CINEMA 4D™ XL

The integrated high-end modelling and animation solution for professional results, running on MacOS or Win9x/NT/DEC Alpha

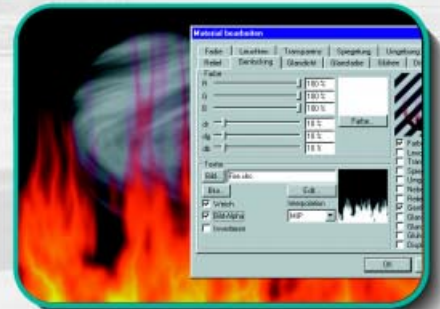**Real-Time Texture Mapping**

MIP and SAT Mapping

Extended Time Control

Straight Alphas

Soft Colorkey Maps

© 1998 by Phaze two – Martinez, Thiel, Wiegemann GbR

© 1998 by Robert Böhme

© 1998 by Aniware

Design: RTL Art Direction,
Production: Phaze two – Martinez, Thiel, Wiegemann GbR

The best things in life are free – like the new CINEMA 4D XL update.

It wasn't so long ago that CINEMA 4D XL v5 was released successfully to an enthusiastic worldwide audience. A few months and **many top awards** later, MAXON presents a brand new version of XL,v5.2. The new version includes some advanced features found up to now only in highly specialized applications. For example, XL's **super-fast gouraud-shading** has been extended to support **real-time texture mapping in the editor** without any special graphic hardware – and, amazingly, there is no noticeable speed loss. So now you are able to control textures, trans-parencies, genlocking and highlights, all while you are modelling your scene. But it's not only the editor which has been extended. The raytracer now supports **MIP and SAT mapping**; these mapping technologies are high-end features which help you to create totally smooth (no jags) pictures and animations.

And there's still more you get for free in CINEMA 4D XL 5.2 ... How about a **totally reworked and extended time control**? The new time control manager gives you the power to control every object's speed and acceleration with ease. Clear diagrams help you create realistic movement and dynamically correct acceleration.

Last, and certainly not least, there is improved handling of **alpha-channels**. In v5.2, „straight alphas" can be generated along withthe render – an important method for clean compositing. Furthermore, when creating a material, **colorkey alpha-maps with soft edges** are now supported, allowing smooth texture blends.

Come and visit our website at **www.maxon.de** and download the **free update** for registered XL users.

CINEMA 4D XL

WINNER
BYTE BEST OF SHOW
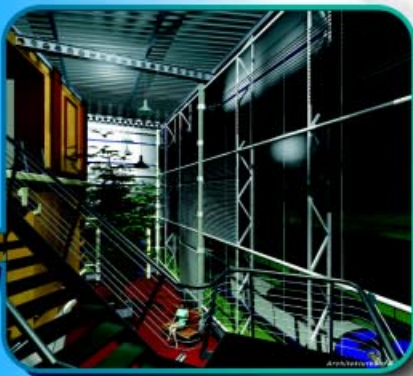The Future of Information Technology Today • CeBIT98

© 1998 by FOX Sports Net

© 1998 by FOX KIDS

© 1998 by Architekturbüro Rehberger

© 1998 by Kreativhaus, Holger Schaal

© 1998 by Lonnie Bailey – www.baileygraphics.com

The package

A packed CD including full program, easy installation, PDFs, example scenes, objects, textures, materials, images plus many utilities and add-ons. Complete with Reference and Tutorial manual

Rendering

Prime-time quality, ultrafast raytracing, broadcast capability with professional antialiasing up to 16 x 16. Cartoon-renderer and batch-rendering included.

Photorealism

Adaptive antialiasing, true refraction/reflection, user defined film format, user defined pixel ratio, internal/external depth and alpha channels (straight and premultiplied), external scripts/applications support, depth of field, lens effects, glow effects, volumetric effects, object motion blur, scene motion blur, image filters (smooth, sharpen etc.), QuickTime VR panoramas and animations.

Material system

Decal mapping, MIP/SAT mapping for high-end rendering quality, use of integrated alpha-channels, extendable material libraries, large variety of mappings (sphere, cylinder, flat, box, frontal, spatial, UV mapping, shrink wrapping, UVW mapping), 12 material channels, procedural 2D/3D-shaders (brick, checkerboard, clouds, cyclone, fire, flame, galaxy, gradient, marble, neptune, noise, saturn, saturnring, starfield, sunburst, turbulence, uranus, water, colour, earth, metal, rust, venus, wood, volumetric fog, volumetric landscapes), additve textures, interactive texture positioning, QuickTime movies (Mac only), AVIs (PC only) or image sequences as moving textures.

No limits

Unlimited number of objects, cameras, light sources etc., up to 100 million points per object, unlimited number of animation tracks and effects per object, unlimited number of textures per project, image size up to 16,000 x 16,000 pixels, integrated browser to handle easily large libraries of objects, materials etc. (just drag-and-drop some objects in your scene and they will be added).

Objects

More than 50 primitives, including Platonic objects, spline objects (e.g. spirals, cycloids, technical profiles)

and special objects (e.g. fractal and relief map), formula splines, light sources, TrueType and PostScript Type-1 fonts, foreground and background objects, cameras, floor, sky, NURBS modelling (sweep, rotate, loft, extrude, Bézier), deformation lattices (FFD).

Particle system

any object type can be used as a particle (light sources, animated objects etc.), particles can cast/receive shadows and emit light, various effectors for particles (attractor, gravity, deflector, friction, rotation, turbulence, destructor, wind), real-time preview in the editor

Editor

Real-time Texture Mapping (RTTM) of objects or scenes (without any special hardware), multiple measurement systems and units, display of background images, OpenGL/QuickDraw3D support, integrated point editor, powerful magnet function, bevelling, virtual walkthrough, presentation and editing as floor plan, front elevation, side elevation, 3D view or a combination of all four views, customizable interface, Boolean operations, hierarchical object manager, precise design with numerical and formula input, structure manager for object geometry modifications, web ready with consistent VRML support (e.g. support of URL adresses), isometric and axonometric camera views (great for game designers).

Light sources

Parallel and divergent light, soft light cones, hard and soft shadows, visible light, dust effects, volumetric lighting, lens effects with more than 40 glow and reflex presets, lens effects editor, automatic lighting, environment lighting, accurate sun simulation.

Character animation

Inverse Kinematics with angle restriction, damping and anchor, skeleton display, true hierarchies (also with bones)

Bones

influence on any object, interactive real-time control, can be moved and animated with Inverse Kinematics, extremely fast even with complex objects and a huge number of bones, bone skeletons can easily be transfered from one object to another.

Animation

Animation special effects with real-time editor preview (bend, explode, formulae, morph, pulsate, melt, shatter, taper, twist, wind; many morph and fading effects), animation based on user defined mathematical formulae, cyclic animations, time manager for precise key framing, time line for animation overview, space control for precise manipulation of space/time graphs, time control for precise manipulation of time curves (world premiere: direct manipulation of path, velocity and acceleration curves), animated Booleans.

Import and export

CINEMA 4D, Direct 3D (export), DXF, QuickDraw 3D, VRML 1, VRML 2, 3D Studio R4, Wavefront, DEM (import), Adobe Illustrator (import), LightWave (import), Imagine (import), TIFF, TGA, JPEG, IFF, BMP (PC only), PICT (Mac only), AVI (PC only), Movie (Mac only).

C.O.F.F.E.E.

Integrated programming language for plug-in development, object oriented, high performance, platform independent – C.O.F.F.E.E. plug-ins can be used without any changes on every CINEMA 4D supported platform, optional SDK for registered developers, many C.O.F.F.E.E. plug-ins on the web (www.gumption.de).

Technology

Multi-platform: currently runs on MacOS, Win9x/WinNT Intel and Win NT Alpha

Multi-threading: runs in threads, instant reaction, background rendering is possible

Multi-processing: support for up to 16 CPUs/machine

Modularity: CINEMA 4D's internal structure is modular and therefore easy to port to any platform

Modern design: CINEMA 4D is based on the latest ground breaking programming techniques. The source code is pure, object oriented C++.

CINEMA 4D's high speed performance and low use of memory makes it ideal for the whole range of 3D users, such as: designers, architects, game designers, research (visualisation and simulation), web designers, multimedia companies, and many more.

MAXON computer