

Introducing...

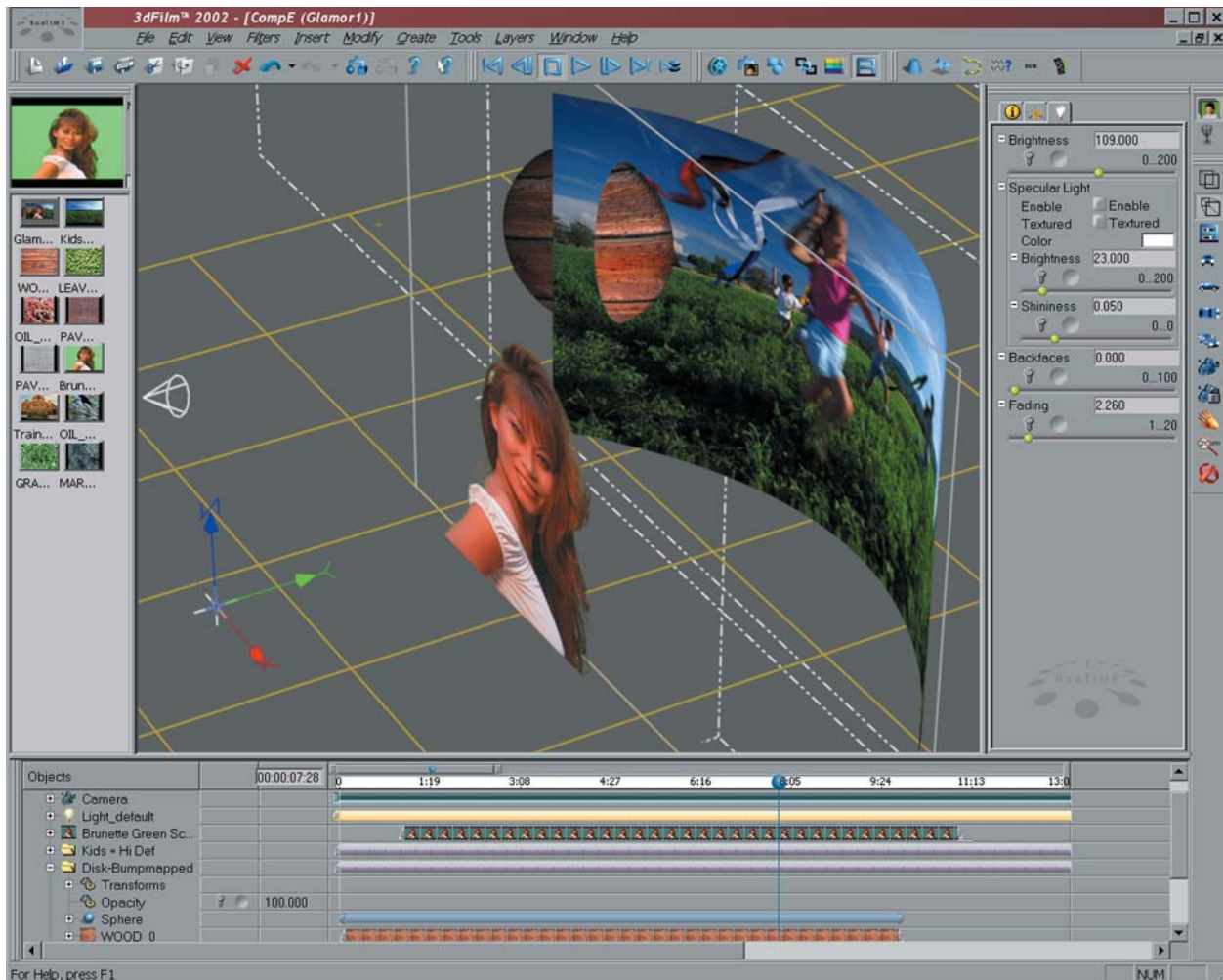
3dFilm™ 2002



The Revolutionary New Tool for Creating Moving Graphics



RadTIME 3dFilm™ 2002



INTEGRATED 3D AND VIDEO COMPOSITING

Introducing 3dFilm™ 2002: the revolutionary new content creation tool with *serious* 3D capabilities *and* video compositing. Now you can create 3D models and composite them with 2D video elements all in one, easy-to-use tool. 3dFilm gives you the creative freedom to easily work in *both* mediums: 2D and 3D.

WORK IN AN ACCELERATED 3D WORLD

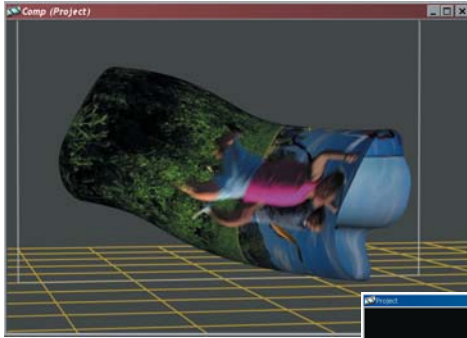
As the first compositor to take full advantage of OpenGL and Pentium-4® acceleration, 3dFilm

brings unprecedented levels of interactivity and animation performance to the production process. Make changes and play your results without using wireframes, proxies or re-rendering after every change. Now you can visualize your ideas almost as fast as you can think them up.

RADTIME ENHANCED LIGHTING

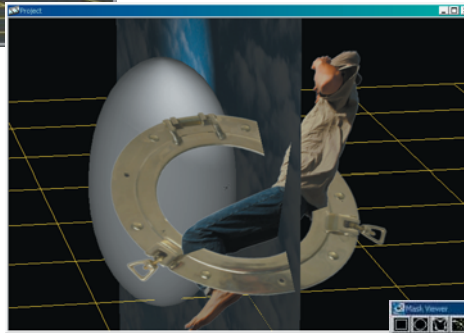
RadTIME has developed a proprietary lighting engine that enhances OpenGL while maintaining real-time playback. RadTIME Enhanced Lighting produces Blinn-based "per-pixel" lighting for unparalleled levels of realism². Cast shadows onto 3D objects or layers, or through the transparent region of a layer using alpha information. All at real-time, interactive rates.

Visualize your creative ideas as fast as you can think them up...



REAL-TIME VIDEO TEXTURE MAPPING

3dFilm now allows texture mapping of any 3D object with video or still images. Textures can be used as color maps, as height fields for bump maps, or as gloss maps. And video textures play in real-time from many movie file formats.



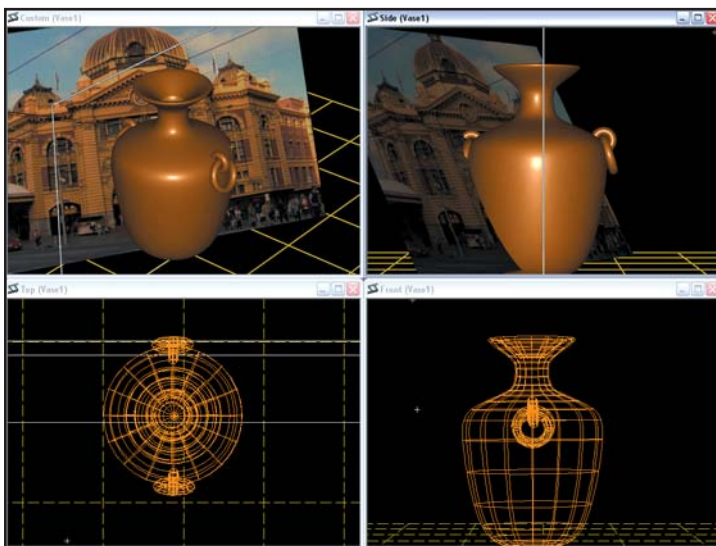
RADTIME 3D α ™ TECHNOLOGY

Alpha transparency information from media files is accurately displayed in 3D space via 3Da™ technology. Even intersections and overlaps are handled. And all with real-time playback.



A COMPLETE SET OF PROFESSIONAL TOOLS

3dFilm provides a complete set of tools for advanced 3D compositing and animation. Roto-masking tools, a "hierarchical" (parent-child) animation system, and editable animation curves, to name a few. 3dFilm now has extremely fast MPEG-2 playback with support for high quality production studio 4:2:2 or 4:4:4 color. In addition, 3dFilm supports 3rd party plug-ins such as Boris and RE: Vision. And as part of the ever-growing family of RadTIME products, 3dFilm can be expanded with add-on modules like the HyperMatte™ KeyingPak and ModelMaker™.



FULLY INTEGRATED 3D MODELING AND ANIMATION

3dFilm was designed from inception to *fully* integrate true 3D with video compositing. With the RadTIME ModelMaker add-on (part of the 3dFilm ProSuite bundle and shown to the left), you can easily create 3D models using powerful B-spline tools. Freeform mesh creation, bending functions, curve sweeping and animation morphing are just a few of the advanced tools in ModelMaker. And best of all, these 3D models are created and animated directly on the *same* time line and stored in the *same* project file as your media layers and compositions.

3dFilm™ 2002 Features

RESOLUTION INDEPENDENCE

- Images up to 4K x 4K pixels³
- Non-destructive editing
- Unlimited number of layers & objects³
- Variable framerate & duration
- Variable pixel aspect ratio
- Nested 3D Compositions with full drag & drop access

HARDWARE ACCELERATION

- OpenGL and Pentium-4 acceleration
- Real-time video textures
- Highly optimized media flow
- Real-time audio playback

ANIMATION

- Hierarchical "parent-child" animation
- Animate virtually every property of every object, layer or filter
- Display & edit animation curves
- Combine Bezier & linear interpolation on same curve
- TimeTransform media layers

ENHANCED LIGHTING²

- True "per-pixel" lighting
- Fast, interactive rates
- Eliminates OpenGL lighting artifacts
- Texture mapping (see below)
- Real-time shadow casting

VIDEO TEXTURE MAPPING

- Color, bump, gloss channels
- Any media layer (video, still or sequence) can be mapped onto any 3D object
- In RadTIME Enhanced Lighting only

TREELINE VIEW

- Hierarchical display of groups, objects, layers, filters, properties
- Picons for fast visual id
- Snapping for easy synchronization
- Drag & drop support
- Single & multi-selection

RadTIME 3D α ™

- Display alpha in 3D space
- Handles overlaps & intersection
- Real-time playback

INTEGRATED 3D MODELING

- Create 2D & 3D Primitives
- B-spline modeling via RadTIME ModelMaker™ add-on
- Model importing
- Animatable light sources
- Fully animatable cameras

EDITING TOOLS

- Fast, highly interactive 3D WorldView
- Easy-to-use TransControl
- Unlimited undo & redo lists
- Group/ungroup
- Layer display priority setting
- Direct numeric editing

IMAGE FILTERS

- Highly accelerated built-in filters
- Animate all parameters
- Blur/sharpen
- Image & color correction
- Keying via HyperMatte KeyingPak add-on
- Channel rewire: layers or filters
- Supports 3rd party plug-in filters

MASKING

- Unlimited masks per layer
- Circle, rectangle, freeform
- Independent feathering curve
- Freeform morphing animation
- Inversion & animatable opacity

MISCELLANEOUS

- Namable, savable render settings
- Video field input & rendering
- Customizable toolbars & hotkeys
- Dockable/undockable windows
- Runs on Windows 98/NT/2K/XP

MEDIA FILE FORMATS

Unless noted otherwise, (a) files below can be imported and exported, (b) sequences of still image files can be used as a movie.

- AIFF audio (import only)
- Audio Video Interleave (AVI)
- BMP
- Brooktrout
- CALS Raster
- Clipboard
- Converted Image (CIF)
- DCX
- DV/DVC/Digital Video (FireWire)
- Encapsulated PostScript
- FlashPix
- GEM Raster
- GIF (import only)
- Icon Resource (ICO)
- IFF
- Image Object Content Arch.
- JPEG/JFIF
- Kodak Photo CD
- MacPaint
- MIDI audio (import only)
- MPEG 1, 2 & 4 (see note 4 below)
- MP3 audio (import only)
- MS Paint, PC Paintbrush
- Photoshop
- PICS
- PICT
- PNG, Portable Anymap, Pixmap
- Portable Bitmap, Graymap
- QuickTime Movie & QTIF
- RLE
- Silicon Graphics (SGI)
- Sun Raster Data
- Targa (TGA)
- TIFF
- WAV, Snd, Au audio (import only)
- Windows MetaFile (WMF)
- WordPerfect Graphics MetaFile
- X Bitmap, Pixmap

Footnotes:

1 On an Intel Pentium 4 with Quantum 10K RPM Ultra-160 hard drive & NVidia GeForce3 OpenGL card

2 Currently available only on select OpenGL graphics cards. See www.radtime.com for the latest on supported boards.

3 Limited only by system and graphics card memory.

4 Exporting requires 3rd party MPEG plug-in.



www.radtime.com