

## Automatic Installation

For a hassle-free installation, use the *aescripts + aeplugins manager app*:

<https://aescripts.com/learn/aescripts-aeplugins-manager-app/>

## Manual Installation

### MacOS

- The plugin is a folder `GeometricFilter.plugin` located in `Install/macOS`
- Open a new Finder window and navigate to:  
`/Library/Application Support/Adobe/Common/Plug-ins/7.0/MediaCore/`
- When updating, please remove the previous version `GeomFilter.plugin` to avoid conflict.
- Drag & drop `GeometricFilter.plugin` into this folder, enter your password to confirm writing to a protected folder.
- Restart After Effects and/or Premiere Pro.

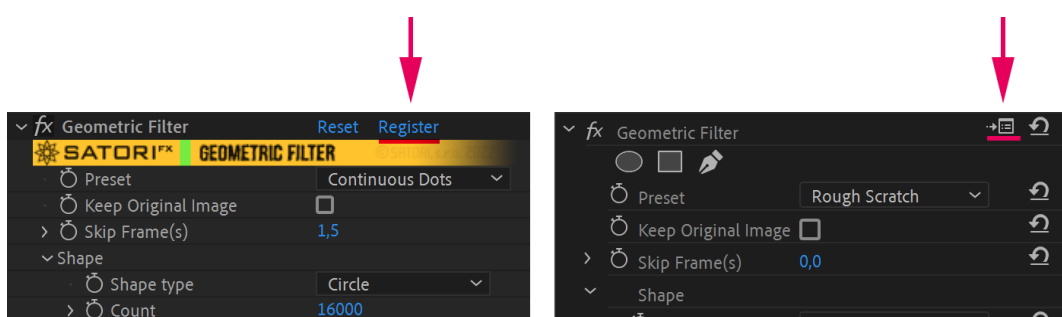
### Windows

- The plugin is located in `Install\Windows\GeometricFilter.aex`
- Open Windows Explorer and navigate to:  
`C:\Program Files\Adobe\Common\Plug-ins\7.0\MediaCore\`
- When updating, please remove the previous version `GeomFilter.aex` to avoid conflict.
- Drag & drop `GeometricFilter.aex` into this folder, confirm you want to make changes.
- Restart After Effects and/or Premiere Pro.

The plugin should be visible in the Effects panel (Visual Effects in Premiere Pro) under the category **Satori** after a successful installation.

## Registration

To remove the watermark, register the plugin using the Register button (After Effects) or the "Setup" icon (Premiere Pro). Enter the code you received when you purchased the plugin on [aescripts.com](https://aescripts.com).



# How it works

The Geometric Filter algorithm works by brute-forcing screen space, finding color-related areas, and filling them with a selected count of shapes.

For each shape drawn, the algorithm picks a random pixel and starts to seek a similar pixel by given parameters. You control this seeking process from the selected start distance up to the maximum distance and starting angle direction up to the arc length chosen.

Seek part finishes when a similar pixel is found in given matching accuracy. If no similar pixel lies in a given area, the drawing part is omitted, and the next random pixel is picked. In the case of a triangle or curve shape, the process continues to find the third point. Two points are enough for the rest of the shape types (line, square, circle, rectangle).

If no recursion is selected, the algorithm draws the shape with the preferred opacity, line width, or fill option. The shape color is identical to the color of the first picked pixel.

With recursion enabled, the seek process continues for a selected number of repeats and then draws the chain of shapes, continuously if possible, for a given shape type.

Additional shading is available according to shape size or recursion step.

The process repeats for a given count of shapes, while not all shapes are necessarily drawn if the seek area doesn't contain matching pixels.

## Parameters guide

- **Preset** - Choose from one of twenty styles presets to get quickly started with a certain expression.
- **Keep Original Image** - Enable filter output over the original image. Handy for covering up unfilled areas.
- **Skip Frame(s)** - Adjust the FPS of the original footage, and allow fewer frames per second for filtering. This suppresses jitter to better simulate the feeling of traditional cel animation.

## Shape parameters

The shape section allows you to tweak what kind of shapes are used for approximating the original image.

The screenshot shows the 'SATORI' Geometric Filter settings panel. It features a dark theme with yellow and green accents. The panel is organized into sections with expandable/collapsible icons. The 'Shape' section is expanded, showing various parameters for shape generation. The 'Image Matching' section is also expanded, showing parameters for how the filter matches the original image. The 'Preset' is set to 'Continuous Dots'. The 'Keep Original Image' checkbox is unchecked. The 'Skip Frame(s)' is set to 1,5. The 'Shape' section includes 'Shape type' (Circle), 'Count' (16000), 'Recursion Steps' (10), 'Size' (3), 'Size Growth' (10), 'Line Width' (1,0), 'Fill' (checked), 'Opacity' (50 %), 'Starting Angle' (25,0), 'Angle Randomization' (20,0), and 'Angle Range' (340,0). The 'Image Matching' section includes 'Matching Accuracy' (99 %), 'Fade Type' (Fade out by recursion), 'Fade Level' (40 %), 'Minimum Luminosity' (0), 'Maximum Luminosity' (255), 'Starting Pos. Strategy' (Grid), 'Grid Randomization' (100 %), and 'Random Seed (Evolution)' (777). Buttons for 'Reset' and 'Register' are visible at the top right.

fx Geometric Filter	Reset	Register
SATORI <sup>FX</sup> GEOMETRIC FILTER		
Preset	Continuous Dots	
Keep Original Image	<input type="checkbox"/>	
Skip Frame(s)	1,5	
Shape		
Shape type	Circle	
Count	16000	
Recursion Steps	10	
Size	3	
Size Growth	10	
Line Width	1,0	
Fill	<input checked="" type="checkbox"/>	
Opacity	50 %	
Starting Angle	25,0	
Angle Randomization	20,0	
Angle Range	340,0	
Image Matching		
Matching Accuracy	99 %	
Fade Type	Fade out by recursion	
Fade Level	40 %	
Minimum Luminosity	0	
Maximum Luminosity	255	
Starting Pos. Strategy	Grid	
Grid Randomization	100 %	
Random Seed (Evolution)	777	

- **Shape type** - there are 6 geometric primitives available:  
Line, Curve, Triangle, Square, Circle and Rectangle.
- **Count** - is the number of shapes used for drawing the image.
- **Recursion Steps** - allows the filter to search for continuous stretches of similar color in the same direction, which results in even more traced outlines.
- **Size** - is the starting size of a shape (or the length of a line).
- **Size Growth** - indicates how much the shape can grow in size when searching for similar colors. Effectively setting the size randomness.
- **Line Width** - Line width affects shape thickness when fill is not selected.
- **Fill** - toggles whether the shapes are filled or just their outlines are kept.
- **Opacity** - sets the alpha of the shapes and gives the image a blurry quality.
- **Starting Angle/Angle Randomization** - define initial angle of the shapes. Use randomization for angle deviation for each particular shape when the result is too uniform.
- **Angle Range** - specifies how far from the chosen angle the algorithm searches for a color match.

## Image Matching parameters

Parameters in this section control the strategy of placing the shapes and color matching sensitivity.

- **Matching Accuracy** - describes how precise the filter should be in matching the original image's colors. Decreasing it gives the output a more chaotic look and faster image processing.
- **Fade Type** - decreases (or increases) the opacity of a shape with its size or its recursion step.
- **Fade Level** - controls how much opacity shade is applied.
- **Minimum/Maximum Luminosity** - limit what range of brightness from the image you wish to use. Useful for skipping too dark or too bright areas.
- **Starting Position Strategy** - determines where the shapes are placed, which is especially important when animating. It gives the result a more stable or wiggly look. The options are: Random, Stable Random, or Grid.
- **Grid Randomization** - randomly moves locations on the grid when using it as a starting position strategy.
- **Random Seed (Evolution)** - the source of randomness for placing geometric shapes. Always produces repeatable results. Can be used for animating image randomness or finding the right seed for your composition.



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