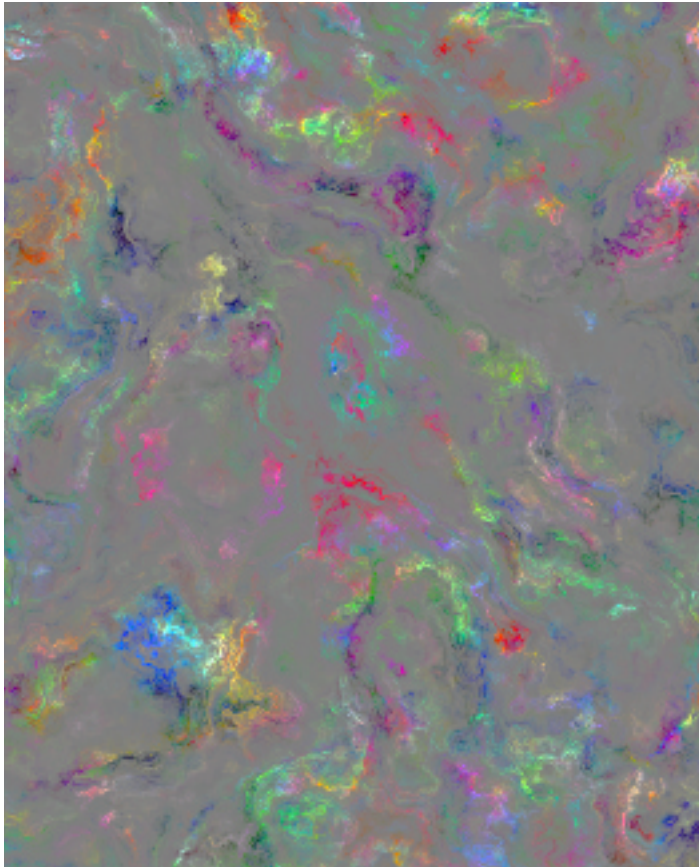


# KPT NOIZE



## **What's in this Section:**

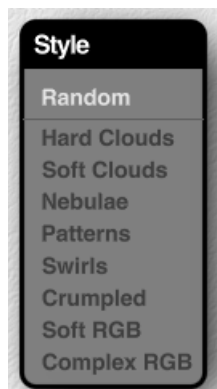
Overview .....	103
Generating Noise .....	103
Setting Up Noise Components .....	105

## Overview

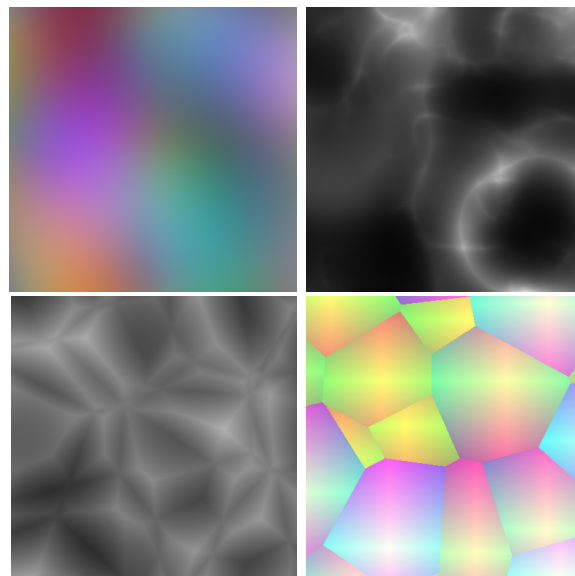
The KPT Noize filter lets you explore a wide variety of noise patterns. Noise patterns are mathematically generated turbulence. Noise can be used as textures, patterns, or as noise maps in one of the other KPT filters, like KPT FiberOptix.

## Generating Noise

The KPT Noize filter is set up like an explorer utility. Noise is divided into a number of families, listed in the Style panel. After you select a noise family, you can explore its many variations using the Mutator. When you've got a noise you like, you can use one of the apply options to add it to your image.



*The KPT Noize Style panel.*



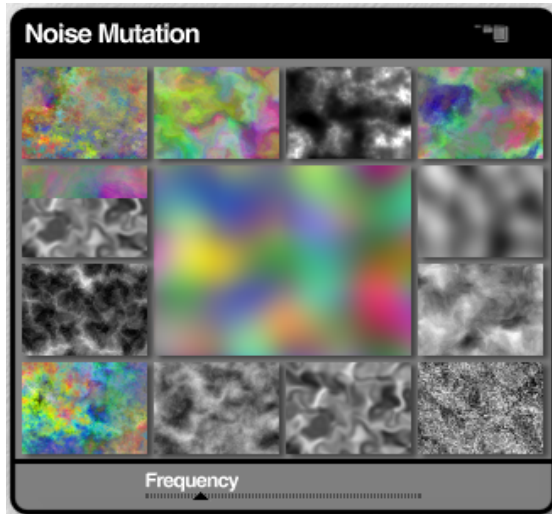
*Examples of different noise families.*

To choose a noise family:

- ✱ Click a family name in the Style panel.  
Choose Random if you want to randomize the families themselves.

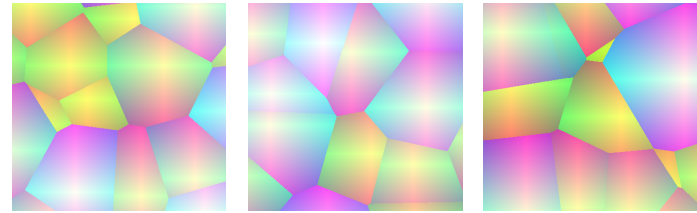
## Using the Noise Mutator

Noise is generated using complex mathematical equations with a wide number of parameters. These parameters are like genes that go into making the final noise. You can change the noise pattern through genetic mutation (i.e. mutating parameters).



*The noise in the center is the parent noise. The smaller previews display derivatives.*

The preview at the center of the Mutator represents the parent noise and the smaller windows that surround it are derivatives, or cousins, of the parent. Every time you mutate the parent, you generate different derivatives.



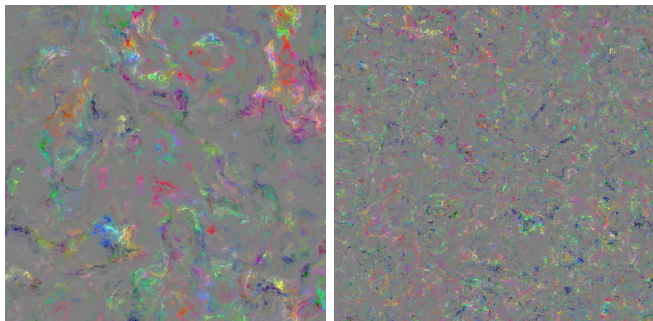
*Examples of mutated noise.*

To mutate a noise pattern:

- 1 In the Noise Mutation panel, click the center preview until you see a noise pattern you like.
- 2 Click the small preview of the noise you want to explore. Your selection becomes the parent noise and is displayed in the center of the Mutator.
- 3 Click the center preview again to generate derivatives of the selected noise.
- 4 Continue clicking the Mutator and selecting derivatives until you get the look you want.

## Scaling Noise

The Frequency slider controls how many times the noise is repeated within an image. Higher scale values create more turbulence in the noise pattern.



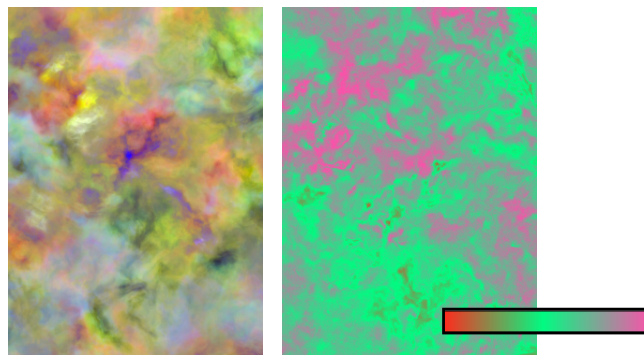
*Noise using low and high Frequency values.*

## Setting Up Noise Components

Noise can have different components, depending on the contents of the source image:

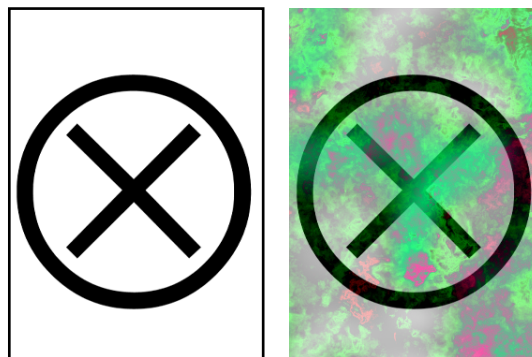
- If your source image is flat (i.e. without layers), KPT Noise can generate RGB noise that can be colored using a gradient.
- If your source image has more than one layer, KPT Noise can generate both RGB noise and Alpha noise.

RGB noise can be colored either randomly or using a gradient. It can also be transparent or opaque. When you turn it off, any alpha noise you generated is combined with the source image.



*RGB noise colored using a gradient.*

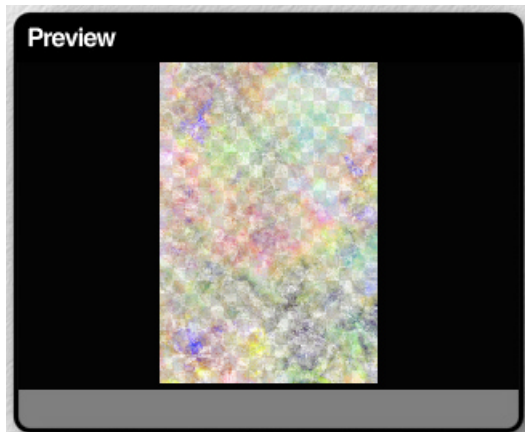
Alpha noise creates transparency within the source image. Noise is only applied in opaque areas.



*An image with both RGB and Alpha noise.*

If you use RGB noise combined with a gradient and alpha noise, you'll get a noise that not only has mathematically generated turbulence, but also a wide variety of colors and transparency patterns as well!

The Main Preview window displays the final noise. If you're combining noise types, the window shows the final result. If you turn off RGB, the window shows how the alpha noise combines with the background image.



*The Main Preview window displaying a combination of RGB and Alpha noise.*

To choose noise components:

- Click the arrow icon at the top of the Noise Component panel and choose a component from the menu.

## Generating RGB Noise

By default, KPT Noise generates RGB noise. The Mutator sets the type of noise you generate.

## Setting RGB Noise Opacity

The Opacity slider lets you control how much the generated noise affects the background image. The more transparent the noise, the less it affects the image. Setting RGB Noise Opacity to 0%, is like turning the noise off.

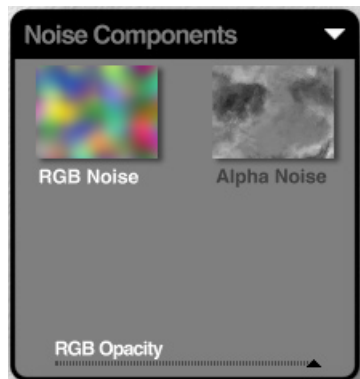
## Using a Gradient

When this component is enabled, the RGB noise is colored using the colors in the Gradient panel.

The Gradient panel appears when you select this component. Use the panel to choose and mix colors. Refer to [“Color Gradient Panel” on page 35](#) for more on creating gradients.

## Generating Alpha Noise

When this component is enabled, KPT Noize generates alpha noise that creates transparency in the noise pattern.



*The Noise Component panel expands when you enable the Using Alpha Noise option.*

To generate alpha noise:

- 1 Click the Alpha Noise preview.
- 2 Use the Mutator to generate a noise pattern.

## Setting Alpha Noise Opacity

Like RGB Noise, you can control how much the alpha noise affects the image, by setting its transparency. Setting Alpha Noise Opacity to 0% is like turning alpha noise off. The RGB Noise you generated is completely opaque.