Presto! ImageFolio

For Windows 95
User's Guide

Preface

Congratulations on your purchase of this software!

Presto! ImageFolio is a professional multimedia image processing software package that is easy to learn. This manual, along with the online help available in the software, give you all the necessary information needed to use the software and understand its features.

The manual is organized as follows:

Chapter 1 Introduction

Briefly introduces the functions and features included in the software, and lists the system requirements to install the program.

Chapter 2 Installing the Software

Provides instructions for installation of the program.

Chapter 3 Screen Layout

Provides instructions to start running the software, describes each part of Presto! ImageFolio screen and helps the user to define a desired screen layout.

Chapter 4 Working with Files

Explains how files are managed.

Chapter 5 Inputting and Outputting Images

Explains how to input and output images by scanning, stitching and printing images.

Chapter 6 Image Manager

Introduces the functions of Presto! Image Explorer used as an image manager for Presto! ImageFolio.

Chapter 7 Viewing Images

Describes how to display an individual image or multiple images in all possibilities for convenience on editing.

Chapter 8 Color Management

Explains the color selection options and palette editing procedures in the Palette Control window.

Chapter 9 Painting Images

Explains how to edit or create images and the tools provided to do so.

Chapter 10 Masks and Selections

Discusses how to make selections in images and deal with masks.

Chapter 11 Layer Management

Describes the working theory of layers and the management of layers and masks in the Layer Manager.

Chapter 12 Editing Images

Explains the function of each command under the *Edit* menu, such as *Cut*, *Copy*, *Paste*, *Crop*, etc.

Chapter 13 Transforming Images

Describes some of the basic image processing functions and commands under the *Transform* menu such as for rotating, inverting and converting images.

Chapter 14 Enhancing and Fine Tuning Images

Explains the features that enable you to creatively improve images by adjusting Brightness and Contrast, Hue and Saturation, using the *Mosaic* command, etc.

Chapter 15 Converting Images

Explains how to convert the file format and image type of the images by using the **File Conversion Utility** provided with Presto! ImageFolio.

Appendix A Glossary

Gives definitions of the special terms used in this manual.

Appendix B Keyboard Shortcuts

Lists the key and key/mouse combinations you can use with this software.

Appendix C Icon Summary

Lists all the icons appearing in the software and their corresponding functions.

Appendix D Communication with Other Applications

Gives general instructions on utilizing the OLE feature supplied by Presto! ImageFolio to edit the images in other applications.

Legends in this Manual

For clear indications on explaining the functions of the software, there are some expressions often used in the manual, such as different fonts or attributes of the text.

The names of menus, commands and options in the software are usually set as *Italic* fonts in the text with the exact names appearing on screen.

The text you must type in or the directory name shown on screen is usually illustrated by the exact words in the `courier` font.

The bracketed text indicates an on-screen button with the text shown on it or a key on the keyboard.

Using the Mouse

In this manual, the term "mouse" actually refers to any kind of pointing device; the term mouse is simply used for convenience.

Most of your editing work involves the usage of a mouse, such as when selecting a painting tool, the color scheme, or when issuing commands from the Icon bar and so on. With this software, the left mouse button does most of the work. Here is a brief review of the terminology involved in mouse operation:

- When you are instructed to "point" at an item, it means to move the mouse pointer or cursor so that it is positioned over that item.

- When you are instructed to "click," it means to quickly press and release the mouse button.

- When you are instructed to "double click," it means to press and release the mouse button twice in rapid succession.

- When you are instructed to "drag," first move the pointer to where you want to start dragging, press and hold down the left mouse button, and move the mouse to drag your object. When you reach the desired destination on the screen release the mouse button.

Note: *If there is no specific indication as to which mouse button to click, double click, or drag, it usually means to use the left button. Clear instructions are always given for when the right mouse button must be activated.*

Contents

1 **Introduction**

Presto! ImageFolio is a comprehensive multimedia image processing program running under MS Windows 95. It enables you to process in detail on your computer screen scanned images such as photographs, graphics and drawings, as well as images captured from video devices such as a VCR, a laser disc, a digital camera, a video capture box, etc.

You can create new images by using the powerful tools included in the software. Its sophisticated set of image editing tools enables you to quickly sketch an image canvas in order to create a new image, or to enhance pre-existing ones. With this software, your imagination is your only limit!

Presto! ImageFolio offers great flexibility in transforming image data formats. Processed images can easily be exported to printers or other applications in a variety of file formats. Because importing and exporting images in popular file formats is simple with this program, you can interact effectively with a wide variety of image environments.

Presto! ImageFolio is a Windows 95-based application that is easy to learn because the Windows graphic interface is consistent from one application to another. Being already familiar with the Windows 95 environment is thus very helpful when starting to use this software.

What Presto! ImageFolio Can Do

Presto! ImageFolio' s features highlight:

Image Input

- Captures images with flatbed/hand scanners, digital camera, capture box, etc.

- TWAIN interface support to communicate with compatible image sources as well as automatic fine tuning on the scanning effect

- Auto & Semi-auto image stitching for inputting large-sized images

- Loading/saving images with various popular file formats such as TIF, PCX, BMP, TGA, JPG, PCD, WMF, PNG, FPX, etc.

- New Flash Pix format support

- Black & White, 16/256 grayscale, index 16/256 color, and 24-bit true color image formats selectivity

Image Output

- **Incorporating Intel MMX^{TM} technology for best performance**

- **Progressive JPEG compression/decompression file format to save disk space**

- Printer Gamma adjustment to improve image output effect

- **Print color-adjustment variations for examining the printing effect before actual printing**

- Monitor Gamma adjustment to calibrate image display quality

- OLE 2.0 support for stand-alone editing mode

- Easy artwork design for home page production and HTML application

Image Editing and Processing

- Image Manager functioning as an image data base which also provides utilities to manage and preview image files in the concept of folders

- Windows compliant user interface with drag-and-drop feature

- **User-definable screen layout, with dual-sized icons and dockable palette windows, for quick and easy processing**

- Image format conversion functions such as color to gray, 256-color to 24-bit true color, etc.

- Multiple documents simultaneous processing

- **Multiple layers with mask channels in single document for complicated object organization**

- Drag-and-drop floating images among documents (moving a selected area to new or other canvases)

- Palette editing function for the user to compose his or her own color palette

- Complete drawing and painting set of tools to work on images such as line, paintbrush, airbrush, color gradation, eraser, zoom, text, text along path, eyedropper, free-hand rotate, hue/saturation brush, brightness/ darkness brush, blur/sharpen brush, image hose, texture brush, etc.

- **Powerful text tools for arranging text path and reforming text shape**

- **Definable image hose tool for quick insertion of image set on canvas**

- **Anti-alias feature with all graphic tools to enhance the drawing effect**

- Full selection tools for easy masking of irregularities in objects

- Mask saving and loading functions for applying mask outlines to different images

- **Allowing drag-and-drop operation between image and mask channels**

- **Creating magic 3D effects with definable light source for selected objects with one touch**

- **Generating object shadows in selectable light directions with one touch**

- **Elegant templates provided for easy applications of daily-life photo usage**

- **Producing texture effects to simulate different materials of image canvas**

- Image fine-tuning functions to adjust brightness, contrast, hue, saturation, tone distribution (equalization) and so on

- Multiple filters to produce special effects such as smooth, sharpen, edge detection, emboss and mosaic

- **Effect browser providing previews in actual size of image, processed with all the fine-tuning functions and filters**

- **16- and 32- bit Adobe^{TM} plug-in filter interface support**

- Image editing and photo retouching functions such as rotating, flipping, inverting and rescaling

- Support user-friendly zoom-in bit editing function for detailed image modification

- Windows 95-style on-line help and tool tips support

System Requirements

This section introduces the hardware and software required for executing the software efficiently.

Hardware Requirements

The following hardware devices are required to run the software:

- An IBM PC 386, 486 or compatible computer
- One 3.5" or 5.25" floppy disk drive
- One CD-ROM drive
- One hard disk drive with at least 60 MB space available to hold and run the program effectively
- At least 8 MB of RAM (preferably 16 MB)
- A Windows compatible pointing device (mouse, trackball, etc.)
- A graphics board (VGA, Super VGA, XVGA, 15/16 bit or 24- bit Windows compatible display board) and appropriate monitor

Software Requirements

The software required for running Presto! ImageFolio includes:

- MS DOS or PC DOS, version 3.3 or later
- MS Windows 95

Recommended System Configuration

To make fully efficient use of the program, the following additional hardware and software elements are highly recommended:

- 50 MB or more of virtual memory
- A scanner that supports TWAIN
- A TWAIN source manager if you already have a scanner installed
- A color printer supported by MS Windows 95

Incorporating MMX Technology

MMX™ media enhancement technology is Intel's most recent processor enhancement that will change the multimedia and communications world. Combining a PC and software both designed for MMX technology will effectively enhance the performance of multimedia processing.

Presto! ImageFolio was designed to incorporate MMX technology. Working on a PC of Pentium® processor with MMX™ technology, the performance of Presto! ImageFolio will be boosted by more than 20%. Therefore a PC of Pentium processor with MMX technology is highly recommended for running with Presto! ImageFolio.

2 **Installing the Software**

This chapter provides instructions on the installation of Presto! ImageFolio, and preparations for running the software.

Installing Presto! ImageFolio

Presto! ImageFolio may be stored on diskettes or CD-ROM with different versions. Please follow the steps below to install the software:

1. Insert the software CD-ROM or diskette into a CD-ROM or disk drive (if there are more than one diskette, insert Disk 1).

2. In Windows 95, click on the [Start] button and select the *Run* command from the pop-up menu. A *Run* dialog box appears.

3. On the *Open* command line, type in the execution file **SETUP.EXE** and its path, depending on which drive you have inserted the software diskette or CD-ROM in.

4. Click on the [OK] button. After a few seconds, the welcoming screen of the installation program appears.

5. Read the content in the dialog box and decide whether to continue the installation.

6. Select the [Next>] button to continue the installation.

7. When the *Choose Destination Location* dialog box appears, follow the screen instruction to specify the location you want to install the software.
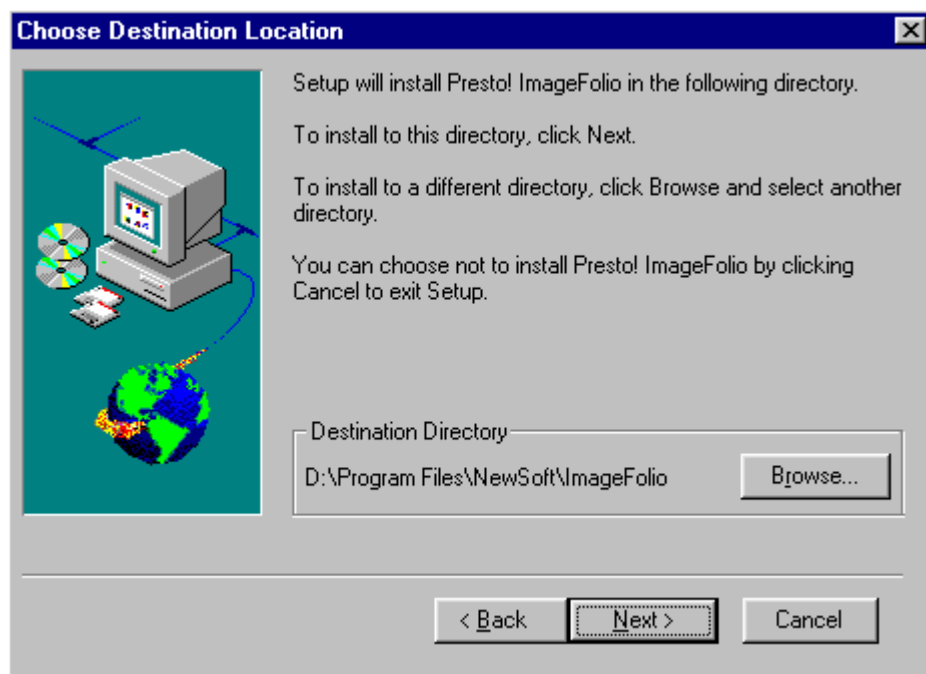
If you want to install the software on a drive or directory other than the one shown, click on the [Browse] button and select another path.

8. In the *Setup Type* dialog box, decide the level you want to install the software as *Typical*, *Compact* or *Custom*.
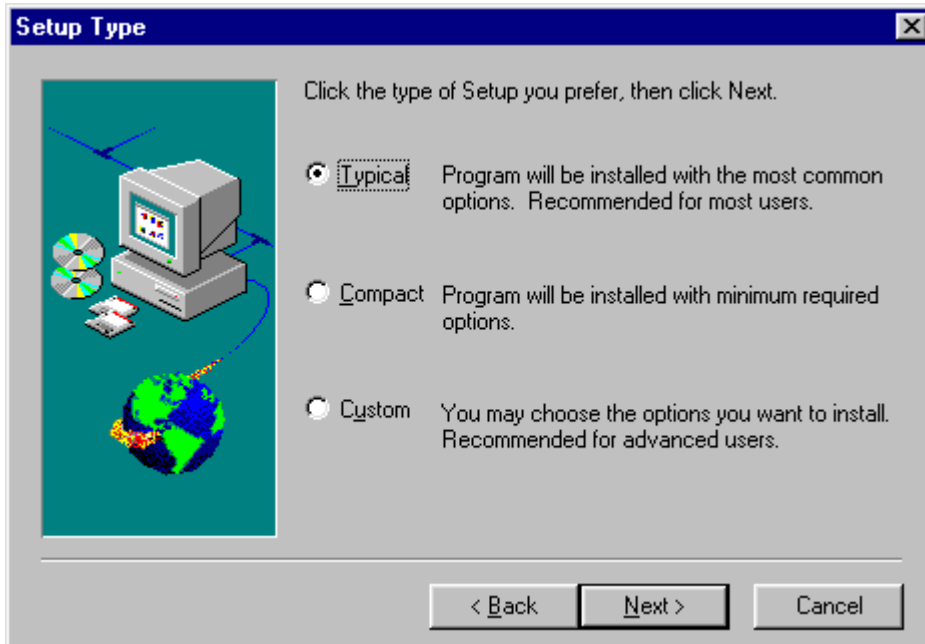
If you have selected *Custom* setup, the *Select Components* dialog box will appear after you click the [Next>] button. Choose the group(s) of program files or template files to be installed in your system.

Note: *If you use **Compact** or **Custom** setup, it may be necessary to insert the software diskette or CD-ROM while executing some functions that need to load files from the libraries provided on the diskette or CD-ROM.*

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9. In the *Select Program Folder* dialog box, enter a new folder name for the folder holding the program icons or choose an existing folder from the list.

10. Click on the [Next>] button to continue the installation.

Follow the screen instruction to complete the installation procedure.

After installation, an application group titled with the icon of software appears.

Preparation for Running Presto! ImageFolio

As in Presto! ImageFolio you may input photos from a scanner or other hardware devices supporting TWAIN interface, you should install the device with Windows 95 before entering Presto! ImageFolio.

Please refer to the installation manual of the hardware device to install it with Windows 95.

3 Screen Layout

In this chapter, you will learn to start the software and go through its basic operations on the screen layout.

Starting the Software

To run the software, do the following:

1.   Click on the [Start] button in Windows 95.

2.   From the pop-up menu, select *Program*.

3.   Select the software name from the program list. The software's main screen appears.
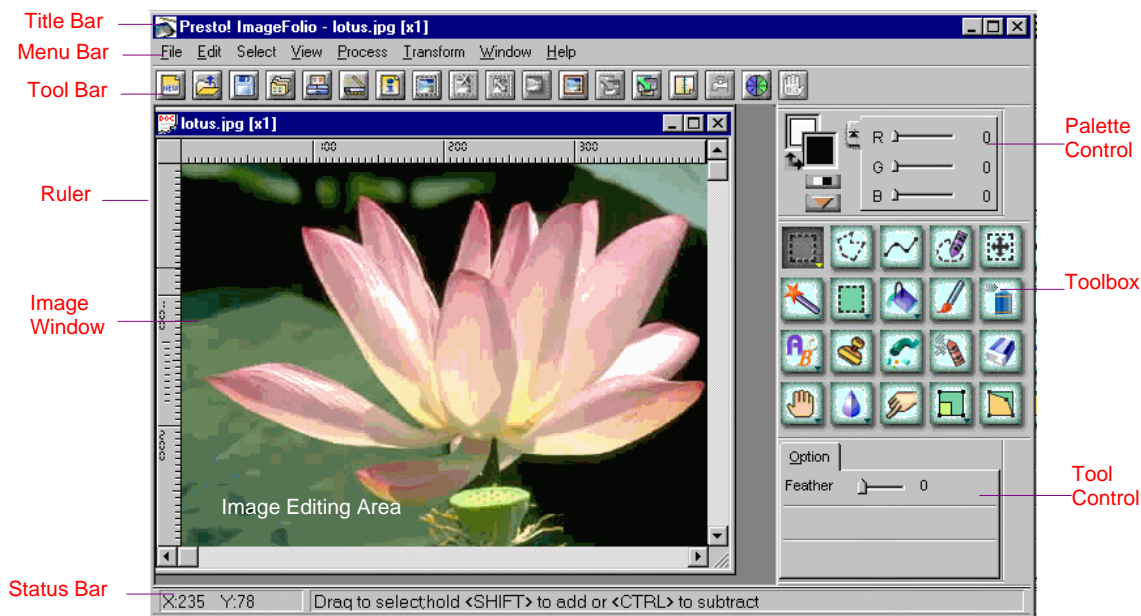
Figure 3-1 Default Screen Layout

Each Part of the Screen

This section introduces the location and function of each part on the screen, and describes the changes you can make to some palette windows.

Title Bar

The title bar indicates the name of the software.

The title bar can be hidden from the screen by executing the *Title Bar* command from the *Layout* options in the *View* menu, or pressing [F9].

Menu Bar

The menu bar lists the available menus. In each menu, there is a pull-down list of commands. The menu commands indicate the tasks you might want to perform.

To open a menu, click on the menu or press its underlined letter while pressing and holding the [Alt] key.

To invoke (or activate) a command, point to it and click or strike the underlined letter in the command name.

To close a menu without choosing a command, click anywhere outside of the menu or press the [Esc] key.

Tool Bar

The icons on the tool bar offer quick and convenient access to several menu commands. The following lists the functions of all menu commands that have proprietary icons on the tool bar.

File Menu:	New, Open, Save As, Image Manager, Acquire, Print, Stitch
Edit Menu:	Undo, Fill in Pattern, Add Shadow, 3D Effect
Select Menu:	All, Invert, None
View Menu:	Information
Transform Menu:	Change Image
Process Menu:	Effect Browser, Photo Fun

Click on the icons to execute the related commands.

The *Tool Bar* can be hidden from the screen by executing the *Tool Bar* command from the *Layout* options in the *View* menu, or pressing [F7].

Image Editing Area

The image editing area is that large portion in the center of the screen where you can work on your image. The "Image Canvas" you actually use to work on your image appears as a window in that area; it can be moved and sized within this image editing area through the general Windows operating method.

Image Window

Each image canvas appears as an image window in the image editing area. If the image canvas is actually larger than the image window, two scroll bars appear. The vertical scroll bar allows you to view the hidden upper and lower portions of the image. The horizontal scroll bar allows you to view its hidden left and right portions.

Palette Control

The Palette Control is used for color selection or canvas palette edition. For utilizing these functions, there are three working modes for operation; each has different outlook and features. You can refer to the chapter of *Color Management* for details.

> *Note:*   *The number of colors that the image canvas can display is independent of the system's display mode. In other words, you can edit a 256-color canvas even though your system only has a 16-color display. In such case, halftone patterns are used to simulate the 256 colors.*

Toolbox

The Toolbox is composed of two major sections. the selection tools and the painting tools. In default you can see 20 tools displayed in the Toolbox; but some of the tool buttons contain a little down arrow at the lower right corner, which indicates that here is a group of tools and the other tools are hidden beneath the current tool. To display the hidden tools, click on the tool button while pressing and holding the [Alt] key or click the right mouse button.

For detailed explanation please refer to the *Painting Images* chapter for painting tools and *Masks and Selections* chapter for selection tools.

Tool Control

The Tool Control window contains options for setting the current selected tool in the Toolbox. The items of setting vary for different tools. Please refer to the *Painting Images* chapter for more descriptions.

Status Bar

The Status Bar is located at the very bottom of the image editing screen. The Status Bar consists of the status box and the message box.

| X:235 Y:78 | Drag to select;hold <SHIFT> to add or <CTRL> to subtract |

Status Box   Message Box

Figure 3-2 Status Bar

The status box displays the X,Y coordinates indicating where the pointer is on your active image window.

The message box displays a message about the item the pointer is currently on.

During processing, the status and message boxes indicate the command you have selected and the progress of the operation. You may press the [Esc] key to abandon the process before it is complete if necessary.

Rulers

The horizontal and vertical rulers can help you edit precisely. You can change the ruler's measure units from the *Preferences* dialog box in the *File* menu.

Composing Your Own Screen

Most palette windows on the screen can be hidden, and their outlook or location can be changed easily. Therefore, you can compose your own screen that is most convenient for your work.

Select the *Layout* option from the *View* menu. You can hide or show any palette window on the pop-up list, including Toolbox, Toolbar, Palette Control, Tool Control, etc.

Most palette windows are docked in a specific gray area on the screen. You can move them within the gray area or drag it out to make it an independent window. Click and drag the left mouse button on the edge of a palette window to change its location. Drop the palette window in the gray area to move it inside the docked area. Drop the palette window in the image editing area to make it independent.
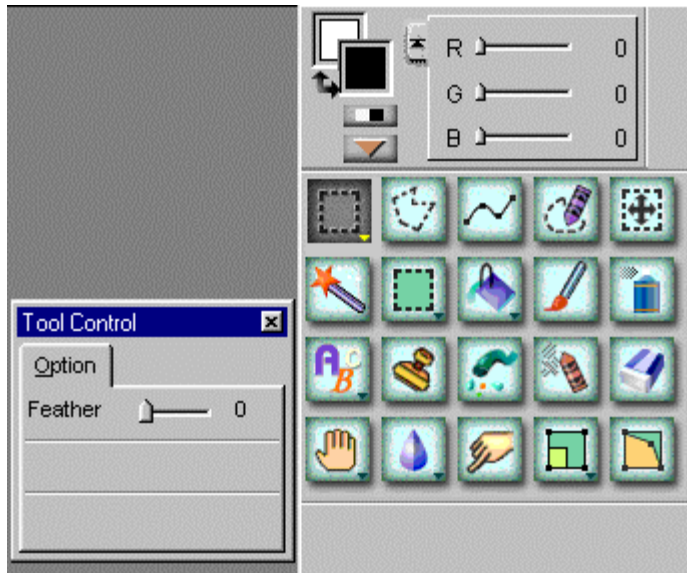
Figure 3-3 Docked and Independent Palette Windows

Clicking the right mouse button within the gray area of any palette window brings up a menu containing all the command options for hiding/displaying the on-screen palette windows in the *Layout* option of the *View* menu. The lower part of the pop-up menu varies depending on which palette window you have clicked in.

You can change the size, default or smaller size, of all the icons in the Toolbox and Tool Bar by clicking the right mouse button in their gray area and selecting the *Large Icon* option from the pop-up menu.
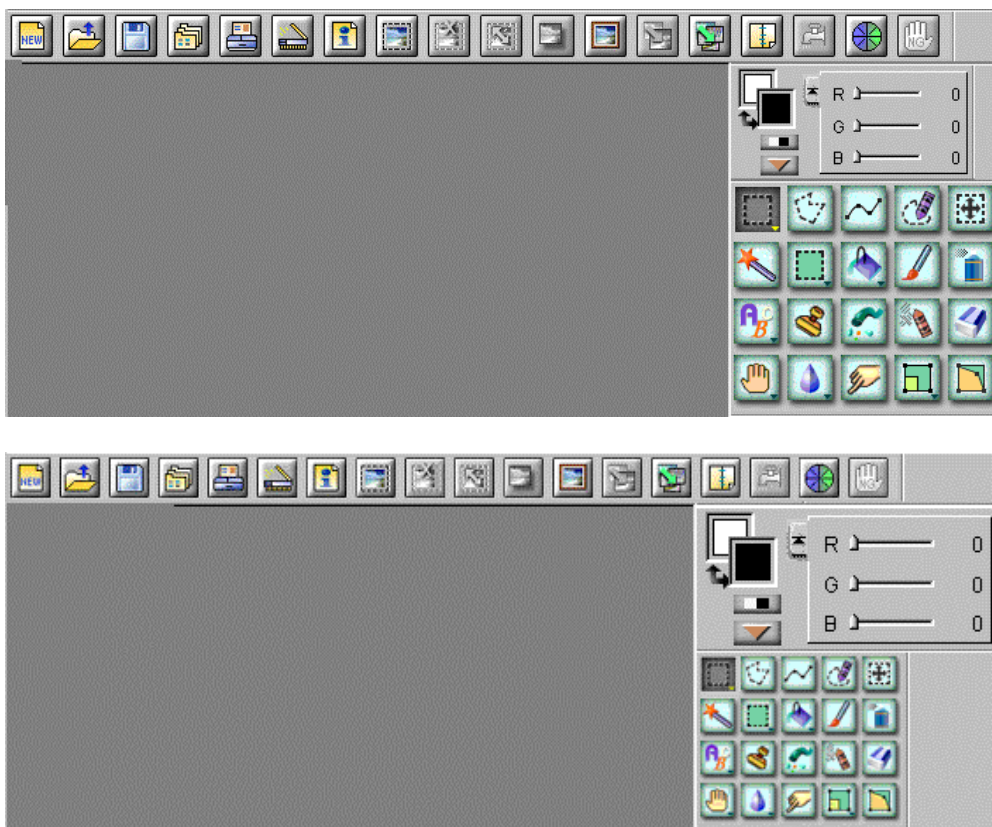
Figure 3-4 icons of Default and smaller Sizes

The icons in Toolbox and Tool Bar can be lined with different numbers of columns. Change the number of columns by clicking the right mouse button on the gray area in the Toolbox window or Tool Bar and selecting the *Alternative Columns* option from the pop-up menu.

Figure 3-5 Toolbox in Different Numbers of Columns

When you have made necessary modifications on the screen layout, you can save it for your usual usage. At the lower part of the *Layout* pop-up option, *Layout 1* and *2* are the default screen layouts defined by the software. Use the *Save as My Layout* to save the current screen layout as your own layout. You can select *My Layout* option to change the screen to the layout you defined anytime.

On Line Help

Although this is a powerful and complicated software, the full on-screen help message will give you plenty of instructions on the operation of the software, so you can still easily get familiar with the usage of the software and accomplish your ideal images.

Tool Tips

Whenever you place the mouse pointer on an object on the screen for a moment, such as a button or part of a palette window, a small balloon pops up with the name of the object. This will help you to identify the function of the object. After the mouse pointer leaves the object, the tool tip will disappear.

Figure 3-6 An Example of Tool Tip Balloon

The function of displaying tool tips can be disabled if you do not need it. Click the right mouse button in the gray area of any palette window, and then select the *Tooltips* option from the pop-up menu.

Help Menu

Besides the messages shown on the status bar, click on the *Help* menu for more information on any of the functions, commands and dialog boxes.

Exiting the Software

To quit the software, select the *Exit* command under the *File* menu.

If your image has been modified and not saved yet, a dialog box will appear and prompt you to save the file. Click on the [Yes] button to save the image; click on the [No] button to ignore the image modification and exit the software; click on the [Cancel] button to quit the *Exit* command.

4 Working with Files

All your image canvases are recognized as files by the computer. When you are working with files you are therefore actually dealing with the image canvases. You may prepare a new image canvas, open an existing canvas, store a painted canvas, or even deal with several image canvases at the same time. Most of these functions are executed via the commands under the *File* menu.

Preparing for Image Processing

Before creating a new canvas for your image, you should set some of the image processing options in the *Preferences* dialog box. For example, you should enter a monitor gamma value so that your monitor will display the color of the image more precisely.

To set the options in the *Preferences* dialog box, choose the *Preferences* command from the *File* menu. The *Preferences* dialog box appears as shown below.
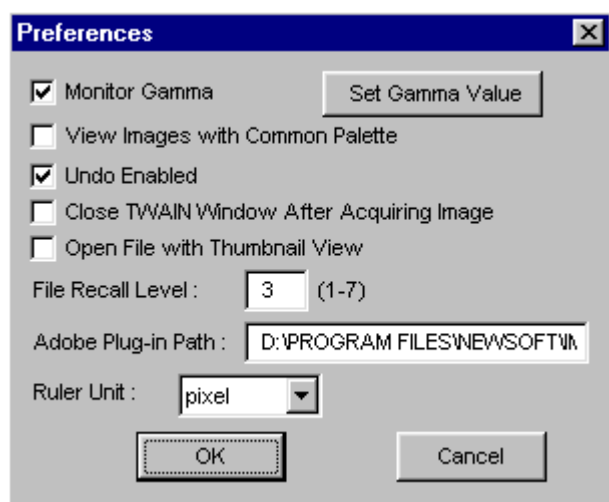
Figure 4-1 Preferences Dialog Box

The following explains only some of the options you should set in general. Other options will be explained later in the sections of their related functions.

Calibrating the Monitor

The *Monitor Gamma* option allows you to compensate for differences among monitors. You may adjust the RGB channels separately and precisely on screen to view images in their real colors.

To set *Monitor Gamma*, follow these steps:

1. Enable the *Monitor Gamma* option (click in the check box) and click on the [Set Gamma Value] button. The *Monitor Gamma* dialog box pops up.
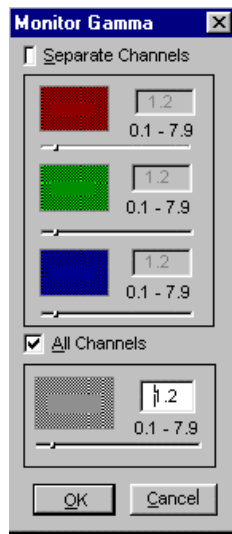
Figure 4-2 Monitor Gamma Dialog Box

2. Select *Separate* to adjust the RGB channels separately, or *All* to adjust three channels at once.

3. Drag the slider(s) to make the color of each small block inside the red, green, and blue color blocks in the *Separate* section or the gray color block in the *All* section look the same as their surrounding colors. The color of the small block changes as you move the slider.

    You can also type in the gamma values directly for more precise setting.

4. Click on the [OK] button to record the gamma value.

Setting the Displaying Color Palette

When you simultaneously open several image files, you may either want to use a different color palette to view/edit each image, or use a common palette for all the images (this in view of the fact that different images were possibly processed with its own color palette). If you choose to view each image using its own palette, thus letting you view an image in its own form, the color palette of the current active image will take charge of all the displayed colors in the inactive background images (the displayed colors of the inactive images may be incorrect). If you choose to view all the images with a system-defined common palette, all the images will appear better when screened but the performance of the overall system will be slow down slightly (this is because the system-defined palette must first override the individual palettes of the different images). The choice of viewing options can be set by the *View Images with Common Palette* option.

Utilizing the Undo Function

The *Undo Enabled* option allows you to enable or disable the *Undo* function under the *Edit* menu.

Selecting the Ruler Unit

The *Ruler Unit* list box allows you to select a measure unit for the rulers in the image window. You can use inches, centimeters or pixels as measure unit.

Creating a Canvas

The *New* command creates a new canvas. To create a new canvas, do the following:

1. Open the *File* menu and select *New* or click on the *New* icon to initiate this command on the tool bar. The *New* dialog box appears.
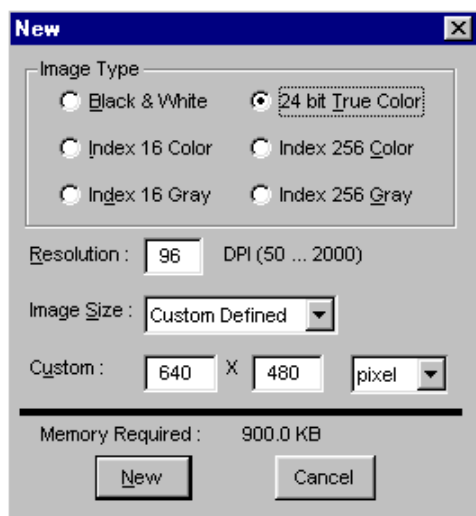
Figure 4-3 New Dialog Box

2. Select the image type for your image. The image type indicates a number of colors to be used in creating your image. The following table illustrates the number of colors used for each type:

Type	Number of Colors
Black & White	2
Index 16 Gray	16 shades of gray
Index 256 Gray	256 shades of gray
Index 16 Color	16
Index 256 Color	256
24-bit True Color	16.7 million

The number of colors that the canvas can display is independent of the display type. This means that you can edit a 256 color canvas, for example, even if your system only has a 16 color display. In that case, halftone patterns are used to simulate the 256 colors.

3. Enter the image resolution in the *Resolution* text box. Higher resolutions provide better images, but take more disk space and more time to process.

4. Click on the *Image Size* pull-down list to select the size of your image canvas.

   Enter the size in the *Custom* text boxes if you select the *Custom Defined* option. And select the appropriate unit from the pull down list box.

   The amount of memory required to create the canvas and the amount of available free memory are displayed at the bottom of the dialog box.

5. Click on the [New] button.

   A new canvas is created with an untitled filename and filled with the current background color.

Opening a File

The *Open* command is used to load an already existing image file. To open an image file, do as follows:

1. Open the *File* menu and select *Open*, or click on the *Open* icon on the tool bar. The *Open* dialog box appears.

2. Locate the drive and directory containing the file(s) want to open.

   The software displays the names of all files in that directory that are of the type selected in the *Files of Type* box. To display a different type of files, select the type you want from the *Files of Type* box.

3. From the list of files, select the file you want to open.

Note: *You can open multiple files by clicking on the file names while holding down the [Ctrl] key to select non contiguous files, or on the file names while holding down the [Shift] key to select contiguous files.*

Whenever you select a file, the lower part of the dialog box will display the information about the image for your reference.
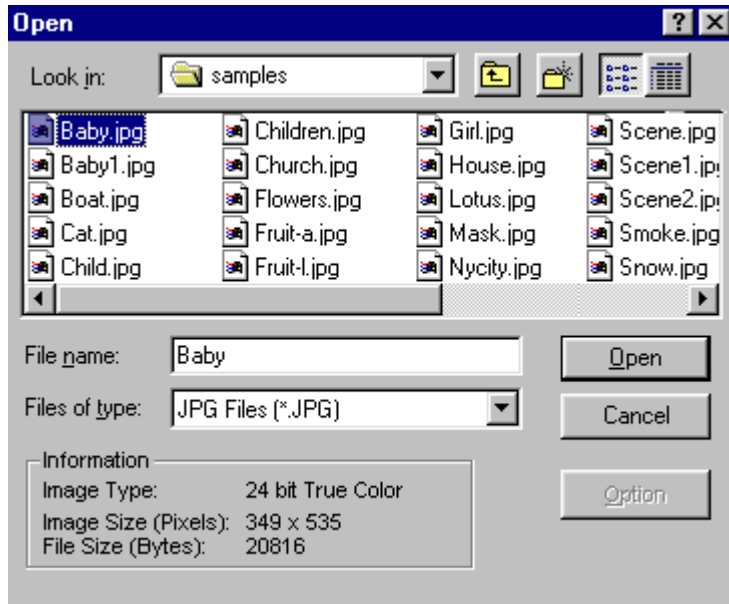
Figure 4-4 Open Dialog Box

4. If the [option] button is enabled, you can set the file format option for opening the image. The setting will be memorized and used until you change it next time.

5. Click on the [Open] button to open the file; or click on the [cancel] button to abandon the process.

   The *Open* dialog box is the default option for opening image files. You can also select to display image previews before opening images files, which is helpful for you to identify the images and ensure you open the right ones. In the *Preferences* dialog box, enable the *Open File with Thumbnail View* option. The dialog box when you execute the *Open* command looks as follows:

Figure 4-5 Opening Files in Thumbnail View

   All the image files appear as shrunken copies for your identification. If the image file you want to open is in another folder, click the [Change Directory] button to locate it. In this dialog box, you can select single or multiple image thumbnails with the same method as in the default *Open* dialog box. After you have selected the files to open, click on [OK] to open them.

Recalling Files

   You can quickly open any of the last few images you worked on by choosing the file name listed in the lower part of the *File* menu. The number of files the software can recall (7 in maximum) depends on the setting of *File Recall Level* in the *Preferences* dialog box.

Saving Images

After editing your image, you may need to store it as a file for future retrieving.

Save As

This command saves a new or previously existing file you have been working on. You can name a new file or save an existing file under a new name and preserve the original file in its previously saved form. To save a new or existing file:

1. Open the *File* menu and click on *Save As,* or click on its icon on the tool bar. The *Save As* dialog box appears.
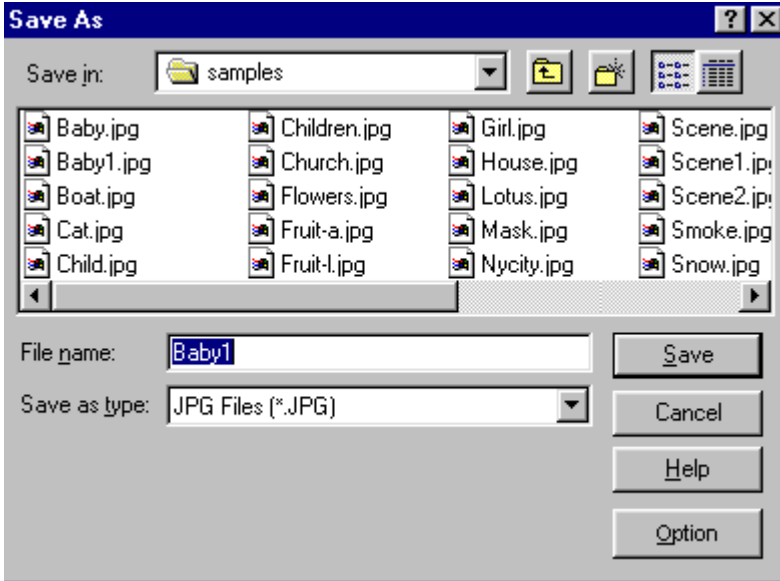
Figure 4-6 Save As Dialog Box

2. Select the location you want to save the image.

3. Click on the extension that corresponds to the image format of the file to be saved in the *Save as Type* box.

4. Enter the filename for the image in the *File Name* text box, or go to the list box and choose an existing filename for the image.

> *Note:*   *If you key in an extension in the **File Name** text box rather than clicking on the extension in the **Save as Type** box, even though the list box doesn't change, what you have keyed in takes precedence over what is shown in the **Save as Type** box.*

5. If the [Option] button is enabled, you should set the saving option for the selected file format.

For example, if you selected the **JPG** compressed file extension, you need to set the compression level by clicking the [Option] button. The compression level determines by how much an image is compressed. This has no direct relationship to the actual compression ratio achieved but the higher the level, the greater the amount of compression.
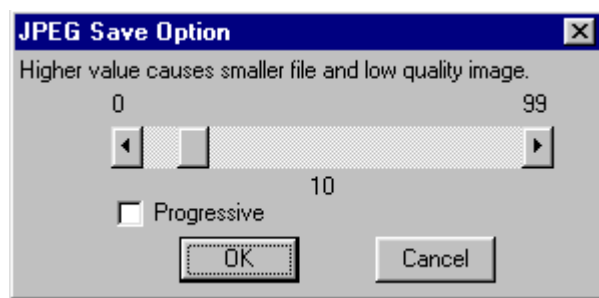
Figure 4-7 JPEG Compression Control Dialog Box

If you select the **TIF** extension, you should also choose whether to compress the image in the pop-up dialog box.

6. Click on the [Save] button to save; click on the [Cancel] button to cancel the process.

Save

Save is used to save an image that already exists on disk. After saving, you can keep on working on the image. It is a good idea to save often to prevent accidental loss of the image changes you have created.

In addition to open the *File* menu and select *Save*, a shortcut method to invoke the *Save* command is to press [Ctrl]+[S].

Reverting Images

After an image has been modified, if you are not satisfied with the changes, you can abandon all the changes by reverting the image to its last saved condition. Execute the *Revert* command in the *File* menu to reload the file again.

Closing Files

If multiple images are opened but do not need editing, you should close them to release more memory for other working. The commands for closing multiple files at once are located in the *Windows* menu.

Close All

To close all the documents on the screen at the same time, select the *Close All* command under the *Window* menu. If any of the documents modified has not yet been saved, a dialog box will pop up to prompt you to save it. Click on the [Yes] button to save the image; or click on the [No] button to ignore the image modification.

Quick Close

If you are sure that all desired modifications to the images have been saved, you can close all the documents by the *Quick Close* command instead of *Close All*. The software will then not prompt you for any unsaved processing of the images.

Information

The *Information* command under the *View* menu provides information about the current active image and system status.

Clicking on either the command or its icon brings up a dialog box with *Document* and *System* tabs. Click on either tab to view the related information.
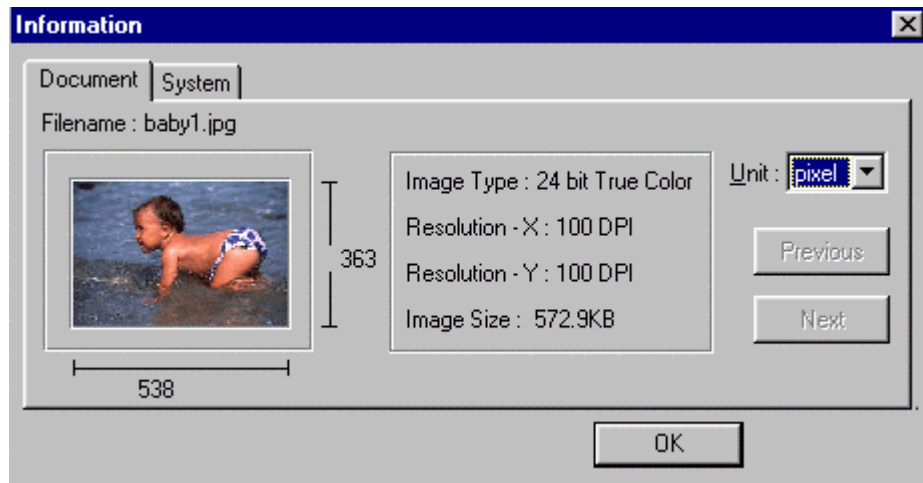
Figure 4-8 Information Dialog Box with Document Tab Active

With the *Document* tab activated, the right and bottom of the small sample image show the image dimensions. The *Unit* pull-down list allows you to change the measure unit for the image dimensions. The [Previous] and [Next] buttons allow you to view the previous and next document information.
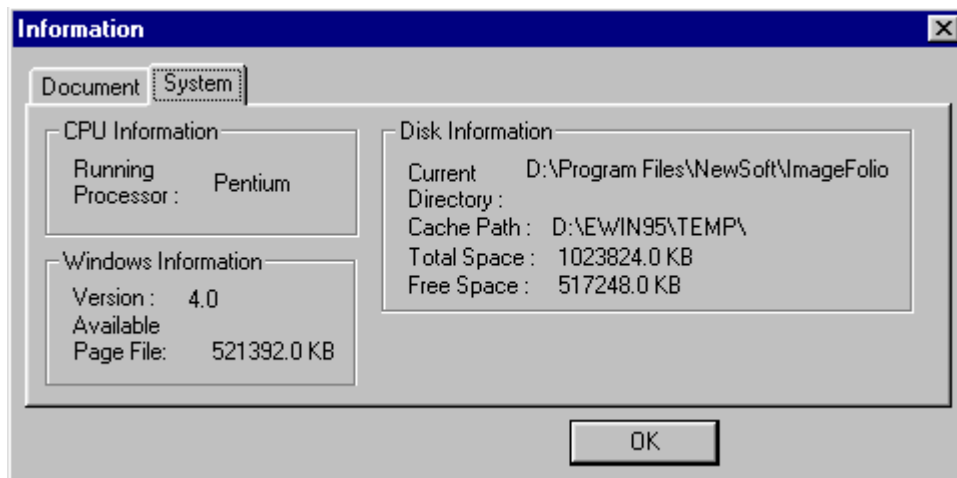
Figure 4-9 Information Dialog Box with System Tab Active

The system information illustrates the information about the CPU, disk and Windows.

5 **Inputting and Outputting Images**

This chapter introduces the procedure of inputting and outputting images into/from the software. You can input an image from a TWAIN-compatible device and output it to a Windows-compatible printer.

Besides, you will learn how to input a large-sized image as well as how to perform an initial correction on the input image.

Acquiring Images

This software supports the TWAIN driver interface to give you access to images from any input device with a TWAIN driver interface such as scanners. This interface protocol was developed by several leading hardware and software manufacturers in order to establish a standard in the combined use of input devices and software applications. As long as the input device provides a TWAIN driver, it can work with the software without any problem.

If you plan to use an input device that has a TWAIN driver with this software, you should first install the driver provided with the hardware on your computer according to your device's manual **before entering image data from it into the software**.

Select TWAIN Sources

To input an image using a TWAIN source, you need to first select the TWAIN source in your system. Open the *File* menu and choose *Select TWAIN Source* command. The *Select Source* dialog box appears.

All the TWAIN sources installed on your system will be listed in the *Sources* box. Click on the device you want to use and press the [Select] button.

Acquire

After you have chosen the TWAIN device you want to use, open the *File* menu and select the *Acquire* command, then click on *Acquire* from the pop-up options; or click on its icon on the tool bar. A dialog box will appear. The dialog box varies for different devices because manufacturers design their own user interface. You may refer to the user's manual of the TWAIN device for details on inputting images from this dialog box.

After you have input an image from the TWAIN device, the *Acquire* dialog box may be closed immediately. If you want to input another image, you have to execute the *Acquire* command again. However, if you disable the *Close TWAIN Window After Acquiring Image* option in the *Preferences* dialog box, the *Acquire* dialog box will stay on screen after an image is input and wait for your further action. You may input images one after another without interruption.

Acquire Image with Auto Process

The software can automatically make corrections to the input image on colors, orientations, etc.

To utilize this function, open the *File* menu and select the *Acquire with Auto Process* option from the *Acquire* command. Execute the procedure for inputting an image with the selected TWAIN device. After inputting the image, the software will automatically make corrections to the input image before it is displayed on screen.

Stitching Images

The *Stitch* command under the *File* menu can stitch or merge two or more images into one. This is especially helpful when you need to scan a picture of dimensions exceeding the scanning width of your scanner. You can even scan the image(s) in the *Stitch* dialog box before stitching them.

With the *Auto Stitch* and *Semi-auto Stitch* functions, you can easily join back the separated parts of images produced by several scanning into one whole image. *Manual Stitch*, however, is mostly applied when stitching images with pronounced differences.

To stitch images:

1. Choose the *Stitch* command under the *File* menu, or click on its icon on the tool bar. The *Stitch* dialog box appears with the *Main Image* tab active.
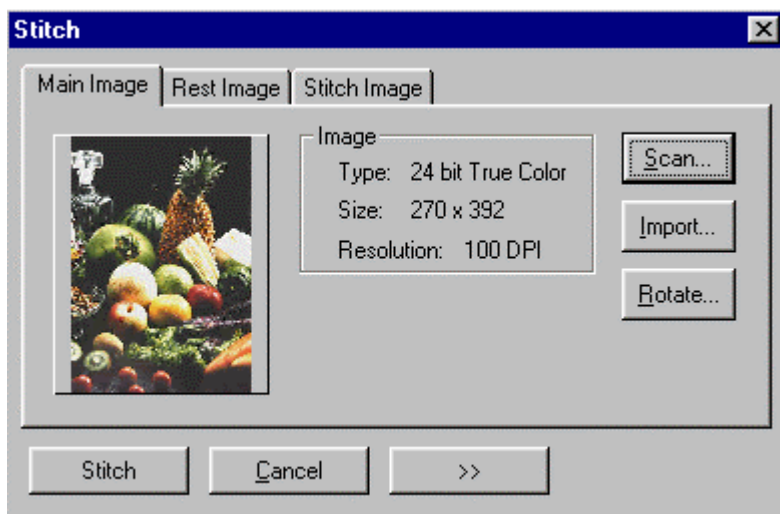
Figure 5-1 Stitch Dialog Box with Main Image Tab Active

2. Click on the [Import] button to load the image file you want to do stitching **from**, or the [Scan] button to input an image from your TWAIN scanner (the scanning process is the same as using the *Acquire* command). The image type, size, resolution, and a shrunken copy of the selected file (the stitching image) are displayed.

    If the image is not in the right direction you want to stitch with, click on the [Rotate] button and select an option to rotate the image in clockwise/counterclockwise 90 degree, or 180 degree.

3. Select the *Rest Image* tab and load the image you want to stitch the main image **to** with the same procedure as in step 2. The image type, size, resolution, and a shrunken copy of the selected file are displayed.

4. Select the *Stitch Image* tab for stitch setting.

Figure 5-2 Stitch Dialog Box with Stitch Image Tab Active

5. If any of the *Main* and *Rest* images is askew, click on the [Deskew] button below the shrunken image to adjust it.

    After you click [Deskew], the image will appear in the image editing area with a straight line that has two reversed crossed nodes at both ends. Point to any of the nodes until the cursor changes into a double-headed arrow, and drag the nodes to have the line aligned with any of the object edge that should be vertically straight after the adjustment. Then click the right mouse button to start the deskew process.
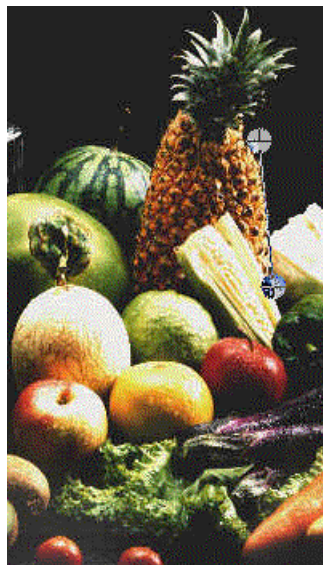
Figure 5-3 Deskewing the Image

    The *Stitch* dialog box will appear again after the deskew process.

6.   Select a *Stitch Control* option, either top, right, bottom, or left of the *Main Image* depending on where you want to put the *Rest Image* picture.

Note: *The Rest Image will be converted to reflect the image type of picture it is stitching on.*

7.   Adjust the *Overlap Range in Auto Stitch* slider to set the overlapping width of the images. An overlapping frame locates in the *Rest Image* to help you identify the stitching position. The frame moves as you adjust the slider.

8.   Select a way, *Manual*, *Semi-auto* or *Auto*, to stitch the image in the *Stitch Method* section.

Manual Stitch

You have to specify the overlapping reference points precisely on both the main and the rest images.

To stitch images manually:

1. Select the *Manual* option in the *Stitch Method* section. The image editing area appears with the overlapping range of both images. You will see a stitching frame in the stitching image.

2. Move the stitching frame to the reference portion to be overlapped and click. The stitching frame with the stitching reference portion will move to the receiving image.

3. Move the stitching frame to the overlapping reference portion in the receiving image and click. The images are stitched.

Note: *If the edges of two images of different lengths or size are to be linked in the matching, you can only stitch the images manually.*

Semi-auto Stitch

> *Note:* To use Semi-auto Stitching, the Main image has to be a 24-bit true color or a 256 gray scale image.

You have to specify the overlapping reference portions but it does not have to be as precise as is needed for *Manual Stitching*. The difference between manual and semi-auto stitch is that semi-auto stitch can adjust the sizes and contrast of the edges of stitched images. Follow the instructions below to execute semi-auto stitch:

1. Select the *Semi-auto* option in the *Stitch Method* section. The image editing area appears with the overlapping range of both images. You will see a stitching frame in the stitching image.

2. Move the stitching frame to the reference portion to be overlapped and click. The stitching frame with the stitching reference portion will move to the receiving image.

3. Move the stitching frame to the overlapping reference portion in the receiving image and click. The images are stitched.

> *Note:* You do not need to align the overlapping portion very precisely because **the overlapping reference range has a tolerance of 10 pixels**.

If you select the *Top* or *Bottom* option from the S*titch Control*, the width of the two images should be the same or with no more than a ±3% difference. If you select the *Left* or *Right* option, the height of the two images should be the same or with no more than a ±3% difference.

Auto Stitch

> *Note:* For Auto Stitch, the Main image has to be a 24-bit true color or a 256 gray scale image.

You do not need to specify any reference point for stitching. The program will automatically calculate and stitch the images.

Adjust the *Overlap Range in Auto Stitch* slider to set the overlapping width of the images. An overlapping frame locates in the *Rest Image* to help you identify the stitching position. The frame moves as you adjust the slider.

If you select the *Top* or *Bottom* option from the *Stitch Control*, the width of the two images should be the same or with no more than a ±3% difference. If you select the *Left* or *Right* option, the height of the two images should be the same or with no more than a ±3% difference.

Printing an Image

Before printing an image, you may want to change the printer configuration or the output format.

Changing the Printer Configuration

The *Print Setup* command allows you to change the settings your printer has been configured to print with. In default, these settings are the ones specified in the Control Panel's *Printer* option during your Windows installation. To change the default settings, do the following:

1. Open the *File* menu and click on *Print Setup*. The *Print Setup* dialog box appears.
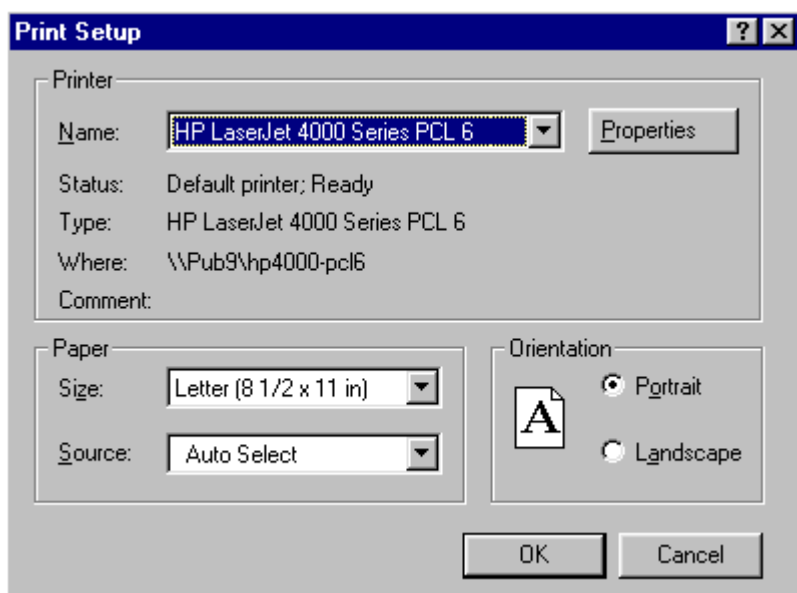

Figure 5-4 Print Setup Dialog Box

2. Make all necessary changes.

3. Click on the [OK] button to save the changes and return to the image canvas; click on the [Cancel] button to close the box and return to the image canvas without saving the changes made.

Setting up Image Output Format for Printing

The *Print* command under the *File* menu provides users with different options for printing and image output formats. To print an image:

1. Open the *File* menu and choose *Print*, or click on its icon on the tool bar. The *Print* dialog box appears.
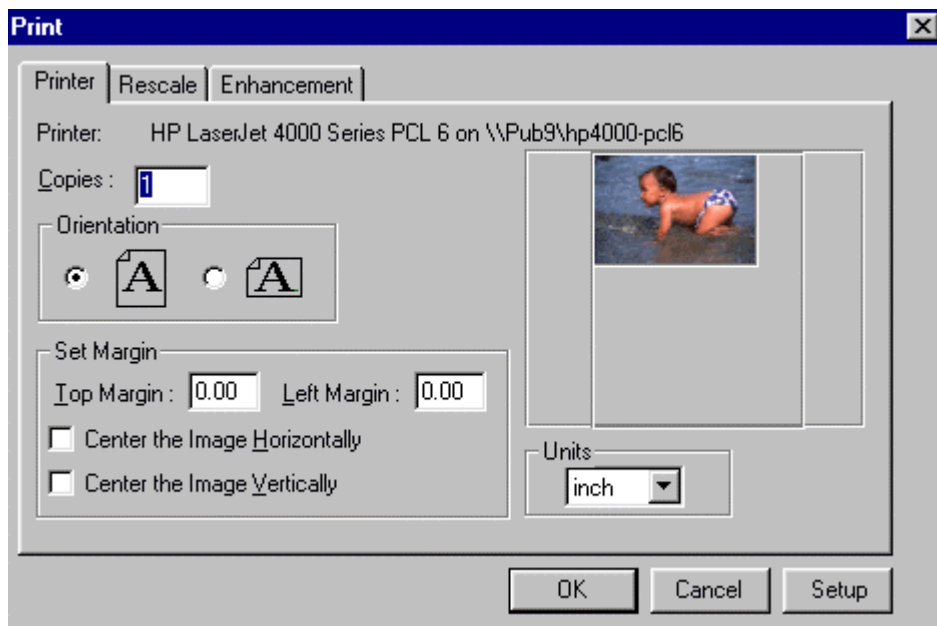
Figure 5-5 Print Dialog Box

In default, the *Printer* tab is active. The information about the current printer, port configuration and page orientation setups are displayed in the upper part of the dialog box. These can only be changed through the commands in the *Print Setup* dialog box. If you want to change any of these items, click on [Setup] at the right.

2. Enter the number of copies you want to print in the *Copies* text box.

3. Select the orientation of the paper as portrait or landscape.

4. The *Set Margin* section allows you to set the top and left margins. You may also choose to print the image horizontally or vertically on the middle of a page.

You can change the position's coordinates and units from the *Unit* pull down list box.

5.   If you want to resize the image while printing, select the *Rescale* tab to make related setting.

Figure 5-6 The Print Dialog box with Rescale Tab Selected

6.   Click on the *Fit In Page* check box if you want to rescale the image in relation to the size of the paper used.
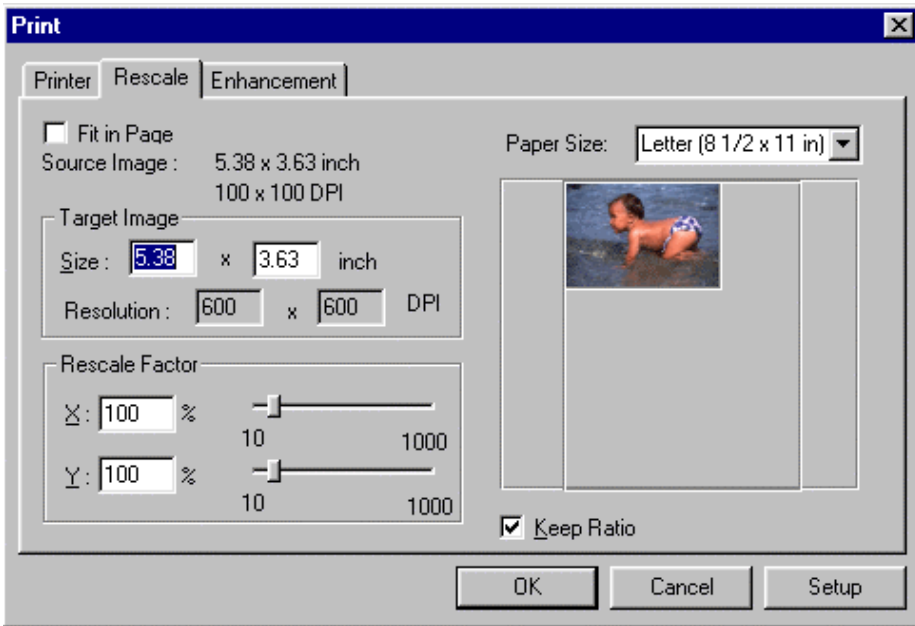
      If you need to change the size of the paper, select the correct size from the *Paper Size* list box.

7.   You can set the scaling ratio by entering its size in the *Target Image* section or by entering the X (horizontal ratio) and Y (vertical ratio) values in the *Rescale Factor* section. You can also specify the scaling ratio by dragging the slider between the 10% and maximum rescale proportion indicated.

      If you have enabled the *Keep Ratio* option, you can enter either the width or the height of the rescaled image. The software will automatically determine the other value for you.

      If you have disabled the *Keep Ratio* option, you have to enter both the width and height to rescale the image. If the values you enter are not proportional, the rescaled image will be distorted.

8.   Enter the horizontal and vertical resolutions of printing in the *Resolution* text boxes.

9. Due to the different effects generated by various types of printers, the colors printed may not be completely the same as those displayed on screen. If you want to adjust the colors of printing, select the *Enhancement* tab.
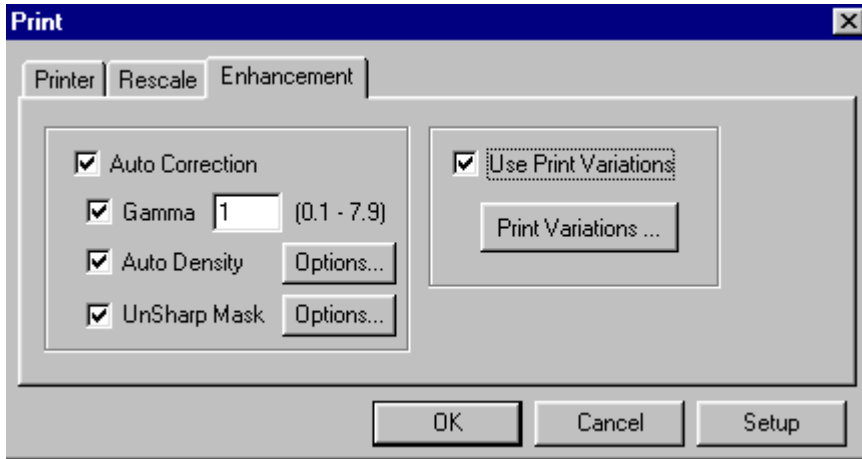

Figure 5-7 The Print Dialog Box with Enhancement Tab Selected

10. The *Auto Correction* function includes three options: *Gamma*, *Auto Density* and *Unsharp Mask*. If you enable the *Auto Correction* function, you can choose whether to execute these three options.

    The *Gamma* option adjusts the brightness level of the printed image. The higher the value, the brighter the printed image will be.

    The *Auto Density* option is used to sharpen dull images or tone down overly sharp ones by redistributing the gray shades in them. Click on the [Option] button to adjust the printing effect. The setting in the pop-up dialog box is the same as the procedure of setting the *Density Control* command under the *Process* menu. Please refer to the *Enhancing/Fine Tuning Images* chapter for more details.

    The *Unsharp Mask* option is used to sharpen the portion of image where the color values among pixels have sound differences. Click on the [Option] button to adjust the sharpen level. This process is the same as the function of the *Unsharp Mask* option in the *Sharpen* command under the *Process* menu. Please refer to the *Enhancing/Fine Tuning Images* chapter for more details.

11. The *Print Variation* function enables you to adjust the image colors on screen and print previews for clear reference.

    To use the *Print Variation* function, enable the *Use Print Variation* option and click on the [Print Variation] button. The *Variations* dialog box appears.
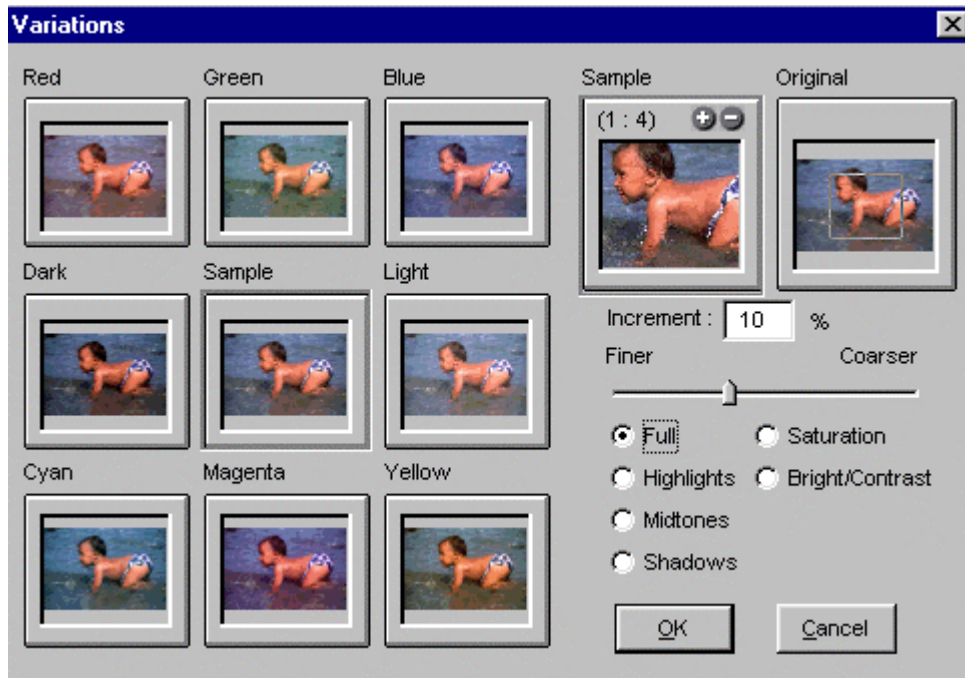

Figure 5-8 Variations Dialog Box

    The setting in this dialog box is mostly the same as that for the *Variations* command under the *Process* menu. The difference is that you can print the image previews to check the actual colors printed before the real image is printed.

    Please refer to the *Enhancing/Fine Tuning Images* chapter for details on setting in the *Variations* dialog box.

    When adjusting the colors in the image, the *Sample* image will be the one you actually print out. Therefore, you can first print the image previews by clicking on the [Print Adjust Page] button to compare the printed color effect with the image previews shown on screen. Because the *Sample* image should be the one you are satisfied with, compare the printed image previews with the *Sample* image on the screen, and find out the printed image preview closest to the effect you desire, then make it the *Sample* image on the screen. You can adjust the image as many times you want to find out the best effect for the image.

    After you obtain the best effect for the image, make it the *Sample* image and click [OK] to return to the *Print* dialog box.

12. Click on the [Print] button to print; click on the [OK] button to save the settings but not print the image immediately; click on the [Cancel] button to abandon all the changes and return to the image canvas without printing.

Setting an Image as Wallpaper

An image edited in Presto! ImageFolio can directly be set as the Wallpaper of Windows desktop. It can be placed at the center of the screen or repeated as tiles filling the entire screen.

Under the *File* menu, select *Set as Wallpaper (Centered)* to place the image at the enter of screen; or select *Set as Wallpaper (Tiled)* to duplicate the image and fill the entire screen as tiles.

6 Image Manager

Presto! Image Explorer is a stand-alone software provided with Presto! ImageFolio for using as an image manager. You can arrange your images in different folders according to their different usage or attributes. It allows you to view an image before actually opening it to ensure that it is the image you want to load on screen. Moreover, it offers functions of acquiring images, adding properties to images, renaming/deleting/sorting files, etc.

Executing the *Image Manager* command under the *File* menu or clicking the Image Manager icon on the tool bar will arouse Presto! Image Explorer from Presto! ImageFolio.

Screen Arrangement

After Presto! Image Explorer has been opened, you may locate the folder that contains the image files you want to preview at the left part of the full view. Reduced or shrunken copies of the images, termed "thumbnails," in the folder appear in the boxes at the right with their file names.
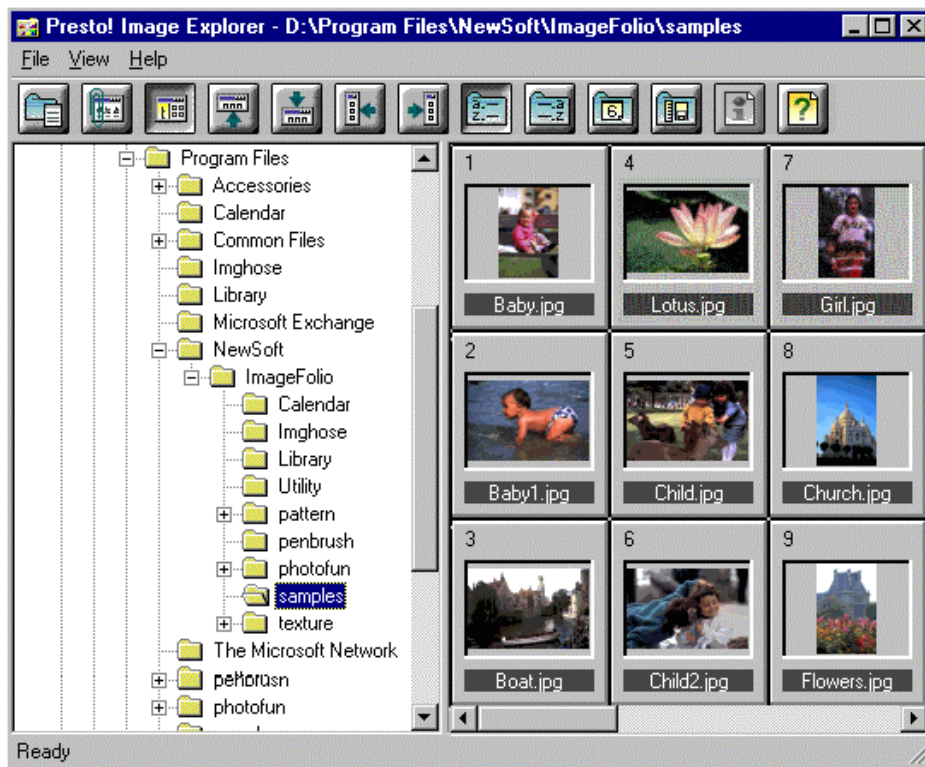

Figure 6-1 Full View of Presto! Image Explorer

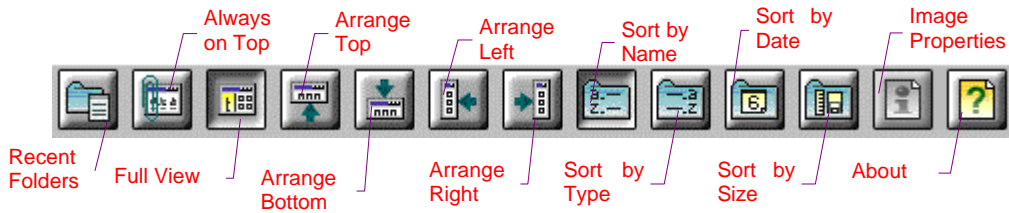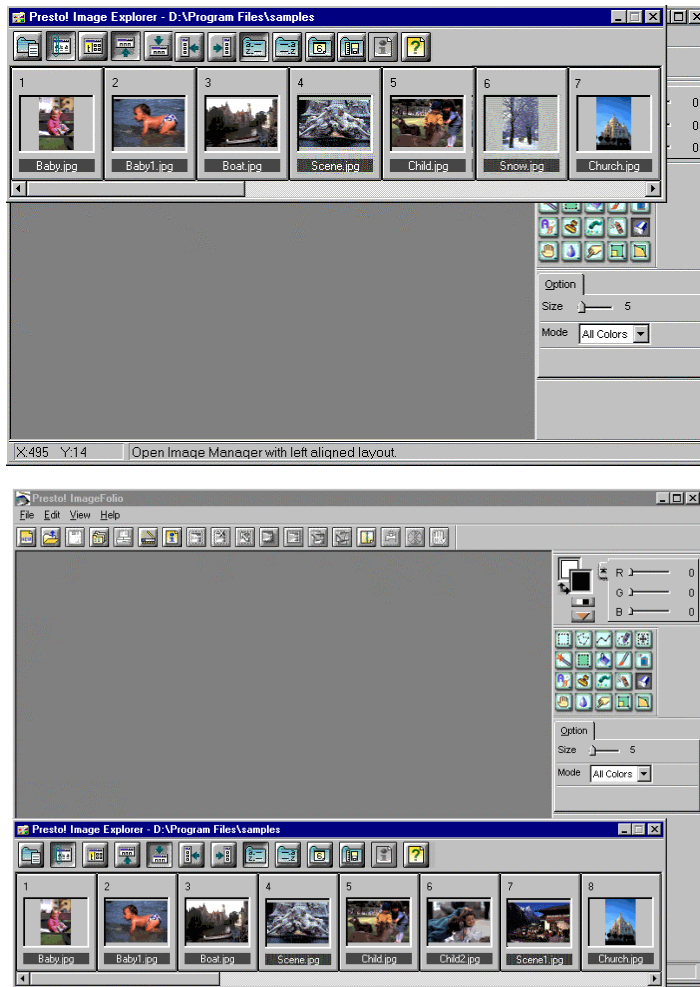Clicking the buttons on the tool bar executes their corresponding menu commands.

Figure 6-2 Buttons on the Tool Bar

You can hide the tool bar or the status bar from the screen. Presto! Image Explorer can also be docked at the top, bottom, left or right of the screen for your convenience of viewing.
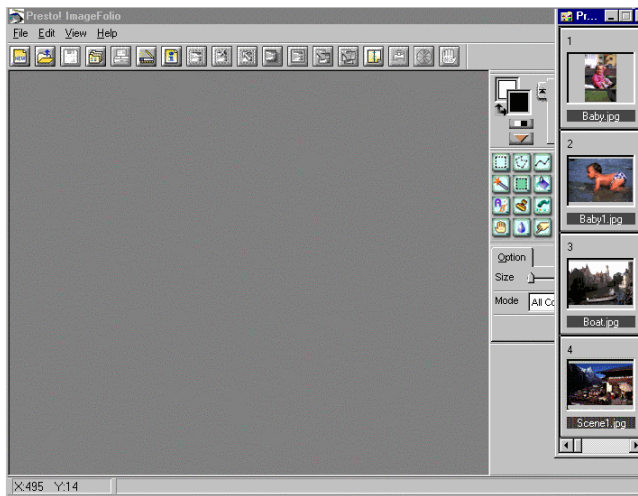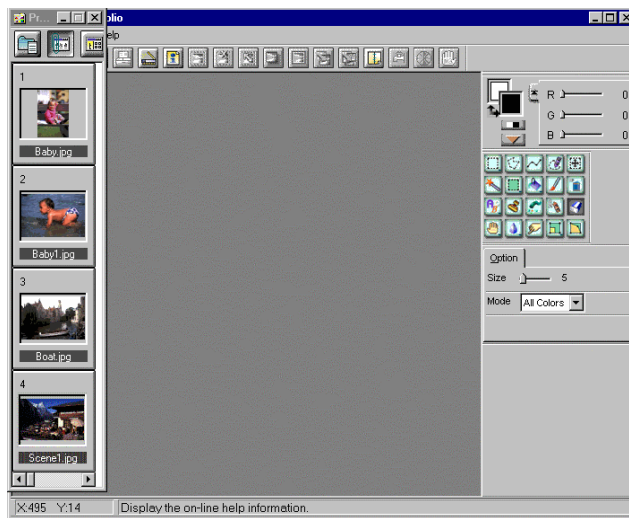
Figure 6-3 Docking Presto! Image Explorer at the Top, Bottom, Left and Right of the Screen

To hide or show the tool bar or status bar, click on the *Tool Bar* or *Status Bar* command under the *View* menu.

To change the displaying form of Presto! Image Explorer, select the *Arrange* command from the *View* menu and choose the desired displaying form, *Full View*, *Top*, *Bottom*, *Left*, or *Right*, from the pop-up options. If you invoke Presto! Image Explorer from the *Image Manager* command under the *File* menu in Presto! ImageFolio, you can select its displaying form by three options: *Align Left*, *Align Bottom* and *Normal View* (full view). Presto! Image Explorer will always be aligned left when you arouse it by clicking the *Image Manager* icon from the tool bar of Presto! ImageFolio.

Enabling the *Always on Top* function in the *View* menu keeps Presto! Image Explorer on top of all the opened applications for handy usage.

By default, files are displayed by filename in alphabetical order. You can also choose to display images by file extension in alphabetical order, by size, or by last modification date. Select the *Sort* command from the *View* menu and choose *Sort by Name*, *Sort by Type*, *Sort by Size* or *Sort by Date*.

Acquiring Images

In Presto! Image Explorer, you can input images with TWAIN-compatible devices as in Presto! ImageFolio. The operation is also similar to that in Presto! ImageFolio. The difference is that you can input multiple images at a time, place them in one folder, and then edit them individually.

You can input images by the *Acquire* and *Select TWAIN Source* commands under the *File* menu.

Selecting Files

You may select one or more file(s) in a folder for further management.

To select a file, click on the thumbnail preview of the image. Click again while holding the [Ctrl] key to deselect it.

To select multiple files, click on the thumbnail previews while holding down the [Ctrl] key to select or deselect non-contiguous files, or on the thumbnail previews while holding down the [Shift] key to select contiguous files.

The *Selection* command under the *File* menu offers three options for selecting or deselecting files: *Select All* for selecting all the files in the folder, *Invert Selection* for deselecting the files that are currently selected and selecting all the files that are not currently selected instead, and *Select None* for deselecting all the files in the folder.

File Management

In Presto! Image Explorer you can create, rename or delete a folder. Open the *File* menu and select *Folder Management*. Choose an option, *New*, *Rename* or *Delete*, from the pop-up submenu to perform the function.

Once you have selected one or more file(s), you can open, rename or delete them, or add some information into their properties. These functions are executed with the pop-up options

while you select the *Image Management* command from the *File* menu.

The *View* option displays a preview window containing the selected image for clearer observation. This preview window can also be aroused by double clicking on the selected image.

The *Open with* option enables you to open the selected file(s) with an image processing software that, the system considers, is proper for editing those images. If you have defined a specific application for editing the images in the *Preferences* dialog box, the images will be opened with that application when you execute this option. If you want to open the images in Presto! ImageFolio, just directly drag them with mouse pointer to the image editing area of Presto! ImageFolio.

When the *Properties* option is selected, a dialog box appears listing the information about the selected file, including image type, image dimensions, file size, image resolution and last modification date. If you click on the *Details* tab, you can give a title to the image and name its author.
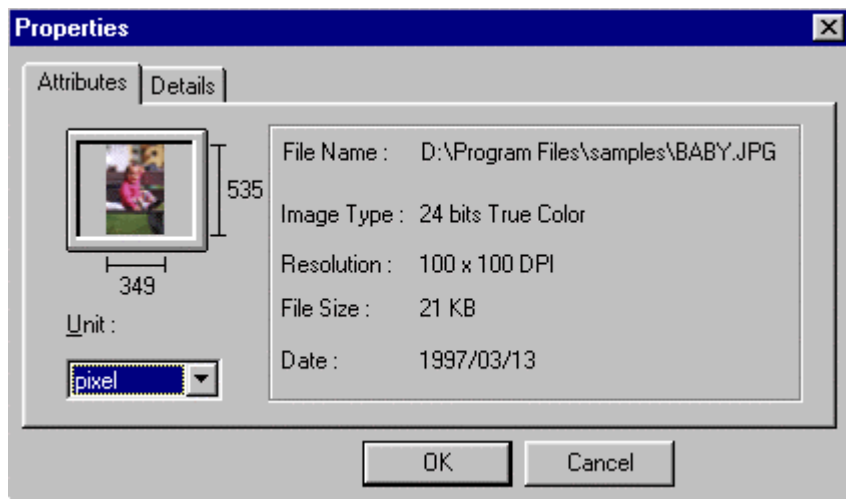
Figure 6-4 Properties Dialog Box with Attributes Tab Selected
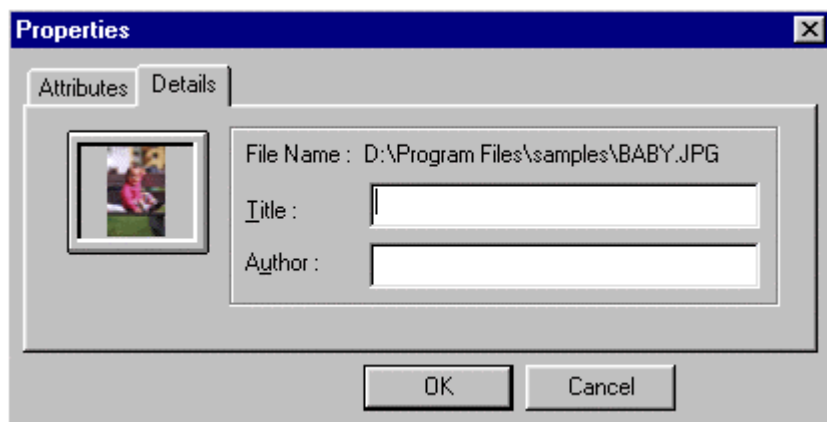
Figure 6-5 Properties Dialog Box with Details Tab Selected

The *Rename* option allows you to change the file name of the image. After the option is selected, the text cursor will appear in the file name area of the thumbnail preview. Type in the new file name and press [Enter].

The *Delete* option removes the selected files from the folder. You can also strike the [Del] key to delete the files.

If you move the mouse pointer into any of the selected image previews and click the right mouse button, an option list will pop up with all these options and an additional *Create Shortcut* option. This additional option can create a shortcut for the image as you can do in Windows 95.

View
Open with IF40LE.EXE

Create Shortcut
Delete
Rename

Properties

Figure 6-6 Pop-up Options

Whenever you invoke Presto! Image Explorer and locate the directory you want to view image files, the thumbnail image previews are displayed according to the current file access situation in the directory. If you change the situation after the directory is explored, i.e. adding or removing some files to/from the directory, and do not refresh the information for the program, the thumbnails displayed will not reflect the latest changes. In this case you should execute the *Refresh* command under the *View* menu to update the modification.

Preferences

The options in the *Preferences* dialog box, invoked from the *File* menu, make settings for operations in Presto! Image Explorer.
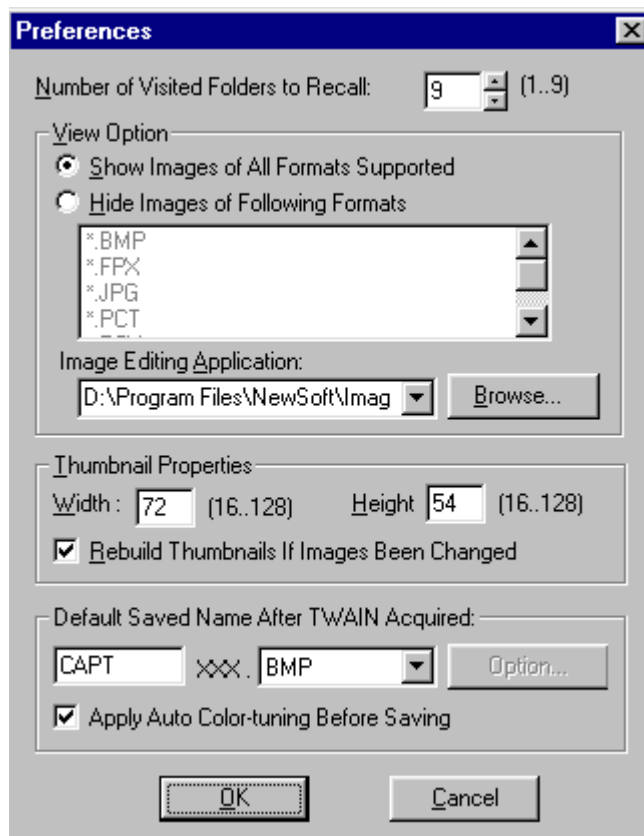

Figure 6-7 Preferences Dialog Box of Presto! Image Explorer

Number of Visited Folders to Recall

When you click on the left-most button on the tool bar, a list of folders with their path names, which you have recently used, appears for your selection. In this way you can rapidly locate the folder you recently and often used.

By the *Number of Visited Folders to Recall* option, you can recall up to 9 folders recently used for quick processing.

View Options

In this section, you can select the file types of images to be displayed in Presto! Image Explorer. If you want to hide any image file type, select the *Hide Images of Following Formats* option and highlight the file type(s) in the list box below it.

Image Editing Application

When you want to open a selected file from Presto! Image Explorer, the image will be opened in the software which Presto! Image Explorer decides to be the proper one for that image. You can also specify the software used for opening all the image files from Presto! Image Explorer. In the *Image Editing Application* option, type in the execution file with its path of the specific software or click the [Browse] button to select from a dialog box.

Thumbnail Properties

You can change the size of the thumbnails illustrating the images. In the *Width* and *Height* text boxes, enter the desired size by pixels from 16 to 288.

After you change the size, the thumbnails may be rebuilt from the original images or rescaled with the old-sized thumbnails to the new size. You can select to rebuild or rescale the thumbnails by the *Rebuild Thumbnails If Images Been Changed* option. This option should be enabled for rebuilding the thumbnails.

Note: *If the Rebuild Thumbnails If Images Been Changed option is enabled, the processing speed will be slower.*

Default Saved Name After TWAIN Acquired

You may input photos from a digital camera or scanner supporting TWAIN interface installed on your system. If your TWAIN device is capable enough, you can input multiple photos at one time.

In this option, type in the first few characters for the file names of the new input photos and select the file format from the pull-down list.

The file names will automatically be assigned with 3-digit numbers after the first few characters.

For some of the file formats, you may click on the [Option] button to further specify their format options.

If you want the software to correct the colors of the input photos, enable the *Apply Auto Color-tuning Before Saving* option.

7 Viewing Images

Some of the commands under the *View* and *Window* menus offer all kinds of possibilities of displaying an individual image or multiple images for your convenience on editing. These displaying forms are very helpful for viewing the image in details and making comparison among images.

Viewing Individual Image

This section introduces all the displaying forms for editing an individual image.

Zoom In & Zoom Out

The *Zoom In* and *Zoom Out* commands under the *View* menu enable you to obtain a magnified or a reduced view of the image. Such function is convenient when you want to edit or enhance the image with precision at any ratio from 16 times to 1/16 of the image size in view.

Zoom In can display the image in a magnified view from 2 to 16 times; *Zoom Out* however can perform a reduced view of the image from 1/2 to 1/16 of the image size.

To zoom in or out with the commands, follow the steps below:

1. Open the *View* menu and click on *Zoom In* or *Zoom Out* command. A list of ratio options appears to the right of the command name.

2. Select the ratio by which you want the image to be zoomed in or out.

Actual Size

The *Actual Size* command under the *View* menu is available only after the *Zoom In* or *Zoom Out* function was performed. It can restore the original view of the image in one step.

Fit in Window

Use the *Fit in Window* command under the *View* menu to display the entire image in the image window frame.

Full Screen

Use the *Full Screen* command to display the image in a full screen size. Press [Esc] to return to the editing screen.

Add a View

You can use the *Add a View* command under the *View* menu to produce a copy of the image in order to view different size ratios of the image at the same time. When you edit any one of the different ratio images, the others will be changed at the same time.
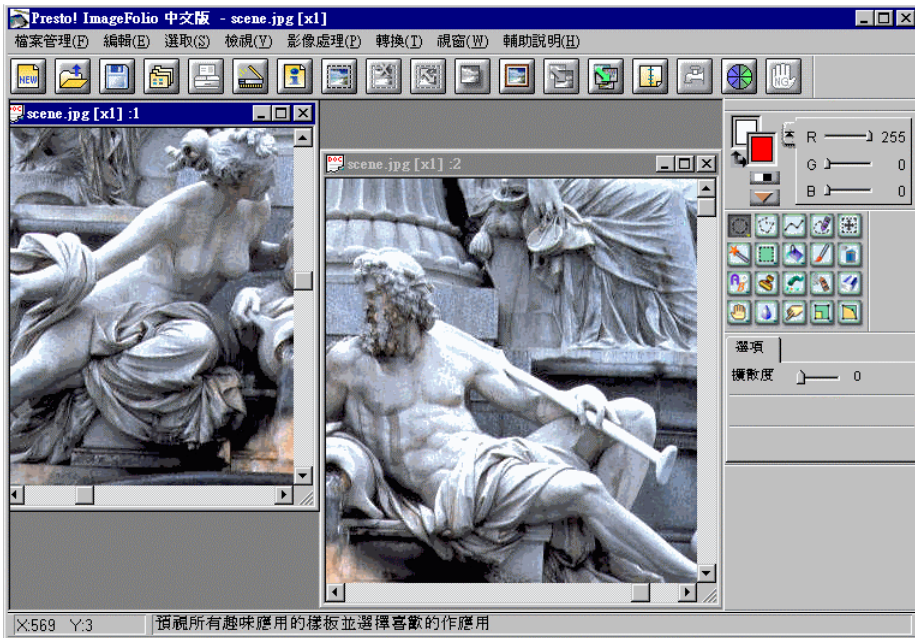

Figure 7-1 Viewing an Image in Different Ratios

Viewing Multiple Images

The software enables you to perform multitasking. The number of documents you can totally open on your screen depends on the capacity of your system's memory.

This section provides information about the display arrangement for editing multiple images. The commands in the *Window* menu enable you to manage all of the image windows on screen.

Cascade

The *Cascade* command arranges the windows in a diagonally overlapping pattern so that only the current active image can be seen on top.
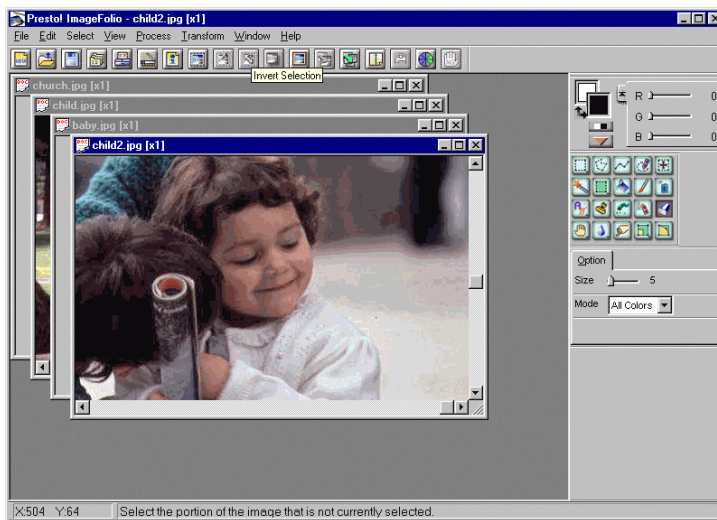

Figure 7-2 Viewing Multiple Images in Cascade

Tile

The *Tile* command arranges the windows so that all of the windows can be seen at once. The space of the image editing area is evenly split and lined with all the windows.
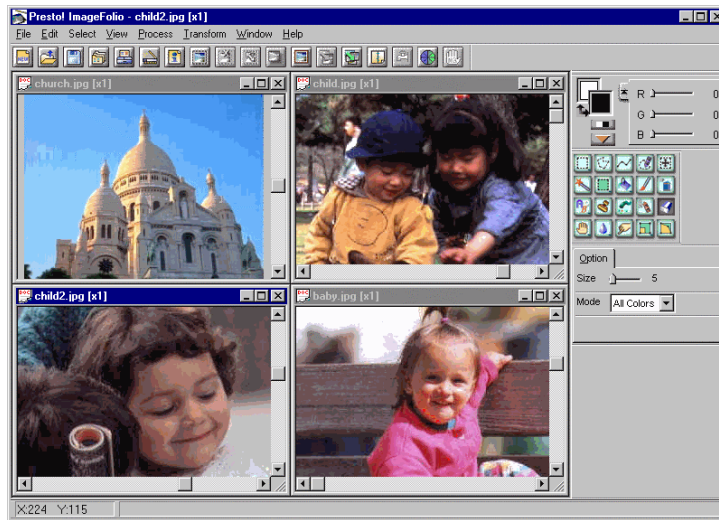

Figure 7-3 Viewing Multiple Images in Tile

Arrange Icons

If any of the simultaneously opened documents temporarily does not need editing, it is recommended to minimize it into a small title bar containing the file name of the image. It can be placed at the bottom of the image editing area by clicking on the *Minimize* button at the upper right corner of the image window.

The *Arrange Icons* command arranges the small title bars evenly across the bottom of the windows.
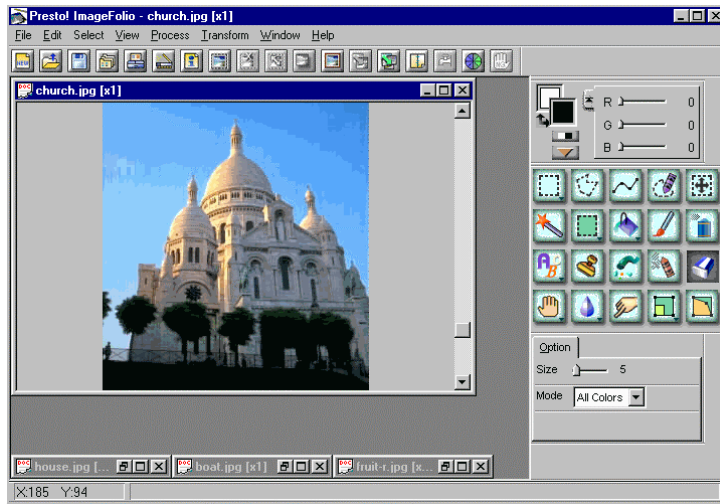
To restore an image, double click on its title bar, click on the *Maximize* button, or open the *Window* menu and click on its file name listed at the lower part of the *Window* menu.

8 Color Management

Each image canvas has its own color palette. For each new image canvas, a color palette corresponding to the image type you select is generated. This is the default color palette for your image canvas.

The default color palette for the current active image canvas is generated according to the image type you specified in the *New* dialog box. For example, if you selected the image type "Index 256-Color," a color palette containing 256 colors is attributed to the image canvas; or if you selected "24-Bit True Color," your color palette contains 16.7 million colors.

Palette Control Options

The procedure of selecting colors and editing color palettes should be performed in the Palette Control window.

The Palette Control window has three different working modes: *Native*, *Appendix* and *Edit* modes. Different modes of Palette Control are illustrated with different outlooks for enhanced functions. The default mode for Palette Control is *Native* mode that appears as you invoke the software for the first time.
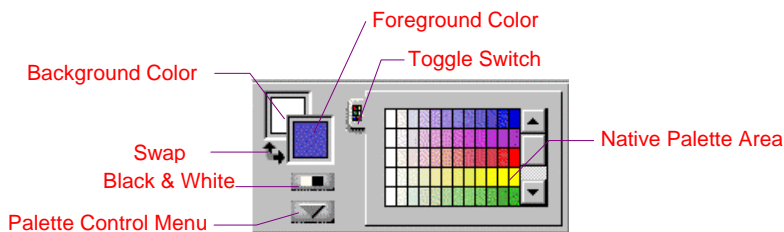

Figure 8-1 Palette Control Window in Native Mode

Foreground/Background Color

The foreground and background colors are selected from the color palette with the color picker in any of the color palettes. Click on a color from the color palette with the left mouse button to select a foreground color and the right button to select a background.

The software can memorize three foreground and background colors that were previous selected by the user. You may hold the [Alt] key and click inside the foreground or background color box to recall the previous selected colors by sequence.

Clicking on the **Swap** arrows exchanges the foreground and background colors. If you want to use black and white as foreground and background colors, click on the **Black & White** button.

Native Palette

In the Native Palette area, you have three methods for selecting foreground and background colors: by using a universal color spectrum, a user-defined palette, or the color channel setting sliders. You can toggle among the three by clicking on the toggle switch.

The universal color spectrum contains all the colors existing in the natural world.

Figure 8-2 Spectrum

The user-defined palette should be produced by yourself. It could contain all the colors you like to use most. You may define several different palettes for different usage and save them as palette files. When you need to use any of the palettes, load the palette into the user-defined palette area by the command in the Palette Control menu. Once you have loaded a palette, the software will automatically remember the palette and display it each time you invoke the software unless you load another palette.
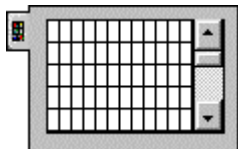
Figure 8-3 An Example of User-defined Palette

Note: *The procedure of producing your own palettes will be explained in the Edit Mode section.*

The color channel setting sliders enable you to set the value of each color channel (like the hue, lightness and saturation in HLS mode) to compose a color that can not be clearly identified in the palette. This is useful if you need to paint with a specific color of which you know the color channel composition. Drag the sliders directly to make the setting.

Figure 8-4 Color Channel Setting Sliders

Palette Control Menu

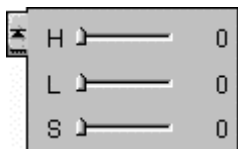When you click on the Palette Control Menu button, a list of commands for palette control pops up for your selection.
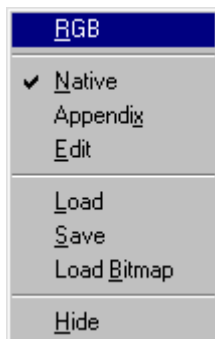

Figure 8-5 Palette Control Menu in Native Mode

RGB/HLS Color Modes

The *RGB/HLS* command is used to toggle between RGB and HLS color modes. When the current color mode is HLS, selecting the *RGB* command changes the color mode to RGB, and the command itself is changed to *"HLS."* The color channels in the Native Palette area change according to the setting here.
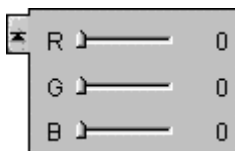

Figure 8-6 Color Channel Setting Sliders in RGB Mode

Working Modes

The three commands, *Native*, *Appendix* and *Edit*, reflect the working modes of the Palette Control respectively. Selecting any of the commands changes the Palette Control to its corresponding working mode.

Load

The *Load* command allows you to load a palette from a file previously saved with **.PAL** extension. The palette will be loaded as the user-defined palette.

Save

The *Save* command is used to save a palette after you have created your own color palette or changed the colors in the user-defined palette. A color palette should be saved with **.PAL** file extension.

Note: *The Load and Save commands are valid only when the Native Palette area shows the user-defined palette.*

Hide

The *Hide* command functions the same as the *Palette Control* command in the *Layout* options under the *View* menu. Choosing this command hides the palette control window from the screen. To bring back the palette control window, pressing [F5] is the easiest way.

Appendix Mode

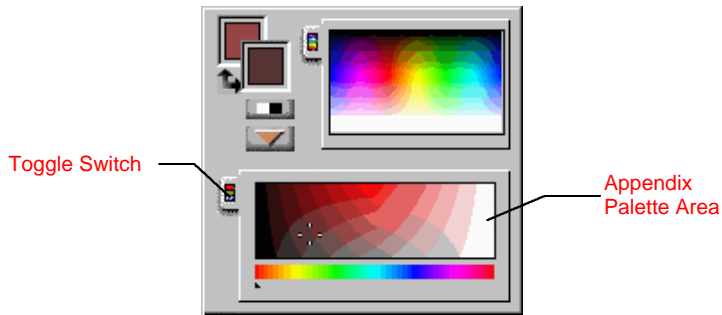After you selected Appendix in the Palette Control menu, the palette control window appears as follows:

Figure 8-7 Palette Control Window in Appendix Mode

Appendix Palette

The Appendix Palette area contains three types of palettes for your selection of colors: the HLS color table, the primary palette of the active image, and the loaded bitmap. You can toggle among the three by clicking on the toggle switch.

The HLS color table displays the hue, lightness and saturation of the colors. First select the hue of the color by dragging the triangular slider under the hue bar below. Then click the right color in the color table according to the lightness and saturation of the color.
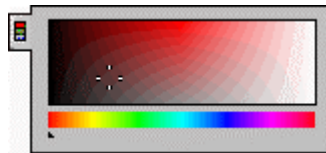
Figure 8-8 HLS Color Table

The primary palette refers to the default color palette of the current active image. If the active image is a true-color one, a system-defined 256-color palette will be loaded here.

The number of display columns in the primary palette can be changed by clicking the right mouse button in the gray area of the Palette Control window and selecting the *Alternative Primary Columns* option from the pop-up menu.

Figure 8-9 Example of Primary Palette

The loaded bitmap is an image that you have loaded by the *Load Bitmap* command of the Palette Control menu.

Figure 8-10 Example of Loaded Bitmap in Palette Control

Selecting Colors from Loaded Bitmap

The *Load Bitmap* command in the Palette Control menu allows you to load an image and select colors from it. When you are in the *Native* mode, the loaded image is not displayed. You can see the loaded image and select colors from it in the *Appendix* or *Edit* mode.

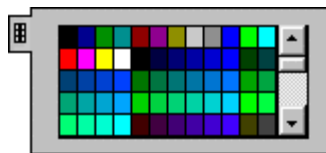The loaded bitmap contains colors you want to use for the current image. Even though you may not be sure of which color it corresponds to on your palette, you can still select the exact color you want in the image.

To load an image into the Appendix palette:

1. Switch the Appendix Palette area to the Loaded Bitmap container.

2. Click on the Menu button and select *Load Bitmap* from the pop-up menu.

3. From the *Load Bitmap* dialog box, select the image file you want to use and click on [Open].

4. The loaded image appears in the Appendix palette.

    If the loaded image is larger than the displayed window, you can bring other parts of the image into view by dragging inside the window while pressing and holding the [Shift] key.

    Select colors from the bitmap by clicking the left or right mouse button for foreground or background color.

Edit Mode

Not only can you select colors to paint on your image canvas from the color palettes through the Palette Control, but you can also change the color composition on the palette through the Palette Control commands and create a secondary color palette for other canvas usage.

To edit a customized palette, you select colors from all the available palettes and use the scratch pad for creating a new palette. Select the *Edit* command from the Palette Control menu. The palette control window changes like this:
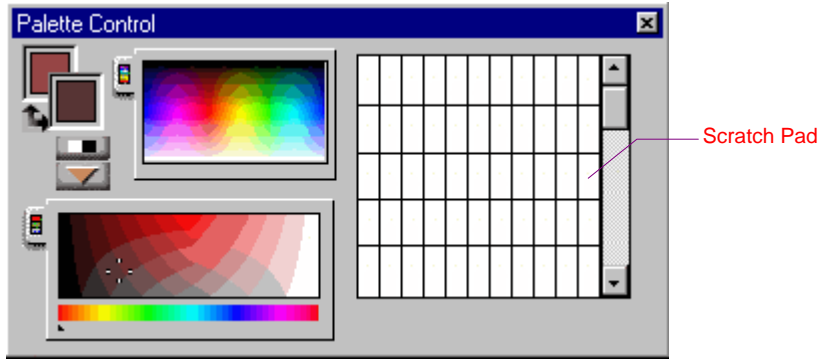
Figure 8-11 Palette Control Window in Edit Mode

The user-defined palette of the Native Palette is enlarged for the usage of a scratch pad. The color grids in the scratch pad can be changed in size (so as to change the number of columns at the same time). Click the right mouse button in the gray area of the Palette Control window and select the *Alternative Secondary Columns* option from the pop-up menu.

The palette in the scratch pad is independent of the current canvas type. You may pick colors from any of the available palettes to display in the scratch pad; load colors from palette files; or get the colors you use most in the primary palette to produce a secondary palette in the scratch pad.

Operations in the Scratch Pad

The following table lists the effects of keyboard/mouse operations while editing the color palette.

Keyboard/Mouse Operation	Function
Click mouse left button	Pick a foreground color
Click mouse right button	Pick a background color
[Shift]+Click left button	Select or deselect colors
[Shift]+Click right button	Deselect all the currently selected color
[Shift]+Drag through a block of colors	Select a block of colors
[D]	Delete the selected colors
[Ctrl]+Click left button	Insert the selected colors starting from the color grid you are now on
[Alt]+Click left button	Replace the colors of the color grid you are on with the selected ones
[Alt]+Click right button	Change the size of the color grids

To replace colors, press the [ALT] key and click. The mouse pointer changes to a *Paint Bucket*.

To insert colors, press the [Ctrl] key and click. The mouse pointer changes to a *Paint Bucket* with a plus sign.

To select multiple colors, press the [Shift] key and drag through the block of colors. The mouse pointer changes to a cutter.

Managing the Scratch Pad

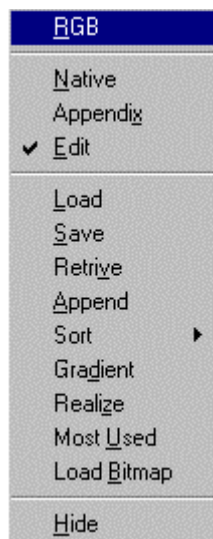The commands in the Palette Control menu help you to manage the scratch pad.

Figure 8-12 Palette Control Menu in Edit Mode

Load

The *Load* command allows you to load a palette from a file previously saved with **.PAL** extension to the scratch pad.

Save

The *Save* command saves the palette in the scratch pad with the required use of a filename with a **.PAL** extension.

Retrieve

The *Retrieve* command loads all the colors from the primary palette into the scratch pad.

Append

The *Append* command appends colors from a **.PAL** file into the scratch pad starting from the next empty color grid in the scratch pad.

Sort by Hue or Light

The *Sort* command can rearrange the color order in the scratch pad by the sequence of colors in the HLS color wheel (the *Hue* option) or by color tint, from lightest to darkest (the *Light* option).

Gradient

The *Gradient* command can create a gradation of colors between foreground and background colors in the scratch pad. First select a blocked area containing the grids to hold the generated gradient colors in the scratch pad, then select this command to create a gradation of colors from foreground to background colors in the blocked area.

Realize

The *Realize* command applies a whole scratch pad palette as your primary palette. In Black & White mode, this command is ineffective. In other modes, the *Set Convert* dialog box will appear, and you can then select a way to convert the image's color scheme. If you select the *Pseudo Color* option, the software will use the color grid of the new palette for color conversions of your image, in accordance with the color positions in the grid of the old palette. In 24-bit true color mode, this function works by reducing palette colors according to the colors in new palette. A new 256-color canvas with the converted image will be generated after color reduction.

Most Used

This command gets the colors used most in the current canvas into the scratch pad. In 24-bit true color mode, the software will get the 256 colors used most in the canvas. In color modes other than 24-bit true color, this function produces the same effect as the *Retrieve* command.

9 **Painting Images**

The Toolbox and the Tool Control contain all the tools you need to create or edit an image.

Before using the tools for editing, you can set their respective Tool Control options. These options vary according to the tool selected.

Tool Control Options

The Tool Control options determine how a tool behaves. For example, you may want to change the thickness of the line when drawing a rectangle with the *Rectangle* tool (or as above, the shape of your brush, etc.).

Choose the *Tool Control* option from the *Layout* command under the *View* menu to bring up or hide the Tool Control options.

The following subsections describe several common options for the tools. The distinct options for individual tool will be explained when the tool is introduced in the *Painting Tools* section later.

Size

The *Size* option is used to specify the line width or the size of the selected tool. The size range is from 1 to 100; the higher the value the larger the size. Drag the slider to set the size.

Feather

The *Feather* option allows you to soften the covering effect of the edges of your tools by bending their edge color into the background. This option ranges from level 1 to 15. Drag the slider to increase the setting and soften the edges of the tool, or to decrease the setting and sharpen its edges.

Shape

This option offers several types of shapes for the painting tools. For example, you can choose a round or a square paintbrush to paint an image. Click on the pop up list box and select a shape for the tool you are going to use.

When you are using the *Stamp* tool, the *Shape* option determines the shape of the stamp as square or circular.

Pattern

The software offers several tool effects or patterns to apply to graphics. Click on the pop up list box and select a pattern for your tool.

Style

This option allows you to draw hollow or solid color rectangles and ellipses. Click on the pop up list box and select a style for the tool you are going to use.

Spacing

The *Spacing* option specifies the space between every two contiguous efficient painting points of a tool along the cursor path. When you set the spacing as 1, the painted drawing will be generated repeatedly along the cursor path without interruption. The larger the spacing specified, the less can the tool paint within the same length of path, and the more the distance between every two efficient painting points.

Painting Tools

Painting tools are used to add drawings, change colors or reform the image. To select a tool, simply click on it.

> *Note:* In the description of using the painting tools below, you may sometimes be instructed to use the selectors for defining a painting or editing area in the image. The explanation on using the selectors is discussed in the **Masks and Selections** chapter.

Line

Use the *Line* tool to draw straight lines. To draw a straight line:

1. Click on the *Line* tool. If it is not displayed in the Toolbox, click on the *Rectangle*, *Ellipse* or *Curve* tool while pressing and holding the [Alt] key to find it.

2. Set the size and pattern for drawing in the Tool Control options. If you enable the *Anti-alias* option, the edges of the generated line will automatically be straightened.

3. Point to where you want to begin drawing.

4. Press and hold the left mouse button.

5. Drag the pointer to extend the line.

6. Release the mouse button.

    Holding the [Shift] key while drawing the line produces a horizontal, vertical or 45 degree slanted line.

Rectangle

This tool is used to create rectangles or squares. You may choose the starting point of the rectangle at any of its corners or its center. To draw a rectangle:

1. Click on the *Rectangle* tool. If it is not displayed in the Toolbox, click on the *Ellipse*, *Line* or *Curve* tool while pressing and holding the [Alt] key to find it.

2. Set the size, pattern and style in the Tool Control options.

3. Move the mouse pointer to the selected starting point (one of its corners or its center) of the rectangle to be drawn.

4. Press and hold the left mouse button if you are starting from one of the corners. If you are starting from the center, hold down the [Alt] key with the left mouse button.

5. Drag the pointer diagonally to the opposite corner of the rectangle. A rectangle appears.

6. Release the mouse button.

    To draw a square, hold down the [Shift] key while dragging the mouse.

Ellipse

You use this tool to draw ellipses or circles. The program allows you to start drawing an ellipse from any point on its rim or its center. To create an ellipse, follow these steps:

1. Click on the *Ellipse* tool. If it is not displayed in the Toolbox, click on the *Rectangle*, *Line* or *Curve* tool while pressing and holding the [Alt] key to find it.

2. Set the size, pattern and style in the Tool Control options. If you enable the *Anti-alias* option, the edges of the generated ellipse will automatically be smoothed.

3. Move your mouse pointer to the starting point of the ellipse to be drawn (any point of its rim or its center).

4. Press and hold the left mouse button if you are starting from its rim. If you are starting from the center, hold down the [Alt] key with the left mouse button.

5. Drag the pointer diagonally to the opposite point on the rim. An ellipse appears.

6. Release the mouse button.

To draw a perfect circle, hold down the [Shift] key while dragging the mouse.
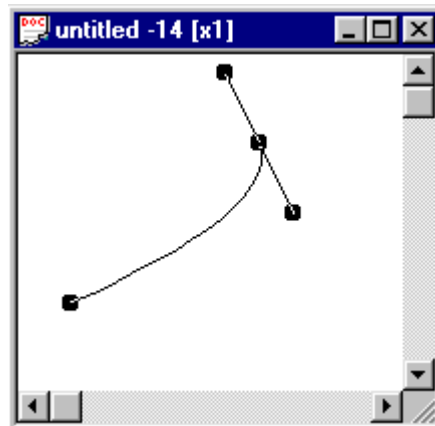
Curve

This tool allows you to draw a bézier curve by setting two nodes and four control points: the nodes locate at both ends and the control points are extended from the nodes for helping you to adjust the height and slope of the curve. The location of the nodes and control points can be adjusted until you are satisfied with the shape and position of the curve.

To draw with the *Curve* Tool:

1. Click on the *Curve* tool. If it is not displayed in the Toolbox, click on the *Rectangle*, *Ellipse* or *Line* tool while pressing and holding the [Alt] key to find it.

2. Set the Tool Control options.

3. Place the mouse pointer to where you want to start drawing your curve.

4. Click the left mouse button to set the beginning of the curve. Do not release the mouse button.

5. Drag the mouse pointer in the direction you want the curve drawn. As you drag, two control points appear and move in opposite directions from the node. The distance between the control points and the node determines the height or depth of the curve. The angle of the control points determines the curve's slope.
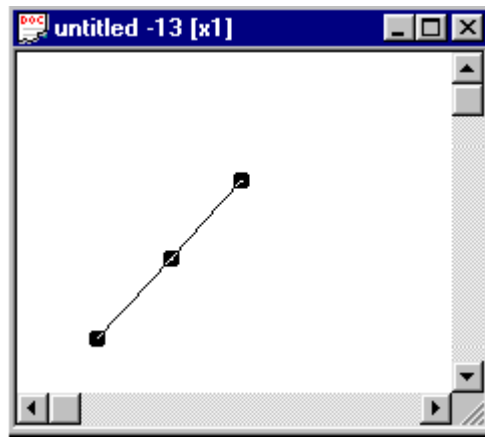
6. When the control points are in the desired position, release the mouse button.

7. Repeat step 4 to set the other end of the first curve segment you want to create. A second node appears and connected to the first.

8. Drag to generate two control points for this node.

9. Release the mouse button. You may drag the nodes and control points to adjust the shape of your curve segment.

    If you did not drag from the nodes to generate control points in previous steps, you may hold the [Shift] key and drag from the nodes to create control points anytime.

10. Click and drag the pointer outside the nodes and control points to form another adjacent segment of curve linking with the first one. Repeat steps 7 through 9 to complete all the segments in the curve you want to create.
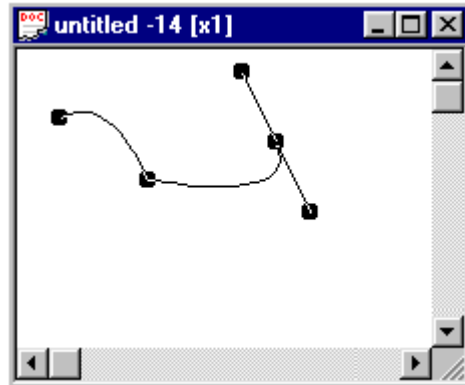
Before fixing the curve segments, you can click on any node to activate the control points of the curve segment connected and adjust the curve.

To remove the last node generated, hold the [Ctrl] key and click the left mouse button.

If you want to create a closed area with the curve segments, hold [Shift] and click the right mouse button to generate a new segment connecting from the last node to the first one.
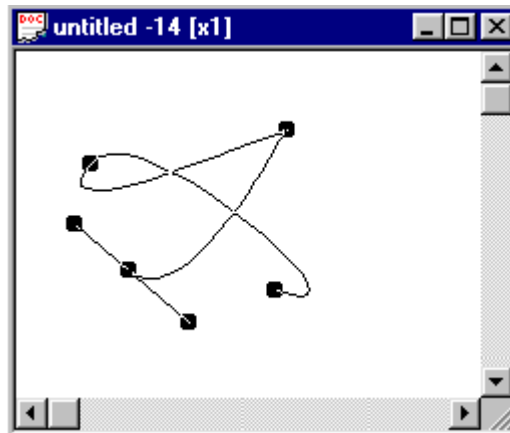
11. When you are satisfied with the shape of your curve, click the right mouse button to fix the curve.

Note: *If you did not drag to generate control points for the nodes, the drawing will become a straight line. Hence you can use this tool to produce adjacent segments of straight lines.*

Paint Bucket

The *Paint Bucket* enables you to fill a selected enclosed portion of image with a color you choose. It fills a selected area with the foreground color according to the calculated range of the original color pixel. When you click on a single pixel of that color with the bucket cursor, the program takes this pixel as the standard to calculate the color value and to decide which other pixels to fill with your new color.

To use the *Paint Bucket*:

1. Click on the *Paint Bucket* tool. If it is not displayed in the Toolbox, click on the *Gradation* tool while pressing and holding the [Alt] key to find it.

2. Set the color range for calculating and the filling pattern in Tool Control options.

   The *Range* option sets the surface range of an area of given color to be filled with another color. The filling range is decided by a color pixel from the image as well as by the tint you set for the color you select as replacement color. The effective value of filling range is from 1 to 255.

3. Move the pointer to the portion you selected.

4. Click on the left mouse button to fill the area with the foreground color.

   Note that if the area you want to fill is not completely enclosed, the paint bucket color will "leak" and fill the surrounding area with that same color (or a certain range of it).

Gradation

This tool enables you to create a gradual transition from the foreground color to the background color, or color gradation of multiple colors with linear, radial or square shape.

You can select multiple colors to create a "rainbow" color gradation. In the Tool Control options, you can select the direction of gradation as linear, radial or square.

Moreover, you can generate lighting effect on the image with this tool. In effect, it looks like putting a light source at any point on the image and the light spreading with different levels of brightness along the cursor path.

To create a color gradation, do as follows:

1. Use the selectors to outline the area you want the gradient colors generated. If there is no such selection made, the program will generate a gradation of colors for the whole canvas.

2. Select the *Gradation* tool. If it is not displayed in the Toolbox, click on the *Paint Bucket* tool while pressing and holding the [Alt] key to find it.

3. Bring up the Tool Control window if it is not shown.

4. In Tool Control window, select an option for gradient colors by pulling down the *Options* list. The "*Fg & Bg*" option generates a gradual transition from the foreground color to the background color. The "*Multicolor*" option uses all the colors you choose in sequence to create the color gradation.

5. Set the color transition manner as *RGB* or *HUE* by the *Mode* pull-down list.

   The *RGB* option changes the colors according to the colors you specified. The HUE option generates the gradation according to the color sequence from the foreground to background colors on the HLS color wheel: *HUE-* option creates color transition in clockwise sequence; and *HUE+* option creates color transition in counterclockwise sequence on the color wheel.

   You can create a "rainbow" color gradation by using the *HUE* mode.

6.   Select the colors you want to use for generating color gradation.

      If you have selected "*Fg & Bg*" option, select the foreground and background colors.

      If you have selected "*Multicolor,*" move the pointer inside the selection frame and click the right mouse button. A dialog box appears for selecting colors used to create the gradation.
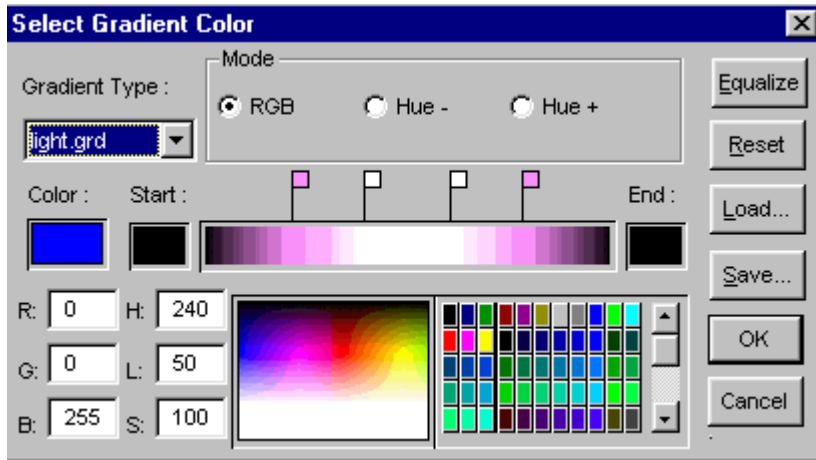

Figure 9-1 Select Gradient Color Dialog Box

      The *Choose* pull-down list includes several pre-defined gradation manners for your application. If you want to define your own color gradation, select *None*.

      In this dialog box, the spectrum and primary palette are displayed for selecting colors. The *Color* color box shows the selected color each time you pick a color from the spectrum or primary palette. If the color you want to choose is not shown in the palette, you can type in the values of *RGB* or *HLS* channels to specify the color.

      The colors in the *Start* and *End* color boxes are automatically loaded from the foreground and background colors in default. You can change the foreground and background colors by dragging colors into the start and end color boxes.

      Click and drag the selected color to the color strip at the middle of the dialog box. The colors you pick will be placed where you drag and release the mouse button. A color flag will appear on the top of the color strip to identify the exact location of the color. These flags can be dragged in the range of the length above the color strip. If you drag a flag out of the range, that color will be removed from the color strip. The colors in the *Color*, *Start* and *End* color boxes can be dragged everywhere into the color strip. The color gradation will be generated as you select the colors.

      You can preview the color gradation generated by each kind of transition manners with the *RGB*, *HUE+* and *HUE-* options in the *Mode* section. This setting is identical with the *Mode* setting in the Tool Control window.

      If you want to make the space equal among the selected colors on the color strip, click on the [Equalize] button to rearrange the position of colors.

      After you are satisfied with the color gradation in the color strip, you can save it with the GRD file extension by clicking the [Save] button and you can recall the gradation later with the [Load] button.

      Click on [OK] when you have finished working on the colors.

7.   Select the shape of gradation as linear, radial or square from the *Shape* pull-down list.

A linear gradation changes color in one direction as specified by the cursor path, while a radial gradation changes color in concentric circles from the center outwards according to the cursor path. A square gradation changes color in concentric squares from the center outwards according to the cursor path.
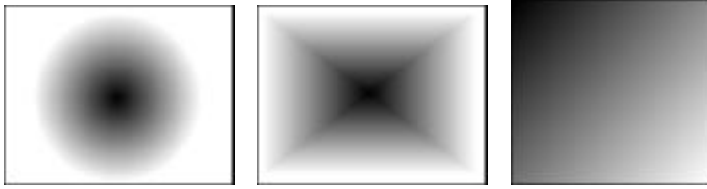

Figure 9-2 Shapes of Color Gradation

8.   Move the mouse pointer to where you want to start the gradation.

9.   Press and hold the left mouse button.

10.   Drag the mouse pointer to the ending point of gradation.

11.   Release the mouse button.

To generate lighting effect:

1.   Use the selectors to outline the area you want the lighting effect generated. If there is no such selection made, the program will make lighting for the whole canvas.

2.   Select the *Gradation* tool.

3.   Bring up the Tool Control window if it is not shown.

4.   In Tool Control window, select the *Lighting* option by pulling down the *Options* list.

5.   Select the foreground and background colors you want to use to generate the gradation of brightness.

The program uses the changes of gray levels between the foreground and background colors to generate the gradation of brightness.

6.   Select the shape of lighting as linear, radial or square from the *Shape* pull-down list.

A linear lighting generates gradation of brightness in one direction as specified by the cursor path, while a radial lighting generates gradation of brightness in concentric circles from the center outwards according to the cursor path. A square lighting generates gradation of brightness in concentric squares from the center outwards according to the cursor path.

7.   Move the mouse pointer to where you want to put the light source.

8.   Press and hold the left mouse button.

9.   Drag the mouse pointer to the ending point of lighting.

10.   Release the mouse button.
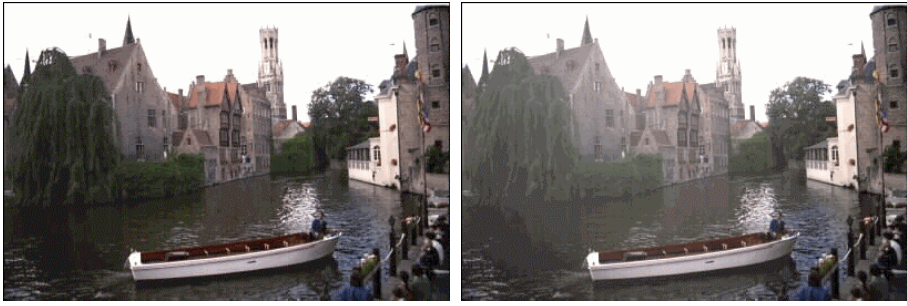
Figure 9-3 an Example of Lighting Effect

Paintbrush

This tool allows you to draw lines free-handily as if you were drawing with a real paintbrush.

To draw with the paintbrush:

1. Click on the *Paintbrush* tool.

2. Set the Tool Control options for the Paintbrush.

    Specify the size, feathering and shape of the paintbrush. With the *Line* tab active, you can set the spacing between efficient painting points and select the style of the line.

3. Place the mouse pointer to the point you want to start tracing your line.

4. Press and hold the left mouse button to paint with the foreground color, or the right mouse button to paint with the background color.

5. Drag the mouse pointer along the line path you want. The line appears along the cursor path as you drag.

6. Release the mouse button where you want the line to end.

Airbrush

The airbrush produces a shading effect on the image by spraying color pixels on the image, conveying to it an impression of depth. The sprayed color is gradually applied towards the edges of the picture so as to make the sprayed color blend in with the surrounding colors' pixels. In other words, the density of sprayed pixels decreases from the middle of the image to its edges. To use the airbrush:

1. Click on the *Airbrush* tool.

2. Set the Tool Control options for the *Airbrush* tool.

    The *Spacing* option determines the space between the sprayed points while you are dragging the mouse.

    The *Pressure* option influences the density and thickness of the drawn line. Use this option to specify the heaviness of coverage by a selected color. The pressure range is from 10% to 100%; the higher the pressure the heavier the coverage with that color.

    With the *Style* tab active, you can select, from the *Option* list box, the shading effect produced by the *Airbrush* tool. The *Spatter* option generates splashed color pixels, and the *Fatting* option produces smooth gradations of foreground color from the middle of line toward the edge.

Fatting Effect   *Spatter Effect*
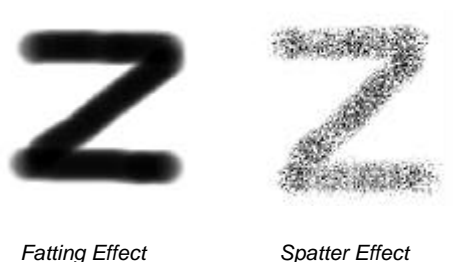
3. Drag the pointer across the image to airbrush. Use the left mouse button to drag for applying the foreground color, and the right mouse button for applying the background color.

    The speed at which you drag the pointer will affect the spray's appearance.

4. Release the mouse button.

Text ![icon]

You can enter text anywhere on an image with the *Text* tool. The software supports all the fonts installed in Windows 95.

The *Text* tool provides options for selecting fonts, font styles, and character sizes. After inputting text, you can reshape it by applying text envelopes to create variations on the text shape.

To enter the text:

1. Click on the *Text* tool. If it is not displayed in the Toolbox, click on the *Text Along Path* tool while pressing and holding the [Alt] key to find it.

2. Bring up the Tool Control options if it is not displayed on screen.

3. Click on the down arrow in *Envelop* list box to display a list of envelope shapes and select the one you want to use.

   If none of the envelopes in the list are similar to the text shape you need, you may select ![icon] (freehand reshaping) to define your own envelope.

   If you do not need to apply an envelop for the text, select the ![icon] option.

4. In the *Control* option, choose *Envelop* for retaining the shape of the envelop you have selected or *Control* for reforming the text shape freely when you will further adjust the text shape later.

5. If you enable the *Anti-alias* option, the outline of the text characters will automatically be smoothed.

6. Move the cursor to where you want the text to start and click. A *Font* dialog box appears.
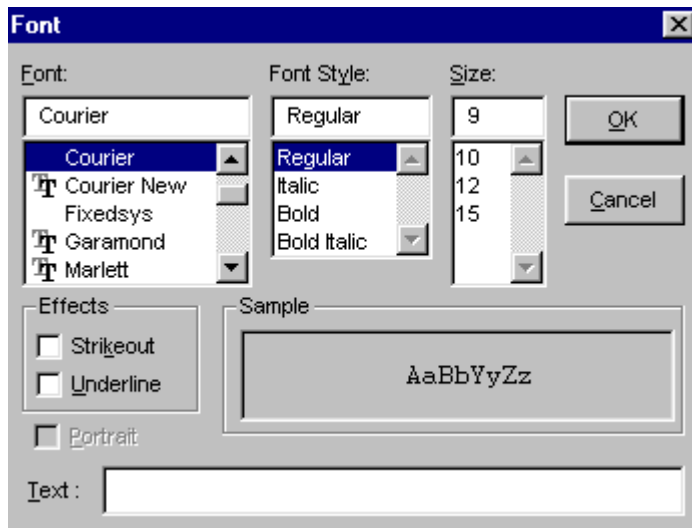

Figure 9-4 Font Dialog Box

7. Select the font, the font style, and the character size. The *Sample* box will display an example of the selection you made.

8. In the *Effects* window, select whether you want the text to be stroked or underlined.

9. If you want the text character to be placed vertically, enable the *Portrait* option.

10. Enter the text in the *Text* box.

11. Click on [OK] to input the text.

12. A rectangle with eight square nodes around the text appears on the canvas. Drag the nodes to change the shape and size of the text.
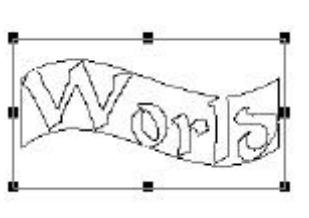
If you have selected *Control* in step 4, four nodes will be displayed on the corners of the rectangle, each with two control points (which will appear when you click on any of the nodes), for your further adjustment of the text shape. Use the hand pointer to drag the nodes and control points, and form your text envelope.

Note: *Hold the [Shift] key while dragging the nodes on the corners to resize the rectangle as square; hold the [Ctrl] key while dragging the nodes on the corners to change the shape of the rectangle. If you are in Control mode, you can not use the [Ctrl] key after you have irregularly changed the shape of the envelope.*

13. If you have selected freehand reshaping, after you have completed adjusting the text shape, you can save the envelope for later usage. Select *Envelop* tab from the Tool Control options and click on Save Envelop]. The envelop is saved with **ELP** file extension. You may recall the envelop later with the [Load Envelop] button when you select freehand reshaping.

14. Click the right mouse button to fix the text shape.

Note: *The added text will be automatically outlined for further edition. After you finish, abandon the selection to fix the text.*

Text Along Path

This tool allows you to insert text on the image and place the text along a defined curve path. To complete this effect, you must define a curve path and adjust the text position along the path.

To generate text along path:

1. Click on the *Text Along Path* tool. If it is not displayed in the Toolbox, click on the *Text* tool while pressing and holding the [Alt] key to find it.

2. Bring up the Tool Control options if it is not displayed on screen.

3. Click at the point you want to start the text in the image to enter the text as you would do when using the *Text* tool.

4. With the *Option* tab active, enable the *Phantom* option to display the text reference frame while adjusting the path and position.

5. Drag the *StartPos* slider to set the starting position of the first text character along the path.

6. Drag the *Spacing* slider to set the spacing between text characters.

7. Activate the *Text* tab.

8. From the *Orientation* list box, select the text to be placed vertically (*upright*) or rotated according to the curve path.
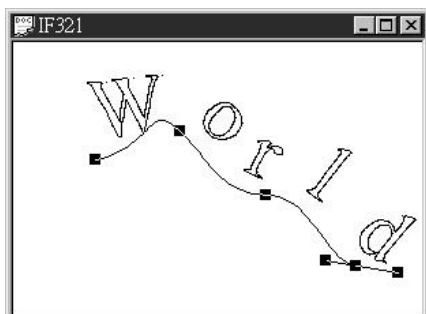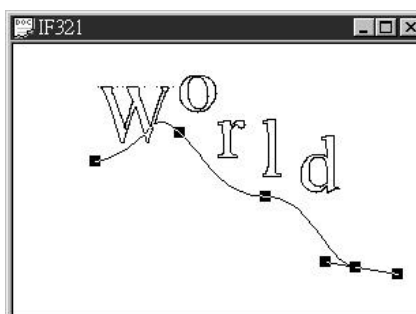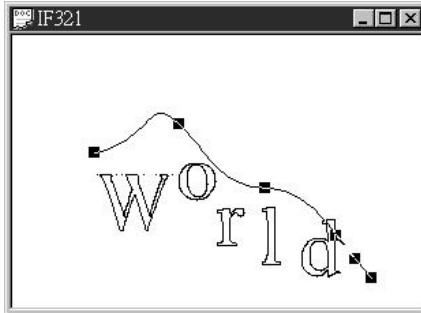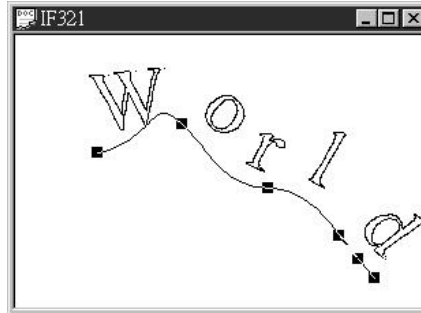
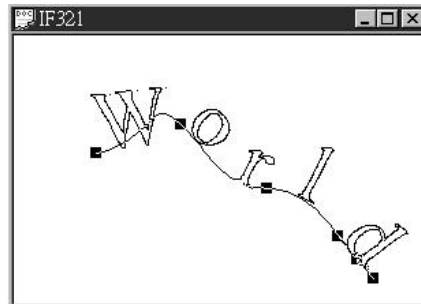|	
Rotate	*Upright*

9.   From the *Alignment* list box, select the text to be aligned with the curve path by the top, bottom or baseline of the text.

Align Top   *Align Bottom*

Align Baseline

10. If you enable the *Anti-alias* option, the outline of the text characters will automatically be smoothed.

11. Define the curve path as you would do when using the *Curve* tool.

12. Before clicking the right mouse button, you can adjust the text position and path by changing the shape of the curve path or modifying the settings in the Tool Control options. With the *Option* tab active, click on the [Text] button to modify the text if it is necessary.

13. Click the right mouse button to complete the process.

Note: The added text will be automatically outlined for further edition. After you finish, abandon the selection to fix the text.

Stamp

The *Stamp* tool performs two different functions: one is the stamp function to copy (stamp) a portion of image to another location that you specify with the cursor, and the other is the cloning feature to trace the entire or part of an image on another or the same canvas with specific shape, transparency and feathering options.
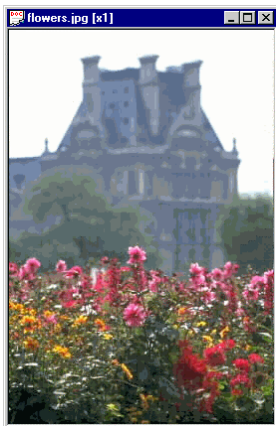
The clone function can create different effects with one image, combine several pieces of images into one, and generate tiled pattern from an image.

To use the stamp:

1. Click on the *Stamp* tool.

2. Select the *Mode* tab in the Tool Control window.

3. Select to use the *Stamp* or *Clone* function from the *Mode* option.

To apply the Stamp function:

1. Select the *Option* tab in Tool Control and set the size of the stamp to copy the image by the *Size* option.

2. Set the shape and feather value you want for the stamp.

3. Move the cursor to the selected area you want to copy.

4. Hold the [Shift] key and click. The stamp has picked up a copy of the image selection.

5. Move to where on the canvas you want to stamp and click.
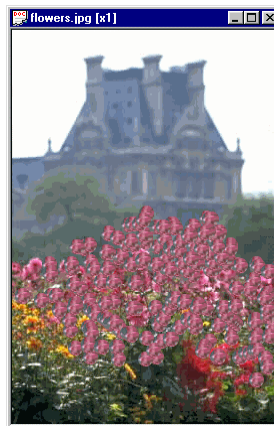
| *Original Image* | *Stamp Effect* |

To apply the Clone function:

1. Select the *Option* tab and set the size used for each movement of cloning by the *Size* option.

2. Set the shape and feather value you want.

Different sizes and shapes generate different effects of an image.

3. To use the *Clone* function to trace one copy of the image, activate the *Mode* tab and select *Single* in the *Source* option. If you want to generate tiled pattern with the image, select *Tile* in this option.

Note: *The image used for tiled pattern is usually only a small portion of the image. Before proceeding on to the next step, you should first select the portion of image used for tiled pattern.*

4. Move the cursor to the starting point on the source image you want to trace.

5. Hold the [Shift] key and click.

6. Move the cursor to the destination canvas where you want to start tracing the image.

7. Click and drag the mouse to trace the image until the image appears in the area you want to fill. A "+" sign keeps moving in the source image while you are moving the mouse, which illustrates the current position in the source image being traced.

Original Image

Single Cloning

Tile Cloning

Image Hose

This tool sprays a series of pre-defined images along your cursor path, like water (the images) flowing out of a hose (the mouse cursor). This function can easily fill the canvas with a set of images in sequence or randomly to achieve a special art design.

Five sets of images are provided with this tool. You can also define your own sets of images to replace the default ones.

To apply the *Image Hose*:

1. Select the *Image Hose* tool.

2. Choose a set of pre-defined images from the *Source* pull-down list in the Tool Control options.

    If you want to define your own set of images, read the instructions below.

3. Select *Linear, Random* or *Fixedness* in the *Direction* option to spray the set of images in sequence, randomly or fixed on the first grid.

4. Move the mouse pointer to where you want to start spraying the images.

5. Click and drag the mouse to paint the images on the canvas.

    If you do not want the sprayed images overlapped with each other, hold down the [Shift] key while dragging the mouse.

6. Release the mouse button.
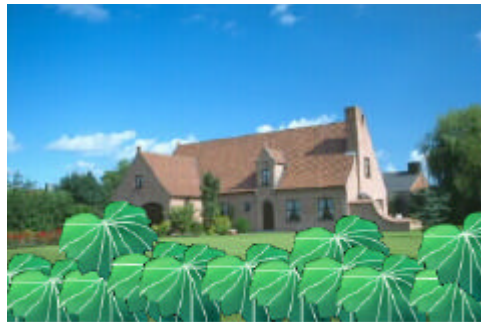
Defining Image Hose

To use your own set of images for _Image Hose_, you must first create the set of images and then replace one of the default sources.

To define a set of images:

1. Create the set of images you want to use for _Image Hose_ on a canvas as you would create and edit any image.

2. Place the series of images in grids and note the grid size (width and height) while arranging the images.

3. Use the _Save As_ command in the _File_ menu to save the canvas as you would for any image.

4. In the _Source_ option, select a set of source to be defined with the saved images.

5. Click the right mouse button in the image window. A dialog box appears.
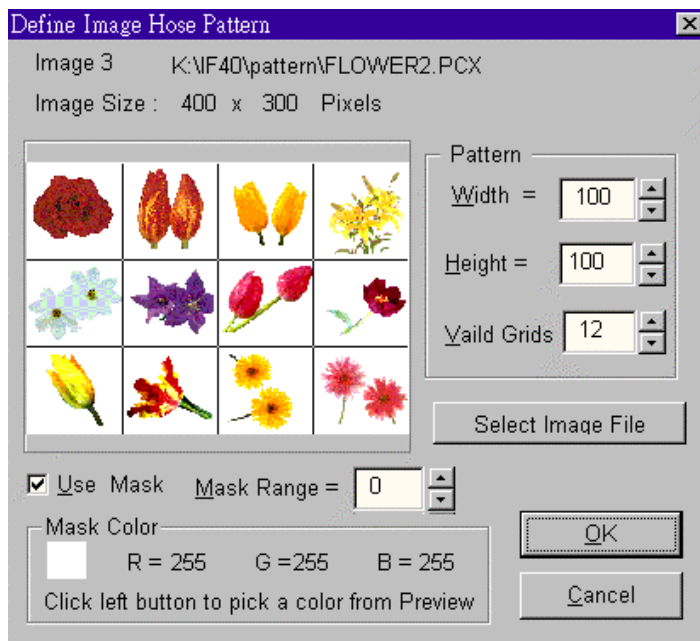

Figure 9-5 Define Image Hose Pattern Dialog Box

Whenever you want to replace a set of pre-defined source, you may arouse this dialog box while using the tool.

6.   The upper left area of the dialog box displays the current image file and its size used for the image hose. Click on the [Select Image File] button at the middle right of the dialog box to select the file you have created before.

The selected image will appears in the preview window with default grid lines.

7.   Set the grid size according to the width and height you noted on step 2 in the *Width* and *Height* options. The grid lines in the preview window changes according to your setting.

8.   Enable or disable the *Use Mask* option.

When a mask is used, you should define a color and the color range (*Mask Range*) for producing the mask. The area of mask color in the image will become 100% transparent when you spray the images on the canvas.

Mask Not Applied   *Mask Applied*

If you want to use a mask, move the pointer into the preview window and click on the color you want to become transparent. The selected color is shown in the color box of *Mask Color* section.

9.   Set the *Valid Grid* option to specify the image in grids valid for image hose. The valid source for using with image hose are the first few grids from the upper left to the lower right counting row by row specified in this option.

10. Click on the [OK] button.

Texture Brush

This tool coats the canvas surface by a specified texture pattern along the cursor path, which produces an outlook for the image as if the canvas were made up with that specific material. The foreground color you select will be applied to the texture pattern.

Various texture pattern files are provided in the \PENBRUSH sub-directory of the ImageFolio program directory, such as stones, cloths, water waves, sands, etc. You can generate your own texture pattern by creating the pattern as a bitmap file before using this tool.

To apply a texture with *Texture Brush*:

1. Select the *Texture Brush* tool.

2. Set the size, shape and feathering options in the Tool Control window.

3. Select the foreground color you want to use with the texture pattern.

4. Move the pointer into the image and click the right mouse button. The *Select Texture* dialog box appears.
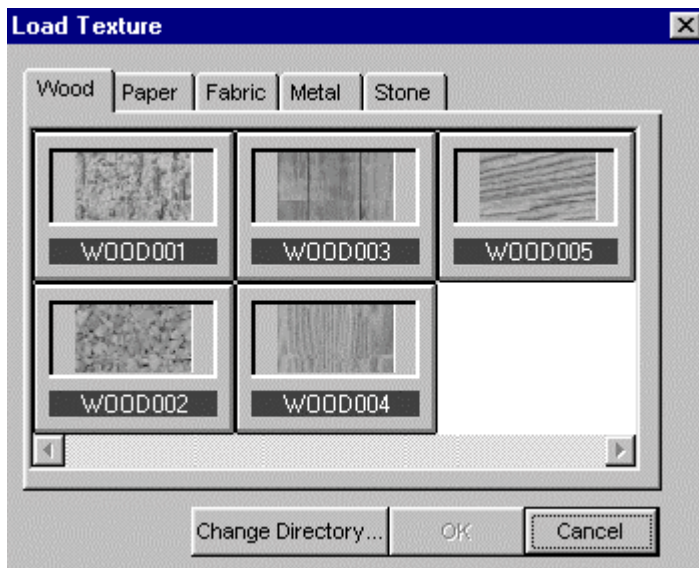
Figure 9-6 Select Texture Dialog box

5. Choose a texture pattern you want. If you want to use a pattern defined by yourself, click on the [Change Directory] button to locate the pattern file.

6. When you have selected the texture pattern you need, click on the [OK] button to close the dialog box.

7. Move the mouse pointer to where you want to start applying the texture.

8. Click and drag the mouse to paint the texture on the canvas.

9. Release the mouse button.

Eraser

This tool erases all the pixels it passes on except for those of the background color. That is, it paints the portion of image along the cursor path with background color. Because you can set the transparency of erasing, the image can look as if blurred while the cursor passes through it. To use the *Eraser*:

1. Click on the *Eraser* tool.

2. Bring up the Tool Control options if it is not displayed currently.

3. Set the eraser size for processing. If you want to erase foreground color only, select *Fg. Color* in Options; if not, select *All Colors* instead.

4. Move the pointer to the image.

5. Press and hold the left mouse button as you drag it over any part of the image you want to use the eraser on.

6. Release the mouse button.

Pan

This tool enables you to move an image within its own canvas. If the actual image is larger than the canvas, and you want to edit some part of it that is unseen on screen because of the limits set by the canvas, *Pan* allows you to bring into editing view any of the unseen parts. Using *Pan* is similar to using the scroll bars except that you can move your image horizontally and vertically simultaneously within the canvas. To use the *Pan*:

1. Click on the *Pan* tool. If it is not displayed in the Toolbox, click on the *Zoom* or *Eyedropper* tool while pressing and holding the [Alt] key to find it.

2. Place the mouse pointer on the image.

3. Press and hold the mouse as you drag the image until you can see the portion of image you want to edit.

4. Release the mouse button.

Zoom Tool

This tool enables you to obtain a magnified or a reduced view of the image. Such function is convenient when you want to edit or enhance the image with precision at any ratio from 16 times to 1/16 of the image size.

To magnify or reduce the image with the *Zoom* tool, do the following:

1. Click on the *Zoom* tool. If it is not displayed in the Toolbox, click on the *Pan* or *Eyedropper* tool while pressing and holding the [Alt] key to find it.

2. Move the mouse cursor to the position you want to zoom in on the image canvas.

3. Click the left mouse button to magnify the image; hold the [Ctrl] key and click to reduce the image.

4. Click the right mouse button to view the image in its original size.

    You map also magnify a specific portion of the image in the canvas for precision editing. This is useful when you want to concentrate your editing on certain objects without viewing other parts of the image canvas. To do this, move your mouse cursor to the starting point of the specific portion selected to be magnified, hold the [Shift] key, drag the mouse pointer over the portion, and release the mouse button when you have dragged to the ending point of the portion.

Note: A shortcut method to zoom in and out is to press the [+] (magnifying by one level) or [-] (reducing by one level) key on the keyboard. This method can be utilized at any time no matter which tool you are actually using.

Eyedropper

The eyedropper picks up the color from a pixel in the image. This means that even though you may not be sure of which color it corresponds to on your palette, you can still select the exact color you want in the image.

To pick a color, select the *Eyedropper* tool from the Toolbox (if it is not displayed in the Toolbox, click on the *Pan* or *Zoom* tool while pressing and holding the [Alt] key to find it) and click on the color you want to pick from the image (click the left button to select a foreground color, and click the right button to select a background color).

Blur/Sharpen Brush

The *Blur/Sharpen Brush* enables you to create a blurred or sharp visual effect on the image along the cursor path, by decreasing or increasing the color contrast values of abutting pixels.

To blur or sharpen the image:

1. Click on the *Blur/Sharpen Brush* tool. If it is not displayed in the Toolbox, click on the *Brightness/Darkness Brush* or *Hue/Saturation Brush* tool while pressing and holding the [Alt] key to find it.

2. Set the size and shape in the Tool Control options.

3. Move the mouse pointer to the starting point of the area to blur or sharpen.

4. Hold and drag the mouse button: the left button to blur and the right one to sharpen the image.

5. Release the mouse button.

Brightness/Darkness Brush

The *Brightness/Darkness Brush* enables you to brighten or darken the image along the cursor path.

To use this tool:

1. Click on the *Brightness/Darkness Brush* tool. If it is not displayed in the Toolbox, click on the *Blur/Sharpen Brush* or *Hue/Saturation Brush* tool while pressing and holding the [Alt] key to find it.

2. Set the size and shape in the Tool Control options.

3. Move the mouse cursor to the starting point of the area to be brightened or darkened.

4. Hold and drag the mouse button: the left button to brighten and the right one to darken the image.

5. Release the mouse button.

Hue/Saturation Brush ![icon]

This tool paints on your image using translucent shades of a color you choose. The original shape of the image is not affected. Only the color along the cursor path is replaced with the selected shade of color. The effect produced is that you will see the image as if through a piece of color tinted glass.

If you change only the hue of the image, some color shades of the original image are retained. If you change the saturation at the same time, full saturation of the selected color can also be achieved.

To paint with the Hue/Saturation Brush:

1. Click on the *Hue/Saturation Brush* tool. If it is not displayed in the Toolbox, click on the *Brightness/Darkness Brush* or *Blur/Sharpen Brush* tool while pressing and holding the [Alt] key to find it.

2. Invoke the Tool Control options if it is not displayed on screen.

3. Set the size and shape for the brush. If you need to change the saturation, select *Hue & Sat* in *Mode* Option; if not, select *Hue Only* instead.

4. Move your mouse pointer to the starting point of painting.

5. Click and drag the mouse over the painting path.

6. Release the mouse button.

Smudge ![icon]

The *Smudge* tool is used to randomly mix pixels in an area. It works like an artist who mixes colors with chalk or pastels. It can add a textured look to a picture.

To use the *Smudge* tool:

1. Select the *Smudge* tool.

2. Set the size, shape and spacing for the tool in the Tool Control options.

   The *Spacing* option determines the mixing level of smudging.

3. Move the mouse pointer to where you want to start smudging.

4. Click and drag the mouse to smudge the canvas.

5. Release the mouse button.
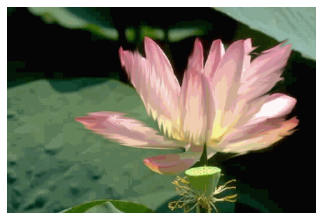
*Original Image*   *Smudged Image*

Free-hand Rescale

This tool enables you to magnify or reduce the dimensions of a selected area on the image. Before using this function, you must first select a specific area for processing. To rescale a portion of the image:

1. Select the portion of image you want to rescale with the selectors.

2. Click on the *Free-hand Rescale* tool. If it is not displayed in the Toolbox, click on the *Free-hand Rotate* tool while pressing and holding the [Alt] key to find it.

   A rectangle with eight small square nodes on its corners and at the middle of its sides appears around the selected area.
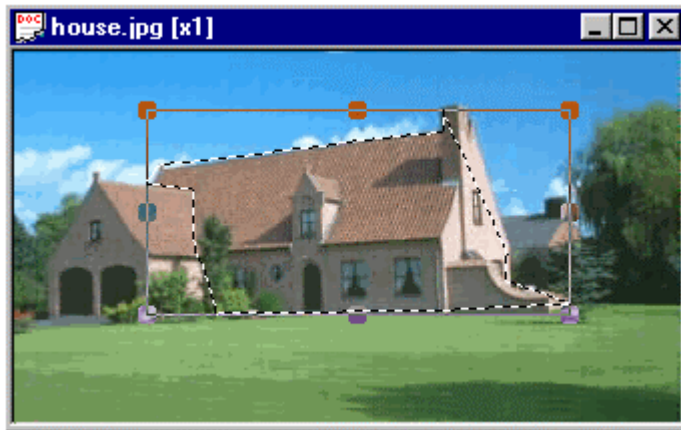
3. Use the mouse to drag a node from any of the corners to magnify or reduce the selected area. Or drag a node on any side of the rectangle to rescale the image horizontally or vertically: a node from the top or bottom side to rescale vertically, and a node from the left or right side to rescale horizontally.

   You can proportionally rescale the selected image by pressing and holding the [Shift] key while dragging the nodes on the corners of the rectangle around the selection outline.

4. Release the mouse button.

Free-hand Rotate

This tool allows you to rotate a selected portion of image to any angle. To rotate the image:

1. Select the portion in the image to be rotated with the selectors.

2. Click on the *Free-hand Rotate* tool. If it is not displayed in the Toolbox, click on the *Free-hand Rescale* tool while pressing and holding the [Alt] key to find it.

   Four square nodes appear on the four corners of the rectangular area containing the selected portion.
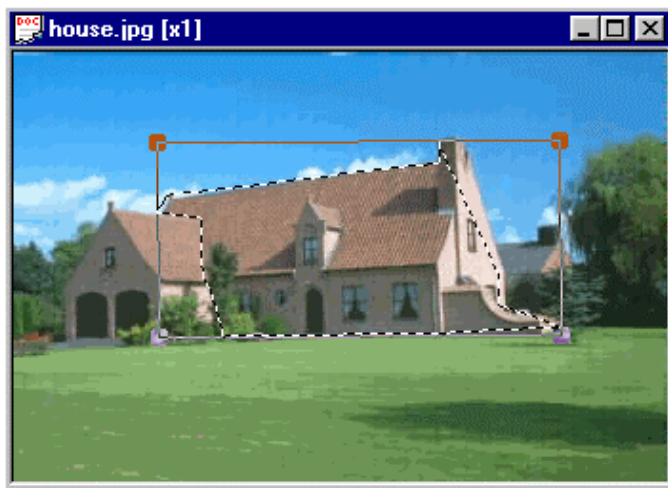
3. Move the mouse pointer to any of the nodes.

4. Click and drag the node to rotate the image.

Hold the [Shift] key while dragging the node to rotate the image in 45 degree increments.

The status bar displays the rotating degree when you are dragging the nodes.

5. Release the mouse button.

Slant Tool

This tool distorts the image of a selected portion by extending it to a parallelogram, a trapezoid, a perspective view or an irregular shape (freehand distortion).

To use the *Slant* tool:

1. Select the portion of image you want to apply the *Slant* tool.

2. Click on the *Slant* icon. A rectangle with four small square nodes on its corners appears around the selected area.

3. Select the shape you want to change the image as parallelogram, perspective, trapezoid or freehand distortion in the Tool Control options.
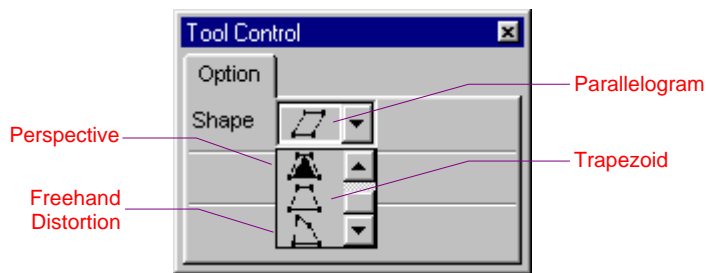
4. Drag the nodes on the rectangle to set the shape.

If you have selected to change the image as parallel, you may drag the nodes horizontally or vertically but must in the same direction. Once you have dragged the first node horizontally, you can only drag all the nodes horizontally later except that you restart the tool (select another tool and then re-select this tool), and vice versa.

If you have selected to change the image as perspective, trapezoid or freehand distortion, you can not drag a node out of the range exceeding its opposite sides.

5. Release the mouse button.
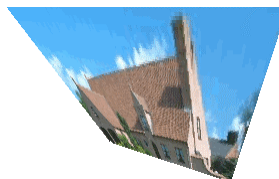
10 Masks and Selections

On the image canvas, you may select a specific portion of image for editing work (such as copy, delete, paint, etc.) without affecting other portions of the image. Use the selectors in the Toolbox to select the portion of image to be edited.

The outlines made by the selectors on an image compose what is termed an editing mask. When you move and edit the selected portion, a mask is formed. This mask can be applied to other images. In other words, you can save and load the shape of a specific outline (the mask) for use with other images.

Selecting on the Images

The tools used to select images, called selectors, are provided in the Toolbox. These powerful selection tools enables you to outline any irregularities on the objects in the images.

Rectangle Selector

This selector allows you to make a rectangular selection of a portion of image. You may choose to make the selection from any of the corners or the center. To select a rectangular portion:

1. Click on the *Rectangle Selector*. If it is not displayed in the Toolbox, click on the *Ellipse Selector* while pressing and holding the [Alt] key to find it.

2. Move the mouse pointer to the selected starting point (one of its corners or its center) of the rectangle for making selection.

3. Press and hold the left mouse button if you are starting from one of the corners. If you are starting from the center, hold down the [Alt] key with the left mouse button.

4. Drag the pointer diagonally to the opposite corner of the area you want to capture as rectangle.

5. Release the mouse button. The selected portion of image appears in a rectangular frame.

    To select a square portion, press and hold the [Shift] key while dragging the mouse.

Ellipse Selector

This selector allows you to select an elliptical portion of image for editing. You can start to make the selection from any point on its rim or its center. To select an elliptical portion:

1. Click on the *Ellipse Selector*. If it is not displayed currently, clicking on the *Rectangle Selector* icon while holding the [Alt] key changes the icon into the *Ellipse Selector*.

2. Move your mouse pointer to the starting point of the ellipse for making selection (any point of its rim or its center).

3. Press and hold the left mouse button if you are starting from its rim. If you are starting from the center, hold down the [Alt] key with the left mouse button.

4. Drag the pointer diagonally starting from one chosen point to form an elliptical frame around the area you want to capture.

5. Release the mouse button at the opposite point of your diagonal trace.

    To select a circular portion, hold down the [Shift] key while dragging the mouse.

Free-hand Selector

This selector allows you to select an irregularly shaped portion manually anywhere on the image. You can use it to select an object with irregular or sharp edges. To select an irregular portion:

1. Click on the Free-hand Selector.

2. Move the pointer to the beginning of the irregular edge.

3. Click and hold the left mouse button.

4. Drag the pointer along the edge to select.

5. When you reach the starting point of a sharp part of the edge, release the mouse button. As you move the mouse, a straight line appears and stretches out following your movement to capture the sharp part of the edge.

6. Move the pointer to the end of the sharp side and click.

7. Keep on selecting using the same procedure until the entire object has been selected.

8. Double click to finish the selection.

Path Selector

The *Path Selector* defines the selection outline by framing an enclosed area on the image with curve or line segments. The operating method is similar with that of the *Curve* tool. The difference is that the *Curve* tool draws real curves and the *Path Selector* only draws selection outlines.

To define a selection outline with the *Path Selector*:

1. Click on the *Path Selector*.

2. Place the mouse pointer to where you want to start defining your curve.

3. Click the left mouse button to set the beginning of the curve. Do not release the mouse button.

4. Drag the mouse pointer in the direction you want the curve generated. As you drag, two control points appear and move in opposite directions from the node. The distance between the control points and the node determines the height or depth of the curve. The angle of the control points determines the curve's slope.
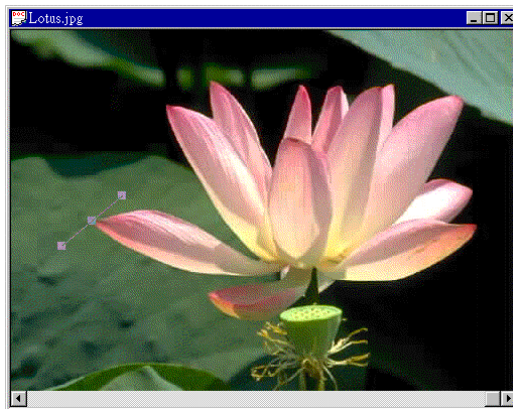
5. When the control points are in the desired position, release the mouse button.

6. Repeat step 3 to set the other end of the first curve segment you want to create. A second node appears and connected to the first.

7. Drag to generate two control points for this node.
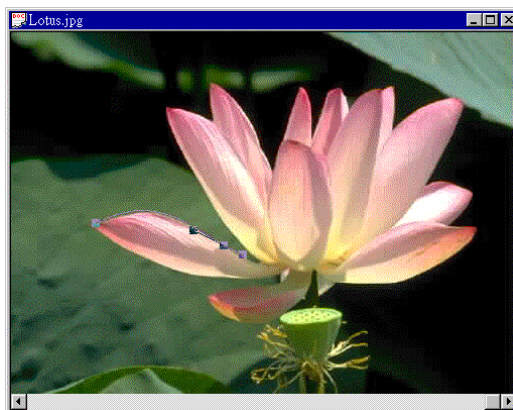
8. Release the mouse button. You may drag the nodes and control points to adjust the shape of your curve segment.

    If you did not drag from the nodes to generate control points in previous steps, you may hold the [Shift] key and drag from the nodes to create control points anytime.

9. Click and drag the pointer outside the nodes and control points to form another adjacent segment of curve linking with the first one. Repeat steps 6 through 8 to complete all the segments in the curve you want to create.
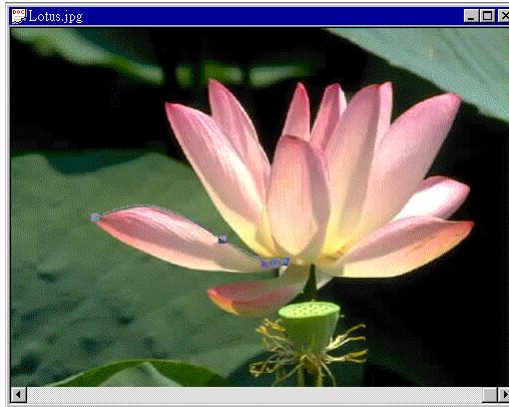
    Before fixing the curve segments, you can click on any node to activate the control points of the curve segment connected and adjust the curve.

    To remove the last node generated, hold the [Ctrl] key and click the left mouse button.

10. When you are satisfied with the shape of your curve, click the right mouse button to create an enclosed selection frame with the curve segments. A new segment is generated connecting from the last node to the first one.
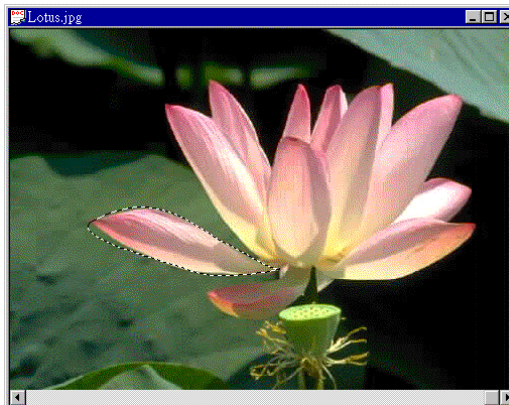
Note: If you did not drag to generate control points for the nodes, the drawing will become a straight line. Hence you can use this tool to produce selection frames composed of adjacent segments of straight lines.

Selector Brush

This tool works like a free-hand brush and defines enclosed selections according to the width and shape the brush is set at. It thus enables you to define the enclosure's outlines. To draw an enclosed frame with the brush set at the required width, follow these steps:

1. Click on the *Selector Brush* icon.

2. Set the brush size (its width will define the width of the frame you will select) and shape from the Tool Control options.

3. Move the mouse pointer to the point you want to start selecting a portion of image with the brush.

4. Press and hold the left mouse button as you move the mouse pointer to draw your selection of an image portion with the activated brush.

   Press the [Ctrl] key with the left mouse button while going over the same area if you want to deselect the area just drawn.
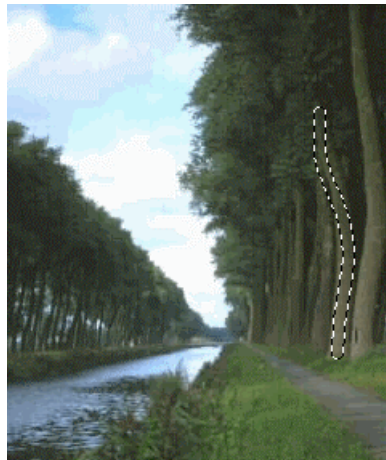
> *Note:* If a selection has been made before you want to further add a selected area with the Selector Brush, start drawing outside the original selection frame, or the selected portion will be moved.

5. Release the mouse button.

Move Tool

After a selection is defined, this tool allows you to move the selected image or selection outline to other parts of an image or another canvas. In a multi-layer image, it can be used to rapidly activate the layer containing the object clicked by the user.

To use the *Move* tool:

1. Click on the *Move* icon.

2. Move the mouse pointer into the selected frame. The shape of the mouse pointer changes to a four-arrowed cross.

3. Move the selected image or selection frame.

    If you want to move the selected image, press and hold the left mouse button.

    If you want to move the selection frame, hold down the [Alt] key while pressing the left mouse button.

4. Drag the selected image or selection frame to a new location.

    If you drag it out of the canvas, the selected image or selection frame will be moved to another canvas or a new one, depending on where you drop it.

5. Release the mouse button.

    In a multi-layer image, you can click on any object with this tool to activate the layer while holding the [Ctrl] key. Please refer to the *Layer Management* chapter for details.

Magic Wand

This tool automatically defines the outline of the area to be selected according to a specific color range set by the user. It selects a portion of image from the color pixels or from the color definition of that image portion. This function is useful for quick selection of an area of same color, or of an area that falls within a specific color range set by the user.

1. Click on the *Magic Wand* icon.

2. Set the options in the Tool Control window.

    The *Range* option is specially designed to set the range of a selected color. If the color range is set to 1, the magic wand will only select from the image the color pixels exactly the same as the one you picked for the tool's effect. When you set a higher value in *Range* (maximum of 255), the selector will also affect different tints in the area selected according to the color pixels that correspond to your settings. This is very useful when you want to select for editing an area with different tints of the same color.

3. Click on the color to use in defining the selection of an area of the image.

More on Selections

By the *Feather* control in the Tool Control option, you may select the image with its edge blurred and diffused into the background color so as to produce a feeling of depth between the selected image and its

canvas. Drag the slider to set the level of feathering by percentage before defining the selection frame by the selection tools.

To further add a portion to the portion of image you just previously selected, press and hold the [Shift] key while selecting the area of the image with the selectors.

To exclude a portion from your previous selection, press and hold the [Ctrl] key while selecting the area to be excluded with the selectors.

To abandon the selection altogether, do one of the following:

Click the left mouse button outside of the selection frame when the *Rectangle* or *Ellipse Selector* is active.

Choose the *None* command from the *Select* menu, or click on its icon on the tool bar.

To move a selected portion of the image without using the *Move* tool:

1. Move the mouse pointer inside the selected area while using a selector.

2. Click and drag the selection to the desired location.

3. Release the mouse button.

Dealing with Selection Frames

All the commands about the editing of masks and selections are included in the *Select* menu.

You may click the right mouse button in the image window to invoke a pop-up menu for options on mask and selection. These options include *Save Mask*, *Load Mask*, *Invert Selection*, *Discard Floating*, *Make Floating*, etc. This function gives you more convenience on editing selections.

The following subsections describe the workings and functions of selection frames.

Load Mask

You can load a pre-defined mask for the usage of any image.

To load a mask:

1. Open the *Select* menu and select the *Load Mask* command. The *Load Mask* dialog box appears.
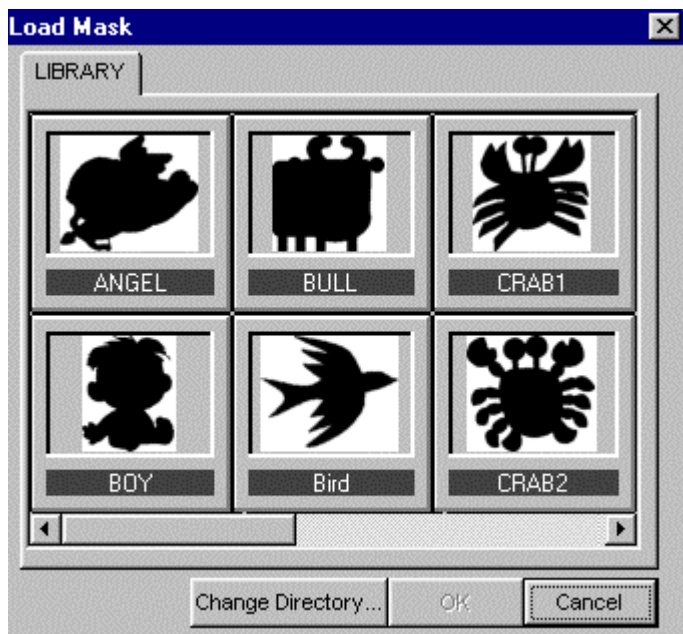
2. Select the mask you want to load and click on the [OK] button. The selected mask will be loaded in at the same location on the current image as the location it was originally saved at.

Save Mask

A selection frame can be saved with the **MSK** file extension for later usage on any image.

To save a mask:

1. Open the *Select* menu and select the *Save Mask* command. The *Save Mask* dialog box appears.
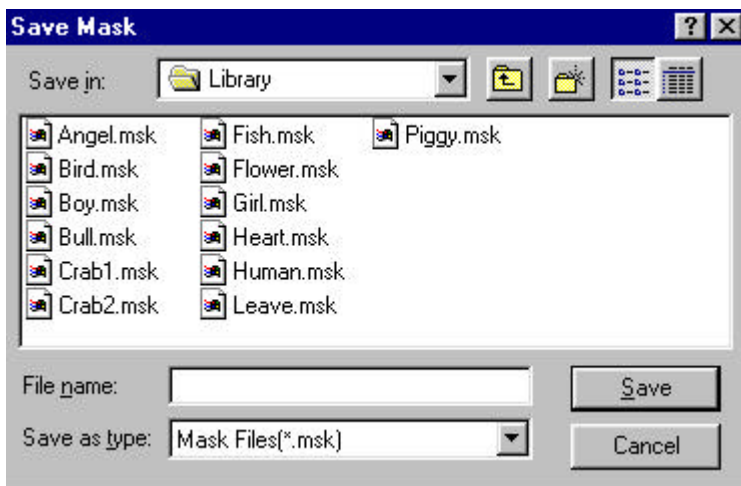
2. Select the directory you want the mask to be saved in and enter a filename for the mask. The mask file should be specified with a **.MSK** extension.

3. Click on the [OK] button.

Selecting an Entire Image

The *All* command enables you to select an entire image. To do so, use the *All* menu command or click on its icon on the tool bar.

Abandoning Selection

Before having made any change to a selected portion, you can abandon the selection by using the *None* command. After having made changes to a selected portion, you can also use the *None* command to fix the floating image on canvas.

To abandon the selection you can also simply click on the *Select None* icon on the tool bar, click the left mouse button outside of the selection, or make another selection elsewhere in the image editing window.

Invert Selection

A selected area is normally an area enclosed by a selection frame and editing is usually done in the selected area. But you can also invert the selection, which means to have a selected area outside of the selection frame and edit that area outside of the frame. To invert the selection:

1. Use a selector to select a portion of the image.

2. Open the *Select* menu and select the *Invert* command, or click on the *Invert Selection* icon on the tool bar.

   Click again to reverse the selection back to the enclosed area inside the outline(s).

Make Floating

The **Floating** feature allows you to work on a selected portion of image without affecting the original image. You can move and edit the selected portion, then merge it back onto the original image.

Make Floating makes your selection a floating image for further editing. The canvas beneath the floating image will be filled with the background color.

Note: *The software automatically makes the selected portion of image floating as long as you move or edit the selected image.*

Discard Floating

This is used to discard changes you have made to a selected portion and remove the floating image. Use the *Discard Floating* command to remove the floating selection.

Copy Floating

Copy Floating enables you to keep the floating image after you have fixed the selection on the canvas.

The shortcut for *Copy Floating* is to click and drag a floating image while pressing and holding the [Alt] key.

Note: *If you want to keep the original image and modify only the floating image, execute **Copy Floating** immediately after you make the selection before you make any change to the floating image or move it.*

11 Layer Management

The software supports multiple layers in an image for complicated editing of multiple objects and masks composition.

Just imagine that the canvas of the image is the background of several transparent sheets with the same size of the canvas, each containing organized object(s). Through the part of the transparent sheets that has nothing or has objects with certain level of transparency, the background can be revealed. You can edit the object(s) on individual transparent sheet without affecting others. When you place the sheets together, the entire image is composed of all the objects on the transparent sheets though probably some part of the objects is not visible because of the overlapping objects on other sheets.

The pieces of transparent sheets are termed "layers." A layer can hold both image and mask. The transparent level of a layer determines how the pixels on the layer mix with those of other layers and the background.

An image with multiple layers should be stored with the **POF** file extension in Presto! ImageFolio. Only the true-color or indexed 256 gray-scaled images can utilize the multi-layer function.

Layer Manager

To manage multi-layer images, you need the Layer Manager provided in the software. To invoke the Layer Manager, open the *View* menu and select the *Layer Manager* option from the *Layout* pop-up menu, or press the [F10] key.
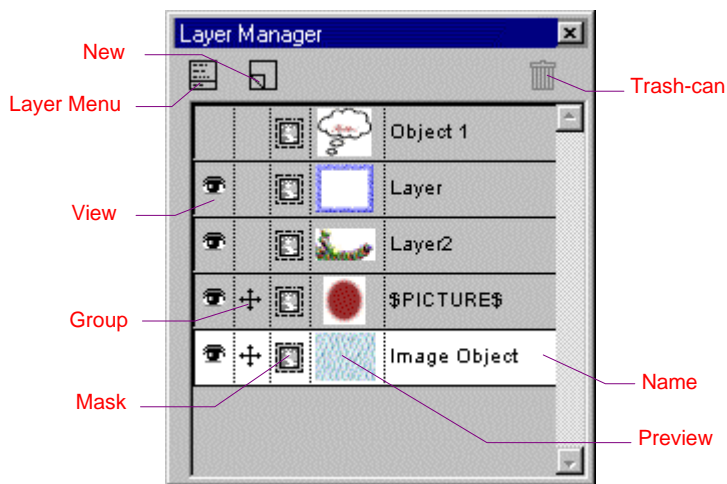
Figure 11-1 Layer Manager

The background of the canvas is always the lowest layer and shown at the very bottom of all the layers in the Layer Manager. The other layers are arranged from low to high by their overlapping order from back to front. The highlighted layer is currently selected.

The View column in the Layer Manager sets the display status of the layers. When an eye icon appears in the grid, the layer is displayed. Click in the grid to toggle the displaying of the layer.

The Group column indicates the grouping status of the layers. Clicking in any grid of the column groups the corresponding layer with the one currently selected.

The Mask column indicates the mask contained in a layer.

The Name column holds the name of a layer; and the Preview column displays a shrunken copy of the image on the layer. Because the shrunken image will continuously reflect the change while you are editing the image, the processing speed will become slower. If you want to speed up the processing, you may hide the Preview column by clicking the right mouse button inside the Layer Manager and disabling the *Show Preview* command in the pop-up menu.

When you click on the Layer Menu icon, a list of commands pops up for your selection of managing layers.

```
New
Paste as New Layer
Duplicate
Make Object to Layer
Delete

Make Layer to Mask
Copy Mask

Option...
Interleave

Merge
Merge All
```

Figure 11-2 Layer Menu

Selecting Layers

A layer can be selected by clicking on the Name or Preview column in the Layer Manager. When a layer is selected, the entire row of the layer is highlighted. All the editing and processing operations will be applied only on that layer, except that some of the commands are meant to apply to the whole image, such as *Change Image*, *Expand Canvas*, the commands under the *View* menu, *Duplicate Document*, etc.

While editing a selected layer, you can decide whether to view the other layers for convenience on editing.

Layer Option

Whenever you double click in the Preview or Name column of a layer, or select the *Layer Option* command from the Layer menu, the *Layer Option* dialog box pops up.

```
Layer Option                    [X]

Name: | Layer        |    [ OK ]

 ─Transparency─────
  0%          100%
  |──────────|    [ 0 ]     [ Cancel ]
```
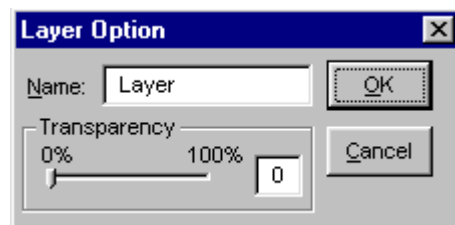
Figure 11-3 Layer Option

You can change the name of the layer in the *Name* text box. Drag the slider in the *Transparency* option to specify the transparency of the layer. The transparency setting decides the mixing level of the pixels in this layer with those in other layers.

Working with Layers

There are several methods to generate or remove layers. Most of the commands are located in the Layer menu.

Adding a Blank Layer

To add a blank layer into an image:

1. Select the layer that you want to add a blank layer upon.

2. Click on the New icon in the Layer Manager, or select the *New* command from the Layer menu.

3. When the *Layer Option* dialog box appears, make the necessary setting and click on [OK] to start the process.

> *Note:*   *If you have made a floating selection on any previous existing layer before executing the* ***New*** *command, the floating image will appear at the same position on the new generated layer for your further editing.*

Pasting the Clipboard Content as Layer

If you have placed certain image on the clipboard, you may paste it on a new layer in the image. To paste as a new layer:

1. Make sure you have placed the desired image onto the clipboard. (You can refer to the *Editing Images* chapter for the methods of moving images onto the clipboard.)

2. Select the layer that you want to add a new layer upon.

3. Open the Layer menu and select the *Paste as New Layer* command.

The pasted image is aligned to the upper left corner of the layer. If the pasted image is larger than the canvas, the portion that exceeds the dimensions of the canvas will be lost.

Duplicating Layers

The content of a layer can be duplicated to a new upper layer. After you select the *Duplicate* command from the Layer menu, a new layer containing the same content appears on the top of the selected layer. The name of the new layer will be automatically assigned as copy of the duplicated layer.

Moving Object to a New Layer

After you have made a selection on an image and made it floating, you can move the selected object to a new layer on the top of the current layer.

1. Select the portion of image you want to move and make it floating.

2. Open the Layer menu and choose *Make Object to Layer*.

3. When the *Layer Option* dialog box appears, make the necessary setting and click on [OK] to start the process.

    The selected image will appear on the new generated layer at the exact position it was placed on the previous layer.

Removing Layers

If a layer is no longer needed, you should remove it to save memory and disk space.

1. Highlight the layer you want to delete.

2. Select the *Delete* command from the Layer menu.

Moving Objects on Grouped Layers

The objects located on several grouped layers can be moved at once to a different position or out of the canvas. This function should be performed by the *Move* tool in the Toolbox.

1. Click in the grid(s) of the Group column to group the selected layer(s) with the current active layer.

2. Select the *Move* tool in the Toolbox.

3. Move the mouse pointer into any of the objects on the grouped layers.

4. Drag the pointer to another position or out of the canvas.

   If you drag the pointer to another canvas, the grouped layers will be duplicated to that canvas. If you drag the pointer to the empty space in the image editing area, a new canvas will be generated with the grouped layers.

5. Release the mouse button.

   Moreover, you can use the *Move* tool to activate a layer by clicking on the object of the layer while holding the [Ctrl] key.

Layer and Mask

A mask can be applied to a layer for restricting the working range and the displayed area of the image on the layer. If no mask is applied by the user, the mask for the layer covers none of the pixels on the image, which means you can edit the whole canvas and display the entire image on the layer. This is the default mask setting for a new generated layer.

The mask used for a layer can be created as a gray-scaled image by the user or converted from a colored image. The area of black color in a gray-scaled image used as a mask completely reveals the image on a layer; the area of white color in the gray-scaled image entirely covers the pixels of the image on a layer; the area of different gray scales in the gray-scaled image reveals the image on a layer by different levels of transparency.

For producing a mask for a layer, you can generate a new layer and create the mask as a gray-scaled image, or place the image you want to use as mask on a new layer.

Applying Image as Mask

After you have produced a layer with the image you want to use as mask, you can apply the image to the layer you need to generate mask. To generate a mask:

1.   Select the layer with the image used as mask.

2.   Choose the *Make Layer to Mask* command from the Layer menu. A dialog box appears.
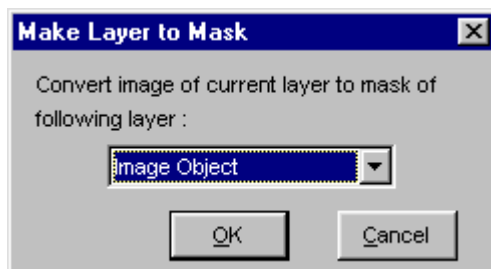
Figure 11-4 Make Layer to Mask Dialog Box

3.   Select the layer you want to apply the mask from the pull-down list.

4.   Click on [OK] to transform the image into the mask of the specified layer.
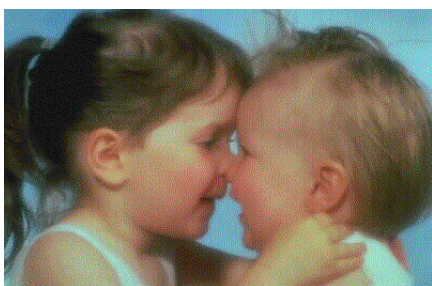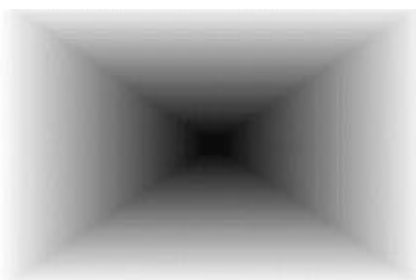
Layer 1   *Layer 2*
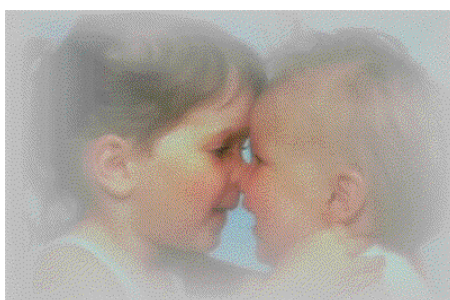
Converting Layer 2 to Mask of Layer 1

If you have used a colored image for generating the mask, the software will automatically transform it to gray scales and then apply it as mask.

Converting Mask to Image

The mask of a layer can be converted to a gray-scaled image on a new layer. In this way you can modify the shape and transparency of a mask and then apply the new image to the layer again as mask.

To convert a mask to image:

1. Select the layer whose mask you want to convert.

2. Drag the Mask icon from the Mask column to the New icon in the Layer Manager.

A new layer containing the gray-scaled image converted from the mask appears on the top of the previous selected layer.

Original Multi-layer Image   *One of the Layers*
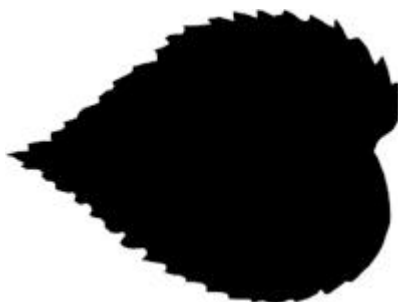
Converting Mask of the Layer to Image of a New Layer

Copying Mask

The mask of a layer can be copied to other layers so that the transparency and restriction for displayed pixels are also applied to those layers.

1. Select the layer containing the mask you want to copy.

2. Choose the *Copy Mask* command from the Layer menu. A dialog box appears.
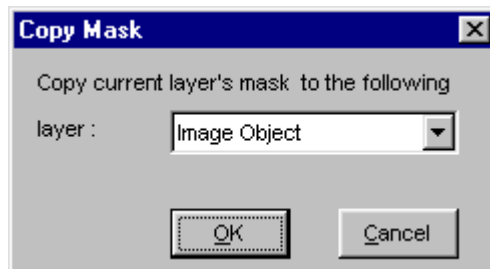
Figure 11-5 Copy Mask Dialog Box

3. Select the layer you want to apply the same mask from the pull-down list.

4. Click on [OK] to copy the mask.

Combining Images and Masks on Two Layers

By computing the color values of the pixels in two images, you can create different special effects while combining images of two layers. This is similar to splitting the pixels of two images to RGB channels, applying the computing function to the corresponding pairs of the individual channels, and then recombining the resulting channels to form a new RGB color image.

With the same procedure, you can also combine the masks of two layers by different computing methods to produce various effects on the image.

This function can be used to color gray-scale images and manipulate or compare two images. You can get numerous results from different computing methods and settings.

To apply this function:

1. Make the images you need to combine on two different layers.

2. Drag the Name or Mask column of the layer containing the image or mask you want to use as source for computing to that of the destination layer. The result of combination will replace the image or mask of the destination layer.

    If you dragged the Name column of the layer, the software will combine the images of the two layers. However if you dragged the Mask column, it will combine the masks of the two layers.

    A list of option now pops up for your selection:
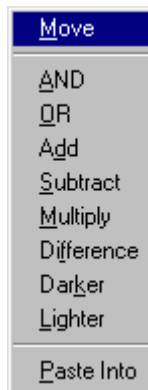
If you dragged the Name column, the first option is used for changing the position of the layer. If you dragged the Mask column, the first option is used for copying the mask to the destination layer.

All the other options are computing methods for combining the images or masks.

AND

This method combines the individual pair of pixels on corresponding location of two layers by applying a logical AND processing.

_OR_

This method combines the individual pair of pixels on corresponding location of two layers by applying a logical OR processing.

Add

Use this method to add the individual pixel values in the two layers. You can produce an average of two images or convert a gray-scale image to a tinted color image.

Subtract

This method subtracts the pixel values in the destination layer from those in the source layer. In result it can remove color values from images.

Multiply

Multiplying image pixel values with themselves is a useful method of increasing depth and contrast in a light image. If you multiply an image by itself, all pixel values (except 255) get darker. The smaller the values the darker they get.

Difference

This method is used to compare two images. When two images are the same, the result will be a pure black image. If there is any difference it will be shown.

Lighter

This method combines the images into a new lighter image. It picks the lighter values after comparing the pixel values of the images.

Darker

This method combines the images into a new darker image. It picks the darker values after comparing the pixel values of the images.

Paste Into

This method enables you to paste the image of a layer into another according to the mask of the latter layer.

Intersection

This method keeps the part that the masks of two layers intersect to produce a new mask for the destination layer.

Producing Stereo Images

In a stereoscope, you can see a stereo image united by two photographs of an object, taken from slightly different angles, with the effect of depth and solidity. On a computer screen, the unity of two photographs composing a stereo image is achieved by the interleaved scanning of odd and even lines in the image.

To produce a stereo image, therefore you have to prepare two images of the same object or scene, taken from slightly different angles, then overlap them in different layers, and make their odd and even lines of pixels interleaved.

1. Place the two images used for a stereo image on two different layers of the same canvas.

2. Open the Layer menu and select *Interleave* command.

3. Use the *Move* tool to adjust the images to proper positions for composing the stereo image.

The odd lines of an image and the even lines of the other image will mix together to compose a stereo image. You can see the effect through a stereoscope.

Picture Taken from Left　　　　　　　　*Picture Taken from Right*
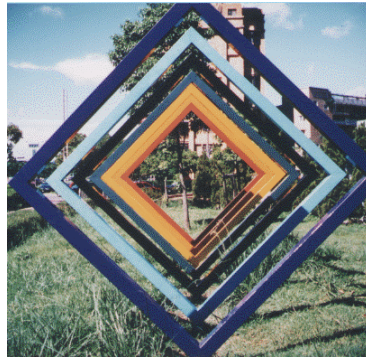
Stereo Image After Applying Interleave Function

Figure 11-6 An example of Composing a Stereo Image

Merging Layers

After finished editing the images on multiple layers, you may combine some of the layers as one to save storage space if you are sure they will not be changed.

If you are sure the images on all the layers will not be changed, you can merge all the layers into one and save the image with any file format.

Merging Some of the Layers

The *Merge* command in the Layer menu can combine the layers that are currently displayed and keep the hidden layers in the image. To merge some of the layers in an image:

1.   Click in the grids of the View column to display all the layers you want to combine.

2.   Select the *Merge* command from the Layer menu.

The merged layer will become the lowest layer you have selected to combine.

Merging All the Layers

The *Merge All* command in the Layer menu combines all the layers that are currently displayed and removes all the hidden layers. The result of the combination will become only one layer left in the image. To merge all the layers in an image:

1.   Click in the grids of the View column to display all the layers you want to combine and hide those you want to remove.

2.   Select the *Merge All* command from the Layer menu.

3.   When a dialog box appears asking you whether to discard the hidden layers, answer [OK] to process or [Cancel] to abandon the combination.

Drag-and-drop in the Layer Manager

Some of the commands in the Layer menu can be invoked by drag-and-drop operation in the Layer Manager window. The Mask, Preview and Name columns are usually the starting pointing of the drag-and-drop operation.

Operation	Function
Drag from the Preview or Name column to the Trash-can icon	Delete the layer
Drag from the Preview or Name column and drop on the top of the Preview or Name column of another layer	Move the former layer to the upper layer of the latter layer or combine the images on the two layers by calculation
Drag from the Preview or Name column and drop on the Mask column of another layer	Convert the image of the former layer to the mask of the latter layer
Drag from the Mask column and drop on the New icon	Convert the mask of the former layer to image of a new layer
Drag from the Mask column and drop on the Mask column of another layer	Copy the mask of the former layer to the latter layer or combine the two masks by calculation
Drag from the Preview or Name column and drop in the current image window	Duplicate the selected layer
Drag from the Preview or Name column and drop in another image window	Duplicate the selected layer to another image

12 Editing Images

The *Edit* menu provides functions to edit images such as copy, cut and paste. These are often used in image processing when creating a new image from existing images, or joining together (pasting) into one image portions of different images.

Besides, the *Edit* menu also supplies powerful functions for adding patterns, 3D effects, and shadows in very simple steps, which makes your work much easier and more efficient.

Removing the Images

The *Cut*, *Clear*, and *Crop* commands become active only after you have selected an area within the image. You can select an area by dragging across the image with a selector from the Toolbox. The area selected is indicated by a dotted line.

Cut

The *Cut* command removes a selected portion of image and places it on the Windows clipboard. You can use the *Paste* command to place the image content last cut and put on the clipboard back onto the original image, or paste it to another document. Only the last cut content resides in the clipboard. To cut a portion of the image, do the following:

1. Select an area by dragging across the area with a selector from the Toolbox.

2. Open the *Edit* menu, and click on the *Cut* command. The content of the selected area is removed.

Note: The keyboard shortcut to execute the Cut command is [Ctrl]+[X].

Clear

The *Clear* command deletes a selected portion of the image. This way of deleting is similar to that of the removing action of the *Cut* command, but with a major difference: the content deleted will not reside in the clipboard. In other words, you can't bring back the portion you deleted using the *Clear* command. To delete a portion of the image, do the following:

1. Select an area by dragging across the area with a selector from the Toolbox.

2. Open the *Edit* menu, and click on the *Clear* command. The deleted portion is then filled with background color.

Note: You can also press the [Del] key on the keyboard to delete the selected portion.

Crop

The *Crop* command enables you to cut out unwanted rectangular portions of image. If your selected area is not rectangular, the image canvas will be cropped to the smallest rectangle in the selected area. The image left is then rectangular. To crop a portion of image:

1.   Select an area by dragging across the area with a selector in the Toolbox.

2.   Open the *Edit* menu, and click on the *Crop* command.

Note: *The Crop function can not be performed when you select a portion of image with feathering and make it floating.*

Joining Images

The pasting and stitching functions are very useful in creating a new image from existing ones. They enable you to join portions of different images into one image frame.

Paste

The *Paste* command pastes the content that was last cut or copied to the clipboard onto your image. The command works only when there is already a content in the clipboard. To paste, do the following:

1. Open the *Edit* menu, and click on the *Paste* command.

    A "phantom window" (sort of a window floating on screen) appears displaying the content of the clipboard.

2. Move the pointer into the floating window. The pointer's shape then changes to an arrowhead-shaped cross.

3. Drag the phantom window to the location on your image where you want to paste its content. Note that any part to be pasted that exceeds the image canvas in size will be lost.

    Furthermore, if the clipboard content contains more colors than that of the current image canvas, the content's colors are automatically converted to match the colors of the canvas.

4. Click the left mouse button outside of the phantom window to paste the content.

Note: The keyboard shortcut to execute the Paste command is [Ctrl]+[V].

Paste as New

This function enables you to paste the content of the clipboard in the form of a new document. The new canvas size depends on the size of the clipboard's content. To paste the content as a new document, open the *Edit* menu and click on the *Paste as New* command. A new image window containing the clipboard's content appears in the image editing area.

Reproducing the Images

The *Copy* and *Duplicate Document* commands are used to reproduce or copy images.

Copy

The *Copy* function enables you to make a copy of your selected image (or portion of image) and place it on the Windows clipboard. The original image is unaffected by the *Copy* command. You could use the *Paste* options to move the content last copied on the clipboard to another document. Only the last copied content resides in the clipboard. To copy a portion of image:

1. Select an area of the image by dragging across the area with a selector from the Toolbox.

2. Open the *Edit* menu, and click on the *Copy* command. A copy of the selected area then resides in the clipboard.

Note: *The keyboard shortcut for copying the image is [Ctrl]+[C].*

Duplicate Document

The *Duplicate Document* function enables you to place into a new canvas but within the same image editing screen the reproduction of an existing image. When you execute the *Duplicate Document* command, a new canvas appears on screen containing the same image as that in the current active image editing window.

Moving a Portion of Image to Other Canvases

Utilizing the Windows drag-and-drop feature, the software allows you to move a portion of image to a new canvas or to other canvases without using the *Cut*, *Copy*, *Paste* and *Paste as New* commands. Steps to follow:

1. Select an image area by dragging across the area with a selector from the Toolbox.

2. Move the mouse pointer into the selected area.

3. Press and hold down the left mouse button.

4. Drag the mouse anywhere in the empty space outside of the image where you will create a new canvas; or drag the mouse to another image canvas to place the selected image into it. The pointer's shape changes to a hand scratching a piece of paper.

5. Release the mouse button.

6. Make changes to the selection if necessary.

7. Click the left mouse button outside of the selection in the image window to fix the selection on the destination canvas.

Canceling the Last Operation

The *Undo* option cancels the last action the software performed. The last action you performed is displayed at the right of the *Undo* command. Click on this command or the *Undo* icon on the tool bar to undo the action.

You can enable this function by using the *Preferences* command under the *File* menu. With *Undo* turned off the program doesn't have to keep track of your actions, and devotes more memory to run other features. The general operation speed is thus faster in disabled mode.

Note: *Not all the commands or functions in the software can be canceled by the **Undo** command. If this is the case, the **Undo** command name will change as **Can't Undo**.*

Painting According to the Selection Frame

Once you have selected a portion of image, you can add colors or special effects to it by using several commands under the *Edit* menu.

Adding Outlines by Tracing the Selection Frame

The *Stroke* function enables you to add outlines around the selected portion of image. The program will draw outlines along the selection frame using foreground color. You can select to draw outlines outside, inside or over the selection frame. To produce this effect:

1. Select a portion of image with selectors in the Toolbox.

2. Pick a foreground color in the color palette.

3. Open the *Edit* menu and select the *Stroke* command. A dialog box appears.
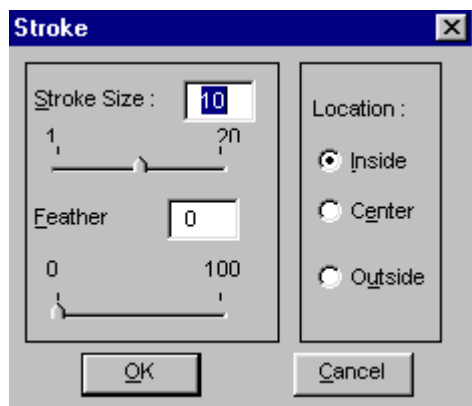
Figure 12-1 Stroke Dialog Box

4. Set the thickness of the outlines to be added with the *Stroke Size* option. The effective values are from 1 to 20 pixels.

5. Set the *Feather* options by dragging the slider or entering the percentage directly.

6. Select the position of drawing the outlines inside the selection frame (*Inside*), outside the selection frame (*Outside*) or over the selection frame (*Center*).

7. Click on the [OK] button.

Figure 12-2 Stroke Effect

Creating Patterns in Images

The *Fill In Pattern* command allows you to fill inside the selection frame with a single color or tiled images which in view is similar to filling with patterns of user-defined images.

The pattern used to fill the area can be defined by saving a selected portion of image as a pattern file or placing the image on the clipboard.

To apply this feature:

1. Decide the type of pattern you use to fill in the image.

   If you want to use one of the patterns provided by the software, go to step 2 directly.

   If you want to use a selected portion of image as your pattern source, select the portion of image with the selectors in the Toolbox. Choose the *Save as Pattern* command from the *Edit* menu and save the image into one of the category folders.

   If you want to fill the selected area with a single color, pick the color as foreground or background color.

   If you want to use the content on the clipboard as your pattern source, make sure you have moved the pattern image onto the clipboard by the *Cut* or *Copy* command.

2. Make the canvas you want to fill the pattern active and select the area you want the pattern filled in.

3. Select the *Define Pattern* command from the *Edit* menu. The *Define Pattern* dialog box appears.
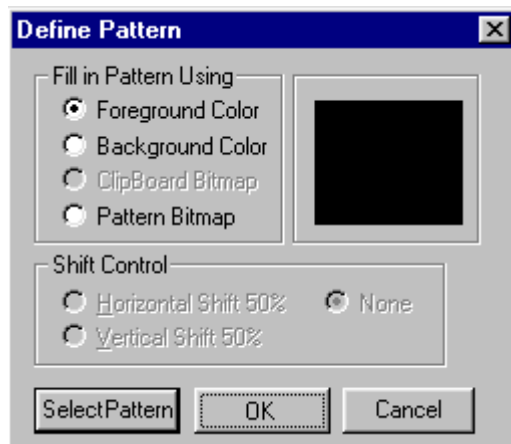
Figure 12-3 Define Pattern Dialog Box

4. In the *Fill in Pattern Using* section, select the color or image you want to fill in the selection frame.

   The right box will display the color or image you have selected to use.

   If you have picked a foreground or background color for filling in, choose the *Foreground Color* or *Background Color* option.

   If you have placed the image to fill in onto the clipboard, choose the *Clipboard Bitmap* option.

If you have saved the image to fill in, choose the *Pattern Bitmap* option. When you click on the [Select Pattern] button below, the pattern files located in the **\PATTERN** sub-directory under the software's program directory will be shown in a pop-up dialog box. You may also click on the [Change Directory] button to locate other image files for using as your pattern.

Figure 12-4 Select Pattern Dialog Box

You may click on each tab to view different categories of patterns provided by the software. Select the pattern you want to use.

5. If you have chosen the *Clipboard Bitmap* or *Pattern Bitmap* option at last step, adjust the vertical and horizontal shifting length among the rows of tiled images by the *Vertical Shift 50%, Horizontal Shift 50%* or *None* option in the *Shift Control* section. The percentage value indicates the shifting length versus the tile size of the pattern.
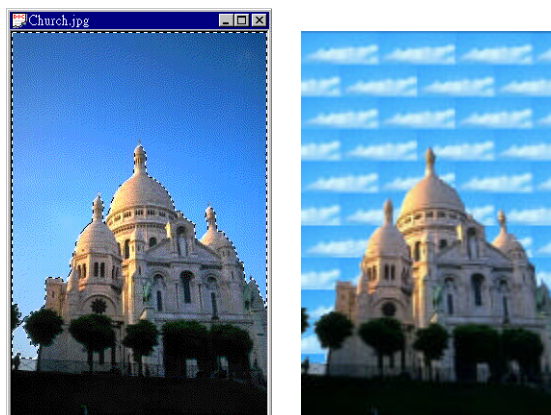
Figure 12-5 Shifting Effect

6. Click on the [OK] button to save the settings.

7. Select the *Fill In Pattern* command from the *Edit* menu to apply the effect.

Generating 3D Effect to Image

The software supplies magic touch for generating 3D effect on an object in the image by applying different directions of light and different levels of depth. This amazing function can be achieved by a single, simple step.

1. Select the object or portion of image you want to generate 3D effect.

2. Open the *Edit* menu and choose the *3D Effect* option from the *Magic Touch* command, or click on the *3D Effect* icon on the tool bar. A dialog box appears.
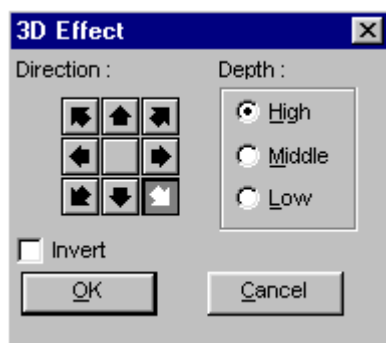
Figure 12-6 3D Effect Dialog Box

3. Click on one of the nine direction buttons to set the direction that the source of light comes from.

4. In the *Depth* section, select the level of depth as *High*, *Middle* or *Low*, for the image to protrude from the canvas.

5. If you want to generate a depressed effect of the image instead of protruding from the canvas, enable the *Invert* option.

6. Click on [OK] to apply the effect.

Original Image

Protruded 3d Effect   *Depressed 3D Effects*

Adding Shadow to Image

The software can produce the effect of projecting light on a selected object and make the shadow of the object fallen upon the background. As you can adjust the transparency and feathering levels of the shadow, it can reflect the distance of the light source by the lightness of the shadow.

Note: *The Add Shadow function is only available when the image contains multiple layers and there is a selected portion on the current active layer.*

To add shadow to an image:

1. Select the object or portion of image you want to add shadow on the current active layer.

2. Open the *Edit* menu and choose the *Add Shadow* option from the *Magic Touch* command, or click on the *Add Shadow* icon on the tool bar. A dialog box appears.
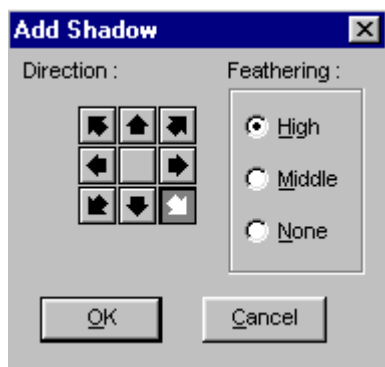
Figure 12-7 Add Shadow Dialog Box

3. Click on one of the nine direction buttons to set the direction that the source of light comes from.

4. In the *Feathering* section, select the level of feathering as *High*, *Middle* or *None*, for the shadow. The higher the feathering, the longer the distance of light source.

5. Click on [OK] to apply the effect.

The selected image will be moved to a new layer and the shadow will be generated on another new layer lower than the one containing the selected image. You can change the transparency of the shadow layer in the *Layer Option* dialog box. The more transparency you specify, the lighter the shadow, and the more distance from the light source.

Selecting Object for adding Shadow
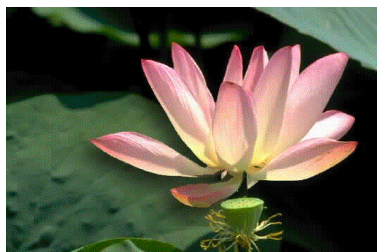
Shadow Effect

13 Transforming Images

The commands under the *Transform* menu are used to flip, rotate, or convert either the whole image or a selected portion of the image. Generally speaking, these commands transform the position, size, or colors of an image without changing its shape and pattern.

Inverting Image Color/Brightness

The *Invert* command reverses the brightness and color of an image as illustrated below. Click on the *Invert* command to invert. Click again to get back the original image.

Figure 13-1 Inverting an Image

Flipping Images

The *Mirror* command flips the image vertically, horizontally, or diagonally as illustrated below.

Original Image *Mirror Horizontally*

Mirror Vertically *Mirror Diagonally*
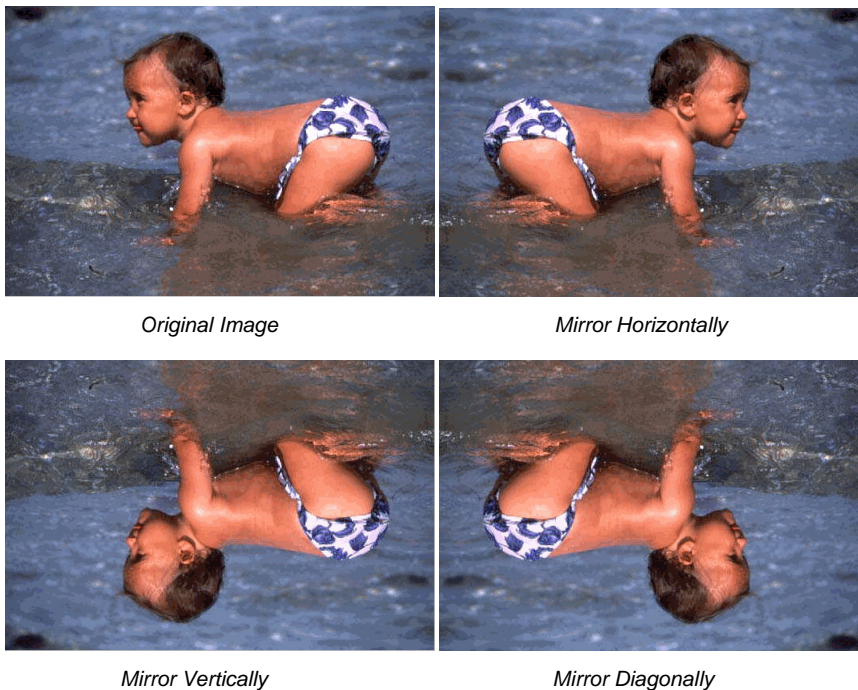
Figure 13-2 Flipping an Image

Rotating Images

The *Rotate* command rotates the image in three options. Whenever you click on the *Rotate* command, a sub-menu pops up for your selection:

The *Left* option rotates the image by 90 degree counter-clockwise.

The *Right* option rotates the image by 90 degree clockwise.

Original Image
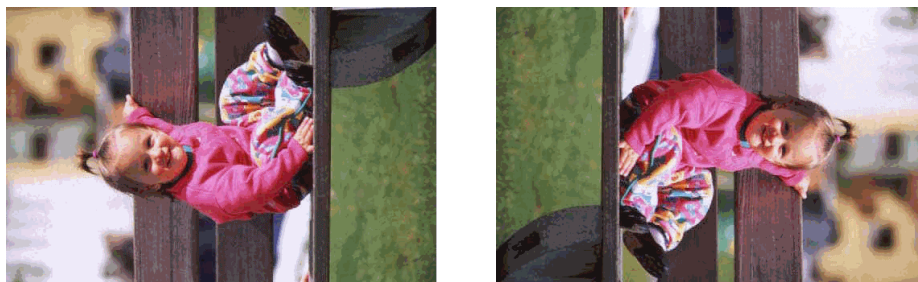
Figure 13-3 Rotate Left and Right

The *Any Degree* option allows you to rotate at any angle the selected portion of an image or the entire image. To execute this:

1.   Click on *Any Degree*. A dialog box appears.
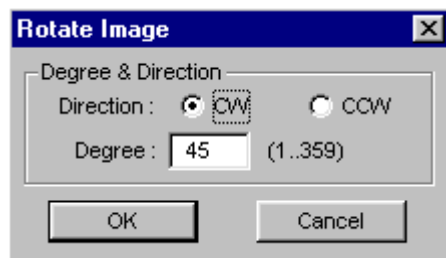
Figure 13-4 Rotate Image Dialog Box

2.   Click on the clockwise (CW) or counter-clockwise (CCW) option for the rotating direction.

3.   Enter the rotation angle.

4.   Click on the [OK] button to start rotating the image.

Rescaling Images

The *Rescale* function allows you to change the size, resolution, and scaling factors for part of, or the entire image. You can easily enlarge or shrink an image proportionally or with proportion distortion.

1. Select the *Rescale Image* command from the *Transform* menu. The *Rescale* dialog box appears.
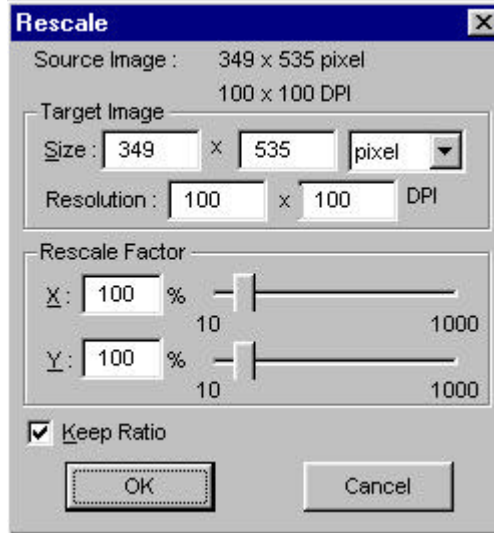
Figure 13-5 Rescale Dialog Box

The *Source Image* field displays the original size and resolution of the image.

2. You can set the scaling ratio by entering its size in the *Target Image* section or by entering the X (horizontal ratio) and Y (vertical ratio) values in the *Rescale Factor*. You can also specify the scaling ratio by dragging the pointer in the scroll bars between the 10% and 1000% values indicated.

    If you have enabled the *Keep Ratio* option, you can enter either the width or the height of the rescaled image. The software will automatically determine the other value for you.

    If you have disabled the *Keep Ratio* option, you have to enter both the width and height to rescale the image. If the values you enter are not proportional, the rescaled image will be distorted.

3. Enter the horizontal and vertical resolutions of printing in the Resolution text boxes.

4. Click on [OK] to start rescaling the image, or [Cancel] to abandon the process.

Converting Images

The *Change Image* function allows you to convert the image canvas format. To convert an image:

1. Choose the *Change Image* command from the *Transform* menu, or click on its icon in the icon bar. The *Change Image Type* dialog box appears.
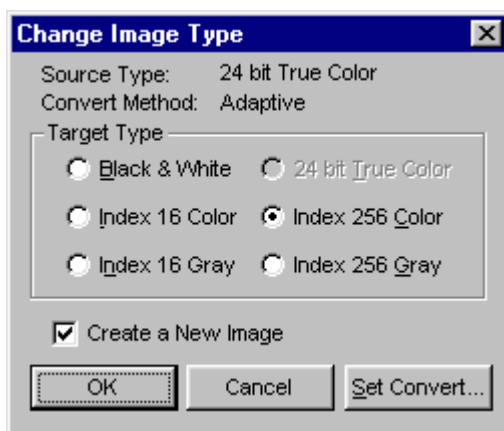
Figure 13-6 Change Image Type Dialog Box

2. Select a *Target Type* option which correspond to the image conversion you want. The options are:

Black & White:	This option converts the active image to two colors, black and white.
Index 16 Color:	This option converts gray, 256 color, or true color images to 16 colors.
Index 16 Gray:	This option converts the active image to 16 gray shades, from black (zero) to white (15). The gray scale image type gives the best representations of black-and-white images.
24 bit True Color:	This option converts gray and 256 color images to RGB true color image (16.7 million colors). This data type is currently the best image data type for editing color images because it retains the maximum amount of information about the image.
Index 256 Color:	This option converts gray and true color images to 256 colors.
Index 256 Gray:	This option converts the active image to 256 gray shades, from black (zero) to white (255), which smoothes tonal changes by using intermediate gray tones. Again, the gray scale image type gives the best representations of black-and-white images.

Note: Dimmed options are not applicable to the active image.

3. Click on the [Set Convert] button to specify a converting method. The *Set Convert Method* dialog box appears.

4. Click on [OK] to return to the previous dialog box.

5. Click on [OK] to return to the previous dialog box.

6. If you want to use a new canvas for the converted image, enable the *Create a New Image* option.

7. Click on the [OK] button to complete the conversion.
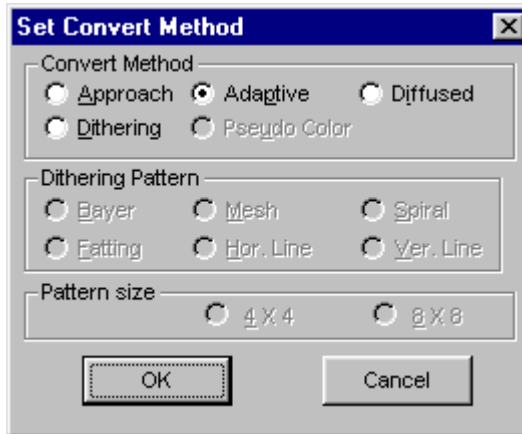
Figure 13-7 Set Convert Method Dialog Box

Approach:	When transferring an image to screen, this option converts original colors from the picture to the best approaching ones within the system's indexed color palette.
Adaptive:	This option calculates the color pixel values and determines the most suitable colors for the image.
Diffused:	This option averages the bright and dark color pixels on the image.
Pseudo Color:	This option is for palette editing. Please refer to the Color Management chapter for details.
Dithering:	This option converts the image using different patterns and sizes to generate special effects. Both the Dithering Pattern options and Pattern Size options allow you to execute conversions with different patterns and sizes. The following examples illustrate different dithering patterns with a 8x8 pattern size.

Original Image

Bayer Pattern
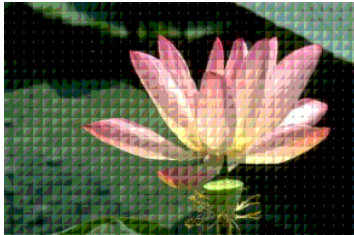
Mesh Pattern
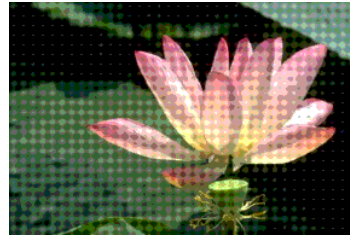
Spiral Pattern
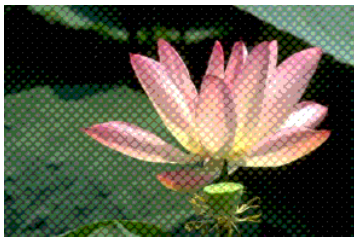
Fatting Pattern
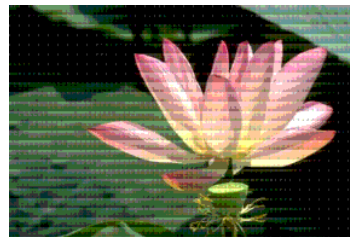
Horizontal Line (Hor. Line) Pattern
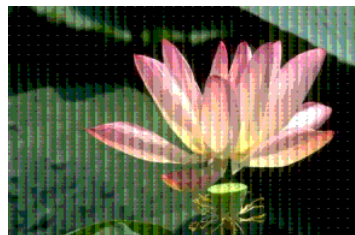
Vertical Line (Ver. Line) Pattern

Figure 13-8 Dithering Patterns

Expanding the Canvas

The *Expand Canvas* function in the *Transform* menu lets you increase the size of canvas without influencing the image size. You can set the image position on the canvas after the expansion.

To expand the canvas:

1. Select *Expand Canvas* from the *Transform* menu. A dialog box appears.
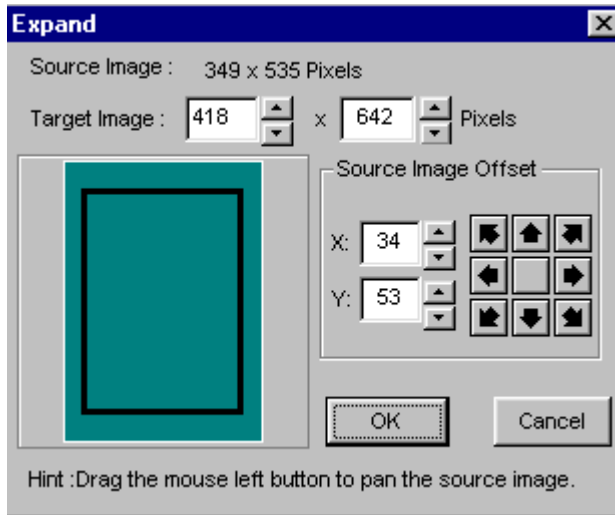
Figure 13-9 Expand Dialog Box

2. The *Source Image* field displays the current image size. Set the canvas size you want to expand in the *Target Image* option.

3. In the *Source Image Offset* section, use the values of X, Y axes or the nine direction buttons to set the position of the original image on the expanded canvas.

    You can also move the mouse pointer into the preview window at left and drag the black rectangle to set the position of the original image.

4. Click the [OK] button to expand the canvas.

14 Enhancing/Fine Tuning Images

The options in the *Process* menu are designed to fine tune images or enhance them through special effects. Scanned or captured images usually need post-processing to make them look more natural and real. Afterwards, you may add various special effects to them for fulfilling creative applications.

Adjusting Brightness/Contrast

The *Brightness/Contrast* command is used to change the brightness and contrast of the image pixels, much as the brightness/contrast controls work on a monitor by increasing or decreasing the brightness and contrast levels between pixels. To alter the brightness/contrast level of the image, invoke the *Set Brightness and Contrast* dialog box:

1. Open the *Process* menu and click on the *Brightness/Contrast* command. The *Set Brightness and Contrast* dialog box appears.

Figure 14-1 Set Brightness and Contrast Dialog Box

2. Select a *Channel* option for processing, either *Red*, *Green*, *Blue*, or *All*.

3. Enter a value in the *Brightness* and *Contrast* text boxes, or drag the sliders to set a value.

4. The *Sample* image changes accordingly as you drag the sliders or enter the values. You can compare the *Sample* image to the *Original* to clearly identify your adjustment.

    The *Sample* image can be zoomed in or out for comparison to the original. Click once on the [+] button to zoom in the image by one level; or click on the [-] button to zoom out the image by one level.

    The rectangle frame displayed in the *Original* image marked out the current portion of the image shown in the *Sample* area. You can drag the frame in the original image, or directly drag the mouse pointer in the sample image to pan the view in the *Sample* area.

5. Click on the [OK] button to effect the change.

Note: You can restore the original settings by clicking on anywhere of the gray area in the Original image.

Adjusting Hue/Saturation

The *Hue/Saturation* command is used to change the hue and saturation of the image's colors. To alter the hue/saturation of the image, do as instructed below:

1. Open the *Process* menu and click on the *Hue/Saturation* command. The *Set Hue and Saturation* dialog box appears.
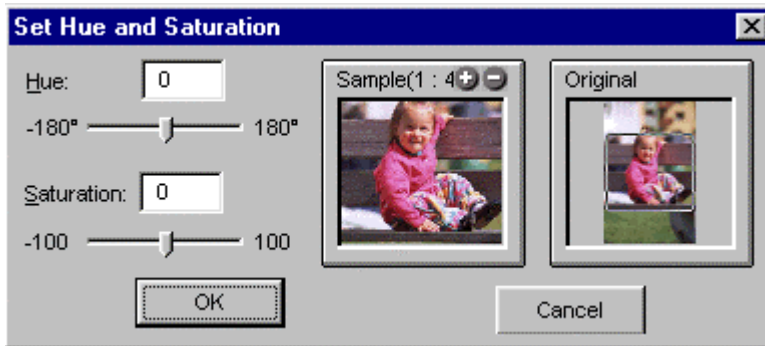
Figure 14-2 Set Hue and Saturation Dialog Box

2. Enter a value in the *Hue* and *Saturation* text boxes, or drag the sliders to set the values.

    The *Hue* setting measures the color attributes in degrees from -180 to 180 according to the HLS color wheel. The color sequence on the HLS wheel is counter-clockwise from the red to the purple colors of the rainbow. Notice that the hue changes when you move the slider.

    The saturation of colors is specified by percentages. Negative percentages decrease the intensity of color pixels in the image. Setting the saturation to -100% causes the image color to change to pure gray. Positive percentages increase the intensity of color pixels in the image so as to enhance the purity of colors.

3. The *Sample* image changes accordingly as you drag the sliders or enter the values. You can compare the *Sample* image to the *Original* to clearly identify your adjustment.

    The *Sample* image can be zoomed in or out for comparison to the original. Click once on the [+] button to zoom in the image by one level; or click on the [-] button to zoom out the image by one level.

    The rectangle frame displayed in the *Original* image marked out the current portion of the image shown in the *Sample* area. You can drag the frame in the original image, or directly drag the mouse pointer in the sample image to pan the view in the *Sample* area.

4. Click on the [OK] button to effect the change.

Note: *You can restore the original settings by clicking on anywhere of the gray area in the Original image.*

Adjusting Tone Map

The *Tone Map* command is used to alter the brightness value of each pixel in the image by directly changing the mapping curve of gray/color values.

The horizontal axis represents the input's brightness level and the vertical axis represents the output's brightness level. "0" represents pure black, and "255" pure white. To adjust the mapping:

1. Choose the *Tone Map* command from the *Process* menu. The *Tone Map* dialog box appears.
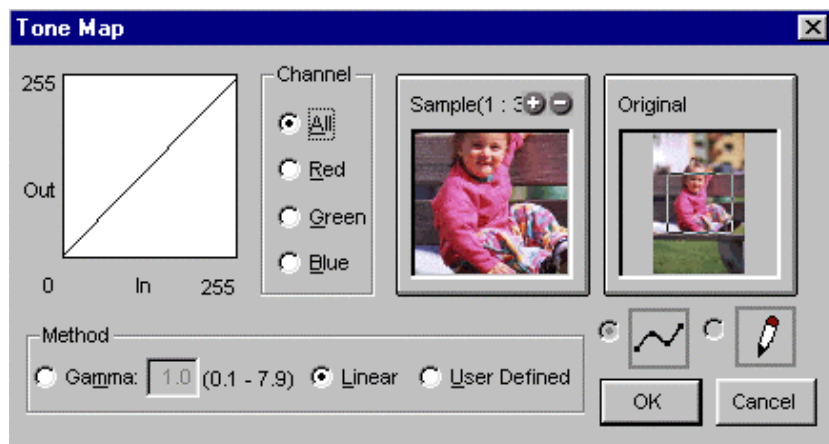
Figure 14-3 Tone Map Dialog Box

2. Select a *Channel* option for processing, either *Red*, *Green*, *Blue*, or *All*.

3. Choose a way to adjust the map from the *Method* options.

   If you choose the *Gamma* option, you can enter a gamma value in the *Gamma* text box. Enter a higher value to lighten the midtone area or enter a lower value to darken the midtone area. The shape of the mapping curve will change according to your settings.

   If you choose the *Linear* option, the default gamma value is 1.0. The image will retain its original outlook.

   If you choose the *User Defined* option, select the way to change the mapping curve as smooth curve or free shape from the two small illustrations. When the smooth curve is selected, several nodes will appear on the mapping curve. You may drag the nodes to form the desired shape of the curve. When the free shape is selected, point to anywhere on the mapping curve and drag it to form the shape corresponding to the image outlook you want. Changing the slope of the line adjusts the contrast; changing the level of the line adjusts the brightness.

4. The *Sample* image changes accordingly as you modify the shape of the mapping curve or enter the values. You can compare the *Sample* image to the *Original* to clearly identify your adjustment.

   The *Sample* image can be zoomed in or out for comparison to the original. Click once on the [+] button to zoom in the image by one level; or click on the [-] button to zoom out the image by one level.

   The rectangle frame displayed in the *Original* image marked out the current portion of

the image shown in the *Sample* area. You can drag the frame in the original image, or directly drag the mouse pointer in the sample image to pan the view in the *Sample* area.

5. Click on the [OK] button to start the process.

Note: *You can restore the original settings by clicking on anywhere of the gray area in the Original image.*

Adjusting Density

The *Density Control* command is used to sharpen dull images or tone down overly sharp ones by redistributing the gray shades in them. This function enables you to enhance contrast and adjust brightness levels by limiting the input and output ranges of gray/color values in the image. In effect, highlighted, shadowed and midtone areas in the image will be enhanced. In other words, it calculates the histogram of the image.

The horizontal axis of the histogram represents the gray/color value in the image, and the vertical axis represents the number of pixels corresponding to that value. The input range refers to the range of gray/color values in the original image, and the output range refers to that after adjusting the image settings.

To adjust the density of image, follow these steps:

1. Choose the *Density Control* command from the *Process* menu. A *Density Control* dialog box appears.
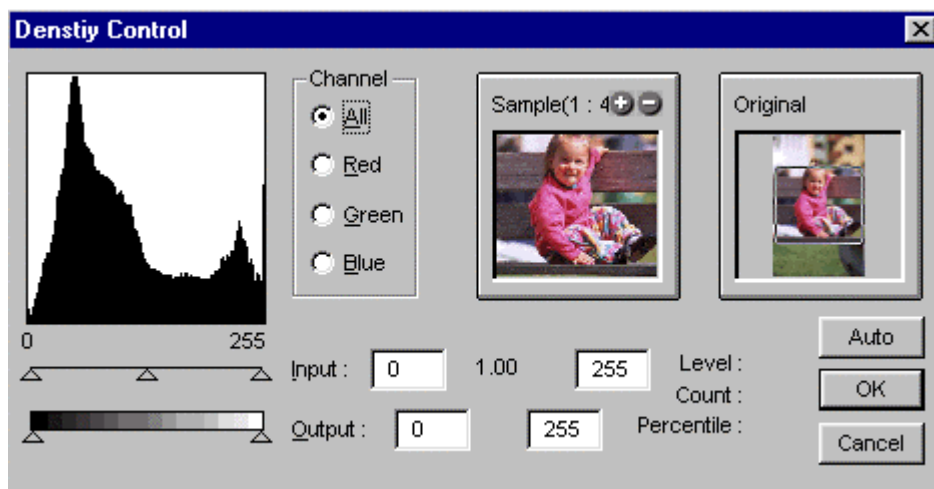
Figure 14-4 Density Control Dialog Box

2. Select a *Channel* option for processing, either *Red*, *Green*, *Blue*, or *All*.

3. Drag the triangular sliders to select the input and output ranges.

    To increase the contrast and bring out the details of the image, you can decrease the input range. The pixels to the left of the left input slider will be black, or mapped to the lowest value of the output range; the pixels to the right of the right input slider will then be white, or mapped to the highest value of the output range.

    On the other hand, you can reduce the output range to decrease contrast and lighten the shadowed areas, or darken the highlighted areas. Drag the left slider to the right for decreasing contrast and lightening the shadowed areas, or drag the right one to the left for decreasing contrast and darkening the highlighted areas.

4. The *Sample* image changes accordingly as you drag the sliders or enter the values. You can compare the *Sample* image to the *Original* to clearly identify your adjustment.

    The *Sample* image can be zoomed in or out for comparison to the original. Click once

on the [+] button to zoom in the image by one level; or click on the [-] button to zoom out the image by one level.

The rectangle frame displayed in the *Original* image marked out the current portion of the image shown in the *Sample* area. You can drag the frame in the original image, or directly drag the mouse pointer in the sample image to pan the view in the *Sample* area.

5.   You may click on the [Auto] button to have the software adjust the density automatically.

6.   Click on the [OK] button to effect the change.

Note: *You can restore the original settings by clicking on anywhere of the gray area in the Original image.*

Variations

The *Variations* dialog box provides you with a preview mode to adjust dark, midtone and light areas of an image in hue, saturation, or brightness/contrast. It enables your instant comparison between the original images and the result of changes you may make on it.

To use Variations:

1. Select the *Variations* command from the *Process* menu. The *Variations* dialog box appears.
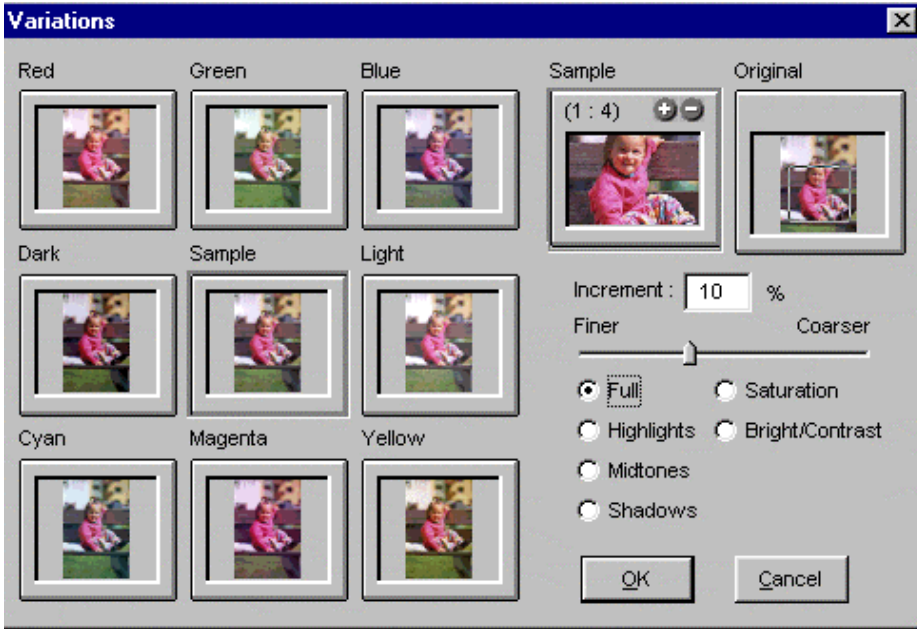
Figure 14-5 Variations Dialog Box in Default

In the left portion of the *Variations* window, you have nine image previews showing different effects of hue and brightness adjustments. Among them, *Sample* represents your current selection taken from the eight surrounding possibilities.

The six previews at the top and bottom of the *Sample* reflect the hue adjustments to the *Sample* image; the two previews at the left and right of the *Sample* show brightness adjustments.

On the right hand portion of the dialog box are two images: the left hand one is your current selection (same as the *Sample* image on the left portion of the box); on the right hand side is a copy of your original image. Placed side by side, they enable you to compare the effects of your adjustments in relation to the original.

The *Sample* image can be zoomed in or out for comparison to the original. Click once on the [+] button to zoom in the image by one level; or click on the [-] button to zoom out the image by one level.

The rectangle frame displayed in the *Original* image marked out the current portion of the image shown in the *Sample* area. You can drag the frame in the original image, or directly drag the mouse pointer in the sample image to pan the view in the *Sample* area.

2. Drag the slider of the *Finer* and *Coarser* line to define the adjustment level as a slight or more pronounced adjustment.

   Your setting will be immediately reflected on the left side previews.

3. Click on the preview (among the eight) which best satisfy your need. The selected preview will move into the *Sample* position, and the surrounding previews will change according to the new Sample.

Note: You may recall the Original as the Sample image by clicking on anywhere of the gray area in the Original image.

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4. The default setting for the area to be changed in the image is *Full*, which means changes to the whole image. If you want to change only the light, midtone, or dark area in the image, click to select the *Highlights*, *Midtones*, or *Shadows* option respectively.

5. If you want to change the saturation of the image, click on the *Saturation* option. The left half of the dialog box then displays only three image previews: the *Sample* as well as the effects of lower (less) and higher (more) saturation. Use the same procedure as in Steps 2 and 3 to adjust the saturation of the image.
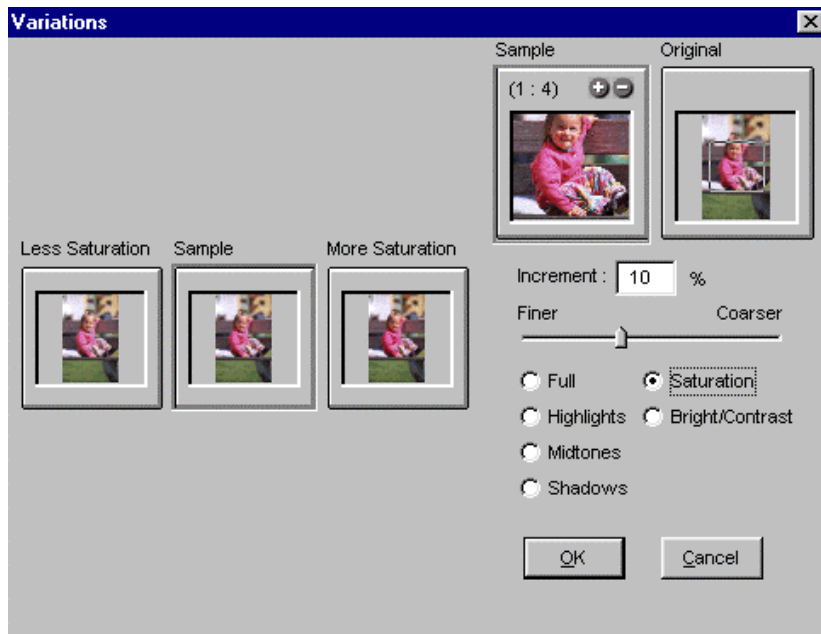
Figure 14-6 Variations Dialog Box in Saturation Option

6.   If you want to change the image's brightness and contrast, click on the *Bright/Contrast* option. The three top image previews reflect the effects of enhancing contrast, and the three bottom ones the effects of reducing contrast. The three left image previews reflect the effects of decreasing brightness, and the three right ones the effects of increasing brightness. Use the same procedure as in Steps 2 and 3 to adjust the brightness/contrast of the image.
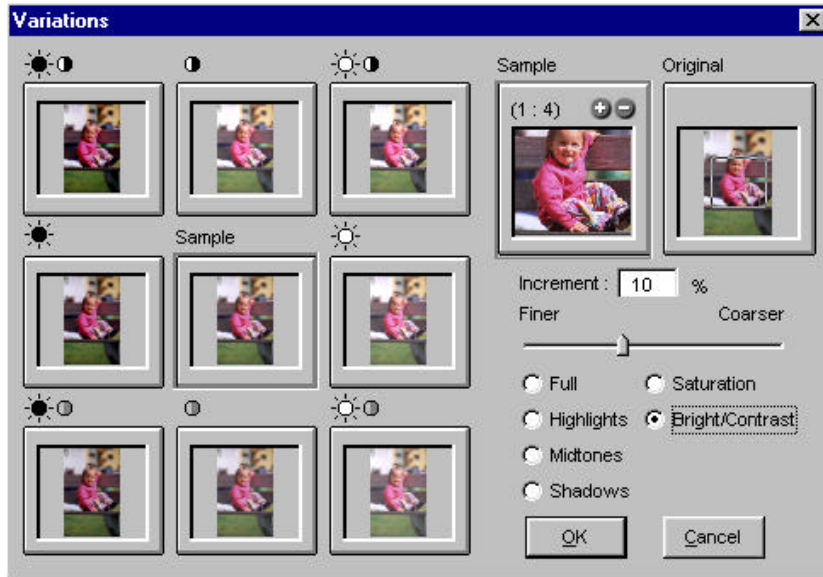
Figure 14-7 Variations Dialog Box in Brightness/Contrast Option

7.   After you obtain a satisfying *Sample*, click on the [OK] button to start the process of adjustment, or click on [Cancel] to abandon the process.

Smoothing Images

The *Smooth* command allows you to soften an image by four options: *Smooth*, *Smooth More*, *Smooth Edge* and *Gaussian Blur.*

Choose *Smooth* to slightly soften the image. If you want to make the image look even softer, choose *Smooth More*. The *Smooth Edge* option only softens the edges of objects in the image.

The *Gaussian Blur* option softens the image like the gradual color fading out of the distance from the light source. It produces an effect as the image were out of focus of eyes. To apply this effect, you have to set the smoothing level in the pop-up dialog box.
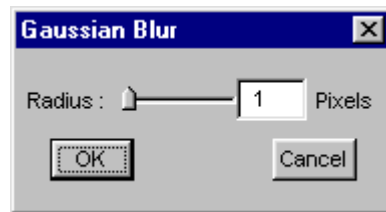
Figure 14-8 Gaussian Blur Dialog Box

Drag the slider to specify the number of pixels for *Radius*. The number of pixels reflects the smoothing level of the image; the more the pixels, the softer the image.
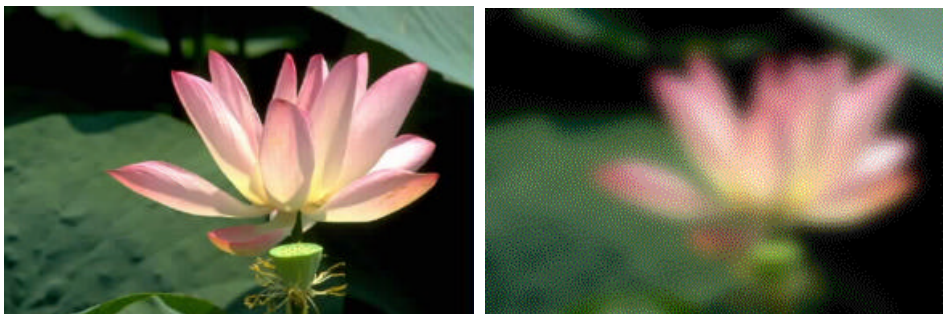
Figure 14-9 Gaussian Blur Effect

Sharpening Images

In order to improve its clarity, the Sharpen command allows you sharpen an image by four options: Sharpen, Sharpen More, Sharpen Edge and Unsharp Mask.

The *Sharpen* option makes the image only a little clearer. The *Sharpen More* option sharpens the image even further. The *Sharpen Edge* option only sharpens the edges of objects in the image.

The *Unsharp Mask* option sharpens the area where the colors among neighboring pixels in the image have sound difference. When you execute this command, the software will calculate the color values of the pixels in the image and find out the part of image with sound difference of neighboring pixels, then sharpen both edges of the neighboring colors and smooth the other portion of image. The viewing effect is like bringing a hazy image into focus and showing the edges clearly of all the objects. There are three factors you should specify for applying this effect.
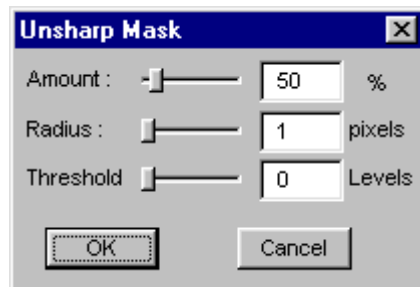
Figure 14-10 Unsharp Mask Dialog Box

The *Amount* slider sets the sharpening level for the edges that should be enhanced. The *Radius* slider specifies the smoothing level that the other portion of image should be softened. The *Threshold* option specifies the levels of color difference where the edges should be sharpened; that is, only the area with the color difference higher than the specified threshold level should be sharpened. The higher the threshold level, the less edges in the image should be sharpened.
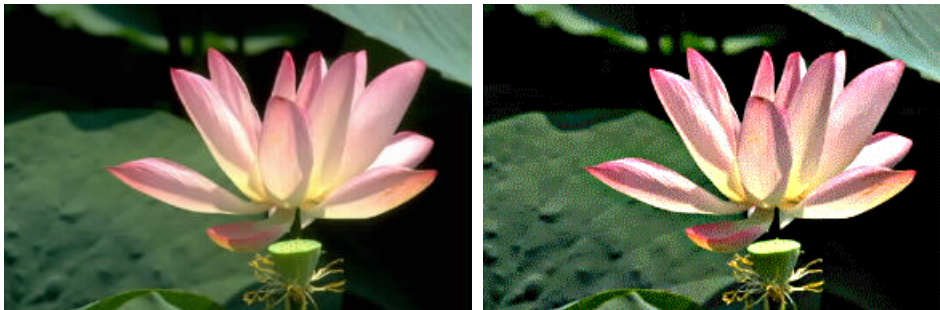
Figure 14-11 Unsharp Mask Effect

Emboss

The *Emboss* filter enables you to make the image stand out from the paper surface or stand in relief against its background. The emboss process coats the image with mostly foreground color on the surface of objects, and with midtone colors from the originals for object outlines.

You can set the direction and depth for the emboss effect for your images. Also, you may coat on the surface of objects in the image with any color by selecting it as foreground color.

To utilize this effect:

1. Choose a foreground color for coating on the emboss surface in the image.

2. Select the *Emboss* command from the *Process* menu. The following dialog box appears.
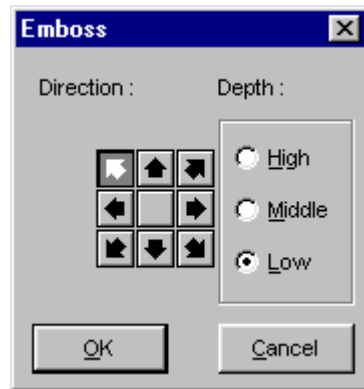
Figure 14-12 Emboss Dialog Box

3. In the *Direction* option click on one of the eight arrow buttons matching the emboss direction you want.

4. In the *Depth* section select the depth of emboss as *High*, *Middle* or *Low*.

5. Click on the [OK] button.
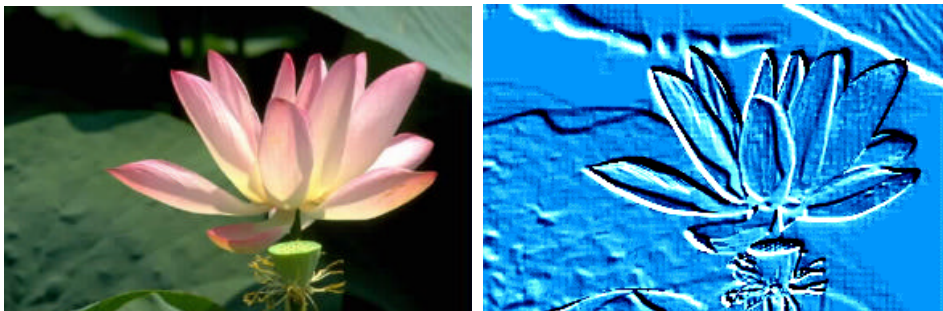
Figure 14-13 Emboss Effect

Texturize

This command coats the canvas surface by a specified texture pattern, which produces an outlook for the image as if it were made up with that specific material. The foreground color you select will be applied to the texture pattern.

Various texture pattern files are provided with several categories in the **TEXTURE** sub-directory of the software's program directory, such as stones, cloths, water waves, sands, etc. You can generate your own texture pattern by creating the pattern, saving it as a bitmap file, and then placing it in one of the category folders under the **TEXTURE** sub-directory.

To apply a texture to the image:

1.   Use the selectors in the Toolbox to outline the portion of image you want to apply a texture. If there is no such selection, the texture will be applied to the whole canvas.

2.   Select the foreground color you want to use with the texture pattern.

3.   Select the *Texturize* command from the *Process* menu. The *Load Texture* dialog box appears.
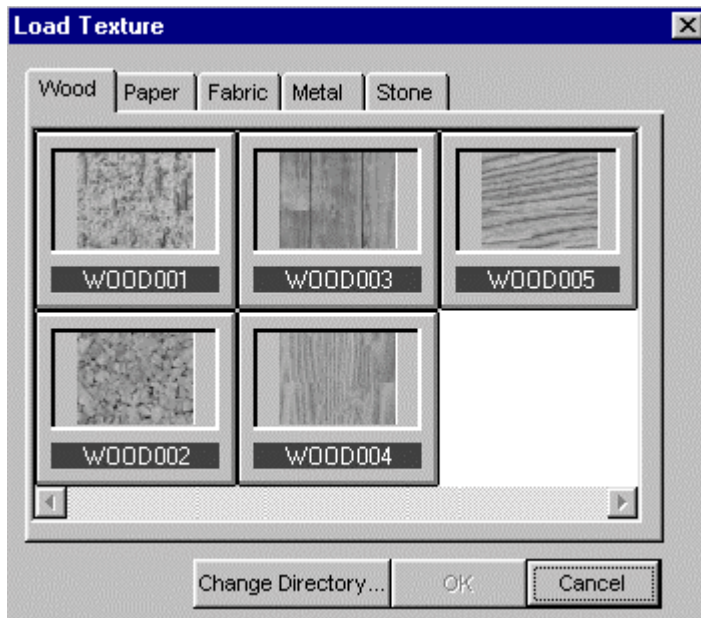
Figure 14-14 Select Texture Dialog Box

4.   Choose a texture pattern from the thumbnail previews.

     If your texture file is not stored in the **TEXTURE** sub-directory, click the [Change Directory] button to locate the right path.

5.   When you have selected the texture pattern you need, click on the [OK] button to apply the texture.
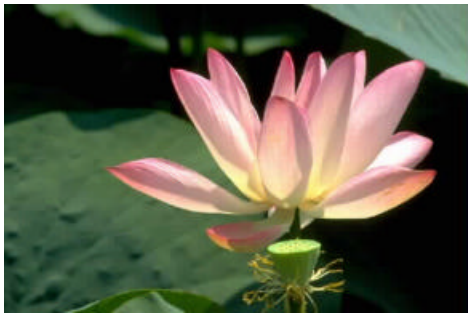
Figure 14-15 Texturize Effect

Average

The *Average* command averages the values of each pixel and its surrounding pixels in an image to generate the new values of the image colors. This will produce a vague image.

To apply this function:

1. Click on *Average* in the *Process* menu. The *Average* dialog box appears.
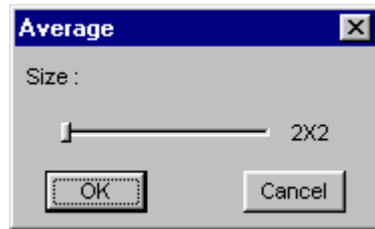
Figure 14-16 Average Dialog Box

2. Set the pixel block size for calculating the new values of image colors by dragging the *Size* slider. For example, if you select 5x5, for each pixel in the image, the new value will be the average from the values of itself and its 24 surrounding pixels (totally 25 pixels).

3. Click on [OK] to start the process.
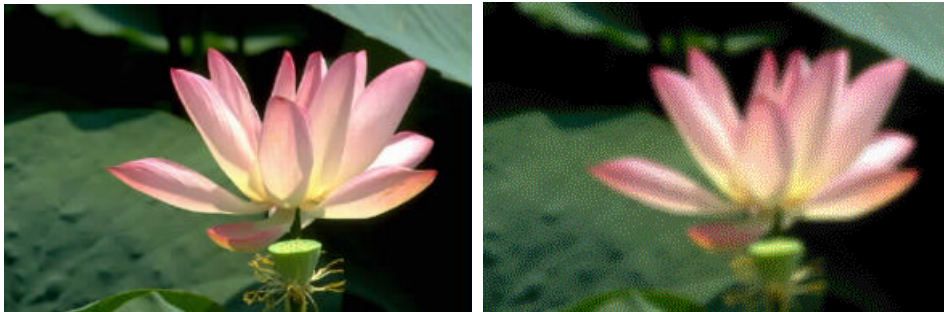
Figure 14-17 Average Effect

Fragment

When executing the *Fragment* function, the software will move the image in up, down, left and right directions to generate four temporary images, and then overlap the four images with certain level of transparency to produce a special effect. In view the final image looks like a photograph seriously out of focus.

To apply this effect:

1. Open the *Process* menu and select *Fragment*. A *Fragment* dialog box appears.
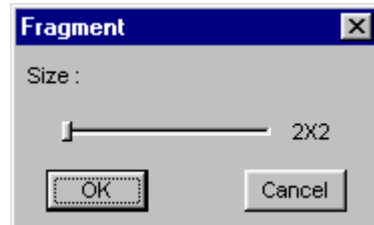
Figure 14-18 Fragment Dialog Box

2. Select the distance for moving the image in four directions. The higher the value, the more obvious the effect.

3. Click on [OK] to start the process.
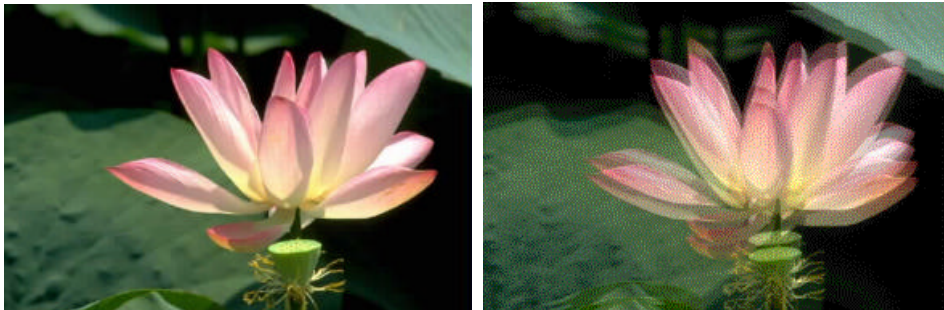
Figure 14-19 Fragment Effect

Mosaic

The *Mosaic* command is used to display an image as a series of mosaic tiles. The colors of the tiles are averaged with the original image colors and according to the tile size selected. To achieve this effect:

1. Open the *Process* menu and click on the *Mosaic* command. The *Mosaic* dialog box appears.
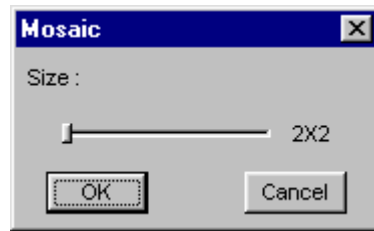
Figure 14-20 Mosaic Dialog Box

2. Select the tile size you want by dragging the slider.

3. Click on [OK] to start the process.
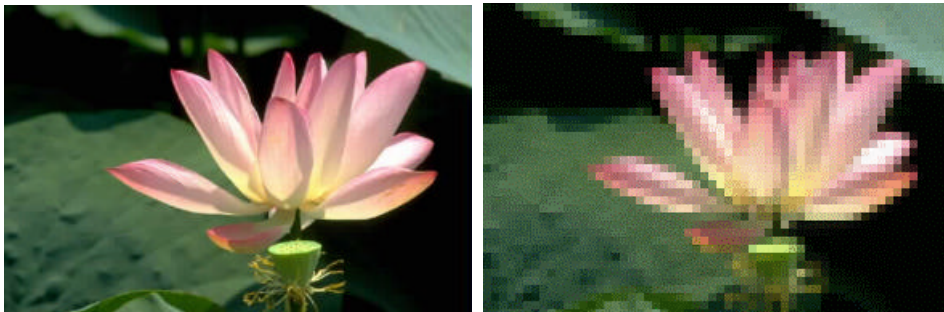
Figure 14-21 Mosaic Effect

Other Special Effects

The *Others* option in the *Process* menu contains several special image processing effects.

Add Noise

The *Add Noise* command can randomly generate color pixels in different levels of brightness of the original colors in the image, which in view looks like the noise generated by TV screens.

To generate this effect:

1. Select the *Add Noise* option of *Others* command from the *Process* menu. The *Add Noise* dialog box appears.
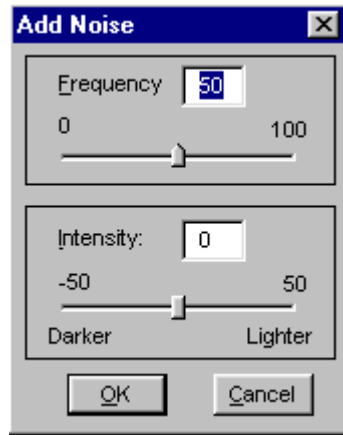
Figure 14-22 Add Noise Dialog Box

2. Drag the slider in the *Frequency* option to set the density for generating color pixels on the image. The higher the frequency, the more density the color pixels.

3. In the *Intensity* option set the level of brightness for the generated color pixels compared to the original colors in the image.

    If you set the intensity between 0 and 50, the color pixels generated will be lighter than the original colors; while setting the intensity between 0 and -50, the color pixels will be darker.

4. Click on the [OK] button.

Despeckle

The *Despeckle* command automatically clears the small speckles on the image. It will only clear a single pixel with great contrast in relation to its surrounding color pixels in order to avoid accidental erasing of the real image.

Diffuse

The *Diffuse* command blurs the image by diffusing its colors. The blurred image looks like an image seen through a plane water surface.

Find Edge

The *Find Edge* command is used to automatically find and display the edges of the objects on the image canvas with white or gray shades on a gray-scaled image, and with the original colors of the areas at the side of the edges of the image on an RGB color image.

Tiles

This command can cut an image into small square pieces and rearrange them to form the image. In view the effect is more like a jigsaw puzzle fitted by square pieces.

To utilize this function:

1. Open the *Process* menu and select *Tiles* option of *Others* command. The following dialog box appears.
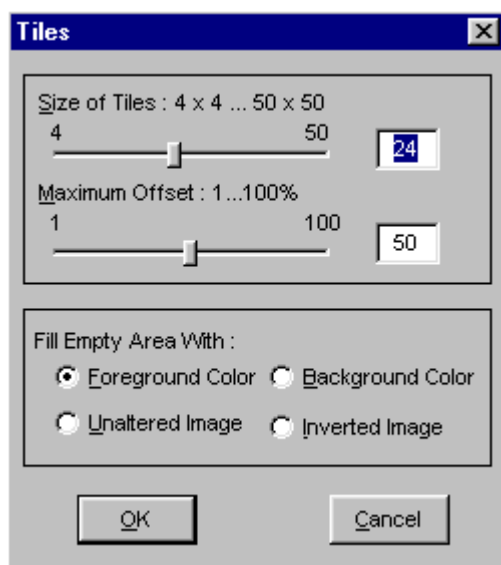
Figure 14-23 Tiles Dialog Box

2. In the *Size of Tiles* option set the dimension of the square pieces fitting the image in a range of 4x4 to 50x50 pixels.

3. Set the range of width among the pieces measured by the percentage of the tile size in the *Maximum Offset* option.

4. Select the background under the image pieces as *Foreground Color*, *Background Color*, *Unaltered Image* (the original image) or *Inverted Image*.

5. Click on the [OK] button.

Trace Contour

The *Trace Contour* filter converts images into a bi-level format in which image outlines are clearly marked. For a gray-scaled image, the outlines contain only black and white pixels; and for an RGB color image, they contain up to eight colors (black, white, red, green, blue, cyan, magenta, and yellow).

This command is specially useful when you need to find the edges of the objects in an image and repaint its objects with different colors.

To utilize the function:

1. Open the *Process* menu and select *Trace Contour* option of *Others* command. The following dialog box appears.
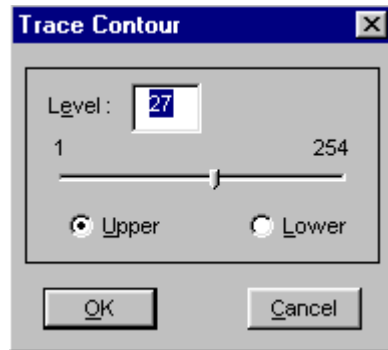
Figure 14-24 Trace Contour Dialog Box

2. In the *Level* option drag the slider to set the difference between the values of any two neighboring colors in the image. While tracing image outlines, only when the difference of two neighboring colors reaches the specified level can the border between them be traced.

3. Selecting the *Upper* or *Lower* option decides the color and position of the image outline between neighboring colors. If you check the *Upper* option, the outlines will be traced with the colors of higher values between neighboring colors; if you check the *Lower* option however, the outlines will be traced with the colors of lower values.

4. Click on the [OK] button.

Solarize

Applying the *Solarize* function makes an image look like a over-exposed photograph.

Click on the command name to start the function.

Original Image

Add Noise

Diffuse
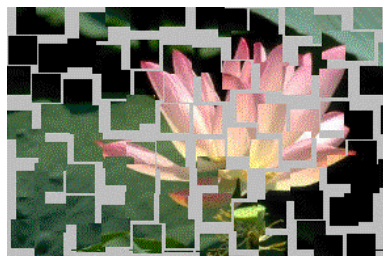
Find Edge

Tiles
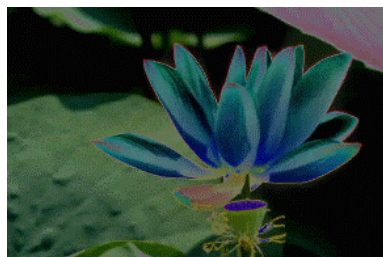
Trace Contour

Solarize

Figure 14-25 Effects: Add Noise, Diffuse, Find Edge, Tiles, Trace Contour, Solarize

Effect Browser

The *Effect Browser* dialog box offers an overview of image alternations processed with all the provided special effects under the *Process* menu. You can observe the different effects of the image, modify the processing factors, and select the one you need to start the real process to the image.

To view the effects:

1. Select the *Effect Browser* command from the *Process* menu. The *Effect Browser* dialog box pops up.
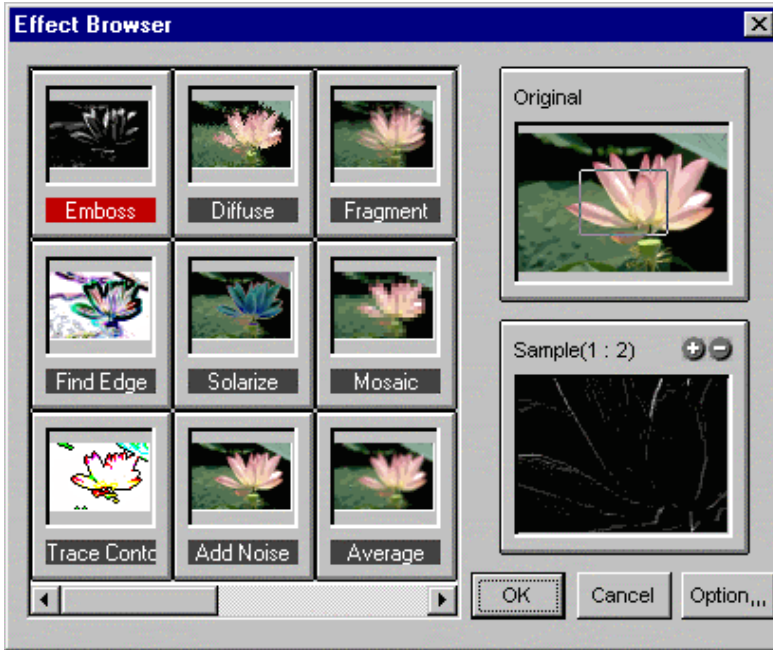
Figure 14-26 Effect Browser Dialog Box

The left half of the dialog box is lined with the image previews processed by different effects. Each effect name is illustrated under its corresponding image preview. You may move the scroll bar below to go through all the image previews.

The right half of the dialog box contains the original and sample images. The sample image refers to the image preview that is currently selected.

The *Sample* image can be zoomed in or out for comparison to the original. Click once on the [+] button to zoom in the image by one level; or click on the [-] button to zoom out the image by one level.

The rectangle frame displayed in the *Original* image marked out the current portion of the image shown in the *Sample* area. You can drag the frame in the original image, or directly drag the mouse pointer in the sample image to pan the view in the *Sample* area.

2. Click on the image preview of the effect you want.

3. If you want to change the options for the effect, click on the [Option] button under the *Sample* image. The dialog box related to the chosen effect, same as the one when you invoke the effect directly from the *Process* menu, will appear for your modification.

4. Click on [OK] to start the process.

Photo Fun

The *Photo Fun* dialog box provides several pre-defined templates for your usage, such as photo frames, calendars, greeting cards, etc. The sketch or format of these templates is pre-defined and fixed. You can add your favorite image into the template and make your own work.

To apply this effect:

1. Open the image you want to add to a template.

2. Select *Photo Fun* from the *Process* menu. The *Photo Fun* dialog box appears.

Figure 14-27 Photo Fun Dialog Box

3. Go through the tabs of categories and choose the template you want to use for your image.

4. Click on [OK] to start the process.

Customizing Calendars

The *Calendar* category offers different formats of calendars for your choice to build up a calendar with your own images. The software will automatically generate the weeks and days as long as you specify the month and year for the calendar.

Double click a proper format of calendar. A dialog box will pop up prompting you to enter the year and month for generating the calendar. After you click on [OK], the calendar will be produced.

Original Image   *Result After Applying the Template*

Figure 14-28 An Example of Photo Fun Effect

Advanced Usage of Templates

Templates for *Photo Fun* are defined by multi-layer images. Therefore, it is easy for you to change the elements in a template or create a personal template with multiple layers.

To change some of the elements in a template, open the template file (`*.POF`) you want to change from the category folders in the `Photofun` sub-directory under the software's program directory. You can change the image located on any layer in the template by the general editing procedure of multiple layers except the layer named "$PICTURE$" which would be applied with the image you want to combine with the template, so it should remain in the template.

In each POF file of Calendar category folder, there is a layer named "$CALENDAR-*$" which indicates the identity number of each calendar style provided in the software. This layer should be reserved for generating the correct style of calendar.

To create a new template, generate a multi-layer image with one of the layers named "$PICTURE$" which is reserved for combining with another image. Then save the template with `POF` extension to one of the category folders in the `Photofun` sub-directory.

If you are creating a calendar template, make sure your template contains a layer named "$CALENDAR-*$" to specify the calendar style.

Plug-in Interface

This software supplies an interface for utilizing third-party plug-ins which are software programs providing special effect filters. If you want to use plug-ins effects, you should set the path of the plug-in programs in the *Adobe Plug-in Path* option of *Preferences* dialog box (all the plug-in programs should be kept in one directory). The software will search for all the plug-ins and add them into the *Plug-in Filters* option under *Process* menu next time you restart it.

Last Filter

This position will display the effect name each time you have executed an effect in the *Process* menu, for your convenience to repeat the same effect next time.

15 Converting the Images

The *File Conversion Utility* provided in Presto! ImageFolio program group enables you to convert file format and image type without opening the images in Presto! ImageFolio. For example, you can convert a **BMP** file into a **JPG** format, or a 24-bit true color image into an Index 256 color one.

To convert images:

1. Execute *File Conversion Utility* from the Presto! ImageFolio program group. A dialog box appears as follows:
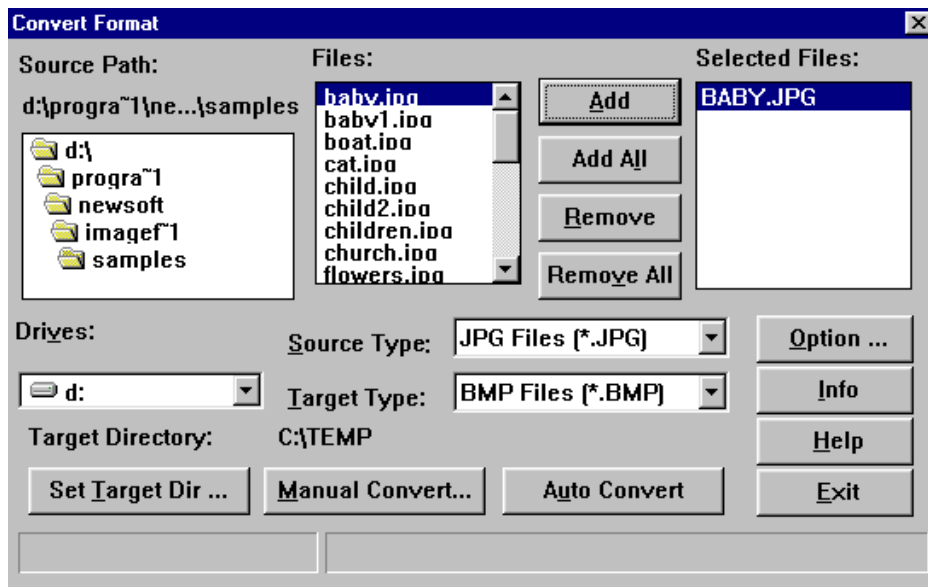
2. Select the drive you want from the *Drives* box if the file(s) you want to convert is on a different drive.

3. In the *Source Path* box, choose the directory where the file(s) you want to convert locates.

   The *Files* box displays the names of all files in that directory that are of the type selected in the *Source Type* option.

4. In the *Files* box, highlight all the files you want to convert by the same method while opening multiple files in the *Open* dialog box.

5. Whenever a file is highlighted, you may click on the [Info] button to view the file information.

6. Click [Add] or [Add All] button to add the highlighted files to the *Selected Files* box. If you want to remove any file in the *Selected Files* box, highlight the file and click the [Remove] button.

7. Click on the [Set Target Dir] button to select the directory where the converted file(s) should be placed from the pop-up dialog box.

8. Select the file format you want to convert the selected files in the *Target Type* pull-down list.

9. If you want to convert the image type of the files, click [Option] to set the target image type and the converting method as in the *Change Image* dialog box. Please refer to the section entitled *Converting Image* in Chapter 13 for more information about selecting target image type and converting method.

10. Click on [Manual Convert] or [Auto Convert] to start converting the files. *Manual Convert* invokes the *Change Image* dialog box for each file to let the user set the target image type and converting method of each individual file. *Auto Convert* uses the setting by the [Option] button to convert all the files.

11. After the conversion is finished, click on [Exit] to close the utility

A Glossary

The following glossary explains the terms used throughout the manual.

Term	Definition
Attribute	A style or characteristic that belongs to something.
Canvas	The totality of the drawing environment in which your images are drawn or edited in. The characteristics of the canvas such as measurement units, number of colors. resolution and size can be specified with the *New* command in the *File* menu. Remember that the entire canvas may be larger than what you see displayed in the image editing area, and that the number of colors that the canvas can display is independent of the display type of your computer. In other words, you can edit a 256-color canvas even though your system has only a 16-color display card. In this case, halftone patterns are used to simulate the 256 colors.
Channel	The elements that come into the composition of a color. For example, the RGB color model contains red, green and blue channels.
Click	Quickly press and release the left mouse button.

Term	Definition
Clipboard	A part of memory which temporarily stores the object that was processed with the *Cut* or *Copy* commands.
Default	The program's initial setting for an option.
Density Control	A method to fine tune the image by redistributing the bright and dark pixel values over the image.
Deselect	To cancel the current selection by executing another function.
Dialog Box	A window that pops up on the screen to allow you to set the values of a function's options before activating its command.
DPI	Dots per inch. The resolution of printers and scanners is measured by the number of dots per inch they produce. The higher the dpi value, the higher the resolution.
Drag	To hold down the left mouse button while you move the mouse pointer to a new position on screen.
Font	A complete set of characters.
Foreground/ Background Color	The colors used to paint on the image canvas. The current foreground and background colors are shown in the Palette Control.
Gamma	The value used to adjust the mid-tone contrast and brightness of an image.
Gray Scale	When a monitor or a printer is limited in its capacity to fully represent the colors of an image to be displayed or printed.

Term	Definition
Halftone	Halftoning is a method of using patterns to produce a continuous range of colors - from light to dark - in order to simulate the undisplayed colors of the image.
Histogram	A graphic representation showing the pixel value distribution in an image. The horizontal coordinate represents the pixel value, and the vertical coordinate represents the number of pixels in the image corresponding to that value.
HLS	A standard color model described by Hue, Lightness, and Saturation (HLS) channels.
Image	A picture created from individual pixels (dots).
Index Number	Colors are numerically indexed according to the color spectrum in order to define a color palette by means of a numerically indexed color grid.
Invert	To change the original colors in an image to their opposites (black to white, for example).
Landscape	The page is set up so that drawing is done horizontally along its longer axis.
Layer	The working sheet, holding objects for composing an image, with certain level of transparency and revealing mask. Several layers on the same canvas compose a whole image.
List Box	A list of options to choose from in a dialog box.
Load	To call up a picture or scanned image from disk and place it in the image editing window.

Term	Definition
Mapping Curve	The mapping curve represents the current gray scale color values: the points on the horizontal axis represent the brightness level of input pixels, and the points on the vertical axis the brightness level of output pixels.
Mask	The special shape marked by the outlines of a selection for processing a specific area on the image. The shape can be saved as a mask file and applied to the editing of other images. A mask used on a layer contains different levels of transparency for revealing the image pixels on the layer, generated from a gray-scaled image.
Memory	Also called RAM (Random Access Memory). A computer's temporary storage area for the information (data and images) you are working on. You copy the contents of that memory to disk (the computer's permanent storage area) to save it permanently.
Node	The small solid rectangles that are positioned on different location on selection's outline, or at the ends of a drawing segment. The nodes can be dragged by mouse action in order to resize and rotate the selected area.
Palette	The color table containing all the colors used for painting on the image canvas.
Pixel	The smallest unit displayed on a monitor.
Point	To move the mouse pointer to an object.
Portrait	The page is set up so that drawing is done horizontally along its shorter axis (its width).

Term	Definition
Pull Down Menu	A list of commands that appears below an item on the menu bar when you click on that item.
Resolution	See DPI.
RGB	A standard computer color mode described by Red, Green, and Blue channels.
Saturation	The purity of color. Measured in percentage: the higher the percentage, the purer the color and the less gray in it.
Scale	The proportions of an image or the gradation of a color.
Scanner	A device that can capture an image (like a photo or other images on paper) and convert it into a computer monitor image.
Scroll Bar	The bars on the right and bottom of the image editing area used to modify your view of the computer image.
Selector	The tool used to outline a specific area on the image for processing.
Stereo Image	United by two photographs of an object, taken from slightly different angles, a stereo image is seen from a stereoscope with the effect of depth and solidity.
Text Box	The area in a dialog box where you type text in.

B Keyboard Shortcut

This appendix lists the key combinations available in the software.

Keyboard Usage for Menu Commands

Many commands on the menus have keyboard equivalents.

Key	Operation
[Alt]	Combined with the underlined letter of an item on the menu bar, pulls down and open the menu. (To invoke a menu command or a dialog box action, press the appropriate underlined letter).
[Ctrl]+[N]	New
[Ctrl]+[O]	Open
[Ctrl]+[S]	Save
[Ctrl]+[R]	Revert
[Ctrl]+[P]	Print
[Ctrl]+[Z]	Undo
[Ctrl]+[X]	Cut
[Ctrl]+[C]	Copy
[Ctrl]+[V]	Paste
[Del]	Clear
[Ctrl]+[I]	Fill in Pattern

Key	Operation
[F1]	Help Index
[F2]	Toggle display of all panels
[F3]	Toggle Toolbox display
[F4]	Toggle Tool Control display
[F5]	Toggle Palette Control display
[F6]	Toggle Rulers display
[F7]	Toggle Tool Bar display
[F8]	Toggle Status Bar display
[F9]	Toggle Title Bar display
[F10]	Toggle Layer Manager display
[Ctrl]+[1]	Change the screen layout to Layout 1
[Ctrl]+[2]	Change the screen layout to Layout 2
[Ctrl]+[3]	Change the screen layout to user-defined layout
[Ctrl]+[F]	Last Filter
[+]	Zoom in
[–]	Zoom out
[Shift]+[F5]	Cascade
[Shift]+[F4]	Tile
[Enter]	Execute the current command
[Esc]	Cancels the current command

Keyboard Usage for Palette Control

The table below lists the keyboard and mouse operations for editing the color palette in the scratch pad.

Keyboard/Mouse Operation	Function
Click Mouse Left Button	Pick a foreground or background color
[Shift]+Click Left Button	Select or deselect colors
[Shift]+Click Right Button	Deselect all the currently selected color
[Shift]+Drag through a block of colors	Select a block of colors
[D]	Delete the selected colors
[Ctrl]+Click Left Button	Insert the selected colors starting from the color grid you are now on
[Alt]+Click Left Button	Replace the colors of the color grid you are on with the selected ones

Mouse and Keyboard Usage for Tools

The keyboard usage for Tools is combined with the mouse actions to edit the image.

Different functions are performed for different tools while holding the [Shift], [Ctrl] or [Alt] key and clicking/dragging the mouse:

Tool	Operation	Function
Selectors as Rectangle Selector, Ellipse Selector, Magic Wand, etc.	[Shift]+drag the left button [Ctrl]+drag the left button	Increase the selected area Exclude the selected area
Rectangle Selector	[Shift]+drag the left button [Alt]+drag the left button	Select a square area Select from the center of the rectangle
Ellipse Selector	[Shift]+drag the left button [Alt]+drag the left button	Select a circular area Select from the center of the ellipse
Free-hand Selector	Double click the mouse left button	Completing the selection
Path Selector	[Shift]+drag on the node [Ctrl]+click the left button [Shift]+click the right button Click the right button	Generate control points Remove the last generated node Create an enclosed area from the first to last node Complete the selection

Tool	Operation	Function
Selector Brush	Drag the left button	Add Selection
	[Ctrl]+drag the left button	Exclude Selection
Move Tool	Drag the left button	Move the selected object
	[Ctrl]+drag the left button	Change the active layer
	[Alt]+drag the left button	Move the selection frame
When a tool capable of creating selections is active	Click the right button	Invoke the mask options
Rectangle	[Shift]+drag the left button	Draw a square
	[Alt]+drag the left button	Draw a rectangle starting from its center
Ellipse	[Shift]+drag the left button	Draw a circle
	[Alt]+drag the left button	Draw an ellipse starting from its center
Curve	[Shift]+drag on the node	Generate control points
	[Shift]+click the right button	Close the curve segments
	[Ctrl]+click the left button	Remove the last generated node
	Click the right button	Complete the curve segments
Line	[Shift]+drag the left button	Draw a line in an angle of 45 degree increments

Tool	Operation	Function
Gradation	Click the right button	Select multiple colors for generating gradation
Paintbrush, Airbrush	Click or drag the left button	Paint with foreground color
	Click or drag the right button	Paint with background color
Text, Text Along Path	Click the right button	Complete the process
Stamp	[Shift]+click the left button	Pick the image for stamping or set the starting point for cloning
Image Hose	[Shift]+click the left button	Avoid overlapping sprayed images
	Click the right button	Define Image Hose Pattern
Texture Brush	Click the right button	Select a texture pattern
Zoom	[Shift]+drag the left button	Fit a part of the image in image window (magnified)
	[Ctrl]+click the left button	Zoom out
	Click the right button	Actual size display
	[Esc]	Return to the editing area from Full Screen display
Eyedropper	Click the left button	Pick foreground color
	Click the right button	Pick background color
Blur/Sharpen Brush	Click or drag the left button	Blur the image
	Click or drag the right button	Sharpen the image
Brightness/ Contrast Brush	Click or drag the left button	Brighten the image
	Click or drag the right button	Darken the image
Free-hand Rescale	[Shift]+drag the left button	Rescale proportionally
Free-hand Rotate	[Shift]+drag the left button	Rotate in 45 degree increments

The following keyboard/mouse operation works no matter what tool you have selected currently.

Operation	Function
[1]+click the left button	Zoom in
[2]+click the left button	Zoom out
[3]+drag the left button	Panning the image
[4]+click the left button	Pick foreground color in a true-color image
[5]+click the left button	Pick background color in a true-color image

C Icon Summary

This appendix lists the functions of all the icons appearing in the software.

Icons on the Tool Bar

	New		Select None
	Open		Select Invert
	Save As		Add Shadow
	Image Manager		Photo Fun
	Print		3D Effect
	Acquire		Effect Browser
	Information		Stitch
	Select All		Fill in Pattern
	Change Image		Undo

Change Image

	Rectangle Selector		Paint Bucket
	Ellipse Selector		Gradation
	Free-hand Selector		Paintbrush
	Path Selector		Airbrush
	Selector Brush		Text
	Move Tool		Text along Path
	Magic Wand		Stamp
	Rectangle		Image Hose
	Ellipse		Texture Brush
	Curve		Eraser
	Line		Zoom
	Eyedropper		Blur/Sharpen Brush
	Pan		Smudge Tool
	Hue/Saturation Brush		Free-hand Rescale
	Brightness/ Darkness Brush		Free-hand Rotate
	Slant Tool		

D Communication with Other Applications

Presto! ImageFolio supports OLE 2.0 feature for communicating with other applications. That is, an image produced by Presto! ImageFolio can be modified in another application by arousing Presto! ImageFolio. Usually when an image has been inserted into a document in another application that also supports OLE feature, you can directly bring up Presto! ImageFolio in that document, make necessary changes, and then update the image immediately.

In this process of modification, Presto! ImageFolio, which produces and modifies the image, acts as a server application and the other application, which edits the document containing the image, is called a client application.

Inserting Objects for Utilizing OLE Feature

The image used for utilizing the OLE feature is usually recognized as an object in a client application. To utilize Presto! ImageFolio as the OLE server for an image, you must make specific steps while inserting it into the client application.

There are two ways to insert the image for utilizing the OLE feature: one is to insert it from the Windows clipboard, and the other is by the *Insert Object* command or an equivalent function.

To insert the image from the Windows clipboard, you should open Presto! ImageFolio and load the image into it. Then select the part of image you want to insert to the client application with the selection tools or commands and copy it onto the clipboard. Finally go to the client application and paste it to where you want.

For using the other method, look for the *Insert Object* command or a function that is equivalent to this command in the client application (usually a client application supporting OLE feature should have this function). When executing this command, you should be able to set the object type and select the image file to be inserted. Choose the object type as *Presto! ImageFolio Document* and specify the file you want to insert. If you did not specify a file to insert, a new canvas will be created for your editing when Presto! ImageFolio is loaded.

Editing the Image in a Client Application

After the image is inserted into the client application, when you select the image, you may find an *ImageFolio Object* command name appearing in the *Edit* menu. This function is used for utilizing OLE feature to edit the image by Presto! ImageFolio. You can select the *Open* option to bring up Presto! ImageFolio.

When you select the *Open* option to edit the image, Presto! ImageFolio will be aroused and become the top application with the image loaded in an image window for your editing. The title of the image window illustrates the name of document or client application that the image is loaded from. This is so called stand-alone editing mode of OLE.

You may edit the image now with all the functions provided in Presto! ImageFolio. In the *File* menu of Presto! ImageFolio, you can find several commands different from the original ones.

Update (document or client application name):

With this command you can update the image in the client application anytime and stay remain in Presto! ImageFolio.

Save Copy As: You can save the modified image as another file for other usage.

Exit & Return to (document or client application name):

This command updates the changes you have made to the image in the client application, closes Presto! ImageFolio and returns the screen to the client application.

After you have finished modifying the image, execute the *Exit & Return to …* command to return to the client application. The image in the client application has been updated with the changes.