



## Tutorial



### About the Tutorial

This tutorial follows a sample project using the FE Cylinder effect. The many effects in this package are diverse, but FE Cylinder is a good representative. Once you've explored the tools and methods in this project, you'll easily pick up the other effects.



### Getting Started

In this project, you'll apply the FE Cylinder effect to wrap some text around a 3D cylinder. You'll make adjustments to enhance the three-dimensional appearance of the text. And finally, you'll animate the cylinder to rotate the text in 3D space.

## Lesson 1: Opening the Project

To help you complete the tutorial more quickly, a project file has been created for you.

To open the project file:

1. Launch Adobe After Effects and open the **Tutorial folder: Cylinder Project file**.



*This is what the project file looks like when you open it.*

The actual project file has a black background, the file displayed here has a white background because it prints more clearly.

## Lesson 2: Applying the FE Cylinder Effect

Now that you have a basic file you can begin by applying an effect to the project.

To apply the FE Cylinder effect:

1. In the Time Layout window, select the “tutorial logo” layer.



*The layer window lets you see and edit all the layers in your file.*

2. Choose **Effects> Perspective> FE Cylinder**.

*If you chose to segregate Final Effects Complete to their own sub-menu during installation, you'll need to choose **Effects> Final Effects> FE Cylinder**.*

After Effects applies the effect to the layer and displays the Effect Controls window.



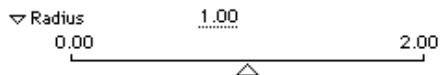
*The Effect Controls window has all the tools you need.*

### Lesson 3: Resize the Cylinder

The effect window has several controls that let you adjust the properties of the cylinder. In this lesson you'll use the radius slider to increase the size of the cylinder.

#### To resize the cylinder:

1. Drag the Radius slider to increase the size of the cylinder.



*The radius slider controls the size of the cylinder.*

The edges of the text should approach the sides of the frame, but you want to leave a little margin.



*Your text is wrapped around the circumference of a cylinder.*

### Lesson 4: Changing Your View

Although the text is wrapped around the cylinder, it might not look like it at first. The default view is straight on. To see the effect better you'll have to change the view.

#### To change the view of the effect:

1. Press the Shift key and drag the **Scrubber: Rotation trackball** straight down.



*Use the Rotation trackball to change your view of the cylinder.*

Using the Shift key constrains movement according to the direction you start dragging.



*Use the Rotation scrubber to rotate the camera.*

The Scrubbers are indirect manipulation tools. You drag them to change the position or orientation of the view camera.

If you look lower in the window, you'll see that the X Rot value has increased. The Rotation trackball consolidates the X Rot, Y Rot and Z Rot controls into a single tool.

▶ X Rot 12.5°

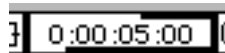
*This is what the Rot X value should look like when you're done.*

The X axis is horizontal. A positive value tips the cylinder toward you.

*If you put an extreme tilt to the camera, the text might be clipped by the edge of the layer. If this happens, you can use the Position + scrubber to move the cylinder vertically within the layer. Drag the + icon in the direction you need to move the cylinder.*

*The Position controls don't move the layer. They move the cylinder within the layer.*

Notice that after making a change, it takes a moment to render the image. While you're waiting, a "progress snake" slithers around the time code display at the bottom of the Composition window. When the snake is gone, the effect is rendered.



*The "progress snake" lets you know how long it takes to render an effect.*

The effect rendering time depends on the resolution of the layer and composition, complexity of the effect, Quality setting and the speed of your system.

You can minimize delay by doing most of your settings work in Draft layer quality and reduced resolution in the Composition window. When you're ready for final output, switch to Best quality and full resolution. Refer to your Adobe After Effects documentation for information on layer Quality settings and Composition window resolution.

## 2. Save the project now.

You'll notice that the view is still not in the best position to view the cylinder. You can rotate the camera around its vertical axis to get a better view.

### To rotate the camera around the cylinder:

1. Expand the Y Rot control to see the radial control.
2. Click in the dial to change the setting.

▷ Y Rot 10.0°

FINAL EFFECT

▷ Y Rot 130.0°

ANIF EFFECT

*Rotate the camera for a different view of the cylinder.*

Y Rot describes the view camera's rotation around the vertical axis. As you move the camera, you'll see different views of the cylinder.

## Lesson 5: Enhancing the 3D Perspective

The Camera Lens Angle controls the foreshortening effect. By adjusting the value of this parameter, you can change the 3D appearance of your cylinder.

**To adjust the cylinder's foreshortening:**

1. Use the Camera Lens Angle slider to increase the setting.

▼ Camera Lens Angle 60.00  
0.00 90.00

*Use the Camera angle slider to adjust the foreshortening effect.*

This parameter controls the foreshortening effect—scale diminishes as distance increases.

FINAL EFFECT

*With a high Camera Lens Angle setting, letters on the back side of the cylinder are smaller than those on the front.*

FINAL EFFECT

*With a Camera Lens Angle setting of 0.0, the text appears at the same scale on the front and back.*

You may want to change the Y Rot to view the cylinder from different angles to check this effect. Use either

the Y Rot control or drag the Scrubber: Rotation trackball horizontally (with Shift down).

The Render pop-up lets you choose which faces of the cylinder are visible—Full, Outside or Inside.



*This is what the cylinder looks like rendering only Inside.*



*This is what the cylinder looks like rendering only Outside.*



*This is what the cylinder looks like using Full.*

## Lesson 6: Adjust Lighting

The Ambient, Diffuse and Specular sliders combine to produce a 3D lighting environment. The lighting contributes to the cylinder's curved appearance with shading and highlights.

Instead of expanding the controls and using the sliders, we'll set the lighting parameters numerically.

**To set lighting parameters numerically:**

1. Turn off Ambient light.
  - Click the Ambient value display.
  - A dialog appears, giving you the opportunity to set Ambient light numerically.

- Enter zero as the Ambient light value and OK the dialog.



*With no light, the text will be very dark.*

2. Set Diffuse light at 0.7.
  - Click the Diffuse value display.
  - Use the dialog to enter 0.7 as the Diffuse light setting.



*With the Diffuse light the only source of illumination, the shading contrast is strong.*



*You can turn up the Ambient light a little to fill in the shadows.*

3. Increase the Specular setting slightly.  
The Specular parameter controls the concentration of the highlight.



**Specular = 1.5**



**Specular = 0.77**

*The highlight is the white streak on the cylinder where the light reflects directly.*

The highlight depends on light direction. You'll set direction in the next step.

*The Roughness control controls the spread of the highlight.*

## Lesson 7: Setting Light Position

Two parameters control the light's aim—Light Direction and Light Depth.

Light Direction controls the light's direction in the X, Y plane.

Light Depth controls the lights position in the Z dimension.

### To set light position:

1. Set Light Direction.
  - Display the Light Direction control.
  - Click in the dial to change light direction.
2. Set Light Depth.
  - Display the Light Depth control.

- Drag the slider to set the light's Z position.

You'll get a nice, front-left lighting with Light Direction set at  $-140^\circ$  and Light Depth set at 0.1.



*By now, the loop of text should be looking pretty good.*

3. Before continuing, save your work.

## Lesson 8: Animating the Cylinder

In this lesson, you'll set key frames to rotate the cylinder. The text will appear to move in an orbit.

### To animate the cylinder:

1. Make sure the current time is rewound to 0:00.

2. In the Time Layout window, expand the “tutorial logo” layer properties.
3. Locate the FE Cylinder property and expand it.



The expanded display shows all of the animatable parameters.

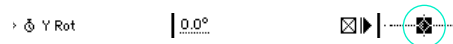
Locate the Y Rot listing. You may need to scroll down the window.

4. Click the stopwatch beside the Y Rot listing.

This sets a key frame for the current Y Rot value. You may adjust the value now to change the animation start orientation.

5. Advance to the frame at four seconds (04:00).
6. Click the Y Rot value in the second column of the Time Layout window.
7. Use the dialog to set Y Rot revolutions to 1.0. Leave the degrees as they are.

Changing a key framed parameter at any other point creates a key frame.



As you create key frames, they appear on a parameter's line.

These key frames will animate the camera to rotate around the cylinder once in the first four seconds.

## Lesson 9: Test Rendering the Animation

Now that you've set up the animation, you can make the movie and check how your key frames look.

### To render the animation:

1. Choose **Composition > Make Movie**.
2. Name the file and choose a save location.
3. Use the Render Queue dialog to adjust rendering settings, if necessary.
4. Click Render, and wait for your movie.

If this test render looks good, you can set the layer Quality to Best and the composition resolution to Full. Then Make the movie again.

If you're not getting the results you want, go back and change the settings.

## Lesson 10: Adding the Final Touches

You can take this project a step further and have the text orbit an object. This is done with layering and a tricky use of the Render display option.

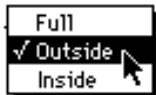
### To split the Inside and Outside of the cylinder into two layers:

1. Make your final adjustments to the FE Cylinder animation.
2. In the Time Layout window, copy the “tutorial logo” layer. Deselect that layer, then choose Paste.  
  
After Effects adds a second copy of the layer to the composition. This copy includes the FE Cylinder effect and all of its adjustments.
3. Select the top layer. In its Effect Controls window, set the Render pop-up to display Outside.



*To change effect properties, select that layer, then use the Effect Controls window. If a layer's Effect Controls window isn't visible, you can open it from the Layer menu.*

4. Select the lower layer and set it to Render only the Inside.



*The two cylinders overlap. One shows its front, the other shows its back.*

Because the FE Cylinder parameters (except the Render face) are identical in the two layers, they match and appear as one.

Adding an item into the Time Layout window centers it in the composition. If you need to, you can reposition the layer.

3. In the Time Layout window, drag the “planet” layer between the two “tutorial logo” layers.

The inside of the cylinder is behind the planet, and the outside of the cylinder is in front of it. When you render the animation, the text will orbit the planet.



*The text orbits the planet.*

#### **To add the central object:**

1. In the Project window, locate the “planet” footage file.
2. Drag the “planet” into the Time Layout window.

