

ALL ABOUT TWISTERS

<open with / music / orbiter / set and running>

Welcome to the All About Twisters Tutorial.

Twisters are where the fun is, and we can go pretty deep in customizing them.

In this tutorial I will show you how to build a complex, twisted, 3D Orbiter from the basic starting point.

Onscreen, I have already loaded my music and dropped in the basic “Orbiter” Animator...

<Mouse over highlighted “Orbiter” text in the Resources panel>

In the Properties panel, I drop down to “Twisters”.

<mouse down to Twisters>

You can see it is set to: “None”.

I click on “None”...

<click None>

...and here is my Twister fly-out menu.

The drop-down menu, here, gives you the choices of “Twist” paths available.

<Click 2D Grid>

Here's what a 2D grid orbiter looks like.

<mousing over colorizer boxes>...

These boxes allow me to set the colors for my Animator.

<click “None” on Body Colorizer drop down menu & select “Dual Color Bounce”>

I click on the selection box and open the drop down menu.

I am going to assign Dual Color Bounce to the Body color.

You can see other details can be customized here, but I'm going to keep the defaults for now.

<close Body Colorizer>

I close this window.
And follow the same procedure for the edge colorizer.

Click. <click "None">
Select. <select Dual Color Bounce>
Close. <close>

A quick warning: If you leave the Twister set to "none", your color settings will do NOTHING to your chaotic... so be sure you choose a Twister!

<mouse over chaotic>

Now we have Color!

Looking at the other twisters:

<select 3D Grid>

This is a 3D Grid.

<mousing over details>

Again, there are several parameters that can be changed, which I am leaving alone for now.

During this walkthrough, I am going to start with a single 3D Twister and dig deeper into the customization there... you can go play with any of them on your own later.

<select 3D Twister x1>

The default setting for the Twist is a "Rotator".

<click "Rotator"> <while mousing over the boxes>

And a Rotator has a default of 6 "steps" rotating around the "Y" axis, in a forward direction with a Phase of zero.

The number of steps is how many times the shape is "rotated" from the original.

<click Steps "6">
then...<while typing in 100>

By clicking on the number, I can change how many steps the shape is twisted – the minimum number of steps is 2, and I can make it as high as I like. This is 100.

Of course, the more steps, the more processing required, and the slower things may run. This only effects preview mode. When you create your final movie everything will run at full speed.

<set to 5>

I'll go with 5 to keep the visual relatively simple.

<point to the axis selection>

The second box shown is where I can change which axis the orbiter is rotated around. "Y" is default.

Rotation around the X axis looks like this <set to X>

And Z, like this <set to Z>

I can choose different paths than a "Rotator" for my twist. The options are in this drop down menu.

<click drop down>

<choose scaler>

This one is a Scaler. My shapes are now a set of 5 octahedrons, running from a minimum of half the size of the original to twice its size.

The choices here...

<mouse over scaling boxes>

... allow you to change that... on each axis independently—the boxes correspond to the X, Y and Z axis from left to right... essentially altering the shape of the octahedron.

<change numbers to show the effect>

The number of steps in the Scaler can also be customized. Here's what 10 steps looks like.

<change to 10>

Finally, let me show you a "Twirler"

<select Twirler>

I'll set the steps to... Whoa! <set to 500> ...<and back to 5>

Pretty cool, but I'll stick with 5 so that it's not overwhelming in the next phase...

<close Twist menu>

Back here at the Twister fly-out menu, we're going to ramp it up a bit.

Let's go to a double twister.

<choose 3D Twister x2>

<mouse over Twist 1>

You can see that the twirler I created in the single twister is assigned to Twist 1.

I could have started from scratch by opening the double twister first... but I love that my prior work wasn't lost! Harmony makes it easy to experiment.

Twist 2 <mouse over Twist 2>
... is set to the default "Rotator".

I can customize it right here...
Let's give it some craziness by increasing the steps to 20, and the axis to Y.
<set steps to 20>

Again, I think I'll reduce the steps for the moment
<change axis to Y, set steps to 5 and close>

What about a Triple Twister? Well, you asked for it!
<select 3DTwister x3>

For the third twist, let's try a Modulator.

<choose Modulator>

As you see, the complexity can soar very quickly!

<close>

To show the forth twister well, you see I've added an Oblique Angle, Far Distance Camera, I'll explain why in a bit.

<select 3D Twister x4>

Twist 4 is set to "Translator" <select it>

<mousing over steps and appropriate boxes>
this has essentially duplicated the triple twister 8 times, at a distance of 1000, along the X axis. And this is why I added that camera clip, without it only a portion of these 8 shape groups was showing onscreen!

Again: the first box is the X axis, second is the Y axis and third is the Z axis.
<mouse over these>

I'll reduce the steps so you can see better.
<reduce to 3 or so>

<change X to 0 and Y to 500>

If I change X to zero and Y to 500... you see the result. They are separated along the Y axis.

If I add a separation along the Z axis of 800 <set Z to 800>
... more “depth” is added.

<while closing out of all twister menus>

There you have it... a whole bunch about the amazing Twisters and their properties!

Go ye forth and mix and match and customize as much as you can stand it. The variations are endless.

when appropriate <change shape to Disc, add Simple Emboss Filter, and add a Close Swoop Camera>...

Don't forget to play with the Animator Shape, check out the filters, and try out the mobile cameras to create more movement in your chaotics.

Harmony makes you the Artist. Go Create!