dpsVelocity™

FASTER

SHARPER

EASIER

EDITS

DPS®

A Leitch Brand

WITH

DFX+
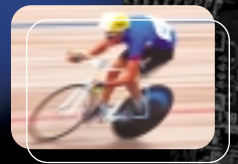
dpsVelocity ™
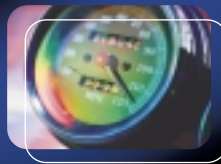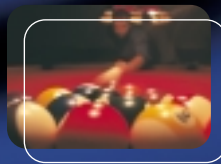
PROFESSIONAL EDITING, WEB STREAMING, COMPOSITING, EFFECTS, ANIMATION AND MORE

dpsVelocity™ is the ultimate real time non-linear editing system for digital video and content creation professionals. A joint effort of DPS' award-winning hardware and software development teams, dpsVelocity delivers faster, sharper and easier edits while raising the bar for reliability and affordability. Whether creating content for broadcast, videotape, CD-ROM, DVD or the web, dpsVelocity is your best choice.

At the heart of every dpsVelocity editing system is the dpsReality™ studio digital disk recorder card. This advanced hardware, which supports compressed and uncompressed video recording modes, delivers quality so sharp it surpasses Digital Betacam. Amazingly compact, the dpsReality card combines the functions of a dual stream DDR, video mixer/keyer, real time 3D effects processor, multi-channel audio mixer, SCSI controller and two graphics framestores in a single PCI slot.

It takes an equally powerful software application to exploit the capabilities of the dpsReality hardware. The extensive real time capabilities of dpsVelocity put you in the fast lane. Optimized for the way you work, the intuitive and flexible interface makes it easy to perform even the most complex three and four point edits. Numerous real time filters such as color correction, speed change and transparency are included along with hundreds of ready to use 2D/3D transitions, rolling/crawling titles and perspective, rotation and warp effects. Enhanced dpsVelocity audio features provide real time volume, pan and EQ control for eight channels (four stereo pairs) of synchronized audio.
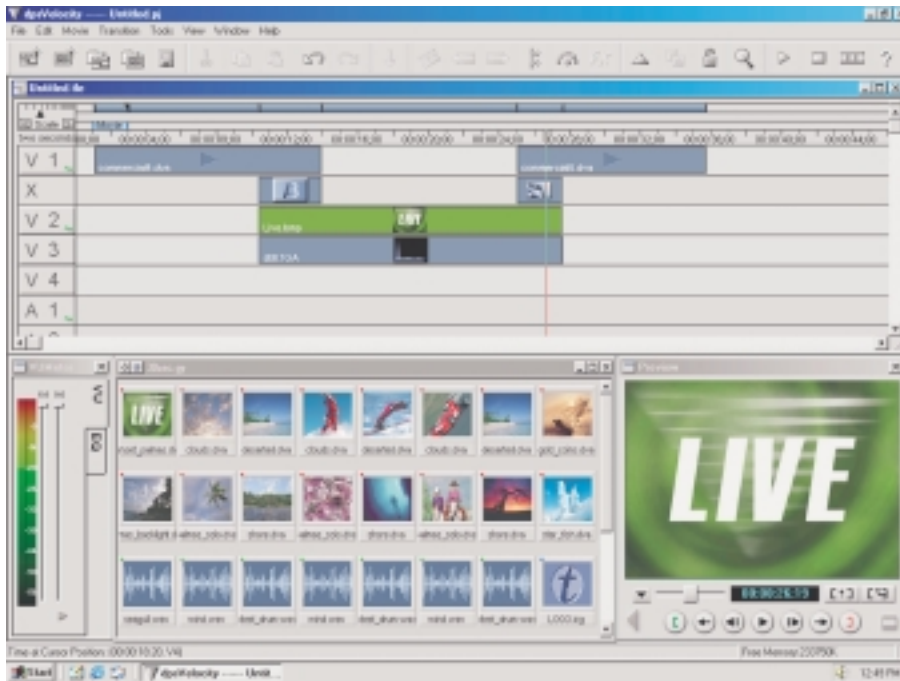
For over 20 years, DPS has been defining and refining the way digital video is created and processed. dpsVelocity leaps ahead of the competition to deliver digital video editing faster, sharper and easier than ever before.
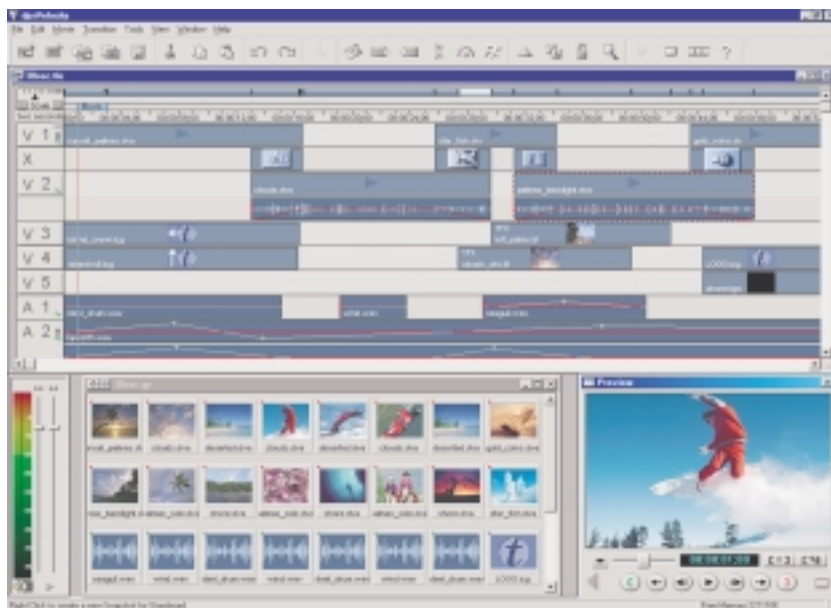
dpsNetStream™

## DISTRIBUTE REAL TIME HIGH QUALITY CONTENTON THE INTERNET

Using dpsNetStream technology, dpsVelocity allows digital video professionals to enter a whole new realm of high quality content distribution via the Internet. Popular streaming formats can be created in one step, directly from the timeline. dpsVelocity also includes live streaming capabilities, allowing timelines to be played live to the Internet. Timelines can include a combination of live and pre-recorded video and audio, with titles and transitions providing exceptional webcasting flexibility.

WEB VIDEO OUTPUT

Creation of high quality streaming video files for the web is handled easily from the timeline. Simply choose the file format you want to output, specify the desired size and compression settings, and let dpsVelocity do the work for you. Ligos GoMotion-powered MPEG-1, MPEG-2, Microsoft Windows Media™, RealNetworks RealVideo™, AVI and QuickTime™ formats are all supported.
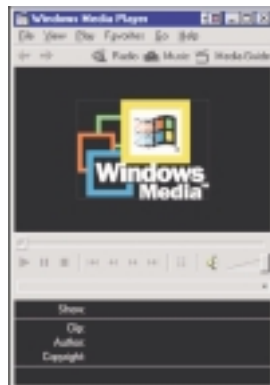
LIVE WEB STREAMING

In addition to creating files in streaming formats, dpsVelocity can stream to the web live from the timeline with the included RealNetworks RealVideo and Microsoft Windows Media Format support. Live video from a camera or deck can be combined in real-time with titles, transitions, and previously captured clips, and streamed live to the Internet. And integrated remote control support for an optional Panasonic WJ-MX20™ switcher makes multi-camera live webcasting easy.

ORGANIZING & TRIMMING CLIPS

Captured clips are easily organized into one or more customizable galleries, which allow playing, sorting, annotating and managing the media on your drives. Trimming individual clips in three or four point fashion is enhanced by the dpsVelocity dual trim window. Slip, slide, insert, overlay, and fit-to-fill modes supplement the ability to trim individual clips directly on the timeline.
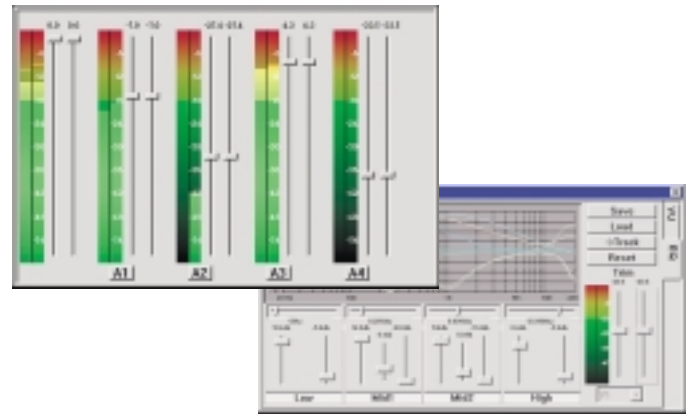

AUDIO EXCELLENCE

As any professional knows, video is only half of the story. Audio features have been enhanced in dpsVelocity to provide real time multi-channel monitoring and hardware mixing of eight audio channels with guaranteed audio sync. Real time EQ has been added for audio sweetening, as well as complete right and left channel panning controls for each audio track. Need more channels? With dpsVelocity, you can even automatically mix down additional audio tracks for real-time preview.
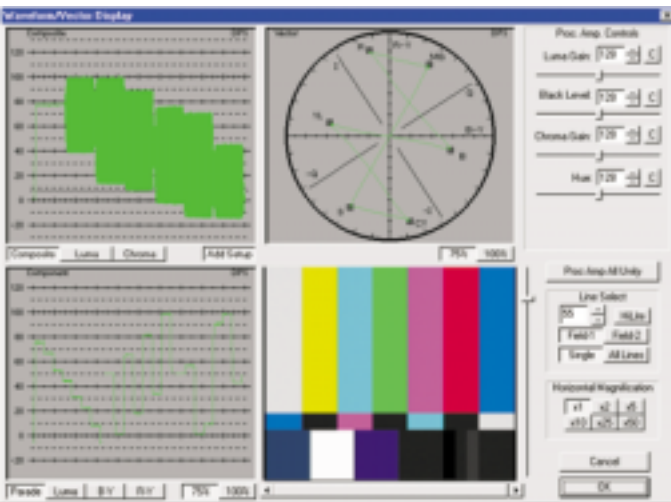
DPS QUALITY CONTROL CENTER

Sophisticated dpsVelocity diagnostic tools, like our integrated waveform monitor and vectorscope display help keep your video levels within spec.
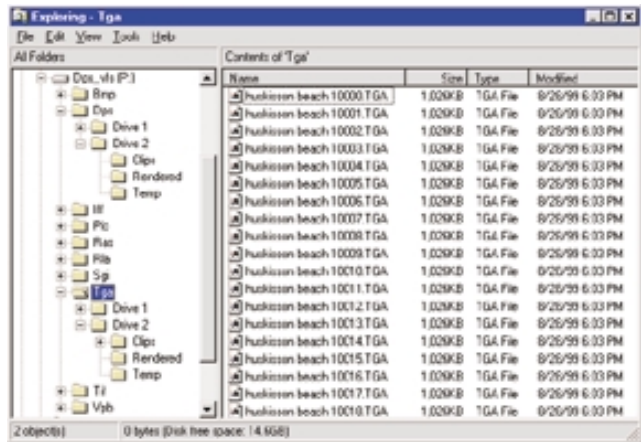
DPS VIRTUAL TAPE FILE SYSTEM™

dpsVelocity users can seamlessly share files with other graphics, animation and editing systems via the revolutionary DPS Virtual Tape File System. VTFS makes each frame of video simultaneously available in nine different file formats: SGI, TGA, BMP, PIC, TIF, IFF, VPB, RAS and RLA. Animation sequences can also be rendered directly to dpsVelocity and then easily accessed for editing.

CAPTURING FOOTAGE

The process of digitizing video is accomplished using either quick capture or RS-422 integrated batch capture, complete with VITC/LTC timecode. Both allow for proc amp controls during capture, as well as an on-board waveform and vectorscope display. Whether you're working online or offline, fully-functional EDL import and export can be utilized using multiple industry formats. When equipped with an optional DV I/O card, batch capturing can also be controlled via a 1394 digital link.

POWERFUL EFFECTS & TRANSITIONS

dpsVelocity transitions and effects are fully keyframable, giving you maximum control. Numerous real time effects are at your disposal, including perspective, speed change, reverse varispeed playback, color correction, cropping, keying, warping, transparency, and more. dpsVelocity even lets you combine video effects with transitions and rolling and crawling titles in complex groupings of up to five layers. Hundreds of pre-designed 2D and 3D transitions are ready to go. You can even key graphics over live video at the touch of a button. For multi-pass effects, dpsVelocity uses fast hardware-assisted rendering. To eliminate re-rendering, DPS Render Bank technology remembers previously rendered segments, paving the way for flexible experimentation.


DVDit!™

Included with dpsVelocity is the ability to create your own DVDs. Sonic's DVDit! makes DVD authoring and publishing easy. DVDit! allows you to author a DVD with multiple menus and movies, and write it directly to a broad range of DVD and CD recorders. DVDit! features real-time DVD simulation, allowing you to proof your DVD prior to burning. With its intuitive user interface, DVDit! can take you quickly from MPEG files to a fully interactive DVD or CD-ROM title. For more sophisticated DVD authoring needs, dpsVelocity is also compatible with a variety of other popular DVD authoring packages.

CAYMAN GRAPHICS POWER CG™

All dpsVelocity systems include the Power CG RFS professional character generator plug-in from Cayman Graphics. Fully anti-aliased characters with an effective resolution of better than one nanosecond can be sized, compressed and expanded on the fly and positioned anywhere on the screen in single scanline/pixel increments. Characters, edges and shadows can be drawn with user-definable textures such as marble, wood grain, etc. The 12-bit precision of the dpsVelocity effects system ensures ultra-smooth Power CG rolls and crawls.
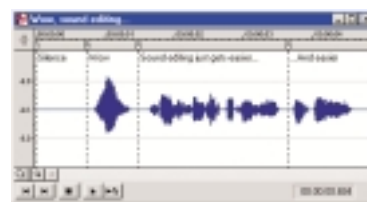
SOUND FORGE XP™

Sound Forge XP is another useful resource we include with dpsVelocity to help you complete your most challenging projects. This comprehensive audio editing package contains a wide range of tools for manipulating digital audio. Typical effects include: fade in/out, normalize, pan, pitch bend, smooth/enhance and time compress/expand.

RESOLUTION INDEPENDENT
COMPOSITING AND EFFECTS SOFTWARE

DFX+™ LETS YOU WORK IN LAYERS

Included in every dpsVelocity package is Digital Fusion DFX+, the latest in advanced resolution independent compositing and effects software from eyeon. DFX+ is designed to allow you to easily add a professional finish to your productions and video sequences. DFX+ will allow you to move quickly from concept to final production with the same speed, precision, and productivity as the award-winning Digital Fusion.

Major studios know that the key to getting that professional looking production is to render all the elements into separate layers. DFX+ uses both flow and timeline layouts to help you visualize your layers, making it easy to explore editorial decisions. By keeping the elements separated, DFX+ will allow you to easily make changes to individual layers. This means you don't have to re-render an entire sequence just to add an effect to the background element. Effecting an individual layer in DFX+ is as easy as adding the effect tool to the flow or timeline and fine tuning that individual layer without affecting the other layers and with complete interactivity.

Direct timeline integration between dpsVelocity and DFX+ makes it easy for dpsVelocity users to harness the power of DFX+ directly within the dpsVelocity interface. DFX+ effects such as time changes, glows, defocusing, warps and custom transitions can be applied to clips from the dpsVelocity timeline. Of course, DFX+ directly supports the dpsReality hardware, allowing you to instantly review your production in full broadcast quality.

DFX+ supports multiprocessor Intel systems and loads and saves over 20 professional image file formats. DFX+ can be expanded via optional modules to include highly advanced features such as tracking, integrated keying, film import, 3D depth tools, network rendering and more.

DFX+™ KEY FEATURES
• Text+ advanced character generator
• Import PSD files to new project
• Interpolated time speed changes
• Supports wide range of native and AE plug-ins
• Can be expanded with support for trackers, advanced keyers, expressions and more with additional plug-in modules
• Direct timeline integration with dpsVelocity
• Free-floating flow interface
• Flow, timeline, and spline views of your project
• Full multithreaded, multiprocessor optimization
• Pentium II MMX, Pentium III SSE optimization
• Unlimited layers
• Resolution independent
• Unlimited undo and redo
• Powerful warps and effects
• Every tool is fully animatable with powerful spline controls
• Powerful polygonal effects/masks that can be animated to apply effects to user definable regions

USES FOR DFX+
• Image file conversion
• Advanced 2D/3D titling for movies, commercials and other productions
• Apply smooth speed changes to video with interpolation
• Direct video hardware support for DPS boards
• Create movies in AVI and Quicktime formats
• Resize images to different resolutions and aspect ratios
• Color correct multiple image sequences
• Flip book (playback images from RAM). On the fly screen switching from 640x480 to 920x1080 and 16 to 32 bit depth
• HDTV support 1080I,1080p and 720p
• 16:9 format for PAL and NTSC
• Change field dominance and other common field problems
• Split alpha out to an image
• Save to multiple image formats, resolution and hardware at the same time
• Save favorite tool settings, tool groups and flows to flexible project bins
• Additive and subtractive merging and alpha blending
• Tile safety and monitor safety guides
• View images including alpha and separate channels
• View alpha overlaid on the image

dpsVelocity™

CHOOSE THE SYSTEM THAT IS RIGHT FOR YOU

THE HARDWARE
dpsReality Studio Digital Disk Recorder

FEATURES	dps Velocity 2D	dps Velocity 3D
Fully integrated DPS hardware/software solution	●	●
dpsVelocity real time NLE software	●	●
dpsReality SDDR hardware – single slot, single IRQ, dual stream video capture card with onboard ultra-wide SCSI interface	●	●
Uncompressed & compressed recording modes	●	●
Real time support of web video streaming formats	●	●
Live webcasting combining live video & audio with prerecorded footage, titles & transitions	●	●
Integrated remote control support for optional Panasonic WJ-MX20 switcher for multi-camera live webcasting	●	●
Enhanced project management architecture	●	●
Mix clips captured at different compression levels on timeline	●	●
Trim Window supports 3 and 4 point edits	●	●
Dual frame buffers for two graphics over real time transitions	●	●
Real time rolls & crawls	●	●
Full Frame 720 x 486 (NTSC) 720 x 576 (PAL) resolution	●	●
Multiple galleries (bins) with search capabilities	●	●
Real time picture-in-picture, 3D perspective & rotation		●
Real time dynamic speed changes	●	●
Real time reverse varispeed playback	●	●
200+ predefined real time 2D transitions (12-bit ultrasmooth anti-aliased wipes with colored, soft edge borders)	●	●
200+ predefined real time 3D transitions (with sub-pixel movement for superb quality)		●
Real time parametric audio EQ	●	●
Balanced & unbalanced stereo audio I/O	●	●
Separate stereo audio input for CD or auxiliary source	●	●
Real time 8-channel (4 stereo pair) hardware audio mixing	●	●
DPS Virtual Tape File System™ supports workgroup file sharing and seamlessly integrates third party graphics applications	●	●
Live video processing including real time titling and transitions	●	●
Hardware accelerated rendering for multi-pass effects	●	●
Time saving Render Bank™ technology remembers previously rendered segments	●	●
Fully keyframeable proc amp controls		●
Real time chroma keyer		●
EDL import & export	●	●
RS422 control of Batch Capture, Recapture & Print to Tape	●	●
Integrated waveform/vectorscope display	●	●
Flexible video I/O: composite, component & Y/C	●	●
Accepts optional SDI, DV & SDI/DV digital I/O cards	●	●
Dedicated preview channel video output	●	●
Export MPEG-1, MPEG-2, RealNetworks RealVideo™, Microsoft WMV™ and ASF, AVI and Quicktime™ formats	●	●
Adjustable genlock timing referenced to video input	●	●
DFX+ compositing & advanced effects w/direct timeline integration	●	●
Cayman Graphics Power CG™ for professional titling	●	●
Sound Forge XP™ for audio sweetening	●	●
Sonic DVDit!™ for DVD authoring	●	●
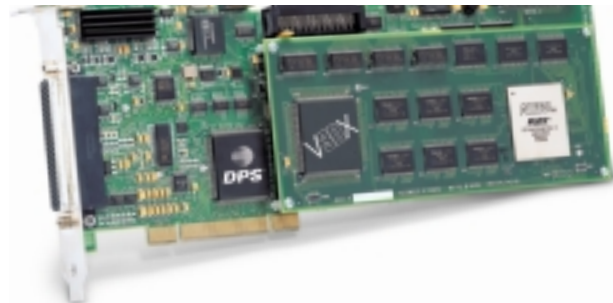
- The dpsReality dual stream video disk recorder card fits in a single PCI slot and requires just one IRQ.
- Onboard SCSI Controller provides maximum data throughput to dedicated video drives.
- Better than digital Betacam quality is achieved in the uncompressed recording mode by bypassing one of the M-JPEG hardware codecs.
- Movie-2 Bus supports optional DPS digital I/O cards. Available SDI, DV and SDI/DV cards also provide AES/EBU and S/PDIF digital audio I/O.
- DPS V3DX™ Real Time 3D Effects Processor (DVE) module (included with dpsVelocity-3D systems) mounts directly on the dpsReality SDDR card.
- Wideband PCI interface facilitates importing of animation files and provides workgroup access to individual video frames via the powerful and exclusive DPS Virtual Tape File System™.
- Integrated SMPTE VITC/LTC time code reader/generator with separate video output for creating window dubs.
- Flexible Video/Audio I/O: Component, composite and Y/C video with balanced and unbalanced stereo audio.

SELECTED OPTIONS:

The rackmountable breakout box consolidates all analog and digital audio/video connections for a truly professional installation.

A variety of digital audio/video I/O cards make it easy to add SDI, DV or SDI/DV capabilities to your dpsVelocity system.

JOG-4000
External hardware jog/shuttle controller provides tactile precision control for scrubbing, trimming, editing and deck control in dpsVelocity.

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