



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 Scatter	27
Exploring the workspace	28



Importing and dispersing particles	32
Adjusting particle color and opacity	37
Sizing particles.	38
Rotating particles	39
Shadowing particles	40
Working with variants	41

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**.

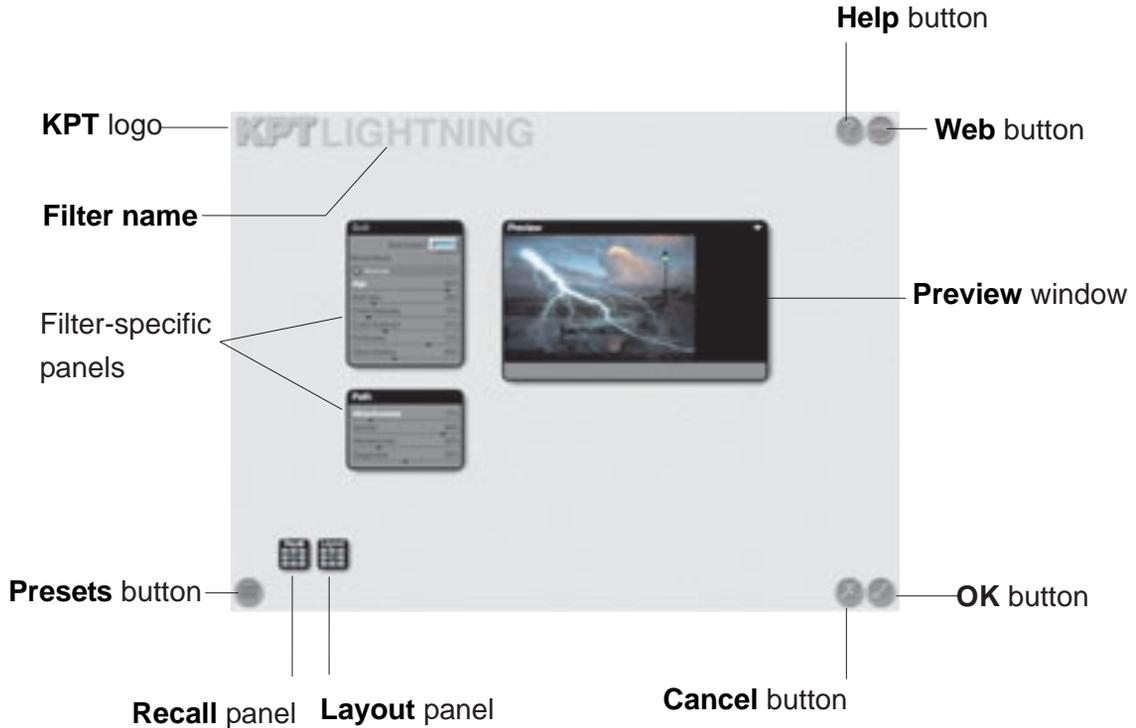
To quit a filter

- ◆ 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
 - ◆ **Preview against checkerboard** — to display an effect against a background of gray squares

Getting started with KPT effects

- ◆ **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 Scatter

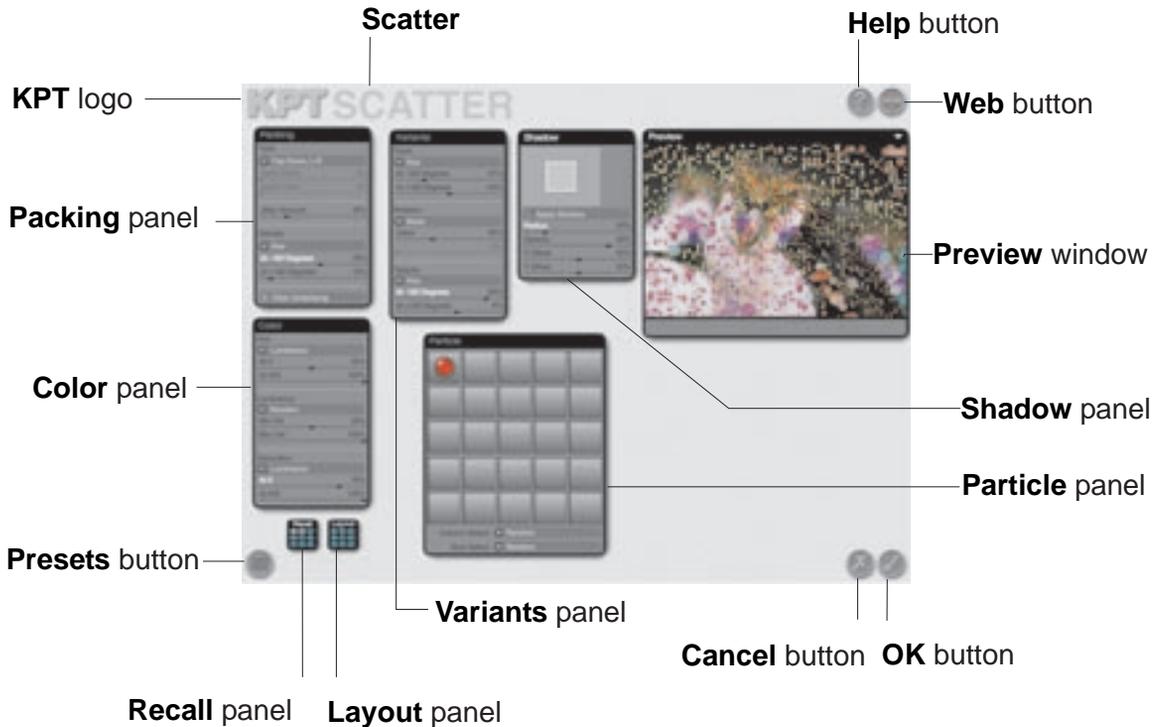
The KPT Scatter filter lets you disperse particles over a source image. You can disperse a single particle or a grid of particles over an effect to emulate intricate effects such as paint strokes or mosaics. You can also use variants to create special effects based on the way particles interact with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

In this section, you'll learn about

- ◆ the workspace
- ◆ importing particles
- ◆ placing particles
- ◆ adjusting particle color and opacity
- ◆ sizing particles
- ◆ rotating particles
- ◆ shadowing particles
- ◆ working with variants

Exploring the workspace

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



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

Control	Description
Particle panel	Lets you import up to 25 particles, and disperse them in various ways over a source image
Packing panel	Lets you determine the packing density and direction of particles as they scatter over a source image
Color panel	Lets you adjust the hue, luminance, and saturation of particles in several ways
Variants panel	Lets you adjust the scale, rotation, and opacity of particles in several ways
Shadow panel	Lets you create shadows behind particles, and pan the effect you are creating

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

Scatter

Lets you customize the display of the **Particle, Packing, Color, Variants,** and **Shadow** 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 effects 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 **Particle, Packing, Color, Variants,** and **Shadow** 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

Importing and dispersing particles

A particle is any image you want to disperse across a source image. You can import up to 25 particles to a grid (5 tiles by 5 tiles). If you import particles to grid tiles directly adjacent to one another, the particles will display close together. If you leave a blank grid tile between imported particles, the particles will display with some space between them.

You can import particles to specific grid tiles, based on where or how you want them to display when applied to a source image. You place particles on a source image using variants that you apply to the columns and rows in the grid. Columns of particles are placed on a source image from the leftmost grid column to the rightmost, and rows of particles are placed on a source image from the top grid row to the bottom row.

The following table provides a description of each variant you can use to disperse particles.

Variant	Description
None	Sets the particles based on their placement in the grid
Hue	Sets the particles based on the hue of the source image. The hue progresses clockwise through the RGB spectrum.

Luminance	Sets the particles based on the luminance of the source image
Saturation	Sets the particles based on the saturation of the source image
Horizontal distance	Sets the particles based on the x-coordinate of the particles in the grid
Vertical distance	Sets the particles based on the y-coordinate of the particles in the grid
Radial distance	Sets the particles based on the distance of the each particle from the center of the source image
Circular distance	Sets the particles based on the circumference of the source image
Random	Sets the particles randomly on the source image

Smooth random

Sets the particles between a random range of key particles with the same value. For example, an image with 100 particles might have a random value for every tenth particle, called a key particle, and other particles would have varying values based on the key particles between which they are placed.

Time

Sets the particles based on the time at which each particle is placed on an effect. For example, if you have set the packing direction to **Bottom up, R-L**, the first particle is placed on the source image starting in the bottom-right corner.

You can also use variants to set the packing density and direction of particles on a source image. The packing density refers to the amount of particles you disperse across a specific area determined by a variant, or the entire source image. The packing direction refers to the order or movement in which particles disperse across the source image.

For detailed information about KPT Scatter variants, see [“Working with variants.”](#)

To import a particle

- 1 In the **Particle** panel, click a gray tile.
- 2 Choose the folder where the file is stored from the **Open** dialog box.
- 3 Click the file.
- 4 Click **Open**.

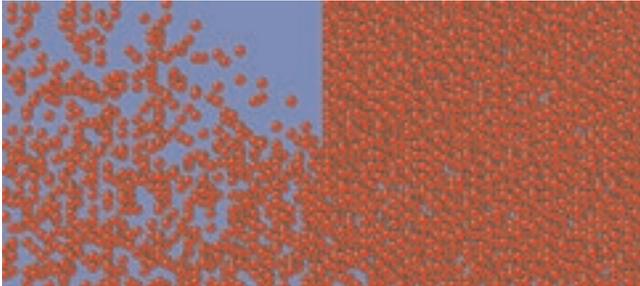
The particle displays in the selected tile in the **Particle** panel.

To place particles on a source image

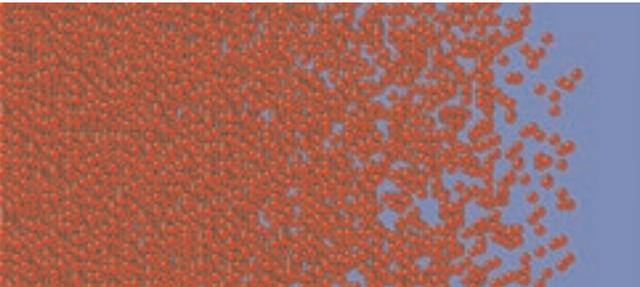
- 1 In the **Particle** panel, click one of the following flyout arrows:
 - ♦ **Column select**
 - ♦ **Row select**
- 2 Choose a variant from the **Variants** list box.

To set the packing density

- 1 In the **Packing** panel, click the flyout arrow in the **Density** area, and click a variant.
- 2 Move the corresponding variant sliders in the **Density** area.



Particle density set using the Circular distance variant



Particle density set using the Horizontal distance variant

To set the packing direction

- 1 In the **Packing** panel, click the flyout arrow in the **Type** area, and click a variant.
- 2 Choose a style from the **Packing** list box.



For more information about variants, see [“Working with variants.”](#)



You can also adjust the regularity of the movement of particles as they disperse across a source image by moving the **Jitter** slider. By default, particles are packed along a regular grid line, but you can jitter them as they progress along the grid line. Jitter is measured in percent from 0 to 100 (the higher the percentage, the more irregular the dispersement of particles).

Adjusting particle color and opacity

You can use variants to adjust the hue, luminance and saturation of color in particles. Hue describes the pigment of color and is measured in percent from 0 to 100. Saturation describes the vividness or dullness of a color and is measured in percent from 0 to 100 (the higher the percentage, the more vivid the color). Brightness describes the amount of white that a color contains and is measured in percent from 0 to 100 (the higher the percentage, the brighter the color).

You can also use variants to adjust the opacity of particles.

For more information about variants, see [“Working with variants.”](#)

To adjust the color of particles

1 In the **Color** panel, click the flyout arrow in one of the following areas:

- ♦ **Hue** — to adjust the pigment of a color
- ♦ **Saturation** — to adjust the vividness of a color
- ♦ **Brightness** — to adjust the amount of white in a color

2 Choose a variant from the **Variant** list box.

3 Move the corresponding variant sliders.

To adjust the opacity of particles

1 In the **Variants** list box, click the flyout arrow in the **Opacity** area, and click a variant.

2 Move the corresponding variant sliders.



If you set the **Opacity** variant to **None**, and set the **Minimum** slider to 100 percent, the particles will be fully opaque. If you reduce the **Minimum** slider value, the particles will become more transparent.

Sizing particles

You can use variants to size particles. For more information about variants, see [“Working with variants.”](#)

To size particles

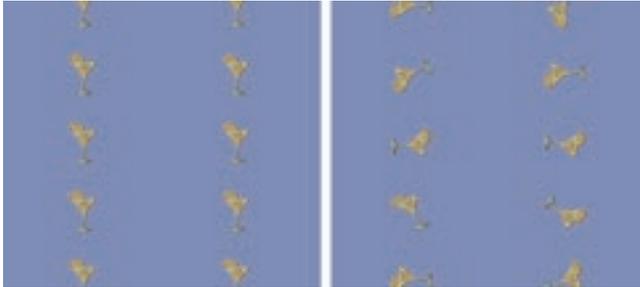
- 1 In the **Variants** panel, click the flyout arrow in the **Scale** area, and click a variant.
- 2 Move the corresponding variant sliders.



A scale value of 50 percent produces particles at their regular size. A scale value of less than 50 percent reduces their size, a scale value of more than 50 percent increases their size. Therefore, if you set the **Scale** variant to **None**, and set the **Minimum** slider to 50 percent, the particles are rendered at their regular size.

Rotating particles

You can use variants to rotate particles. For more information about variants, see [“Working with variants.”](#)



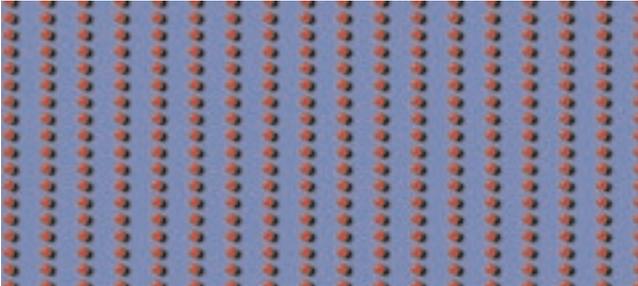
On the left, particles that are not rotated; on the right, particles that are rotated using the Random variant

To rotate particles

- 1 In the **Variants** list box, click the flyout arrow in the **Rotation** area, and click a variant.
- 2 Move the corresponding variant sliders.

Shadowing particles

You can add a shadow to particles. You can also adjust the radius, opacity, and position of a shadow.



Shaded particles

To add a shadow to particles

1 In the **Shadow** panel, enable the **Apply shadow** option.

2 Move any of the following sliders:

- ◆ **Radius** — to set the size of the shadow
- ◆ **Opacity** — to set the transparency of the shadow
- ◆ **X offset** — to set the vertical location of the shadow
- ◆ **Y offset** — to set the horizontal location of the shadow



If you set the **X offset** to 50 percent, the shadow is centered horizontally with the particle. At 0 percent the shadow is positioned left of the center

of the particle by 50 percent. At 100 percent the shadow is positioned right of center of the particle by 50 percent.

If you set the **Y offset** to 50 percent, the shadow is centered vertically with the particle. At 0 percent the shadow is positioned above the particle by 50 percent. At 100 percent the shadow is positioned below the particle by 50 percent.

Working with variants

Variants are properties of a source image or particle system that you can use to adjust the placement, density, direction, color, and contrast of particles.

The following table provides a description of each variant included in KPT Scatter:

Variant	Description
None	Sets the effect to an absolute value based on the Value slider setting

Hue

Sets the effect based on the hue of the source image. The hue progresses clockwise through the RGB spectrum to the highest value specified by the **At +180 degrees** slider.

Luminance

Sets the effect based on the luminance of the source image. Luminance ranges from black (a value of 0), to white (a value of 100), with a range of colors in between.

Saturation

Sets the effect based on the saturation of the source image

Horizontal distance

Sets the effect based on the x-coordinate of a particle. Particles at the far left on the source image are set using the **At left** slider. Particles at the far right on the source image are set using the **At right** slider.

Vertical distance

Sets the effect based on the y-coordinate of a particle. Particles at the top of the grid are set using the **At top** slider. Particles at the bottom of the grid are set using the **At bottom** slider.

Radial distance

Sets the effect based on the distance of the particle from the center of the source image. Particles at the center are set using the **At center** slider. Particles at the outer edge are set using the **At edge** slider.

Circular distance

Sets the effect based on the circumference of the image. Particles pack more densely as they radiate around the source image.

Random

Sets the effect at a random value between the **Min val** slider setting and the **Max val** slider setting. If you reduce the settings of the **Min val** and **Max val** sliders, you create a smaller range from which the value is derived.

Smooth random

Sets the effect at a value between a random range of key particles with the same value. The random range is derived from between the **Min val** and **Max val** slider settings.

Time

Sets the effect based on the time at which each particle is placed on an effect. For example, if you have set the packing direction to **Bottom up**, **R-L**, the first particle is placed in the bottom right corner. Particles at the bottom right are set using the **At start** slider. Particles at the top left are set using the **At end** slider.
