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WELCOME TO COREL KPT COLLECTION

WHAT'S IN THIS SECTION:

WELCOME TO COREL KPT COLLECTION

Welcome to Corel® KPT® Collection, the revolutionary KPT series of filters designed to help you create dazzling and unique effects.

THE COREL KPT COLLECTION FILTERS

Corel KPT Collection includes 24 extraordinary filters that produce dazzling and unique effects for print and the Web.

KPT FIBEROPTIX

The KPT® FiberOptix™ filter lets you create realistic hair, fur, rain showers, and more. You can control the length, color, and tint of each fiber you create on a source image. Using a mask, you can create fibers in specific shapes; for example, you can create hair that grows as text.

KPT FRAX4D

The KPT® Frax4D™ filter lets you create 3-D sculptures out of fractal space. You can wrap these sculptures with any environment map. You can also rotate sculptures and render them as images.

KPT BLURRRR

The KPT® Blurrrr™ filter lets you manipulate the pixels in a source image to soften, smooth, and blend its edges and colors.

KPT EQUALIZER

The KPT® Equalizer™ filter lets you use a variety of filters to add interesting effects to images by manipulating their frequencies; for example, you can sharpen or blur images.

KPT FRAXPLORER

The KPT® FraxPlorer™ filter lets you create an infinite variety of fractal patterns. You can also customize fractals using various color, contrast, distortion, and zooming tools.

KPT SHAPESHIFTER

The KPT® ShapeShifter™ filter lets you apply interesting effects to objects; for example, you can apply bevels, graphics and text layers, and dimensions. You can also use environment and bump maps to achieve reflections and surface texture. You can create multiple objects at once; for example, by loading a mask with the shapes of each letter in a font set, you can turn the shapes into 3-D buttons for a Web site.

KPT NOIZE

The KPT® Noize™ filter lets you explore a variety of mathematically generated noise patterns that can be used as textures, patterns, or noise maps. You can select a noise family, mutate it to explore its variations, and apply it to a source image.

KPT GEL

The KPT® Gel™ filter lets you use paint tools to create 3-D images, text treatments, and objects such as buttons and borders. You can use lighting effects, tinting, and transparency to control the qualities of effects.

KPT GOO

The KPT® Goo filter lets you create effects that simulate the look of gelatin finger-painted on a source image. You can smear, splatter, twirl, pinch, or bulge images to create unique results. You can also use animation controls to save effects as movies.

KPT LENSFLARE

The KPT® LensFlare™ filter lets you apply interesting effects on a source image to simulate the photographic reflections created by a bright light shining on a camera lens. For example, you can create glows, halos, and streaks of light.

KPT MATERIALIZER

The KPT® Materializer™ filter lets you create complex textures, stunning backgrounds, and dazzling text treatments on source images. You can import bump maps and scale, pan, and rotate them to achieve interesting effects. You can also use lighting controls to manipulate surface textures.

KPT PROJECTOR

The KPT® Projector™ filter lets you use warping effects to create 2-D perspective distortions and 3-D transformations on source images. You can also create infinite planar tiling at any angle, and you can use anisotropic light filtering.

KPT REACTION

The KPT® Reaction™ filter lets you use patterns and diffusion options to create realistic simulations of organic textures, such as the growth pattern of coral or the stripes on a zebra.

KPT Turbulence

The KPT® Turbulence™ filter lets you create waves on a surface image. As the waves distort the image, they become animated and fluid. You can apply color blends to the waves. You can also take a snapshot of the waves that you can apply to a source image, or you can save the waves in motion as a movie.

KPT RadWarp

The KPT® RadWarp™ filter lets you use a simulated camera effect called barrel distortion to warp the edges of images. You can also correct barrel distortion on images.

KPT Channel Surfer

KPT® Channel Surfer™ lets you apply effects to individual channels in an image. You can blur or sharpen a channel, or adjust its contrast or value. You can adjust the amount and transparency of the effect, and control how the effect blends with the source image.

KPT Fluid

KPT® Fluid™ lets you manipulate images by applying liquid-like transformations and distortions that simulate dragging a brush across a wet surface. You can control the effect by setting the thickness of the fluid as well as the brush size and velocity. You can use various preview techniques to fine tune the effect, and choose to save the fluid in motion as a movie.

KPT FraxFlame II

KPT® FraxFlame II™ lets you explore and mutate an infinite variety of flame fractals. You can also customize fractals with various color, contrast, and distortion techniques.

KPT Gradient Lab

KPT® Gradient Lab™ lets you create complex color blends with various levels of transparency. You can also customize gradients with interesting shapes, styles, and pixel distortions.

KPT Hyper Tiling

KPT® Hyper Tiling™ lets you create and save intricate tiling effects by reducing the source image to create a tile. The tile is then repeated to create a hyper tiling effect. You can create different blends between the source image and the effect, and change the perceived distance from the effect. You can also change the depth, transparency, position, and size, of the effect, and rotate it through space.

KPT Ink Dropper

KPT® Ink Dropper™ lets you create the effect of dropping colored liquid (ink) on glass, canvas, or into another liquid. You can also create your own background images. You can choose the color of the liquid, and change its intensity and transparency. You can also change the size of the individual drops, and the rate at which they disperse on the surface.

KPT Lightning

KPT® Lightning™ lets you create powerful, customized lightning bolts. You can control every aspect of a lightning bolt, from setting its length and color, to determining its path and how much it zags and wanders. The lightning effect can then be realistically integrated into your source image using one of several blend modes.

KTP Pyramid Paint

KPT® Pyramid Paint™ uses the Lab color mode to let you transform source images into effects that resemble paintings, and perform various color and contrast adjustments to them.

KPT Scatter

KPT® Scatter™ is a 2-D particle system that lets you scatter a range of particles over a source image. You can scatter large masses of particles over an effect, or create densely packed particles to emulate intricate effects such as paint strokes or mosaics. You can also create special effects based on the way particles interact with the properties of a source image.

About the User Guide

The Corel KPT Collection User Guide assumes you are already familiar with basic Mac OS® and Windows® concepts — menus, dialog boxes, and mouse operations, such as clicking and dragging. If you need more information on these subjects, or about the Apple® Finder™ or the Windows desktop, refer to the Mac OS® User Manual or the Microsoft® Windows® User Guide, respectively.

User Guide conventions

The Corel KPT Collection User Guide is for both Mac OS and Windows platforms. By convention, Mac OS commands precede Windows commands in the text. For example, Command/Ctrl + I, is equivalent to the Mac OS Command + I and the Windows Ctrl + I, and indicates that you must hold down the Command or Ctrl key, and press I. The term "folder" refers to directories as well as folders. The Corel KPT Collection interface for Mac OS and Windows platforms is identical, unless otherwise specified.

About Corel Corporation

Founded in 1985, Corel Corporation (**www.corel.com**) is a leading technology company specializing in content creation tools, business process management and XML-enabled enterprise solutions. The company's goal is to give consumers and enterprise customers the ability to create, exchange and instantly interact with visual content that is always relevant, accurate and available. With its headquarters in Ottawa, Canada, Corel's common stock trades on the Nasdaq Stock Market under the symbol CORL and on the Toronto Stock Exchange under the symbol COR.

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For information about online support services, visit **www.corel.com**. Please note, some of the services are available only in English.

TELEPHONE SUPPORT SERVICES

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Corel® Knowledge Base	Allows you to read, print and download documents that contain answers to many technical questions.
Newsgroups (peer-to-peer forums)	Allow you to exchange information, tips and techniques with other users of Corel products.
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Contact Customer Service for pricing, purchasing, general inquiries, or replacement CDs. Contact Technical Support Services should you require technical assistance operating your Corel software.

Country	Customer Service	Technical Support
Argentina	0800 777 3203	57 1 523 1240
Australia	1 800 658 850	61 2 8844 4101
Austria	0192 89600	0192 89600
Belgium (Dutch)	0240 06733	0240 06733
Belgium (French)	0240 06777	0240 06777
Brazil	0800 14 1212	55 11 5696 5797
Chile	54 0800 777 3203	57 1 523 1240
China	10 800 610 2323	10 800 610 2673
Colombia	01 800 091 9370	57 1 523 1240
Czech Republic	0224 239645	0224 239645
Denmark	352 58008	352 58008
Finland	922 906040	922 906040
France	0170 706090	0170 706090
Germany	06922 2220288	06922 2220288
Hong Kong	800 964 514	800 964 515
Hungary	204 117089	204 117089
Indonesia	1 803 61 539	1 803 61 544
Ireland	0124 77724	0124 77724
Israel	44 1628 581601	44 1628 581601
Italy	0236 003600	0236 003600
Japan	81 3554 53274	81 3531 93013
Luxembourg	44 1628 581603	44 1628 581603
Malaysia	1 800 807 895	1 800 807 899
Mexico	1 800 1234 854	57 1 523 1240
Netherlands	0207 132700	0207 132700
New Zealand	0508 267 351	0800 908 592
Norway	229 71908	229 71908
Poland	071 3477279	071 3477279
Portugal	44 1628 581601	44 1628 581601
Singapore	800 6161 853	800 6161 854
South Africa	0860 223 388	0860 223388
South Korea	82 2 3444 5166	82 2 3444 5166
Spain	0914 141500	0914 141500
Sweden	0856 610555	0856 610555
Switzerland (German)	0158 03280	0158 03280

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Corel Support Services
1600 Carling Avenue
Ottawa, Ontario, Canada
K1Z 8R7
Fax: 1-613-761-9176

GETTING STARTED

What's in this section:

Getting started with Corel KPT Collection

Corel KPT Collection is an extraordinary collection of filters that produce dazzling and unique effects for print and the Web. Whether you are a professional designer, artist, Web author, or hobbyist, the Corel KPT Collection filters will help you take your work to a new creative level, and enhance your productivity.

Installing Corel KPT Collection

You can install Corel KPT Collection in host applications compatible with Mac OS and Windows.

To install Corel KPT Collection in Mac OS

1 Insert the Corel KPT Collection CD into the computer's CD drive.

2 Browse to the **Corel KPT Collection** folder.

3 Double-click the **Corel KPT Collection installer** icon.

4 Follow the instructions on your screen.

To install Corel KPT Collection in Windows

1 Insert the **Corel KPT Collection** CD into the computer's CD drive.

2 Click **Install**.

3 Follow the instructions on your screen.

STARTING AND QUITTING FILTERS

You can access a Corel KPT Collection filter from the host application. You can quit a Corel KPT Collection filter in two ways. You can quit a filter and apply the effect to the source image in the host application. You can also quit a filter without applying the effect to the source image in the host application.

TO ACCESS A FILTER

ᴅ Do one of the following:

- In Adobe® Photoshop®, click **Filters ▶ Corel KPT Collection**, and click a filter.
- In Painter, click **Effects ▶ Corel KPT Collection**, and click a filter.
- In Corel PHOTO-PAINT, click **Effects ▶ Corel KPT Collection**, and click a filter.
- In Bryce®, click a flyout arrow in the **Pictures** dialog box in **Picture editor**, click **Corel KPT Collection**, and click a filter.

Note

If you want to access a Corel KPT Collection filter in Bryce for the first time, you must first click a flyout arrow in the **Pictures** dialog box, click **Select plug-ins folder**, choose the folder where Corel KPT Collection is installed, and click **Choose/OK**.

TO QUIT A FILTER

ᴅ Click one of the following buttons:

- **OK** — to quit a filter and apply the effect
- **Cancel** — to quit a filter without applying the effect

USING PANELS AND SLIDERS

You can set the style in which panels display. You can also move sliders.

TO SET A PANEL DISPLAY STYLE

1 Click the filter name.

2 From the **Filter options** list box, choose one of the following styles:

- **Panel auto popup** — to automatically expand panels as you move the pointer over them
- **Panel manual popup** — to manually expand panels by clicking the **Cycler** button in the title bar
- **Panel solo mode** — to expand the current panel and automatically collapse those not in use

Tip

In **Panel auto popup** mode, sliders expand to display a panel with additional controls you can use to adjust slider settings incrementally, and view previous slider settings (indicated by the location of the gray arrow).

In **Panel manual popup** mode, you can expand a panel by clicking the **Cycler** button in the right corner of its title bar.

In **Panel solo mode**, you can collapse an expanded panel by double-clicking its title bar.

TO MOVE A SLIDER

• Drag the black slider arrow.

PREVIEWING FILTER EFFECTS

The **Preview** window lets you dynamically view the results of your work. You can apply a background to the **Preview** window. You can also move and size the **Preview** window.

TO APPLY A BACKGROUND TO THE PREVIEW WINDOW

• Click the flyout arrow in the **Preview** window, and choose one of the following options from the **Preview options** list box:

   • **Preview against black** — to display an effect against a solid black background
   • **Preview against white** — to display an effect against a solid white background
   • **Preview against checkerboard** — to display an effect against a background of gray squares
   • **Preview against dark checkerboard** — to display an effect against a background of dark gray squares
   • **Preview against gradient** — to display an effect against a grayscale gradient background

Note | The effect only displays against the background while it is in the **Preview** window. The background is not applied to the source image in the host application, and does not impact the final render of the effect.

TO MOVE THE PREVIEW WINDOW

• Drag the title bar.

TO SIZE THE PREVIEW WINDOW

1 Click the flyout arrow in the **Preview** window.
2 From the **Preview options** list box, choose one of the following **Preview** window sizes:

   • **Small preview**
   • **Medium preview**
   • **Large preview**

CUSTOMIZING THE WORKSPACE

You can apply a fun icon style to the common workspace. If the KPT workspace is smaller than the resolution of your screen, you can also display or hide common workspace controls.

TO APPLY A FUN ICON STYLE TO THE COMMON WORKSPACE

1 Click the **KPT** logo.
2 Choose **Smileys!** from the **Global options** list box.

TO DISPLAY OR HIDE COMMON WORKSPACE CONTROLS

1 Click the **KPT** logo.
2 Choose **Black out screen** from the **Global options** list box.

STORING WORKSPACE AND PANEL SETTINGS

Storing workspace settings lets you save different workspace layouts. For example, you can arrange all panels on one side of the workspace and enlarge the **Preview** window, and then save this layout for later use.

Storing panel settings lets you save and compare different versions of a filter effect.

The workspace and panel settings you save are retained from one session to another, so you can use them again and again. When you no longer need stored workspace and panel settings, you can clear them. You can also restore default workspace or panel settings.

TO STORE WORKSPACE SETTINGS

- Click a gray memory dot in the **Layout** panel.

Note	Empty memory dots display gray, full memory dots display green, and memory dots currently in use display yellow.

TO STORE PANEL SETTINGS

- Click a gray memory dot in the **Recall** panel.

TO USE STORED WORKSPACE OR PANEL SETTINGS

- Click a green memory dot in one of the following panels:
  - **Layout** — to use stored workspace settings
  - **Recall** — to use stored panel settings

TO CLEAR STORED WORKSPACE OR PANEL SETTINGS

- Hold down **Option/Alt**, and click the corresponding green memory dot in one of the following panels:
  - **Layout** — to clear stored workspace settings
  - **Recall** — to clear stored panel settings

TO RESTORE DEFAULT WORKSPACE OR PANEL SETTINGS

- Click the memory dot in the center of one of the following panels:
  - **Layout** — to restore default workspace settings
  - **Recall** — to restore default panel settings

Working with presets

Some Corel KPT Collection filters provide you with preset effects. You can load a preset effect. You can also save an effect you create as a preset. You can create multiple presets categories in which to organize the presets you store.

You can import and export presets.

TO LOAD A PRESET

1 Click the **Presets** button.
2 Double-click a preset thumbnail in the **Presets library** panel.
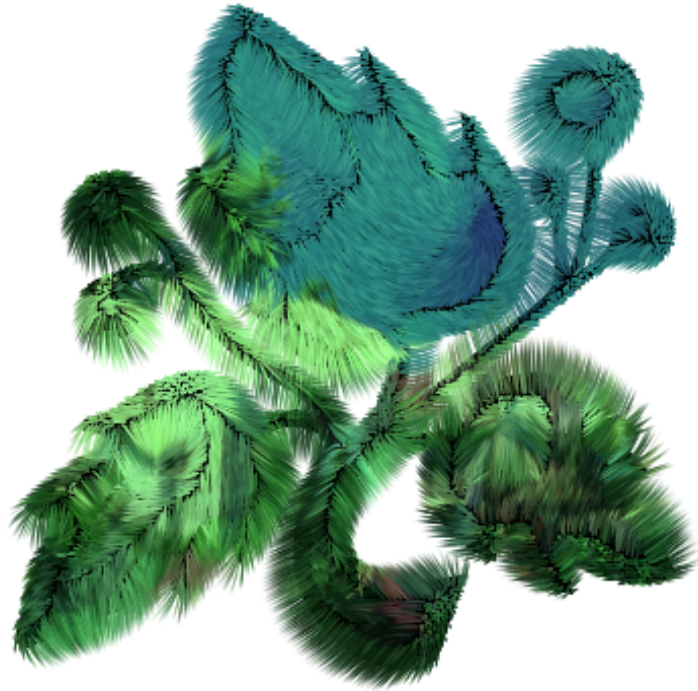
   If the preset is stored in a category, you must first choose the category from the middle-left tile of the **Presets library** panel, then double-click a preset thumbnail.

Note	You can preview a preset by single-clicking a preset thumbnail. A larger version of the preset thumbnail displays in the upper-left tile of the **Presets library** panel.

TO SAVE AN EFFECT AS A PRESET

1 Click the **Presets** button.

2   Choose a category from the middle-left tile of the **Presets library** panel.

3   Click **Add preset**.

A preset thumbnail displays in the **Presets library** panel.

Note   You can also delete a preset from a category by clicking a preset thumbnail, and clicking **Delete preset**.

TO CREATE A PRESETS CATEGORY

1   Click the **Presets** button.

2   Click the flyout arrow in the **Presets library** panel, and click **Create new category**.

3   A text box displays in the middle-left tile of the **Presets library** panel.

4   Type a name.

5   Press **Return**/**Enter**.

Each category can store up to 24 presets.

TO IMPORT A PRESET

1   Click the **Presets** button.

2   Click **Import** in the **Presets library** panel.

If you want to import a preset to a specific category, you must first choose the category from the middle-left tile of the **Presets library** panel, and then click **Import**.

3   Choose the folder where the file is stored in the **From** dialog box.

4   Click the file.

5   Click **Open**.

The preset displays as a thumbnail in the **Presets library** panel.

TO EXPORT A PRESET

1   Click the **Presets** button.

2   Choose a category from the middle-left tile of the **Presets library** panel.

3   Click a preset thumbnail.

4   Click **Export**.

5   In the **Save as** dialog box, type a filename in the **Save as** box.

6   In the **Where** box, choose the folder where you want to export the file.

7   Click **Save**.

KPT FRAX4D

What's in this Section

OVERVIEW

KPT Frax4D is a beautiful new way to look at fractals. It creates 3D sculptures out of fractal space at the click of a mouse. These sculptures can then be wrapped with any environment map. In other words, you can make 3D fractal sculptures out of gold, silver, green gel, or whatever you come up with.

CREATING A KPT FRAX4D OBJECT

KPT Frax4D lets you create a 3D object by choosing a number of parameters or dragging in the Frax4D preview windows. As you change these parameters, you're actually exploring fractal space encountering different fractal patterns as you go. The fractals you find are displayed in the Main Preview window. Once you have a fractal you like, you can rotate it, add an environment map to it, and finally, render it as an image.

4D VS. 3D FRACTALS

KPT Frax4D has two modes. The first mode, called Cogiternion, lets you explore 3D fractal space by combining three parameters.

The other mode, called Quaternion, lets you explore 4D fractal space. The point you're exploring is defined by setting four parameters. The final 3D object is created by taking a 3D slice of a 4D fractal.
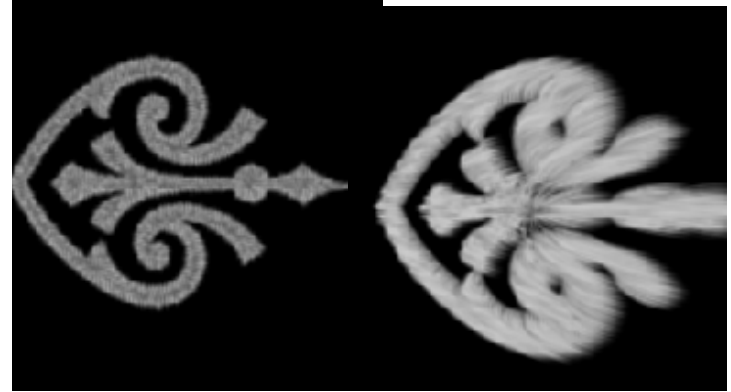
Examples of 3D and 4D fractals.

The number of parameters available in the Control panel depends on the type of fractal you're creating.

TO SWITCH MODES:

D Click the 3D/4D toggle button in the center of the 2D Slice of 4D Space panel.

Click the 3D/4D toggle button to switch between 4D and 3D fractals.

USING THE 2D SLICE OF 4D SPACE PANEL

The 2D Slice of 4D Space panel lets you view your fractal by taking slices of it and displaying them in 2D previews. Basically, what you're seeing is the inside of the object. The sliders on the panel let you adjust the coordinates of the fractal slices.
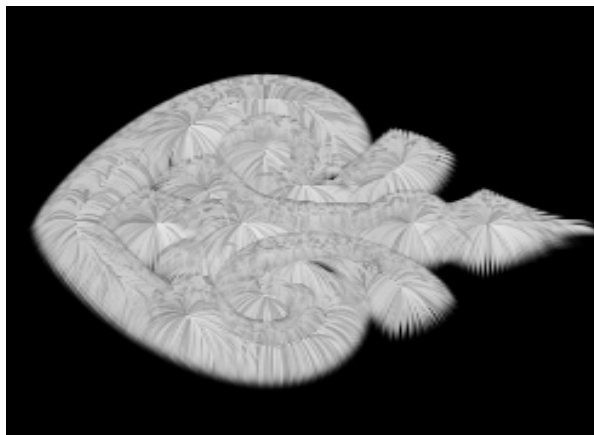
The 2D Slice of 4D Space panel.

You can also explore the fractal by dragging inside the panel's preview windows. As you drag, you're adjusting two parameters at once.

The number of controls available depends on the type of fractal you're creating. For a 3D fractal, you'll have R, I, and J controls. For a 4D fractal, you'll have R, I, J, and K controls, plus a W slice control.

CHOOSING R AND I PARAMETERS

The R and I Coefficient controls let you set the position of the R and I slice of your fractal. The R I slice is a roughly horizontal plane cutting through 3D or 4D space. As you adjust the coefficients, the preview shows you a horizontal slice of the fractal object you're exploring.

CHOOSING J AND K PARAMETERS

The J and K Slice Coordinate sliders control the position of the J K slice. This plane is roughly vertical. As you change the position, the preview shows you a vertical slice of the fractal object.

VIEWING YOUR FRACTAL USING A W SLICE

Since you can't actually display a four dimensional fractal on a computer, 4D fractals are sliced along their origin, either horizontally or vertically, to produce a three-dimensional object that you can see on screen. The Slicing Offset W slider controls how the slice is taken from the 4D fractal.

This control is only available when you're working with a 4D fractal.Setting Fractal Complexity

Fractals in KPT Frax4D are actually volume renders. As the filter renders, it moves through 3D space, rendering your fractal as it goes. The Complexity parameter tells the filter how many steps to take for a render. The more steps the filter takes, the more detail it will encounter, which in turn results in a higher quality object.

If you find that your fractal has some unwanted noise in it, increase the Complexity value.

Exploring your 4D Fractal

Once you have a fractal you're happy with, you can explore its patterns to see if there are any areas of the fractal you want to render as the final image.
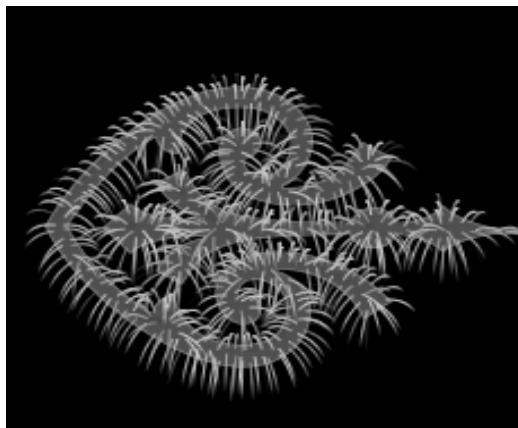
The KPT Frax4D Main Preview window.

Zooming into a Fractal

Like other fractals, a 4D fractal is infinitely detailed. The Zoom control lets you enlarge a portion of your fractal so you can see more detail.

Viewing a Fractal in the Preview window

The Main Preview window lets you rotate your rendered sculpture by dragging it in any direction.

The Reset control lets you clear all the rotations you've applied to the fractal so that it appears in its default position.

Setting Fractal Iterations

The Detail control sets the sharpness of the fractal. Lower values produce smoother-edged fractals. Higher values produce more jaggy-edged fractals. As well, the higher the detail value, the longer the fractal takes to render.

Adding an Environment Map

An environment map is an image that is projected onto your fractal to create reflections. It can be used to simulate different surfaces like gold or silver. The map is controlled using the Environment panel.

Setting Up Lighting

KPT Frax4D sculptures are three-dimensional objects, which means that you can light them from any angle. The 3D Lighting panel contains all the controls you'll need to set light color and angles.

Rendering your Fractal

Depending on whether you're working with a 3D or 4D fractal, you can change the render quality of the fractal before you turn it into an image.

4D fractals can be rendered using the High Quality option which uses enhanced raytracing to produce a cleaner image.

To choose a render mode:

▷ Click the option arrow at the top of the 2D Slice of 4D Space panel and choose either Quaternion: Normal or Quaternion: High Quality from the menu.

TECHNICAL NOTES

The general description provided earlier in this chapter explains how KPT Frax4D works in laymen's terms. What follows is a more technically accurate description. Be fore-warned, the paragraphs that follow provide information that won't really enhance your use of the filter, but it may give you a mild headache.

KPT Frax4D lets you choose parameters that define a point in 4D space. What you're seeing in the preview windows is the fractal that exists at that point. As you change parameters, you're exploring either 3D or 4D space locating either more of the same fractal, or completely new fractals.

When you're working with a 3D fractal, you're defining a point in 3D space using R, I, and J parameters, which result in a 3D object.

When you're working with a 4D fractal, you're defining a point in 4D space using R, I, J and K. The W slice parameter is then used to fix the L parameter. This results in a R, I and J object which can then be converted into a 3D object you can work with.

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