeline with hundreds of nonlinear editing features optimized for creative productivity.

The other software components included with Adobe Premiere Pro CS6 give you even more creative control and flexibility. With 64-bit Adobe Encore<sup>\*</sup> CS6 software, use a robust feature set that supports the latest authoring technologies to deliver your work on DVD and Blu-ray Disc, as well as searchable web DVD. And Adobe Media Encoder makes delivery in virtually all of the major formats for broad-cast, film, online, device, and mobile distribution a snap.

Canon offers an extensive range of digital video cameras for demanding professional videographers as well as serious video enthusiasts. Canon video cameras come in different shapes and sizes, capture at various frame rates and resolutions using advanced CCD or CMOS image sensors, and offer features and optional accessories designed to provide the creative control, flexibility, and advanced capabilities your work demands.

Adobe Systems and Canon have collaborated to bring highly efficient, file- and tape-based workflows to Adobe Premiere Pro CS6 software, giving users the ability to natively edit HD and SD footage shot with Canon video cameras, including the Canon EOS C300 Digital Cinema camera, Canon XF305/300, and Canon XF105/100, which record video on solid-state media using the powerful Canon XF MPEG-2 codec with Full HD 1920x1080 resolution, 50Mbps bit rate, and 4:2:2 color sampling.

This document provides sample workflows and describes the benefits of using Adobe Premiere Pro CS6 with Canon digital video cameras.

# Native format support

Adobe Premiere Pro CS6 offers full native format support for the HD and SD video formats used by Canon video cameras—DV, HDV, and AVCHD, as well as the Canon XF MPEG-2 codec. Adobe Premiere Pro CS6 also offers native support for high-definition video shot with the Canon EOS 5D Mark II, 7D, 1D X, and 60D DLSRs.

Native format support eliminates the time-consuming process of transcoding or rewrapping your footage in an intermediate codec, so you can start working with your footage as soon as you've imported it into your project. Because it hasn't been transcoded, your source footage maintains its pristine quality throughout the production workflow. Native support also means that the metadata coming from the camera is retained.

# Capture and import footage

Adobe Premiere Pro CS6 provides highly efficient options for acquiring and importing Canon camcorder footage into your projects. Choose the workflow best suited to your camera, production, and post-production needs.

#### File-based acquisition

Canon video cameras record video and audio on various digital storage media, including hard drive, flash memory, and removable SD memory cards. To bring any of these files into your Adobe Premiere Pro projects, use the Media Browser panel to navigate to, view, and scrub clip thumbnails as well as select the files. Because Adobe Premiere Pro supports the video formats used by Canon video cameras natively, the files import in a few seconds, without complex and time-consuming format conversions. When you're ready to begin editing, you can open clips and image files in the Source Monitor directly from the Media Browser panel. Or save time by quickly dragging and dropping clips into the Project Panel, where you can directly add In points and Out points to your clips without having to first open them in the Source Monitor.



Depending on the camera model, shoot XF MPEG-2, AVCHD, or HDV-format video, store it on file-based digital media, and quickly import it into Adobe Premiere Pro using the Media Browser, complete with metadata.

Canon HD Video Cameras	Resolution & Frame Rates	Import Method	Capture Hardware/ Software	Codec Options/Notes
EOS C300 XF305/300, XF105/100	1920x1080, 60i, 30p, 24p	File Transfer	Adobe Premiere Pro	50Mbps, 4:2:2, CBR
	1280x720, 60p, 30p, 24p		Media Browser	MPEG-2 in an MXF wrapper
	1920x1080, 60i, 30p, 24p 1280x720, 60p, 30p, 24p			35Mbps, 4:2:0, VBR MPEG-2 in an MXF
				wrapper
	1440x1080			25Mbps, 4:2:0, CBR HDV-compatible MPEG-2 in an MXF wrapper
XA10	1920x1080, 60i, 24p, PF24, PF30	File Transfer	Adobe Premiere Pro Media Browser	AVCHD
VIXIA HF G10, HF M500, HF M40, HF MF M41, HF M400, HF M50, HF M51, HF, M500, HF R20, HF R20, HF R200, HF S30	1920x1080, 24p, 24p Cinema Mode, 30p			
HV40	1920x1080 24p, 24p Cinema Mode, 30p 1440x1080 24p, 24p Cinema Mode, 30p	File Transfer	Adobe Premiere Pro Media Browser	HDV
XH A1S, XH G1S	1440x1080 60i, 30F, 24F	File Transfer	Adobe Premiere Pro Media Browser	HDV

Alternately, you can use Adobe Prelude software (available separately as a component of Adobe Creative Suite 6 Production Premium, Master Collection, or the Adobe Creative Cloud Service\*) to ingest full or partial file-based media clips, 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.

#### About the Canon XF MPEG-2 codec

Canon has adapted the highly reliable and versatile MPEG-2 compression format for use in its EOS C300, XF305/300, and XF105/100 cameras. These cameras use the Material Exchange Format (MXF) for their file structure. The internationally standardized container format is used to wrap video and audio content along with important metadata into a single media file that is recorded on readily available, cost-effective Compact Flash Cards.

The EOS C300, XF305/300, and XF105/100 shoot Full HD 1920x1080 resolution at 50Mpbs using 4:2:2 color sampling. 4:2:2 provides twice the color resolution of HDV and other codecs that rely on 4:2:0 color sampling and yields smooth tonal and color gradients, making it well-suited for post-production processes such as color grading, keying, and compositing.

#### About AVCHD and XF MPEG-2 spanned clips

With Relay Recording, some Canon video cameras automatically switch recording from their internal memory to SD cards when the internal drive becomes full, so recording continues uninterrupted. This creates spanned clips. Canon EOS C300, XF305/300, and XF105/100 cameras feature Relay Recording between Compact Flash Cards

The Media Browser in Adobe Premiere Pro treats spanned clips from Canon video cameras as a single asset. When dragged from the Media Browser panel into the Project panel, spanned clips are displayed as one file.

#### About the Canon XF Utility

The Canon XF Utility (included with the Canon EOS C300, XF305/300, and XF100/105) runs on Mac and Windows computers, and offers various options for conveniently managing and playing back clips recorded with the video camera, including the ability to:

• Display and search a list of all clips recorded on a Compact Flash (CF) card and play back clips

 Transfer clips recorded on a CF card to your computer, or write back previously saved clips from the computer onto a CF card

 Create, edit, and save User Memo profiles on SD memory cards, and later load a User Memo file to your video camera. During recording, the User Memo file information is embedded in the clips

• Export clips as MXF files, and then save them in a folder on your hard drive While watching footage, you can create rough cuts by marking In points and Out points, 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 them. 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.

# Tape-based capture

For those who still need to pull HDV and DV content off of tape shot with XH series video cameras or other Canon models that record to miniDV tape, Adobe Premiere Pro supports batch capturing—automatic, unattended capture of multiple clips from controllable cameras and tape decks. You define a batch by selecting a group of clips that you have logged. These appear as offline (placeholder) clips in the Project panel or in a bin. You can capture any number of logged offline clips by selecting them and choosing File > Batch Capture. When you begin capture, Adobe Premiere Pro automatically re-sorts entries by tape name and timecode In points so that they're captured as efficiently as possible. Automatic scene detection for both HDV and DV footage saves more time by reducing the number of clips you have to log manually.

# Editing workflow

Adobe Premiere Pro enables a flexible, intuitive, and comprehensive workflow for editing, refining, and delivering content. Start by creating a new project and choosing a preset that best matches your source footage. Or you can start with a generic sequence—Adobe Premiere Pro CS6 automatically detects and notifies you when a clip dragged onto the timeline doesn't match the sequence settings, enabling you to easily choose to change the sequence settings to match the clip's settings or vice versa.



To help get your projects started quickly, Adobe Premiere Pro CS6 includes an extensive array of sequence presets—including presets for the Canon XF MPEG2 codec.

You can also freely mix source footage with different resolutions, frames rates, and aspect ratios in sequences without complex format conversions. For example, you can drop HDV 1440x1080 24F footage shot with a Canon XH A1S into the same timeline as 1920x1080 24p footage from a Canon EOS C300 Digital Cinema camera and 1280x720 30p footage from an XF105. You can even drop SD 4:3 clips into a 16:9 HD sequence—when you do so, the SD clips are pillar-boxed automatically.

#### **Real-time editing**

# Supported NVIDIA 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*. For system requirements and compatibility, please see 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 1GB VRAM that are available on some MacBook Pro computers running OS X 10.7.

Thanks to the Mercury Playback Engine and broad native format support, you can smoothly play and scrub through multilayer, multiformat sequences that include HD 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 with improved support for third-party hardware—the enhanced Mercury Playback Engine delivers astounding performance, with or without a GPU. This lets you work on dense, complex projects using a fast, GPU-enabled workstation, and bring them onto a lesser-powered computer, and continue working without skipping a beat.

GPU acceleration via supported NVIDIA graphics cards and AMD OpenCL-based graphics card available with certain Apple MacBook Pro computers makes the creative process more fluid and accelerates rendering for faster output. With these cards, you can see results instantly when vector keying with the Ultra<sup>®</sup> keyer, applying blend modes, and working with many other effects including the intuitive Three-Way Color Corrector effect.

Throughout this real-time editing workflow, in most cases, rendering occurs only when you send your sequence to Adobe Media Encoder for output in virtually any of the major delivery formats.

## Delivery

When your project is complete, Adobe Premiere Pro CS6 gives you the flexibility to deliver your work practically anywhere. When you want to output your work on DVD or Blu-ray Disc, you can use Adobe Dynamic Link to send your Adobe Premiere Pro sequences straight to 64-bit Adobe Encore without intermediate rendering. Adobe Premiere Pro lets you put markers in your sequence's timeline that act as chapter markers when imported into Encore or interactive cue points when exported to FLV or F4V for viewing in Adobe Flash<sup>®</sup> Player. You can also turn your DVD and Blu-ray Disc projects into web DVDs. Web DVDs replicate their DVD or Blu-ray Disc counterparts by displaying the same content online in a web browser and include interactive menus and subtitles, as well as pop-up menus and high-resolution video.

To deliver your projects online, on air, on device, and on film, Adobe Media Encoder, a separate 64-bit software application included with Adobe Premiere Pro CS6, saves you time by automating the process of creating multiple encoded versions of your source files and Adobe Premiere Pro sequences. You can set up multiple items for 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 a wide variety of device and video formats, including iOS and Android devices, YouTube, Vimeo, MPEG-2, H.264, QuickTime, AVC-Intra, DPX, and more.

## Summary

Broad native format support lets you bring footage from Canon digital video cameras into Adobe Premiere Pro quickly and efficiently, while preserving image quality. Native 64-bit, GPU-accelerated performance lets you edit complex timelines in real time, and a comprehensive set of professional editing tools give you the power and flexibility to you achieve the look and pacing you're after. And with Adobe Encore and Adobe Media Encoder you can deliver your work practically anywhere.

#### For more information

Adobe Premiere Pro CS6 details: www.adobe.com/premiere Adobe Premiere Pro CS6 system requirements: www.adobe.com/products/premiere/systemregs

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