

SPECIAL THANKS!

Thanks for downloading "AE Shapes Blender" script. I hope you will find it really useful and fun to use in your projects.

Feel free to contact in case of any queries, suggestions or issues.



"AE Shapes Blender" allows you create beautiful path blendings using multiple shape paths. You can create beautiful looping backgrounds very easily using this script and will find it really helpful, easy to use and fun.

INSTALLATION:

Download and unzip the script.
Copy.jsxbin file to:

WINDOWS:

C:\Program Files\Adobe\Adobe After Effects <version>\Support Files\Scripts\
ScriptUI Panels

MAC:

/Applications/Adobe After Effects <version>/Scripts/ScriptUI Panels

HOW IT WORKS?

The process to create a blend is very easy. All you need to create are selected path properties (You can search "path" in search panel and it will reveal path properties that you can select easily.)

The keyframes of the paths will get picked automatically.

The performance of the blend really depends on the number of shapes and the complexity of the paths.

It is recommended to start and set up with less shapes and increase/decrease the shapes in steps.

When you create a blend, it creates some layers and provides controls to animate its properties.

The things you need to know about blend layers:

Master Paths - The paths which are selected while creating the blend will be collected to this layer and will control the whole blend.

You can edit and animate these paths to affect the blend.

There will be also controls added to this layer to control the properties for the blend from "Effects Controls" panel.

Blend Paths - The paths that are generated between master paths to create the blend.

You cannot edit these paths directly as these are rendered with expressions.

If you still want to edit the paths then use "Freeze Blend" command in script to make the whole blend static and then edit the path easily.

(Don't forget to remove it's expression completely if you want to keep this shape even after "Unfreezing Blend".)

Additional properties of paths, e.g. , Trim Paths, Round Corners, Wiggle Paths, Zig Zag etc can be added after "Group-Blend" group in blend layer contents.

Spine Path - The path that controls the distribution and orientation of blended paths. You can decide to enable "Use Spine" or "Rotate Along Spine" in master controls.

If this is enabled in the master controls then you cannot move master shapes individually and need to adjust their position using the spine path.

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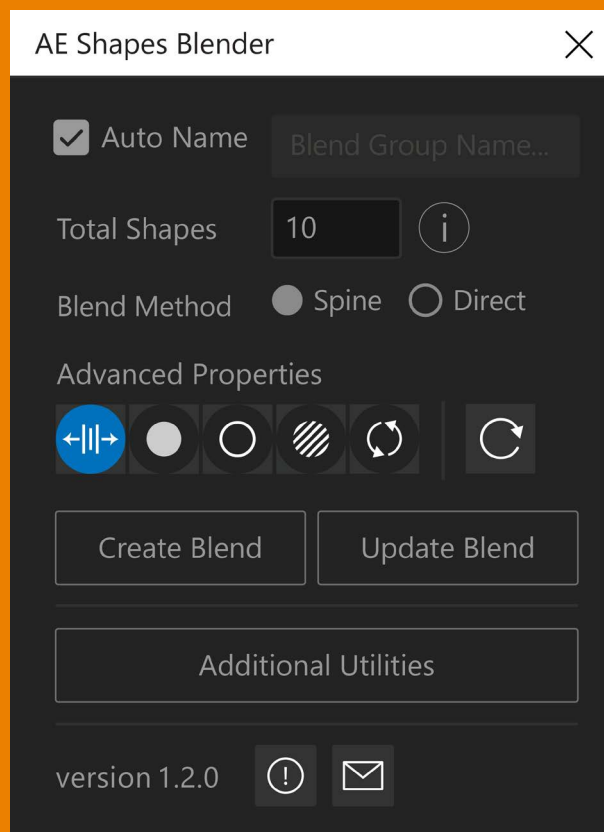
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Blend Options

Use Default Name

This option lets you decide if you want to generate a unique name or want to give custom name to the blend group.

Total Shapes

Number of shapes to create in the blend.

It is recommended to start with less shapes and increase in steps and according to your machine capabilities.

Blend Method

Direct: It will create blending paths in between the selected paths directly.

Spine: The paths will be set on a spine and can rotate and distribute accordingly. You can also enable "Rotate Along Spine" to rotate paths along with it.

Advanced Properties

Advanced properties allows you to have more controls over blended paths. If you don't enable this then only simple controls will be added.

You can easily change the properties for each control in the "Effects Controls" panel of master paths layer.

The simple controls will have few properties and all of those are explained below in Advanced Properties instead of explaining them separately.
Also simple controls will render faster as these have simple expressions.

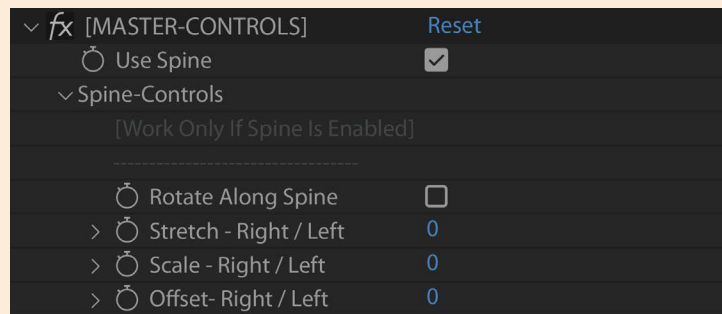
1. Offset

To offset, scale, stretch and loop the blended paths.

It will add two controls for master and blend paths. ([MASTER-CONTROLS] and [OFFSET & LOOP CONTROLS])

For an even distribution of paths in more than 2 shapes blend, you need to scale them evenly in concentric shapes blend or space them evenly in distanced shapes blend.

[MASTER-CONTROLS]



- **Use Spine** - To enable or disable use of spine.
- **Spine-Controls** - To control the master path's offset properties along spine.

Spine Controls will only work if "Use Spine" is enabled.

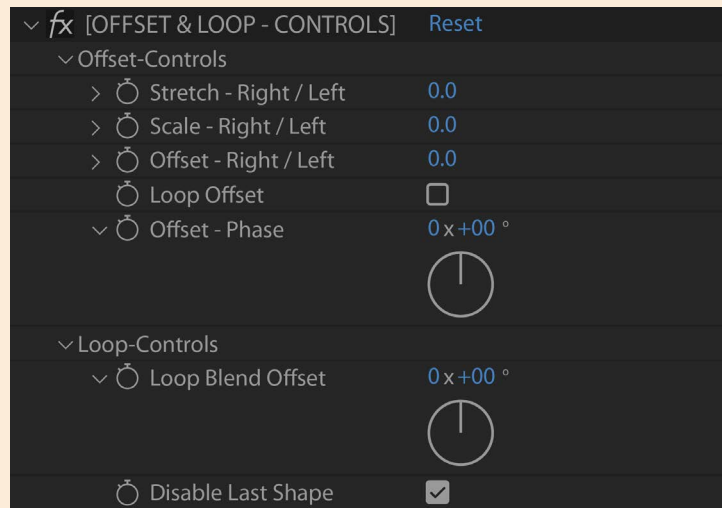
- ◇ **Rotate Along Spine** - If enabled then the paths will rotate according to the tangents on the spine path.

You may notice some weird shifting in some shape's angles if there will be any sharp corner on the spine below that path. You can make that smooth using bezier handle to fix this issue.

- ◇ **Stretch - Right / Left** - To stretch the master paths to the right or left. The blend paths will remain on place but will change their shape based on the closest master path.
- ◇ **Scale - Right / Left** - To scale in between paths to the right or left. Blended paths will get shape of nearest master path.
- ◇ **Offset - Right / Left** - To offset the in between paths to the right or left and clamp them at the end. The blend shapes will get shapes of the nearest path and without changing their position.

Above controls will not affect first and last shapes as those are required for the blend to work. Although this will not be the case with blend group's "Offset & Loop Controls".

[OFFSET & LOOP - CONTROLS]



You can offset, stretch, scale and loop blend paths here. And these will change their shapes according to the closest master path.

(These controls won't be available in simple controls.)

• **Offset Controls**

These controls will affect the whole blend group and will move/offset blend shapes along or without the spine.

- ◇ **Stretch - Right / Left** - To stretch the blend shapes to the right or left.
- ◇ **Scale - Right / Left** - To scale the blend paths to the right or left. Scaling will maintain the form of stretched shapes but will scale them according to the scaling factor.
- ◇ **Offset - Right / Left** - To offset the whole group of paths to the right or left. The shapes will get clamped at the edges unless "Loop Offset" checkbox is enabled and the value of 100 will complete the loop while moving all paths to their original location.
- ◇ **Loop Offset** - To enable or disable the shapes appearing again from the other end. Otherwise it will clamp to one end and will not appear on the other side.

The difference between offset and loop is that offset will loop the whole blend along the spine and loop controller will only loop between each shape.

- ◇ **Offset - Phase** - Will work only if "Loop Offset" is enabled and will let you animate the cycles as many times as you want. The complete cycle will be at 360° . On the other hand "Offset - Right / Left" will only allow to offset once.

• **Loop Controls**

These controls will loop between each shape and will retain its modified offset amounts between each shape if modified in offset group.

- ◇ **Loop Blend Offset** - It will create a loop including all shapes until they reach to their original positions. The value of 360° is a complete loop.

If you want to have more control over loop or want to loop between a single path rather than the whole blend, then divide the number of shapes (subtract 1 from total shapes to compensate the position for the paths on the edges as they will overlap and appear on same location when looped.)

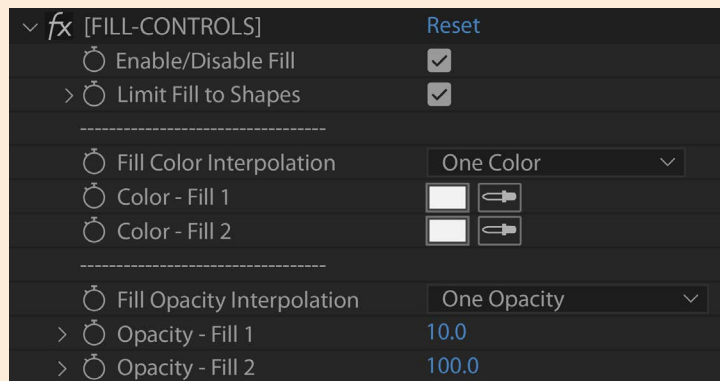
- ◇ **Disable Last Shape** – It will make the last shape disappear as the paths on the edges will overlap if they are looped.
(You can disable this option if you don't want to loop or offset the paths.)

2. Fill

To set the two different fills and fill opacities to the blend.

For your convenience these properties are set to single interpolation by default. But you can set to two if you want to make transition between two.

[FILL - CONTROLS]



- **Enable/Disable Fill** – To enable or disable the fill completely.
- **Limit Fill To Shapes** – If enabled then the fill will start at first shape and will end at the last shape.
If disabled then the fill will work along spine. The first point will have fill 1 and second will have fill 2. The blend paths will get the fill based on their location on the spine.

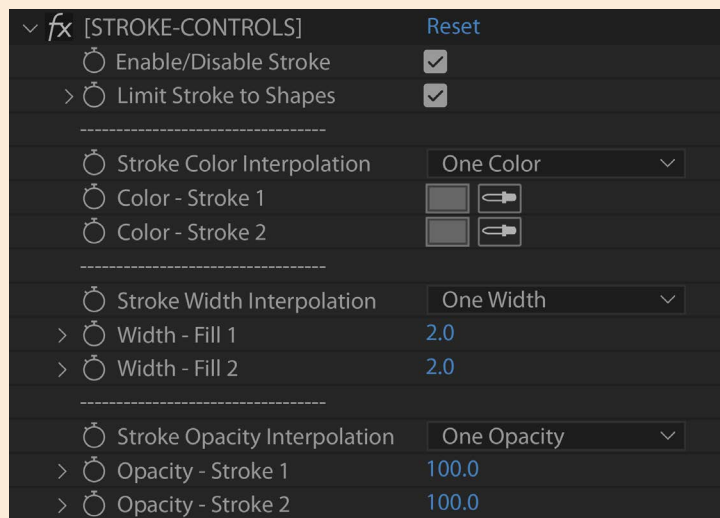
Limit properties can be found in some of the controls. And they all behave the similar way. If enabled then the effect will be limited only to shapes, even with distribution of paths using offset controls the effect will stick to its shapes. If disabled then the effect will be calculated along the spine and will affect the shapes differently as they move through the spine.

- **Fill Color Interpolation** – By default is set to “One Color” for your convenience. You need to select “Two Colors” to create color transition with both colors.
- **Fill Opacity Interpolation** – To apply two different opacities on blend. Select one or two opacities upon your choice.

3. Stroke

To apply stroke to the blend. You can set stroke colors, widths and opacities here.

[STROKE - CONTROLS]

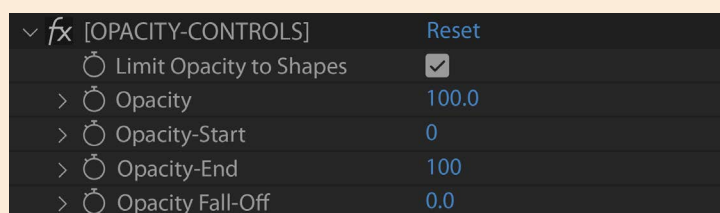


- **Enable/Disable Stroke** – To enable/disable the stroke completely.
- **Limit Stroke to Shapes** – If enable then the stroke will start at first shape and will end at the last shape.
If disabled then the stroke will be calculated along spine. The blend paths will get the stroke based on their location on the spine.
(The other controls e.g., Stroke Color, Width and Opacity Interpolations work the same way as mentioned in “Fill Controls” above.)

4. Opacity

The main opacity for all blend paths.

[OPACITY - CONTROLS]



- **Limit Opacity to Shapes** – If enable then the opacity will start at first shape and will end at the last shape.
If disabled then the opacity will work along the spine.
- **Opacity-Start** – To disappear a number of shapes from start based on this percentage.
- **Opacity-End** – To disappear a number of shapes at the end based on this percentage.
- **Opacity Fall-Off** – This option will feather out the start and end of the opacities to create smooth transition.

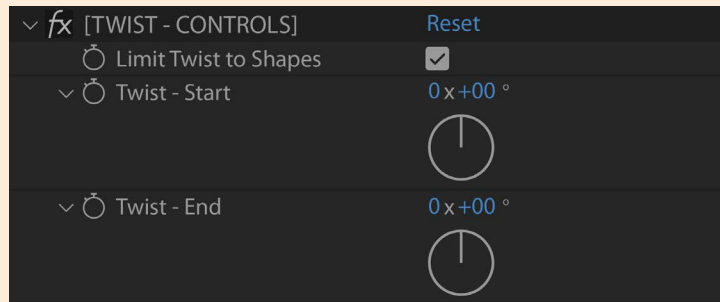
It is also useful with loops as you will notice when paths jump from one end to the other end of blend while looping, it can help you make that smooth. (Make sure “Limit Opacity To Shapes” is disabled.)

You can also use this to make paths disappear from any side of the blend for animation or other purpose.

5. Twist

It will rotate the paths from either side of the blend and can be controlled from both sides separately. The in between rotations are result of transition happening from one end to the other.

[TWIST - CONTROLS]



- **Limit Twist to Shapes** - If enabled then each path will have its fixed calculated rotation value and no matter if you offset the paths the calculated value will stick to its shape.
If disabled then the twisting will be calculated along the spine and paths will get the rotation value according to their current position on the spine.

Get Blend Properties

To get and update the script UI properties according to the applied blend properties. It will detect all properties of the blend and will set them in the script UI fields, which you can easily change and update.
You can also click with "Alt/Opt" key to reset UI properties to their defaults and then apply these to the new blend or update existing one to reset their properties as well.

Create Blend

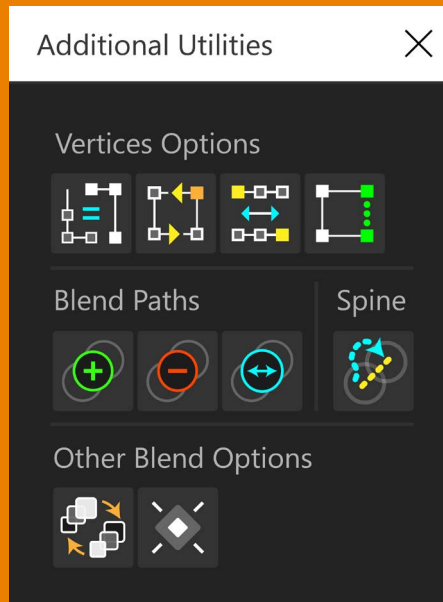
To create a new blend based on the options you have selected.

Requirements For Blend Creation:

- Make sure minimum of 2 paths are selected.
- Each path has at least 2 vertices.
- Select Path properties for the paths.
- Number of vertices are equal. (The script will also ask and will match if needed.)
- All have same close statuses. (Script will ask and open all paths by default if they don't have same close statuses. You can also close or open by "Open & Close Paths" button in the script.)

Update Blend

To update the blend based on the selected properties.
(Make sure you press refresh button first if you select a different blend. Otherwise, all selected properties will be applied to the active blend.)



Vertices Options

To modify the vertices of the selected paths inside or outside the blend. In case your shapes aren't blended correctly, then most probably it is because they have different path directions or their first vertex are not at the same locations, which you can fix using these options by selecting any of the blend paths. (These will work with keyframed paths as well.)

Match Vertices

To match the number of vertices of any selected paths (Incremental or Decremental).

It will calculate the distance between each vertex/point and will start from the longest one then process will continue the same way until they all have same points.

Click - Match all selected paths incrementally.

Alt+Click - Match all selected paths in decremental way.

Shift Vertex

To shift the vertex forward or backward of any selected paths.

It will shift vertex for closed paths one step forward or backward. But for open paths it is not possible to shift vertex as their shape can only have vertex on either side of the path. So, for open paths it will shift vertex to either end of the path.

Click - Shift the vertex forward for all selected paths.

Alt+Click - Shift the vertex backward for all selected paths.

Reverse Paths

To reverse the directions of the paths while maintaining their form in the blend or of any selected paths.

The direction of paths also affects the blend. If you don't get the desired results then try reversing any of the blend's paths.

Open/Close Paths

To open or close all the blend paths or selected paths.

Click - Open paths for all selected paths.

Alt+Click - Close paths for all selected paths.

Ctrl+Click - Open all paths of active blend.

Ctrl+Alt+Click - Close all paths of active blend.

Blend Paths

Add Paths

To add any additional paths to the blend.

Select the path property for one or more paths, select any blend layer and it will add selected paths to this blend.

It will consider first blend group as active if more than one blend group's layers are selected.

Remove Paths

To remove any selected paths from the blend.

It requires the path property selected to remove. You can activate path edit mode by double clicking on path or using pen tool.

You can also do it manually and delete any shape group directly from the blend group inside the layer's contents.

Replace Paths

To replace any selected blend paths with any other paths.

Can select multiple paths. For the un-equal selection it will replace first matched pairs. Make sure path properties are selected from and outside the blend to replace.

Spine Options

Replace Spine

To replace the spine with any other shape path. Need to select any blend layer and it will automatically detects its spine and the other path property outside of the blend will be considered its replacement.

Other Blend Options

Reverse Order

To reverse the order of the blended paths. It will be more noticeable with filled shapes.

Freeze Blend

To freeze or unfreeze the blend group. It will remove all the expressions from the group and will bake their values.

You can freeze the blend if you want to have static blend design for faster execution. Or you can freeze it temporarily and unfreeze before rendering.

Click - To freeze the blend.

Alt+Click - To unfreeze the blend.

Check out the overview tutorial here:

<https://youtu.be/hOR9-Q2cllQ>

CONTACT

Feel free to contact me for any queries, bug report, feature request or suggestions.

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<https://aescrpts.com/ae-shapes-blender/>

Thanks & Regards,
Have fun!

