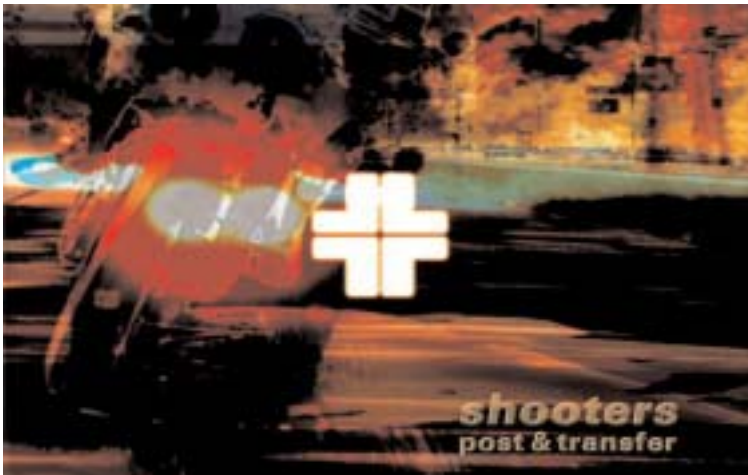


editing/finishing
discreet*



EDITING/FINISHING

DISCREET

Based in the Cité Multimédia section of Montreal's historic Old Port, Discreet has been a key force behind the development and evolution of digital media creation and design for the last decade. Discreet's solutions have played critical roles in shaping the post-production industry and the skills of today's digital editors and artists, helping set many of the standards that define how visual content is created today.

Discreet designs and builds highly optimized real-time solutions that consistently defy the most demanding post-production challenges. From tools to workflow, Discreet's advanced editing and finishing systems are designed from an intimate knowledge of the evolving nature of our clients' work and with their active participation.

Innovative excellence

They breathe life into creative vision with fluid power and force. Yet there is no disguising that Discreet's **fire**® and **smoke**® editing and finishing systems stand at the forefront of technological innovation. Combining uncompromising performance with the subtle sophistication of a deep and rich toolset, Discreet's editing and finishing systems provide the world's best editors and artists with the finest tools and unmatched performance for any project: broadcast video, HDTV, digital cinema or feature film.

100% pure adrenalin

Fluid, robust, inspired – Discreet's editing and finishing systems offer you an unparalleled artistic experience. The immediacy of superior graphics performance of SGI® systems, combined with high-resolution, real-time capabilities and a toolset that is without equal in the industry, allows interaction with clients in a highly creative design process. So this process provides the ultimate thrill of fast-paced sessions, immediate feedback and real-time brainstorming.

A dream team

fire and **smoke** – your perfect partners, moving rhythmically with you as you capture the story from your mind's eye and bring it to the screen. And with that comes the ultimate confidence that together you will succeed, safe in the knowledge that time-critical editorial projects will make their deadlines, whatever the format, and with beautiful results, too.

The perfect thoroughbred

Award-winning creative work, both short- and long-form, demands flexible, powerful systems that combine extensive editing and effects toolsets. **fire** and **smoke** go beyond the traditional online editing and conforming capabilities of the myriad non-linear editing solutions available today. Offering visual effects technology derived from their Academy Award®-winning cousins **inferno**® and **flame**®, **fire** and **smoke** provide you with the superior finishing capabilities you'll need to push the boundaries of what's possible digitally – and attain your ultimate goals.

Freedom of expression

Escape humdrum reality. With **fire** and **smoke** you'll feel the freedom to alter reality for your client without the constraints of typical production limitations. Work in any resolution and any format simultaneously. Output to multiple formats from a single master. Integrate your work with Discreet's visual effects systems or animation software. Connect to VTRs and third-party offline non-linear editing systems or hardware systems. Delegate tasks to offline assistant solutions such as Discreet's **backdraft**™. It's all there so that **fire** and **smoke** editors are free to focus more on creativity and less on workflow.



Non-linear editing and finishing

fire and **smoke** give you the online performance, the superior finishing tools and the effects capabilities you need to meet the multi-format distribution demands of modern television and film post-production. With the unmatched interactivity of **fire** at the highest resolutions, and versatile price-performance options of **smoke**, you'll confidently create, edit and deliver the highest quality images for any format. **fire** and **smoke** offer the most comprehensive palette of visual effects tools within any editorial environment. From the timeline, you have direct access to tools based on our award-winning **flame** technology, tools such as a true 3D DVE, keying, color correction, paint, text, tracking and stabilization.

fire

fire is Discreet's premier non-linear editing and finishing system, providing the ultimate interactive environment for high-resolution film, digital cinema, HDTV and standard-definition video work.

fire offers native 4:4:4 image quality, up to 12-bit/component color depth and Academy Award-winning visual effects tools. It provides real-time capabilities for standard-definition video, HDTV and 2K film with additional support for up to 4K x 3K image manipulation and processing.

Running on the world's most advanced visual supercomputer, the SGI Onyx® 3200, **fire** draws its phenomenal power from multiple concurrent processors and the industry's only real-time 12-bit graphics pipeline. No other editing and finishing system offers real-time interactivity at full non-compressed HDTV or film resolutions throughout the creative process.

smoke

For facilities seeking the flexibility to edit and finish standard- and high-definition projects on a single system, **smoke** delivers real-time interactivity with exceptional price performance. While other systems stagger through high-definition playback on simple cuts or effects, **smoke** blazes through multi-layered effects and edits without delay. **smoke** offers real-time capabilities for standard-definition video and HDTV as well as native 4:4:4 image quality for pristine visual effects work.

Running on the SGI Octane2, **smoke** offers excellent performance for fast-paced, interactive client sessions, especially at HDTV resolutions. **smoke** is unique in terms of its performance, online capabilities and uncompromised image quality.

Multi-mastering

Multi-Master Editing™ gives **fire** and **smoke** the ability to output a project in multiple formats from a single high-definition master – a tremendous advantage to facilities producing content for multiple distribution formats. **fire** and **smoke** also provide advanced pan-and-scan support for fast conversion between aspect ratios, as well as on-the-fly 3:2 pull-down and interlacing capabilities.

fire and **smoke** offer advanced audio processing to enable accurate frame rate conversions while maintaining audio synchronization, as well as up to 8 tracks of audio output monitoring. From stereo to surround sound, your suite will be ready to handle whatever project the client requires.

fire and **smoke** feature Open Media Framework Interchange (OMFI) with other non-linear editing systems – such as Avid® – letting editors move to a better offline-to-online workflow as they progress beyond EDL exchange and conforming to true editorial finishing.



Previous page
Images courtesy of
Liquid Light,
Rushes,
i^3,
Liquid Light,
Shooters Post & Transfer,
Crawford.

This page
(Top image)
The Finishing Timeline
Image courtesy of
The Matchbox and Discreet

(Bottom image)
3D DVE
Image courtesy of
Broadway Video
and Discreet

Editing

From fast, single keystroke editing to intuitive gestural manipulation of clips and timeline, **fire** and **smoke** offer you the best in editing and finishing tools: like match-frame, multi-tracks, containers, Multi-Master Editing and real-time transitions. Moreover, you can fully customize the editing layouts and settings to suit your preferences.

Audio

fire and **smoke** incorporate high-quality audio capabilities, unlimited audio tracks and up to 8 channels of external monitoring. **fire** and **smoke** audio tools include fully keyframable controls for level, gain, pan and parametric EQ, as well as a wide range of advanced effects from reverb and pitch-controlled time-stretching to full VST plug-in support.

3D DVE and compositing

Our powerful 3D DVE offers pristine image quality and breathtaking speed. Whether you need to push to the limits of 3D compositing, create 3D text animations, or simply twirl an image in space as a transition, **fire** and **smoke** offer you all the tools you need to really add spice to your work. You can even import and composite 3D models and data from applications like Discreet's **3ds max™** software.

Color correction and keying

fire and **smoke** feature Discreet's Academy Award-winning color correction and keying technology, including a sophisticated array of tools for full primary and secondary color correction, advanced color grading and accurate color matching. Keying capabilities include high quality Chroma and RGB keyers, user-definable linear keying and advanced spill suppression.

Tracking and stabilization

fire and **smoke** feature our Academy Award-winning tracking and image stabilization technology, including powerful new features (such as Pre-Tracking) designed to help you achieve accurate results with greater speed and ease.

Text and paint

Create, edit and format 2D and 3D text in the powerful text module of **fire** and **smoke**, featuring intuitive tools for changing layout, animating text and creating effects. **fire** and **smoke** also offer extensive paint capabilities including fully customizable brushes and Autopaint motion tracking for fast touch-up or rotoscoping work.

Gmask

Discreet's powerful Gmask (garbage mask) rotoscoping technology provides a fast and accurate means of isolating moving elements. Gmasks allow you to control the amount of blur at each point on the shape, perfect for motion blur compensation.

Filters and plug-ins

fire and **smoke** offer sophisticated, user-definable image processing filters as well as de grain/re grain tools for working with film-originated media. You can further enhance your effects toolset and extend your creative possibilities through the more than 400 **sparks™** third-party plug-in filters currently available.

Archiving and I/O

fire and **smoke** support real-time I/O and playback of all ITU-R 601 NTSC/PAL and ATSC high-definition video formats and frame rates, including 24P. **fire** and **smoke** also support 2K film playback, OMFI and multiple-EDL conform capabilities, real-time 2:3 insertion and extraction and 30-24 fps EDL conversion capabilities. **fire** and **smoke** projects can be archived to both SD and HD videotape or as data.

Creativity without boundaries

Creating compelling media is an ever more challenging task: from fast-paced edits to increasingly complex visual effects, and all in less time than before. Editors today require solutions without compromise. And that's exactly the design philosophy behind our advanced **fire** and **smoke** editing and finishing systems – a combination of superior performance with one of the most sophisticated arrays of editorial and effects tools to be found in a single system.



This page
(Top image)
Audio Finishing Tools
Image courtesy of
Broadway Video
and Discreet

Next page
Image courtesy of
Kopp Film

(Bottom image)
Color Corrector
Image courtesy of
Le Bureau de Post
and Discreet

Digital cinema with fire

As pioneering directors and cinematographers continue to push the boundaries of what's possible digitally – exploring new ways of telling their story – they have come to rely on the talent of Discreet's clients to help realize their vision.

The unbeatable combination of the online finishing tools in **fire** with **inferno** and **flame** visual effects has been core to the successful completion of digital projects such as *The Cell*, *Jason X*, *How High* and *Spy Kids 2*. Digital cinema is empowering talented and visionary film-makers around the world, such as Germany's Carsten Fiebeler, whose *Die Datsche* (Home Truths) was recently finished entirely in **fire** by Koppfilm GmbH.



Commercials

Selling a product is never easy. Nor is getting a jaded viewer's attention. Yet with **fire** and **smoke** the task is made easier. Interact with your clients, test new ideas online and create multiple versions – :30s and :15s – with greater ease. **fire** and **smoke** provide the tools to create award-winning commercials for the most demanding of art directors.

Film and digital cinema

Since **flame** was first used by Sony Pictures Imageworks on *Super Mario Bros.* in 1993, Discreet systems have been the powerhouse behind some of the most stunning on-screen visual experiences. With a long list of feature film credits to their name, Discreet visual effects systems earned their own Academy Award for Scientific and Technical Achievement in 1998.

Whether your media is from a film source or digital camera, **fire** and **smoke** offer you the ability to tell a compelling visual story with greater ease and efficiency. Renowned for their sophisticated toolset and pristine image quality, Discreet **fire** and **smoke** systems are used worldwide by some of the world's most talented editors and artists working on projects ranging from blockbuster feature films to TV drama.

fire and **smoke** allow you to natively edit high-resolution digital-cinema projects without compromising quality. **fire** is the industry's only fully featured NLE offering full 12-bit/component color fidelity, real-time HDTV and 2K playback, and support for up to 4K image resolutions.

Music videos

MTV and the birth of the modern music video empowered recording artists to explore new means of expression – and ensnare their fans through imagery as much as song. And our systems have helped editors and artists create the most compelling music videos: fast cuts, color correction, synched edits, incredible effects. From giant rock stars roaming the streets of New York to monkeys playing instruments, make the impossible possible – now.

fire and **smoke** provide you with the rich editorial and visual effects toolsets required to make it happen. Interact with the producer, the director, the artist – they all may have a different opinion. With the versioning capabilities and speed of **fire** and **smoke**, you'll be able to try them all.

Broadcast television

As networks expand and proliferate, their need to differentiate increases dramatically. To attract and hold viewers, networks are becoming ever more creative – and that requires good tools. But to be able to make changes in rapid response to events takes excellent tools – such as Discreet's powerful **fire** and **smoke** online systems. From the world's leading networks to local PBS stations, broadcasters and cable networks have turned to **fire** and **smoke** to help them create new station IDs, on-air promos, and program opens and bumpers.

Fast versioning allows templates to be customized with ease and efficiency, shaving hours of production time so :60s can be repurposed as :30s, or a news open re-edited with the latest breaking story.

TV production departments also use **fire** and **smoke** systems for documentary and drama work, relying on their strength at assembling and editing long-form programs, and on their rich set of visual effects tools to deliver compelling programming.

Project and media management

fire and **smoke** provide the editor with intuitive tools to manage their media assets throughout the entire editorial process. Desktop elements and clip libraries (bins) can be viewed in frame or list modes across multiple framestores. Tuned sort and search tools, including user-defined criteria, enable fast location of your media. Advanced archiving tools allow fast and efficient back-up of both media and project data to videotape, creating an XML-based Table of Contents for selective restoring of projects.

Interoperability

Projects are interchangeable between Discreet systems: **fire** projects can be opened on **smoke** or sent to **flame**, and **combustion**® software allows efficient backroom preparation of elements for any of your **fire**, **smoke**, **inferno**, **flame** or **flint**® systems. From Gmask vector shapes to keying, color correction and tracking setups, data can be exchanged quickly and efficiently.

Discreet Storage and Discreet Networking

Discreet Storage and Discreet Networking provide the high-performance storage and networking backbone for **fire** and **smoke** systems. They can serve up real-time media at the extremely high bandwidths required by Discreet systems, from standard-definition video to all ATSC HDTV resolutions and 2K film.

Discreet Storage arrays are tuned to deliver real-time uncompressed RGB data (4:4:4 sampling), providing superior image quality for graphics and effects as well as avoiding the sampling limitations of YUV (4:2:2).

Discreet Networking provides high speed data transfer between systems, is optimized for HiPPI networks and supports industry-standard TCP/IP networking technologies including ATM (OC3, OC12), FDDI, Ethernet, Fibre Channel, and Gigabit Ethernet. Discreet Networking also provides a direct interface to digital disk recorders such as telecine databases, DVEs and CGs.

Discreet switchable storage

Discreet switchable storage offers the benefit of accessing projects or frames on different interconnected Discreet storage arrays without physically reconnecting systems or using Discreet Networking to transfer files.

Discreet switchable storage significantly improves the productivity and workflow of any facility. Discreet Storage framestores switch instantly between Discreet systems through an intuitive software interface. Once a complex series of composites are rendered on a **flame** system, they can be switched to the **smoke** system instantly, preserving bandwidth and eliminating lengthy network transfers. Discreet switchable storage saves hours of downtime and provides a new level of collaboration across editing and effects suites.

backdraft

backdraft is a powerful tool for expanding the capabilities of your facility and managing productivity and workflow. Whether you want to transfer media from one system to another, switch storage units between systems or carry out background video I/O and archiving, **backdraft** provides the tools to do so without taking resources from your creative workstations or suites.

Installable on existing **fire** and **smoke** systems, or on an less expensive administrative assistant workstation, **backdraft** also provides you with productivity tools – including VTR emulation, the ability to browse and play Discreet media anywhere in the facility, and connectivity to third-party solutions such as telecine, hardware color correction and film restoration tools.

Workflow

Every year, the amount of digital media that is edited on computers increases dramatically. We know this places increasingly heavy demands on post-production companies to improve workflow, media management and operating efficiency. So our systems are fully designed to increase productivity throughout the facility through unmatched inter-product integration, dedicated administration applications and superior product performance, enhancing project workflow and resulting in greater profitability.

Maintain your competitive advantage Discreet Technical Support and Services

At Discreet our mission is to support you every step of the way towards growing your business and ensuring your success with our products. We can help you increase your competitive advantage, and protect your investment, through a range of comprehensive annual support programs designed to best meet your particular needs:

Level 1 – Hotline, e-mail, online knowledge base

Level 2 – Level 1, plus advanced parts exchange

Level 3 – Level 1 and Level 2, plus on-site support

Other support options to help you plan and budget for your support needs include three-year contracts, on-site integration and installation, per-incident support and SGI system support. For more information, visit www.discreet.com/support.

Knowledge is empowerment Discreet Learning and Training

Maintaining your competitive edge means being a master of all the tools in your facility. Take advantage of world-class training from Discreet to fully leverage your talent and fire or smoke editing and finishing system.

Instructor-led classroom sessions provide the ultimate hands-on experience, and on-site training sessions brings the instructor to your facility for a fully customized learning environment. Invest in knowledge by learning from our expertise. For more information or to book training, visit www.discreet.com/training.

Discreet solutions

Discreet offers a range of visual effects, editing, finishing, 3D animation, desktop effects, web design and streaming media solutions.

inferno®

The ultimate Academy-Award winning online visual effects system for film and high-definition work.

flame®

The industry-leading, Academy-Award winning visual effects system with exceptional return on investment.

flint®

The ideal system for superior broadcast graphics and post-production visual effects.

combustion®

The new standard in desktop visual effects software for Macintosh® and Windows® platforms.

3ds max™

The world's best-selling and award-winning 3D modeling, animation and rendering solution.

mental ray®

Discreet's high-performance, photo-realistic ray tracing and scanline rendering package.

character studio®

Bring creatures to life with this ground-breaking 3D character animation system plug-in to **3ds max**.

plasma™

Professional 3D animation software for web designers and artists.

cleaner™

The worldwide standard for professional video encoding and the indispensable complement to Apple® Final Cut Pro®, Adobe® Premiere® and Avid® Xpress® DV.

cleaner central™

An automated, scaleable, distributed system for encoding high-volume streaming media projects.

cleaner™ streaming studio

An interoperable suite for webcasting, editing, authoring and publishing of on-demand or live event web content.

discreet[®]
realize



Image courtesy of Rushes.

To obtain more information about Discreet systems and software,
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