IllusionFX™ Pack Plug-ins

The IllusionFX Pack contains high-quality AVX plug-in effects developed by Avid Technology.

The majority of the effects appear in the Illusion FX category of the Effect palette. The only exception is the Region Stabilize effect, which appears in the Image category.
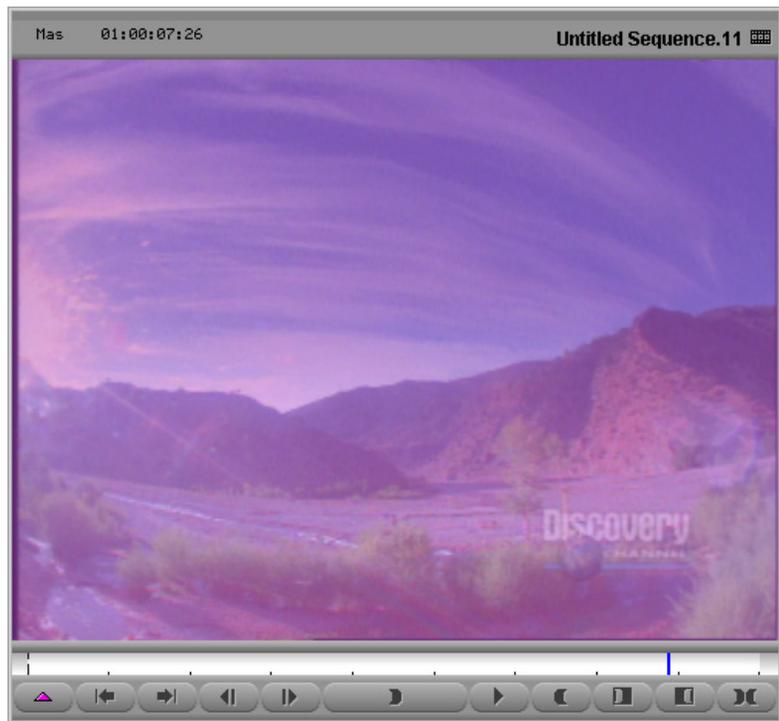
You can use the plug-ins like any other AVX plug-ins. For more information on AVX plug-ins, see the effects guide or Help for your Avid system.

Contents

Color Mix

This segment effect allows you to keyframe a color effect.

Input Parameters

Color Level

Choose the amount of color to add.

Color

Select the color using the Windows Color dialog box or the eyedropper, or by directly manipulating the RGB sliders.

Crystal
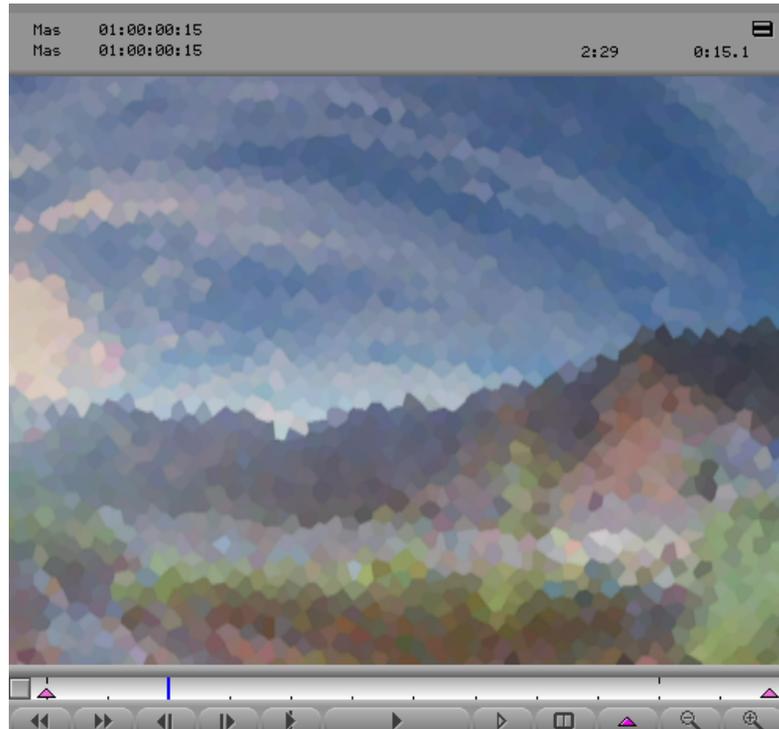
This segment effect creates a mosaic effect using polygons. The size of the polygons, and the randomness of their shape, can be controlled.

Input Parameters

Size

Sets the radius of the polygons in pixels.

Jitter

Sets the randomness of the shape of the polygons. A value of 0 creates regular hexagons — the higher the value, the more random the shapes.

Random Seed

This is a base number upon which all random values are calculated. Each value will result in a different random effect. This parameter is not keyframeable.

Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Film Grain


```
Mas    01:00:03:12
Mas    01:00:03:12                              2:27        0:13.1
```

This segment effect adds a grainy texture to a video clip to simulate
the imperfections present in some film footage, such as 16mm stock.

Input Parameters

Level

Sets the amount of graininess.

Size

Sets the size of the individual grain elements.

Color

Film footage often contains slight color and luminance imperfections caused by the chemical processes used to transfer the negative to the film. You can think of these as very small color smears on the film. The default setting applies a balanced combination of color and luminance imperfections. Increase the color value to add more color imperfections and fewer luminance imperfections. Decrease the value to increase the luminance imperfections and decrease the color imperfections.

Field Mode

When this box is selected, the grain pattern updates every field.

Hilite Grain

Adds grain to the brighter areas of the image.

Shadow Grain

Adds grain to the darker areas of the image.

Flare

This segment effect creates a random ring flare. The brightness, size, and center of the flare can be controlled.

Input Parameters

Brightness

Sets the brightness of the flare. A value of 0 is no brightness (no flare).

Size

Sets the diameter of the flare ring.

Width

Sets the distance between the inner and outer edges of the flare ring.

Amount

Sets the amount of distortion to the flare ring; 0 is no distortion.

Random Seed

This is a base number upon which all random values are calculated. Each value will result in a different random effect. This parameter is not keyframeable.

X and Y

Position the center of the flare ring.

FluidBlur

This segment effect creates a motion blur. The amount of blur is based on the amount of motion in the clip. Only objects that are moving from one frame to the next will be blurred.

FluidBlur creates a higher quality effect than the Motion Blur effect because it blurs in the direction of travel. See "Motion Blur" on page 25.

You must render this effect to see the result.

Input Parameters

Blur Amount

The level of blur for objects that are moving.

Lower Motion Threshold

Objects moving less than this number of pixels between frames or fields will not be blurred.

Upper Motion Threshold

Objects moving more than this number of pixels between frames or fields will be blurred by the Blur Amount.

The amount of blur ramps linearly from 0 to Blur Amount as the pixel motion increases from the Lower Motion to the Upper Motion Threshold values. This means that the faster an object moves, the more it is blurred.

Trail

Instructs the system to add an amount from the previous frame's (or field's) blur to the current frame. This produces smooth movement, especially as objects move along curved paths.

Sharpen Leading Edge

Allows you to keep the front edge of an object crisp and clear while other portions are blurred.

Progressive Source

Use this option if your footage was captured or converted to progressive footage (i.e., not interlaced). If your sources are progressive, enabling this button produces smoother results. This option has no effect in 24p projects because the system assumes that you are using progressive footage.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

FluidColorMap

This segment effect creates an animation based on the amount of motion in a scene. The effect maps motion to color values as follows:

- Direction of movement maps to unique chroma (color) values. A different color is used for each direction within a 360 degree circle. The system uses the Vectorscope layout (used in the Video Input tool) as a compass of color values.

- Motion magnitude maps to luminance (brightness) and color saturation values. Motion magnitude is defined as the amount of pixels an object moves between frames (or fields).

Input Parameters

Min Motion Threshold

Objects moving less than this number of pixels between frames (or fields) will have the minimum saturation and luminance. The amount of saturation depends on the Constant Saturation value.

Max Motion Threshold

Objects moving more than this number of pixels between frames will have the maximum saturation and luminance. The amount of saturation depends on the Constant Saturation value.

Brightness and color saturation increase as the motion of an object increases from the minimum to the maximum threshold values. The faster an objects move, the brighter and more color saturated it becomes.

Constant Saturation

This setting controls how much the Min and Max Motion Threshold values control the color saturation. The min and max values always control the luminance (brightness) of the image. However, for a low Constant Saturation value, the min and max values strongly affect

saturation as well as luminance. For a high Constant Saturation value, the min and max values affect saturation to a lesser degree. If Constant Saturation is set to the maximum value, motion will have no effect on color saturation.

Progressive Source

Use this option if your footage was captured or converted to progressive footage (i.e., not interlaced). If your sources are progressive, enabling this button produces smoother results. This option has no effect in 24p projects because the system assumes that you are using progressive footage.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

FluidMorph

This transition effect allows you to morph between two clips.

Source

Allows you to choose the morphing method as follows:

- Still image — The system take snapshots of the first frame of outgoing video and the last frame of the incoming video and creates an output that is a morph between the two images.

- Video stream — The system creates an output by morphing the two clips, frame by frame.

Input Parameters

Feature Match

When this option is selected, the system attempts to match features between the two clips when it creates the morph for each frame. If the option is not selected, the system creates the morph based on the brightness of the two images.

Swap Source

This option allows you to specify whether to apply the effect to the incoming or outgoing video. This parameter is not keyframeable.

Progressive Source

Use this option if your footage was captured or converted to progressive footage (i.e., not interlaced). If your sources are progressive, enabling this button produces smoother results. This option has no effect in 24p projects because the system assumes that you are using progressive footage.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Iris

This transition effect wipes the foreground clip away to reveal the background clip using a circle that radiates out from the center. The softness of the edge of the circle can be controlled.

Input Parameters

Amount

Sets the proportion of each clip to be displayed. A value of 0 displays all of the foreground clip; the maximum value displays all of the background clip. The normal animation would be from 0 at the first frame to maximum value at the last frame.

Softness

Sets the size of the area over which the pixels will be faded from the foreground clip to the background clip.
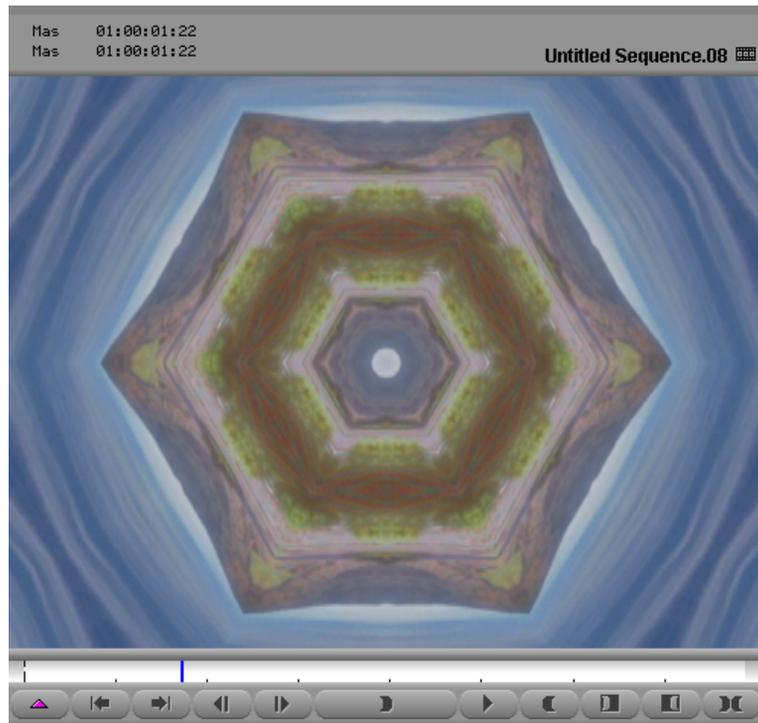
X and Y

Set the center of the iris wipe.

Swap Sources

This option allows you to specify whether to apply the effect to the incoming or outgoing video. This parameter is not keyframeable.

Kaleidoscope

This segment effect creates an animation that resembles a kaleidoscope. The number, angle, and position of the mirrors can be controlled, as can the source area for the effect.

Input Parameters

Symmetry

Sets the number of mirrors.

Angle

Sets the angle of the mirrors.

Scale

Sets the scale of the image.

Center Parameters

X and Y

Set the center of the mirrors. Use the sliders, or click the corresponding marker and drag within the image.

Offset Parameters

X and Y

Use the X and Y sliders to set the offset from the original source area.

Use the sliders, or click the corresponding marker and drag within the image.

Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Lightning

This segment effect creates a random lightning pattern.

Generation Parameters

Amount

Sets the proportion of the lightning to be displayed. A value of 0 is no lightning; the maximum value is the complete lightning bolt. The normal animation would be from 0 at the first frame to the maximum value at the last frame.

Branch Probability

Sets the likelihood that the lightning will have few or many branches. A value of 0 displays no branches — the higher the value, the more branches are likely.

Random Seed

This is a base number upon which all random values are calculated. Each value will result in a different random effect. This parameter is not keyframeable.

Render Mode

Sets the quality of the rendered lightning. Choose an option from the pop-up menu:

• Quick to view just the motion of the lightning.

• Standard to view the full lightning without anti-aliasing while editing the animation.

• Anti-aliased to ensure that fine branches do not break up.

Core Parameters

Width

Sets the radius of the core in pixels.

Color

Sets the color of the core. Select the color using the Windows Color dialog box or the eyedropper, or by directly manipulating the RGB sliders.
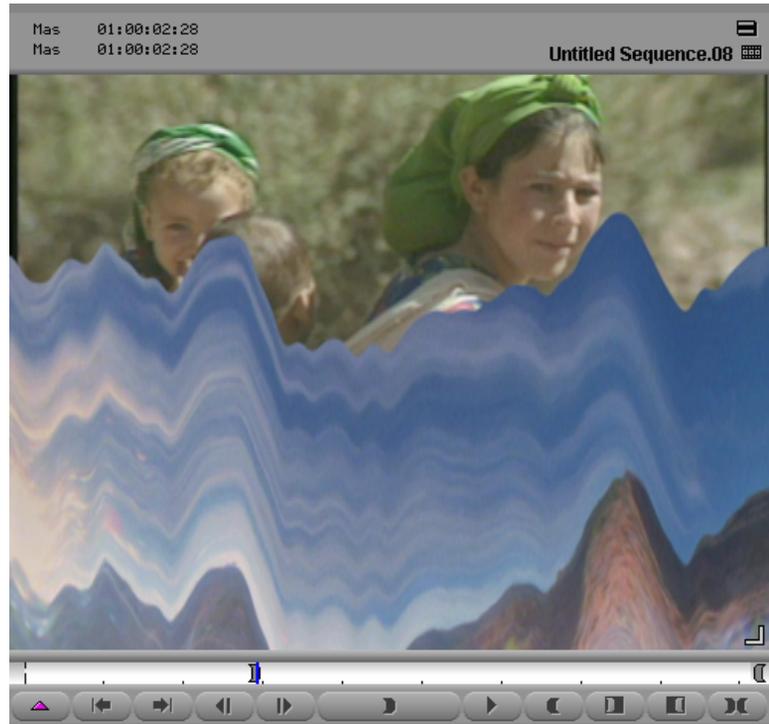
Glow Parameters

Width

Sets the radius of the glow in pixels.

Color

Sets the color of the glow. Select the color using the Windows Color dialog box or the eyedropper, or by directly manipulating the RGB sliders.

Melt

This transition effect melts away the foreground clip to reveal the background clip. The foreground clip "melts" downward off the screen, while being distorted in a random "liquid" manner along the horizontal lines; the vertical lines are not distorted. The strength of the distortion can be controlled.

Input Parameters

Bleed

Changes the melt image to a more dramatic effect.

Melt Up

Reverses the direction of the melt.

Amount

Sets the progression of the effect. A value of 0 is no effect; all of the foreground clip is displayed. The higher the value, the more the foreground clip is melted away, and more of the background clip is displayed. The normal animation would be from 0 at the first frame to the maximum value at the last frame.

Strength

Sets the strength of the distortion; the higher the value, the greater the distortion.

Random Seed

This is a base number upon which all random values are calculated. Each value will result in a different random effect. This parameter is not keyframeable.

Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Swap Sources

This option allows you to specify whether to apply the effect to the incoming or outgoing video. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Motion Blur

This segment effect allows you to blur the edges of moving objects.

See also "FluidBlur" on page 10.
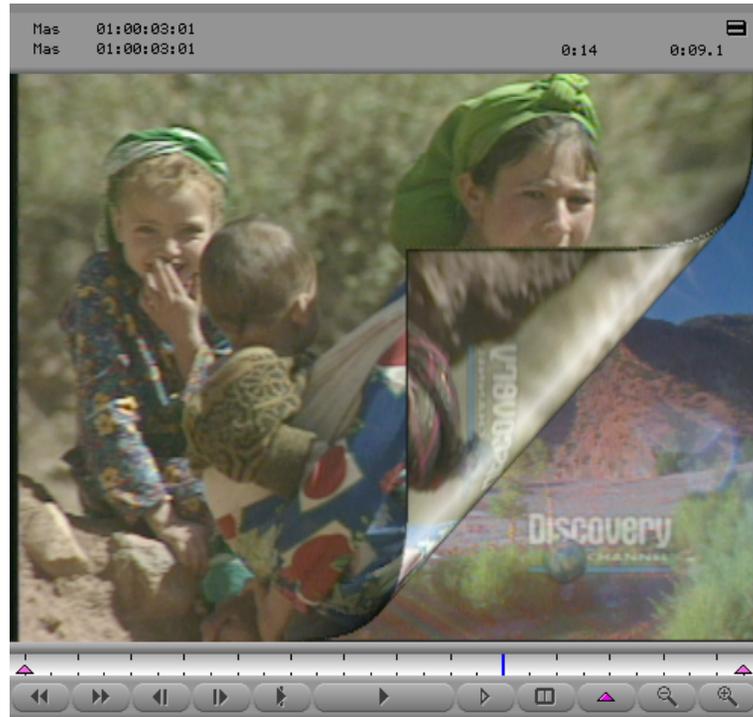
Input Parameters

Amount

Sets the length of the blur.

Direction

Sets the direction of the blur.

Page Curl

This transition effect treats the foreground video channel as though it were a sheet of paper being rolled over to reveal another page beneath.

Input Parameters
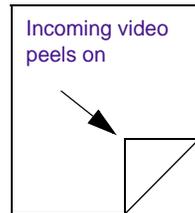
Turn Left and Reverse

These options allow you to control whether the outgoing video peels off to reveal the incoming video or whether the incoming video peels on to cover the outgoing video. You can also control the direction of the peel. The following illustration shows the possible combinations.

Outgoing video
peels off

Turn Left On, Reverse Off
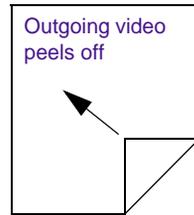
Outgoing video
peels off

Turn Left Off, Reverse Off

Incoming video
peels on

Turn Left On, Reverse On

Incoming video
peels on

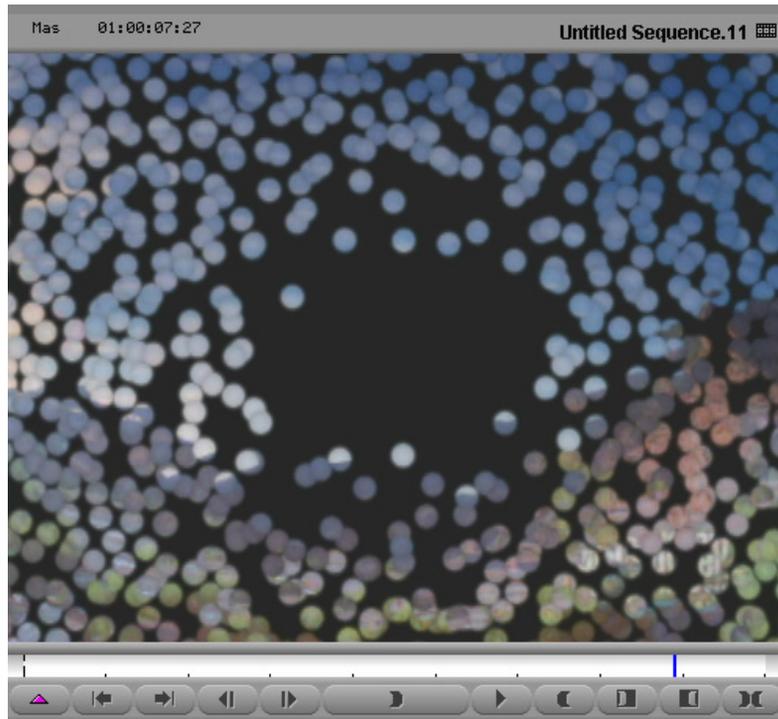Turn Left Off, Reverse On

Swap Sources

This option allows you to specify whether to apply the effect to the incoming or outgoing video. This parameter is not keyframeable.

This effect is similar to the Rollup effect. Rollup has more flexibility, but Page Curl adds a highlight along the curled edge.

Particle Blast

This transition effect divides the foreground image into circular
particles and then blows away the particles from the center outward.

Input Parameters

Amount

Sets the progression of the animation. The larger the difference in the
Amount value between keyframes, the faster the effect will happen.

Size

Sets the radius of the particles.

Spacing

Sets the space between the center of the original position of the particles. This parameter is not keyframeable.

Front Speed

Controls whether the particles in the center of the blast start to move before the particles at the outside edges.

Front Randomness

Allows particles nearest the center to move at different speeds.

Speed

Sets the speed at which particles move apart.

Speed Randomness

Allows particles to move at different speeds to give a more natural effect.

Acceleration

Controls how quickly a particle reaches the full speed of the blast. The higher the value, the more quickly the particle will reach full speed.

Bumpiness

Adds a shadow to the edge of the particles.

Swap Sources

This option allows you to specify whether to apply the effect to the incoming or outgoing video. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Particle Orbit

This transition effect divides the foreground image into circular particles, which then orbit around their original position. The size and spacing of the particles can be controlled.

Input Parameters

Amount

Sets the maximum distance of the orbit of the particles from their original position.

Size

Sets the radius of the particles.

Spacing

Sets the space between the center of the original position of the particles. This parameter is not keyframeable.

Bumpiness

Adds a shadow to the edge of the particles.

Speed

Sets the progression of the animation. The larger the speed value, the faster the particles will move.

Swap Sources

This option allows you to specify whether to apply the effect to the incoming or outgoing video. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Example

When using this effect as a transition effect, the following parameter changes are recommended:

- Set the initial Amount and Bumpiness values to 0 so the transition will begin smoothly.

- Animate the Amount value from 0 to a non-zero value. For example, change the value from 0 to 40.

- Animate the Size value during the transition. For example, reduce the value from 10 to 0.

- Optionally animate bumpiness during the transition. Increasing the amount of bumpiness gives an additional amount of texture to the particles. For example, change the value from 0 to 100.

The following illustrations show various stages of a transition effect using the above values. The transition proceeds from left to right in the illustrations.
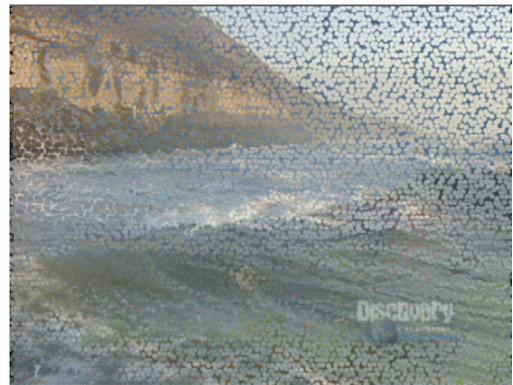
Particle Wind
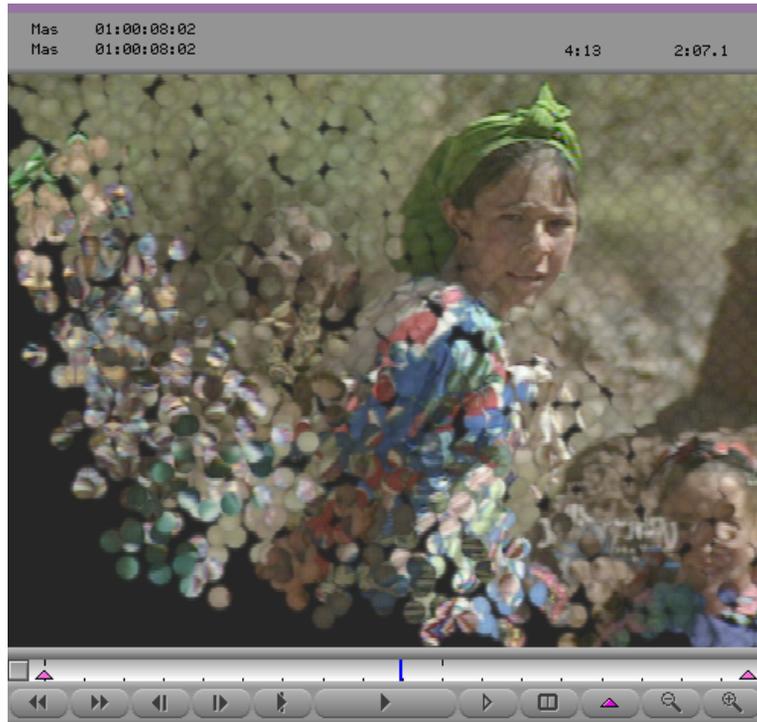
This transition effect divides the foreground image into circular particles and then blows the particles away directionally.

Input Parameters

Amount

Sets the progression of the animation. The larger the difference in the Amount value between keyframes, the faster the effect will happen.

Size

Sets the radius of the particles.

Spacing

Sets the space between the center of the original position of the particles. This parameter is not keyframeable.

Front Speed

Controls whether the particles near the front edge (where the wind first hits) start to move before the particles at the outside edge.

Front Randomness

Allows particles nearest to the front to move at different speeds.

Speed

Sets the wind speed.

Speed Randomness

Allows particles anywhere within the effect to move at different speeds, giving a more natural effect.

Acceleration

Controls how quickly a particle reaches the full speed of the wind. The higher the value, the more quickly the particle will reach full speed.

Angle

Sets the source direction of the wind. A value of 0 degrees is three o'clock; positive values move counterclockwise.

Bumpiness

Adds a shadow to the edge of the particles.

Swap Sources

This option allows you to specify whether to apply the effect to the incoming or outgoing video. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Pattern Generator

This segment effect creates a clip using a solid color, a variety of color bars, or a grid. The frames can be numbered automatically, and a circle can be animated. This effect is useful for testing purposes.

Background Parameters

Pattern Type

Sets the pattern to be used. Select one of the following patterns: Solid color, EBU bars (75%), Color bars (75%), Color bars (100%), EIA bars, SMPTE bars, Color ramps, Cross ramp, or Grid.

Axis

Sets whether color bars are drawn horizontally or vertically. Choose X axis or Y axis from the pop-up menu.

Base Color

Sets the color of the clip when the Pattern Type is set to Solid Color and the color of the grid lines when the Pattern Type is set to Grid.

The background color of the grid will be black if Base Color has 50% or greater luminance, or white if Base Color has less than 50% luminance. Select the color using the Windows Color dialog box or the eyedropper, or by directly manipulating the RGB sliders.

Number Parameters

Number Offset

Sets the offset of the number from the current frame number.

Opacity

Sets the opacity of the number.

Text Size

Sets the size of the number.

Stroke Width

Sets the width of the number stroke.

Text color

Sets the color of the number. Select the color using the Windows Color dialog box or the eyedropper, or by directly manipulating the RGB sliders.

X and Y

Set the position of the center of the number.

Circle Parameters

Size

Sets the radius of the circle.

Width

Sets the width of the circle outline.

Opacity

Sets the opacity of the circle.

Color

Sets the color of the circle. Select the color using the Windows Color dialog box or the eyedropper, or by directly manipulating the RGB sliders.

X and Y

Set the position of the center of the circle.

Pinch

This segment effect pinches the image in toward, or pushes it out from a user-defined point. The amount of distortion and the area affected can be controlled.

Input Parameters

Amount

Sets the scale of the effect. Negative values push the image outward from the center; positive values pinch it inward toward the center.

Size

Sets the diameter of the affected area.

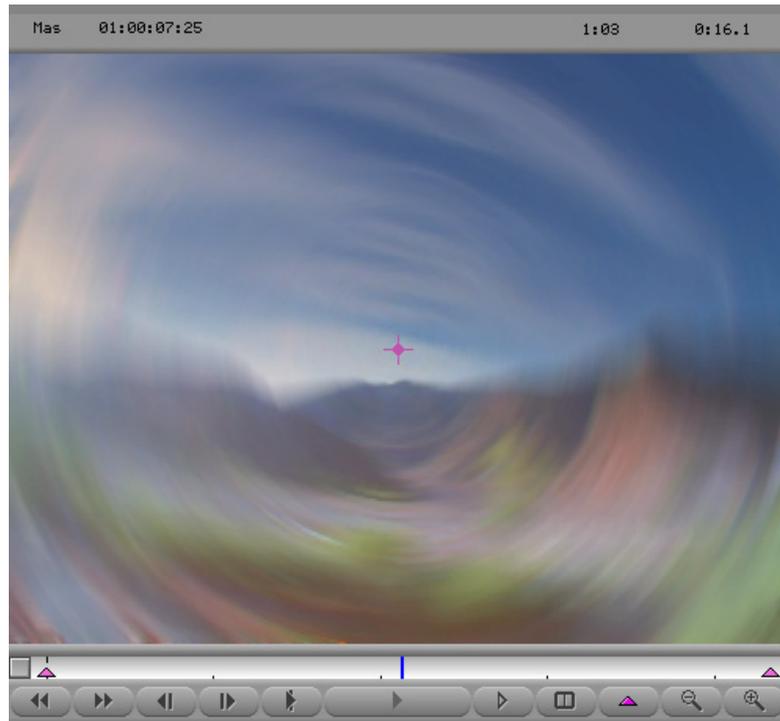### X and Y

Set the center of the effect.

Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Radial Blur

This segment effect blurs the image inward or outward from a user-defined point, and around a user-defined rotation. The zoom factor can be controlled.

Input Parameters

Zoom

Sets the scaling of the blur. Smaller values zoom in and larger values zoom out.

Angle

Sets the rotation of the blur.

This effect can take a long time to render. The greater the angle, the more time it will take to render the effect.

X and Y

Set the center of the effect.

Mode

Sets whether the effect is rendered, or just the center marker shown. Choose the required option from the pop-up menu:

- Choose Locate while setting up the center.

- Choose Render Low Quality, Render Medium Quality, or Render High Quality to render the effect.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Random Blend
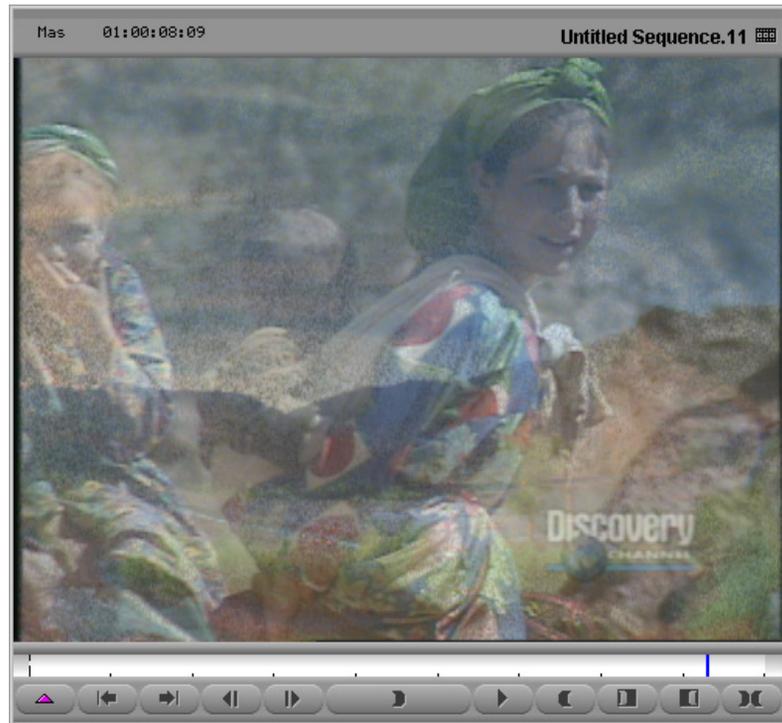
This transition effect uses a random pattern to blend the image of the incoming and outgoing video.

Input Parameters

Amount

Sets the amount of blend.

Random Scale

Sets the amount of randomness. This allows the system to blend different portions of the image at different rates.

Swap Sources

This option allows you to specify whether to apply the effect to the incoming or outgoing video. This parameter is not keyframeable.

Region Stabilize

This segment effect eliminates unwanted motion in a video clip, such as motion from an unstable camera. Region Stabilize allows you to select an area of the image that you want to remain stationary and then uses the information to reposition each frame in the clip to keep the region steady.

Stabilization exposes black around the edges of the repositioned frames. You can resize (and, if necessary, reposition) the rendered clip to remove the exposed edges. Auto Zoom, in the Options parameter category, does this automatically.

You must render this effect to see the result.

This effect appears in the Image category of the Effect palette.

Model

The following options allow you to select the type of stabilization:

- **Translational** — Keeps the region of interest steady along both the horizontal and the vertical axes.

- **Horizontal** — Constrains horizontal motion in the region of interest. Objects in the region of interest can move vertically but not horizontally.

- **Vertical** — Constrains vertical motion in the region of interest. Objects in the region of interest can move horizontally but not vertically.

Region of Interest

These sliders define the area of the image that is to remain stationary. Use the T (top), L (left), B (bottom), and R (right) sliders to set the corners of the region of interest.

You can also change the size and position of the region of interest by dragging the wire frame in the Effect Preview monitor.

Options

Auto Zoom

Stabilization exposes black around the edges of the repositioned frames. Auto Zoom compensates by resizing and, if necessary, repositioning the clip to remove the exposed edges.

Progressive Source

Use this option if your footage was captured or converted to progressive footage (i.e., not interlaced). If your sources are progressive, enabling this button produces smoother results. This option has no effect in 24p projects because the system assumes that you are using progressive footage.

Using the Region Stabilize Effect

To stabilize a segment:

1. Drag the Region Stabilize Effect icon to the segment you want to stabilize.

2. Click the Effect Mode button in the Tool palette.

   A wire frame appears in the Effect Preview monitor to indicate the region of interest. This is the area you want to use in stabilizing the image.
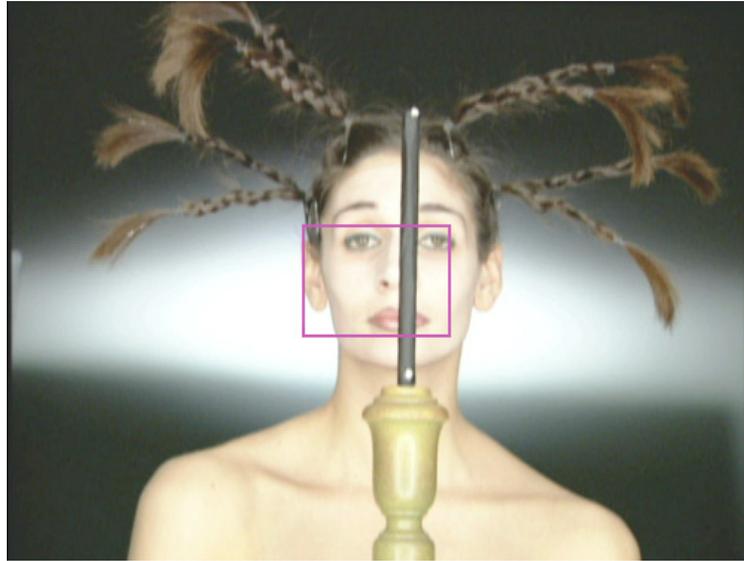
3. Reposition and resize the wire frame by doing one of the following:

▸ Use the sliders in the Region of Interest parameter category.

▸ Click the wire frame, and drag it in the Effect Preview monitor.

Select a region that contains one or more features that do not change much from frame to frame, for example, objects such as buildings or rocks. Another approach is to shoot the scene with stabilization in mind: include an object, such as a reflective sticker, that you intend to use as your region of interest.

4. Choose the type of stabilization from the Model pop-up menu:

- **Translational** keeps the region of interest steady along both the horizontal and the vertical axes.

- **Horizontal** constrains horizontal motion in the region of interest. Features in the region of interest can move vertically but not horizontally.

- **Vertical** constrains vertical motion in the region of interest. Features in the region of interest can move horizontally but not vertically.

5. (Option) Turn on Auto Zoom:

   Stabilization exposes black around the edges of the repositioned frames. Auto Zoom compensates by resizing and, if necessary, repositioning the clip to remove the exposed edges.

6. Render and review the effect.

   If the rendered clip does not perform as expected, see "Making Adjustments to the Region of Interest" on page 49.

7. (Option) Add keyframes to further refine the motion of the stabilized clip.

8. Continue to review and refine the effect until you achieve the results you want.

9. (Option) Resize and, if necessary, reposition the clip to eliminate black edges.

Making Adjustments to the Region of Interest

If the Region Stabilize effect does not perform as expected, it might be due to one of the following:

- **Large motion.** If an object in your region of interest moves too far away from the region from one frame to the next, the rendered clip might display unexpected results.

- **Extraneous motion.** An object in your region of interest might move over the course of the clip in a way that unpredictably affects the stabilization.

- **Insufficient texture.** The region of interest might not have enough features to allow Region Stabilize to track it effectively.

If the Region Stabilize effect does not perform as expected, experiment with the following adjustments:

- Increase the size of the region of interest, or reposition it, to encompass large motion.

- Decrease the size of the region of interest to eliminate extraneous motion that is affecting the stabilization.

- Choose a new region of interest.

- Add keyframes to reestablish or refine the region of interest over the course of the clip.

Ripple

This segment effect creates ripples on the image, as if you dropped a stone into a pond. The number of ripples; their size, speed, and spread; and the color and direction of the light can be controlled.

Motion Parameters

Amount

Sets the progression of the animation. The larger the difference in the time value between keyframes, the faster the effect will happen.

Wave Speed

Sets how fast the waves move.

Ripple Spread

Sets the width of the ripple from the inner ring to the outer ring.

Reflections

Sets whether or not the waves physically reflect off the edges of the image — as though hitting a wall.

Generation Parameters

Strength

Sets the height of the waves.

Length

Sets the distance between the wave peaks.

Number of Ripples

Sets the number of ripples.

Random Seed

This is a base number upon which all random values are calculated. Each value will result in a different random effect. This parameter is not keyframeable.

Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Illumination Parameters

Color

Sets the color of the light. Select the color using the Windows Color dialog box or the eyedropper, or by directly manipulating the RGB sliders.

Angle

Sets the source direction of the light. A value of 0 degrees is three o'clock; positive values move counterclockwise.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Rollup

This transition effect rolls up the foreground clip to reveal the background clip. The size and direction of the rollup can be controlled.

This effect is similar to the Page Curl effect. Rollup has more flexibility, but Page Curl adds a highlight along the curled edge.

Input Parameters

Amount

Sets the proportion of each clip to be displayed. A value of 0 displays all of the foreground clip; the maximum value displays all of the

background clip. The normal animation would be from 0 at the first frame to the maximum value at the last frame.

Curl Size

Sets the size of the roll.

Direction

Sets the direction of the roll-up. A value of 0 degrees is three o'clock; positive values move counterclockwise.

Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Swap Sources

This option allows you to specify whether to apply the effect to the incoming or outgoing video. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Shear
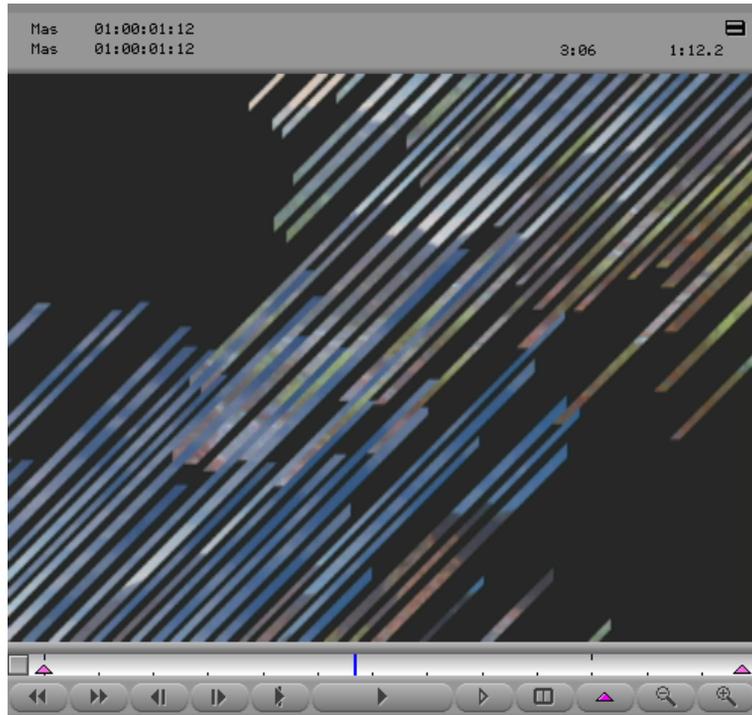
This transition effect divides the foreground clip into strips and moves alternate strips away in opposite directions to reveal the background clip.

Input Parameters

Amount

Sets the proportion of each clip to be displayed. A value of 0 displays all of the foreground clip; the maximum value displays all of the background clip. The normal animation would be from 0 at the first frame to the maximum value at the last frame.

Min Width and Max Width

Set the minimum and maximum possible width of the slats.

Width Randomness

Controls the variety of sizes of slats. The system creates slats of various widths in between the minimum and maximum width value.

Spread

Sets the randomness of when individual strips start moving. A value of 0 causes all strips to start at the same time.

Angle

Sets the direction of the effect. A value of 0 degrees is three o'clock; positive values move counterclockwise.

Random Seed

This is a base number upon which all random values are calculated. Each value will result in a different random effect. This parameter is not keyframeable.

Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Swap Sources

This option allows you to specify whether to apply the effect to the incoming or outgoing video. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Sparkler
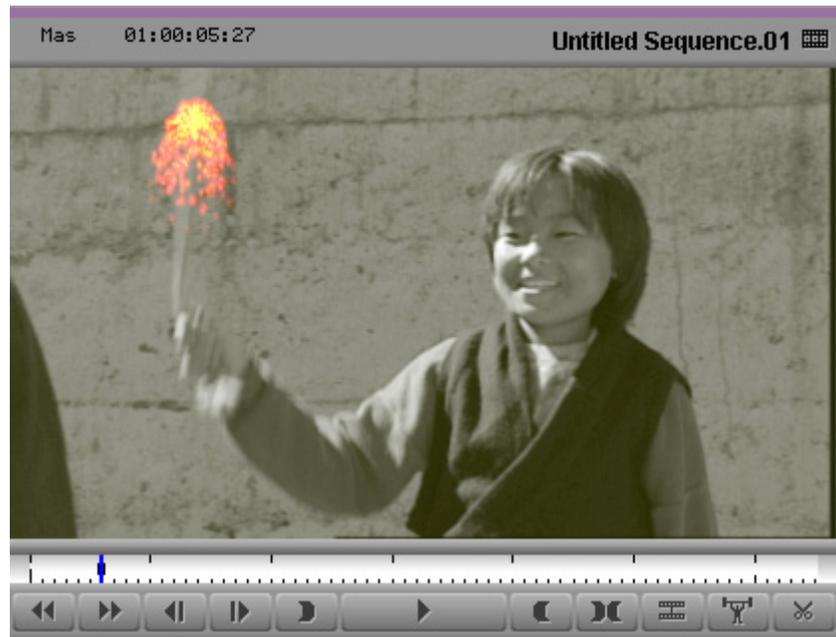
This segment effect creates random sparks or fireworks. The number and nature of the sparks can be controlled.

Generation Parameters

Birth Rate

Sets the number of sparks generated every frame.

Lifetime

Sets how long each spark lives in frames.

X and Y

Set the center of the effect.

Link Speed

If animating the center, causes the movement of the center to be added to the movement of the sparks.

Length

Sets the accumulative exposure of the sparks. For example, a value of 3 produces an image that looks as though you left a virtual camera shutter open for the last three frames.

Speed Bias X, Speed Bias Y

Set the bias to the direction of the sparks; these values are added to the initial random directions.

Movement Parameters

Speed

Sets the value around which the speed of the sparks is randomized.

Gravity

Sets the attraction of the sparks downward or upward. The greater the value, the more the sparks are attracted downward.

Air Resistance

Set the air resistance. The higher the value, the less the sparks will radiate outward.

Wind X, Wind Y

Set a virtual directional wind, which affects the trajectory of the sparks.

Air Resistance must be greater than 0 for Wind to have an effect.

Turbulence

Adds randomness to the movement of the sparks.

Glow Parameters

Glow Radius

Sets the radius of the glow in pixels.

Glow Color

Sets the color of the glow. Select the color using the Windows Color dialog box or the eyedropper, or by directly manipulating the RGB sliders.

Core Parameters

Core Radius

Sets the radius of the core in pixels.

Core Color

Sets the color of the core. Select the color using the Windows Color dialog box or the eyedropper, or by directly manipulating the RGB sliders.

Sphere

This segment effect creates a spherical distortion in the image. The size and position of the sphere can be controlled.

Input Parameters

Amount

Sets the scale of the distortion. Negative values distort the image inward; positive values distort it outward.

Size

Sets the diameter of the circle as a normalized proportion of the vertical size of the image.

X and Y
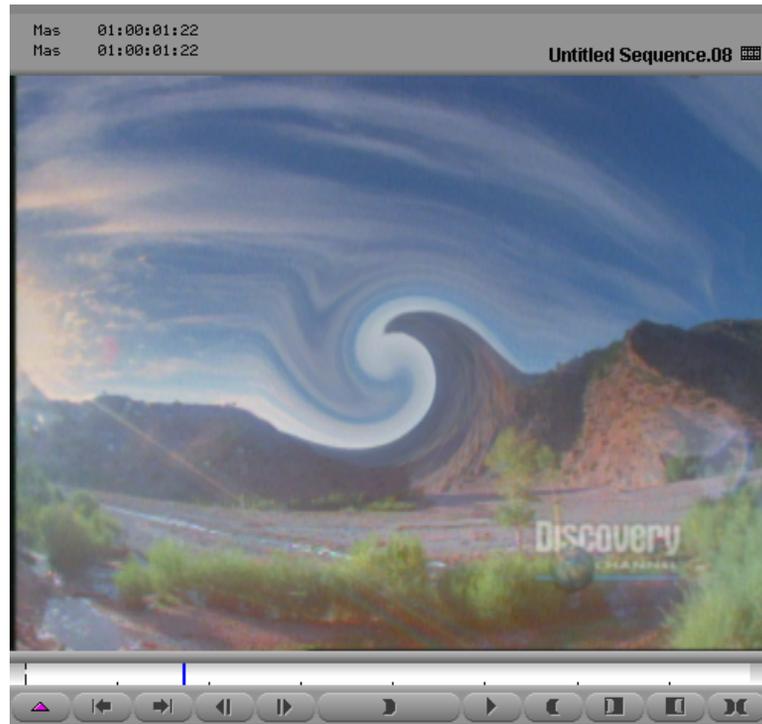
Set the center of the effect.

Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Swirl

This segment effect distorts the image by swirling the pixels within a circular area. The size and position of the circle and the amount of swirl can be controlled.

Input Parameters

Amount

Sets the amount of swirl. Negative values swirl the image counterclockwise; positive values swirl it clockwise.

Size

Sets the diameter of the circle.

X and Y

Set the center of the effect.

Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Timecode

This segment effect allows you to add burn-in timecode on a clip. The system automatically increments the timecode on each frame of the clip. This effect works for 30-fps, 24-fps, and 25-fps projects.

This effect works well on a video mixdown or when you apply the effect to a separate uncut video filler track that plays above all other tracks. Applying the effect to adjacent clips can be time consuming because it means that you need to apply the effect, choose the appropriate starting timecode, and render the effect for each clip.

Feet and frames will be incorrect in a Matchback project.

> *The system uses the native timecode for the project. For example, in a 24p project, the system uses 24-fps non-drop-frame timecode.*

Input Parameters

Timecode Color

This menu allows you to choose between the following color schemes:

- White text with no background

- Black text with no background

- White text on Black

- Black text on White

Timecode Text Font and Size

This menu allows you to set the font and size of the timecode text.

X and Y

Set the position of the lower left corner of the effect. You can also drag the associated marker in the Effect Preview monitor.

Timecode Type

This menu allows you to identify the timecode type as follows:

- Non-drop — Uses a colon (:) as a separator

- Drop frame — Uses a semicolon (;) as a separator (applies only to NTSC projects)

- Feet and Frames — Uses either a plus sign (+) or an ampersand (&) symbol as a separator.

   The separator changes from + to & between the values 24 and 25. The + sign is used for 16mm projects and the & symbol is used for 35mm projects.

Frames per Foot

Use the slider to specify the number of frames per foot. This option applies when you choose Feet and Frames from the Timecode Types menu.

Start Timecode

These sliders allow you to choose the day, hour, minute, and second, and frame of the starting timecode. When you choose the Feet and Frames timecode type, you can specify the starting feet.

When Starting Timecode day is 0, the value does not appear. If day is non-zero, you can use it to identify items such as spool, reel, and so forth.

Twist
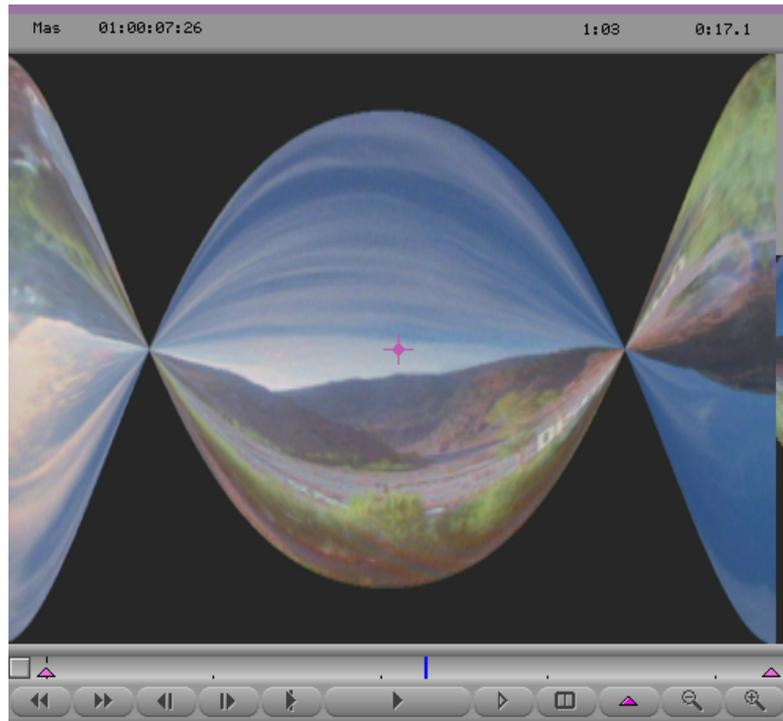
This segment effect distorts the image by twisting the two ends in opposite directions. The position and the amount of the twist can be controlled.

Input Parameters

Amount

Sets the amount of twist.

X and Y

Set the center of the effect.

Axis

Sets whether the twist is applied about the X axis or the Y axis.
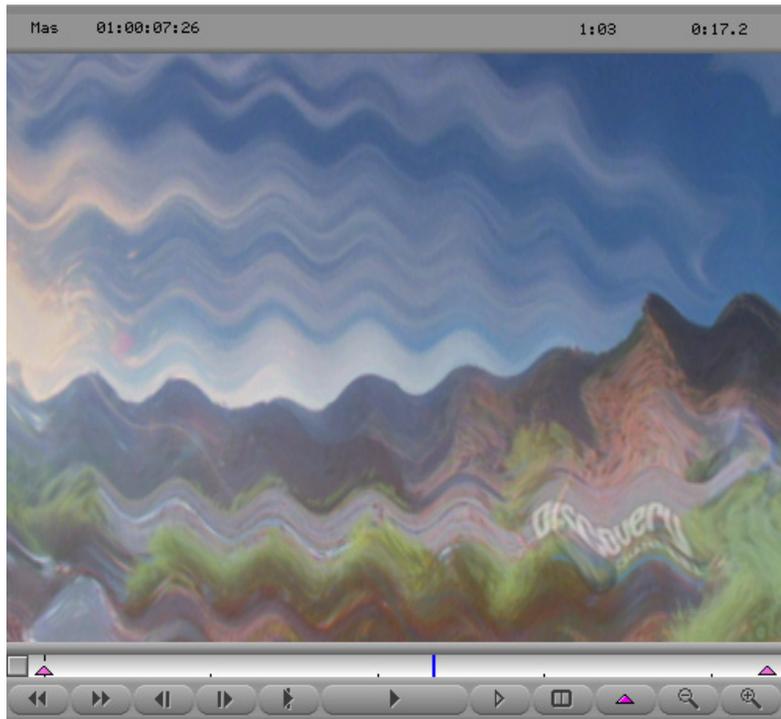
Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.

Wave


```
Mas    01:00:07:26                              1:03      0:17.2
```

This segment effect distorts the image by applying a user-defined number of waves to it. The size of the waves can be controlled.

Input Parameters

Amount

Sets the scale of the effect.

Minimum Size

Sets the minimum wavelength.

Maximum Size

Sets the maximum wavelength.

Horizontal Factor

The amount of horizontal distortion, where 0 is no distortion.

Vertical Factor

The amount of vertical distortion.

Number of Waves

Sets the number of waves. Wave effects are superimposed upon each other.

Speed

Sets the progression of the animation.

Random Seed

This is a base number upon which all random values are calculated. Each value will result in a different random effect. This parameter is not keyframeable.

Anti-alias

Sets whether or not transformed areas will be smoothed. This parameter is not keyframeable.

Border Parameters

Use the Left, Right, Top, and Bottom sliders to prevent black edges of the source clip from warping into the effect.