SuperBladePro

Flaming Pear Software

What it does

SuperBladePro gives graphics a 3-D look by creating beveled edges and surface textures. The effects can be subtle or stark, raised or sunken. You can do bevels, textures, and mirror-like reflections. There are controls for lighting, gloss, iridescence, tarnish, glassiness, and more – it's a timesaving way to make touchable-looking text, buttons, and special effects.

How to install

Illustrated installation instructions are online at www.flamingpear.com/faq.html .

To use this software, you need to install it into Photoshop.

Just drag the plug-in filter into the folder where Photoshop expects to find it. On OS X, it will be similar to Applications/Adobe Photoshop/Plug-ins.
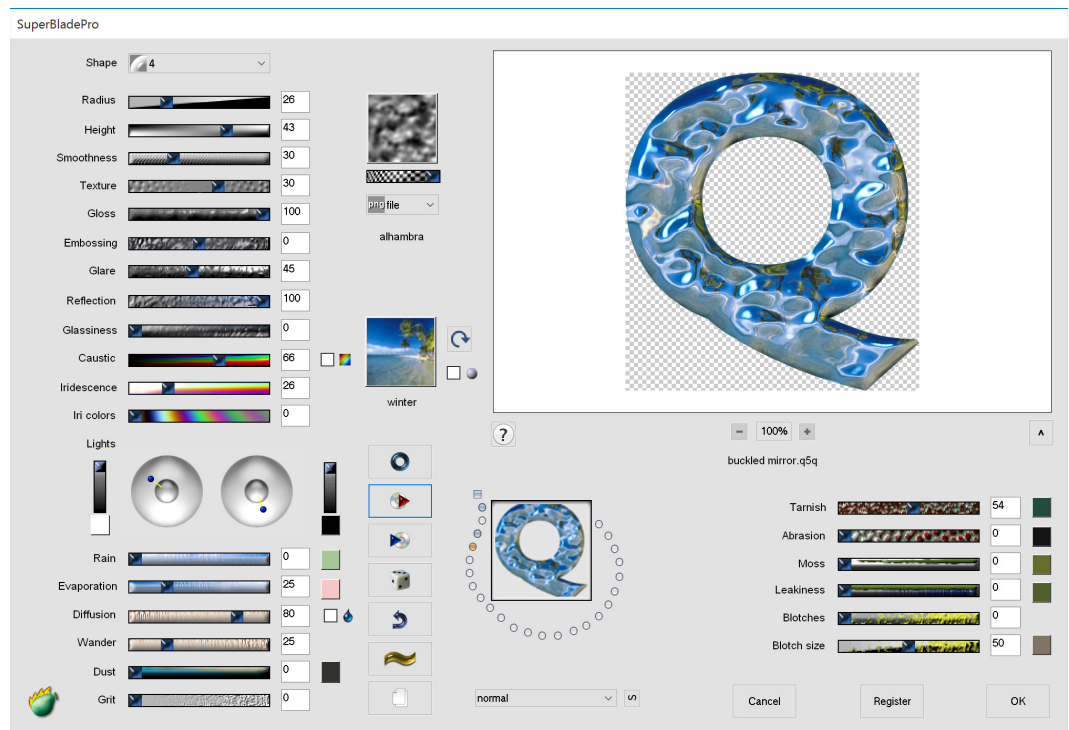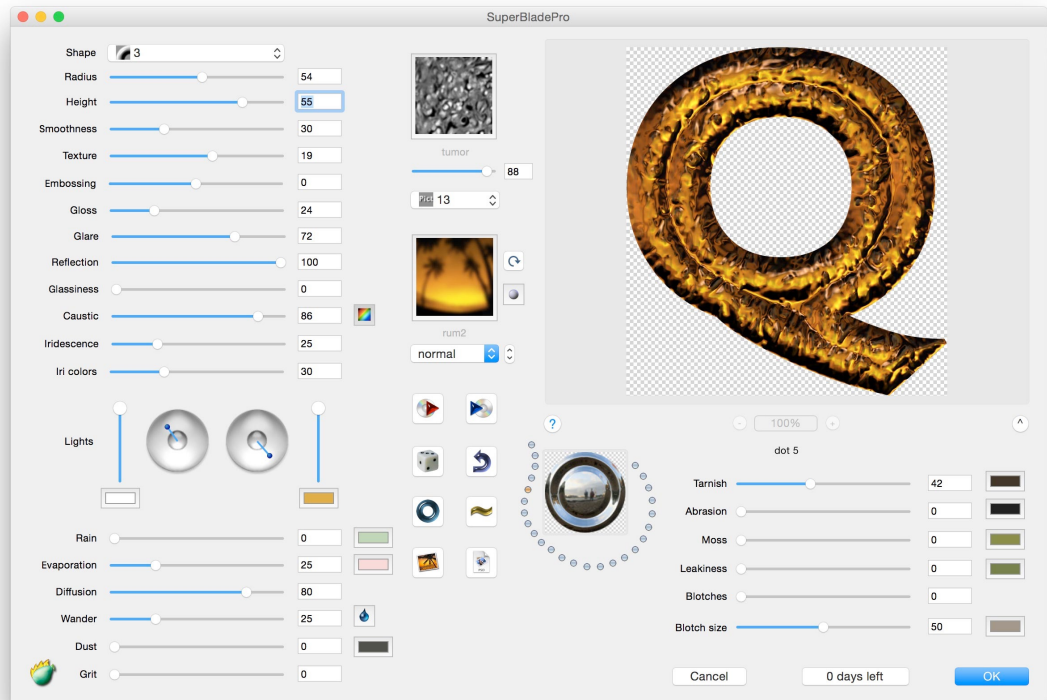
On Windows, it will be similar to C:/Program Files/Adobe/Adobe Photoshop/Plug-ins.

You must restart Photoshop before it will notice new plug-ins.

The plug-in is now installed. To use it, open any image and select an area. From the menus, choose Filter > Flaming Pear > SuperBladePro.

Quick start

When you invoke SuperBladePro, a dialog box will appear.

In your paint program, select a shape with the lasso tool, then start SuperBladePro.

dice

Click the dice button a few times until you see something you like.

Click OK. The progress bar will appear, and then your selection will have a new 3–D look.

If you want to exert fine control over the result, it helps to learn the controls which govern shape, lighting, and appearance.

Shape

Bring the filter back and take a look at the controls. On left are a popup menu and several sliders.

Shape sets the shape of the bevel. Choose from straight, curved, up–and–down, and doubled forms. The last shape is a Gaussian bevel which produces a very smooth result with no edges.

Radius The width, in pixels, of the beveled edge.

Height Larger values here make the bevel steeper. Positive values make the selection rise out of its background, and negative values make it sink in.

Smoothness Larger values reduce the rippled appearance of the bevel.

Texture specifies the strength of the texturing. Positive values make the texture rise out of the bevel, negative ones make it sink in.

**Embossing** make the brightness of the underlying image influence the shape.
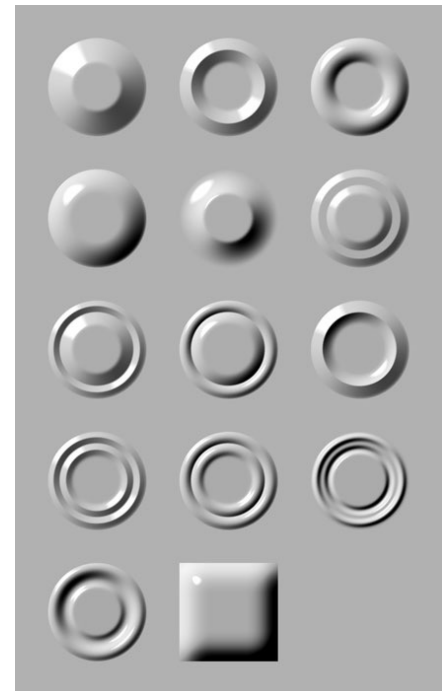
bevel shapes

Light

Light angle controls are the two grey spheres. To change the placement of a light, drag the small blue dot to a new position. Best results come from placing the light somewhere in the upper half of the ball.

Spotlight sliders next to the light angle controls can produce uniform illumination or a spotlight effect.

Color buttons are for changing the lights' colors. To turn a light completely off, set its color to black.
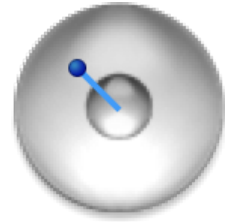
light angle

color button

Gloss

Gloss controls shininess. Zero gives a chalky appearance. Higher numbers are glossier.

Glare controls the size of the glossy highlight.

plain bevel with gloss and glare

Reflection controls how much the selection reflects the Environment graphic. If you don't want any reflection at all, use zero.

reflection and texture

Glassiness gives the selection a glassy appearance. The color of the original image becomes the color of the glass.

Caustic controls the brightness of the caustic highlight that appears opposite the light source. In only works when glassiness is turned on. The checkbox just to the right of the slider lets you choose prismatic or white caustics.

glassiness and prismatic caustics

Iridescence controls the strength of iridescent coloration.

Iri colors controls the choice of iridescent colors.

Together, Caustic and Iridescence reproduce the effect that gives soap bubbles their rainbow colors.

iridescence

Textures and reflections

Texture popup menu chooses a texture. The first item is 'no texture'; the next eleven items are built-in textures; and the last item is the custom texture.

texture popup

You can use any greyscale PICT file (on Macintosh) or BMP file (on Windows) as a custom texture. To do this, select the custom texture item from the popup menu, and use the file browser to choose a picture from disk.

The **texture graphic** is just below. Clicking on it is another way you can load a new texture file. You can reposition the texture by dragging it with the mouse.

Texture files are "height fields" and describe the shape of a surface. Black is low, white is high, grey is in between. SuperBladePro comes with several texture files in its 'environments and textures ' folder, and you can make your own. They can be as large as 256 by 256 pixels. Larger ones will be squeezed to fit. The right edge should wrap seamlessly around to the left, and the top to the bottom.

crackle

texture graphic

The **texture zoom slider** is right below the texture graphic. It can scale the texture up or down by a factor of 16.

Next is the **environment graphic**: When Reflection is on, Blade will produce mirror–like reflections of the environment graphic. Just click on the graphic and you can load any PICT file (on Macintosh) or BMP file (on Windows) as an environment. You can find several samples in the 'environments and textures' folder that came with SuperBladePro.

If you don't want reflections, set the reflection slider to zero.

Some of the example environments, like 'gold', appear to contain their own light source coming from the top left. If that conflicts with your design plan, you can spin the environment with the **environment spinner** button, so that it better matches the rest of the lighting. This button is the one with the little curly arrow on it.

gold

normal
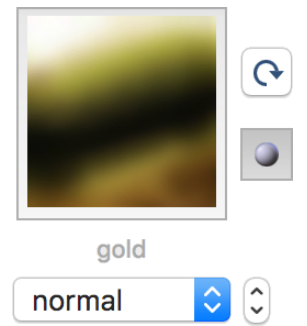
environment graphic and spinner

Rain

SuperBladePro can simulate water stains. This uses four sliders:

Rain is the amount of water falling from the top of the selection.

hubcap with rain

Evaporation sets the rate at which water evaporates. If evaporation is greater than rain, water stains may only appear near wrinkles in the surface.

more evaporation

Diffusion controls the horizontal spread of the water

less diffusion

Wander makes water wander over flat areas instead of falling straight down.

less wander

There are two **rain color** buttons. As rain becomes heavier, the color changes from the first color to the second.

color button

A **wet/dry** checkbox controls whether the rain acts like opaque paint or transparent dye.

wet rain

Weathering

Dust makes dull powder appear on upward-facing surfaces.

Grit puts high-frequency noise in the texture.

dust and grit

Tarnish puts dull, matte color in the concave parts of the surface. The color button just to the right of the slider lets you change the tarnish color.

Abrasion is like Tarnish, but puts dirt on convex areas.

green tarnish and red abrasion

Moss puts moss on upward-facing surfaces.

Moss has two **color buttons**: one for the moss itself, one for the underlying soil.

moss

Leakiness makes the moss leak water, and makes the blotches soak in the resulting stains.

Blotches grows lichen-like blobs. Blotches have color, scale, and coverage controls.
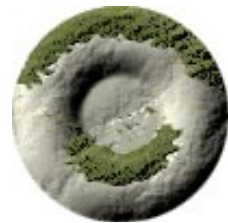

blotches

Blotch Size makes the blotches bigger or smaller.

The **random seed** nearby changes the detail of the blotches. You can click it repeatedly until you see the effect you like.

random seed

Other controls

Dice: The dice choose a random effect. Click as much as you want to see different effects.

dice

Reset: Gives you the "factory settings," a plain bevel.

reset

Glue mode popup: menu Lets you combine the result with the underlying image in various ways. Modes other than "normal" produce special effects. The **next-glue button** advances to the next glue mode.

next glue

Send to photo manager: Sends the result to Photos (on Macintosh).
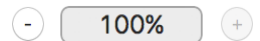
send to Photos

Export to PSD: Renders the result to a a .psd image file.

export to PSD

Plus, % and minus buttons: If the selected image area is bigger than the preview, these buttons let you zoom in and out. Drag the preview to move it.

- 100% +

minus, %, plus

Make Gallery: Does three things:

^ make gallery

– If you have a folder full of presets from original BladePro, you can automatically turn them into SuperBladePro presets containing previews.

– You can make a web page showing all your texture and environment images.

– You can make a web page that displays all the presets' previews, and lists which environment and texture files they use.

Load preset: SuperBladePro comes with some presets, which are files containing settings. To load one, click this button and browse for a preset file.

load preset

The presets expect their texture and environment files to be in the 'environments and textures' folder. If presets fail to load properly, SuperBladePro will ask you where that folder is. The Installation section of this guide explains in more detail.

Save preset: When you make an effect you like, click this button to save the settings in a file.

save preset

Undo: backs up one step.
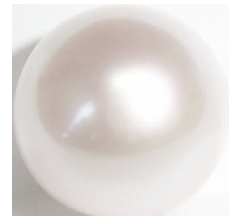
undo

Info: Briefly explains the controls.

info

Spherical reflection: lets you achieve more realistic-looking reflections by using a picture of a sphere as the environment image. Use a picture whose edge just grazes the edge of the sphere.

spherical

spherical reflection image

Three more buttons:

OK: Applies the effect to your image.

Cancel: Dismisses the plug-in, and leaves the image unchanged.

Register: Allows you to type in a registration code and remove the time limit from the demo.

Memory dots

Although you can save your settings permanently to files, you can also stash settings in memory dots.

Click an empty dot to stash the current settings in it.

Click a full dot to retrieve its settings.

Hover the mouse over a dot to see what it contains.

Option-click to erase a dot on Macintosh.

Right-click to erase a dot on Windows.

If a dot is orange, SuperBladePro's currently using that dot's settings.

Dots remember their contents until you erase them. If you'd rather make a temporary dot that forgets when you exit SuperBladePro, control-click it. Temporary dots are square.

When you start SuperBladePro, it puts the starting settings in a temporary dot. That way it's easy to start over without exiting the plug-in.

On Mac, you can drag-and-drop settings files from the central memory well.

You can build a web page showing how the current image would look with every memdot setting. Just option-click (Mac) or right-click (Windows) on the big memdot image.

memory dots

empty

full

current

temporary
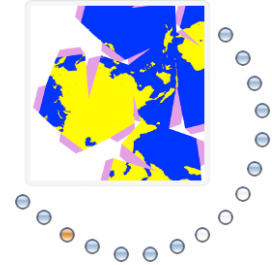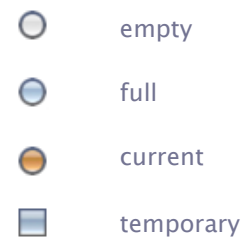
Some effects you can try

A ruby

Make a selection with some straight sides and fill it with ruby-red. Bring up SuperBladePro and decide how you want your ruby to look.

Adjust the Shape and Radius and Height to produce a shape with some internal edges in it.

Rubies are glassy, so set Glassiness to about 90. You want it to appear sparkly and reflective, so set Gloss to about 50, Glare to 50, Reflection to 75. Choose an environment with flattering colors in it: 'Rum' is nice.

To increase sparkle further, turn Caustic up to 60 to produce a highlight away from the light. Even better, use both light sources: move the second one to about the 2 o'clock position, and set its color to creamy yellow.

Introduce more variety of color by turning Iridescence to about 15 and putting the Iri Colors slider somewhere in a pink-and-yellow region.

Subtle texture will make your ruby look best. Click the texture graphic and load the texture file called 'ripples2'. Set the Texture slider to something between 10 and 30, and experiment with the Texture Zoom until you like the result.

Click OK. There's your ruby.
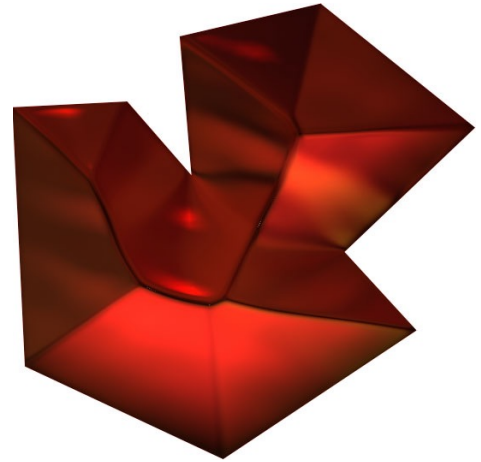
Tarnished metal

Select a region of your image, and call up SuperBladePro.

Load the preset called 'old brass, big'. The important elements here are 100% reflection of a brassy environment, a wavy texture, some dark tarnish like oxidized metal, and a light source at the upper left, which matches the light in the environment map.

If the real light and the light in the environment don't match, the tarnish will look wrong. If you want, try moving the light source and spinning the environment to see how they need to be in sync.

The tarnish collects in the concave parts of the surface, so it will react to the scale and height of the texture, as well as the crevices in some of the bevel shapes. Try changing those settings and the tarnish amount and color to see how they interact.

Try some other combinations: the environment 'city' with black tarnish looks like dirty silver. The 'dull steel' environment with brick-red tarnish looks like rust; strange tarnish colors like magenta give a surreal effect.

Good textures to use with tarnish are 'scales', 'pits', 'crackle', and 'dimples'. And try the preset called 'my tailpipe' to see a oxidized metal effect that uses tarnish and iridescence together.

Iridescent surfaces

Select a part of your image, and call up SuperBladePro, and load the preset called 'ski goggles 1'.
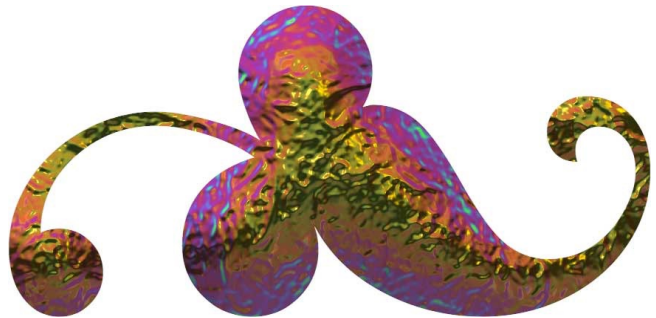
The selection reflects a nearly colorless environment, but the iridescence adds plenty of color to the result. The Iridescence slider controls the strength of the added color, and the Iri Colors slider decides the range of possible hues.

The final outcome of colors will react to the shape of the bevel and the strength of the texture, so try changing those settings to get a feel for how the colors change. The more strongly sloped the surface gets, the wider variety of colors it will have.

The Iri Colors slider produces assorted effects. At zero, iridescence disappears. At very small values, about 7, surfaces become dull brown, like slightly oxidized metal. At 12, you have an anti-reflective coating. Soap bubbles are about 25, and higher values give the hues you see in ski goggles and sunglasses.

Adding a very small amount of iridescence can create attractive variation in hue in any effect. Check out the preset 'my tailpipe' and change its iridescence settings to see what's possible.

A glassy logo

Use your text tool to write a word in 25% gray, using a large, husky font – say, Gill Sans Bold at 100 pt.

Make sure the text is selected, and call up SuperBladePro. Load the 'rainbow glass' preset. The word should now appear as glass with a bright rainbow caustic.

Play with the controls. Try a white caustic, or a different environment, or a different degree of glassiness or reflectivity.

Click OK if you like the effect.

If you want to experiment with colored glass, cancel out of the filter, and use your paint tools to paint each letter a different color. Moderately saturated tones at about half of full brightness work best. Then go back into the filter and see how the colored glass looks.

Hints

Selections with an antialiased edge will yield vastly better results than ones with hard edges. Most paint programs can create an antialiased edge for text-shaped and freehand selections.

The environment and texture graphics can be any PNG or BMP image, and you can use Photoshop to make your own. Included with SuperBladePro are...

Environments

2am

big city

bronze sunset

canal

cheap gold

chinarock

city

cloudvista

copper

cove

Curacao

daycare ball

driftwood

dull steel

earthspace

empire

glitter

gold

greenhouse ball

greenstairs

hillside

island

la–la land

lumphini

mylar ball

puffy

red copper

road

rum

samui

sea & sky

shrine

sparkle

steel ball

tinsel

tumor

Victoria sky

watery

white chrome

winter

zwolle

Textures

bark

burrs

cow

crackle

crumples

dendrites

fibrous

grass

lumps

moorgrille

panel

pits

plaster

ringlets

ripples2

ruffles

scales

silk

turbulence

zaprelief

You can use the gallery maker button to keep track of your environments and textures. It creates a web page showing all the SuperBladePro items in a folder.

Free SuperBladePro tutorials and extra textures are available at flamingpear.com .

If you want to make your own metal environments, it aids realism to make the bright parts slightly bluer and the dark parts slightly redder than your base hue.

If you want to produce a scene with shiny objects in front of some backdrop, you can use a small (64x64 pixels or so) version of the backdrop as your environment map. This way the shiny objects will match their background. There's an example of this online.

Constructing a 3-D shape from a selection's edge results in a slightly ripply surface, so reflections tend to have fine striations in them. For that reason, the best results come from environments with contrasty ramps of color and a bare minimum of detail. Take a look at the included samples to get an idea.

You can use bevels with a small radius and negative height to create a chiseled edge.

SuperBladePro can be used purely as a texture generator; just set Bevel Height to zero, and reduce Radius to the minimum. Try this using the texture 'dimples' and some tarnish.

You can make your own textures: dark areas are low, bright areas are high. Try this recipe:

> Find an interesting piece of a some image.
>
> Use the cloning brush to make a roughly square, roughly homogenous chunk
>
> Gaussian Blur by about 0.5 pixels
>
> Adjust->Auto Levels
>
> Use the highpass filter on it, radius 4 to 8 pixels
>
> Adjust->Auto Levels again
>
> Wrap the edges of the selection to make a seamless tile.

Try inverting the grey values of the whole image. If the picture becomes generally darker, then use the inverted picture. That way, positive settings of the texture slider will produce bumps, and negative settings pits.

Version History

Version 1.95

Improves the interface on high-DPI Windows monitors.

Version 1.94

Restores 32-bit compatibility for Mac OS X.

Version 1.92

Fixes a problem with loading certain environment images.

Version 1.90

Environments with higher resolution and the option to use mirror-ball images. Smoother bevels. 64-bit and retina-ready for Macintosh.

Version 1.82

Fixes the memory dots on Macintosh.

Version 1.8

64-bit version for Windows. Fixes a Mac bug that could cause a crash when choosing a new environment graphic.

Version 1.7

Adds convenience features to the interface. The Mac version is resizable.

Version 1.5.2

Fixes a Macintosh problem where the plug-in could have bad settings or crash when installed on a machine for the first time.

Version 1.5

Universal Binary for Macintosh. Fixes a Windows problem where the plug-in wouldn't remember its registration when it was installed in one user account but activated in another.

Version 1.45

Fixes the result when used in a 16-bit layer.

Version 1.42

Faster. Does not forget settings when used with Paint Shop Pro 9.

Version 1.4

Works with 16-bit-per-component color.

Version 1.3a

Fixes incorrect results with floating selections in PSP8.

Version 1.3

Adds dozens of new glue modes.

Version 1.2

Recordable as a Photoshop action.

Version 1.1

Adds the preset-management feature. Changes the behavior of zoomed-out selections in PSP8 again.

Version 1.09a

Makes the big previews work more reliably. Fixes the numeric display of the texture-zoom slider in the Mac OS X version.

Version 1.09

Adds bigger previews in the preset browser. Adds a button for automatically updating a whole folder of presets.

Version 1.08

Fixes the appearance of zoomed-out views in Paint Shop Pro 8 .

Version 1.07

Fixes the appearance of text in the interface when running under Mac OS X 10.2.3 .

Version 1.06

Fixes a bug in the both the Windows and Macintosh versions where loading presets would sometimes cause spurious error messages.

Version 1.04

Fixes yet a third bug in the Macintosh version where presets would sometimes not load their texture and environment files. This version is PowerPC only.

Version 1.02

Fixes another bug in the Macintosh version where presets would sometimes not load their texture and environment files.

Version 1.01

Fixes a bug in the Macintosh version where presets would sometimes not load their texture and environment files.

Version 1.0

The first public release. Novel features include water stains, blotches, abrasion, spotlighting, dust, grit, embossing, moss, and smooth Gaussian bevels. The Windows version will operate correctly even if Windows is installed on a drive other than C:.

How to purchase

You can place an order online here. A secure server for transactions is available.

Questions

The software, documentation, and supporting materials are made by Flaming Pear Software. Answers to common technical questions appear on our support page, and free updates appear periodically on the download page.

For bug reports and technical questions, please write to support@flamingpear.com .