



Contents

Welcome to KPT effects	3
KPT effects.	4
About KPT effects Help	6
KPT effects tutorials	7
About procreate.	7
Support and services	8
Getting started with KPT effects	13
Installing KPT effects	14
Accessing and quitting KPT effects filters	14
Exploring the workspace	16
Using panels and sliders	19
Previewing filter effects	20
Customizing the workspace	22
Storing workspace and panel settings	22
Working with presets	24
Using KPT FraxFlame II	27
Exploring the workspace	28



Defining a work area	32
Choosing and mutating fractal styles	34
Working with color and contrast	40
Distorting fractals	44
Exploring fractals	45
Rendering fractals	46

Welcome to KPT effects

procreate[™] presents KPT[®] effects[™], the next generation of the revolutionary KPT series of filters designed to help you create dazzling and unique effects.

In this section, you'll learn about

- ◆ KPT effects filters
- ◆ KPT effects Help
- ◆ KPT effects tutorials
- ◆ **procreate**
- ◆ support and services

KPT effects

The KPT effects filters are KPT® Channel Surfing™, KPT® Fluid™, KPT® FraxFlame II™, KPT® Gradient Lab™, KPT® Hyper Tiling™, KPT® Ink Dropper™, KPT® Lightning, KPT® Pyramid Paint™, and KPT® Scatter™.

KPT Channel Surfing

The KPT Channel Surfing filter lets you apply effects to individual channels in an image. You can blur or sharpen a channel, or you can 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

The KPT Fluid filter 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

The KPT FraxFlame II filter 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

The KPT Gradient Lab filter 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

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

KPT Ink Dropper

The KPT Ink Dropper filter lets you create the effect of dropping colored liquid (ink) on a surface. You can create fluid drops, stains, and smoky swirls. 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

The KPT Lightning filter lets you create 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.

KPT Pyramid Paint

The KPT Pyramid Paint filter 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

The KPT Scatter filter lets you disperse particles over a source image. You can disperse a single particle or a grid of particles over an effect to emulate intricate effects such as paint strokes or mosaics. You can also use variants to create special effects based on the way particles interact with different components of a source image. You can control every aspect of particle placement, color, and shadow.

About KPT effects Help

The KPT effects Help 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.

KPT effects Help conventions

The KPT effects Help 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. For simplicity, the term “folder” refers to directories as well as folders. The KPT effects interface for Mac OS and Windows platforms is identical.

KPT effects tutorials

The KPT effects tutorials introduce you to KPT effects and help you become productive quickly.

To access the tutorials, [click here](#).

The KPT effects tutorials page is updated regularly, and new tutorials are added as we create them.

About procreate

procreate is a new line of software expressly designed to extend the possibilities of creative professionals. It defines a new category of products that add enhanced capabilities to the user’s collection of tools. With **procreate**, creative professionals can bring their most ambitious ideas to life. Featuring KnockOut 2, KPT effects and Painter 7™, **procreate** makes the impossible possible.

Learn more. Visit www.procreate.com.

Support and services

We are committed to providing quality customer service and support that is easy to access and convenient to use, while fostering one-to-one customer relationships. If you have a question about the features and functions of our applications or operating systems, see the user guide or Help for the product you are using. Updates and technical information are also available in the Release Notes.

Registering products

Registering products is important. Registration provides you with timely access to the latest product updates, valuable information about product releases and access to free downloads, articles, tips and tricks, and special offers.

For more information about registering a product, see the Help for the product or see <http://www.corel.com/support/register> on the Internet.

Technical support

The Web address for Corel is <http://www.corel.com> on the Internet. A list of localized Corel Web sites is available at

<http://www.corel.com/international/> on the Internet.

Self-serve technical support options

Several self-serve tools are available to address technical questions 24 hours a day, seven days a week.

Support newsgroups

<http://www.corel.com/support/newsgroup.htm>

Knowledge base

<http://kb.corel.com>

FAQs

<http://www.corel.com/support/faq>

File Transfer Protocol (FTP)

<ftp://ftp.corel.com>

FTP information

<http://www.corel.com/support/downloads/index..htm>

Automated Fax on Demand*

1-877-422-6735

*Fax on Demand is available only in North America.

Telephone technical support options

Users can use complimentary and fee-based telephone technical support options. Three levels of support are available.

Classic Service

Classic Service is a complimentary, 30-day service designed to address installation, configuration, and new feature issues. This service begins on the day of your first technical support call.

Classic Service is a paid for service for OEM, “White box,” Jewel Case (CD only), trial, or Academic versions of products.

Priority Service

Priority Service is a fee-based service for users who require the help of second-level technicians. Priority Service may be purchased by the minute, by the incident, or on a term basis. Options range from core-business-hour access for individual users to around-the-clock access for multiuser environments.

Premium Service

Premium Service is the highest level of support. This service is designed for organizations that want to establish a direct relationship with Corel and for organizations that employ dedicated support professionals or have centralized technical management.

Customer Service

Customer Service can provide you with prompt and accurate information about product features, specifications, pricing, availability, and services. Customer Service does not provide technical support. You can access Customer Service support through the following avenues.

World Wide Web

You can access general customer service and product information at <http://www.procreate.com> on the Internet.

Mail, fax, email

You can send specific customer-service questions to Customer Service representatives by mail, fax, and email.

Corel Corporation
Corel Customer Service
1600 Carling Avenue
Ottawa, Ontario
Canada K1Z 8R7

Fax: 1-613-761-9176

Email: custserv2@corel.ca

Telephone

You can telephone Customer Service centers with your questions.

In North America, you can reach Customer Service by calling the 1-800-772-6735 toll-free line.

The hours of operation are 9:00 a.m. to 9:00 p.m., eastern time (ET), Monday through Friday, and 10:00 a.m. to 7:00 p.m. on Saturdays.

Corel customers outside North America can call a local authorized Corel Customer Service Partner.

Getting started with KPT effects

KPT effects 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 KPT effects filters will help you take your work to a new creative level, and enhance your productivity.

In this section, you'll learn about

- ♦ installing KPT effects
- ♦ accessing and quitting KPT effects filters
- ♦ the workspace
- ♦ using panels and sliders
- ♦ previewing filter effects
- ♦ customizing the workspace
- ♦ storing workspace and panel settings
- ♦ working with presets

Installing KPT effects

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

To install KPT effects in Mac OS

- 1 Insert the **KPT effects** CD into the computer's CD drive.
- 2 Browse to the **KPT effects** folder.
- 3 Double-click the **KPT effects installer** icon.
- 4 Follow the instructions on your screen.

To install KPT effects in Windows

- 1 Insert the **KPT effects** CD into the computer's CD drive.
- 2 Click **Install**.
- 3 Follow the instructions on your screen.

Accessing and quitting KPT effects filters

You can access a KPT effects filter from the host application. You can quit a KPT effects 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.

Getting started with KPT effects

To access a filter

- ◆ Do one of the following:
 - ◆ In Adobe® Photoshop®, click **Filters** ▶ **KPT effects**, and click a filter.
 - ◆ In **Painter 7™**, click **Effects** ▶ **KPT effects**, and click a filter.
 - ◆ In Corel PHOTO-PAINT®10, click **Effects** ▶ **KPT effects**, and click a filter.
 - ◆ In Bryce®, click a flyout arrow in the **Pictures** dialog box in **Picture editor**, click **KPT effects**, and click a filter.



If you want to access a KPT effects 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 KPT effects is installed, and click **Choose/OK**.

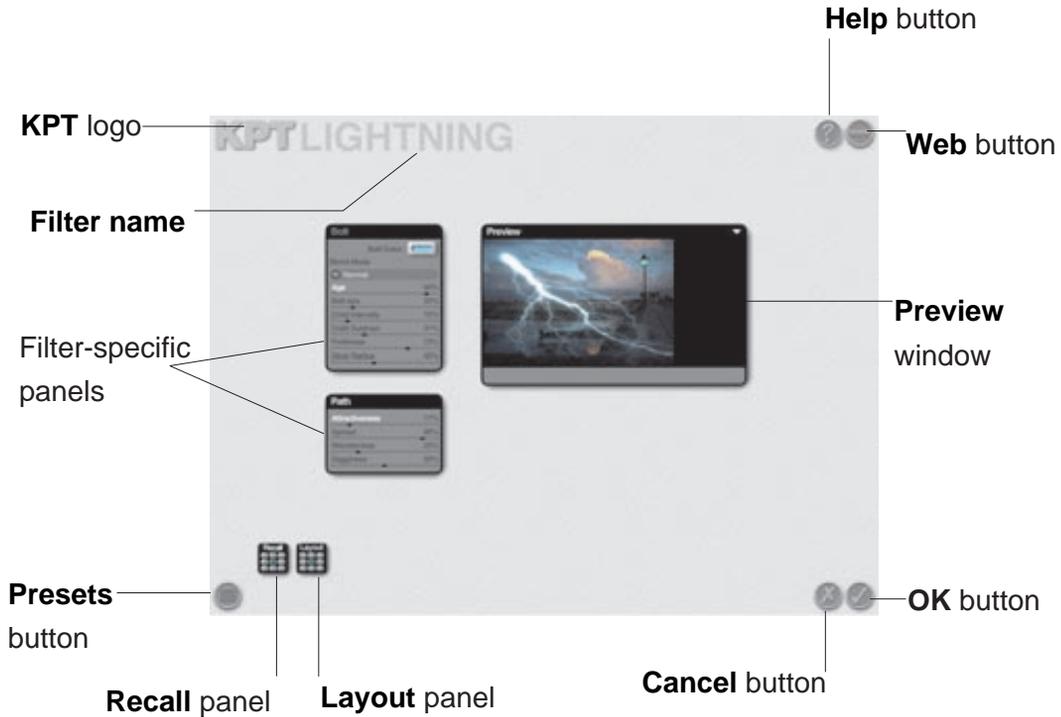
To quit a filter

- ◆ Click one of the following buttons:
 - ◆ **OK** — to quit a filter and apply the effect
 - ◆ **Cancel** — to quit a filter without applying the effect

Getting started with KPT effects

Exploring the workspace

The KPT effects workspace contains a **Preview** window and a set of controls.



Getting started with KPT effects

The following table provides a description of each common control in the KPT effects workspace, starting with the **Preview** window.

Control name	Description
Preview window	Lets you preview the effects you create. For more information about setting preview options, see “Previewing filter effects.”
KPT logo	Lets you customize the display of the KPT workspace, and access product information
Filter name	Lets you customize the display of panels. For more information about setting panel display options, see “Using panels and sliders.”
Web button	Lets you connect to the procreate Web site where you can access information about KPT effects and other procreate products

Getting started with KPT effects

Control name	Description
Help button	Lets you access the KPT effects Help
Layout panel	Lets you store workspace layout settings. For more information about using the Layout panel, see “Storing workspace and panel settings.”
Recall panel	Lets you store panel settings. For information about using the Recall panel, see “Storing workspace and panel settings.”
Presets button	Lets you load and store presets. For more information about using presets, see “Working with presets.”
Cancel button	Returns to the host application without applying the effect to the source image
OK button	Returns to the host application and applies the effect to the source image

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



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).

Getting started with KPT effects



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

Getting started with KPT effects

- ◆ **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



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

Getting started with KPT effects

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.



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

Getting started with KPT effects

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 KPT effects 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.



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.

Getting started with KPT effects

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.



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**.

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

- 3 Type a name.
- 4 Press **Return/Enter**.



Each category can store up to 24 presets.

Getting started with KPT effects

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**.

Using KPT FraxFlame II

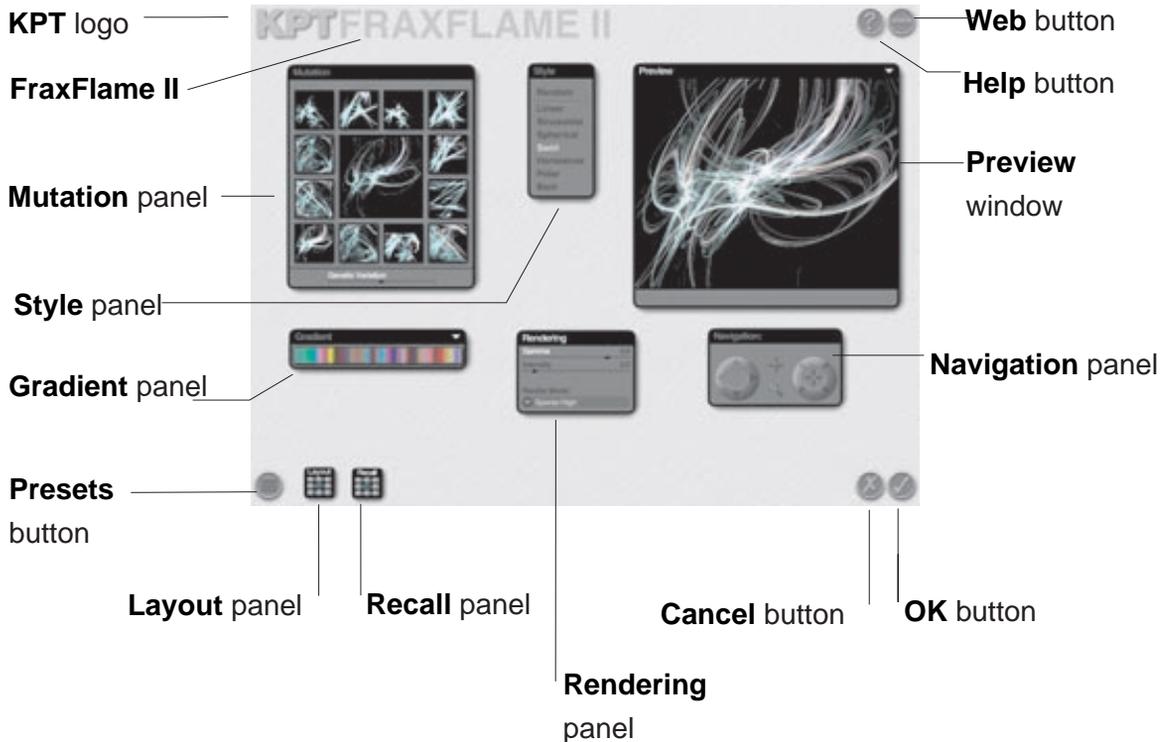
The KPT FraxFlame II filter lets you explore and mutate an infinite variety of flame fractals. A fractal is a geometric pattern repeated at very small scales to produce irregular shapes. You can customize fractals with various color, contrast, and distortion techniques.

In this section, you'll learn about

- ♦ the workspace
- ♦ choosing and mutating fractal styles
- ♦ defining a work area
- ♦ working with color and contrast
- ♦ distorting fractals
- ♦ exploring fractals
- ♦ rendering fractals

Exploring the workspace

The KPT FraxFlame II workspace contains a **Preview** window and a set of panels and controls.



The following table provides a description of each control in KPT FraxFlame II, starting with the filter-specific panels.

Control	Description
Rendering panel	Lets you render a fractal. For more information, see “Rendering fractals.”
Style panel	Lets you choose a fractal style. For more information, see “Choosing and mutating fractal styles.”
Navigation panel	Lets you view a fractal from different perspectives. You can pan or zoom a fractal; shrink or expand a fractal; and explore the 3-D facets of a fractal in conjunction with any of those viewing options. For more information, see “Exploring fractals.”

Mutation panel

Lets you mutate a fractal style, creating an infinite variety of parent and cousin styles in the process. For more information, see [“Choosing and mutating fractal styles.”](#)

Gradient panel

Lets you apply a color, shade of gray, or level of transparency. You can also adjust the intensity and contrast, and distort a fractal with techniques such as blurring, squeezing, repeating, and more. For more information, see [“Working with color and contrast”](#) or [“Distorting fractals.”](#)

Preview window

Lets you preview the effect you create. For more information about setting preview options, see [“Previewing filter effects.”](#)

KPT logo

Lets you customize the display of the KPT workspace, and access product information

FraxFlame II

Lets you customize the display of the **Rendering**, **Style**, **Navigation**, **Mutation**, and **Gradient** panels. For more information about setting panel display options, see [“Using panels and sliders.”](#)

Web button

Connects you to the **procreate** Web site where you can find information about KPT and other **procreate** products

Help button

Lets you access the KPT effects Help

Layout panel

Lets you store workspace layout settings. For more information about using the **Layout** panel, see [“Storing workspace and panel settings.”](#)

Recall panel	Lets you store different settings of the Rendering , Style , Navigation , Mutation , and Gradient panels. For information about using the Recall panel, see “Storing workspace and panel settings.”
Presets button	Lets you load and store presets. For more information about using presets, see “Working with presets.”
Cancel button	Returns to the host application without applying the effect to the source image
OK button	Returns to the host application and applies the effect to the source image

Defining a work area

By default, effects you apply encompass the entire flame fractal, unless you define a specific section as a work area. You can move or pivot the work area. You can also reset the work area.

To define a work area

- ◆ In the **Gradient** panel, drag an edge of the bracket left or right.
The bracket is located directly above the **Combination** palette.

You can also

Move the work area

Click the bracket, and drag left or right.

Pivot the work area

Drag one edge of the bracket past the opposite edge.

Reset the work area

Double-click the bracket.



You can move, pivot, or reset the work area only after you have dragged an edge of the bracket left or right.

You cannot apply effects to areas of a fractal that are not contained in the bracket. If you want to apply effects to another area of a fractal, you must move the bracket.

Choosing and mutating fractal styles

You can choose from seven preset fractal styles. Once you have chosen a fractal style, you can mutate the parameters of the parent fractal. When you mutate the parent fractal, you generate a range of cousins.



Sample image



A fractal to which the Linear style has been applied



A fractal to which the Sinusoidal style has been applied



A fractal to which the Spherical style has been applied



A fractal to which the Swirl style has been applied



A fractal to which the Horseshoe style has been applied



A fractal to which the Polar style has been applied



A fractal to which the Bent style has been applied

To choose a preset style

1 In the **Style** panel, click one of the following styles:

- ◆ **Linear**
- ◆ **Sinusoidal**
- ◆ **Spherical**
- ◆ **Swirl**
- ◆ **Horseshoe**
- ◆ **Polar**
- ◆ **Bent**

A range of fractals in the selected style display in the **Mutation** panel.

- 2 Click a fractal in the **Mutation** panel.



The parent fractal displays in the center tile of the **Mutation** panel. The cousins of the parent fractal display in the surrounding tiles. When you click a parent fractal or cousin, it displays in both the center tile of the **Mutation** panel, and the **Preview** window.

You can mutate a parent fractal, and choose a new parent fractal from the cousins generated from the mutation. For more information, see [“To mutate a fractal.”](#)



You can choose from a variety of fractal styles by clicking **Random** in the **Style** panel. A range of fractal styles display in the **Mutation** panel, from which you can click a style.

To mutate a fractal

- 1 In the **Mutation** panel, click anywhere on the parent fractal.
A range of cousins display on the tiles surrounding the parent fractal.
- 2 Click a cousin.
The cousin displays in the center tile, and becomes the parent fractal.
- 3 Move the **Genetic variation** slider.
- 4 Click the parent fractal.



The **Genetic variation** slider controls how closely related the cousins are to the parent fractal. If you move the **Genetic variation** slider to the right, the cousins are less like the parent fractal. If you move the **Genetic variation** slider to the left, the cousins are more like the parent fractal.

Once you achieve the effect you want, you can explore the fractal in several ways. For more information, see [“Exploring fractals.”](#)

Working with color and contrast

You can apply a color, shade of gray, or level of transparency, to a fractal.

You can adjust the intensity of colors in a fractal by modifying the hue, saturation, and brightness. Hue represents the pigment of a color and is measured in degrees. Saturation represents the vividness or richness of a color and is measured in percent from 0 to 100 (the higher the percentage, the more vivid the color). Brightness represents the amount of white contained in a color and is measured in percent from 0 to 100 (the higher the percentage, the brighter the color).

You can adjust the contrast of colors in a fractal. By adjusting the contrast, the differences in the color values of neighboring light and dark pixels are adjusted. You can also adjust the color tone and vibrancy of a fractal.

To apply a color or shade of gray

- 1 In the **Gradient** panel, click and hold down the pointer on the **Combination** palette.
- 2 Drag the pointer over one of the following:
 - ♦ **Color** bar — to apply a color
 - ♦ **Grayscale** bar — to apply a shade of gray
- 3 Release the pointer on the preferred color or shade of gray.



When you click the **Combination** palette, three bars display. The top bar is the **Grayscale** bar, which lets you apply a shade of gray from black to white. The middle bar is the **Color** bar, which lets you apply a color from a spectrum of colors and shades. The lower bar is the **Opacity** bar, which lets you adjust the transparency through which the source image can display.

Where you click on the **Combination** palette determines where the effect will display in the fractal. For example, clicking on the far left side of the **Combination** palette lets you apply the effect to the far left side of the fractal. Similarly, clicking on the far right side of the **Combination** palette lets you apply the effect to the far right side of the fractal.

To adjust the transparency of a fractal

- 1 In the **Gradient** panel, click and hold down the pointer on the **Combination** palette.
- 2 Drag the pointer over the **Opacity** bar.
- 3 Release the pointer on the preferred transparency.



When you adjust the transparency of a fractal, you change the grayscale values of its individual pixels. Grayscale values range from black (a transparent value of 0), to white (an opaque value of 255).

To adjust the color intensity of a fractal

- 1 In the **Gradient** panel, click one of the following:
 - ♦ **Hue** — to rotate hues
 - ♦ **Saturation** — to modify the intensity of colors
 - ♦ **Brightness** — to modify the brightness of colors
- 2 Move the black slider arrow in the expanded panel.



When you rotate hues in a fractal, you cycle through all colors in the spectrum, but maintain the relative distance, in pixels, between each color.

To adjust the color contrast

- 1 Click **Contrast** in the **Gradient** panel.
- 2 Move the black slider arrow in the expanded **Contrast** panel.



If you increase the contrast, the difference between colors is exaggerated. If you decrease the contrast, the colors are homogenized.



You can decrease the contrast to the point where the gradient displays in a shade of gray.

To adjust the color tone and vibrancy of a fractal

- ♦ In the **Rendering** panel, move either of the following sliders:
 - ♦ **Gamma** — to adjust the color tone
 - ♦ **Intensity** — to adjust the color vibrancy



Moving the **Gamma** slider to the right saturates the flame colors, and moving it to the left dulls the flame colors. Moving the **Intensity** slider to the right brightens the flame colors, and moving it to the left fades the flame colors.

Distorting fractals

You can blur a flame fractal. Blurring smudges the edges of pixels by gradually blending them together.

You can squeeze a fractal. You can repeat a fractal, increasing its frequency up to 20 times. You can also adjust the color tone and vibrancy of a fractal.

To blur a fractal

- 1 Click **Blur** in the **Gradient** panel.
- 2 Move the black slider arrow in the expanded **Blur** panel.



Dragging up increases the blur and dragging down decreases the blur.

To squeeze a fractal

- 1 Click **Squeeze** in the **Gradient** panel.
- 2 Move the black slider arrow in the expanded **Squeeze** panel.



If you have defined a work area, the squeeze starts at the center of the bracket and moves to the end.

For more information about defining a work area, see [“Defining a work area.”](#)



If you want to start a squeeze from a point other than the center of the bracket, you must hold down **Option/Alt**, and drag in the **Combination** palette.

To repeat a fractal

- 1 Click **Frequency** in the **Gradient** panel.
- 2 Move the black slider arrow in the expanded **Frequency** panel.

Exploring fractals

You can explore the 3-D facets of a fractal. You can also zoom a fractal. You can pan a fractal to view areas that are not displayed at the zoom level you are working with. You can also shrink or expand a fractal.

To explore the 3-D facets of a fractal

- ♦ In the **Navigation** panel, click any of the following arrows on the **Navigation** wheel.
 - ♦ **Up**
 - ♦ **Down**
 - ♦ **Left**
 - ♦ **Right**

You can also	In the Navigation panel
Pan a fractal	Drag across the Pan button.
Zoom a fractal	Drag across the Zoom button.
Shrink a fractal	Click the Shrink arrows on the Sizing wheel.
Expand a fractal	Click any of the Grow arrows on the Sizing wheel.



The **Navigation** wheel is located at the far left side in the **Navigation** panel.

The **Sizing** wheel is located at the far right side in the **Navigation** panel.

Rendering fractals

You can automatically render a fractal, using a preset rendering style. You can also custom render a fractal.

To automatically render a fractal

- ◆ In the **Rendering** panel, click the flyout arrow in the **Render mode** area, and choose one of the following render modes:

- ◆ **Sparse low**
- ◆ **Sparse medium**
- ◆ **Sparse high**
- ◆ **Sharp low**
- ◆ **Sharp medium**
- ◆ **Sharp high**



The **Sparse low**, **Sparse medium** and **Sparse high** render modes are designed to improve the quality of cloudy, dispersed or pixelated fractals, such as **Sinusoidal** fractals.

The **Sharp low**, **Sharp medium** and **Sharp high** render modes are designed to improve the quality of tightly packed fractals, such as **Linear** fractals.

To custom render a fractal

- 1 In the **Rendering** panel, click the flyout arrow in the **Render mode** area, and click **Custom**.
- 2 Move any of the following sliders:
 - ◆ **Sample density** — to set the complexity and detail in a fractal
 - ◆ **Oversample** — to set the number of times a fractal is sampled to generate each pixel

- ◆ **Filter radius** — to set the amount of blur on the edges of a fractal



Adjusting the **Sample** density and **Oversample** sliders can greatly increase the quality of a fractal, but it may take some time to complete the rendering process.