

TK Gen Fill Instructions Manual



NOTE: Button names are underlined in the sections that follow.

LEGAL NOTICE

The TK Gen Fill plugin is copyrighted material (©Tony Kuyper). You may use the plugin for your personal work and enjoyment but transfer or sale is prohibited. If someone is interested in using the plugin, please have them visit my website www.Goodlight.us to obtain it.

Thank you for respecting the time and effort it takes to develop these techniques and for showing the appropriate consideration for the intellectual property of others. As always, please feel free to [contact me](#) if you have questions, comments, or suggestions.

ACKNOWLEDGEMENTS

The TK Gen Fill plugin owes much to [Dave Kelly's YouTube channel](#), which provided inspiration for most of the features. [David Tillett](#) beta-tested the plugin and helped find several bugs. Some of the icons used in the TK Gen Fill plugin come from the FontAwesome.com website and were not changed ([license](#)).

IMPORTANT INFORMATION

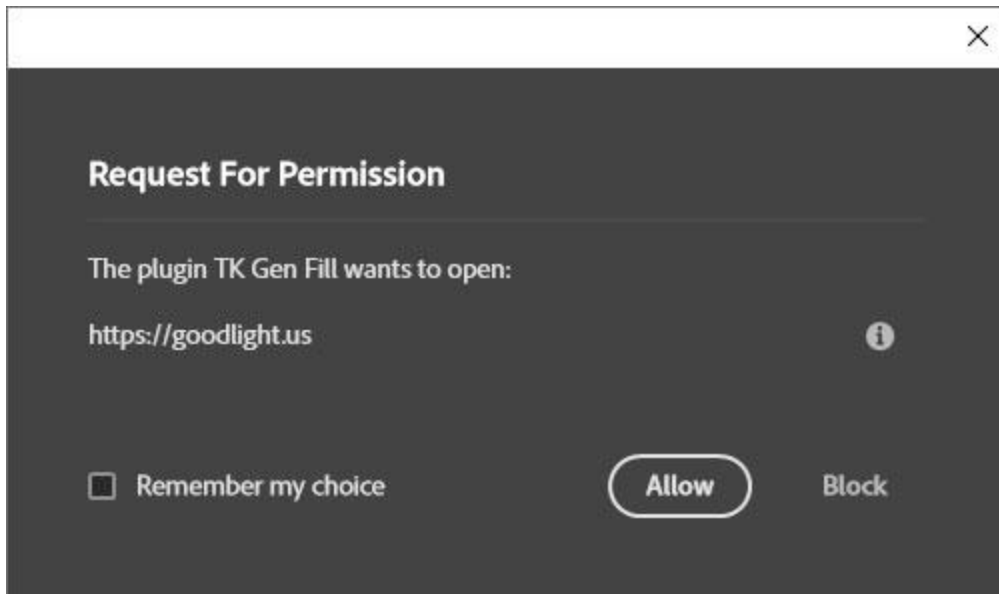
The TK Gen Fill plugin uses Adobe's generative artificial intelligence functionality, which is currently only available in Photoshop 2024 (version 25.x) and Photoshop Beta. The plugin does not have its own artificial intelligence algorithm for generative fill processing. It simply uses what Photoshop makes available.

While the TK Gen Fill plugin works in Photoshop Beta, installing it requires a product version of Photoshop to also be installed. Plugins cannot be installed if Photoshop Beta is the only installed version of Photoshop on the computer.

Generative fill technology is still evolving, and will likely change in the future. These changes might affect the TK Gen Fill plugin. If a future version of Photoshop affects the plugin, I'll probably write an article about it on [my blog](#), so be sure to subscribe. I'll fix future problems if I can. You will be able to use your download link to get a new version (save your download link) or can visit my website to obtain it. Installing updated versions will overwrite the previous version.

While I try to get everything right when coding the plugin, it is complex and there can occasionally be some bugs. In addition, periodic Adobe updates to Photoshop sometimes cause unexpected problems for all plugins. If you have issues with TK Gen Fill, [contact me](#) and I can look into it. If I can reproduce the problem, I can usually find a way to fix it.

There are links to external websites in the fly-out menu for this plugin. Clicking one initially opens a window where the user needs to grant permission to open that website.



INSTALLATION

There is an installation PDF in the download folder that explains how to install the TK Gen Fill plugin.

THE FLY-OUT MENU

Clicking the menu icon in the upper right corner opens the plugin's preferences and provides access to other features.

Version—This is the current version of the plugin

Language—This section lists the available languages for this plugin. English is currently the only available option.

Show selection indicator—When checked, the active selection indicator displays around the module's perimeter whenever there is an active selection even if the selection is not sufficient to trigger the presence of selection edges (marching ants) or if the selection edges have been intentionally hidden.

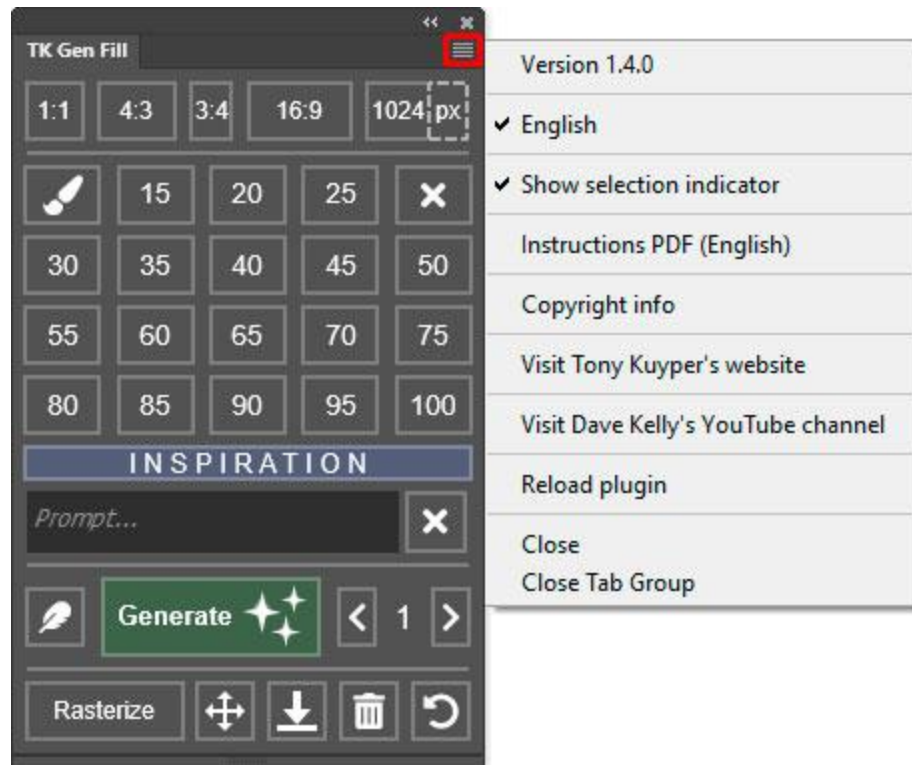
Instructions PDF (English)—This option opens a web-based PDF with the plugin's instructions manual

Copyright info—This option opens a message window in Photoshop that reviews copyright and end-user license agreement information.

Visit Tony Kuyper's website—This option opens the front page of Tony Kuyper's website in the computer's default internet browser.

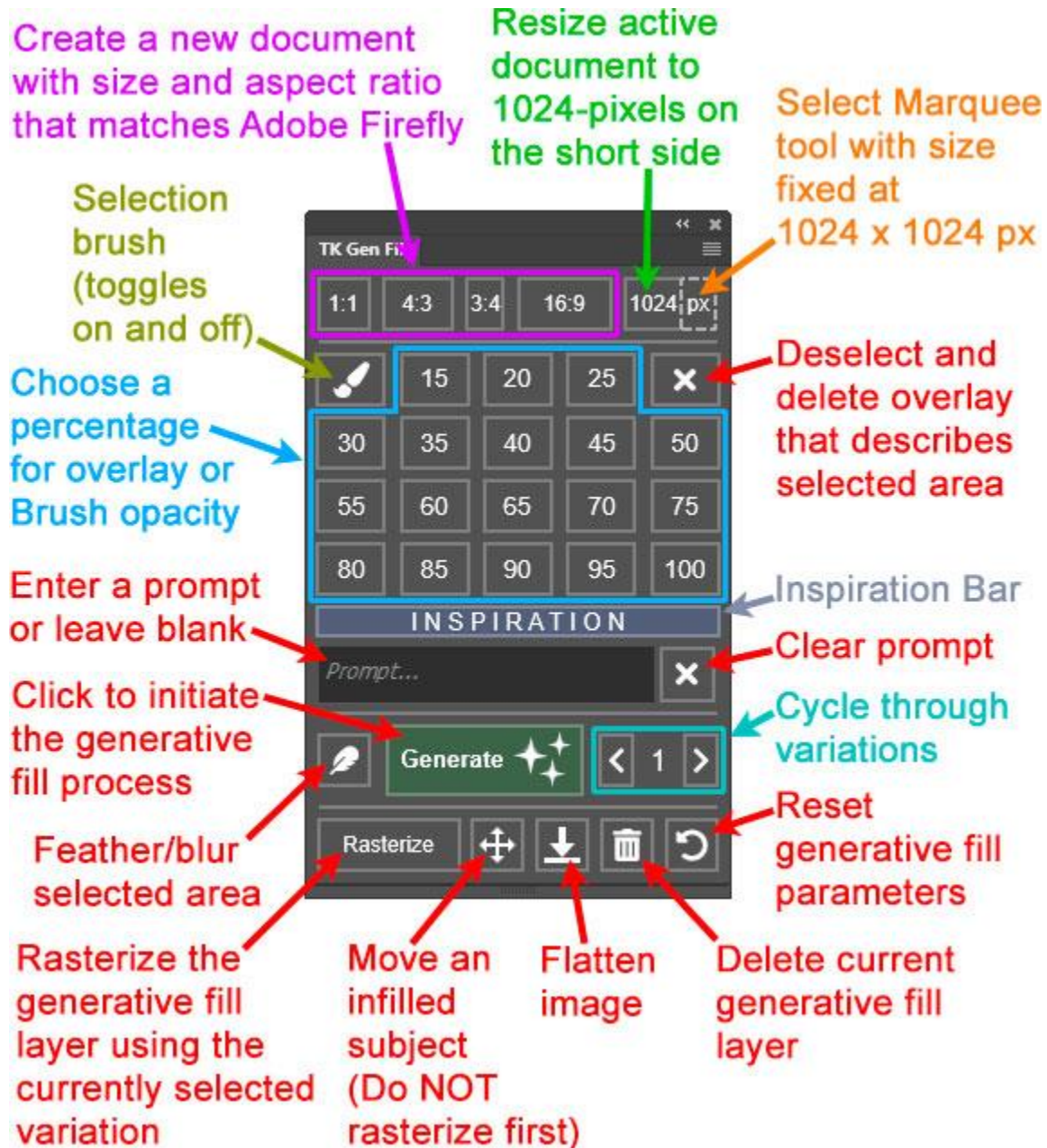
Visit Dave Kelly's YouTube channel— This option opens Dave Kelly's YouTube channel in the computer's default internet browser.

Reload plugin—This option reloads the plugin. This is rarely necessary, but can be used to reset the plugin if it appears to not be working properly.



THE MAIN INTERFACE

The image below shows the function of all buttons on the plugin.



WORKFLOW

There are several ways to use generative fill in Photoshop, and the TK Gen Fill plugin allows easy and improved access to several of them.

1. Use the top row of buttons to get an optimally sized document for working with Photoshop's generative fill. The buttons with ratios (1:1, 4:3, etc.) each make a new document that includes a dimension that is 1024-pixels on one side.

The 1024 button resizes the current image to 1024-pixels on the LONG side. Hold down "CTRL" on Windows or "command" on Mac to resize the current image to 1024-pixels on the SHORT side.

Use the px button to select the Marquee tool and set it to a fixed size of 1024 x 1024 pixels. Hold down "CTRL" on Windows or "command" on Mac when clicking the px button to remove the fixed size on the Marquee tool.



NOTE #1: This step is optional. Generative Fill works with documents of any size but quality is best at sizes around 1024 x 1024 pixels (1 megapixel).

2. Make a selection of the areas to be generatively filled. This might include the entire image or just part of the image. It might also require the selected area to be partially selected instead of 100% selected. The plugin provides several options. It is particularly good at helping to make areas that are partially selected. It does this by displaying a magenta overlay over the selected area that is proportional to the degree of selection.

- a) To generatively fill the entire image at 100% selection, no selection is actually necessary. Just type the prompt in the Prompt field and click Generate. With no active selection and no magenta overlay, the plugin assumes the entire image is meant to be 100% selected for the generative fill process.
- b) The plugin also works fine with regular selections created using a selection tool (Lasso, Marquee, etc), specific selections created by Photoshop (Sky and Subject), or selections loaded from channels saved on the Channels panel. It infills them appropriately based on the prompt.
- c) To create a partial selection of the entire image, click one of the Percentage buttons **when there is no active selection**. This will make a percentage selection across the entire image and display it as a magenta overlay. The percentage on the button determines the color intensity of the

magenta overlay, the degree of selection, and ultimately how strongly generative fill will be revealed in the image. For low-percentage values, much of the original image will still be visible through the overlay and will also be recognizable after the generative fill process is complete. For high-percentage values, much of the original image will be obscured by the magenta overlay and consequently generative fill will replace much of the underlying image with new content. In other words, the percentage value determines how strongly the image is affected by generative fill. The higher the percentage, the more substantially the image might be changed. For a process like turning a photo into a painting, try a percentage from 20% to 50% as the degree of selection, and then enter a prompt like "oil painting" or "watercolor painting" before clicking the Generate button. It's easy to delete the results (there's a button for that) and adjust the selection percentage to fine-tune the results.



d) To create a partial selection of a specific area of the image, first create the appropriate selection using a Photoshop selection tool (e.g. Marquee, Lasso) or one of Photoshop's automatic selections (e.g. Sky, Subject). Selections loaded from layer masks or from alpha channels on the Channels panel can also be used. Then click a Percentage button. The selected area receives a magenta overlay where the color is proportional to the percentage selected. Lower percentage values have a lighter magenta overlay and higher percentages have a more intensely colored magenta overlay. As described above, the percentage determines how strongly the generative fill process affects the images. For good blending when adding new elements to the image, percentages of 40% to 70% can be quite useful.

e) Starting in version 1.2.0, the TK Gen plugin has the option to use a Selection Brush to create a selection. To use it, click the Selection Brush button. This activates the Selection Brush and sets its opacity at 100%. However, it's often useful to paint with a lower opacity, and clicking a Percentage button now changes Brush opacity. To use the Selection Brush to create a selection, just paint on the image in the areas to be selected. Doing so creates a magenta overlay of the painted area. The intensity of the magenta color is proportional to the brush's opacity, chosen with a Percentage button, and this in turn determines the percentage selection of the painted area. When finished painting on the image to create the selected area, click the Selection Brush button again to deactivate it. When using the Selection Brush, it is best to complete the selection painting process in a single brushstroke without lifting the brush. Multiple brush strokes in the

same areas will increase the opacity of the magenta overlay and ultimately the degree to which the area is selected.

*NOTE: If a magenta overlay has been created using the plugin, it will be used to determine what is selected and to what degree for the generative fill processing. If a magenta overlay **and** an active selection are both present, the active selection is ignored and the magenta overlay determines what is selected for generative fill processing.*

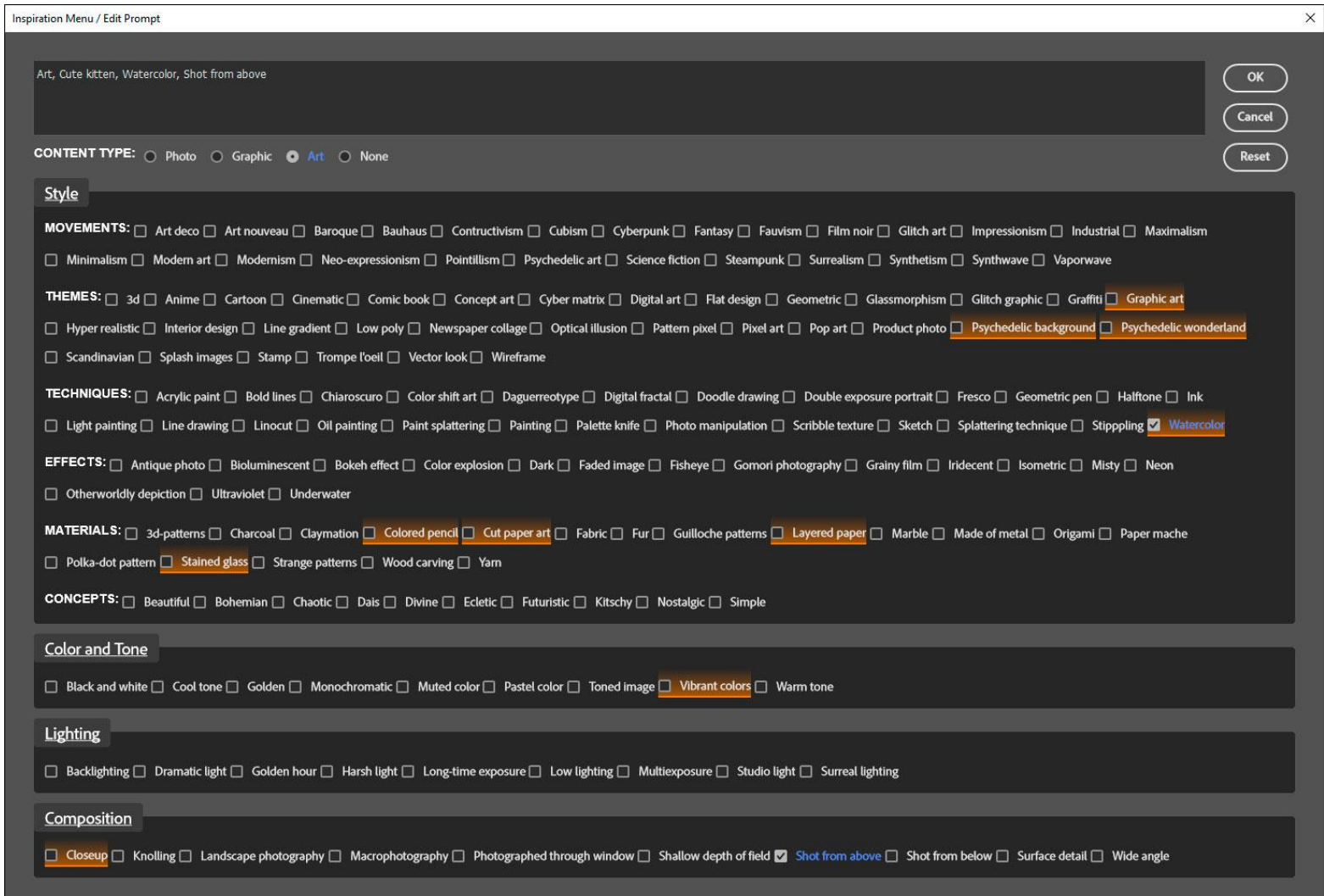
3. Feather the selected area. This is optional, but the Feather button can be used to do this and feathering might improve blending of the new pixels into the original image. If a magenta overlay is present, feathering is accomplished by applying a Gaussian blur to the overlay. If there is no magenta overlay but there is an active selection, then the selection itself can be feathered. The plugin opens the correct Photoshop dialog for both situations.

4. Enter a prompt (or not). To add an element to the image, use the Prompt field to describe what is to be added. Leave the Prompt field blank to allow Photoshop's artificial intelligence to make a best guess as to what to fill the selected area with.

5. Use the INSPIRATION bar to edit the prompt or to add descriptive modifiers. Clicking it opens a new window (image on next page) with additional space to edit the prompt. The new window also provides an extensive list of modifiers for Style, Color and Tone, Lighting, and Composition similar to the options found in [Adobe Firefly](#). Turning these modifiers on (or off) using checkmarks, adds (or removes) them from the prompt. The new window is called the Inspiration Menu and it's a useful way to explore enhancing what's possible with generative fill.

NOTE: Users can designate their favorite modifiers in the Inspiration Menu by right-clicking on them, which creates an orange highlight for that item. To un-favorite a modifier, right-click it again to turn off the orange highlight





6. Click the Generate button. This initiates Photoshop's generative fill process and produces three variations. It is expected that once Adobe implements its "credits" system for generative fill that clicking Generate will utilize one credit.

7. Use the Arrow buttons to cycle through the variations that were generated. The Next button will loop back to the first variation when it reaches the last variation. The Previous button stops at the first variation and does NOT loop to last variation.

8. Use the first four buttons in the bottom row of buttons to manipulate the generative fill smart object.

a) **Rasterize** rasterizes the generative fill smart object using the currently active variation. This requires less disk space when the image is saved



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since the smart object has been eliminated, but it also maintains the current layer structure with the generative fill content on its own layer but.

b) Move can be used when there is a distinct subject in the new generative fill content, like a bird in the sky. Clicking it rasterizes the generative fill smart object using the chosen variation, selects the subject, and then activates the Photoshop move tool in order to move this subject to a new location in the image.

c) Flatten flattens the image using the currently chosen variation. This option leaves only a "Background" layer.

d) Delete deletes the current layer. This is useful when all gen fill variations are not what was expected and won't be useful.

9. Use the Reset button to reset the plugin's generative fill parameters. This is useful when switching to a different image and needing to use a new selection or prompt.



ADDITIONAL FEATURES

1. In addition to including the prompt used, the generative fill smart object layer name includes the percentage selection used for generative fill.
2. Selection indicator. This turns on when there is an active selection even if the selection is too weak (less than 50%) to trigger the appearance of selection edges or the selection edges have been intentionally turned off (hidden).
3. Editable Prompt. This is new in TK Gen Fill starting in v1.2.0. If the variations provided via generative fill do not work, consider editing the Prompt to give the artificial intelligence a better description of the desired outcome. Version 1.3.0 also provides a larger space for editing prompts in the INSPIRATION menu.
4. Don't forget to check out the plugin's fly-out menu for links to additional resources.

I hope the TK Gen Fill plugin is useful to you and that it helps you achieve your artistic goals in Photoshop. Please feel free to [contact me](#) if you have any questions, problems, or suggestions.