Power Illusion 1.8

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Photo Illusion

System Requirements

- Mac OS X or Windows XP

- 1024 x 768 Monitor Resolution
- At least 4 GB of free hard drive space
- 256mb of Ram memory minimum
- CD/DVD ROM Drive

Software Installation

1. Insert the Power Illusion CD
2. Double click the file “Installer”
3. Follow installer instructions

Table of Contents

Command Keys.....03

Preference Window.....04

Render Settings:.....05-09

Complex Scene Mode.....10-12

Simple Interlace Mode.....13-14

Movie Tools.....15-16

Step and Repeat tool: 17-18

Create Calibration tool:.....19

Calibrate Image tool:.....20

Print Options.....21

Tutorials.....22-44

- Pitching and Image Calibration.....22-26
- Complex Scene Editing.....27-34
- Simple Interlace Editing.....35
- Rendering.....36-37
- Power Repeat.....38-39
- Movie Import.....40
- File Import.....41
- Timeline Actions.....42-44

Command Keys

Command Mac/Control PC

New Scene.....Command-N
New Simple Interlace.....Shift + Command-N
New Scene from Photoshop.....Option + Command-N

Open Scene.....Command-O
Open Simple Interlace.....Shift + Command-O

Print.....Command-P

Save.....Command-S
Close.....Command-W

Preferences.....Command-,

Timeline: (Only active when the timeline is open)
Layer Add.....Command-G
Layer Delete.....Shift + Command-G
Layer Up.....Shift + Command-U
Layer Down.....Shift + Command-Y
Layer Copy.....Shift + Command-C

Add Track Position.....Option + Command-P
Add Track Rotation.....Option + Command-R
Add Track Scale.....Option + Command-S
Add Track Opacity.....Option + Command-O
Add Track Parallax.....Option + Command-Z
Delete Track.....Option + Command-T

Add Frame.....Command-F
Delete Frame.....Option + Command-F

Key Add.....Shift + Command-K
Key Delete.....Shift + Command-D
Key Left.....Shift + Command-L
Key Right.....Shift + Command-J

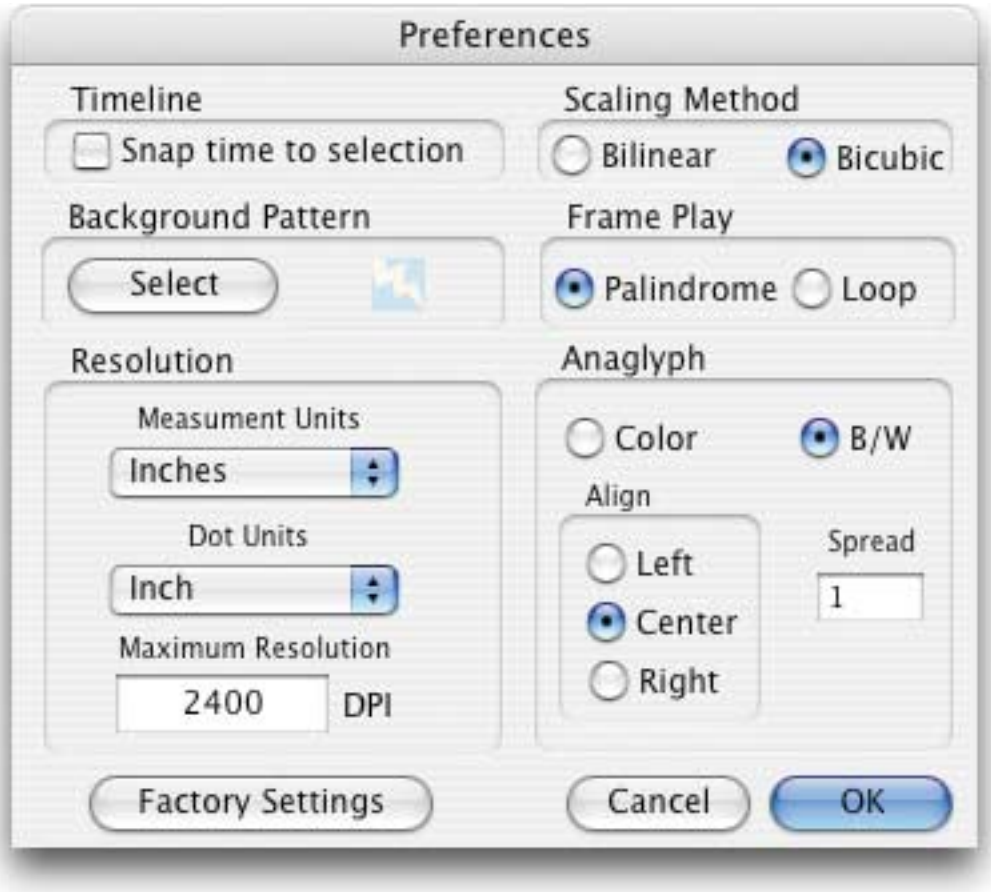
Render Settings.....Shift + Command-R
Render.....Command-R

Step and Repeat.....Command-1
Calibrate Image.....Command-2
Create Calibration.....Command-3

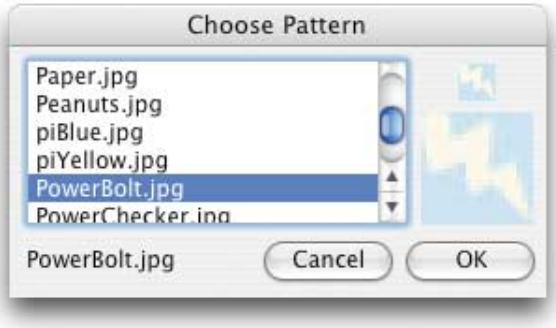
Quit.....Command-Q

Preference Window

The preference window allows the user to set some basic application functions that will be used on startup and in the general use of the application.



Timeline:
Snaps the time to the current selection.
Scaling Method:
Bilinear: Faster, but poorer quality scaling method.
Bicubic: Slower, but higher quality scaling method.
Choose Pattern window
Select: Click to choose a background picture. This tiling picture will be shown in cases of transparency with no background or in windows that do not yet have a frame or object loaded.



Frame Play: Determines the default playing method of frames.

Palindrome: Plays “start to end” then “end to start.”
Loop: Plays “start to end”.
Resolution:
Measurement Units: Inch, Centimeter, Millimeter, Feet or Pixels will be displayed in all related user input fields.
Dot Units: Inch, Centimeter, or Millimeter will be displayed in all related user input fields.
Maximum Resolution: The maximum resolution to use for calculating available resolutions.
Anaglyph:
Color: Display the anaglyph in color.
B/W: Display the anaglyph in black and white (preferred)
Align: This option will align the anaglyph to the left, center or right of the frames list.
Spread: The separation between frames used for creation of the anaglyph.
Factory Settings:
Resets the window placement to the factory settings.

Render Settings Window: Interlace Tab

The Render Settings Interlace tab is the main control point for the creation of interlaces.

Interlace: If this box is checked, Power Illusion will generate an interlaced file using the values in the Render Settings window.

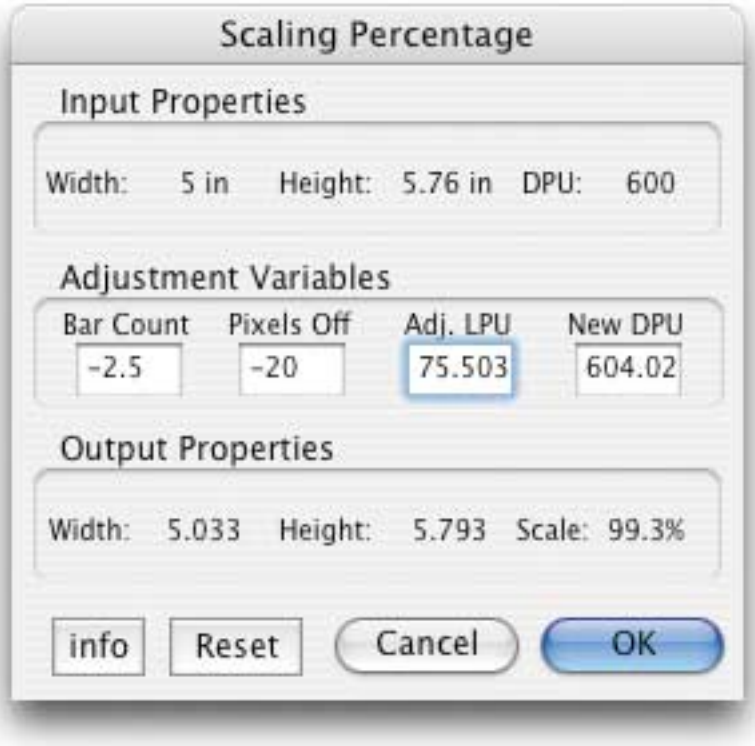
Lens:
LPU: The lines per unit of the lenticular pattern.
Vertical/Horizontal: The direction the file will be interlaced. Typically, vertical is used for 3D, and horizontal is used for animation.

Alignment:
Size: The size of the alignment pattern around the image.
Left, Right, Center: Specifies how the pattern will align.
Custom: Allows the user to open the alignment editor and create a custom pattern.

Render Settings Window: Interlace Tab: Scaling Percentage Editor

Size:
Width/Height: The size in preferred units of the output file.
Aspect: Keeps the aspect ratio of the image the same if either direction is modified up or down.

% (Scaling Percentage Editor):
Use this option to scale the image up or down depending on the amount of pitch deviation. To use click the percentage symbol and the Scaling Percentage window will appear. Enter the amount of pitch in any of the input fields and Power Illusion will calculate a new size for the image. Once pitched the image will return to the original size so that trims and cuts meet up.



Resolution:
Use Loaded: Use the currently loaded frame count to calculate output resolution.
Use Calculated: Allows the user to set the resolution and Power Illusion will automatically set up the correct number of frames and calculate any duplicates that need to be made. Not available in complex mode.

Scaling Method:
Bilinear: Faster but poorer quality scaling method.
Bicubic: Slower but higher quality scaling method.

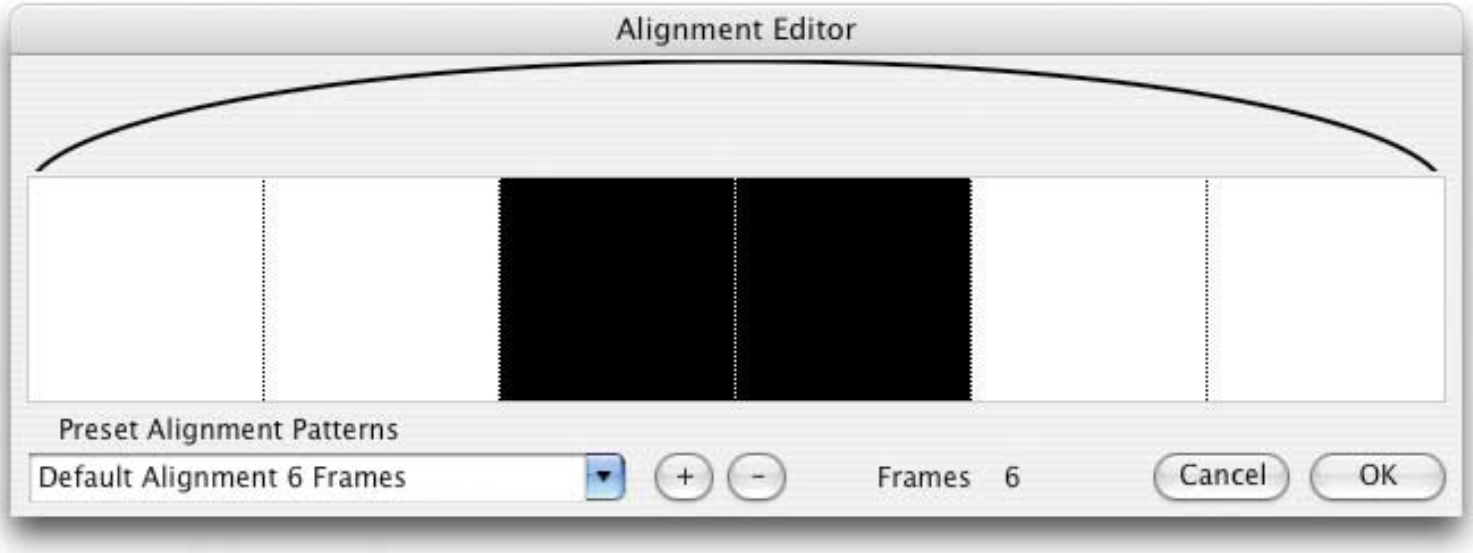
Output information:
The width, height, color mode and file size of the output interlace file.

Save File name:
The name of the interlaced file on output.

Render Now:
If checked, Power Illusion will render the file when the Render Settings dialog is closed.

Render Settings Window: Interlace Tab: Alignment Editor

The alignment editor allows the user to set up custom alignment patterns quickly and gives visual feedback.



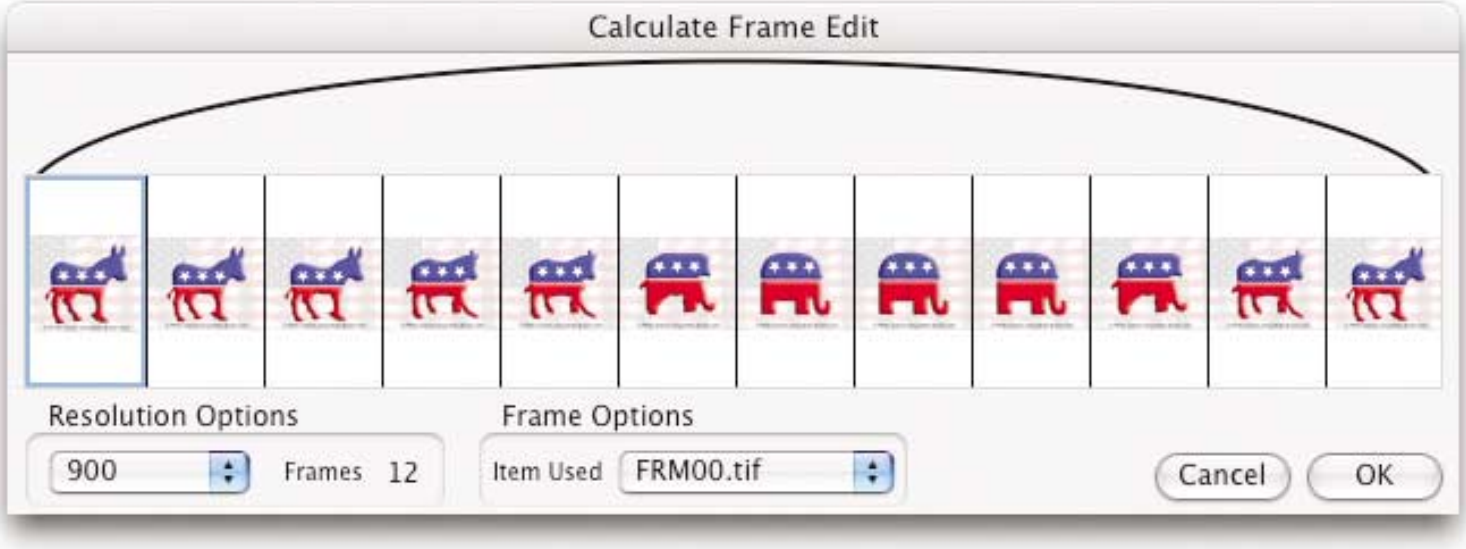
Frame Area: Click in a frame area to turn the value on or off for the selected frame.

Alignment Presets: Alignment presets allow the user to keep often- used alignment settings.

To add an alignment setting create a new name for it in the combobox and hit the “+” button. To Remove an alignment pattern select it from the combobox list and hit the “-” button.

Render Settings Window: Interlace Tab: Calculated Frame Editor

The Calculated Frame Editor allows the user to quickly duplicate or reduce the frame count to meet any resolution as well as set what image is used for each frame.



Frame Area: Click in a frame area to select the frame.

Resolution Options: Pull down the menu to select an output resolution. This resolution will be a multiple of the current LPU in the Render Settings window.

Frame Options: Once a frame is selected use the frame options to set any frame from the list into the one selected. Simply pull down and release on the desired frame and Power Illusion will use that frame in the rendering process.

To select a frame, click it in the window and it will highlight blue. To change the selected frame, select any frame from the pulldown list and the selected frame will be updated.

Render Settings Window: Frames Tab

The Render Settings Frames tab is the main control point for the creation of Frames.

Frames:
If checked Power Illusion will generate frames from the complex scene mode to the destination of choice.

Save File Name:
Allows the user to specify the folder name and individual frame names of the output files.

Anaglyph:
If this box is checked Power Illusion will generate an anaglyph image from the selected frames.

Left:
The frame that will be used for the left anaglyph view.

Right:
The frame that will be used for the right anaglyph view.

Save File Name:
Allows the user to specify the name of the output file.

Complex Scene Mode

The Complex mode is the primary mode for working in Power Illusion.

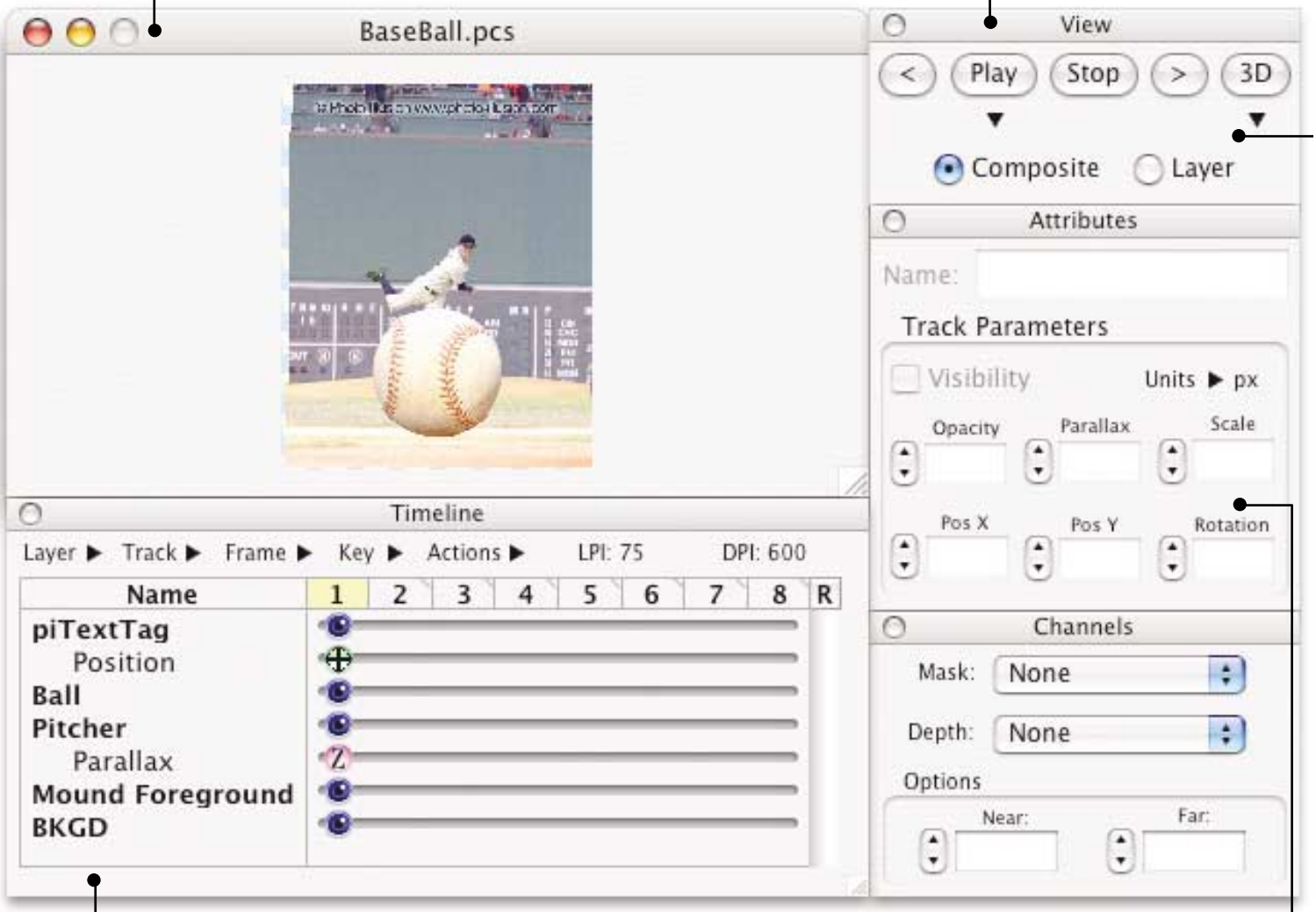
Overview

Preview Window

Allows for the preview of the project.

View Palette

Control for various viewing modes.



Channels Palette

Control for the depth map and mask of the selected layer.

Timeline Window

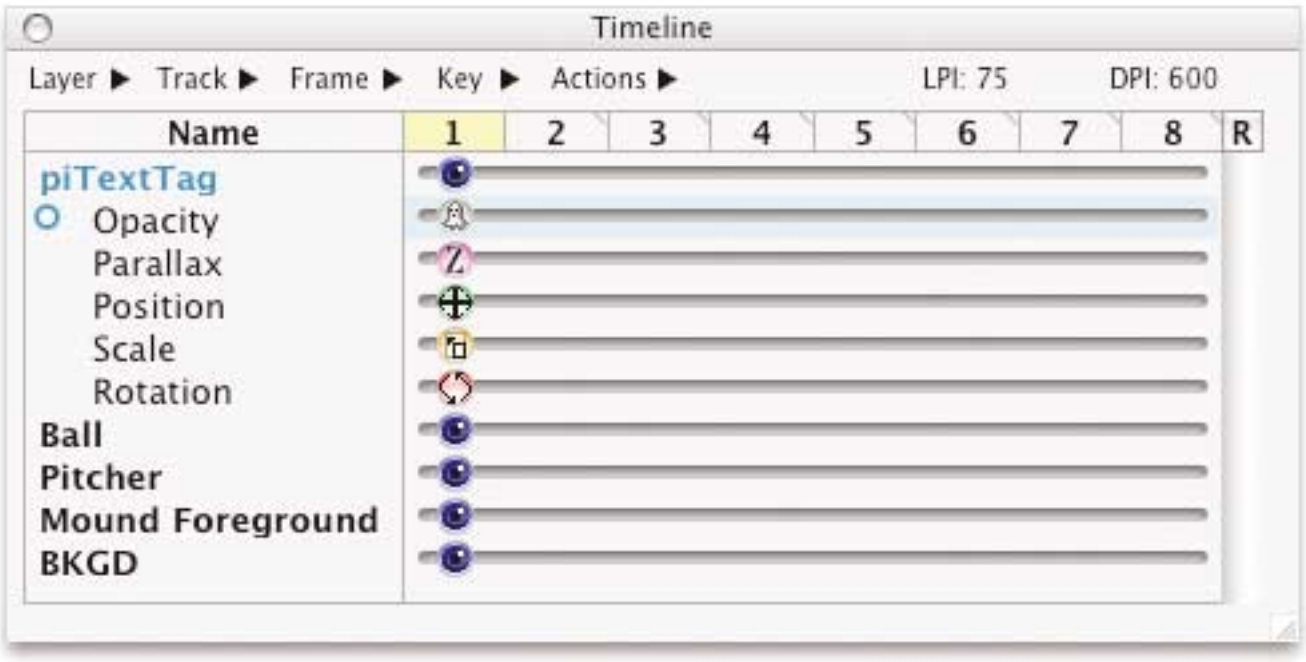
Control for all effects in the complex mode. Each layer can have opacity, parallax, position, scale, rotation and visibility tracks.

Attributes Palette

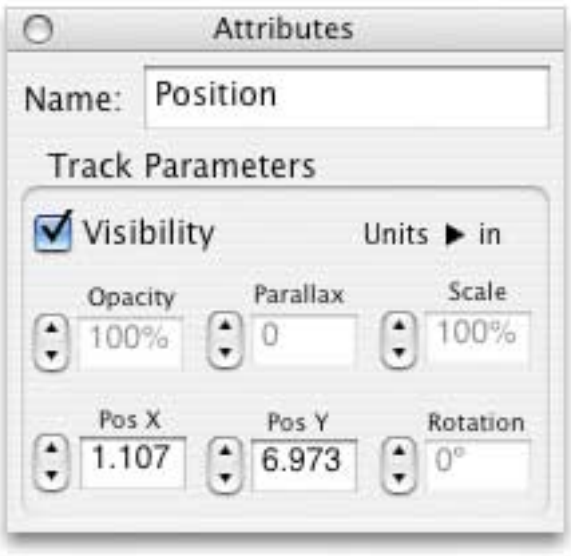
Control for entering values for any selected key in the timeline window.

Complex Scene Mode continued

Timeline: The Power Illusion timeline is a revolutionary tool for lenticular. The Timeline allows for control of a layer across the span of frames. Each layer has 6 available tracks visibility, opacity, parallax, position, scale and rotation. Each track can have a key for each frame. Keyframes allow for precise control over the tracks on a frame-by-frame basis. To add a track, from the timline menu pull down and add the desired track to a selected layer. To add a key to any selected frame on a track, command click the selected frame. The “R” Button in the top right corner causes a redraw of all frames.



Attributes Palette:



Name: The name of the selected layer.

Visibility: The visibility of the layer at the current key.

Opacity: The amount of layer transparency.

Parallax: The amount of flat 3D shift applied to the layer.

Position: The X and Y position of the current layer.

Scale: The overall scaling percentage of the layer.

Rotation: The amount of rotation around the layer center.

The timeline and attributes palette work hand in hand.When you select a layer in the timeline the values for that layer become available in the attributes palette. Select a key in the timeline and the value for that key is automatically enabled. If you select a frame between two keys the attributes palette will show the interpolated value between them in the appropriate edit field.

Channels Palette:

The channels palette allows the user to set the alpha and depth images as well as set the amount of depth overall for the depth map.

Mask: Sets the transparency mask for the selected layer.

Depth: Sets the depth map for the selected layer.

Near: The maximum amount of parallax that the object will shift into the foreground.

Far: The maximum amount of parallax that the object will shift into the distance.

A depth map will span from the near to the far distance. Any value can be entered into the “Near” and “Far” edit fields. Be careful of the unit mode you are in, a value of 64 in pixel units is a considerably smaller amount of parallax than a value of 64 in inch units.

Power Illusion, like many applications, considers white near and black far in depth map rendering.

Depth maps override flat parallax settings. To disable depth, set the selection to none.

View Palette:

The view palette controls the play, stop and anaglyph mode

<: Goes back one frame in the order.

Play: Plays through the current frame list.

Stop: Stops the play of the list.

>: Goes forward one frame in the order.

3D: Presents an anaglyph of the selected frames.

Composite: Complex mode only. Composites the layers into the final image for preview.

Layer: Complex mode only. Shows only the current layer selected over the preferred background pattern.

Simple Interlace Mode

The Simple Interlace mode is the secondary mode for working in Power Illusion.

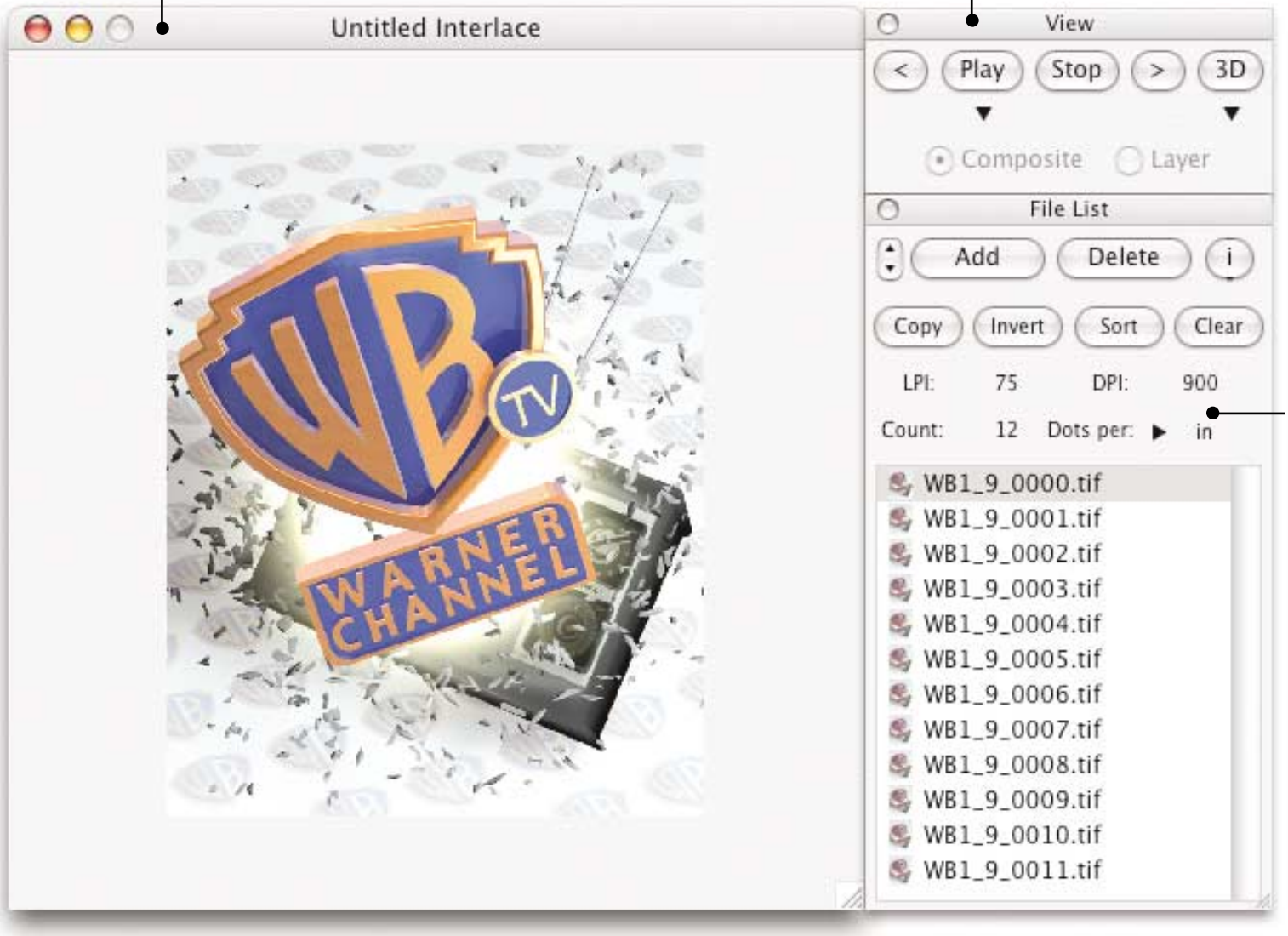
Overview

Preview Window

Allows for the preview of the project.

View Palette

Control for various viewing modes.



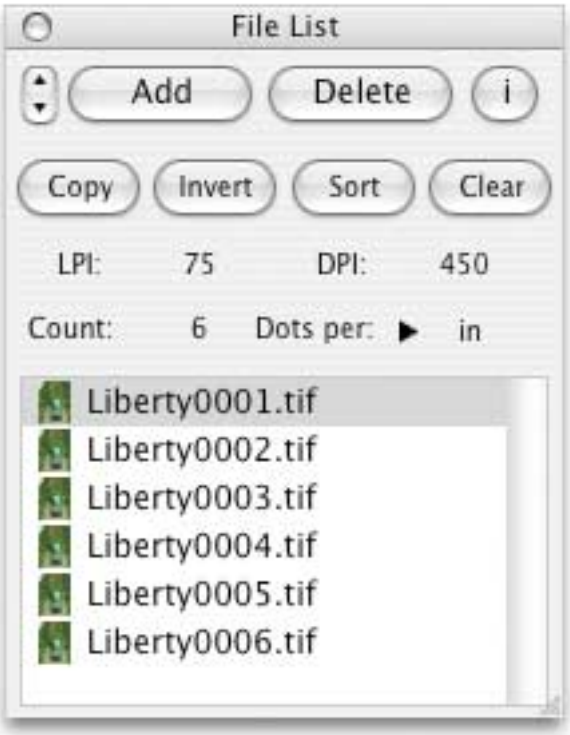
File Palette

Control of importing,deleting and order options for a simple interlace.

Simple Interlace Mode

The Simple Interlace mode is used for quick interlaces from frames usually generated in another program, such as a 3D modelling or timline application.

Interlace Palette:



This is the main control point for simple interlace mode and allows for editing of the frames in the list.

Up/Down Arrows: The Up and Down arrows allow the selected frame to be moved up or down in the list order.

Add: Add a frame from a image file.

Delete: Delete the selected frame from the list.

(i): Get information on the currently selected frame.

Copy: Duplicate the currently selected frame.

Invert: Reverse the list order.

Sort: Numerically sorts the list.

Clear: Clears all frames from the list.

View Palette:

The View Palette allows control over the play of frames and viewing of anaglyphs.

<: Goes back one frame in the order.

Play: Plays through the current frame list.

Stop: Stops the play of the list.

>: Goes forward one frame in the order.

3D: Presents an anaglyph of the selected frames.

Composite: Complex mode only. Composites the layers into the final image for preview.

Layer: Complex mode only. Shows only the current layer selected over the preferred background pattern.

Movie Tools

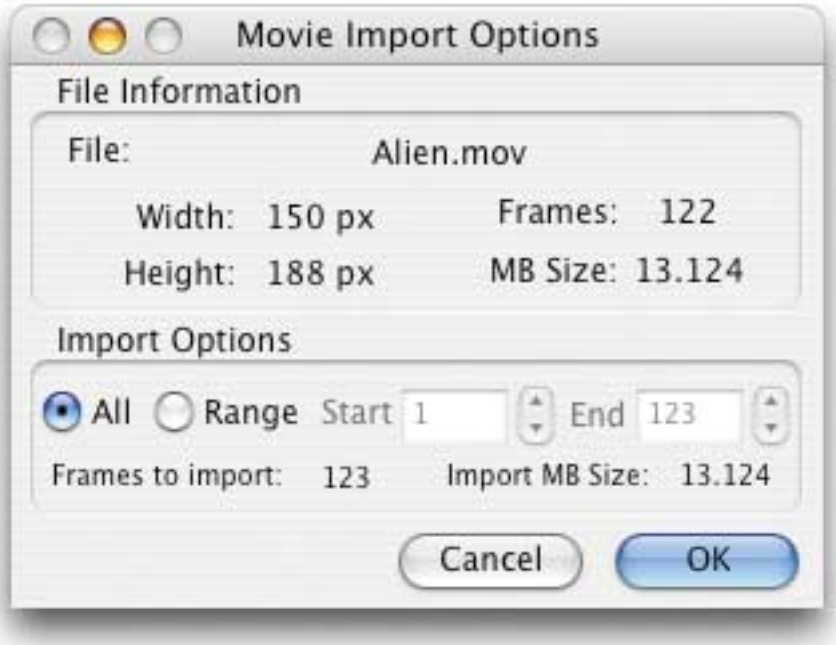
The movie tools allow for the playing, import and export of quicktime movies.

Open and Play movie

Open and Play movie allows for the playing of quicktime movies for preview purposes.

Export movie

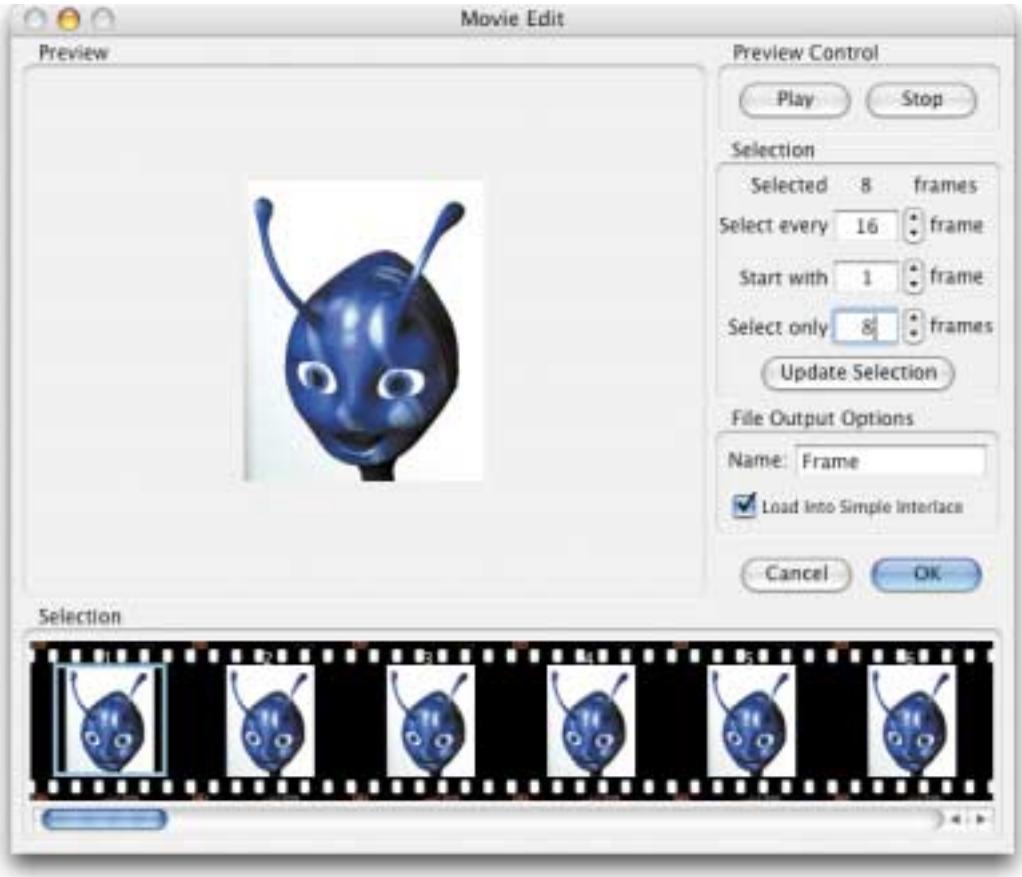
Allows the export of a quicktime movie from the complex scene or simple interlace mode. This allows clients to quickly see animations prepared in Power Illusion.



Import

All:
If selected Power Illusion will load all the frames into the editor

Range:
If selected Power Illusion will load only the frames between the start and end frame.
Start: The start frame for the range of frames.
End: The end frame for the range of frames.



Edit

Play / Stop
Control over the play and stop of the currently selected frames.

File Output Options
The name of the folder that will contain the frames exported from the editor.
Automatic load of frames into simple interlace.

Selection:
Allows for the selection of any number of frames by the nth frame across the movie and from any starting point.
Select Every: Nth frame
Start with: Frame selection starts with.
Select only: Number of frames that will be selected.

Step and Repeat tool

The step and repeat tool allows the user to step and repeat an interlaced file to the nearest lenticule. This does away with the painful process of stepping at the pixel level in an image editing application.

Device Settings: The setup for the current step and repeat document.

Edit: Opens the device editor.

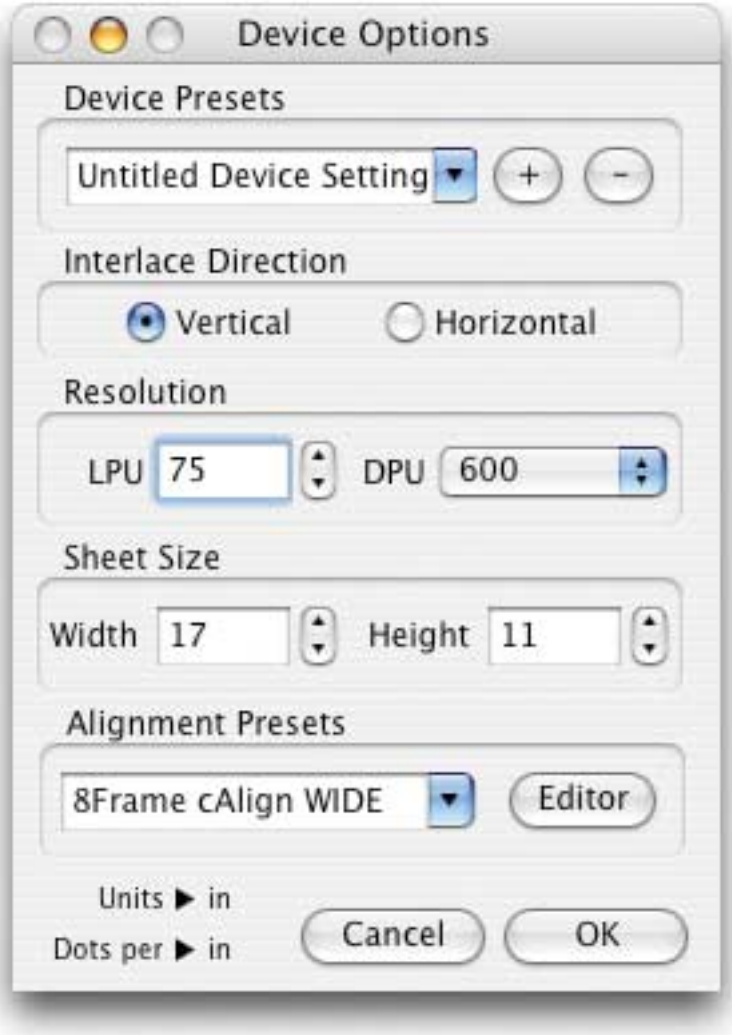
Save: Sets the file path of the output file.
Files: The list of files for the step and repeat process.
Add: Adds an interlaced file to the list.
Delete: Removes the selected file from the list.

Trim Settings: Settings for the trim (cut) marks on the image.
Length: The length in preferred units of the trim mark.
Weight: The weight in points of the trim stroke.
Bleed: The amount of bleed contained in the image file.
Offset: The amount the trim marks are set away from the bleed.

Step Settings: Settings for the repeat of the image and its location.
StepX: The number of times the image will repeat in the X direction.
StepY: The number of times the image will repeat in the Y direction.
GutterX: The space between each repeated image in the X direction.
GutterY: The space between each repeated image in the Y direction.
StartX: The starting point of the first repeat in the X direction.
StartY: The starting point of the first repeat in the Y direction.

Close: Closes the step and repeat generator.
Process: Processes the stepped file at the current settings.

Step and Repeat Mode continued: Device editor



Device Presets: Allows the user to set up a frequently used device for easy reload at a later date.

Interlace direction: All devices are more accurate in one direction than the other. This more accurate direction should be set as the interlace direction. Many presets are loaded with common devices and the correct interlace directions for each.

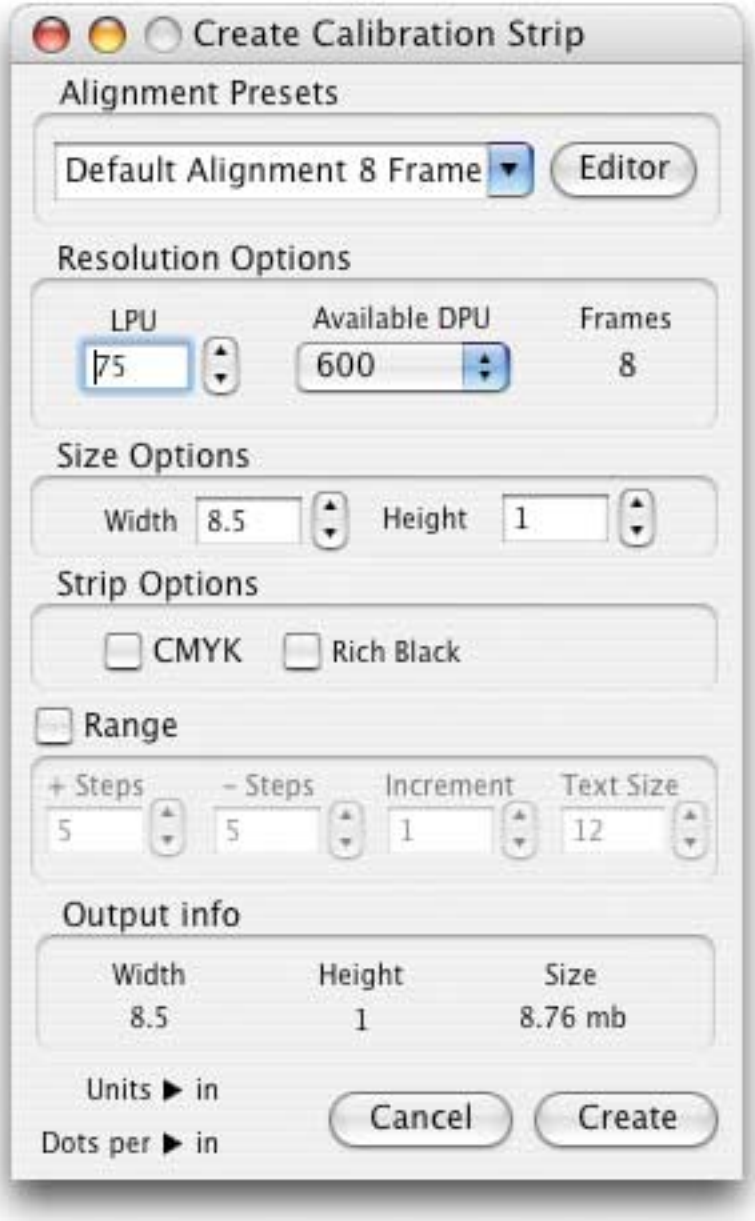
Resolution: Sets up the LPU and output DPU of the file. The DPU will be a multiple of the LPU.

Sheet Size: The sheet width and height in preferred units.

Alignment Presets: Access to the alignment pattern and the custom editor.

Create Calibration

Lens frequency and device frequency never quite match up. Deviations in manufacturing lead to slight deviations in lens and device frequencies. Power Illusion includes a powerful suite of calibration tools to help quickly calculate the deviation and adjust the interlaced file for optimal output and registration.



Create Calibration: Creates a pitch alignment test as a single strip or range of strips.

Alignment Presets: Access to the alignment pattern and the custom editor.

Resolution: Sets up the LPU and output DPU of the calibration file.

Size: Width and height of the calibration file in preferred units.

Strip Options: Variables for calibration output.
CMYK: Outputs a CMYK strip instead of the default RGB.
Rich: Pattern shows in all plates CMYK.
Tiff: Output file in TIFF format.
EPS: Output file in EPS format.

Range: Allows the user to create a range of pitch strips with each one labelled as to the DPU and LPU deviation.

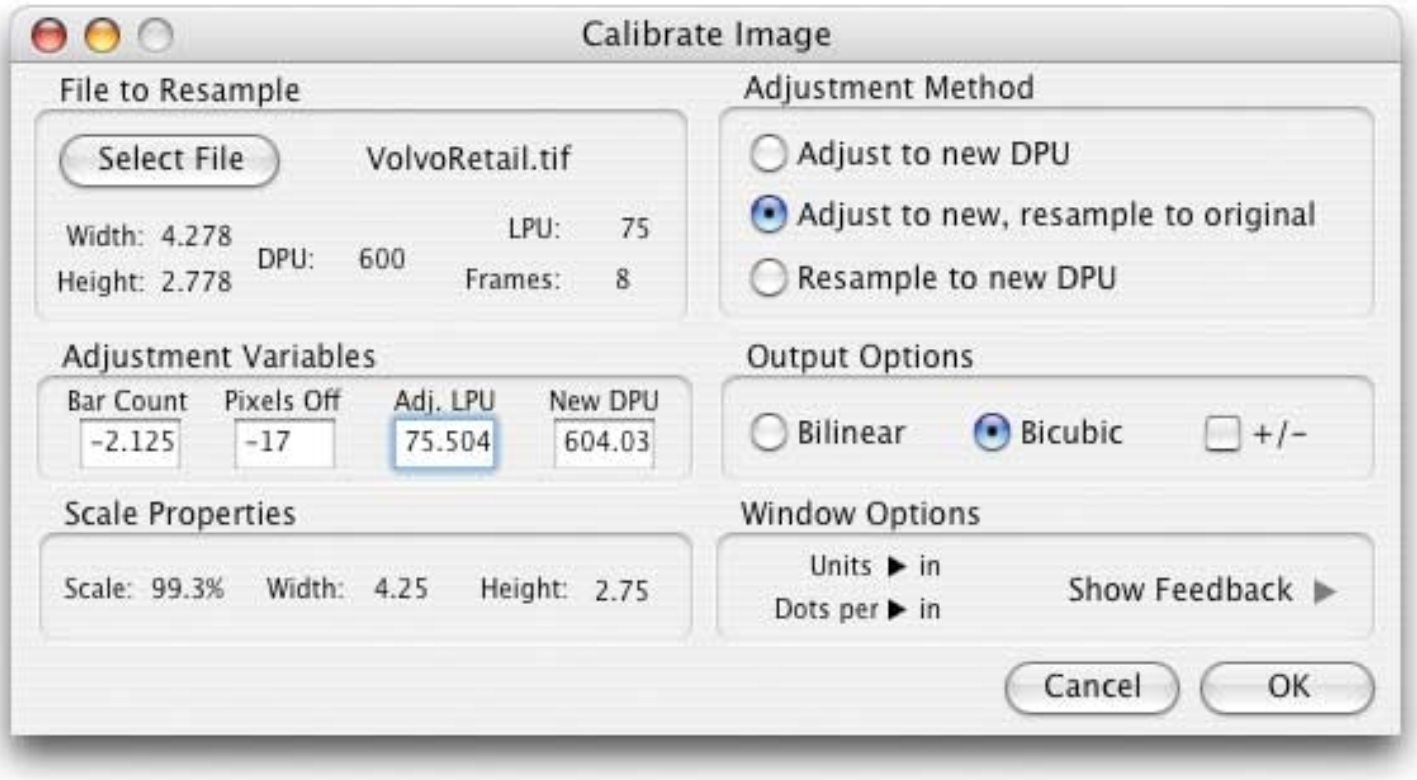
+ Steps: the number of steps above the zero pitch

-Steps: The number of steps below the zero pitch

Increment: the amount each step will change in lenticules. A value of 1 will equal 1 lenticule off per step. Partial values may be used.

Calibrate Image

Use the calibrate image tool to adjust the LPI of an image to a new pitch.



Adjustment method: How the file will be calibrated.

Adjust to new DPU: Simple change of the resolution header in the file. Does not resample the file.

Adjust to new; resample to original: Change to the new DPU then resample back to the original DPU.

Resample to new: Resamples the current DPU to the New DPU.

Adjustment variables: Input fields for deviation amount.

Bar Count: The number of black to white bars that show on the file under the lens.

Pixels Off: Enter the number of pixels to adjust here.

Adjusted LPU: If the lens manufacturer has provided an actual LPU enter it here.

New DPU: If the DPU variation is known, enter it here.

Output Options: Options for scaling and bi-directional rendering.

Bicubic/Bilinear: Scaling method for resampling.
+/-: Bi-directional resampling. Creates a positive and negative file at the current pitch setting and labels them. Warning: only use with calibration strips. Using large images could result in longer calibration times.

Print Options

Print Options allows the user to print a tiff file to any device with a valid driver. The Print Options window allows for stepping, gutter and placement of the image for optimal sheet usage.

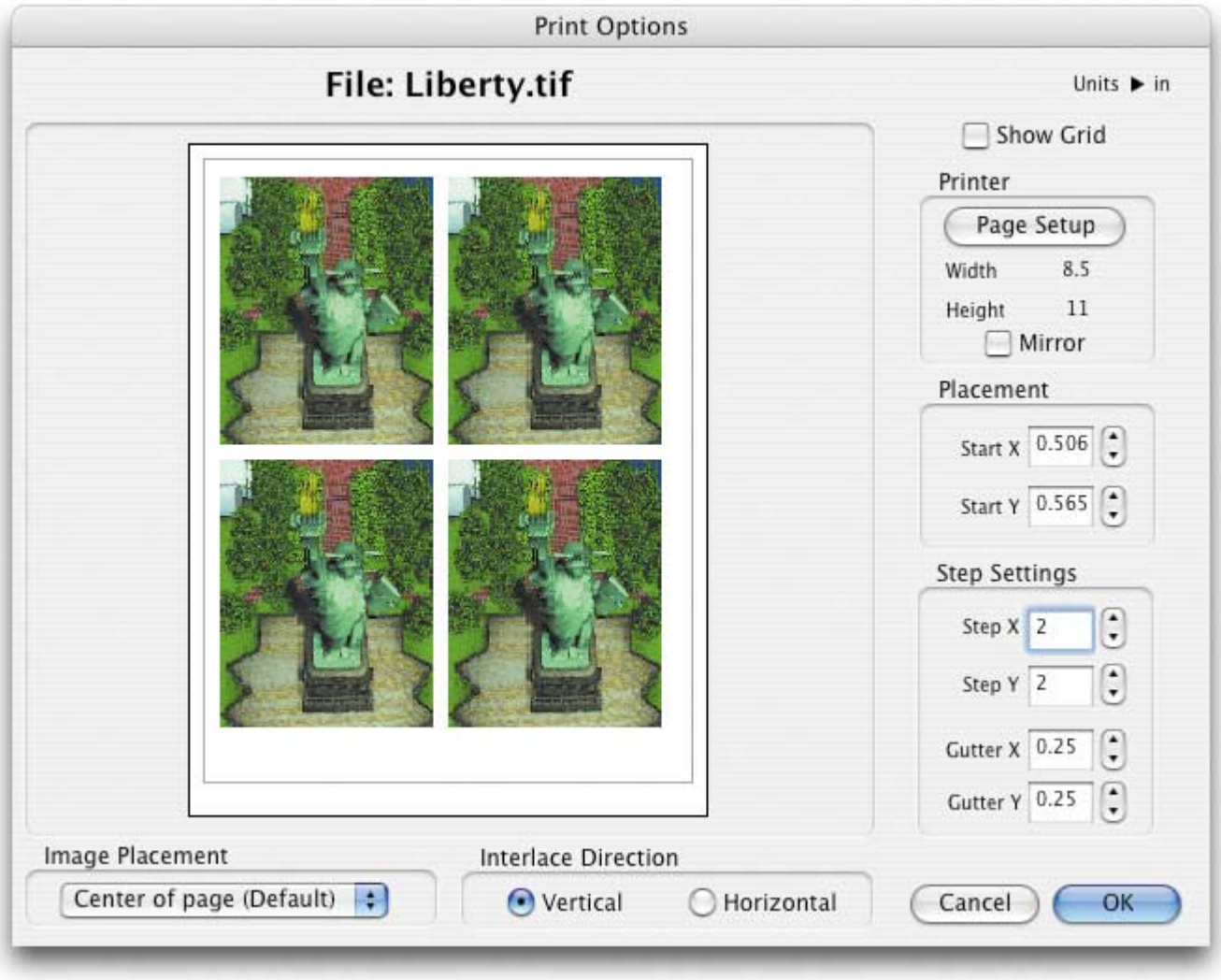


Image placement: Automatically aligns the image to a list of presets.

Image placement: Allows the user to override the built in file setting and print the interlace in any direction.

Page Setup: Allows access to the setup dialog.
Mirror: Mirrors the image.

Placement: Allows the user to place the image
StartX: The starting point of the first repeat in the X direction.
StartY: The starting point of the first repeat in the Y direction.

Step Settings: Settings for the repeat of the image and its location.
StepX: The number of times the image will repeat in the X direction.
StepY: The number of times the image will repeat in the Y direction.
GutterX: The space between each repeated image in the X direction.
GutterY: The space between each repeated image in the Y direction.

Cancel: Cancels the print.
Print: Processes the print.

Show Grid: Shows a unit defined grid.
Units: Sets the units to Inches,Pixels or Centimeters.

Power Illusion Tutorials

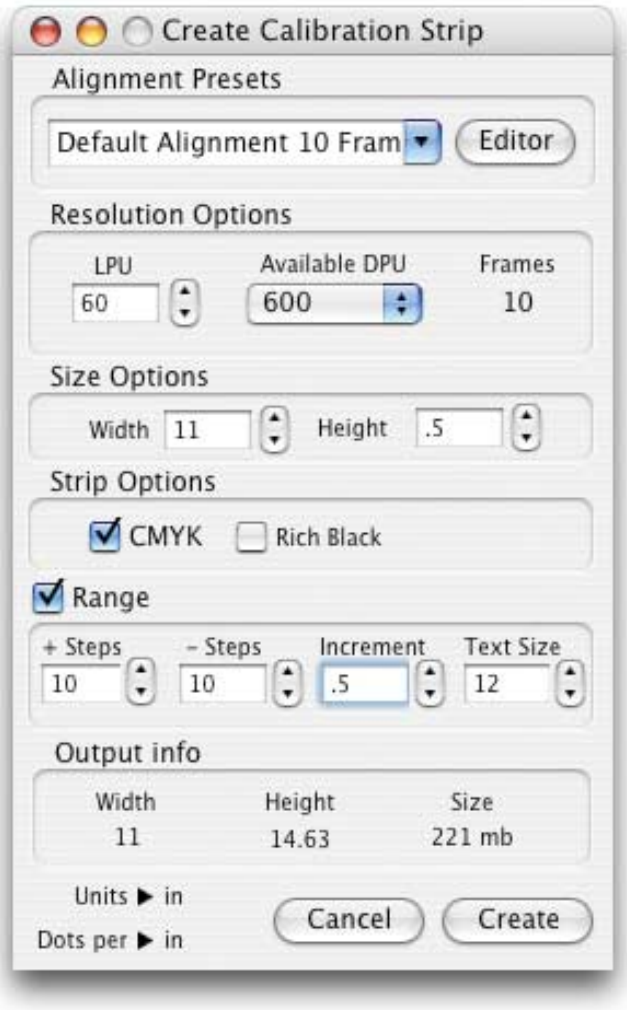
Power Illusion 1.8

Here you will find tutorials, tips and procedures for working with Power Illusion

Pitching

These are the general steps to creating and evaluating a pitch test.

There are a few things to remember when pitching a lens to a device. Always pitch to the size and resolution of the final device if possible. In other words if the resolution of your device is 1200 then create the pitch test at 1200 or a multiple of 1200 like 600. Make the pitch no larger than the imagable area of the device. Now with that in mind lets create a pitch test for 60 LPI on a 600 DPI digital press with a 11X17 imagable area.



1) From the Tools menu pull down “Create Calibration”. A Dialog will appear. This is the Create Calibration dialog.

2) Under Resolution options type 60 in the LPU entry field. This sets the utility up to render a 60LPI frequency.

3) The available resolution is already 600. If not set it to 600.

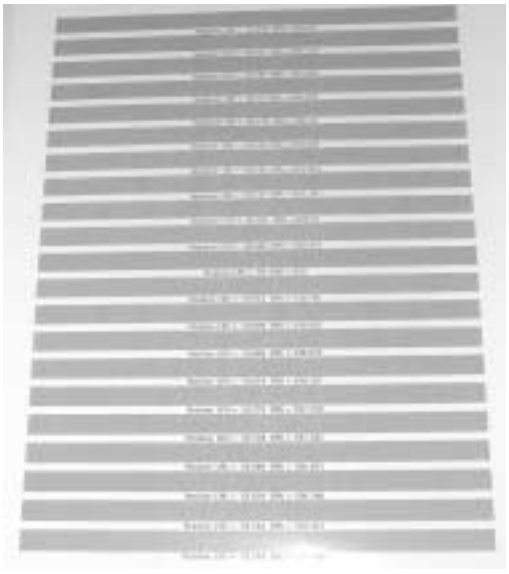
4) Enter a strip width of 11 and a strip height of .5. The total size of the pitch with one single strip or many strips is calculated at the bottom of the window.

5)Click the “CMYK” button to set the strip to CMYK mode.

6) Click the “Range” checkbox and enter 10 positive steps, 10 negative steps with an increment of .5 of a lenticule. You will see the size change at the bottom with the addition or reduction of steps.

7) Click the “Create” button and save the range to the desired location.

8) Once the file is generated you should have a resulting tiff file that looks like this:



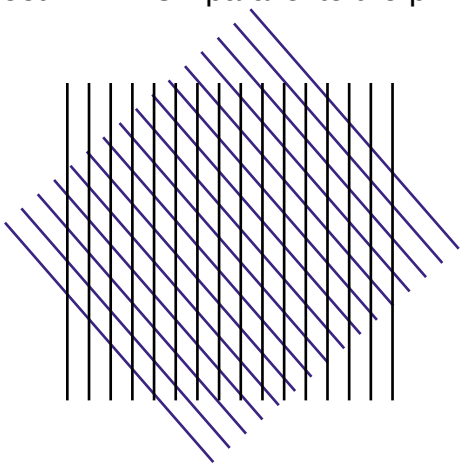
Pitching continued

9) Now take a sheet of 60LPU and lay it over the printed pitch sheet. You will see a result similar to this:

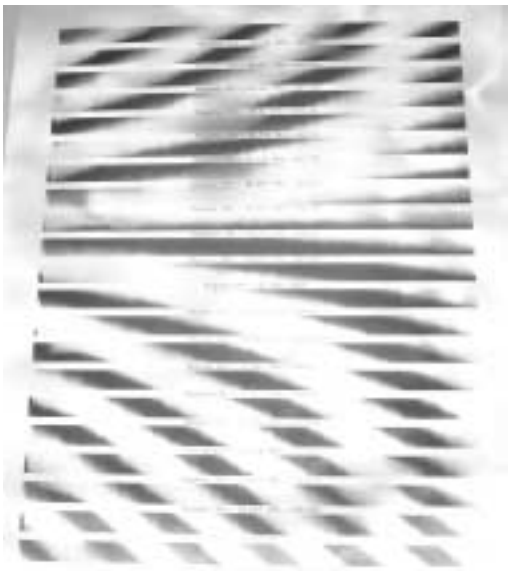
The lenticules of the lens sheet ARE NOT parallel to the printed pattern.

Printed Sheet

Lens Sheet

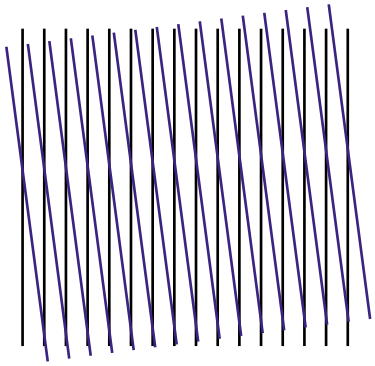


10) Twist the sheet so that the lenticules on the sheet are parallel to the printed pattern. As the lenticules get closer to being parallel with the printed sheet you will see less and less black to white bars similar to this:

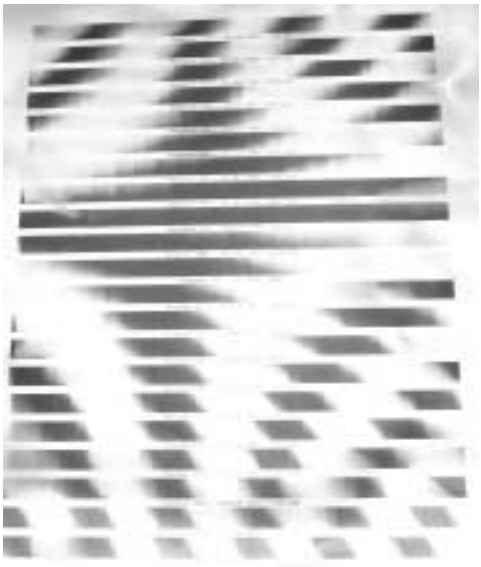


Printed Sheet

Lens Sheet



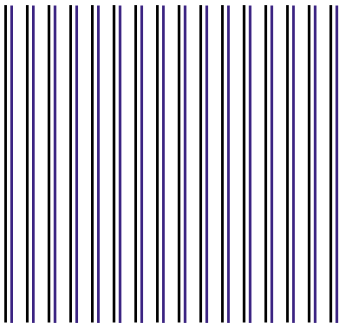
11) Once the lenticules are parallel to the printed pattern the result should be similar to this:



Notice how the pattern makes a star shape.

Printed Sheet

Lens Sheet

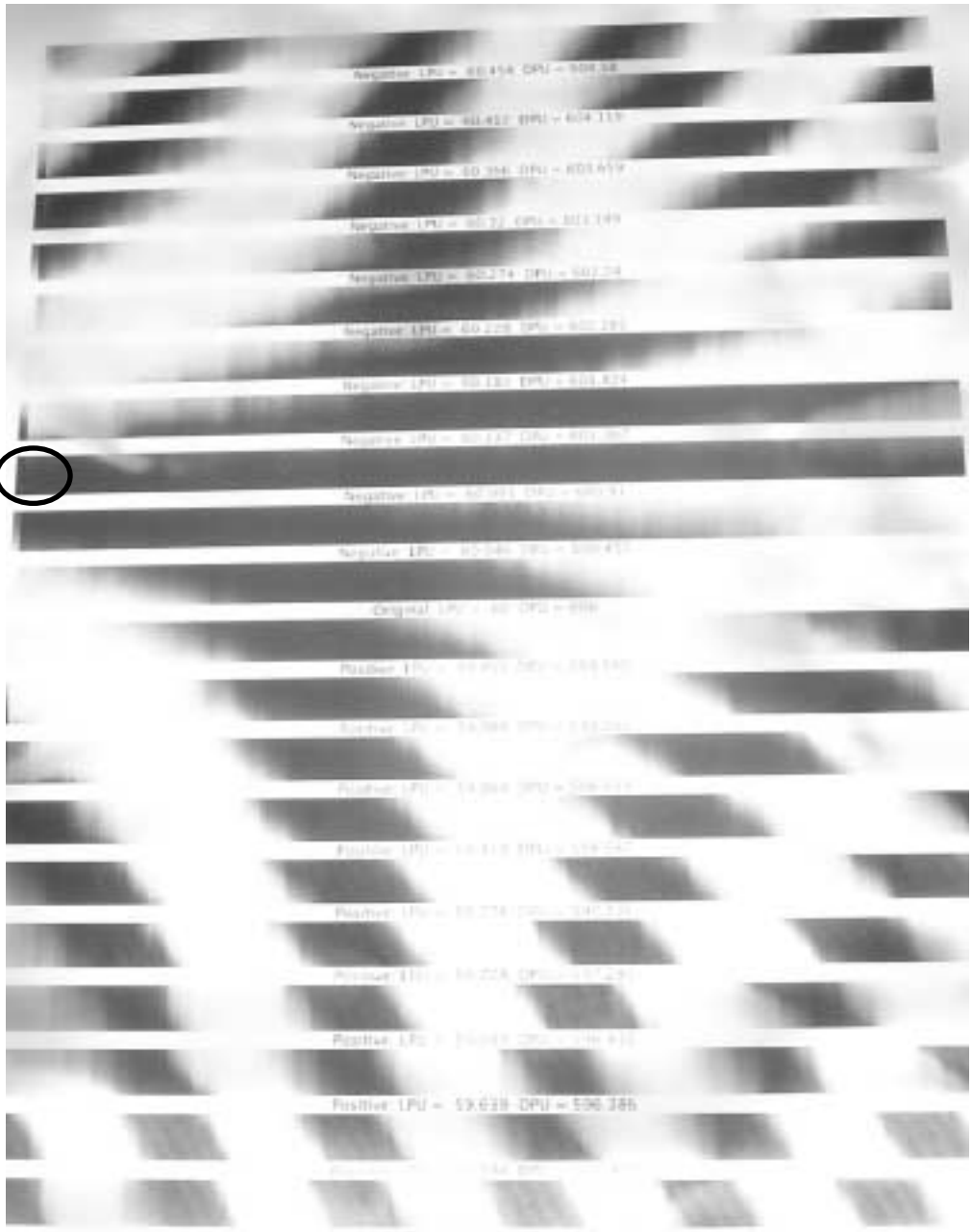


Pitching continued

12) The pitch that turns solid black or solid white is the correct pitch.

13) The pitch in this case is

60.091 LPI at 600.91 DPI



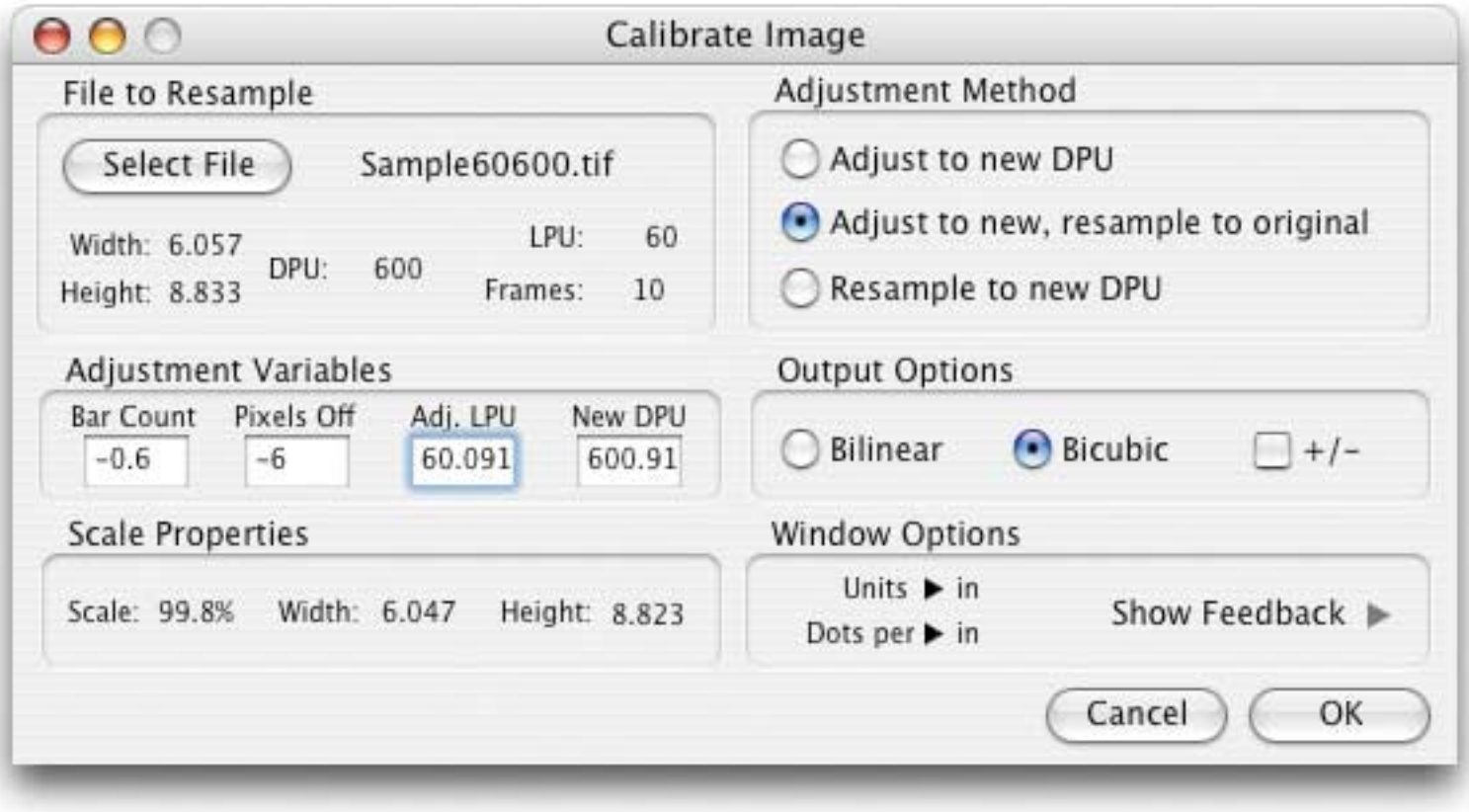
This completes our tutorial for creating and pitching a lens sheet to a device. This procedure is identical with any device or lens sheet just substitute the values for another lens or device.

Pitch Calibration

Now that you've created a pitch and pitched a lens to it, its time to use that adjustment on an image you intend to print. Our Pitch from our 11x17 60LPI 600DPI pitch range was: 60.091 LPI at 600.91 DPI. Lets use this figure to adjust an image

1) From the Tools menu pull down Calibrate Image. A dialog will appear. This is the Calibrate Image dialog.

2) We have a generated file called "Sample60600.tif". We want to adjust this file to the pitch we know fits the lens properly. In the Calibrate Image dialog choose the "Sample60600.tif" file from the samples folder inside the Power Illusion folder or your own 60LPI file.



3) Type the LPU that you got from your pitch test into the "Adj. LPU" field. You will see the Calibrate Image utility calculate the DPU, Pixels Off and Bar count as well as the new height,width and overall amount of scaling that will occur.

4) Click the OK button and Power Illusion will adjust the selected image. The resulting file will have the same name with the letters "AR_ " appended to the beginning of the name. This file for instance would have the resulting name: "AR_Sample60600.tif". This file is now ready for print. That's all there is to it.

Tutorial: Complex Scene Mode

Complex scene mode is the primary mode for working in Power Illusion. The following tutorial will cover the use of a complex scene from the opening of a new scene from a Photoshop® file to the rendering of an interlaced master file. If you are not familiar with the complex scene mode please review the “Complex Scene Mode” starting on page 8 of the manual before beginning this tutorial.

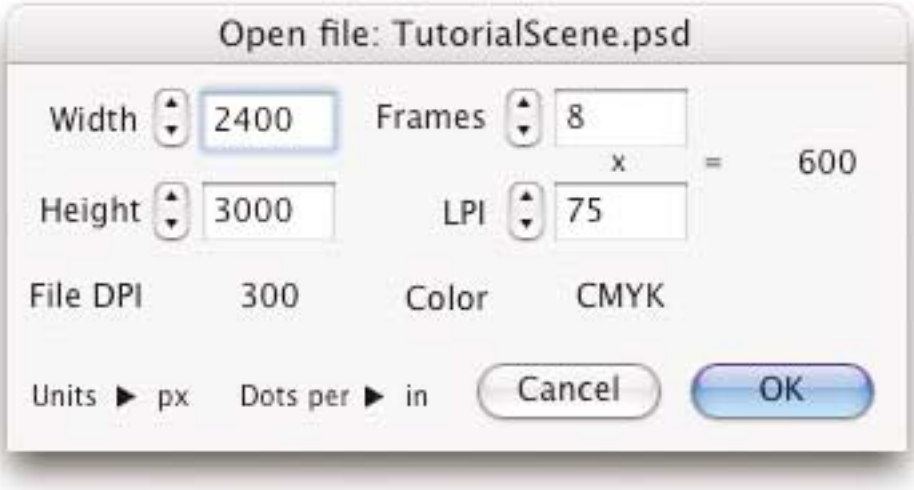
1) Double click Power Illusion application to start.

2) From the File menu choose File : New : New Scene from Photoshop® file.

3) You will be prompted to choose a file. Go to the Power Illusion application folder. Go into the folder “Sample Files” go into “Sample Photoshop® files” folder and select the file “TutorialScene.psd” and click the OK button.

4) A Dialog will appear, This dialog allows you to set the frame count, canvas size and LPU of the current document. Hit the OK button as all of the default setting will be fine for our tutorial.

5) After you hit the OK button you will see a progress window that indicates how far along Power Illusion is at importing the Photoshop® document. Additionally the Power Illusion interface will open and prepare for the incoming file.



Tutorial: Power Composite continued

Visibility key : 

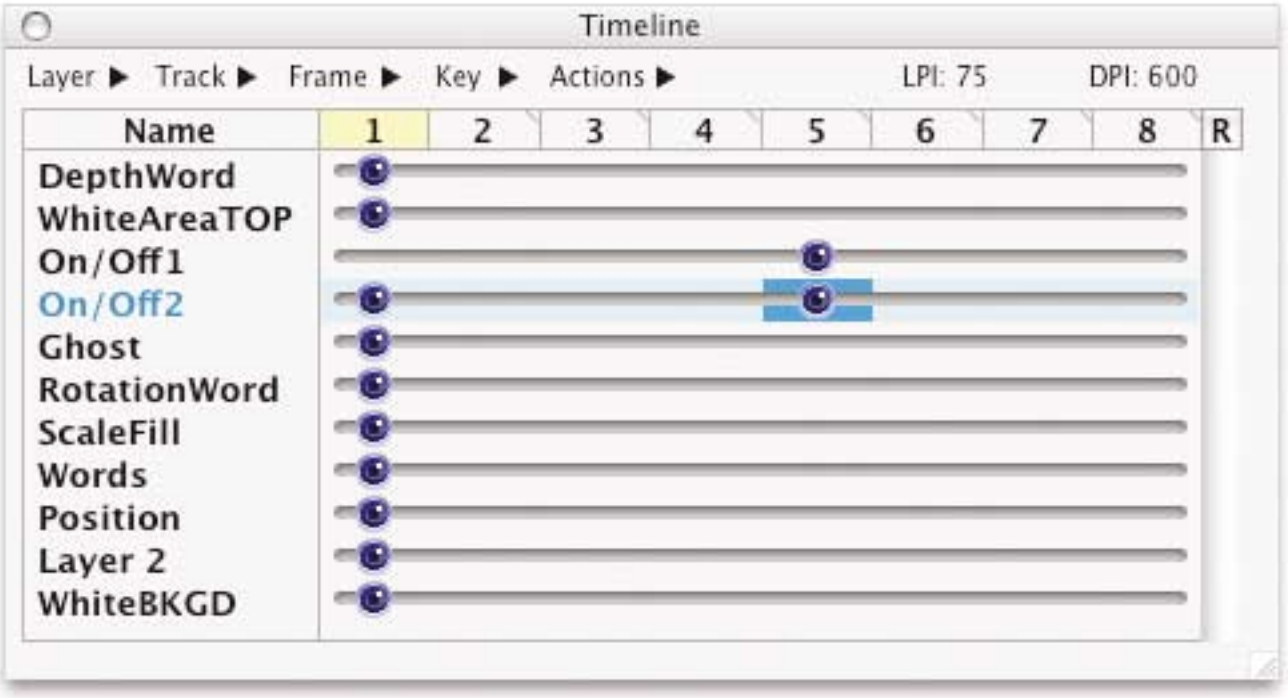
In the Timeline window to the left you will see each layer in the document. To the right you will see the tracks and frames for each layer. In the first frame you will see a small blue icon. This is a Visibility key. If you hold the Command key(Control PC) and click it, it will disappear. If you click it again it will reappear. This turns the visibility Key on or off.

1) On the layer “On/Off1” Command/Click the visibility key for frame 1 This will turn the visibility off for the layer “On/Off1” . Now at frame 5 on layer “On/Off1” Command/Click the visibility key and a visibility icon will appear. This turns the layer back on for all frames after frame 5.

2) On the layer “On/Off2” do not turn off the key at frame one. Command/Click on the visibility track at frame 5 and a visibility icon will appear. This will turn off all frames after 5 for the layer “On/Off2”. Notice the value of the visibility key in the Attributes palette. The value for each visibility key can be altered in the Attributes palette.

3) Press the “Play” button in the view palette. Power Illusion will build a preview of the animated frames. You should see the “On” and “Off” buttons at the bottom of the image flip from on to off. You have just made an A/B flip in Power Illusion.

The result should be a Timeline that looks similar to this:



Before we go any further lets save our project. Power Illusion will save your work in a layered keyframed document that you can come back and edit later. From the menu select File : Save. You will be prompted to select a location and name for your file. Name the file Tutorial01 select the location of your choice and click the “OK” button.

Tutorial: Power Composite continued

Opacity Key :

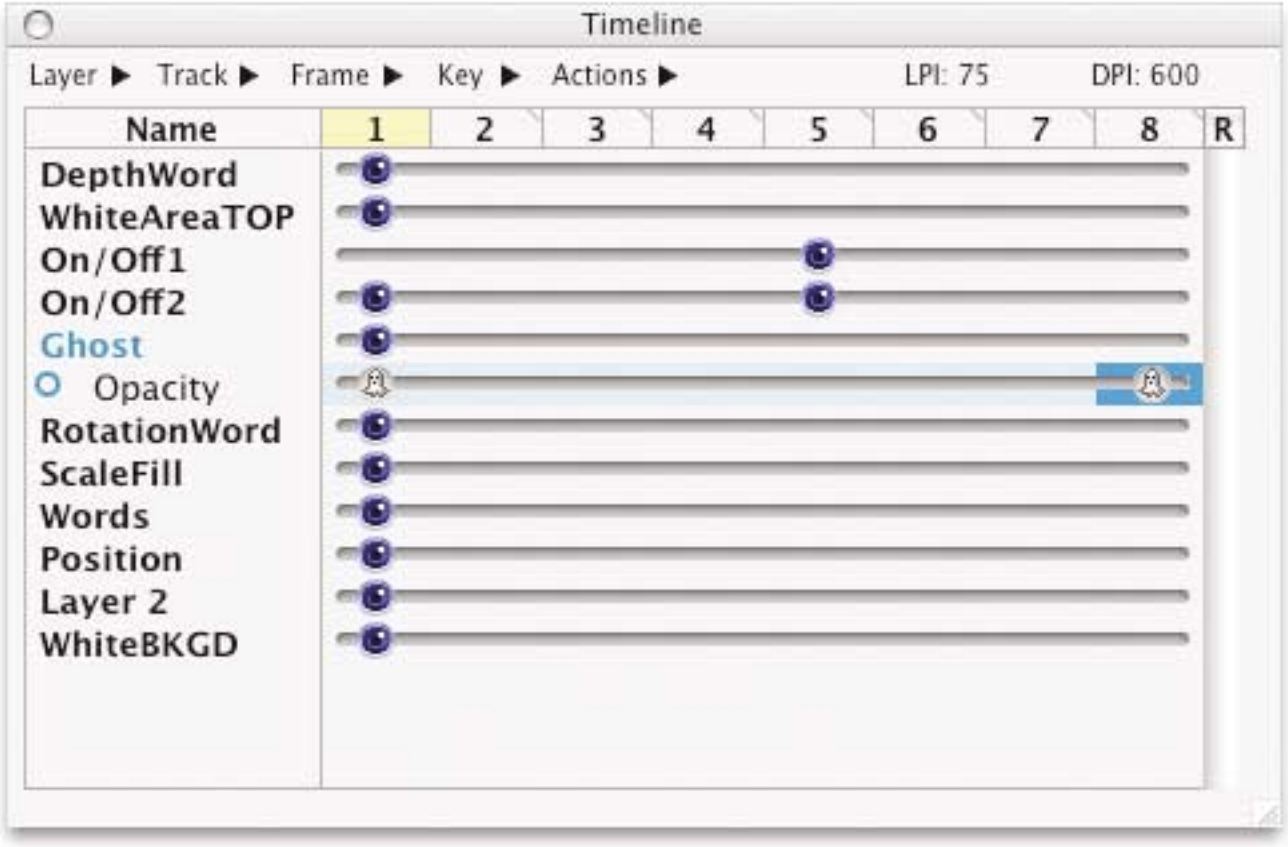
This icon is represented by a small ghost. Click on the layer “Ghost” and from the “Timeline” menu pull down to: “Add Track Opacity”. When you do this you will see an opacity track added to the “Ghost” layer.

1) On frame one of the “Ghost” opacity track Command/Click. You will see the ghost icon appear in the first frame. Look in the Attribute palette and notice that the value is 100%.

2) Now Command/Click on frame 8 of the “Ghost” opacity track and another ghost icon will appear. If the key at frame 8 isn’t selected click it with the mouse and it will become highlighted with blue. In the Attributes palette set the value to 0%.

3) Once again press the “Play” button and you will see the ghost fade out and then come back in. You have just created an animation of the ghost that will fade out across the frames in your final lenticular image.

The result should be a Timeline that looks similar to this:



Save your document. From the menu select File : Save or press Command “S” on your keyboard. Once the document finishes saving we can move on to the parallax key.

Tutorial: Power Composite continued

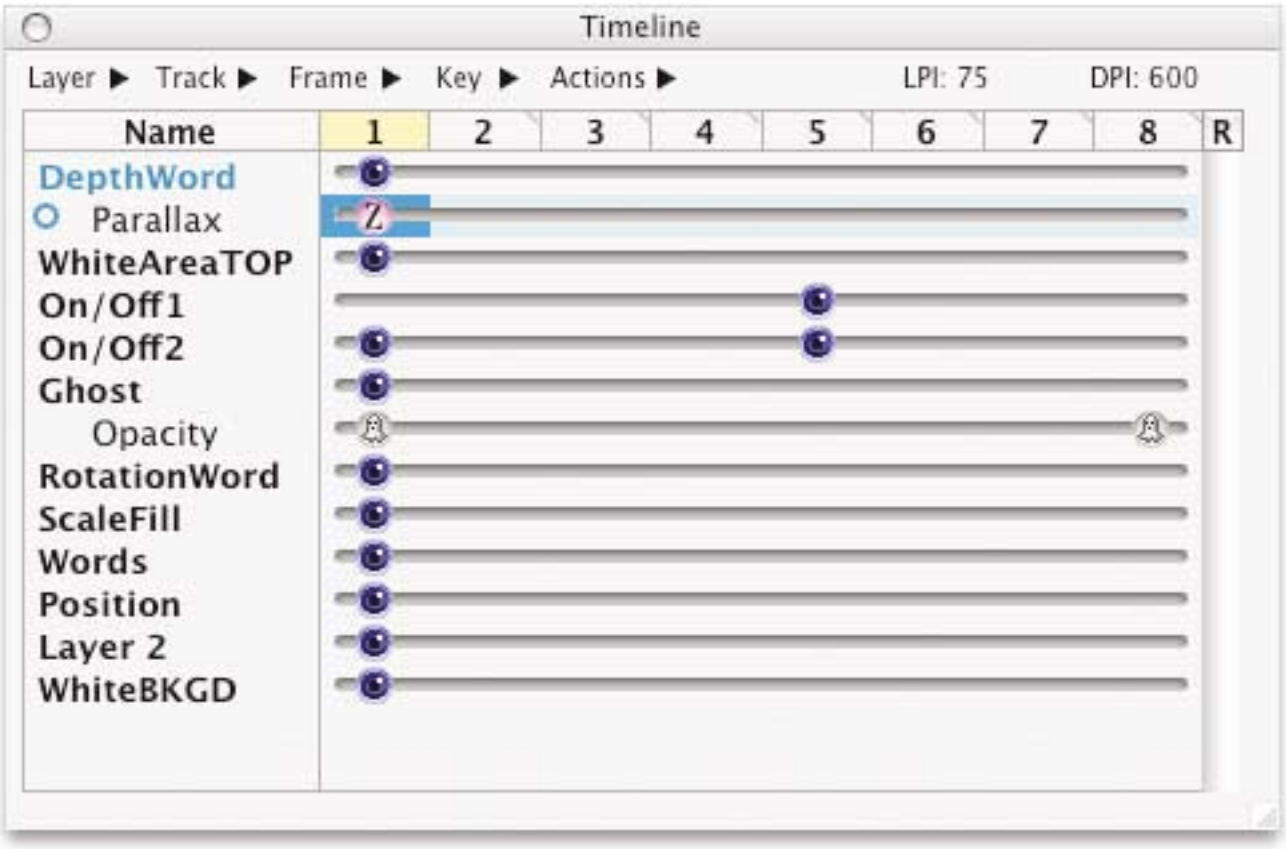
Parallax Key : Z

1) Click on the layer “DepthWord” and from the “Timeline” menu pull down to: “Add Track Parallax”. When you do this you will see an parallax track added to the “DepthWord” layer. The parallax value is constant. So you will only need to add it to the first frame. On frame one of the parallax track Command/Click. You will see the parallax icon appear in the first frame. If the first frame on the parallax track isn’t selected click it to highlight it. In the attributes palette you will see the parallax value become enabled and as a default is set to zero. Set the value to .5.

2) Repeat step one on the layer “WhiteAreaTop”

3) Once complete click the “3D” button in the View palette. Power Illusion will generate a 3D anaglyph image so that you can view the 3D. You have just added parallax to two layer in your project. For a parallax setting, positive values push the 3D out toward the user and negative values push the 3D away from the user.

The result should be a Timeline that looks similar to this:



Save your document. From the menu select File : Save or press Command “S” on your keyboard. Once the document finishes saving we can move on to depth maps.

Tutorial: Power Composite continued

Depth Map :

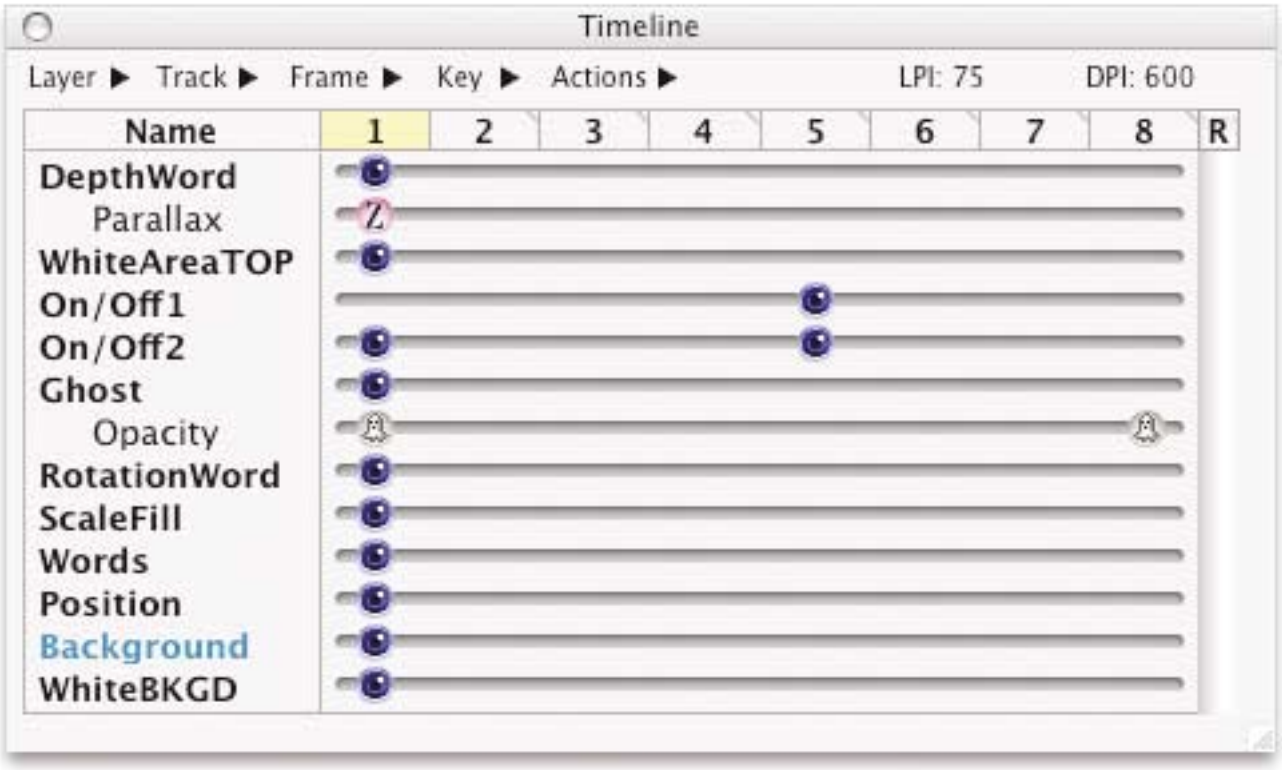
1) While we are on parallax lets look at depth maps on layers. Depth maps, unlike flat parallax allows for variable amounts of parallax for each pixel. Depth maps are saved as standard alpha channels in tiff or Photoshop documents. When you load a tiff or Photoshop document Power Illusion will automatically pick up any alpha channels and make them available to you for use on any layer.

2) Click the layer “Background”. On the Channels palette pull the “Depth” pulldown to “BKGDDepth”. This sets that alpha channel to be used as the depth map for the layer “DepthMapLayer”.

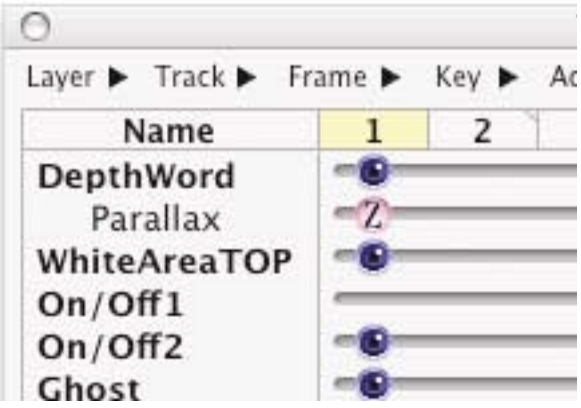
3) In the channels palette set the “Near” to .5 and the “Far” to -.5. We are setting the maximum and minimum amounts of forward and backward parallax that will be generated for this layer.

4) Click the ‘3D” button to preview the depth you’ve created. Setting up depth maps and parallax has never been this easy.

The result should be a Channels palette and Timeline that look similar to this:



Save your document. From the menu select File : Save or press Command “S” on your keyboard. Once the document finishes saving we can move on to the position key.



Tutorial: Power Composite continued

Position key :

All layers start off with a default position. To change the position or animate a position you can simply add keys for each position you require. Power Illusion will automatically interpolate the positions between each key, making animation a snap.

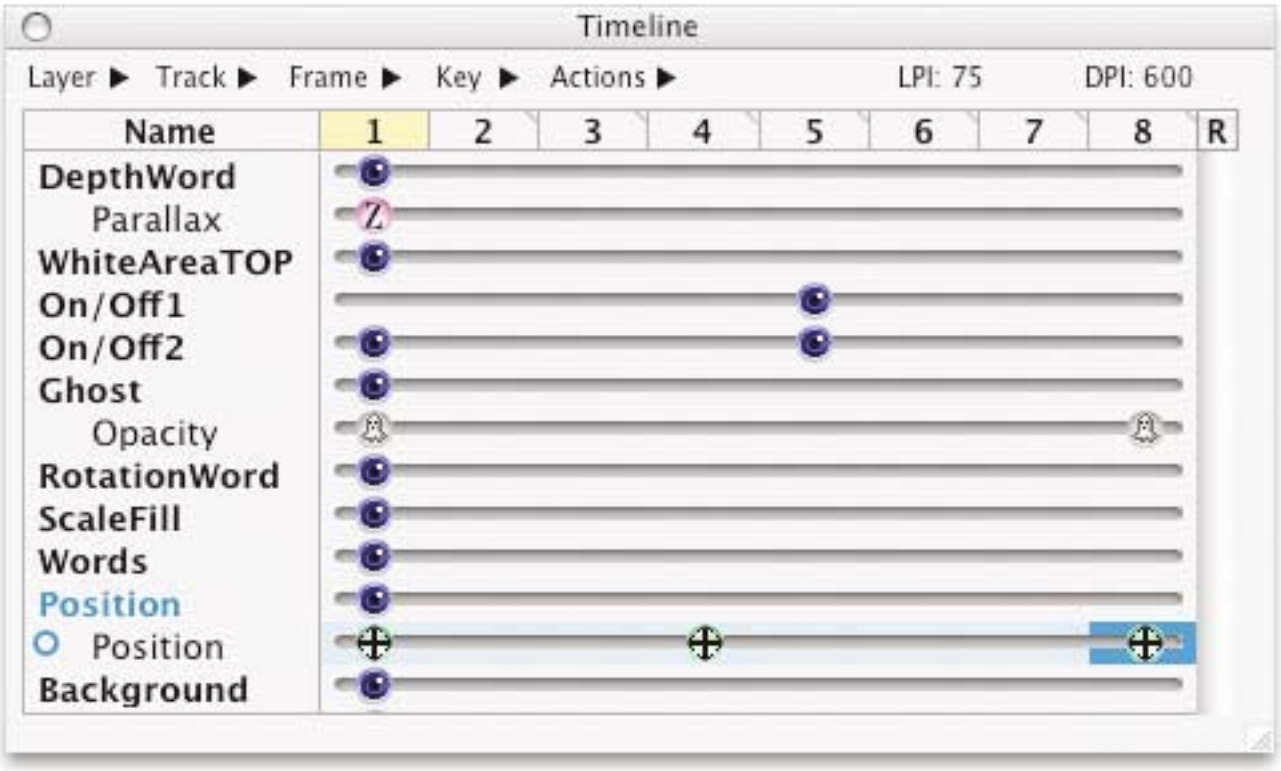
1) Select the layer “Position” and from the “Timeline” menu pull down to: “Add Track Position”. When you do this you will see an position track added to the “Position” layer with an initial position key.

2) Command/Click on Frame 4 and frame 8 of the “Position” layers position track. A position key will be added for each frame you Command/Click.

3) Click the position key at frame 4 of the position track and enter 1.8 for the “PosX” and 6.2 for the “PosY” in the attributes palette.

4) Now click the play button and watch as the position layer animates from one position to another and then back to the original position. You have just set up a simple layer animation in power Illusion.

The result should be a Timeline that looks similar to this:



Save your document. From the menu select File : Save or press Command “S” on your keyboard. Once the document finishes saving we can move on to the scale key.

Tutorial: Power Composite continued

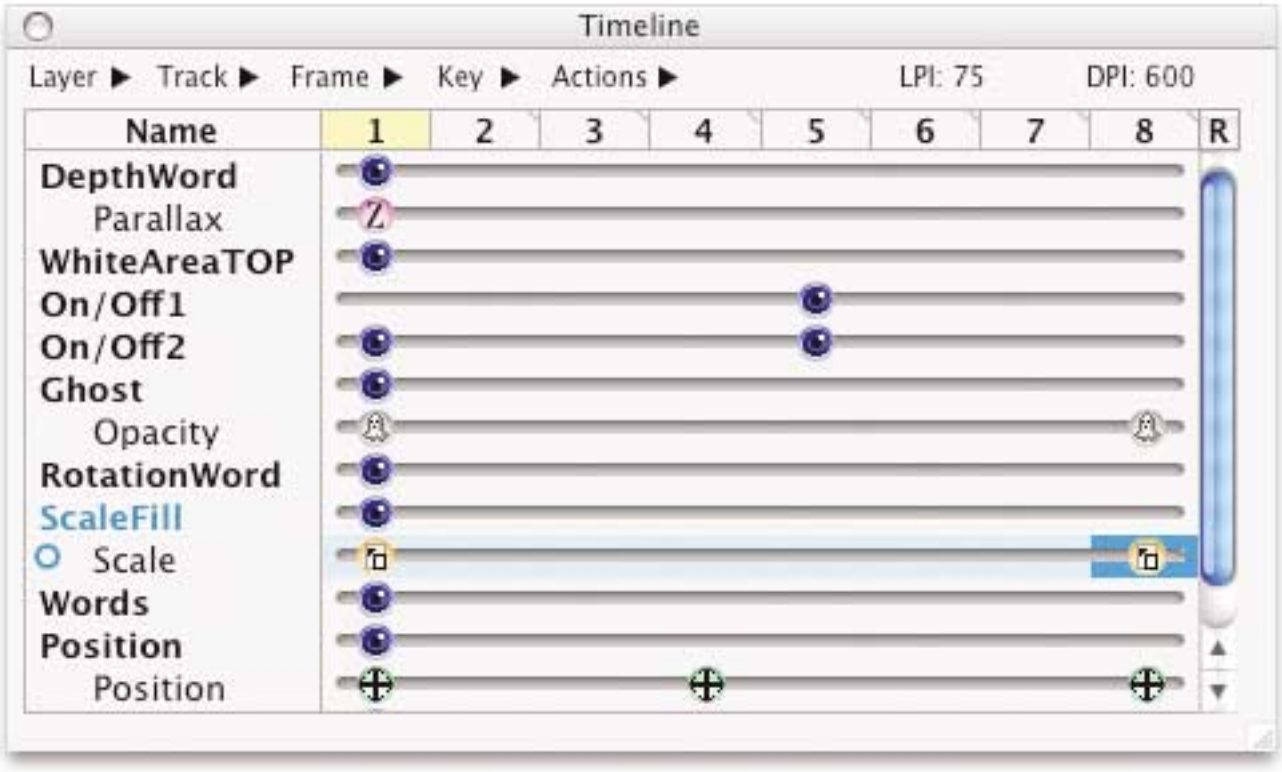
Scale Key :

All layers start off with a scale value of 100%. By simply adding a scale track you can increase or decrease the size of the layer or scale it across the frames. This makes the “Zoom” effect a breeze. Click on the “Scale” layer and from the “Timeline” menu pull down to: “Add Track Scale”. When you do this you will see a scale track added to the “Scale” layer.

1) Command/Click on the Scale track at frame 1 and frame 8. A scale key will be added to both. Notice in the attributes palette the value of the scale is 100%. Click on the scale key in frame 8 and change the value in the attributes window to 30%

2) Click the “Play” button in the view palette and watch as the scale layer zooms up and down across the layers. That’s how easy it is to make a zoom in Power Illusion.

The result should be a Timeline that looks similar to this:



Save your document. From the menu select File : Save or press Command “S” on your keyboard. Once the document finishes saving we can move on to the rotation key.

Tutorial: Power Composite continued

Rotation key :

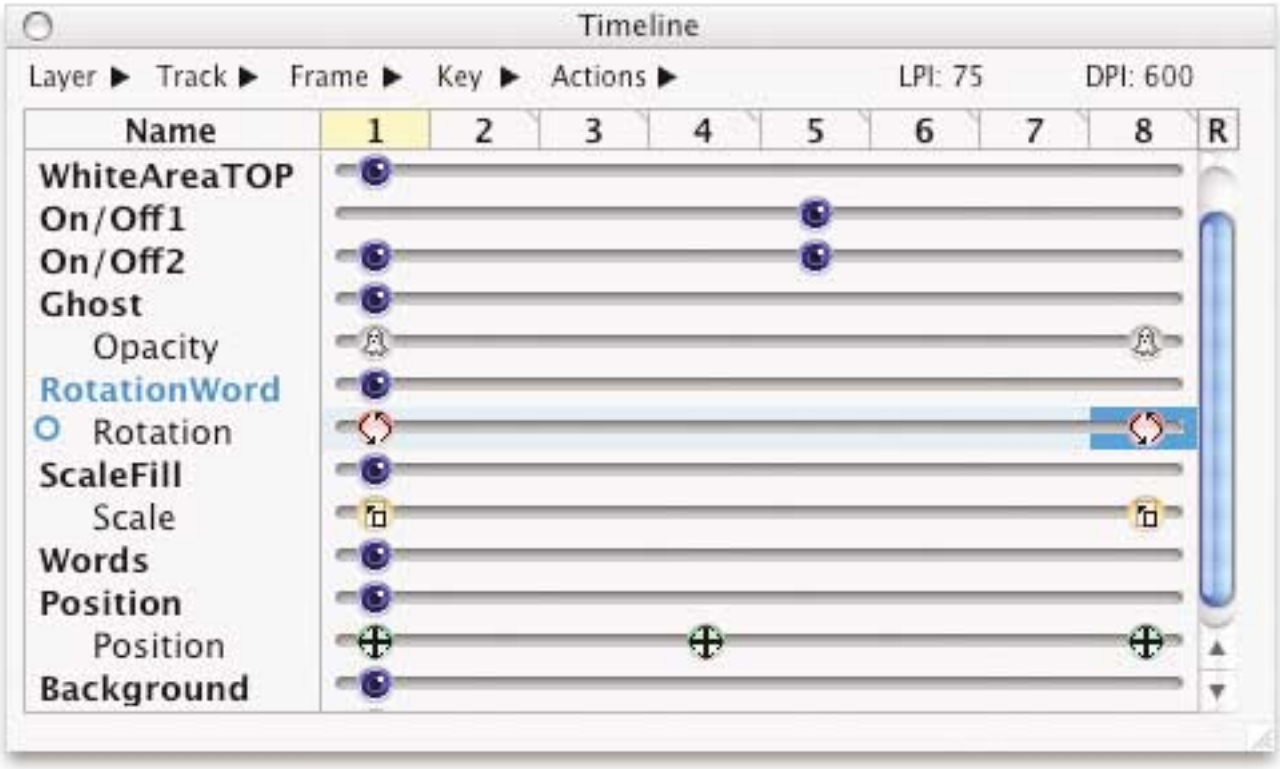
The rotation key allows you to rotate the position of the layer or animate it across the timeline.

1) Click on the “RotationWord” layer and from the “Timeline” menu pull down to: “Add Track Rotation”. When you do this you will see an rotation track added to the “RotationWord” layer.

2) Command/Click on the rotation track at frame 1 and frame 8. A rotation key will be added to both. Notice in the attributes palette the value of the rotation is 0. Click on the rotation key at frame 8 and change the value in the attributes palette to 180.

3) Click the “Play” button in the view palette and watch as the “RotationWord” layer rotates 180 degrees. Now you can imagine mixing the scale and rotation tracks and having a zoom that rotates as it zooms out toward the user.

The result should be a Timeline that looks similar to this:



Save your document. From the menu select File : Save or press Command “S” on your keyboard. Once the document finishes saving we can move on to the simple interlace tutorial.

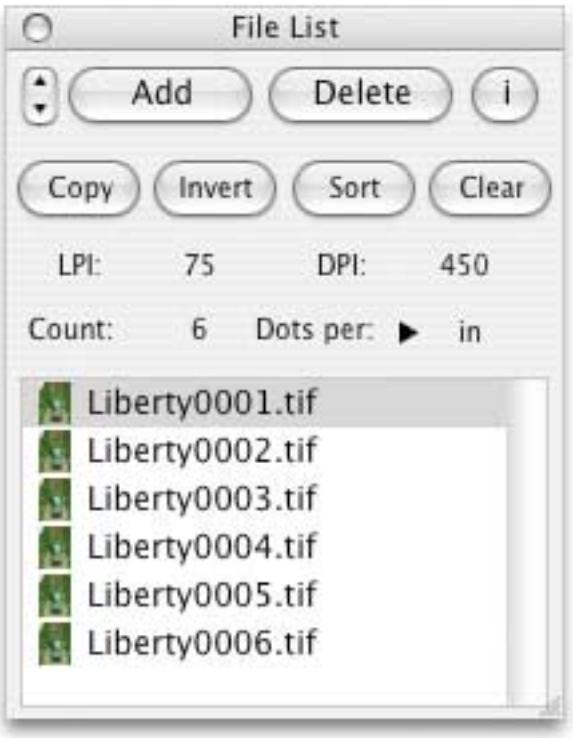
We hope this has helped in learning how to use Power Illusions timeline and the incredible control it gives over all types of lenticular effects.

Tutorial: Simple Interlace

1) Double Click Power Illusion to start the application. If Power Illusion is already open save and close the document you have open by selecting from the menu File : Save and once the document is saved select from the menu File : Close

2) From the menu select File : New : New Simple Interlace. You will be automatically prompted to select frames. Go to the Power Illusion application folder. Go into the folder “Sample Files”. Go into the folder “Sample Frames” Hold down the shift key and click on each of the frames in the folder. Holding shift lets you select multiple files for loading. Once you have selected all the frames click the “OK” button.

3) Once the frames have loaded Click the “Sort” button on the file list palette. Now click the 3D button in the view palette. You will see a 3D image generated from the loaded frames. You can use the file list palette to copy, delete, move, sort or add frames.



4) Save your project. From the menu select File : Save. You will be prompted to select a location and file name. Its always a good idea to keep a simple interlace document in the folder with the frames you have chosen. If you don’t when you open the file again you will be prompted to locate the frames as you are with many of todays applications that use placed graphics in their documents.

5) That’s all there is to the simple interlace mode. Using the render settings dialog you can create an interlaced file from a complex scene or simple interlace.

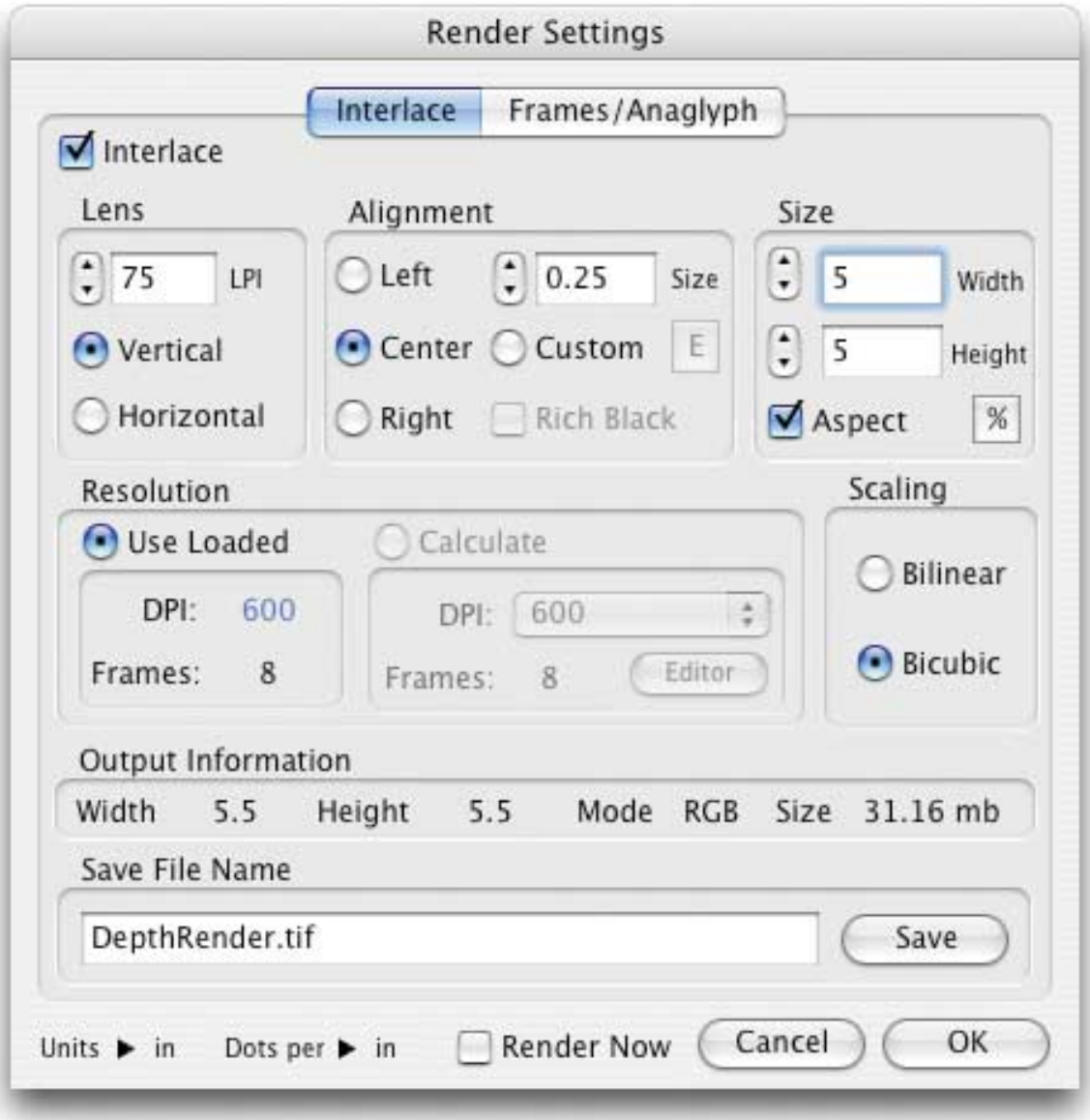
Tutorial: Rendering an interlace

1) Double Click Power Illusion to start the application. If Power Illusion is already open save and close the document you have open by selecting from the menu File : Save and once the document is saved select from the menu File : Close

2) From the menu select File : Open : Open Complex Scene. You will be prompted to select a file. Go to the Power Illusion application folder and open the “Sample Files” folder. Open the “Sample Power Composite scenes” folder and select the file “DepthMapTester.pcs” Click the OK button to open.

3) Once the file opens, from the menu select Render : Settings. The Render Settings Dialog will appear. Click the Interlace Checkbox near the top left corner. All the settings in the Interlace tab will become enabled. You can read more on all the settings and what they do in the Render Settings section of the manual. For now we are just going to generate the file out as is. Click the save button at the bottom of the dialog. You will be prompted to select the location you wish to render to and the name of the file.

4) Click the “Render Now” checkbox located just above the OK button. Now click the OK button and rendering will start. We did not choose to save the frames under the frame tab so we will be left with the interlaced file only when the application is done rendering. Once the application has finished rendering the frames, the interlace progress window will appear and give a preview of the render in progress.



Tutorial: Rendering frames

Power Illusion allows you to render frames, Interlace or both. If you do not have the “Frames” checkbox checked in the frames tab they will render to the temporary folder and be deleted after the interlace is complete. If you do have it checked it will save the frames to a location of your choice and use the same frames to render the final interlace. To save the frames go to the Frames/Anaglyph tab in the render settings dialog. Check the Frames/Anaglyph checkbox in the top left corner. Click the save button to name and save the frames to a location of your choice. Frames will automatically be generated into a folder named FRMS. You can change the folder name in the field next to frame name.

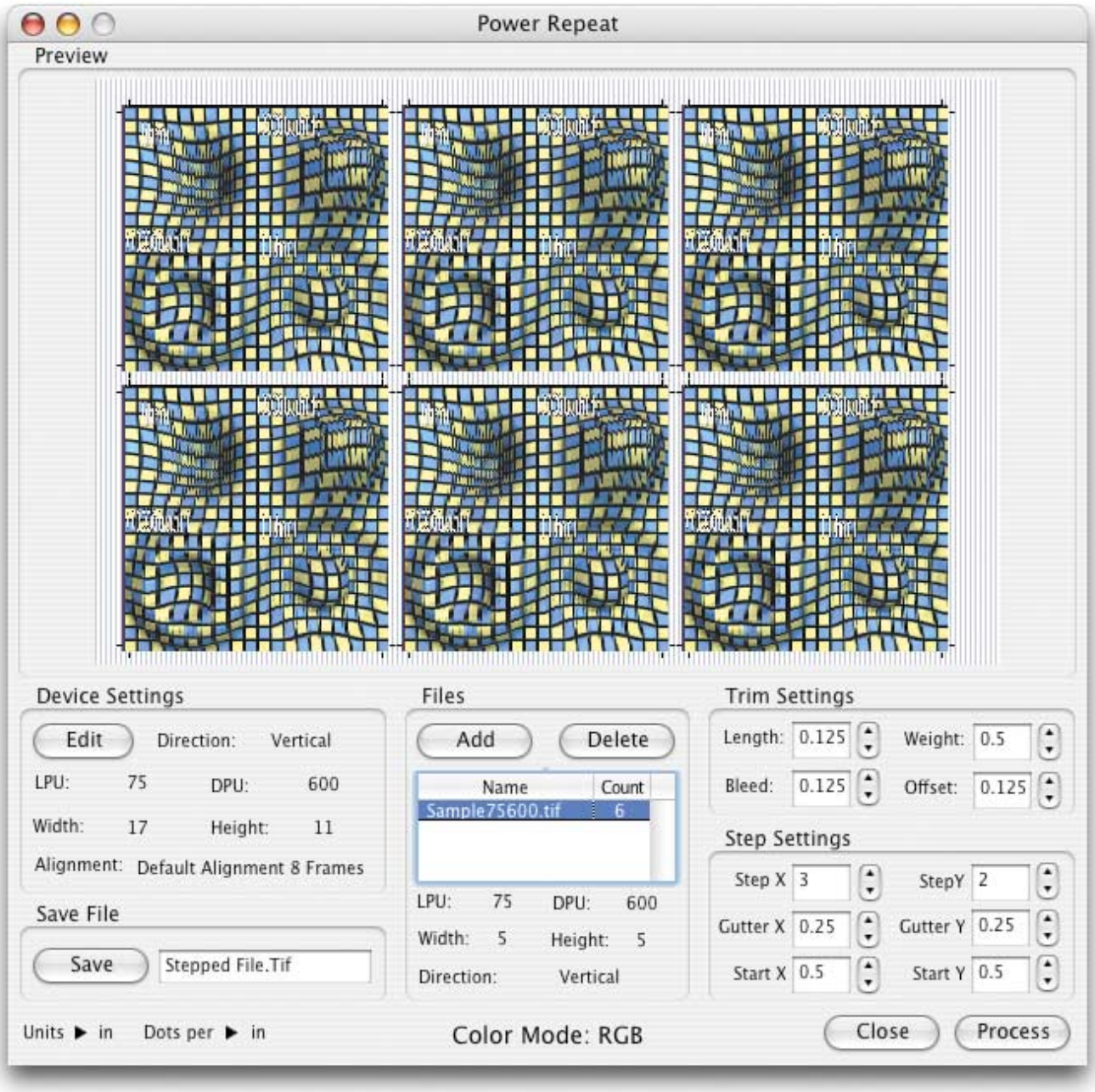
Tutorial: Power Repeat

1) Double Click Power Illusion to start the application. If Power Illusion is already open save and close the document you have open by selecting from the menu File : Save. Once the document is saved select from the menu File : Close

2) From the menu choose Tools : Power Repeat. The Power Repeat window will appear. Once open, click the “Edit” button to the left in the “Device Settings” area. The Device Editor will appear. This is the main interface for altering or creating device settings. From the Device Presets menu you will find many industry standard device settings so that you can quickly setup a step and repeat.

3) Click the OK button to close the Device Editor window. Click the add button in the “Files” section. Go to the Power Illusion application folder. Go into the “Sample Files” folder. Select the file“Sample75600.tif”.

4) The file “Sample75600.tif” will be added and will appear in the sheet preview window. Now we need to step the file across and down the sheet and edit its trims.



Tutorial: Power Repeat continued

5) Under the “Trim” Area set the Length, Offset and Bleed to .125. Set the stroke weight to .5. Stroke weight is measured in points.

6) Under the “Step Settings” area set the StepX to 3 and the Step Y to 2 you will see the file step across the sheet instantly.

7) Now click the Save button and name and save the stepped file to a location of your choice.

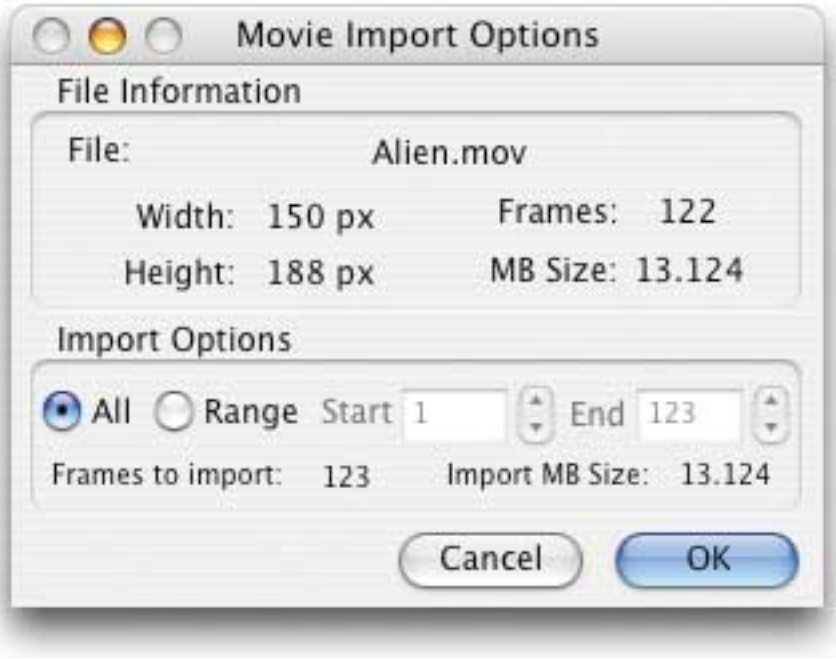
8) Click the process button and Power Illusion will create your stepped file to the location you chose.

9) You have just created a stepped and repeated file to the lenticule with trims in Power Illusion. Pre-Press almost complete! Now simply apply your pitch settings in the “Calibrate Image” utility and you’re ready to print.

Tutorial: Movie Import

It's easy to import frames from quicktime movies with Power Illusion.

1) From the menu choose File : Get Frames from Movie. A prompt will appear for file selection. Select the "Alien.mov" file from the sample files folder inside the Power Illusion folder. Click "OK".



2) The Movie Import window will appear. If the "All" radio button isn't selected, select it and hit "OK"

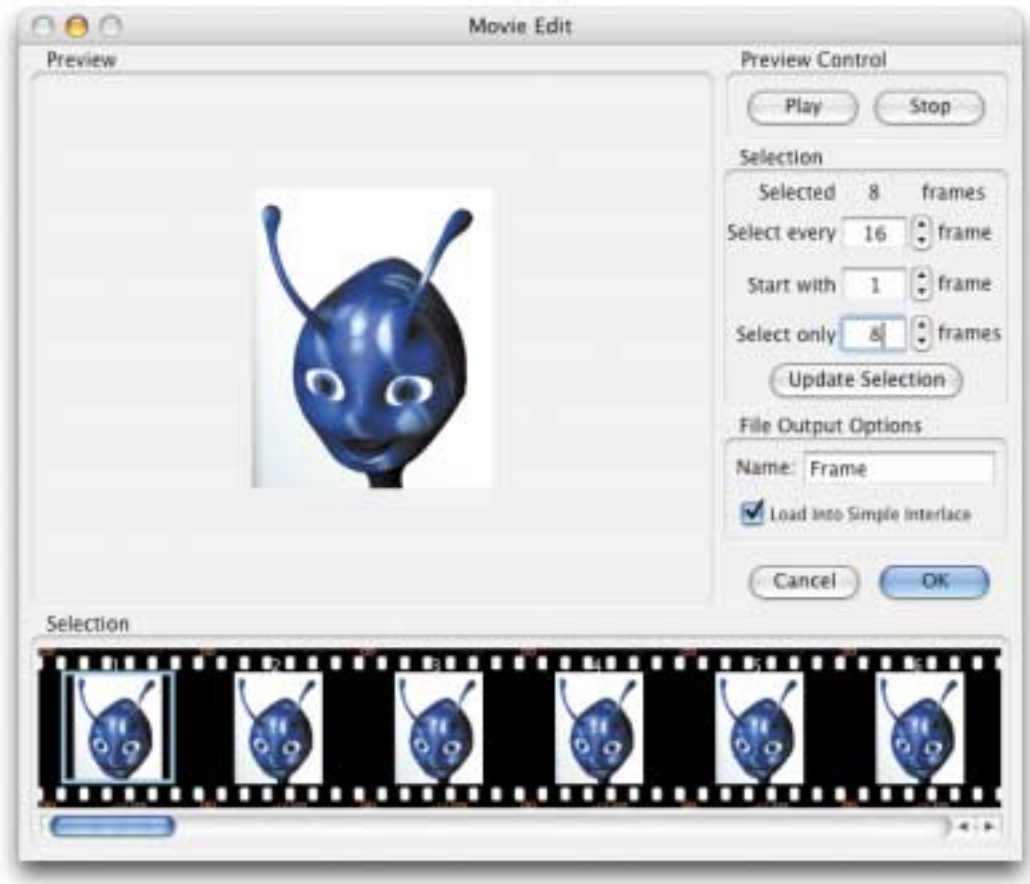
3) The Movie Edit window will open. In the "Select every" field enter 16.

4) In the "Select only" field enter 8

5) Hit the "Update Selection" button.

6) If the movie doesn't play, hit the play button to see a preview of the selection.

7) Once satisfied click the "OK" button and name the path to the frame folder. This is were the frames will be stored.



8) Load the frames into a complex scene or simple interlace to produce a lenticular image.

9) If the "Load into Simple Interlace" checkbox is selected a new simple interlace will be created and the frames will be automatically loaded.

Tutorial: File import

There are many different ways to import files into a Power Illusion Complex scene.

In addition to using “Add Layer” and importing Tiff, Pict, BMP, and Jpeg you can also load individual layers from the “Import from PCS” or “Import from PSD” menu items under the “File” menu.

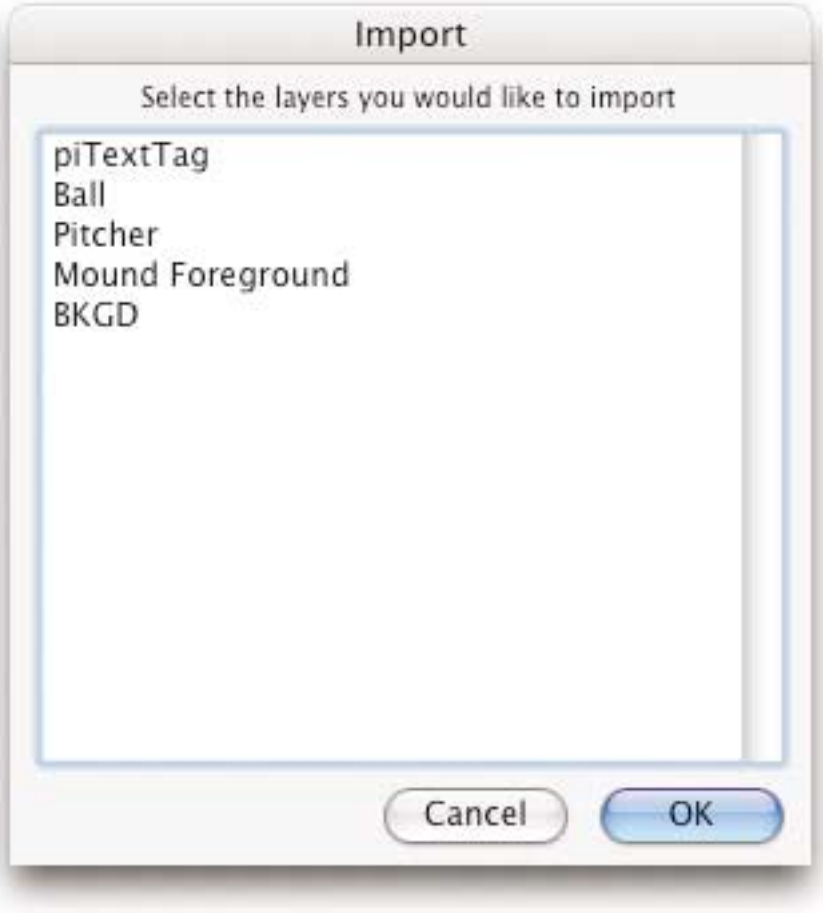
The Dialog is the same for both methods of import.

1) From the file menu choose “Import Layer from PCS” or “Import Layers from PSD”.

2) You will be asked to select a PSD of PCS file.

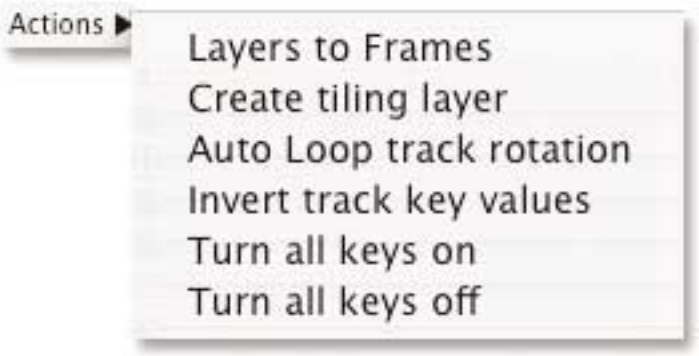
3) Power Illusion will read the document and present you with a list of layers in the document to select. Select whatever layers you wish to use. Holding down shift or command (control PC) will allow for the selection of multiple layers.

4) Click the “OK” button and the layers will be added to the document.



Tutorial: Timeline Actions

Timeline Actions provide many shortcuts to tasks that become repetitive or are difficult to calculate, as well as a couple of cool tools that make for some nice effects.

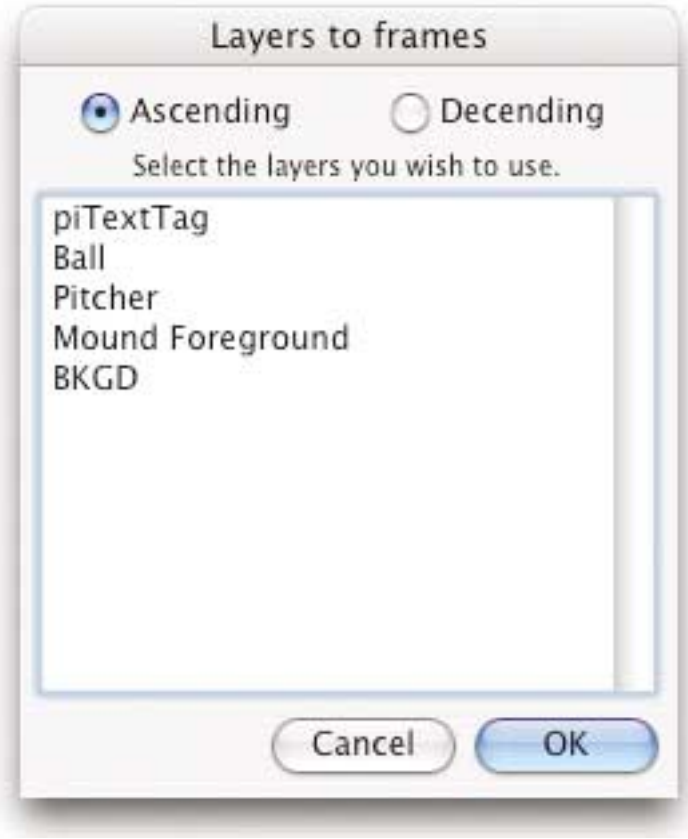


Layers to Frames:

Layers to frames will take any selection of layers and convert the to frames. It does this by automatically calculating hwo the visibility tracks for each layer need to be turned on or off so that the layers selected show as individual frames.

1) To coplete this function from the “Timeline” menu choose “Timeline Actions” then “Layers to Frames”.

2) A Dialog will appear with a list of the layers in the document. Select whatever layers you wish to use. Holding down shift or command (control PC) key will allow for the selection of multiple layers. Select Ascending or Descending and click OK. Power Illusion will handel the rest.

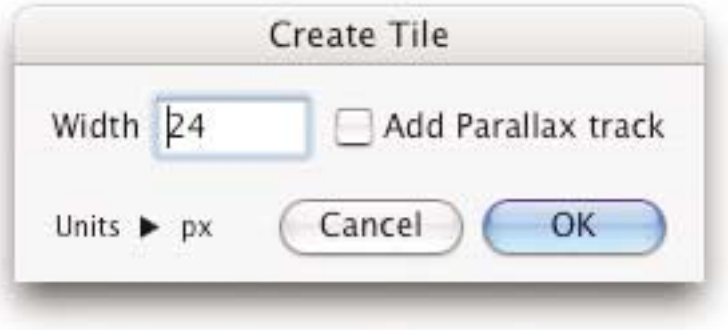


Tutorial: Timeline Actions Continued

Create Tiling Layer:

Ever seen one of those 3D backgrounds that never seem to have that lenticular jump when you reach a certain point? This effect is completed by creating a tiling layer for the background that has just the right amount of parallax mixed with just the right tile size. Power Illusion will automatically create one of these backgrounds for you from any layer in your document.

1) Select any layer in a document and from the “Timeline” menu choose “Timeline Actions” then “Create Tiling Layer”. A dialog will appear:



2) Enter the amount of Parallax you want for the layer. If you plan for the layer to have 3D, the amount needs to be reasonable. If you place 5 inches of parallax on a 8 inch wide image it will not tile properly. Setting tiling to an amount between -.1 and -.25 inches should make for a nice effect on smaller images. Once you hit the “OK” button a tiling layer with parallax will be created and inserted in the background layer of the document.

Tutorial: Timeline Actions Continued

Auto Loop Track Rotation:

A Rotation track allows for the rotation of a layer to any degree and from one rotation angle to another rotation angle over a period of time. Auto Loop Track Rotation will rotate a layer one full revolution, however it will calculate the last rotation state so that it loops seemlessly into the next Full rotation. This results in a layer that rotates over and over seemlessly as the viewer handels or walks past the lenticular image.

1) Select any layer in a document.

2) From the “Timeline” menu choose “Timeline Actions” and “Auto Loop Track Rotation”.

Invert Track Key Values:

This action takes all the keys on a track and inverts their position values on the Timeline. Select any track(Visibility, position etc.) on a layer. From the “Timeline” menu choose “Timeline Actions” then “Invert Track Key values”.

Turn All Keys On, Turn All Keys Off:

These actions take all the keyframes on a track and turns them on or off.Select any track(Visibility, position etc.) on a layer. From the “Timeline” menu choose “Timeline Actions” then “Turn All Keys On” or “Turn All Keys Off”.