

# ***Tutorial***

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# Introduction

This Tutorial shows you how to build several basic effects in *Boris FX*. It should take you about ten minutes to complete each effect in the Tutorial. The lessons cover most of the basic types of effects used in programs today:

- Single Channel DVE effect: Video 1 to Video 2
- Single Channel DVE effect: Video 2 to Video 1
- Picture-In-Picture effect
- Title with Alpha channel effect
- Video Cube effect
- Sphere effect
- Mask effect

## Prerequisites

This tutorial assumes that you already know how to use your computer, (including how to open and save a file, choose color, and use dialog boxes), and that you are familiar with your host application. To be able to work with this tutorial, you must install Boris FX. If you haven't already done so, please consult your *Installing and Entering Boris FX Supplement*.

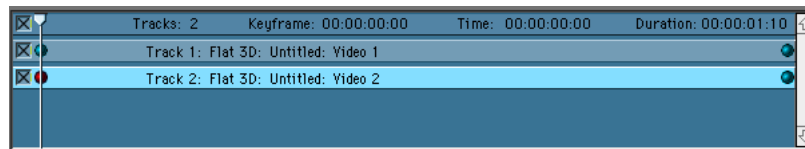
## Single Channel Effect: Video 1 To Video 2

First, we will build a single channel effect from Video 1 to Video 2. This effect rotates the outgoing clip as it shrinks to infinity and disappears, revealing the incoming clip.

In this effect we need two tracks; one for Video 1, the outgoing clip, and one for Video 2, the incoming clip. Video 1 will change over time while Video 2 will remain stationary in the background.



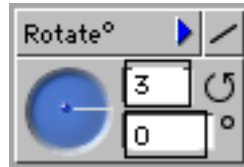
First we need to prepare the timeline by deleting unwanted tracks (select the unwanted track by clicking on it and press the Delete button) and resetting Track 1 and Track 2 with the Reset button. Your timeline should look like this:



1. Select the last keyframe on Track 1. It will turn red.
2. Activate the Rotate parameter in the Position Tab and enter 3 in the



Revs text box. Press Tab or Enter to accept the value.



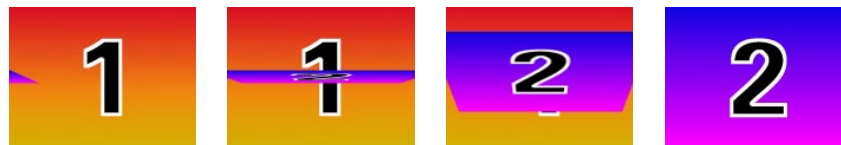
3. Now activate the scale control and enter 0 in the text box (or move the slider all the way to the left), then press Enter.



4. Preview the effect by pressing the Space bar.
5. Save your effect, if desired, by selecting the Save Settings from the file menu.

You've just set up your first effect! You may also render your effect and play it back.

## Single Channel Effect: Video 2 To Video 1

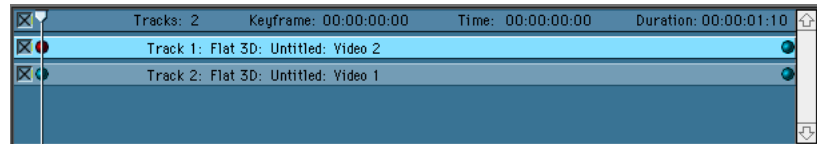


In this effect we will bring in a new shot (Video 2) as a narrow slice, then tumble it into position full frame.

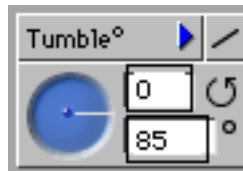
1. First we need to prepare the timeline by resetting Tracks 1 and 2 with the Reset button.
2. Next, drag Track 2 (with Video 2) above Track 1 (with Video 1). This will bring Video 2 to the foreground.



Your timeline should look like this:



3. Click the first keyframe in Video 2 to select it.
4. Activate the Tumble control to make the slice. Because  $90^\circ$  would tumble the image all the way forward and it would disappear, you need to choose a lower number. Enter  $85^\circ$  in the text box for degrees.



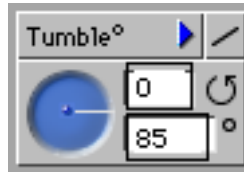
5. Press enter to see the slice in the Preview area.



6. Now move the image to its starting position, which is out of frame to the left. To do this, activate Position X. Then drag the position dot to the left until the image is just outside of the screen with its right edge showing slightly.

Because this effect will have two parts-Video 2 first moving in as a slice, then tumbling open-you must add a new keyframe.

7. Position the CTI in the timeline where you want the new keyframe (at around frame 10).
8. Press the New Keyframe button. You now have a new keyframe in your Video 2 track at frame 10.
9. Activate the Tumble tool and set the same Tumble of 85°.



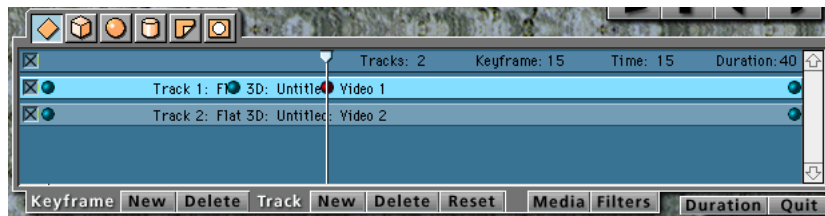
10. Select Position X from the Position Tool Tab and choose the center button. The slice returns to the center of the frame.

Your effect is nearly finished, but there is one more thing you can do to improve it. Often, two-part effects look better with a slight pause between parts. You will add a “hold” to accomplish this.

### Adding a “Hold”

To add a hold we will copy the second keyframe and paste the copy in the same track a few frames later.

1. Select Keyframe 2 from Track 1 and copy it to the clipboard (Mac: Command-C; Win: Control-C).
2. Position the CTI at Frame 15 and paste the keyframe (Mac: Command-V; Win: Control-V), onto the track.





Now you'll have a brief hold in the middle. Save the effect if you like, or press OK to return to the host application to begin rendering.

## Creating a Picture-in-Picture Effect

For this effect, you'll fade in a picture-in-picture at the upper-right corner of the screen, hold it briefly, and then bring it up to full screen.



In your host application choose two images and make your transition two seconds long. Then enter *Boris FX* and reset each track.

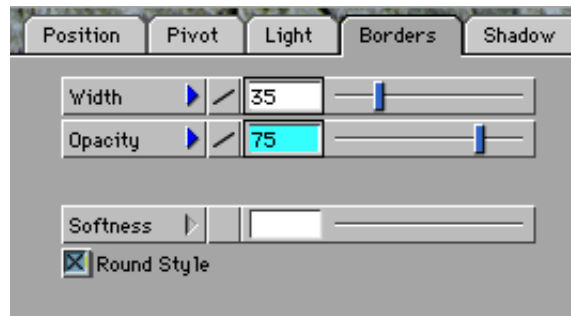
1. Because Video 2 will come in over Video 1, put Video 1 in the background by dragging Video 2 above Video 1.
2. In the first keyframe of Video 2, activate Scale and set it to 40%.
3. Activate both Position X and Position Y. A position dot appears in the Preview area. Drag the blue dot in the Preview area to position the image in the upper-right corner. To make sure the image is title-safe, select Title-Safe from the Mark menu under the Preview Menu. Once you've made the necessary adjustments, deactivate Title-Safe.





Now you will add a border.

1. Select the Border Tab to enter the Border area.
2. Under Border, activate the Width parameter and move the slider until you have a border of about 35.
3. Activate Opacity and set it to 75%.





Now we're going to make the bordered picture fade in over 10 frames.

1. Copy the beginning keyframe in Video 2 (Mac: Command-C; Win: Control-C).
2. Place the CTI at Frame 10, and paste the copied keyframe (Mac: Command-V; Win: Control-V) onto track 1.
3. Select the Position Tool Tab. Return to the beginning keyframe and set its Opacity to 0%.
4. Select Keyframe 2 and set its Opacity to 100%. Now the bordered picture fades in over the first 10 frames of the effect.

At this point, you will put in a one-second hold. Copy Keyframe 2 and paste it at the Frame 40, or 1:10, mark.

To complete your picture-in-picture effect:

1. Select the end keyframe and position the CTI over it. It should show Track 2 full frame. This means your effect ends with Track 2 zooming up to full frame.
2. Press Save or OK, then render the effect.

## Title with Alpha Channel Effect

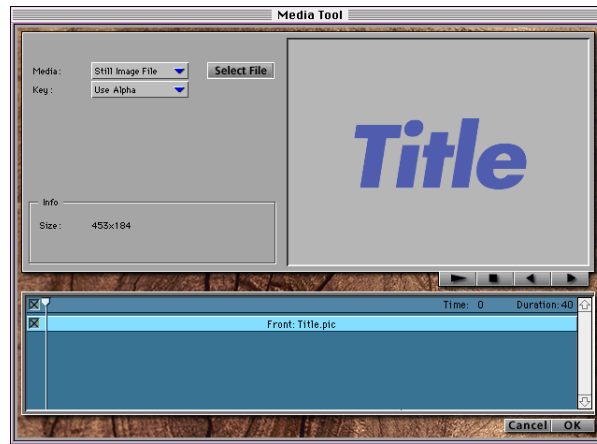
In this section, you'll fly in a logo with an Alpha channel. Alpha channels let you cut out part of the frame in the shape of a logo or other graphic element.



Your title should appear in the foreground and your video in the background. This means that the title should be in Track 1 and Video 1 should be in Track 2. This can be accomplished by dragging the track with Video 1 down below the other track.

In *Boris FX*, reset the track containing Video 1 with the Reset button. This will be your background. Reset your Video 2 track, too, since you are going to link the graphics file to the Video 2 track using the Media Tool. The file you are loading is on the Boris FX CD-ROM > Tutorial > Media > Title.xxx.

1. Select the Video 2 track.
2. Press the Media Button (or double-click the track).
3. From the Media pop-up menu, select Still Image file.
4. Locate "Title.xxx" image file on your hard drive and select Open.



5. From the Alpha pop-up menu, select Use Alpha.
6. Press OK to exit the Media Tool. Your Title should appear in front of Video 1.

**Exercise:** Keyframe Track 1 to fly your title in from the lower left corner across the screen and fly out in the upper left corner. (**Hint:** set Position X and Position Y parameters for the first and last keyframes of Track 1 accordingly).

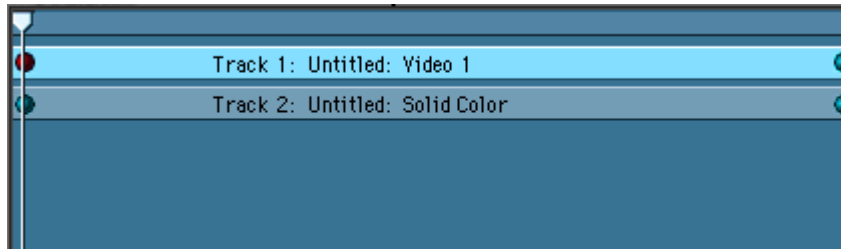
## Video Cube Effect

*Boris FX* allows you to easily create solid cube objects and move them in space. You can map six different images (including live video) on six sides (faces) of the cube: Front, Back, Left, Right, Top and Bottom.



The entire cube object is built in one track (Track 1 in this case). Track 2 will be a solid color background.

1. Start by deleting all of your tracks and setting up the track layout shown below. Reset Tracks 1 and 2 as discussed previously.



2. Select Track 1 and choose the Cube shape from the Shape buttons above the time line. This has created a video cube although you can not see it yet. Once we've turned the image around, you will see the cube.



3. Our cube is going to land on the right side at the end of the effect. Let's map Video 2 onto the right side. Press the Media button to enter the Media Tool window.
4. Select the Media track labeled "right", and then choose Video 2 in Media menu. Activate the display shape check box.
5. The preview will now show the cube displaced with the Video 2 media on the right hand side. Click OK to exit the Media Tool
6. Now it's time to design the last keyframe of the cube track. We want to spin our cube 90° to reveal its right face.
7. Move the CTI to the end of the track by pressing the Keyboard End key, and select the last keyframe. Turn on the Spin parameter and enter 90 in the degrees field. Press Enter to preview the change.



**One last touch:** To make the cube more realistic, add another keyframe in the middle of the timeline to move the cube back 600 to 700 pixels (using the Distance parameter).



Creating a cube is that easy. Save and/or render your effect.



## Creating a Sphere Effect

For this effect, you will bring in an image as if it were a gently tossed softball that unwraps to fill the screen.



Create a three second, or 90 frame, transition in your host application. Then enter Boris FX and reset both Video 1 and Video 2 tracks.

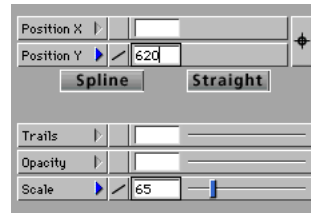
1. Layer Video 2 over Video 1 by dragging Video 2 over Video 1.
2. Select Video 2, and apply the Sphere Shape by clicking the Sphere icon in the palette just above the Track List.



3. Activate the Scale and Position Y controls. We want the ball to start below the frame, so enter a value of 620 into position Y.



We want the new shot to start wrapped around the Sphere and somewhat scaled down, so enter a value of 65 into Scale.



4. Move the CTI one second into the effect and create a new Keyframe on the Video 2 track. Activate the Scale control, and enter a value of 65. Activate the Position Y control, and enter a value of 170. This will put the Video 2 Sphere somewhat above the center of the frame, for the “top of the toss”.

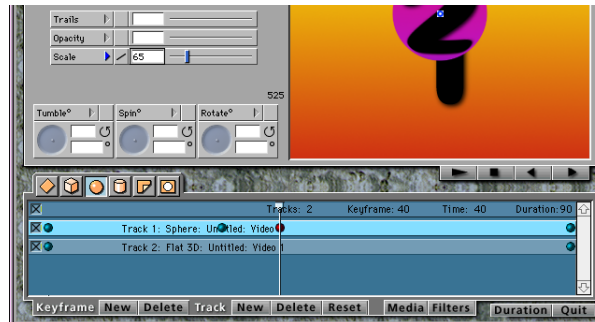


You can also choose this location by dragging the position dot. Since you have only activated Position Y, you will only be able to

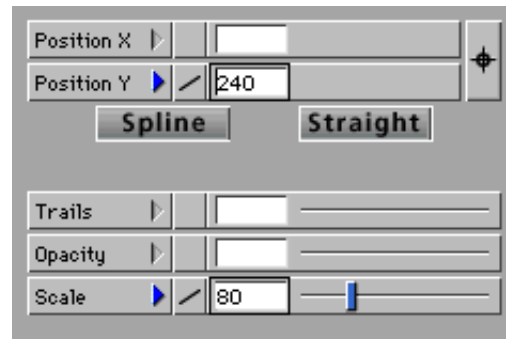


drag the dot vertically.

5. We want the ball to hang at this location for 10 frames. Copy the keyframe to the clipboard using the Copy Command in the Edit Menu, move the CTI ten frames down the Timeline, and select Paste from the Edit Menu.



6. Now we are going to make the ball move to the center of the screen and expand slightly. Move the CTI 2 seconds into the effect and create a new Keyframe. Activate Position Y, and center the image by clicking the Centering Icon. Increase the size of the Sphere by clicking the Scale icon and entering a value of 80. Then enter the Sphere Tab and change the value of Wrap to 100.



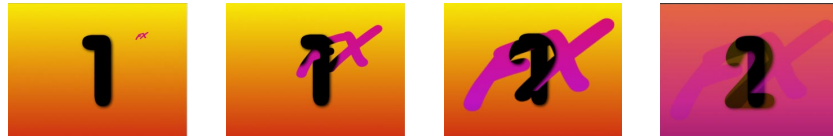
7. Select the end Keyframe and enter the Sphere tab, Activate Wrap Percentage, and set the control to 0 to fully unwrap the Sphere.

You can now save or render the effect. Now that you have made the Sphere Toss, there are many additional touches that you can add. You could put "English" on the ball by animating Spin, Tumble or Rotation. You could light the ball by applying a specular light at the beginning of the animation, and fading it out when the Video 2 image unwraps to fill the screen. You could toss in several Video 2 balls, and then unwrap the top one.



## Mask Effect

This effect uses a mask in a transition effect. The effect duration used to create this effect is 40 frames, or 1:10 in seconds:frames. Adjust your effect duration accordingly.

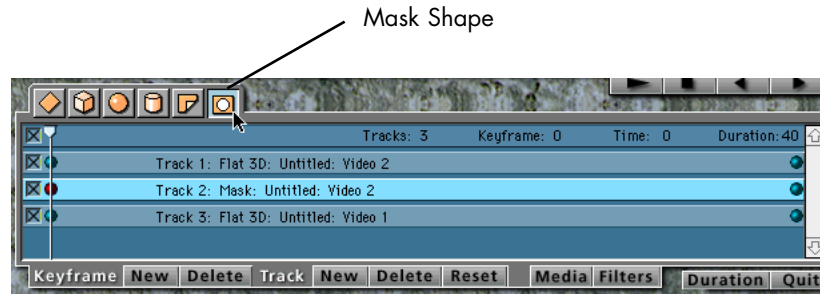


1. Begin with your two video source tracks from your host application, Video 1 and Video 2, as the only tracks in the timeline. Reset both tracks.

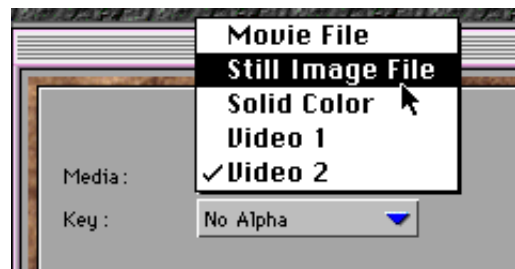


2. Drag Video 2 over Video 1 so that Video 2 is the top layer.
3. Create a new track beneath Video 2 by selecting Video 2 and clicking the New Track button.
4. Change this new track from a Flat 3D shape into a Mask shape by selecting the track and clicking the Mask Shape button.



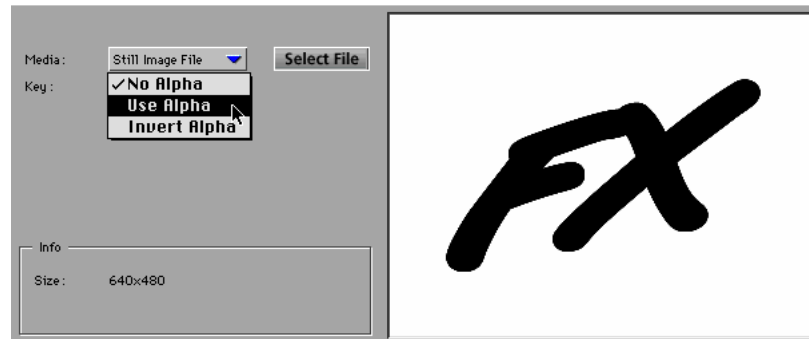


5. Change the media of the Mask track to our mask image. Click on the Media button. In the Media Tool, choose Still Image File from the Media pop-up menu.

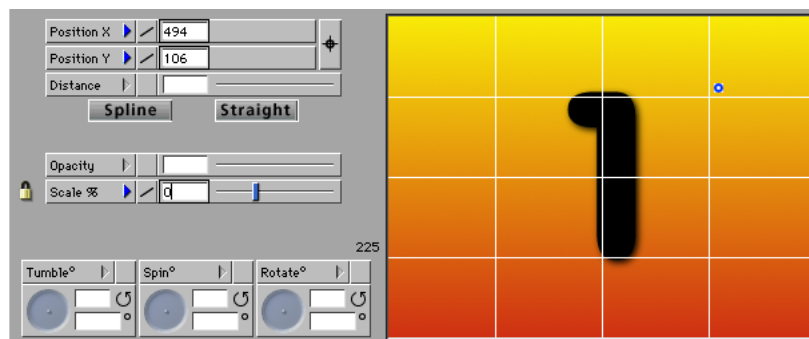


Select the mask image. It is located on the *Boris FX* CD-ROM in the Tutorial folder inside the Media folder with the file name *FX Mask*.

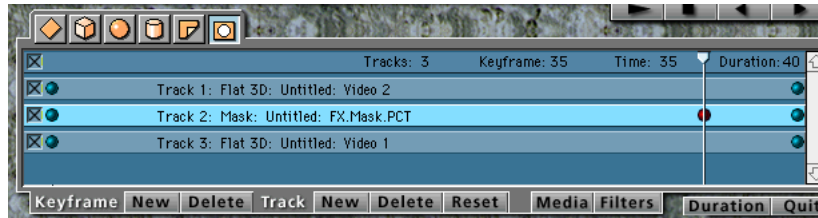
6. Use the alpha channel for the mask by selecting Use Alpha from the Key pop-up menu in the Media Tool. Click OK.



7. Select the first Keyframe of the mask track and adjust the scale parameter to a value of 0. The image should disappear and reveal only Video 1.
8. Enter the Preview menu and under Mark, select Grid. Turn on Position X and Y and drag the position point indicator to the lower left corner of the top right grid square.



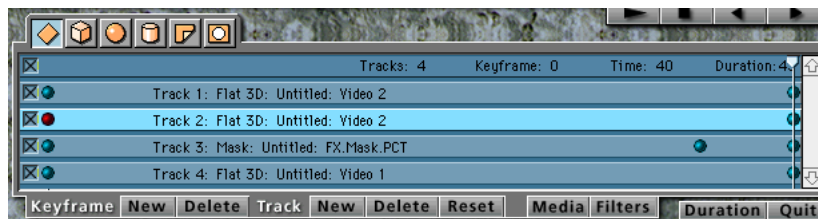
9. Move the CTI to frame 35 in the effect and create a new keyframe on the mask track. Turn on the Opacity and leave it at 100.



10. Select the last keyframe of the mask track. Activate Opacity and change its value to 0. Activate Scale and increase its value to 130.



11. Select the Video 2 track at the top of the timeline and duplicate it. You can either select the menu command in the Edit menu, or use the keyboard shortcut (Command-D for Power Macintosh; Control-D for Windows).



12. Drag the first Keyframe of the top Video 2 track to frame 35. Reduce the Opacity of that keyframe to 0.



The effect is complete. Preview the effect, render it and/or save it and compare it to the completed effect in the Tutorial folder on the *Boris FX* CD.

The Mask shape is nice for transitions, but you can also use it to move a title or logo mask across the screen without creating a transition. Experiment with the Mask shape, and you'll find many interesting uses for it.