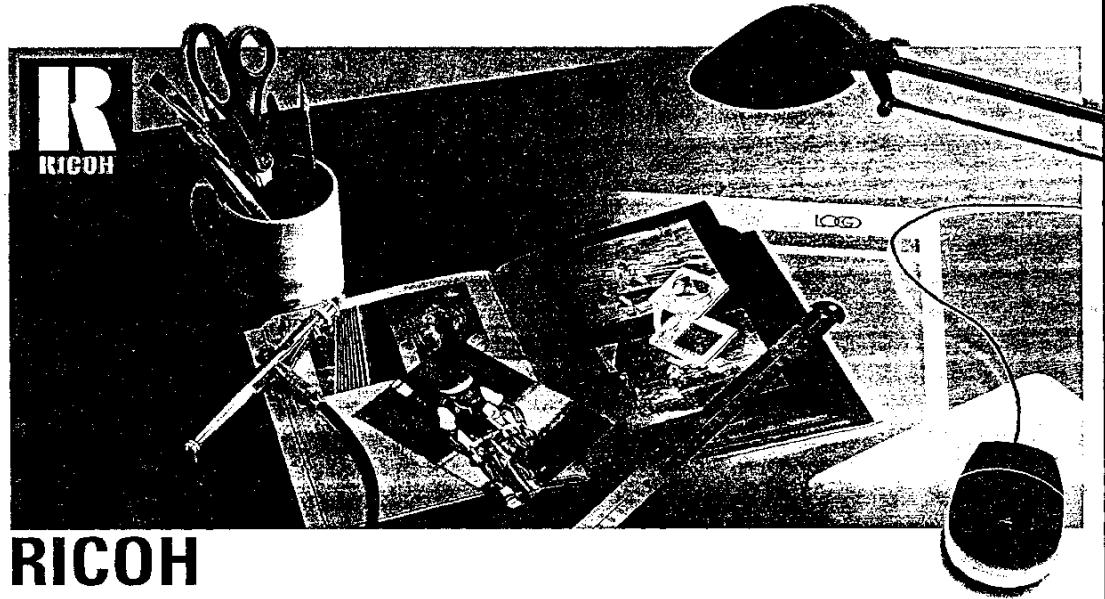


**RICOH®**



**RICOH  
PhotoStudio™ 2.0**

By ArcSoft®

**Chapter 4. REFERENCE FOR  
User Manual  
PALETTES AND Tools**

Windows® 3.X, Windows 95® and Windows NT®

Copyright 1994-1996, by ArcSoft, Inc. and Ricoh Company Ltd. All rights reserved.

This manual and the software described within are subject to a Software License Agreement. The software may only be copied in accordance with the license and can only be used on a single computer at any point in time unless a multi-user license has been purchased. Copying of the manual is expressly forbidden without the prior written permission of ArcSoft, Inc. and Ricoh Company, Ltd..

PhotoStudio is a registered trademark of ArcSoft, Inc.

The Ricoh PhotoStudio is a licensed software licensed from ArcSoft by Ricoh for bundling with Ricoh digital cameras.

PageMaker is a registered trademark of Aldus Corporation.

Photoshop is a trademark of Adobe System Corporation.

Microsoft Word and Windows are registered trademarks of Microsoft Corporation.

Ricoh is a registered trademark of Ricoh Company Ltd..

Other brand and product names are trademarks or registered trademarks of their respective holders.

#### **Credits For This Manual**

Writing - David Chang and Kyle Coachman

Book design and layout - Li Yu

For software technical support and product information, please contact:

Ricoh Corporation

475 Lillard Drive

Sparks, NV 89434

Tel 702.352.1600

Fax 800.544.8246

Internet: [www.ricohcpg.com](http://www.ricohcpg.com)

Ricoh PhotoStudio for Windows

By using the commands in the View menu, you can have three floating palettes - the Tools Palette, the Color Palette, and the Brush Palette - simultaneously displayed on the screen.

The Color Palette contains a variety of predefined colors for quick color selecting. The Brush Palette is used to define the size, shape, and drawing speed of the editing tools. The Tools Palette contains twenty-four tools and two color swatches for image editing.

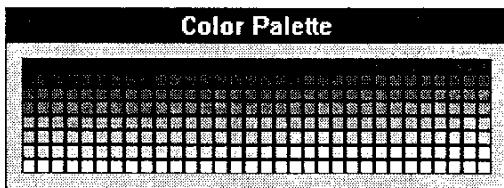
This chapter describes the three floating palettes and the tools in the Tools Palette.

### Contents

The Color Palette .....	4-2
The Brush Palette .....	4-3
The Tools Palette and Tools .....	4-4
Rectangle Select Tool .....	4-4
Ellipse Select Tool .....	4-6
Freehand Select Tool .....	4-7
Magic Wand Tool .....	4-8
Mask Move Tool .....	4-9
Area Move Tool .....	4-10
Zoom Tool .....	4-10
Grabber Tool .....	4-10
Text Tool .....	4-11
Stamp Tool .....	4-12
Gradient Fill Tool .....	4-14
Bucket Fill Tool .....	4-15
Airbrush Tool .....	4-16
Paintbrush Tool .....	4-17
Smudge Tool .....	4-18
Pen Tool .....	4-18
Brighten/Darken Tool .....	4-19
Smooth/Sharpen Tool .....	4-19
Clone Tool .....	4-21
Revert Tool .....	4-23
Transform Tool .....	4-24
Crop Tool .....	4-25
Eyedropper Tool .....	4-26
Trash Can Tool .....	4-26
Color Swatches .....	4-27

## 4 Reference For Palettes And Tools

### The Color Palette



The Color Palette shows a good sample of the colors you can choose for the active color in Ricoh PhotoStudio. To call it up, choose the Show Color Palette command from the View menu.

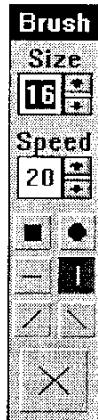
As you move the mouse over the palette, the mouse pointer changes to the Eyedropper Tool's pointer, and the status bar will display the RGB (or HSV) color values of the color that's under the pointer. When you find a color you like, simply click on it to make it the active color.

Of course, the palette's colors change depending on the type of image you are working on. If it is a 24-bit RGB True Color image, the palette will show a sampling of the millions of colors you can use. If it is 8-bit Grayscale, it will show all 256 gray levels; if it is 16- or 256-Color Indexed, it will show all colors in the image's color lookup table; and if it is 1-bit Black-and-White, the palette will display both black and white.

You can move the palette by clicking on its blue title bar and dragging. To put the palette away, either double-click on its title bar or choose Hide Color Palette from the View menu. If the palette is displayed when you quit Ricoh PhotoStudio, it will reappear when you start the program again.

## 4 Reference For Palettes And Tools

### The Brush Palette



The Brush Palette gives you control over the shape of the brush that is used by many of Ricoh PhotoStudio's major painting and retouching tools. To activate it, choose the Show Brush Palette command from the View menu.

The Size setting changes the brush size, which is measured in pixels. The Speed setting alters the rate at which the tools add their effects when you are moving the mouse. For example, at higher Speed settings, the Paintbrush Tool will draw a solid line when the mouse is dragged quickly. At lower settings, the rate will be slower and you will be able to create gaps in the line by dragging quickly.

You can type in a value for Size and Speed, or use the up and down arrows. The top six buttons allow you to pick various brush shapes that have variable sizes. The large button at the bottom is the user editable brush. If you double click on this button, the User Defined Brush dialog box will appear to let you edit your own brush shape.

The User-Defined Brush dialog box shows you a grid which corresponds to the shape of the brush you are defining. Black squares on the grid are active, and will affect the image when the brush is used. White squares are not active. Click on a square to change its status; press and drag in the grid to change many squares.

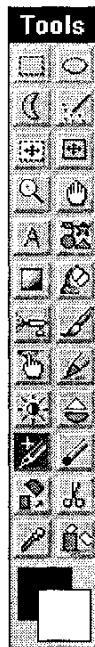
You can change the size of your brush by changing the grid size. The largest size is 32 pixels by 32 pixels. (Although the size of the grid in the dialog box does not actually change, the density of the square changes. Since each square is equivalent to a pixel, more square means that the brush will affect a larger area.)

You can also save brush shapes and load them back later when you want to use them. Brush shapes are saved with a ".bsh" filename extension.

Ricoh PhotoStudio remembers the brush shape and size settings when you quit and restores them, or when you run the program again.

You can move the palette by clicking on its blue title bar and dragging. To put the palette away, either double-click on its title bar or choose Hide Brush Palette from the View menu. If the palette is displayed when you quit Ricoh PhotoStudio, it will reappear when you start the program again.

## The Tools Palette and Tools



The Tools Palette contains tools for selecting, viewing, drawing, painting, retouching, and editing images. It also contains controls for choosing the active and alternative colors.

When you move the mouse over its icon in the Tools Palette, a brief description of the tool will appear in the main window's status line. To select a tool, click on its icon.

Most tools are affected by the setting on the Brush Palette and the color in the active color swatch when you are painting or editing an image. Some tools also have specific options associated with them. To access tool options, double-click on the icon of a tool.

In the rest part of this chapter, we will describe all tools in the order from the top to the bottom of the Tools Palette.

### Rectangle Select Tool



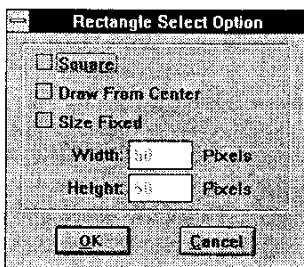
This tool allows you to select rectangular portions of your image. To use it, simply press and drag in the image window. As long as you hold the mouse button down, you can change the size of the selection you are making. Release the mouse button when you have selected the portion you want. The pointer position and the size of the selected rectangle are displayed in the status line (located at bottom of the Ricoh PhotoStudio window) during the selecting operation.

If you decide you want to remove the mask you have created, click (but do not drag) anywhere in the image, or choose None from the Mask menu.

You can also combine the existing mask with your new selection by holding down the Shift key and dragging.

*Tip: To make accurate selections, make sure the mouse pointer is at one corner of the rectangular area you want to select before you start to click and drag. If the options are set to Draw From Center, you will want to make sure the pointer is at the center of the area you want to select. (See "Options" below.)*

When you double-click on the Rectangle Select Tool button, a dialog box will appear for more options. Click OK to activate your setting.



Options in the Rectangle Select Tool dialog box:

**Square**

When this box is checked, the tool will always select perfectly square areas of your image. If you try to select a rectangular area, the tool will limit the size of the selection to the largest possible square within that rectangular area.

**Draw From Center**

Allows you to draw rectangular selections out from the center of the area you want to select. When this option is on, simply click at the center of the area you want to select and then drag the mouse out toward any corner of the area.

**Size Fixed**

When this option is turned on, the tool will only select areas of the fixed size you specify in the width and height fields. If you turn the Square option on as well, Ricoh PhotoStudio will require the width and height fields to be equal. Simply click on the location on the image, a desired selection will appear.



### Ellipse Select Tool

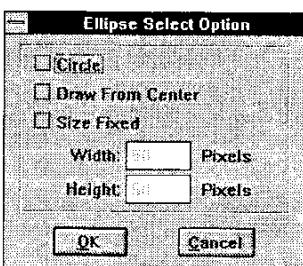
This tool allows you to select elliptical or oval-shaped portions of your image. To use it, simply press and drag in the image window. As long as you hold the mouse button down, you can change the size and shape of the selection you are making. Release the mouse button when you have selected the portion you want. The pointer position and the size of the selected area are displayed in the status line (located at bottom of the Ricoh PhotoStudio window) during the selecting operation.

If you decide you want to remove the existing selection, click (but do not drag) anywhere in the image.

You can also combine the existing mask with your new selection by holding down the Shift key and dragging.

*Tip: For more accurate selections, imagine that you are using the rectangle select tool to make a rectangular selection that is just the right size to contain the oval area you want. Make sure the mouse pointer is at one corner of that imaginary rectangular area before you start to click and drag. Also, you may want to try the Draw From Center option. (See "Options" below.)*

When you double-click on the Ellipse Select Tool button, a dialog box will appear for more options. Click OK to activate your setting.



#### Options in the Ellipse Select Tool dialog box:

##### Circle

When this box is checked, the tool will always select perfectly circular areas of your image. If you try to select an elliptical area, the tool will limit the size of the selection to the largest possible circle within that area.

## Draw From Center

Allows you to draw elliptical selections out from the center of the area you want to select. When this option is on, simply click at the center of the area you want to select and then drag the mouse outwards.

## Size Fixed

When this option is turned on, the tool will only select areas of the fixed size you specify in the width and height fields. If you turn the Circle option on as well, Ricoh PhotoStudio will require the width and height fields to be equal.

 Freehand/Polygon Select Tool

To create irregularly-shaped or polygonal selections, you should use this tool. You can also make selections that are partly polygonal and partly irregular.

Irregular selections are made by pressing and dragging in the image window. Simply move the mouse around the area you want to select. If you want a polygonal selection—like a star or an octagon—you only need to click the mouse on the points of the polygon, in a connect-the-dots fashion. Ricoh PhotoStudio will connect the points where you click. (Note: The Stamp Tool has a template feature that makes some polygonal selections easier.)

By using a combination of these two techniques, you can create a selection that is partly polygonal and partly irregular.

You can also combine the existing mask with your new selection by holding down the Shift key and dragging.

When you are ready to finish your selection, double-click on the point where you want to end the selection. Most people find it easiest to simply make the selection and then double-click on the place where they started, thus making a complete shape. If you do not double-click where you started, Ricoh PhotoStudio will complete the selection with straight lines.

This tool has no options, so double-clicking on the tool button has no effect.



### Magic Wand Tool

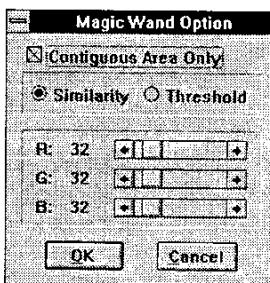
The Magic Wand Tool is very handy for situations where you want to select an area of your image based on color similarity. (In grayscale and black-and-white images, it selects regions of similar darkness.) For example, if your image is a landscape with a blue sky, you can use the magic wand tool to select the sky without selecting the white clouds at the same time. Then you can apply various effects to change the color of the sky.

To make this selection, you would just click on the sky with the magic wand tool. The tool selects everything of that color or a similar color. The tool also has an option that allows you only to select a contiguous area of your image based on color similarity. In other words, it will select all of the blue in the sky, but it won't select the blue ball that's in the middle of the meadow.

Of course, it's not always that easy, since there are parts of the sky that are lighter than others, and you may end up just selecting part of the sky. Also, if your image also includes a blue lake that touches the sky, you may end up selecting the sky and the lake.

However, you can change the tool's sensitivity by adjusting the options. Also, the tool can add to the current selection when the Shift key is held down.

When you double-click on the Magic Wand Tool button, a dialog box will appear for more options. Click OK to activate your setting.



#### Options in the Magic Wand Tool dialog box:

##### Contiguous Area Only

If this box is checked, the magic wand tool only selects the contiguous area containing the pixel you click on. Otherwise, the tool selects all pixels in the image that have the same or similar color to the pixel where you clicked on.

## 4 Reference For Palettes And Tools

### Similarity

This is the default setting for this tool. When this is the setting, the Magic Wand selects the color you click on and all colors that are (1) touching the clicked-on color and (2) are similar to the clicked-on color. The similarity sensitivity is specified by the RGB sliding settings; the higher the numbers, the greater the number of colors that will be selected.

### Threshold

When set to Threshold, the Magic Wand Tool categorizes all the pixels in your image into two types: ones that have RGB values that are all greater than the threshold settings, and others that have values equal to or below them. (A pixel with red and green values greater than the respective threshold settings but a blue value below the threshold blue value would fall into the "less than" category.) Then when you click in your image, the tool selects the color you click on and all colors that are (1) touching the clicked-on color and (2) are in the same threshold category as the first color.

### RGB Sliders

There are three sliders; one each for red, green, and blue. Each one has a range of 0 to 255, which corresponds to the color values given to each color in a Ricoh PhotoStudio image.

### Mask Move Tool



The Mask Move Tool gives you the power to move the current mask to a different part of your image. When you click in the current selection and drag, the tool picks up the mask—without changing its shape, but leaving the currently-masked pixels behind—and relocates it in your image window. In its new position, the mask acts just like any ordinary mask, and any pixels within its borders will be affected by commands or tools that you use.

This tool has no effect if you don't have anything selected in your image window. It has no options, so double-clicking on its tool button in the toolbox has no effect. Masks cannot be moved between images with this tool.

## 4 Reference For Palettes And Tools



### Area Move Tool

Unlike the mask move tool, the area move tool moves both the mask and the pixels that lie within its boundaries. To use it, click in the current mask and drag it to its new location.

The tool does not remove the original masked pixels; it only moves a copy of those pixels to the new location. It's like peeling off a copy of that part of your image and then placing the copy elsewhere on the image. The copy is a floating selection, so you can move the copy as many times as you like without changing the image underneath it.

This tool does nothing if there is no current selection. It has no option dialog box. In addition, you can also move the selected area without using Area Move Tool. Please see the "Using the Keyboard" section in Chapter 2.



### Zoom Tool

Clicking the left button in the active image window with this tool magnifies your view of the image. This is like using a magnifying glass to get a better look at your work; it does not change the actual size of your image. (To change the image size, use the Resample command in the Transform menu.)

You can see the current magnification ratio in the status bar at the bottom of the screen; magnification of 1:1 is 100% (normal size), 2:1 is 200%, 3:1 is 300%, and so on.

To shrink the image, simply click with the right button in the active image window. 1:2 is 50%, 1:3 is 33%, 1:4 is 25%, and so on.

You can make your view as large as 16:1 or as small as 1:16.

Double-clicking on the zoom tool button sets the viewing ratio of the current image to 1:1.



### Grabber Tool

To adjust the position of your image in the image window, click on your image with the Grabber Tool and drag in the direction you want your image to move. For example, if your image is very large and you can only see half of it at a time, you can use this tool to move it and look at the other half. It's more convenient than clicking on the image window scroll bars because you can use it to move at any angle with one quick mouse movement.

## 4 Reference For Palettes And Tools

If you have trouble getting the hang of dragging your image in the right direction, try thinking of your image as a large canvas hanging outside your little bathroom window. (The canvas is your image, and the window is the image window.) Imagine that clicking on the image is the act of grabbing the canvas. Then you drag the canvas in the direction you want it to move.

This does not affect your image in any way; it only adjusts your view of the image.

Double-clicking on the Grabber Tool button has no effect.

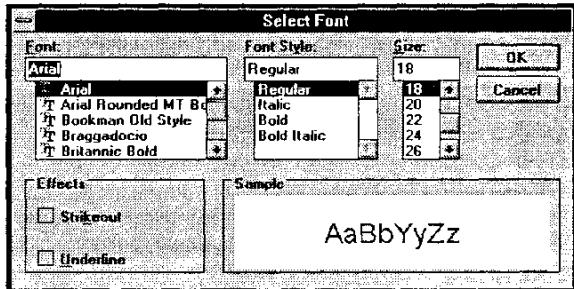


### Text Tool

The Text Tool allows you to add a line of text on the active image. To use it, click the tool on the location where you want the text to start. Since text you create with this tool flows from left to right, you should click at the top left corner of the area where you want the text to appear.

When you click, the text dialog box appears for you to enter your text. Type the text you want in the main dialog box area. Note that pressing return will have the same effect as clicking on the OK button.

You can also click on the "Font" button to get the Select Font dialog box, which allows you to change the font and add various styles and effects. Changes you make in the Select Font dialog box will be applied to all of the text in the text dialog box.



Once you have created the text, it appears as a floating selection that can be repositioned with the Area Move Tool. The color of the text is the same as the active color. If you click again with the text tool, however, the floating selection will be released and Ricoh PhotoStudio will prompt you with a new text dialog box.

#### Options in the Text Tool dialog box:

Double-clicking on the Text Tool button shows up the Select Font dialog box, and allows you to designate the default font settings for your text.

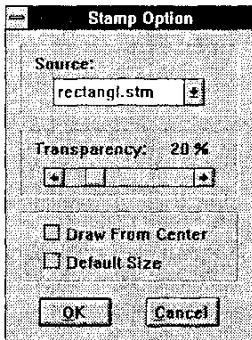
### Stamp Tool

The Stamp Tool allows you to lay down a predefined shape on your image with every click and drag of your mouse. If you do not set it to something else, the Stamp Tool creates rectangles and fills them with the active color at 0% transparency (opaque). To use it, click and drag in your image to create the rectangle, just like you would do with the Rectangle Select Tool if you were making a rectangular selection. If you don't like the result, use the Trash Can Tool to discard the stamp.

You can define your own stamps, too. To do this, create a new 8-bit Grayscale image of the same proportions that you want the stamp to have. Draw your stamp in white on a black background. (If you want your stamp to have holes in it, draw them in black.) Then convert the image to 1-bit Black-and-White format and save it as a .BMP file in the "STAMPS" sub-directory of the Ricoh PhotoStudio program directory. Quit Ricoh PhotoStudio and change the files extension from .BMP to .STM (use the Rename command) so that Ricoh PhotoStudio will know it is a stamp file. When you run Ricoh PhotoStudio again, the new stamp name will appear in the list with the other predefined stamps in the Stamp Option dialog box. (Refer to the Options discussed below.)

The Stamp Tool has many options you can access by double-clicking on the tool button.

## 4 Reference For Palettes And Tools



Options in the Stamp Tool dialog box:

Source	This list contains a library of predefined shapes like ellipse, line, frame, arrow, and star. If you pick one of these shapes, the tool will create that shape until you change your selection again, or until you quit Ricoh PhotoStudio.
Transparency	Changes the transparency of the stamps made by the tool, from 0% (opaque) to 99% (so transparent you can barely tell that you made a stamp).
Draw From Center	Like the Rectangle Select Tool option, this option makes the Stamp Tool create stamps from the center outward. In other words, when you click and drag to create a stamp, the click defines the center of the stamp instead of the upper left corner.
Default Size	If this option is turned on, simply clicking with the Stamp Tool will create a stamp of a predefined size. If the Draw From Center option is on, the new stamp will be centered at the location where you clicked; if not, it will be located below and to the right of the place where you clicked. The default size varies depending on the current Source selection.

## 4 Reference For Palettes And Tools

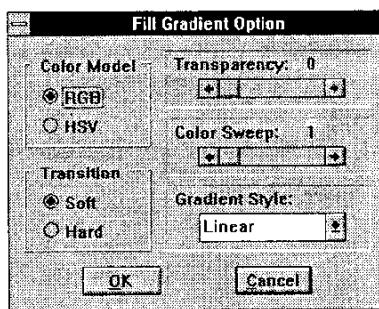


### Gradient Fill Tool

This tool fills the current selection or the entire active image with a gradient from the alternative to the active color. A gradient is a transition from one color to another, like the transitions you see between orange and blue near the horizon during a sunset.

To use it, click at the point where you want the gradient to begin and drag to designate the length and direction of the transition. For example, if you want a gradual, sunset-like gradient, set your alternative color to a sky blue and your active color to a deep orange. Then click at the top of your image and drag straight down to the bottom. If you drag for a shorter distance, the transition will occur more quickly. Also, you can have part of the transition occur outside of the current mask or image by dragging past the boundary of the mask or image.

By default, gradients are opaque (0% transparency), but you can change this by double-clicking on the tool button and changing the options.



#### Options in the Gradient Fill Tool dialog box:

Color Model	Ordinarily, gradients are made in the RGB scale. HSV makes the gradient transition happen in the HSV color scale; the end result is a rainbow-like transition between the colors.
Transition	Allows you to opt for a harsher transition.
Transparency	Allows you to change the transparency of the gradient.

## 4 Reference For Palettes And Tools

### Color Sweep

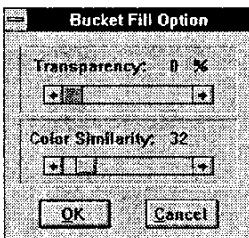
Allows you to choose multiple gradients. If this is set to 3, for example, the transition you want will occur between the alternative and active colors. However, right after changing to the active color, it will transition right back to the alternative color, and then back to the active color once again, for a total of three bands of changing colors.

### Bucket Fill Tool



The Bucket Fill Tool selects an area based on color similarity and adds the active color to it. It's like the Magic Wand Tool (see Magic Wand Tool), except that after it makes the selection, it fills the selected area with the active color. To use it, click on the area where you want to add the active color.

Of course, you can change its characteristics by double-clicking on the tool button and altering the options.



Options in the Bucket Fill Tool dialog box:

#### Transparency

Changes the transparency of the active color that is added by the tool.

#### Color Similarity

Like the Magic Wand Tool, the Bucket Fill Tool's similarity option allows you to make the tool affect more or affect less of the contiguous area where you have clicked. Setting this to a higher number means that the tool will affect more of your image. However, unlike the Magic Wand Tool's similarity option, you cannot separate the red, green, and blue spectrums. Your similarity setting is the same for all three.

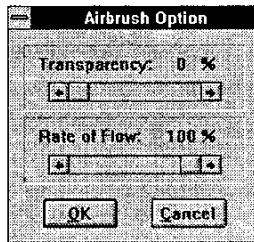
## 4 Reference For Palettes And Tools



### Airbrush Tool

This tool simulates the effect of an artist's airbrush, slowly adding layers of the current active color on top of areas where you click and drag. For a stronger effect, drag back and forth over the area several times. If the shape of the airbrush effect is not to your liking, change it using the Show Brush Palette command from the View menu.

If you want the color to appear more slowly or more transparently, you can change the rate of application or transparency by double-clicking on the tool button and changing the options.



Options in the Airbrush Tool dialog box:

Transparency	Changes the transparency of the color that is added by the Airbrush (0% being opaque).
Rate of Flow	Ordinarily, this is set to 100%. If you want to moderate the speed at which the active color is added by the Airbrush, lower this setting.

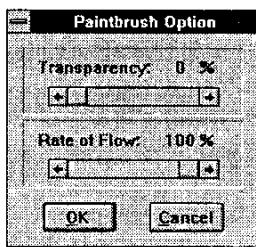


### Paintbrush Tool

This tool applies a thick, opaque layer of the active color to the area where you click and drag. (You can make the "paint" more transparent by changing the options.) Like a real paintbrush, the color applied by the tool fades somewhat when you drag more quickly. Unlike a real paintbrush, the tool never runs dry; moving the mouse slowly will always create the richest color allowed by the current settings.

Like the Airbrush Tool, the Paintbrush's settings can be customized by changing the options and/or altering the brush shape using the Show Brush Palette command from the View menu.

When you double-click on the Paintbrush Tool button, a dialog box will appear for more options. Click OK to activate your setting.



Options in the Paintbrush Tool dialog box:

**Transparency**

Changes the transparency of the color that is added by the paintbrush (0% being opaque).

**Rate of Flow**

Ordinarily, this is set to 100%. If you want to moderate the speed at which the active color is added by the paintbrush, lower this setting.

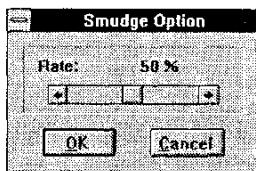
## 4 Reference For Palettes And Tools



### Smudge Tool

This tool simulates a finger smearing the "paint" in the image. It's a directional effect; if you click in a red area and drag into a white area, you'll end up creating a small pink area in the white section. Going in the opposite direction makes a pink area in the red section. Also, if you drag faster, the effect is rougher and not as intense.

The shape of the brush is set using the Show Brush Palette command from the View menu.



Options in the Smudge Tool dialog box:

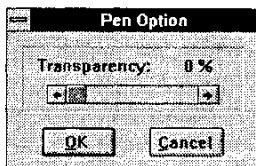
Rate This changes the intensity of the smudge effect. A higher setting creates a more intense effect.



### Pen Tool

This tool draws like a marker or felt-tip pen. In other words, when you click and drag in the image, it draws an opaque line that's the same color as the active color. (You can change the transparency in the options.) If you drag more quickly, the line becomes less solid.

The shape of the brush is set using the Show Brush Palette command from the View menu.



Options in the Pen Tool dialog box:

Transparency Changes the transparency of the color that is added by the Pen (0% being opaque).

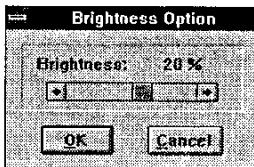
## 4 Reference For Palettes And Tools



### Brighten/Darken Tool

This tool brightens (or darkens, depending on current settings) the area in your image where you click and drag the mouse. The shape of this tool can be changed using the Show Brush Palette command from the View menu.

The tool cursor will change to reflect whether you are about to brighten or darken: when brightening, the value of Brightness is larger than zero, the cursor is an arrow with a white star; when darkening, the value of Brightness is negative, the cursor is an arrow with a black star.



Options in the Brighten/Darken Tool dialog box:

**Brightness** Changes the effect of this tool anywhere from 100% (completely bright) to -100% (completely dark).



### Smooth/Sharpen Tool

This brush-type tool has an interesting averaging or differentiating effect in the area where you click. It's useful for smoothing rough edges and harsh transitions, and for sharpening areas that seem fuzzy. Drag to affect a larger area. To get the heaviest effect, click (and drag, if necessary) many times in same general area.

By default, the Smooth/Sharpen Tool is set to the smoothing function. (To change this setting, double-click on the tool button to bring up the options dialog.) Each time you smooth an area, Ricoh PhotoStudio averages the color of each affected pixel a little with the colors of the pixels around it. This adds a general blur or haze to the area and hides sharp contrasts.

For example, if you have an image of small red polka-dots on a blue background, smoothing it would make the edges of the dots blurry and purplish. A lot of smoothing would make the

## 4 Reference For Palettes And Tools

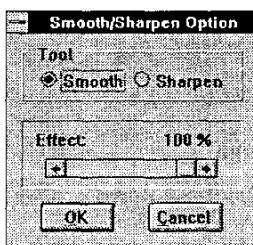
whole area purple.

On the other hand, sharpening accentuates the contrast between each affected pixel and its neighbors. If it is the same color as the others but slightly darker, sharpening makes the pixel darker and its neighbors lighter. Too much sharpening makes your image seem grainy.

The tool's cursor will show you whether you are about to smooth or to sharpen. When you are in smooth mode, the cursor is an arrow with an arc next to it; when in sharpen mode, the arc becomes an angle.

The shape of the brush is set using the Show Brush Palette command from the View menu.

To smooth or sharpen your entire image or selected area, use the filters from the Enhance menu.



Options in the Smooth/Sharpen Tool dialog box

Tool                      Switches the tool between Smooth and Sharpen mode.

Effect                      Changes the intensity of the smoothing or sharpening.

## 4 Reference For Palettes And Tools



### Clone Tool

This useful tool duplicates one part of your image in another part of the image. For example, you can give a person a third eye in the middle of his forehead if you clone one of his existing eyes.

To do this, you'd click with right button on the existing eye. This tells Ricoh PhotoStudio where the source of the cloning will be; a plus sign (+) would appear at that location for your reference. Then you'd press and drag with the left button in the middle of his forehead.

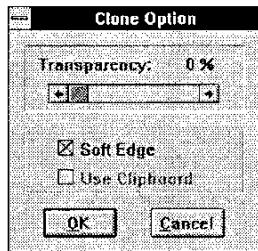
Of course, Ricoh PhotoStudio does not know exactly what you want to clone, so dragging too wildly will deposit a nose on your victim's left eye and an eyebrow in his hairline. Also, each time you release the mouse button and press it down again, you tell Ricoh PhotoStudio that you want to make another clone in the current location, so uncontrolled clicking will create a panorama of eyes.

One of the most powerful aspects of the Clone Tool is that you can clone between images. Just set your source in one image, switch to the other, and clone. You can also activate the Use Clipboard feature in the options dialog. This feature lets you use the image you have on the Ricoh PhotoStudio clipboard as the source for your next cloning operation.

Like many other tools, the Clone tool's area of effect is determined by the current setting in the brush palette.

When you double-click on the Clone Tool button, a dialog box will appear for more options. Click OK to activate your setting.

## 4 Reference For Palettes And Tools



### Options in the Clone Tool dialog box:

Transparency	Changes the transparency of the cloned area(s) you are planning to create. This is set to 0% by default.
Soft Edge	Makes the edge of the cloned area softer for a better visual match with the existing image. This is turned on by default.
Use Clipboard	As mentioned in the main Clone Tool description, this feature allows you to use the current clipboard image as the source for the next cloning operation. If there is no image in the Ricoh PhotoStudio clipboard, this option will be unavailable. The location of the source point is hard to determine for clipboard cloning, since you cannot see the plus sign on the clipboard, and you cannot define a new source point by clicking the right mouse button on the clipboard. The clipboard source point will be located at the same coordinates as the last source point you used (even if the last source point was not in the same image as the clipboard image). If this is the first time you have used the Clone Tool since you started Ricoh PhotoStudio, the clipboard source point will be located at the coordinates (0,0) — that is, the very top left-hand corner.

## 4 Reference For Palettes And Tools



### Revert Tool

This tool is like a modified eraser brush that allows you to blend the changes you've made to the currently masked area together with the original state of that area (the underlying image area).

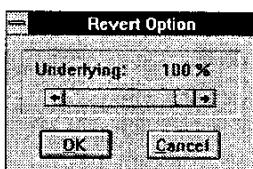
To use it, simply click and drag over the areas that you want to blend. By default, this tool erases the floating selection affected and restores the respective underlying (100%). You can change this setting in the options dialog box.

Of course, you cannot make a change, make a few other alterations, mask the first change, and then use this tool. It only affects changes that have been made while the current mask has been active.

To undo all the changes you've made to the current selection, use the Trash Can Tool.

The shape of the brush is set using the Show Brush Palette command from the View menu.

When you double-click on the Revert Tool button, a dialog box will appear for more options. Click OK to activate your setting.



Options in the Revert Tool dialog box:

Underlying

Changes the opacity of the pixels that are being restored from the underlying image area. By default, this is set to 100%.

## 4 Reference For Palettes And Tools



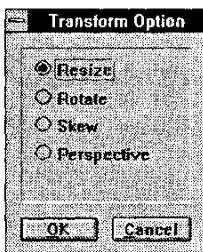
### Transform Tool

This tool allows you to resize the current selection. When you choose this tool from the toolbox, your selection instantly gains four small black squares at its four corners. (If your selection is not rectangular, Ricoh PhotoStudio puts a temporary rectangular boundary around it and the squares appear at the corners of this rectangle.) These are called "handles" and they are not permanent; they disappear when the transformation is complete. Clicking and dragging any one of them will allow you to resize the selection from that side.

You can release the mouse button and resize it again and again without the change taking effect. To restore the original selection size, double-click outside the selection boundaries. To trigger the actual resizing operation, double-click within the selection. If you start the operation and change your mind, you can cancel it by pressing the escape key (Esc).

The new resized selection appears as a floating selection; if you move it away with the Area Move Tool, the underlying original image will appear untouched.

If you double-click on the tool button and change the options settings, you can use this tool in three other ways:



- 1) **Rotate** — rotates the selection around its center point. As you drag, the amount of rotation (in degrees) appears in the status bar for your reference.
- 2) **Skew** — distorts the selection horizontally or vertically, depending on the initial direction you drag the mouse. Visually, this effect makes your selection look like it is leaning to one side (or up or down on one end). Geometrically, this effect lets you give your selection the shape of a parallelogram, and stretches or shrinks parts of the image to match the new shape.

## 4 Reference For Palettes And Tools

3) **Perspective** — distorts the selection in such a way that it gives one end (left, right, top, or bottom) the appearance of being either in the distance or in the foreground. Geometrically, this effect allows you to give your selection a trapezoidal shape, and stretches or shrinks parts of the image to match the new shape.

Repeatedly transforming your selection until you get the result you want is not recommended, because each transformation operation reduces the sharpness of the selection.

### Crop Tool

When you click on this tool's button, it instantly copies the current selection from your image and makes a new document out of it. The original document is left untouched. For example, if you select the sun from your landscape image and then crop, a new, smaller image window will appear, and it will only contain the sun. The rest of the landscape will be left out of the new window.

This tool has no options dialog box.

## 4 Reference For Palettes And Tools

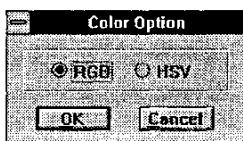


### Eyedropper Tool

The Eyedropper Tool makes the active color the same as the color of the point you click on. It also displays in the Status Line the color values of the pixels that you move the pointer over. (As you can guess, this makes it much easier to create objects and shapes that match existing ones.)

*Tip: The Eyedropper samples the point that's at the very tip of the eyedropper icon in the image window. It's easy to accidentally sample the wrong color, especially since some areas that look solid actually contain tiny spots of other colors. For example, an orange flower can contain tiny spots of red and yellow. Make sure that the active color visually matches the color you want after you've used this tool.*

If you double-click on the tool button, a dialog box will appear for option's setting.



Options in the Eyedropper Tool dialog box:

RGB and HSV      Switches the color value display between RGB and HSV scales.



### Trash Can Tool

Clicking on this tool's button instantly removes the current mask and all changes that have been made in it. If you are about to try some experimentation on your image, it's often handy to mask everything first so you can undo the changes made within the selection if necessary.

Of course, you cannot make a change, make a few other alterations, mask the first change, and then use this tool. It only affects changes that have been made while the current mask has been active.

This tool has no options dialog box.



### Color Swatches

The color swatches at the bottom of the toolbox are convenient indicators of your current active and alternative color selections. The active color is the color that is applied to your image by the various brush tools, and it is used by other functions and tools as well. It is also the color that appears in the place of your selection after you perform a Cut command from the Edit menu. The alternative color helps to determine the effect you get with the Gradient Tool, and it is handy as an "on deck" color because you can make it into the active color merely by clicking on its swatch.

If you move the mouse pointer over the color swatches, the status bar will show you what they are and their respective color values.

To change the alternative color, click on it to make it the active color, change the active color, and then switch back to the original active color.

There are three ways to change the active color:

- 1) Use the Eyedropper Tool (Please refer to the Eyedropper Tool in Chapter 4). This is the best method for getting the active color to match a color in your image.
- 2) Use the Color Palette (Please see the Color Palette in Chapter 4). This is a quick way to pick from the range of colors available in Ricoh PhotoStudio.
- 3) Double-click on the Active Color Swatch to bring up the Color Selection dialog box. This is the best method when you want to use the HSV color system to choose a color, or when you find the Color Palette's selections to be too imprecise.

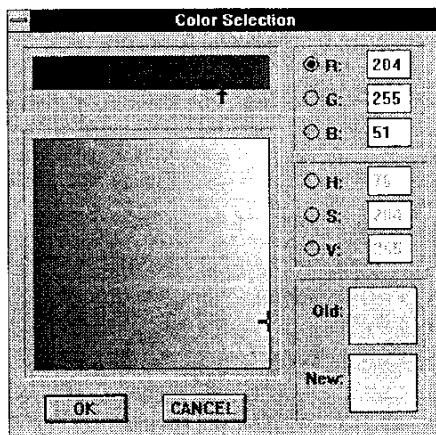
#### The Color Selection Dialog Box:

This dialog box gives you many color selection options, including two different color systems: RGB and HSV.

When the dialog box first appears, it is in RGB color mode with the red spectrum selected. This is indicated by the button next to the R in the top right-hand corner. If you know the RGB color values of the color you want to select, simply enter them into the R, G, and B value boxes at the top right. Then click the OK button to make that your active color.

## 4 Reference For Palettes And Tools

If you want to switch to the HSV color system, just click on the button next to the H, S, or V at the right. If you have specific HSV values, you can enter them in the value boxes at this time.



The sliding scale at the top of the dialog box and the field below it provide a good two-part system for in-depth color selection. The button that is clicked next to the R, G, B, H, S, or V on the top right-hand side indicates the color characteristic you are currently examining. The scale always shows the range of possible values for that characteristic. For example, if the R button is currently selected, the slider shows a range from black (no red) to bright red. Clicking at different spots on the scale changes the amount of red in the current color selection and in the field.

The field shows all the possible colors you could choose if you were to keep the current red value and vary the other two values (green and blue). If the G button were currently selected, the field would show varying levels of red and blue; if the H button were selected, the field would show varying levels of saturation and brightness.

Using the sliding scale to isolate the most important color characteristic and the field to pick from the resulting possibilities should make it easy for you to find the color you want.

For your reference, the Old color patch shows the active color and the New color patch shows the color selection you've made in this dialog box.

## 4 Reference For Palettes And Tools

---

Of course, if your monitor or video card cannot display 24-bit color, this dialog box cannot show the full range of possible colors. Ricoh PhotoStudio will arrange the available colors in such a way that you can get a good general idea of how the colors would look if you had 24-bit color.

*Tip: If you are simply browsing for a color, it's often helpful to click on the H button to see the hues displayed like a rainbow in the sliding scale. You can click on the hue you want and then pick out your color from the large field below the scale.*