

THE BASICS 1

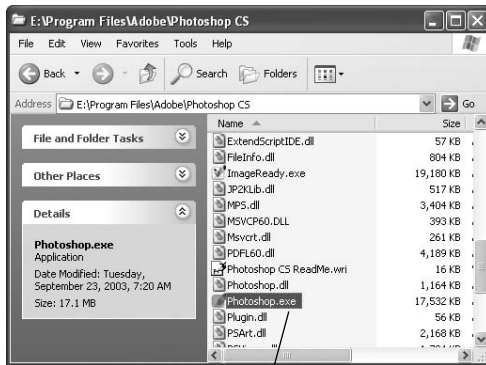


Too hearty a welcome?

When you launch Photoshop, a welcome screen pops up, offering you access to an online tutorial, color management information, lists of new features in PDF format, etc. If you get tired of seeing it, uncheck **Show this dialog at startup**.



1 In Windows, click *Adobe Photoshop CS*.



2 In Windows, double-click the *Photoshop application icon*.

Adobe Photoshop CS



3 In Mac, click the *Adobe Photoshop CS icon in the Dock*.

Welcome to Photoshop 8—Er...CS!

In this chapter (which is more of a read than a do), you'll learn how to launch Photoshop and get acquainted with the Photoshop interface—menus, palettes, and whatnot. You can use this chapter as a reference guide as you work. The next chapter, which is an introduction to color in Photoshop, is more theory than technique, too. From Chapter 3 onward, though, it's nonstop action.

To launch Photoshop in Windows:

In Windows 2000 or XP, click the Start button on the taskbar, choose All Programs, then click Adobe Photoshop CS **1**.

or

Open the C:\Program Files\Adobe\Photoshop CS folder in My Computer, then double-click the Photoshop application icon **2**.

or

Double-click a Photoshop file icon.

To launch Photoshop in Macintosh:

In Mac OS X, click the Photoshop icon in the Dock **3**. (If you don't have an icon there yet, open the Adobe Photoshop CS folder in the Applications folder, then drag the Adobe Photoshop CS application icon into the Dock.)

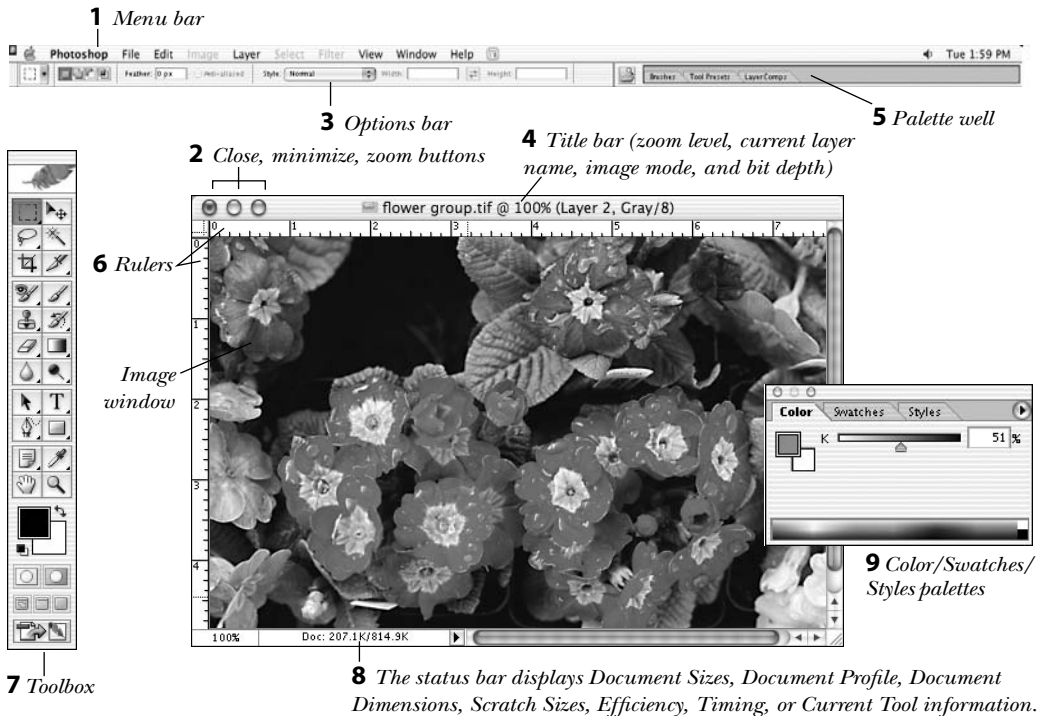
or

Open the Adobe Photoshop CS folder in the Applications folder, then double-click the Adobe Photoshop CS application icon.

or

Double-click any Photoshop file icon.

The Photoshop screen in Macintosh



Key to the Photoshop screen: Macintosh and Windows features

1 Menu bar

Press any menu heading to access dialog boxes, submenus, and commands.

2 Close, minimize, and zoom buttons

To close a file or a palette, click its close (red) button. Click the minimize (yellow) button to stow it in the Dock. Click the zoom (green) button to enlarge a window to maximum size, or on a palette to show/hide extra options.

3 Options bar

Use to choose settings for the current tool.

4 Title bar

Displays the image's title, zoom level, current layer (or the Background), image mode, and bit depth.

5 Palette well

Use to store and open palettes.

6 Rulers

Choose View > Show Rulers to display rulers. The position of the pointer is indicated by a mark on each ruler.

7 Toolbox

Press Tab to show/hide the Toolbox and all open palettes.

8 Status bar

The status bar displays Document Sizes, Document Profile, Document Dimensions, Scratch Sizes, Efficiency (the percentage of time Photoshop is processing edits, as opposed to writing to the scratch disk), Timing, or Current Tool information. To reset the timer, choose Timing with Alt/Option held down.

9 Palettes

There are 19 movable palettes. Click a tab (palette name) in a palette group to bring that palette to the front of its group.

The Photoshop screen in Windows

1 *Application Control menu*

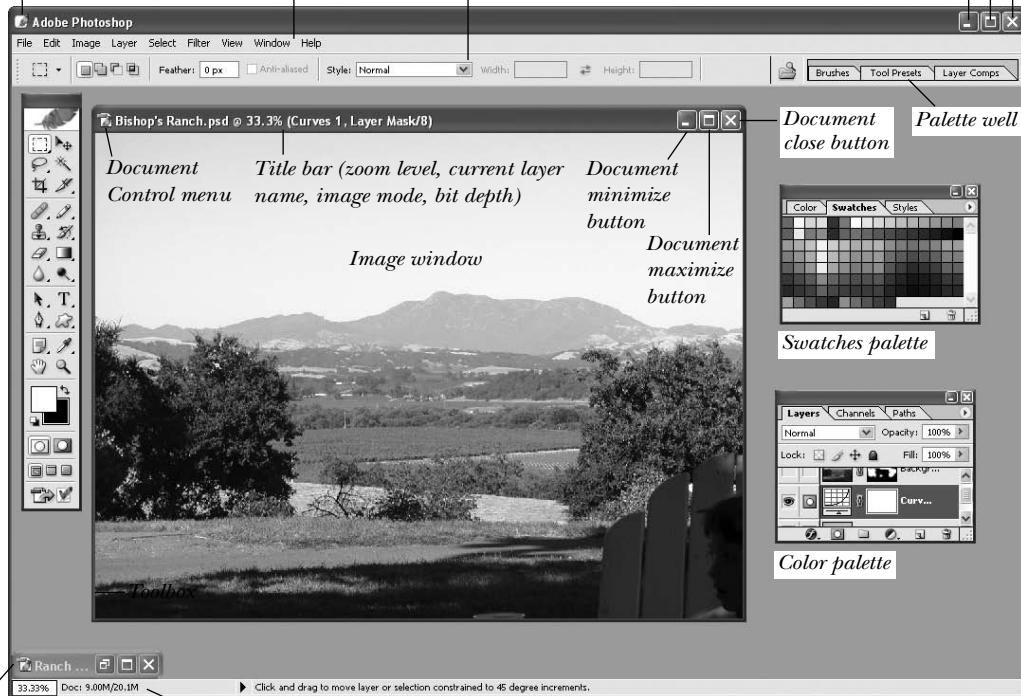
Menu bar

Options bar

3 *Application maximize button*

2 *Application minimize button*

4 *Application close button*



A minimized window, showing the restore button

The status bar displays Document Sizes, Document Profile, Document Dimensions, Scratch Sizes, Efficiency, or Timing information.

Key to the Photoshop screen: Windows-only features

1 *Application (or document) Control menu*

The application Control menu commands are Restore, Move, Size, Minimize, Maximize, and Close. The document Control menu commands are Restore, Move, Size, Minimize, Maximize, Close, and Next.

2 *Application (or document) minimize button*

Click the application minimize button to shrink the document to an icon in the taskbar. Click the icon on the taskbar to restore the application window to its previous size. Click the document minimize button to shrink the document to an icon at the lower

left corner of the application window. Click the restore button to restore the document window to its previous size.

3 *Application (or document) maximize/restore button*

Click the application or document maximize button to enlarge a window to its largest possible size. Click the restore button to restore a window to its previous size. When a window is at the restored size, the restore button turns into the maximize button.

4 *Application (or document) close button*

Closes the application (or image).

The menus



File menu

Use commands on the File menu to create, open, close, save, place, scan, import, export, and print images; open the File Browser; automate operations; and exit Photoshop. Use the Jump To submenu to switch to a helper application, such as Adobe Illustrator or GoLive. (In Mac, the Quit Photoshop command is on the Photoshop menu.)



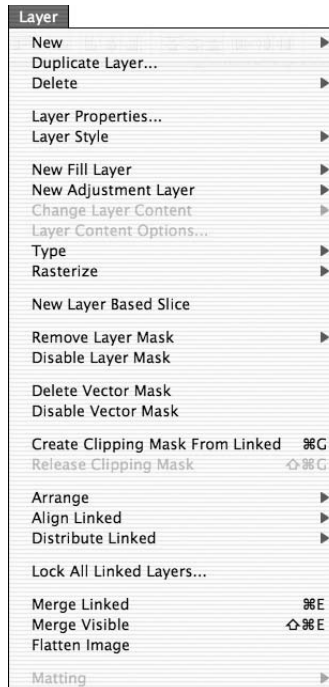
Edit menu

The Edit menu is a storehouse of image-editing commands that copy, transform, and paste imagery; apply fills and strokes; and create custom brushes, patterns, and shapes. Fade lessens the effect of the last edit; the Purge commands free up memory. Also found here are commands for word processing, for managing presets, and for customizing shortcuts. (In Mac, the Preferences and Color Settings commands are on the Photoshop menu.)



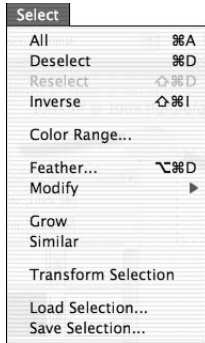
Image menu

An image can be converted to any of eight image (color) modes via the Mode submenu. The Adjustment commands modify an image's hue, saturation, brightness, contrast, etc. The Image Size command modifies an image's file size, dimensions, or resolution. The Canvas Size dialog box is used to add or subtract from an image's live canvas area. Other commands rotate, crop, or trim the canvas.



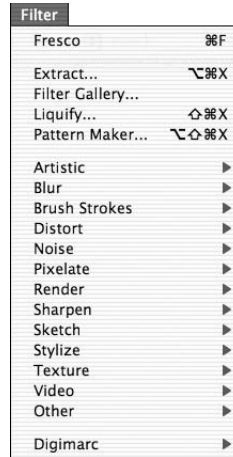
Layer menu

Layer menu commands create, duplicate, delete, apply styles to, rasterize, arrange, align, distribute, merge, and flatten layers. Other commands add, remove, or disable layer, vector, and clipping masks. Some of these commands can also be chosen from the Layers palette menu.



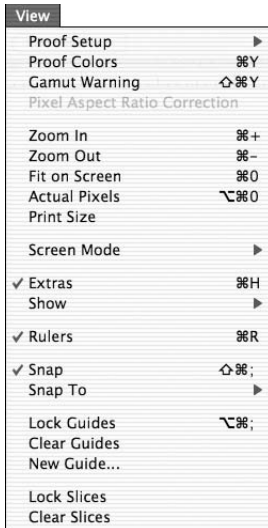
Select menu

The All command on the Select menu selects an entire layer. Deselect deselects all selections, Reselect restores the last deselected selection, and Inverse swaps the selected and unselected areas. The Color Range command creates a selection based on image color. Other Select menu commands enlarge, contract, smooth, or feather selection edges, as well as save selections to and from channels.



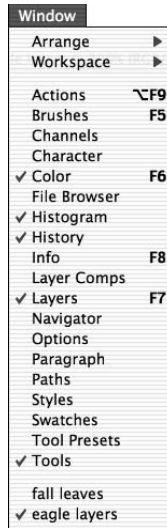
Filter menu

Filters, which perform a wide range of image-editing functions, are organized into submenu groups. Extract allows you to make complex silhouettes, the Filter Gallery allows you to apply multiple filters, Liquify pushes pixels around, Pattern Maker creates seamless patterns from selections, and Digimarc embeds a copyright watermark.



View menu

Commands on the View menu control what features are visible onscreen. Use this menu to show/hide rulers, grids, guides, slices, selection edges, the currently selected (target) path, or annotations, or to change the current zoom level or screen mode. The Proof Setup commands allow you to see how your image will look in different output color spaces, and the Gamut Warning highlights colors that won't print on a four-color press.



Window menu

The Window menu is used primarily for showing and hiding the 19 palettes. Open images can also be activated via this menu and arranged via Arrange submenu commands. Workspace commands allow you to customize your workspace. In Windows, the Status Bar command for showing/hiding the status bar is also found on this menu.



Help menu

Use Help menu commands to access Photoshop onscreen help, get the latest news from Adobe, connect to Adobe Online, or perform automated tasks via onscreen prompts. (Not all the commands shown here are available in Mac.)

Using the Toolbox


To **choose** a tool whose icon is currently visible, click once on its icon. Click the itty bitty arrowhead next to a tool icon to choose a related tool from a pop-out menu.

Or even better, choose a tool using its shortcut (try to memorize the boldface letters on the next three pages). If you forget a tool's shortcut, just leave the cursor over the tool icon for a moment, and the tool tip will remind you **1**. To cycle through hidden, related tools on a pop-out menu that also share the same shortcut, press **Shift** plus the shortcut key. You could also Alt-click/Option-click the currently visible tool icon.

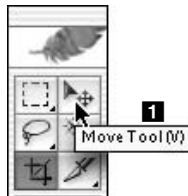
Note: If Use Shift Key for Tool Switch is unchecked in Edit (Photoshop, in Mac) > Preferences > General, you can just press the letter without using Shift.

Attributes are chosen for each tool (e.g., blending mode, opacity percentage) from the **options bar** at the top of the screen (read more about the options bar on page 11) **3**. Features on the bar change depending on which tool is selected.

Options bar settings remain in effect for an individual tool until they're changed or the tool is reset. You can save settings as presets in the Tool Preset palette (see page 28). To reset a tool to its defaults, right-click/Control-click the tool thumbnail on the options bar, then choose **Reset Tool** from the context menu **2**. Or to reset all tools, choose **Reset All Tools** from the same menu.

If you try to use a tool **incorrectly**, a cancel icon  will appear. Click in the image window to make an explanation appear.

TIP Choose whether tool pointers look like their Toolbox icon or a crosshair in Edit (Photoshop, in Mac) > Preferences > Display & Cursors.



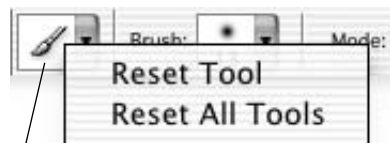
Tool tips

Rest the pointer on a tool icon—without clicking or pressing the mouse button—to learn that tool's name or shortcut **1**. Use the same method to learn the function of a palette or options bar feature **3**. Check **Show Tool Tips** in Edit (Photoshop menu, in Mac) > Preferences > General to enable this feature.

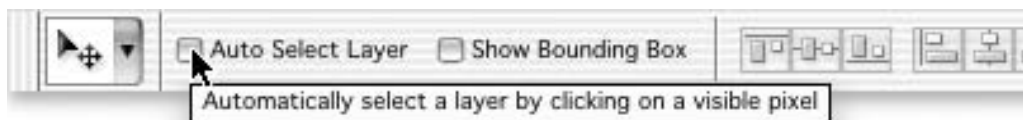
Tool shortcuts

Hide/show the Toolbox and all open palettes	Tab
Cycle through hidden, related tools on the same pop-out menu	Shift plus shortcut key* or Alt-click/Option-click the currently visible tool
Cycle through blending modes for the current editing tool or layer	Shift-+ (plus) or Shift-- (minus)

*If Use Shift Key for Tool Switch is checked in Edit (Photoshop, in Mac) > Preferences > General



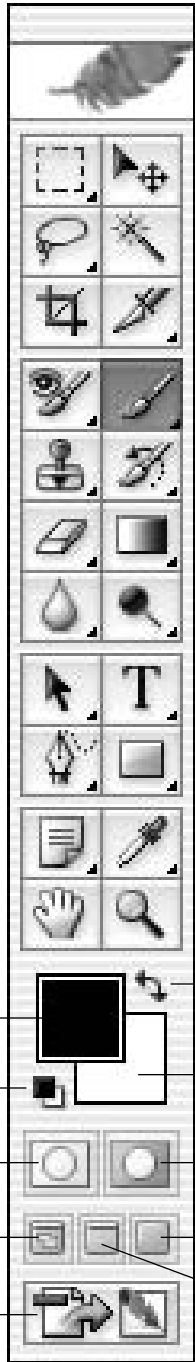
2 To access the **Reset Tool** command for an individual tool or the **Reset All Tools** command for all tools, right-click/Control-click the tool thumbnail on the options bar.



3 Choose options for the current tool from the **options bar** at the top of your screen.

The Toolbox

- Rectangular Marquee M**
Creates rectangular selections
- Lasso L**
Creates freehand selections
- Crop C**
Crops the canvas
- NEW Color Replacement J**
Changes colors, preserves texture
- Clone Stamp S**
Clones imagery
- Eraser E**
Erases pixels
- Blur R**
Blurs edges
- Path Selection A**
Selects paths
- Pen P**
Draws curved or straight paths
- Notes N**
Creates nonprinting annotations
- Hand H**
Moves the image in its window
- Foreground color square**
- Default colors D**
Black and white
- Standard mode Q**
- Standard windows F**
- Edit in ImageReady**
Ctrl-Shift-M/Cmd-Shift-M



- Click here to go to the Adobe website*
- V Move**
Moves a layer, selection, or guide
- W Magic Wand**
Selects similarly colored pixels
- K Slice**
Slices images for optimization
- B Brush**
Applies brushstrokes
- Y History Brush**
Restores pixels from a designated state
- G Gradient**
Creates color blends
- O Dodge**
Lightens pixels
- T Horizontal Type**
Creates editable type on its own layer
- U Rectangle**
Draws rectangular shapes
- I Eyedropper**
Samples colors from the image
- Z Zoom**
Changes the zoom level
- X Switch foreground/background colors**
- Background color square**
- Q Quick Mask mode**
- F Full screen with no menu bar**
- F Full screen with menu bar**





Toolbox

(Continued on the following page)

M Elliptical Marquee
Creates oval selections

Single row
Creates 1-pixel-high selections

Single column
Creates 1-pixel-wide selections

	Rectangular Marquee Tool	M
	Elliptical Marquee Tool	M
	Single Row Marquee Tool	
	Single Column Marquee Tool	


L Polygonal Lasso
Creates polygonal selections

L Magnetic Lasso
Creates snap-to freehand selections


	Lasso Tool	L
	Polygonal Lasso Tool	L
	Magnetic Lasso Tool	L

J Healing Brush
Corrects flaws by hand

J Patch
Corrects flaws using a selection




	Healing Brush Tool	J
	Patch Tool	J
	Color Replacement Tool	J

S Pattern Stamp
Applies patterns

	Clone Stamp Tool	S
	Pattern Stamp Tool	S




E Background Eraser
Erases the sampled color to transparency

E Magic Eraser
Erases color areas by clicking


	Eraser Tool	E
	Background Eraser Tool	E
	Magic Eraser Tool	E

R Sharpen
Sharpens pixels

R Smudge
Smudges pixels

	Blur Tool	R
	Sharpen Tool	R
	Smudge Tool	R

A Direct Selection
Selects segments and points on a path



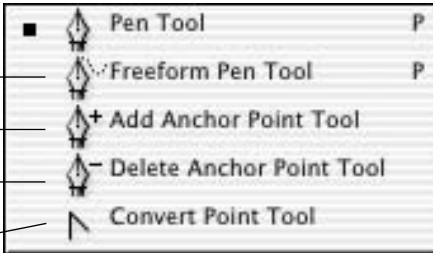
Path Selection Tool A
 Direct Selection Tool A

P Freeform Pen
Draws freehand paths

Add Anchor Point
Adds points to a path


Delete Anchor Point
Deletes points from a path

Convert Point
Converts corner points into curve points, and vice versa



Pen Tool P
 Freeform Pen Tool P
 Add Anchor Point Tool
 Delete Anchor Point Tool
 Convert Point Tool

N Audio Annotation
Creates audio annotations



Notes Tool N
 Audio Annotation Tool N

K Slice Select
Selects slices by clicking




Slice Tool K
 Slice Select Tool K

B Pencil
Draws freehand lines



Brush Tool B
 Pencil Tool B

Y Art History Brush
Paints a history state or snapshot in stylized brushstrokes

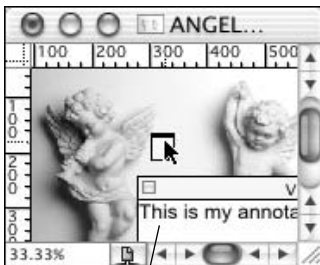
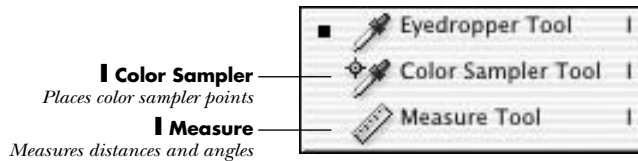
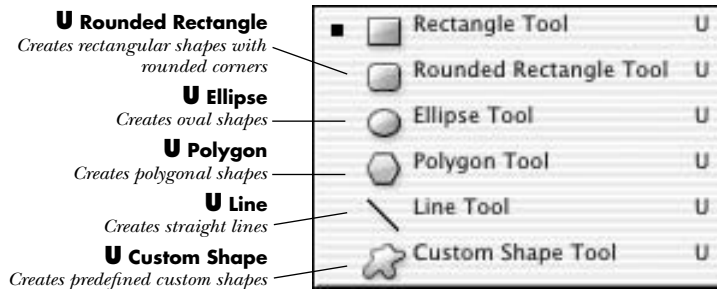
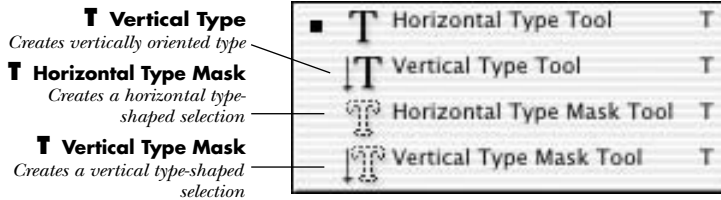
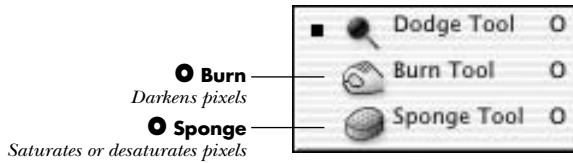


History Brush Tool Y
 Art History Brush Y

G Paint Bucket
Fills similarly colored areas by clicking



Gradient Tool G
 Paint Bucket Tool G



1 An annotation created using the **Notes** tool

Annotate

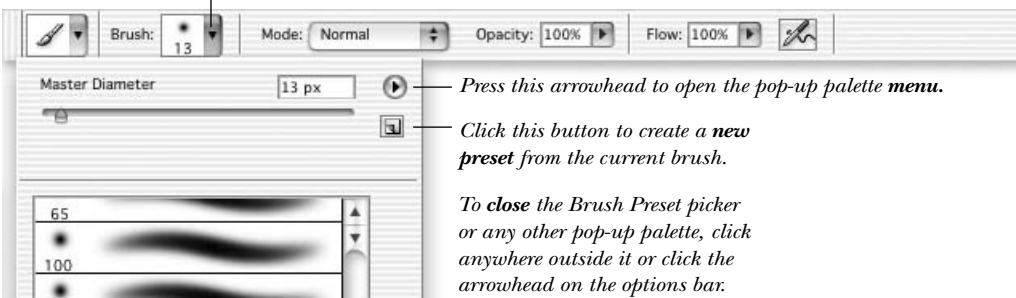
The **Notes** tool creates nonprinting Acrobat-compatible notes, which can be used for communicating with a client, output service, etc. **1** When you click a note icon, a note window containing the message opens. The **Audio Annotation** tool creates audio notes.

Options bar

The options bar is used to choose settings for each tool (e.g., Opacity, Flow, blending Mode). Options on the bar change depending on which tool is currently chosen, and your choices remain in effect until you change them. Like the palettes, the options bar can be dragged to a different part of your screen. Double-click the left edge of the options bar to collapse/expand it.

The palette well on the options bar is discussed on page 12.

Click the Brush arrowhead to open the **Brush Preset picker** (it's a pop-up palette).



The options bar for the **Brush** tool



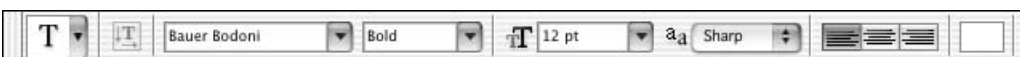
The options bar for the **Rectangular Marquee** tool



The options bar for the **Gradient** tool



The options bar for the **Pen** tool



The options bar for the **Type** tool

The palettes

How to use the palettes

Many Photoshop operations are triggered by choosing commands on movable palettes.

To save screen space, the palettes are joined into default **groups**, such as History/Actions and Color/Swatches/Styles.

To **open** a palette, choose its name from the Window menu. The palette will appear in front within its group.


Press Tab to **show/hide** all open palettes, including the Toolbox. Press Shift-Tab to show/hide all open palettes except the Toolbox.

To **display** an open palette at the front of its group, click its tab (palette name).

You can **separate** a palette from its group by dragging its tab **1–2**. You can **add** a palette to any group by dragging the tab into the group. If you need to widen a palette to make additional tabs visible, drag the palette's **resize** box (lower right corner). Most of the palettes are resizable.

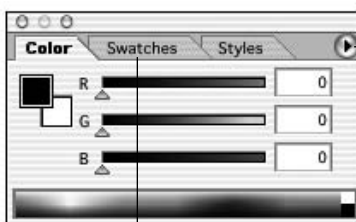
You can **dock** (store) palettes in the palette well on the right side of the options bar;

either by dragging the palette into the well **3** or by choosing Dock to Palette Well from the palette menu.

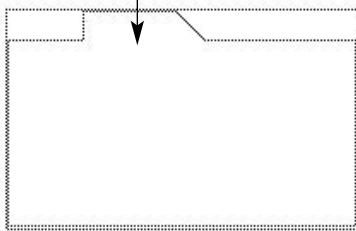
If the current tool uses a particular palette (e.g., the Pencil tool uses the Brushes palette, the type tools use the Character palette), you can click the **Toggle** palette button  on the options bar to show/hide that palette.

To **shrink/expand** a palette, double-click its tab. In Windows, you can also click the palette minimize/maximize button. If the palette isn't at its default size, click the minimize box/zoom (green) button once to restore its default size, then click it a second time to shrink the palette.

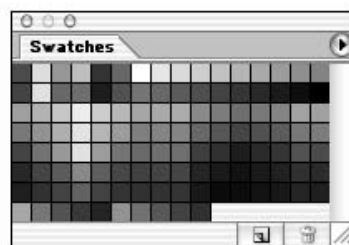
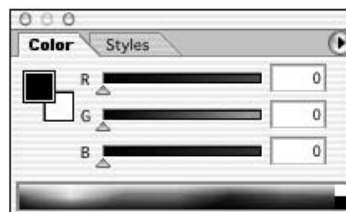
TIP Quick-change: Click in a field on a palette or in a dialog box, then press the up or down arrow on the keyboard to change that value incrementally.



Press this arrow-head to choose commands from the *palette menu*.



1 To **separate** a palette from its group, drag the tab (palette name) away from the palette group.



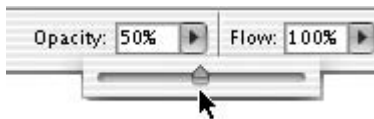
2 The Swatches palette is now going solo.



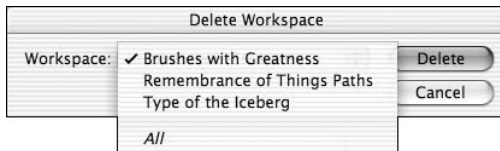
Change your values

You can change most numerical values simply by clicking the option name and **dragging** to the left or the right. Examples of options that this works for are the Width and Height values in dialog boxes, Opacity and Fill on the Layers palette, Feather on the options bar, Input Levels and Output Levels in the Levels dialog box, and Fuzziness in the Color Range dialog box.

There are two ways to use a **pop-up slider** **1**: Either press an arrowhead and drag the slider in one move, or click the arrowhead and then drag the slider. To close a slider, click anywhere outside it or press Enter/Return. If you click the arrowhead to open a slider, pressing Esc will restore its last setting.



1 A *pop-up slider* on the options bar.



2 In the *Delete Workspace* dialog box, choose a workspace name, or choose *All*.

If **Save Palette Locations** is checked in Edit (Photoshop, in Mac) > Preferences > General, palettes that are open when you exit/quit Photoshop will reappear in their same location when you relaunch the program.

To further customize your onscreen working environment, you can set up special configurations of palettes and dialog boxes for different kinds of tasks and save them as **workspaces**. For example, you might want to keep the Character and Paragraph palettes open any time you're working on a text-intensive document, or create a workspace in which the Brushes, Color, and Swatches palettes are open and accessible for use when painting.

To create a custom workspace:

1. Display whichever palettes you want open and accessible, and arrange them on the screen as you like.
2. Choose Window > Workspace > Save Workspace.
3. Enter a descriptive Name for the new workspace, then click Save. The new workspace is now accessible on the Window > Workspace submenu.

To delete any or all custom workspaces:

1. Choose Window > Workspace > Delete Workspace.
2. Choose the name of the workspace you want to get rid of, or choose **All** **2**.
3. Click Delete, then click Yes.

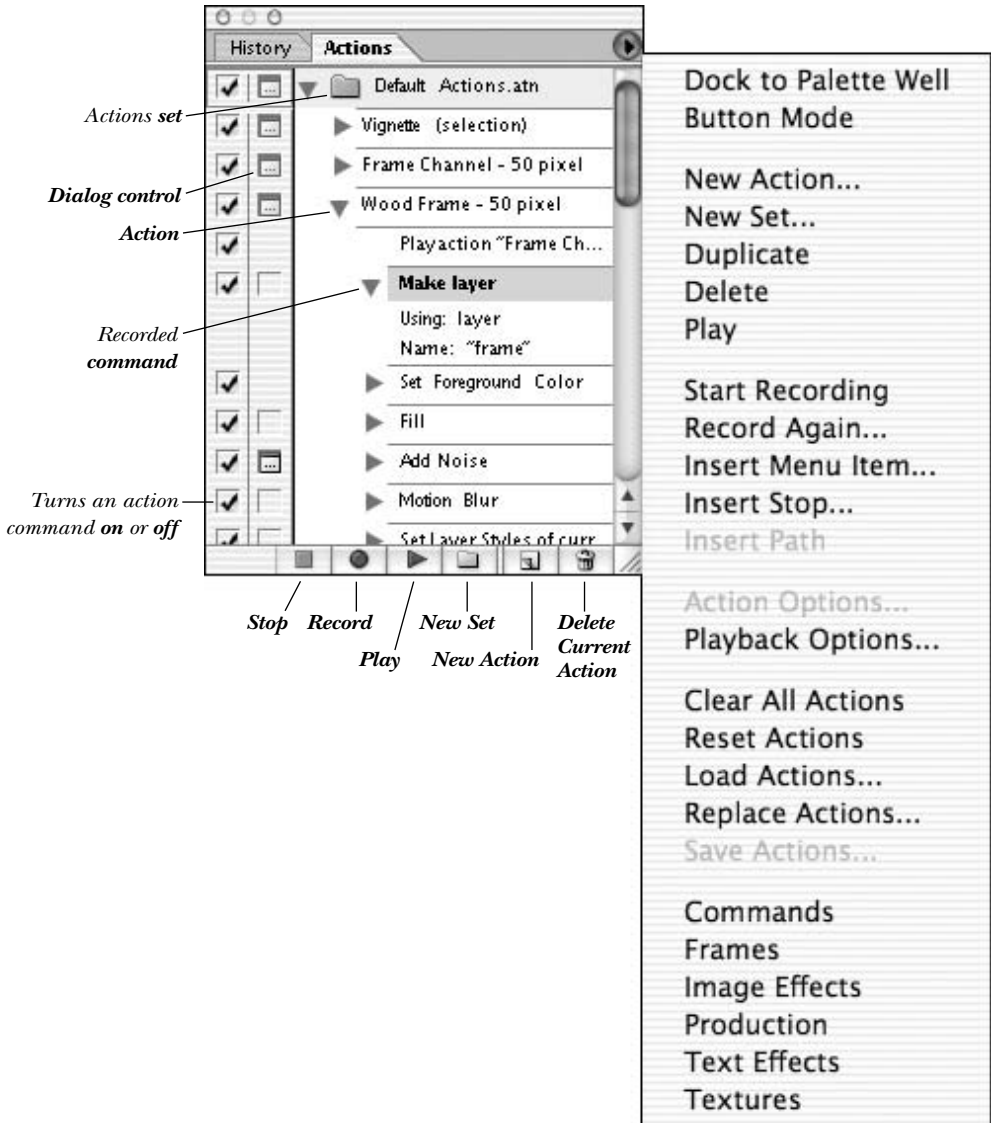
TIP To restore the palettes' default groupings and locations at any time, choose Window > Workspace > Reset Palette Locations.

Actions palette

You can record a series of commands in an action, and then replay that action on one image or on a batch of images. The Actions palette is used for recording, storing, editing, and replaying actions.

The game plan

The palettes are illustrated in alphabetical order, starting on this page except, that is, for the indispensable Toolbox, which is illustrated on pages 7–10, and the options bar, which is illustrated on page 11.

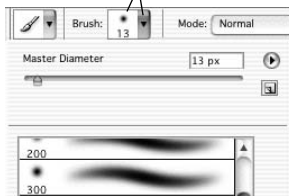


Brushes palette

The Brushes palette is used for customizing brush tips for the Brush, Pencil, History Brush, Art History Brush, Clone Stamp, Pattern Stamp, Eraser, Background Eraser, Blur, Sharpen, Smudge, Dodge, Burn, and Sponge tools. Options on the palette are organized into categories, such as Shape Dynamics, Scattering, Texture, and Color Dynamics. You can also use the Brushes palette to choose options for a stylus or for an airbrush input device.

TIP The numeral under a brush tip icon is the diameter of the tip, in pixels.

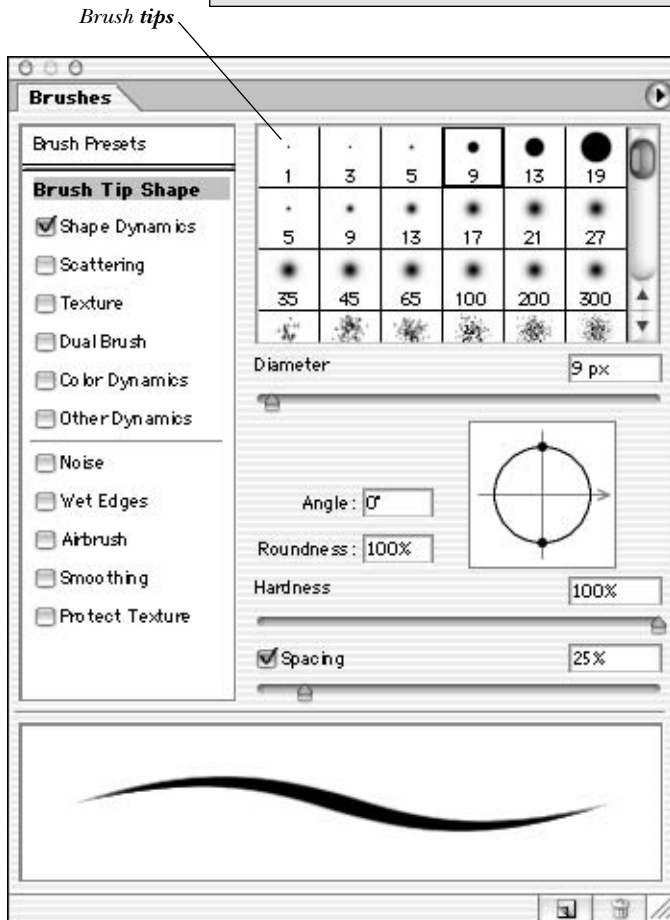
1 Click here to open the **Brush Preset picker**.



Brush editing categories

Individual brush options

Brush stroke preview



Brush tips

New Brush Delete Brush

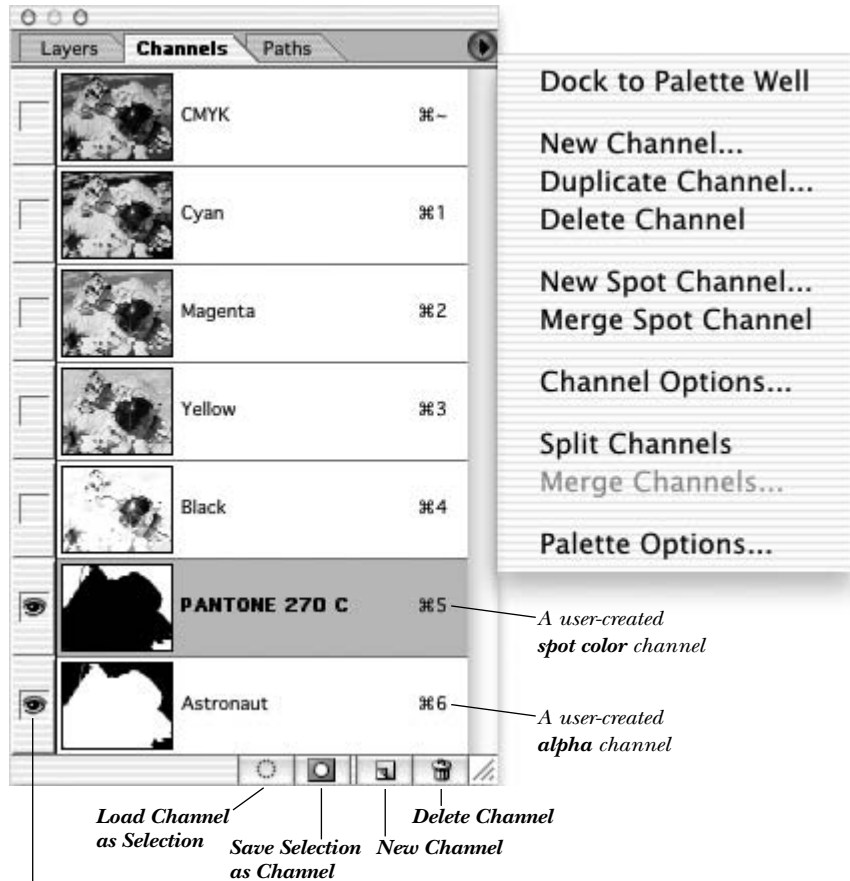
Picker or palette?

Brush tips for the painting and editing tools can be chosen either from the **Brushes palette** (illustrated below) or from the **Brush Preset picker**, a pop-up palette that you open from the options bar. To close the Brush Preset picker, click outside it or click the Brush arrowhead again. To hide the Brushes palette (but keep it open), dock it into the palette well on the options bar; to redisplay it, click the palette tab in the well.

Commands for **loading**, **appending**, and **saving** brushes and brush libraries can be chosen from the Brushes palette menu or the Brush Preset picker menu (click the palette menu button on the right side).

Channels palette

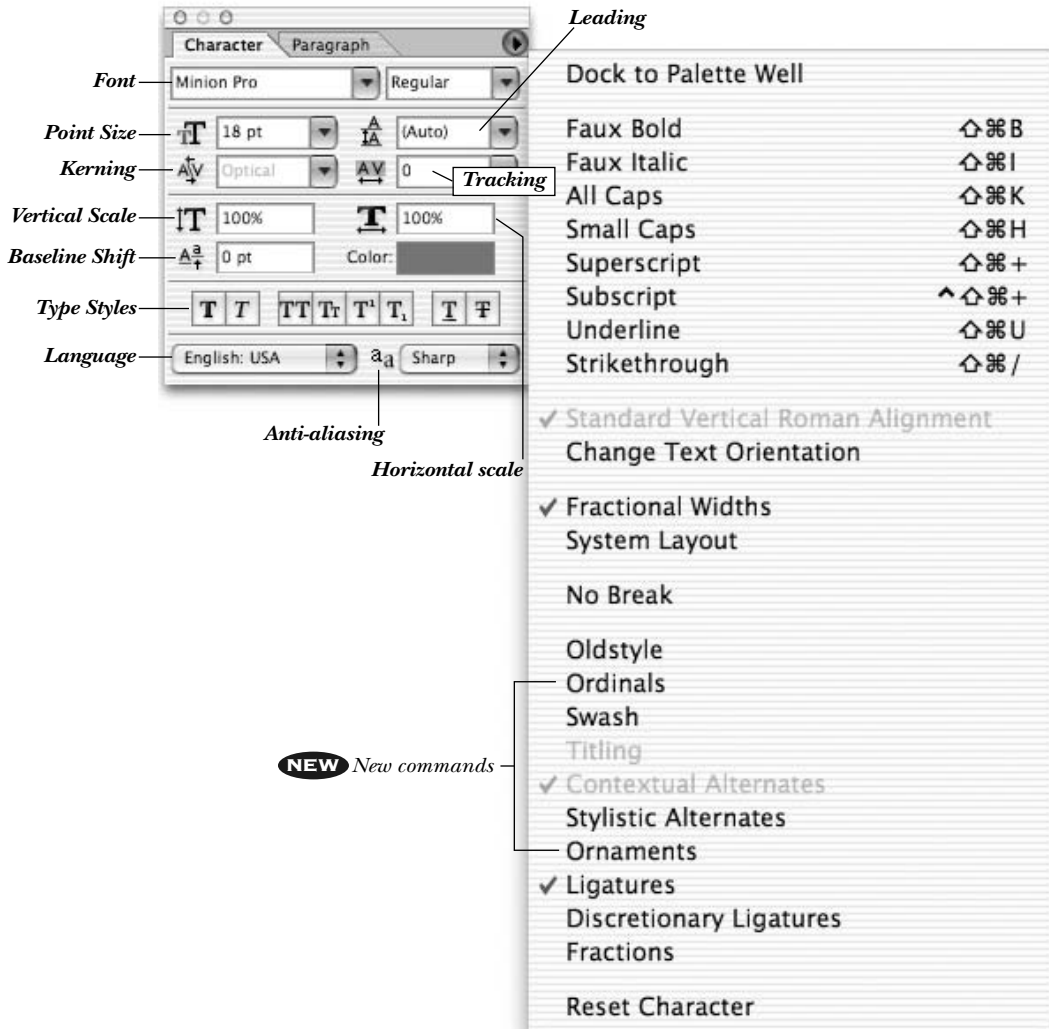
The Channels palette is used for displaying one or more of the color channels that make up an image. It is also used for creating and displaying alpha channels, which are used for saving selections, and spot color channels, which are used for producing individual spot color plates.



The eye icon indicates that this channel is currently **visible**. To display a channel by itself in the image window, click its name or use the keystroke listed on the palette.

Character palette

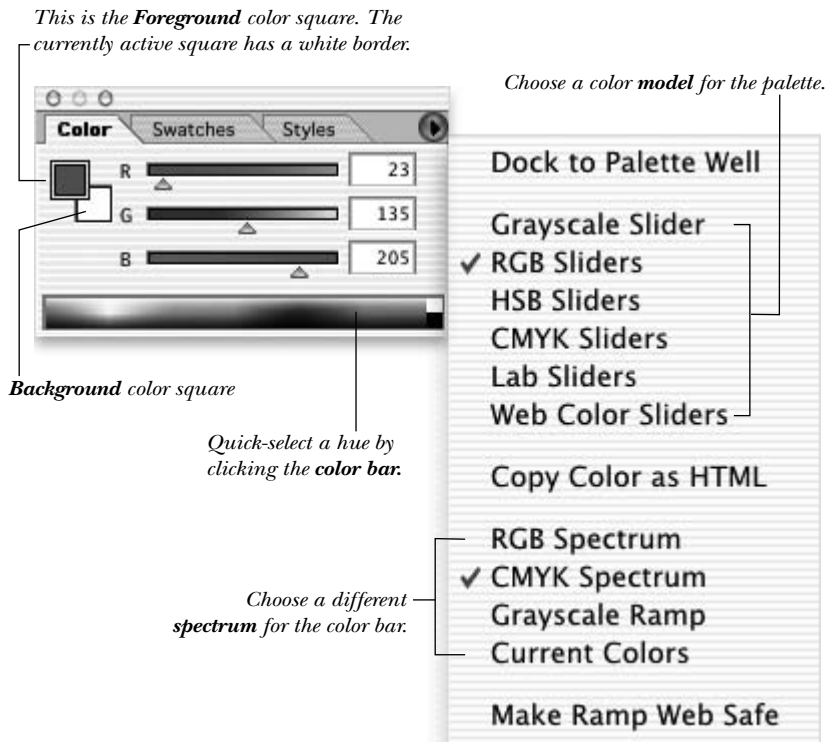
When a type tool is chosen, type attributes can be chosen via the Character palette, illustrated below, or from the options bar.



Color palette

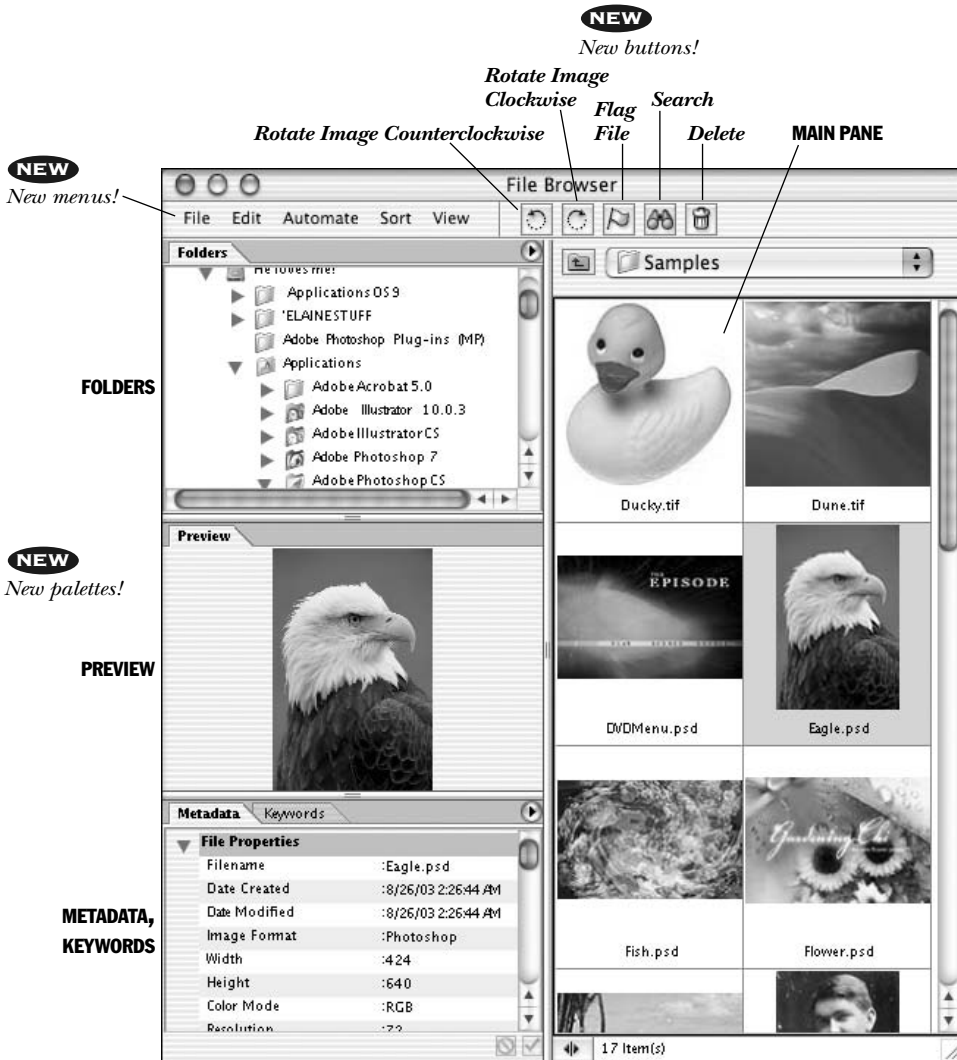
The Color palette is used for mixing and choosing colors. Colors are applied with a painting or editing tool, or via a command such as Fill or Canvas Size. Choose a color model for the palette from the palette menu. Mix a color using the sliders, or quick-select a color by clicking on the color bar at the bottom of the palette.

To open the Color Picker, from which you can also choose a color, click once on the Foreground or Background color square if it's already active, or double-click the square if it's not active.



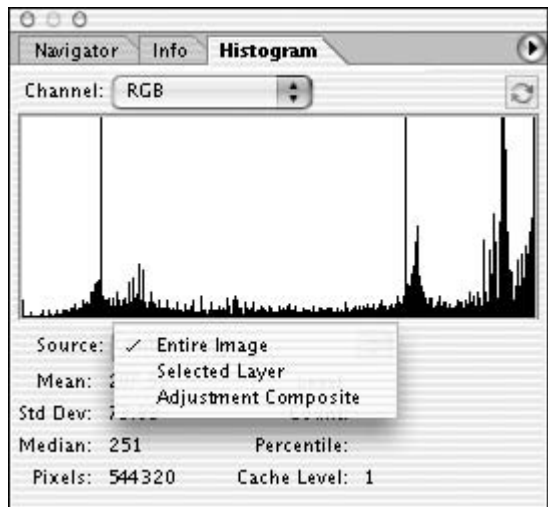
File Browser palette

The File Browser enables you to search for, open, sort, batch-process, move, rename, and delete Photoshop files. Images in the currently selected folder are represented by image thumbnails in the main window. The File Browser in Photoshop CS boasts a number of new features, such as buttons at the top of the palette, palettes on the left side, and menus that let you activate many commands.



NEW Histogram palette

The Histogram palette (formerly a dialog box) diagrams the current light and dark values of an image, or its before and after light and dark values as it's being edited or while an adjustment dialog box is open. Via the Channel pop-up menu, you can choose to have the palette display information about the combined channels or about just one channel. You can also expand the palette to display histograms for every channel. The screenshot at right shows the palette in Expanded View (the other display options are Compact View and All Channels View).

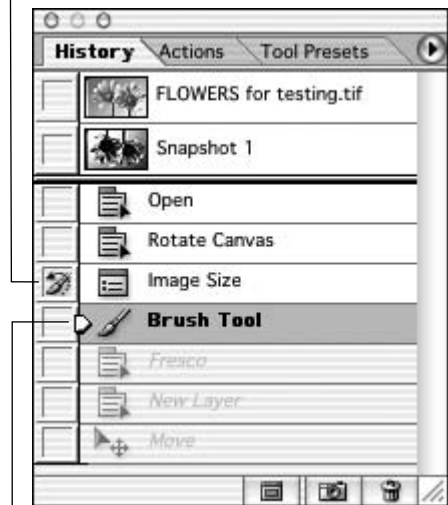
**History palette**

The History palette is used to selectively undo one or more previous steps in a work session. Each brushstroke, filter application, or other image-editing command is listed as a separate state on the palette, with the bottommost state being the most recent. Clicking on a prior state restores the document to that stage of the editing process. What happens to the document when you click on a prior state depends on whether the palette is in linear or non-linear mode.

In linear mode, if you click back on and then delete a state or resume image editing from an earlier state, all subsequent states (dimmed, on the palette) will be deleted. In non-linear mode, you can click back on an earlier edit state or delete a state without losing subsequent states. This option is turned on or off via the Allow Non-Linear History check box in the History Options dialog box (choose History Options from the palette menu). You can switch between linear and non-linear modes at any time during editing.

The New Snapshot command creates a state that stays on the palette until the image is closed. The History Brush tool restores an image to a designated prior state where the brush is dragged in the image window. The Art History Brush does the same thing, but in stylized strokes.

The current source for the History Brush



History State slider (at the current state) *New Document from Current State* *Delete Current State*
New Snapshot

This is the History palette in linear mode. Note that some steps are dimmed.

Info palette

The Info palette displays a color breakdown of the pixel that's currently under the pointer **1**. The palette will also show readouts for up to four color samplers, if they're placed on the image **2**. If a color adjustment dialog box is open, the palette will display before and after color readouts. The Info palette also shows the *x/y* location of the pointer on the image.

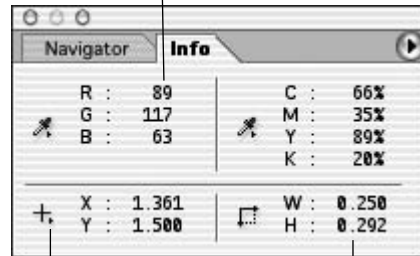
Other information may display on the palette, depending on which tool is being used, such as the distance between points when a selection is moved, a shape is drawn, or the Measure tool is used; the dimensions of a selection or crop marquee; or the width, height, and angle of a selection as it's being transformed **3**.

Press one of the tiny arrowheads to choose a color mode for that readout (it can be different from the current image mode): Actual Color (the current image mode), Proof Color, Grayscale, RGB Color, Web Color, HSB Color, CMYK Color, Lab Color, Total Ink, the current layer Opacity, or 16-bit. **NEW**

To do this via a dialog box, choose Palette Options from the palette menu, then change the mode for the First and Second Color Readouts. You can also change the unit of measurement for the palette (Mouse Coordinates), and for an image in 16-bit mode, you can check Show 16 bit values **4**. **NEW**

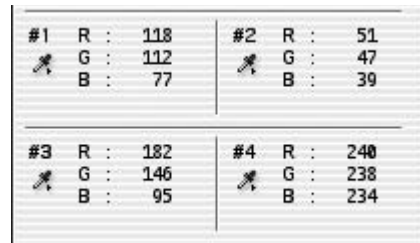
TIP If an exclamation point appears next to a color readout, it means that color is outside the printable, CMYK gamut.

1 Color breakdown for the pixel that's currently under the pointer



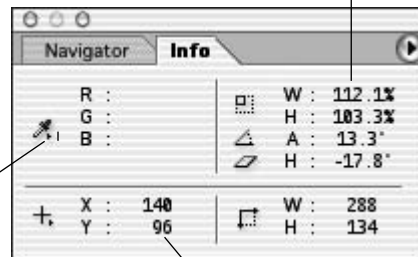
Press this arrowhead to choose a different unit of measurement for the palette (and the rulers).

The **Width** and **Height** of the current **selection**



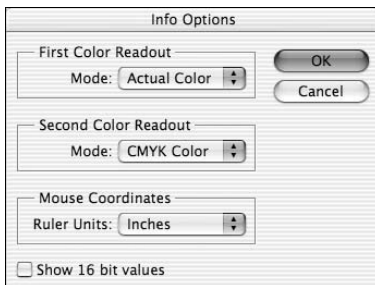
2 #1, #2, #3, and #4 color readouts on the Info palette from four color samplers that were placed on the image

3 During a **transform** operation, the width (W), height (H), angle (A), and horizontal skew (H) or vertical skew (V) of the transformed layer, selection, or path are shown in this area.



Press an arrowhead to choose a different **color mode** for that readout.

The current *x/y* location of the pointer on the image

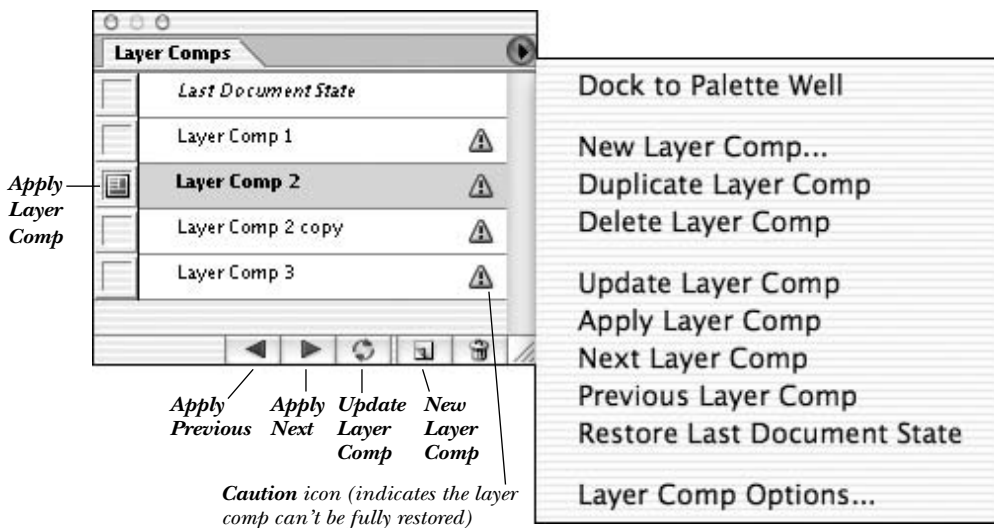


4 Choose options for different areas of the Info palette via the **Info Options** dialog box.

NEW Layer Comps palette

A layer comp (short for “composition”) is a set of layer characteristics, including visibility, position, and appearance (layer styles). The purpose of layer comps is to enable multiple versions of the same image to coexist in one Photoshop or ImageReady file, and to provide a convenient palette mechanism for displaying them. This can be useful when you need to present design variations to a client.

Layer comps are saved to the Layer Comps palette with the image in which they’re created and are applied to a whole image simply by clicking the comp name on the palette. Whereas histories affect all editing done to an image (and can’t be saved), layer comps remember and apply only specific layer options and settings.



Layers palette

Each new image starts out with a Background, which can be a solid color or transparent. Using the Layers palette, you can add layers on top of the Background, that you can show/hide, duplicate, group, link, delete, or restack. Each layer can be assigned its own blending mode, opacity, and fill opacity without affecting the other layers.

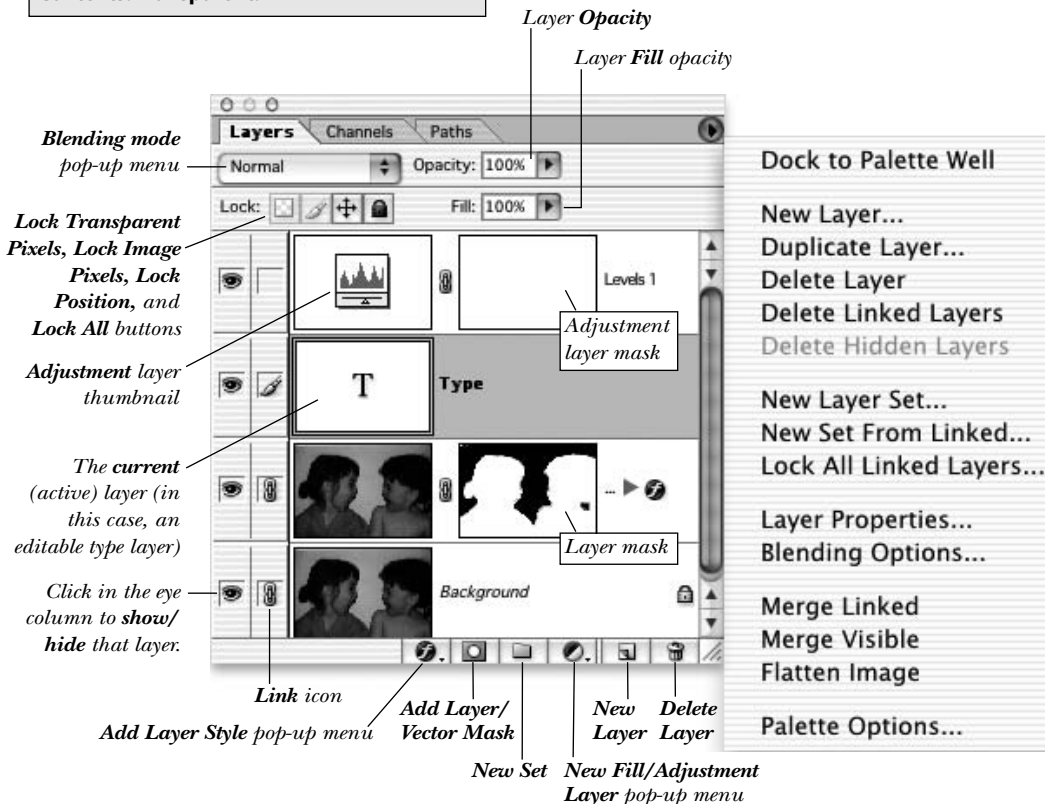
In addition to standard layers, you can also create three other kinds of layers: adjustment layers, which are used for applying temporary color or tonal adjustments to

the layers below it; editable type layers, which are created automatically when the Horizontal Type or Vertical Type tool is used; and shape layers, which contain vector shapes with a color or pattern fill. If you apply a layer effect to a layer (e.g., Inner Glow or Drop Shadow), a layer effect icon and pop-up menu will appear next to the layer name. You can also attach a mask to a layer.

Only the current (or “active”) layer can be edited. To choose a layer, click next to its name or click its thumbnail.

Starting out transparent

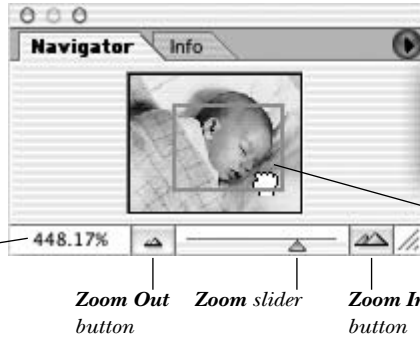
To have the bottommost tier of a new image be a layer with transparency instead of an opaque Background, in the File > New dialog box, click **Contents: Transparent**.



Layers Palette

Navigator palette

The Navigator palette is used for moving an image in its window and for changing the zoom level of an image.



Enter the desired **zoom percentage** (or enter a ratio, as in 1:1 or 4:1), then press Enter/Return.

Zoom Out
button

Zoom slider

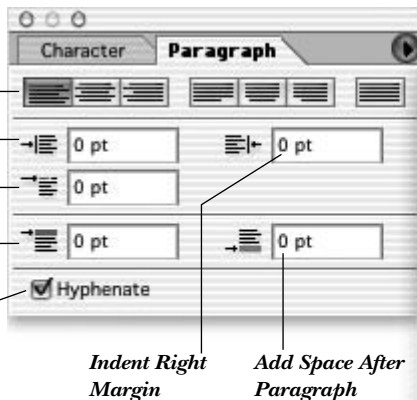
Zoom In
button

Dock to Palette Well
Palette Options...

Drag in the view box to **move** a magnified image in its window. Ctrl-drag/Cmd-drag in the view box to marquee an area for magnification.

Paragraph palette

The Paragraph palette is used to apply paragraph-wide attributes to type, including horizontal alignment, indentation, space before, space after, and auto hyphenation.



Horizontal Alignment

Indent Left Margin

Indent First Line

Add Space Before Paragraph

Auto-hyphenate

Indent Right Margin

Add Space After Paragraph

Dock to Palette Well

Roman Hanging Punctuation

Justification...

Hyphenation...

Adobe Single-line Composer

Adobe Every-line Composer

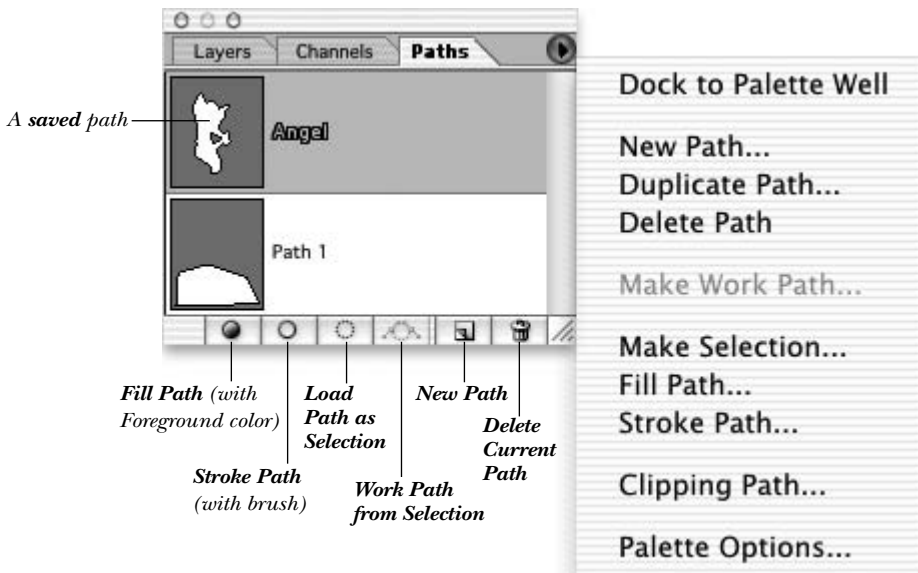
Reset Paragraph

Paths palette

A path is a vector shape that's composed of curved and straight line segments connected by anchor points. A path can be drawn directly with a shape tool or a pen tool, or you can start by creating a selection and then convert the selection into a path. To create a precisely drawn selection, you can draw a path and then convert it into a selection.

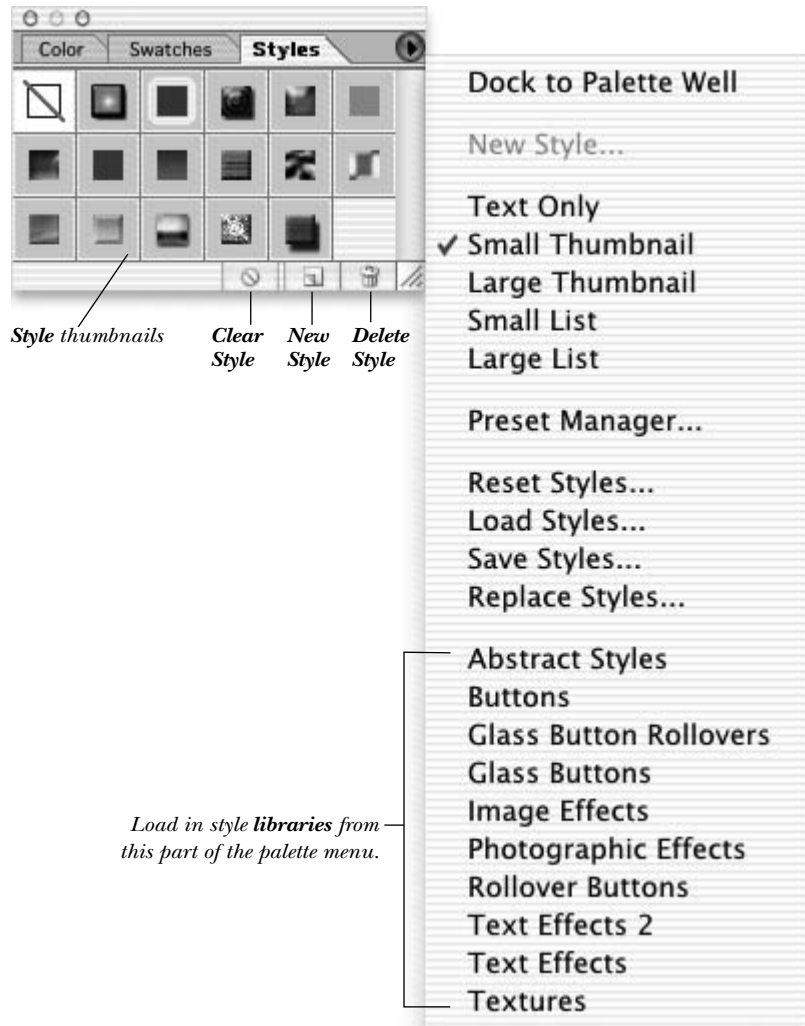
Once a path is drawn, you can apply a fill or stroke color to it or use the Pen tool or any of its relatives—the Add Anchor Point, Delete Anchor Point, or Convert Point tool—to reshape it. Paths are saved, activated, duplicated, and deleted via the Paths palette.

TIP While a shape layer or an image layer that has a vector mask is selected, the path for that vector mask will be listed on the Paths palette.



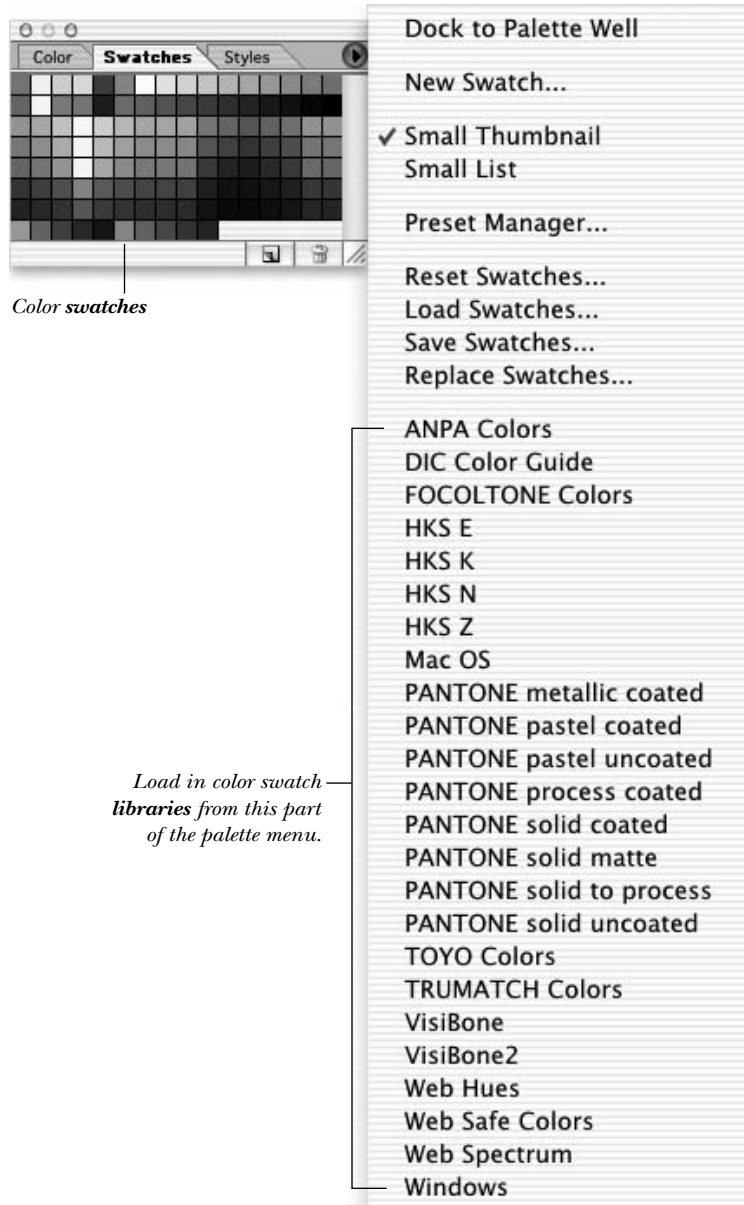
Styles palette

The Styles palette is used to save and apply previously saved individual layer effects or combinations of effects. Custom style libraries can be loaded, appended, and saved using commands on the Styles palette menu.



Swatches palette

The Swatches palette is used for saving and choosing already mixed colors. Individual swatches can be added to or deleted from the palette. Custom swatch libraries can also be loaded, appended, and saved using commands on the Swatches palette menu.



Tool Presets palette

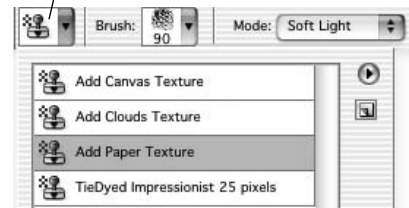
You can save and reuse tool settings, just as you can any other type of preset. Say, for example, you frequently resize and crop images to a particular set of dimensions. If you create a preset with the width, height, and resolution parameters you need, the next time you perform the cropping operation, instead of having to type in the numbers, all you have to do is choose the tool preset from the Tool Presets palette or pop-up palette.

You can also save presets for type (complete with font, point size, and color attributes),

and for selection tools, brushes, gradients, patterns, shapes, contours, and styles.

The Tool Presets palette is used for managing saved tool presets. To have the palette list the presets for only the current tool, check Current Tool Only.

Tool presets are also accessible from this pop-up palette, which opens if you click the tool's thumbnail on the options bar.

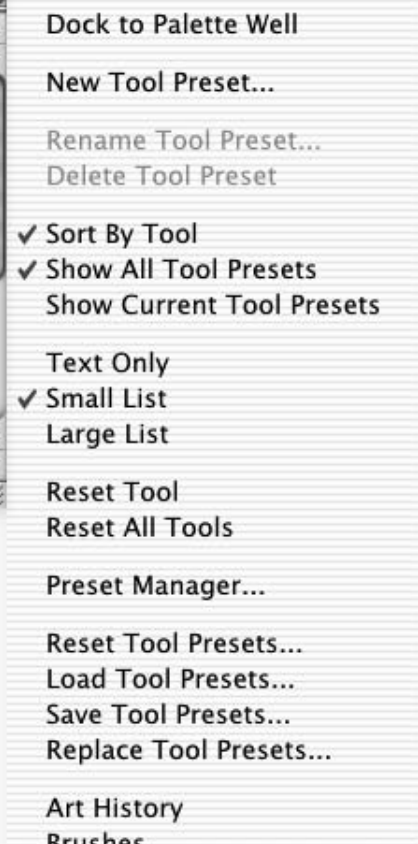


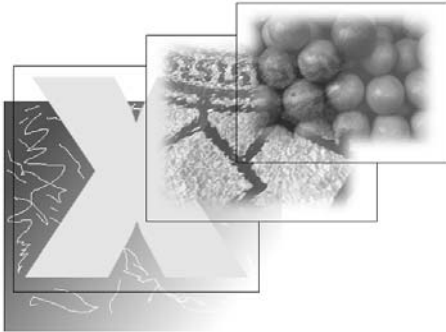
*Click a tool **pres**et to make it the current tool, complete with its saved settings.*



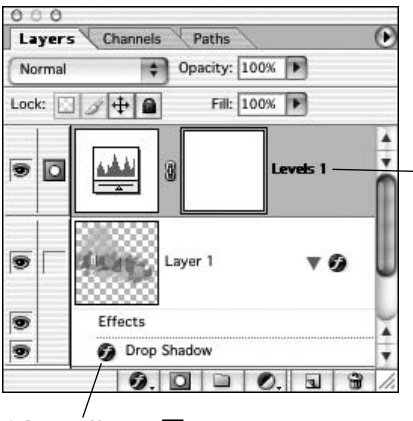
New Tool Preset

Delete Tool Preset





1 Layers are like clear acetate sheets: **opaque** where pixels are present, **transparent** where there are none.



A layer effect **2** The Levels command, applied via an adjustment layer



3 Individual **pixels** are discernible in this image because it is shown at 500% view.

Mini-glossary

Layer

An image can have just a Background (no layers), or it can have multiple layers **1**. Only the currently active layer can be edited. Individual layers can contain layer effects; they can be restacked and moved; you can choose blending options for them; and you can assign masks to them. They are transparent where there are no pixels.

Adjustment layer

Unlike a standard layer, modifications made to an adjustment layer don't alter actual pixels until the layer is merged with the layers below it **2**. You can use them to try out color and tonal adjustments without having to commit to those changes immediately.

Pixels

Pixels are dots that are used to display a bitmapped image in a grid onscreen **3**.

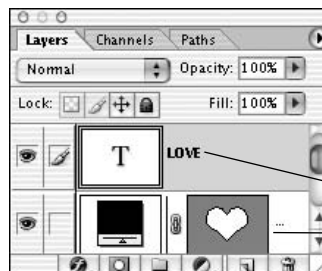
Vector

In addition to pixel imagery, you can also create paths, shapes, and editable type in Photoshop, each of which automatically appears on its own mathematically defined vector layer **4**. Vector elements print at the printer resolution, not the file resolution.

Foreground and Background colors

The current Foreground and Background colors are shown in the Foreground and Background color squares on the Toolbox and on the Color palette. The Foreground color is applied when you use a painting tool, create type, or use the Stroke command. The Background color is applied when you apply a transformation command

(Continued on the following page)



4 An editable type layer

A shape layer

to, or move a selection on, the Background using the Move tool.

Selection

A selection is an area of an image that's isolated via a "marching ants" marquee; the unselected area is protected from editing **1**. A selection can be created by using a selection tool (e.g., Lasso), by using a command (e.g., Color Range), by converting a path into a selection, or by loading an alpha channel mask as a selection. Another way to protect part of an image is by using a mask.

Preset

Saved type, gradient, pattern, shape, contour, style, or tool settings.

History

Every change that's made to an image is saved on the History palette as a separate state. While an image is still open, it can be restored to any prior state that's listed.

Layer effects

Photoshop has ten effects (e.g., Drop Shadow, Outer Glow, Gradient Overlay) that can be applied to any layer and are fully editable (and removable). A style is a saved effect or combination of multiple effects.

Pixel dimensions, resolution

The pixel dimensions value is the number of pixels an image contains. The resolution is the density of pixels per unit of measure (usually per inch) **2**.

Brightness, hue, saturation

Brightness is a color's lightness **3**; its hue is the wavelength of light that gives the color its name, such as red or blue; saturation is its degree of purity (amount of gray).

Optimization

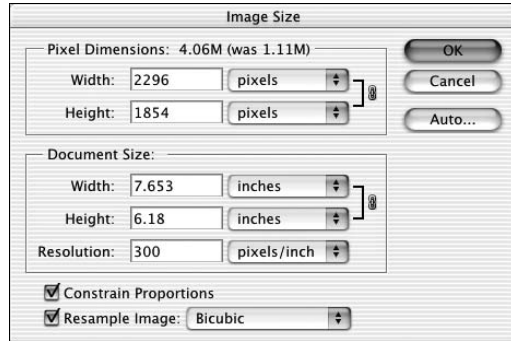
Optimization is the preparation of an image for Web output, and it involves choosing file format, color, and size parameters. By using slices, you can apply differing optimization settings to various areas of an image.

Rollover

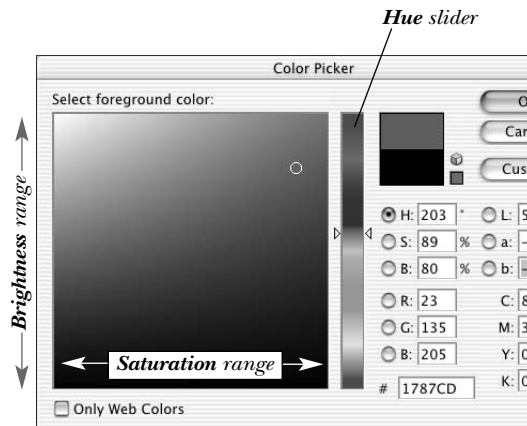
A rollover is a change on a Web page (e.g., the temporary appearance of supplemental text or a picture) that occurs when the user's mouse is over or clicks on a designated area.



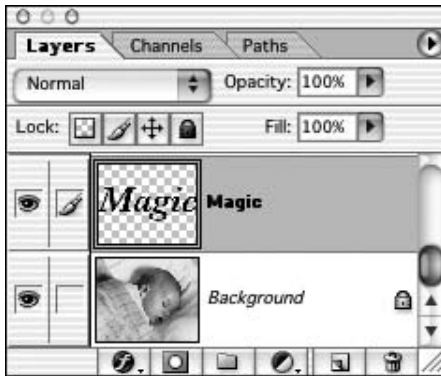
1 A selected area of an image



2 The *Image Size* dialog box is used for changing an image's pixel dimensions and/or resolution.



3 The *Photoshop Color Picker*



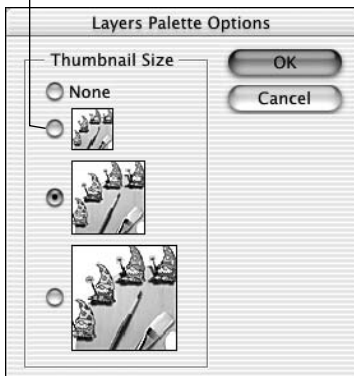
Build your image using layers

You can work on one layer at a time without affecting the other layers, and discard any layers you don't need. You can conserve memory when you're working on a large image by merging two or more layers together periodically.

Using a **layer mask** or a **vector mask**, you can temporarily hide pixels on select areas of a layer. When you're finished using the mask, you can either discard it or permanently apply its effect to the layer.

Quick on the redraw

To speed performance, choose Palette Options from the Layers, Channels, or Paths palette menu, then click the smallest **Thumbnail Size**.



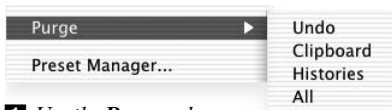
Production techniques

Keep these ideas in mind for future reference (don't worry, we'll explain them later!):

- To undo the last modification, choose Edit > **Undo** (Ctrl-Z/Cmd-Z) (*Note:* Some commands can't be undone.) To undo multiple steps, click a prior state on the **History** palette or use the **History Brush** tool to restore selective areas.
- Drag across an option name (e.g., **NEW** "Opacity") on the Layers palette to the left or right to change a value without having to type it in the field.
- Use the **File Browser** to search for, sort, open, move, rename, and delete files, and to activate Automate commands. **NEW**
- Periodically click the **New Snapshot** button at the bottom of the History palette to save temporary versions of your image. Click a snapshot thumbnail to revert to that version.
- Use **adjustment layers** to try out tonal and color adjustments, and then later merge them downward to apply the effect, or discard them to remove the effect. Use the Layers palette Opacity slider to lessen the impact of an adjustment layer.
- Use Edit > **Fade** (Ctrl-Shift-F/Cmd-Shift-F) to lessen the last applied filter, adjustment command, or tool edit without having to undo and redo—and choose an opacity and blending mode for the command while you're at it.
- Memorize as many **keyboard shortcuts** as you can. Start by learning the shortcuts for choosing tools. Use onscreen tool tips to refresh your memory, or refer to pages 7–10 or our shortcuts appendix. Shortcuts are included in most of the instructions in this book.
- Choose the **lowest** possible resolution and dimensions for your image, given your output requirements. Note that vector layers (editable type, shapes, and vector masks) print at the printer resolution—not at the file resolution.

(Continued on the following page)

- **Interrupt** the screen redraw after executing a command or applying a filter by choosing a different tool or command.
- Save any sequence of commands that you use frequently in an **action** so it can be applied quickly and easily to any image.
- Display your image in **two windows** simultaneously, one at a larger zoom level than the other, so you don't have to constantly change zoom levels.
- Save any complex selection to its own grayscale channel, called an **alpha channel**, which can be loaded and reused on any image whenever you like. Or even better, create a **path** or a **vector mask**, which occupies significantly less storage space than an alpha channel and can be converted into a selection at any time.
- Use **Quick Mask** mode to turn a selection into a mask, which will cover the protected areas of the image with transparent color and leave the unprotected area as a cutout, and then modify the mask contour using a painting tool. Turn off Quick Mask mode to convert the cutout area back into a selection.
- CMYK files process more slowly than RGB files. You can work in RGB Color mode, using View > Proof Setup > **Working CMYK** to preview your image as CMYK Color mode, and wait until it's done to convert it to the "real" CMYK Color mode.
- Try to allot at least 50% of available **RAM** (at least 128 MB) to Photoshop, or four times an image's RAM document size.
- Choose the Edit > **Purge** submenu commands periodically to regain RAM that was used for the Clipboard, the Undo command, the History palette, or All (of the above) **1**. The Purge commands can't be undone.

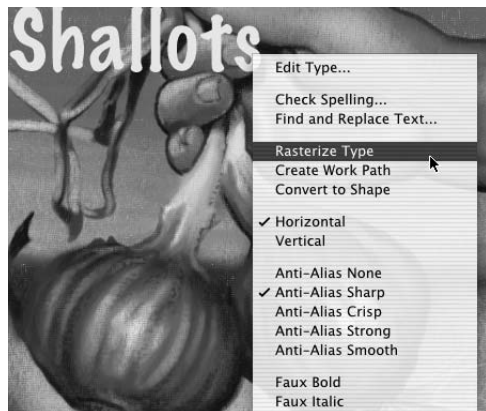


1 Use the **Purge** submenu commands to free up memory.

Context menus save time

To choose from an onscreen **context menu**, right-click/Control-click a Layers, Channels, or Paths palette thumbnail, name, or feature **2**. Or choose general commands or options for the current tool by right-clicking/Control-clicking in the image window **3-4**.

2 You can choose some **palette** commands via context menus.



3 Right-click/Control-click with a **type** tool to choose from a list of type commands.



4 Right-click/Control-click with a **selection** tool to choose from yet another list of commands.