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Before You Begin

TOPIC: What is Paint Shop Pro?

Before You Begin

What is Paint Shop Pro?

Paint Shop Pro is a raster format image editing program, a type of software more commonly known as a "bitmap editor". Raster image formats break a picture into a grid of equally sized pieces, called *pixels*, and record color information for each pixel. Common examples of raster formats include the Windows ".BMP" format and the CompuServe ".GIF" format.

Unlike most bitmap editors, Paint Shop Pro isn't confined to a short list of raster file formats. It provides full support for all of the most popular raster formats, full or partial support for many less-popular raster formats, and can read nine meta and vector image formats.

Related Topics:

▸ File Formats

TOPIC: Using this Help File

Before You Begin

Using this Help File

- ▸ For help using Windows Help, <u>click here</u>.
- ▸ For help with features specific to Paint Shop Pro Help, see the sections below.

Hypertext Features

Paint Shop Pro Help has a few special hypertext features:

Tab Jumps

Each topic has a row of tabs across the top, like this one. Each set of tabs groups related topics. You can access a topic by clicking on its tab.

Hypertext Formatting

In the standard Windows Help File format, all hypertext is green. Topic jumps have a solid underline, and pop-ups have a dashed underline. In Paint Shop Pro Help, topic jumps are red, pop-ups are blue, and jumps to secondary windows are magenta.

Mouse vs. Keyboard

For most tasks, both mouse and keyboard instructions are provided.

Mouse instructions are preceded by a small diagram of a mouse...

...Or by a picture of the Toolbar button that performs the command.

Keyboard instructions are preceded by a small diagram of a keyboard.

Keyboard Instructions Formatting

You can access many Windows features and functions from the keyboard by using a combination of keystrokes. These combinations are called hot keys, accelerator keys, or short-cut keys. In Paint Shop Pro Help, the keys you should press appear within angle brackets (< >) and a plus sign ("+") connects keys that you should press simultaneously. For example, "press <Alt> + <X>" means "hold down the Alt key while you press the X key".

TOPIC: Help on Help

SEARCH: Before You Begin

TOPIC: Technical Support

Before You Begin

Technical Support

Please Note:

Most of JASC's Paint Shop Pro technical support calls concern poor image display quality. If an image appears grainy or mottled, it's probably because your video display doesn't support enough colors to show the image correctly.

▸ See Color Problems.

The manual and this help file should address the majority of user's questions. For solutions to common problems, see Troubleshooting. If we've failed to address your question or problem, you can:

▸ Contact one of the distributors listed in the README.TXT file that is included with Paint Shop Pro.

▸ Contact the developers via CompuServe at GO JASC.

▸ Contact the developers at:

JASC, Inc.
10901 Red Circle Drive, Suite
340
Minnetonka, MN 55343
(612) 930-9171

Color Functions

TOPIC: Color Adjustment Functions

Color Functions

📂 **Color Adjustment Functions**   **Using Color Adjustment Functions**

Paint Shop Pro has five functions for adjusting an image or selection's color. The functions all use a similar dialog box and operate in a common manner. The purpose of each function is explained briefly below.

Please Note:

The Color Adjustment Functions will work on a selection if the image's color depth is 256 color grey scale, or greater than 256 colors. With lower color depths, these functions affect the entire image.

Brightness / Contrast Function
You use the Brightness/Contrast Function to brighten or darken an entire image or selection, or to increase or decrease the range of luminance (contrast) within an image or selection. In other words, the Brightness Setting shifts the entire histogram, and the Contrast Setting flattens or tightens it.

Gamma Correct Function
The Gamma Correct Function compensates for any difference in gamma levels between your computer's monitor and the equipment that originally produced the image.

Highlight / MidTone / Shadow Function
The Highlight/MidTone/Shadow Function skews an image or selection's luminance. You use the function to emphasize highlights or shadows, or to lighten or darken an image or selection's mid-range colors.

Hue / Saturation / Luminance Function
A color can be described by the three characteristics of hue, saturation, and luminance. Hue describes the color's shade or tint, saturation describes the hue's purity, and luminance describes the color's brightness. You can use the Hue/Saturation/Luminance Function to modify these three characteristics for the entire image or selection.

Red / Green / Blue Function
As the name implies, you use the Red/Green/Blue Function to change the levels of red, green, and blue in an image or selection. Computer monitors create colors by combining red, green, and blue, which are the three primary colors for projected light.

TOPIC: Using a Color Adjustment Function

Color Functions

📁 **Color Adjustment Functions**   **Using Color Adjustment Functions**

To use one of the Color Adjustment Functions, follow these steps:

1️⃣ **Select the Image Area**
The Color Adjustment Functions will work on a selection if the image's color depth is greater than 256 colors. With color depths of 256 or less, these functions affect the entire image.

   ▶ To modify part of an image, select it now.
   ▶ To modify the entire image, make sure that there is no selection.

2️⃣ **Select the Function**
The five Color Adjustment Functions are explained above. You select a function from the Colors Adjust Sub-Menu. Paint Shop Pro will open the Color Adjustment Function Dialog Box.

3️⃣ **Set the Function's Parameters**
You use spin controls to set a Color Adjustment Function's parameters. Any changes that you make to the settings will be reflected in the Preview Box. For help with a function's settings, click on its name below.

   ▶ Brightness / Contrast Function
   ▶ Gamma Correct Function
   ▶ Highlight / MidTone / Shadow Function
   ▶ Hue / Saturation / Luminance Function
   ▶ Red / Green / Blue Function

4️⃣ **Select the OK Button**
When you have finished adjusting the settings, click on the OK Button, or press <Enter>. Paint Shop Pro will modify the image or selection.

TOPIC: Colorize Function

Color Functions

Colorize Function

You use the Colorize Function to convert an image or selection to a uniform hue and saturation, while retaining the image or selection's luminance (see Color Definition Methods). You can use the function to create sepia tones and other single-color effects.

Using the Colorize Function is very similar to using one of the Color Adjustment Functions. Follow the steps below.

① **Select the Image Area**
The Colorize Function will work on a selection if the image's color depth is greater than 256 colors. With color depths of 256 or less, the function affects the entire image.

▸ To modify part of an image, select it now.

▸ To modify the entire image, make sure that there is no selection.

② **Access the Colorize Dialog Box**
To access the dialog box, select "Colorize" from the Colors Menu.

③ **Set the Function's Parameters**
You use spin controls to set the Colorize Function's parameters. Any changes that you make to the settings will be reflected in the Preview Box.

④ **Select the OK Button**
When you have finished adjusting the settings, click on the OK Button, or press <Enter>. Paint Shop Pro will modify the image or selection.

TOPIC: Grey Scale Function

Color Functions

Grey Scale Function

Converting an image to grey scale replaces each color with a grey of equal luminance. The effect is similar to a black-and-white photograph. Converting a 16 million color image to grey scale automatically reduces it to 256 colors. You convert an image to grey scale by selecting "Grey Scale" from the Colors Menu:

Click on "Colors" in the Menubar, then click on "Grey Scale".

Press <Alt> + <C>, then press <G>.

TOPIC: Histogram Functions

Color Functions
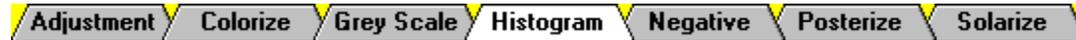
Histogram Functions

The Colors Histogram Sub-Menu contains two functions that modify an image or selection based upon its histogram. These two functions are explained below. To use one of the functions, choose an image or selection, then select the function from the sub-menu.

Please Note:

The Histogram Functions will work on a selection if the image's color depth is 256 grey scale, or greater than 256 colors. With color depths of 256 or less, the functions affect the entire image.

Equalize Histogram Function
The Equalize Histogram Function smoothes out the image or selection's histogram. The result is a tempering or averaging of the image or selection's brightness.

Stretch Histogram Function
If the histogram does not span the entire luminance spectrum   in other words, if the image does not include both black and white   the Stretch Histogram Function adjusts the image' s luminance so that it does span the full spectrum.

TOPIC: Negative Image Function

Color Functions

Negative Image Function

Inverting an image or selection replaces each color with its opposite. The effect is similar to a photographic negative. To invert an image or selection, choose "Negative Image" from the Colors Menu:

- Click on "Colors" in the Menubar, then click on "Negative Image".
- Press <Alt> + <C>, then press <N>.

TOPIC: Posterize Function

Color Functions

Posterize Function

The Posterize Function (pronounced "poster-ize", as in "make it look like a poster") reduces the bits per color channel. The lower the bits/channel, the fewer colors the image or selection can include.

Using the Posterize Function is very similar to using one of the Color Adjustment Functions. Follow the steps below.

1 Select the Image Area
The Posterize Function will work on a selection if the image's color depth is 256 grey scale, or greater than 256 colors. With color depths of 256 or less, the function affects the entire image.

▸ To modify part of an image, select it now.
▸ To modify the entire image, make sure that there is no selection.

2 Access the Posterize Dialog Box
To access the dialog box, select "Posterize" from the Colors Menu.

3 Set the Bits Per Color Channel
You use the Bits/Channel Spin Control to set the bits per color channel. The effect of the new setting will be shown in the Preview Box. The preview will show the effect as applied to the entire image, even if the image contains a selection.

4 Select the OK Button
When you have finished adjusting the levels, click on the OK Button, or press <Enter>. Paint Shop Pro will modify the image or selection.

TOPIC: Solarize Function

Color Functions

Solarize Function

The Solarize Function inverts the colors that are above a certain luminance. Using the Solarize Function is very similar to using one of the Color Adjustment Functions. Follow the steps below.

1. **Select the Image Area**
   The Solarize Function will work on a selection if the image's color depth is 256 grey scale, or greater than 256 colors. With color depths of 256 or less, the function affects the entire image.
   ▸ To modify part of an image, select it now.
   ▸ To modify the entire image, make sure that there is no selection.

2. **Access the Solarize Dialog Box**
   To access the dialog box, select "Solarize " from the Colors Menu.

3. **Set the Solarize Threshold**
   You use the Threshold Spin Control to set the solarize threshold. The effect of the new threshold will be shown in the Preview Box. The preview will show the effect as applied to the entire image, even if the image contains a selection.

4. **Select the OK Button**
   When you have finished adjusting the threshold, click on the OK Button, or press <Enter>. Paint Shop Pro will modify the image or selection.

Managing Colors

TOPIC: Editing an Image's Color Palette

Managing Colors

Editing an Image's Color Palette

You edit the current image's color palette from the Color Palette Dialog Box. There are two versions of the dialog box: one for 16 color images, and one for 256 color images.

Accessing the Dialog Box
You can access the dialog box by double-clicking on either of the color panels in the Select Toolbox, or you can select "Edit Palette" from the Colors Menu.

Sorting the Palette (256 Colors Only)
You can sort a 256 color palette by palette order, luminance, or hue. You select a sort order from the Palette Order Drop Down Box:

Changing a Color
To change a color, double-click on its square. Paint Shop Pro will open the Color Dialog Box.

Abandoning Your Changes
To return the palette to its original state, undo any changes to its colors, and leave the dialog box open, click on the Reset Button, or press <R>. To and abandon your changes and close the dialog box, click on the Cancel Button, or press <Esc>.

Saving Your Changes
To close the dialog box and save the edited palette in the active image, click on the OK Button, or press <Enter>. If you accessed the Color Palette Dialog Box from the Color Controls in the Select Toolbox, the foreground or background color will be set to the color that is highlighted in the Color Palette Dialog Box.

Editing a Color Palette File Using a Text Editor
The Jasc palette file format (".PAL") saves color palette information in a text file format. You can edit a PAL file using a text editor, such as Notepad.

TOPIC: Loading a Color Palette Into an Image

Managing Colors

Loading a Color Palette Into an Image

You can load color palettes into images with <u>color depths</u> of 16 or more. If the color depth of the image differs from the color depth of the palette, Paint Shop Pro alters the image to match the palette. To load a color palette into the current image, follow these steps:

1. **Access the Load Palette Dialog Box**
   To access the <u>dialog box</u>, <u>select</u> "Load Palette" from the Colors Menu.

2. **Select the Disk Drive**
   You select a disk drive from the <u>Drive Drop Down Box</u>.

3. **Select the Directory**
   You change the directory from the <u>Directories List Box</u>.

4. **Select the Palette File**
   You select the file from the <u>File Name List Box</u>.

5. **Select the Application Method**
   There are three methods for applying the palette to the current image:

   Nearest Color Method
   As the name implies, the Nearest Color Method changes each color in the image to the color in the palette that is the closest match.

   Error Diffusion Method
   The <u>Error Diffusion Method</u> attempts to maintain the image's appearance by dithering colors that are not in the palette.

   Maintain Indexes Method
   The Maintain Indexes Method assigns each color in the palette a sequential index number, does the same for the colors in the image, then changes each color in the image to the like-numbered color in the palette.

   You select a method by choosing its option button.

   Click on the button or its text.

   Press <Alt> plus the option's underlined letter.

6. **Select the OK Button**
   When you have selected the palette and application method, click on the OK Button, or press <Enter>. Paint Shop Pro will modify the image to match the new palette.

TOPIC: Saving a Color Palette to a Palette File

Managing Colors

Saving a Color Palette to a Palette File

To save the current image's color palette to a palette file, follow these steps:

1. **Access the Save Palette Dialog Box**
   To access the dialog box, select "Save Palette" from the Colors Menu.

2. **Select the Disk Drive**
   You select a disk drive from the Drive Drop Down Box.

3. **Select the Directory**
   You change the directory from the Directories List Box.

4. **Enter the Filename**
   You enter a name for the new file by typing over the text in the File Name Text Box. Don't worry about the file extension   Paint Shop Pro will add it automatically.

5. **Select the OK Button**
   Click on the OK Button, or press <Enter>. If the filename is already in use, Paint Shop Pro will present the Filename In Use Prompt. Click on the Yes Button or press <Enter> to overwrite the existing file.

TOPIC: Using the Color Dialog Box

Managing Colors

Using the Color Dialog Box

You use the Color Dialog Box to select a color from your system's entire color spectrum. You can access the Color Dialog Box from one of the Color Palette Dialog Boxes, or from the Color Tools in the Select Toolbox. The dialog box uses two color definition methods.

Basic Colors

There are 48 Basic Colors that are preset and cannot be modified. To select a Basic Color:

 Click on the color, then click on the OK Button.

 Press <Alt> + <B>, then use the arrow keys,
 <Home>, and/or <End> to highlight the color.
 When the color is highlighted, press
 <Spacebar>, then press <Enter>.

Selecting a Custom Color

There are 16 Custom Colors. To select a Custom Color:

 Click on the color, then click on the OK Button.

 Press <Alt> + <C>, then use the arrow keys,
 <Home>, and/or <End> to highlight the color.
 When the color is highlighted, press
 <Spacebar>, then press <Enter>.

Changing a Custom Color

You change a Custom Color by highlighting it, selecting a Full Spectrum Color, then selecting the Add to Custom Colors Button. Follow these steps:

1 Highlight the Custom Color by clicking on it. With the keyboard, press <Alt> + <C>, then use the arrow keys, <Home>, and/or <End> to highlight the color.

2 Select a Full Spectrum Color (see below).

3 Click on the Add to Custom Colors Button, or press <Alt> + <A>.

Selecting a Full Spectrum Color with the Mouse

There are two controls for selecting a color with the mouse: the Crosshair Control in the large color box, and the Pointer Control for the smaller color box. The controls affect the contents of the Color/Solid Display Box.

Crosshair Control   Pointer Control

Adjusting a Control
You can move the crosshair control or the slide control by dragging them to a new location, or you can just click where you want the control to go.

Color vs. Solid
The hue in the Color half of the Color/Solid Display Box is the setting that is used by Paint Shop Pro. If the two differ and you prefer the hue that appears in the Solid side, double-click on it. The Color side will be adjusted to match the Solid side.

Selecting a Full Spectrum Color with the Keyboard

You select a color with a keyboard by typing numbers into the text boxes in the Color Dialog Box. Unless you are already familiar with the concepts of computer display color creation, and have a specific color in mind, it is considerably easier to select a color using

the mouse.

Color vs. Solid

The hue in the Color half of the Color/Solid Display Box is the setting that is used by Paint Shop Pro. If the two differ and you prefer the hue that appears in the Solid side, press <Alt> + <O>. The Color side will be adjusted to match the Solid side.

TOPIC: Changing an Image's Color Depth

Managing Colors

📂 Changing an Image's Color Depth

Increasing Color Depth
To increase the number of available colors in the current image, you select the new color depth from the Colors Increase Color Depth Sub-Menu:

Click on "Colors" in the Menubar, click on "Increase Color Depth" in the Colors Menu, then click on the color depth that you want to use.

Press <Alt> + <C>, then press <I>, and then press the color depth's underlined character.

Decreasing Color Depth
There are up to six different menu selections for decreasing an image's color depth. As you may have suspected, how many selections are available depends on the image's current color depth. For more help, click on a folder below.

📁 **Reducing an Image to Two Colors**

📁 **Reducing an Image to Sixteen Colors**

📁 **Reducing an Image to 256 Colors**

📁 **Reducing an Image to 32K or 64K Colors**

📁 **Reducing an Image to Between 16 and 257 Colors**

TOPIC: Reducing an Image to Two Colors

Managing Colors

📂 **Changing an Image's Color Depth**

📂 **Reducing an Image to Two Colors**

To reduce an image to two colors, follow these steps:

1. **Select 2 Color Reduction**
   You choose a color reduction level from the Colors Decrease Color Depth Sub-Menu. Paint Shop Pro will open the appropriate version of the Decrease Color Depth Dialog Box.

2. **Select the Palette**
   The Palette Option determines which color component will be used to set pixels to black or white. For most images, the grey value (or luminance) yields the best results, but if an image contains mostly red, green, or blue, then selecting that color component will probably be the best choice. For example, images with a lot of flesh tones usually reduce better using the red color component. To select a Palette Option:

   ⎁ Click on the option's button or its text.

   ⌨ Press the option's underlined letter.

3. **Select the Reduction Method**
   Paint Shop Pro provides three methods for reducing an image to two colors:

   Nearest Color Method
   Each pixel is treated independently: any difference between the original color and black or white is ignored, so there is no dithering. Yields stark, simple, high-contrast images.

   Ordered Dither Method
   Shading is achieved by patterned dithering. Best suited to certain print mediums. Images often appear "hashed", or composed of dots, xshapes, and crosses.

   Error Diffusion Method
   Uses dithering to maintain shading. When you select the Error Diffusion Method, you must also select of three algorithms: FloydSteinberg, Burkes, or Stucki. Each algorithm gives slightly different results.

   You select a method from the Reduction Method Group Box:

   ⎁ Click on the method's button or its text.

   ⌨ Press the method's underlined letter.

4. **Select Palette Weighting Option**
   Weighting the palette sets the image's current colors closer to black and white. This results in less dithering, and therefore less shading and sharper edges. Conversely, a non-weighted palette yields more dithering, and therefore more shading and softer edges. To select a weighting option:

   ⎁ Click on the option's button or its text.

   ⌨ Press <W> for weighted or <I> for non-weighted.

⑤ Select the OK Button
When you have finished selecting the color reduction options, click on the OK Button, or press <Enter>. Paint Shop Pro will close the dialog box and reduce the image's color depth.

TOPIC: Reducing an Image to Sixteen Colors

Managing Colors

📁 **Changing an Image's Color Depth**

📂 **Reducing an Image to Sixteen Colors**

To reduce an image to sixteen colors, follow these steps:

1️⃣ **Select the Colors to Boost**
An image's less common colors can get all-but-eliminated when you reduce color depth. The uncommon colors are often artistically significant, providing the image's contrast, or emphasizing its subject.

To emphasize the significance of a specific color or colors, select a rectangular area in the image that contains the colors you want to boost.

2️⃣ **Select 16 Color Reduction**
You choose a color reduction level from the Colors Decrease Color Depth Sub-Menu. Paint Shop Pro will open the appropriate version of the Decrease Color Depth Dialog Box.

3️⃣ **Select the Palette**
An optimized palette contains the sixteen best colors for recreating the current image. The Windows palette contains the sixteen colors used by Windows.

If you will be using the image for display under Windows (as part of an application, in a multimedia presentation, etc.), or if you want to create multiple images with the same palette, select the Windows Palette Option. Otherwise, choose the Optimized Option, because it will yield the best image quality.

To select a palette option:

Click on the option's button or its text.

Press <P> for optimized or <W> for Windows.

4️⃣ **Select the Reduction Method**
There are three reduction methods:

Nearest Color Method
As the name implies, the Nearest Color Method changes each color in the image to the color in the palette that is the closest match.

Ordered Dither Method
Uses patterned dithering. Best suited to certain print mediums. Images often appear "hashed", or composed of dots, xshapes, and crosses. Only available for Windows palette.

Error Diffusion Method
Uses non-patterned, pixel-to-pixel dithering.

You select a method from the Reduction Method Group Box:

Click on the method's button or its text.

Press the method's underlined letter.

5️⃣ **Select the Options**
There are two options:

Boost Marked Colors
Sets the factor by which the colors in the selection are boosted . Only available for an optimized palette.

Reduce Color Bleeding
Reduces the amount of left-to-right color bleeding that occurs when using Error Diffusion.

You select an option from the Options Group Box. If you select the Boost Marked Colors Option, enter the boost factor into the option's text box. To turn an option on or off:

Click on the option's check box or its text.

Press the option's underlined letter.

Select the OK Button
When you have finished selecting the color reduction options, click on the OK Button, or press <Enter>. Paint Shop Pro will close the dialog box and reduce the image's color depth.

TOPIC: Reducing an Image to 256 Colors

Managing Colors

📁 **Changing an Image's Color Depth**

📂 Reducing an Image to 256 Colors

To reduce an image to 256 colors, follow these steps:

1 Select the Colors to Boost

An image's less common colors can get all-but-eliminated when you reduce color depth. The uncommon colors are often artistically significant, providing the image's contrast, or emphasizing its subject.

To emphasize the significance of a specific color or colors, select a rectangular area in the image that contains the colors you want to boost.

2 Select 256 Color Reduction

You choose a color reduction level from the Colors Decrease Color Depth Sub-Menu. Paint Shop Pro will open the appropriate version of the Decrease Color Depth Dialog Box.

3 Select the Palette

An optimized palette contains the 256 best colors for recreating the current image. The standard palette covers the full color spectrum and includes the sixteen Windows colors.

If you want to create multiple images with the same palette, select the Standard Palette Option. Otherwise, choose the Optimized Option, because it will yield the best image quality.

To select a palette option:

🖰 Click on the option's button or its text.

⌨ Press <P> for optimized or <S> for standard.

4 Select the Reduction Method

There are three reduction methods:

Nearest Color Method
As the name implies, the Nearest Color Method changes each color in the image to the color in the palette that is the closest match.

Ordered Dither Method
Uses patterned dithering. Best suited to certain print mediums. Images often appear "hashed", or composed of dots, xshapes, and crosses. Only available for Windows palette.

Error Diffusion Method
Uses non-patterned, pixel-to-pixel dithering.

You select a method from the Reduction Method Group Box:

🖰 Click on the method's button or its text.

⌨ Press the method's underlined letter.

5 Select the Options

There are three options:

Boost Marked Colors
Sets the factor by which the colors in the selection are boosted . Only available for optimized palette.

Include Windows Colors
Adds the sixteen Windows colors to an optimized palette. (Standard palette contains the Windows colors by default.) Select this option if you will be using the image under Windows running a 256 color display.

Reduce Color Bleeding
Reduces the amount of left-to-right color bleeding that occurs when using Error Diffusion.

You select an option from the Options Group Box. If you select the Boost Marked Colors Option, enter the boost factor into the option's text box. To turn an option on or off:

Click on the option's check box or its text.

Press the option's underlined letter.

Select the OK Button
When you have finished selecting the color reduction options, click on the OK Button, or press <Enter>. Paint Shop Pro will close the dialog box and reduce the image's color depth.

TOPIC: Reducing an Image to 32K or 64K Colors

Managing Colors

📁 **Changing an Image's Color Depth**

📂 **Reducing an Image to 32K or 64K Colors**

Please Note:

Images of 32K and 64K color depth (15 bits-per-pixel and 16 bits-per-pixel respectively) are handled in memory as 16 million color images (24 bits-per-pixel). This is because Windows does not support 15 bits-per-pixel and 16 bits-per-pixel images. The Statusbar will indicate that images in these formats can support 16 million colors.

To reduce an image to 32 or 64 thousand colors, follow these steps:

1️⃣ **Select 32K or 64K Color Reduction**
You choose a color reduction level from the Colors Decrease Color Depth Sub-Menu. Paint Shop Pro will open the appropriate version of the Decrease Color Depth Dialog Box.

2️⃣ **Select the Reduction Method**
There are two reduction methods:

> **Nearest Color Method**
> As the name implies, the Nearest Color Method changes each color in the image to the color in the palette that is the closest match.

> **Error Diffusion Method**
> Uses non-patterned, pixel-to-pixel dithering.

You select a method from the Reduction Method Group Box:

> 🖱️ Click on the method's button or its text.
> ⌨️ Press the method's underlined letter.

3️⃣ **Select the OK Button**
When you have finished selecting the color reduction options, click on the OK Button, or press <Enter>. Paint Shop Pro will close the dialog box and reduce the image's color depth.

TOPIC: Reducing an Image to Between 16 and 257 Colors

Managing Colors

🗀 **Changing an Image's Color Depth**

🗁 **Reducing an Image to Between 16 and 257 Colors**

To reduce an image to between 16 and 257 colors, follow these steps:

1. **Select the Colors to Boost**

   An image's less common colors can get all-but-eliminated when you reduce color depth. The uncommon colors are often artistically significant, providing the image's contrast, or emphasizing its subject.

   To emphasize the significance of a specific color or colors, select a rectangular area in the image that contains the colors you want to boost.

2. **Select X Colors Reduction**

   You choose a color reduction level from the Colors Decrease Color Depth Sub-Menu. Paint Shop Pro will open the appropriate version of the Decrease Color Depth Dialog Box.

3. **Enter the Number of Colors**

   Type the number of colors that you want the image to contain into the Number of Colors Text Box. To access the text box, click in it, or press <Alt> + <U>.

4. **Select the Reduction Method**

   There are two reduction methods:

   Nearest Color Method
   As the name implies, the Nearest Color Method changes each color in the image to the color in the palette that is the closest match.

   Error Diffusion Method
   Uses non-patterned, pixel-to-pixel dithering.

   You select a method from the Reduction Method Group Box:

   Click on the method's button or its text.

   Press the method's underlined letter.

5. **Select the Options**

   There are three options:

   Boost Marked Colors
   Sets the factor by which the colors in the selection are boosted .

   Include Windows Colors
   Adds the sixteen Windows colors to the image's palette. Select this option if you will be using the image under Windows running a 256 color display.

   Reduce Color Bleeding
   Reduces the amount of left-to-right color bleeding that occurs when using Error Diffusion.

   You select an option from the Options Group Box. If you select the Boost Marked Colors Option, enter the boost factor into the option's text box. To turn an option on or off:

   Click on the option's check box or its text.

   Press the option's underlined letter.

6. **Select the OK Button**

When you have finished selecting the color reduction options, click on the OK Button, or press <Enter>. Paint Shop Pro will close the dialog box and reduce the image's color depth.

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Creating a New Image

TOPIC: Creating an Empty Image

Creating a New Image

Creating an Empty Image

To create a new, empty image, follow these steps:

1 **Select the Background Color**
The new image will be filled with the background color.

2 **Access the New Image Dialog Box**
To access the dialog box:

Click on the File New Button.

Select "New" from the File Menu.
Press <Alt> + <F>, then press <N>.

3 **Set the Width and Height**
You use the Width and Height Text Boxes to set the new image's dimensions in pixels. If the default values are fine, go to the next step. If not:

1 Type the width into the Width Text Box.

2 Press <Tab>.

3 Type the height into the Height Text Box.

4 **Select the Image Type**
The image type determines the new image's color depth and palette. You select the image type from the Image Type Drop Down Box:

5 **Select the OK Button**
Click on the OK Button, or press <Enter>. Paint Shop Pro will open a new image window filled with the background color.

TOPIC: Copying an Image

Creating a New Image

Copying an Image

The easiest way to copy an entire image is to select "Duplicate" from the Window Menu:

- Click on "Window" in the Menubar, then click on "Duplicate".
- Press <Alt> + <W>, then press <D>.

Paint Shop Pro will copy the image to a new image window.

TOPIC: Creating a Screen Capture

Creating a New Image

📂 **Creating a Screen Capture Selecting a Hot Key**

You can use the Screen Capture Utility to copy an image from your computer screen into Paint Shop Pro. Follow these steps:

1️⃣ **Select the Hot Key**
If you haven't used the Screen Capture Utility before, you'll need to <u>set the hot key</u>.

2️⃣ **Set the Include Cursor Option**
To include the cursor in the screen capture, turn the Include Cursor Option on. The option is on when a check appears next to "Include Cursor" on the Capture Menu. To turn the option on or off, <u>select</u> "Include Cursor".

3️⃣ **Choose a Capture Type**
The <u>capture type</u> determines which area of the screen will be copied. You <u>select</u> one of the five capture types from the top section of the Capture Menu.

4️⃣ **Go to the Screen Area**
When you select a capture type, Paint Shop Pro will automatically minimize. Go to the application or window that you want to copy from. If you want to copy the whole screen, arrange the open applications as you want them to appear in the captured image.

5️⃣ **Press the Hot Key**
Press the Capture Utility's hot key, then follow the directions below for the capture type that you selected. Paint Shop Pro will place the captured screen area in a new image window.

   ▸ **Full Screen, Client Area, or Window**
   If the capture type is the full screen, a client area, or a window, Paint Shop Pro will copy the area.

   ▸ **Area**
   If the capture type is an area, the cursor will change to crosshairs. Point the crosshairs at a corner of the area, press and hold the <u>primary mouse button</u>, then drag the crosshairs to the opposite corner of the area. Paint Shop Pro will copy the area.

   ▸ **Object**
   If the capture type is an object, Paint Shop Pro will highlight the current object. Move the cursor until the correct object is highlighted, then click once.

TOPIC: Selecting a Hot Key

Creating a New Image

📁 **Creating a Screen Capture** Selecting a Hot Key

To select the Screen Capture Utility hot key, follow these steps:

1️⃣ **Access the Capture Setup Dialog Box**
To access the dialog box, select "Hot Key Setup" from the Capture Menu:

2️⃣ **Select the Function Key**
The screen capture hot key consists of a function key and an optional combination key. To select a function key:

� Click on it in the Hot Key Group Box.

⌨ Press <O>, then use the arrow keys to highlight a function key.

3️⃣ **Select a Combination Key (Optional)**
The available combination keys are <Alt>, <Ctrl>, and <Shift>. You select a combination key from the bottom of Hot Key Group Box:

⌵ Click on it.

⌨ Press the key's underlined letter.

4️⃣ **Select the OK Button**
When you're done, click on the OK Button or press <Enter>. Paint Shop Pro will save the hot key definition.

TOPIC: Using a TWAIN-Compliant Device

Creating a New Image

Using a TWAIN-Compliant Device (Scanner)

Paint Shop Pro supports TWAIN-compliant image devices, such as scanners. TWAIN is an industry standard that allows applications (like Paint Shop Pro) to talk to the software that controls an image device.

TWAIN.DLL and the Image Device Menu Selections

The interface between an application and an image device's software is handled by a file named TWAIN.DLL. When you install the software for an image device, a copy of TWAIN.DLL is placed in your Windows directory. When Paint Shop Pro starts, it scans your Windows directory to see if the file is installed. If it is, the TWAIN-specific menu selections (the File Menu's "Acquire" and "Select Source") and the Acquire Image Button are made available. If it isn't, the menu selections and Toolbar button are greyed out.

It is possible to have TWAIN.DLL in your Windows directory without having a TWAIN-compliant device installed. Some software applications independently install a copy of the file, without checking to see if a compliant device is available. Conversely, it also possible to have a TWAIN-complaint device attached to your system without having TWAIN.DLL in your Windows directory. Some device software installation routines do not automatically install TWAIN.DLL. The user must specifically elect to do so.

Please Note:

If you have a TWAIN-compliant device installed, but "Acquire" and "Select Source" on the File Menu are greyed out, check to see if TWAIN.DLL is installed in your Windows directory. If it isn't, try reinstalling your device software. Make sure you turn on any options that pertain to TWAIN drivers. If TWAIN.DLL is still missing, contact the device manufacturer.

Selecting a TWAIN-Complaint Device

To select a TWAIN-complaint device for acquiring images, choose "Select Source" from the File Menu. Paint Shop Pro will tell TWAIN.DLL to open its Select Source Dialog Box. Highlight the device that you want to use, then click on the OK Button, or press <Enter>.

Acquiring an Image

To acquire an image using the selected TWAIN-complaint device, choose "Acquire" from the File Menu, or click on the Acquire Image Button in the Toolbar. Paint Shop Pro will tell TWAIN.DLL to open the device software's Acquire Dialog Box. For help using the dialog box, consult its on-line help or the device software's manual. When the hardware finishes processing the image, it will be sent to Paint Shop Pro.

SECTION: Basic Image Editing

TOPIC: Selecting Part of an Image

Basic Image Editing
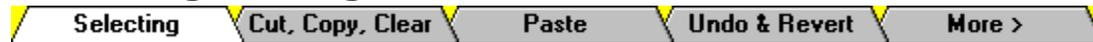
Selecting Part of an Image

Selecting part of an image is the first step in a variety of editing tasks. You can copy a selection, delete it, alter its colors, apply a filter to it, and more. You create a selection by drawing a line around the area that you want to edit. You use one of these four Select Tools to draw the line:

- ▶ Lasso
- ▶ Magic Wand
- ▶ Oval Selector
- ▶ Rectangle Selector

Selection Formatting

The line around a selection appears as flashing dashes, which has been described as resembling a line of marching ants. In image editing circles, a selection is often referred to as "the marquee", because it resembles the flashing lights around a theater marquee.

Selections and Anti-Aliasing

If the Anti-Alias Selected Area Operations Preference Option is turned on, data that is copied using non-rectangular selections will have soft edges.

Removing a Selection

You can remove a selection by clicking with the Standard Cursor Tool. If you are using one of the Selection Tools , you can remove a selection by clicking anywhere in the image with the secondary mouse button.

TOPIC: Cut, Copy, and Clear

Basic Image Editing

Cut Command

The Cut Command is only available when the active image contains a selection. The Cut Command sends the selection to the Windows Clipboard and removes it from the image. The resulting hole is filled with the current background color. You can use the Cut Command by selecting "Cut" from the Edit Menu, or you can:

Click on the Cut Button.

Press <Ctrl> + <X>.

Copy Command

The Copy Command sends the current image or selection to the Windows Clipboard without affecting the image. You can use the Copy Command by selecting "Copy" from the Edit Menu, or you can:

Click on the Copy Button.

Press <Ctrl> + <C>.

Clear Command

The Clear Command removes the current image or selection and replaces it with the background color. The Clear Command does <u>not</u> send data to the Windows Clipboard. You use the command by selecting "Clear" from the Edit Menu:

Click on "Edit" in the Menubar, then click on "Clear".

Press <Alt> + <E>, then press <L>.

TOPIC: Paste Command

Basic Image Editing

Paste Command

The Paste Command retrieves the contents of the Windows Clipboard. There are three ways to paste data in Paint Shop Pro:

As a New Image

When you paste data as a new image, Paint Shop Pro opens a new image window and fills it with the current data. If the data is in a metafile or vector format, Paint Shop Pro will open the Meta Picture Import Dialog Box. To paste as a new image:

Click on the Paste Button.

Press <Ctrl> + <V>.

As a New Selection

When you paste data as a new selection, Paint Shop Pro adds it to the current image and defines it as a selection. Follow these steps:

1 Select the image that you want to paste into.

2 Select "As New Selection" from the Edit Paste Sub-Menu.

3 If the data is in a metafile or vector format, Paint Shop Pro will open the Meta Picture Import Dialog Box.

4 Use the mouse to position the selection. When you've got it where you want it, click once.

Into the Current Selection

When you paste data into the current selection, Paint Shop Pro replaces the contents of the selection with the data from the Clipboard. Follow these steps:

1 Select the image that you want to paste into.

2 Select the area you want to paste into.

3 Select "Into Selection" from the Edit Paste Sub-Menu.

4 If the data is in a metafile or vector format, Paint Shop Pro will open the Meta Picture Import Dialog Box.

TOPIC: Undo and Revert to File

Basic Image Editing

Undo Command

The Undo Command reverses the last edit to the active image. It can remove painting or drawing commands, color alterations, filter effects, etc. You can specify how you want Undo to <u>save data</u>. To use the Undo Command:

Click on the Undo Button.

Press <Ctrl> + <Z>.

Reverting to the Saved File

To abandon all changes made to a file since it was last saved, <u>select</u> "Revert" from the File Menu. You will be prompted to confirm you decision.

▸ To abandon all of your changes and revert to the saved file, click on the Yes Button, or press <Enter>.

▸ To keep your changes, click on the No Button, or press <N>.

TOPIC: Empty Clipboard Command

Basic Image Editing

< More | Empty Clipboard | Adding Borders | Crop / Enlarge | More >

Empty Clipboard Command

Data that's in the Windows Clipboard resides in your active memory (RAM). And since image data is often sizable, this can tie up a considerable amount of memory and slow down your system.

The Empty Clipboard Command solves this problem by clearing the Clipboard of data. To use the command, select "Empty Clipboard" from the Edit Menu:

TOPIC: Adding Borders to an Image

Basic Image Editing

< More | Empty Clipboard | Adding Borders | Crop / Enlarge | More >
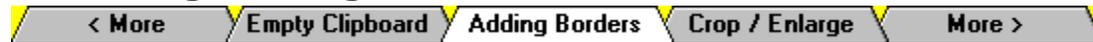
Adding Borders to an Image

To add a border to the active image, follow these steps:

1. **Select the Border Color**
   The borders will use the <u>foreground color</u>.

2. **Access the Add Borders Dialog Box**
   To access the <u>dialog box</u>, <u>select</u> "Add Borders" from the Image Menu:

3. **Set the Symmetric Option**
   When the Symmetric Option is turned on, the image will have equally-sized borders on all sides. The option is on when its check box is filled. To turn the option on or off:

   Click on the check box or its label.

   Press <Alt> + <M>.

4. **Enter the Border Width(s)**
   How you enter the border widths depends on whether you're using the Symmetric Option.

   With Symmetric Option
   If you're using the Symmetric Option, enter the width for the borders in the Top Text Box. To access the text box, double-click in it, or press <Alt> + <T>.

   Without Symmetric Option
   If you're not using the Symmetric Option, enter a width for each border in the appropriate text box. To access a text box, double-click in it, or press <Alt> plus the text box label's underlined letter.

5. **Select the OK Button**
   When you have finished selecting the settings, click on the OK Button, or press <Enter>. Paint Shop Pro will add the borders to the image.

TOPIC: Cropping an Image

Basic Image Editing

< More | Empty Clipboard | Adding Borders | Crop / Enlarge | More >

📂 **Cropping an Image**   **Enlarging an Image's Area**

Cropping an image is like cropping a photograph: you cut off one or more outside edge, eliminating unwanted parts of the original graphic. To crop an image:

1 Use the Rectangle Selector to select the part of the image that you want to retain. The area outside of the selection will be deleted.

2 Select "Crop" from the Image Menu.

TOPIC: Enlarging an Image's Area

Basic Image Editing

< More | Empty Clipboard | Adding Borders | Crop / Enlarge | More >

📁 **Cropping an Image**   **Enlarging an Image's Area**

Enlarging an image's area adds background color around the image, or below it and to the right. Follow these steps:

**1 Select the Background
Color**
The new area will be filled with the background color.

**2 Access the Enlarge Canvas Dialog
Box**
To access the dialog box, select "Enlarge Canvas" from the Image Menu:

**3 Enter the New Width and
Height**
You enter each of the image area's new dimensions into the appropriate text box. To access a text box, click in it, or press <Alt> plus the label's underlined letter. For example, to access the Height Text Box, press <Alt> + <H>.

**4 Set the Center Image
Option**
When the Center Image Option is turned on, the current image is centered in the new image area. When the option is turned off, the image appears in the new image area's upper left corner. The option is on when its check box is filled in, and is off when the check is empty. To turn the option on or off:

　　Click on the check box or its
　　title.
　　Press <Alt> + <C>.

5 Select the OK Button
When you're done filling in the Enlarge Canvas Dialog Box, click on the OK Button, or press <Enter>. Paint Shop Pro will expand the image area.

TOPIC: Changing an Image's Width and Height

Basic Image Editing

Changing an Image's Width and Height

Paint Shop Pro includes two methods for changing an image's width and height: resampling and resizing. The two methods are:

- Nearly identical in procedure (the steps you use to achieve the effect).
- Very different in process (the calculations performed by the computer).
- Anything from very similar to very different in results. In most cases, resampling produces noticeably superior image quality.

Resampling Defined

Resampling minimizes the raggedness normally associated with changes in image width and height by using a process called "interpolation". As applied here, interpolation smoothes out rough spots by estimating how the "missing" pixels should appear, and filling them with the appropriate color.

Resampling is available for grey scale images and images with color depths greater than 256. Sixteen color grey scale images are automatically converted to 256 color grey scale. If the image you want to edit is not grey scale, and has a color depth of 256 or less, you can get around this limitation by:

1 Increasing the image's color depth.

2 Resampling it.

3 Returning its color depth to the original format.

Resizing Defined

Resizing duplicates or deletes pixels as necessary to achieve the desired width and height. Resizing gives superior results to resampling with simple and hard-edged images, and when working with sixteen colors or less. With photo-realistic images, and with images that are irregular or complex, try resampling instead.

Resampling/Resizing Procedure

To change an image's width and height, follow these steps:

1 **Access the Appropriate Dialog Box**
The dialog boxes for the two functions differ only in their titles. You select the function that you want to use from the Image Menu.

2 **Select the New Size**
You can select one of five standard image sizes, you can specify a custom size by width and height, or you can specify a custom size by aspect ratio.

Standard Sizes
The five standard image sizes are listed in the group box on the left. To select one of the standard sizes:

  Click on the option's button or its text.

  Press <Alt> plus the option's underlined letter.

Custom Size by Width and Height
To specify a custom size by width and height in pixels:

1 Click on the Custom Size Option, or press <Alt> + <U>.

2 If the Maintain Aspect Ratio Option is turned on (the check box is filled), turn

it off. Click on the text or check box, or press <Alt> + <M>.

3 Type the new width into the first text box.

4 Press <Tab>.

5 Type the new height into the second text box.

Custom Size by Aspect Ratio
The aspect ratio is the relationship between the image's two dimensions, expressed as width divided by height. To specify a custom size using the aspect ratio:

1 Click on the Custom Size Option, or press <Alt> + <U>.

2 If the Maintain Aspect Ratio Option is turned off (the check box is empty), turn it on. Click on the text or check box, or press <Alt> + <M>.

3 The Aspect Ratio Text Box will display the image's current aspect ratio. If you want to change the ratio, double-click in the text box, or press <Alt> + <F>, then type the new ratio.

4 Enter the setting for the dimension that you want to fix. For example, if you want to fix the width and let the height be determined by the aspect ratio, double-click in the Width Text Box and type the new width.

3 Select the OK Button
When you're done setting the image's new size and shape, click on the OK Button, or press <Enter>. Paint Shop Pro will modify the image to match its new dimensions.

TOPIC: Reversing Orientation: Flip and Mirror

Basic Image Editing

Reversing Orientation: Flip and Mirror

The Flip and Mirror Commands reverse an image or selection's orientation along the vertical and horizontal axes:

Flip Command
Reverses the image or selection vertically, so that what was the top becomes the bottom, and vice-versa. To use it:

Select "Flip" from the Image Menu. Click on "Image" in the Menubar, then click on "Flip".

Press <Ctrl> + <F>.

Mirror Command
Reverses the image or selection horizontally, so that what was the left side becomes the right side, and vice-versa. To use it:

Select "Mirror" from the Image Menu. Click on "Image" in the Menubar, then click on "Mirror".

Press <Ctrl> + <M>.

Rotating an Image

Rotating an Image

The Rotate Command lets you spin an image by a specified number of degrees. Follow these steps:

1️⃣ **Access the Rotate Dialog Box**
To access the [dialog box](), [select]() "Rotate" from the Image Menu.

2️⃣ **Select the Direction**
You select the direction of rotation from the Direction Group Box. Right is clockwise, and left is counter-clockwise. To select the direction:

   Click on the direction's option button or its text.

   Press <Alt> the direction's underlined letter.

3️⃣ **Select the Degrees**
You select the degrees of rotation from the Degrees Group Box:

   Click on the appropriate option button or its text.

   Press <Alt> the direction's underlined letter.

   Free Option (Specified Rotation)
   The Free Option is only available for 256 color grey scale and 16 million color images. Enter the degrees of rotation into the Free Text Box.

4️⃣ **Select the OK Button**
When you have finished selecting the settings, click on the OK Button, or press <Enter>. Paint Shop Pro will rotate the image.

TOPIC: Viewing Image Information

Basic Image Editing

Viewing Image Information

The Image Information Dialog Box lists fourteen facts about the active image. The following table explains each of the data items. To access the dialog box, select "Image Information" from the file's Image Window Control Menu:

- Click on the image window's control box, then click on "Image Information" in the Control Menu.
- Press <Alt> + <->, then press <I>.

Image Information Data Items

Item	Description
Width	Image width, in pixels.
Height	Image height, in pixels.
Bits Per Pixel	Bits-per-pixel of image in memory.
Max # of Colors	Maximum number of colors that image supports. Determined by file format.
Memory Required	RAM used by image.
Source File Name	Name of file that contains the original image information.
Source File Type	Source file's format.
Sub Type	Source file's sub-format, if any.
Image can...	Indicates if image can be saved to above format.
File Is Deletable?	Indicates if file can be deleted. Will say "no" for files that are read-only, are on read-only media (such as CR-ROM), or have not been saved.
Has Been Changed?	Indicates if image contains any unsaved changes.
Type of Selection	Indicates the selection type, if any. Types are rectangle, oval, or polygon.
Undo Buffer Location	Indicates memory location for undo buffer.
Has Mask Channel?	Indicates if image has a mask attached.

Deformations and Filters

TOPIC: Applying Deformations and Filters

Deformations and Filters

📂 Applying Deformations and Filters

Deformations and filters alter an image or selection to achieve a particular effect.

- Deformations create an effect by moving image data from one area to another. As the name implies, the result is a deformed version of the original image.
- Filters alter each pixel's color based on its current color and the colors of any neighboring pixels. The results can vary widely, from a minor adjustment of a single image characteristic (such as luminance), to a wholesale transformation of the image's appearance.

Color Depth

Deformations and filters are available for images with color depths greater than 256 colors, and for images in 256 color grey scale. To apply a deformation or filter to an image in a lower color depth:

1 Increase its color depth to greater than 256 colors or to 256 color grey scale.

2 Apply the filter or deformation.

3 Reduce the image's color depth to its original format.

Methods

There four ways to apply deformations and filters to images and selections:

- You can select a standard deformation or filter from the Image Menu.
- You can use the Effects Browser to preview and apply deformations and filters.
- You can create and apply your own filters.
- You can apply plugin filters.

📁 **Selecting Effects from the Image Sub-Menus**

📁 **Using the Effects Browser**

TOPIC: Selecting Effects from the Image Sub-Menus

Deformations and Filters

📁 **Applying Deformations and Filters**

📂 **Selecting Effects from the Image Sub-Menus**

The Image Menu contains four standard sub-menus for selecting deformations and filters:

- Deformations
- Edge Filters
- Normal Filters
- Special Filters

To select an effect from one of these sub-menus:

🖱 Click on "Image" in the Menubar, click on the sub-menu's name in the Image Menu, then click on the effect that you want to use.

⌨ Press <Alt> + <I>, then press the underlined letter in the sub-menu's name, and then press the effect's underlined letter.

The effect may open a dialog box. Paint Shop Pro's deformations and filters use dialog boxes that are similar to the ones used by the Color Functions. For an example, see Using a Color Adjustment Function.

📁 **Using the Effects Browser**

TOPIC: Using the Effects Browser

Deformations and Filters

Deformations and Filters	User-Defined Filters	Plugins

📁 **Applying Deformations and Filters**

📁 **Selecting Effects from the Image Sub-Menus**

📂 **Using the Effects Browser**

There are two version of the Effects Browser: the Deformation Browser and the Filter Browser. To use the Effects Browser, follow these steps:

1️⃣ **Select the Image Area**

The Circle, Pentagon, Perspective, and Skew Deformations only work on an entire image. They cannot be applied to a selection.

▸ To modify part of an image, <u>select</u> it now.

▸ To modify the entire image, make sure that there is no <u>selection</u>.

2️⃣ **Access the Effects Browser Dialog Box**

You access the <u>dialog box</u> by <u>selecting</u> "Deformation Browser" or "Filter Browser" from the Image Menu.

3️⃣ **Select an Effect**

You select an effect by highlighting it in the list box on the left. Paint Shop Pro will preview the effect in the Sample Preview Box on the right. The preview will show the effect as applied to the entire image, even if the image contains a selection. To select an effect:

🖱 Click on it in the list box. Use the scroll bar to move through the list.

⌨ Press <Alt> plus the list box label' s underlined letter (<F> or <D>), then use the cursor keys and/or letter keys to highlight the effect. Pressing a letter key moves to the next effect that begins with that letter.

4️⃣ **Select the Apply Button**

When you have found the effect that you want to apply, click on the Apply Button, or press <Enter>. Paint Shop Pro will apply the effect to the image or selection. If none of the effects are what you wanted, click on the Cancel Button, or press <Esc>.

TOPIC: User-Defined Filters

Deformations and Filters

🗁 User-Defined Filters   Creating a User-Defined Filter

Here's where the <u>real</u> fun begins: Paint Shop Pro 3.0 lets you create your own filters. You manage user-defined filters from the Apply User Defined Filter Dialog Box. To access the dialog box, select "User Defined Filters" from the Image Menu.

Filters Explained
A filter alters each pixel's color based on its current color and the colors of any neighboring pixels. The heart of a filter is an array of numbers called a filter matrix. Paint Shop Pro uses a 5x5 matrix.

The numbers in the array act as coefficients. When a pixel is processed, its color value is multiplied by the coefficient in the array's center, and any pixels within the 5x5 grid are multiplied by the corresponding coefficients in the array. The sum of the products becomes the target pixel's new value. The new value is saved in a separate bitmap so that it does not affect the remaining pixels.

▶ Simple Filter Calculation Example

The formula for this calculation is:

$$F = \sum_{i=1}^{25} P_i C_i$$

Where F is the filtered value of the target pixel, P is a pixel in the grid, and C is a coefficient in the matrix.

▶ Creating a User-Defined Filter

TOPIC: Creating a User-Defined Filter

Deformations and Filters

📁 **User-Defined Filters**   **Creating a User-Defined Filter**

Now that you know how a filter works, let's create one. Follow these steps:

1 **Access the Define New Filter Dialog Box**

To access the dialog box, click on the New Button in the Apply User Defined Filter Dialog Box.

2 **Enter the Filter Name**

Type the new filter's name into the Filter Name Text Box.

3 **Enter the Filter Matrix Values**

You enter the filter matrix values into the table in the center of the dialog box. Press <Tab> to access the first cell and to move through the table. Non-integers will be truncated (chopped off at the decimal place). See the next step for help achieving the same effect as decimal coefficients.

4 **Set the Division Factor**

You can think of the Division Factor as the coefficient denominator: each coefficient in the filter matrix is divided by the Division Factor before being applied to a pixel. The Division Factor allows you to achieve effects that would otherwise require decimal coefficients:

  1 Raise the coefficients to integers by multiplying them by the Division Factor (typically 10, 100, or 1000).

  2 Enter the "integer-ized" coefficients in the matrix.

  3 Enter the Division Factor in the Division Factor Text Box.

When Paint Shop Pro applies the filter, the effect of the coefficients is reduced by the Division Factor, and the net result is the same as would have been achieved by the original decimal coefficients.

The advantage of this approach is execution speed: the Division Factor speeds the filtering process by allowing Paint Shop Pro to perform its math using integers. In actuality, the Division Factor is applied to the product of the matrix calculation.

The Division Factor changes the filter formula to:

$$F = \left\{ \sum_{i=1}^{25} P_i C_i \right\} \div D$$

Where F is the filtered value of the target pixel, P is a pixel in the grid, C is a coefficient in the matrix, and D is the Division Factor.

5 **Set the Bias**

The Bias is added to the product of the matrix calculation and the Division Factor. You use the Bias to shift the value of each pixel by a fixed amount. Bias adjustments are particularly useful for creating embossing effects. The Bias changes the filter formula to:

$$F = \left\{ \sum_{i=1}^{25} P_i C_i \right\} \div D - B$$

Where F is the filtered value of the target pixel, P is a pixel in the grid, C is a coefficient in the matrix, D is the Division Factor, and B is the Bias.

Like the other inputs, the Bias must be an integer; non-integers will be truncated. Integers outside of the range of 0 to 255 will be converted to fall within the range. For example, 256 becomes 0, and -1 is converted to 255.

6 **Select the OK Button**
When you've finished entering the filter's settings, click on the OK Button, or press <Enter>. Paint Shop Pro save the filter and return to the Apply User Defined Filter Dialog Box.

TOPIC: Applying Plugins

Deformations and Filters

Applying Adobe-Compatible Plugins

If you have installed Adobe-compatible image processing filters, there will be a Plugins Sub-Menu at the end of the Image Menu. To select a plugin effect:

- Click on "Image" in the Menubar, then click on "Plugins" in the Image Menu. The Plugins Sub-Menu may contain effects, more sub-menus, or both. Click on a sub-menu to open it, or click on an effect to apply it.

- Press <Alt> + <I>, then press <G> to open the Plugins Sub-Menu. underlined letter in the sub-menu's name, and then press the effect's underlined letter.

Please Note:

The plugin effect may open a dialog box. For help using it, please consult the plugin's documentation or on-line help. For information about plugins and masked images, see Enable Internal Plugin Filter Masking.

Managing Image Files

TOPIC: Saving a File

Managing Image Files

Saving a File

You can save the changes to the current file by selecting "Save" from the File Menu, or you can:

Click on the Save File Button.

Press <Ctrl> + <S>.

If you are saving a new file, Paint Shop Pro will open the File Save As Dialog Box.

TOPIC: Copying Files

Managing Image Files

Copying Files

There are three ways to copy image files:

‣ You can use the File Save As Dialog Box to save an image under a new filename.

‣ You can copy an image to a new image window.

‣ You can use PSP Browser to copy files to a different directory.

TOPIC: Converting Files

Managing Image Files

📂 **Converting a Single File**   **Batch Conversion Utility**

You can use the File Save As Dialog Box to save a file in a different format. When you get to Step 3, select the new format from the File Type Drop Down Box. If the format has sub-formats, select one from the File Sub-Format Drop Down Box.

TOPIC: Batch Conversion Utility

Managing Image Files

📁 **Converting a Single File**   **Batch Conversion Utility**

You use the Batch Conversion Dialog Box to convert multiple image files to a single format. Follow these steps:

1 Access the Batch Conversion Dialog Box
To access the dialog box:

    Click on the Batch Conversion Button.
    Select "Batch Conversion" from the File Menu. Press <Alt> + <F>, then press <T>.

2 Select the Input Settings
You select the Input Settings from the Input Group Box. Use the Drive Drop Down Box and Directory List Box to select the drive and directory where the files are located. You can select specific files from the File Name List Box, or you can use the Select All Button to execute the conversion .

3 Select the Output Settings
You select the Output Settings from the Output Group Box. You use the File Type Drop Down Box (Example) and the File Sub-Format Drop Down Box to select the file format. To select the drive and directory for the new files, click on the Browse Button. Paint Shop Pro will open the Select Directory Dialog Box.

4 Execute the Batch Conversion
If you don't want to see any error messages during the conversion, fill in the Suppress Error Messages Check Box. Error messages will still appear in the Batch Processing Status Dialog Box.

    ▶ To convert the files that you selected in Step 2, click on the OK Button.

    ▶ To convert all files in the source directory, click on the Select All Button.

Paint Shop Pro will begin the batch conversion and will open the Batch Processing Status Dialog Box. If you selected any meta/vector, Photo-CD, or RAW files, Paint Shop Pro might open the appropriate Image Import Dialog Box

Batch Conversion Dialog Box

TOPIC: Printing a File

Managing Image Files

Printing a File

To print a file, follow these steps:

1. **Access the Print Dialog Box**

   You set the printing options from the <u>Print Dialog Box</u>. To access the dialog box:

   - Click on the Print Button.
   - Select "Print" from the File Menu. Press <Alt> + <F>, then press <P>.

2. **Set the Print Quality**

   You set the print resolution from the <u>Print Quality Drop Down Box</u>. The available options are determined by the selected printer. For some printers, the Print Quality Drop Down Box will be greyed out.

3. **Enter the Number of Copies (Optional)**

   If your printer supports multiple copies, you can enter the number of copies that you want to print into the <u>Copies Text Box.</u>

4. **Change the Printer or Printer Setup (Optional)**

   The current printer is listed at the top of the Print Dialog Box. If you want to select a different printer or change your <u>printer setup</u>, click on the Setup Button, or press <Alt> + <S>.

5. **Change the Page Setup (Optional)**

   If you want to change the current page setup, click on the Page Setup Button, or press <Alt> + <P>. Paint Shop Pro will open the <u>Page Setup Dialog Box</u>.

6. **Select the OK Button**

   Click on the OK Button, or press <Enter>. Paint Shop Pro will send the image file to the printer.

TOPIC: Closing a File

Managing Image Files

Closing a Single File

To close a file, follow these steps:

1. **Select the File's Image Window**

    ▶ Selecting an Image Window

2. **Select the File Close Command**

    You can select "Close" from the File Menu or from the image window's Control Menu, or you can:

    Double-click on the image window's Control Box.

    Press <Ctrl> + <F4>.

3. **Respond to the Save File Prompt**

    If you have edited the file and haven't saved it, you will be prompted to do so.

Closing All Files

To close all open files, select "Close All" from the Window Menu:

Click on "Window" in the Menubar, then click on "Close All".

Press <Alt> + <W>, then press <A>.

By default, Paint Shop Pro will prompt you to save any new or edited files. You can use the Window Close All Option in under the Saving Tab in the General Preferences Dialog Box to turn this prompting on or off.

TOPIC: Deleting a File

Managing Image Files

Deleting a File

To delete a file, follow these steps:

1. **Open or Select the File**

   ▸ Opening Image Files
   ▸ Selecting an Image Window

2. **Select the File Delete Command**

   To select the command:

   Choose "Delete" from the File Menu. Click on "File" in the Menubar, then click on "Delete".

   Press <Del> or <Delete>.

3. **Respond to the Delete File Prompt**

   Paint Shop Pro will prompt you to confirm your decision.

Opening Image Files

TOPIC: Opening Files

Opening Image Files

Opening Images Files

Paint Shop Pro supports a wide range of <u>file formats</u>. There are <u>six</u> ways to open files:

- From the <u>Open Image Dialog Box</u>
- From the <u>Most-Recently Used List</u>
- Using <u>PSP Browser</u>
- From <u>File Manager</u>
- <u>Drag-and-Drop</u> from File Manager
- From the <u>Command Line</u>

When You Open a File...

When you open a file, one of two things will happen:

- Paint Shop Pro will open the file in a new <u>image window</u>.
- If you selected a meta or vector file, a Photo-CD file, or a RAW file, Paint Shop Pro may open the appropriate <u>Image Import Dialog Box</u>.

TOPIC: From the Open Image Dialog Box

Opening Image Files

Using the Open Image Dialog Box

To open a file using the Open Image Dialog Box, follow these steps:

1 **Access the Open Image Dialog Box**
You can access the dialog box by selecting "Open" from the File Menu, or you can:

Click on the File Open Button.

Press <Ctrl> + <O>.

2 **Select the Disk Drive**
You change the disk drive from the Drive Drop Down Box.

3 **Select the Directory**
You change the directory from the Directories List Box.

4 **Select the Format**
You select the file format from the File Type Drop Down Box.

5 **Select the File**
You select the file from the File Name List Box.

6 **Check the File Information (Optional)**
To see information about the file, click on the Information Button, or press <Alt> + <I>. Paint Shop Pro will open the File Info Dialog Box, which lists various facts about the selected file. For explanations of the data items, see the following table. When you're done reviewing the information, click on the OK Button, or press <Enter>.

Item	Description
Disk ID	Volume label for a removable medium, such as a diskette or a CD, where image file is located.
Directory	Drive and directory where image file is located.
File Size	File size in bytes. Reflects file compression, if any.
File Date	Date and time when file was last saved.
File Type	File type or format.
Version	File sub-format, if any.
Compression	Compression type, if any.
Width	Image width, in pixels.
Height	Image height, in pixels.
Bits Per Plane	Bits per color plane. For raster format, reports image data. For metafile format, reports video display.
# of Planes	Number of color planes. For raster format, reports image data. For metafile format, reports video display. Reports 1 for non-planar raster formats.
Max # of Colors	Maximum number of colors that file format

supports.

Unpacked Size   Image size in bytes. Uncompressed file size.

■ Select the OK Button

Click on the OK Button, or press <Enter>. One of two things will happen:

▸ Paint Shop Pro will open the file in a new image window.

▸ If you selected a meta or vector file, a Photo-CD file, or a RAW file, Paint Shop Pro may open the appropriate Image Import Dialog Box.

TOPIC: From the Most-Recently Used List

Opening Image Files

From the Most-Recently Used List

The Most-Recently Used List tracks the four files that have been used most recently by Paint Shop Pro. The list appears at the bottom of the File Menu, just below the Exit Selection.

Please Note:

If you have just installed Paint Shop Pro, the Most-Recently Used List will be empty, and the File Menu will end with the "Exit" selection.

Selecting a File

To select a file from the Most-Recently Used List:

Click on it.

Press <Alt> plus the file's underline number. For example, to select the first file, press <Alt> + <1>.

When You Open a File...

When you open a file, one of two things will happen:

- Paint Shop Pro will open the file in a new image window.
- If you selected a meta or vector file, a Photo-CD file, or a RAW file, Paint Shop Pro may open the appropriate Image Import Dialog Box.

TOPIC: From File Manager

Opening Image Files

From File Manager

If the file's extension is associated with Paint Shop Pro in File Manager, you can open the file by double-clicking on it, or by highlighting it and pressing <Enter>. When you open a file, one of two things will happen:

▶ Paint Shop Pro will open the file in a new image window.

▶ If you selected a meta or vector file, a Photo-CD file, or a RAW file, Paint Shop Pro may open the appropriate Image Import Dialog Box.

Getting Help

For more information, see File Manager's on-line help:

⌐ Select "Contents" from File Manger's Help Menu.
Click on "Help" in the File Manager Menubar, then click on "Contents".

⌨ Go to File Manager and press <F1>.

TOPIC: Drag-and-Drop from File Manager

Opening Image Files

Dragging-and-Dropping from File Manager

You can "drag" files from File Manager and "drop" them on Paint Shop Pro's Main Window. Follow these steps:

1. **Position the Windows**

   Position the File Manager Main Window and the Paint Shop Pro Main Window so that you can see them both. The File Manager Main Window should be "on top" since you will use it to "grab" the file. Only a small part of the Paint Shop Pro Main Window in fact, just the Titlebar   needs to be visible.

2. **Find the File**

   Use File Manager to locate the file. For help:
   - Select "Contents" from File Manger's Help Menu. Click on "Help" in the File Manager Menubar, then click on "Contents".
   - Press <F1>.

3. **Grab the File**

   Point at the file's name with your mouse, then press and hold the primary mouse button.

4. **Drag the File**

   Drag the file to the Paint Shop Pro Main Window by moving your mouse.

5. **Drop the File**

   OK-to-Drop Cursor
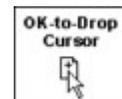
   You can drop the file when the cursor changes to the form shown at right. When it does, release the mouse button. The Paint Shop Pro Main Window will move to the foreground, and if it recognizes the file format, one of two things will happen:
   - Paint Shop Pro will open the file in a new image window.
   - If you selected a meta or vector file, a Photo-CD file, or a RAW file, Paint Shop Pro may open the appropriate Image Import Dialog Box.

TOPIC: From the Command Line

Opening Image Files

From the Command Line

You can add filenames to the command line after the Paint Shop Pro executable file. For more information, go to Program Manager, select "Run" from the File Menu, and click on the Help Button. When you open a file, one of two things will happen:

▶ Paint Shop Pro will open the file in a new image window.

▶ If you selected a meta or vector file, a Photo-CD file, or a RAW file, Paint Shop Pro may open the appropriate Image Import Dialog Box.

Getting Started

TOPIC: Starting Paint Shop Pro

Getting Started

📂 Starting Paint Shop Pro

You can start Paint Shop Pro from:

▸ Program Manager

▸ File Manager

▸ Command Line

When you start Paint Shop Pro, one of two things will happen:

▸ It will open the Main Window.

▸ You will receive a prompt informing you that your current display settings only support sixteen colors.

📁 **From Program Manager**

📁 **From File Manager**

📁 **From the Command Line**

📁 **Sixteen Color Display**

📁 **Exiting Paint Shop Pro**

TOPIC: From Program Manager

Getting Started

📁 **Starting Paint Shop Pro**

📂 **From Program Manager**

Paint Shop Pro Icon

Like most Windows applications, you can start Paint Shop Pro by double-clicking on its icon. The location of the icon depends on how you installed Paint Shop Pro. If you used the default setup, the icon is in the Paint Shop Pro group. When you start Paint Shop Pro, one of two things will happen:

▸ It will open the <u>Main Window</u>.

▸ You will receive a prompt informing you that your current display settings only support <u>sixteen colors</u>.

Adding Paint Shop Pro to Program Manager
For help adding Paint Shop Pro to Program Manager, consult your Windows documentation. You can also select "New" from Program Manager's File Menu, then click on the Help Button (or press <H>) in the New Program Object Dialog Box.

📁 **From File Manager**
📁 **From the Command Line**
📁 **Sixteen Color Display**
📁 **Exiting Paint Shop Pro**

TOPIC: From File Manager

Getting Started

📁 **Starting Paint Shop Pro**

📁 **From Program Manager**

📂 **From File Manager**

You start Paint Shop Pro from File Manager by double-clicking on PSP.EXE, or by highlighting it and pressing <Enter>. You'll find PSP.EXE in the drive and directory that you entered during installation. If you used the default setup, PSP.EXE is in C:\PSP. When you start Paint Shop Pro, one of two things will happen:

- ▸ It will open the <u>Main Window</u>.

- ▸ You will receive a prompt informing you that your current display settings only support <u>sixteen colors</u>.

📁 **From the Command Line**

📁 **Sixteen Color Display**

📁 **Exiting Paint Shop Pro**

TOPIC: From the Command Line

Getting Started

📁 **Starting Paint Shop Pro**

📁 **From Program Manager**

📁 **From File Manager**

📂 **Command Line**

To start Paint Shop Pro from the Windows command line, follow these steps:

1️⃣ **Access the File Run Dialog Box**

Select "Run" from the Program Manager's File Menu:

　🖱 Click on "File" in the Menubar, then click on "Run".

　⌨ Press <Alt> + <F>, then <R>.

2️⃣ **Enter Paint Shop Pro's Full Path**

Type Paint Shop Pro's drive and directory, followed by "PSP.EXE". If you used the default setup, you would type "C:\PSP\PSP.EXE". When you're done, click on the OK Button, or press <Enter>. One of two things will happen:

　▶ It will open the Main Window.

　▶ You will receive a prompt informing you that your current display settings only support sixteen colors.

📁 **Sixteen Color Display**

📁 **Exiting Paint Shop Pro**

TOPIC: Sixteen Color Display

Getting Started

🗀 **Starting Paint Shop Pro**
🗀 **From Program Manager**
🗀 **From File Manager**
🗀 **From the Command Line**

🗁 **Sixteen Color Display**

If you run Paint Shop Pro with a sixteen color video display, you'll receive a prompt informing you that Paint Shop Pro works best with 256 colors or more. Paint Shop Pro will run just fine with a sixteen color display, but images of greater color depth will not look their best.

Please Note:

Most of JASC's Paint Shop Pro technical support calls concern poor image display quality. If an image appears grainy or mottled, it's probably because your video display doesn't support enough colors to show the image correctly.

▸ See Color Problems

When you select either of the prompt's buttons, Paint Shop Pro will open the Main Window.

▸ If you want the prompt to open whenever your system is running a sixteen color display driver, click on the Yes Button, or press <Y>.

▸ If you want to close the prompt permanently, click on the No Button, or press <N>.

🗀 **Exiting Paint Shop Pro**

TOPIC: Exiting Paint Shop Pro

Getting Started

📁 **Starting Paint Shop Pro**
📁 **From Program Manager**
📁 **From File Manager**
📁 **From the Command Line**
📁 **Sixteen Color Display**

📂 **Exiting Paint Shop Pro**

You exit Paint Shop Pro like most Windows programs. You can:

▸ Select "Exit" from the File Menu.
▸ Double-click on the Main Window's Control Box.
▸ Press <Alt> + <F4>.
▸ Select "Exit" from the Main Window's Control Menu.

TOPIC: Main Window

Getting Started

Main Window

Paint Shop Pro's Main Window contains five regions: the Titlebar, the Menubar, the Toolbar, the Workspace, and the Statusbar. Each region has specific uses and functions. The Main Window also "hosts" image windows and the Tool Windows.

- ▸ Maximize, Minimize, and Restore
- ▸ Moving a Window
- ▸ Resizing a Window

Main Window Titlebar

The Main Window Titlebar displays "Paint Shop Pro" and contains the standard Windows titlebar controls.

Control Box
At the left end of the Titlebar is the Control Box, which you use to access the Main Window Control Menu. Double-clicking on the Control Box closes Paint Shop Pro.

Text Display
Double-clicking on the text display section of a titlebar switches the window between its maximized and normal states.

Positioning Buttons
At the right end of the Titlebar are the Main Window's positioning buttons. In the diagram of the Titlebar shown here, the Minimize and Maximize Buttons are present. When the window is maximized, the Maximize Button is replaced by the Restore Button.

Menubar

The Menubar contains Paint Shop Pro's menus. Each menu lists a "family" of selections, and each selection performs a specific action.

Toolbar

Below the Menubar is a row of buttons called the Toolbar. Toolbar buttons perform an action, just like a menu selection. Using a Toolbar button couldn't be easier   just click on it.

Workspace

The Workspace is the area between the Toolbar and the Statusbar. As the name implies, the Workspace is where you do your work. When you open a file or create a new image, Paint Shop Pro opens a new image window within the Workspace.

- ▸ Opening Image Files
- ▸ Creating a New Image
- ▸ Working With Image Windows

Statusbar

The Statusbar appears at the bottom of the Main Window. When you highlight a menu item or place the cursor over a Toolbar or Toolbox button, the Statusbar displays information about the item or button. When you're working with images, the Satusbar displays information about the active image:

- • The left panel displays the width, height, and color depth.
- • The middle panel displays information about the cursor position.
- • The right panel displays: (1) the amount of memory occupied by the image and its undo buffer; and (2) the available memory. An image will have an Undo buffer if the Undo Storage Option is set to "In Memory".

Main Window Features

For help with an area of the Main Window, click on it in the diagram below.

SEARCH: Main Window Features

SEARCH: Main Window Control Box

TOPIC: Menus

Getting Started

Menus

The Menubar contains Paint Shop Pro's menus. Each menu lists a "family" of selections, and each selection performs a specific action.

Using the Menus
You open a menu by clicking on it, or by pressing <Alt> plus the letter that is underlined in the menu's title. For example, to open the File Menu, you would press <Alt> + <F>. You choose a menu selection by clicking on it, by pressing its underlined letter, or by using the cursor keys to highlight it and then pressing <Enter>.

Greyed Out Menus and Selections
Menus and selections that are not currently available appear in grey. When no images are open: (1) the Image, Colors, and Window Menus are not available; and (2) about half of the selections on the File, Edit, and View Menus are not available.

Getting Help with a Menu Selection
When you highlight a menu selection, Paint Shop Pro displays a brief description of the selection in the Statusbar. If you press <F1>, Paint Shop Pro will open this help file to the appropriate topic. To highlight a menu selection:

Point at the menu's title in the Menubar, then press and hold the primary mouse button. The menu will open. Slide the cursor down the menu to highlight the selection that you're interested in.

Press <Alt> plus the underlined letter to open the menu, then use the cursor keys to highlight the selection.

TOPIC: Toolbar

Getting Started

Toolbar

Below the Menubar is a row of buttons called the Toolbar. Toolbar buttons perform an action, just like a menu selection. Using a Toolbar button couldn't be easier   just click on it.

Greyed Out Buttons

Toolbar buttons that are not currently available appear greyed out.

Getting Help with a Toolbar Button

To find out what a Toolbar button does, point at it with the mouse. Paint Shop Pro will display a brief explanation of the button's action in the Statusbar. For more help, keep the cursor over the button, and press <F1>. Paint Shop Pro will open this help file to the appropriate topic.

TOPIC: Toolboxes

Getting Started

📂 **Toolboxes**   **Tool Control Panel**

The Toolboxes contain thirty-five tools for image editing. You select a tool from a toolbox by clicking on its button. The button stays depressed, and the Tool Control Panel displays the controls for the selected tool.

Example: Selecting the Pen Tool

1. Click on the Tool's Button
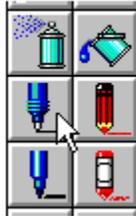
2. Active Button Stays Depressed

3. Tool Control Panel Changes

Pen

Size   Style

1   Square

You won't see the changes to the Tool Control Panel if it's hidden. Double-clicking on a tool's button selects the tool <u>and</u> makes its Tool Control Panel visible. You can also <u>un-hide</u> the Tool Control Panel from the View Menu and the Toolbar.

Related Topics:

▸ Select Tools
▸ Paint Tools

TOPIC: Tool Control Panel

Getting Started

📁 **Toolboxes**   **Tool Control Panel**

When a Select Tool is active, and when three of the Paint Tools are active, the Tool Control Panel displays only the Zoom Spin Control. This version of the Tool Control Panel is entitled the Zoom Control Panel.

Most of the Paint Tools use a version of the Tool Control Panel that is unique to the particular tool. For help with a specific version of the Tool Control Panel, see the section that covers the relevant Paint Tools.

Although there are many versions of the Tool Control Panel, it only displays two types of controls:

▸ Spin Controls

▸ Drop Down Boxes

HOW TO:Using Menus

TOPIC: Making a Selection

Using Menus

Making a Selection

Opening a Menu
You open a menu by clicking on it, or by pressing <Alt> plus the letter that is underlined in the menu's title. For example, to open the File Menu, press <Alt> + <F>.

Choosing a Menu Selection
You can choose a menu selection:

- By clicking on it.
- By pressing its underlined letter.
- By using the cursor keys to highlight it and then pressing <Enter>.

Using Sub-Menus
Some menu selections open a "pop-up" menu that appears alongside the parent menu. Menu selections that open a sub-menu are followed by a small wedge ("▸"). You select an item from a sub-menu the same way that you select an item from a regular menu: by clicking on it, by pressing its underlined letter, or by using the cursor keys to highlight it and then pressing <Enter>.

SEARCH: Menus, Making a Selection

TOPIC: Getting Help

Using Menus

Getting Help

When you highlight a menu selection, Paint Shop Pro displays a brief description of the selection in the [Statusbar](#). To see a menu selection's description:

- Point at the menu's title in the [Menubar](#), then press and hold the [primary mouse button](#). The menu will open. Slide the cursor down the menu to highlight the selection that you're interested in.

- Press <Alt> plus the underlined letter to open the menu, then use the cursor keys to highlight the selection.

SEARCH: Menus, Getting Help

HOW TO: Controlling the Windows

TOPIC: Maxmize, Minimize, and Restore

Controlling the Windows

Minimize, Maximize, and Restore

To [minimize](#), [maximize](#), or [restore](#) the Main Window or an image window, use the Positioning Buttons (see below). The Positioning Buttons appear at the right end of the windows titlebar. You can toggle back and forth between the maximized and normal states by double-clicking on the text display section of a window's titlebar.

Minimize	Maximize	Restore
▼	▲	⬍
Reduces window to an icon	Enlarges window to fill the screen	Returns window to its last non-icon, non-maximized position

SEARCH: Main Window - Minimize, Maximize, and Restore

SEARCH: Image Window - Minimize, Maximize, and Restore

TOPIC: Moving a Window

Controlling the Windows

Moving a Window

To move the Main Window, an Image Window, or a Tool Window to a different location:

- Point the cursor at the display portion of the titlebar.
- Press and hold the [primary mouse button](#).
- Drag the window by moving the mouse.
- Release the mouse button.

SEARCH: Main Window - Moving

SEARCH: Image Window - Moving

TOPIC: Resizing a Window

Controlling the Windows

Resizing a Window

To change the size of the Main Window or an image window:

⬌ Point at a side or corner of the window.
The cursor will change to a double-headed arrow.

🖱 Press and hold the [primary mouse button](#).

✛ Resize the window by moving the mouse.

🖱 Release the mouse button.

SEARCH: Main Window - Resizing

SEARCH: Image Window - Resizing

HOW TO: Spin Controls, Drop Down Boxes, Scrollbars

TOPIC: Using Spin Controls

Using Controls

Using Spin Controls
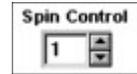
Spin Control

You use a spin control to set a numeric property. A spin control consists of a text display and two arrow buttons.

- **Increase/Decrease by a Single Unit**
  To increase the property's value by one unit, click on the Up Arrow Button. To decrease the value by one unit, click on the Down Arrow Button.

- **Increase/Decrease by "Scrolling" Units**
  To increase or decrease the value by several units or more, point at the appropriate arrow button and press and hold the primary mouse button. Release the button when you've reached the value that you want.

- **Entering a Value from the Keyboard**
  To enter the property's value from the keyboard, double-click in the control's text display, then type the new value.

TOPIC: Using Drop Down Boxes

Using Controls

Using Drop Down Boxes

You use a drop down box to set a non-numeric property. To select a setting from a drop down box:

Drop Down Box
Round
Round
Left Slash
Right Slash
Horizontal Line
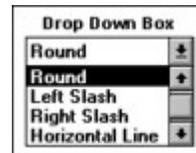
Click on the box to open it, then click on the value that you want to select. If the entire list doesn't fit in the open drop down box, use the scroll bar to move through it.

To access the drop down box, press <Alt> plus the underlined letter in the drop down boxs label. You use the cursor keys and letter keys to highlight a selection. Pressing a letter key once moves to the first item that begins with that letter. Pressing it again moves to the second.

TOPIC: Scrollbars

Using Controls

Using Scrollbars

Scroll bars come in two versions, horizontal and vertical. You use them to view text or graphics that won't fit in a window, or in some cases, to adjust values.

Scroll Bar (Example)
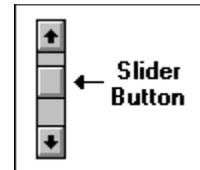
You use a scrollbar by moving the slider button. Point at the slider button with the mouse, press the primary mouse button, and drag the button in the direction you want to go.

You can also move the slider button by clicking on either side of it, or by clicking on the arrow buttons at either end of the scrollbar.

HOW TO: Image Import Dialog Boxes

TOPIC: Overview

Image Import Dialog Boxes

There are three file formats that can require additional input before being opened by Paint Shop Pro:

▸ **Meta / Vector**
If you selected a meta or vector file, Paint Shop Pro may open the <u>Meta Picture Import Dialog Box</u>.

▸ **Photo-CD**
If you selected a Photo-CD file, Paint Shop Pro will open the <u>PCD Size Dialog Box</u>.

▸ **RAW**
If you selected a RAW file, Paint Shop Pro will open the <u>RAW Options Dialog Box</u>.

TOPIC: Meta Picture Import Dialog Box

Image Import Dialog Boxes

Meta Picture Import Dialog Box

You use the Meta Picture Import Dialog Box to set the size for an image that is in a metafile or vector format. Paint Shop Pro will present the dialog box if:

▶ The appropriate header information is missing from a metafile or vector file.

▶ Under the Metafile / Import Options in the General Preferences Dialog Box, "Ask for Size and Options Each Time a File is Opened" is selected.

▶ You are using the Edit Paste Command to copy meta or vector image data from the Windows Clipboard.

To change the size and scale of the image, you edit the contents of the Width and Height Text Boxes. To access a text box, click in it, or press <Tab> until you highlight its text. When you're done, click on the OK Button, or press <Enter>.

Default Import Size

You can change the default import size from the Loading Tab of the General Options Dialog Box.

TOPIC: PCD Size Dialog Box

Image Import Dialog Boxes

PCD Size Dialog Box

Kodak Photo-CD files contain multiple sizes of a single image. The active Default PCD Size Option determines which size will be read when a PCD file is opened. If the last option is selected, Paint Shop Pro will present the PCD Size Dialog Box each time you open a PCD file. To use the dialog box:

Click on a size option's button or its text, then click on the OK Button.

Press a size option's underlined letter, then press <Enter>.

TOPIC: RAW Options Dialog Box

Image Import Dialog Boxes

RAW Options Dialog Box

You use the [RAW Options Dialog Box](#) to tell Paint Shop Pro how to interpret RAW pixel data. For information about a RAW file's format, refer to the documentation for the application that created the image.

If you are familiar with RAW files, the dialog box should be self-explanatory. If you are new to the format, please find and read information about RAW data in general, and about the file you are trying to open in particular. A discussion of RAW pixel data is beyond the scope of this help file.

SEARCH: RAW Options Dialog Box

HOW TO: File Save As Dialog Box

File Save As Dialog Box

You use the File Save As Dialog Box to save, copy, or convert an image file. Follow these steps:

1 **Select the Disk Drive**
You change the disk drive from the Drive Drop Down Box.

2 **Select the Directory**
You change the directory from the Directories List Box.

3 **Select the Format**
You select the file format from the File Type Drop Down Box. If the format has sub-formats, select one from the File Sub-Format Drop Down Box.

4 **Enter the Filename**
You enter a name for the new file by typing over the text in the File Name Text Box. Don't worry about the file extension   Paint Shop Pro will add it automatically.

5 **Select the OK Button**
Click on the OK Button, or press <Enter>. If the filename is already in use, Paint Shop Pro will present the Filename In Use Prompt. Click on the Yes Button or press <Enter> to overwrite the existing file.

SEARCH: File Save As Dialog Box

HOW TO: Selecting an Image Window

Selecting an Image Window

Selecting an Image Window

Only one Image Window can be selected at a time. The currently selected window contains the active image, which is the image that any and all editing commands will affect. When an Image Window is selected:

- It appears "above" any other Image Windows.
- Its titlebar is highlighted.
- There is a check next to its filename on the Window Menu.

You can select an Image Window by clicking on it, or you can select its filename from the Window Menu.

When More than Nine Images are Open...
Only nine images can appear on the Window Menu. When more than nine images are open, you can access the "unlisted" images by selecting "More Windows" from the bottom of the Window Menu, and then using the Select Window Dialog Box.

HOW TO: Basic Color Tasks

TOPIC: How To: Selecting the Active Colors

Basic Color Tasks

Selecting the Active Colors

You can select the active colors using the Color Tools, which are grouped at the bottom of the Select Toolbox. Double-click on the Foreground Color Panel or the Background Color Panel.

Monochrome Images
Paint Shop Pro will toggle the color. If it's black it will switch to white, and vice-versa.

16 Color and 256 Color Images
Paint Shop Pro will open the appropriate color palette dialog box. To select a color, click on its square, then click on the OK Button.

16 Million Color Images
Paint Shop Pro will open the Color Dialog Box.

Reversing the Active Colors
To switch the active colors, so that the foreground color is set to the current background color and vice-versa, double-click on the Color Reverse Tool.

TOPIC: How To: Counting an Image's Colors

Basic Color Tasks

Counting an Image's Colors

To find out how many colors are actually used in the current image, select "Count Colors Used" from the Colors Menu:

- Click on "Colors" in the Menubar, then click on "Count Colors Used".
- Press <Alt> + <C>, then press <U>.

Paint Shop Pro will display the number of colors in a message box. When you're done with the message, click on the OK Button or press <Enter>.

SEARCH: Counting an Image's Colors

TOPIC: How To: Increasing an Image's Color Depth

Basic Color Tasks

Increasing an Image's Color Depth

To increase the number of available colors in the current image, you select the new [color depth](#) from the Colors Increase Color Depth Sub-Menu:

- Click on "Colors" in the Menubar, click on "Increase Color Depth" in the Colors Menu, then click on the color depth that you want to use.
- Press <Alt> + <C>, then press <I>, and then press the color depth's underlined character.

SEARCH: Increasing an Image's Color Depth

HOW TO: Using the Select Area Dialog Box

TOPIC: Using the Select Area Dialog Box

Using the Select Area Dialog Box

You access the [Select Area Dialog Box](#) by double-clicking on the [Rectangle Selector Button](#) or the [Oval Selector Button](#).

Resizing or Creating a Selection
You set a selection's coordinates in pixels by entering numbers in the four text boxes, then clicking on the OK Button or pressing <Enter>. Paint Shop Pro will create or resize the selection using the specified coordinates. To access a text box:

Click in it to edit the current text, or double-click to overwrite the text.

Press <Alt> plus the text box label's underlined letter. For example, to access the Top Text Box, press <Alt> + <T>.

Changing a Selection's Shape
You can use the Select Area Dialog Box to convert a rectangular selection to an oval selection and vice-versa:

1 If the current selection is a rectangle, double-click on the Oval Selector Button. If the current selection is an oval, double-click on the Rectangle Selector Button.

2 Click on the OK Button, or press <Enter>.

Saving and Using the Selection Aspect Ratio
When you select the OK Button to close the Select Area Dialog Box (click on it or by press <Enter>), Paint Shop Pro saves the current selection aspect ratio (selection width / selection height). You can use the saved aspect ratio with the [Rectangle Selector](#) and the [Oval Selector](#) to create selections with identical proportions.

SEARCH: Select Area Dialog Box

HOW TO: Using the Select Directory Dialog Box

TOPIC: Using the Select Directory Dialog Box

Using the Select Directory Dialog Box

To use the Select Directory Dialog Box:

1 Select the the disk drive from the Drive Drop Down Box.

2 Select the directory from the Directories List Box.

3 Click on the OK Button, or press <Enter>.

SEARCH: Select Directory Dialog Box

Masks

TOPIC: What is a Mask?

Masks

What is a Mask?

You use a mask to apply an editing function (see list below) to an area or areas of an image. A mask is a 256 grey scale bitmap that acts something like a stencil.

- A mask is like a stencil in that both have areas that are "open" and areas that are "closed". The open areas "let" a function affect the masked image.
- A mask is unlike a stencil in that open and closed are not absolutes: white is completely open, black is completely closed, and a shade of grey is a mixture of both. In this respect, a mask is more like a silk screen: it allows you to achieve different levels of an effect within a single image, and during a single "pass" of the function.
- A mask is unlike a stencil in that it will not work with the Paint Tools. You cannot use a mask to block "paint" from hitting your "canvas". Masks only work with the functions listed below.

Functions that Work with Masks:

- Color Adjustment Functions
- Colorize Function
- Negative Image Function
- Posterize Function
- Solarize Function
- Deformations and Filters
- Flip
- Mirror

TOPIC: Using Masks

Masks

Using Masks

To use a mask, you add it to an image, then perform the function or functions that you want the mask to screen. An image that has a mask is called a "host image". When you add a mask, you select an image to create the mask from. An image that is used to create a mask is called a "source image". A single image can fill both roles.

▶ Adding a Mask to an Image
▶ Inverting a Mask
▶ Deleting a Mask

Editing Masks

With one exception - the Invert Mask Command - you cannot edit a mask. You can, however, create a special kind of source image, called a "mask image", and edit it. This allows you to achieve the same results.

▶ Creating Mask Images
▶ Editing Mask Images

TOPIC: Adding a Mask to an Image

Masks

📂 Adding a Mask to an Image

There are two ways to add a mask to an image:

▸ You can base the mask on an <u>entire image</u>.

▸ You can create a mask with a <u>single white area</u> that corresponds to a selection in the host image. The rest of the mask will be entirely black.

🗀 **Creating a Mask from an Image**

🗀 **Creating a Mask from a Selection**

TOPIC: Creating a Mask from an Image

Masks

📁 **Adding a Mask to an Image** Creating a Mask from an Image

To create a mask from an image, follow these steps:

☐ **Open the Source Image**
If the image that you want to create the mask from is closed, open it now.

② **Select the Host Image**
Open or activate the image that you want to attach the mask to. A source image does not have to be the same size and dimensions as the host image. If the host image and the source image are of different width and height, the mask will be automatically reshaped to accommodate the host image.

③ **Access the Add Mask Channel Dialog Box**
To access the dialog box, select "Add Mask" from the Image Menu.

④ **Select the Source Image**
You select the source image from the Source Window Drop Down Box:

⑤ **Select the Mask Type**
You select the type of mask from the Create Mask From Group Box. The two whole-image options are:

Source Luminance
The Source Luminance Option creates a mask that is a grey-scale copy of the entire image. All of the image's luminance is preserved.

Any Non-Zero Value
The Any Non-Zero Value Option sets all non-black colors to white. The closed areas of the mask correspond to any pure black areas in the image. If there is not any black in the image, then the entire mask will be white.

To select the mask type:

⌁ Click on the option's button or its text.

⌨ Press <Alt> plus the option's underlined letter.

⑥ **Set the Invert Mask Data Option**
Inverting the mask data creates a negative mask: what is black becomes white, what is white becomes black, and all other colors are assigned their mirror luminance. The Invert Mask Data Option is turned on when its check box is filled. To turn the option on or off:

⌁ Click on the check box or its label.

⌨ Press <Alt> + <I>.

■ **Select the OK Button**
When you've finished setting the options, click on the OK Button, or press <Enter>. Paint Shop Pro will create the new mask, attach it to the active image, and add an "M" after the filename in the image window's titlebar. The "M" indicates that a mask is

attached to the image.

FLOWER.JIF [1:1] M

You are now ready to use any of the mask-compatible functions:

- ▶ Color Adjustment Functions
- ▶ Colorize Function
- ▶ Negative Image Function
- ▶ Posterize Function
- ▶ Solarize Function
- ▶ Deformations and Filters
- ▶ Flip
- ▶ Mirror

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TOPIC: Creating a Mask from a Selection

Masks

📁 **Adding a Mask to an Image** **Creating a Mask from a Selection**

You can create a mask from a selection within the host image, but you <u>cannot</u> create a mask from a selection in another image. In other words, when you are creating a mask from a selection, the host image and the source are one and the same.

A mask based on a selection has the same dimensions as the entire image. The selection becomes a white area in the mask, and the rest of the mask is set to black. (You can use the Invert Mask Data Option to reverse this relationship.) If the anti-aliasing preference option is turned on, the white area created by the selection will have grey edges of varying hues.

To create a mask from a selection, follow these steps:

1️⃣ **Select the Image Area**
Select the area that you want to be white in the mask.

2️⃣ **Access the Add Mask Channel Dialog Box**
To access the dialog box, select "Add Mask" from the Image Menu.

3️⃣ **Choose the Current Selection Option**
You select the type of mask from the Create Mask From Group Box. To choose the Current Selection Option:

　🖱 Click on the option's button or its text.
　⌨ Press <Alt> + <C>.

4️⃣ **Set the Invert Mask Data Option**
Inverting the mask data creates a negative mask: the selection area is set to black, and the rest of the mask is set to white. The Invert Mask Data Option is turned on when its check box is filled. To turn the option on or off:

　🖱 Click on the check box or its label.
　⌨ Press <Alt> + <I>.

5️⃣ **Select the OK Button**
When you've finished setting the options, click on the OK Button, or press <Enter>. Paint Shop Pro will create the new mask, attach it to the active image, and add an "M" after the filename in the image window's titlebar. The "M" indicates that a mask is attached to the image.

| ▬ | FLOWER.JIF [1:1] M | ▼ ▲ |

You are now ready to use any of the mask-compatible functions:

▸ Color Adjustment Functions
▸ Colorize Function
▸ Negative Image Function
▸ Posterize Function

TOPIC: Inverting or Deleting a Mask

Masks

Inverting a Mask

Inverting a mask flips its colors: what was black becomes white, what was white becomes black, and shades of grey are assigned their <u>mirror luminance</u>. To invert active image's mask, select "Invert Mask" from the Image Menu:

Click on "Image" in the Menubar, then click on "Invert Mask".

Press <Alt> + <I>, then press <V>.

Deleting a Mask

To remove a mask from the active image and permanently delete it, select "Delete Mask" from the Image Menu:

Click on "Image" in the Menubar, then click on "Delete Mask".

Press <Alt> + <I>, then press <L>.

TOPIC: Creating and Editing Mask Images

Masks

Creating Mask Images

A mask image is a standard 256 color grey scale bitmap. You can edit a mask image, use it as source image, and achieve the effect of editing the mask itself. There are two ways to create a mask image:

Creating an Empty Mask Image

An empty mask image is a solid black 256 color grey scale bitmap. To create an empty mask image with the same size and dimensions as the active image, select "Create Empty Mask" from the Image Menu.

Converting a Mask into a Mask Image

To separate a mask from the active image, select "Split Mask" from the Image Menu. Paint Shop Pro will place the mask in a separate image window. You can then edit the mask as you would any other image.

Please Note:

When you create a mask image from a mask, the mask is destroyed. To "reapply" the mask, you use the new mask image to create a new mask for its former host.

Editing Mask Images

A mask image is a standard 256 color grey-scale bitmap, which you can edit just like any other image. To edit a mask that is attached to an image, you must separate it first (see "Converting a Mask into a Mask Image" above).

Mask Color Properties

White Completely open. All of a function's effect will pass through the mask and alter the corresponding area of an image.

Black Completely closed. The corresponding area of an image will remain unaltered.

Grey In-between. Some of the function's effect will pass through the mask and alter the corresponding area of an image. The amount that gets through is determined by the grey's luminance: a lighter grey lets more effect through, and a darker grey lets less through.

TOPIC: Page Setup

Customizing Your Setup

Page Setup

You change your page setup from the Page Setup Dialog Box. You can access the dialog box from the Print Dialog Box, or by selecting "Page Setup" from the File Menu.

Unit of Measure

You can use inches or millimeters as your unit of measure. When you change the units, Paint Shop Pro automatically converts all of the measurements in the dialog box. To select a unit of measure:

Click on it or its option button.

Press <Alt> plus the unit's underlined letter.

Image Scale and Size

To maintain the image's current scale (width/height), turn the Maintain Aspect Ratio on. To expand the image so that it will fill the printed page, turn the Use Full Page Option on. These options are on when their check boxes are filled. To turn them on or off:

Click on the option's check box or its text.

Press <Alt> plus the option's underlined letter.

If you turn the Use Full Page Option off, you can specify a width and height by entering values in the Image Width and Image Height Text Boxes. To access a text box, double-click in it, or press <Alt> plus its label's underlined letter.

Image Position

To center the image on the page, turn the Center On Page Option on. The option is on when its check box is filled. To turn it on or off:

Click on the option's check box or its text.

Press <Alt> + <P>.

If you turn the Center On Page Option off, you can specify the image's position by entering values in the From Left and From Top Text Boxes. To access a text box, double-click in it, or press <Alt> plus its label's underlined letter.

TOPIC: Printer Setup

Customizing Your Setup

Printer Setup

You change your printer setup from the Print Setup Dialog Box. You can access the dialog box from the Print Dialog Box, or by selecting "Printer Setup" from the File Menu.

Please Note:

The name of the Print Setup Dialog Box is a little misleading. You can use the dialog box to select any of your system's graphic output devices. These devices are usually printers, but can also be another type of device, such as a fax modem. In the interest of simplicity, this section will use "printer" to mean any graphic output device.

Selecting a Printer
You can can use any of the other printers that are available to your system. You select a printer form the Printer Drop Down Box.

Setting the Page Orientation
There are two different page orientations, portrait and landscape. On a standard piece of stationary paper (8½" by 11" in the U.S.), printing in portrait orientation will place the image with its top toward one of the narrower sides, and printing in landscape orientation will place the image with its top toward one of the wider sides. To select an orientation:

- Click on its text or option button in the Orientation Group Box.
- Press <Alt> plus the option's underlined letter.

Selecting the Paper Size and Source
The printer determines which paper size and source options are available. You select the size and source from the drop down boxes in the Paper Group Box. (For some printers, one or both of the drop down boxes may be unavailable.)

Other Options
Selecting the Options Button opens a dialog box that is specific to the software or driver that operates the selected printer. For help using the dialog box, try pressing <F1>, selecting the Help Button (if there is one), or referring to the appropriate documentation.

TOPIC: General Preferences

Customizing Your Setup

| Page Setup | Printer Setup | General Prefs | New Windows | Undo Storage |

General Preferences

You change most of Paint Shop Pro's settings from the General Preferences Dialog Box. You access the dialog box by selecting "General" from the File Preferences Sub-Menu.

Using the General Preferences Dialog Box

The options in the General Preferences Dialog Box are grouped under four tabs. You select a tab by clicking on it. Most of the options are controlled by check boxes. To turn a check box option on or off:

- Click on the option's text or its check box.
- Press <Alt> plus the option's underlined letter.

General Tab Options

Adobe-Compatible Image Processing Filters (Plugins)

Adobe-compatible is the Windows standard for image processing filters. To use Adobe-compatible filters with Paint Shop Pro:

1 Fill the Enable Plugins Check Box.

2 Select the Browse Button.

3 Use the Select Directory Dialog Box to select the directory that contains the filters.

Enable Internal Plugin Filter Masking

If the Enable Internal Plugin Filter Masking Option is turned on, and a plugin filter is applied to an image that has a mask, Paint Shop Pro will run the results of the plugin filter through the image's mask. Some plugin filters may work better with this option on, and others may require it to be off. For more information, consult the plugin's documentation or on-line help.

Fit Window to Image When Zooming

When this option is turned on, Paint Shop Pro resizes image windows when you zoom in or out. A window is resized to include as much of the image as possible.

Anti-Alias Selected Area Operations

Anti-aliasing smoothes out jagged edges by applying shading to outlying pixels. When this option is turned on, Paint Shop Pro applies anti-aliasing to tasks that involve selections.

Close Browser After an Image is Selected

When this option is turned on, PSP Browser will close when you load an image or images into Paint Shop Pro.

Loading Tab Options

Use Aldus-Compatible Import Filters

Aldus-compatible is the Windows standard for file import filters. Paint Shop Pro can use Aldus-compatible filters to read additional file formats. To use Aldus-compatible import filters with Paint Shop Pro, fill in the check box, and enter the appropriate section heading from your WIN.INI file in the text box. For most users, this will be "MS Graphic Import Filters".

Metafile / Import Options

There two ways that Paint Shop Pro can open metafiles: (1) it can prompt you for the

size and other settings when it opens a metafile; or (2) it can try to use the available file header information. If you select to use file header information, you need to set the default size for files without a header. You use the spin controls to set the dimensions.

Saving Tab Options

Ask Before Changing...
When an option in this group is turned on, and the specified task is performed, Paint Shop Pro will ask for confirmation before it alters an image to accommodate a change in file format. For example, if the File Save As Option is turned on, and you use the File Save As Dialog Box to save an image to a format that does not support the image's current color depth: (a) you will be notified that a color depth change is necessary to accommodate the new format; and (b) you will be asked to confirm the change.

Ask to Save Changes...
When an option in this group is turned on, and the specified task is performed, Paint Shop Pro will prompt you to save each open file that is new or has been changed. For example, if the File Exit Option is turned on, and you close Paint Shop Pro, you will be prompted to save every open file that has been edited or has not been saved.

DPI To Be Written...
These options control the dots-per-inch (DPI) for files saved under the specified formats. You use the spin controls to change the DPI settings.

JIF/JPG Compression Level
Controls the amount of compression applied to JIF/JPG files. The higher the number, the smaller the files, and the greater the loss of data.

Misc Tab Options

Default PCD Size
Kodak Photo-CD files contain multiple sizes of a single image. The active Default PCD Size Option determines which size will be read when a PCD file is opened. If the last option is selected, you will be prompted to select the size each time you open a PCD file.

RAW Save Options
The RAW Save Options control how Paint Shop Pro saves RAW pixel data.

TOPIC: New Windows

Customizing Your Setup

New Windows

Paint Shop Pro lets you determine if commands that create a new image should:

▶ Replace the original image with the new image within the current image window

▶ Leave the original image intact and place the new image in a new window.

For example, when you apply a deformation or filter, you may want to create a new image instead of replacing the existing image.

Please Note:

When you install Paint Shop Pro 3.0, all commands are set to replace existing images. If you installed Version 3.0 over Version 2.0, your old settings were <u>not</u> retained. This is due to a necessary change in the underlying technology, and we regret any inconvenience.

You change the New Window Settings from the New Windows Dialog Box. You access the dialog box by selecting "New Windows" from the File Preferences Sub-Menu.

Understanding the Menu Items
The word before the dash indicates the menu and the text after the dash indicates the item. For example, "Image - Resize" is the Resize Selection on the Image Menu.

Selecting/Deselecting Menu Items
You can set all of the menu items at once, or you can select them individually.

▶ To turn the New Window Option <u>on</u> for all of the menu items, select the All Create Button.

▶ To turn the New Window Option <u>off</u> for all of the menu items, select the All Replace Button.

To turn the New Window Option on or off for a specific menu item:

1 Select the menu item from the list box.

2 Select the appropriate option from the bottom of the dialog box.

TOPIC: Undo Storage Options

Customizing Your Setup

Undo Storage Options

The Undo Command removes the last set of unsaved changes to an image. You use the File Preferences Undo Sub-Menu to select if and where Paint Shop Pro should store its backup images.

Please Note:

For most users, the "In Memory" setting provides the best results.

Disabled

If Undo is disabled, Paint Shop Pro does not save backup images. To undo your changes, use the File Revert Command to retrieve the last saved copy of the file.

In Memory

When "In Memory" is selected, Paint Shop Pro saves the backup images in RAM, which provides the quickest retrieval. If your system is short on memory, or you are working with very large, memory-intensive images, this option may prove too demanding. Try the "To Disk" setting.

To Disk

When "To Disk" is selected, Paint Shop Pro saves the backup images to the Windows temporary directory, which places less demand on your system's memory, but offers slower retrieval. If the drive containing your Windows temporary directory is short on space, this option may take too long to read and write, and you may encounter problems with large image files.

Selecting an Undo Setting

You select an Undo Setting by clicking on its menu selection, or by pressing the appropriate hot keys. The selected setting has a check mark next it on the File Preferences Undo Sub-Menu

Using the Paint Tools

TOPIC: Overview

Using the Paint Tools

Overview

You use the Paint Tools to create and edit images. The Paint Tools simulate many types of painting and drawing utensils, such as brushes, pens, and pencils. For help with one of the Paint Tools, click on it in the diagram below.

Paint Toolbox

Please Note:

Many of the Paint Tool's color effects are only apparent at high color depths. If some of the Paint Tools seem to do little or nothing, please confirm that your video display and the image you are editing both show 16 million colors.

TOPIC: Standard Brush

Using the Paint Tools

Standard Brush

The Standard Brush Tool simulates painting with an artist's paintbrush. To use the Standard Brush:

1 Select the colors that you want to use.

2 Click on the Standard Brush Button.

3 Place the cursor where you want to start painting.

4 Press and hold the primary mouse button to paint with the foreground color. Press and hold the secondary mouse button to paint with the background color. Paint Shop Pro will add color at the cursor.

5 Move the brush by moving the mouse.

6 When you're done, release the mouse button.

Standard Brush Properties

You change the Standard Brush's size and style from the Standard Brush Control Panel. The Size Spin Control sets the brush's width in pixels. You select the brush's shape from the Style Drop Down Box.

TOPIC: Clone Brush

Using the Paint Tools

Clone Brush

You use the Clone Brush to copy part of an image to another location. You can use it to copy within a single image, or between two images of the same color depth. To use the Clone Brush:

1 Click on the Clone Brush Button.

2 Place the cursor over the part of the image that you want to copy.

3 Click once with the secondary mouse button. Your computer will beep once to indicate that you have selected the source area.

4 Place the cursor where you want the copy of the source area to appear. This is called the target area. The target area can be within the same image, or in another image of the same color depth.

5 Press and hold the primary mouse button. Crosshairs will appear over the source area. The crosshairs indicate which pixel you are copying from.

6 Move the mouse to copy color from the source area to the target area.

7 When you're done, release the mouse button.

Clone Brush Properties

You change the Clone Brush's properties from the Clone Brush Control Panel.

Size
The Size Spin Control sets the brush's width in pixels.

Opacity
The Opacity Property determines how opaque or transparent the applied color will be. The Opacity Spin Control sets the property on a scale of 1 to 128, with 1 being nearly transparent (the applied color will barely appear) and 128 being completely opaque (the applied color will completely cover any underlying colors).

Style
You select the Clone Brush's shape from the Style Drop Down Box.

TOPIC: User-Defined Brush

Using the Paint Tools

User-Defined Brush

The User-Defined Brush Tool is essentially the Standard Brush with more options. The extra properties give you a greater degree of control over the brush's behavior. To "paint" with the User-Defined Brush:

1 Select the colors that you want to use.

2 Click on the User-Defined Brush Button.

3 Place the cursor where you want to start painting.

4 Press and hold the primary mouse button to paint with the foreground color. Press and hold the secondary mouse button to paint with the background color. Paint Shop Pro will add color at the cursor.

5 To add more color, move the brush by moving the mouse.

6 Release the mouse button.

User-Defined Brush Properties

You change the User-Defined Brush's properties from the User Brush Control Panel, which contains two sets of controls. To switch between the two sets, click on the Right Arrow Button or the Left Arrow Button.

Size
The Size Spin Control sets the tool's width in pixels. If the Size Spin Control is not currently visible, click on the Left Arrow Button.

Opacity
The Opacity Property determines how opaque or transparent the applied color will be. The Opacity Spin Control sets the property on a scale of 1 to 128, with 1 being nearly transparent (the applied color will barely appear) and 128 being completely opaque (the applied color will completely cover any underlying colors). If the Opacity Spin Control is not currently visible, click on the Left Arrow Button.

Style
You select the brush's shape from the Style Drop Down Box. If the Style Drop Down Box is not currently visible, click on the Left Arrow Button.

Fade
The Fade Properly determines the change in opacity from the brush's center to its edges. The Fade Spin Control sets the property on a scale of zero to 100, with zero being no change in opacity across the brush, and 100 being an opacity of zero (complete transparency) at the brush's edges. If the Fade Spin Control is not currently visible, click on the Right Arrow Button.

Density
The Density Property determines how many of the brush's "fibers" make contact with the image. In computerese, it determines how many of the tool's pixels are active. The Density Spin Control sets the property on a scale of one to 255, with one activating very few pixels, and 255 activating all of the brush's pixels. If the Density Spin Control is not currently visible, click on the Right Arrow Button.

Movement
The Movement Property determines how the brush responds to the movement of the mouse:

Continuous: Applies color at every pixel along the brush's path.

Non-Continuous: Applies color when Windows sends a message to Paint Shop Pro

saying that the mouse has been moved.

Stepped: Staggers color based on the brush's size.

Velocity-Sensitive: Applies color less often as the mouse moves faster, and more often as it moves slower.

You select the Movement Property from the [Movement Drop Down Box](). If the Movement Drop Down Box is not currently visible, click on the Right Arrow Button.

TOPIC: Push Brush

Using the Paint Tools

< More | Push Brush | Airbrush | Fill Tool | More >

Push Brush

You use the Push Brush to spread colors. The effect is similar to smearing paint, but with the Push Brush the color never thins. To use the Push Brush:

1 Click on the Push Brush Button.

2 Place the cursor where you want to pick up colors.

3 Press and hold the primary mouse button.

4 Move the brush by moving the mouse. The color you picked up will be deposited by the brush.

5 Release the mouse button.

Push Brush Properties
You change the Push Brush's properties from the Push Brush Control Panel.

Size
The Size Spin Control sets the brush's width in pixels.

Strength
The Strength Property determines how much color the Push Brush will deposit. The Strength Spin Control sets the property on a scale of 1 to 128, with 1 being almost no color and 128 being an exact match of the colors it picked up.

Style
You select the brush's shape from the Style Drop Down Box. Click on the drop down box to open it, then click on the shape that you want. Use the scroll bar to move through the list.

TOPIC: Airbrush

Using the Paint Tools

< More | Push Brush | Airbrush | Fill Tool | More >
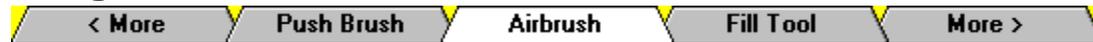
Airbrush

The Airbrush Tool simulates painting with an airbrush or spray can. To use the Airbrush:

1 Select the colors that you want to use.

2 Click on the Airbrush Button.

3 Place the cursor where you want to start painting.

4 Press and hold the primary mouse button to paint with the foreground color. Press and hold the secondary mouse button to paint with the background color. Paint Shop Pro will add color at the cursor.

5 To add more color, move the brush by moving the mouse.

6 Release the mouse button.

Airbrush Properties

You change the Airbrush's properties from the Airbrush Control Panel.

Size
The Size Spin Control sets the brush's width in pixels.

Flow
The Flow Spin Control sets determines how heavily the color is applied (how fast the paint is sprayed on).

Opacity
The Opacity Property determines how opaque or transparent the applied color will be. The Opacity Spin Control sets the property on a scale of 1 to 128, with 1 being nearly transparent (the applied color will barely appear) and 128 being completely opaque (the applied color will completely cover any underlying colors).

TOPIC: Fill Tool

Using the Paint Tools

< More   Push Brush   Airbrush   Fill Tool   More >

Fill Tool

You use the Fill Tool to fill an area with a color. The area can be:

- An area filled with a single color or similar colors and bounded by different colors and/or the edge of the image.
- A selection that contains a single color or similar colors.
- An area within a selection that contains a single color or similar colors, and is bordered by: (a) another color or colors; and (b) part of the selection's boundary.

To use the Fill Tool, follow these steps:

1 Set the Fill Tool Tolerance (see below) to the appropriate level. If you're working with full-color images (16 million colors), the tolerance level will determine if you do or do not fill color blends.

2 Select the colors that you want to use.

3 If you're using a selection as all or part of the area's boundaries, make the selection now.

4 Click on the Fill Tool Button.

5 Place the cursor's crosshairs over a pixel in the area that you want to fill.

6 Click once with the primary mouse button to fill the area with the foreground color. Click once with the secondary mouse button to fill the area with the background color.

Fill Tool Tolerance

The Fill Tool sets the fill area by color. It determines the color of the current pixel, then searches for pixels that are within a certain range of that target color. The tolerance setting determines how closely the color of the pixels it selects must be to the color of the selected pixel.

You set the Fill Tool's tolerance from the Tolerance Spin Control on the Fill Tool Control Panel. The spin control uses a scale of zero to 100, with zero being no tolerance (a perfect color match), and 100 being a tolerance of roughly half the spectrum.

TOPIC: Pen

Using the Paint Tools
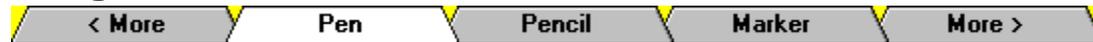
Pen

The Pen Tool simulates drawing with a ball-point pen. To use the Pen:

1 Select the colors that you want to use.

2 Click on the Pen Button.

3 Place the cursor where you want to start drawing.

4 Press and hold the primary mouse button to draw with the foreground color. Press and hold the secondary mouse button to draw with the background color. Paint Shop Pro will add color at the cursor.

5 To add more color, move the brush by moving the mouse.

6 Release the mouse button.

Pen Properties

You change the Pen's width and shape from the Pen Control Panel. The Size Spin Control sets the Pen's width in pixels. You select the Pen's shape from the Style Drop Down Box.

TOPIC: Pencil

Using the Paint Tools

< More | Pen | Pencil | Marker | More >
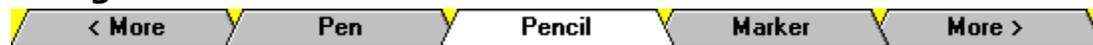
Pencil

The Pencil Tool simulates drawing with Pencil. To use the Pencil:

1 Select the colors that you want to use.

2 Click on the Pencil Button.

3 Place the cursor where you want to start drawing.

4 Press and hold the primary mouse button to draw with the foreground color. Press and hold the secondary mouse button to draw with the background color. Paint Shop Pro will add color at the cursor.

5 To add more color, move the brush by moving the mouse.

6 Release the mouse button.

Pencil Properties

You change the Pencil's width and shape from the Pencil Control Panel. The Size Spin Control sets the Pencil's width in pixels. You select the Pencil's shape from the Style Drop Down Box.

TOPIC: Marker

Using the Paint Tools

< More | Pen | Pencil | Marker | More >
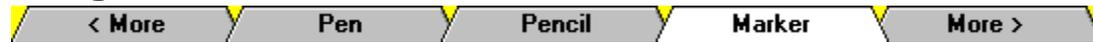
Marker

The Marker Tool simulates drawing with a magic marker or felt-tip pen. To use the Marker:

1 Select the colors that you want to use.

2 Click on the Marker Button.

3 Place the cursor where you want to start drawing.

4 Press and hold the primary mouse button to draw with the foreground color. Press and hold the secondary mouse button to draw with the background color. Paint Shop Pro will add color at the cursor.

5 To add more color, move the brush by moving the mouse.

6 Release the mouse button.

Marker Width

You change the Marker's width from the Marker Control Panel. The Width Spin Control sets the width in pixels.

TOPIC: Crayon

Using the Paint Tools

Crayon

The Crayon Tool simulates drawing with Crayon. To use the Crayon:

1 Select the colors that you want to use.

2 Click on the Crayon Button.

3 Place the cursor where you want to start drawing.

4 Press and hold the primary mouse button to draw with the foreground color. Press and hold the secondary mouse button to draw with the background color. Paint Shop Pro will add color at the cursor.

5 To add more color, move the brush by moving the mouse.

6 Release the mouse button.

Crayon Width

You change the Crayon's width from the Crayon Control Panel. The Width Spin Control sets the width in pixels.

TOPIC: Chalk

Using the Paint Tools

< More | Crayon | Chalk | Charcoal | More >

Chalk

The Chalk Tool simulates drawing with chalk. To use the Chalk Tool:

1 [Select](#) the colors that you want to use.

2 Click on the [Chalk Button](#).

3 Place the [cursor](#) where you want to start drawing.

4 Press and hold the [primary mouse button](#) to draw with the foreground color. Press and hold the [secondary mouse button](#) to draw with the background color. Paint Shop Pro will add color at the cursor.

5 To add more color, move the brush by moving the mouse.

6 Release the mouse button.

Chalk Width

You change the Chalk Tool's width from the [Chalk Control Panel](#). The [Width Spin Control](#) sets the width in pixels.

TOPIC: Charcoal

Using the Paint Tools

Charcoal

The Charcoal Tool simulates drawing with Charcoal. To use the Charcoal:

1 Select the colors that you want to use.

2 Click on the Charcoal Button.

3 Place the cursor where you want to start drawing.

4 Press and hold the primary mouse button to draw with the foreground color. Press and hold the secondary mouse button to draw with the background color. Paint Shop Pro will add color at the cursor.

5 To add more color, move the brush by moving the mouse.

6 Release the mouse button.

Charcoal Width

You change the Charcoal's width from the Charcoal Control Panel. The Width Spin Control sets the width in pixels.

TOPIC: Swap Brush

Using the Paint Tools

< More   Swap Brush   Undo Brush   Text Tool   More >

Swap Brush

You use the Swap Brush to replace one color with another. To use the Swap Brush:

1 Select the colors that you want to use. The Swap Brush can replace the background color with the foreground color or vice-versa.

2 Click on the Swap Brush Button.

3 Place the cursor where you want to start replacing color.

4 To replace the background color with the foreground color, press and hold the primary mouse button. To replace the foreground color with the background color, press and hold the secondary mouse button.

5 Move the mouse to swap the colors.

6 Release the mouse button.

Swap Brush Properties
You change the Swap Brush's properties from the Swap Brush Control Panel.

Size
The Size Spin Control sets the Swap Brush's width in pixels.

Tolerance
The Tolerance Property determines how close a color must be to the background color in order to be replaced. The Tolerance Spin Control uses a scale of zero to 100, with zero being no tolerance (a perfect color match), and 100 being a tolerance of roughly half the spectrum.

Style
You select the Swap Brush's shape from the Style Drop Down Box.

TOPIC: Undo Brush

Using the Paint Tools

< More | Swap Brush | Undo Brush | Text Tool | More >
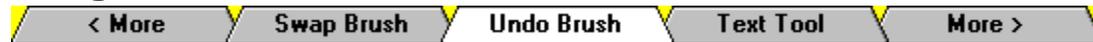
Undo Brush

You use the Undo Brush to remove the effect of your last action. For example, if you added a color over another color, you can "peel back" the new color using the Undo Brush. To use the Undo Brush:

1 Click on the Undo Brush Button.

2 Place the cursor where you want to start removing the effect.

3 Press and hold the primary mouse button.

4 Move the mouse to remove the effect.

5 Release the mouse button.

Undo Brush Properties

You change the Undo Brush's properties from the Undo Brush Control Panel.

Size

The Size Spin Control sets the brush's width in pixels.

Opacity

The Opacity Property determines how much of the effect will be removed. The Opacity Spin Control sets the property on a scale of 1 to 128, with 1 leaving the effect almost as is, and 128 removing all of the effect.

Style

You select the Undo Brush's shape from the Style Drop Down Box. Click on the drop down box to open it, then click on the shape that you want. Use the scroll bar to move through the list.

TOPIC: Text Tool

Using the Paint Tools

Text Tool

You use the Text Tool to add text to an image. Follow these steps:

1. **Select the Text's Color**
   Select the colors that you want to use. The new text will appear in the foreground color. If you use the Shadow Effect, it will appear in the background color.

2. **Select the Text Tool**
   Click on the Text Button in the Paint Toolbox.

3. **Select the Image**
   Click anywhere in the image that you're editing. Paint Shop Pro will open the Add Text Dialog Box.

4. **Select the Font Properties**
   The Text Tool supports three font properties: font (typeface), style, and size. You select the properties from the combo boxes at the top of the dialog box.

5. **Select the Text Effects**
   The Text Tool provides two text effects, strikeout and underline. A text effect is on when its check box is filled.

6. **Select the Special Effects**
   The Text Tool provides three special effects: AntiAlias, Shadow, and Rotate 90 Degrees. A special effect is on when its check box is filled.

   Enter the Text
   Enter the text that you want to add to the image in the text box (labeled "Text") at the bottom of the dialog box. To access the text box, click in it, or press <Alt> + <T>.

   Close the Add Text Dialog Box
   Click on the OK Button, or press <Enter>. Paint Shop Pro will close the Add Text Dialog Box.

   Position the Text
   When the Add Text Dialog Box closes, your cursor will be a four-headed arrow, and the text that you entered will be floating behind the cursor. Move the cursor to the place where you want the text to appear and click once. Paint Shop Pro will deposit the text at the selected spot.

TOPIC: Line Tool

Using the Paint Tools

Line Tool

You use the Line Tool to draw straight lines. To use the Line Tool:

1 Select the colors that you want to use.

2 Click on the Line Button.

3 Place the cursor where you want to the line to start.

4 To draw a straight horizontal or vertical line, press and hold <Ctrl> while you complete these steps.

5 Press and hold the primary mouse button to draw with the foreground color. Press and hold the secondary mouse button to draw with the background color. Paint Shop Pro will add color at the cursor.

6 Drag the cursor to the other end of the line.

7 Release the mouse button.

Line Width

You change the Line Tool's width from the Size Spin Control on the Line Tool Control Panel. The Width Spin Control sets the width in pixels.

TOPIC: Hollow Rectangle Tool

Using the Paint Tools

< More   Line Tool   Hollow Rec   Solid Rec   More >

Hollow Rectangle Tool

You use the Hollow Rectangle Tool to draw empty boxes. To use the Hollow Rectangle Tool:

1 Select the colors that you want to use.

2 Click on the Hollow Rectangle Button.

3 Point the cursor's upper-left corner where you want one of the rectangle's corners to appear.

4 To draw a square, press and hold <Ctrl> while you complete these steps.

5 Press and hold the primary mouse button to draw with the foreground color. Press and hold the secondary mouse button to draw with the background color.

6 Drag the cursor to the opposite corner of the rectangle.

7 Release the mouse button.

Hollow Rectangle Width

You change the width of the Hollow Rectangle's border from the Hollow Rectangle Tool Control Panel. The Width Spin Control sets the width in pixels.

TOPIC: Solid Rectangle Tool

Using the Paint Tools

Solid Rectangle Tool

You use the Solid Rectangle Tool to draw filled rectangles. To use the Solid Rectangle Tool:

1 Select the colors that you want to use.

2 Click on the Solid Rectangle Button.

3 Point the cursor's upper-left corner where you want one of the rectangle's corners to appear.

4 To draw a square, press and hold <Ctrl> while you complete these steps.

5 Press and hold the primary mouse button to draw with the foreground color. Press and hold the secondary mouse button to draw with the background color.

6 Drag the cursor to the opposite corner of the rectangle.

7 Release the mouse button.

TOPIC: Hollow Oval Tool

Using the Paint Tools

Hollow Oval Tool

You use the Hollow Oval Tool to draw empty ovals. To use the Hollow Oval Tool:

1. Select the colors that you want to use.
2. Click on the Hollow Oval Button.
3. Point the cursor's crosshairs at any "corner" of the oval area that you want to draw.
4. To draw a circle, press and hold <Ctrl> while you complete these steps.
5. Press and hold the primary mouse button to draw with the foreground color. Press and hold the secondary mouse button to draw with the background color.
6. Drag the cursor to the opposite "corner" of the oval.
7. Release the mouse button.

Hollow Oval Width

You change the width of the Hollow Oval's border from the Hollow Oval Tool Control Panel. The Width Spin Control sets the width in pixels.

TOPIC: Solid Oval Tool

Using the Paint Tools

Solid Oval Tool

You use the Solid Oval Tool to draw filled ovals. To use the Solid Oval Tool:

1 Select the colors that you want to use.

2 Click on the Solid Oval Button.

3 Point the cursor's crosshairs at any "corner" of the oval area that you want to draw.

4 To draw a circle, press and hold <Ctrl> while you complete these steps.

5 Press and hold the primary mouse button to draw with the foreground color. Press and hold the secondary mouse button to draw with the background color.

6 Drag the cursor to the opposite "corner" of the oval.

7 Release the mouse button.

TOPIC: Smooth Brush

Using the Paint Tools

Smooth Brush

You use the Smooth Brush to soften or blur edges and contrasts. To use the Smooth Brush:

1 It's generally a good idea to zoom in on the part of the image that you want to soften.

2 Click on the Smooth Brush Button.

3 Press and hold the primary mouse button.

4 Move the brush over the area by moving the mouse. Repeat until you achieve the desired effect. If it's not happening fast enough, increase the Strength Setting (see below) and start over at Step 3.

5 Release the mouse button.

Smooth Brush Properties
You change the Smooth Brush's properties from the Smooth Brush Control Panel.

Size
The Size Spin Control sets the brush's width in pixels.

Strength
The Strength Property determines how powerful the Smooth Brush's effect will be. The Strength Spin Control sets the property on a scale of 1 to 128, with 1 having almost no effect and 128 being a pronounced and rapid blurring of details.

Style
You select the brush's shape from the Style Drop Down Box. Click on the drop down box to open it, then click on the shape that you want. Use the scroll bar to move through the list.

TOPIC: Sharpen Brush

Using the Paint Tools

Sharpen Brush

You use the Sharpen Brush to heighten and accentuate edges and contrasts. To use the Sharpen Brush:

1 It's generally a good idea to zoom in on the part of the image that you want to sharpen.

2 Click on the Sharpen Brush Button.

3 Press and hold the primary mouse button.

4 Move the brush over the area by moving the mouse. Repeat until you achieve the desired effect. If it's not happening fast enough, increase the Strength Setting and start over at Step 3.

5 Release the mouse button.

Sharpen Brush Properties

You change the Sharpen Brush's properties from the Sharpen Brush Control Panel.

Size
The Size Spin Control sets the brush's width in pixels.

Strength
The Strength Property determines how powerful the Sharpen Brush's effect will be. The Strength Spin Control sets the property on a scale of 1 to 128, with 1 being almost no effect and 128 being a pronounced and rapid increase in edges and contrasts.

Style
You select the brush's shape from the Style Drop Down Box.

Using the Select Tools

TOPIC: Overview

Using the Select Tools

Overview

For help with one of the Select Tools, click on it in the diagram below.

Select Toolbox

TOPIC: Standard Cursor

Using the Select Tools

Standard Cursor Tool

The Standard Cursor Tool returns your cursor to its default state. If you click on an image that contains a selection, the Standard Cursor Tool will deactivate the selection.

Button   **Cursor**

TOPIC: Color Selector

Using the Select Tools

Color Selector

You use the Color Selector to set an active color by clicking on part of an image. To use the Color Selector:

1 Click on the Color Selector Button.

2 Point the eye dropper's tip at the color you want to select. The middle panel of the Statusbar will display the color's RGB values. In palletized images, the Statusbar displays the color's palette index before its RGB values.

3 Click once with the primary mouse button to select the foreground color. Click with the secondary mouse button to select the background color.

TOPIC: Magnifier

Using the Select Tools

Magnifier

When you click on the Magnifier Button, the cursor changes to a small magnifying glass.

Zooming In
Clicking on an image with the primary mouse button increases the magnification factor by one level. If you start at 1:1, clicking once will take you to 2:1.

Zooming Out
Clicking on an image with the secondary mouse button (the button you use less often) decreases the magnification factor by one level. If you start at 1:1, clicking once will take you to 1:2.

TOPIC: Image Mover

Using the Select Tools

Image Mover

You use the Image Mover to scroll through the image area when the entire image is not visible. To use the Image Mover:

1 Click on the Image Mover Button.

2 Place the hand-shaped cursor over the image area.

3 Press and hold the primary mouse button.

4 Drag the image by moving the mouse.

5 Release the mouse button.

TOPIC: Rectangle Selector

Using the Select Tools

< More | Rectangle Sel | Oval Selector | Sel Adjuster | More >
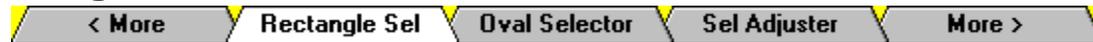
Rectangle Selector

You use the Rectangle Selector to select rectangular areas. There are two ways to use this tool: you can draw the rectangle, or you can specify it numerically. Once you have made a selection, you can use the Selection Adjuster to modify it.

Drawing a Rectangular Selection

To draw a rectangle with the mouse, follow these steps:

1 Click on the Rectangle Selector Button.

2 Point the cursor's crosshairs at any corner of the rectangular area that you want to select.

3 To select a square, press and hold <Ctrl> while you finish these steps. To use the saved aspect ratio (width / height), press and hold <Shift>.

4 Press and hold the primary mouse button.

5 Drag the cursor to the opposite corner of the rectangle.

6 Release the mouse button.

Specifying a Rectangular Selection Numerically

Double-clicking on the Rectangle Selector Button accesses the Select Area Dialog Box. You use the dialog box to specify a selection by entering X and Y pixel coordinates.

TOPIC: Oval Selector

Using the Select Tools

< More | Rectangle Sel | Oval Selector | Sel Adjuster | More >
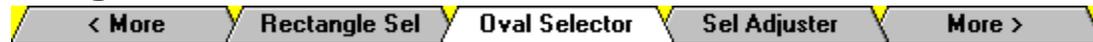
Oval Selector

You use the Oval Selector to select oval areas. There are two ways to use this tool: you can draw the oval, or you can specify it numerically. Once you have made a selection, you can use the Selection Adjuster to modify it.

Drawing an Oval Selection

To draw an oval with the mouse, follow these steps:

1 Click on the Oval Selector Button.

2 Point the cursor's crosshairs at any "corner" of the oval area that you want to select.

3 To select a circle, press and hold <Ctrl> while you finish these steps. To use the saved aspect ratio (width / height), press and hold <Shift>.

4 Press and hold the primary mouse button.

5 Drag the cursor to the opposite "corner" of the oval.

6 Release the mouse button.

Specifying an Oval Selection Numerically

Double-clicking on the Oval Selector Button accesses the Select Area Dialog Box. You use the dialog box to specify a selection by entering x and y pixel coordinates.

TOPIC: Selection Adjuster

Using the Select Tools
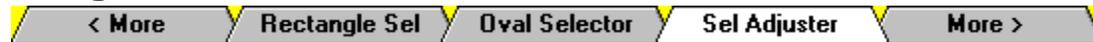
Selection Adjuster

You use the Selection Adjuster to move or resize a selection.

Moving a Selection

When you move a selection, you are <u>not</u> moving the selected image data. Instead, you are changing what part of the image is selected. To move a selection, follow these steps:

1 Click on the Selection Adjuster Button.
2 Point at the middle of the selection. The cursor will change to a four-headed arrow.
3 Press and hold the primary mouse button.
4 Drag the selection to its new location.
5 Release the mouse button.

Resizing a Selection

You <u>cannot</u> resize selections made with the Lasso Tool or the Magic Wand. You can only resize selections made with the Rectangle Selector and the Oval Selector.

When you resize a selection, you move a side or corner so that the selection includes a different portion of the image. Moving a corner repositions two sides of the selection at once. To resize a selection, follow these steps:

1 Click on the Selection Adjuster Button.
2 Point at a side or corner of the selection. The cursor will change to a two-headed arrow. The "corners" of an oval selection are located where the corners of a rectangle with equal height and width would appear.
3 Press and hold the primary mouse button.
4 Drag the border or corner to its new location.
5 Release the mouse button.

TOPIC: Cloner

Using the Select Tools
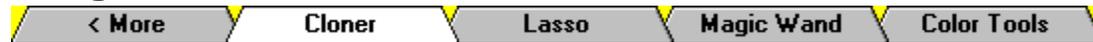
Cloner

You use the Cloner to copy a selection's contents to another location in the image. Follow these steps:

1. Click on the [Cloner Button](#).
2. Place the [cursor](#) over the selection.
3. Press and hold the [primary mouse button](#).
4. Drag the selection by moving the mouse.
5. Release the mouse button. Paint Shop Pro will copy the selection's contents to the new location.

TOPIC: Lasso

Using the Select Tools
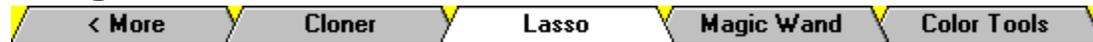
Lasso

You use the Lasso to make a freehand selection. A freehand selection can be any shape that you can draw with the mouse. To use the Lasso:

1 Click on the Lasso Button.

2 Point the cursor's crosshairs at any point along the boundary of the area that you want to select.

3 Press and hold the primary mouse button.

4 Drag the cursor to draw the selection's boundary. The boundary can cross itself. The selection will contain any image data that is within an area enclosed by the boundary .

5 Release the mouse button. If you haven't "closed" the selection, Paint Shop Pro will add a straight line between the selection's starting and ending points.

TOPIC: Magic Wand

Using the Select Tools
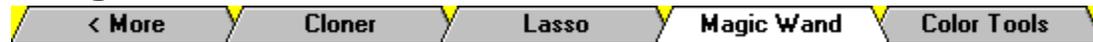
Magic Wand

You can use the Magic Wand to select an area of similar or matching color, or to select an area that is bounded by a single color or by similar colors.

Using the Magic Wand
To use the Magic Wand:

1 If the object you're trying to select is small, try zooming in until it's clearly visible.

2 Click on the Magic Wand Button.

3 Point the cursor at the object that you want to select.

4 Click once with the primary mouse button.

5 If the Magic Wand didn't select the object you wanted, try repositioning the cursor. If that doesn't work, try adjusting the Wand's tolerance.

Setting the Magic Wand Tolerance
The Magic Wand locates image objects by color. It determines the color of the current pixel, then searches for pixels that are within a certain range of that target color. The tolerance setting determines how closely the color of the pixels it selects must be to the color of the selected pixel.

To set the tolerance, start by double-clicking on the Magic Wand Button. Paint Shop Pro will present the Magic Wand Dialog Box. You use the Tolerance Spin Control to change the tolerance setting. The spin control uses a scale of zero to 100, with zero being no tolerance (a perfect color match), and 100 being a tolerance of roughly half the spectrum.

When the Tolerance Text Box displays the setting that you want, click on the OK Button, or press <Enter>.

TOPIC: Color Tools

Using the Select Tools
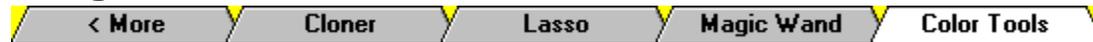
Color Tools

You can select the active colors using the Color Tools, which are grouped at the bottom of the Select Toolbox.

Selecting an Active Color

To select an active color from the current image's available colors, double-click on the Foreground Color Panel or the Background Color Panel.

Monochrome Images
Paint Shop Pro will toggle the color. If it's black it will switch to white, and vice-versa.

16 Color and 256 Color Images
Paint Shop Pro will open the appropriate color palette dialog box. To select a color, click on its square, then click on the OK Button.

16 Million Color Images
Paint Shop Pro will open the Color Dialog Box.

Reversing the Active Colors

To switch the active colors, so that the foreground color is set to the current background color and vice-versa, double-click on the Color Reverse Tool.

Controlling the Screen

TOPIC: Image Windows

Controlling the Screen

Working with Image Windows

When you open a file or create a file, Paint Shop Pro displays the image in an Image Window. Image windows appear within the Workspace.

Positioning an Image Window
You can position an Image Window within the workspace just like you position the Main Window within the Windows desktop.

- ▶ Maxmize, Minimize, and Restore
- ▶ Moving a Window
- ▶ Resizing a Window

Resizing a Window to Fit Its Image
To resize an Image Window so that it exactly fits its image, select "Fit to Image" from the Window Menu.

Scrolling the Image Area
If an image is larger than its window can display, you can view it by scrolling through the image area. There are three ways to do this:

- ▶ You access the Image Mover Tool by clicking on its button in the Select Toolbox.
- ▶ When an image is larger than its window's image area, scrollbars will appear at the right side and/or bottom of the image area.
- ▶ You can use the cursor keys.

Arranging All of the Image Windows
The Window Menu's Tile Command and the Cascade Command arrange all of the non-minimized Image Windows. The Arrange Icons Command lines up all the of minimized Image Windows at the bottom of the Workspace.

Closing Image Windows
When you close an Image Window, you are also closing the image's file.

- ▶ You can close a single Image Window...
- ▶ ...Or you can close all of the Image Windows.

TOPIC: Image Window Features

Image Window Features

SEARCH: Image Window Control Box

TOPIC: Zoom Tools

Controlling the Screen

Zoom Tools

There are three command types that control the magnification of an image:

▶ Zoom In: Magnifies an image. Makes it appear larger.

▶ Zoom Out: Reduces an image. Makes it appear smaller.

▶ Quick Normal View: Immediately returns the image to standard (1:1) magnification.

Zoom In / Zoom Out

Hot Keys

▶ Press <Ctrl> + <+> to zoom in one level.

▶ Press <Ctrl> + <-> to zoom out one level.

Menu Selections

There are two Zoom selections on the View Menu: Zoom In and Zoom Out. Each selection opens a sub-menu that lists all the relevant magnification factors.

Zoom Control Panel

The Zoom Control Panel is the most common form of the Tool Control Panel. You set the magnification level using the Zoom Level Spin Control.

Quick Normal View

To return an image to 1:1 magnification, click on the View Normal Button, or select "Normal Viewing (1:1)" from the View Menu.

Automatic Window Resizing

When the Fit Window to Image When Zooming Option in the General Preferences Dialog Box is turned on, Paint Shop Pro will automatically resize an Image Window when you zoom in or out.

TOPIC: Image Features

Controlling the Screen

Pixel Grid

The Pixel Grid appears at magnification levels of 10:1 and greater. The grid is turned on when a check appears next to "Grid When Zoomed" on the View Menu. To turn the Pixel Grid on or off, you select "Grid When Zoomed":

Click on "View" in the Menubar, then click on "Grid When Zoomed".

Press <Alt> + <V>, then press <G>.

Displaying an Image Full Screen

To display an image against a black, full-screen background, select "Full Screen" from the View Menu, or:

Click on the View Full Screen Button.

Press <Shift> + <F>.

When an image is displayed full screen, it is frozen at the current zoom level. If the image is too big to fit on the screen, you can use the cursor keys to scroll through the image. To return to Paint Shop Pro's normal state, click anywhere, or press <Enter>.

TOPIC: Other Screen Components

Controlling the Screen

Other Screen Components

Hide-able stuff:

Tool Control Panel
Histogram Window
Paint Toolbox
Select Toolbox
Toolbar

There are five "parts" of Paint Shop Pro that you can choose to display or hide . You can turn display of a component on or off by selecting its name from the bottom half off the View Menu. In addition to the View Menu selections, the Toolbar has four buttons for controlling display of the Tool Windows (see section below). Clicking on these buttons turns display of the windows on and off.

Tool Window Display Buttons

Histogram Window | Paint Toolbox

Select Toolbox | Tool Control Panel

Please Note:

Paint Shop Pro will run faster with the Histogram Window closed, since it will not have to update the histogram whenever you change the image.

Tool Windows

There are four Tool Windows: the Select Toolbox, the Paint Toolbox, the Tool Control Panel, and the Histogram Window. The Toolboxes contain the buttons for selecting tools, and the Tool Control Panel contains the controls for the active tool. The Tool Windows can be placed anywhere on the screen.

▶ Positioning the Tool Windows

▶ About Histograms

Computers and Colors

TOPIC: About Histograms

Computers and Colors

About Histograms

A histogram is a graph of an image's colors by luminance or brightness. The luminance spectrum appears on the horizontal axis, ranging from zero luminance (pure black) to full luminance (pure white). The vertical axis indicates the portion of the image's color that matches each point on the luminance spectrum.

Example
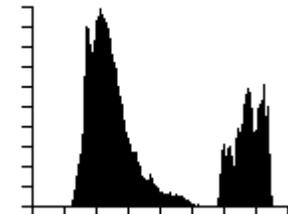
In the example at right, the image's luminance is clustered at the bottom of the midrange, and again near the top of the spectrum. The image is a photograph of hills and sky. The hills in the foreground are covered with grass and dark green pine trees, and the hills in the background have a blue caste. These two elements create the bottom-midrange luminance cluster. The sky and clouds create the second, high-range cluster.

If our explanation of histograms has failed you, maybe this will help: converting an image to grey scale   replacing all of the image's colors with greys of corresponding shade   does not affect the histogram. A histogram is strictly a measure of brightness, and is not affected by any other color quality.

Histogram Window
Paint Shop Pro displays a histogram for the active image in the Histogram Window.
- Hiding/Displaying Screen Components
- Moving a Window

Histograms and Image Enhancement
A histogram can help you decide what changes might enhance an image's quality. Consider the histogram on the left, which is from a photograph of rugged grey mountains covered lightly with snow, standing against a grey-blue sky. The photograph is a little harsh, and the histogram shows why: the colors are bunched tightly near the top of the luminance spectrum.
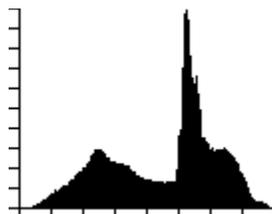
Before Adjustment   After Adjustment

Changing the shape of the histogram will alter the image's balance of detail, and in some cases, that's exactly want you want do. In this case, the photograph's composition is quite good, so you want to retain the histogram's shape. By shifting the entire histogram down slightly, you can reduce the image's harshness and actually improve its overall balance. The change may seem minor, but the improvement to the human eye is significant.

TOPIC: Color Definition Methods

Computers and Colors

Color Definition Methods

There are several methods for defining the projected colors that appear on a computer monitor. The two most common methods, which are also the methods used by Paint Shop Pro's functions and dialog boxes, are red, green, and blue and hue, saturation, and luminance (see below). The following tableTable A-2.1 outlines the Color Dialog Box RGB and HSL settings for the standard white light color spectrum.

Color Dialog Box Settings: While Light Color Spectrum

Spectrum Color	RGB Settings			HSL Settings		
	Red	Green	Blue	Hue	Sat	Lum
Red	255	0	0	0	240	120
Orange	255	128	0	20	240	120
Yellow	255	255	0	40	240	120
Green	0	255	0	80	240	120
Azure (Light Blue)	0	255	255	120	240	120
Indigo (Dark Blue)	0	0	255	160	240	120
Violet	255	0	255	200	240	120

Red, Green, and Blue (RGB)
The most popular method for defining a projected color is as a combination of red, green, and blue. For example, pure red is defined by red = 100%, green = 0%, and blue = 0%. Pure black has red, green, and blue values of 0%, and pure white has red, green, and blue values of 100%.

Hue, Saturation, and Luminance (HSL)
A projected color can be defined by the three characteristics of hue, saturation, and luminance:

Hue describes the color's shade or tint. It is measured on a circular spectrum running from red to green to blue and returning to red.

Saturation describes the hue's purity. A color with a saturation of 100% is bright and vivid, and a color with a saturation of 0% is a shade of grey.

Luminance describes the color's brightness. A color with luminance of 100% is always pure white, and a color with luminance of 0% is always pure black.

TOPIC: Gamma Correction

Computers and Colors

Gamma Correction

An image is stored in computer memory as a series of numbers. Depending on the image's format, a pixel's values can be described a variety of ways:

- By the binary number range of 0 to 1.
- By three separate numbers, each on a scale of 0 to 255.
- By some other system, usually falling between these two in complexity.

All of these formats have at least one thing in common: a higher number means a brighter color value. This rule has two corollaries: (1) the highest combination of values possible for a pixel produces pure white; and (2) the lowest combination of values possible for a pixel produces pure black.

It would follow logically that a value half-way up any scale would have a luminance exactly between black and white. This assumes that our hypothetical scale would allow an integer value exactly in the middle, which in reality it would not: image formats are based on powers of two, so integer midpoints are not possible.

To get over this hurdle, let's consider an approximate midpoint, and to base it in reality, let's assume that the image is in a 256 color grey scale format. A graph of a monitor's pixel output over the image's potential pixel values would look like the following figure. Our approximate midpoint   say 120   would produce an identical luminance on the monitor.

Linear Luminance (Example)
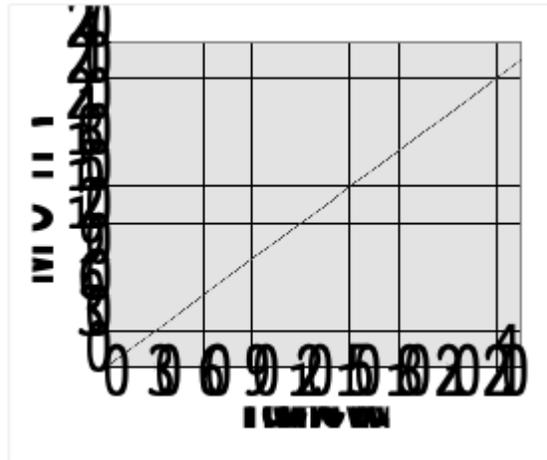
A computer monitor displays colors by exciting phosphors on the screen. Unfortunately, phosphors do not excite linearly. For example, if a computer reads a luminance value from a photographic image and sends it directly to the monitor, the displayed color will be dimmer than in the original photograph.

As you may have already guessed, this is where gamma correction comes in: a gamma correction value adjusts for the nonlinearity of phosphor excitation. The following diagram provides an example of how gamma correction can alter the color values sent to a computer monitor. In this case, our approximate midpoint of 120 produces a monitor value of 168.

Gamma-Corrected Luminance (Example)
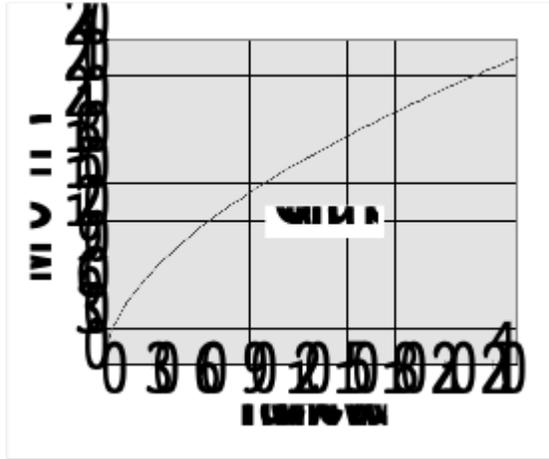
Determining Your Monitor's Gamma Level

Included with Paint Shop Pro is a file named GAMMA.TIF. You can use GAMMA.TIF to determine your monitor's gamma level. Follow these steps:

1. **Open GAMMA.TIF**

   GAMMA.TIF will be in Paint Shop Pro's root directory. If you used the default installation, it will be in C:\PSP.

2. **Duplicate the GAMMA.TIF Window**

   You do <u>not</u> want to accidentally save a gamma-corrected version of GAMMA.TIF. If you do, you will no longer be able to use the file to test gamma levels. To copy the file, select "Duplicate" from the Window Menu. To avoid any accidents, close GAMMA.TIF.

3. **Find the Gamma Correction Value**

   The GAMMA.TIF image is made up of four sections, one each of red, green, blue and grey. Each section has an outer area and a center area. The outer area is a dithered pattern of pixels with luminance values of 0 and 255, and the center area contains pixels with a luminance value of 128.

   Use the Gamma Correct Function to adjust the image's gamma level so that these two areas are of equal brightness. The correction value that synchronizes their luminance is the gamma level of your monitor.

   A good starting value is 2.0. The Preview Box for the Gamma Correct Function is not very reliable for this particular task. If the results aren't right, use the Undo Command to remove the effects of the Gamma Correct Function, then try again.

TOPIC: Error Diffusion Dithering

Computers and Colors

Error Diffusion Dithering

Dithering is a technique for simulating colors that are missing from an image file's palette. Missing colors are is simulated by intermingling pixels of two or more palette colors. If the unavailable color differs too greatly from the colors in the image's palette, dithering will produce a grainy or mottled appearance.

Error diffusion dithering is a popular dithering method. The "error" in the title refers to the cumulative difference between the actual values of pixels in the image and their "true" values if they were all set to their correct colors. By reducing this error, error diffusion dithering produces image quality that is superior to that achieved by non-error adjusted dithering.

The process starts at the first pixel in the image (the upper left corner). The algorithm finds the color in the palette that is nearest to the color of the pixel. It then compares the two colors' numerical values, saves the difference as the initial error, and applies the color from the palette to the pixel.

The process then proceeds to the second pixel. It finds this pixel's nearest color, and calculates the sum of the color and the error value from the last pixel. It sets the pixel to the color that is nearest to this sum. Any difference between the applied color and the sum becomes the new error value.

When the process reaches the third pixel, it repeats the procedure that was used to set the color for the second pixel. The algorithm cycles through the image's remaining pixels in the same manner. The error value is abandoned at the end of each row, and is created anew at the beginning of each row.

Reduce Color Bleeding Option

As you may have suspected, error diffusion dithering causes colors to bleed from left to right. This is because the algorithm, and therefore the error value, travels in this direction. Color bleed is most noticeable in images with hard vertical edges, because the edges are softened by the traveling color.

Paint Shop Pro functions that use error diffusion dithering include a Reduce Color Bleeding Option. This option lessens the left-to-right color bleed by applying a fractional coefficient to the error value. By reducing the error value, less color information is carried from one pixel to the next. Because it reduces error correction, the Reduce Color Bleeding Option hurts the quality of some images, but it can improve the quality of images with hard vertical edges

File Formats

TOPIC: File Formats

File Formats

Overview

Direct File Format Support
Paint Shop Pro directly supports 35 different file formats:

- 26 raster image formats
- 9 meta and vector image formats

Support for External Import filters
Paint Shop Pro can read other file formats if the appropriate external import filters are installed on your system.

Palette File Format
Paint Shop Pro uses a text file format for storing palette information.

TOPIC: Raster Image Formats

File Formats

Raster Image Formats

A raster format breaks an image into a grid of equally-sized pieces, called "pixels", and records color information for each pixel. The number of colors that the file can contain is determined by the bits-per-pixel: the more information that is recorded for each pixel, the more shades and hues that the file can contain.

Bits-Per-Pixel and Color Depth

Most raster formats support more than one level of bits-per-pixel, and therefore more than one level of color. The following table lists the bits-per-pixel ratios in the raster formats that Paint Shop Pro supports, and shows the corresponding maximum number of colors.

Bits-Per-Pixel	Maximum Number of Colors
1	2
4	16
8	256
16	32,768 or 65,536 (depends on format)
24	16,777,216
32	16,777,216

Most raster formats record color information on pixel-by-pixel basis, but some formats use color planes. Each color plane contains all of the pixel information for a single color. Color planes are also called "color channels". Formats that use color planes are called "planar" formats.

The bits-per-pixel are determined by the bits-per-plane times the number of planes. If the resulting number is not a power of two (expressible as 2^x, where x is an integer), then the bits-per-pixel are "promoted" to the next- highest power of two. For example, if there are two bits-per-plane and three planes, the bits-per-pixel are promoted to eight: 2 x 3 = 6, and $2^2 < 6 < 2^3$.

Supported Formats

The following table lists the raster file formats supported by Paint Shop Pro.

📂 = Paint Shop Pro can open files of this specification   💾 = Paint Shop Pro can save files to this specification

Format	Sub-Format / Description	Source/Standard	1	4	8 Grey	8 Color	16	24	32
BMP	RGB encoded	OS/2	📂💾						
BMP	RGB encoded	Microsoft Windows	📂💾						
BMP	RLE encoded	Microsoft Windows			📂💾				
CLP	Bitmap	Windows Clipboard	📂						
CLP	Device Independent Bitmap	Windows Clipboard	📂💾						
CUT		Dr. Halo						📂💾	
DIB	RGB encoded	OS/2	📂💾						
DIB	RGB encoded	Microsoft Windows	📂💾						
DIB	RLE encoded	Microsoft Windows			📂💾				
GIF	Ver. 87a (interlaced)	CompuServe	📂💾						
GIF	Ver. 87a (non-interlaced)	CompuServe	📂💾						
GIF	Ver. 89a (interlaced)	CompuServe	📂💾						
GIF	Ver. 89a (non-interlaced)	CompuServe	📂💾						

Format	Description	Vendor	Icons
IFF	Compressed	Electronic Arts	📂💾
IFF	Uncompressed	Electronic Arts	📂💾
IMG	Old Style	GEM Paint	📂💾
IMG	New Style	GEM Paint	📂
JAS	JASC format; obsolete	JASC, Inc.	📂
JIF	Huffman compressed	Joint Photo. Expert Group	📂💾
JPG	Huffman compressed	Joint Photo. Expert Group	📂💾
LBM	Compressed	Deluxe Paint	📂💾
LBM	Uncompressed	Deluxe Paint	📂💾
MAC	With header	MacPaint	📂💾
MAC	Without header	MacPaint	📂💾
MSP	New version	Microsoft Paint	📂💾
MSP	Old version	Microsoft Paint	📂
PBM	Portable Bitmap	UNIX	📂💾
PCD		Kodak Photo CD	📂
PCX	Version 0	ZSoft Paintbrush	📂
PCX	Ver. 2 (with palette info.)	ZSoft Paintbrush	📂
PCX	Ver. 3 (without palette info.)	ZSoft Paintbrush	📂
PCX	Version 5	ZSoft Paintbrush	📂💾
PGM	Portable Graymap	UNIX	📂💾
PIC		Pictor/PC Paint	📂💾
PPM	Portable Pixelmap	UNIX	📂💾
PSD	RGB or indexed	Photoshop	📂💾
RAS	Type 1 (Modern Style)	Sun Microsystems	📂💾
RAW	Un-encoded pixel data		📂💾
RLE	CompuServe	CompuServe	📂💾
RLE	Windows	Microsoft Windows	📂💾
TGA	No compression	Truevision	📂💾
TGA	Compressed	Truevision	📂💾
TIFF	Huffman compressed	Aldus Corporation	📂💾
TIFF	No compression	Aldus Corporation	📂💾
TIFF	Pack bits compressed	Aldus Corporation	📂💾
TIFF	LZW compressed	Aldus Corporation	📂💾
TIFF	Fax Group 3 compressed	Aldus Corporation	📂💾
TIFF	Fax Group 4 compressed	Aldus Corporation	📂
WPG	Version 5.0	WordPerfect	📂💾
WPG	Version 5.1	WordPerfect	📂💾
WPG	Version 6.0	WordPerfect	📂💾

TOPIC: Meta and Vector Image Formats

File Formats

Meta and Vector Image Formats

Meta and vector image formats can both contain vector information. Vector information is a collection of geometric shapes that combine to make an image. The information is recorded as mathematical formulas. Vector data cannot reproduce photo-realistic images, but for other types of images it has two advantages over raster data: it is scaleable without distortion (the "jaggies" that come with re-sizing a bitmap), and it produces smaller files.

In the strictest definition, a vector format can only contain vector information. In common practice, many formats that are considered to be vector allow the user to include non-vector data, such as raster images or text.

Meta formats explicitly allow more than just vector data. For example, a typical Windows metafile might contain a bitmap, vector information, and text, with the bitmap constituting the majority of the image, and the vector and text data providing annotation.

Please Note:

Paint Shop Pro can read vector data, but it <u>cannot</u> write vector data. When you view a vector image from Paint Shop Pro, what you are seeing is a raster image based on the vector data. Paint Shop Pro imports the vector image and converts it to an internal raster format. Paint Shop Pro can write to the Windows metafile format, but the resulting files contain raster data <u>only</u>.

Supported Formats
The following table lists the meta and vector formats supported by Paint Shop Pro.

    📂 = Paint Shop Pro can open files of this format
    💾 = Paint Shop Pro can save files to this format

Format	Source/Standard	Open/Save
CDR	CorelDRAW!	📂
CGM	Computer Graphics Metafile	📂
DRW	Micrografx Draw	📂
DXF	Autodesk	📂
GEM	Ventura/GEM	📂
HGL	Hewlett-Packard Graphics Language	📂
PIC	Lotus Development Corp.	📂
WMF	Microsoft Windows Metafile	📂 💾*
WPG	WordPerfect (versions 5.0 and 5.1)	📂

*When you save data in the Windows metafile format, the file contains raster data only. JASC has provided this capability at the request of its customers.

TOPIC: Other Formats: External Import Filters

File Formats

Other Formats: External Import Filters

In addition to the file formats that it supports directly (see Raster Image Formats and Meta and Vector Image Formats), Paint Shop Pro can also read other image file formats if the appropriate external import filters are installed on your system. Most major software applications, such as Microsoft Word®, install external import filters. A common file type that Paint Shop Pro can support via external import filters is the Macintosh® PICT format (".PCT").

In Paint Shop Pro's dialog boxes, the file types that are supported via external import filters have "EXT:" after the file extension. For example, the Macintosh® PICT format appears as "PCT - EXT: Macintosh PICT (.PCT)".

TOPIC: Jasc Palette File Format

File Formats

Jasc Palette File Format

Please Note:

The Jasc palette file format is <u>not</u> the same as the Microsoft PAL format.

Paint Shop Pro uses the Jasc palette file format (extension ".PAL") for saving 16 and 256 color palette files. The file type was created as a text file so that you can edit or create palettes with a text editor, such as Notepad. The file structure is as follows:

Header:	JASC-PAL
Version:	0100
Number of Colors:	16 or 256
Palette Data:	Made up of Red, Green and Blue color components. Color components are values from 0 to 255. RGB values must be separated by one space. Each RGB series must be on a separate line.

Example

The following is Window's default colors in the Jasc PAL file format:

```
JASC-
PAL
0100
16
0 0 0
0 0
191
0 191
0
0 191
191
191 0
0
191 0
191
191
191 0
192
192
192
128
128
128
0 0
255
0 255
0
0 255
255
255 0
0
255 0
255
255
255 0
255
255
255
```

Troubleshooting

TOPIC: Troubleshooting Overview

Troubleshooting

Troubleshooting Overview

This section contains answers to the most common technical support questions. Refer to the README.TXT file in your Paint Shop Pro directory to see if there are any additional questions and answers that were not available when this help file was published.

TOPIC: Color Problems

Troubleshooting

Color Problems

Please Note:

Changing Your Video Driver

If your video card supports higher color resolutions, installing a video driver that supports more colors should improve your image display quality. To determine your current display resolution, click on "Help" in the Menubar, then click on "About Paint Shop Pro". Look at the line marked "Resolution" in the About Paint Shop Pro Dialog Box. The last number is the number of colors that your display supports. For help changing your video driver, consult the documentation that came with your video card.

Colors in an image are wrong

Your video card and/or video driver probably don't support enough colors to show the image correctly. For help changing your video driver, see above.

16 Color Display Drivers

When displaying sixteen colors, Windows uses a set palette that cannot be changed. Images are mapped to the closest colors in the Windows palette: a color that is not in the palette is replaced by the nearest color that is. The more colors the image contains, the more colors that are lost when the image is mapped.

256 Color Display Drivers

When it's running a 256 color display driver, Windows reserve 20 colors for its own use. This alters an image's available palette to 236 independent or optimized colors (256 - 20 = 236), plus the 20 fixed Windows colors. Images are mapped to the closest colors in the available palette: a color that is not in the palette is replaced by the nearest color that is.

Image is grainy or mottled

Your video card and/or video driver probably don't support enough colors to show the image correctly. For help changing your video driver, see above.

The graininess is caused by dithering. Paint Shop Pro automatically dithers images that contain more colors than the video system can display. Dithering provides the best possible color approximation.

Paint Shop Pro maintains the original, un-dithered image in memory. If you edit the image, the change is applied to the original and a new dithered image is created to display your changes. This allows you to work with images that are beyond the limits of your video system.

Wallpaper colors change as different images are displayed

When it's running a 256 color display driver, Windows reserve 20 colors for its own use. This leaves 236 colors that can be optimized to display an image (256 - 20 = 236).

When Paint Shop Pro displays an image, Windows gives it control of the 236 available colors, which Paint Shop Pro optimizes to best suit the active image. In so doing, Paint Shop Pro alters the common palette that is being used by the wallpaper, and for that matter, the entire screen.

Once Paint Shop Pro or the offending image is closed, the wallpaper's colors should return to normal.

TOPIC: File Formats

Troubleshooting

File Format Problems

Paint Shop Pro won't load a WPG image.

The file is probably a WPG Version 6 vector image. Paint Shop Pro did not support the Version 6 vector sub-format at the time this help file was written.

▸ Supported File Formats

TOPIC: Memory

Troubleshooting

Memory Problems

Editing image causes memory error message.

Depending on its size and resolution, an image may require substantial amounts of memory to be displayed, and even more memory to be edited. The following example shows how the memory requirements of an image escalate as its color depth increases.

Height	Width	Bits/Pixel	Display (KB)	Max Edit (KB)
800	600	1	59	176
800	600	8	469	1,406
800	600	24	1,406	4,219

Editing an image may require up to three times the amount of memory required to display the image. Turning the Undo buffer off may decrease the memory requirements.

When Windows 3.1 is running in Enhanced Mode, it can use a swap file to simulate additional memory. A swap file allows systems with large amounts of memory to operate Paint Shop Pro very quickly, and lets systems with less memory run Paint Shop Pro with less risk of encountering memory errors. For help setting up a swap file, see your Windows documentation, or contact your hardware support provider or personnel.

Paint Shop Pro says an image is about twice as big as it should be.

The difference in size is caused by an Undo buffer. An image will have an Undo buffer if the Undo Storage Option is set to "In Memory".

▶ Undo Storage Options

TOPIC: Operations

Troubleshooting

Operation Problems

Why are some functions unavailable for 16-color and 256-color formats?

These functions create new pixel values that may not have existed in the original image. Only 24-bits-per-pixel images and 8-bits-per-pixel grey scale images have the required internal structure to hold any and all of these new pixel values.

Printing crashes Windows, Print Manager, or Paint Shop Pro.

You will be unable to print an image if your Windows temporary directory does not have enough room to hold the image file. Something will crash: it could be Windows, it could be Print Manager, or it could be Paint Shop Pro.

We at JASC firmly believe that it is a bad idea to use a RAM drive as your Windows temporary directory. The allocated memory goes to waste, and it constrains the size of your temporary directory.

For more help, contact your hardware support provider or personnel.

POPS: **Main Window**

Main Window Titlebar

The [Main Window Titlebar](#) displays "Paint Shop Pro" and contains the
standard Windows titlebar controls.

Paint Shop Pro

Menubar

The [Menubar](#) contains Paint Shop Pro's menus. Each menu lists a "family" of selections, and each selection performs a specific action.

<u>F</u>ile	<u>E</u>dit	<u>V</u>iew	<u>I</u>mage	<u>C</u>olors	C<u>a</u>pture	<u>W</u>indow	<u>H</u>elp

Toolbar
[Toolbar](#) buttons perform an action, just like a menu selection. You select a
Toolbar button by clicking on it.

Workspace

The [Workspace](#) is where you edit images: when you open a file or create a new image, Paint Shop Pro opens a new image window within the Workspace.

Workspace

The [Workspace](#) is where you edit images: when you open a file or create a new image, Paint Shop Pro opens a new image window within the Workspace.

Statusbar

The Statusbar displays information about the current image and/or the current task.

| Image: 498 x 29 x 256 | (168, 14) | Image: 15.2k |

Control Box
At the left end of each titlebar is the Control Box, which you use to access the window's Control Menu. Double-clicking on the Control Box closes the window.

Control Menu
To open the Control Menu, click on the Control Box. You can use the Control Menu to position the window from the keyboard, to close the window, or to access your system's task manager. To choose a menu selection, you can click on it, press its underlined letter, or use the cursor keys to highlight it and then press <Enter>.
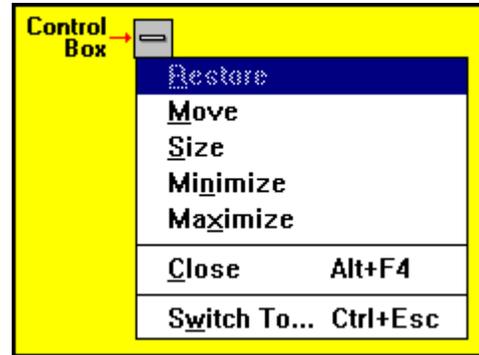
POPS: Toolboxes

Tool Control Panel: Examples

Airbrush		
Size	Flow	Opacity
15	50	50

Brush	
Size	Style
10	Round

Color Replacer		
Size	Tolerance	Style
10	20	Round

POPS: **Opening Files**

Most-Recently Used List (Example)

E_xit

1 d:\graphics\files\jif\home.jif
2 d:\...\grdcnyn.jif
3 d:\graphics\files\jif\fika.jif
4 d:\...\baybrdg.jif

← Most-
Recently
Used List

POPS: File Selection Features

Drive Drop Down Box (Example)
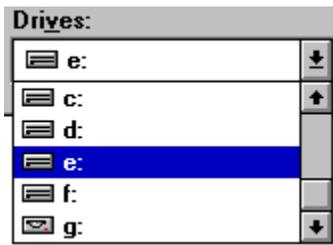
Click on the drop down box to open it, then click on the drive that you want. If the list is too long to fit in the box, use the scroll bar to move through it.

Press <Alt> + <V> to access the drop down box, then press the drive letter.

Directories List Box (Example)

Directories:
d:\graphics\files\jif

- 📂 d:\
- 📂 graphics
- 📂 files
- 📂 jif
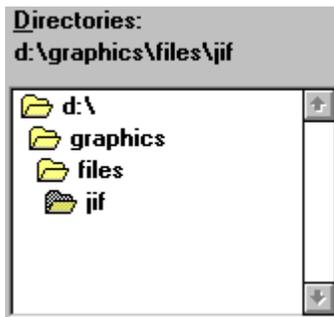
Double-click on the directory or its folder icon. Use the scroll bars to move up and down the directory tree.

Press <Alt> + <D> to access the list box, use the cursor keys to highlight the directory, then press <Enter>.

Please Note:

If you are unfamiliar with directories and directory trees, see your Windows documentation.

File Type Drop Down Box (Example)

List Files of Type:

All Files

All Files
ADI - EXT: AutoCAD Plot File[.ADI]
BMP - OS/2 or Windows Bitmap
CDR - CorelDraw Drawing
CGM - Computer Graphics Metafile
CLP - Windows Clipboard
CUT - Dr. Halo
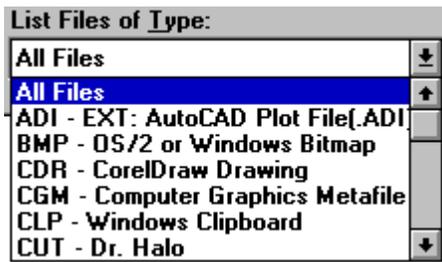
Click on the drop down box to open it, then click on the file type that you want. If the list is too long to fit in the box, use the scroll bar to move through it.

Press <Alt> + <T> to access the drop down box. You use the cursor keys and letter keys to highlight a selection. Pressing a letter key once moves to the first format that begins with that letter. Pressing it again moves to the second.

File Sub-Format Drop Down Box
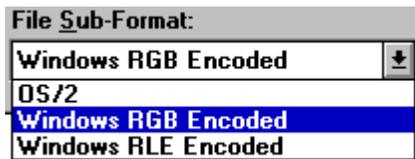
Click on the drop down box to open it, then click on the sub-format that you want. If the list is too long to fit in the box, use the scroll bar to move through it.

Press <Alt> + <S> to access the drop down box. You use the cursor keys and letter keys to highlight a selection. Pressing a letter key once moves to the first sub-format that begins with that letter. Pressing it again moves to the second.

File Name Text Box

File **N**ame:

To access the File Name Text Box:

- Double-click in it to overwrite the current text, or click in it once to edit the text.
- Press <Alt> + <N>.

File Name List Box (Example)

| africa.jif |
| alcatraz.jif |
| bambi.jif |
| baybrdg.jif |
| btrfly.jif |
| dog1.jpg |
| drink.jif |
| ducks.jif |

Click on the file's entry in the list box. If the list is too long to fit in the box, use the scroll bar to move through it.

Press <Alt> + <N> and then <Tab> to access the list box, then use the cursor keys and letter keys to highlight the filename. Pressing a letter key once moves to the first file that begins with that letter. Pressing it again moves to the second.

POPS: **Miscellaneous**

Preview Box

The Preview Box will display a selection, if the image contains one, even if the function will affect the entire image. If the image does not contain a selection, then the Preview Box will display the entire image.

Positioning Buttons

Minimize	**Maximize**	**Restore**
▼	▲	⬍
Reduces window to an icon	Enlarges window to fill the screen	Returns window to its last non-icon, non-maximized position

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Developed by:

Windows® Documentation Specialists

Want your help file to look this good?
Contact us via CompuServe at 74551,3060

Sixteen Color Display Prompt

16 Color Video Driver Detected

Your Windows system is configured for only 16 color display. Paint Shop Pro is designed to work best with 256 or greater colors. See the Help Index item "16 Color Displays" for more information.
Would you like this message displayed in the future?

Yes   No

POPS: **CLRFUNCS.DOC**

**Color Adjustment Function Dialog Box
(Example)**
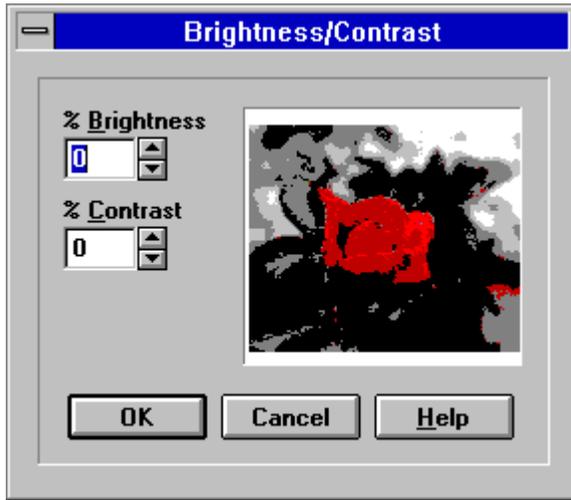
Brightness / Contrast Function

Scale = -100% to +100%

Setting	Effect
Brightness	Shifts entire histogram in the direction of change. Positive 100% turns image or selection pure white. Negative 100% turns image or selection pure black.
Contrast	Positive change flattens histogram, producing wider range of luminance. Negative change tightens histogram, producing narrower range of luminance.

Gamma Correct Function

Scale = 0.01 to 4.99

Setting	Effect
Correction	Gamma correction factor.

Highlight / MidTone / Shadow Function

Scale = 0% to +100%

Setting	Effect
Highlight	Adds luminance proportionally. Lighter pixels are increased more, darker pixels are increased less.
MidTone	Shifts mid-quarter of luminance scale up or down.
Shadow	Removes luminance proportionally. Darker pixels are reduced more, lighted pixels are reduced less.

Hue / Saturation / Luminance Function

Scale = -100% to +100%

Setting	Effect
Hue	Increases/decreases hue. Moves all colors up or down red/green/blue spectrum.
Saturation	Increases/decreases saturation. -100% converts image or selection to grey scale.
Luminance	Increases/decreases luminance. -100% produces pure black. +100% produces pure white if original histogram is in top half of luminance spectrum.

Red / Green / Blue Function

Scale = -100% to +100%

Setting	Effect
Red	Increases/decreases red level
Green	Increases/decreases green level
Blue	Increases/decreases blue level

Colorize Dialog Box (Example)
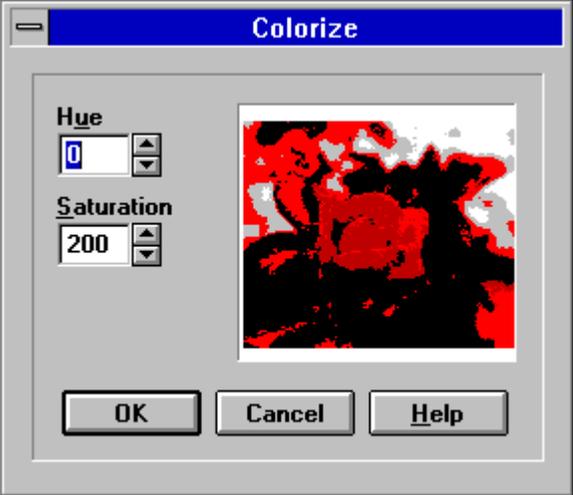
Colorize Function Settings

Scale = 0 to 255

Setting	Effect
Hue	Sets hue for image or selection. Spectrum is red/green/blue.
Saturation	Sets saturation for image or selection. 0 produces grey scale.

Posterize Dialog Box (Example)
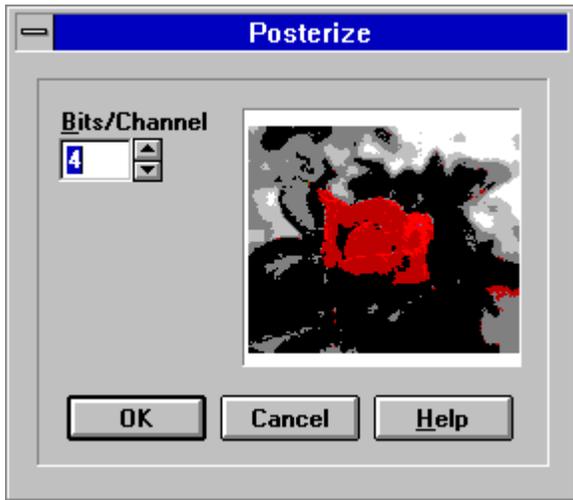
Solarize Dialog Box (Example)
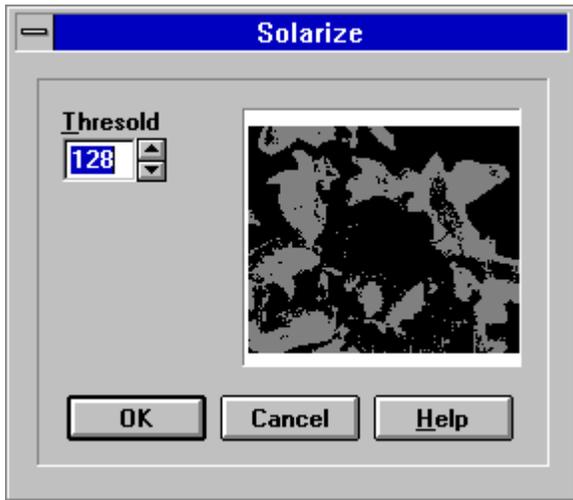
POPS: COLORS.DOC

Color Palettes

You can edit, load, and save color palettes for 16 and 256 color images. You can load color palettes into images with [color depths](#) of 16 or more.

Color Palette Dialog Box (Example)

16 Color Palette

Double click on the color you wish to edit

Index: 0, R:0, G:0, B:0

OK   Cancel   Help   Reset

Load Palette Dialog Box

Load Palette File

File Name:

`*.pal`

burnt16.pal
gamma.pal
green256.pal
new-27.pal
sepia256.pal
std16.pal
std256.pal
windmill.pal

List Files of Type:

PAL - JASC Palette

Directories:

d:\graphics\psp\palettes

📂 d:\
  📂 graphics
    📂 psp
      📂 palettes

Drives:

d:

OK

Cancel

Help

Apply Palette to Image using:
- ◉ Nearest Color
- ○ Error Diffusion
- ○ Maintain Indexes

Save Palette Dialog Box

Save Palette As

File Name:

new-3.pal

burnt16.pal
gamma.pal
green256.pal
new-27.pal
sepia256.pal
std16.pal
std256.pal
windmill.pal

List Files of Type:

PAL - JASC Palette

Directories:

d:\graphics\psp\palettes

📂 d:\
  📂 graphics
    📂 psp
      📂 palettes

Drives:

d:

OK

Cancel

Help
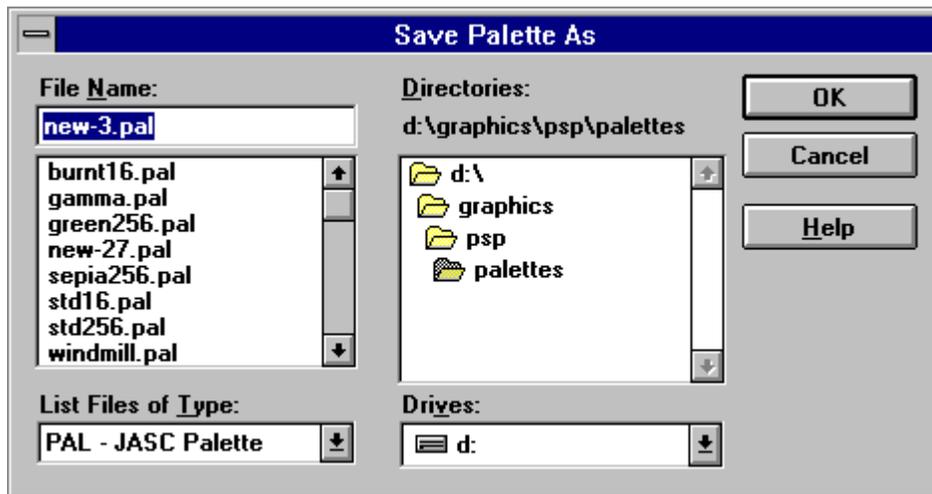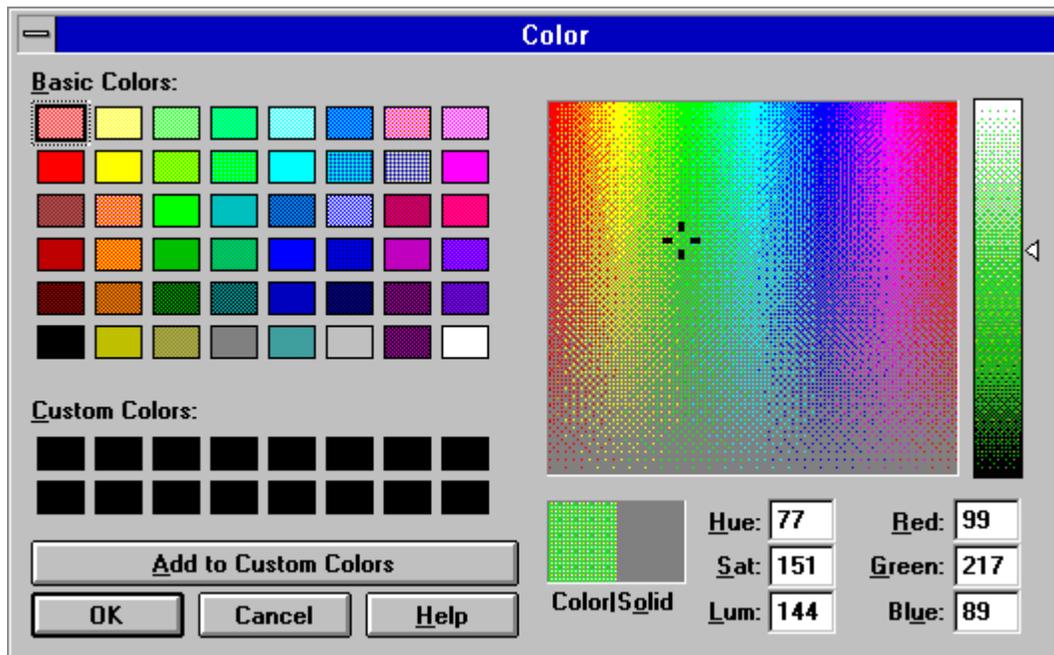
Color Dialog Box

Decrease Color Depth Dialog Box: 2 Colors Version

Decrease Color Depth - 2 Colors

Palette

- ⦿ Grey Values
- ○ Red Components
- ○ Green Components
- ○ Blue Components

- ⦿ Weighted
- ○ Non-weighted

Reduction Method

- ⦿ Nearest Color
- ○ Ordered Dither
- ○ Error Diffusion
  - ○ Floyd-Steinberg
  - ○ Burkes
  - ○ Stucki

OK

Cancel

Help
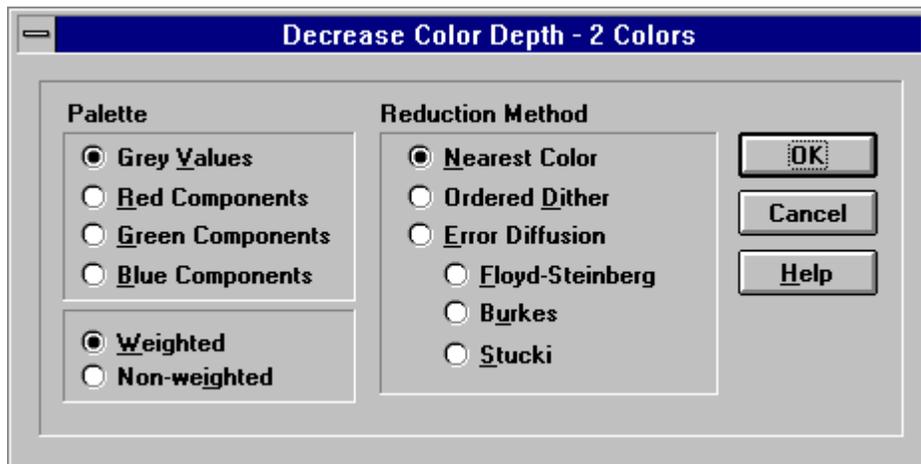
Decrease Color Depth Dialog Box: 16 Colors Version

Decrease Color Depth - 16 Colors

Palette

○ Optimized
● Windows'

Reduction Method

● Nearest Color
○ Ordered Dither
○ Error Diffusion

Options

☐ Boost Marked Colors by
　[0]　(1 to 10)

☐ Reduce Color Bleeding

OK　　Cancel　　Help
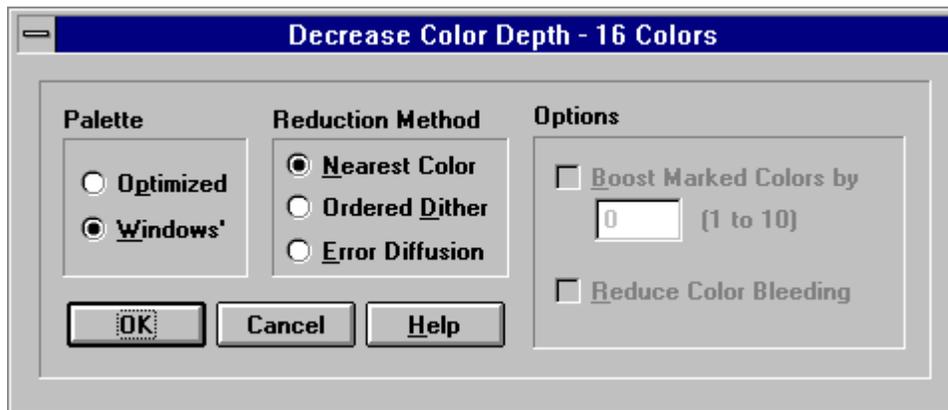
Decrease Color Depth Dialog Box: 256 Colors Version

Decrease Color Depth - 256 Colors

Palette
- ◉ Optimized
- ○ Standard

Reduction Method
- ◉ Nearest Color
- ○ Ordered Dither
- ○ Error Diffusion

Options
- ☐ Boost Marked Colors by
  - [0]   (1 to 10)
- ☒ Include Windows' Colors
- ☐ Reduce Color Bleeding

[OK]   [Cancel]   [Help]
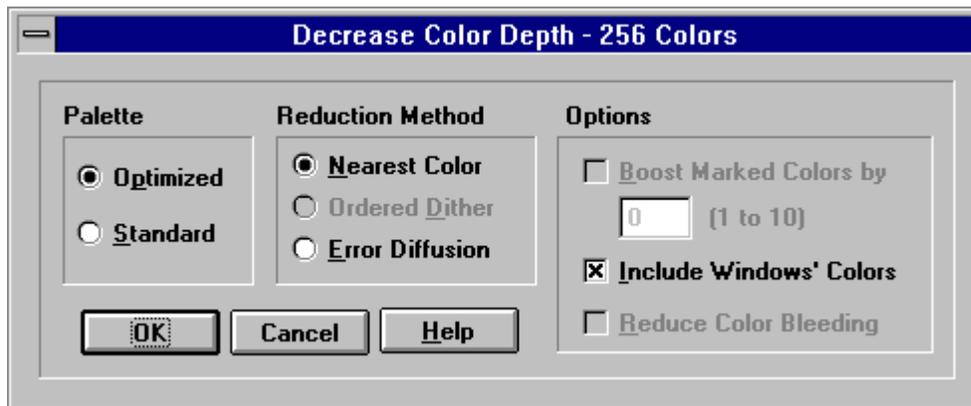
Decrease Color Depth Dialog Box: 32K Colors Version

Decrease Color Depth-32K Colors

Reduction Method

OK

● **N**earest Color

○ Error **D**iffusion

Cancel

Help
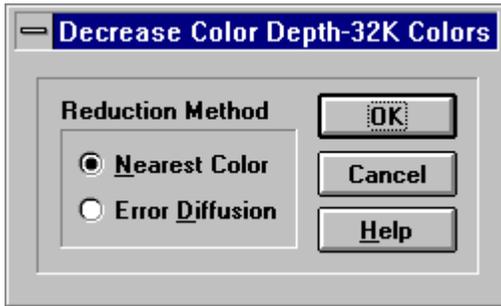
Decrease Color Depth Dialog Box: X Colors Version

Decrease Color Depth - X Colors

Palette

Number of Colors

`256` (17-256)

Reduction Method

○ Nearest Color
● Error Diffusion

Options

☐ Boost Marked Colors by

`0` (1 to 10)

☐ Include Windows' Colors
☐ Reduce Color Bleeding

[OK]   [Cancel]   [Help]
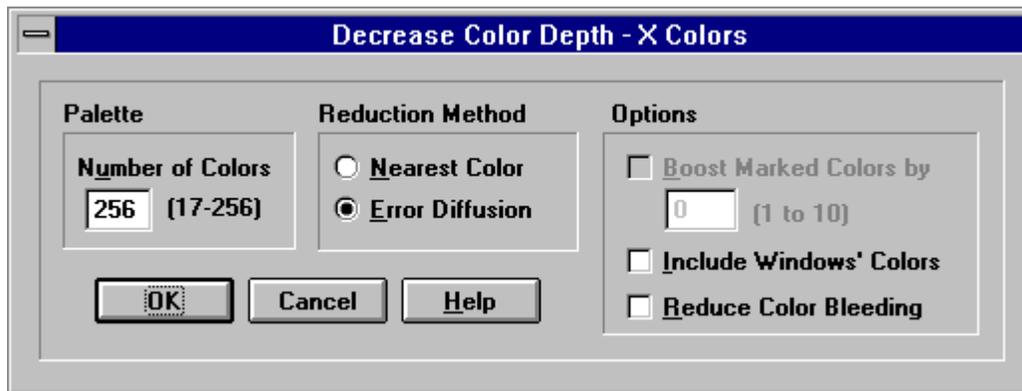
POPS: CREATE.DOC

New Image Dialog Box

New Image

Width: 600   x   Height: 500

Image Type:
16.7 Million colors (24 Bit)

Memory Required: 1.7 MBytes

OK   Cancel   Help
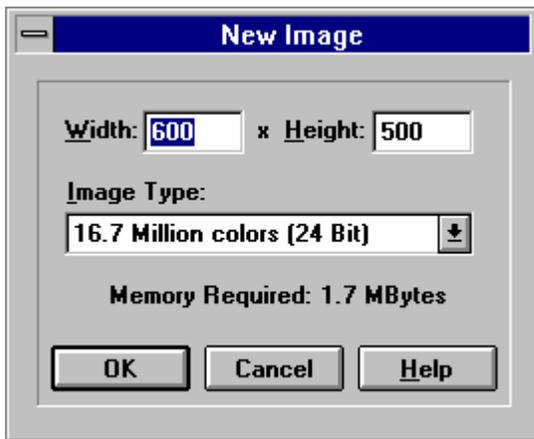
Capture Types

Type	Action
Area	Use the mouse to select a rectangular portion of the screen.
Full Screen	Copy the entire screen.
Client Area	Copy the input section of the active window.
Window	Copy the entire active window.
Object	Copy a window feature or group of features.

Capture Setup Dialog Box

Acquire Image Button
Clicking on the Acquire Image Button accesses the TWAIN device software's Acquire Dialog Box.

POPS: **EDIT.DOC**

Add Borders Dialog Box

Add Borders

Border Size

[X] Symmetric

Top: `0`

Bottom: `0`

Left: `0`

Right: `0`

OK

Cancel

Help

Enlarge Canvas Dialog Box

Enlarge Canvas

Width: 200
Height: 200

☒ Center Image

OK
Cancel
Help

Resize Dialog Box

Resize

Select the new size...

○ 3̲20 x 200
◉ 6̲40 x 350
○ 64̲0 x 480
○ 8̲00 x 600
○ 1̲024 x 768

○ C̲ustom Size:

378   x   269

☐ M̲aintain Aspect Ratio

of̲ 1.4037 to 1

OK   Cancel   H̲elp
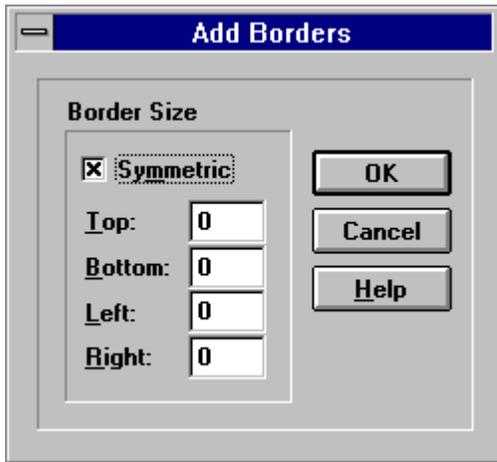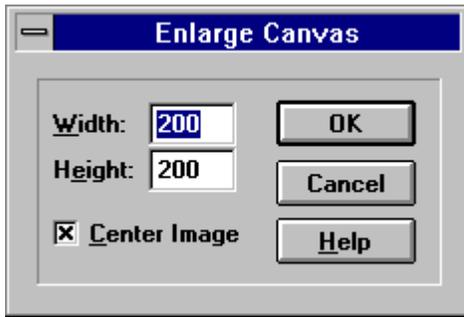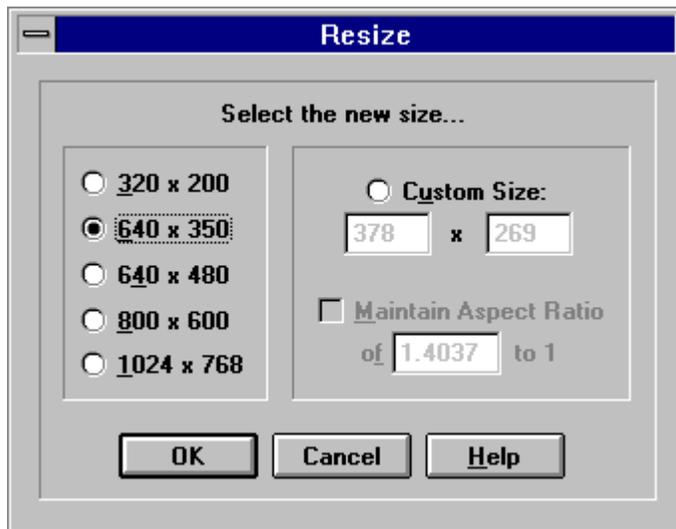
Resample/Resize Text Boxes

⊙ C̲ustom Size:

[378] x [294]

☒ M̲aintain Aspect Ratio

of̲ [1.2868] to 1

Rotate Dialog Box
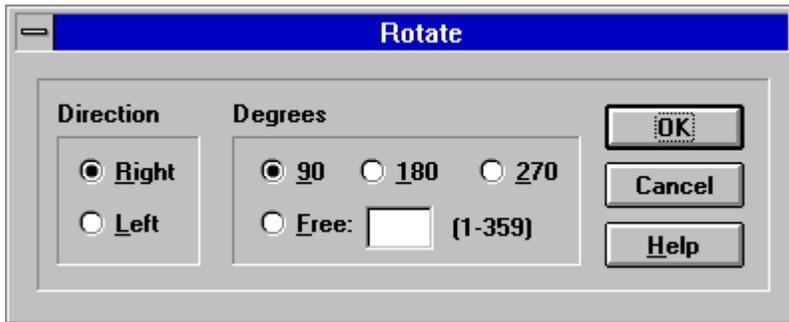
Image Information Dialog Box

Image Information

Width	318
Height	447
Bits Per Pixel	8
Max # of Colors	256
Memory Required	139.7 KBytes

Source File Name:
ht-00054.bmp

Source File Type:
OS/2 or Windows Bitmap

Sub Type: Windows RGB Encoded

Image can be saved to this format.

File is Deleteable?	Yes
Has Been Changed?	No
Type of Selection:	None
Undo Buffer Location:	In Memory
Has Mask Channel?	No

[OK]

POPS: EFFECTS.DOC

Effects Browser Dialog Box (Example)

Filter Browser

Filter Name

- Edge Enhance
- Edge Enhance More
- Find Edges
- Find Vertical Edges
- Find Horizontal Edges
- Trace Contour

Enhance the edges in the image

Sample Preview

Apply

Cancel

Help

Apply User Defined Filter Dialog Box

Apply User Defined Filter

Filter Name

Grease
Lithograph
Psychedelic Distillation

OK

Cancel

Help

Delete

Edit...

New...

Apply To

○ Grey Values
◉ Color Component(s)
☒ Red
☒ Green
☒ Blue
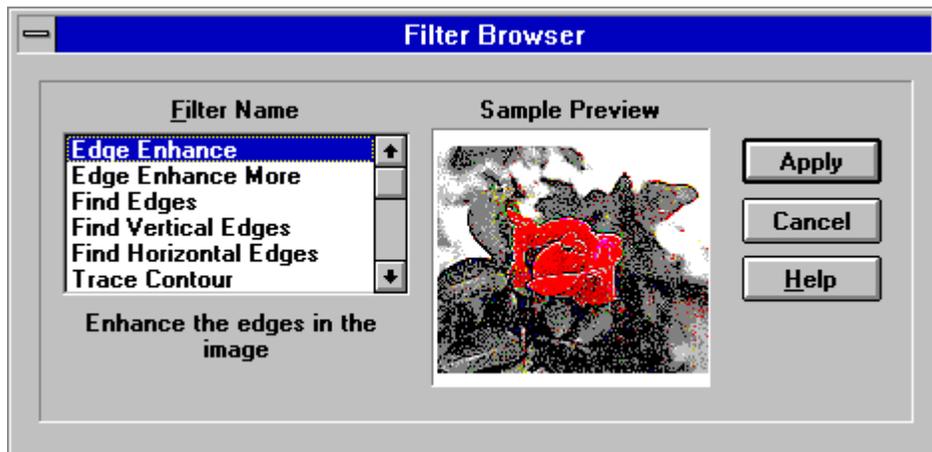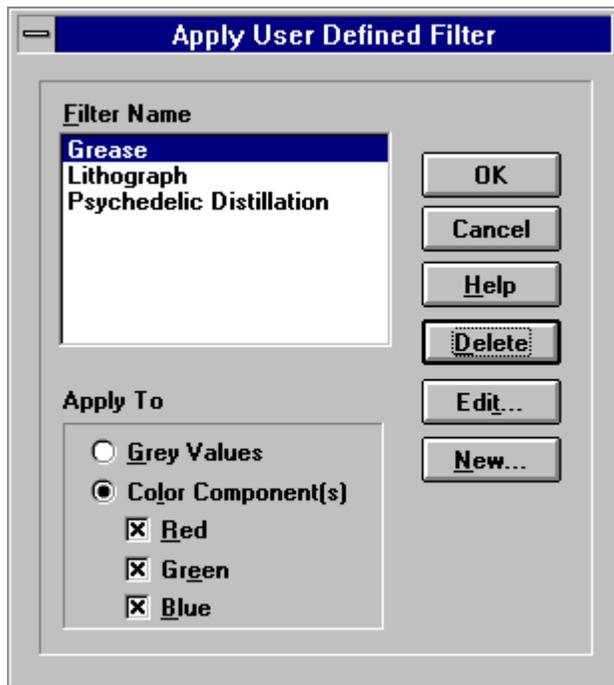
Filter Matrix (Example)

Filter Matrix

0	0	0	0	0
0	1	1	1	0
0	1	-7	1	0
0	1	1	1	0
0	0	0	0	0

Target Pixel
Coefficient

Simple Filter Calculation Example:

Pixel Values					x	Filter Matrix					=	Products					Σ	Sums
0	0	1	1	2		0	0	0	0	0		0	0	0	0	0		0
0	1	1	2	2		0	1	1	1	0		0	1	1	2	0		4
1	1	2	2	3		0	1	-7	1	0		0	1	-14	2	0		-11
1	2	2	3	3		0	1	1	1	0		0	2	2	3	0		7
2	2	3	3	4		0	0	0	0	0		0	0	0	0	0		0

New Target Pixel Value: **0**

Define New Filter Dialog Box
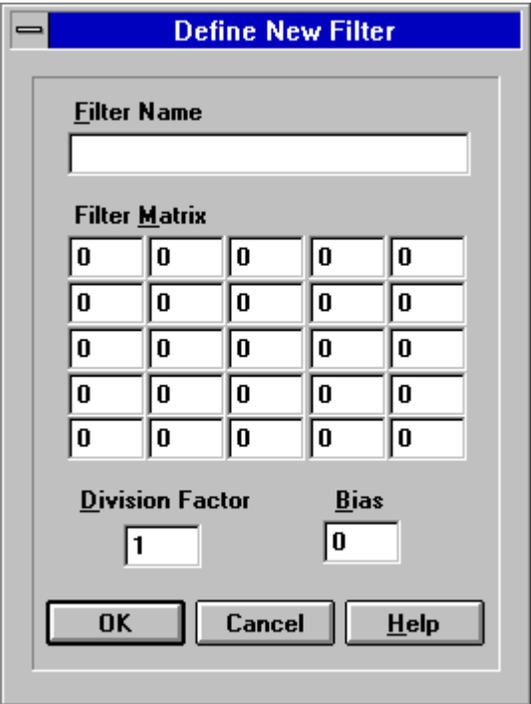
Define New Filter

Filter Name

Filter Matrix

0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0
0	0	0	0	0

Division Factor   **Bias**

1   0

OK   Cancel   Help

POPS: FILEMNG.DOC

Batch Processing Status Dialog Box

The Batch Processing Status Dialog Box displays mesages about the batch conversions progress. To stop the batch conversion, select the Abort Button.

Batch Processing Status (File 6 of 32)

```
..OK.
Reading baybrdg.jif
..OK.
Saving d:\graphics\files\baybrdg.bmp
..OK.
Reading btrfly.jif
..OK.
Saving d:\graphics\files\btrfly.bmp
..OK.
Reading drink.jif
```
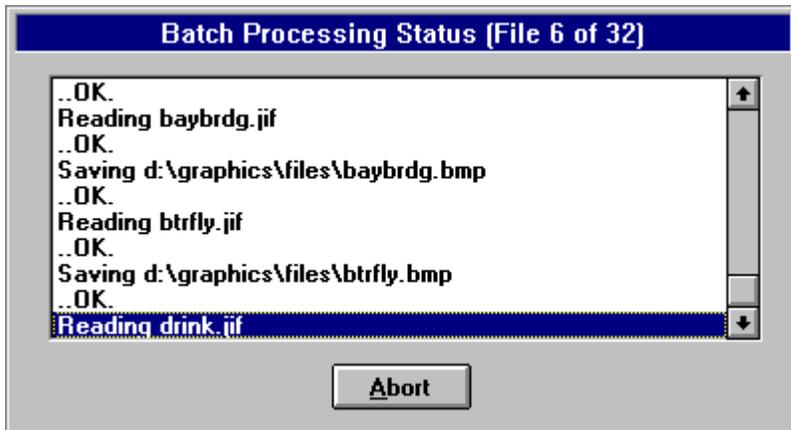
Abort

When the conversion is complete, the Abort Button will be replaced by a Close Button and a Save Log Button. Selecting the Close Button shuts the dialog box. Selecting the Save Log Button opens the Save Dialog Box, which you can use to save the progress messages to a text file.

Print Dialog Box
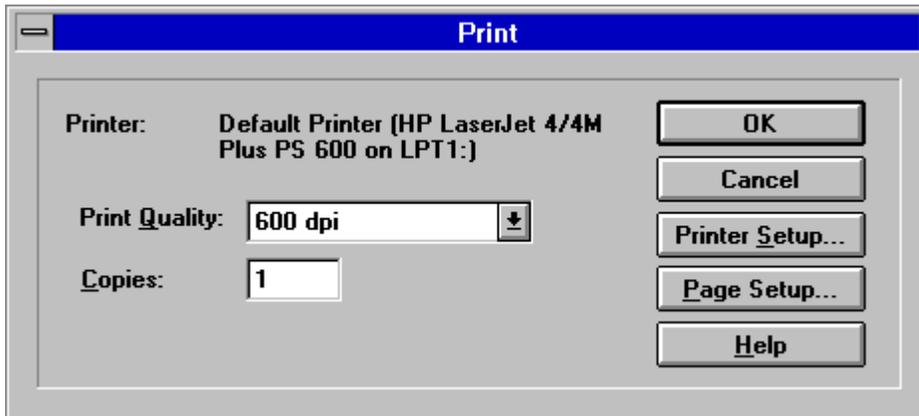
Print

Printer: Default Printer (HP LaserJet 4/4M Plus PS 600 on LPT1:)

Print Quality: 600 dpi

Copies: 1

OK

Cancel

Printer Setup...

Page Setup...

Help

Print Quality Drop Down Box

The entries in the Print Quality Drop Down Box are determined by the type of printer you are using.

600 dpi
600 dpi
300 dpi
150 dpi

Click on the drop down box to open it, then click on a selection.

To access the drop down box, press <Alt> + <Q>. Use the cursor keys to highlight the selection you want.

Copies Text Box

Copies: [1]

Enter the number of copies that you want to
print into the Copies Text Box. If your printer
does not support multiple copies, the text
box will be grayed out. To access the text
box, click in it, or press <Alt> + <C>.

Save File Prompt (Example)

Paint Shop Pro

This filename is in use. Do you want to overwrite the existing file?

Yes   No

▶ Click on the Yes Button to save the file and close it.
▶ Click on the No Button to close the file without saving it.
▶ Click on the Cancel Button to leave the file open.

Delete File Prompt (Example)


```
┌─────────────────────────────────────────────────────────────┐
│ ▬              Paint Shop Pro                                │
├─────────────────────────────────────────────────────────────┤
│                                                               │
│   ?    Are you sure you want to delete d:\graphics\files\    │
│        acrobat.wmf?                                           │
│                                                               │
│              ┌──────┐     ┌──────┐                           │
│              │ Yes  │     │  No  │                           │
│              └──────┘     └──────┘                           │
└─────────────────────────────────────────────────────────────┘
```

▸ To delete the file, click on the Yes Button, or press <Enter>.

▸ To leave the file intact, click on the No Button, or press <Alt> + <N>.

POPS: FILESOPN.DOC

Open Image Dialog Box

File Info Dialog Box

BAYBRDG.JIF

File Type:
JPEG - JFIF Compliant

Version: 1
Compression: Huffman - Baseline

Disk ID: N/A
Directory: D:\GRAPHICS\FILES\JIF

File Size: 20,850
File Date: Oct 26, 1993 - 15:35:14

Width: 470
Height: 305
Bits Per Plane: 8
# of Planes: 3
Max # of Colors: 16 Million
Unpacked Size: 431,880

OK
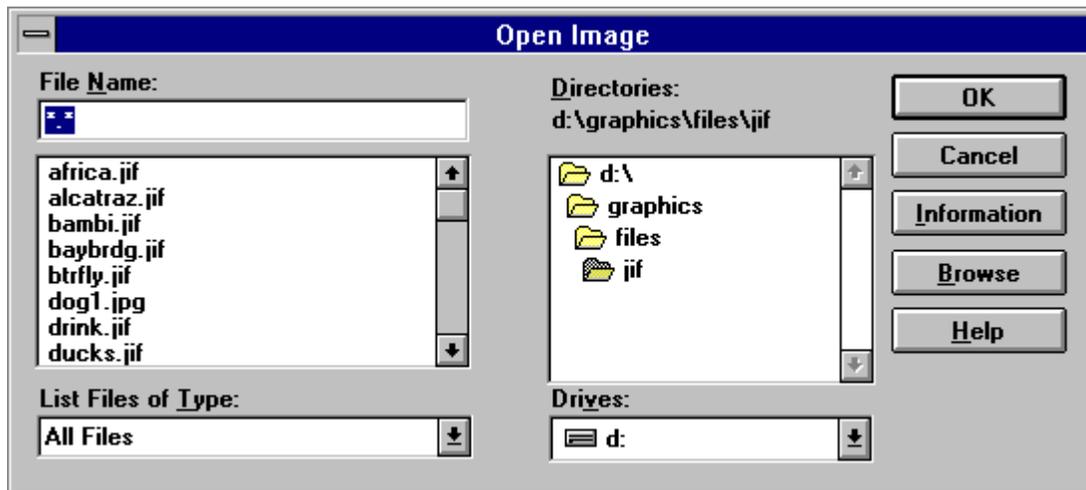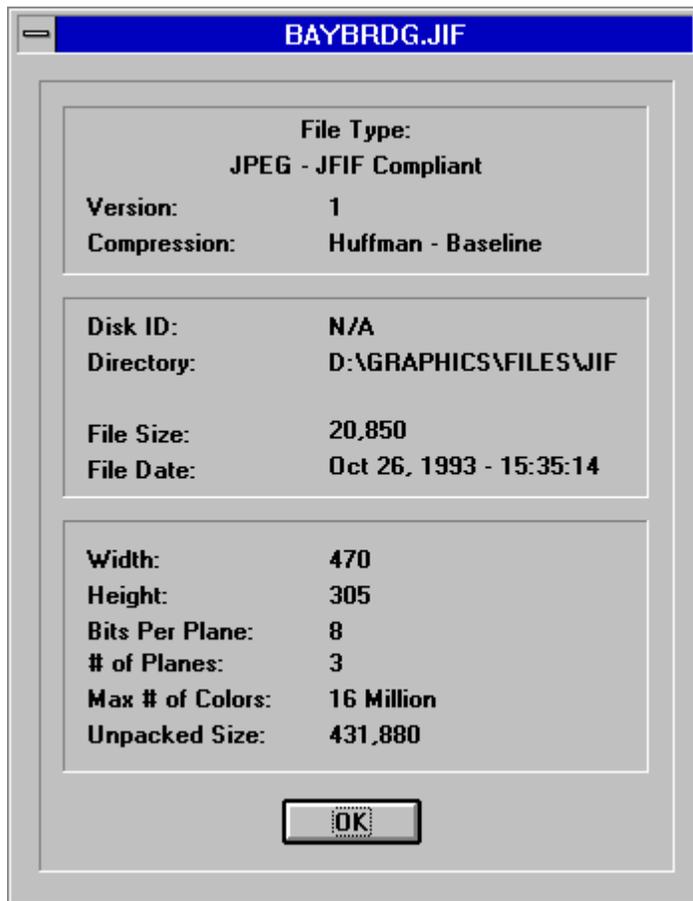
POPS: HOWTO.DOC

Meta Picture Import Dialog Box (Example)
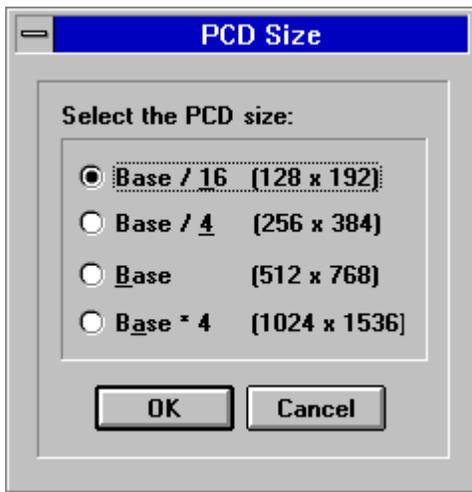
Meta Picture Import	
Original Size	**Import Size**
Width in pixels:	Width in pixels:
309	309
Height in pixels:	Height in pixels:
98	98
	OK

PCD Size Dialog Box

RAW Options Dialog Box
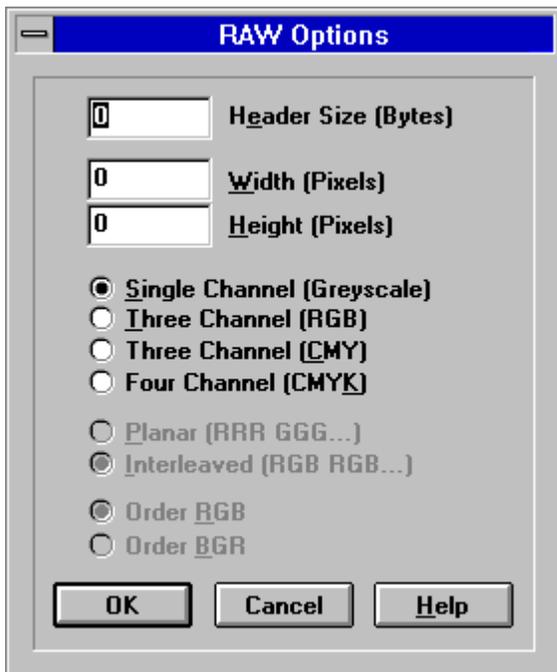
RAW Options	

```
┌─────────────────────────────────┐
│ [0]      Header Size (Bytes)     │
│                                  │
│ [0]      Width (Pixels)          │
│ [0]      Height (Pixels)         │
│                                  │
│ (•) Single Channel (Greyscale)   │
│ ( ) Three Channel (RGB)          │
│ ( ) Three Channel (CMY)          │
│ ( ) Four Channel (CMYK)          │
│                                  │
│ ( ) Planar (RRR GGG...)          │
│ (•) Interleaved (RGB RGB...)     │
│                                  │
│ (•) Order RGB                    │
│ ( ) Order BGR                    │
│                                  │
│  [ OK ]   [ Cancel ]   [ Help ]  │
└─────────────────────────────────┘
```

File Save As Dialog Box

Save As

File Name:

new-1.bmp

arcade.bmp
argyle.bmp
castle.bmp
egypt.bmp
honey.bmp
redbrick.bmp
rivets.bmp
squares.bmp

List Files of Type:

BMP - OS/2 or Windows Bitmap

File Sub-Format:

Windows RGB Encoded

Directories:

c:\windows

c:\
windows
cicdesk
fontspec
hpguide
mhuni2
msapps

Drives:

c:

OK

Cancel

Help
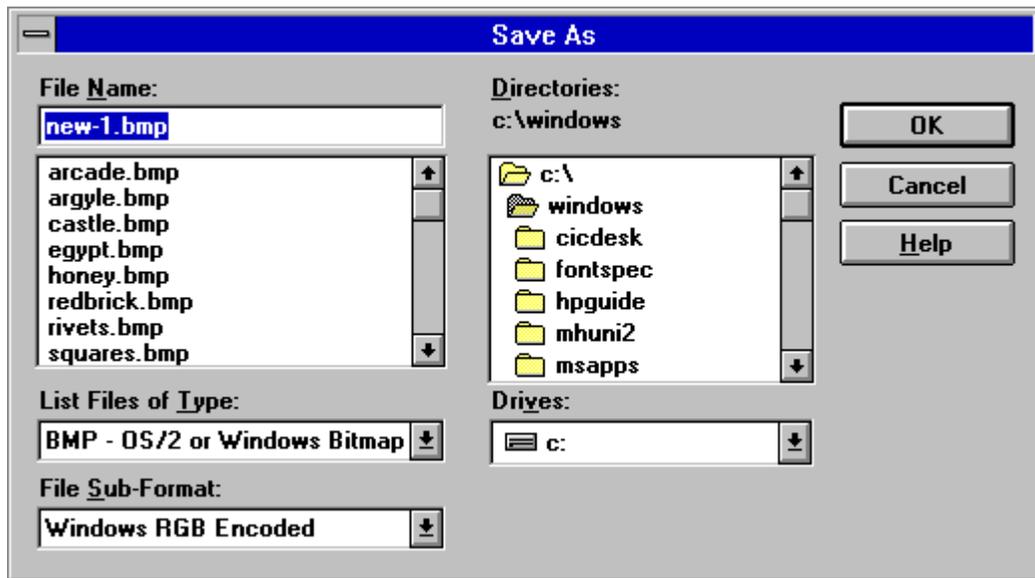
Filename In Use Prompt

Select Window Dialog Box
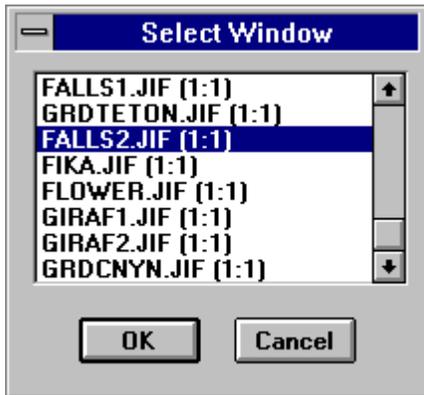
Double-click on the image's filename, or click on it once, then click on the OK Button. Use the scrollbar to move through the list.

Use the cursor keys and letter keys to highlight a filename. Pressing a letter key once moves to the first file that begins with that letter. Pressing it again moves to the second.

Select Area Dialog Box
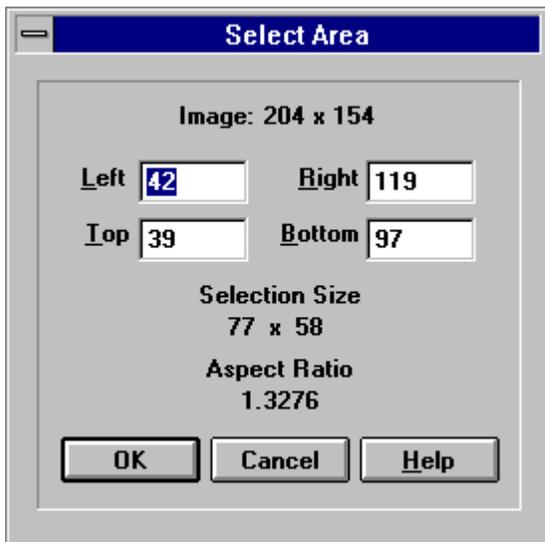
Select Area

Image: 204 x 154

Left **42**   Right **119**

Top **39**   Bottom **97**

Selection Size
77 x 58

Aspect Ratio
1.3276

OK   **Cancel**   **Help**

Select Directory Dialog Box

New Windows Dialog Box

New Windows

Image - Flip
Image - Mirror
Image - Rotate
Image - Add a Border
Image - Crop
Image - Resample
Image - Resize
Image - Edge Filters
Image - Normal Filters
Image - Special Filters
Image - User Defined Filters

OK
Cancel
Help
All Create
All Replace

● Command will replace current image
○ Command will create a new window
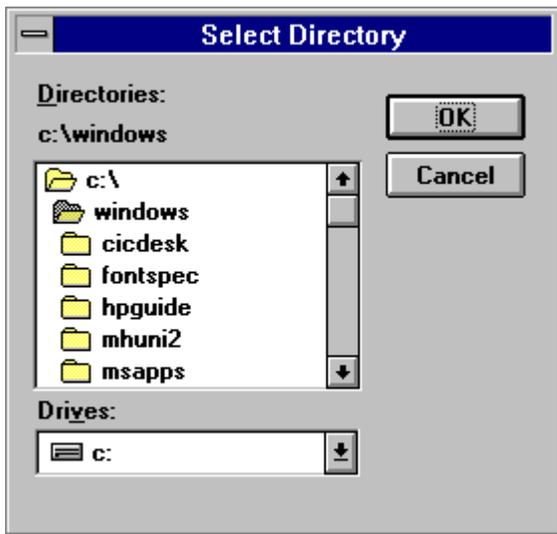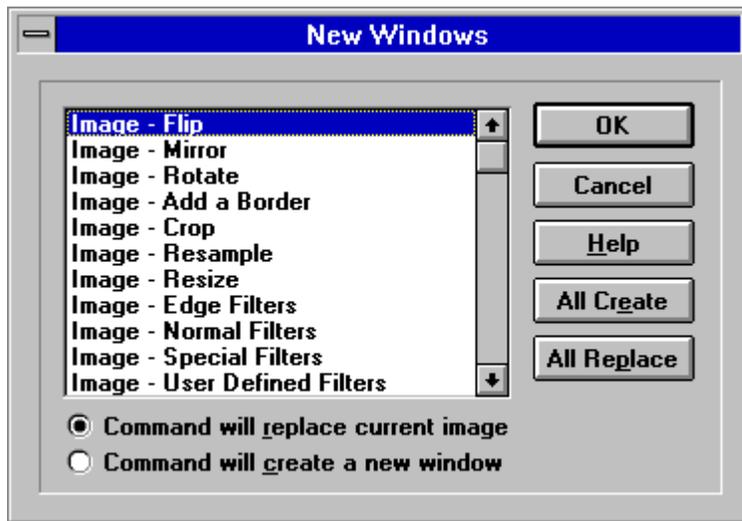
Maximized

A window is maximized when it occupies all of its available space.

Minimized

A window is minimized when it is reduced to an icon.

Restore

Restoring a window returns it to its last non-[minimized](), non-[maximized]() position.

POPS: MASKS.DOC

Add Mask Channel Dialog Box

Add Mask Channel

Source Window

This Window

Create mask from

- ● Source luminance
- ○ Any non-zero value
- ○ Current selection

☐ Invert mask data

OK

Cancel

Help

Mirror Luminance

A color's "mirror" luminance is equal to the luminance of white minus the color's current luminance. For example, since white has a luminance value of 255, a color with a luminance of 100 would have a mirror luminance of 155.

POPS: SETUP.DOC

Page Setup Dialog Box (Example)

Print Setup Dialog Box (Example)

Control Panel's Printers Option

You use the Control Panel's Printers Option to change the default printer.

Control Panel Icon

Printers Option Icon

Portrait vs. Landscape

Portrait is taller than it is wide, landscape is wider than it is tall.

Portrait   Landscape

General Preferences Dialog Box

General Preferences

General | Loading | Saving | Misc

Adobe-Compatible Image Processing Filters (Plugins):

☒ Enable Plugins
Directory Containing Plugins:

Browse...

c:\psp\plugin\

Note: Changes will not take effect until you restart the program

☒ Enable Internal Plugin Filter Masking
☒ Fit Window to Image When Zooming
☐ Anti-Alias Selected Area Operations
☒ Close Browser After an Image is Selected

OK
Cancel
Help

General Preferences Tabs

General	Loading	Saving	Misc

POPS: **TBPAINT.DOC**

Standard Brush

You access the Standard Brush by clicking on its button in the Paint Toolbox. The image cursor will change to a paintbrush.

Button   **Cursor**

Standard Brush Control Panel

To access Standard Brush Control Panel,
double-click on the [Standard Brush Button](#).

Clone Brush

You access the Clone Brush by clicking on its button in the Paint Toolbox. The image cursor will change to a paintbrush.

Button

Cursor

Clone Brush Control Panel

To access Clone Brush Control Panel, double-click on the <u>Clone Brush Button</u>.

User-Defined Brush

You access the User-Defined Brush by clicking on its button in the Paint Toolbox. The image cursor will change to a paintbrush.

Button   **Cursor**

User Brush Control Panel

First Set of Controls

User Brush		
Size	Opacity	Style
10	128	Round

Second Set of Controls

User Brush		
Fade	Density	Movement
50	255	Continuous

Push Brush

You access the Push Brush by clicking on its button in the Paint Toolbox. The image cursor will change to a paintbrush.

Button   **Cursor**

Push Brush Control Panel

To access Push Brush Control Panel, double-click on the [Push Brush Button](#).

Airbrush

You access the Airbrush by clicking on its button in the Paint Toolbox. The image cursor will change to a paintbrush.

Button   **Cursor**

Airbrush Control Panel

To access Airbrush Control Panel, double-click on the [Airbrush Button](#).

Fill Tool

You access the Fill Tool by clicking on its button in the Paint Toolbox. The image cursor will change to a tipping pitcher.

Button

Cursor

Fill Tool Control Panel

To access Fill Tool Control Panel, double-click on the [Fill Tool Button](#).

Pen

You access the Pen by
clicking on its button in the
Paint Toolbox. The image
cursor will change to a pen.

Button　　**Cursor**

Pen Control Panel

To access Pen Control Panel,
double-click on the [Pen Button](#).

Pencil

You access the Pencil by clicking on its button in the Paint Toolbox. The image cursor will change to a pencil.

Button   **Cursor**

Pencil Control Panel

To access Pencil Control Panel, double-click on the [Pencil Button](#).

Pencil	
Size	**Style**
2	Square
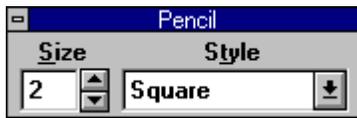
Marker

You access the Marker by clicking on its button in the Paint Toolbox. The image cursor will change to a marker.

Button　　**Cursor**

Marker Control Panel

To access Marker Control Panel,
double-click on the [Marker Button](#).

Crayon

You access the Crayon by clicking on its button in the Paint Toolbox. The image cursor will change to crayon.

Button   **Cursor**

Crayon Control Panel

To access Crayon Control Panel, double-click on the [Crayon Button](#).

Chalk

You access the Chalk by clicking on its button in the Paint Toolbox. The image cursor will change to a piece of chalk.

Button

Cursor

Chalk Control Panel

To access Chalk Control Panel,
double-click on the [Chalk Button](#).

Charcoal

	Button	**Cursor**

You access the Charcoal by clicking on its button in the Paint Toolbox. The image cursor will change to a piece of charcoal.

Charcoal Control Panel

To access Charcoal Control Panel, double-click on the [Charcoal Button](#).

Swap Brush

	Button	**Cursor**
You access the Swap Brush by clicking on its button in the Paint Toolbox. The image cursor will change to an eraser.		

Swap Brush Control Panel

To access Swap Brush Control Panel, double-click on the [Swap Brush Button](#).

Undo Brush

You access the Undo Brush by clicking on its button in the Paint Toolbox. The image cursor will change to an eraser.

Button   **Cursor**

Undo Brush Control Panel

To access Undo Brush Control Panel, double-click on the [Undo Brush Button](#).

Text Tool

You access the Text Tool by
clicking on its button in the Paint
Toolbox. The image cursor will
change to crosshairs with a
trailing "T".

Button   **Cursor**

Add Text Dialog Box

Add Text

Font:

MS Dialog

- **MS Dialog**
- MS Dialog Light
- MS LineDraw
- MS Sans Serif
- MS Serif
- MS SystemEx
- MT Extra
- Penguin
- Playbill

Font Style:

Bold

- **Bold**
- Bold Italic

Size:

8

- 6
- **8**
- 10

Text Effects

- ☐ Stri̱keout
- ☐ U̱nderline

Special Effects

- ☒ AntiAlias
- ☐ Sha̱dow
- ☐ Ṟotate 90 Degrees

Sample of Font

Paint Shop Pro

Ṯext:

[OK] [Cancel] [H̱elp]
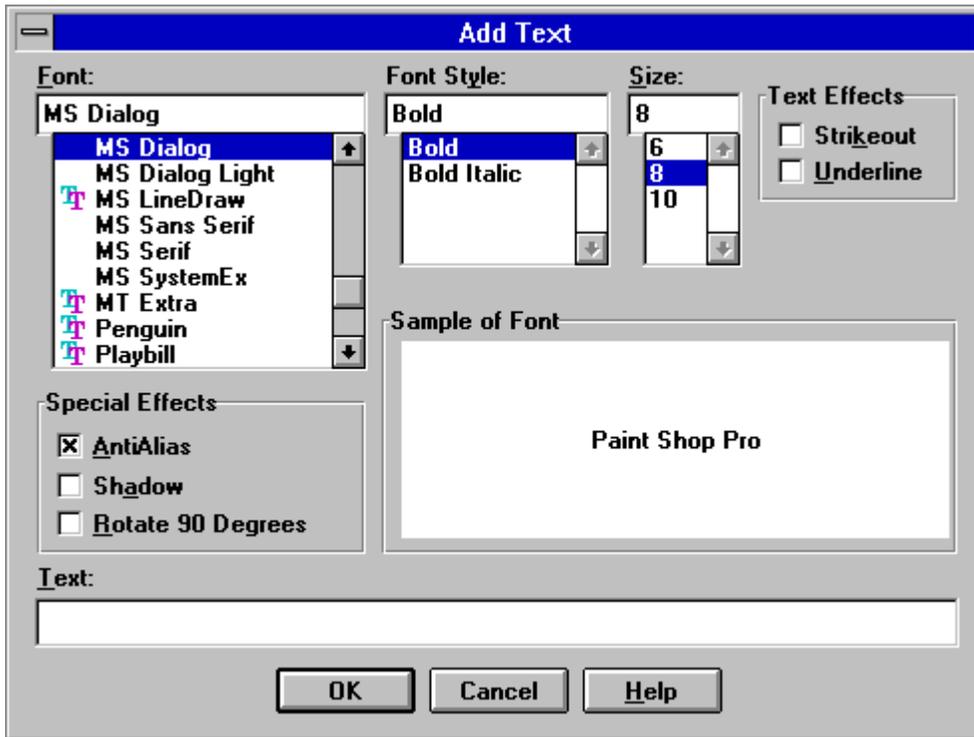
Font Combo Boxes
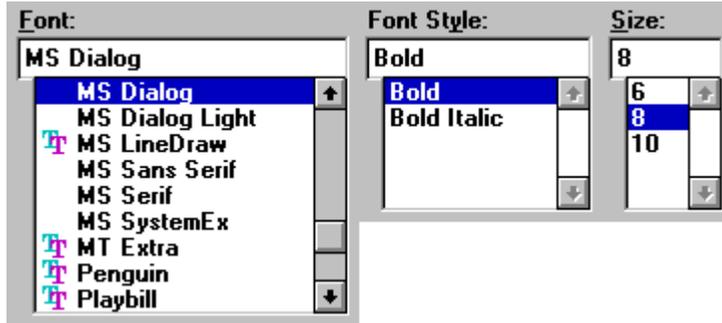
⊍ Click on its entry in the list section of the appropriate combo box. Use the scroll bar to move through the list.

⌨ Press <Alt> plus the combo box's underlined letter (<F>, <Y>, or <S>) to access the text section of the combo box, then type your selection. If the entry is available, Paint Shop Pro will highlight it in the list. You can use the cursor keys to move through the list.

Text Effects Check Boxes
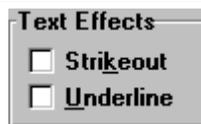
Text Effects

☐ Stri<u>k</u>eout

☐ <u>U</u>nderline

To turn a text effect on or off:

⌣ Click on the effect's title or its check box.

⌨ Press <Alt> plus the underlined letter in the effect's title.

AntiAlias Effect

Bitmapped text is created by assembling square pixels, which can create jagged characters, especially at larger font sizes. The AntiAlias effect corrects for "the jaggies" by using shades of the text's color to soften the characters' edges.

AntiAlias Effect: With & Without

A A

Anti-aliasing is only available for 256 color grey scale and for color depths greater than 256.

▶ Increasing an Image's Color Depth

Shadow Effect

The Shadow Effect creates the impression that the letters are slightly above the page and are illuminated from above and to the left. The shadow appears in the current background color.

Shadow Effect

S

Rotate 90 Degrees Effect

The Rotate 90 Degrees effect spins the text 90° counter-clockwise from the regular horizontal position.

Rotated Text

Sideways

Special Effects Check Boxes
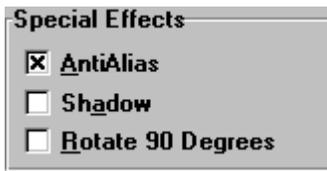
Special Effects

☒ AntiAlias
☐ Shadow
☐ Rotate 90 Degrees

To turn a text effect on or off:

⌣ Click on the effect's title or its check box.

⌨ Press <Alt> plus the underlined letter in the effect's title.

Line Tool

You access the Line Tool by clicking on its button in the Paint Toolbox. The image cursor will change to line.

Button   **Cursor**

Line Tool Control Panel

To access Line Tool Control Panel,
double-click on the [Line Tool
Button](#).

Hollow Rectangle Tool

You access the Hollow Rectangle Tool by clicking on its button in the Paint Toolbox. The image cursor will change to an empty box.

Button

Cursor

Hollow Rectangle Tool Control Panel

To access Hollow Rectangle Tool Control Panel, double-click on the [Hollow Rectangle Tool Button]().

Solid Rectangle Tool

You access the Solid Rectangle Tool by clicking on its button in the Paint Toolbox. The image cursor will change to solid square.

Button

Cursor

Hollow Oval Tool

You access the Hollow Oval Tool by clicking on its button in the Paint Toolbox. The image cursor will change to an empty circle with trailing crosshairs.

Button   **Cursor**

Hollow Oval Tool Control Panel

To access Hollow Oval Tool Control Panel, double-click on the [Hollow Oval Tool Button](#).

Oval
Width
1

Solid Oval Tool

You access the Solid Oval Tool by clicking on its button in the Paint Toolbox. The image cursor will change to solid circle with trailing crosshairs.

Button   **Cursor**

Smooth Brush

	Button	**Cursor**

You access the Smooth Brush by clicking on its button in the Paint Toolbox. The image cursor will change to teardrop.

Smooth Brush Control Panel

To access Smooth Brush Control Panel, double-click on the [Smooth Brush Button.](#)

Sharpen Brush

You access the Sharpen
Brush by clicking on its
button in the Paint Toolbox.
The image cursor will
change to triangle.

Button   **Cursor**

Sharpen Brush Control Panel

To access Sharpen Brush Control Panel, double-click on the [Sharpen Brush Button](#).

Size	Strength	Style
10	128	Square

POPS: TBSELECT.DOC

Color Selector Tool

You access the Color Selector Tool by clicking on its button in the Select Toolbox. The image cursor will change to an eyedropper.

Button   **Cursor**

Magnifier Tool

You access the Magnifier Tool by clicking on its button in the Select Toolbox. The image cursor will change to a magnifying glass.

Button   **Cursor**

Image Mover Tool

You access the Image Mover Tool by clicking on its button in the Select Toolbox. The image cursor will change to a hand.

Button

Cursor

Rectangle Selector Tool

	Button	Cursor
You access the Rectangle Selector Tool by clicking on its button in the Select Toolbox. The image cursor will change to crossharis with a trailing square.		

Oval Selector Tool

You access the Oval Selector Tool
by clicking on its button in the
Select Toolbox. The image cursor
will change to crosshairs with a
trailing circle.

Button   **Cursor**

Oval Selection's "Corners"

Selection Adjuster Tool

You access the Selection Adjuster Tool by clicking on its button in the Select Toolbox. The image cursor will change to a four-headed arrow.

Button   **Cursor**

Cloner Tool

You access the Cloner Tool by clicking on its button in the Select Toolbox. The image cursor will change to a four-headed arrow.

Button

Cursor

Lasso Tool

You access the Lasso Tool by clicking on its button in the Select Toolbox. The image cursor will change to crosshairs with a trailing lasso.

Button   **Cursor**

Crossed Boundary
(Example)

selection
includes
both areas

Magic Wand Dialog Box

Magic Wand Tool

You access the Magic Wand Tool by clicking on its button in the Select Toolbox. The image cursor will change to crosshairs with a trailing wand.

Button   **Cursor**

Color Tools

Foreground Color
Double-click to change →

Background Color
← Double-click to change

Color Reverse
Double-click to reverse foreground
and background colors
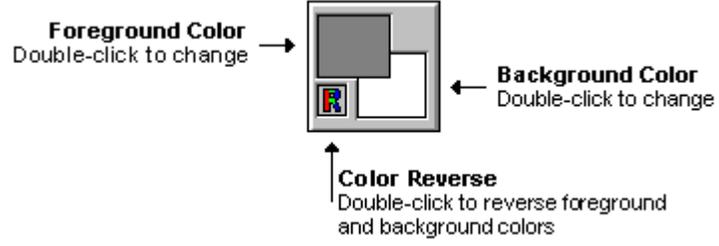
POPS: VIEW.DOC

MDI Child Windows

In Windows programming parlance, Image Windows are known as MDI Child Windows, or as document windows. MDI stands for Multiple Document Interface, which means that the application can open more than one file at a time.

Child windows are subordinate to and controlled by another window. A window that has "children" is called a parent window. Paint Shop Pro's Main Window is an example of a parent window.

Titlebar Text Display

The titlebar text display shows the image file's name and its current magnification. If a mask is attached to the image, an M will appear after the magnification level.

▶ [Zooming In and Out](#)

▶ [Masks](#)

Resizable Border

You can use the mouse to resize an Image Window by grabbing and dragging its border.

▶ [Resizing a Window](#)

Image Area

The image area is where you do your work. It's an Image Window's equivalent of the Main Window's [Workspace](#).

▸ [Basic Image Editing](#)

POPS: X-GLOSS.DOC

Active Colors

There are two active colors, the foreground color and the background color. You can select the active colors using the Color Tools, which are grouped at the bottom of the Select Toolbox, or you can use the Color Selector to select the active colors directly from an image.

When you're using the Paint Tools, the foreground color is activated by the [primary mouse button](#), and the background color is activated by the [secondary mouse button](#). The background color is also the fill color for new images.

▸ [Color Selector](#)

[Color Tools](#)

Color Depth

The number of colors that an image file's format can record. Typically 2, 16, 256, or 16.7 million. Images that can contain 16.7 million colors are commonly referred to as "16 million color images".

Primary Mouse Button

On a two-button mouse, the primary button is the one that you use more often. For most users, it's the left button. If you're left-handed, your buttons may be reversed, in which case the primary button would be on the right.

Secondary Mouse Button

On a two-button mouse, the secondary button is the one that you use less often. For most users, it's the right button. If you're left-handed, your buttons may be reversed, in which case the secondary button would be on the left.

POPS: X-COLORS.DOC

Histogram Window (Example)

Example
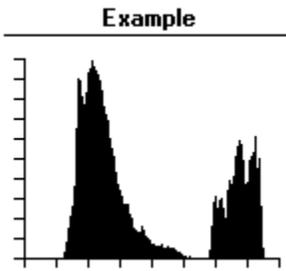
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You can purchase Jasc products from the vendor of your choice. To see a vendor's order form, click on their name:

Vendor	Location
Budgetware	Australia
Pro Soft	Denmark
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BroCo Software	Nederland
Personal Data Factory	Japan
Jasc, Inc.	USA

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- You will receive 100 WMF clip art images free when you purchase Jasc Media Center.

Related Topics:
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Shipping/Handling (Outside of Austrailia)	$15.00 Australian	_____
TOTAL		_____

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P.O. Box 496
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Australia

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Adresse: _____

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Paint Shop Pro & Media Center	738,00 kr	738,00 kr
Forsendelse	20,00 kr	
Forsendelse incl. opkrav.		50,00 kr.
MOMS (p.t 25%)	_____ kr	
Total	_____ kr	_____ kr

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You can order from Digital Workshop by payment with cheque or credit card (American Express, MasterCard and Visa). The numbers for ordering are: Voice (0295) 258335 or FAX (0295) 254590

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Paint Shop Pro and Jasc Media Center	£ 64.95	_____	£ _____
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Shipping/Handling	£ 2.50		£ _____
Total			£ _____

***The prices here are discounted off the suggested retail price.   This discount is in recognition that our shareware users should enjoy the savings we all enjoy in the cost of the software.

Make cheques payable to: Digital Workshop

Mail to: Digital Workshop
First Floor, 8 West Bar
Banbury, Oxon

OX16 9RP England

WindowShare (France)

Il faut claquer le bouton "Print" au dessus pour imprimer cette fiche.

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** Paint Shop Pro & Jasc Media Center **

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Paint Shop Pro est désormais livré avec 30 images de qualité professionnelle au format JPEG.
Jasc Media Center est livré avec 100 images de qualité professionnelle au format WMF.

Quantité	Nom du produit	Prix Unitaire H.T.	Prix Unitaire TTC	Total Produit
_____	Paint Shop Pro	420.75 FF	499 FF	_____
_____	Jasc Media Center	252.10 FF	299 FF	_____
_____	Paint Shop Pro & Jasc Media Center	547.20 FF	649 FF	_____
	Port			00
	Total Général			_____

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_____ _____ _____ _____ Exp. : _____ /_____

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VERVALDATUM

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372 JAPAN.

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Minnetonka, MN 55343   USA

Verlag Gisela Lakies (Deutschland)

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In Deutschland, Österreich und der Schweiz wird eine deutsche Version von Paint Shop Pro und von Jasc Media Center als   Standardsoftware mit deutschsprachigen Handbüchern angeboten. Das Handbuch enthält wichtige Informationen und Tabellen, die zur Nutzung der gesamten Leistungsfähigkeit von Paint Shop Pro oder Jasc Media Center unentbehrlich sind.

Im Kaufpreis ist die kostenlose Benutzung der Supporthotline bei auftretenden Problemen enthalten. Bestellungen können per Verrechnungsscheck, VISA-Card, Kreditkarte oder nach tel. Absprache per Nachnahme oder Rechnung erfolgen. Bezugsadresse (auch für Händler):

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___ Paint Shop Pro (deutsche Version)   145,00 DM   _____ DM
___ Jasc Media Center (englische Version)   65,00 DM   _____ DM
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___ Paint Shop Pro und Jasc Media Center (engl.)   140,00 DM   _____ DM
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SECTION: Products

Jasc Products

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- [Paint Shop Pro](#)
- [Jasc Media Center](#)
- [Professional Capture Systems](#)

Distributed by Jasc:

- [SkyMap](#)
- [CDPlayer](#)
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Related Topics:

- [Purchasing Jasc Products](#)

Paint Shop Pro

Paint Shop Pro is a powerful Windows graphics program that provides Painting, Photo Retouching, Image Enhancement, Editing and Color Enhancement functions. An Image Browser, Batch Image Conversion, Image Viewing and Printing, Screen Capture and Scanner Support (TWAIN Complient) are also provided. Enhance your other applications with Paint Shop Pros OLE support.

Painting
You can use one of 8 different brushes including pen, pencil, marker, crayon, chalk, charcoal, airbrush, and paintbrush to edit an existing or create your own images. A user defined brush allows you to combine elements of any of the other brushes to create a unique effect, while the fill tool allows easy filling of large areas. No need to worry about errors since the undo brush allows mistakes to be easily corrected. Other features include:

- Color replacer brush allows easy replacement of one color with another.
- Filled and hollow rectangle and oval tools allow simple creation of objects.
- Variable width line tool allows for quick creation of lines.
- Text tool allows high quality anti-aliased type to be added to images.

Photo Retouching
Work on existing images with the clone brush for easy duplication of image areas, or with the magic wand for quick selection of similar areas for manipulation. Paint Shop Pro also provides a push brush for easy touch-up, a sharpen brush to enhance detail in small areas, and a smooth brush for easy blending. You can also use the eye dropper to pick up and analyze a color from an image.

Image Enhancement and Editing
Paint Shop Pro allows you to perform flip, mirror, rotate (by 1 degree increments), and crop operations, plus the ability to add borders and frames, or resize and resample your image. Paint Shop Pro ships with 20 standard image filters plus any user definable filters you create. Also included are 12 image deformations, including skew and circle. Paint Shop Pro also includes filter and deformation browsers to allow quick previews of their effects. Additional functions include:

- Support for 3rd party plug-in filters.
- All effects may be applied to a selected area.
- Paste functions allow sections of one image to be placed into any other.

Color Enhancement
You can use Paint Shop Pro to alter the hue, saturation, lightness and RGB levels. Adjustments to brightness and contrast and changes to highlight, shadow, and midtone can also be made. Palette editing and direct palette mapping allowing global changes to multiple images are also available. Gamma correction and color reduction are also provided. Other features include:

- Colorize to add overall hue to greyscale images.
- Histogram to aid in color adjustments.
- Color enhancements may be made to selected areas (24 bit images only).

Image Browser
The browser, using thumbnails, allows you to visually search directories for those easy to lose images. The thumbnails may optionally be saved to specific directories for super-quick access. You can select multiple images to be loaded directly into Paint Shop Pro for editing. Complete file management functions allow you to easily keep track of images.

Batch Conversion
When it comes to converting a large number of images from one format to another, Paint

Shop Pro has made it as easy as possible. All messages during the conversion are sent to the log window for unattended operation, and the log may be saved to a file for later inspection.

Supported File Formats
BMP/DIB/RLE (Windows), BMP/DIB (OS/2), *CDR, *CGM, CLP, CUT, *DRW, *DXF, EPS (Write Only), GIF/RLE, *GEM, *HGL, IFF, IMG, JIF/JPG, LBM, MAC, MSP, *PCD (Kodak Photo CD), PCX, *PIC (Lotus), PIC, PBM/PGM/PPM, PSD, RAW, RAS, TIF, TGA, WMF, WPG (Bitmap), *WPG (Vector).
   * = Read Only

Winner of the Following Awards:
- Shareware Magazine Editor's Choice
- Winner of the Shareware Industry Awards - Best Graphics Application
- Winner of the Ziff Davis Shareware Awards - Graphics

Special Offer!
When you purchase Paint Shop Pro, you can purchase Jasc Media Center at a reduced price.

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Professional Capture Systems

Professional Capture Systems (PCS) allows you to do screen capturing under both Windows and DOS.

The Windows program, JasCapture, allows you to capture a defined area, the full screen, a window, a client area, an object, or a predefined size. The capture can be sent to any combination of the clipboard, printer, and disk. Captures can be saved to BMP, PCX or TIFF. Requires Windows 3.1 or later.

The DOS program, DosCapture, allows you to capture standard and extended VGA text modes and standard VGA graphics modes. Captures are saved to PCX files. DosCapture requires a 286 processor or better and VGA.

Winner: Shareware Magazine Editor's Choice

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Jasc Media Center

Jasc Media Center is designed to be your command center for multimedia file management and manipulation. It contains all the commands you need to manage your multimedia files. Features include:

- Organizing your multimedia files into albums. Arrange the thumbnails using drag and drop or one of many sorting options.
- Catalog multimedia files using keywords and comments for future searches.
- Scan for all the files on your system to hunt down those unneeded, space wasting files.
- View your images full screen or in a configurable slide show.
- Use the slide show option to create transition effects, play an audio CD in the background and associate WAV files with images.
- Activate your favorite editor to edit the files.
- Print your album as a catalog.
- Support for 30 different multimedia file formats.
- Convert your image file to another format.
- Files of an album may come from different directories and different drives. Special support for removable disks and CD Roms allows you to track your multimedia files and have Jasc Media Center tell you which disk you need.
- Move, Copy, or Rename the original multimedia file.

Winner: Shareware Magazine Editor's Choice

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SkyMap

SkyMap is a highly accurate "planetarium" for Windows 3.1. It can draw a map of the sky, as seen from any place on Earth, for any date between 4000 BC and 8000 AD, displaying stars, planets, comets, deep-sky objects, constellation names and figures, and a whole lot more. Detailed information about any object on a map can be obtained simply by clicking on it with the mouse, and high quality charts can be printed on any printer supported by Windows. Pictures of objects, in several formats, can be associated with objects and displayed, either manually or automatically.

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CDPlayer

CDPlayer is an audio CD playing program for Windows and DOS that provides even more functions than a home CD player, including the ability to catalogue and browse through your CD collection. CDPlayer's features include:

- Custom program play
- Single track play
- Shuffle play
- Repeat on any play function
- Fit tracks to time (for tape recording)
- Track skip
- Music search
- Replay track
- Pause
- On screen volume and balance - either using CDPlayer's
- Internal dialogue or running your soundcard mixer program.
- Multiple CD ROM support
- Disc catalogue allowing the storage of the following for each disc: disc name, composer/artist, music type, disc reference, individual track details, word-search browsing
- On screen display of elapsed and remaining time for both the current track and the disc

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Illuminatus

Illuminatus is an impressive new program offering an alternative to both business presentation packages and complex multimedia authoring tools. Illuminatus is a multimedia publisher that works like a frame-based DTP package. Illuminatus produces a standalone interactive multimedia publication which you can publish and distribute on CD or floppy disk. Quickly and easily combine words, pictures, video, animation and sound into exciting interactive multimedia publications of all kinds and publish them on floppy disk or CD Rom. NO PROGRAMMING! NO ROYALTIES!

Features Include:

- Page Options - Double click on your page to edit...

  Background color or picture.

  Timing - control how long the page stays in view.

  Display - control the special effects to bring your page on or take it off again.

- Frame Options - Fill your frames with...

  Background color or picture.

  Slideshows.

  Animation.

  Video.

  Text.

  and add a border.

- Button Options - Program your masterpiece simply by setting the options you need...

  Close the publication.

  Go to another page.

  Run an animation, video or slideshow (and/or stop one).

  Play a sound (or stop one).

  Launch a program or extension.

  Store text on disk (for recording scores/progress etc.).

  Make the button invisible to act as a hot spot.

- Publication Options

  Choose how your publication can be interrupted and protect it with a password to prevent unauthorized closedown. Also choose how your publication closes.

- Installation Options

  Select the size of disk your publication will be distributed on and Illuminatus will divide it up accordingly. Choose an icon for your program, the default directory for your user to store it in and what your publication will be called.

- Slideshows

  Create onscreen slideshows of any size from your graphics files using any special effects at your own speed. You can even create simple animations, message boxes, and text effects with this feature.

- Background Music and Voice Overs

  You can launch music or sound from any page. Narration can play over the op of music and you can use a simple delay option to synchronize events.

- Special Effects

  Cut, Horizontal Blinds, Explode, Swirl In, Swirl Out, Slide Up, Slide Down, Slide Left, Slide Right, Blocks.

- Formats - Illuminatus Supports...
    - BMP, PCX, WMF, CGM, TIF, TGA, GIF, JPG, WPG
    - WAV, MID, RMI
    - AVI, FLC, FLI
- Illuminatus is ideal for creating...
    - Interactive Encyclopedias
    - Disk-based (or CD-ROM) Catalogs
    - Computer Based Training
    - Demos for Shows and Shops
    - Electronic Brochures
    - On-line Books
    - Multimedia Presentations
    - Interactive Entertainment
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