## Dummy Topics

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## Before You Begin

Window:
Main

TOPIC: Overview

## Before You Begin

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## Overview

Paint Shop Pro is a raster format image editing application, a type of software more commonly known as a "painting program". Common examples of raster image formats include the Windows BMP format and the CompuServe GIF format.

## Exiting Paint Shop Pro

To exit Paint Shop Pro, select "Exit" from the File Menu. Paint Shop Pro will close all of its open windows.

TOPIC: Using this Help File

## Before You Begin

Overview Y Using Help Xavigating YTech Support

## Using this Help File

For help using Windows Help, click here. 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. If the current tab set is linked to another tab set, you can jump to the linked set by clicking on the link indicator.

## 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.
- Hypertext is not underlined.

TOPIC: Getting Around

## Before You Begin

Overview Y Using Help Y Navigating \Tech Support
Getting Around
Main Window
Paint Shop Pro's Main Window contains four regions. Each region has specific uses and functions.

- Positioning the Main Window

Tool Windows
There are five types of Tool Windows.

- Controlling the Tool Windows

Image Windows
When you open a file or create a new file, Paint Shop Pro displays the image in an image window. Image windows appear within the Main Window's Workspace.

- Working with Image Windows.

TOPIC: Technical Support

## Before You Begin

/ Overview Y Using Help Y Navigating YTech Support $\backslash$

## Technical Support

This help file and the Paint Shop Pro User's Guide are designed to address the majority of user's questions.

## Solutions to Common Problems

For solutions to common problems, see Troubleshooting.

## Poor Image Display Quality

Most of JASC's Paint Shop Pro technical support calls concern poor image display quality.

## Getting More Help

If the above-mentioned sources fail 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 JASC, Inc.

Paint Shop Pro Main Window Window:

TOPIC: Titlebar

Main Window
/ Titlebar Menubar Workspace Y Status Bar
Titlebar
The Titlebar displays "Paint Shop Pro" and the filename of the active image, if any image files are open.

## Control Icon

At the left end of the Titlebar is the Control Icon, which you use to access the Control Menu (see following section). Double-clicking on the Control Icon closes Paint Shop Pro.

## Control Menu

You open the Control Menu by clicking on the Control Icon. You can use the Control Menu to position the Main Window or to exit Paint Shop Pro.
Window Buttons
The window buttons appear at the right end of the Titlebar. You use the buttons to position the Main Window or to exit Paint Shop Pro.

TOPIC: Menubar

## Main Window

Titlebar Y Menubar Yorkspace Y StatusBar

## Menubar

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

## Please Note:

Menus that are not currently available are temporarily removed from the Menubar. When no images are open, only the File, Edit, View, Capture, and Help Menus are visible.

## Using the Menus

1 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 press <Alt> + <F>.
2 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>. Menu selections that appear in grey are not currently available.

TOPIC: Workspace

## Main Window

Titlebar Y Menubar Yworkspace \ Status Bar

## Workspace

As the name implies, the Workspace is where you do your work. For help locating the Workspace, see the Main Window diagram. When you open a file or create a new file, Paint Shop Pro opens a new image window within the Workspace.

## Maximizing the Workspace: Full Screen Edit

Maximizing the Workspace strips the Main Window of its Titlebar, Menubar, and Statusbar, and expands the Main Window so that it fills the entire screen. To switch between the normal Workspace and its maximized state, you can:

- Select "Full Screen Edit" from the View Menu.
- Press <Shift> + <F>.


## Related Topics

- Full Screen Preview

Search / Full Screen Edit

TOPIC: Status Bar

## Main Window

Titlebar $y$ Menubar $y$ workspace $y$ Status Bar

## Status Bar

The Status Bar appears at the bottom of the Main Window. The Status Bar displays information about images, features, and procedures.

## Paint Shop Pro Main Window

TOPIC: Maximize, Minimize, and Restore

## Positioning the Main Window

Max/Min Moving $Y$ Resizing
Maximize, Minimize, and Restore

- You can maximize, minimize, or restore the Main Window using the window buttons.
- Double-clicking on the text display section of the Titlebar switches the Main Window between its maximized and normal states.

TOPIC: Moving the Main Window

## Positioning the Main Window

Max/Min Y Moving Resizing

Moving the Main Window
To move the Main Window to a different location:
1 Point the cursor at the text display section of the Titlebar.
2 Press and hold the primary mouse button.
3 Drag the window by moving the mouse.
4 Release the mouse button.

TOPIC: Resizing the Main Window

## Positioning the Main Window

Max/Min Y Moving Y Resizing

## Resizing the Main Window

To change the size of the Main Window:
1 Point at a side or corner of the window. The cursor will change to a double-headed arrow. Grabbing a corner moves two sides at once.
2 Press and hold the primary mouse button.
3 Resize the window by moving the mouse.
4 Release the mouse button.

Tool Windows
Window:

TOPIC: Toolbar

## Tool Windows

/ Toolbar $\$ Tool Palette $\$ Style Bar $\backslash D$

## Toolbar

The Toolbar contains five groups of command buttons. The first time you start Paint Shop Pro, the Toolbar appears just below the Menubar. Using a Toolbar button couldn't be easier just click on it.

## Please Note:

Toolbar buttons that are not currently available appear greyed out.

TOPIC: Tool Palette

## Tool Windows

Toolbar Y Tool Palette Style Bar $\backslash D$

## Tool Palette

The first time you start Paint Shop Pro, the Tool Palette appears just below the Toolbar. The Tool Palette contains the following tools:

- Zoom Tool
- Mover Tool
- Selection Tools
- Painting and Drawing Tools

TOPIC: Style Bar

## Tool Windows

Toolbar $Y$ Tool Palette ${ }^{\prime}$ Style Bar $\backslash$

## Style Bar

You use the Style Bar to set parameters for the Tool Palette's active tool.

- Working with Selections
- Painting and Drawing

TOPIC: Color Palette

## Tool Windows

$\triangleleft /$ Color Palette \ Histogram

## Color Palette

The Color Palette contains color selection tools and displays color information.

TOPIC: Histogram Window

## Tool Windows

$\triangleleft /$ Color Palette Y Histogram

## Histogram Window

The Histogram Window displays color component graphs for the active image.
Please Note:
Paint Shop Pro runs faster with the Histogram Window closed, because doesn't have to update the histogram whenever you select an image or edit an image.

## Tool Windows

Window:
How To

TOPIC: Displaying a Tool Window

## Controlling the Tool Windows

Displaying Moving Y Docking

## Displaying a Tool Window

To show or hide a Tool Window, you can select its name from the View Menu, or you can click on the appropriate Toolbar button:

## Tool Window Buttons



TOPIC: Moving a Tool Window

## Controlling the Tool Windows

Displaying Y Moving \ Docking

## Moving a Tool Window

The Tool Windows can be placed anywhere on the screen. To move a Tool Window:
1 Point the cursor at the text area of the window's titlebar, or at the tool window's main panel. Do not point at the control icon or one of the window's buttons.
2 Press and hold the primary mouse button.
3 Drag the window by moving the mouse.
4 Release the mouse button.

TOPIC: Docking a Tool Window

## Controlling the Tool Windows

Displaying Y Moving Y Docking

## Docking a Tool Window

You can dock a Tool Window to a side of the Workspace by positioning it at the Workspace's edge. You can switch back and forth between a Tool Window's floating and docked states by double-clicking on its titlebar or main panel.

- The Toolbar and Tool Palette can be docked to any side.
- The Color Palette can be docked to the left or right side.
- The Style Bar can be docked to the top only. You can remove the control labels so that the Style Bar docks more neatly.
- The Histogram Window cannot be docked.

Window: How To

TOPIC: Contacting JASC, Inc.

| Contacting JA Via | Inc. At |
| :---: | :---: |
| Internet | techsup@jasc.com |
| Web Site | http://www.jasc.com |
| CompuServe ${ }^{\circledR}$ | GO JASC |
| America Online | Keyword JASC |
| Microsoft Network | Find JASC |
| BBS | (612) 930-3516 |
| Telephone | (612) 930-9171 |
| Mail | JASC, Inc. <br> P.O. Box 44997 <br> Eden Prairie, MN <br> 55344 |

## Opening Image Files

Window:
Main

TOPIC: Opening Image Files Overview

## Opening Image Files

Overview $\backslash$ Open Dialog Box $\$ MRUList $\backslash D$
Opening Image Files Overview
Paint Shop Pro supports a wide range of file formats. You can open image files:

- Using the Open Dialog Box
- Using the Most-Recently Used List
- Using the Browser
- Using My Computer or the Windows Explorer
- Using Drag-and-Drop
- Using the Run Dialog Box

TOPIC: Using the Open Dialog Box

## Opening Image Files

Overview Yopen Dialog Box MRUList $\backslash D$

## Using the Open Dialog Box

The Open Dialog Box is a standard Windows File Open Dialog Box with a few special features.

- Step-by-Step Instructions

Viewing Image Information
The Image Information Group Box displays basic image data for the selected file. To see more information, click on the Details Button. Paint Shop Pro will open the File Information Dialog Box.

## Browsing the Selected Folder

To browse the selected folder's image files, click on the Browse Button. Paint Shop Pro will activate the Browser.

TOPIC: Using the Most-Recently Used List

## Opening Image Files

Overview $Y$ Open Dialog Box $Y$ MRU List $\$

## Using the Most-Recently Used List

The Most-Recently Used List contains the names of the files that have been opened most recently by Paint Shop Pro. The list appears at the bottom of the File Menu, just above the "Exit" selection. The number of files that can appear on the list is controlled by the Recent File Listing Option.

## Please Note:

If you have just installed Paint Shop Pro, the list will be empty.
You select a file from the list by clicking on it. 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 a format-specific dialog box requesting additional information.

TOPIC: Using My Computer or the Windows Explorer

## Opening Image Files

\/My Computer $\$ Drag-and-Drop $Y$ Run Dialog Box

## Using My Computer or the Windows Explorer

If the file's extension is associated with Paint Shop Pro, you can open the file by doubleclicking on it. Associated file types use the Paint Shop Pro image file icon. When you double-click on the 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 a format-specific dialog box requesting additional information.

TOPIC: Using Drag-and-Drop

## Opening Image Files

$\checkmark$ My Computer Y Drag-and-Drop \ Run Dialog Box

## Using Drag-and-Drop

You can open image files by "dragging" them from My Computer or the Windows Explorer and "dropping" them on any of the following:

- Paint Shop Pro's Main Window
- Paint Shop Pro's executable file (PSP.ExE)
- A shortcut to Paint Shop Pro's executable file


## Step-by-Step

The steps show here walk you through dragging-and-dropping files to the Main Window. The process for dragging-and-dropping to PSP.EXE or a shortcut is essentially the same.

- Step-by-Step Instructions

TOPIC: Using the Run Dialog Box

## Opening Image Files

/ My Computer Y Drag-and-Drop Y Run Dialog Box

## Using the Run Dialog Box

You can add filenames to the command line after the Paint Shop Pro executable filename in Windows' Run Dialog Box. 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 a format-specific dialog box requesting additional information.


## Using the Open Dialog Box

 Window:
## Steps

TOPIC: Step 1: Access the Open Dialog Box

## Using the Open Dialog Box

## Step 1: Access the Open Dialog Box

There are two ways to access the Open Dialog Box:

- You can select "Open" from the File Menu.
- You can click on the Open Button in the Toolbar.

TOPIC: Step 2: Select the File's Folder

## Using the Open Dialog Box

## Step 2: Select the File's Folder

You select a folder using the following controls:

- Look In Drop Down Box
- Up One Level Button
- Contents List Box

TOPIC: Step 3: Select the File Type

## Using the Open Dialog Box

## Step 3: Select the File Type

You select the file type from the File Type Drop Down Box.
1 Click on the drop down box. Paint Shop Pro will open it.
2 Click on the file type that you want to select. If the file type isn't visible, use the scrollbar to move through the list.

TOPIC: Step 4: Select the File

## Using the Open Dialog Box

## Step 4: Select the File

Click on the file that you want to select in the Contents List Box. If the file list is too long to fit in the box, use the scrollbars to move through it.

TOPIC: Step 5: Check the File Information (Optional)

## Using the Open Dialog Box

## Step 5: Check the File Information (Optional)

The Image Information Group Box displays basic image data for the selected file. To see more information:

1 Click on the Details Button. Paint Shop Pro will open the File Information Dialog Box, which lists various facts about the selected file.
2 When you're done reviewing the information, click on the OK Button.

TOPIC: Step 6: Select the Open Button

## Using the Open Dialog Box

## Step 6: Select the Open Button

To open the file, click on the Open Button. 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 a format-specific dialog box requesting additional information.

Using Drag-and-Drop Window:

## Steps

TOPIC: Step 1: Position the Windows

## Using Drag-and-Drop

## Step 1: Position the Windows

- Position the My Computer or Windows Explorer window and the Paint Shop Pro Main Window so that you can see them both.
- The My Computer or Windows Explorer 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.

TOPIC: Step 2: Find the File

## Using Drag-and-Drop

## Step 2: Find the File

Find the file in My Computer or the Windows Explorer. For further assistance, see the application's documentation.

TOPIC: Step 3: Grab the File

## Using Drag-and-Drop

## Step 3: Grab the File

1 Point at the file with your mouse.
2 Press and hold the primary mouse button.

TOPIC: Step 4: Drag the File

## Using Drag-and-Drop

## Step 4: Drag the File

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

TOPIC: Step 5: Drop the File

## Using Drag-and-Drop

## Step 5: Drop the File

You drop the file by releasing the mouse button. The Paint Shop Pro Main Window will move to the foreground, and if Paint Shop Pro 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 a format-specific dialog box requesting additional information.


## Creating Image Files

Window:
Main

TOPIC: Creating Image Files Overview

## Creating Image Files

Overview B Blank X Duplicate Y Capture Y TWAIN

## Creating Image Files Overview

Paint Shop Pro provides five ways to create image files:

- Creating an Empty Image
- Duplicating an Image
- Capturing an Image from the Screen
- Using a TWAIN-Compliant Device
- Pasting from the Clipboard

TOPIC: Creating an Empty Image

## Creating Image Files

Overview Blank Duplicate Capture TWAIN

## Creating an Empty Image

To create a new, empty image, you can:

* Select "New" from the File Menu
- Click on the New Button in the Toolbar.

Paint Shop Pro will open the New Image Dialog Box. For more help, see:

- Step-by-Step Instructions

TOPIC: Duplicating an Image

## Creating Image Files

Overview Y Blank YDuplicate \ Capture Y TWAIN

## Duplicating an Image

To copy an entire image:
1 Open the image file, or select the image's window.
2 Select "Duplicate" from the Window Menu. Paint Shop Pro will copy the image to a new image window.

TOPIC: Capturing Images From the Screen

## Creating Image Files

Overview Y Blank Y Duplicate Y Capture X TWAIN

## Capturing Images From the Screen

The Screen Capture Function lets you copy all or part of your computer screen into Paint Shop Pro. Images captured from the screen are commonly called "screen snaps".

## Example

All of the pictures of Paint Shop Pro's features that appear in this help file were created using the Screen Capture Function.

## Creating Screen Captures

You have to setup the Screen Capture Function before you use it.

- Setting Up a Screen Capture
- Performing a Screen Capture

TOPIC: Using a TWAIN-Compliant Device

## Creating Image Files

Overview Y Blank Y Duplicate Y Capture Y TWAIN

## Using a TWAIN-Compliant Device

Paint Shop Pro supports TWAIN-compliant image devices, such as scanners and digital cameras.

- Selecting a TWAIN-Complaint Device
- Acquiring an Image

Paint Shop Pro and TWAIN_32.DLL
If you have installed a TWAIN-compliant device, but "Acquire" and "Select Source" on the File Menu are greyed out, see Operations.

Creating an Empty Image Window:

TOPIC: Step 1: Open the New Image Dialog Box

## Creating an Empty Image

## Step 1: Open the New Image Dialog Box

There are two ways to open the New Image Dialog Box:

* You can select "New" from the File Menu
- You can click on the New Button in the Toolbar.

TOPIC: Step 2: Set the Width and Height

## Creating an Empty Image

## Step 2: Set the Width and Height

Use the Width and Height Spin Controls to set the image's dimensions in pixels.

- Using Spin Controls

TOPIC: Step 3: Select the Background Color

## Creating an Empty Image

## Step 3: Select the Background Color

When the new image first opens, it will be filled with the selected background color. You select the color from the Background Color Drop Down Box. The first two selections are the current active colors.

1 Click on the drop down box to open it.
2 Click on the color you want to select. If the color isn't visible, use the scrollbar to move through the list.

TOPIC: Step 4: Select the Image Type

## Creating an Empty Image

## Step 4: Select the Image Type

The image type is the new image's color depth. You select the image type from the Image Type Drop Down Box:

1 Click on the drop down box to open it.
2 Click on the image type you want to select.

TOPIC: Step 5: Check the Memory Required

## Creating an Empty Image

## Step 5: Check the Memory Required

At the bottom of the New Image Dialog Box is a text display that indicates how much memory (RAM) is required to create the new image. If you don't have at least as much memory as is indicated here, select one or both of the following:

- Lower color depth

TOPIC: Step 6: Select the OK Button

## Creating an Empty Image

## Step 6: Select the OK Button

Click on the OK Button. One of two things will happen:

- Paint Shop Pro will open a new image window filled with the selected background color.
- Paint Shop Pro will present a prompt stating that there is insufficient memory to create the image. Click on the OK Button. To create an image, you will have to select a lower color depth and/or smaller dimensions.


## Setting Up a Screen Capture

 Window:TOPIC: Step 1: Access the Capture Setup Dialog Box

## Setting Up a Screen Capture

## Step 1: Access the Capture Setup Dialog Box

Select "Setup" from the Capture Menu. Paint Shop Pro will open the Capture Setup Dialog Box.

TOPIC: Step 2: Choose a Capture Type

## Setting Up a Screen Capture

## Step 2: Choose a Capture Type

The capture type determines which area of the screen will be copied. You select a capture type by clicking on it in the Capture Group Box.

Type
Area
Full Screen
Client Area Copy the input area of the active window
Window Copy the entire active window
Object Copy a window feature or group of features

TOPIC: Step 3: Select the Activation Method

## Setting Up a Screen Capture

## Step 3: Select the Activation Method

You select an activation method from the Activate Capture Group Box. The activation method determines how the screen captures are initiated.

- $\frac{\text { Right Mouse Cli }}{\text { - Hot Key Method }}$

TOPIC: Step 4: Set the Include Cursor Option

## Setting Up a Screen Capture

## Step 4: Set the Include Cursor Option

To include the cursor in the screen capture, mark the checkbox labeled "Include cursor". This option is not available for area captures.

TOPIC: Step 5: Set the Multiple Captures Option

## Setting Up a Screen Capture

## Step 5: Set the Multiple Captures Option

When the checkbox labeled "Multiple captures" is:
Empty Paint Shop Pro is automatically reactivated when you perform a screen capture.
Filled You can continue performing screen captures until you manually reactivate Paint Shop Pro.

TOPIC: Step 6: Select the OK Button / Capture Now Button

## Setting Up a Screen Capture

## Step 6: Select the OK Button / Capture Now Button

- Click on the OK Button to close the dialog box and save the capture setup settings. You can now perform a screen capture using the selected settings.
- Click on the Capture Now Button to close the dialog box, save the capture setup settings, and start taking screen snaps. Continue at Step 4 under "Performing a Screen Capture".


## Performing a Screen Capture

TOPIC: Step 1: Setup the Screen

## Performing a Screen Capture

## Step 1: Setup the Screen

- If you are copying part of an application, start the application now.
- If you want to copy the whole screen, arrange the open windows as you want them to appear in the captured image.

TOPIC: Step 2: Activate Paint Shop Pro

## Performing a Screen Capture

Step 2: Activate Paint Shop Pro
Make Paint Shop Pro the active application.

TOPIC: Step 3: Select "Start" From the Capture Menu

## Performing a Screen Capture

Step 3: Select "Start" From the Capture Menu
Select "Start" From the Capture Menu. Paint Shop Pro will minimize automatically.

TOPIC: Step 4: Select the Window / Position the Cursor

## Performing a Screen Capture

Step 4: Select the Window / Position the Cursor
If you are capturing:

## Area or Object

Position the cursor over the area or object that you want to capture. If you are capturing an object and using the Include Cursor Option, position the cursor as you want it to appear in the screen snap.

Window or Client Area
Select the window (or the window that contains the client area) that you want to capture. If you are using the Include Cursor Option, position the cursor as you want it to appear in the screen snap.

## Full Screen

If you are using the Include Cursor Option, position the cursor as you want it to appear in the screen snap.

TOPIC: Step 5: Activate the Capture

## Performing a Screen Capture

## Step 5: Activate the Capture

How you activate the capture depends on what method you selected.
Method To Activate
Right Mouse Click Click with the secondary mouse button.
Hot Key Press the hot key that you selected when you setup the screen capture function.
Timer Activates automatically. Paint Shop Pro will beep when it performs a capture.

TOPIC: Step 6: Complete the Screen Capture

## Performing a Screen Capture

## Step 6: Complete the Screen Capture

What happens next depends on the type of capture you are creating:

- If you are capturing the full screen, a client area, or a window, Paint Shop Pro will copy the captured screen area to a new image window.
- If you are capturing an area or an object, you must specify the area or object that you want to capture.


## Complete the Screen Capture

 Window:How To

TOPIC: Capturing an Area

## Capturing an Area

The cursor will change to crosshairs.
1 Click on one corner of the area you want to select.
2 Click on the area's opposite corner. Paint Shop Pro will copy the captured screen area to a new image window.

TOPIC: Capturing an Object

## Capturing an Object

The object under the cursor will be highlighted.
1 Move the cursor until the correct object is highlighted.
2 Click on the object. Paint Shop Pro will copy the captured object to a new image window.

Window: Options

TOPIC: Right Mouse Click Method

## Activation Methods:

C
Right Mouse Click Method
C
Hot Key Method
C
Timer Method
You can activate the screen capture using the secondary mouse button. Click on the option labeled "Right mouse click".

TOPIC: Hot Key Method

## Activation Methods:

C
Right Mouse Click Method
C
Hot Key Method
C
Timer Method
You can specify a function key or a function key combination that will activate the screen capture.

1 Click on "Hot Key".
2 Click on the Hot Key Drop Down Box to open it.
3 Click on the hot key that you want to use.

TOPIC: Timer Method

## Activation Methods:

C
Right Mouse Click Method
C
Hot Key Method
c
Timer Method
You can specify an interval in seconds between the time that the capture is initiated and the time that it is performed.

1 Click on "Delay timer".
2 Press <Tab> to access the text box.
3 Enter the number of seconds.

TWAIN
Window:

TOPIC: Selecting a TWAIN-Complaint Device

## Using a TWAIN-Compliant Device

Select $\quad$ Acquire

## Selecting a TWAIN-Complaint Device

To select a TWAIN-complaint device for acquiring images:
1 Choose "Select Source" from the File Menu. Paint Shop Pro will tell twain_32.DLL to open its Select Source Dialog Box.
2 Highlight the device that you want to use.
3 Click on the OK Button.

TOPIC: Acquiring an Image

## Using a TWAIN-Compliant Device

Select $Y$ Acquire

## Acquiring an Image

To acquire an image using the selected TWAIN-complaint device:
1 Select "Acquire" from the File Menu. Paint Shop Pro will tell Twain_32.DLL to open the device software's interface.
2 Use the interface to set the image acquisition options. For help using the interface, consult its on-line help or the device software's help file. When the device and its software finish processing the image, it will be sent to Paint Shop Pro.

Managing Image Files
Window:
Main

TOPIC: Managing Image Files Overview

## Managing Image Files

Overview \ Save Y Revert Y Close Y Copy $\backslash D$
Managing Image Files Overview
You can use Paint Shop Pro to perform the following image file management tasks:

- Saving a File
- Reverting to the Saved File

Closing Files
Copying Files
Converting Files
Printing a File
Viewing Image Information
Deleting a File

TOPIC: Saving a File

## Managing Image Files

Overview Y Save \ Revert Y Close Y Copy $\backslash D$

## Saving a File

To save the changes to the active image, you can:

- Select "Save" from the File Menu.
- Click on the Save Button in the Toolbar.

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

- Step-by-Step Instructions

TOPIC: Reverting to the Saved File

## Managing Image Files

Overview y Save $Y$ Revert $\$ Close $Y$ Copy $D$

## Reverting to the Saved File

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

- To abandon all of your changes and revert to the saved file, click on the Yes Button.
- To keep your changes, click on the No Button.

TOPIC: Closing Files

Managing Image Files
$/$ Overview $y$ Save $y$ Revert $y$ Close $Y_{\text {Copy }} D$

## Closing Files

You can close a single file, or you can close all of the open files.

## Closing a Single File

1 Select the file's image window.
2 Select "Close" from the File Menu, or click on the image window's Close Button. If you have edited the file and haven't saved it, you will be prompted to confirm your decision.

## Closing All Files

To close all open files, select "Close All" from the Window Menu. The Window Close All Option determines whether you will be prompted to save any new or edited files. Paint Shop Pro will also close the Browser Window.

TOPIC: Copying Files

## Managing Image Files

Overview y Save $y$ Revert $y$ Close $y$ Copy $D$

## Copying Files

There are three ways to copy a file to a different file format:

- Select "Save As" from the File Menu. Paint Shop Pro will open the Save As Dialog Box.

Use the dialog box to save the image under a new filename.

- You can copy an image to a new image window.
- You can use the Browser to copy one or more files to a different folder.

TOPIC: Converting Files

## Managing Image Files

$\checkmark /$ Convert Y Print Y View Info Y Delete

## Converting Files

There are two ways to convert files to different file formats:

## Using the Save As Dialog Box

You can use the Save As Dialog Box to save a file in a different format.
1 Select "Save As" from the File Menu. Paint Shop Pro will open the Save As Dialog Box.
2 When you get to Step 2, select the new format. Paint Shop Pro will change the image you're editing to match the selected format's color depth.

## Using the Batch Conversion Utility

You can use the Batch Conversion Utility to convert a group of files to a single format.

TOPIC: Printing a File

## Managing Image Files

$\checkmark /$ Convert Y Print Y View Info Y Delete

## Printing a File

You print the active image from the Print Dialog Box. You can preview a file before printing it.

- Step-by-Step Instructions

TOPIC: Viewing Image Information

## Managing Image Files

$\checkmark$ Convert Y Print YView Info \ Delete

## Viewing Image Information

The Image Information Dialog Box lists sixteen facts about the active image. To access the dialog box, select "Image Information" from the View Menu.

TOPIC: Deleting a File

## Managing Image Files

$\checkmark /$ Convert Y Print $Y$ View Info Y Delete

## Deleting a File

To delete an image file:
1 Open or select the file.
2 Choose "Delete" from the File Menu. You will be prompted to confirm your decision.
3 To delete the file, click on the Yes Button. To leave the file intact, click on the No Button.

Save As Dialog Box
Window:

## Steps

TOPIC: Step 1: Select or Create the File's Folder

## Using the Save As Dialog Box

Step 1: Select or Create the File's Folder

## Selecting a Folder

You select a folder using the following controls:

- Save In Drop Down Box
- Up One Level Button
- Contents List Box


## Creating a Folder

1 Select the folder that will contain the new folder. See the section above.
2 Click on the Create New Folder Button.

TOPIC: Step 2: Select the File Type

## Using the Save As Dialog Box

## Step 2: Select the File Type

You select the file type from the File Type Drop Down Box.
1 Click on the drop down box to open it.
2 Click on the file type that you want to select. If the file type isn't visible, use the scrollbar to move through the list.
Select the Subtype
If the file format you selected has subtypes, then you select the subtype from the File Subtype Drop Down Box.

TOPIC: Step 3: Set the File Preferences

## Using the Save As Dialog Box

## Step 3: Set the File Preferences

If the file type that you selected in the previous step supports format options, then the Options Button will become available.

1 Click on the Options Button. Paint Shop Pro will open the File Preferences Dialog Box, and will select the tabbed page for the appropriate file type.
2 Use the dialog box to set the file preferences. The settings that you select become the new defaults for the specified file type.

TOPIC: Step 4: Enter the Filename

## Using the Save As Dialog Box

## Step 4: Enter the Filename

You enter a name for the new file in the File Name Text Box. Don't worry about the file extension Paint Shop Pro will add it automatically.

1 Double-click in the text box.
2 Type the filename.

TOPIC: Step 5: Select the Save Button

## Using the Save As Dialog Box

## Step 5: Select the Save Button

Click on the Save Button. One of two things will happen:

- Paint Shop Pro will save the image file and close the Save As Dialog Box.
- You will be asked if you want to overwrite an existing file.
- Click on the Yes Button to overwrite it.
- Click on the No Button to leave the file intact and return to the Save As Dialog Box.


# Batch Conversion Utility 

Window:

## Steps

TOPIC: Step 1: Access the Batch Conversion Dialog Box

## Batch Conversion Utility

## Step 1: Access the Batch Conversion Dialog Box

Select "Batch Conversion" from the File Menu. Paint Shop Pro will open the Batch Conversion Dialog Box.

TOPIC: Step 2: Select the Output File Format Settings

## Batch Conversion Utility

Step 2: Select the Output File Format Settings
You select the output file format settings from the Output Settings Group Box. Select the file type and sub-type (if any) from the appropriate drop down boxes. You can set format options for eight image formats.

TOPIC: Step 3: Select or Create the Output Folder

## Batch Conversion Utility

## Step 3: Select or Create the Output Folder

1 Click on the Browse Button. Paint Shop Pro will open the Select Folder Dialog Box.
2 Use the dialog box to select or create the destination folder for the new files. When you choose the Select Button, Paint Shop Pro will return to the Batch Conversion Dialog Box.

ALink / Select Folder Dialog Box

TOPIC: Step 4: Select the Input Folder

## Batch Conversion Utility

## Step 4: Select the Input Folder

Select the folder that contains the source files. You select a folder using the following standard Windows file controls:

- Look In Drop Down Box
- Up One Level Button
- Contents List Box

TOPIC: Step 5: Set the Suppress Error Messages Option

## Batch Conversion Utility

## Step 5: Set the Suppress Error Messages Option

If you don't want to see any error messages during the conversion, fill in the Suppress Error Messages Checkbox. Error messages will still appear in the Batch Conversion Status Dialog Box (see Step 7).

TOPIC: Step 6: Select the Input Files

## Batch Conversion Utility

Step 6: Select the Input Files

## Selecting Specific Files

You select specific files from the Contents List Box. You select files by clicking on them.

- Press <Shift> to select contiguous files.
- Press <Ctrl> to select non-contiguous files.


## Selecting Nonspecific Files

You can select nonspecific files by:

- Entering filename wildcards in the File Name Text Box.
- Selecting a file type from the Files of Type Drop Down Box.

Paint Shop Pro will look for filename wildcards first. If none were entered, it will select files by file type.

TOPIC: Step 7: Execute the Batch Conversion

## Batch Conversion Utility

## Step 7: Execute the Batch Conversion

There are two ways to execute a batch conversion:

- To convert the specific files that you selected in the last step, click on the Start Button.
- To convert the files in the Contents List Box that match the filename wildcards or the selected file type, click on the Select All Button.
Paint Shop Pro will begin the batch conversion and will open the Batch Conversion Status Dialog Box. The dialog box displays messages about the batch conversion's progress. To stop the batch conversion, click on the Abort Button.


## Format-Specific Dialog Boxes

If you selected a meta or vector file, a Photo-CD file, or a RAW file, Paint Shop Pro may open a format-specific dialog box requesting additional information.

## When Conversion is Complete...

When the conversion is complete, the Abort Button on the Batch Conversion Status Dialog Box will become inactive, and the OK Button and the Save Log Button will become active.

- Select the OK Button to exit the dialog box.
- Select the Save Log Button to save the progress messages to a text file.


## Printing a File

 Window:
## Steps

TOPIC: Step 1: Check the Page Setup

## Printing a File

## Step 1: Check the Page Setup

The page setup settings determine the paper source and the image's placement on the page.

TOPIC: Step 2: Access the Print Dialog Box

## Printing a File

## Step 2: Access the Print Dialog Box

There are two ways to access the Print Dialog Box:

- You can select "Print" from the File Menu.
- You can click on the Print Button in the Toolbar.

TOPIC: Step 3: Select the Printer

## Printing a File

## Step 3: Select the Printer

You select the printer from the Printer Drop Down Box. The drop down box lists all of the output devices that are available to your system. For example, in addition to the available printers, it will also include any fax software that is installed on your computer.

1 Click on the drop down box to open it.
2 Click on the printer that you want to select. If the list is too long to fit in the box, use the scrollbar to move through it.

TOPIC: Step 4: Set the Printer Properties (Optional)

## Printing a File

Step 4: Set the Printer Properties (Optional)
If you want to change the selected printer's properties, click on the Properties Button. Paint Shop Pro will open the properties dialog box for the selected printer. For help using the dialog box, try pressing <F1>.

TOPIC: Step 5: Set the Print to File Checkbox

## Printing a File

## Step 5: Set the Print to File Checkbox

The Print to File Checkbox determines if the output is sent to the selected printer or to a printer file. If you want to:

- Send the output to the selected printer, make sure that the checkbox is empty. - Send the output to a print file, mark the checkbox. You will be prompted for the filename later.

TOPIC: Step 6: Enter the Number of Copies

## Printing a File

## Step 6: Enter the Number of Copies

If your printer supports multiple copies, then you can print more than one copy of a file at a time. If your printer does not support multiple copies, the Number of Copies Spin Control will be greyed out.

- You can type the number of copies into the spin control, or you can use the arrow buttons to set the value.
- To scroll to a higher or lower value, point at the appropriate button and press and hold the primary mouse button.

TOPIC: Step 7: Select the OK Button

## Printing a File

## Step 7: Select the OK Button

When you're ready to print, click on the OK Button. One of two things will happen, depending on the setting of the Print to File Checkbox:

- If the option is off, the Paint Shop Pro will send the image to the printer.
- If the option is on, Paint Shop Pro will open the Print to File Dialog Box. For more help, press $<\mathrm{Fl}>$.


## Previewing a Printed File

TOPIC: Previewing a Printed File

## Previewing a Printed File

To view the active image as it will appear when printed, select "Print Preview" from the File Menu. Paint Shop Pro will open the Image Print Preview Window.
Printing the Image
The Print Button closes the Image Print Preview Window and opens the Print Dialog Box. See Step 3 of "Printing a File".
Changing the Page Setup
The Setup Button closes the Image Print Preview Window and opens the Page Setup Dialog Box. When you close the Page Setup Dialog Box, Paint Shop Pro will return to the Image Print Preview Window.

## Changing the Magnification

The Zoom In and Zoom Out Buttons magnify and reduce the image. You can also change the magnification by clicking on the image.

## Closing the Window

The Close Button closes the Image Print Preview Window.

Using the Browser Window:

TOPIC: Browser Overview

## Using the Browser

/ Overview $\$ Change Folder $Y$ Thumbnails $\backslash D$

## Browser Overview

The Browser is a visual file system that makes accessing and managing image files easier and more intuitive.

- Starting the Browser
- Closing the Browser

The Browser supports every Paint Shop Pro file format except for the RAW format.

TOPIC: Changing Folders

## Using the Browser

Overview Y Change Folder \Thumbnails $\triangle D$

## Changing Folders

To select a new folder to browse:
1 Choose "New Folder" from the File Menu. Paint Shop Pro will open the Select Folder Dialog Box.
2 Use the dialog box to select the folder that you want to browse. Paint Shop Pro will open the Browser Window. If it finds image files in the selected folder, it will fill the Browser Window with image file thumbnails.

TOPIC: Managing Thumbnails

## Using the Browser

Overview $Y$ Change Folder $Y$ Thumbnails $\$
Managing Thumbnails
If Paint Shop Pro finds image files in the selected folder, it fills the Browser Window with image file thumbnails.

- Sorting Thumbnails
- Selecting Thumbnails
- Updating Thumbnails
- Printing Thumbnails
- Previewing Printed Thumbnails


## Adjusting the Browser Window

To resize the Browser window so that it accommodates the current thumbnails, select "Fit to Thumbnails" from the Window Menu.

TOPIC: Opening Files

## Using the Browser

$\triangleleft /$ Open Files Copy Files $\quad$ Delete Files $\backslash D$

## Opening Files

Opening a Single File
There are two quick ways to load a single file:

- Double-click on its thumbnail.
- Click on its thumbnail with the secondary mouse button, then select "Open in PSP" from the pop-up menu. Paint Shop Pro may open a format-specific dialog box.


## Opening Multiple Files

1 Select the files that you want to open.
2 Do one of the following:

- $\quad$ Select "Open Image" from the ImageFile Menu.
- Press <Enter>.
- Drag the thumbnails into the Workspace.

3 Paint Shop Pro may open format-specific dialog boxes.

TOPIC: Copying Files

## Using the Browser

$\triangleleft /$ Open Files $Y$ Copy Files $\$ Delete Files $\backslash D$

## Copying Files

To copy image files from the current folder to another folder:
1 Select the files' thumbnails.
2 Select "Copy" from the ImageFile Menu. Paint Shop Pro will open the Select Folder Dialog Box.
3 Use the dialog box to select or create the destination folder for the selected files. When you choose the Select Button, Paint Shop Pro will copy the files to the specified folder.

TOPIC: Deleting Files

## Using the Browser

$\triangleleft /$ Dpen Files $y$ Copy Files $y$ Delete Files $\$

## Deleting Files

To delete image files from the current folder:
1 Select the files' thumbnails.
2 Select "Delete" from the ImageFile Menu. You will be prompted to confirm your decision.
3 Click on the Yes Button to delete the selected files.

TOPIC: Moving Files

## Using the Browser

$\checkmark /$ Move Files Y Rename a File Y View File Info

## Moving Files

To move image files from the current folder to another folder:
1 Select the files' thumbnails.
2 Select "Move" from the ImageFile Menu. Paint Shop Pro will open the Select Folder Dialog Box.
3 Use the dialog box to select or create the destination folder for the selected files. When you choose the Select Button, Paint Shop Pro will move the files to the specified folder.

TOPIC: Renaming a File

## Using the Browser

## $\checkmark$ Move Files Y Rename a File V View File Info

## Renaming a File

1 Select the file's thumbnail.
2 Select "Rename" from the ImageFile Menu. Paint Shop Pro will open the Rename File Dialog Box.
3 Enter the file's new name. The filename can be up to 255 characters long, including the file extension. The Browser does not automatically add the extension. If you want the filename to include an extension, add it now.
4 Click on the OK Button. Paint Shop Pro will rename the file.

TOPIC: Viewing a File's Information

## Using the Browser

$\checkmark$ Move Files $Y$ Rename a File Y View File Info

## Viewing a File's Information

You view a file's information from the File Information Dialog Box. There are two ways to open the dialog box:

- Click on the file's thumbnail, then Select "Info" from the ImageFile Menu.
- Click on the file's thumbnail with the secondary mouse button (the button you use least), then select "Info" from the pop-up menu.
When you're done viewing the data, click on the OK Button. Paint Shop Pro will close the dialog box.


## Sorting Thumbnails

Window:

## Steps

TOPIC: Step 1: Select "Sort" From the File Menu

## Sorting Thumbnails

## Step 1: Select "Sort" From the File Menu

Paint Shop Pro will open the Thumbnail Sort Dialog Box.
Sorting thumbnails is a one-time operation. The thumbnails will not remain sorted if you add new images, or change the properties of the existing files. New images are always added to the end of the list.

TOPIC: Step 2: Select the Primary Sort Criteria

## Sorting Thumbnails

## Step 2: Select the Primary Sort Criteria

There are two criteria groups, the primary sort and the secondary sort. To set the primary criteria:

1 Click on an option in the Sort Order Group Box. You can sort the images in ascending or descending order.
2 Click on a sort attribute in the File Attributes Group Box or the Image Attributes Group Box.

TOPIC: Step 3: Select the Secondary Sort Criteria

## Sorting Thumbnails

## Step 3: Select the Secondary Sort Criteria

To select the secondary sort criteria:
1 Click on the Secondary Sort Tab.
2 Click on an option in the Sort Order Group Box. You can sort the images in ascending or descending order, or you can select "No sort" to turn off the secondary sort criteria. When you choose "No sort", the file attributes options and image attributes options will be grayed out.
3 If you choose ascending or descending order in the previous step, click on a sort attribute in the File Attributes Group Box or the Image Attributes Group Box.

The attribute that you selected for the primary sort will be greyed out. Selecting the same attribute for both criteria would be redundant or conflicting.

TOPIC: Step 4: Select the OK Button

## Sorting Thumbnails

## Step 4: Select the OK Button

Click on the OK Button. Paint Shop Pro will close the dialog box and sort the thumbnails using the order and criteria that you selected.

## Updating the Thumbnails

Window:
More2

TOPIC: Updating Thumbnails

## Updating Thumbnails

To update the thumbnail images for the current folder, select "Update" from the File Menu. Updating does two things:

- Revises the thumbnail images to reflect any changes to the files.
- Adds and removes thumbnails to match the current contents of the selected folder.


## Printing Thumbnails

Window:

## Steps

TOPIC: Step 1: Check the Page Setup

## Printing Thumbnails

## Step 1: Check the Page Setup

The page setup settings determine the paper source and the placement of the thumbnails on the page.

TOPIC: Step 2: Select the Thumbnails

## Printing Thumbnails

Step 2: Select the Thumbnails
If you want to print specific thumbnails, select them now.

TOPIC: Step 3: Select "Print" From the File Menu

## Printing Thumbnails

## Step 3: Access the Print Dialog Box

The are two ways to access the Print Dialog Box. You can:

- Select "Print" From the File Menu.
- Click on the Print Button in the Toolbar.

TOPIC: Step 4: Select the Printer

## Printing Thumbnails

## Step 4: Select the Printer

You select the printer from the Printer Drop Down Box. The drop down box lists all of the output devices that are available to your system. For example, in addition to the available printers, it will also include any fax software that is installed on your computer.

1 Click on the drop down box to open it
2 Click on the printer that you want to select. If the list is too long to fit in the box, use the scrollbar to scroll through it.

TOPIC: Step 5: Set the Printer Properties (Optional)

## Printing Thumbnails

## Step 5: Set the Printer Properties (Optional)

If you want to change the selected printer's properties, click on the Properties Button. Paint Shop Pro will open the properties dialog box for the selected printer. For help using the dialog box, try pressing <F1>.

TOPIC: Step 6: Set the Print to File Checkbox

## Printing Thumbnails

## Step 6: Set the Print to File Checkbox

The Print to File Checkbox determines if the output is sent to the selected printer or to a printer file. If you want to:

- Send the output to the selected printer, make sure that the checkbox is empty. - Send the output to a print file, mark the checkbox. You will be prompted for the filename later.

TOPIC: Step 7: Select the Print Range

## Printing Thumbnails

## Step 7: Select the Print Range

You can print all of the thumbnails, a range of pages, or just the selected thumbnails. You select an option by clicking on it in the Print Range Group Box.

- If you select "Pages", enter the first and last pages to print in the text boxes labeled "from:" and "to:".

TOPIC: Step 8: Enter the Number of Copies

## Printing Thumbnails

## Step 8: Enter the Number of Copies

If your printer supports multiple copies, then you can print more than one copy of a file at a time. If your printer does not support multiple copies, the Number of Copies Spin Control will be greyed out.

- You can type the number of copies into the spin control, or you can use the arrow buttons to set the value.
- To scroll to a higher or lower value, point at the appropriate button and press and hold the primary mouse button.

TOPIC: Step 9: Select the OK Button

## Printing Thumbnails

## Step 9: Select the OK Button

When you're ready to print, click on the OK Button. One of two things will happen, depending on the setting of the Print to File Checkbox:

- If the option is off, the Paint Shop Pro will send the image thumbnails to the printer. - If the option is on, Paint Shop Pro will open the Print to File Dialog Box. For more help, press $<$ F1>.


## Previewing Printed Thumbnails

Window:

TOPIC: Previewing Printed Thumbnails

## Previewing Printed Thumbnails

To view thumbnails as they will appear when printed, select "Print Preview" from the File Menu. Paint Shop Pro will open the Browser Print Preview Window.

Printing the Thumbnails
The Print Button closes the Browser Print Preview Window and opens the Print Dialog Box. See Step 4 of "Printing Thumbnails".

## Changing the Page Setup

The Setup Button closes the Browser Print Preview Window and opens the Page Setup Dialog Box. When you close the Page Setup Dialog Box, Paint Shop Pro will return to the Browser Print Preview Window.

## Changing Pages

The Next Page and Prev Page Buttons move forward and back by one page respectively. You can also use the scrollbar.

## Number of Pages Visible

The Two Page / One Page Button switches the display between two pages and one.

## Changing the Magnification

The Zoom In and Zoom Out Buttons magnify and reduce the image. You can also change the magnification by clicking on the image.

## Closing the Window

The Close Button closes the Browser Print Preview Window.

## Selecting Files

Window:

TOPIC: Overview

## Selecting Files

Overview \ Specific Y Property Y Filename Y All \}
Overview
You select files by selecting thumbnails. You can:

- Select specific files
- Select files by property
- Search for files by filename
- Select all of the files in the current folder

TOPIC: Selecting Specific Files

## Selecting Files

Overview Y Specific Y Property Y Filename X All

## Selecting Specific Files

You can select a single thumbnail, a sequential group of thumbnails, or a non-sequential group of thumbnails.

## Single Thumbnail

You select a single thumbnail by clicking on it. Use the scrollbars to view any thumbnails that aren't currently visible.

## Sequential Thumbnails

1 Click on the first thumbnail in the sequence that you want to select.
2 Press and hold the <Shift> key.
3 Click on the last thumbnail in the sequence.

## Non-Sequential Thumbnails

1 Press and hold the <Ctrl> key.
2 Click on the thumbnails that you want to select. Clicking on a selected thumbnail will deselect it.

TOPIC: Selecting Files By Property

## Selecting Files

Overview Specific Property Y Filename All

## Selecting Files By Property

You can select thumbnails that have a specific filename, file extension, width, height, or bits-per-pixel.

1 Choose "Select" from the File Menu. Paint Shop Pro will open the Select Dialog Box.
2 Use the Select Based On Drop Down Box to choose a file property to search by.
3 Type the property's setting into the Equal To Text Box.
4 Click on the OK Button. Paint Shop Pro will select the thumbnails that match the file characteristic.

TOPIC: Searching By Filename

## Selecting Files

Overview Y Specific Y Property y Filename A All

## Searching By Filename

You can use the Find Dialog Box to search for files by filename. You access the dialog box by selecting "File Name" From the Find Menu.

- Step-by-Step Instructions

TOPIC: Selecting All Files

## Selecting Files

Overview Y Specific Y Property y Filename y all

## Selecting All Files

1 Press < Home>.
2 Press <Shift> + <End>. The Browser will highlight every thumbnail.

## Selecting Files: <br> Property Settings

Window:
More2

TOPIC: Property Settings

## Property Settings

## Property Setting

Filename Enter the file's name, including the extension, or any portion thereof.
Extension Enter the file's extension, without the period (".").
Width Enter an image's width in pixels.
Height Enter an image's height in pixels.
Bits Per Enter the number of bits
Pixel recorded per pixel in an image.

Selecting Files: Searching By Filename
Window:
Steps2

TOPIC: Step 1: Select "File Name" From the Find Menu

## Searching By Filename

Step 1: Select "File Name" From the Find Menu
Paint Shop Pro will open the Find Dialog Box.

TOPIC: Step 2: Enter the Search Text

## Searching By Filename

## Step 2: Enter the Search Text

Type all or part of the file's name into the text box. The Browser will highlight the first file it finds that has the search string anywhere in its name.

## Example

If you enter "bird", Paint Shop Pro will highlight the first thumbnail with a filename that contains "bird".

TOPIC: Step 3: Set the Match Case Option

## Searching By Filename

## Step 3: Set the Match Case Option

If you want the search to be case-sensitive, fill in the checkbox labeled "Match case". In a case-sensitive search, Paint Shop Pro highlights only those files with the same case as the search text.

## Example

In a case-sensitive search for "bird", Paint Shop Pro will not highlight files that contain "Bird", or "BIRD", or any other combination of cases.

TOPIC: Step 4: Select the Find First Button

## Searching By Filename

## Step 4: Select the Find First Button

Click on the Find First Button. The Browser will search for the text that you entered. One of two things will happen:

- If the Browser finds a thumbnail with matching text, it will highlight the thumbnail. If you want to keep searching, see Step 5.
- If the Browser doesn't find any matching text, Paint Shop Pro will present a prompt telling you so. Click on the OK Button to close the prompt.

TOPIC: Step 5: Repeat the Search (Optional)

## Searching By Filename

## Step 5: Repeat the Search (Optional)

If the Browser found a match for the text that you entered, you can keep searching to see if there are any other thumbnails with a matching filename. Select "Repeat Find" from the Find Menu.

## Starting and Exiting

Window:

TOPIC: Starting the Browser

## Starting and Closing the Browser

## Starting

## Starting the Browser

1 Select "Browse" from the File Menu, or click on the Browse Button in the Open Dialog Box. Paint Shop Pro will open the Select Folder Dialog Box.
2 Use the dialog box to select the folder that you want to browse. Paint Shop Pro will open the Browser Window. If it finds image files in the selected folder, it will fill the Browser Window with image file thumbnails.

TOPIC: Closing the Browser

## Starting and Closing the Browser

## Starting Closing

## Closing the Browser

To exit the Browser, you can:

- Click on the Browser Window's Close Button.
- Click on the Browser Window to activate it, then select "Close" from the File Menu.

Working with Image Windows
Window:
Main

TOPIC: Working with Image Windows Overview

## Working with Image Windows

/ Overview S Selecting Positioning (Scrolling $D$

## Working with Image Windows Overview

When you open a file or create a new file, Paint Shop Pro displays the image in an image window. Image windows appear within the Workspace.

- About Image Windows
- Image Window Tasks

Titlebar Text
An image window's titlebar displays the image's filename and magnification level, and indicates if the image has been edited since it was last saved.

TOPIC: Selecting an Image Window

## Working with Image Windows

Overview Y Selecting (Positioning $\$ Scrolling $\backslash D$

## Selecting an Image Window

Only one image window can be active at a time. The selected image:

- Receives all editing commands.
- Appears on top of any other image windows.
- Has a highlighted titlebar.
- Has a check next to its filename on the Window Menu. Its filename also appears in the Main Window's Titlebar.
You can select an image window by clicking on it, or you can choose the image's filename from the Window Menu.

TOPIC: Positioning an Image Window

## Working with Image Windows

Overview $y$ Selecting Positioning
Scrolling
Positioning an Image Window
Standard Windows Commands

- Maximize, Minimize, and Restore
- Moving an Image Window
- Resizing an Image Window


## Full Screen Preview

Full Screen Preview displays the active image against a full-screen black background.

- To use Full Screen Preview, select it from the View Menu, or click on the Full Screen Preview Button in the Toolbar.
- To return to normal viewing, press <Ctrl> $+<$ Shift $>+<\mathrm{F}>$.


## Related Topics

- Maximizing the Workspace

Search / Full Screen Preview

TOPIC: Scrolling the Image Area

## Working with Image Windows

- overview $y$ Selecting $y$ Positioning $y$ Scrolling $D$


## Scrolling the Image Area

If an image is larger than its window's image area, you can view it by scrolling through the image area. There are three ways to do this:

- Using the Mover Tool
- Using the Scrollbars
- Using the Cursor Keys

TOPIC: Closing Image Windows

## Working with Image Windows

$\checkmark /$ Closing $\backslash$ Arranging $\$ Zooming $Y$ Grid

## Closing Image Windows

When you close an image window, you are also closing the image's file.

## Closing a Single Image Window

1 Select the image window.
2 Select "Close" from the File Menu, or click on the image window's Close Button. If you have edited the file and haven't saved it, you will be prompted to confirm your decision.

## Closing All Windows

To close all image windows and the Browser Window, select "Close All" from the Window Menu. The Window Close All Option determines whether you will be prompted to save any new or edited files.

TOPIC: Arranging the Image Windows

## Working with Image Windows

$\checkmark /$ Closing Arranging Zooming ${ }^{\prime}$ Grid

## Arranging the Image Windows

The Window Menu contains three selections that arrange all of the image windows and the Browser Window:

- Cascade
- Tile Horizontally
- Tile Vertically

These commands only affect the non-minimized windows.

TOPIC: Zooming in and Out

## Working with Image Windows

$\checkmark /$ Closing $Y$ Arranging $Y$ Zooming $Y$ Grid

## Zooming in and Out

The Zoom Features control the magnification of an image:

- Zoom Tool
- Hot Keys
- Normal Viewing
- Zoom Submenus


## Zoom Options

The Zoom Options determine if Paint Shop Pro will automatically resize image windows when you zoom in or out.

TOPIC: Enabling the Pixel Grid

## Working with Image Windows

$\checkmark /$ Closing $Y$ Arranging $y$ Zooming $y$ Grid

## Enabling the Pixel Grid

The pixel grid appears at magnification levels of 10:1 or greater. As the name applies, it displays an image's pixels within a grid.
The grid is enabled when a check appears next to "Grid When Zoomed" on the View Menu. To turn the grid on or off, select "Grid When Zoomed".

## Select Window Dialog Box

Window:
How To

TOPIC: Using the Select Window Dialog Box

## Using the Select Window Dialog Box

Only nine images can appear on the Window Menu. To access any remaining open images:
1 Select "More Windows" from the bottom of the Window Menu. Paint Shop Pro will open the Select Window Dialog Box.
2 Click on the image's filename. If the filename isn't visible, use the scrollbar to move through the list.
3 Click on the OK Button. Paint Shop Pro will close the dialog box and activate the image.

## Positioning an Image Window

 Window:TOPIC: Maximize, Minimize, and Restore

## Positioning an Image Window

/Max/Min Moving Resizing
Maximize, Minimize, and Restore
You can maximize, minimize, and restore an image using the appropriate window buttons Double-clicking on the text display section of the titlebar switches an image window between its maximized and normal states.

## Maximized Image Window

A maximized image window occupies the entire Workspace. When an image window is maximized, its titlebar features are added to the Main Window.

TOPIC: Moving an Image Window

## Positioning an Image Window

## /Max/Min Y Moving Y Resizing

## Moving an Image Window

To move an image window to a different location:
1 Point the cursor at the text display portion of the titlebar.
2 Press and hold the primary mouse button.
3 Drag the window by moving the mouse.
4 Release the mouse button.

TOPIC: Resizing an Image Window

## Positioning an Image Window

/Max/Min Y Moving Y Resizing

## Resizing an Image Window

To change the size of an image window:
1 Point at a side or corner of the window. The cursor will change to a double-headed arrow. Point at a corner to move two sides at once.
2 Press and hold the primary mouse button.
3 Drag the window by moving the mouse.
4 Release the mouse button.

## 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
Window:
More

TOPIC: Using the Mover Tool

## Scrolling the Image Area

Mover Tool Y Scrollbars Y Cursor Keys

## Using the Mover Tool

You use the Mover Tool to drag the part of the image that you want to see into view.
1 Click on the Mover Button in the Tool Palette.
2 Place the hand-shaped cursor over the image area.
3 Press and hold the primary mouse button.
4 Scroll through the image by moving the mouse.
5 Release the mouse button.

TOPIC: Using the Scrollbars

## Scrolling the Image Area

Mover Tool Y Scrollbars X Cursor Keys

## Using the Scrollbars

When an image is larger than its window's image area, scrollbars appear at the right side and/or bottom of the image area. You use a scrollbar by moving the slider button.

1 Point at the slider button with the mouse.
2 Press and hold the primary mouse button.
3 Use the mouse to drag the button in the direction you want to scroll. You can also move the slider button by:

- Clicking on the arrow buttons at each end of the scrollbar.
- Clicking between the slider button and an arrow button.

TOPIC: Using the Cursor Keys

## Scrolling the Image Area

Mover Tool Y Scrollbars Y Cursor Keys

## Using the Cursor Keys

Press <Page Up>, <Page Down $>,<>$, and $<\downarrow>$ to scroll vertically.

- Press $<$ Home $>,<$ End $>,<\leftarrow\rangle$, and $<\rightarrow>$ to scroll horizontally.


## Zoom Features

## Window:

TOPIC: Zoom Tool

## Zoom Features

Zoom Tool Y Hot Keys Yormal View Y Submenus

## Zoom Tool

The Zoom Tool is probably the most intuitive way to zoom in and out.
1 Click on the Zoom Button in the Tool Palette. The cursor will change to a small magnifying glass.
2 You can increase or decrease the magnification level:

- To zoom in, click on the image with the primary mouse button. Paint Shop Pro will increase the magnification factor by one level.
- To zoom out, click on the image with the secondary mouse button. Paint Shop Pro will decrease the magnification factor by one level.

TOPIC: Hot Keys

## Zoom Features

Z Zoom Tool Y Hot Keys Yormal View Y Submenus

## Hot Keys

Zoom In Press <+> on the numeric keypad to increase magnification by one level.
Zoom Out Press <-> on the numeric keypad to decrease magnification by one level.

TOPIC: Normal Viewing

## Zoom Features

Z Zoom Tool Y Hot Keys Y Normal View Y Submenus

## Normal Viewing

To return an image to 1:1 magnification, you can:

- Select "Normal Viewing (1:1)" from the View Menu.
- Click on the Normal Viewing Button in the Toolbar.

TOPIC: Zoom Submenus

## Zoom Features

/ Zoom Tool Y Hot Keys Y Normal View Y Submenus

## Zoom Submenus

There are two submenus on the View Menu that contain image magnification settings:

- The Zoom In selection opens a submenu that lists zoom in magnification factors.
- The Zoom Out selection opens a submenu that lists zoom out magnification factors.

Working with Selections
Window:
Main

TOPIC: Working with Selections

## Working with Selections

Overview Y Create $Y$ Remove $\quad$ Invert $D$

## Working with Selections

Selecting part of an image is the first step in a variety of editing tasks. You can move a selection, copy its contents, delete its contents, alter its colors, apply a filter to it, and more.

## What Does a Selection Look Like?

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

TOPIC: Creating a Selection

## Working with Selections

Overview Y Create $\quad$ Remove $Y$ Invert $\backslash D$

## Creating a Selection

## Selecting Part of an Image

You select part of an image by drawing a line around the area that you want to select.

- Selecting a Regular Area
- Selecting an Irregular Area
- Selecting a Color Object


## Adding To / Subtracting From

- To add an area to an existing selection, press and hold the <Shift> key while you select the area.
- To remove an area from an existing selection, press and hold the <Ctrl> key while you select the area.


## Selecting an Entire Image

To select the entire contents of the active image, choose "Select All" from the Selections Menu.

Search / Selecting an Entire Image

TOPIC: Removing a Selection

## Working with Selections

Overview $y$ Create $y$ Remove $\quad$ Invert $D$

## Removing a Selection

To remove a selection from the active image:

- You can choose "Select None" from the Selections Menu.
- 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: Inverting a Selection

## Working with Selections

Overview $y$ Create $y$ Remove $y$ Invert $D$

## Inverting a Selection

To swap an image's selected and non-selected areas, choose "Invert" from the Selections Menu.

TOPIC: Modifying a Selection

## Working with Selections

$\checkmark$ Modify Save/Load Modes $V$ Move

## Modifying a Selection

The Modify Submenu on the Selections Menu contains three commands for modifying a selection. You can:

- Change the feathering
- Set the opacity
- Choose a transparent color

TOPIC: Saving and Loading Selections

## Working with Selections

$\checkmark /$ Modify Y/Save/Load Modes Move

## Saving and Loading Selections

You can save selections to files, and load them from the files into images. When you save a selection, Paint Shop Pro records the selection's boundaries, not its contents.

- Saving a Selection
- Loading a Selection

TOPIC: Selection Modes

## Working with Selections

$\checkmark /$ Modify ${ }^{\prime}$ Save/Load $y$ Modes

## Selection Modes

There are two selection modes:

- A floating selection is a separate image that appears above the "host" or "parent" image. When you move or process a floating selection, you are modifying the selection itself, and not the underlying image.
- A standard selection is part of an image. When you move or process a standard selection, you are directly modifying the image itself.

TOPIC: Moving a Selection

## Working with Selections

$\checkmark /$ Modify $Y$ Save/Load Y Modes $Y$ Move

## Moving a Selection

There are two ways to move a selection. You can move:

- Selection frame and its contents
- Selection frame only


## Selecting a Regular Area

 Window:How To

TOPIC: Selecting a Regular Area

## Selecting a Regular Area

Overview Options Y Using XialogBox

## Selecting a Regular Area

There are two ways to select a regular geometric area.

## Using the Select Shape Tool

You can use the Select Shape Tool to select a rectangular, square, elliptical, or circular area.

- Setting the Options
- Using the Select Shape Tool


## Using the Select Shape Dialog Box

You can use the Select Area Dialog Box to specify the coordinates of a rectangular area.

TOPIC: Setting the Select Shape Tool Options

## Selecting a Regular Area

Overview Options Using DialogBox

## Setting the Select Shape Tool Options

The Select Shape Tool has two options that determine what shape it selects and how it selects it.

1 Click on the Select Shape Button in the Tool Palette. If the Style Bar is visible, it will display the Select Shape Tool's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Selection Type Drop Down Box to choose the shape that you want to select.
4 Use the Feather Spin Control to set the selection feathering. The feathering determines the sharpness of a selection's edges. A setting of 20 creates the softest edges, and 0 creates the sharpest edges.

TOPIC: Using the Select Shape Tool

## Selecting a Regular Area

Overview Options y Using (DialogBox

## Using the Select Shape Tool

1 Click on the Select Shape Button in the Tool Palette.
2 If the image contains an existing selection, you can add area to it, or remove area from it:

- To add area to the selection, press and hold the <Shift> key.
- To remove area from the selection, press and hold the <Ctrl> key.

3 Point the cursor's crosshairs at any corner of the area that you want to select.
4 Press and hold the primary mouse button (the button you use most often).
5 Drag the cursor to the opposite corner of the area you want to select.
6 Release the mouse button. If you are holding either the <Shift> key or the <Ctrl> key, you can release them too.

TOPIC: Using the Select Area Dialog Box

## Selecting a Regular Area

Overview Options $y$ Using Dialog Box

## Using the Select Area Dialog Box

You use the Select Area Dialog Box to specify the coordinates of a rectangular area.
1 Double-click on the Select Shape Button in the Tool Palette. Paint Shop Pro will open the dialog box.
2 Enter the pixel positions for the selection's corners in the appropriate text boxes.
3 Click on the OK Button. Paint Shop Pro will close the dialog box and create the selection.

Selecting an Irregular Area Window:

TOPIC: Selecting an Irregular Area

## Selecting an Irregular Area

Overview Options Y Using

## Selecting an Irregular Area

You use the Freehand Tool to select an irregular area. The tool has a feathering option that determines the sharpness of the selection's edges.

- Setting the Feathering Option
- Using the Tool

TOPIC: Setting the Freehand Tool Options

## Selecting an Irregular Area

Overview Y Options Using

## Setting the Freehand Tool Feathering Option

1 Click on the Freehand Button in the Tool Palette. If the Style Bar is visible, it will display the Freehand Tool's Feather Spin Control.
2 If the Style Bar isn't visible, display it now.
3 Use the Feather Spin Control to set the selection feathering. The feathering determines the sharpness of a selection's edges. A setting of 20 creates the softest edges, and 0 creates the sharpest edges.

TOPIC: Using the Freehand Tool

## Selecting an Irregular Area

Overview Y Options Y Using

## Using the Freehand Tool

1 Click on the Freehand Button in the Tool Palette.
2 If the image contains an existing selection, you can add area to it, or remove area from it:

- To add area to the selection, press and hold the <Shift> key.
- To remove area from the selection, press and hold the <Ctrl> key.

3 Point the cursor's crosshairs at any point along the boundary of the area that you want to select.
4 Press and hold the primary mouse button (the button you use most often).
5 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.
6 Release the mouse button. If you are holding either the <Shift> key or the <Ctrl> key, you can release them too. Paint Shop Pro will "close" the selection by adding a straight line between the selection's starting and ending points.

Selecting a Color Object
Window:
More

TOPIC: Selecting a Color Object

## Selecting a Color Object

Overview \ Options Y Using

## Selecting a Color Object

You use the Magic Wand to select an area of a particular color, hue, or brightness. The tool has three options that determine how it recognizes and selects color.

TOPIC: Setting the Magic Wand Options

## Selecting a Color Object

## Overview Y Options Y Using

## Setting the Magic Wand Options

1 Click on the Magic Wand Button in the Tool Palette. If the Style Bar is visible, it will display the Magic Wand's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Match Mode Drop Down Box to choose a method for determining which pixels to select.
4 Use the Tolerance Spin Control to set the color tolerance. The color tolerance setting determines how close the color of a pixel must be to the color of the chosen pixel in order to be selected. The spin control uses a scale of 0 to 200 , with 0 being no tolerance (only pixels with a perfect match will be selected), and 200 being total tolerance (all pixels will be selected).
5 Use the Feather Spin Control to set the selection feathering. The feathering determines the sharpness of a selection's edges. A setting of 20 creates the softest edges, and 0 creates the sharpest edges.

TOPIC: Using the Magic Wand

## Selecting a Color Object

Overview Y Options Y Using

## Using the Magic Wand

1 Click on the Magic Wand Button in the Tool Palette.
2 If the image contains an existing selection, you can add area to it, or remove area from it:

- To add area to the selection, press and hold the <Shift> key.
- To remove area from the selection, press and hold the <Ctrl> key.

3 Click on the color area that you want to select. If you are holding either the <Shift> key or the <Ctrl> key, you can release them.
4 If the Magic Wand didn't select the object you wanted, try repositioning the cursor. If that doesn't work, try adjusting the Magic Wand's options.

## Saving \& Loading

Window:

TOPIC: Saving a Selection

## Saving and Loading Selections

Saving (Loading

## Saving a Selection

1 Choose "Save" from the Selections Menu. Paint Shop Pro will open the Save Selection Area Dialog Box.
2 Select or create the file's folder.
3 Enter the filename for the new selection file in the File Name Text Box. Don't worry about the file extension - Paint Shop Pro will add it automatically.
4 Click on the Save Button. If the filename is already in use, Paint Shop Pro will present a prompt. Click on the Yes Button to overwrite the existing file.

TOPIC: Loading a Selection

## Saving and Loading Selections

Saving Y Loading

## Loading a Selection

1 Choose "Load" from the Selections Menu. Paint Shop Pro will open the Load Selection Dialog Box.
2 Select the file's folder.
3 Click on the file in the Contents List Box. If the file list is too long to fit in the box, use the scrollbars to move through it.
4 Click on the Open Button. If the selection won't fit in the image, Paint Shop Pro will present a prompt.

- Click on the Yes Button to place the selection on the upper-left corner.
- Click on the No Button to place the selection in its original location.
- Click on the Cancel Button to abort loading the selection.

Modifying a Selection
Window:

TOPIC: Changing the Feathering

## Modifying a Selection

Feathering Ypacity Y Transparent Color

## Changing the Feathering

The feathering determines the sharpness of a selection's edges. A higher setting creates softer edges, and a lower setting creates sharper edges. If you increase the feathering, Paint Shop Pro will expand the selection's borders to include the area necessary to fade the selection's edges.

1 Select "Modify" from the Selections Menu, and then select "Feather" from the submenu. Paint Shop Pro will open the Feather Selection Dialog Box.
2 Use the Feather Spin Control to set the selection feathering. A setting of 40 creates the softest edges, and 0 creates the sharpest edges.
3 Click on the OK Button. Paint Shop Pro will close the dialog box and apply the new feathering setting to the selection.

TOPIC: Changing the Opacity

## Modifying a Selection

Feathering Y Opacity Y Transparent Color

## Changing the Opacity

The opacity determines how opaque or transparent the selection is. A higher setting creates a more opaque selection, and a lower setting creates a more transparent selection. To increase or decrease a selection's opacity:

1 Select "Modify" from the Selections Menu, and then select "Overall Opacity" from the submenu. Paint Shop Pro will open the Selection Opacity Dialog Box.

2 Use the Opacity Spin Control to set the change in the selection opacity. The scale is $1 \%$ to $200 \%$. A settings of $1 \%$ makes the selection almost transparent, a setting of $100 \%$ maintains the current opacity, and a setting of $200 \%$ doubles the opacity.
3 Click on the OK Button. Paint Shop Pro will close the dialog box and apply the new opacity setting to the selection.

TOPIC: Choosing a Transparent Color

## Modifying a Selection

```
Feathering y Opacity YTransparent Color
```


## Choosing a Transparent Color

When you choose a transparent color, Paint Shop Pro deselects all of the pixels in the selection that match the color you chose.

1 If you want to choose a color other than white, black, red, green, or blue, select it as one of the active colors.
2 Select "Modify" from the Selections Menu, and then select "Transparent Color" from the submenu. Paint Shop Pro will open the Transparent Color Select Dialog Box.
3 Use the Transparent Color Drop Down Box to select the color.
4 Use the Tolerance Spin Control to set the color tolerance. The color tolerance setting determines how close the color of a pixel must be to the transparent color in order to be deselected. The spin control uses a scale of 0 to 200, with 0 being no tolerance (only pixels with a perfect match will be deselected), and 200 being total tolerance (all pixels will be deselected).
5 Click on the OK Button. Paint Shop Pro will close the dialog box and apply the transparent color settings to the selection.

## Selection Modes

Window:

TOPIC: Floating a Selection

## Choosing a Selection Mode

Floating Defloating
Floating a Selection
To change the current selection from standard mode to floating mode, select "Float" from the Selections Menu. Moving a selection will also place the selection in floating mode.

TOPIC: Defloating a Selection

## Choosing a Selection Mode

Floating Defloating

## Defloating a Selection

To change the current selection from floating mode to standard mode, select "Defloat" from the Selections Menu. Paint Shop Pro will paste the selection's contents into the image.
The following actions will also create or put a selection in standard mode:

- A new selection is always in standard mode.
- Adding an area to or removing an area from a floating selection will change the selection to standard mode.


## Moving a Selection

TOPIC: Moving a Selection Frame and Its Contents

## Moving a Selection

Frame and Contents Frame Only

## Moving a Selection Frame and Its Contents

You can use any of the Selection Tools to move a selection and its contents. How Paint Shop Pro processes the image depends on whether the selection is in standard mode or floating mode.

## Standard Mode

If the selection is in standard mode, Paint Shop Pro will "cut out" the selection's contents and fill the resulting "hole" with the current background color. You can avoid the cut out effect by pressing and holding the <Alt> key when you start moving the selection.

## Floating Mode

If the selection is in floating mode, Paint Shop Pro will leave the image intact and will create a duplicate copy of the selection. The copy will move with the selection frame.

## Steps

To move a selection frame and its contents:
1 Choose the selection mode that you want to use.
2 Click on one of the Selection Tools in the Tool Palette.
3 Place the cursor over the selection. It will change to a four-headed arrow.
4 Press and hold the primary mouse button. The primary button is the one you use most often.
5 Drag the selection by moving the mouse.
6 When the selection is where you want it, release the mouse button.

TOPIC: Moving a Selection Frame Only

## Moving a Selection

Frame and Contents Frame Only
Moving a Selection Frame Only
You can use the Mover Tool to move a selection transparently. Paint Shop Pro will move the selection frame only. The selection's contents will change as it moves.

1 If "Defloat" is available on the Selections Menu, select it now. Paint Shop Pro will place the selection in standard mode.
2 Click on the Mover Button in the Tool Palette.
3 Place the cursor's crosshairs over the image.
4 Press and hold the secondary mouse button. The secondary button is the one you use least often.
5 Drag the selection by moving the mouse.
6 When the selection frame is where you want it, release the mouse button.

Working with Colors
Window:
Main

TOPIC: Selecting the Active Colors

## Working with Colors

Active Palettes Count $\$ Increase Decrease

## Selecting the Active Colors

There are two active colors, the foreground color and the background color. You use the active colors with a wide variety of tools and functions. You can select the active colors:

- Using the Color Palette's Select Color Panel
- Using the Color Palette's Active Colors Panel
- Using the Dropper Tool

TOPIC: Working with Palettes

## Working with Colors

Active Y Palettes Count Increase $\$ Decrease

## Working with Palettes

An image palette contains the color definitions for an image. You can edit and save image palettes from 16 and 256 color images. You can load palette files into images with color depths of 16 or more.

- Editing an Image Palette
- Saving an Image Palette
- Loading an Image Palette

TOPIC: Counting an Image's Colors

## Working with Colors

Active $y$ Palettes Count ${ }^{\text {A }}$ Increase Decrease

## Counting an Image's Colors

To find out how many colors are actually used in the active image:
1 Select "Count Colors Used" from the Colors Menu. Paint Shop Pro will display the number of colors in a message box.
2 When you're done with the message, click on the OK Button.

TOPIC: Increasing an Image's Color Depth

## Working with Colors

Active $y$ Palettes $y$ Count $y$ Increase Decrease

Increasing an Image's Color Depth
To increase the number of available colors in the active image, you select the new color depth from the Increase Color Depth Submenu. How many selections are available depends on the image's current color depth.

1 Select "Increase Color Depth" from the Colors Menu.
2 Select the color depth that you want to use.

TOPIC: Decreasing an Image's Color Depth

## Working with Colors

Active Y Palettes Y Count Y Increase Y Decrease

## Decreasing an Image's Color Depth

There are up to six different menu selections for decreasing an image's color depth. How many selections are available depends on the image's current color depth. For help reducing an image to:

- Two colors
- Sixteen colors
- $\quad \underline{256}$ colors
- 32 K or 64 K colors
- Between 16 and 257 colors


## Using the Color Dialog Box

 Window:TOPIC: Using the Color Dialog Box

## Using the Color Dialog Box

/ Overview Y Basic Yustom Y Full Spectrum
Using the Color Dialog Box
You use the Color Dialog Box to select a color from your system's entire color spectrum.

- Basic Colors
- Custom Colors
- Full Spectrum Colors

TOPIC: Basic Colors

## Using the Color Dialog Box

Overview Y Basic Yustom YFullSpectum

## Basic Colors

There are forty-eight basic colors that are preset and cannot be modified. To select a basic color:

1 Click on the color's square in the upper-left corner of the Color Dialog Box.
2 Click on the OK Button.

TOPIC: Custom Colors

## Using the Color Dialog Box

Overview Y Basic Y Custom Y Full Spectrum

## Custom Colors

There are sixteen custom colors. To select a custom color:
1 Click on the color's square in the lower-left corner of the dialog box.
2 Click on the OK Button.

## 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.

1 Click on the custom color's square in the lower-left corner of the Color Dialog Box.
2 Select a full spectrum color.
3 Click on the Add to Custom Colors Button.

TOPIC: Full Spectrum Colors

## Using the Color Dialog Box

Overview Y Basic Y Custom Y Full Spectrum

## Full Spectrum Colors

1 If only the basic colors and custom colors sections of the Color Dialog Box are currently visible, click on the Define Custom Colors Button. Paint Shop Pro will expand the Color Dialog Box to include the full spectrum color definition controls.
2 There are two controls for selecting a color with the mouse:

- The Crosshair Control sets the hue and saturation.
- The Pointer Control sets the luminance.

The controls affect the contents of the Color/Solid Display Box. You can move the Crosshair Control or the Pointer Control by dragging them to a new location, or you can just click where you want the control to go.
3 The hue in the Color side 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 the Active Colors

Window:

TOPIC: Using the Select Color Panel

## Selecting the Active Colors

Select Color Active Colors Y Dropper

## Using the Select Color Panel

To select an active color using the Select Color Panel on the Color Palette:
1 Point the cursor at the Select Color Panel. The cursor will change into an eyedropper. The Current Color Panel will display the color under the cursor and its RGB or HSL values.
2 Point the eyedropper at the color that you want to select.
3 Click with the:

- Primary mouse button to select the foreground color.
- Secondary mouse button to select the background color.

The appropriate color area in the Active Colors Panel will change to the closest color in the active image's palette.

TOPIC: Using the Active Colors Panel

## Selecting the Active Colors

Select Color Y Active Colors Dropper

## Using the Active Colors Panel

To select an active color from the active image's available colors, click on the foreground color or the background color in the Active Colors Panel. The Active Colors Panel appears in the Color Palette.

## Images with 2 to $\mathbf{2 5 6}$ Colors

Paint Shop Pro will open the Edit Palette Dialog Box. To select a color, click on its square, then click on the OK Button.

Images with $\mathbf{1 6}$ Million Color
Paint Shop Pro will open the Color Dialog Box.
Switching the Active Colors
To exchange the active colors, so that the foreground color is set to the background color and vice-versa, click on the Color Switcher in the Active Colors Panel.

TOPIC: Using the Dropper Tool

## Selecting the Active Colors

Select Color A Active Colors y Dropper
Using the Dropper Tool
You use the Dropper Tool to set one of the active colors by clicking on part of an image.

- Step-by-Step Instructions


## Working with Palettes

Window:

TOPIC: Editing an Image Palette

## Working with Palettes

/ Editing Saving Loading

## Editing an Image Palette

You edit the active image's palette from the Edit Palette Dialog Box. You can access the dialog box:

- By selecting "Edit Palette" from the Colors Menu.
- By clicking on the foreground color or the background color in the Active Colors Panel on the Color Palette.


## Sorting the Palette

You can sort an image palette by palette order, luminance, or hue. You select a sort order from the Sort 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 Revert Button.

TOPIC: Saving an Image Palette

## Working with Palettes

Editing Saving Loading

## Saving an Image Palette

You can save image palettes from 16 and 256 color images.
1 Select "Save Palette" from the Colors Menu. Paint Shop Pro will open the Save Palette As Dialog Box.
2 Select or create the file's folder.
3 Enter a name for the new palette file in the File Name Text Box. Don't worry about the file extension - Paint Shop Pro will add it automatically.
4 Select the palette type from the File Type Drop Down Box. If you want to use the palette with an application other than Paint Shop Pro, save it in the Microsoft Palette format.
5 Click on the Save Button. If the filename is already in use, Paint Shop Pro present a prompt. Click on the Yes Button to overwrite the existing file.

TOPIC: Loading an Image Palette

## Working with Palettes

$/$ Editing $y$ Saving $/$ Loading

## Loading an Image Palette

You can load palette files into images with color depths of 16 or more.
1 Select "Load Palette" from the Colors Menu. Paint Shop Pro will open the Load Palette Dialog Box.

2 Select the file's folder.
3 Click on the file in the Contents List Box. If the file list is too long to fit in the box, use the scrollbars to move through it.
4 There are three methods for applying the palette to the active image. You select a method by clicking on it.

- Nearest color matching changes each color in the image to the color in the palette that is the closest match.
- Error diffusion dithering attempts to maintain the image's appearance by dithering colors that are not in the palette.
- Maintain indexes 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 likenumbered color in the palette.

5 Click on the Open Button. Paint Shop Pro will modify the image to match the new palette.

Reducing an Image to Two Colors Window:

TOPIC: Step 1: Select Two Color Reduction

## Reducing an Image to Two Colors

Step 1: Select Two Color Reduction
Select "Decrease Color Depth" from the Colors Menu, then select "2 Colors". Paint Shop Pro will open the two colors version of the Decrease Color Depth Dialog Box.

TOPIC: Step 2: Select the Palette Component

## Reducing an Image to Two Colors

## Step 2: Select the Palette Component

The Palette Component determines which color value (or luminance) is used to set pixels to black or white. You select a component by clicking on it in the Palette Component Group Box.

- For most images, the grey value yields the best results.
- If an image contains mostly red, green, or blue, then selecting the dominant color component may be the best choice. For example, images with mostly flesh tones often reduce better using the red color component.

TOPIC: Step 3: Select the Reduction Method

## Reducing an Image to Two Colors

## Step 3: Select the Reduction Method

Paint Shop Pro provides three methods for reducing an image to two colors. You select a method by clicking on it in the Reduction Method Group Box.

## 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. This method yields stark, simple, high-contrast images.

## Ordered Dither Method

Shading is achieved by patterned intermingling of pixels. Best suited to certain print mediums. Images often appear "hashed", or composed of dots, $x$-shapes, and crosses.

## Error Diffusion Method

Uses intermingling of pixels to maintain shading. You must also select one of three algorithms: Floyd-Steinberg, Burkes, or Stucki. Each algorithm gives slightly different results. You select an algorithm by clicking on it.

TOPIC: Step 4: Select Palette Weighting Option

## Reducing an Image to Two Colors

## Step 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. You select an option by clicking on it in the Palette Weight Group Box.

TOPIC: Step 5: Select the OK Button

## Reducing an Image to Two Colors

## Step 5: Select the OK Button

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

Reducing an Image to Sixteen Colors
Window:
Steps

TOPIC: Step 1: Select the Colors to Boost (Optional)

## Reducing an Image to Sixteen Colors

## Step 1: Select the Colors to Boost (Optional)

An image's less common colors can be eliminated when you reduce color depth. The uncommon colors are often esthetically significant, providing the image's contrast, or emphasizing its subject. Their elimination by a color reduction algorithm can harm or even ruin an image's composition.
To emphasize the significance of a specific color or colors, select an area that contains the colors you want to boost.

TOPIC: Step 2: Select Sixteen Color Reduction

## Reducing an Image to Sixteen Colors

## Step 2: Select Sixteen Color Reduction

Select "Decrease Color Depth" from the Colors Menu, then select "16 Colors". Paint Shop Pro will open the sixteen colors version of the Decrease Color Depth Dialog Box.

TOPIC: Step 3: Select the Palette

## Reducing an Image to Sixteen Colors

## Step 3: Select the Palette

Paint Shop Pro offers two types of 16 color palettes. You select a palette by clicking on it in the Palette Group Box.

- An optimized palette contains the sixteen best colors for recreating the active image.
- The Windows palette contains the sixteen standard 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, use the Windows palette. If not, choose the optimized palette, because it will yield better image quality.

TOPIC: Step 4: Select the Reduction Method

## Reducing an Image to Sixteen Colors

Step 4: Select the Reduction Method
Paint Shop Pro provides three methods for reducing an image to sixteen colors. You select a method by clicking on it in the Reduction Method Group Box.

## 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
Shading is achieved by patterned intermingling of pixels. Best suited to certain print mediums. Images often appear "hashed", or composed of dots, $x$-shapes, and crosses. Only available for Windows palette.

## Error Diffusion Method

Uses non-patterned, pixel-to-pixel dithering.

TOPIC: Step 5: Select the Options

## Reducing an Image to Sixteen Colors

## Step 5: Select the Options

There are two options. You select an option by clicking on it in the Options Group Box.

## Boost Marked Colors

Sets the factor by which the colors in the selection are boosted. Only available for an optimized palette. Enter the boost factor into the option's text box.

## Reduce Color Bleeding

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

TOPIC: Step 6: Select the OK Button

## Reducing an Image to Sixteen Colors

## Step 6: Select the OK Button

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

## Reducing an Image to 256 Colors

Window:

TOPIC: Step 1: Select the Colors to Boost (Optional)

## Reducing an Image to 256 Colors

## Step 1: Select the Colors to Boost (Optional)

An image's less common colors can be eliminated when you reduce color depth. The uncommon colors are often esthetically significant, providing the image's contrast, or emphasizing its subject. Their elimination by a color reduction algorithm can harm or even ruin an image's composition.
To emphasize the significance of a specific color or colors, select an area that contains the colors you want to boost.

TOPIC: Step 2: Select 256 Color Reduction

## Reducing an Image to 256 Colors

## Step 2: Select 256 Color Reduction

Select "Decrease Color Depth" from the Colors Menu, then select "256 Colors". Paint Shop Pro will open the 256 colors version of the Decrease Color Depth Dialog Box.

TOPIC: Step 3: Select the Palette

## Reducing an Image to 256 Colors

## Step 3: Select the Palette

Paint Shop Pro offers two types of 256 color palettes. You select a palette by clicking on it in the Palette Group Box.

- An optimized palette contains the 256 best colors for recreating the active image.
- The standard palette covers the full color spectrum and includes the sixteen standard Windows colors.
If you want to create multiple images with the same palette, select the standard palette. Otherwise, choose the optimized palette, because it will yield better image quality.

TOPIC: Step 4: Select the Reduction Method

## Reducing an Image to 256 Colors

## Step 4: Select the Reduction Method

Paint Shop Pro provides three methods for reducing an image to 256 colors. You select a method by clicking on it in the Reduction Method Group Box.

## 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
Shading is achieved by patterned intermingling of pixels. Best suited to certain print mediums. Images often appear "hashed", or composed of dots, $x$-shapes, and crosses. Only available for the standard palette.

## Error Diffusion Method

Uses non-patterned, pixel-to-pixel dithering.

TOPIC: Step 5: Select the Options

## Reducing an Image to 256 Colors

## Step 5: Select the Options

There are three options. You select an option by clicking on it in the Options Group Box.

## Boost Marked Colors

Sets the factor by which the colors in the selection are boosted (see Step 1). Only available for an optimized palette. Enter the boost factor into the option's text box.

## Include Windows Colors

Adds the sixteen standard 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.

TOPIC: Step 6: Select the OK Button

## Reducing an Image to $\mathbf{2 5 6}$ Colors

## Step 6: Select the OK Button

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

Reducing an Image to 32 K or 64 K Colors
Window: Steps

TOPIC: Step 1: Select 32K or 64K Color Reduction

## Reducing an Image to 32 K or 64 K Colors

Step 1: Select 32K or 64K Color Reduction
Images of 32 K and 64 K 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.
Select "Decrease Color Depth" from the Colors Menu, then select "32K Colors" or " 64 K Colors". Paint Shop Pro will open the appropriate version of the Decrease Color Depth Dialog Box.

TOPIC: Step 2: Select the Reduction Method

## Reducing an Image to 32 K or 64 K Colors

## Step 2: Select the Reduction Method

Paint Shop Pro provides two methods for reducing an image to 32 K or 64 K colors. You select a method by clicking on it in the Reduction Method Group Box.

## 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.

TOPIC: Step 3: Select the OK Button

## Reducing an Image to 32 K or 64 K Colors

## Step 3: Select the OK Button

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

Reducing an Image to Between 16 and 257 Colors Window: Steps

TOPIC: Step 1: Select the Colors to Boost (Optional)

## Reducing an Image to $\mathbf{1 7}$ to $\mathbf{2 5 6}$ Colors

## Step 1: Select the Colors to Boost (Optional)

An image's less common colors can be eliminated when you reduce color depth. The uncommon colors are often esthetically significant, providing the image's contrast, or emphasizing its subject. Their elimination by a color reduction algorithm can harm or even ruin an image's composition.
To emphasize the significance of a specific color or colors, select an area that contains the colors you want to boost.

TOPIC: Step 2: Select X Colors Reduction

## Reducing an Image to 17 to $\mathbf{2 5 6}$ Colors

## Step 2: Select X Colors Reduction

Select "Decrease Color Depth" from the Colors Menu, then select "X Colors". Paint Shop Pro will open the X colors version of the Decrease Color Depth Dialog Box.

TOPIC: Step 3: Enter the Number of Colors

## Reducing an Image to 17 to $\mathbf{2 5 6}$ Colors

## Step 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. Double-click in the text box to access it.

TOPIC: Step 4: Select the Reduction Method

## Reducing an Image to 17 to $\mathbf{2 5 6}$ Colors

## Step 4: Select the Reduction Method

Paint Shop Pro provides two methods for reducing an image to X colors. You select a method by clicking on it in the Reduction Method Group Box.

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.

TOPIC: Step 5: Select the Options

## Reducing an Image to $\mathbf{1 7}$ to $\mathbf{2 5 6}$ Colors

## Step 5: Select the Options

There are three options. You select an option by clicking on it in the Options Group Box.

## Boost Marked Colors

Sets the factor by which the colors in the selection are boosted (see Step 1). Enter the boost factor into the option's text box.

## Include Windows Colors

Adds the sixteen standard Windows colors to the image's 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.

TOPIC: Step 6: Select the OK Button

## Reducing an Image to 17 to $\mathbf{2 5 6}$ Colors

## Step 6: Select the OK Button

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

Using the Dropper Tool Window:

TOPIC: Step 1: Select the Dropper Tool

## Using the Dropper Tool

## Step 1: Select the Dropper Tool

There are two ways to select the Dropper Tool:

- Click on the Dropper Button in the Tool Palette.
- If you are using one of the following tools, you can temporarily switch to the Dropper

Tool by pressing and holding the <Ctrl> key.

- Paintbrush
- Color Replacer
- Airbrush
- Fill Tool
- Line Tool
- Shape Tool

TOPIC: Step 2: Point At the Color

## Using the Dropper Tool

## Step 2: Point At the Color

When you move the Dropper Tool's cursor over an image, it changes into an eyedropper.
Point the eyedropper's tip at the color you want to select.
The Current Color Panel on the Color Palette will display the color's RGB or HSL values. In palletized images, the panel will also display the color's palette index.

## Related Topics

- Display Control Descriptions on Style Bar

TOPIC: Step 3: Click On the Color

## Using the Dropper Tool

## Step 3: Click On the Color

Click on the color with the:

- Primary mouse button to select the foreground color.
- Secondary mouse button to select the background color.

The appropriate control in the Active Colors Panel of the Color Palette will change to the closest available color in the active image.

Basic Image Editing
Window:
Main

TOPIC: Undo Command

## Basic Image Editing

Undo $\quad$ Clear $\quad$ Cut \& Paste $\backslash D$

## 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 Paint Shop Pro saves the Undo data. To use the Undo Command, you can:

- Select "Undo" from the Edit Menu.
- Click on the Undo Button in the Toolbar.
- Press <Ctrl> + <Z>.


## Removing All Changes

To undo all of your changes since you last saved the file, use the file Revert Command. The File Revert Command is not available for new images that have not been saved.

TOPIC: Clear Command

## Basic Image Editing



## Clear Command

The Clear Command removes the current image or selection and replaces it with the background color. The Clear Command does not send data to the Windows Clipboard. To use the command, you can:

- Select "Clear" from the Edit Menu.
- Press <Del>.

TOPIC: Cutting and Pasting

Basic Image Editing
Undo $y$ Clear $Y$ Cut \& Paste $\$

## Cutting and Pasting

Paint Shop Pro offers the three basic cut and paste commands:

- Cut
- Copy
- Paste

It also has an Empty Clipboard Command, which allows you to free the Clipboard of unwanted data.

TOPIC: Cropping an Image

## Basic Image Editing

## $\triangleleft$ Crop $\quad$ AddBorder $\$ Enlarge Canvas $\backslash D$

## Cropping an Image

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

1 Select the part of the image that you want to retain. The area outside of the selection will be deleted. If you select a non-rectangular area, Paint Shop Pro will retain the rectangular portion of the image that contains the selection.
2 Select "Crop" from the Image Menu.

TOPIC: Adding Borders to an Image

## Basic Image Editing

## $\checkmark$ Crop $\quad$ Y Add Border Y Enlarge Canvas $\backslash D$

## Adding Borders to an Image

To add a border to the active image:
1 Select the color for the borders as the background color.
2 Select "Add Borders" from the Image Menu. Paint Shop Pro will open the Add Borders Dialog Box.
3 Mark the Symmetric Checkbox if you want to create equally-sized borders on all sides.
4 Enter the border widths. If you:

- Turned on the Symmetric Option, use the Top Spin Control to set the width for the borders.
- Turned off the Symmetric Option, set a width for each border using the appropriate spin control.

5 Click on the OK Button. Paint Shop Pro will close the dialog box and add the borders to the image.

TOPIC: Enlarging an Image Canvas

## Basic Image Editing

$\triangleleft /$ Crop $\quad$ Y Add Border $\quad$ Y Enlarge Canvas $\backslash\rangle$

## Enlarging an Image Canvas

Enlarging an image canvas adds background color around the image, or below it and to the right.

1 Paint Shop Pro will fill the new area with the background color. Select the color that you want to use.
2 Select "Enlarge Canvas" from the Image Menu. Paint Shop Pro will open the Enlarge Canvas Dialog Box.
3 Use the spin controls to set the dimensions.
4 When the Center Image Checkbox is marked, the current image is centered in the new canvas. When the option is turned off, the image appears in the new canvas's upper left corner.
5 Click on the OK Button. Paint Shop Pro will expand the canvas.

TOPIC: Changing Image Width and Height

## Basic Image Editing

\/ Change Size Flip\& Mirror $\quad$ Rotate

## Changing Image Width and Height

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

- Resizing gives superior results with simple and hard-edged images, and when working with sixteen colors or less.
- Resampling gives superior results with photo-realistic images, and with images that are irregular or complex.
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 many cases, resampling produces superior image quality, but takes noticeably longer to complete.

TOPIC: Reversing Image Orientation

## Basic Image Editing

$\triangleleft /$ Change Size Y Flip \& Mirror $\$ Rotate

## Reversing Image Orientation

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

## Flip Command

The Flip Command reverses the image or selection vertically, so that what was the top becomes the bottom, and vice-versa. To use the command, select "Flip" from the Image Menu.

## Mirror Command

The Mirror Command reverses the image or selection horizontally, so that what was the left side becomes the right side, and vice-versa. To use the command, select "Mirror" from the Image Menu.

TOPIC: Rotating an Image

## Basic Image Editing

$\triangleleft /$ Change Size $y$ Flip \& Mirror $Y$ Rotate

## Rotating an Image

The Rotate Command lets you spin an image by a specified number of degrees.
1 Select "Rotate" from the Image Menu. Paint Shop Pro will open the Rotate Dialog Box.
2 Select the direction of rotation from the Direction Group Box. Right is clockwise, and left is counter-clockwise. Click on the direction's option button or its text.
3 Select the degrees of rotation from the Degrees Group Box. Click on the appropriate option button or its text. For help using the Free Option, see the following section.
4 Click on the OK Button. Paint Shop Pro will rotate the image.

## Free Option (Specified Rotation)

The Free Option is only available for 256 color grey scale and 16 million color images. You use the Free Spin Control to set the degrees of rotation. To rotate an image of insufficient color depth:

1 Increase the image's color depth to 256 color grey scale or 16 million color .
2 Rotate it.
3 Reduce its color depth to the original format.

## Cutting and Pasting

Window:

TOPIC: Cut Command

## Cutting and Pasting

1 Cut Copy $Y$ Paste $Y$ Empty Clip

## 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. To use the Cut Command, you can:

- Select "Cut" from the Edit Menu.
- Click on the Cut Button in the Toolbar.
- Press $\langle$ Ctrl $>+\langle X\rangle$.

TOPIC: Copy Command

## Cutting and Pasting

Cut Y Copy Yaste Ympty Clip

## Copy Command

The Copy Command sends the current image or selection to the Windows Clipboard without affecting the image. To use the Copy Command, you can:

- Select "Copy" from the Edit Menu.
- Click on the Copy Button in the Toolbar
- Press $<\mathrm{Ctrl}>+<\mathrm{C}>$.

TOPIC: Paste Command

## Cutting and Pasting

Cut Y Copy Y Paste Y Empty Clip
Paste Command
The Paste Command retrieves the contents of the Windows Clipboard. There are three ways to paste in Paint Shop Pro:

- As a New Image
- As a New Selection
- As Transparent Selection
- Into the Current Selection

TOPIC: Empty Clipboard Command

## Cutting and Pasting

Cut Y Copy Y Paste Ympty Clip
Empty Clipboard Command
Data in the Windows Clipboard resides in your active memory (RAM). Since image data is often sizable, leftover data 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.

## Paste Command

Window:
More2

TOPIC: As a New Image

## Paste Command



As a New Image
When you paste as a new image, Paint Shop Pro loads the Clipboard image in an image window. 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, you can:

- Select "Paste" from the Edit Menu, then select "As New Image" from the submenu.
- Click on the Paste Button in the Toolbar. button shown at right.
- Press <Ctrl> $+\langle\mathrm{V}\rangle$.

TOPIC: As a New Selection

## Paste Command

Image Y Selection Y Transparent Y Into Selection

## 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.

1 Open or 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.

TOPIC: As Transparent Selection

## Paste Command

Image $Y$ Selection $Y$ Transparent Into Selection

## As Transparent Selection

When you paste data as a transparent selection, Paint Shop Pro adds it to the current image, defines it as a selection, then deselects all of the pixels that match the current background color. The Transparent Paste Tolerance Option determines how close the color of a pixel must be to the background color in order to be deselected.

1 Open or select the image that you want to paste into.
2 Select the color that you want to make transparent as the background color.
3 Select "As Transparent 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.
5 Use the mouse to position the selection. When you've got it where you want it, click once.

TOPIC: Into the Current Selection

## Paste Command

I Image $Y$ Selection $Y$ Transparent $Y$ Into Selection

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.

1 Open or 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.

Resizing and Resampling Defined Window:

TOPIC: Resizing Defined

## Resizing and Resampling Defined

/Resizing (Resampling

## Resizing Defined

Resizing duplicates or deletes pixels as necessary to achieve the desired width and height.

TOPIC: Resampling Defined

## Resizing and Resampling Defined

Resizing YResampling

## 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 Reducing its color depth to the original format.

Changing Image Width and Height Window:

TOPIC: Step 1: Access the Appropriate Dialog Box

## Changing Image Width and Height

## Step 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.

TOPIC: Step 2: Select the New Size

## Changing Image Width and Height

## Step 2: Select the New Size

You can select one of five standard image sizes, a custom size by width and height, or 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.

Custom Size<br>- By Width and Height<br>- By Aspect Ratio

TOPIC: Step 3: Select the OK Button

## Changing Image Width and Height

## Step 3: Select the OK Button

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

Changing an Image's Width and Height: Custom Size Window:

More2

TOPIC: Custom Size By Width and Height

## Custom Size

Width \& Height X Aspect Ratio

## Custom Size By Width and Height

To specify a custom size by width and height in pixels:
1 Click on the Custom Size Option.
2 Empty the Maintain Aspect Ratio Checkbox.
3 Type the new width into the first text box.
4 Press <Tab>.
5 Type the new height into the second text box.

TOPIC: Custom Size By Aspect Ratio

## Custom Size

Width \& Height $Y$ Aspect Ratio

## 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.
2 Mark the Maintain Aspect Ratio Checkbox.
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, 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. The remaining field will update when you either (a) exit the current field, or (b) select the OK Button.

## Painting and Drawing

Window:
Main

TOPIC: Painting and Drawing Overview

## Painting and Drawing

/ Overview Paintbrush Clone Brush $\backslash D$

## Painting and Drawing Overview

The Tool Palette contains a ten tools that simulate painting and drawing utensils - such as brushes, pens, and pencils - or provide related functionality.
-
Many of the Painting and Drawing 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: Paintbrush

## Painting and Drawing

Overview Y Paintbrush Clone Brush $\backslash D$

## Paintbrush

You use the Paintbrush to paint or draw freehand. The Paintbrush has four configuration options that control how it applies color to an image.

- Setting the Paintbrush Options
- Painting with the Paintbrush
- Drawing Lines with the Paintbrush

TOPIC: Clone Brush

## Painting and Drawing

Overview y Paintbrush y Clone Brush $\$
Clone Brush
You use the Clone Brush to copy part of an image to another location. You can use it to copy within an image, or between two images of the same color depth. The Clone Brush has four configuration options that control how it copies and applies color.

- Setting the Clone Brush Options
- Using the Clone Brush


## Example

If you have a photograph with a flaw against a multi-toned or multicolored background such as skin, cloth, or water - you can use the Clone Brush to copy the background over the flaw.

TOPIC: Color Replacer

## Painting and Drawing

$\checkmark /$ Color Replacer Y Retouch Tool Y Eraser $\backslash D$

## Color Replacer

You use the Color Replacer to replace one color in an image with another. The Color
Replacer has three configuration options that control how it recognizes and replaces color.

- Setting the Color Replacer Options
- Replacing All Occurrences of a Color
- Painting with the Color Replacer
- Drawing Lines with the Color Replacer

TOPIC: Retouch Tool

## Painting and Drawing

$\triangleleft /$ Color Replacer $/$ Retouch Tool $\quad$ Eraser $D$

## Retouch Tool

You use the Retouch Tool to apply photo retouching effects to an image. The Retouch Tool
has four configuration options that determine which effect is applied and how.

- Setting the Retouch Tool Options
- Painting with the Retouch Tool
- Drawing Lines with the Retouch Tool

TOPIC: Eraser

## Painting and Drawing

$\triangleleft /$ Color Replacer Y Retouch Tool Y Eraser $\$

## Eraser

You use the Eraser to remove the effect of your last action. For example, if you added a color over another color, you can use the Eraser to "peel back" the new color. The Eraser has three configuration options that determine how it removes editing effects.

- Setting the Eraser Options
- Painting with the Eraser
- Drawing Lines with the Eraser

TOPIC: Airbrush

## Painting and Drawing

```
|/ Airbrush \ Fill Tool \ TextTool\D
```


## Airbrush

The Airbrush simulates painting with an airbrush or spray can. The Airbrush has three configuration options that determine how it applies color.

- Setting the Airbrush Options
- Painting with the Airbrush
- Drawing Lines with the Airbrush

TOPIC: Fill Tool

## Painting and Drawing

$\checkmark /$ Airbush $Y$ Fill Tool $\$ Text Tool $\backslash D$

## Fill Tool

You use the Fill Tool to fill an area with a color or pattern. The Fill Tool has a variable number of configuration options that control how it recognizes and replaces color. There are three standard options, and up to two additional options.

- Setting the Standard Options
- Pattern Style Options
- Linear Gradient Style Options
- Non-Linear Gradient Style Options
- Using the Fill Tool

TOPIC: Text Tool

## Painting and Drawing

## $\checkmark /$ Airbrush $Y$ Fill Tool $Y$ Text Tool $\$

## Text Tool

You use the Text Tool to add text to an image. The Text Tool works a little differently than the other painting and drawing tools. The options are not presented on the Style Bar, but in a separate dialog box.

- Step-by-Step Instructions

TOPIC: Line Tool

## Painting and Drawing

$\triangleleft /$ Line Tool \ Shape Tool

## Line Tool

You use the Line Tool to draw lines. You change the Line Tool's width from the Style Bar.

- Setting the Line Width
- Using the Line Tool

TOPIC: Shape Tool

## Painting and Drawing

$\checkmark /$ Line Tool $Y$ Shape Tool

## Shape Tool

You use the Shape Tool to draw a rectangle, square, ellipse, or circle. The Shape Tool has three configuration options that determine what shape it draws.

- Setting the Shape Tool Options
- Using the Shape Tool


## Paintbrush

Window:
More

TOPIC: Setting the Paintbrush Options

## Paintbrush

Options Y Painting Y Drawing

## Setting the Paintbrush Options

1 Click on the Paintbrush Button in the Tool Palette. If the Style Bar is visible, it will display the Paintbrush's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Brush Type Drop Down Box to choose the type of brush that you want to use. The brush type determines how the color "leaves" the cursor.
4 Use the Size Spin Control to set the Paintbrush's size in pixels.
5 Use the Shape Drop Down Box to select a brush shape.
6 Use the Paper Texture Drop Down Box to select a surface type. The paper texture setting determines how the image "absorbs" the color.

TOPIC: Painting with the Paintbrush

## Paintbrush

Options Y Painting (Drawing

## Painting with the Paintbrush

1 Select the colors that you want to paint with.
2 If you want to paint within a specific area, select it now. Paint Shop Pro will only apply color within the selection.

3 Click on the Paintbrush Button in the Tool Palette.
4 Position the cursor where you want to start painting.
5 Press and hold the:

- Primary mouse button to apply the foreground color.
- Secondary mouse button to apply the background color.

6 Apply color to the image by moving the mouse.
7 When you're done painting, release the mouse button.

TOPIC: Drawing Lines with the Paintbrush

## Paintbrush

Options Y Painting Y Drawing

## Drawing Lines with the Paintbrush

1 Select the colors that you want to draw with.
2 If you want to draw within a specific area, select it now. Paint Shop Pro will only apply color within the selection.

3 Click on the Paintbrush Button in the Tool Palette.
4 Click on the image where you want to start drawing lines.
5 Press and hold the <Shift> key.
6 Click where you want to end the line segment. Use the:

- Primary mouse button to apply the foreground color.
- Secondary mouse button to apply the background color.

7 You can continue adding line segments by clicking with either mouse button. When you're done, release the <Shift> key.

Clone Brush
Window:
More

TOPIC: Setting the Clone Brush Options

## Clone Brush

Options \ Using

## Setting the Clone Brush Options

1 Click on the Clone Brush Button in the Tool Palette. If the Style Bar is visible, it will display the Clone Brush's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Clone Mode Drop Down Box to select the clone mode that you want to use. The clone mode controls the behavior of the source area when you stop copying and then resume copying somewhere else:

- In aligned mode, the source area moves accordingly. The source area behaves as if you never stopped copying.
- In non-aligned mode, the source area does not move. The source area behaves as if you just selected it.
4 Use the Size Spin Control to set the Clone Brush's size in pixels.
5 Use the Shape Drop Down Box to select a brush shape.
6 Use the Opacity Spin Control to set the brush's opacity.
7 Use the Paper Texture Drop Down Box to select a surface type. The paper texture setting determines how the target area "absorbs" the color.

TOPIC: Using the Clone Brush

## Clone Brush

Options Y Using

## Using the Clone Brush

1 If you want to copy into a specific area, select it now. Paint Shop Pro will only apply color within the selection.
2 Click on the Clone Brush Button in the Tool Palette.
3 Position the cursor over the part of the image that you want to copy.
4 Click with the secondary mouse button. Your computer will beep to indicate that you have selected the source area.
5 Position the cursor where you want to copy to. The target area can be within the same image, or in another image of the same color depth.
6 Press and hold the primary mouse button. Crosshairs will appear over the source area. The crosshairs indicate which pixel you are copying. Paint Shop Pro will start copying to the target area.
7 Move the mouse to copy color from the source area to the target area.
8 When you're done copying, release the mouse button.
9 To resume copying, start over at step 5 . Where the source area will be depends on the clone mode.

## Color Replacer

 Window:TOPIC: Setting the Color Replacer Options

## Color Replacer

Options Replace All Painting D Drawing

## Setting the Color Replacer Options

1 Click on the Color Replacer Button in the Tool Palette. If the Style Bar is visible, it will display the Color Replacer's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Size Spin Control to set the Color Replacer's width in pixels.
4 Use the Shape Drop Down Box to select a brush shape.
5 Use the Tolerance Spin Control to set the color tolerance. The tolerance setting determines how close a color must be to the target color in order to be replaced. The scale is 0 to 200, with 0 being no tolerance (a perfect color match), and 100 being a tolerance of roughly half the spectrum.
6 Use the Paper Texture Drop Down Box to select a surface type. The paper texture setting determines how the image "absorbs" the new color.

TOPIC: Replacing All Occurrences of a Color

## Color Replacer

Options YReplace All Painting Y Drawing

## Replacing All Occurrences of a Color

1 Select the colors that you want to use. The Color Replacer can replace the background color with the foreground color or vice-versa.
2 If you want to replace colors within a specific area, select it now. Paint Shop Pro will only replace colors within the selection.
3 Click on the Color Replacer Button in the Tool Palette.
4 Double-click anywhere in the image. Use the:

- Primary mouse button to replace the background color with the foreground color.
- Secondary mouse button to replace the foreground color with the background color.

TOPIC: Painting with the Color Replacer

## Color Replacer

Options Y Replace All Y Painting $\$ Drawing

## Painting with the Color Replacer

1 Select the colors that you want to use. The Color Replacer can replace the background color with the foreground color or vice-versa.
2 If you want to replace color within a specific area, select it now. Paint Shop Pro will only replace color within the selection.
3 Click on the Color Replacer Button in the Tool Palette.
4 Place the cursor where you want to start replacing a color.
5 Press and hold the:

- Primary mouse button to replace the background color with the foreground color.
- Secondary mouse button to replace the foreground color with the background color. Paint Shop Pro will replace the appropriate color at the cursor.
6 Move the mouse to continue replacing the color.
7 When you're done, release the mouse button.

TOPIC: Drawing Lines with the Color Replacer

## Color Replacer

Options Y Replace All Y Painting Y Drawing

## Drawing Lines with the Color Replacer

1 Select the colors that you want to draw with.
2 If you want to draw within a specific area, select it now. Paint Shop Pro will only replace colors within the selection.
3 Click on the Color Replacer Button in the Tool Palette.
4 Click where you want to start drawing lines.
5 Press and hold the <Shift> key.
6 Position the cursor where you want to end the first line segment.
7 Click with the:

- Primary mouse button to replace the background color with the foreground color.
- Secondary mouse button to replace the foreground color with the background color.

8 You can continue adding line segments by clicking with either mouse button. When you're done, release the <Shift> key.

## Retouch Tool

Window:

TOPIC: Setting the Retouch Tool Options

## Retouch Tool

Options Y Painting Y Drawing

## Setting the Retouch Tool Options

1 Click on the Retouch Button in the Tool Palette. If the Style Bar is visible, it will display the Retouch Tool's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Retouch Mode Drop Down Box to select the effect that you want to apply.

| Mode |  | Effect |
| :--- | :--- | :--- |
| Lighten |  | Increases brightness. |
| Darken |  | Decreases brightness. |
| Soften |  | Smoothes edges and reduces contrasts. <br> Sharpen |
| Heightens edges and accentuates contrasts. <br> Emboss | Causes foreground to appear raised from <br> background by suppressing color and tracing <br> edges in black. |  |
| Smudge | Spreads colors. Effect is similar to smearing paint. |  |

4 Use the Size Spin Control to set the Retouch Tool's size in pixels.
5 Use the Shape Drop Down Box to select a brush shape.
6 Use the Opacity Spin Control to set the tool's opacity.
7 Use the Paper Texture Drop Down Box to select a surface type. The paper texture setting determines how the image "absorbs" the color.

TOPIC: Painting with the Retouch Tool

## Retouch Tool

Options Y Painting $\backslash$ Drawing

## Painting with the Retouch Tool

1 If you want to apply the effect within a specific area, select it now. Paint Shop Pro will only apply the effect within the selection.
2 It's generally a good idea to zoom in on the part of the image that you want to retouch.
3 Click on the Retouch Button in the Tool Palette.
4 Press and hold the primary mouse button. Paint Shop Pro will apply the effect at the cursor.
5 Move the cursor over the area you want to retouch by moving the mouse. If the effect isn't applying fast enough, increase the opacity setting and start over at Step 3.
6 When you're done applying the effect, release the mouse button.

TOPIC: Drawing Lines with the Retouch Tool

## Retouch Tool

Options Y Painting Y Drawing

## Drawing Lines with the Retouch Tool

1 If you want to apply the effect within a specific area, select it now. Paint Shop Pro will only apply the effect within the selection.
2 It's generally a good idea to zoom in on the part of the image that you want to retouch.
3 Click on the Retouch Button in the Tool Palette.
4 Click where you want to start retouching.
5 Press and hold the <Shift> key.
6 Click where you want to end the first line segment.
7 You can continue applying the effect in line segments by clicking on the image. When you're done, release the <Shift> key.

## Eraser

TOPIC: Setting the Eraser Options

## Eraser

Options Y Painting X Drawing

## Setting the Eraser Options

1 Click on the Eraser Button in the Tool Palette. If the Style Bar is visible, it will display the Eraser's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Size Spin Control to set the Eraser's size in pixels.
4 Use the Shape Drop Down Box to select a brush shape.
5 Use the Opacity Spin Control to set the brush's opacity. The opacity setting determines how much of the effect will be removed. The scale is 1 to 128 , with 1 leaving the effect almost as is, and 128 removing all of the effect.
6 Use the Paper Texture Drop Down Box to select a surface type. The paper texture setting determines how the color is dispersed.

TOPIC: Painting with the Eraser

## Eraser

Options Y Painting \ Drawing

## Painting with the Eraser

1 Click on the Eraser Button in the Tool Palette.
2 Place the cursor where you want to start erasing the effect.
3 Press and hold the primary mouse button.
4 Move the mouse to erase the effect.
5 When you're done, release the mouse button.

TOPIC: Drawing Lines with the Eraser

## Eraser

Options Y Painting Y Drawing
Drawing Lines with the Eraser
1 Click on the Eraser Button in the Tool Palette.
2 Click where you want to start erasing.
3 Press and hold the <Shift> key.
4 Click where you want to end the first line segment.
5 You can continue erasing in line segments by clicking on the image. When you're done, release the <Shift> key.
Airbrush
Window:

TOPIC: Setting the Airbrush Options

## Airbrush

Options Y Painting $\$ Drawing

## Setting the Airbrush Options

1 Click on the Airbrush Button in the Tool Palette. If the Style Bar is visible, it will display the Airbrush's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Size Spin Control to set the Airbrush's size in pixels.
4 Use the Shape Drop Down Box to select a brush shape.
5 Use the Opacity Spin Control to set the Airbrush's opacity.
6 Use the Paper Texture Drop Down Box to select a surface type. The paper texture setting determines how the image "absorbs" the color.

TOPIC: Painting with the Airbrush

## Airbrush

Options Y Painting \ Drawing

## Painting with the Airbrush

1 Select the colors that you want to paint with.
2 If you want to paint within a specific area, select it now. Paint Shop Pro will only apply color within the selection.

3 Click on the Airbrush Button in the Tool Palette.
4 Position the cursor where you want to start painting.
5 Press and hold the:

- Primary mouse button to apply the foreground color.
- Secondary mouse button to apply the background color.

Paint Shop Pro will add color at the cursor.
6 Apply color to the image by moving the mouse.
7 When you're done painting, release the mouse button.

TOPIC: Drawing Lines with the Airbrush

## Airbrush

## Options Y Painting Y Drawing

## Drawing Lines with the Airbrush

1 Select the colors that you want to draw with.
2 If you want to draw within a specific area, select it now. Paint Shop Pro will only replace colors within the selection.

3 Click on the Airbrush Button in the Tool Palette.
4 Click on the image where you want to start drawing lines.
5 Press and hold the <Shift> key.
6 Click where you want to end the line segment. Use the:

- Primary mouse button to apply the foreground color.
- Secondary mouse button to apply the background color.

7 You can continue adding line segments by clicking with either mouse button. When you're done, release the <Shift> key.

Fill Tool
Window:

TOPIC: Setting the Standard Options

## Fill Tool

/ Options Y Pattern $Y$ Linear $\$ Non-Linear Y Using

## Setting the Standard Options

1 Click on the Fill Button in the Tool Palette. If the Style Bar is visible, it will display the Fill Tool's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Match Mode Drop Down Box to select a method for determining which pixels to fill:

- RGB Value method selects matching RGB values
- Hue Method selects matching hue values
- Brightness Method selects matching luminance values
- None overwrites all pixels

4 Use the Tolerance Spin Control to set the fill tolerance. The fill tolerance setting determines how close the color of a pixel must be to the color of the selected pixel in order to be overwritten. The spin control uses a scale of 0 to 200, with 0 being no tolerance (only pixels with a perfect match will be filled), and 200 being total tolerance (all pixels will be filled).
5 Use the Fill Style Drop Down Box to select the type of fill that you want to perform.
6 Every fill style except for the solid color fill has additional configuration options.

## TOPIC: Pattern Style Options

## Fill Tool

Options Y Pattern X Linear Y Non-Linear Y Using

## Pattern Style Options

The pattern fill style requires that you select a pattern source. When you use the fill tool, the fill area is overwritten with the selected pattern.

1 You can use an entire image or part of an image as a pattern source. If the image that you want to use isn't open, open it now.
2 If you want to use part of the image as the pattern source, select it now.
3 Click on the Style Bar's Options Button. Paint Shop Pro will open the Define New Pattern Dialog Box.
4 Use the New Pattern Source Drop Down Box to select the image that you want to use.
5 Click on the OK Button. Paint Shop Pro will close the dialog box and save the new pattern.

TOPIC: Linear Gradient Style Options

## Fill Tool

Options Y Pattern Y Linear X Non-Linear Y Using

## Linear Gradient Style Options

The linear gradient fill style requires that you set the fill angle.
1 Click on the Style Bar's Options Button. Paint Shop Pro will open the Gradient Fill Direction Dialog Box.
2 To set the fill angle, you can:

- Use the Direction Control. Click anywhere in the circle, or use the mouse to drag the control's needle. The display box at right will show an example of the selected fill.
- Use the Degrees Text Box. Double-click in the text box to access it, then type in the number of degrees. The range is 0 to 360 .

3 Click on the OK Button. Paint Shop Pro will close the dialog box and save the angle setting.

TOPIC: Non-Linear Gradient Style Options

## Fill Tool

Options Y Pattern Y Linear YNon-Linear \ Using

## Non-Linear Gradient Style Options

The rectangular, sunburst, and radial gradient fill styles require that you set the gradient fill's origin. The origin is the point from which the gradient fill disperses or radiates. The foreground color will appear at the gradient's origin, and the background color will appear at its edges.

1 Click on the Style Bar's Options Button. Paint Shop Pro will open the Gradient Fill Origin Dialog Box.
2 Use the Vertical Slider Control or the Vertical Text Box to set the distance between the top edge of the fill area and the gradient origin. The distance is measured as a percentage of the fill area's height.
3 Use the Horizontal Slider Control or the Horizontal Text Box to set the distance between the left edge of the fill area and the gradient origin. The distance is measured as a percentage of the fill area's width.
4 Click on the OK Button. Paint Shop Pro will close the dialog box and save the origin setting.

TOPIC: Using the Fill Tool

## Fill Tool

Options Pattern $y$ Linear $Y$ Non-Linear $y_{\text {Using }}$

## Using the Fill Tool

1 Select the colors that you want to fill with.
2 If you want to fill within a specific area, select it now. Paint Shop Pro will only apply color within the selection.
3 If the Tool Palette isn't visible, display it now.
4 Click on the Fill Button in the Tool Palette.
5 Position the cursor where you want to fill.
6 Click with the:

- Primary mouse button to fill with the foreground color.
- Secondary mouse button to fill with the background color.

Text Tool Window:

TOPIC: Using the Text Tool: Steps 1 to 5

## Text Tool

Steps 1 to 5 Y Steps 6 to 9

## Using the Text Tool: Steps 1 to 5

1 The text can be created in the foreground color, or as an empty selection. If you want the text to appear as a color, select the one you want to use now.
2 Click on the Text Button in the Tool Palette.
3 Click on the image where you want the text to appear. Paint Shop Pro will open the Add Text Dialog Box.
4 There are three font properties: Name (typeface), Style, and Size. Set each property by clicking on an entry in the appropriate list box. Use the scrollbars to move through the lists.
5 Set the three text effect checkbox options:

| Effect |  | Result |
| :--- | :--- | :--- |
| Strikeout |  | Places a line through the text. <br> Underline |
| Places a line under the text. |  |  |
| Anti-alias | Softens jagged character edges by using <br> shades of the text's color. Only available for <br> 256 color grey scale and for color depths |  |
|  | greater than 256. |  |

TOPIC: Using the Text Tool: Steps 6 to 9

## Text Tool

Steps 1 to 5 Steps 6 to 9

## Using the Text Tool: Steps 6 to 9

6 Click on an alignment option in the Alignment Group Box.
7 Type the text you want to add into the large text box labeled "Enter Text Here". You access the text by clicking in it or by pressing <Alt> $+<\mathrm{E}>$.
8 Set the Floating Checkbox Option.

- If you turn the option on, the text will appear in the foreground color, and will be in a floating selection.

If you turn the option off, the text will be created as a standard selection. The selection will contain the colors that appear in the image at the place where the text was created.
9 Click on the OK Button. Paint Shop Pro will close the dialog box and add the text to the image. The text will be selected. You can move the text by dragging its selection.

Line Tool
Window:

TOPIC: Setting the Line Width

## Line Tool

Setting Width Using

## Setting the Line Width

1 Click on the Line Button in the Tool Palette. If the Style Bar is visible, it will display the Line Tool's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Width Spin Control to set the line's width in pixels.

TOPIC: Using the Line Tool

## Line Tool

\section*{Setting Width Y Using \}

## Using the Line Tool

1 Select the colors that you want to draw with.
2 Click on the Line Button in the Tool Palette.
3 Position the cursor where you want the line to start.
4 To draw the line at fixed angles in increments of $45^{\circ}$, press and hold the <Shift> key.
5 Press and hold the:

- Primary mouse button to apply the foreground color.
- Secondary mouse button to apply the background color.

6 Drag the cursor to where you want the line to end. Paint Shop Pro will draw a light line between the starting point and the cursor.
7 Release the mouse button. Paint Shop Pro will draw a line of the selected width and color between the two points.

## Shape Tool

Window:

TOPIC: Setting the Shape Tool Options

## Shape Tool

Options Using

## Setting the Shape Tool Options

1 Click on the Shape Button in the Tool Palette. If the Style Bar is visible, it will display the Shape Tool's style controls.
2 If the Style Bar isn't visible, display it now.
3 Use the Line Spin Control to set the width of the shape's boundary line in pixels.
4 Use the Shape Drop Down Box to select a shape to draw.
5 Use the Style Drop Down Box to select whether the shape is outlined or filled.

TOPIC: Using the Shape Tool

## Shape Tool

Options Y Using

## Using the Shape Tool

1 Select the colors that you want to draw with.
2 Click on the Shape Button in the Tool Palette.
3 Point the cursor's crosshairs at any corner of the shape that you want to draw.
4 Press and hold the:

- Primary mouse button to apply the foreground color.
- Secondary mouse button to apply the background color.

5 Drag the cursor to the opposite corner of the shape. As you move the cursor, Paint Shop Pro will draw an outline of the shape.
6 Release the mouse button. Paint Shop Pro will draw the shape using the selected options.

## Color Functions

Window:
Main

TOPIC: Color Functions Overview

## Color Functions

Overview \Adiustment Y Colorize YGreyScale $\backslash D$

## Color Functions Overview

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

## Color Composition and Histograms

Histograms analyze image color composition. The information they provide can help you make image enhancement adjustments, or achieve particular color effects.

TOPIC: Color Adjustment Functions

## Color Functions

/ Overview Yadjustment \ Colorize Y Grey Scale \D

## 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.

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

TOPIC: Colorize Function

## Color Functions

/ Overview Y Adiustment Y Colorize YGrey Scale $\backslash D$

## 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. You can use the function to create sepia tones and other single-color effects.

1 Select the area to modify.
2 Select "Colorize" from the Colors Menu. Paint Shop Pro will open the Colorize Dialog Box.
3 Use the spin controls to set the function's parameters. Any changes that you make to the settings will be reflected in the Preview Box.

| Parameter |  | Effect |
| :--- | :--- | :--- |
| Hue <br> Saturation | Sets hue for image or selection. <br> Sets saturation for image or selection. <br> Setting of 0 produces grey scale. |  |

4 To see the function settings applied to the image or selection, click on the Preview Button.
5 When you have finished adjusting the settings, click on the OK Button. Paint Shop Pro will modify the image or selection.

TOPIC: Grey Scale Function

## Color Functions

Overview Y Adjustment Y Colorize Y/Grey Scale $\backslash \downarrow$

## Grey Scale Function

When you convert an image to grey scale, Paint Shop Pro replaces the colors in the image with greys 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.

- To convert the active image, select "Grey Scale" from the Colors Menu.

TOPIC: Histogram Functions

## Color Functions

$\checkmark$ /Histogram \ Negative Y Posterize Y Solarize

## Histogram Functions

The Histogram Functions modify an image or selection based upon its luminance
histogram. To apply one of the functions to the active image:
1 Select the area to modify.
2 Select "Histogram Functions" from the Colors Menu, then select the function from the submenu.

## 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 cover 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 its histogram covers the entire spectrum.

TOPIC: Negative Image Function

## Color Functions

$\checkmark /$ Histogram Negative $\$ Posterize Solarize

## Negative Image Function

The Negative Image Function replaces each color with its opposite. The effect is similar to a photographic negative.

1 Select the area to modify.
2 Select "Negative Image" from the Colors Menu.

TOPIC: Posterize Function

## Color Functions

$\checkmark /$ Histogram $Y$ Negative $Y$ Posterize $\$ Solarize

## Posterize Function

The Posterize Function (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.

1 Select the area to modify.
2 Select "Posterize" from the Colors Menu. Paint Shop Pro will open the Posterize Dialog Box.
3 Use the 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 To see the function settings applied to the image or selection, click on the Preview Button.
5 When you have finished adjusting the bits per color channel, click on the OK Button. Paint Shop Pro will modify the image or selection.

TOPIC: Solarize Function

## Color Functions

$\checkmark /$ Histogram Y Negative $Y$ Posterize $y^{\prime}$ Solarize

## Solarize Function

The Solarize Function inverts the colors that are above a certain luminance.
1 Select the area to modify.
2 Select "Solarize " from the Colors Menu. Paint Shop Pro will open the Solarize Dialog Box.
3 Use the spin control to set the solarize threshold. 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 To see the function settings applied to the image or selection, click on the Preview Button.
5 When you have finished adjusting the solarize threshold, click on the OK Button. Paint Shop Pro will modify the image or selection.

Histograms
Window:

TOPIC: About Histograms

## Histograms

About Histograms Y Image Enhancement

## About Histograms

A histogram is a graph of image color values, typically RGB values and/or luminance. In a histogram, the spectrum for a color component appears on the horizontal axis, and the vertical axis indicates the portion of the image's color that matches each point on the component's spectrum. Paint Shop Pro displays histograms for the active image in the Histogram Window.

## Example

The diagrams shown here contain a histogram and its source image. The luminance spectrum appears on the histogram's horizontal axis, ranging from zero luminance (black) to full luminance (white). The vertical axis indicates the percentage of the source image that matches a point on the luminance spectrum. The spike near the top of the luminance scale is caused by the sky in the image background.

TOPIC: Histograms and Image Enhancement

## Histograms

About Histograms Y/Image Enhancement

## Histograms and Image Enhancement

A histogram can help you decide what changes might enhance an image's quality. Changing the shape of the histogram will alter the image's balance, and in some cases that's exactly what you want to do. In other cases, when the image composition is good, you want to retain the histogram's shape, but shift it in one direction to subtly enhance the image.

## Example

Consider the histogram shown here. The photograph appears harsh, and the histogram shows why: the colors are bunched tightly towards the top of the luminance spectrum. Shifting the histogram down slightly will reduce the harshness and improve the image's overall balance.

## Color Adjustment Functions

TOPIC: Brightness / Contrast Function

## Color Adjustment Functions

/Brt/Cont \ Gamma Y HMS Y HSL Y RGB

## 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 stretches or compresses it.

- Using a Color Adjustment Function


## Parameter 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.

TOPIC: Gamma Correct Function

## Color Adjustment Functions

Brt/Cont Y Gamma X HMS Y HSL Y RGB

## 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.

- Gamma Correction
- Using a Color Adjustment Function


## Parameter Effect

Correction Gamma correction factor.

TOPIC: Highlight / MidTone / Shadow Function

## Color Adjustment Functions

Brt/Cont Y Gamma Y HMS Y HSL $Y$ RGB
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.

- Using a Color Adjustment Function


## Parameter 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.

TOPIC: Hue / Saturation / Luminance Function

## Color Adjustment Functions

Brt/Cont Y Gamma Y HMS Y HSL X RGB

## Hue / Saturation / Luminance Function

A color can be described by the three components 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 components for the entire image or selection.

- Using a Color Adjustment Function


## Parameter Effect

Hue Increases/decreases hue. Moves all colors up or down the color 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.

TOPIC: Red / Green / Blue Function

## Color Adjustment Functions

/Brt/Cont Y Gamma Y HMS Y HSL Y RGB

## 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.

Using a Color Adjustment Function

## Parameter Effect

Red Increases/decreases red level.
Green Increases/decreases green level.
Blue Increases/decreases blue level.

Using a Color Adjustment Function Window:

TOPIC: Using a Color Adjustment Function

## Using a Color Adjustment Function

1 Select the area to modify.
2 Select a Color Adjustment Function from the Colors Adjust Submenu: select "Adjust" from the Colors Menu, then select the function from the submenu. Paint Shop Pro will open the function's dialog box.
3 Use the spin controls to set the function's parameters. Any changes that you make to the settings will be reflected in the Preview Box.
4 To see the function settings applied to the image or selection, click on the Preview Button.
5 When you have finished adjusting the settings, click on the OK Button. Paint Shop Pro will modify the image or selection.

Image Processing
Window:
Main

TOPIC: Image Processing Overview

## Image Processing

Overview $\quad$ Image Arithmetic $Y$ Color Channels $\backslash D$
Image Processing Overview

Paint Shop Pro provides five groups of image processing features. You access these features from the Image Menu.

## Availability and Color Depth

With the exception of the Image Arithmetic Function and the Color Channel Functions, all of Paint Shop Pro's image processing features require image color depth of 256 color grey scale or greater than 256 colors. These features are not available for images with lower color depth. To apply a feature 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 to its original color depth.

TOPIC: Image Arithmetic Function

## Image Processing

Overview Y/mage Arithmetic \ Color Channels $\backslash D$
Image Arithmetic Function
The Image Arithmetic Function combines data from two images. The function accepts any two images as input, and produces a third image that is the product of the source images' color data.

- Step-by-Step Instructions

TOPIC: Color Channels Functions

## Image Processing

Overview $y$ Image Arithmetic $y$ Color Channels $\rangle$

## Color Channels Functions

You use the Color Channel Functions to split and combine RGB color channel data.

## Splitting Color Channels

Splitting an image's color channels creates three grey scale images based on the RGB channels of the source image. The images will be named "Red", "Green", and "Blue", followed by a common number (for example, "Red2", "Green2", and "Blue2").

- To split the active image, select "Channels" from the Image Menu, then select "Splitting" from the submenu.


## Combining Color Channels

You can create a 16 million color image by generating RGB color data from 256 color grey scale images.

- Step-by-Step Instructions

TOPIC: Special Effects Functions

## Image Processing

\/Special Effects \Deforms \& Filters \ User Defined

## Special Effects Functions

The Special Effects Functions add emphasis to an area or to an entire image. You select the functions from the Special Effects Submenu, which appears on the Image Menu. There are six Special Effects Functions:

- Add Drop Shadow Function
- Create Seamless Pattern Function
- Cutout Function
- Chisel Function
- Buttonize Function
- Hot Wax Coating Function

TOPIC: Deformations and Filters

## Image Processing

\/ Special Effects Y Deforms \& Filters $\backslash$ User Defined

## Deformations and Filters

Deformations and filters alter an image or selection to achieve a particular effect. To apply a built-in deformation or filter, you can:

- Select it from the Image Menu
- Use the Effects Browser

You can also create and apply your own filters.

## Plugin Filters

If you have successfully installed Adobe-compatible image processing filters, there will be a Plugins Submenu at the bottom of the Image Menu. You select a plugin filter from the submenu.
-
The plugin filter may open a dialog box. For help using it, please consult the plugin's documentation or on-line help.

TOPIC: User Defined Filters

## Image Processing

## - Special Effects Y Deforms \& Filters Y User Defined

## User Defined Filters

You can create and apply your own filters.

- How Filters Work
- Creating a User Defined Filter


## Applying a User Defined Filter

1 Select "User Defined Filters" from the Image Menu. Paint Shop Pro will open the User Defined Filters Dialog Box.
2 Click on the filter in the Filter Name List Box.
3 Click on the Apply Button. Paint Shop Pro will close the dialog box and apply the filter.

## Image Arithmetic Function

TOPIC: Step 1: Open the Images

## Image Arithmetic Function

## Step 1: Open the Images

Open the images that you want to combine.

TOPIC: Step 2: Select "Arithmetic" From the Image Menu

Image Arithmetic Function

## Step 2: Select "Arithmetic" From the Image Menu

Paint Shop Pro will open the Image Arithmetic Dialog Box.

TOPIC: Step 3: Select the Images

## Image Arithmetic Function

## Step 3: Select the Images

Use the drop down boxes labeled "Source image \#1" and "Source image \#2" to select the images that you want to combine. The size of the resulting image is determined by source image \#1.

TOPIC: Step 4: Select the Function

## Image Arithmetic Function

## Step 4: Select the Function

Click on a function in the Function Group Box. Function processing is performed as follows:
1 A copy of source image \#2 is resized to match source image \#1. The resized copy is used in the function processing. It resides in temporary memory and is not displayed.
2 The color data from the two images is combined on a pixel-by-pixel basis according to the formulas detailed below.

| Function | New Color Value Equals |
| :--- | :--- |
| Add | Image 1 Value + Image 2 Value |
| Subtract | Image 1 Value - Image 2 Value |
| Multiply | Image 1 Value $\times$ Image 2 Value |
| Difference | Absolute Value of (Image 1 Value - Image 2 Value) |
| Lightest | Maximum of (Image 1 Value, Image 2 Value) |
| Darkest | Minimum of (Image 1 Value, Image 2 Value) |

TOPIC: Step 5: Select the Channels

## Image Arithmetic Function

## Step 5: Select the Channels

Use the Channel Group Box to select the color channels that you want to process.

- Mark the All Channels Checkbox to use all color channels in both images. The function will produce a 16 million color image.
- Selecting a specific channel for each image will produce a 256 color grey scale image. You select a color channel by clicking on it.

TOPIC: Step 6: Set the Modifiers

## Image Arithmetic Function

## Step 6: Set the Modifiers

The modifiers are applied to the color values produced by the function formula and the color channel selections.

## Divisor

The color value produced by the function formula and the color channel selections is divided by the value selected in the Divisor Spin Control. This allows you to reduce the effects of the other selections.

## Bias

You use the bias to shift each color value by a fixed amount. The value selected in the Bias Spin Control is added to the color value produced by the function formula, channel, and divisor selections.

## Clip Color Values

The Clip Color Values Checkbox determines how Paint Shop Pro handles final color values that are greater than 255 or less than 0.

| Setting | $\mathbf{x}<0$ | x > 255 |
| :---: | :---: | :---: |
| On | X $=0$ | $x=255$ |
| Off | $x=256$ | X-25 |

TOPIC: Step 7: Select the OK Button

## Image Arithmetic Function

## Step 7: Select the OK Button

Click on the OK Button. Paint Shop Pro will close the dialog box and create the new image from the combined color data.

Combining Color Channels Window:

TOPIC: Step 1: Open the Source Images

## Combining Color Channels

## Step 1: Open the Source Images

Open the 256 color grey scale images that you want to use as source data. The source images are often generated by splitting an image's color channels.

TOPIC: Step 2: Open the Channel Combining Dialog Box

## Combining Color Channels

## Step 2: Open the Channel Combining Dialog Box

1 Select "Channels" from the Image Menu.
2 Select "Combining" from the submenu. Paint Shop Pro will open the Channel Combining Dialog Box.

TOPIC: Step 3: Select the Source Images

## Combining Color Channels

Step 3: Select the Source Images
You can use source images that were generated by splitting an image's color channels, or you can select other images.

## Using Split Color Channels

To use source images generated by splitting an image's color channels, fill in the checkbox labeled "Sync blue and green to red if possible". Paint Shop Pro will automatically select the green and blue color channel images that match the selected red color channel image.

## Using Other Images

If the source images were not created by splitting an image's color channels, then use the drop down boxes to select a source image for each channel.

TOPIC: Step 4: Select the OK Button

## Combining Color Channels

## Step 4: Select the OK Button

Click on the OK Button. Paint Shop Pro will create an image by converting the grey scale images into color channel data.

## Special Effects Functions

Window:
More

TOPIC: Add Drop Shadow Function

## Special Effects Functions

Shadow Pattern Cutout $D$
Add Drop Shadow Function
The Add Drop Shadow Function adds a shadow effect behind the current selection.

- Step-by-Step Instructions

TOPIC: Create Seamless Pattern Function

## Special Effects Functions

Shadow Y Pattern $\backslash$ Cutout $\backslash D$
The Create Seamless Pattern Function converts a selection's contents into a smooth-edged pattern for use in tiling. It was designed for use with the Fill Tool's pattern fill style.

1 Open the image that contains the detail that you want to use as a pattern.
2 It's a good idea to work on a copy of the image, in order to avoid overwriting the original file.
3 To avoid confusion, close the original file. That way you won't accidentally edit it.
4 Select the part of the image that you want to use as a pattern.
5 Select "Special Effects" from the Image Menu, then select "Create Seamless Pattern" from the submenu. Paint Shop Pro will crop the image and convert it to a pattern.

TOPIC: Cutout Function

## Special Effects Functions

Shadow Y Pattern Y Cutout $\backslash D$

## Cutout Function

The Cutout Function creates the illusion that part of the image has been "cut out", allowing you to look "through" the image to a "surface" below.

- Step-by-Step Instructions

TOPIC: Chisel Function

## Special Effects Functions

\/ Chisel \Buttonize Yot Wax

## Chisel Function

The Chisel Function adds a border around the selection that makes it appear chiseled out of stone. The effect can be applied transparently, which allows the colors it overwrites to "show through", or it can use the background color.

1 If you want the chiseling to appear in a single color, select it as the background color now.
2 Select the part of the image that you want to appear chiseled.
3 Select "Special Effects" from the Image Menu, then select "Chisel" from the submenu. Paint Shop Pro will open the Chisel Dialog Box.
4 Use the Size Spin Control to set the width of the chiseled border. The scale is 1 to 100, measured in pixels.
5 Select a color option by clicking on either "Transparent" or "Background Color".
6 Click on the OK Button. Paint Shop Pro will close the dialog box and add the chiseled effect using the selected settings.

TOPIC: Buttonize Function

## Special Effects Functions

$\checkmark /$ Chisel Y Buttonize \HotWax

## Buttonize Function

The Buttonize Function applies a three-dimensional border, which makes the image or selected area appear raised. The three-dimensional effect can be created transparently, which allows the colors it overwrites to "show through", or it can use the background color.

1 If you want the effect to appear in a single color, select it as the background color now.
2 To modify part of the image, select it now. To modify the entire image, make sure that there is no selection. Choose "Select None" from the Selections Menu.

3 Select "Special Effects" from the Image Menu, then select "Buttonize" from the submenu. Paint Shop Pro will open the Buttonize Dialog Box.
4 Use the Size Spin Control to set the width of the raised effect. The scale is 0 to 50 , measured as a percent of the image or area.
5 Select a color option by clicking on either "Transparent" or "Background Color".
6 To see the function settings applied to the image or selection, click on the Preview Button.
7 Click on the OK Button. Paint Shop Pro will close the dialog box and add the chiseled effect using the selected settings.

TOPIC: Hot Wax Coating Function

## Special Effects Functions

$\triangleleft /$ Chisel $Y$ Buttonize Y Hot Wax

## Hot Wax Coating Function

The Hot Wax Coating Function creates the effect of dipping the image in melted wax. It applies a coating or layer of color with varying degrees of transparency. The transparency of the applied color is determined by the "contours" of the image.

1 Select the color that you want to "coat" with as the foreground color.
2 Select the part of the image that you want to process.

- To modify part of an image, select it now.
- To modify the entire image, make sure that there is no selection. Choose "Select None" from the Selections Menu.

3 Select "Special Effects" from the Image Menu, then select "Hot Wax Coating" from the submenu. Paint Shop Pro will apply the processing to the image or area.

## Add Drop Shadow Function <br> Window:

TOPIC: Step 1: Set the Active Colors (Optional)

## Add Drop Shadow Function

## Step 1: Set the Active Colors (Optional)

If you want to use a color other than white, black, red, green, or blue for the shadow, select the color now as the foreground or background color.

TOPIC: Step 2: Select the Area to Shadow

## Add Drop Shadow Function

## Step 2: Select the Area to Shadow

Select the part of the image that you want to shadow.

TOPIC: Step 3: Select "Drop Shadow"

## Add Drop Shadow Function

## Step 3: Select "Drop Shadow"

1 Select "Special Effects" from the Image Menu.
2 Select "Drop Shadow" from the submenu. Paint Shop Pro will open the Drop Shadow Dialog Box.

TOPIC: Step 4: Set the Attributes

## Add Drop Shadow Function

## Step 4: Set the Attributes

The attributes determine the shadow's "look". You select the attributes from the Attributes Group Box.

## Color

Use the Color Drop Down Box to select a color for the shadow effect.

## Opacity

The Opacity Spin Control determines how opaque or transparent the shadow will be. The scale is 1 to 255, with 1 being nearly transparent (the shadow will barely appear) and 255 being completely opaque (the shadow will completely cover any underlying colors).

## Blur

The setting in the Blur Spin Control determines how sharp or soft the shadow's edges will be. The scale is 0 to 9 , with 0 creating the sharpest edges and 9 the softest.

TOPIC: Step 5: Select the Offset

## Add Drop Shadow Function

## Step 5: Select the Offset

The offset settings determine the shadow's position relative to the selection. The available range is -100 to +100 , measured in pixels. You can:

- Enter the settings into the Horizontal and Vertical Text Boxes.
- Use the slider controls.

TOPIC: Step 6: Select the OK Button

## Add Drop Shadow Function

## Step 6: Select the OK Button

Click on the OK Button. Paint Shop Pro will close the dialog box and create the shadow using the selected settings.

## Cutout Function

Window:

TOPIC: Step 1: Set the Active Colors (Optional)

## Cutout Function

## Step 1: Set the Active Colors (Optional)

If you want to use colors other than white, black, red, green, or blue, select the colors now as the foreground and/or background colors.

TOPIC: Step 2: Select the Area to Cutout

## Cutout Function

## Step 2: Select the Area to Cutout

Select the part of the image that you want to cut out.

TOPIC: Step 3: Select "Cutout"

## Cutout Function

## Step 3: Select "Cutout"

1 Select "Special Effects" from the Image Menu.
2 Select "Cutout" from the submenu. Paint Shop Pro will open the Cutout Dialog Box.

TOPIC: Step 4: Set the Attributes

## Cutout Function

## Step 4: Set the Attributes

The attributes determine the cutout's appearance. You select the attributes from the Attributes Group Box.

Fill Interior With Color
When the checkbox labeled "Fill interior with color" is filled in, Paint Shop Pro will fill the area that is within the selection but not in the shadow with the selected interior color (see following section).

## Interior Color

You select the interior color from the Interior Color Drop Down Box.

## Shadow Color

You select the shadow color from the Shadow Color Drop Down Box.

## Opacity

The Opacity Spin Control determines how opaque or transparent the shadow will be. The scale is 1 to 255 , with 1 being nearly transparent (the shadow will barely appear) and 255 being completely opaque (the shadow will completely cover any underlying colors).

## Blur

The Blur Spin Control determines how sharp or soft the shadow's edges will be. The scale is 0 to 9 , with 0 creating the sharpest edges and 9 the softest.

TOPIC: Step 5: Select the Offset

## Cutout Function

## Step 5: Select the Offset

The offset settings determine the cutout's position relative to the selection. The available range is -100 to +100 , measured in pixels. You can:

- Enter the settings into the Horizontal and Vertical Text Boxes.
- Use the slider controls.

TOPIC: Step 6: Select the OK Button

## Cutout Function

## Step 6: Select the OK Button

Click on the OK Button. Paint Shop Pro will close the dialog box and create the cutout using the selected settings.

## Applying Deformations and Filters

Window:

TOPIC: From the Image Menu

## Applying Deformations and Filters

/ Image Menu Y Effects Browser

## From the Image Menu

The Image Menu contains four submenus that list Paint Shop Pro's built-in deformations and filters:

Deformations Normal Filters
Edge Filters Special Filters
The deformation or filter that you select may open a dialog box. These dialog boxes that are similar to the ones used by the Color Adjustment Functions.

TOPIC: Using the Effects Browser

## Applying Deformations and Filters

## Image Menu VEffects Browser

## Using the Effects Browser

1 To modify part of the image, select it now. To modify the entire image, make sure that there is no selection. Choose "Select None" from the Selections Menu.
2 There are two versions of the Effects Browser: the Deformation Browser and the Filter Browser. Choose the appropriate selection from the Image Menu. Paint Shop Pro will open the relevant dialog box.
3 Click on an effect 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.
4 Click on the Apply Button. Paint Shop Pro will close the Browser Dialog Box and either:

- Apply the deformation or filter to the image or selection.
- Open the deformation or filter's dialog box. The dialog boxes are similar to the ones used by the Color Adjustment Functions.


## How Filters Work

Window:

TOPIC: How Filters Work

## How Filters Work

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 coefficients called a filter matrix.
A filter processes an image pixel-by-pixel: each pixel's color value is multiplied by the coefficient in the matrix center, and any pixels within the matrix are multiplied by the corresponding coefficients.
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.
The formula for this calculation is:
$F=\sum_{i=1}^{49} P_{i} C_{i}$
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.

- Calculation Example


## Related Topics

- Creating a User Defined Filter


## Creating a User Defined Filter

Window:

TOPIC: Step 1: Open the Define New Filter Dialog Box

## Creating a User Defined Filter

## Step 1: Open the Define New Filter Dialog Box

1 Select "User Defined Filters" from the Image Menu. Paint Shop Pro will open the User Defined Filters Dialog Box.
2 Click on the New Button. Paint Shop Pro will open the Define New Filter Dialog Box.

TOPIC: Step 2: Enter the Filter Name

## Creating a User Defined Filter

## Step 2: Enter the Filter Name

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

- Example Filters

TOPIC: Step 3: Enter the Filter Matrix Values

## Creating a User Defined Filter

## Step 3: Enter the Filter Matrix Values

Enter the filter matrix values into the table in the center of the dialog box. Non-integers will be truncated (chopped off at the decimal place). See the next step for help achieving the same effect as decimal coefficients.

- Example Filters

TOPIC: Step 4: Set the Division Factor

## Creating a User Defined Filter

## Step 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. In actuality, the division factor is applied to the product of the matrix calculation. The division factor changes the filter formula to:
$F=i_{i=1}^{49} i_{i} \mathrm{P}_{\mathrm{i}} \mathrm{C}_{\mathrm{i}}^{\mathrm{i}}, \mathrm{D}$
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.
The division factor allows you to achieve effects that would otherwise require decimal coefficients. The advantage of requiring non-decimal coefficients is execution speed: Paint Shop Pro can accelerate the filtering process by perform the math using integers.

- If you're using one of the example filters, leave the division factor set to 1.


## Using the Division Factor

1 Raise the decimal 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. Non-integers will be truncated.

TOPIC: Step 5: Set the Bias

## Creating a User Defined Filter

## Step 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:
$F=\sum_{i=1}^{49} \sum_{i} P_{i} C_{i}^{i}, D+B$
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.

- If you're using one of the example filters, leave the bias set to 0 .


## Using the Bias

- 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 .

TOPIC: Step 6: Select the OK Button

## Creating a User Defined Filter

## Step 6: Select the OK Button

When you've finished entering the filter's settings, click on the OK Button. Paint Shop Pro will save the filter and return to the User Defined Filters Dialog Box. To apply your new filter to the active image:

1 Click on it on the Filter Name List Box.
2 Click on the Apply Button. Paint Shop Pro will close the dialog box and apply the filter.

## Using Masks

Window:
Main

TOPIC: Masks Overview

## Using Masks

/ Overview \Compatibility $\$ Creating $\$ Viewing $\backslash D$

## Masks Overview

A mask is a 256 color 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.

TOPIC: Compatibility

## Using Masks

Overview Compatibility Creating $\$ Viewing $D$

## Compatibility

## With Other Features

- Five of the Paint and Drawing Tools work with masks. Excluding the Fill Tool, masks and selections are mutually exclusive: selections take precedence over masks. The Fill Tool will work with both.
- A number of the Color Functions work with masks.
- Many Image Processing features work with masks.


## With Alpha Channels

An alpha channel is essentially a mask saved as part of an image. Paint Shop Pro uses masks to support alpha channels for TGA, TIFF, and non-palletized PNG files.

- When you open a file that contains an alpha channel, Paint Shop Pro converts it to a mask.
- When you save a file that has a mask, Paint Shop Pro saves the mask as an alpha channel.

TOPIC: Creating a Mask

## Using Masks

Overview $y$ Compatibility $y$ Creating ${ }^{\text {V }}$ Viewing $D$

## Creating a Mask

There are three ways to create a mask:

- From scratch
- From an image
- From a selection

TOPIC: Viewing an Image Through Its Mask

## Using Masks

Overview $y$ Compatibility $y$ Creating $y$ Viewing $D$

## Viewing an Image Through Its Mask

To view the active image through its mask, select "View Though Mask" from the View Menu.
Paint Shop Pro will overlay the image with its mask. The Masked Areas Color Option determines the color used to designate masked areas.

- To return to normal viewing, select "View Though Mask" again. Paint Shop Pro will remove the check next to the menu selection.
- To view the mask alone, see Editing a Mask.


## TOPIC: Editing a Mask

## Using Masks

- Editing $\$ Inverting $Y$ Deleting $\$ Save/Load


## Editing a Mask

To edit the active image's mask, select "Edit" from the Masks Menu. Paint Shop Pro will display the mask image in the host image's window.
When you have finished editing the mask, select "Edit" from the Masks Menu again. Paint Shop Pro will hide the mask and re-display the host image.

TOPIC: Inverting a Mask

## Using Masks

$\checkmark$ Editing Y Inverting Y Deleting Y Save/Load

Inverting a Mask
Inverting a mask reverses its transparency: what is black becomes white, and what is white becomes black. Greys are assigned their mirror transparency.
To invert the active image's mask, select "Invert" from the Masks Menu.

TOPIC: Deleting a Mask

## Using Masks

$\checkmark$ Editing $y$ Inverting $Y$ Deleting $V$ Save/Load

## Deleting a Mask

To remove a mask from the active image and permanently delete it, select "Delete" from the Masks Menu.

TOPIC: Saving and Loading Masks

## Using Masks

$\checkmark$ Editing $Y$ Inverting $y$ Deleting Y/Save / Load

## Saving and Loading Masks

You can save a mask to a file, and you can load a saved mask into an image.

- Saving a Mask
- Loading a Mask

Saving and Loading Masks
Window:

TOPIC: Saving a Mask

## Saving and Loading Masks

/ Saving Loading

## Saving a Mask

1 Choose "Save" from the Masks Menu. Paint Shop Pro will open the Save Mask Channel Dialog Box.
2 Select or create the file's folder.
3 Enter the filename for the new mask file in the File Name Text Box. Don't worry about the file extension - Paint Shop Pro will add it automatically.
4 Click on the Save Button. If the filename is already in use, Paint Shop Pro will present a prompt. Click on the Yes Button to overwrite the existing file.

TOPIC: Loading a Mask

## Saving and Loading Masks

Saving Loading

## Loading a Mask

1 Choose "Load" from the Masks Menu. Paint Shop Pro will open the Load Mask Channel Dialog Box.
2 Select the file's folder.
3 The default mask file type is the Paint Shop Pro mask channel format (*.MSK), but you can also load 256 color grey scale bitmaps. To load a bitmap as a mask, select "All Files" from the File Type Drop Down Box.
4 Click on the file in the Contents List Box. If the file list is too long to fit in the box, use the scrollbars to move through it.
5 Click on the Open Button. Paint Shop Pro will close the dialog box and add the mask to the active image. If the mask and the image are different sizes, the mask will be resized.

## Creating a Mask

Window:

TOPIC: Creating an Empty Mask

## Creating a Mask

Empty Mask From Image $\backslash$ From Selection

## Creating an Empty Mask

An empty mask is a solid black bitmap. To add an empty mask to the active image:
1 Select "New" from the Masks Menu.
2 Select "Empty" from the submenu.

TOPIC: Creating a Mask From an Image

## Creating a Mask

Empty Mask Y From Image From Selection
Creating a Mask From an Image
Paint Shop Pro creates a mask from an image by copying it into a 256 color grey scale bitmap. The original source image is not altered.

- Step-by-Step Instructions

TOPIC: Creating a Mask From a Selection

## Creating a Mask

Empty Mask From Image From Selection

## Creating a Mask From a Selection

You can create a mask from a selection within the host image.

- The selection becomes a transparent area in the mask (set to white).
- The rest of the image becomes opaque (set to black).

A mask based on a selection has the same dimensions as the host image.
1 Select the mask's white area.
2 Select "New" from the Masks Menu.
3 Choose "From Selection" from the submenu. Paint Shop Pro will create the new mask and attach it to the active image.

Creating a Mask From an Image Window:

TOPIC: Step 1: Select the Source Image

## Creating a Mask From an Image

## Step 1: Activate the Source Image

Open or select the image that you want to create the mask from.

TOPIC: Step 2: Select the Host Image

## Creating a Mask From an Image

## Step 2: Select the Host Image

Open or select the image that you want to attach the mask to. If the host image and source image have different dimensions, the mask will be automatically resized to match the host image.

TOPIC: Step 3: Open the Add Mask From Image Dialog Box

## Creating a Mask From an Image

## Step 3: Open the Add Mask From Image Dialog Box

Select "New" from the Masks Menu, then select "From Image" from the submenu. Paint Shop Pro will open the Add Mask From Image Dialog Box.

TOPIC: Step 4: Select the Source Image

## Creating a Mask From an Image

Step 4: Select the Source Image
Select the source image from the Source Window Drop Down Box.

TOPIC: Step 5: Select the Mask Type

## Creating a Mask From an Image

## Step 5: Select the Mask Type

Click on a mask type in the Create Mask From Group Box.

- Select "Source luminance" to create a mask that is a grey-scale copy of the source image.

Select "Any non-zero value" to set all non-black colors to white.

TOPIC: Step 6: Set the Invert Mask Option

## Creating a Mask From an Image

## Step 6: Set the Invert Mask Option

If you want to invert the mask, fill in the Invert Mask Data Checkbox. Inverting a mask reverses it transparency: black becomes white, white becomes black, and greys are assigned their mirror transparency.

TOPIC: Step 7: Select the OK Button

## Creating a Mask From an Image

## Step 7: Select the OK Button

Click on the OK Button. Paint Shop Pro will create the new mask and attach it to the active image.

## General Program Preferences

TOPIC: General Program Preferences Overview

## General Program Preferences

Overview \ Undo $Y$ Plugins $Y$ Viewing $\backslash D$

## General Program Preferences Overview

You change most of Paint Shop Pro's configuration settings from the Paint Shop Pro
Preferences Dialog Box. To access the dialog box:
1 Select "Preferences" from the File Menu.
2 Select "General Program Preferences" from the Preferences Submenu.
The options in the Paint Shop Pro Preferences Dialog Box are grouped under six tabs. You access a group of options by clicking on its tab.

TOPIC: Undo Preferences

## General Program Preferences

Overview Y Undo Y Plugins Y Viewing $\backslash D$

## Undo Preferences

The Undo Command removes an image's last set of unsaved changes. The Undo
Preferences determine where and if Paint Shop Pro will retain the image's undo information.
For most users, the "To Memory" setting provides the best results. You select an option by clicking on it.

- Disabled
- To Memory
- To Disk

TOPIC: Plugins Preferences

## General Program Preferences

Overview Y Undo Y Plugins \Viewing $\backslash D$

## Plugins Preferences

The Plugin Filters Preferences determine if Paint Shop Pro will utilize your system's image processing and image import filters.

- Adobe-Compatible Image Processing Filters
- Aldus-Compatible Image Import Filters

TOPIC: Viewing Preferences

## General Program Preferences

Overview Y Undo Y Plugins Y Viewing $\ \triangleright$

## Viewing Preferences

The Viewing Preferences controls if and how Paint Shop Pro automatically sizes images and image windows. A viewing option is on when its checkbox is marked.

- Zooming
- New Images
- After Changing Size

TOPIC: Palettes Preferences

## General Program Preferences

\/Palettes \ Browser Y Misc

## Palettes Preferences

The Palettes Preferences determine how Paint Shop Pro displays color data.

## Color Palette Options

The Color Palette Options determine how Paint Shop Pro displays color data in the Current Color Panel on the Color Palette. You select an option by clicking on it.

- You can display the data in RGB or HSL format.
- You can display the values as decimal or hexadecimal numbers.


## Display Control Descriptions on Style Bar

- When the checkbox labeled "Display control descriptions on style bar" is filled in, Paint Shop Pro displays control labels on the Style Bar.
- When it is empty, Paint Shop Pro removes the labels, which makes the Style Bar smaller, and allows it to be docked more neatly at the top of the Main Window.

TOPIC: Browser Preferences

## General Program Preferences

## $\triangleleft /$ Palettes Y Browser \ Misc

## Browser Preferences

The Browser Preferences control how Paint Shop Pro displays the image thumbnails, and whether it saves the image data to the disk.

- Thumbnail Size
- Thumbnail Selection Color
- Saving Browser Files
- Automatically Updating Thumbnails

TOPIC: Miscellaneous Preferences

## General Program Preferences

## $\triangleleft /$ Palettes $Y$ Browser Y Misc

## Miscellaneous Preferences

The Miscellaneous Preferences control:

- The length of the file list at the bottom of the File Menu.
- The color Paint Shop Pro uses to represent masked areas.
- The color tolerance setting for transparent pastes.
- Whether you are prompted to save modified files when you select "Close All" from the Window Menu.
- Whether the splash screen is displayed when Paint Shop Pro starts.

Undo Preferences
Window:
More

TOPIC: Disabled

## Undo Preferences

Disabled Yo Memory Y To Disk

## Disabled

When "Disabled" is selected, Paint Shop Pro does not save undo information.

TOPIC: To Memory

## Undo Preferences

Disabled Y To Memory Y ToDisk

## To Memory

When "To Memory" is selected, Paint Shop Pro saves the undo information 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 instead.

TOPIC: To Disk

## Undo Preferences

Disabled Y To Memory Y To Disk

## To Disk

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

## Plugins Preferences

Window:

TOPIC: Adobe-Compatible Image Processing Filters

## Plugins Preferences

Adobe-Compatible Aldus-Compatible
Adobe-Compatible Image Processing Filters
Adobe-compatible is the Windows standard for image processing filters. To use Adobecompatible filters with Paint Shop Pro:

1 Mark the Enable Plugin Filters Checkbox.
2 Click on the Browse Button. Paint Shop Pro will open the Select Folder Dialog Box.
3 Use the dialog box to select the folder that contains the filters.

TOPIC: Aldus-Compatible Image Import Filters

## Plugins Preferences

Adobe-Compatible Y Aldus-Compatible

## Aldus-Compatible Image 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:

1 Mark the Enable Import Filters Checkbox.
2 Enter the appropriate section heading from your WIN.INI file in the text box. For most users, this will be "MS Graphic Import Filters".

## Viewing Preferences

Window:

TOPIC: Zooming

## Viewing Preferences

/ Zooming $\backslash$ New Images $Y$ Changing Size

## Zooming

The Zooming Options determine if Paint Shop Pro automatically resizes an image window when you zoom in or zoom out. A window is resized to include as much of the image as possible.

TOPIC: New Images

## Viewing Preferences

## Zooming Y New Images Y Changing Size

## New Images

If you open an image that is too large to fit in its image window, and the Auto Size Option under New Images is turned on, Paint Shop Pro will automatically set the image's magnification so that the entire image is visible.

TOPIC: After Changing Size

## Viewing Preferences

Zooming $y$ New Images $Y$ Changing Size

## After Changing Size

The After Changing Size Options determine how Paint Shop Pro responds to a change in image size:

- If the Fit Window To Image Option is turned on, the image window will be resized to accommodate the new image size.
- If the Auto Size Option is turned on, and an image's size is increased to the point that it cannot fit in its image window, then the image's magnification will be reduced accordingly.


## Browser Preferences

Window:

TOPIC: Thumbnail Size

## Browser Preferences

/ Size Color Y Files YUpdating
Thumbnail Size
There are four thumbnail size options. Each option is defined as width and height in pixels. You select a size by clicking on it.

TOPIC: Thumbnail Selection Color

## Browser Preferences

Size Color Files Updating
Thumbnail Selection Color
You can change the color that the Browser uses to highlight selected thumbnails.
1 Click on the Change Button. Paint Shop Pro will open the Color Dialog Box.
2 Use the dialog box to select the new color.

TOPIC: Saving Browser Files

## Browser Preferences

Size Y Color Y Files (Updating

## Saving Browser Files

The Browser can save a folder's image information to a file, which is named PSPBRWSE.JBF, and is saved in the scanned folder. When you scan the folder again, the Browser reads the information from the file, which provides much faster operation than re-scanning the folder's images.

- To use this feature, mark the checkbox labeled "Save Browser files to disk".

TOPIC: Automatically Updating Thumbnails

## Browser Preferences

Size $Y$ Color $Y$ Files Y Updating

## Automatically Updating Thumbnails

When Paint Shop Pro reads a Browser file, it can either:

- Display the image information "as is".
- Check to see if any image files have been added, deleted, or modified since the last time the folder was scanned, and update the thumbnails accordingly.
To automatically update the image information, mark the checkbox labeled "Automatically update the thumbnails".


## Miscellaneous Preferences

Window:

TOPIC: Recent File Listing

## Miscellaneous Preferences

/ Recent Files Yransparent Paste $Y$ Other Options

## Recent File Listing

The Recent File Listing Option sets the maximum number of files that can appear in the list at the bottom of the File Menu. You use the spin control to change the setting. Note that: - You must restart Paint Shop Pro in order for the new setting to take effect. - If you increase the setting, you will not reach the new maximum list length until you have opened a sufficient number of new files. For example, if the old list was four files long, and you increased the setting to ten, then you will have to open six new files before you reach the new maximum length.

TOPIC: Transparent Paste Color Tolerance

## Miscellaneous Preferences

Recent Files Yransparent Paste Other Options

## Transparent Paste Color Tolerance

When you paste data as a transparent selection, Paint Shop Pro adds it to the current image, defines it as a selection, then deselects all of the pixels that match the current background color.
You use the Tolerance Spin Control to set the color tolerance for transparent pastes. The color tolerance setting determines how close the color of a pixel must be to the background color in order to be deselected.
The spin control uses a scale of $0 \%$ to $200 \%$, with 0 being no tolerance (only pixels with a perfect match will be deselected), and 200 being total tolerance (all pixels will be deselected).

TOPIC: Other Options

## Miscellaneous Preferences

Recent Files Y Transparent Paste Y Other Options
Other Options
Masked Areas Color
To select a color for designating masked areas, click on "100\% black" or "50\% red".

## Window Close All

When the checkbox labeled "Do not ask to save changes on Window Close All" is marked, Paint Shop Pro will not prompt you to save files when you select "Close All" from the Windows Menu. All of the changes to all of the open files will be discarded.

## Show Splash Screen

When the checkbox labeled "Show splash screen when application starts" is marked, Paint Shop Pro will display its splash screen whenever you launch the application. The splash screen shows the JASC, Inc. logo and shows the version number of Paint Shop Pro.

File Format Preferences
Window:
Main

TOPIC: File Format Preferences Overview

## File Format Preferences

$/$ Intro $\$ GIF $Y$ JIF/JPG $\ P C D \quad Y$ PCX $\backslash D$

## File Format Preferences Overview

You can set format preferences for a number of file types. The settings that you select become the new defaults for files saved to that file type.

1 Select "Preferences" from the File Menu, then select "File Format Preferences" from the submenu. Paint Shop Pro will open the File Preferences Dialog Box.

2 Click on the dialog box tab for the file type preferences that you want to set.

TOPIC: GIF Preferences

## File Format Preferences

/ Intro Y GIF $Y$ JIF/JPG $\ P C D \quad Y$ PCX $\backslash D$

## GIF Preferences

You set the GIF file preferences from the GIF Preferences Page of the File Preferences Dialog Box.
A GIF image can contain a transparent color. You select one of the four transparency
options by clicking on its button or the text. For an explanation of a specific option, click on it below.

- Maintain Original Transparency
- Do Not Save Transparency
- Set to Background Color
- Set to Palette Entry


## Preview

If you have a GIF image open, clicking on the Preview Button will temporarily replace the image's transparent color with the current foreground color.

TOPIC: JIF/JPG Preferences

## File Format Preferences

/ Intro Y GIF Y JIF/JPG \PCD Y PCX $\backslash D$

## JIF/JPG Preferences

You set the JIF/JPG file preferences from the 【IF/JPG Preferences Page of the File Preferences Dialog Box.

## Dots-Per-Inch (DPI)

You use the DPI Spin Control to set the image resolution in dots-per-inch (DPI). DPI data is used mostly by word processing and page layout programs.

## Compression Level

You use the Compression Level Spin Control to set the amount of data compression applied to the image. The higher the number, the smaller the file, and the greater the loss of data.

TOPIC: PCD Preferences

## File Format Preferences

Intro $Y$ GIF $Y$ JIF/JPG $Y$ PCD $Y$ PCX $\backslash D$

PCD Preferences
You set the PCD file preferences from the PCD Preferences Page of the File Preferences Dialog Box.
Kodak Photo-CD files contain multiple sizes of a single image. The PCD size preference option determines which size will be read when a PCD file is opened. If you select "Ask when loading each file", Paint Shop Pro will present the PCD Size Dialog Box each time you open a Kodak Photo-CD file. You select a size option by clicking on it.

TOPIC: PCX Preferences

## File Format Preferences

Intro $Y$ GIF $Y$ JIF/JPG $Y$ PCD Y PCX $\$

## PCX Preferences

You set the PCX file preferences from the PCX Preferences Page of the File Preferences Dialog Box.
You use the DPI Spin Control to set the image resolution in dots-per-inch (DPI). DPI data is used mostly by word processing and page layout programs.

TOPIC: PNG Preferences

## File Format Preferences

- PNG Y RAW Y TIF Y WMF Y WPG


## PNG Preferences

You set the PNG file preferences from the PNG Preferences Page of the File Preferences Dialog Box.
A paletted PNG image (color depths of 256 or less) can contain a transparent color. You select one of the four transparency options by clicking on its button or the text. For an explanation of a specific option, click on it below.

- Maintain Original Transparency
- Do Not Save Transparency
- Set to Background Color
- Set to Palette Entry


## Preview

If you have a PNG image open, clicking on the Preview Button will temporarily replace the image's transparent color with the current foreground color.

TOPIC: RAW Preferences

## File Format Preferences

```
\/ PNG Y RAW \ TIF Y WMMF Y WPG
```


## RAW Preferences

You set the RAW file preferences from the RAW Preferences Page of the File Preferences Dialog Box.
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 preference settings 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.

TOPIC: TIF Preferences

## File Format Preferences

## $\checkmark /$ PNG $Y$ RAW Y TIF XWMF Y WPG

## TIF Preferences

You set the TIF file preferences from the TIF Preferences Page of the File Preferences Dialog Box.
You use the DPI Spin Control to set the image resolution in dots-per-inch (DPI). DPI data is used mostly by word processing and page layout programs.

TOPIC: WMF Preferences

File Format Preferences


WMF Preferences
You set the WMF file preferences from the WMF Preferences Page of the File Preferences Dialog Box.
There are two ways that Paint Shop Pro can open metafiles. You select one of these options by clicking on it.

## Ask for size and options each time a file is opened

Paint Shop Pro can prompt you for the size and other settings each time it opens a metafile. If you select this option, Paint Shop Pro will present the Meta Picture Import Dialog Box whenever it reads metafile data.

## Use file header information when available

Paint Shop Pro can try to use the available file header information. If you select this option, Paint Shop Pro will attempt to read the header information. If it cannot, or no header information exists, it will use the default size.

## Default File Size

If you select to use file header information, you need to set the default size for files without a header. Use the spin controls to set the dimensions.

TOPIC: WPG Preferences

## File Format Preferences

$\checkmark /$ PNG Y RAW Y TIF Y WMF Y wPG

## WPG Preferences

You set the WPG file preferences from the WPG Preferences Page of the File Preferences Dialog Box.
You use the DPI Spin Control to set the image resolution in dots-per-inch (DPI). DPI data is used mostly by word processing and page layout programs.

## Transparent Color

 Window:TOPIC: Transparent Color

## Transparent Color

When an image containing a transparent color is displayed, the transparent color is replaced with a color or colors selected by the host application. The selected color or pattern is usually the application's background fill.

Paint Shop Pro does not utilize transparent colors. The transparent color feature is used by other applications. The transparent color will display as a normal color when the image is viewed in Paint Shop Pro.

## Example

Consider an image of a rose against a white background, with its transparent color set to white. When the image is displayed against a grey fill, the white will be replaced with the grey, so that the rose appears against a grey background.


## Transparency Options

 Window:
## Options

TOPIC: Maintain Original Transparency

## Transparency Options:

Maintain Original Transparency
Do Not Save Transparency
Set to Background Color
Set to Palette Entry
The current transparency information is retained. The image's transparency will not be changed.

TOPIC: Do Not Save Transparency

## Transparency Options:

Maintain Original Transparency
Do Not Save Transparency
-
Set to Background Color
Set to Palette Entry
The current transparency information is deleted. The image will be displayed "as is".

TOPIC: Set to Background Color

## Transparency Options:

Maintain Original Transparency
Do Not Save Transparency
Set to Background Color

## Set to Palette Entry

The transparent color is set to the first best-match index for the current background color. For example, consider the following situation: the selected background color is dark blue, and the only blues in the image's palette are two identical lighter shades. The image's transparent color will be set to the first of the palette's blues.

## TOPIC: Set to Palette Entry

## Transparency Options:

Maintain Original Transparency
Do Not Save Transparency
Set to Background Color
Set to Palette Entry
The transparent color is set to a specific palette index. The image's transparent color will change if the selected index differs from the current color's index. Use the spin control to set the index.

## Customizing the Toolbar

Window:
Main

TOPIC: Customizing the Toolbar Overview

## Customizing the Toolbar

Overview Add Y Remove Y Move Y Restore

## Customizing the Toolbar Overview

You can add, remove, and rearrange the buttons on the Toolbar. You edit the Toolbar from the Customize Toolbar Dialog Box. To access the dialog box:

1 Select "Preferences" from the File Menu.
2 Select "Customize Toolbar" from the Preferences Submenu.

## Related Topics

- Adding a Button or Space
- Removing a Button or Space
- Moving a Button or Space
- Restoring the Default Configuration

TOPIC: Adding a Button or Space

## Customizing the Toolbar

Overview Add $Y$ Remove $Y$ Move $Y$ Restore

## Adding a Button or Space

You can add a button or space by dragging the item from the Available Buttons List Box to the Toolbar Buttons List Box. You can also use the Add Button:

1 Click on the button that you want to add in the Available Buttons List Box. To add a space, click on "Separator".
2 Use the Toolbar Buttons List Box to select the position where you want to insert the new item. Click on the item that currently occupies the position.
3 Click on the Add Button. Paint Shop Pro will insert the new button or space at the selected position. If you added a new button, it will be deleted from the Available Buttons List Box.

TOPIC: Removing a Button or Space

## Customizing the Toolbar

Overview Y Add Y Remove Y Move Y Restore

## Removing a Button or Space

You can remove a button or space by dragging the item from the Toolbar Buttons List Box to the Available Buttons List Box. You can also use the Remove Button:

1 Click on the button or space that you want to delete in the Toolbar Buttons List Box.
2 Click on the Remove Button. Paint Shop Pro will delete the selected item from the Toolbar Buttons List Box. If you deleted a button, it will be added to the Available Buttons List Box.

TOPIC: Moving a Button or Space

## Customizing the Toolbar

Overview y Add Y Remove Y Move (Restore
Moving a Button or Space
You can move a button or space by dragging the item within the Toolbar Buttons List Box. You can also use the Move Up Button and the Move Down Button:

1 Click on the button or space that you want to move in the Toolbar Buttons List Box.
2 Click on the Move Up Button to move the item up one space. Click on the Move Down Button to move the item down one space.

TOPIC: Restoring the Default Configuration

## Customizing the Toolbar

Overview Y Add Y Remove Y Move Y Restore

## Restoring the Default Configuration

To add all the buttons to the Toolbar and remove all the spaces, click on the Reset Button.

## File Formats

Window:
Main

TOPIC: File Formats Overview

## File Formats

Overview $\$ Raster Meta/Vector $Y$ Other

File Formats Overview
Paint Shop Pro directly supports 35 different file formats:

- $\quad 26$ raster image formats
- 9 meta and vector image formats

Paint Shop Pro can read other file formats if the appropriate external import filters are installed on your system.

TOPIC: Raster Image Formats

## File Formats

Overview Y Raster Meta/Nector $Y$ Other

## 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.

- Color Depth
- Planar Formats
- Supported Formats

TOPIC: Meta and Vector Image Formats

## File Formats

Overview y Raster Meta/Vector Other

## Meta and Vector Image Formats

Meta and vector image formats can both contain vector data. Vector data is a collection of geometric shapes that combine to make an image, 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.
-
Paint Shop Pro can read vector data, but it cannot 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 can write to some metafile formats, but the resulting files contain raster data only.

- Meta Formats
- Vector Formats
- Supported Formats

TOPIC: Other Formats: External Import Filters

## File Formats

Overview Y Raster Y MetaNector $Y$ Other

Other Formats: External Import Filters
In addition to the file formats that it supports directly, Paint Shop Pro can 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.
In Paint Shop Pro's dialog boxes, the file types that are supported via external import filters have "ЕХт:" after the file extension.

## Raster Image Formats

Window:

TOPIC: Color Depth

## Raster Image Formats

Color Depth Y Planar Formats Supported

## 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 all of 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 | $16,777,216$ |

TOPIC: Planar Formats

## Raster Image Formats

Color Depth YPlanar Formats S Supported

## Planar Formats

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: $2 \times 3=6$, and $22<6<23$.

TOPIC: Supported Formats

## Raster Image Formats

ColorDepth Y Planar Formats Y Supported

## Supported Formats

The following table lists the raster image formats that are supported by Paint Shop Pro, the type of support that is provided (read, write, or both), and the format's bits-per-pixel levels.

In order to view this table correctly, you must have the Wingdings True Type Font installed on your system.

- Supported Raster Image Formats

Meta and Vector Image Formats Window:

TOPIC: Meta Formats

Meta and Vector Image Formats
/ Meta ${ }^{\text {Y }}$ Vector $\backslash$ Supported

## Meta Formats

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.

TOPIC: Vector Formats

## Meta and Vector Image Formats

Meta Y Vector (Supported
Vector Formats
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 nonvector data, such as raster images or text.

TOPIC: Supported Formats

## Meta and Vector Image Formats

Meta Y Vector Y/Supported

## Supported Formats

The following table lists the ten meta and vector formats that are supported by Paint Shop Pro.

In order to view this table correctly, you must have the Wingdings True Type Font installed on your system.

| Format | Source/Standard |  | Open/Save |
| :--- | :--- | :--- | :---: |
| CDR |  | CoreIDRAW! |  |
| CGM |  | Computer Graphics Metafile |  |
| DRW |  | Micrografx Draw |  |
| DXF | Autodesk |  | 1 |
| GEM | Ventura/GEM |  | 1 |
| HGL | Hewlett-Packard Graphics |  | 1 |
|  | Language |  | 1 |
| PCT | Apple |  | $1<$ |
| PIC | Lotus Development Corp. |  | 1 |
| WMF | Microsoft Windows Metafile |  | $1<$ |
| WPG | WordPerfect |  | 1 |

1 Can open files of this format
$<$ Can save files to this format, the files contain raster data only.

## Computers and Colors

 Window:Info

TOPIC: Color Definition Methods

## Computers and Colors

Definition (Gamma Dithering

## 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. The following table outlines the Color Dialog Box RGB and HSL settings for the standard white light color 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 | 0 | 255 | 255 | 120 | 240 | 120 |
| Indigo | 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 components 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

Definition Y Gamma Dithering

## 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 in a variety of ways. 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 diagram entitled "Linear Luminance" below. Our approximate midpoint - say 120 - would produce an identical luminance on the monitor.

## Linear Luminance



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 non-linearity of phosphor excitation. The diagram entitled "Gamma-Corrected Luminance" below 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



TOPIC: Error Diffusion Dithering

## Computers and Colors

Definition Y Gamma Y Dithering

## Error Diffusion Dithering

Dithering is a technique for simulating colors that are missing from an image file's palette. The missing colors are 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.

## 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.

Troubleshooting
Window:
Main

TOPIC: Troubleshooting Overview

## Troubleshooting

Overview Colors Memory $\$ Operations
Troubleshooting Overview
This section contains answers to the most common technical support questions. Refer to the readme.txt file in your Paint Shop Pro folder to see if there are any additional questions and answers that were not available when this help file was published.

TOPIC: Colors

Troubleshooting
Overview Y Colors Memory $\$ Operations

## Colors

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 "Number of Colors" in the About Paint Shop Pro Dialog Box. It shows 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 doesn't support enough colors to show the image correctly. 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 or video driver probably doesn't support enough colors to show the image correctly. For help changing your video driver, consult the documentation that came with your video card.
The graininess is caused by dithering. Dithering is a technique for simulating colors that are missing from an image file's palette. The missing colors are simulated by intermingling pixels of two or more palette colors. 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 will return to normal.

TOPIC: Memory

## Troubleshooting

Overview Colors Memory Operations

## Memory

## 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.

## 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".

TOPIC: Operations

## Troubleshooting

Overview $y$ Colors $y$ Memory ${ }^{\text {Opmations }}$

## Operations

## Some functions are unavailable.

Functions can be unavailable for two reasons:

## Insufficient Color Depth

Some functions create new pixel values that may not exist 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.

## No Selection in the Active Image

Some functions require a selection. If the active image does not contain a selection, the function will not be available.

## Printing crashes Windows, Print Manager, or Paint Shop Pro.

You will be unable to print an image if your Windows temporary folder 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 folder. The allocated memory goes to waste, and it constrains the size of your temporary folder.
For more help, contact your hardware support provider or personnel.
Can't use scanner: Acquire and Select Source are unavailable.
The interface between an application and an image device's software is handled by a file named TWAIN_32.DLL. When you install a TWAIN-compliant device, a copy of TWAIN_32.DLL is placed in your Windows folder. When Paint Shop Pro starts, it scans your Windows folder to see if TWAIn_32.DLL 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.

If the "Acquire" and "Select Source" selections on the File Menu are unavailable, Paint Shop Pro could not find a copy of TWAIN_32.DLL on your system. Check to see if TWAIN_32.DLL is installed in your Windows folder. If it isn't, try reinstalling your device software. Make sure you turn on any options that pertain to TWAIN drivers. If TWAIN_32.DLL is still missing, contact the device manufacturer.

Getting Around Window:

## Graphics



## Tool Windows



For Help, press F1

## Image Windows



For Help, press F1

## Image Files

## Graphics

File Information Dialog Box


## Image Information Dialog Box



# Histogram Example 

Window:

## Graphics

Histogram Example


User Defined Filters - Examples
Window:

## Example

Calculation Example
Pixel values $\quad x$

| 0 | 0 | 1 | 1 | 2 |
| :--- | :--- | :--- | :--- | :--- |
| 0 | 1 | 1 | 2 | 2 |
| 1 | 1 | 2 | 2 | 3 |
| 1 | 2 | 2 | 3 | 3 |
| 2 | 2 | 3 | 3 | 4 |


| 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 |



Example Filters

| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| 0 | 0 | 1 | -7 | 1 | 0 | 0 |
| 0 | 0 | 1 | 1 | 1 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Division Factor $=1$
Bias $=0$

| Lithograph |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 0 0 0 0 0 0 <br> 0 -1 -1 -1 -1 -1 0 <br> 0 -1 -10 -10 -10 -1 0 <br> 0 -1 -10 98 -10 -1 0 <br> 0 -1 -10 -10 -10 -1 0 <br> 0 -1 -1 -1 -1 -1 0 <br> 0 0 0 0 0 0 0 |  |  |  |  |  |  |

Division Factor $=1$
Bias $=0$

Psychedelic Distillation

| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | -1 | -2 | -3 | -4 | 0 |
| 0 | 0 | -1 | 3 | 2 | 1 | 0 |
| 0 | 0 | -1 | 10 | 2 | 1 | 0 |
| 0 | 0 | -1 | 3 | 2 | 1 | 0 |
| 0 | 0 | -1 | -2 | -3 | -4 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Division Factor $=1$
Bias $=0$

## Supported Raster Image Formats

Window:

## Supported Raster Image Formats

1 = Paint Shop Pro can open files < = Paint Shop Pro can save files

| Format | Sub-Format / Description | Source/Standard | Bits-Per-Pixel and Color Type |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 | 4 | $\begin{gathered} 8 \\ \text { Grey } \end{gathered}$ | $\stackrel{8}{\text { Color }}$ | 16 | 24 | 32 |
| BMP | RGB encoded | OS/2 | $1<$ | $1<$ |  | $1<$ |  | $1<$ |  |
| BMP | RGB encoded | Microsoft Windows | $1<$ | $1<$ |  | $1<$ |  | $1<$ |  |
| BMP | RLE encoded | Microsoft Windows |  | $1<$ |  | $1<$ |  |  |  |
| CLP | Bitmap | Windows Clipboard | 1 | 1 |  | 1 |  | 1 |  |
| CLP | Device Independent Bitmap | Windows Clipboard | $1<$ | $1<$ |  | $1<$ |  | $1<$ |  |
| CUT |  | Dr. Halo |  |  |  | $1<$ |  |  |  |
| DIB | RGB encoded | OS/2 | $1<$ | $1<$ |  | $1<$ |  | $1<$ |  |
| DIB | RGB encoded | Microsoft Windows | $1<$ | $1<$ |  | $1<$ |  | $1<$ |  |
| DIB | RLE encoded | Microsoft Windows |  | $1<$ |  | $1<$ |  |  |  |
| EPS | Image only | Adobe | < | $<$ |  | $<$ |  | $<$ |  |
| GIF | Ver. 87a (interlaced) | CompuServe | $1<$ | $1<$ |  | $1<$ |  |  |  |
| GIF | Ver. 87a (non-interlaced) | CompuServe | $1<$ | $1<$ |  | $1<$ |  |  |  |
| GIF | Ver. 89a (interlaced) | CompuServe | $1<$ | $1<$ |  | $1<$ |  |  |  |
| GIF | Ver. 89a (non-interlaced) | CompuServe | $1<$ | $1<$ |  | $1<$ |  |  |  |
| IFF | Compressed | Electronic Arts | $1<$ | $1<$ |  | $1<$ |  |  |  |
| IFF | Uncompressed | Electronic Arts | $1<$ | $1<$ |  | $1<$ |  |  |  |
| IMG | Old Style | GEM Paint | $1<$ | 1 |  | $1<$ |  |  |  |
| IMG | New Style | GEM Paint | 1 | 1 |  | 1 |  |  |  |
| JIF | Huffman compressed | Joint Photo. Expert Group |  |  | $1<$ |  |  | $1<$ |  |
| JPG | Huffman compressed | Joint Photo. Expert Group |  |  | $1<$ |  |  | $1<$ |  |
| JPG | Progressive | Joint Photo. Expert Group |  |  | $1<$ |  |  | $1<$ |  |
| LBM | Compressed | Deluxe Paint | $1<$ | $1<$ |  | $1<$ |  |  |  |
| LBM | Uncompressed | Deluxe Paint | $1<$ | $1<$ |  | $1<$ |  |  |  |
| MAC | With header | MacPaint | $1<$ |  |  |  |  |  |  |
| MAC | Without header | MacPaint | $1<$ |  |  |  |  |  |  |
| MSP | New version | Microsoft Paint | $1<$ |  |  |  |  |  |  |
| MSP | Old version | Microsoft Paint | 1 |  |  |  |  |  |  |
| PBM | Portable Bitmap | UNIX | $1<$ |  |  |  |  |  |  |
| PCD |  | Kodak Photo CD |  |  |  |  |  | 1 |  |
| PCT | Macintosh PICT format | Apple | $1<$ | $1<$ | $1<$ | $1<$ | 1 | $1<$ | 1 |
| PCX | Version 0 | ZSoft Paintbrush | 1 |  |  |  |  |  |  |
| PCX | Ver. 2 (with palette info.) | ZSoft Paintbrush | 1 | 1 |  |  |  |  |  |
| PCX | Ver. 3 (without palette info.) | ZSoft Paintbrush | 1 | 1 |  |  |  |  |  |
| PCX | Version 5 | ZSoft Paintbrush | $1<$ | $1<$ |  | $1<$ |  | $1<$ |  |
| PGM | Portable Graymap | UNIX |  |  | $1<$ |  |  |  |  |
| PIC |  | Pictor/PC Paint | $1<$ | $1<$ |  | $1<$ |  |  |  |
| PNG | Portable Network Graphics |  | $1<$ | $1<$ |  | $1<$ | 1 | $1<$ | 1 |
| PPM | Portable Pixelmap | UNIX |  |  |  |  |  | $1<$ |  |
| PSD | RGB or indexed | Photoshop | $1<$ |  |  | $1<$ |  | $1<$ |  |
| RAS | Type 1 (Modern Style) | Sun Microsystems | $1<$ |  |  | $1<$ |  | $1<$ | 1 |


| RAW | Un-encoded pixel data |  |  | $1<$ |  | $1<$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RLE | CompuServe | CompuServe | $1<$ |  |  |  |  |
| RLE | Windows | Microsoft Windows |  | $1<$ |  | $1<$ |  |
| TGA | No compression | Truevision |  |  | $1<$ | 1 | $1<$ |
| TGA | Compressed | Truevision |  |  | $1<$ | 1 | $1<$ |
| TIFF | Huffman compressed | Aldus Corporation | $1<$ |  |  |  |  |
| TIFF | No compression | Aldus Corporation | $1<$ | $1<$ | $1<$ | $1<$ |  |
| TIFF | Pack bits compressed | Aldus Corporation | $1<$ | $1<$ | $1<$ | $1<$ |  |
| TIFF | LZW compressed | Aldus Corporation | $1<$ | $1<$ | $1<$ | $1<$ |  |
| TIFF | Fax Group 3 compressed | Aldus Corporation | $1<$ |  |  |  |  |
| TIFF | Fax Group 4 compressed | Aldus Corporation | 1 |  |  |  |  |
| WPG | Version 5.0 | WordPerfect | $1<$ | $1<$ | $1<$ |  |  |
| WPG | Version 5.1 | WordPerfect | $1<$ | $1<$ | $1<$ |  |  |
| WPG | Version 6.0 | WordPerfect | $1<$ | $1<$ | $1<$ | $1<$ |  |

Open / Load Dialog Boxes: Selecting a Folder Window:

How To

TOPIC: Look in Drop Down Box

## Selecting a Folder:

## $\square$

Look in Drop Down Box
Up One Level Button
Contents List Box
The Look In Drop Down Box lists the currently selected folder and any folders above it, including the Windows system folders (Desktop, My Computer, etc.). To select a folder:

1 Click on the drop down box to open it.
2 Click on the folder that you want to select. If the folder isn't visible, use the scrollbar to move through the list.

TOPIC: Up One Level Button

## Selecting a Folder:

## Look in Drop Down Box <br> - <br> Up One Level Button

Contents List Box
Clicking on the Up One Level Button takes you to the folder that directly contains the current folder. For example, if the current folder is $\mathrm{C}:$ IWINDOWSISYSTEM, clicking on the button will take you to $\mathrm{C}: / \mathrm{WI}$ INDows.

TOPIC: Contents List Box

## Selecting a Folder:

Look in Drop Down Box
Up One Level Button
$\square$
Contents List Box
The Contents List Box displays the contents of the folder that is currently selected in the Look In Drop Down Box. To select a folder:

1 Click on the folder that you want to select. If the folder isn't visible, use the scrollbar to move through the list.
2 Click on the Open Button. Paint Shop Pro will update the Look In Drop Down Box and the Contents List Box.

Save Dialog Boxes: Selecting a Folder
Window:
How To

TOPIC: Save in Drop Down Box

## Selecting a Folder:

- 


## Save In Drop Down Box

Up One Level Button
Contents List Box
The Save In Drop Down Box lists the currently selected folder and any folders above it, including the Windows system folders (Desktop, My Computer, etc.). To select a folder:

1 Click on the drop down box to open it.
2 Click on the folder that you want to select. If the folder isn't visible, use the scrollbar to move through the list.

TOPIC: Up One Level Button

## Selecting a Folder:

$-$
Save In Drop Down Box
-
Up One Level Button
Contents List Box
Clicking on the Up One Level Button takes you to the folder that directly contains the current folder. For example, if the current folder is $\mathrm{C}: \mid \mathrm{IWINDOWSISYSTEM}$, will take you to C:IWINDOWs.

TOPIC: Contents List Box

## Selecting a Folder:

- 

Save In Drop Down Box
Up One Level Button
$\square$
Contents List Box
The Contents List Box displays the contents of the folder that is currently selected in the Save In Drop Down Box. To select a folder:

1 Click on the folder that you want to select. If the folder isn't visible, use the scrollbar to move through the list.
2 Click on the Save Button. Paint Shop Pro will update the Save In Drop Down Box and the Contents List Box.

Save Dialog Boxes: Creating a Folder
Window:
How To

TOPIC: Creating a New Folder

## Creating a New Folder

To add a folder to the currently-selected folder:
1 Click on the Create New Folder Button. Paint Shop Pro will add a "new folder" item to the Contents List Box.
2 Type a name for the new folder. You can edit the name as you would any other text.
3 Press <Enter>. Paint Shop Pro will create the new folder, add it to the Contents List Box, and highlight it.
4 Press <Enter> again. Paint Shop Pro will open the new folder.

Select Folder DIg: Selecting a Folder Window:

TOPIC: Step 1: Select the Folder

## Selecting a Folder

Step 1: Select the Folder
You use the Select Folder Dialog Box to choose a folder for a function or feature. You select a folder using the following controls:

- Look In Drop Down Box
- Up One Level Button
- Contents List Box

TOPIC: Step 2: Choose the Select Button

## Selecting a Folder

## Step 2: Choose the Select Button

Click on the Select Button. Paint Shop Pro will return to the function that called the Select Folder Dialog Box.

Select Folder DIg: Creating a Folder
Window: Steps2

TOPIC: Step 1: Select the Parent Folder

## Creating a Folder

## Step 1: Select the Parent Folder

You use the Select Folder Dialog Box to create a folder for use by the Browser or by the Batch Conversion Utility. Use the following controls to select the folder that will contain the new folder:

- Look In Drop Down Box
- Up One Level Button
- Contents List Box

TOPIC: Step 2: Create the New Folder

## Creating a Folder

## Step 2: Create the New Folder

1 Click on the Create New Folder Button. Paint Shop Pro will add a "new folder" item to the Contents List Box.
2 Type a name for the new folder. You can edit the name as you would any other text.
3 Press <Enter>. Paint Shop Pro will create the new folder, add it to the Contents List Box, and highlight it.
4 Press <Enter> again. Paint Shop Pro will open the new folder.

TOPIC: Step 3: Choose the Select Button

## Creating a Folder

## Step 3: Choose the Select Button

Click on the Select Button. Paint Shop Pro will return to the function that called the Select Folder Dialog Box.

Format-Specific Dialog Boxes
Window:
More

TOPIC: Overview

## Using the Format-Specific Dialog Boxes

Overview Meta Picture Y PCD Size YRAW Options
Overview
There are three file formats that may require additional input before being opened by Paint Shop Pro:

- Meta / Vector
- Photo-CD
- RAW

TOPIC: Using the Meta Picture Import Dialog Box

## Using the Format-Specific Dialog Boxes

Overview Y Meta Picture PCD Size XAW/ Options

## Using the Meta Picture Import Dialog Box

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

- You are opening a file and the "Ask for size" option in the WMF file preferences is selected.
- You are pasting metafile or vector data from the clipboard.

Changing the Image's Size and/or Scale
You change the size and/or scale of the image by entering new values in the Width and Height Text Boxes.

## Opening the Image

Click on the OK Button. Paint Shop Pro will open the image using the selected dimensions.

## Default Import Size

For help changing the default WMF import size, see WMF Preferences.

TOPIC: Using the PCD Size Dialog Box

## Using the Format-Specific Dialog Boxes

Overview Meta Picture Y PCD Size RAW Options

## Using the PCD Size Dialog Box

Kodak Photo-CD files contain multiple sizes of a single image. The default PCD size option determines which size will be read when a PCD file is opened.
If the option labeled "Ask when opening each file" is selected, Paint Shop Pro will present the PCD Size Dialog Box each time you open a PCD file. To select a size option from the dialog box:

1 Click on the desired size.
2 Click on the OK Button.

TOPIC: Using the RAW Options Dialog Box

## Using the Format-Specific Dialog Boxes

Overview Y Meta Picture Y PCD Size YRAW Options

## Using the 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.

## RAW Pixel Data

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

Window: More2

TOPIC: Changing the Image's Size And/or Scale

## Changing the Size and/or Scale:

You change the size and/or scale of the image by entering new values in the Width and Height Text Boxes. To access a text box, click in it, or press <Tab> until its text is highlighted.

## Maintaining the Aspect Ratio

If you change the width last, the aspect ratio (width/height) will be preserved. When the image is resized, its proportions will be maintained. The height will be determined by the new width and the aspect ratio.

## Changing the Aspect Ratio

If you change the height last, the aspect ratio (width/height) will be abandoned. When the image is resized, its proportions will be determined by the new measurements.

## Page Setup

Window:

## Steps2

TOPIC: Step 1: Access the Page Setup Dialog Box

## Page Setup

## Step 1: Access the Page Setup Dialog Box

The page setup settings determine the paper source, and control how images or thumbnails are arranged on a printed page. You change the page setup from the Page Setup Dialog Box. There are two versions of the dialog box, one for images and one for Browser thumbnails.
You can access the dialog box by:

- Selecting "Page Setup" from the File Menu.
- Clicking on the Setup Button in the Image Print Preview Window or the Browser Print Preview Window.

TOPIC: Step 2: Select the Printer

## Page Setup

Step 2: Select the Printer
Click on the Printer Button. Paint Shop Pro will open the Select Printer Dialog Box.

- Use the drop down box to choose the printer.
- To set printer-specific options, click on the Properties Button.

TOPIC: Step 3: Select the Paper Size and Source

## Page Setup

Step 3: Select the Paper Size and Source
You select the paper 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.

TOPIC: Step 4: Set the Page Orientation

## Page Setup

## Step 4: Set the Page Orientation

There are two page orientations, portrait and landscape.

- Printing in portrait orientation places the top of the image against one of the page's narrow sides.
- Printing in landscape orientation places the top of the image against one of the page's wide sides.
To select an orientation, click on its text or option button in the Orientation Group Box.

TOPIC: Step 5: Select the Image Settings (Images Only)

## Page Setup

## Step 5: Select the Image Settings (Images Only)

The settings in this step are only available from the image version of the Page Setup Dialog Box. If you are setting up the page for printing thumbnails, skip to the next step.

## Checkbox Options

There are three checkbox options in the Options Group Box.

- To maintain the image's current proportions (width/height), fill the checkbox labeled "Maintain aspect ratio".
- To expand the image so that it will fill the printed page, mark the checkbox labeled "Use full page".
- To center the image on the page, mark the checkbox labeled "Center on page".


## Image Size

If you turn the "Use full page" option off, you can specify the printed image's width and height by entering values in the Image Size Group Box.

## Maintaining the Aspect Ratio

If you turn the "Maintain aspect ratio" option on, and you want to resize the printed image, enter a new value in one of the image size text boxes, then press <Enter>. Paint Shop Pro will calculate the remaining dimension.

TOPIC: Step 6: Set the Margins

## Page Setup

Step 6: Set the Margins
You can specify the page's margins by entering values in the Margins Group Box. To set margins for images, turn off the "Center on page" option.

TOPIC: Step 7: Select the OK Button

## Page Setup

Step 7: Select the OK Button
Click on the OK Button. Paint Shop Pro will close the Page Setup Dialog Box and save the new settings.

About

## Paint Shop Pro Help

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Authored by:


Windows ${ }^{\circledR}$ Documentation
Specialists
74551.3060@compuserve.com

Add Link

## Add Link

The desired topic is currently
unavailable. An active link will be added later.
(I)

Glossary

## 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.

## Pixel

Raster image formats break an image into a grid of small, equallysized pieces, called "pixels". The image is stored by setting each pixel to a specific color.


## Help Windows

There are two types of help windows: the main window and secondary windows. In this help file:

- The main help window contains
menus and is titled "Paint Shop Pro Help".
- The secondary windows do not
contain menus, and have titles like "More
Information" and "How To".


## TWAIN Standard

To enable communication between imaging hardware and software, five companies (Aldus, Caere, Eastman Kodak, Logitech, and Hewlett Packard) developed what is now an industry-wide compatibility standard known as TWAIN. TWAIN allows Data Sources (a scanner, a digital camera, etc.) to communicate with Host Applications (an image-editing or page layout program).

## Active Colors

There are two active colors, the foreground color and the background color. You use the active colors with a wide variety of tools and functions.

Standard Controls

## Window Buttons



Up One Level Button
国

Create New Folder Button
包

New Folder Item New Folded

## Scrollbar Slider Button

```
\Delta
```

```
-& Slider
    Button
\nabla
```


## Checkbox Options

A checkbox option is on when its checkbox is marked. You turn the option on and off by clicking on its label or the checkbox.
V Save Browser files to disk

## Spin Controls

10 - Text Area
You use a spin control to set a value. You can type a number into the text area, or you can use the arrow buttons.
To increase or decrease the number by one, click on the appropriate button.
To scroll to a higher or lower number:
1 Point at the appropriate arrow button.
2 Press and hold the primary mouse button. The number will start to increase or decrease.
3 When the number reaches the value you want, release the mouse button.

## Slider Controls

You use a slider control to set a position or value.
1 Point the cursor at the slider button.
2 Press and hold the primary mouse button.
3 Drag the slider button by moving the mouse.
4 Release the mouse button.

## Drop Down Boxes

Closed:


You use a drop down box to select a setting from a list of options.

1 Click on the drop down box to open it.
2 Click on the item that you want to select. If the list is too long to fit in the box, use the scrollbar to scroll through it.

## Scrollbars

You use a scrollbar to set a position.
1 Point the cursor at the slider button.
2 Press and hold the primary mouse button.
3 Drag the slider button by moving the mouse.
4 Release the mouse button.
You can also change the position by:

- Clicking on the arrow buttons at each end of the scrollbar.
- Clicking between the slider button and an arrow button.


## Basic Image Editing.doc

## Undo Button

$\because$

Add Borders Dialog Box

| Add Borders |  |
| :---: | :---: |
| Border size | OK |
| $\ulcorner$ Symmentric | Cancel |
| Iop: 0 卷 | Help |
| Bottom: 0 - |  |
| Left: 0 - |  |
| Bight: 0 : |  |



## Cut Button

| 4 |
| :--- |

## Copy Button

蹅

## Resample Dialog Box



## Paste Button

蒌

Rotate Dialog Box

| Rotate |  |  |
| :---: | :---: | :---: |
| - Direction | Degrees | OK |
| 6 Bight | C. $\underline{90} \bigcirc \bigcirc 180 \quad \bigcirc 1270$ | Cancel |
| O Left | C Eree: 1 园 (1-359) | Help |

## Before You Begin.doc

## Link Indicators

A link indicator is a little wedge that appears at the end of a tab set. The wedge indicates that there is a linked set in the relevant direction. You can jump to the linked set by clicking on the indicator.


## Style Bar (Example)

| Clone Brush |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Clone mode |  | Size | Shape |  | Opacity |
| Aligned | $\checkmark$ | 10 园 | Round |  | 128 - |

- Displaying the Style Bar

Main Window Titlebar

Main Window Control Icon

Main Window Control Menu

| Riestore |
| :--- |
| Move |
| Size |
| Minimize |
| Maximize |
| Close Alt+F4 |

## Menubar

Eile Edit View Image Colors Masks Selections Capture Window Help

## Status Bar

For Help, press F1
Image: $768 \times 512 \times 16$ Million -2.2 MBytes

## Toolbar



- Displaying the Tool Bar


## Toolbar with No Images Open

The arrows indicate the buttons that are unavailable when no images are open.


## Tool Palette



- Displaying the Tool Palette


## Histogram Window

The Histogram Window displays a histogram of the active image's RGB values and luminance. You select which color components to graph by filling in their checkboxes. The top of the window displays the number of pixels that match the histogram's maximum, minimum, and average values.


Creating Image Files.doc

New Image Dialog Box

| New Image |  |
| :---: | :---: |
| - New image properties |  |
| Width: 500 园 $\times \mathrm{H}$ | 园 |
| Background color: White | $\checkmark$ |
| Image type: |  |
| 256 Colors (8 Bit) | $\pm$ |
| Memory Required: 244.1 KBytes |  |
| OK Cancel | Help |

New Button
미

Not Enough Memory Prompt
Paint Shop Pro $x$
(i) Not enough memory, close one or more windows and try again.
$\square$

Width and Height Spin Controls
Width: 500 : $\times$ Height: 500 :

Background Color Drop Down Box

| White | $\square$ |
| :--- | :--- |
| Whitem |  |
| Black <br> Red <br> Gireen <br> Blue | - |

## Image Type Drop Down Box

16 Colors (4 Bit)
2 Colors (1 Bit)
16 Colors [4 4 Bit
256 Greys (8 Bit)
256 Colors (8 Bit)
16.7 Million Colors (24 Bit)

## Memory Required Text

Display
Memory Required: 244.1 KBytes

Capture Setup Dialog Box
Capture Setup

Capture
C Area
C Eull screen
C Client area
C Window
C Object

Activate capture using
C Right mouse click
© Hot key
F11
C Delay timer
$\sqrt{5}$ seconds
$\square$
x
Options
$\Gamma$ Include cursar
■ Multiple captures
-


OK
Help

## Capture Group Box

Capture
C Area
C Full screen
C Client area
C Window
C Objeck

## Activate Capture Group Box

- Activate capture using

O Right mouse click
c Hot key
F11
© Delay timer
$\sqrt{5}$ seconds

File Format Preferences.doc

## File Preferences Dialog Box



## JIF/JPG Preferences Page




## PCD Preferences Page




## PNG Preferences Page

PNG


## RAW Preferences Page



## TIF Preferences Page



## WMF Preferences Page




Format-Specific Dialog Boxes.doc

Meta Picture Import Dialog Box

| Meta Picture Import |  |
| :---: | :---: |
| Original size Width in pixels: 347 Height in pixels: 262 | Import size <br> Width in pixels: <br> 347 <br> Height in pixels: <br> 262 |
| OK |  |

## PCD Size Dialog Box



## RAW Options Dialog Box

| RAw Options | x |
| :---: | :---: |
| $\left[\begin{array}{l} \text { Image size (in pixels] } \\ \text { width: } \sqrt{100} \times \text { Height: } 100 \end{array}\right.$ |  |
| Color channels Single channel (greyscale) Ihree channel (RGB) Three channel (CMY) Four channel (CMYK]) |  |
| File structure <br> Header size (in bytes): <br> Planar (RRR GGG...) <br> C Interleaved (RGB RGB...) <br> (c) Order RGB Order BGR Flipped (bottom up) |  |
| OK Cancel Help |  |

Managing Image Files.doc

## Save Button

맘


File Delete Prompt

| Confirm File Delete |  |  | 区 |
| :---: | :---: | :---: | :---: |
| $0$ | Are you sure you want to send 'Marina.ipg' to the Recycle Bin? |  |  |
|  | Yes | No |  |

File Revert Prompt


## Batch Conversion Dialog Box



## Suppress Error Messages

Checkbox
A checkbox option is on when its checkbox is filled in. You turn the option on and off by clicking on its label or the checkbox.
V Suppress error messages

## Batch Conversion Status Dialog Box



Print Dialog Box


Print Button
要

Printer Drop Down Box
HP LaserJet 4/4M Plus PS
HPLaserdet 4/4MPlus PS
HP Laserdet 4M Plus
Microsoft Fax
Quick Link II Fax

## Print to File Checkbox

A checkbox option is on when its checkbox is filled in. You turn the option on and off by clicking on its label or the checkbox.
$\square$ Print to file

Number of Copies Spin Control
Number of copies: 1 入
Spin Control

Print to File Dialog Box


Image Print Preview Window


Page 1

## Save As Dialog Box



## Save in Drop Down Box



File Type Drop Down Box
BMP - 0S/2 or Windows Bitmap
BMP. OS/2 or Windows Bitman
CLP - Windows Clipboard
CUT - Dr. Halo
DIB - 0S/2 or Windows DIB $\xrightarrow{\substack{\text { Slider } \\ \text { Button }}} \rightarrow$
tド' - Encapsulated 'ost'script
GIF - CompuServe
IFF - Amiga
IMG - GEM Paint
JIF - JPEG - JFIF Compliant
JPG - JPEG - JFIF Compliant

Filename In Use Prompt

| Save As |  |  | 区 |
| :---: | :---: | :---: | :---: |
|  | D:\GRAPHICSVMages\Boats on the Tigris. bmp This file already exists. |  |  |
|  | Replace existing file? |  |  |
|  | Yes | No |  |

## Opening Image Files.doc

Open Dialog Box


Paint Shop Pro Image File Icon
䦪

## Open Button

- 


## Look in Drop Down Box

| $\bigcirc \mathrm{Jpg}$ | $\checkmark$ |
| :---: | :---: |
| $\Delta$ (D:) | - |
| $\square$ Graphics |  |
| $\square 1$ Images |  |
| elimg |  |
| $\Delta(\mathrm{E}])$ |  |
| $\boldsymbol{\sim}$ ( $\mathrm{F}:$ ) |  |
| \% (G) |  |
| 盽 My Briefcase |  |

## Contents List Box

| Animals | Giagraipg | Fí Rushmore．ipg | 5 Watrial2．if |
| :---: | :---: | :---: | :---: |
| $\square$ Flowers | －Oldfaith．ipg | S Stathome．jpg | S Windmillip |
| $\square$ Panoramas | －Pencils．jpg | －Stockhlm．jpg |  |
| 㢌Africa1．jpg | 㦛pspbrwse．bf | ETree．jpg |  |
| Gricheship．jpg | －Retreat．jpg | G Vale．ipg |  |
| －Marina．jpg | 國 River．jpg | －Watriall ipg |  |
| －1 |  |  | － |

File Type Drop Down Box

| Alll Files |  |
| :---: | :---: |
| Adllilles |  |
| BMP - 0S/2 or Windows Bitmap <br> CDR - CorelDraw Drawing |  |
| CGM - Computer Graphics Metafile |  |
| CLP - Windows Clipboard |  |
| CUT - Dr. Halo |  |
| DIB - 05/2 or Windows DIB |  |
| DRW - Micrografix Draw |  |
| DXF - Autodesk Drawing Interchange |  |
| GEM - Ventura/GEM Drawing |  |

Image Information Group Box

| Image information |  |
| :--- | :--- |
| $\begin{array}{l}\text { Width: } 766 \quad \text { Height: } 512 \\ 24 \text { Bits Per Pixel ( } 16 \text { Million Colors) }\end{array}$ | Details... |

Using the Browser.doc

## Browser Window



## Image File Thumbnails

Each image file thumbnail represents an image file. A
thumbnail contains the file's name and a reduced version of the file's image, displayed on a raised panel.


- Managing Thumbnails


## Browser Delete Prompt

Paint Shop Pro $\square$
?) Are you sure you want to send all the files associated with the selected thumbnails to the Recycle Bin?


## Rename File Dialog Box



Print Dialog Box


Print Range Group Box
Print range
C All
C Pages from: $: \sqrt{1} \quad$ to: $\square$
$\bigcirc$ Selection

Browser Print Preview Window


## Select Dialog Box



Find Dialog Box


## Search Failure Prompt



Thumbnail Sort Dialog Box

| Thumbnail Sort 区 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Primary Sort Secondary Sort |  |  |  |  |
| -Sort order |  |  |  |  |
| ¢ Ascending $\bigcirc$ Descending |  |  |  |  |
| By file attributes |  | By image attributes |  |  |
| C Name | $\bigcirc$ Type | $\bigcirc$ width |  |  |
| C Extension |  | $\bigcirc$ Height |  |  |
| $\bigcirc$ Date |  | C Bits per pixel |  |  |
| C Size |  | $\bigcirc$ Size |  |  |
|  | OK | Cancel | He |  |

Primary Sort Order Group Box
-Sort order $\quad \subset$ scending $\quad \subset$ Descending

## File Attributes Group Box



Sort Criteria Tabs
Primary Sort Secondary Sort |

## Secondary Sort Order Group Box

| Sort order |  |
| ---: | :--- |
| C No sort | A Ascending $\quad \mathrm{D}$ Descending |

File Attributes Group Box
By file attributes
C Name $\quad$ O Type
C Extension
C Date
C Size

## Image Attributes Group Box

- By image attributes
$C$ width
C Height
C Bits per pixel
C Size


## Color Functions.doc

## Select the Area to Modify

The Color Functions will work on a selection if the image's color depth is greater than 256 colors, or if the image is 256 color grey scale. With lower color depths, the Color 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. Choose "Select None" from the Selections Menu.



## Posterize Dialog Box



## Solarize Dialog Box




## Customizing the Toolbar.doc



## General Program Preferences.doc

## Paint Shop Pro Preferences Dialog Box



## Undo Preferences <br> Undo <br> C Disabled - Undo information will not be saved. The undo command will not be available. <br> © To memory - Undo information will be saved to memory. <br> C To disk - Undo information will be saved to a temporary disk file.

## Plugin Filters Preferences



## Viewing Preferences

Viewing

```
    Zooming
    V/Fit window to image when zooming in - The window will resize to fit the image.
    \ Fit window to image when zooming out - The window will resize to fit the image.
    New images
    V Auto size - Automatically set the zoom factor when loading large images.
    After changing size
    V Fit window to image - The window will resize to fit the image if the image size changes.
    V Auto size - Automatically set the zoom factor when the image size increases.
```


## Palettes Preferences

Palettes

| Color palette |  |
| :---: | :---: |
| C Display colors in RGGB format | (c) Decimal display |
| © Display colors in HSL formas | C Hexadecimal display |
| V Display control descriptions on style bar |  |

## Browser Preferences



## Miscellaneous Preferences



Style Bar Without Control Labels
Clone Brush 区
Aligned $\quad 10 \geqslant$ Round $\geqslant 128 \geqslant$

Image Processing.doc

## Deformations

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

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.

## Arithmetic Dialog Box



## Function Group Box

| Function |  |  |
| :---: | :---: | :---: |
| $C$ Add | $C$ Multiply | $C$ Darkest |
| $C$ Subtract | $C$ Difference | C Lightest |

## Channel Group Box

| Channel |  |  |
| :---: | :---: | :---: |
| Image \#1 | Image \#2 |  |
| C Red | C Red |  |
| $C$ Green | $C$ Green | All channels $\square$ |
| $C$ Blue | $C$ Blue |  |

## Modifiers Group Box




## Drop Shadow Dialog Box



## Attributes Group Box

-Attributes
Color: Backgound Colorw"w
Qpacity: 255 Blur: 0 目


## Cutout Dialog Box




## Buttonize Dialog Box



Filter Browser Dialog Box



Filter Matrix

| Filter matrix: |  |  |  |  |  |  |  | Target Pixe Coefficient |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 |  |  | 0 |  |
| 0 | 0 | 0 | 0 | 0 |  | ) | 0 |  |
| 0 | 0 | 1 | 1 | 1 |  | 0 | 0 |  |
| 0 | 0 | 1 | -7 | 1 |  | 9 | 0 |  |
| 0 | 0 | 1 | 1 | 1 |  | 10 | 0 |  |
| 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |
| 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |



Simple Embossing Filter

| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | -1 | 0 | 1 | 0 | 0 |
| 0 | 0 | -1 | 0 | 1 | 0 | 0 |
| 0 | 0 | -1 | 0 | 1 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Division Factor $=1$
Bias = 128

## Attributes Group Box

| -Attributes |  |
| :---: | :---: |
| $\square$ Fill interior with color |  |
| Interior color: White | $\square$ |
| Shadow color: Black | $\square$ |
| Qpacity: 255 者 |  |



## Page Setup.doc

## Page Setup Dialog Box



## Page Setup Dialog Box



## Select Printer Dialog Box



## Paper Group Box

| Paper |  |
| :--- | :--- |
| Size: | Letter |
| Source: | AutoSelect Tray |

## Page Orientations



## Options Group Box

| Options |
| :--- |
| $\square$ Maintain aspect ratio |
| $\nabla \underline{\text { Use full page }}$ |
| $\square \underline{\text { Center on page }}$ |

Image Size Group Box
-Image size
Width: 8
Height: 8.14"

Margins Group Box

- Margins (inches)
Left: $\sqrt{0.18^{\prime \prime}}$ Bight: $\sqrt{0.18^{\prime \prime}}$
Iop: $\sqrt{1.43^{\prime \prime}}$ Bottom: $\sqrt{1.43^{\prime \prime}}$

Painting and Drawing.doc

## Clone Brush Image Areas

When you use the Clone Brush, you work with two image areas:

- The area you copy from is called the source area.
- The area you copy to is called the target area. It can be within the same image, or in another image of equal color depth.


## Paintbrush Button

,

## Color Replacer Button



Define New Pattern Dialog Box


## Gradient Fill Direction Dialog Box



## Gradient Fill Origin Dialog Box

Gradient Fill Origin


## Add Text Dialog Box



Fill Button

Fill Tool Style Bar

| Flood Fill |  | 区 |
| :---: | :---: | :---: |
| Match mode | Tolerance Fill style |  |
| RGB Value - | 20 \# Rectangular Gradient | Qptions... |

## Paintbrush Style Bar

| Paint Brushes |  |  |  |  |  | X |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Brush type |  | Size | Shape |  | Paper texture |  |
| Pen | - | 6 \# | Square | $\checkmark$ | None | $\checkmark$ |

## Clone Brush Button <br> 3

Clone Brush Style Bar

## Brush Shape

The brush shape is the shape of the area at the cursor to which color is applied.

## Opacity Setting

The opacity setting determines how opaque or transparent the tool's effect will be. The scale is 1 to 128 :

- A setting of 1 creates a nearly transparent effect. The applied color will barely appear.
- A setting of 128 creates a completely opaque effect. The applied color will completely overwrite the existing colors.


## Color Replacer Style Bar

| Color Replacer 区 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Size | Sha |  | Tolerance |  |  |
| 10 - | Square | $\cdots$ | 20 园 | None | $\checkmark$ |

## Retouch Button

## Retouch Tool Style Bar



Eraser Button

## Eraser Style Bar

| Eraser Brush 区 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Size Sha |  | Opacity |  |  |
| 10 Round | $\checkmark$ | 128 - | None | $\checkmark$ |

## Airbrush Button

Airbrush Style Bar


## Text Button

A

## Line Button

$\square$

## Line Tool Style Bar

| Lin... $\mathbf{x}$ |
| :---: |
| Width |
| $1 \geqslant$ |

## Shape Button

$\square$

## Shape Tool Style Bar

| Shape Tool <br> Line <br> 1 <br> Rectangle |
| :--- |

## Using Masks.doc

Save Mask Channel Prompt

| Save Mask Channel |
| :--- |
| D:\PSP\Masks\Geyser.msk |
| This file already exists. |
| Replace existing file? |
| Yes |

Add Mask From Image Dialog Box

| Add Mask From Image |  |
| :---: | :---: |
| Source window: |  |
| This Window | OK |
| -Create mask from- | Cancel |
| c Source luminance <br> C Any non-zero value | Help |
| $\square$ Invert mask data |  |

## Mirror Transparency

Mirror transparency is calculated by subtracting a color's current luminance from the value of white.

Save Mask Channel Dialog Box


## Load Mask Channel Dialog Box



Working with Colors.doc


## Crosshair and Pointer Controls



## Active Color Panel



## Edit Palette Dialog Box



## Dropper Button

## $\theta$

## Sort Order Drop Down Box

Palette Order
Pablette Drider
By Luminance
By Hue

## Save Palette As Dialog Box



Filename In Use Prompt

| Save Palette As |  |  |
| :---: | :---: | :---: |
| {$D: \backslash$ Test Apps $\backslash p s p 4 b \backslash$ Palettes \( |  |  |
| ) Color Palette 16 .pal This file already exists.} |  |  |
|  |  |  |
|  | No |  |

## Load Palette Dialog Box



## Dithering

Dithering means to intermingle pixels of two or more colors to simulate a color that is not available.

- Error Diffusion Dithering


## Decrease Color Depth Dialog Box

| Decrease Color Depth | Colors |  |
| :---: | :---: | :---: |
| $\left[\begin{array}{l}\text { Palette component } \\ \text { C Grey values: } \\ \text { C Red components } \\ \text { C Green components } \\ \text { C Blue components }\end{array}\right.$ $\left[\begin{array}{l}\text { Palette weight } \\ \text { C weighted } \\ \text { C Non-weighted }\end{array}\right.$ | $\left[\begin{array}{l}\text { Reduction method } \\ \text { C Nearest color } \\ \text { C Ordered dither } \\ \text { C Error diffusion } \\ \text { C Floyd-Steinberg } \\ \text { C Burkes } \\ \text { C Stucki }\end{array}\right.$ | OK <br> Cancel <br> Help |

## Palette Component Group

Palette component
C Grey values
O Red components
O Green components
O Elue components

## Reduction Method Group Box

Reduction method
C Nearest color
C Ordered dither
C Error diffusion
C Floyd-Steinberg
C Burkes
C Stucki

## Palette Weight Group Box

 -Palette weightC Weighted
C Non-weighted

## Decrease Color Depth Dialog Box



## Palette Group Box

- Optimized

C Windows'

## Reduction Method Group Box

Reduction method
(6) Nearest color

C Ordered dither
C Error diffusion

## Options Group Box

Options
$\Gamma$ Boost marked colors by
1
$\square$ (1 to 10)
$\square$ Reduce color bleeding

## Decrease Color Depth Dialog Box



## Palette Group Box

( Optimized
C Standard

## Options Group Box

Options $\square$ Boost marked colors by<br>1 ( 1 to 10 )<br>- Include Windows' colors<br>$\square$ Reduce color bleeding



## Reduction Method Group Box

-Reduction method
c Nearest collon
C Error diffusion

## Decrease Color Depth Dialog Box



## Number of Colors Text Box

Number of colors:
256 (17-256)

## Reduction Method Group Box

- Reduction method
(c) Nearest color

Error diffusion

Working with Folders.doc

## Select Folder Dialog Box



Working with Image Windows.doc


## Select Window Dialog Box



## Image Window Titlebar

Filename $\quad \digamma^{\text {Edited Flag }}$

- Magnification


## Maximized Image Window - Titlebar Features



Mover Button
(III)

About Image Windows
In Windows programming, image windows are called "MDI child windows", or "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.

## Zoom Button

## Normal Viewing Button

Pixel Grid Example


Full Screen Preview Button +

Working with Selections.doc

## Selection Appearance

A selection looks like a moving version of the dashed line in the diagram below.


## Selection Tools



## Select Shape Button

## Select Shape Tool Style Bar

## Selections

区
Selection type Feather
Rectangle $\quad \square \quad \div$

## Select Area Dialog Box



Filename In Use Prompt

| Save Selection Area 区 |  |  |
| :---: | :---: | :---: |
| $D: \ T e s t A p p s \ p s p 4 b \backslash S e l e c t i o n s \backslash C i r c l e . s e l$ This file already exists. |  |  |
| $!$ |  |  |
|  | No |  |

## Save Selection Area Dialog Box



## Load Selection Dialog Box



## Load Selection Prompt

Paint Shop Pro
? The dimensions of the current image are too small to allow the selection to be placed at its original location. Do you wish to place the selection at the upper-left of your image instead?


## Feather Selection Dialog Box



## Selection Opacity Dialog Box

| Selection Opacity |  |
| :---: | :---: |
| Qverall opacity (\%): 100 | OK |
|  | Cancel |
|  | Help |

Transparent Color Select Dialog Box



SECTION: Order Forms

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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. Prices are subject to change with out notice.

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NAAM

BEDRIJFSNAAM

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[ ] Jasc BatchMaster

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FI. 169 , 00
FI. 99,00
FI. 99,00
FI. 119 , 00
FI. 7,50
FI. 12,50

$$
==============
$$

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(aankruisen wat van
( ) Overmaking op girorekening:
28.39.530
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## Paint Shop Pro (3.5HD)

Price Quantity
includes comprehensive manual Paint Shop Pro Deluxe CD Rom £ 49.95 $\qquad$
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includes manual, New Features online tutorial and sample photographs

Jasc Media Center
£ 19.95 $\qquad$ £ $\qquad$
Professional Capture Systems
SPECIAL OFFER: PhotoPremier
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CD Rom with 200 true colour photoclips worth $£ 12.95$

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## JASC, Inc. (USA)

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| Jasc Media Center | 3.5 " | \$ 39.00 |  |  |
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| PostScript(R) Renderer | 3.5 " | \$ 49.00 |  | \$ |
| Professional Capture System | 3.5 " | \$ 39.00 |  | \$ |
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Make checks payable to: JASC, Inc.
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|  | FAX |  |
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| Jasc Media Center | $¥ 6,000$ | \# |
| Paint Shop Pro | $¥ 9,000 \quad$ |  |
| Paint Shop Pro \& Jasc Media Center | $\begin{array}{ll} \neq \\ 12,000 \end{array}$ |  |
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The registered packages of Paint Shop Pro consist of I. Registered version on 3.5" 1.44 MB disks or CD, please indicate the media below in line 29. II. Full description of the program in a professional manual, III. Software-box \& IV. Registration-card. The CD-version will also have extra bonuses on it.

Item / Valuta:
[ ] 1.1 Paint Shop Pro v. 4 (Windows 95 or NT 4)
[ ] 1.2 Paint Shop Pro v. 3.12 (Windows 3.1 or 3.11)
[ ] 2. Jasc Media Center
[ ] 3. Pro Capture Systems
[ ] 4. PostScript(R) Renderer
[ ] 5. Jasc BatchMaster

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[ ] 8. Extra licenses over 10, Numbers above 10: $\qquad$ * 210,00 $\qquad$
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[ ] 10. Jasc Media Center, 10-user, 1 manual
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29. We want the program on: 29.1 [ ] CD-ROM or 29.2 [ ] Disks.

## Call, mail, upload, fax or e-mail to:

Pro Soft, Benloese Skel 4 G, DK-4100 Ringsted, Denmark.

TIf.: $\quad(+45) 536190$ 42. Monday-friday 10:00-16:30.
Fax.: $\quad(+45) 53619391,24$ hours.
BBS: (+45)57671747, 24 hours, free access, (28.800, 8,N,1)
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Internet: support@prosoft.dk
Compuserve: 100065,1744

All prices above is in danish kroner. All orders are sent the same day as the payment is received or same day as the order is received if sent by "postforskott" / postopkrav. Sorry, no creditcards.

## Verlag Gisela Lakies (Deutschland)

To print this form, click on the Print Button above, or press <Alt> $+<\mathrm{P}>$.
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. Im Kaufpreis ist die kostenlose Benutzung der Supporthotline bei auftretenden Problemen enthalten. Bestellungen können per Verrechnungsscheck, Kreditkarte, per Nachnahme oder auf Rechnung erfolgen. Alle Preisangaben erfolgen inkl. 15\% MwSt. Bezugsadresse (auch für Händler):

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## Bestellung

Anz.
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Pro Capture Systems (englische Version)
__ Paint Shop Pro 4 (englische Version)
_ Paint Shop Pro 4 (deutsche Version)
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## Code Postal et Ville:

Paint Shop Pro est livré avec des images de qualité professionnelle uniquement sur le CDRom,
**Disquettes___ ou CDRom___ (cocher I'option choisie)
Jasc Media Center est livré avec 100 images de qualité professionnelle au format WMF, **Disquettes uniquement
Professional Capture System est un module de captures d'écrans sous Windows et DOS,
**Disquette uniquement.

## Programmes et manuels sont en anglais.

| QTE | Produit | Prix unité H.T* | Prix unité T.T.C |
| :--- | :--- | :---: | :---: |
|  | Paint Shop Pro | 413.76 FF | 499.00 FF |
| Media Center | 247.93 FF | 299.00 FF |  |
| Professional Capture System | 247.93 FF | 299.00 FF |  |
|  | Paint Shop Pro et Media Center | 538.14 FF | 649.00 FF |

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## SECTION: Purchasing \& Other Products

## Other Products from JASC, Inc.

If you are interested in any of our products, please contact one of our vendors.
Products Developed by Jasc:
Paint Shop Pro
Jasc BatchMaster
Jasc Media Center
Professional Capture Systems
Products Published by Jasc:
Illuminatus
Ornamatica
PostScript(R) Renderer
SkyMap

## 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 Pro's OLE support.

## - Painting

Paint Shop Pro gives you the power to paint your way! You can choose one of the default settings (paintbrush, pen, pencil, marker, crayon, pastel, airbrush or charcoal) or adjust any of the brush attributes to create your own effects.. 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

Now you have all the power you need to enhance your existing images. Use the clone brush for quick and easy duplication of image areas, even between separate images. The retouching brush provides you with flexible control over the various attributes. Use the defaults (lighten, darken, soften, sharpen or emboss) or change the attributes to work the way that is easiest for you.

## - Image Enhancement and Editing

Paint Shop Pro includes full featured masking support (alpha channel support is available for TIFF, TGA, and PNG file formats). Image Arithmetic allows you to combine two images together. Paint Shop Pro allows you to perform flip, mirror, rotate (by one degree increments) and crop operations. The program includes 21 image filters and 11 deformations, plus the ability to create your own filters, and supports third party plug-in filters such as Kai's Power Tools or Alien Skin's Black Box.

## - Color Enhancement

Paint Shop Pro provides full support for adjusting brightness, contrast, highlight, shadow, midtone, gamma correction and color reduction, as well as hue, saturation, luminance and RGB levels. Palette editing and direct palette mapping allow global changes to multiple images. Furthermore, histogram functions enable the user to equalize and stretch the image values. Results can be viewed on the enhanced histogram window that displays red, green, blue and luminance values.

## - Image Browser

The thumbnail browser allows you to visually search directories for images. You can select images to be loaded into Paint Shop Pro for editing.

## - 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.

## - Built-in Special Effects

Paint Shop Pro now includes special effects, such as drop shadow, buttonize, seamless welder, gradient fill, hot wax coating, chisel, and cutout. Buttonize creates a shaded edge for a graphic, giving it the appearance of a button. Seamless welder creates a tiled background. Gradient fill allows an area to be filled with a gradient, such as linear, rectangular, sunburst, or radial. Hot wax coating
applies an artificial wax coating on an image. Chisel will create a raised effect around the selected area. Cutout will eliminate an area of an image to reveal a "surface" below the area.

## - Brush Based Paper Textures

Paint Shop Pro now includes paper textures to give the appearance of painting on a variety of surfaces. These paper textures work with the air brush, clone, eraser, retouch, replacer, and paintbrush tools. Choose from 29 paper textures, including woodgrain, clouds, lava, and asphalt.

## - Transparency Support

The World Wide Web is an increasingly popular medium for information transportation. As more and more people begin "surfing the web", they are becoming interested in designing their own web pages. With this in mind, Paint Shop Pro has incorporated several file formats popular for World Wide Web graphics, such as Transparent GIF, Transparent PNG, and Progressive JPEG. View the transparency defined for any Transparent GIF or Transparent PNG with the new preview option.

## - 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, PICT/PCT, PBM/PGM/PPM, PNG, PSD, RAW, RAS, TIF, TGA, WMF, WPG (Bitmap), *WPG (Vector).

* $=$ Read Only $\quad+=$ Write Only
- Shareware Magazine Editor's Choice
- Home Office Computing Magazine Editor's Pick
- Winner of the Shareware Industry Awards - Best Graphics Application
- Winner of the Ziff Davis Shareware Awards - Graphics

Other Products from JASC, Inc.

## Purchasing Jasc Products

## 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.

- Shareware Magazine Editor's Choice
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## PostScript(R) Renderer

Add PostScript(R) file support to your applications!

Features:

## True PostScript(R) Rendering.

Instantly adds PostScript(R) support to existing programs that support external import filters.
Works with dozens of different programs including Paint Shop Pro and Microsoft Word(R).
Does not require a PostScript( R ) printer to print!
See the image on your screen, no guesswork while laying out the document.
When used with Paint Shop Pro or Jasc Media Center, the PostScript(R) image can be converted to any other bitmap format supported by the program.
Access huge clipart libraries that were previously useless without a PostScript(R) printer.

The Technology:
Unlike other PostScript $(R)$ filters that simply "hide" the $\operatorname{PostScript(R)~image~from~the~program~and~then~}$ only sends it out to PostScript $(R)$ printers, this filter converts the PostScript $(R)$ information into an image that can be interpreted by any Windows printer or display device. With this filter Paint Shop Pro can actually "rasterize" the PostScript data and convert it into a bitmap to be used in any other graphics program.

The PostScript $(\mathrm{R})$ filter is not available as shareware.

Other Products from JASC, Inc.
Purchasing Jasc Products

## Jasc Media Center

Jasc Media Center is designed to be your command center for multimedia file management and manipulation. It consists of all the features to manage your multimedia files.

## - Multimedia File Management

Jasc Media Center allows you to organize your multimedia files by creating albums. Files within the album may be arranged by drag and drop, as well as numerous sort options. If desired, albums can be merged together.

Select one or more thumbnails to copy, move, rename operations, or save them to a new album. You can even scan your system to delete all unneeded, space wasting multimedia files.

Jasc Media Center supports an extensive list of multimedia file formats including sound (WAV and MID), animation/video (AVI and FLC/FLI) and Images. Image formats supported include the high compression JPEG formats (JIF, JPG), Kodak Photo CD (PCD) and several more.

## - Cataloging

Catalog your multimedia files using keywords and comments for future searches. Print an album displaying all the images and multimedia files with their filenames.

## - Slide Show

Display album thumbnails in a slide show sequence. Extensive control options over the slide show, including associating WAV files with thumbnails, and playing an audio CD in the background are available.

## - Support for Removable Disks

Jasc Media Center remembers the Disk ID (volume label) of any removable disk or CD-ROM. No more guessing which disk the file was stored on. Jasc Media Center will tell you the correct disk to use.

## - Additional Features

- Double click to view an image in full screen display, or double click to play a sound animation.
- Print images quickly and easily
- Convert an image's file format to another
- Configure Jasc Media Center to summon your favorite media file editors, even one for each file extension
- Use Jasc Media Center with your OLE clients to find the image you want to use
- Shareware Magazine Editor's Choice
- Winner of the Ziff Davis Shareware Awards - Graphics

Other Products from JASC, Inc.
Purchasing Jasc Products

## Jasc BatchMaster

Save time and energy processing image files with Jasc BatchMaster.

## - Complete Batch Processing

Do you ever wish you could apply deformations or filters or perform file format conversions from one graphic format to another without having to do so file by file? Now, it can be a reality with Jasc BatchMaster. This program allows you to perform a wide variety of batch processing functions. No programming is necessary -- simply select the image files and select your batch process commands you would like to use and Jasc BatchMaster will do the rest. It works on the basis of a script. The script will contain your selected commands used for the batch process. Processed images will be written to a separate directory for later viewing. You can also save the actual script (batch processes used) for later use.

## Features Include:

- File Format Conversion

Convert graphic files from one format to another with ease. Jasc BatchMaster supports more than 30 graphic file formats. Support includes the GIF and Progressive JPG formats popular for World Wide Web graphics.

## - Palette Adjustments

Select a new palette before a batch process and each image selected for the process will have the palette applied. This is helpful to avoid palette clashes when working with graphics that vary in color. In addition, Jasc BatchMaster allows you to generate and apply a fully optimized palette to a group of images, ensuring that you get the highest possible image quality while maintaining a common palette.

- Filters

Choose from 20 filters to apply various effects during a batch process. Includes such filters as emboss, soften, and blur.

## - Deformations

Select one of 11 deformations to create a truly unique effect. Deformations commands include such effects as circle, motion blur, and horizontal cylinder.

## - Logs

Once your batch process is complete, there is the option to save the log of the process. Detailed information on the entire process is contained in the log.

## - Color Adjustments

Select commands to increase or decrease the color depth of images. Choose from such options as change to 256 colors, change to 16.7 million colors, and change to greyscale. If desired, you can also adjust the RGB values, brightness, and contrast.

## - Effects

Adjust the size and shape of images with options such as resample, enlarge canvas, and rotate image.

## - Preview

Before executing the batch process, you can execute a specific command selected or test the entire script on a preview image. This is helpful since it allows you to preview the various batch process commands applied to a image before you perform the batch process.

## - File Formats Supported

BMP/DIB/RLE (Windows), BMP/DIB (OS/2), *CGM, CLP, CUT, +EPS, GIF/RLE, IFF, IMG, JIF/JPG, LBM, MAC, MSP, *PCD, PCX, *PIC (Lotus), PIC, PCT, PBM/PGM/PPM, PNG, PSD, RAS TIF, TGA, WMF, WPG (Bitmap).
*=Read Only $\quad+=$ Write OnlyOther Products from JASC, Inc.
Purchasing JASC Products

## SkyMap

SkyMap is a highly accurate "planetarium" for Windows 3.1 and Windows 95. 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.

## Other Products from JASC, Inc.

## Purchasing Jasc Products

## Illuminatus

Illuminatus is an impressive program offering an alternative to both business presentation packages and complex multimedia authoring tools. Illuminatus is a multimedia publisher and 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 top 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
Digital Newsletters

Other Products from JASC, Inc.
Purchasing Jasc Products

## Ornamatica

Ornamatica is the fast, fun, and easy way to automatically create ornamental borders for advertisements, menus, posters, certificates, invitations, awards, notices and a host of other DTP projects. Create unlimited original boards at whatever size you need -- no more stretching readymade boarders to fit. Easy to use simply drag and drop a graphic onto the border. Ornamatica automatically fills the sides, corners or whole border. Over 5,000 design elements are included for borders of all kinds_ from simple milled lines, through ornate certificates, Victorian, and traditional designs. Import graphics to utilize existing clip art collection for even more possibilities and you can even create boarders from company or project logos. Cut and paste support allows you to use Ornamatica with all your Windows DTP, Word Processing and graphics packages. You can also print out direct from the program or export the border to WMF or BMP formats.

Includes of 5,000 images to get started right away

Other Products from JASC, Inc.

