This document will explain how to use ShapeLayerToolbar.
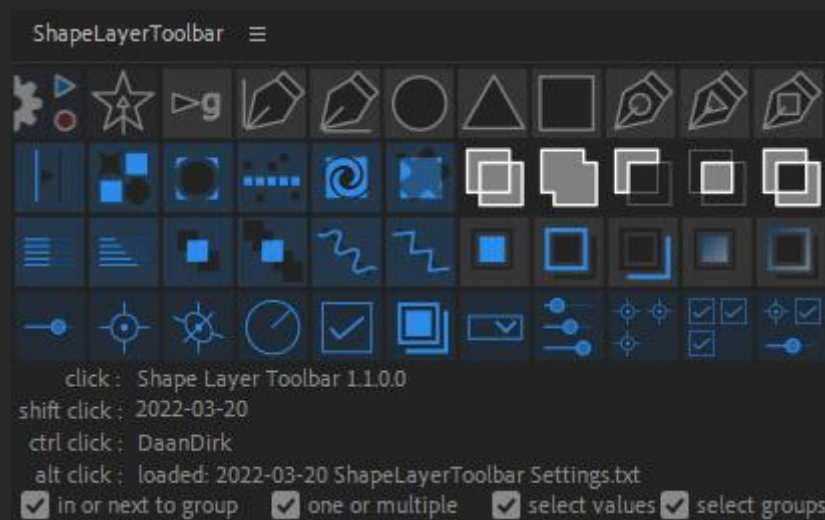
Contents:

Shape Layers in After Effects

If you are not familiar with Shape Layers or would like to know all, then take a look at the section at the bottom of this document about native ways to add to shape layers in After Effects.

ShapeLayerToolbar

ShapeLayerToolbar features:
- ★ Your personal shape layer element settings
- ★ Easily save and set shape layer elements, including:
  - ○ every value, including keyframes
  - ○ expressions and the values hidden by active expressions
  - ○ gradients (through an animation preset)
- ★ Add expression controls with a button
- ★ Save and load all settings
- ★ Easily select all elements of one type

Installation

From CC2019 onward you can install from the menu: File > Script > Install ScriptUI Panel
Add both ShapeLayerToolbar.jsx and The ShapeLayerToolbar folder to the ScriptUI Panel folder.
Restart After Effects and load ShapeLayerToolbar.jsx from the window menu.

Or do a manual install:
1. Place the extracted contents of ShapeLayerToolbar.zip into your After Effects ScriptUI folder.
   Example paths:
   Mac: ~/Applications/Adobe After Effects Cc 2018/Scripts/ScriptUI Panels/
   Windows: C:\Program Files\Adobe\Adobe After Effects Cc 2018\Support Files\Scripts\ScriptUI Panels\
2. Relaunch Adobe After Effects if currently open.
3. Launch the script from the Window menu by selecting ShapeLayerToolbar.
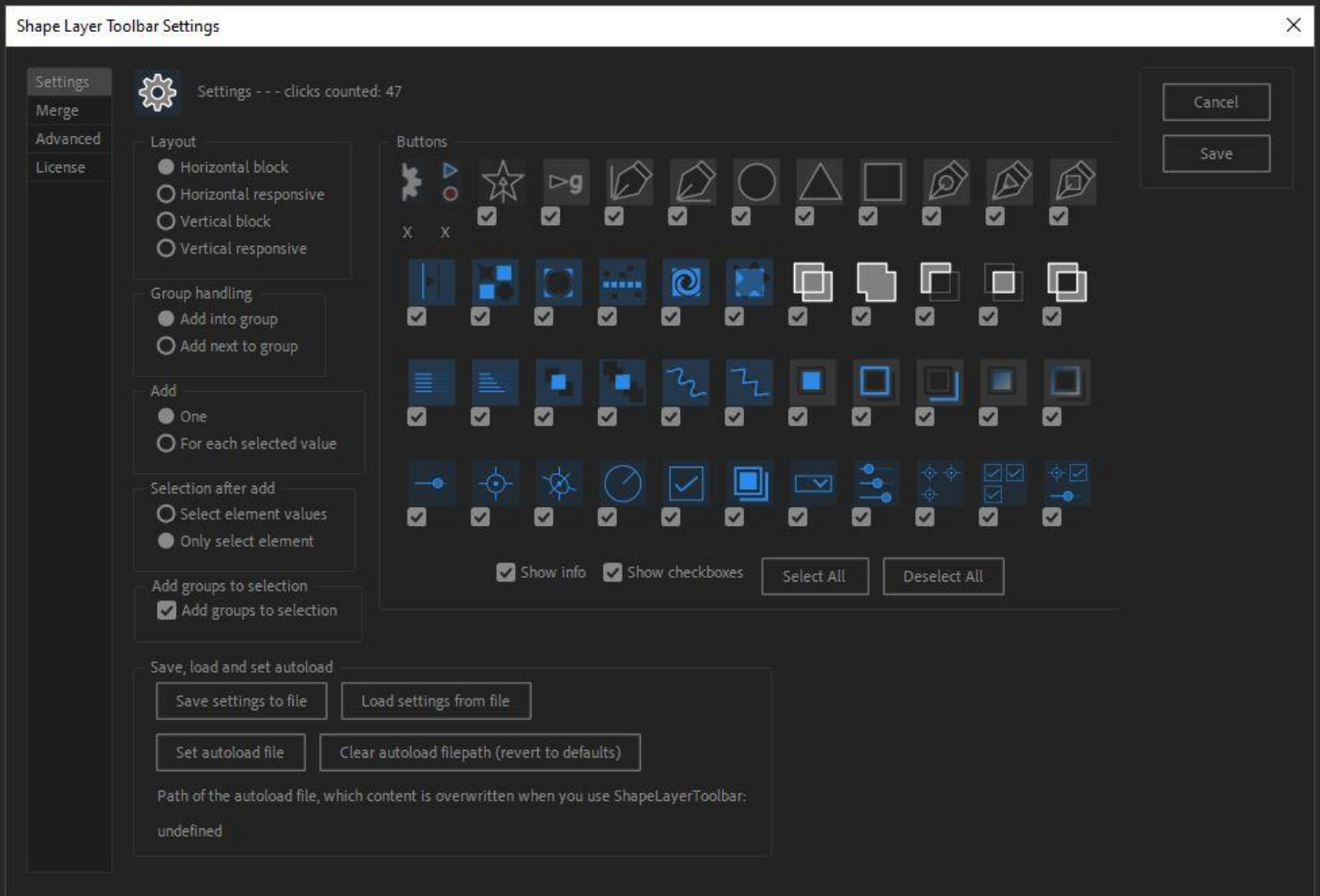
ShapeLayerToolbar.zip contents:
      ShapeLayerToolbar.pdf
      ShapeLayerToolbar.jsx
      Panel-Settings.txt
      folder: ShapeLayerToolbar
              fill black soft edge CS6.ffx
              fill black white black CS6.ffx
              fill rainbow CS6.ffx
              fill zebra CS6.ffx
              ShapeLayerToolbar-Default-Settings.txt
              stroke default CS6.ffx
              stroke red glow CS6.ffx
              stroke shadow-ish CS6.ffx
              stroke zebra CS6.ffx

Settings

This button will bring up the settings menu, where you can choose how the toolbar behaves, save and load your settings and a few settings regarding the adding of shape layer elements.

The general settings, including:

Layout_____	Horizontal block	Buttons_____	Toggle for each button
	Horizontal responsive		Toggle for info
	Vertical block		Toggle for checkboxes
	Vertical responsive		
Groups handling_____	Add into group		
	Add next to group		
Add_____	One	Adds one at the first selected property.	
	For each selected value	Adds one for each selected property.	
Selection after add_____	Select all element values after adding element		
	Select only the element after adding element		
Add groups to selection_____	Toggle to add groups to your selection.		
	This helps you find your way in complicated shape layers.		
Save Load and set autoload_	Save settings to file		
	Load settings from file		
	Set autoload file path		
	Clear autoload file path and revert to defaults		

Shape Layer Toolbar Settings

Settings
Merge
Advanced
License

Merge

click modifier   none   shift   ctrl   alt

| name/tip | Merge | | | |
| type | Merge ∨ | Merge ∨ | Merge ∨ | Merge ∨ |

| name/tip | Add | | | |
| type | Add ∨ | Add ∨ | Add ∨ | Add ∨ |

| name/tip | Subtract | | | |
| type | Subtract ∨ | Subtract ∨ | Subtract ∨ | Subtract ∨ |

| name/tip | Intersect | | | |
| type | Intersect ∨ | Intersect ∨ | Intersect ∨ | Intersect ∨ |

| name/tip | Exclude Inters | | | |
| type | Exclude I... ∨ | Exclude I... ∨ | Exclude I... ∨ | Exclude I... ∨ |

Cancel

Save

The merge menu lets you set the merge buttons, including shift, ctrl and alt settings for each button.

Shape Layer Toolbar Settings

Settings
Merge
Advanced
License

Advanced

Display Scaling   125

Display scaling helps to properly scale the icons when windows Display Scaling setting are not set to 100%

This setting will scale the icons to the desired size. Minimum value is 50%.

Sizes at 100%:   125%:   and 150%:

To save gradients in another language change this to the command name in your local language: Save Animation Preset...

In English this is: Save Animation Preset...

☑ Change active tooltype to Pentool after adding an empty path.

Setting to pentool is supported from After Effects CC 2017 or version number 14.0.

Currently running After Effects version: 16.1.2x55

Changing to pentool works in this version of After Effects.

Cancel

Save

The Advanced menu shows settings for display scaling to set the icon scale, for using gradients when using a different menu language and allows you to turn off setting the tooltype to pen after adding an empty path.

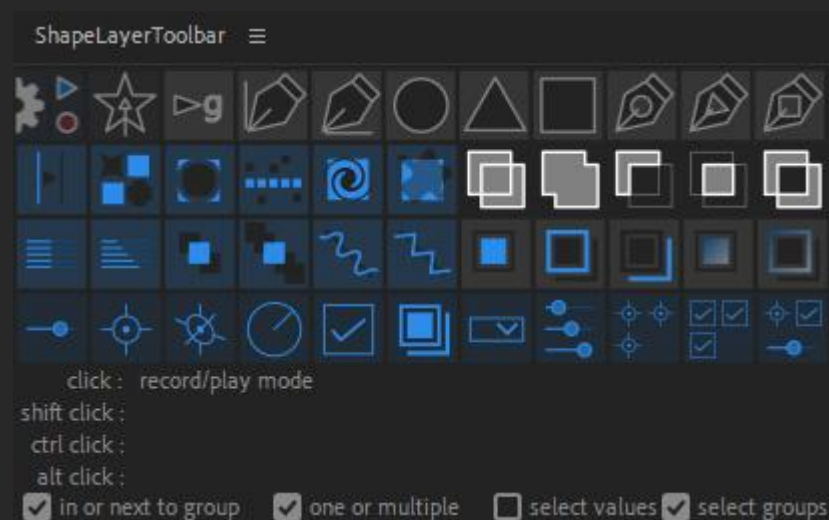The License menu shows register info and the License Help button leads to the "Deactivate License"-button if needed.

Panel Settings from file (for CS6)

If you want to use ShapeLayerToolbar with CS6, you might not be able to save the panel settings. In that case you can put the "Panel-Settings.txt" file in the ShapeLayerToolbar folder and the settings in this file will then overwrite the settings saved in the AE preferences file.

The Panel-Settings.txt contain for example this:

```
[
["displayOption","5"],["seeButtons",
"[1,2,true,true,false,true,true,true,true,true,true,true,true,true,true,true,true,true,true,true,true,true,true,tru
e,true,true,true,true,true,true,true,true,true,true,true,true,true,true,true,true,true,true,false]"],["putInGroup
","false"],["selectChildren","true"],["pasteOnce","true"],["displayInfo","true"],["displayCheckboxes","false"],[win
Scale,1]
]
```

|		
displayOption:	"1"/"4"/"5"/"6"	1:Horizontal block,
		4:Horizontal responsive,
		5:Vertical block,
		6:Vertical responsive
seeButtons:	true/false	Gives you the possibility to turn the buttons on or off.
	"[1,2,true,...	The first two buttons cannot be turned off.
putInGroup:	"true"/"false"	Sets the checkbox for group handling to into group or next to group
selectChildren:	"true"/"false"	Select all element values after adding elements or only the element.
pasteOnce:	"true"/"false"	Add one for each selected property or add one.
displayInfo:	"true"/"false"	Show info below the buttons
displayCheckboxes:	"true"/"false"	Show checkboxes below the buttons
winScale	1	Adjust the button size to make the icons scale, 1 = 100%, 1.25 = 125%

Record & Play

This button lets you switch between Record and Play mode.

In play mode buttons are blue.
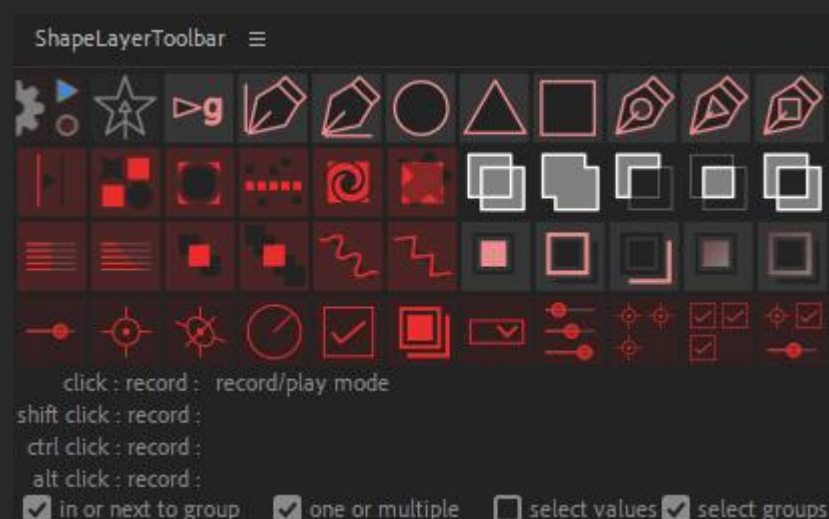
In record mode buttons are red.

In record mode you can save four settings per button of that element type, for example for square: a small square, a big square, a circle from a square and a square taking comp dimensions with expressions.
The script allows you to name your settings. Cancelling this will stop the script from saving the settings.

Creating Shape Layer Elements with ShapeLayerToolbar

This is the part doing
All these buttons have to do with shape layers.

Click: add a new shape layer to comp.
Shift click: select children of the current selection. One level down. Type: SS to show in the timeline.
Ctrl click: open/close your selected paths.
Alt click: get the createPath formula of a path as its expression.

Add: ▷g   Save: ▷g
Add and save one of four predefined groups.

Add and save one of four x5 predefined shape paths.
An empty shape path will autoset your tooltype to the pen tool, so you can start drawing straight away.

Add and save one of four predefined circles, ngons or rectangles.

Add and save one of four or eight predefined filter settings.

For the merge filter, a button for each setting. Settings of the buttons can be changed in the menu.
ShapeLayerToolbar will place a new merge path below the other filters and above existing stroke and fill.
Unlike adding a merge path with the dropdown, which will place it at the bottom of the selected level and add
the settings of the fill and stroke according to the After Effects toolbar.

Add a fill, stroke, gradient fill or gradient stroke.
Gradients are saved as animation presets for which you will be prompted a location to save and open.
The gradients which come with ShapeLayerToolbar are backwards compatible from CC 2014 or version 13.0.

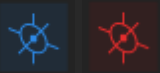## Creating Expression Controls with ShapeLayerToolbar

Save and Add any of the predefined settings of the expression control effects to your layer.
Including any combination of expression controls.
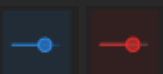
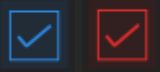Add and save an expression control slider.

Add and save an expression control point.

Add and save an expression control 3d point.

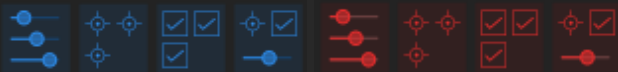Add and save an expression control angle.

Add and save an expression control checkbox.

Add and save an expression control color.

Add and save an expression control layer selector or a dropdown menu control.

Add and save multiple expression controls.

Note that you can actually add any number or kind of expression controls to any of these buttons.

Saving Expressions

Expressions that are turned off when saved to the toolbar, will be turned on when that element is added. ShapeLayerToolbar does not remember whether an expression is on or off.

Selecting Elements

To select all shape layer and expression control elements of one kind: shift + ctrl + click a button

Checkboxes

These checkboxes influence what happens when you add an element to a shape layer.

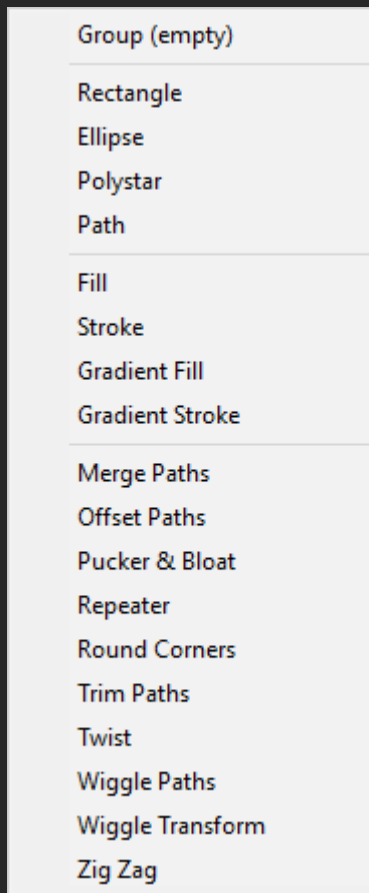|	
'in or next to group'	This allows you to add elements into a selected group or at the same level as the group.
'one or multiple'	This allows you to add one element or one element for each selection.
'values or element'	This allows you to have all values selected after adding an element or only have the element name selected. Pressing s 2 times ("ss") will open the selection in the timeline.
'select groups'	This will add all groups to a selection when pressing a button with ctrl+shift.

What ShapeLayerToolbar doesn't do

ShapeLayerToolbar doesn't save:
- no blending options
- no material options
- no visibility settings of elements
- not more than one shape layer element setting at a time
- gradients work from CC2014 or version 13.0 onward

Add to Shape Layers - Native

Creating Shape Layer Elements - Native After Effects

Group (empty)
Rectangle
Ellipse
Polystar
Path
Fill
Stroke
Gradient Fill
Gradient Stroke
Merge Paths
Offset Paths
Pucker & Bloat
Repeater
Round Corners
Trim Paths
Twist
Wiggle Paths
Wiggle Transform
Zig Zag

You probably know this dropdown very well.
It is accessed from the toolbar and at the top of each shape layer.

You need to click this tiny round button to open it: Add: ●

The dropdown menu contains four types:
- ➔ **Group**
  - ● sets coordinates system

- ➔ **Shapes**
  - ● sets parametric shapes and bezier paths

- ➔ **Graphic elements**
  - ● gives fills and strokes to shapes

- ➔ **Filters**
  - ● changes the attributes of the above

When you add these elements with the dropdown they will appear:
- new shapes and groups below existing shapes and groups
- filters below existing filters
- graphic elements at the bottom

When you add an element it will be selected. And after adding a group, the subsequent elements will be added into that group.

Adding a merge path with the dropdown, will place it at the bottom of the selected level and add the settings of the fill and stroke according to the After Effects toolbar.

Groups can be nested, making shape layers act as a "precomp in a layer" with its own parenting structure.
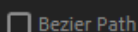
## Creating Shape Layer Elements in the Composition Viewer
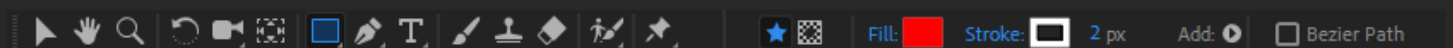
Another way of adding shapes is with the native After Effects toolbar tools.

Here you can select parametric shapes or a path with the pen tool.

By selecting the Bezier path checkbox at the end of this toolbar or by pressing alt while drawing a parametric shape it will instantly become path. While!! doing this you can press the spacebar to position the shape.
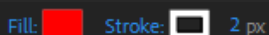
Drawing with these tools will automatically create a group in your shape layer with a fill and stroke as set in the toolbar.

▪ ☐	Rectangle Tool	Q
☐	Rounded Rectangle Tool	Q
⬭	Ellipse Tool	Q
⬡	Polygon Tool	Q
☆	Star Tool	Q

By pressing Q you can select one of the parametric shapes.

▪ ✒	Pen Tool	G
✚✒	Add Vertex Tool	
✒	Delete Vertex Tool	
⌐	Convert Vertex Tool	
✦	Mask Feather Tool	G

By pressing G you can toggle between the pen tool and the mask feather tool.
The mask feather tool won't interact with your shapes or do anything if you haven't already got a mask on your selected layer.

★ ▨

This selector will decide whether you draw shape layer shapes or mask paths.

Keyboard Shortcuts

Some basic shortcuts
These shortcuts come in handy when you are using shape layers:

ss	show selected, after you have added a new element
u	open keyframes
uu	open altered values, if altered from
e	open effects / expression controls
ctlr + '	toggle expansion of effects properties
ee	show expressions
/	switch focus between composition and timeline

Shape layer shortcuts
|	
g	sets tool to pen tool and cycles trough them
v	sets tool to pointer
ctrl + g	group your selected elements
ctrl + shift+ g	UNgroup your selected elements
ctrl + d	duplicate selected
ctrl + alt+ home	set anchor point to the middle of the layer
ctrl + home	center selected layer

Other Shape Layer Knowledge

Gradient Fill or gradient Stroke Compviewer Interface

Set the start and end point of your gradient with this line.

Set the highlight with this circle. This position will translate into % and angle.
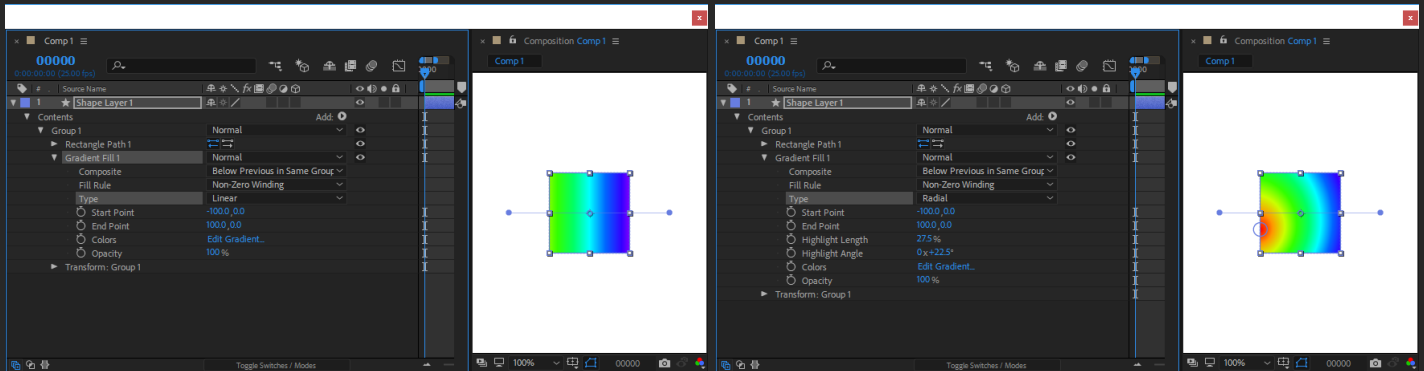
Linear and radial gradient UI.

To get the gradient fill UI or the gradient stoke UI in the compViewer you need:
- A gradient fill or stroke
- A group the gradient is in
- Some shape at the same level as the gradient
- The pointer tool

Set Bezier Handle Size

You can set the size of Bezier handles and vertices in the preferences:
Win: Edit > Preferences > General
Mac: After Effects > Preferences > General

Shape Layer Brain Freeze, when AE doesn't respond

When you add too many filters AE can freeze up.
This can occur when you accidentally duplicate wiggle paths.
This filter will break up your paths and shapes to consist of more subdivision. If you have the filter twice it will try to subdivide those subdivisions again.
Breaking up one path segment into 100 path segments and each of those again into 100 etc can add up.
Depending on how long ago your last save was, it is often faster to restart AE when this happens. Sometimes you get the chance to turn off the filter when AE temporarily unfreezes before preparing the next frame.

Merge paths, what's going on?

When you are using more than one "Merge Paths" filter at the same time, it helps to group the different parts you are merging. Sometimes you need to explicitly add the implicit "Merge Path" set to Merge or Add.
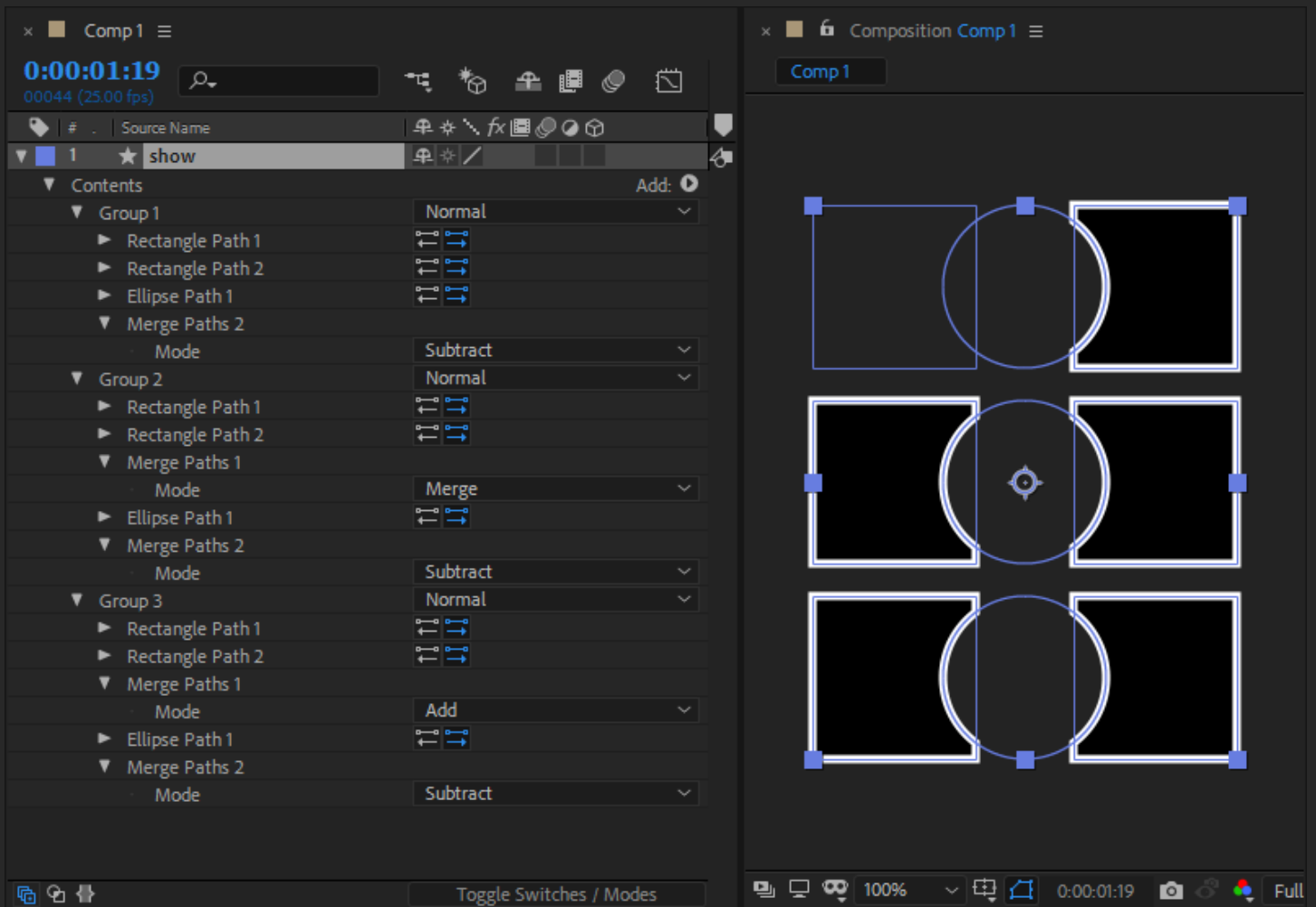
For example: when you want to subtract one circle from two squares,
you need to add the implicit "Merge Paths" set to Merge or Add.
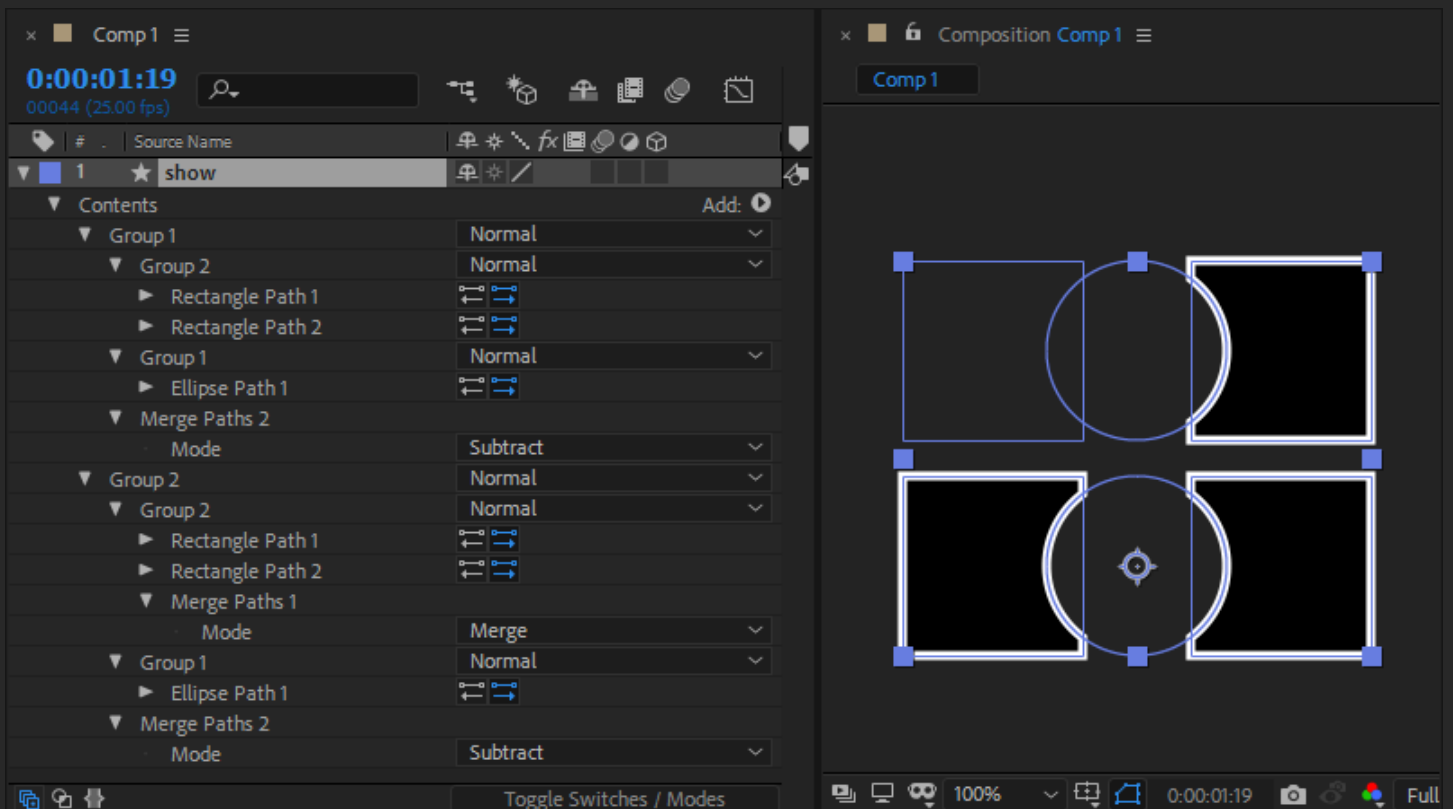
Grouping can add some clarity, but you still need to add the implicit Merge Paths.

Colofon

About me

Hey, I'm Daan Dirk, the creator of ShapeLayerToolbar.

More about me on:
http://www.daandirk.com/

Links

Adobes resources on Shape Layers:
https://helpx.adobe.com/after-effects/using/overview-shape-layers-paths-vector.html

https://helpx.adobe.com/after-effects/using/animating-shape-paths-masks.html

https://blogs.adobe.com/creativecloud/creating-motion-graphics-with/

Other not to miss shape layer tools:

- **Buttcapper**
  http://www.battleaxe.co/buttcapper/
  Change line caps and joins of a selection, with a button.

- **Explode Shape Layers**
  https://aescripts.com/explode-shape-layers/
  Splits all groups from a layer to new layers and merges shape layers into one layer.

- **Shape Repeater Baker**
  https://aescripts.com/shape-repeater-baker/
  Brings the repeater settings to the needed number of groups.

- **Shape Out Toolkit**
  https://gumroad.com/l/ShapeOutToolkit
  Set nulls for shape groups and reposition anchor points for shape groups.