



*Welcome to the Gumption PlugWare Plug-in catalog*  
*The Reference Guide for extending the power of CINEMA 4D™*  
*Volume 5*  
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## Welcome to Gumption!

As a partner company of MAXON Computer, we're proud to introduce you to GUMPTION (<http://www.gumption.de>) the integrated service for the world of C.O.F.F.E.E. plug-ins - the additions that extend the power of the professional's 3D graphics environment: CINEMA 4D™.

GUMPTION will provide every information and service related to C.O.F.F.E.E. plug-ins to users who are looking for additional features for CINEMA 4D™ as well as to developers who want to create new plug-ins.

As for users interested in extending the features of CINEMA 4D™, GUMPTION will host the most comprehensive database that offers detailed and the most up-to-date information about all the available plug-ins with extensive search capabilities and instant downloads.

As for users who want to create their own plug-ins using the C.O.F.F.E.E. programming language, GUMPTION provides assistance during their entire development cycle - no matter if you're new to programming or a NASA software engineer blessed with a bunch of PhDs. In a nutshell, GUMPTION provides every developer with everything you need to plan, write and distribute C.O.F.F.E.E. plug-ins. In the stage of planning you'll be able to grasp ideas for new plug-ins as well as an overview over the worldwide C.O.F.F.E.E. plug-in market i.e. what's already available and what is the world begging for. In the stage of actually writing plug-ins GUMPTION is the place to get the official Software Development Kit (SDK) from. To enable rapid development you'll also find GUMPTION to be the source for sample code and hands-on-guides to act as entry points as well as to help you thru the most various programming problems. After your plug-in is ready to go GUMPTION will list it in the official plug-in database and optionally handle marketing and sales if you want to sell your plug-in as a commercial product.

And the good news: basically developing plug-ins for CINEMA 4D™ is free! In cooperation with MAXON we offer the C.O.F.F.E.E. Home SDK with unlimited functionality free of charge and the C.O.F.F.E.E. Professional SDK with additional integrated compiler and extended technical reference manual for a registration fee of \$99. The Home SDK's idea is to provide everyone with a tool who wants to write plug-ins for CINEMA 4D™. The Professional SDK is the product of choice for developers who want to create commercial plug-ins which perform in greater speed and prevent their source code from being extracted directly or from reverse engineering.

All these features and further information can be accessed thru the GUMPTION.de Web Server (<http://www.gumption.de>) which hosts the official C.O.F.F.E.E. SDK, documentation, sample code and the plug-in database. In addition to the web service we want to point out that we're running GUMPTION is a living company which means that we will always take care of all our stakeholders' needs personally. In that sense our global philosophy is to integrate them into the company's evolution in order to create the best possible service for the world of C.O.F.F.E.E. plug-ins.

## **About this catalog**

This catalog offers you an overview of all plug-ins currently listed in the official plug-in database. To obtain a plug-in contact the GUMPTION Web Server (<http://www.gumption.de>) and visit the Plug-In Database. Should you need a plug-in which doesn't exist, yet, just proceed to the Information Forum on our web server and enter your suggestion for a new plug-in or join the Developer Discussion and talk to the developers directly. This way you make you can get involved and make your own contribution to the world of C.O.F.F.E.E. plug-ins.

So come on in and join the Club...

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## Axes Centre

*Developed by Michael Kearns*

*Plug-in is free of charge*

These two plugins (axes2obj & obj2axes) allow you to centre the axes on the object, or the object on the axes, if you have moved the axes independently.

## Ball and Stick 2

*Plug-in is free of charge*

Places a stick object on every edge and a ball object on every point of a polygon object. Looks quite nice.

## BioVision Import V 1.5

*Developed by Christian Losch of Maxon Computer GmbH*

*Price: \$99*

With this plug-in you can import the data which was record by a BioVision System. For example a dancing woman, which was connected to a laser motion detecting system. Import Format: BVH and BVA/VPM. Also you can use this plugin for importing Lifeforms animations. Included are two additional plugins. ReduceKeys (only available with this package) reduces effectively the huge number of motion keys for easy manual manipulation. CopyAnimation lets you exchange motion capture data in seconds without the need to adjust or rebuild your object.



## Bolt v1.0

*Developed by Benjamin Johnson*

*Price: \$25*

Bolt creates an animated “lightning bolt” effect, using a custom algorithm that mimics the way natural lightning follows its path. You have complete control over the shape, size, duration, and complexity.

## BunnyShop

*Developed by John Detch of 3D Gear*

*Plug-in is free of charge*

This macro is designed to help users duplicate large numbers of objects using a grid based concept. It will create a large number of objects. Dialog 1: Number X: The number of objects to be placed in the X direction. Number Y: The number of objects to be placed in the Y direction. Number Z: The number of objects to be placed in the Z direction. Rand Rotation X: The maximum possible number of degrees of rotation in the X direction. Rand Rotation Y: The maximum possible number of degrees of rotation in the Y direction. Rand Rotation Z: The maximum possible number of degrees of rotation in the Z direction. Rand Scale: Percentage of randomness in the scale of each object. Separate Children: If you have a group selected and want to randomly place one of the children at each grid point instead of the group, set this to 1. Dialog 2: Offset X: The X spacing between the grid points. Offset Y: The Y spacing between the grid points. Offset Z: The Z spacing between the grid points. Rand Offset X: The maximum random offset for each object in the X direction. Rand Offset Y: The maximum random offset for each object in the Y direction. Rand Offset Z: The maximum random offset for each object in the Z direction. Rand Seed: Change this to change the start of the random number generator.



## CineHaarSE

*Developed by Stefan Bauer of Bauer Computergrafik*

*Plug-in is free of charge*

Makes plug-in with gravitation and random features.

## CopyAnimation

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

This plugin allows you to easily transfer a complex animation from one hierarchical model to another. Simply type in the source and the destination object and all tracks and sequences will be copied. Attention: This works only if both objects have the same hierarchical structure. All tracks of the destination object will be erased before copying. And also be careful to use different names for the source and the destination object. Christian Losch (C) MAXON Computer GmbH 1998

## DistCalc.cof

*Plug-in is free of charge*

Calculate distance between camera & object. It's useful when you want to set depth of field.





## **DPI**

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

Calculate pixel resolution from DPI and paper size.

## **EqualTangents**

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

Set all selected points of an hermite spline to the same length, defined by the user.

## **FACT Loader**

*Developed by John Detch of 3D Gear*

*Plug-in is free of charge*

Electric Image FACT File Importer/Exporter



## Fillet

*Plug-in is free of charge*

Create a fillet blend, with specified radius, between two polygon objects. Bonus plugs: Inflate and Spline of Intersection.

## FindAndReplace

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

Find and Replace phrase of object names.

## GenerateKeys

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

Especially game designers want to use VRML files for their work. But VRML doesn't know anything about IK or Align to Path animations. So this plugin duplicates the selected object and generates for each child object a position, scale and direction key for every frame of the animations. If you save this object in VRML another VRML viewer can exactly play the animation. Christian Losch (C) MAXON Computer GmbH 1998



## Grate

*Developed by John Detch of 3D Gear*

*Plug-in is free of charge*

Shader for creating Grates.

## Hanging Rope 1.1

*Developed by Mikael Sterner of XLent Plugs*

*Price: \$20*

Creates and animates a spline of specified length that hangs between two objects. The spline follows the catenary curve proven to be the formula for a hanging rope in reality. Can also create real cool chain together with Splineattach. New in 1.1: The rope can be controlled by a third alignpoint which allows for swaying ropes.

## Helix

*Developed by Mikael Sterner of XLent Plugs*

*Price: \$20*

Create a helix (spiral) along a specified path. The helix can be animated if the spline is morphed. See readme and tutorial for help!



## Jim's spline tools

*Plug-in is free of charge*

Derive splines from poly mesh, remove excess points, set first point, create uniformly spaced splines Revised 3/3/98.

## Julia Shader

*Plug-in is free of charge*

## MapTemplate2

*Developed by Yoshihiro Manabe*

*Price: \$30*

Create template image for texture mapping. This plug-in can create template for Spherical or Cylindrical mapping.



## Mikaels Magic Bundle

*Developed by Mikael Sterner of XLent Plugs*

*Price: \$105*

A bundle of my four commercial plugs: Rope 1.1, Helix, Morphkey and Multiple Splineattach 1.1. See their separate descriptions for more info. Total rebate: \$5

## Morph Master

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

You can specify up to 5 morph targets in 1 key. The morph amount for each target can be set individually. Allows smooth mixing between different expressions e.g. angry face and happy face. You get thousands of new expressions out of 10 morph targets. The sample file shows a very simple example of a speaking mouth.

## Morphkey

*Developed by Mikael Sterner of XLent Plugs*

*Price: \$20*

Automatically creates morph-targets and morph-sequences. Very time-saving! See readme for more info.



## MPControl

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

Simple plugin wich lets you switch off and on the use of multiple cpu when rendering. Can be useful if you only want the raytracer to work with 1 cpu while working with another program. Makes sense only when you have a machine with more than 1 cpu!

## Multiple Splineattach 1.1

*Developed by Mikael Sterner of XLent Plugs*

*Price: \$50*

Let's you attach one or several objects in a row to a spline. Just select a group and enter some settings and you can easily get a more flexible loft or an automatic chain. Attach a single object and create keyframes for advanced motion. Only your imagination sets the limit! Many options are available. There's no demo but you can read the readme. Still not convinced? E-mail me your questions!

## Power Magnet (beta)

*Developed by John Detch of 3D Gear*

*Plug-in is free of charge*

This C.O.F.F.E.E. script turns any object or multible objects into a magnet tool affecting a polygonal object. Positive numbers pull at the object's points, Negative numbers push at the object's points.



## Quaternion

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

Animation plugin for improved rotation animation. Allows smooth rotations between keys, fully independent of a specific coordinate system. Therefore you have no singularities as with Euler angles (e.g. a pitch of 90 degrees allows unlimited combinations of heading and bank for specifying the same orientation) For each key you can specify a rotation axis and a rotation angle. There are the following limitations at the moment: \* The interpolation is only linear, there will be some kind of spline interpolation in the future. \* The plugin ignores time curves. This will be working when the SDK allows full access to all animation parameters.

## RAW Files

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

Simple Loader/Saver for POV RAW files.

## Rename

*Developed by Michel Goubet*

*Plug-in is free of charge*

Rename and renumber objects (in a hierarchy or alone)



## ResolveLoops

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

Resolve a loop sequence in a sequence without loops. You can select a sequence, track or an entire object.

## Reveal Tangents

*Developed by Christian Losch of Maxon Computer GmbH*

*Plug-in is free of charge*

Set all selected zero tangents to non-zero values.

## Roll It

*Developed by Benjamin Johnson*

*Price: \$20*

Roll It is a plugin which assists in determining how an object should rotate as it moves along a path. If you've ever tried to animate a ball rolling along a floor, you've probably struggled trying to get the rotation just right. Well, no more! With Roll It, this process is now pain-free.





## Screen Shader

*Developed by John Detch of 3D Gear*

*Plug-in is free of charge*

Screen Shader.

## Select Row/Column

*Developed by John Detch of 3D Gear*

*Plug-in is free of charge*

Using the edge tool to select a single edge on a polygonal model. Then use the plugin (Tools->Plugins->Select Row/Column).

## Selective Subdivide

*Plug-in is free of charge*

Allows subdivision of a selected set of points in a polygon mesh, with proper transition at the boundary.



## SelectWithSpline

*Developed by Yoshihiro Manabe*

*Price: \$20*

With this plug-in, you can select non-rectangle area. This is a shareware. So, Demo is just the same, but if you think it's useful, please order this plug-in to pay shareware fee.

## ShrinkWrap

*Plug-in is free of charge*

Wraps a closed mesh, like a rubber sheet, around a group of perfect spheres. Sort of like metaballs, only different.

## Sierpinski's Shader

*Developed by John Detch of 3D Gear*

*Plug-in is free of charge*

This is a shader designed to build a rough estimate of a mathematical idea called Sierpinski's Carpet.



## SmoothMesh

*Developed by Yoshihiro Manabe*

*Price: \$20*

This plug-in gives a smooth to Polygon Object. Before you select the SmoothMesh command, please select points you want to smooth with point tool. This plug-in tends to shrink the object. So if you don't want to move surface edge (that means the edge which contribute to only one polygon), set "Protect edge" parameter to 1.

## Spark

*Developed by Benjamin Johnson*

*Price: \$20*

Spark creates an animated "Jacob's Ladder" type effect. You have complete control of the diameter of the bolt, the length, the complexity, color, and amount of movement.

## Spark, Roll It and Starfield Bundle

*Developed by Benjamin Johnson*

*Price: \$50*

This package contains Spark, Roll It and Starfield plug-ins. Please see the individual plug-ins in the list for more info and demos for each.



## Spiral

*Plug-in is free of charge*

An animated spiral texture. The user can decide the color, the size, the direction and the speed of the spiral.

## SplineTools

*Developed by John Detch of 3D Gear*

*Plug-in is free of charge*

This is a set of tools to help create the splines required to stitch object together.

## Starfield

*Developed by Benjamin Johnson*

*Price: \$20*

Starfield creates a 3D spherical starfield. You have complete control of the size of the stars, their color, and the size of the field's diameter itself.



## SteerMaster

*Developed by Christian Losch of Maxon Computer GmbH*

*Price: \$20*

Often it is difficult to estimate the right angles for wheels when driving a curve because the angles of the left and the right wheels are different and depend heavily on the dimensions of the car. This plugin simulates the correct steering angles of the wheels of a car when driving. It was designed for a driving school to show the learner the behaviour of the car. The plugin automatically animates the front wheels, the axle and the track rod.

## Strut

*Developed by John Detch of 3D Gear*

*Plug-in is free of charge*

This is a shader I wrote so that I could build bridges & such using cubes & have them rendered as if they were made with struts.

## SubDivMaster

*Developed by Yoshihiro Manabe*

*Price: \$50*

This is an enhanced subdivide tool. You can do selective, smooth, directional subdivide.



## Sync Plug-in

*Developed by André Koppany of GUMPTION - PlugWare*

*Plug-in is free of charge*

You can choose one object which an animation track. Any changes of the position of the sync object will automatically change the object self too.

## Waves

*Developed by Michel Goubet*

*Plug-in is free of charge*

Waves animation for polygon objects (a plane). Another object can control the position of the waves

## WindowSize Plug-in

*Plug-in is free of charge*

It let's you to change the Editor window size to any custom size you want. It creates a new custom preference file with the new, user-specified Edxitor window size. Say, you want 640x480 Editor window to work with, just type the dimentions into the plug-in's window, specify the file name for the new preference file..and restart XL from that new preference file - you'll have the desired Editor window size. NOTE: The versions for Mac and Windows are different. Make sure to download the right one for your platform.