FX

3D Effects

EFFECTS VOLUME 1

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3D Basic Forms

3D basic forms are applied to objects which then, in turn, take on their shape. The resulting body can be manipulated and altered. 3D basic shapes can be successfully combined with one another or with other 3D effects.

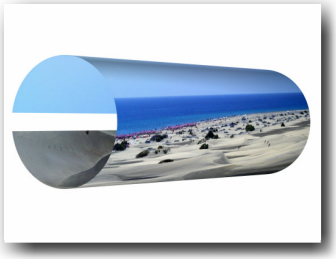
Amazing results can be achieved by animating the objects.

Why not spin the world?

Cylinder

This effect rolls up the object into a closed cylinder.

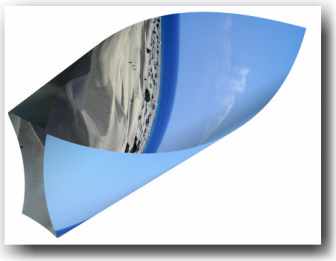
Parameter	Setting / Change	Range of Values
Amplitude	Intensity of effect	-100 to +100
Angle	Angle of rotation axis Complete rotation	0° to 360° -27776 to 27777
Center	Effect center (X / Y)	-2 to +2



Straight roll.

Amplitude

This parameter determines the intensity of the roll. At 0 the effect is not applied, meaning the sides are not rolled up. The higher the +/- value selected, the more the object is rolled. When negative values are used the sides of the object roll inwards, while positive values result in an outward rolling of the sides.

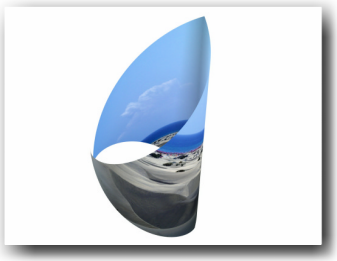


Diagonal.

Angle

The **angle** determines the direction of the roll and thereby which edges and corners are involved and to what extent.

The **Rotation** parameter determines the number of complete rotations the effect makes on the object.



Object is moving in space.

Center

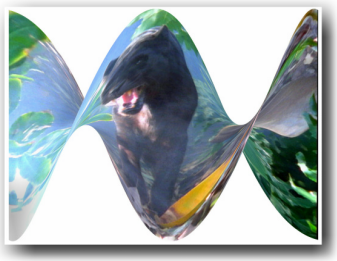
The center of the effect can be positioned anywhere on the object using the coordinate slider. This also determines the starting position of the roll.

If the amplitude is high and the effect center is placed at the edge of the object, the object rolls out of view.

Spiral

This effect rotates the object on a freely movable axis so that the rotation begins at the corners of the object and rotates regularly until the center of the effect is reached. The axis can be positioned as desired.

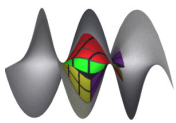
Parameter	Setting / Change	Range of Values
Revolutions	No. of rotations Angle	-2 to 2 0° to 360°
Direction	Angle of rotation axis Complete rotation	0° to 360° -1 to +1
Center	Effect center (X / Y)	-0,5 to +0,5

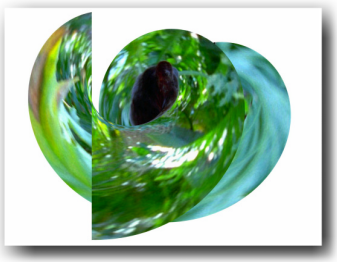


Uniform spiral.

Revolutions

The **Revolutions** parameter determines the number of **complete rotations** on the axis of rotation and as a result the shape of the effect. **Angle** helps with the finer tuning of intermediate values between full rotations.

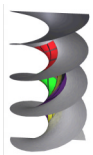




Angle of rotation has been moved slightly.

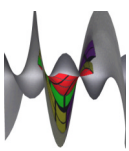
Angle of Rotation Axis

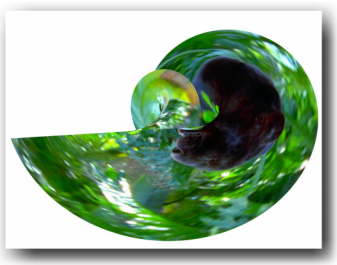
Direction: This parameter determines the angle of the rotation axis around which the object rotates in a spiral. **Revolutions** defines the rotation of the axis on the object. Combined with **Center**, this setting can create very profound deformations.



Center

Center: The center of the effect can be positioned freely on the object with the help of the coordinate slider.



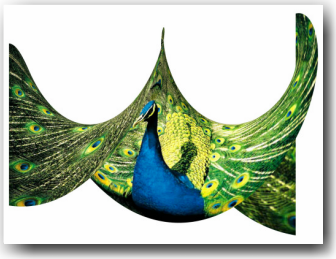


Axis has been moved to the edge of the object.

Twister

The object is twisted on a movable axis. Unlike the Spiral effect, the Twister can be made into a cone shape.

Parameter	Setting / Change	Range of Values
Revolutions	Full and partial rotations	-2 to +2
Direction	Angle of rotation axis Complete rotation	0° to 359° -1 to +1
Slope	Conical shape of twister	0 to 100

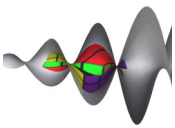


With two revolutions.

Twisted on the side.

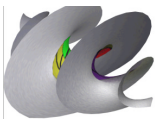
Various forms can result.

Revolutions



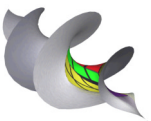
This parameter determines the number of **Complete Rotations** together with the degree of any partial rotations using the two text input boxes or the interactive control. The higher the values, the more the object twists on the axis of rotation. An angle of 180° produces a half rotation.

Direction



This parameter determines the **Angle** and therefore the position of the axis on which the object rotates. A **full rotation** turns the axis in a full circle.

Slope



The **Slope** parameter determines the gradient between the tip and the base of the twister. With high settings the slope is very steep and the twister forms a cone shape. With a gradient of 0 both sides of the twister are the same width, like the Spiral effect.

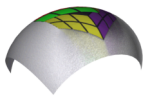
Parachute

This effect causes the object to arch like a parachute. All four corners of the object move in towards the same point.

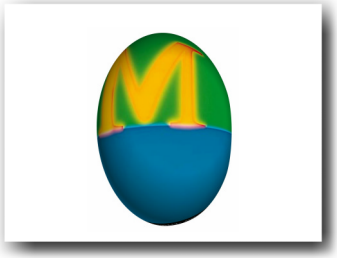
Parameter	Setting / Change	Range of Values
Amplitude	Strength of effect	-100 to +100
Center	Center of effect (X / Y)	-1 to +1

Amplitude

This parameter determines the strength of the arching effect. With a value of 0, the effect is not applied to the object so the object is in no way arched. The higher the +/- value, the more arched the object becomes. However, the object never curves so much that it turns into a ball.



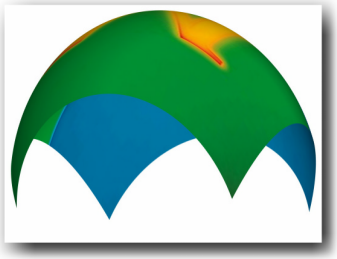
Positive values cause corners to arch backwards, while negative values cause the corners to curve forwards.



Arched backwards.

Center

The **effect center** can be positioned anywhere on the object using the coordinate sliders.



The object can be rotated in any direction.

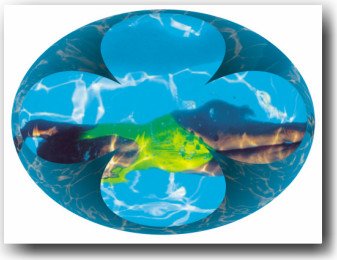
If the effect center is positioned on the edge of an object, the object may partially disappear from view depending on the canvas setting.

Slightly tilted.

Balloon

This effect curves the object until it becomes a closed ball or ellipsoid. The object is joined at the corners and not the edges. All four corners are reduced to one point. All edges of the object meet at one point.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of effect	-100 to +100



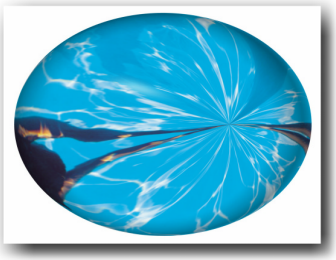
The corners are moving towards each other...

Amplitude

This parameter determines the strength of the curve. The effect is not applied when the amplitude is set to 0 and the object is therefore not curved.

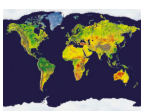
Positive values curve the object backwards, while negative values curve the object forwards.

A ball is formed only if the original object is a square. If the original is rectangular, an ellipsoid is formed which can then be stretched and scaled (into a ball) like all objects in MoviePack.



...until they meet at one point.

Closed ellipsoid.



These two source images (left) form a body which can be scaled, rotated, warped and animated. The earth rotates in the foreground against a wavy foggy background which is constantly changing (Sky object from MoviePack).

Globe

This effect curves the object until it becomes a closed ball or ellipsoid. The object is not joined at the corners but at the two edges. The other two edges are each reduced to a point, thus forming the axis.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of effect	-100 to +100
Cylindrical Deformation	Distortion of object	0 to 5
Vertical Direction	Position of the axis	On / Off

Original.

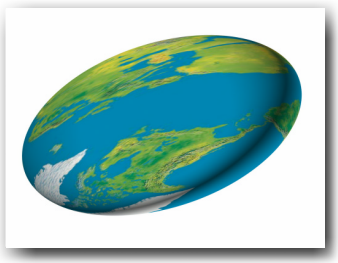
Amplitude

This parameter determines the extent of the curvature. At a value of 0 the effect is not applied to the object. The higher the chosen +/- value, the more the object curves. Negative values curve the object forwards, while the object curves backwards for positive values. A perfect ball is formed only if the object is square, otherwise an ellipsoid is formed.

The vertical contours are closing together.

Cylindrical Deformation

This parameter deforms the model. If the effect is applied to a square object, a value of 1 will result in a spherical deformation, i.e. the object becomes globular. Values lower than 1 shorten the axis, while values above 1 lengthen it. A value of 0 creates the strongest vertical deformation and the object becomes a disc. If the value is gradually increased from 1 to 5, the extent of the cylindrical deformation increases. Firstly the object becomes spherical, then ellipsoid and finally, at a value of 5, almost cylindrical, i.e. the poles (edges reduced to a point) open up but the joined edges do not.



Is the world really flat?

Vertical Direction

The **On / Off** switch determines whether the axis will lie vertically or horizontally.

Example

Creating a globe from a flat map.

- The map must first be scaled to a square (**Transformation**).
- Select the Globe effect from the **Browser** by dragging the effect icon onto the object (Map) in the **Timeline**.
- Switch **Vertical Direction ON**. This causes the object to curl on an imaginary vertical central axis.
- Set **Amplitude** to **100**. The object curls up into a ball.
- **Scale** the object until it almost fills the canvas. The object becomes naturally smaller when it curls up.
- Unify all parameters. On the **Object** menu, click **Unify** and then the **Unify Keyframes** button.

- Position the Timeslider in the **Timeline** at the temporal end of the object.
- Rotate the object on the Y axis using **Transformation** **Rotate**. Set or rotate the Y axis rotation to 1 full rotation.

3D Effects

3D Effects are constructed from built-in wireframe models. An image or video is then applied automatically as a texture to this real 3D model. Fascinating effects can be created quickly and easily.

MoviePack has many ready-made 3D functions and models. There is no need to go through the tedious and complicated process of creating them from scratch, simply adjust the parameters to adapt the model to suit your needs. This is why using and working with 3D within MoviePack is as easy as child's play even for the uninitiated.

Whirl

This effect deforms the object concentrically, i.e. it distorts the object into a vortex. This effect can be applied both to a flat surface and to a 3-dimensional object.

Parameter	Setting / Change	Range of Values
Angle & Zone	Full rotation Direction using angle Effect center Radius	-1 to +1 0 to 360 -2 to +2 0,2 to 2
Linearity along the radius	Consistency of the whirl	0 to 100

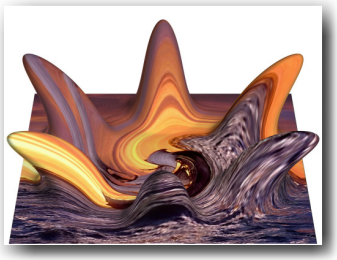
On a flat surface.

Angle & Zone

Rotation determines the number of complete rotations the effect makes on the object. The **Angle** can be set between 0 and a full rotation. A negative value changes the direction of the effect.

The **Center** of the effect is set using the coordinate slider.

The **Radius** determines the diameter of the effect.



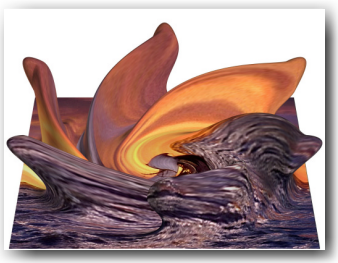
First Whirl, then Fingers.

Linearity along the radius

This parameter determines the consistency of the whirl. At a lower value, the whirl behaves like water that has been gently stirred. The higher the value, the more viscous the whirl becomes.

The sequence is important when using this effect together with other 3D effects. Without another 3D deformation the whirl would be flat.

If Whirl is used after another 3D effect, this 3D form will be deformed according to the Whirl. If the Whirl is used before other 3D effects, only the texture whirls, see the examples on the left.



First Fingers, then Whirl.

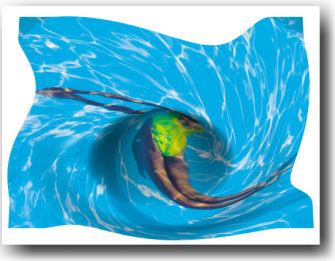
Whirlpool

This effect applies a whirlpool to the object which swirls forwards or backwards and whose size and form can be altered in many ways.

Parameter	Setting / Change	Range of Values
Angle & Zone	Rotation	-1 to +1
	Angle	-360° to +360°
	Effect center (X / Y)	-2 to +2
	Radius	0,2 to 2
Linearity along the radius	Consistency	0 to 100
Height	Depth or height of whirlpool	-100 to +100

Swirls downwards.

Swirls upwards.



The side of the clip is also drawn into the whirlpool.

Angle & Zone

Rotation determines the number and direction of the full rotations.

The **Angle** determines the degree of distortion and its direction between the limits 0 and a full rotation.

The **Effect Center** can be moved within the object. The two bars on the coordinate slider represent the X and Y directions and can be moved using the mouse. Numeric entry is available for more precision.

The **Radius** determines the diameter of the effect. The entire object is drawn into the whirlpool if the radius is very large or if the center of the effect is moved to the edge of the object, as shown in the example.

Linearity along the radius

This parameter determines the consistency of the whirlpool. At very low values the whirl behaves like water that has been gently stirred. The higher the value, the more viscous the effect becomes.

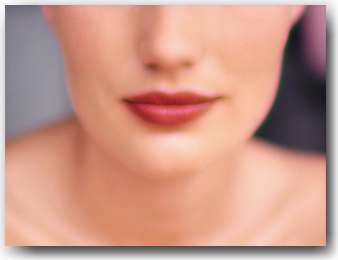
Height

The height or depth of the whirlpool can be altered using this parameter. There is no visible effect if the value is 0. Negative values swirl the whirpool upwards.

Jitter

This effect causes the object to jump back and forth creating the impression that the object is jittering. These movements are automatically carried out in all directions (X - Y - Z axes).

Parameter	Setting / Change	Range of Values
Rock	Force of jump	0 to 100
Roll	Force of rotation	0 to 100
Speed	No. of jumps over time	0 to 100



Original.

Force of jump

Rock: This parameter determines how vigorously the object moves from side to side, forwards and backwards and up and down. The higher the value, the more vigorously the object jitters. If the value is 0, the object does not move.

Force of rotation

Roll: This parameter defines how much the object is rotated. The higher the value, the more the object rotates while it jitters.

If the clip is reduced, the rotation is visible.

Speed

This parameter regulates the speed of the movements. The higher the value, the faster and more often the object moves. If the value is 0, the image moves very slowly.

To ensure that the jitter effect looks real, the clip must be scaled to a size where even if the clip moves vigorously the canvas is not visible.

Canvas remains visible.

Punch

This effect generates a moving bulge on the object, which can be greatly altered in form.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of effect	-100 to +100
Zone	Center of Effect (X / Y) Radius	-3 to +3 0,1 to 3

Size can be selected as desired.

Amplitude

This parameter determines the height of the punch. A positive amplitude creates a punch on the front of the object, a negative value generates a punch on the reverse side. The effect can be seen more clearly if the object is turned on its side.

Zone

This parameter determines the position of the effect center, which can also be outside the object. Moreover, the radius of the punch can be altered.

Two punches: one forwards, the other backwards.

- The **Effect Center** can be altered either using the coordinate slider or numerically.
- The **Radius** can be set using the mouse or numerically. This determines the circumference of the effect. A lower value means that the effect will be applied near to the effect center. The higher the value, the more the circumference increases until the object begins to curve slightly.

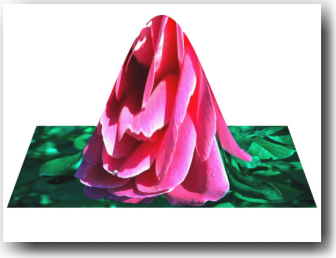
Even the most varied contortions are possible.

Effects can be cascaded on an object (used repeatedly one after another). In the center example the Punch effect has been applied twice to the object. It is also possible to apply many different effects one after the other.

Peak

This effect can generate deformations ranging from gentle hill shapes to sharp peaks. The shape and movement of these deformations can be altered.

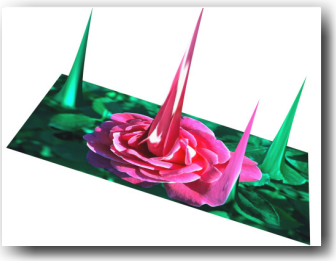
Parameter	Setting / Change	Range of Values
Amplitude	Height of deformation	-100 to +100
Zone	Effect Center (X / Y) Radius	-1,5 to +1,5 0,1 to 2
Shape	Shape of deformation	0 to 100



"Rounded" peak, at the front.

Amplitude

This parameter determines the height of the deformation. If the slider is set to 0, the effect is not applied to the object. The higher the +/- value, the higher the deformation. Negative values generate a peak on the reverse of the object, while positive values generate a peak on the front of the object.



Several small peaks.

Zone

This parameter determines the position of the effect center, which can also be outside the object. Moreover, the radius of the peak can be altered.

- The **Effect Center** can be altered either using the coordinate slider or numerically.
- The **Radius** can be set using the mouse or numerically. This determines the circumference of the effect. A lower value means that the effect will be applied near to the effect center.

Shape

This parameter defines the shape of the peak. The lower the value, the wider and flatter the deformation appears on the object. The higher the value, the sharper and thinner the deformation.

The deformation can be turned inside out.

Cone

This effect curves the object into a cone.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of Effect	-100 to +100
Zone	Radius Effect Center (X / Y)	0,2 to 2 -1,5 to +1,5

Cone base gradually merges with the flat surface.

Amplitude

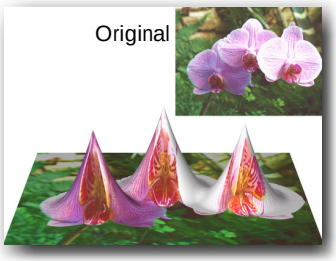
This parameter determines the height of the cone. If the slider is set to 0, the effect is not applied to the object. Minus values generate a conical deformation on the reverse of the object, while plus values generate a cone on the front of the object. The higher the +/- values, the taller the cone.

Zone

The **Radius** of the effect is determined using this parameter. The lower the given value, the more pointed the cone becomes. The higher the value, the wider and flatter the cone.

The **Effect Center** is determined using the coordinate slider.

Center of the effect is outside the object.



Several cones can be applied at once.

Membrane

This effect creates moving deformations on the object. These deformations can be altered in number and shape and can be made to vibrate.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of Effect	0 to 100
Radius	Effect Circumference	0 to 2
Speed	Speed of Vibration	0 to 100
Nodes in x direction	No. of deformations in the x direction	0 to 6
Nodes in y direction	No. of deformations in the y direction	0 to 6

Several nodes mean that the deformations are taller in the middle.

Amplitude

The amplitude determines the height of the deformation. If the slider is set to 0, the effect is not applied to the object. The higher the value, the more pronounced the deformation will be. The effect can be seen more clearly if the effect is turned on its side.

Nodes in only one direction.

Radius

Radius determines the circumference of the effect. Lower values mean the effect is applied near to the effect center resulting in a pointed deformation. The higher the value, the wider the circumference of the deformation becomes.

Speed determines the number of vibrations over a certain period. The deformation vibrates at values above 0. The deformation is also visible on the reverse of the object. The higher the value, the faster the vibrations.

Large Radius.

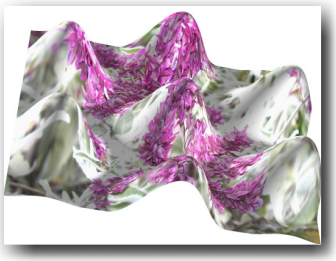
Nodes in X and Y direction

The deformations are divided into undulating elevations depending on direction. The higher the value, the more segments appear. If both x and y nodes are entered, several deformations are created which vary according to the number of nodes.

Punches

This effect deforms the object with numerous punches whose shape can be changed.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of Effect	-100 to +100
Angle & Size	Rotation Angle Center (X / Y) Radius	-27777 to 27777 0° - 360° -2 to +2 0,1 to 2
Density	Density of deformation	0 to 100



Deformations extend over the edge of the object.

The little punches can move around the object in a circle.

The smaller the spacing, the smaller the punches.

Amplitude

The parameter determines the height of the punches. If the value is 0, the effect is not applied to the object. Negative values create punches on the reverse of the object, while positive values produce punches on the front of the object. The higher the +/- value, the taller and more pointed the punches become.

Angle & Size

The **Rotation** parameter determines the number of full rotations the effect makes on the object; the little punches then move around the object in a circular fashion.

Angle values between 0 and a complete rotation are set using this parameter.

The **Effect Center** can be positioned anywhere within the object. If the effect center is positioned in the top right-hand corner, it seems as if the punches are running in a straight line from left to right.

The **Radius** determines the size and also the number of punches.

Density

Density determines the spacing between the punches. A higher value means the punches will lie close together, but not flow into one another. Each punch retains its assigned radius and height.

Ocean

This effect generates waves on an object - these act like waves on the sea which can merge together depending on the settings.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of effect	-100 to +100
Wave Control	Wave Rotation Radius Effect Center	0° to 360° -2 to +2 0,3 to 1 -3 to +3

Amplitude

This parameter determines the strength of the waves. If the slider is set to 0, the effect is not applied to the object. The higher the +/- value, the stronger the waves will be. Whether the values are positive or negative alters the effect very little, as the deformations occur on both the front and the back of the object.

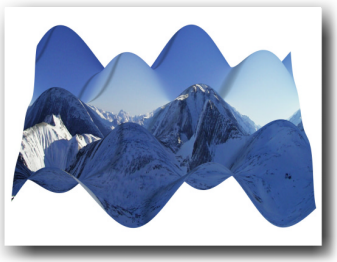
Corrugated waves are also possible.

Wave Control

The **Angle** enables the wave to move around the object in a circle.

Complete rotation is added to the angle. Positive or negative values determine the direction of the movement.

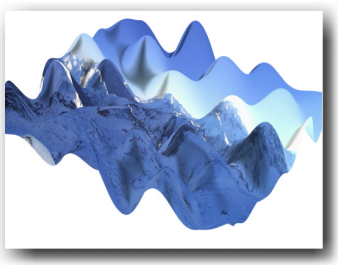
The **Radius** determines the circumference (size) of the wave and the number of waves as well.



Radius alters the size of the wave.

The coordinate slider allows the **Effect Center** to be placed anywhere on the object.

The difference between the **Ocean** and the **Punches** effects is that in **Ocean** the waves move irregularly over the object and they rise and fall like waves in the ocean. Oblong waves can also be created with certain parameter combinations.

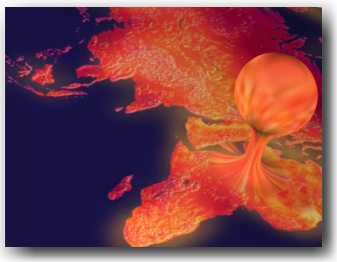


Irregular waves.

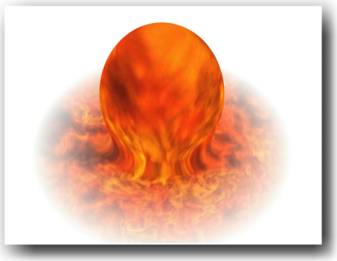
Bulb

A bulb emerges from the object. The bulb is attached to the object by a modifiable neck.

Parameter	Setting / Change	Range of Values
Neck		
Height	Height of the Neck	-1 to +1
Width	Width of the Neck	0,2 to 0,8
Radius	Radius of the bulb	0,1 to 0,5
Center	Effect Center (X / Y)	-1,5 to +1,5
Slant		
Slant	Slant of bulb	0 to 100
Slant Direction	Angle Rotations	360° to -360° -27777 to 27777



Thin neck.



With transparent border.

Slanted bulb.

Neck

If the **Height of the Neck** is set to 0, no neck joins the bulb to the object and the bulb lies on the object. The higher the value, the longer the neck will be. Negative settings cause the bulb to grow from the back of the object. Positive settings result in a bulb protruding from the front of the object.

The **Radius** determines the circumference of the effect. The higher the value, the thicker the neck becomes. Depending on the height setting, the neck may completely disappear.

The coordinate slider is used to position the **Effect Center**.

Slant

The shape of the bulb can range from a cone to a long ellipsoid. The higher the **Slant** value, the more slanted the neck becomes and the more deformed the bulb.

The **Slant direction** can be determined using **Angle**. Assigning a **Full Rotation** makes the bulb move in circles.

Steps

This effect generates circular shaped steps on the object.

Parameter	Setting / Change	Range of Values
Amplitude	Height of Plateau	0 to 100
Position & Size	Effect Center (X / Y) Radius	-3 to +3 0,1 to 3
Hardness	Contours	1 to 20

Height

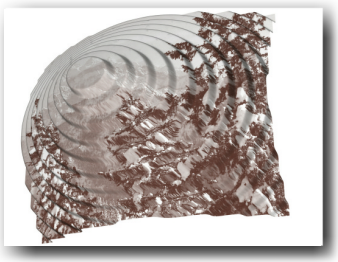
The **Amplitude** determines the height of the steps. If the slider is positioned at 0, the object remains flat. The higher the +/- values, the greater the steps. Negative values create steps on the reverse of the object, while positive values generate steps on the front. The effect can be seen more clearly if the object is tipped on its side.

Steps with smooth contours.

Position & Size

Effect Center: The center of the effect can be positioned anywhere on the object using the coordinate slider.

The **Radius** parameter determines the circumference of the effect. A low value means that the effect will be applied very close to the effect center and the number of steps increases. The higher the value, the wider the effect becomes.

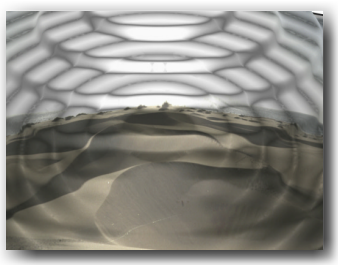


Small radius.

Hardness

This parameter alters the contours of the steps. At a setting of 1, the contours are smooth. The higher the setting on the slider, the sharper the contours become.

If this effect is used several times one after the other (cascaded), the steps run into each other and the contours gradually become softer until the object is recognisable again.

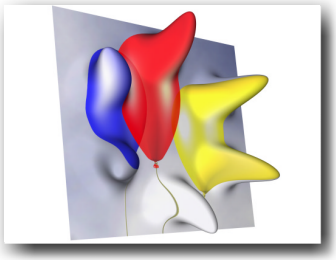


The steps overlap.

Fingers

This effect generates fingers which bore through the object.

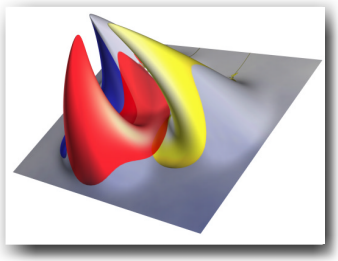
Parameter	Setting / Change	Range of Values
Amplitude	Length of the fingers	-100 to +100
Number of Fingers	Add / Delete fingers	1 to 12
Angle & Zone	Complete rotations Angle Radius Center of Effect (X / Y)	+/- 27777 0° to 360° 0,1 to 2 -3 to +3
Fold	Curve inwards / outwards	-100 to +100



Fingers curving outwards.

Amplitude

This parameter defines the length of the fingers. Lower values generate small hill-like protuberances that depend on the number of fingers and the radius. If there are many fingers, they will become thinner and longer as the amplitude increases. A large radius also lengthens and widens the fingers.

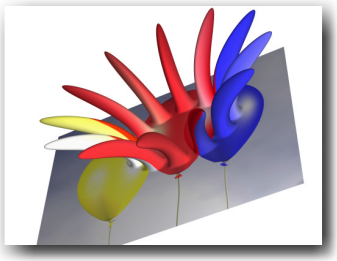


Curving inwards.

The **Number of Fingers** jutting from the object can be selected here. A setting of 1 generates one finger on the object, a setting of 12 generates 12 fingers etc.

Angle & Zone

The fingers move in a circle around the object; **Full Rotations** determines the number of full rotations. The **Angle** setting determines the partial rotations on the object. The fingers circle to the left or to the right. The angle can be entered either numerically or by using the graphic tools available.



The more fingers there are, the thinner they become.

The **Radius** alters the circle around which the fingers are arranged or rotated as well as the entire size of the object. The fingers become thicker and longer as the radius increases.

The **Effect Center** is also the center of the rotation. It can be positioned anywhere on the object using the coordinate slider.

The fingers can curve inwards towards the center or outwards, depending on the **Fold** settings.

Star Wave

This effect is closely related to the Fingers effect. However, the deformations are more like ripples than fingers.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of Effect	-100 to +100
Number of Fingers	No. of deformations	1 to 16
Angle & Zone	Angle Full Rotation Effect Center (X / Y) Radius	0° to 360° -27777 to 27777 -2 to +2 0,1 to 2

Small Waves.

Amplitude

This parameter defines the height of the ripples. The ripples protrude from both sides of the object. The higher the chosen + /- value, the higher the ripples. The height is also affected by the radius and number of fingers: 2 or 3 ripples will be much higher and thicker than 12 at the same amplitude.

Over the edge.

Number of Fingers

This parameter determines the number of ripples which emerge from the object. The width of the ripples is also affected by the number of ripples. The more ripples there are, the smaller they become.

Angle & Zone

The **Angle** determines how wide and in which direction the ripples should move around the objects.

Full Rotations determines the number of full rotations the wave makes on the object. The rotations can be in either direction depending on whether the setting is positive or negative.

The **Effect Center** can be positioned anywhere on the object using the coordinate slider.

Center is at the edge of the object.

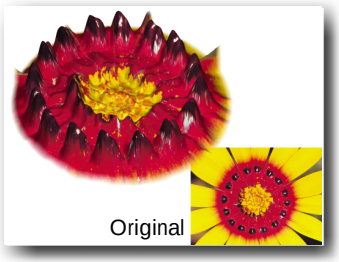
The **Radius** determines the size of the circle which the ripples will form and the shape of the ripples themselves. A smaller radius creates thin, pointed ripples, while a larger radius generates wider, flatter ripples.

Depth Mask

This effect generates a three dimensional object on the image, which takes the form of the chosen mask (image, clip, or objects like Titler or Chequer Board).

Flower over a flower.

Parameter	Setting / Change	Range of Values
Operation		
Amplitude	Height of Relief	-100 to +100
Equalize	Original Contrasts	On / Off
Invert	Inversion of dips and peaks	On / Off
Zero Shift	Equalizes displacement	-1 to +1
Smooth	Smooth Borders	0 to 100
Mask		
Change	Select another mask	Selection window
Zoom	Magnify mask	Zoom



Mountainous landscape.

After selecting this effect, you will be asked to "Choose a Source". As in the Browser, all the objects are at your disposal. Select an example with as much contrast as possible, as the dips and peaks are calculated according to light / dark contrasts of the source.

Operation

The **Amplitude** determines the height of the relief. Positive settings turn the light areas into relief on the front of the object. Darker areas remain flat. Negative settings generate a relief on the reverse side.

With a title.

Equalize emphasizes the relief by increasing the contrast in the mask (cf. the Equalize effect under Image Control).

Invert transforms the dips into peaks and vice-versa. The object is turned upside down so the base is displaced from zero.

Zero Shift moves the object vertically on the zero level so that the displacements throughout the effect are equalized.

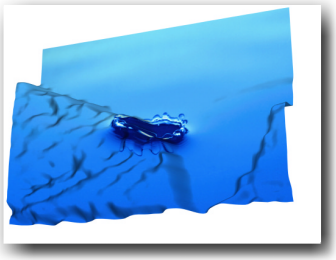
Smooth rounds the sharp contours of the relief.

Mask

In **Mask** it is possbile to enlarge the source by using **Zoom** or to select another mask using **Change**. If the source, for example the Chequer Board or a Titler, has its own parameters, they will also be shown and can be changed here.

If, for instance, a titler is used as a mask, all the parameters - font, size, color etc. can still be changed. It is therefore not necessary to define a titler beforehand and save it. Procedural images and objects with their own parameters are used in the same way.

No changes can be made to a clip or still image that has been selected as a mask. The length of the source automatically adapts itself to the length of the object, whether it is a clip, still image or another object.



The darker areas of the source remain flat.

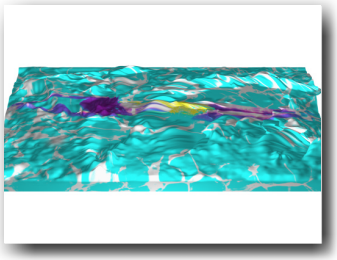
Title.

The Relief is easier to see if the object is tilted.

XYZ Depth Mask

This effect deforms the object using a mask. The three dimensional deformation is defined by the difference between the highest and lowest brightness values of the mask. The parameters change depending on the source. The relief can be displaced in all directions (XYZ).

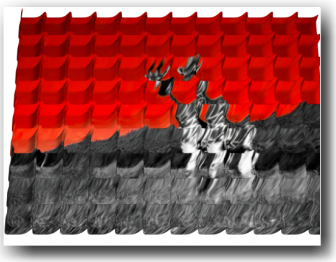
Parameter	Setting / Change	Range of Values
Basis	Amplitude	-100 to +100
	Equalize	On / Off
	Invert	On / Off
X / Y / Z	Amplitude	-100 to +100
	Shift	-1 to +1
	Smooth	0 to 100

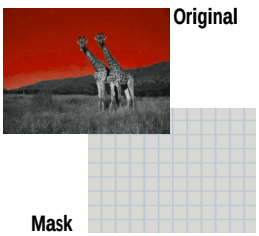


The mask is a map of the world.

Main

The **Amplitude** determines the strength of the effect. Negative values create a relief on the reverse of the object from the zero level. The direction of the deformation becomes clearer at higher amplitude values.





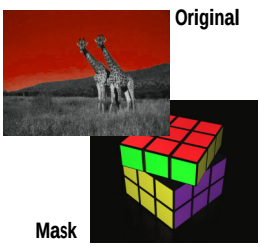
Equalize intensifies the contrasts in the source.

Invert switches the dips and peaks.

X / Y / Z

The **X/Y/Z Amplitude** determines the strength of the effect in the respective directions.

Shift can displace the entire object in any direction.



Smooth softens the jagged contours.

Mask

In **Mask** the source can be enlarged using **Zoom** or another mask can be selected using **Change**.

Correction by Z

This effect moves the object along the z axis and supplements position modification (along the x and y axes) in the transformation. A displacement in height can be seen when the object is tilted.

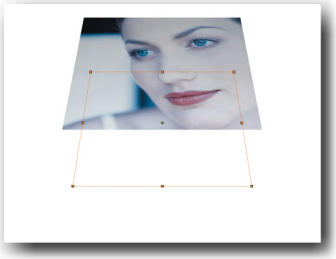
Parameter	Setting / Change	Range of Values
Amplitude	Correction of the z axis	-150 to +150

Amplitude

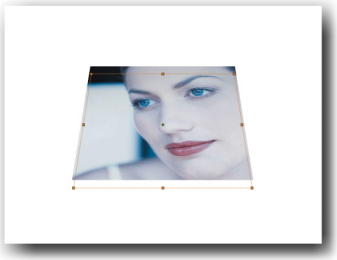
The slider controls the movement of the object along the z axis. At 0 the object remains in its original position on the z axis. Negative values cause the object to move downwards or backwards, while positive values result in the object moving upwards or forwards.

This effect is very important for post production editing with cameras and light and can be combined with the x/y positions of the **Transformation**.

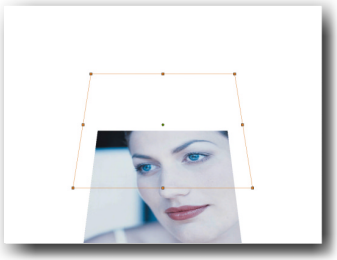
If the image is perpendicular to the camera (no rotation on the x or y axis) it appears as if it is becoming larger or smaller. The movement on the z axis is only visible if the image is at an angle to the camera.



Height displacement can be seen when the object is tilted.



The yellow object border indicates the original position.



Enlarges to canvas size, there is hardly any noticeable change.

Corrugated

This effect applies a regular wave pattern to the object.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of Effect	-100 to +100
Direction & Wavelength	Direction	0° to 360°
	Rotation	-27777 to 27777
	Center (X / Y)	-2 to +2
	Radius or wavelenght	0,1 to 2

Corrugated at 0 degrees.

Amplitude

The Amplitude determines the strength of the wave. If the slider is set at 0, the effect is not applied. The higher the positive or negative value, the stronger the wave will be in one or the other direction. The effect is clearer if the object is tilted to the camera.

Direction & Wavelength

Larger radius creates larger waves.

Direction determines the direction. An angle of 45° creates a diagonal wave on the image. The wave rotates if the angle is altered during an animation.

The parameter **Rotation** determines the number of full rotations the wave makes on the object.

The **Effect Center** can be positioned anywhere on the object using the coordinate slider. The wave moves around the image depending on the angle.

The waves are small if the radius is small.

The **Radius** regulates the **Wavelength**. Thus it also influences the number and size of the waves. The lower the value, the smaller and more numerous the waves become.

By switching between positive and negative values in the animation, the wave can be made to oscillate.

Surf

This effect applies a wave to the object which can be dramatically altered in behavior and shape.

Parameter	Setting / Change	Range of Values
Main		
Amplitude	Strength of effect	-100 to +100
Direction & Zone	Rotation Angle Radius Effect Center (X / Y)	-27777 to 27777 0° to 360° 0,1 to 1 -2 to +2
Advanced		
Wave Asymmetry	Angle Rotation	0° - 360° -27777 to 27777
Lateral Movement	Angle Rotation	0° - 360° -27777 to 27777

The wave can move in circles over the image.

Main

Amplitude determines the strength of the wave. If the slider is set at 0, the effect is not applied. The higher the + / - value, the more wavy the object becomes.

Direction & Zone

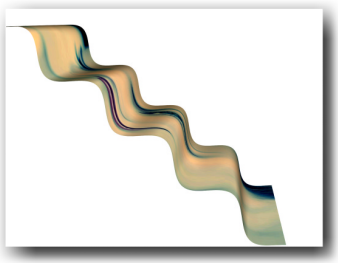
Angle defines the **Direction** of the wave. The waves move in a circle around the object between zero and 360°.

The **Rotation** parameter determines the number of full rotations the effect makes on the object.

Radius determines the wavelength. A lower value creates many small waves, a very high setting creates only one wave but the object becomes almost flat and distorted.

Moving the **Effect Center** determines the position of the waves. In the animation the wave moves over the object as a result of the position change. Depending on the **Direction** this movement may be linear or curved.

A small radius generates small waves.



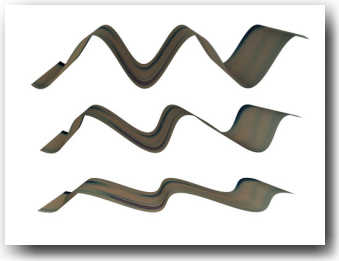
The wave is uniform if the angle settings remain unchanged.

Advanced

The two angles create an irregular wave.

These **Angles** define how steep the wave will be, in which direction and how strongly they slant (spherical coordinates).

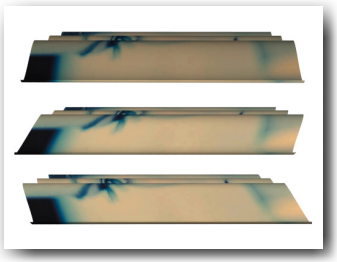
Wave Asymmetry



Wave assymetry..

Looking at the wave from the side, horizontally (see example), the wave moves in one direction depending on the **Angle**, until the wave appears to be almost flat and then becomes steeper again and vice-versa. **Rotation** enables this movement to be carried out numerous times.

Lateral Movement



Irregularities.

It is evident in the horizontal frontal view that the **Angle** has created a lateral movement. Again a **Complete Rotation** generates movement from an almost flat phase back to the original position. This parameter only alters the wave in conjunction with the wave asymmetry that is larger or smaller than zero.

Flag

This effect makes your object appear as if it is flapping in the wind.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of Effect	-100 to +100
Direction & Wavelength	Rotation Angle Radius or wavelength Effect Center (X / Y)	-2 to +2 0° to 360° 0,1 to 2 -2 to +2
Right Side?	Imaginary flagpole	On / Off

An angle of 0.

Amplitude

Amplitude defines the height of the wave. If the slider is set to zero, the effect is not applied. The higher the +/- amplitude, the stronger the wave is. Alternating positive and negative values create a vibration.

Direction & Wavelength

Angle determines the direction and origin of the wave.

Rotation determines the number of full rotations. The wave moves in circles around the object.

A smaller **Radius** creates a larger number of waves, while a large radius not only reduces the number of waves but also reduces their size.

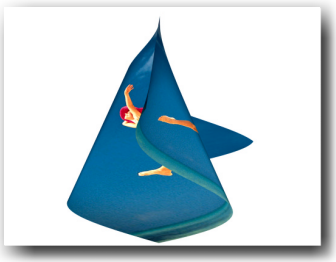
The **Effect Center** can be positioned either inside or outside of the object.

The flag flaps slanted in the wind.

If you want a billowing flag without a rotation, the effect center must move in the same direction as the wave (selected angle) between the beginning and end of the animation.

Right Side?

This parameter determines whether the flag should be fixed on the right side (**On**) or the left side (**Off**). An imaginary flagpole is thus created.

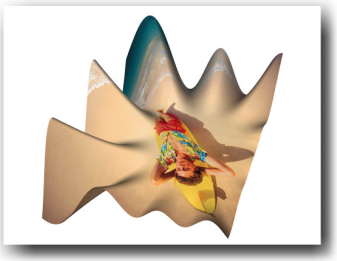


From the side.

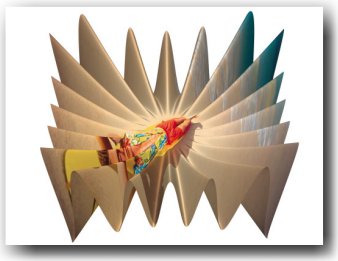
Crinkle

This effect transforms the outer borders of the object into crinkly waves.

Parameter	Setting / Change	Range of Values
Main		
Amplitude	Height of the wave	-100 to 100
Angle & Position	Angle Rotation Effect Center (X / Y) Radius	0° to 360° -27777 to 27777 -2 to +2 0,1 to 2
Number	Number of deformations	0 to 20
Advanced		
Wave asymmetry	Angle Rotation	0° to 360° -27777 to 27777
Lateral movement	Angle Rotation	0° to 360° -27777 to 27777



Large Radius.



The number of deformations can be chosen.

Wave asymmetry can cause irregularities.

Amplitude

Amplitude determines the height of the wave. If the slider is set to zero, the effect is not applied. The higher the +/- value, the stronger the wave. An up/down movement (vibration) results if the values are altered during the course of the animation.

Angle & Position

Angle determines the rotation and the direction of the effect on the object with +/- values.

The **Rotation** parameter determines the number of complete rotations. Positive and negative values affect the direction of the rotation.

The coordinate slider determines the position of the **Effect Center**.

An increasing **Radius** means that the area in the middle which is not wavy increases in size. At very high settings only slightly wavy borders are visible, as if the 'paper' has become wet.

Number

The **Number** of waves is determined by this parameter. Unlike other effects such as Fingers, the number of waves cannot be changed during the course of the animation.

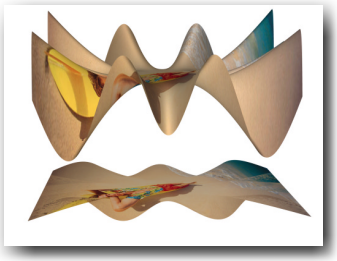
Displaced center.

Advanced

These **Angles** define how steeply the wave rises outwards and in which direction and how strongly they slant (spherical coordinates).

Wave Asymmetry

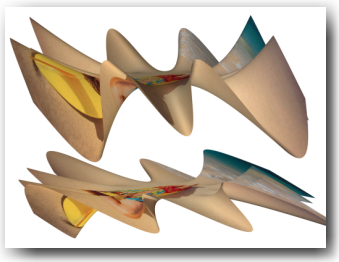
Looking at the wave from the side, horizontally (see example), the wave moves in one direction depending on the **Angle**, until the wave appears to be almost flat and then becomes steeper again and vice-versa. The **Rotation** enables this movement to be carried out numerous times.



Irregular waves.

Lateral Movement

If the **Angle** is altered over time, a lateral movement occurs if the wave asymmetry is greater than or less than zero and so, depending on the setting, the object may become extremely distorted.



Lateral deformation.

Envelope

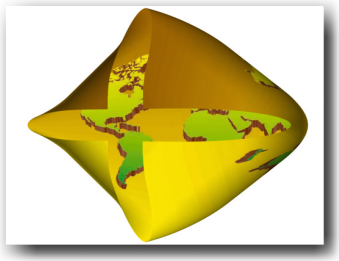
This effect folds over the corners or sides of the object like an envelope.

Parameter	Setting / Change	Range of Values
Amplitude	Effect Strength	-100 to +100
Angle	Direction of effect Rotation	0° to 360° - 27776 to +2777
Curl Radius	Strength of warping	0,1 to 0,5

The corners are folded inwards.

Amplitude

This parameter determines the extent of the fold. If the slider is set to zero, the effect is not applied. The higher the +/- value, the stronger the effect. Positive values mean the corners are folded inwards, while negative values fold the corners outwards. A very low setting means that the corners just curl slightly.



Round shape with a large curl radius.

Angle

Angle determines the direction of the movement and can be entered numerically or using the graphic control. Depending on the angle, the corners rotate to a certain position then back again.

A **Rotation** of the effect on the object is entered either numerically or by numerous rotations on the graphic control. The previously selected angle is added to the full rotation.

Curl Radius

This parameter controls the strength of the curve. A lower value generates a very strong curving of the edges. The higher the setting, the weaker the curving becomes and the envelope increases in volume.

Folded laterally.

Page Fold

This effect folds the object in any direction and to various degrees.

Parameter	Setting / Change	Range of Values
Amplitude	Effect Strength	-100 to +100
Direction	Rotation Direction of fold	-27777 to 27777 0 to 360°
Radius	Sharpness of crease	0,05 to 1
Position	Position of fold	-100 to 100

Amplitude

Amplitude determines the strength of the fold. If the slider is set to zero, the effect is not applied. The higher the +/- value, the stronger the fold. At a setting of 50 the angle of the fold is 90°. Positive values mean the page is folded inwards, negative values fold the page outwards.

Angle: 45 degrees.

Direction

Rotation determines the number of full rotations. The fold moves in circles around the object.

Angle determines the direction of the fold.

Large radius.

Radius

A low value creates a sharp crease, higher values mean the crease is more rounded.

Position

The position of the fold can be altered, it can even lie outside the object, which means the effect is not visible.

Rotated in space.

Page Curl

This popular effect causes an edge or corner of the object to curl. In contrast to Page Roll, where a roll is created, the curled areas simply curl and do not roll.

Parameter	Setting / Change	Range of Values
Amplitude	Effect strength	-100 to +100
Angle	Direction of curl Rotation	0° to 360° -27777 to 27777
Radius	Radius of curve	0,1 to 2
Slide	Displacement of object	-100 to +100

Flip the page!

Slide causes the object to move while the edges curl.

The effect from both sides.

Amplitude

Amplitude determines the extent of the page curl. If the slider is set to zero, the effect is not applied. The higher the +/- value, the stronger the effect. Positive values cause the page to curl inwards and negative values cause the page to curl outwards. The effect can be seen more clearly by tilting the object on its side.

If the slider is set to the highest possible +/- value, the object curls out of the canvas.

Angle

The **Full Rotation** of the effect on the object is entered numerically. The **Angle** is set between a value of 0 and 1 full rotation. The **Angle** also determines which corner or edge is to be curled.

Radius

Whether the curl is to be sharply folded or generously rounded is determined by **Radius**.

The **Slide** parameter controls the displacement of the object during the curl. Positive values move the object in the direction of the curl, thereby emphasizing the curl. Negative values displace the object in the opposite direction to the curl.

Page Roll

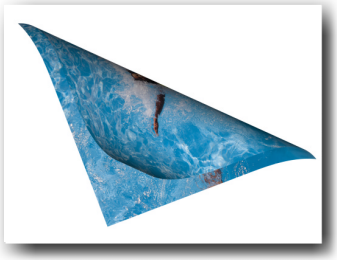
This effect causes the edges or the corners of the object to roll.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of Effect	-100 to +100
Angle	Angle Rotation	0° to 360° -27777 to 27777
Radius	Strength of roll	0,1 to 1

Amplitude

This parameter determines the extent of the page roll. If the slider is set to zero, the effect is not applied. The higher the +/- value, the stronger the effect. Positive values cause the page to roll inwards and negative values cause the page to roll outwards.

If the slider is set to the highest +/- value, the object rolls out of the canvas.



An Angle of 45 degrees.

Angle

Angle determines where the roll begins or ends.

The number of **Full Rotations** can also be entered.

A roll is created.

Radius

The parameter determines the strength of the roll. A setting of 0,1 results in a pronounced rolling of the object. The higher the value, the softer the roll. The size of the roll is also chosen here.

Depending on the radius, the roll can be thick or thin.

Dropping Wave

This effect generates a circular wave on the object.

Parameter	Setting / Change	Range of Values
Amplitude	Strength of Effect	-100 to +100
Dissipation	Scope	0 to 100
Phase & Zone	Rotation Angle Radius Effect Center (X / Y)	-27777 to 27777 0° to 360° 0,1 to 3 -3 to +3

Uniform wave.

Amplitude

This parameter determines the strength of the wave. If the slider is set to zero, the effect is not applied to the object. The higher the +/- value, the stronger the effect. Positive values create a wave on the front of the object while negative values generate a wave on the reverse.

The radius determines the wavelength.

Dissipation

This parameter defines the scope of the effect. The closer the slider gets to 0, the more extensive the wave becomes and secondary waves start forming. At 100, the wave is in the center and the outer wave is restricted. Used together with Radius, the most diverse shapes can be created.

Phase & Zone

Angle determines the movement of the wave on the object, or the **Phase**. With increasing values (whether angle or rotation) the wave moves outwards while the opposite is true for decreasing values. The center of the wave transforms into a plateau with increasing + values. The more **Rotation** over a certain time, the more quickly the wave moves.

The Phase determines the shape of the wave.

The **Radius (wavelength)** determines the size and circumference of the wave. Combined with **Dissipation**, this parameter determines the number of waves.

The **Effect Center** can be positioned anywhere on the object using the coordinate slider.