

Panopticum Lens Pro 1.0 for Adobe PhotoShop™



Release 1.0 April 1999

# User Guide



# Lens Pro



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## About the software

### **Panopticum Lens Pro 1.0 for Adobe PhotoShop User Guide**

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**Panopticum Lens Pro** is a unique set of special lens effects which was created by our company for designers using in their work such program tools as Adobe PhotoShop, Corel PhotoPaint, Paint Shop Pro and other sets which support the standard of Adobe PhotoShop additional modules.

**Panopticum Lens Pro** is a powerful means which allows to get the effect of seeing various pictures through various types of lens, prisms and crystals very quickly and easily. All the lens effects contain a wide set of adjustable parameters for the shape, optical properties, position of the lens and light intensity.

**Panopticum Lens Pro** contains a unique mechanism of creating an optical effects called chromatic aberration in physics. This is an effect resulting from refraction of a light ray on the borders two transparent substances with different density. This is displayed as rediscout radiance around the picture through the lens. You can regulate the intensity of chromatic aberration down to zero.

**Panopticum Lens Pro** support the build-in anti-aliasing effect which allows to gradually enlarge the picture seen throw the lens. Besides you don't see a grain of the pictures even at a great increase. Also measures have been taken to eliminate the margin effect of the lens. It's useful when cutting the lens with the help of the alpha channel.

**Panopticum Lens Pro** can be executed at the real time mode due to the great efforts of our programmers. This allows to carry out a finer adjustment of the parameters and to create great expressiveness of the lens effects.

**Panopticum Lens Pro** is provided with an easy-to-use interface which enables you to see the results of changing the parameters. It makes working with our software interesting and provides you with a ten moments of fun. ENJOY YOURSELVES!!!



## New Features

NEW FEATURES in the Panopticum Lens Pro 1.0 for Adobe PhotoShop:



**STAR LENS** creates lens in form of crystal like star with a lot of settings;  
**ANTI-ALIASING** effect;  
**COLOR ADJUSTMENTS** like color hiliting and facet color;  
**ABERRATION** of the lenses;  
New convenient **USER'S INTERFACE**.



Panopticum Lens Pro works also with **Corel PhotoPaint 8** and  
**PaintShop Pro 5.0!**

## System Requirements

### **Panopticum Lens Pro for Adobe PhotoShop / Windows95/NT**

1. Windows NT version 4.0 or Windows 95 or later operating system.
2. An Intel processor-based PC with a 486/66, Pentium, Pentium II, or Pentium Pro processor.
3. At least 32 megabytes of RAM, 64 megabytes of RAM recommended.
4. 12-bit (4096) display color; true color (16.7M colors) recommended.
5. 640 x 480 display resolution; 800 x 600 or better recommended.
6. 5 megabytes of free disk space for installation.

### **Panopticum Lens Pro for Adobe PhotoShop / MacOS**

1. MacOS 7.5 or later operating system.
2. A PowerMac (or compatible) with any PowerPC processor.
3. At least 32 megabytes of RAM, 64 megabytes of RAM recommended.
4. 12-bit (4096) display color; true color (16.7M colors) recommended.
5. 640 x 480 display resolution; 800 x 600 or better recommended.
6. 5 megabytes of free disk space for installation.

## Lens description

**Universal** - many forms of lens are available: from classic circle lens to very complex such as star lens.

**Ellipse** - classic circle lens. By using the lens you can easy and quick create circle lens any kind, shape, optical parameters and so on. It is very simple to create very nice effects with using the lens.

**Droplet** - this lens allows you to complete your image with drops flowing down on wet glass or with crystal tears shed from your hero eyes. You can edit the form and shape end of the droplet.

**Square** - classic rectangular lens. The effect lets you create any lens in form of rectangle with a lot of parameters, which adjust shape, optic and color's properties of lens.

**Torus** - to create lens like torus with large range of adjustment parameters. The shape of torus varies from the simple circle to torus any form, orientation and scale.

**Star** - Crystal Star effect allows your images to sparkle as never before on the facets of crystals. You can set the number of facets, distance between center and border, cut of facets.

**Diamond** - Crystal Diamond effect allows your images to sparkle as never before on the facets of crystals. You can set the number of facets, distance between center and border, cut of facets.

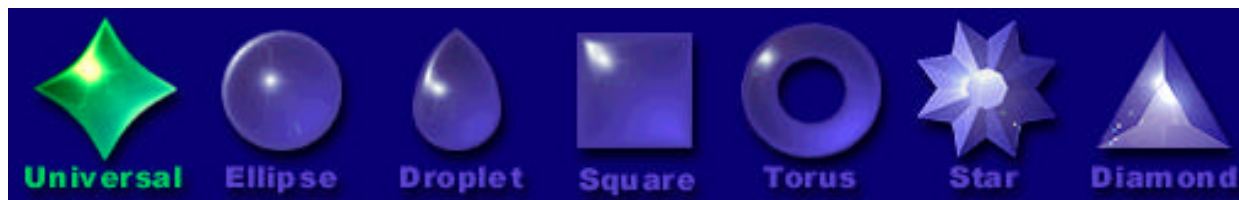






## Interface description

For switching between lenses use the bar at the bottom of window - select the necessary lens and click the button in kind of the lens.



Active lens is highlighted by the green color, for example at the picture below the active lens is Universal.

For cutting image outside the created lens use the special "alpha" button.



Buttons "OK", "Cancel", "Reset", "Load" and "Save" are grouped in the special structure shown at the right picture, move the cursor to a button and its "name" will be shown in the large circle area. For processing command - click the necessary button.



For example at the right picture the "OK" button is activated.



The parameters of all lenses are grouped in the three categories:

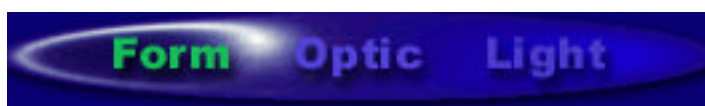
**Form** - adjust the geometry of lens;

**Optic** - adjust the optical parameters of lens;

**Light** - adjust the lighting effects on the lens.

Click a category for adjustment of the necessary parameters.

The sliders adjust the parameters of the lenses.



# Panopticum Lens Pro 1.0 for Adobe PhotoShop™



For example at the pictures shown slider that adjust the geometry characteristic "proportion".



When slider is active - it is hilited, drag the thumb for changing the value of the parameter or click at the little arrows for changing the value for one division.



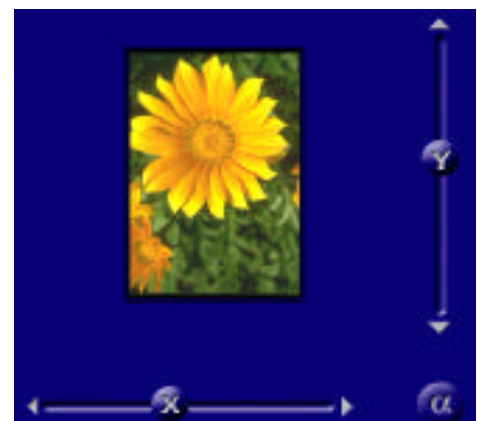
The value of the parameters is shown at the right border of the slider.



For setting a color's parameter - click at a color bar.



The sliders "X" and "Y" adjust the position of a lens on the image.



The parameters that discribe rotation are adjusted by the control like this



The parameters that discribe hilighting position are adjusted by the control like this



The parameters that discribe facet light position position are adjusted by the control like this





## Adjustments

### Universal Lens

#### *Form:*

**SIZE** - adjust the size of the lenses;

**VERTEX COUNT** - adjusts the number of the vertex;

**ZIG-ZAG** - adjusts direction bend tops stars lenses;

**CUBATURE** - adjusts curvature parties lenses between by tops;

**PROPORTION** - adjusts proportions lenses on to axes X and Y;

#### *Optic:*

**REFRACTION** - adjusts optical properties lenses refraction;

**ABERRATION** - adjusts aberration of the lenses;

**CURVATURE** - adjusts curvature surfaces lenses;

**COLOR LENS** - adjust color of the lenses;

#### *Light:*

**CHINE** - adjusts brightness shine by Hilight;

**SPECULAR** - adjusts width spotlight;

**COLOR HILIGHT** - adjusts color light;

**ROTATION LIGHT** - adjusts turn spotlight on edge lenses.

### Ellipse Lens

#### *Form:*

**SIZE** - adjust the size of the lenses;

**PROPORTION** - adjusts proportions lenses on to axes X and Y;

#### *Optic:*

**REFRACTION** - adjusts optical properties lenses refraction;

**ABERRATION** - adjusts chromatically aberration of the lenses;

**CURVATURE** - adjusts curvature surfaces lenses;

**COLOR LENS** - adjust color of the lenses;

#### *Light:*

**CHINE** - adjusts brightness shine by Hilight;

**SPECULAR** - adjusts width spotlight;

**COLOR HILIGHT** - adjusts color light;

**ROTATION LIGHT** - adjusts turn spotlight on edge lenses.





## Droplet Lens

### *Form:*

**SIZE** - adjust the size of the lenses;

**PROPORTION** - adjusts proportions lenses on to axes X and Y, without  
preservations proportions at rotation;

**PROPORTION ROTATE** - adjusts proportions lenses on to axes X and Y,  
with by preservation proportions at rotation;

**HEIGHT** - adjusts height tops drops;

**SKEW** - adjusts direction bend drops lenses;

### *Optic:*

**REFRACTION** - adjusts optical properties lenses refraction;

**ABERRATION** - adjusts chromatically aberration of the lenses;

**CURVATURE** - adjusts curvature surfaces lenses;

**COLOR LENS** - adjust color of the lenses;

### *Light:*

**CHINE** - adjusts brightness shine by Hilight;

**SPECULAR** - adjusts width spotlight;

**COLOR HILIGHT** - adjusts color light;

**ROTATION LIGHT** - adjusts turn spotlight on edge lenses.

## Square Lens

### *Form:*

**SIZE** - adjust the size of the lenses;

**PROPORTION** - adjusts proportions lenses on to axes X and Y;

### *Optic:*

**REFRACTION** - adjusts optical properties lenses refraction;

**ABERRATION** - adjusts chromatically aberration of the lenses;

**CURVATURE** - adjusts curvature surfaces lenses;

**COLOR LENS** - adjust color of the lenses;

### *Light:*

**CHINE** - adjusts brightness shine by hilight;

**SPECULAR** - adjusts width spotlight;

**COLOR HILIGHT** - adjusts color light;

**ROTATION LIGHT** - adjusts turn spotlight on edge lenses.



## Torus Lens

### *Form:*

**SIZE** - adjust the size of the lenses;

**PROPORTION** - adjusts proportions lenses on to axes X and Y, without  
preservations proportions at rotation;

**PROPORTION ROTATE** - adjusts proportions lenses on to axes X and Y,  
with by preservation proportions at rotation;

**INTERNAL SIZE** - internal radius torus lenses;

**ROTATION** - adjusts rotation of lenses;

### *Optic:*

**REFRACTION** - adjusts optical properties lenses refraction;

**ABERRATION** - adjusts chromatically aberration of the lenses;

**CURVATURE** - adjusts curvature surfaces lenses;

**COLOR LENS** - adjust color of the lenses;

**FOCAL** - adjusts curvature surfaces lenses;

### *Light:*

**CHINE** - adjusts brightness shine by Hilight;

**SPECULAR** - adjusts width spotlight;

**COLOR HILIGHT** - adjusts color light;

**ROTATION LIGHT** - adjusts turn spotlight on edge lenses.

## Star Lens

### *Form:*

**SIZE** - adjust the size of the lenses;

**BASE** - adjusts size central sides crystal;

**AMOUND** - adjusts distance of internal tops of a star from base;

**VERTEX COUNT** - adjusts amount of the sides;

**ROTATION** - adjusts rotation of crystal;

### *Optic:*

**REFRACTION** - adjusts optical properties lenses refraction;

**ABERRATION** - adjusts chromatically aberration of the lenses;

**COLOR LENS** - adjust color of the lenses;

### *Light:*

**CHINE** - adjusts brightness shine by Hilight;

**SPECULAR** - adjusts width spotlight;

**COLOR HILIGHT** - adjusts color light;



**COLOR FASET** - adjusts color of facet;  
**FASET LIGHT** - adjusts the power of the lighting  
**ROTATION LIGHT** - adjusts turn spotlight on edge lenses.  
**ROTATION FACET LIGHTING** - adjust the angle of facet light.

## Diamond Lens

### *Form:*

**SIZE** - adjust the size of the lenses;  
**BASE** - adjusts size central sides crystal;  
**BEVEL** - adjusts bevel corners crystal;  
**VERTEX COUNT** - adjusts amount of the sides;  
**ROTATION** - adjusts rotation of crystal;

### *Optic:*

**REFRACTION** - adjusts optical properties lenses refraction;  
**ABERRATION** - adjusts chromatically aberration of the lenses;  
**COLOR LENS** - adjust color of the lenses;

### *Light:*

**CHINE** - adjusts brightness shine by Hilight;  
**SPECULAR** - adjusts width spotlight;  
**COLOR HILIGHT** - adjusts color light;  
**COLOR FASET** - adjusts color of facet;  
**FACET LIGHT** - adjusts the power of the lighting on the facets  
**ROTATION LIGHT** - adjusts turn spotlight on edge lenses.  
**ROTATION FASET LIGHTING** - adjust the angle of facet light.



## Example of using Panopticum Lens Pro

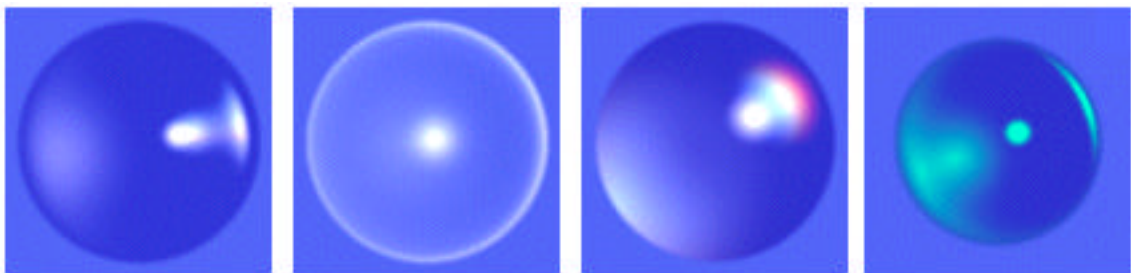
Here you can see a collection of pictures created by using Panopticum Lens Pro and read some notes about how to create such effects.

### Hilight Effects

In this chapter you can read about effects with color and hotspot which you can create by using Panopticum Lens Pro. Panopticum Lens Pro have a lot of parameters that adjust the Hilight color effect such as: **Declination**, **Facet Color**, **Hilight Color**, **Specular** and **Aberration**.

#### Ellipse Lens

Next pictures show different kinds of Hilight effect, which you can achieve by using Ellipse Lens:



Picture 1 you can get by using Ellipse Lens with default parameters to simple blue picture.

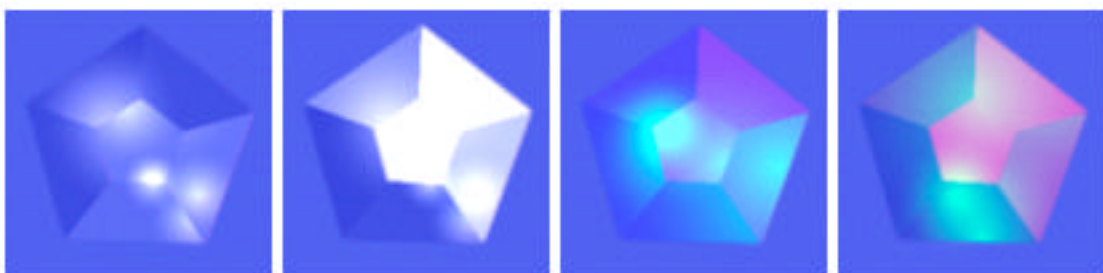
Now set value of **Declination** to maximum (about 90 degree) it is adjust the angle of the source of light under the picture result is shown on the Picture 2.

Panopticum Lens Pro includes the effect of chromatically **Aberration**, at the Picture 3 you can see it with maximum value.

At the Picture 4 you can see different colors for hilighting the **Hilight color** is green.

#### Diamond Lens

Next pictures show different kinds of Hilight effect, which you can achieve by using Diamond Lens:





Picture 1 was created by using Diamond Lens with value of the **facet Hilight** to zero.

Picture 2 on the other hand was created with Diamond Lens with **facet Hilight** to maximum value. Look at the Picture 1 and you will see how it differs from the Picture 2.

Picture 3 and Picture 4 was created by adjusting **Specular** and adding color to facet and hilight, in other words some colors were selected as **facet Color** and **Hilight Color**.

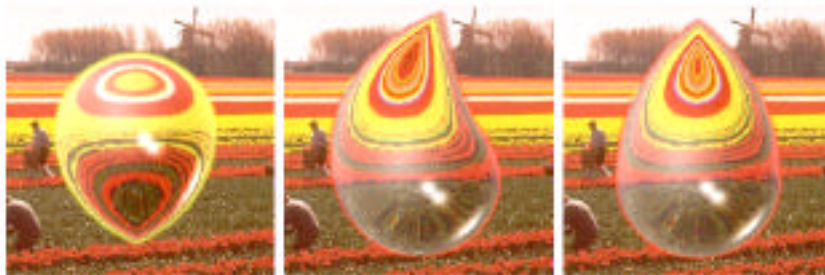
## Geometry of Lens

In this chapter you can read about adjustments of lens geometry and parameters that adjust by using Panopticum lens Pro. You can get lens any shape, size and other geometry parameters.

**Size, Proportion, Skew, Internal Size** and so on.

### Droplet Lens

Next pictures show a droplet lens with different parameters of geometry:



Picture 1 - the lens is rotated and its **height** is decreased; Picture 2 - the **height** is decreased, some **rotation** is added and **skew** adjust the geometry of lens; Picture 3 - the lens created by default parameters;

### Torus Lens

Next pictures show a torus lens with different parameters of geometry:



Picture 1 - a torus lens with decreased internal size; Picture 2 - such lens you can get by using scale rotate and rotate lens using rotation; Picture 3 - torus lens created by default parameters.

## Universal Lens

Next pictures show a universal lens with different parameters of geometry:



Picture 1 - universal lens with default parameters; Picture 2 - **cubature** of lens is maximum; Picture 3 - the **rays count** is five, so you can create by this tool any lens from the classic circle to complex star!

## Ellipse Lens and Square Lens

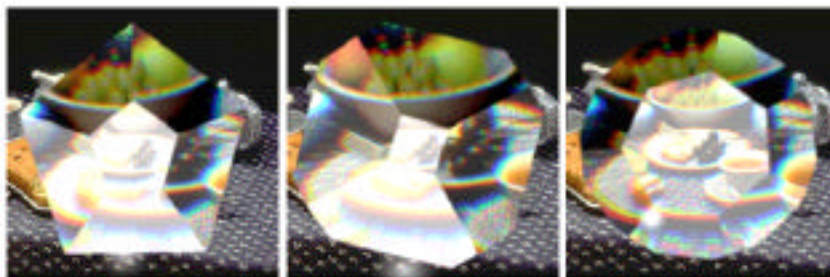
Next pictures show an ellipse lens and a square lens with different parameters of geometry:



Picture 1 - ellipse lenses with **scale** less than 127; Picture 2 - square lens with **scale** more than 127. So you can see that changing only one parameter **scale** can great change the shape of the lens!

## Diamond Lens

Next pictures show a diamond lens with different parameters of geometry:



Picture 1 - diamond lens with default parameters; Picture 2 - diamond lens with **bevel** effect and the **base** of the crystal is decreased; Picture 3 - diamond lens with **bevel** effect, the **base** of the crystal is increased and the **number of facet** increased.



## Star Lens

Next pictures show a star lens with different parameters of geometry:



Picture 1 - star lens with default parameters; Picture 2 - star lens **base** of the crystal is decreased and **star count** is increased; Picture 3 - star lens with **bevel** effect, the **base** of the of the crystal is increased and the **star count** increased.

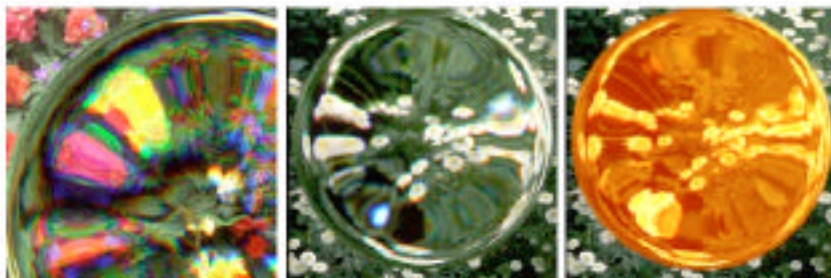
## Optic Effects

In this chapter you can read about adjustments of lens optic properties and parameters that adjust it. By using Panopticum lens Pro you can get lens with wide range of optical characteristics.

Panopticum Lens Pro has a lot of parameters that adjust the optical properties of lens such as:

**Curvature, Refraction, Aberration, Color of Lens** and so on.

Next pictures show an ellipse lens with different parameters of aberration:



Picture 1 - the value of **aberration** is maximum; Picture 2 - **aberration** is off (minimal); Picture 3 - the **Lens Color** is set to some color.

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Next pictures show an ellipse lens with different parameters of curvature and square lens with different parameters of refraction:



Picture 1 - the value of **curvature** is minimum 0; Picture 2 - the value of **curvature** is maximum 255; Picture 3 - the value of refraction is maximum 255; Picture 4 - the value of refraction is about 70.

**Panopticum Lens Pro** is very powerful means for creating magnificent effects with lens any kind, form, optical characteristics and so on... Use it and enjoy working with our software!

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