

# **Cinema4D**

Philip Losch Giebel

<b>COLLABORATORS</b>
----------------------

	<i>TITLE :</i> Cinema4D		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	Philip Losch Giebel	June 4, 2025	

<b>REVISION HISTORY</b>
-------------------------

NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>Cinema4D</b>	<b>1</b>
1.1	Cinema4D Demo . . . . .	1
1.2	grenzen . . . . .	1
1.3	leistungsdaten . . . . .	2
1.4	bedienung . . . . .	2
1.5	oberfläche . . . . .	2
1.6	zahlen . . . . .	3
1.7	objekte . . . . .	3
1.8	polygon . . . . .	3
1.9	punkte . . . . .	3
1.10	funktionen . . . . .	4
1.11	material . . . . .	4
1.12	licht . . . . .	4
1.13	rechnen . . . . .	5
1.14	animation . . . . .	5
1.15	format . . . . .	6
1.16	system . . . . .	6

## Chapter 1

# Cinema4D

### 1.1 Cinema4D Demo

Dear customer,

we would like to thank you for your interest in Cinema4D.

This demo will give you a first impression of this powerful raytracing package.

Cinema4D is sold in the UK by:

HiSoft Systems  
The Old School  
Greenfield  
Bedford  
MK45 5DE  
United Kingdom  
Tel: ++44 (0) 1525 718181  
Fax: ++44 (0) 1525 713716  
email: hisoft@cix.compulink.co.uk

System requirements  
Limitations  
Features

### 1.2 grenzen

This demo has some limitations which are listed below:

- Scenes or rendered pictures can not be stored.
- The maximum resolution for rendering pictures is 320\*256 pixels.
- The additional modules "raytracer" and "scanline" are

not included. Therefore mirrorings are only partly possible and shadows can't be rendered. "Scanline" is available from within the editor.

- Utilities like Animbuilder and additional modules are missing.
- Some scenes, lots of textures and two fonts are not included.
- The optimized program versions for FPU and 68020-CPU are not included.

## 1.3 leistungsdaten

Usage  
Graphical User Interface  
Numerics  
Objects  
Polygons  
Points, edges and plains  
Functions and tools  
Materials and textures  
Lighteffects  
Picture rendering  
Animation  
Fileformat, extensions

## 1.4 bedienung

Usage and ergonomics

- High-speed rendering
- Easy-to-use and consistent user interface
- Asynchronouss and non-modal windows
- Interactive realtime display
- Intuitive placement of the camera in realtime
- Fast access to all important functions via icons
- Keyboard shortcuts
- Pin-point acuracy using mouse or user defined parameters
- Amiga styleguide compliant
- Self-explaning functions
- User-definable menus

## 1.5 oberfläche

Graphical User Interface

- Free position for all symbols
  - Layout freely configurable
  - Display selectable between outline, draft, side, 3D or
-

- combinations of all four displays
- Processing of the objects in all sights
- Resolutions freely selectable
- Editor runs on the workbench
- Help function
- Several reduced display modes for fast working

## 1.6 zahlen

### Numbers

- High internal computing precision
- Integrated parser for mathematical expressions like +, Sin, Abs etc.
- True to scale constructing

## 1.7 objekte

### Objects

- Infinite amount of objects applicable
- Thirteen different, variable basic objects
- Five different , variable polygons
- Five different special objects
- Fractals for the formation of mountain landscapes
- Unlimited amount of polygon objects, which are produced through drilling, pushing or rolling of a contour or through joining of several contours
- Roanding of edges
- Smoothing of objects with Phong-method
- Hierarchical system for the simple and efficient administration of objects

## 1.8 polygon

### Polygon

- Infinite many three-dimensional polygons
- Four different interpolation modes (Linear, Akima, B-Spline and cubic)
- Moving, turning, scaling of base points
- Base points can be imported from an external file

## 1.9 punkte

Points, edges and plains

- Elements changeable as you like
- Points, edges and plains can be moved, turned, scaled, deleted etc.
- Magnetism-function for the interactive forming of surfaces
- Summing up of marked elements to new object
- Import from external files
- Interactive Input in realtime and manipulation

## 1.10 funktionen

Functions and tools

- Turning, moving, scaling and sizing in realtime
- Clipboard for the comfortable data transfer between different documents
- Intelligent functions notice wrong inputs and support the user with suggestions
- Boolean operations
- Mirroring, wrapping, ordering, centering, shaping, forming random, optimizing, joining, smoothing and much more

## 1.11 material

Materials and textures

- Extensive, expandable material archive with glass, wood, plastic and metal etc.
- Colour, transparency, splendor, reflection and refraction freely definable
- Textures for realistic 3-dimensional unevenness
- Input alternatively in RGB- or HSV-System
- Plain, cylindric and spherical projection
- Colour-, transparency-, mirror-, relief-, splendor- and fluorescent textures
- tile textures
- Direct usage of IFF-pictures in all resolutions and colour depths
- Textures can be placed interactive in realtime on the objects

## 1.12 licht

Lichteffects

- As many colored sources of light as you like
  - Divergent and parallel light
-

- Shadowing
- Floodlights
- Fog
- Sunlight (color and direction according to time of day, date and geographical width)
- Altogether 18 different modes of light sources

## 1.13 rechnen

Rendering of pictures

- Six different methods of visualising, from wire frame over scanline up to raytracing
- Different levels of quality
- Separate raytracer for best usage of memory and multitasking
- Adaptive, optimized raytracer through combination with scanline-algorithm
- Scanline-algorithm can display reflections of ground and heaven
- Complex and fast algorithms
- Qualitatively high-grade antialiasing
- Calculations in all available screenmodes (AA, ECS)
- Support of the graphic boards Retina, Merlin, Picasso and all EGS-boards (Piccolo, Domino, Rainbow, GVP Spectrum, GVP EGS-110/24, IV24, Visiona, Videolayer etc.)
- Other graphic boards accessible over library
- Output on harddisk with flexible resolutions and 16 Million colours possible
- Usage background and foreground picture

## 1.14 animation

Animation

- Keyframe-animation for bodies, sources of light and camera through interactive definition of the bases (Keyframes for position, size, situation, material and texture) in realtime.
  - Path-animation for objects through attributing of polygons
  - Real hierarchy-animation
  - Timestrip for graphical controlling of the animation
  - Time control for exact temporal editing of animations
  - Genuine accelerating, braking as well as complex speed-functions applicable
  - Selectable spatial and temporal interpolation modes (jump, linear, B-spline, akima, cubical)
  - Object -, camera -, material -, texture -, light - and sun - animation
  - many specialeffects
  - Animation of background, foreground, floor, heavens etc.
  - Easiest usage through functions like photograph, start, stop, fast forward and rewind etc.
-



- Preview-function (animation can be played from harddisk or memory in realtime)

## 1.15 format

Fileformat and Extensions

- Powerful and documented IFF-Format
- Converter CASTILLIAN reads and writes the formats Cinema4D, Fastray, Imagine, Refelctions, Turbo Silver, Videoscape, Sculpt, Pagerender and DXF
- Program functionality can be expanded through documented interface

## 1.16 system

System requirements

Following are the minimum requirements for running Cinema4D.  
Note that this is really the MINIMUM! When you are doing raytracing especially with animations think of this:  
THE MORE THE BETTER!

- Amiga-computer  
A500, A600, A1000, A1200, A2000, A2500, A3000, A4000, A3000T, A4000T
  - Harddisk
  - 3 MByte memory (Demo: 2 MByte)
  - WB 2.0 and Kickstart 2.04 or higher
-