

# WHAT ARE YOU WAITING FOR?



Realtime shading  
in the editor

Many different  
material options

Infinite  
number of objects

Splines, NURBS and  
Freeform deformations (FFD)

Motion blur and  
choice of depth of focus

Path animations and  
many special effects

Lens flares, glows

Super-realistic  
raytracing

Material and  
object morphing

Powerful  
particle system

TrueType fonts and  
Illustrator paths

Object shading  
in realtime

Bones and  
Inverse Kinematics

# CINEMA 4D<sup>®</sup>

The raytracing and animation tool  
for creating virtual worlds.  
Apple Power Macintosh,  
Windows 95 and Windows NT

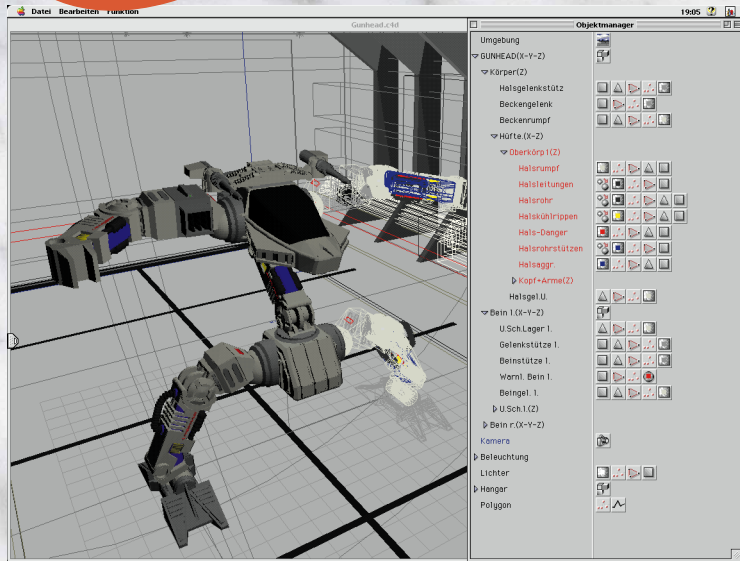
Terrifically fast performance • infinite numbers of objects  
all parameters can be animated • outstanding import and export functions  
easy and fast handling • hierarchical object management

True  
Workstation  
Feeling



Available  
March 1997

# CINEMA 4D



## Editor

- Object shading in realtime.
- Precise object construction with numerical and mathematical input of all parameters, even as formulae.
- Choice of measurement system and units (pixel, nanometres up to kilometres, frames, SMPTE code).
- User-defined tool boxes.
- Virtual walk-through.
- Presentation and editing as floor plan, front elevation, side elevation, 3D view or as a combination of all four.
- Make objects or groups invisible.
- Screen redraw may be interrupted at any time.

## Objects

- Hierarchical object management with any depth you like.
- Excellent range of basic objects.
- Complex special objects (height reliefs, figure, sun, floor, sky and many others).
- New forms and objects created using the rotation, extrusion, coiling and binding of splines.
- Bevels.

## Splines

- Infinite number of 3D polygons and splines.
- Interpolation types: Linear, Akima, B-Spline, Cubic and Hermite.

## Functions and Tools

- Interactive object deformation.
- Rotation, moving, scaling, pulling and magnet in realtime.
- Boolean operations.
- Converts TrueType fonts into 3D objects or splines.
- File format is cross-platform compatible.
- Mirror, Wrap, Align to Path, Centre, Crumple, Deform, Sub-divide, Transfer to Object, Optimise, Join, Align to Point or Object.

## Camera

- Infinite numbers of cameras.
- Choice of lenses ranging from wide angle up to super telephoto.
- User defined frame and pixel sizes.
- Choice of depth of focus (sharp foreground, background or middle).

## Light Sources

- Infinite number of coloured light sources.
- Automatic lighting.
- Spotlights, fog, environment lighting and fading light.
- Hard and soft shadows.
- Parallel and divergent light.

- Visible light.
- Accurate sun simulation.
- Lens flares, lens glows, lens reflections and light effects.

## Materials and Texturing

- Expandable material libraries.
- Real time material preview.
- Attributes for colour, luminosity, transparency, fog, bump mapping, refraction, reflection, highlight, highlight colour, genlocking and environment mapping.
- Flat, cylindrical and spherical material projections.
- Tiling of textures.
- Infinite number of materials and textures per object.

## Animation

- Keyframe animation.
- Simple control via record, start, stop, rewind, forward.
- Object, camera, material, texture, light and sun animation.
- Path animation with any splines.
- Full hierarchical animation.
- Skeleton animation.
- Inverse kinematics.
- True acceleration and deceleration.
- Different spatial and temporal interpolation methods.
- Any combination of special effects including explosions, wind, melt, morph, pulse and vibrate.
- Objects can be constrained to paths.
- Time line and Time control.

## Rendering and Output

- Real Raytracing.
- Flat, Phong and Gouraud shading.
- Fast high-quality anti-aliasing (oversampling).
- Post image processing functions (smooth, sharpen).
- Background and Foreground layers.
- Highly optimised adaptive raytracer.
- Predefined formats for video or computer animation.
- Field rendering for video recording.
- AVI/QuickTime movies can be used as textures.

## Import and Export

- TIFF, IFF, JPEG, Targa, BMP/PICT (depending on OS), AVI/QuickTime movies (depending on OS), QuickDraw 3D, 2D/3D DXF (polyline, solid, 3D face), external point files.
- Import only: Adobe Illustrator paths, Lightwave (objects, scenes, animations and textures, Imagine).
- Export only: image sequences for QuickTime VR, depth map, alpha channel.



# Press Comments

## DOS 2/97



Test Winner  
"CINEMA 4D is so powerful; semi-professionals at least could not wish for more", "Fastest raytracing in test"

## CHIP 12/96



Product of the Month  
"The ease of use, the many functions as well as the extremely quick and robust raytracer make CINEMA 4D a top product"  
"very user-friendly"

## DOS DIP-Test 11/96

"The 3D modelling, raytracing and animation program that is Cinema 4D delivers speed at a favourable price. (Other programs take several hours for this calculation.)"

## PC professionell 12/96

"Modelling, raytracing and animation software of exceptional quality"  
"Summary: The modelling, animation and raytracing software is enormously powerful, even on a modest configuration."

## DOS DIP-News 11.09.96

"... The program impresses through short render times. Further strengths are outstanding export and import functions (including three DFX formats), very good anti-aliasing (edge smoothing) and realistic lighting effects ..."

## MacWEEK 16.12.1996

"The renderer smokes", said Sean Safreed, Apple QuickDraw 3D product manager. "I was able to get full-screen ray-traced images in seconds"



## MacWelt 1/97

"A super quick raytracer, every animation refinement, previews in realtime ..."

"Summary: CINEMA 4D is a new, recommendable product, whose accessibility soon leads to a feeling of achievement. And there is a lot in reserve for the professionals, particularly with regards to animations and rendering." Rating: very good/outstanding (4.5/5 mice)

## Mac-Magazin 1/97

"CINEMA 4D is truly impressive, and its enormous range of functions and high speed are captivating. Till now, one dared not even dream of such speed."

"One of CINEMA 4D's strengths is the physically precise and extremely realistic calculation of every light phenomenon in record time. Those with multiprocessor machines no longer have a chance to get to the coffee machine. Rendering animations at these speeds is great fun."  
"CINEMA 4D naturally offers all that the competition can ... what sets the program apart from its competitors are completely different things."  
"... diverse optical effects ... lens reflections ... visible light or fog without incurring expense ... blurring for realistic looks ... the object manager makes for considerable simplification when working with complicated scenes ..."

## MacWelt 12/96

Report on multiprocessor applications

"On the software side, Adobe Photoshop 3.0.5 and the CINEMA 4D render engine profit the most."

	Single-CPU	2-CPU	4-CPU
Photoshop	100%	162%	238%
CINEMA 4D	100%	177%	346%
After Effects	100%	131%	156%

"...we witnessed the most extreme acceleration when rendering an animation with the multiprocessing beta-version of CINEMA 4D."

## Mac Magazin & Mac easy 2/97

"CINEMA 4D, the newcomer from Germany, redefines the 3D scene."  
"...the program belts along even on a moderately equipped PowerPC Performa, leaving you speechless."

## MacWorld Swiss 12/96



"...mass of functions, unique in this price range ... no wishes remain. Not only have 3D modelling, rendering and animation been mastered, there are also possibilities which provide for truly photo-realistic results and natural movement..."  
"CINEMA 4D seems a long way in front of the competition, both in terms of picture calculations within the editor and when raytracing."  
"Those who really know about three dimensional graphics can scarcely avoid CINEMA 4D."

## MacOPEN 12/96

"Render results of absolutely professional quality."  
"It is easy to find your way about the program within a short time - this is not least of all thanks to the excellent accompanying manual."  
Rating: "very good"

## MacForum ARCHITEKTUR 4/96

"CINEMA 4D, from the German firm MAXON Computer ... turns out to be a real discovery."  
"impressive speed ... modelling in realtime ... The adaptive raytracer convinced us with its speed and render picture quality ..."

## invers 11/96

"... The render results are of an absolutely professional quality."  
"Under testing, CINEMA 4D proved itself well up to the task. Not only did the terrific speed astound us, but also its enormous functionality and the robustness of the code ... Bull's eye!"

## PC-VIDEO 2/96



VIDEO recommendation  
Highest rating (5/5 stars)

## SAT1-Text 22.11.96

"CINEMA 4D has features known previously only in the 5000 DM price range. In addition, the software is quick, easy to use and boasts the latest technology. This powerful program is suitable for professionals and beginners. All along the line CINEMA 4D impresses throughout.  
Rating: "very good"

MAXON Computer GmbH  
Industriestr. 26 • 65760 Eschborn • Germany  
Tel. (+49) 6196 - 481811  
Fax. (+49) 6196 - 41885  
www.maxon.de • E-mail: c4d-info@maxon.de

